AKAI PROFESSIONAL

FORCE

User Guide

English

Manual Version v3.8

Table of Contents

Introduction **6**

Support **6**

About This User Guide **6**

Important Notes **7**

Updates in v3.8 7

Setup **8**

Tutorial **9**

Starting Up **9**

Launching Clips **9**

Editing Clips & Tracks **12**

Clip Editor 13

Grid View 15

List Edit Mode 18

Track Edit Mode 19

Renaming & Saving **22**

Using the Browser 24

Mixing Tracks **25**

Cueing Tracks 27

Recording Clips **28**

Recording with Note Mode 28

Recording with the Step Sequencer 30

Working with the Linear Arranger **32**

Saving Your Work **34**

Other Features Explained **35**

Main Mode 35

Q-Links 36

Drum Loops & Chop Mode 37

Sampling (Recording) 39

Sample Editing 41

Recording Automation with the XY Pad 43

Creating a Song 44

Operation **46**

General Features **46**

Control Types 46

Knobs 46

Parameter Values 47

Drop-Down Menus / Lists 47

Selectors 48

Buttons 48

Checkboxes 48

Tabs 48

Sliders 49

Envelopes 49

Grid View Tools 50

Pad Modes 52

Launch Mode 52

Note Mode 53

Drum Note Mode 53

Melodic Note Mode 55

Launch & Note Mode 57

Step Sequencer 58

Drum Mode 59

Melodic Mode 59

Lanes Mode 60

Lanes (Mono) Mode 60

Mono Steps 8x4 Mode 61

Poly Notes 8x4 Mode 61

Mono 8x8 Mode 62

Poly 8x8 Mode 62

Tracks 63

About Tracks 63

Audio Tracks 65

Drum Tracks 66

Keygroup Tracks 68

Plugin Tracks 70

MIDI Tracks 71

CV Tracks 73

Menu 74

Toolbar 75

Sync 75

Help 75

Undo History 75

Tuner 76

MIDI Monitor 76

Mode 77

System Resources 78

Project 79
Preferences....80
Info 80
Activations 80
Wi-Fi 81
Ethernet 81
Bluetooth 81
Audio Device....81
Audio/Export....82
MIDI / Sync 82
Hardware....83
Sequencer 84
Project Defaults....85
Project Load/Save 86
General....86
Splice 87
Save Window 88
Pull-Down Menu....91
Time Counter / Locate 93
Timing Correct (TC)....94
Metronome (Click/Metro) 96
Automation....97
Global 97
Tracks....97
Arpeggiator 99
Effects 102
Overview 102
Insert Effects 105
Pads and Keygroups....105
Tracks, Submixes, and Outputs 107
Send/Return Effects 109
Pads and Keygroups....111
Tracks and Submixes....113
Audio Mixdown 114
Modes....116
Clip Matrix Mode 117
Navigate Mode 122
Channel Mixer....123
Volume....124
Pan & Volume 124
Sends 125
Effects....126
I/O 127
Pad Mixer....128
Volume....129
Pan & Volume 129
Sends 130
Effects....131
I/O 131
Browser....132
Sample Assign 136
Arrange Mode 137
Recording Arrangements....139
Switching Between the Arrangement and Clips ...139
Editing Arrangements 140
Arrangement Track Editor....147
Saving and Exporting the Arrangement....148
Grid View 149
Audio Tracks....151
MIDI Tracks....155
Velocity/Automation Lane....161
Clip Editor 162
List Edit Mode....164
Step Sequencer 170
Step Automation 174
Track Edit Mode 175
Drum Tracks 175
Global....178
Samples 180
Envelopes....188
Mods (Modulations)....191
Effects 192
LFO 195
Utilities....196
Mod Matrix 197

Keygroup Tracks....198
Global (Legacy and Advanced)....200
Samples (Legacy and Advanced)....202
Envelopes (Legacy)....210
LFO (Legacy)....213
Mods (Legacy)....214
Effects (Legacy)....215
Filters (Advanced)....217
Envelopes (Advanced)....219
LFO (Advanced)....226
Utilities/Sensitivity (Advanced)....229
KG Stack (Advanced)....231
Mod Matrix (Advanced)....233
Randomize (Advanced)....234
Plugin Tracks....235
MIDI Tracks....236
CV Tracks....237
Anatomy of an Envelope....238
Sample Edit Mode....239
Settings....242
Trim Mode....243
Assigning Samples....246
Processing Slices & Samples....247
Chop Mode....252
Converting or Assigning Slices....255
Processing Slices....258
Pad Mode....262
Assigning Samples....265
Processing Slices & Samples....265
Sampler....266
Auto Sampler....270
Looper....272
XYFX Mode....276
Q-Link Edit....279
Learning Macro Assignments....280
Editing Macro Assignments....285
Q-Links....286
XY Pad....289
Crossfader....290
Pad Grid....291
Envelope Follower / LFO....292
MIDI Learn....294
Live Control Mode....296
Setup....296
Control Bar....298
Matrix View....299
Mixer View....300
Device Control View....301
Control Map....302
Sounds Mode....304
Favorites....305
Setlists....305
Main Mode....306
Overview....306
Toolbar....307
Shortcuts....307
Function Buttons....308
Sequence Section....309
Track Section....313
Drum Tracks....314
Keygroup Tracks....316
Plugin Tracks....317
MIDI Tracks....318
CV Tracks....319
Audio Tracks....320
Buses....321
Track Edit....322
Arrangement & Clip Section....325
Arrangement....325
Clips....329
Mixer Strips....334
Next Sequence Mode....337
Song Mode....339
Track View....342
Pad Color Mode....345

Hardware Features....347

Top Panel....347

Display....350

Rear Panel....351

Front Panel....352

Appendix 353

Glossary 353

Effects & Parameters 358

Delay/Reverb 358

Dynamics 366

EQ/Filter 370

Harmonic 376

Modulation 385

Vocal 390

Plugins 392

Bassline 392

Electric 395

Hype 399

TubeSynth 404

DrumSynth 411

Mellotron 415

Solina 418

WayOutWare Odyssey 421

MPC Instrument Collection 425

SATA Drive Installation 427

MIDI Machine Control (MMC) 428

Technical Specifications 429

Trademarks & Licenses 432

Addenda 433

MPC Pro Pack 431

Advanced CV Track Edit 433

Routing 433

Env 1–4 434

LFO 1–4 435

Stepper 436

Utilities 437

Matrix 437

Super Warp Algorithm 438

MPC Pro Pack Plugins 438

AIR Visual EQ4 439

AIR Reverb Pro 440

AIR Utility 444

AIR Fabric Select 445

Introduction

Thank you for purchasing the Force. At Akai Professional, we know how serious music is to you. That's why we design our equipment with only one thing in mind—to make your performance the best it can be.

Support

For the latest information about this product (documentation, technical specifications, system requirements, compatibility information, etc.) and product registration, visit **akaipro.com**.

For additional product support, visit **support.akaipro.com**.

About This User Guide

This manual should help you get familiar with using the Force. For consistency, the terminology throughout is based on the Force parameter names. We also used specific formatting to indicate particular topics of significance:

Important/**Note**/**Tip**: Important or helpful information on a given topic.

Names of buttons, controls, parameters, settings, and other options are written in **bold** characters throughout the manual.

Examples: Press the **Play** button.

Turn **Knob 4**.

Tap the **Mute** icon.

The **Velocity** ranges from **0** to **127**.

Set the **Sample Play** selector to **One Shot**.

Tap **BPM**, and then use the numeric keypad to enter a **120** as the tempo.

Some parts of this manual refer to other relevant chapters or sections, which are cited in ***bold, italic blue*** characters. Click the text to skip immediately to that section.

Examples: Read the ***Important Notes*** section before proceeding.

For more information about launching clips, see ***Tutorial*** > ***Launching Clips***.

To learn more about using send effects, see ***General Features*** > ***Effects*** > ***Send/Return Effects***.

Important Notes

Read the included safety & warranty manual before using Force.

Before getting started and connecting devices to Force or turning the hardware on/off, make sure all devices are switched off.

Updates in v3.8

New Effects Added

Force now includes five new effects from MPC Sample:

- **Color Compressor:** Adds character and punch while controlling dynamics, inspired by classic hardware compression.
- **Trigger FX**: A performance-focused multi-effect that can be triggered for stutter, filter, delay, and other creative effects.
- **Vintage:** Adds warmth, saturation, and lo-fi character to emulate the sound of classic hardware samplers.
- **Vinyl Emulation:** Recreates the sound of vinyl records, including noise, dust, wobble, and age-related character.
- **Tape Emulation:** Recreates the sound of tape machines, including wow, noise and pitch.

To use the new plugins, go to ***Preferences > Activations*** to download, install, and activate the plugins on your device.

Once activated, the new effects are available from the Effects Browser and can be used on inserts, submixes, or the master channel. See ***Operation > General Features > Effects*** to learn more about using effects.

Load and Export MPC Sample Files

You can now load projects from MPC Sample to your standalone Force hardware.

You can also export a drum track directly as an MPC Sample file from your standalone Force hardware:

1. With a Drum Track selected, open the ***Menu***.
2. Tap the **Save** button at the bottom of the screen to open the ***Save Window***.
3. Select **Save Drum Track As MPC Sample file**.

   Check the **Use Insert FX** box to render samples with the Insert FX for each pad enabled.

   Check the **Use volume and pan settings** box to render samples with each pad's volume and pan settings enabled.

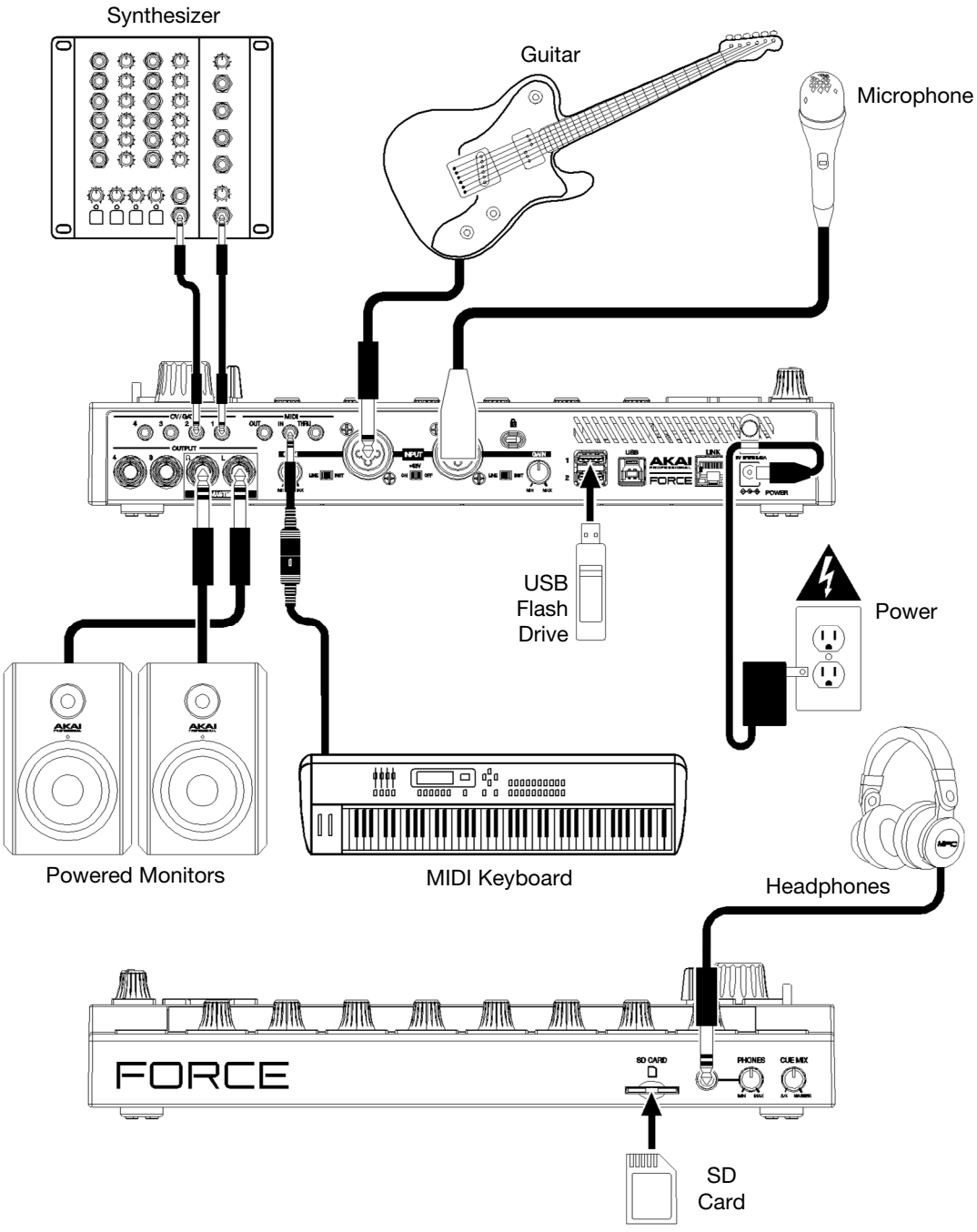
   Use the **Tail Length** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio samples.

You can then select a destination for the saved files. Export to an SD card which you can then insert into MPC Sample and load as a new project file. All rendered samples will be loaded to the MPC Sample pads, and note events will be imported as sequence data.

Setup

Here is just an example of how to use Force in your setup. Items not listed under ***Introduction*** > ***Box Contents*** of your included Quickstart Guide are sold separately.

For a breakdown of the hardware controls on your Force hardware, see the ***Hardware Features*** section.



Remember to remove the protective film from the Force touchscreen!

Note: We highly recommend checking **akaipro.com** for any available updates to the Force firmware and/or drivers. You can also connect your device to ***Wi-Fi*** and check for updates in the ***Preferences*** menu.

Tutorial

This chapter describes how to get started doing basic tasks using your Force. We'll use one of Force's included Demo projects to illustrate some of the most important concepts and features. To get the most out of this chapter, we recommend reproducing each of the described steps.

For in-depth information on the various features and modes in Force, proceed to the ***Operation*** chapter.

For a breakdown of all the controls on your Force hardware, proceed to the ***Hardware Features*** chapter.

You can also access video tutorials from the Akai Professional YouTube page at **youtube.com/AkaiProVideo**.

Starting Up

Make sure you have connected your Force hardware to a power source using the included power adapter and powered it on.

When you first power on your Force, you can select a demo project to help get you started, select **Empty Project** at the bottom of the screen to load a blank template, or select **User Template** to load a saved custom template.

For this tutorial, tap the **Deep House - Colors** Demo project to load it.

Launching Clips

After loading the demo, Force will automatically open **Clip Matrix Mode**. This display mode gives you an overview of your project and mirrors the 8x8 layout of the **clip launch pads**. Use the **cursor** buttons to move the current view of the matrix by one row or column at a time.

Each column in Clip Matrix Mode represents a *track*. Tracks can be used to hold audio samples, drum kits, instrument plugins and more. On the display, you will see tracks labeled **Kick Loop**, **Top Loop**, **Fill** and more.

Each track is made up of *clips*, which are short sequences of audio or MIDI. Only one clip in a track can play at a time. Let's try playing with a few clips to see how they work.

Clip Matrix Mode can also be configured to show or hide the Arrangement row, which is used to trigger linear arrangements recorded in Force's Arrange Mode. To show or hide the Arrangement row in the matrix, press and hold **Shift** and press the **Launch/Config** button to open the Launch Configuration window, and then check or uncheck **Show arrangement in clip matrix**. See ***Operation*** > ***Modes*** > ***Arrange Mode*** for more information about Arrange Mode.

Press the **Launch** button to make sure the **clip launch pads** are in **Launch Mode**. In this pad mode, each pad represents a single clip in a track. The lighted pads represent the clips shown on the display, and the dim pads are empty clips.

Tap the first clip in **Track 8 – Drum Kit** to begin playing it. The **clip launch pad** will slowly blink green to indicate it is active, and the clip on the display will show the position of the playhead in the clip.

Now, while in Launch mode, press the **clip launch pad** below the pad that is currently playing. The second clip will start playing after the next bar.

See ***Operation*** > ***General Features*** > ***Pad Modes*** > ***Launch Mode*** to learn more.

Clips will continue to play until another clip in the same track is launched, until playback is stopped or until the clip is stopped while playback continues.

To stop playback, press the **Stop** button.

To stop the clip, first press the **Clip Stop** button to assign the **Track Assign** buttons to stop mode. Then, press the **Track Assign** button for the track with the clip playing. You can also press the **Stop All Clips** button to stop clips in all tracks.

In addition to launching clips in a track, you can launch multiple clips across tracks in the same *row*, and these can be used to arrange different parts of a song.

Press the top-most **Row Launch** button to launch the first row of clips, and then continue launching other rows in order.

While one row is playing, try launching clips from other rows to experiment with different variations.

You can also assign Tracks to Force's crossfader. This allows you to seamlessly transition between clips from multiple tracks.

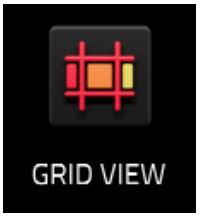
1. Press and hold the **Assign A** button and press the **Track Assign** button for **Track 1 – Kick Loop**. The track name at the top of the display will now show an **A** icon.
2. Next, press and hold the **Assign B** button and press the **Track Assign** button for **Track 4 – Hat Fill**. The track name at the top of the display will show a **B** icon.
3. Launch the third row and then use the crossfader to blend from one clip to the other by moving it from the A side to the B side and back.

To clear crossfader assignments, hold **Shift** and press the **Assign A** or **Assign B** button.

To edit the slope profile of the crossfader, open the **Mixer Config** window by tapping **Settings** when viewing the Mixer, or by holding **Shift** and pressing **Mute** or **Solo**. Select **Linear**, **Exponential** or **Logarithmic**.

Editing Clips & Tracks

Now that you are familiar with the basics of launching clips, let's explore some of the modes and menus that let you edit clips and tracks for even more customization of your project.

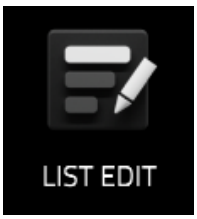


In **Grid View**, you can view and edit note events and their parameters, such as length, velocity and transposition, for MIDI tracks and audio samples and their parameters, such as length, volume and tuning, in Audio tracks.

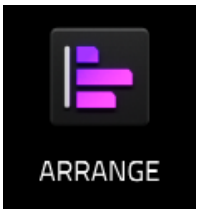
For MIDI clips such as those in drum, keygroup or plugin tracks, use the toolbar at the top of the display to add, erase, or select notes and move around the grid, and use the Edit menu to further edit the MIDI note events.

For Audio clips, use the toolbar at the top of the display to select, move, erase, cut and mute parts of the waveform below. This page also contains Force's powerful Warp tool, which can be used to adjust the tempo of any sample to match your project's tempo without changing the pitch.

In the **Clip Editor**, you can view and edit the parameters of the clip container itself, such as its length, launch mode and quantization. When using an audio clip, this view will show the waveform of the sample. When using a MIDI clip, such as a drum kit clip or a plugin clip, this view will show either all available pads in a vertical view with their corresponding data or a vertical “piano roll” keyboard.



Additionally, MIDI clips can be edited using **List Edit Mode**. This mode gives you many of the same features as the Grid View, but in a list workflow. You can use this view to filter your MIDI events by a particular type, for instance, Aftertouch messages or Track Automation.



In **Arrange Mode**, you can record your clip performance to a linear timeline and use Force's powerful Arrange Edit commands to shape your song. See ***Working with the Linear Arranger*** later in this Tutorial to learn more.

Force's **Track Edit Mode** is used to edit the parameters of the track itself. This mode is not available for audio tracks.

For drum tracks, you can edit the parameters of the four layers as well as all synthesis parameters and insert effect settings.

For keygroup tracks, you can set the keygroup note ranges and edit the parameters of each keygroup and set their note ranges. You can also edit all synthesis parameters and insert effect settings.

For plugin tracks, you can parameters of the plugin using the graphic interface for built-in plugins, or an overview of all plugin parameters with a slider for each for other plugins.

Each of these sections is explained in further detail below and in the ***Operation*** > ***Modes*** chapter.

Clip Editor

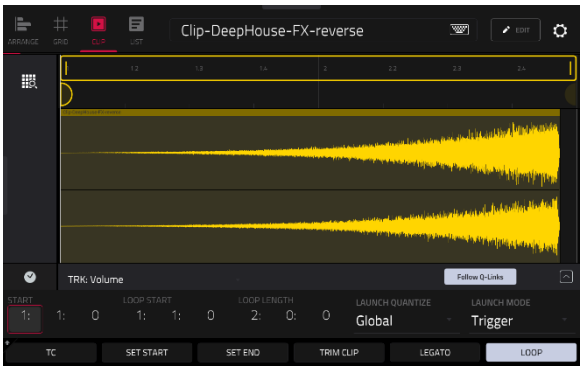
First, let's look at the ***Clip Editor***, where you can view and edit clip information and parameters.

To enter the Clip Editor, do either of the following:

- Press **Clip**.
- Press **Menu** and then tap **Clip Editor**.

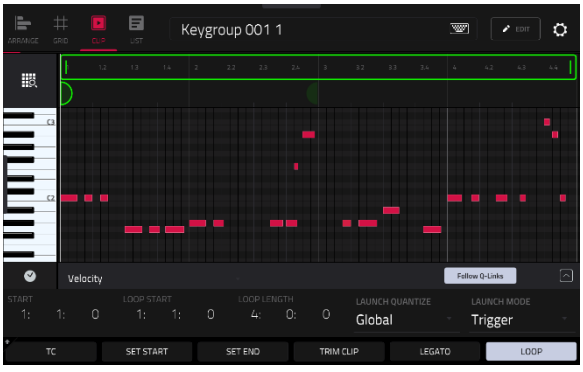
In the Clip Editor, you can view and edit the parameters of the clip container itself, such as length, launch mode, and quantization. The appearance of the Clip Editor depends on what kind of track the clip belongs to:

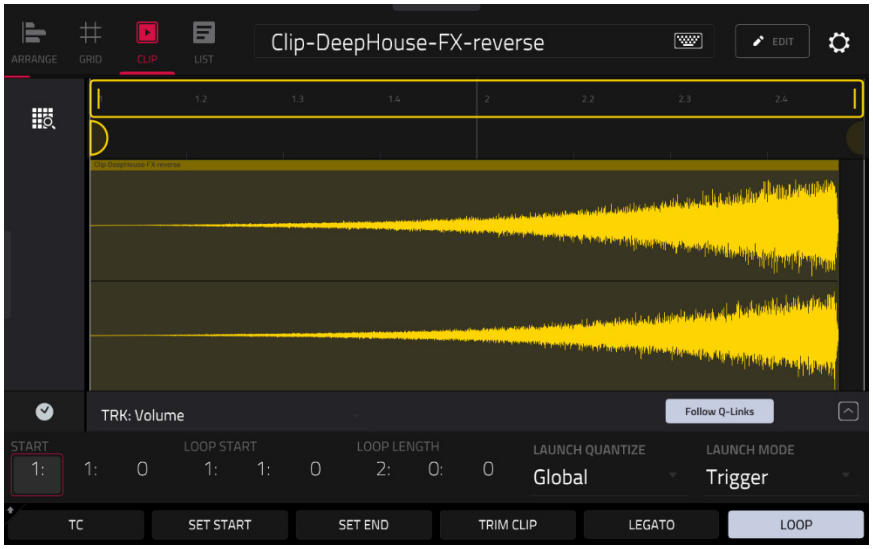
For audio tracks, the waveform of the audio clip is shown:



For drum tracks, the left column shows you all available pads in a vertical view with their corresponding events in the grid to the right:

For keygroup, plugin, MIDI and CV tracks, the left column shows a vertical “piano roll” keyboard with the corresponding events in the grid to the right:





Let's edit one of the clips in our demo project:

1. Make sure the **clip launch pads** are in Launch Mode by pressing the **Launch** button.
2. Press and hold the **Select** button, then press the first clip launch pad for **Track 7 – SFX**.
3. Now, try making some of the edits to the clip described below. Tap to select the desired field, and then use the **data dial** or **+/- buttons** to change the value. You can also double-tap on the selected field to adjust it on the touchscreen using the menu that appears.

   At any time, press **Undo** to revert to the previous state.

   Use the **Start**, **Loop Start** and **Loop Length** fields to adjust the length of the clip**.** Alternatively, use the **Set Start** and **Set End** buttons during playback. The start or end point will be placed at the position of the playhead when the button was pressed.

   Use the **Launch Quantization** field to adjust the timing of how the clip is launched. This can be set separately from the global launch quantization. For instance, you may keep the global launch quantization at **1 Bar** to keep longer clips in sync, but set sound effects or other "one shots" to a smaller launch quantization, such as **1/8 Bar**.

   Use the **Launch Mode** field to change the clip launch behavior. Select **Toggle** mode for the clip to start or stop with each successive press. Select **Trigger** mode for the clip to start at the beginning with each press. Toggle is useful for clips of full phrases, whereas Trigger is useful for one shot sound effects.

   Tap the **TC** button to open the ***Timing Correct (TC)*** window to adjust the timing correction. This window contains various settings to help quantize the events in your clip.

   Use the **Loop Length** field to adjust an audio clip to a preferred length, then tap **Trim Clip** to trim the whole clip to this size.

   Tap the **Legato** button to carry the playhead position from one clip to another in the same track. When active, the playhead will continue from the same position as it was in the previous clip of the same track when switching between clips. This is useful for creating seamless fills in drum breaks, working with an acapella track or other scenarios where you would like a clip to play across multiple rows.

   Tap the **Looping** button to enable or disable clip looping. Clips like sound effects, drum hits and other "one shots" should usually have **Loop** set to **Off**. For longer melodic or rhythmic phrases, set **Loop** to **On**.

   To adjust the loop, hold **Shift** and tap the **<<Loop** or **Loop>>** buttons to shift the loop left or right, or hold **Shift** and tap the **/2** or **2X** buttons to halve or double the loop size.

See ***Operation*** > ***Modes*** > ***Clip Editor*** to learn more about this feature.

Grid View

In Grid View (formerly *Clip Event Editor*), you can edit parameters of the audio clip itself, such as length, levels, tuning and BPM.

Let's start by making some edits to an audio clip using the Grid View.

1. Launch the first clip in **Track 1 – Kick Loop**.
2. Press **Menu** and tap **Grid**.
3. Now, try making some of the edits to the audio clip described below. At any time, press **Undo** to revert to the previous state.

    Use the **tools** at the top of the display to edit the clip:

    To select part of the clip, tap the **select box** icon in the upper-right corner, then tap and drag in the lower-half of the waveform.

    To move all or part of the clip, tap the **pointer** icon in the upper-right corner, and then tap and drag at the top part of the waveform.

    To shorten or lengthen a clip region (or multiple selected clip regions), tap the **select box** or **pointer** icons in the upper-right corner, and then tap and drag the lower third of it left or right.

    To split the clip into multiple parts, tap the **scissors** icon in the upper-right corner, and then tap anywhere in the waveform.

    To mute all or part of a clip, tap the **speaker** icon in the upper-right corner, and then tap in the waveform. Alternatively, select the part of the waveform you want to mute, and then press the **Mute** button.

    To scroll through or change the zoom level of the waveform, tap the **magnifying glass** icon. Then, tap and drag to scroll through the waveform, pinch with two fingers to zoom out, or spread with two fingers to zoom in.

    Use the **Fade In** or **Fade Out** to apply a fade to the clip.

    Use the **Level** field to change the level of the clip.

    Use the **Semi** or **Fine** fields to change the tuning of the clip.

    Tap the **Reverse** button to reverse the clip (or a section of it).

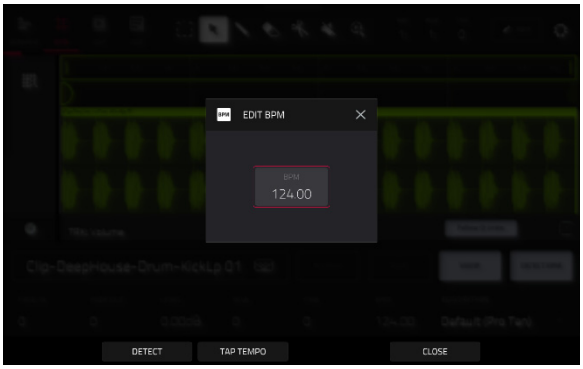
    Tap the **keyboard icon** under the waveform to rename the clip using the keyboard that appears on the display.

In the Grid View, you can also use Force's powerful warp tool to adjust the tempo of any sample to match your project's tempo without changing the pitch.

To sync an audio clip to the project tempo:

1. Load the desired sample to an empty clip launch pad using the **Browser**.
2. With the clip launch pad selected, open the **Grid View** by pressing **Menu** and tapping **Grid**.
3. If your sample is already cut to a set number of bars and beats, you can continue to the next step.

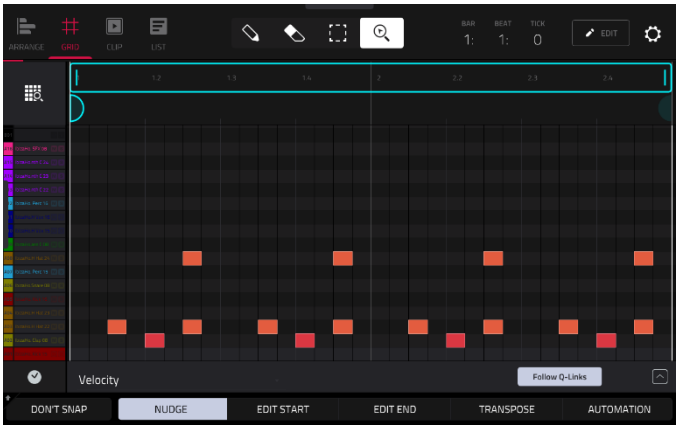
   If your sample is not already evenly cut, you can use the **Edit Start** and **Edit End** tools to isolate the section of the sample you would like to use. Alternatively, use the **scissors** icon to cut the audio.



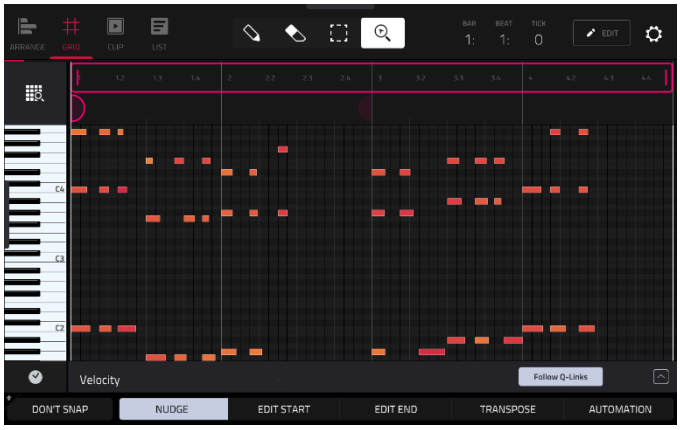
4. Tap the **Warp** button to enable warping of the sample. This will allow you to lengthen or shorten the selected clip region to the desired loop length without changing the sample pitch.
5. To adjust the BPM of the sample, tap the **Detect** button to open the **Edit BPM** window. From here, you can set the BPM in one of three ways:
   i. Press **Detect** to have Force analyze the BPM for you.
   ii. Play the clip and use the **Tap Tempo** button to input the BPM.
   iii. Enter the BPM manually if you know it.
6. As the BPM of the sample is changed, the number of bars and beats it covers will also change.

See ***Operation*** > ***Modes*** > ***Grid View*** to learn more about this feature.

The Grid View will appear differently when using a clip with MIDI data on a Drum, Keygroup, Plugin, MIDI or CV track.



Grid View for a drum track



Grid View for a keygroup, plugin, MIDI, or CV track

Now let's make some edits to a MIDI clip using the Grid View.

1. Launch the first clip in **Track 2 – Top Loop**.
2. Press **Menu** and tap **Grid View** to open the Grid View.
3. Now, try making some of the edits to note events described below. At any time, press **Undo** to revert to the previous state.

    Tap the **Pencil** icon at the top of the display to add a note. Then, in the grid, tap a square.

    Tap the **Eraser** icon at the top of the display to erase a note. Then, in the grid, tap a note.

    Tap the **select box** icon at the top of the display to select a note. Then, in the grid, tap a note. You can also drag your finger to select multiple notes.

    Tap **Nudge** at the bottom of the screen to move the selected notes, using the **data dial** or **–/+** buttons to shift the notes left or right. By default, you can position notes only by quantization values defined by the ***Timing Correct (TC)*** value.

    Tap **Edit Start** or **Edit End** at the bottom of the screen to adjust the start point or end point of the selected notes (without changing their position) using the **data dial** or **–/+** buttons.

    Tap **Transpose** at the bottom of the screen to transpose the selected notes up or down using the **data dial** or **–/+** buttons.

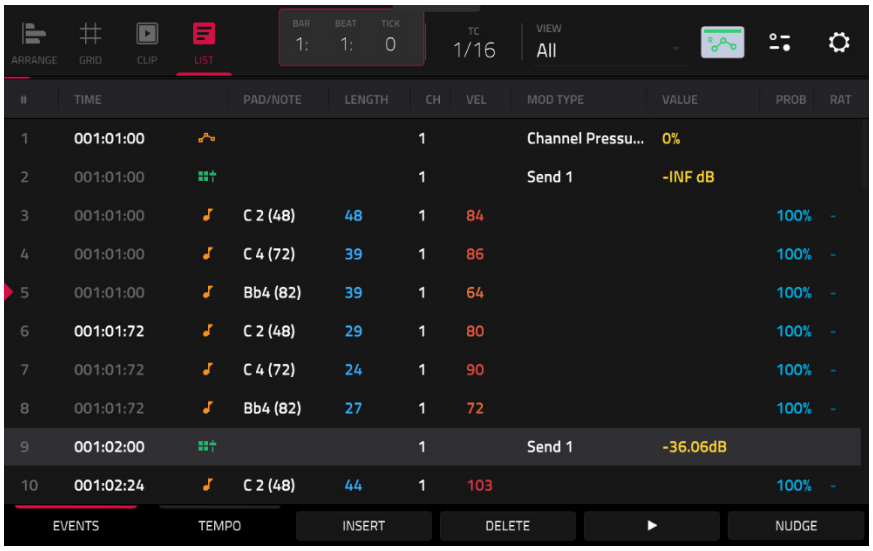
    Tap **Velocity** at the bottom of the screen to adjust the velocity of the selected notes using the **data dial or –/+** buttons. The numeric value will appear on the screen.

    Tap the **up arrow** (∧) button in the lower-right corner of the screen to show the **automation lane** below the grid. By default, the Velocity parameter is shown, with each note's velocity represented by a vertical bar. The higher and redder the bar is, the higher the velocity is. Double-tap the **Velocity** field to add a new automation parameter.

        When the automation lane is expanded, the **up arrow** (∧) button will turn into a **down arrow** (∨) button, which you can then tap to hide the automation lane.

See ***Operation*** > ***Modes*** > ***Grid View*** to learn more about this feature.

List Edit Mode



List Edit Mode is similar to the Grid View for MIDI tracks, but uses a scrolling list workflow to display MIDI note event parameters. This allows you to quickly filter your MIDI events by a particular type using the **View** menu or by the current playhead position using the **time counter** at the top of the display. You can also insert, delete, play and nudge note events using the buttons at the bottom of the display.

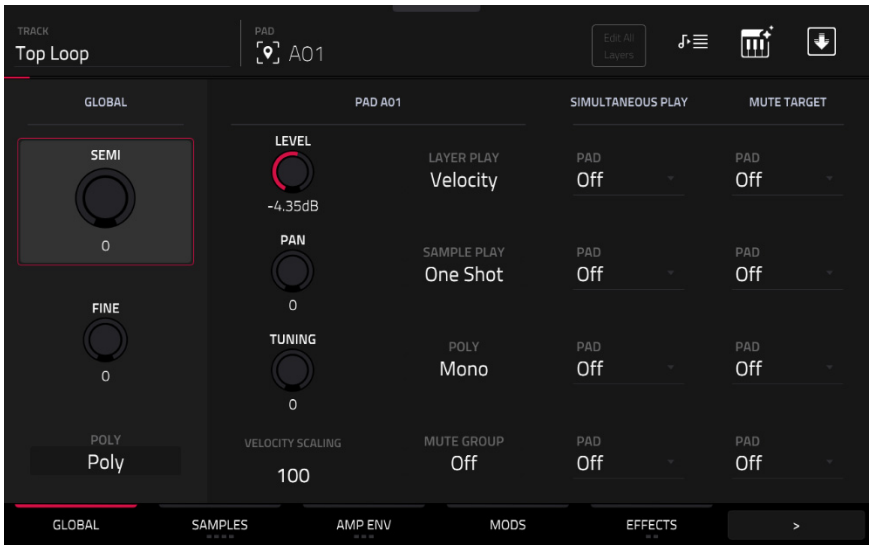
See ***Operation*** > ***Modes*** > ***List Edit Mode*** to learn more about this feature.

Track Edit Mode

In addition to editing MIDI note events using the clip edit modes, you can edit the parameters of a track using **Track Edit Mode**. This mode is not available for audio tracks.

To enter the Track Edit Mode, do either of the following:

- Press **Menu** and then tap **Track Edit**.
- Hold **Shift** and press **Clip**.



Now, let's make some simple edits to the sounds in a drum track. Try making these edits while a clip is playing to hear the difference.

1. In Clip Matrix Mode, press and hold the **Track Select** button for **Track 8 – Drum Kit** to select the track.
2. Press the **Note** button to set the **clip launch pads** to Note mode. The lower left quadrant will now show a typical 16-pad drum kit.
3. Press the kick drum pad (A01) to select it.
4. In the **Global** tab of Track Edit Mode, adjust the **Level** knob up or down.
5. Press the snare drum pad (A02) to select it.
6. Tap and drag the **Pan** knob up or down to adjust the stereo panning. We recommend spreading the panning of the bright sounds (e.g., cymbals, snare drum) a little.
7. Press the hi-hat pad (A03) to select it.
8. Tap the **Samples** tab so the first square under it is lit.
9. Use the **Semi** and **Fine** fields to adjust the tuning of the sample.

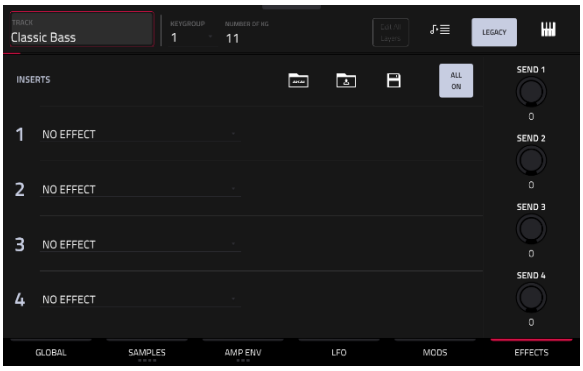
You can also apply effects to a track with Track Edit mode. Let's try adding an effect to the bass track.

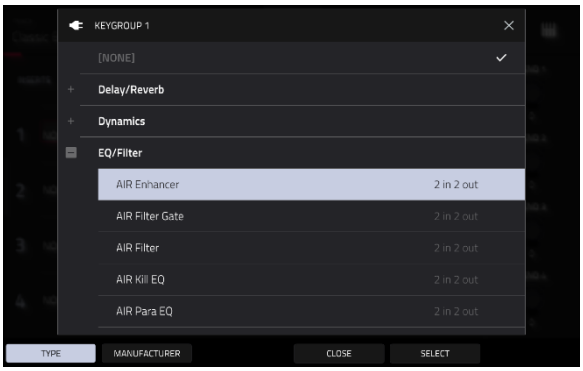
1. While in Track Edit Mode, press and hold the **Track Select** button for **Track 6 – Classic Bass** to select the track.
2. Tap the **Effects** tab at the bottom of the screen to view the Insert Effects tab.
3. Double-tap the first effect slot. A list of effects will appear.
4. Swipe up or down to move through the list.
5. **To load an effect**, double-tap it. Alternatively, tap it once and then tap **Select** or push the **data dial**. Let's try adding the **AIR Enhancer**.
6. **To close the list,** tap **Close**.
7. Now that the effect has been added to the bass track, you can adjust its parameters to your liking.

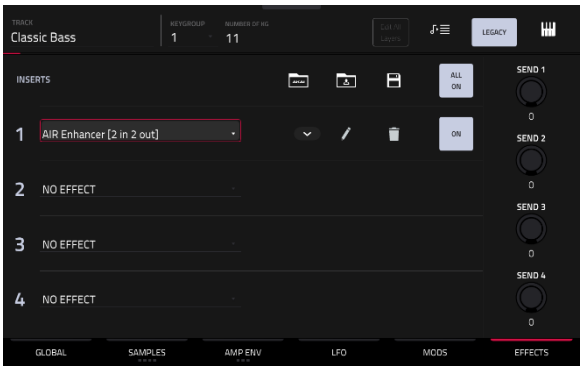
   To adjust the effect's parameters, tap the **pencil icon**.

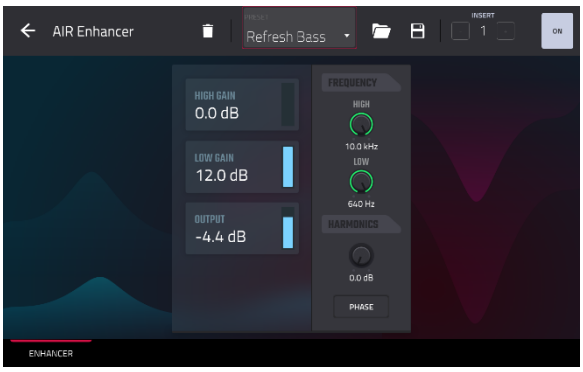
   To adjust a parameter's value, tap and drag your finger on a slider. Alternatively, tap the parameter and use the **data dial** or **–/+** buttons.

   To empty the effect slot, tap the **trash can icon**. Switch the effect on or off by tapping the **On**/**Off** button for the slot.









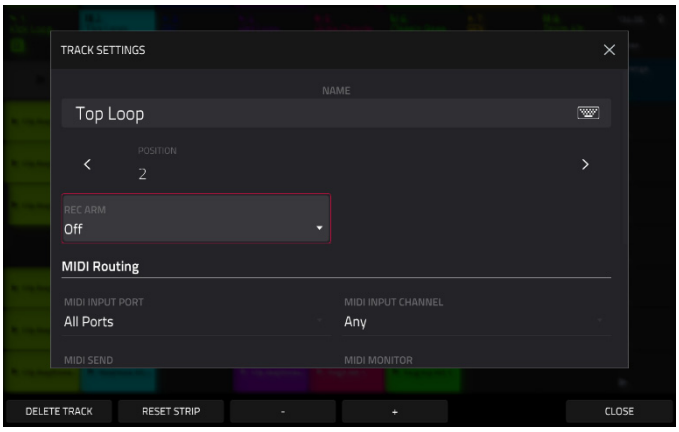
When a Plugin track is selected, Track Edit Mode shows the parameters of the loaded plugin.

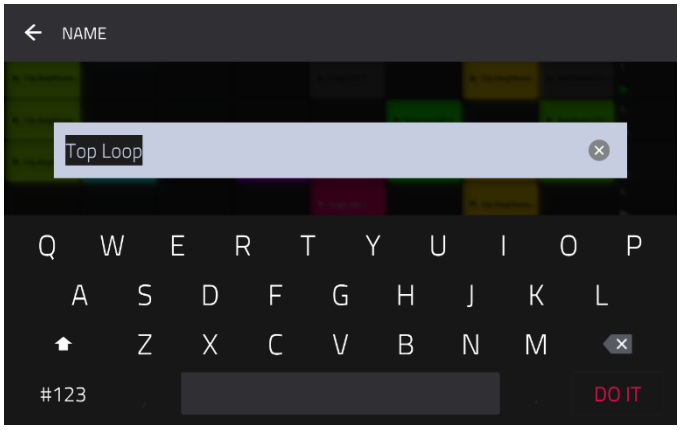
1. Press **Matrix** to enter Clip Matrix Mode.
2. Press and hold the **track selector button** for **Track 5 – Hype Chords**.
3. Launch the first clip in **Track 5 – Hype Chords**.
4. Enter Track Edit Mode.
5. While the clip is playing, try making edits to the various plugin parameters. Use the tabs at the bottom of the page to view different sets of parameters.

See ***Operation*** > ***Modes*** > ***Track Edit Mode*** to learn more about this feature.

Renaming & Saving

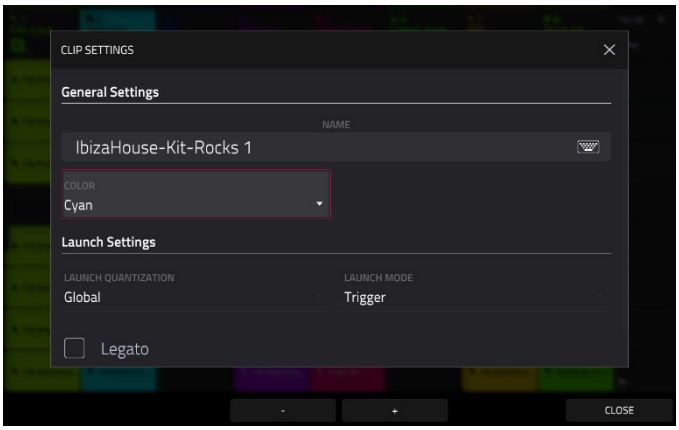
After making changes to clips and tracks, you may want to do some renaming and save your project before going further.

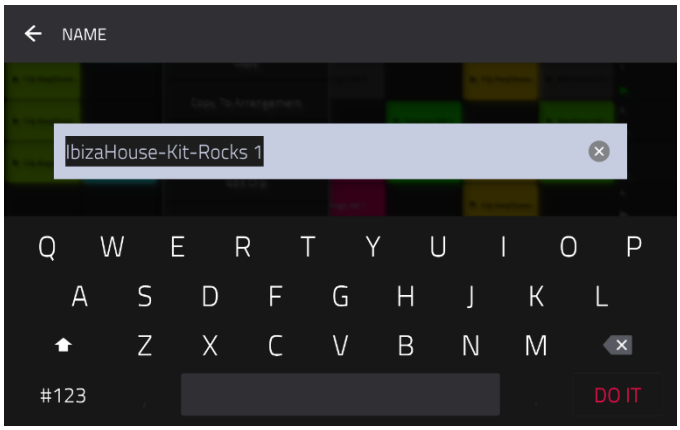




To rename a track:

1. Press **Matrix** to enter Clip Matrix Mode.
2. Double-tap the track name at the top of the display.
3. Under **Name**, tap the keyboard icon.
4. Use the virtual keyboard that appears to enter a new name (e.g., Synth Lead), and then tap **Do It**.



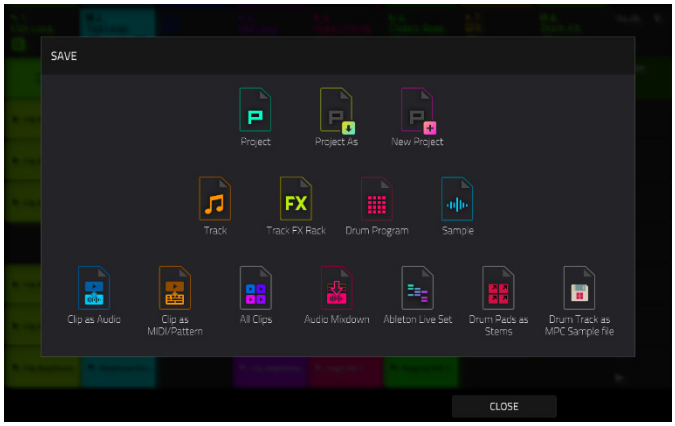


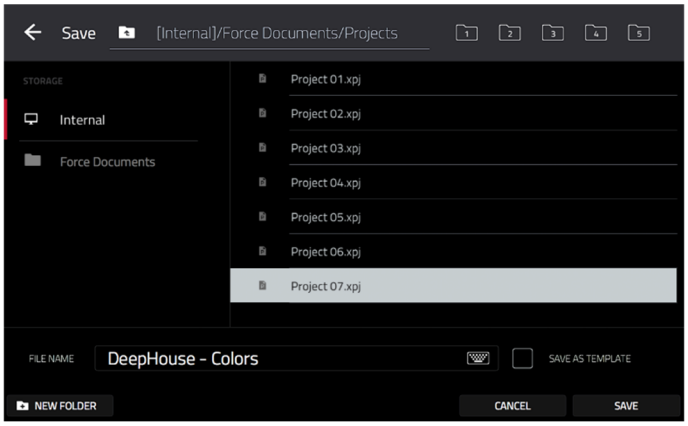
To rename a clip:

1. Press **Matrix** to enter Clip Matrix Mode.
2. Hold **Edit** press a **clip launch pad**.
3. In the window that appears, tap the keyboard icon next to **Name**.
4. Use the virtual keyboard that appears to enter a new name (e.g., Drum Fill), and then tap **Do It**.

Now that we've made changes to our demo, this would be a good time to save as a new project. You can save your project by doing either of the following:

- Press **Menu** to show the Menu and tap **Save** at the bottom of the screen.
- Press the **Save** button on Force to open the Save window. Then, select **Project As**.





In the Save screen, do any of the following:

To select the storage device you want to view, tap it in the **Storage** column on the left.

Internal is the internal drive of Force.

Force Documents is a shortcut to the **Force Documents** folder on the internal drive of Force.

If you have storage devices connected to the USB ports or SD card slot of Force, they will appear in this column, as well.

Double-tap a folder to enter it. Alternatively, turn the **data dial** or use the **–/+** buttons to move through the list, and press the **data dial** to enter a folder. You can also tap one of the five **folder buttons** in the upper-right to jump immediately to those pre-assigned file paths (see ***Operation*** > ***Modes*** > ***Browser*** to learn how to do this).

Tap **New Folder** to create a new folder. Use the virtual keyboard that appears to enter a name, and then tap **Do It**. You will immediately enter the new folder.

Tap the **folder/↰ icon** in the upper-left corner to move up one folder level.

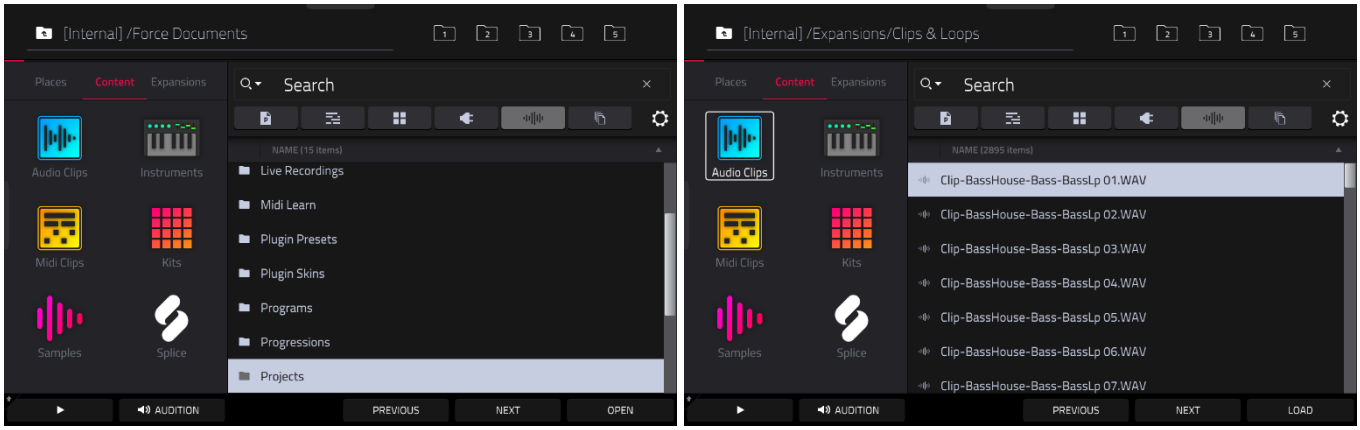
Tap the **File Name** field at the bottom of the screen to name the file, and use the virtual keyboard that appears.

Tap **Save** to save the file.

Tap **Cancel** to cancel and return to the Menu. Alternatively, tap the **← icon** in the upper-left corner.

Using the Browser

Force's Browser is where you can browse and load clips, samples, instruments and more from Force's internal library, as well as the library of any connected devices.



To open the Browser, do either of the following:

- Press **Menu** to show the Menu, and tap **Browser**.
- Press **Load**.

Let's try creating a new drum track and loading samples to it.

1. Press **Matrix** to open Matrix view.
2. Use the **right cursor** to scroll the Matrix view all the way to the right, until the last column shows a **+** sign above the clips.
3. Tap the **+** symbol to open the Add Track window. Alternatively, you can press and hold the **Track Selector** button under an unused track to open the Add Track window.
4. Select **Drum** to create a new drum track.
5. Set the pads to **Note** mode by pressing the **Note** button.
6. Tap a pad to select it. While in the Browser, the selected pad will be lit bright white. Since we are creating a drum kit, start by tapping the bottom-left pad.
7. To search for drum samples, first open the **Content** tab, then select **Samples**.
8. Start by searching for a kick drum sound. Tap in the **Search** bar, then use the keyboard that appears to type "kick" and tap **Do It** to perform the search. A list of all kick drum samples will now appear.
9. To load a sample, tap the **Load** button.
10. You can browse and preview samples in two ways:

    Turn the data dial to scroll through the list, and tap the **Play** button to preview the sample. You can enable auto-preview by tapping the **Speaker** icon and tapping the **Auto** button so it is highlighted.

    You can also quickly audition samples by using the **Previous** and **Next** buttons on the display, or the **–** and **+** buttons on Force. When you move to a new sample, it will automatically be loaded to the selected pad. If you decide to not use the sample, the old sample will automatically be deleted when a new one is loaded to the same pad.
11. Repeat this process to add a snare, hi-hat or anything else you can think of to your drum kit.

You can use this same general process for browsing and loading other files such as audio or MIDI clips, instruments, kits and projects.

See ***Operation*** > ***Modes*** > ***Browser*** to learn more about this feature.

Mixing Tracks

Force's mixer allows you to adjust parameters such as level, stereo panning and routing the same way you would with a traditional mixer or digital audio workstation.

To open the Channel Mixer, press **Mixer**. Alternatively, press **Menu** and tap **Mixer**.

The Channel Mixer contains four tabs of pages that let you control different settings for the tracks and buses. Tap and drag your finger to scroll through available tracks, or use the **cursor** buttons.

Let's start with the **Pan & Volume** tab. Tap the tab at the bottom of the display to select it. Launch a row in your project and try making a few of the following adjustments to the tracks:

- **To adjust the track volume,** tap and drag your finger on the volume slider, or tap it and then use the **data dial** or **-/+** buttons.
- **To adjust the track panning,** tap and drag your finger on the Pan slider, or tap it and then use the **data dial** or **-/+** buttons.
- **To mute or solo the track,** tap the **M** or **S** buttons, respectively.
- **To give a track a crossfader assignment,** tap the **A** or **B** buttons at the bottom of the display.

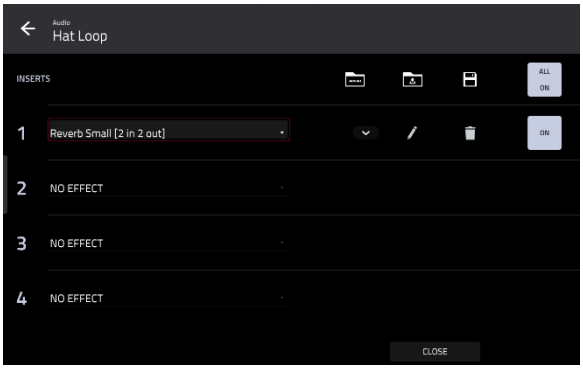
Next, tap the **Effects** tab. Let's try adding an insert effect to a track:

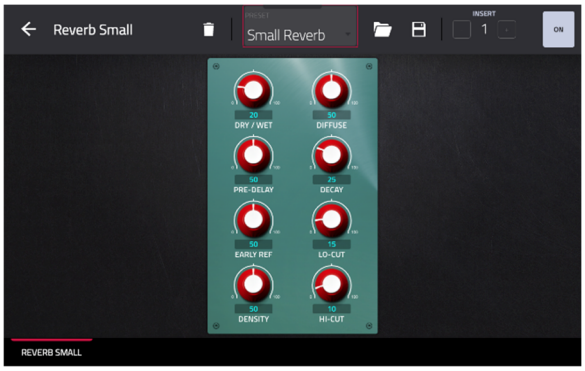
1. Tap the **Inserts** button in **Track 4 – Hat Loop** to open the Inserts window. Empty insert slots below this button are marked with a **+** sign.
2. Double-tap the first effect slot. A list of effects will appear.
3. Swipe up or down to move through the list, or turn the **data dial**.
4. **To load an effect**, double-tap it. Alternatively, tap it once and then tap **Select** or push the **data dial**. Let's add the **Reverb Small** effect.
5. **To close the list,** tap **Close**.
6. Now that the effect has been added to the track, you can adjust the settings to your preference.

   To adjust the effect's parameters, tap the **pencil icon**.

   To empty the effect slot, tap the **trash can icon**. Switch the effect on or off by tapping the **On**/**Off** button for the slot.

See ***Operation*** > ***Modes*** > ***Channel Mixer*** to learn more about this feature.





Cueing Tracks

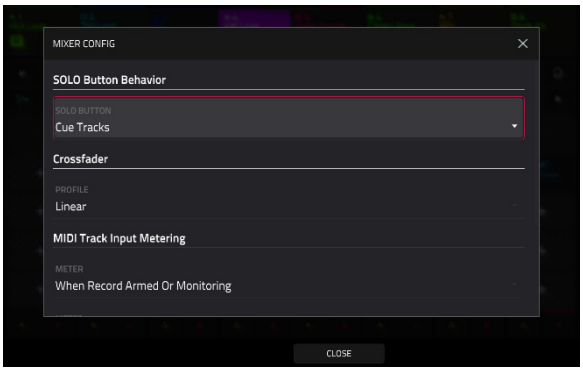
In addition to using the **Solo** button to isolate a track, you can use it to cue tracks. This allows you to preview the sound of a track using the **Phones** output or **Outputs 3/4** before sending it to the main mix for your audience to hear.

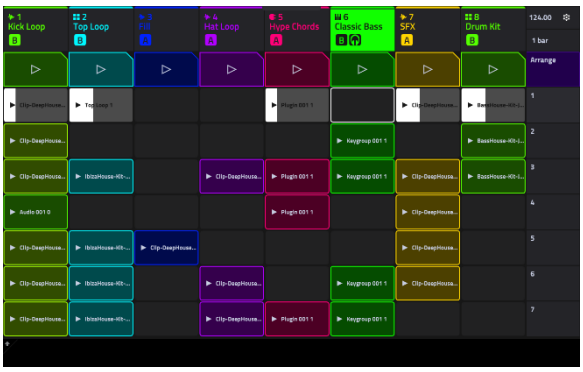
To cue tracks:

1. Connect headphones to the **Phones** output, or connect **Outputs 3/4** to your monitors, mixer, etc.
2. Open the **Mixer Config** window, either by pressing **Settings** while viewing the Mixer, or by holding **Shift** and pressing **Solo** or **Mute**.
3. Set the **Solo Button Behavior** to **Cue Tracks**.
4. Adjust the **Cue Mix** knob so that it is between **3/4** and **Master**. You can adjust the exact mix to your preference. Turn the **Cue Mix** knob toward **3/4** for more of the cued track audio, or more toward **Master** for more of the main mix audio.
5. Press the **Solo** button.
6. Press the **Track Assign** button for the track you would like to assign to the cue mix.

   When viewing certain pages of the Mixer, the **S** icon in the channel strip will become a **Headphones** icon that is highlighted when enabled.

   When viewing the Matrix, a **Headphones** icon will be added to the track heading.
7. Launch a clip in the track you have cued. You should hear both the main mix and the audio of the cued track.
8. Using headphones attached to the **Phones Output** on Force's front panel, and/or speakers connected to **Outputs 3/4**, listen to the cued audio to make sure it is in sync with your main mix.
9. When you are ready to send the track audio to the main mix, press the **Solo** button and the **Track Assign** button for the track to disable cueing.

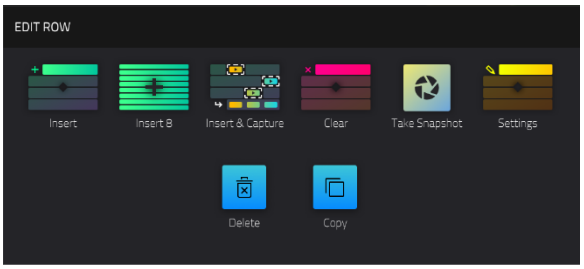


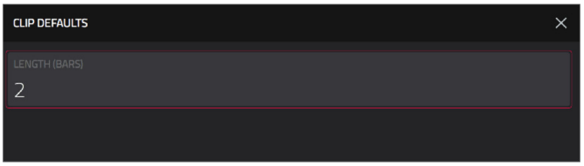


Recording Clips

Now that you're more familiar with the basics of clip launching and editing, let's try recording new clips to add to the project.

Before recording, let's create a new row and an empty clip to record into:





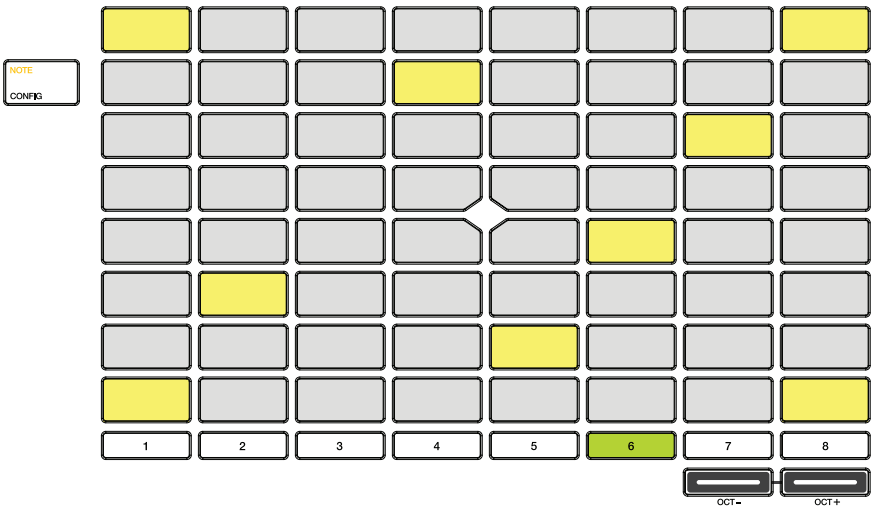
1. Press **Matrix** to open Clip Matrix Mode on the display.
2. Hold **Edit** and press the top **Row Launch** button (below the **Arrange** row launch) to open the **Edit Row** window.
3. Tap the **Insert** icon. A new row will be created at the top of the Matrix.
4. On the display, double-tap an empty clip slot in your new row to create a new clip. New clips are always created at the default length, which can be set by holding **Shift** and holding the second **Track Assign** button.

   Alternatively, you can create an empty clip using the **clip launch pads**. First, press the **Launch** button to enter Launch mode. Then, hold the **Select** button and double-tap an empty pad.

Recording with Note Mode

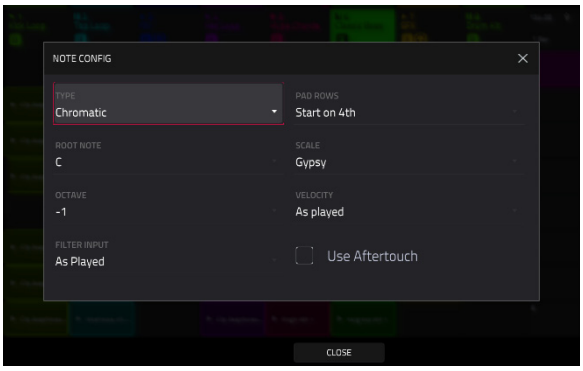
In addition to using the clip launch pads for launching clips, you can use them to record notes chromatically as you would use a MIDI keyboard. This is enabled by pressing the **Note** button to enter **Note Mode**.

In the **Deep House – Colors** project, select **Track 6 – Classic Bass** and press **Note** to view Note Mode in action. In Note Mode, the appearance of the pads will change. The root note or chord will be lit in one color, and the notes or chords in between will be lit white.



To configure the pads in Note Mode, hold **Shift** and press **Note** to open the **Note Config** window. In this window, you can set the function of the pads, from playing notes in a scale to playing full chord progressions. For now, let's leave **Type** set to **Scales** and set **Pad Rows** to **Start on root**.

See ***Operation*** > ***General Features*** > ***Pad Modes*** > ***Note Mode*** to learn more.



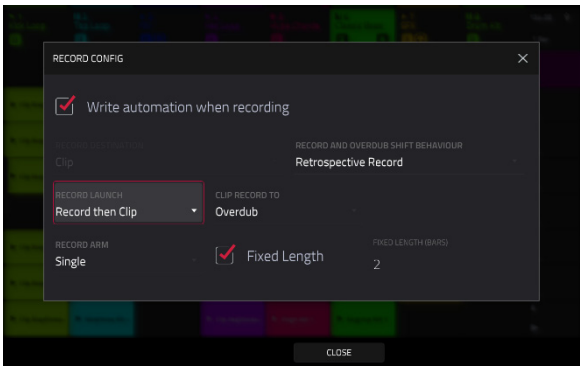
Now, let's prepare the clip and track for recording:

1. Create an empty clip in **Track 6 – Classic Bass** following the directions above.
2. Launch the clip to make sure it is playing.
3. Press the **Rec Arm** button, then press the sixth **Track Select** button to record enable the track. A record symbol will appear under the track name.
4. Finally, when you are ready to record, press the **Rec** button. On the display, the selected clip will turn red and show **Overdub**.
5. Try recording a simple bassline using the **clip launch pads** in Note mode. Press **Undo** at any time to undo any recorded note events.
6. You have finished recording, press the **Rec** button again to stop recording.

You can also change the recording configurations to suit your preferences.

1. Press **Matrix** to open Clip Matrix Mode on the display.
2. Press and hold **REC**, and in the window that appears, tap **Settings** to open the Record Configuration window. Alternatively, hold **Edit** and press **Record**.
3. Use this window to adjust recording setting such as automation recording, record launch behavior, record arm behavior, and fixed clip length.

   See the **Record Configuration** section in the ***Clip Matrix Mode*** chapter to learn more about these settings.
4. When you are finished, tap **Close** to close the Record Configuration window.

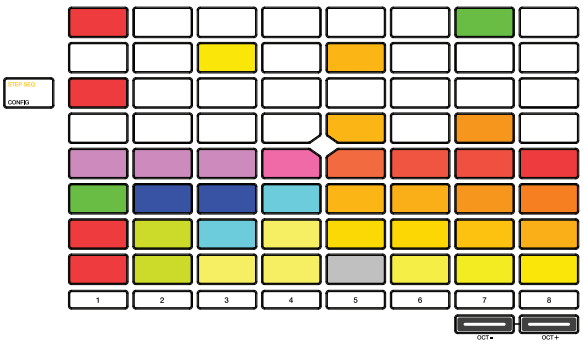


Recording with the Step Sequencer

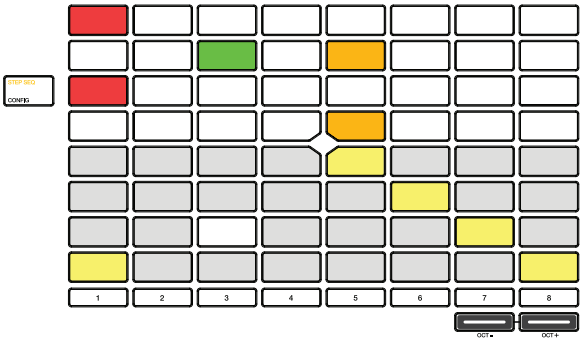
When sequencing drums, you can use Force's built-in **Step Sequencer** to quickly enter note events by using the clip launch pads as “step buttons,” simulating the experience of a traditional step-sequencer-style drum machine.

When using the Step Sequencer, you can assign the clip launch pads to a number of different modes depending on the type of track. These include:

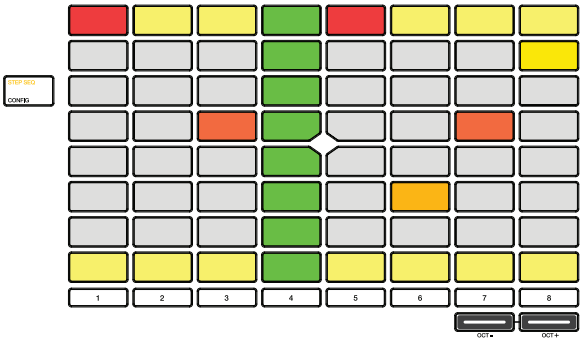
Drum: In this mode, the top four rows of pads represent each step in the clip. The bottom four rows of pads are split into two 4x4 quadrants: the left quadrant is used for selecting and triggering drum sounds, while the right quadrant is used to select the velocity of the note events. This mode is most useful for recording drum parts with the step sequencer.



Melodic: In this mode, the top four rows of pads represent each step in the clip. The bottom four rows of pads are notes in the set scale, which can be adjusted by holding **Shift** and pressing **Step Seq**. This mode is most useful for recording melodic parts such as a bassline with the step sequencer.



Lanes: In this mode, each column of clip launch pads represents a step in the clip. The eight rows represent eight different pads. You can set the base pad by holding **Shift** and pressing **Step Seq**.



See ***Operation*** > ***General Features*** > ***Pad Modes*** > ***Step Sequencer*** to learn more about the other Step Sequencer pad modes.

To cycle between these modes, press the **Step Seq** button. You can also press and hold the **Step Seq** button while in any Step Sequence mode to quickly select another mode.

Let's use the Drum mode to sequence a drum pattern using the Step Sequencer.

1. Select **Track 2 – Top Loop** and add a new empty clip as described above.
2. Make sure the clip you are recording into is playing, otherwise you won't hear the pattern you are creating.
3. Press **Menu** and then tap **Step Sequencer** on the display.
4. Press the **Step Seq** button until **Drum** is shown on the display. The pads will now be in Drum mode.
5. Select the bass drum sound by pressing its pad (A01).

   Tip: Press and hold the **Clip Select** button and then press a pad to select it without sounding the sample.
6. Use the top four rows of **clip launch pads** to sequence a simple bass drum pattern.

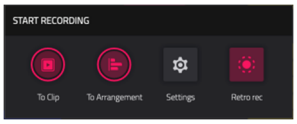
   You can also change portion of the clip you are viewing and editing by pressing and holding the **Step Seq** button and using the top row(s) of **clip launch pads**. The number of pages available depends on the selected step size and the number of bars in the clip.
7. Next, select a snare drum sound (A02) and sequence a pattern.
8. Finally, select a hi-hat sound (A03) and sequence a pattern. Try using the velocity pads to vary the velocity of the hi-hat sounds to make the clip sound more realistic.

See ***Operation*** > ***General Features*** > ***Pad Modes*** > ***Step Sequencer*** and ***Operation*** > ***Modes*** > ***Step Sequencer*** to learn more about this feature.

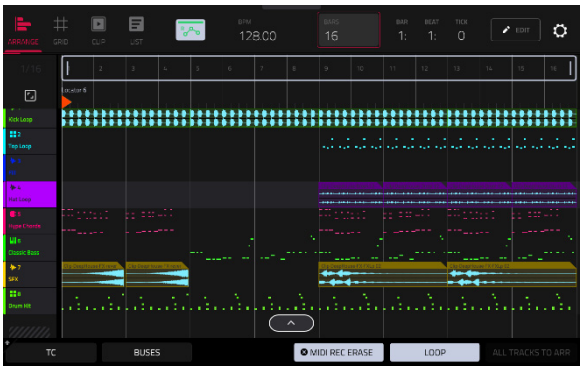
Working with the Linear Arranger

To take your track further, you can use ***Arrange Mode*** to record, edit, and arrange your sequences on a DAW-style linear timeline. Now that you've recorded a few tracks, open Arrange Mode by pressing **Menu** and then tapping **Arrange**.

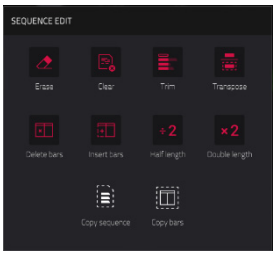
Let's start by recording a clip performance into the arranger.



1. Press and hold the **REC** button to open the Start Recording Selector window, and then tap **To Arrangement**.
2. Trigger a clip or row to begin recording. As clips are triggered, Arrange Mode will draw regions containing audio or MIDI data into the track lanes.
3. Continue triggering clips and rows until you've built a short sequence of 16 bars.

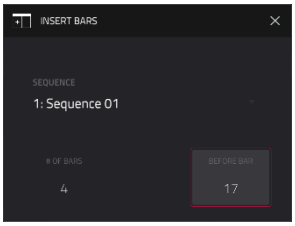


After recording, you can use the Arrange sequence editing tools to apply further changes to your linear arrangement, such as expanding the length of the sequence.



1. Tap the **pencil Edit** button at the top of the Arrange screen to open the Sequence Edit window.

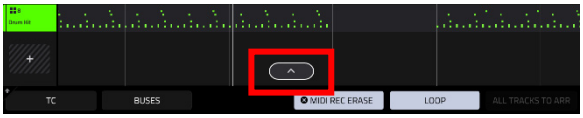
2. Tap the **Double length** button to instantly double the length of your sequence, including all recorded events. In this example, the sequence has been doubled from 2 bars to 4 bars. We will repeat this process again to double the sequence from 4 bars to 8 bars.



3. Next, let's try adding a new section in between these bars. Tap the **pencil Edit** button again, and this time select **Insert Bars**. Set the **# of Bars** field to **2**, set the **Before Bar** field to **5**, and then tap **Do It**. This will add two blank bars between the two sixteen-bar phrases.

Next, let's fill in these empty bars in two ways. Perhaps you want to continue the same drum beat over these two bars, but change the bass line. We can start by copying over notes from our drum track into this section. You can do this using the **Copy Events** function in the Sequence Edit window, but it is also easily accomplished using the Arrangement Track Editor.

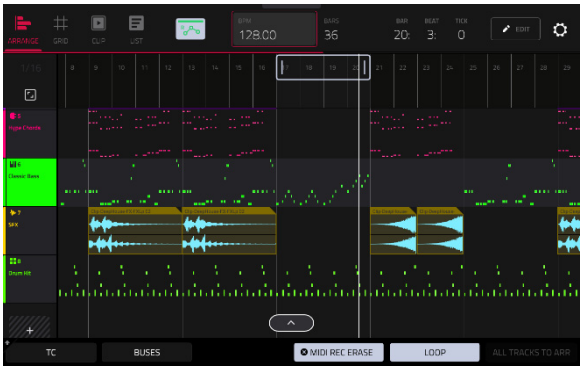
1. Tap your drum track to select it.
2. At the bottom of the Arrange window, tap the up arrow (^) to expand the Arrangement Track Editor. This is a fully featured grid editor (the same as ***Grid View*** mode) where you can add, remove, and edit note events.
3. Tap the **box icon** to use selection mode.
4. Tap and drag your finger over the recorded drum notes in the two bars before your empty bars.
5. Once selected, press and hold **Shift** on your Force, and then tap **Duplicate**. This will instantly duplicate the selected events on the next available beat marker. As needed, tap **Nudge** at the bottom of the screen to enable note nudging, and then turn the **data dial** on your Force to adjust the position of the duplicated notes so they start on the downbeat of the bar.



You can also record into a section of the arrangement with a new performance.

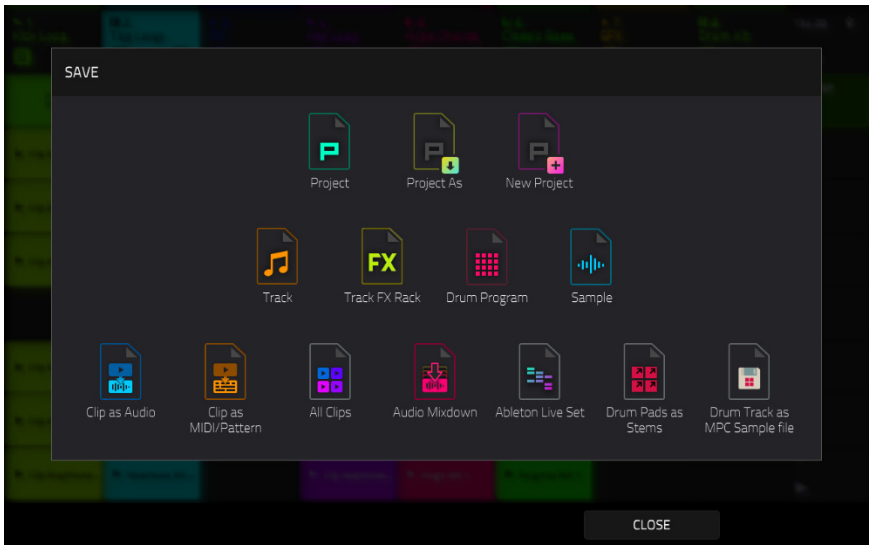
1. Tap the **Loop** button at the bottom of the screen to activate loop.
2. Set the **Loop Start** and **Loop End** points by tapping and dragging the beginning and end of the loop region in the timeline. Tapping and dragging in the middle of the loop region moves both the Loop Start and Loop End points at the same time. Move the loop so it covers the two new bars we created.
3. Select the track where you want to record by tapping the track header on the left side of the screen. If the ● **SEQ REC ARM** button was already enabled in Main Mode, this will automatically enable this track for recording. You can also double-tap the track header to bring up the Track Settings window, and then set the **Rec Arm** field to **On**.
4. Press the **REC** button to arm recording and then **Play** to begin recording. The recording will begin at the Loop Start point, and once it reaches the Loop End Point, will switch to Overdubbing mode.
5. Record a new melody using the Force pads.

   If you made a mistake while recording, you can simply press **UNDO** on your hardware to undo the last event (or events) recorded if playback is stopped. If you are currently recording, the **UNDO** button will flash, and pressing it will erase **all** events from that recording (i.e., since **PLAY** or **PLAY START** was pressed).



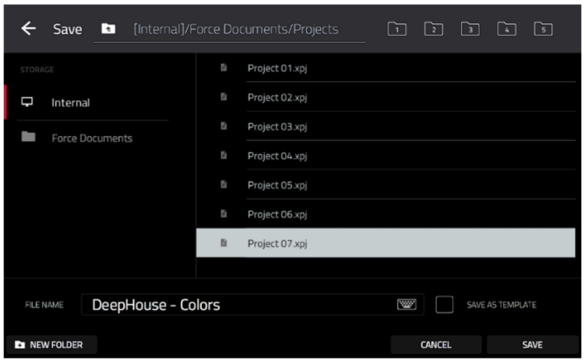
Saving Your Work

Now would be a good time to save your project. Press **Menu** to show the Menu, and tap the **Save** at the bottom of the screen to open the **Save** window.



The options displayed in this window may differ based on the type of track you have selected. For now, simply tap the **Project As** button to save your project as a new file. A new save window will appear where you can choose your save location and name your file.

To select the storage device you want to view, tap it in the **Storage** column on the left.



Internal is the internal drive of your Force.

Force Documents is a shortcut to the **Force Documents** folder on the internal drive of your Force.

If you have storage devices connected to USB ports or SD card slot of your Force, they will appear in this column, as well.

Double-tap a folder to enter it.

Tap **New Folder** to create a new folder. Use the virtual keyboard that appears to enter a name, and then tap **Do It**. You will immediately enter the new folder.

Tap the **folder/↰ icon** in the upper-left corner to move up one folder level.

Tap the **File Name** field at the bottom of the screen to name the file using the virtual keyboard that appears.

Tap **Save** to save the file.

Tap **Cancel** to cancel and return to the Menu. Alternatively, tap the **← icon** in the upper-left corner.

Other Features Explained

This chapter describes various advanced features. For a fuller explanation of these features, please refer to their corresponding sections in the ***Operation*** chapter.

Main Mode

Force now includes **Main Mode**, which provides visual feedback and fast access to many of its key features.

The image below shows an overview of Main Mode. You can view more information about all the features mentioned below in the ***Main Mode*** chapter later in this User Guide.

The **Toolbar** shows the Project name, Time Counter, Timing Correct, Metronome, Automation, and MIDI status.

The **Sequence** section shows the current sequence and its information.

The **Track / Arrangement Views c**an be toggled between to display essential details for each track type and the recorded events of the track on the linear timeline, respectively. When a new project is loaded, the **Track** view will be selected.

Try selecting one of the drum tracks in the **Deep House - Colors** Demo project. Once selected, you can hit each pad (while in **Note** mode on your Force) to hear the assigned sample and view a simple waveform editor, where you can adjust sample start and end points. Double-tapping this area will take you directly to ***Track Edit Mode***, where you can apply more advanced editing techniques.

Next, tap the **Arrangement** header to show the Arrangement view. Here, you can see all the MIDI or audio events recorded on the selected track. Double-tapping this area will open the full ***Grid View***, where you can edit your MIDI notes or audio events.

The new **Mixer Strips** allow you to effortlessly manage all your mixing tasks with access to important settings for the current pad, track, and main output.

The **Function buttons** at the bottom of the screen provide quick access to different functions in Main Mode, while the **Shortcuts** provide quick access to other Force modes.

Q-Links

Your Force features Q-Link knob controls, which allow you to quickly manipulate various parameters on screen or in your project.

The current Q-Link control parameters are shown on the display strips above each knob, and you can use the Q-Link buttons to switch between the different Q-Link modes.

Q-Link controls are divided into two banks of eight, which can be cycled through using the **Knobs** button, and the current Q-Link control parameters are shown on the display strips above each knob.

You can also press and hold the **Knobs** button to open the Q-Link window, where you can switch between Q-Link modes and view the current Q-Link controls.

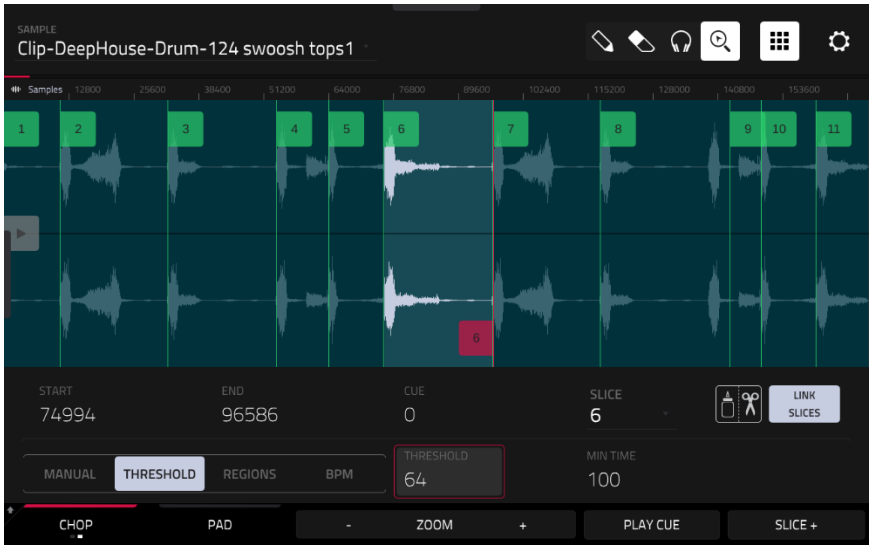
See the ***Q-Link Edit*** section to learn more about how to use Q-Link knobs.

Drum Loops & Chop Mode

Modern music producers often use drum loops to add grit and nuance to programmed beats. This section explains how to use Sample Edit Mode to work with drum loops.

Use the ***Browser*** to locate a drum loop. If you have a pad selected in a Drum Track, you can tap **Load** to instantly add it to the kit. You can also tap **Load to Pool** to load it to the general sample pool of your project. The loop does not have to match the tempo of anything in the project.

To enter Sample Edit Mode, press **Menu**, and then tap **Sample Edit**.

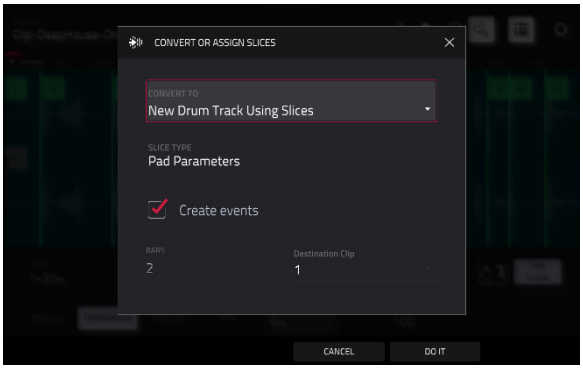


1. Tap the **Sample** field at the top of the screen, and then use the **data dial** or **–/+** buttons to select a loaded drum loop. You can scroll through all loaded samples in the project. Alternatively, double-tap the **Sample** field, and then tap a sample to select it.
2. Tap the **Trim**/**Chop** tab in the lower-left corner to switch between Trim Mode and Chop Mode. Select Chop Mode, which will let us cut the drum loop into slices.
3. Tap **Threshold**, and then tap the **Threshold** field to the right of it. Use the **data dial** or **–/+** buttons to select a value. Alternatively, double-tap the **Threshold** field and use the numeric keypad on the screen. The lower the threshold, the more slices will be created. Be sure to select a value so that every transient peak of the drum loop has a corresponding a slice marker.

   Tip: Each slice will be automatically assigned to a pad: **Pad A01** plays Slice 1, **Pad A02** plays Slice 2, etc. Press each pad to play the slice with the same number.

Let's use this chopped sample to create a new track in which each of these slices is an individual sample. We can also automatically create corresponding note events to play back these slices sequentially.

1. Press and hold **Shift** and then tap **Convert** at the bottom of the screen to enter the **Convert or Assign Slices** window.
2. Tap the **Convert To** field, and then use the **data dial** or **–/+** buttons to select **New Drum Track Using Slices**.
3. Make sure **Create Events** is checked. If it is not, tap it.
4. Tap the **Bars** field, and then use the **data dial** or **–/+** buttons to select how many bars the entire sample should use in your track.
5. Use the **Destination Clip** field to select whether the new events will be added to a new clip in the new track, or directly to the linear Arrangement.
6. Tap **Do It** to proceed. Each slice will be assigned to a pad, and each pad will have a recorded note event in the track. When you play that track, it will play each pad (each slice) in the original order. Press **Menu** and then tap **Grid View** to see how the sample appears in your sequence.
7. Press **Play** and listen to how the drum loop matches your song tempo now.



You can also edit the note events of the drum loop slices—enter Main Mode to do this. A new track with the note events playing their corresponding slices has been automatically created. Tap the **TC/clock icon** at the top of the screen to use the ***Timing Correct (TC)*** window to quantize the note events so they fall on exact, even time intervals.

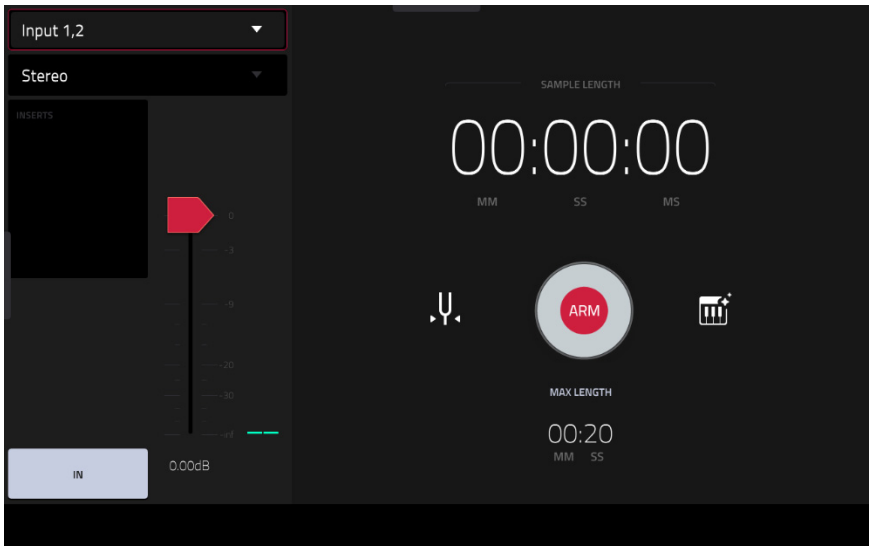
You can also rearrange the note events, thus creating a new playback order for the slices. You can also edit each slice or sample in ***Track Edit Mode***. You can add effects for slices or use the filter function to change the frequency range of a selected slice. You can even convert your chopped sample to an audio track instead, using the **Audio Track from Samples** option in the **Convert** menu. There are almost no limits to what you can do.

See ***Operation*** > ***Modes*** > ***Sample Edit Mode*** > ***Chop Mode*** to learn more about these features.

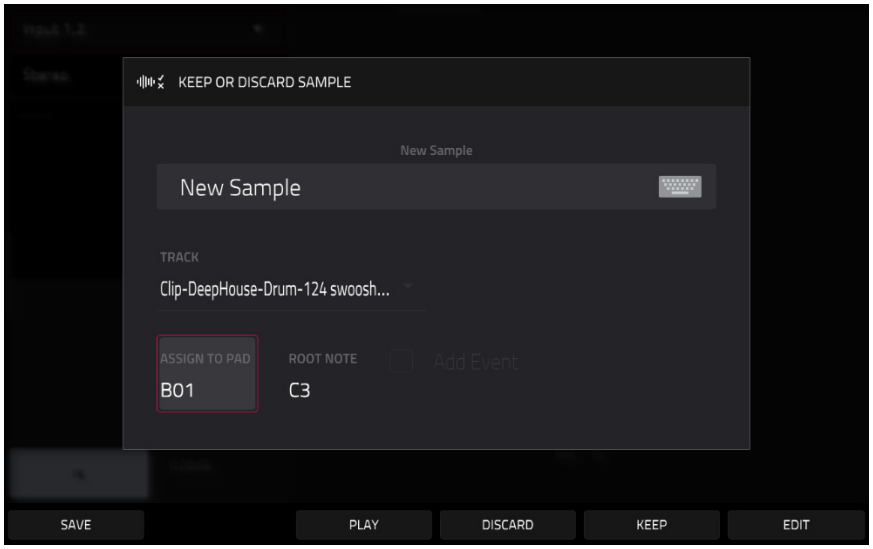
Sampling (Recording)

Earlier in this tutorial, we described recording audio from an external instrument directly into your arrangement. You can also record from an external instrument to create samples that can be used in other ways in your project. This can be done using the Sampler function.

To open the Sampler, press **Menu**, and then tap **Sampler**.



1. Connect an audio source to the input/inputs of your Force.
2. The **Input** ___ menu in the upper-left corner should be set to **Input 1,2** (the inputs of your Force). If it is not, then select **Input 1,2**.
3. Turn the respective **Gain** knob to set the input level while playing your audio source. You should now see the level in the meter. Make sure it does not exceed the maximum level (the meter should not be "peaking" constantly).
4. Tap and drag **threshold slider** to set the threshold. Alternatively, use the **data dial** or **–/+** buttons. Set it to a fairly low level (e.g., **-50 dB**).
5. Tap **Arm** to record-arm the Sampler.
6. Play your audio source. The Sampler will start recording immediately when the input level reaches the threshold value. Alternatively, tap the round **Record** button to manually start recording.
7. **To stop recording**, tap the round **Stop** button. The **Keep or Discard Sample** window will appear.



In the **Keep or Discard Sample** window:

Tap the **Name** field to name the new sample using the virtual keyboard.

Use the **Track** field to select the desired track. Tap to select it, and then use the **data dial** or **–/+** buttons to select the track. You can also double-tap this field to open the list of tracks, and then tap to select your track.

Use the **Assign To Pad** field to assign the sample to a pad in your track. You can tap this field and then press the desired **pad**, use the **data dial** or **–/+** buttons to select the desired pad number, or double-tap the **Pad** field, and then tap a pad number.

Use the **Root Note** field to set the root note for the sample. Tap the field and then then use the **data dial** or **–/+** buttons to select the desired note.

Tap the **Save** button at the bottom of the screen to save the sample.

Tap the **Play** button at the bottom of the screen to play the recording.

Tap the **Discard** button at the bottom of the screen to discard the recording and return to the previous screen.

Tap **Keep** at the bottom of the screen to confirm your selections.

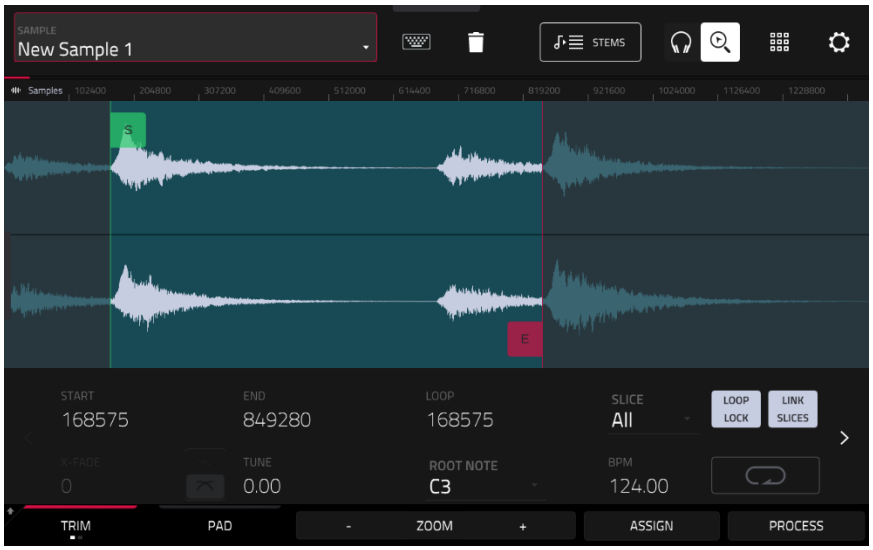
Tap the **Edit** button at the bottom of the screen to edit the sample in Sample Edit Mode.

See ***Operation*** > ***Modes*** > ***Sampler*** to learn more about this feature.

Sample Editing

You may need to edit your newly recorded samples using Sample Edit Mode.

To enter Sample Edit Mode, press **Menu**, and then tap **Sample Edit**.



In Sample Edit Mode:

Tap the **Trim**/**Chop** tab at the bottom of the screen to switch between Trim Mode and Chop Mode. In this example, use **Trim Mode**.

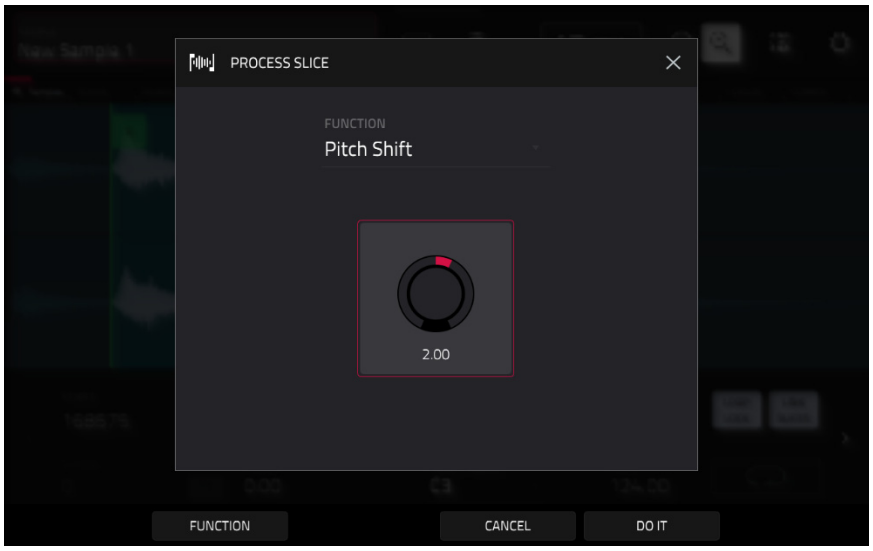
To set the sample's start point, use the **first** column of **Q-Link knobs** (when in the **Screen** Q-Link Edit Mode) to adjust the start point with varying degrees of resolution. Alternatively, tap and drag the **S** marker in the waveform. You can also double-tap the **Start** field and use the numeric keypad on the screen to enter a value (or tap the **Start** field and use the **numeric keypad**).

To set the sample's end point, use the **second** column of **Q-Link knobs** (when in the **Screen** Q-Link Edit Mode) to adjust the end point with varying degrees of resolution. Alternatively, tap and drag the **E** marker in the waveform. You can also double-tap the **Start** field and use the numeric keypad on the screen to enter a value (or tap the **Start** field and use the **numeric keypad**).

To hear your edits, press **Pad 10** to play the sample from the start point to the end point.

Let's apply some processing to the sample.

To open the Process Sample window, tap **Process** at the bottom of the screen.



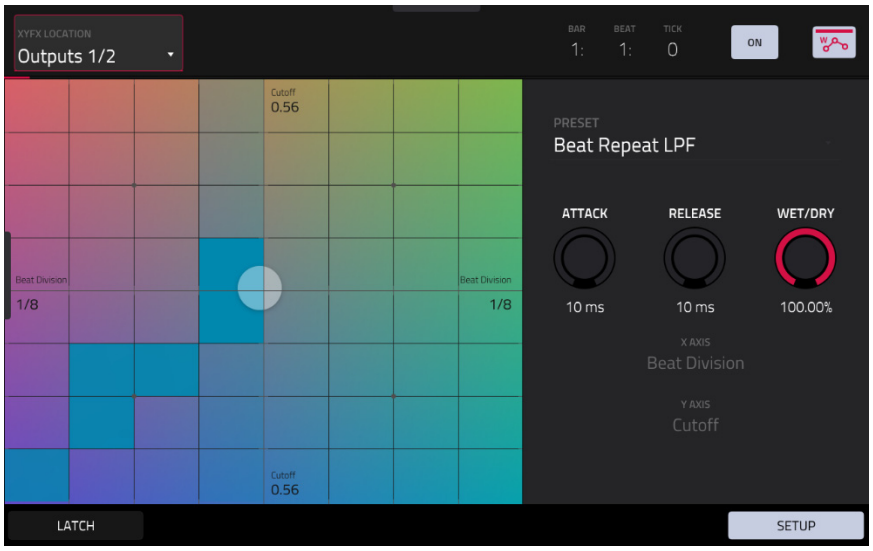
1. Use the **data dial** or **–/+** buttons to select the desired process in the **Function** field. Alternatively, tap **Function** or double-tap the **Function** field, and then tap the desired process. Let's select **Pitch Shift** to change the overall pitch of your sample. This will transpose the sample without affecting its length.
2. **To set the pitch shift amount**, tap and drag the **knob** in the center of the window up or down. Alternatively, use the **data dial** or **–/+** buttons.

   To make finer adjustments, double-tap the **knob** and adjust the larger version that appears. Tap anywhere else to return to the previous screen.
3. Tap **Do It** to confirm your selections, or tap **Cancel** to cancel the process.

See ***Operation*** > ***Modes*** > ***Sample Edit Mode*** to learn more.

Recording Automation with the XY Pad

Automating various parameters is a good way to add some motion and dynamism to your sequences.



1. Press **Menu**, and then tap **XYFX** to enter XYFX Mode.
2. Tap the **XYFX Location** field, and select **Track**. This will add the XY effect to the currently selected track.
3. When you first enter this mode in a project, you will be prompted to "load" XYFX to the track. Tap **Insert XYFX** to do this.
4. Tap **Setup** to show the Setup panel, which controls how the XY pad behaves.
5. Double-tap the **Preset** field, and tap an effect to select it. (These are just the effects available in XYFX Mode, not all Force effects.) Swipe up or down to view the complete list.
6. Tap and drag any of the knobs (**Attack**, **Release**, or **Wet/Dry**) up or down to set their values as desired. Below them, you can see what parameter the X axis and Y axis control.

   Note: XYFX uses an envelope to control how quickly the effect crossfades between the dry signal and wet signal. The **Attack** knob determines how long it takes the completely dry signal to reach the wet signal (determined by the **Wet/Dry** knob) after you touch the XY pad. The **Release** knob determines how long it takes the wet signal (determined by the **Wet/Dry** knob) to return to the completely dry signal after you touch the XY pad.
7. Tap the **automation button** to cycle through the available automation modes. Make sure the button is **red** (the **Write** (**W**) option).
8. Press **Play Start** to start recording.
9. As you record, move your finger over the **XY pad** on the screen. The changes in the sound are being recorded as automation of both the X axis and Y axis parameters.

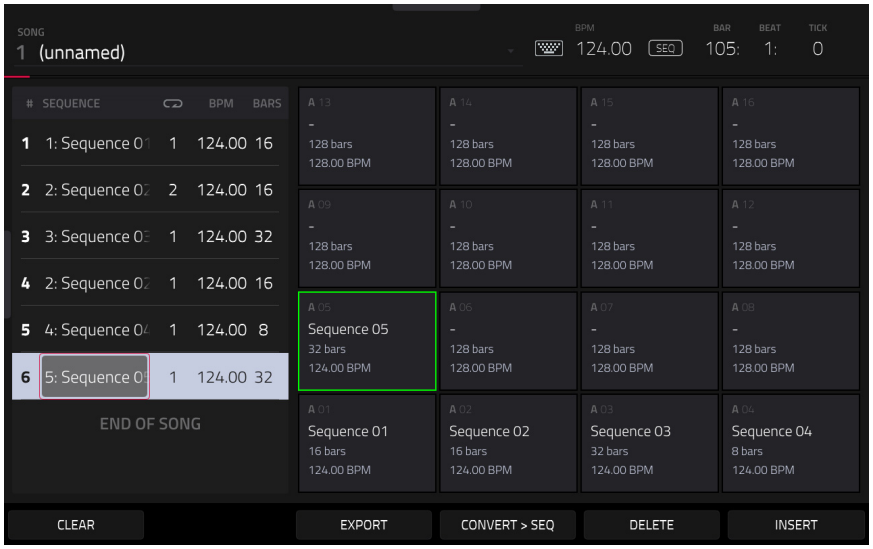
   Tip: While touching the **XY pad**, tap **Latch** in the lower-left corner to keep the marker on the XY pad even after you release it. The marker will remain there until you touch another part of the XY pad or until you tap **Latch** again.
10. When you are done recording, press **Stop**.
11. Tap the **automation button** to select the **green Read** (**R**) option. This ensures your track uses the automation you just recorded when you play it back.

See ***Operation*** > ***Modes*** > ***XYFX Mode*** to learn more about using this feature.

Creating a Song

As your project grows, you may have multiple sequences of music that you want to piece together into a larger song for exporting. This can be done using ***Song Mode***.

To enter Song Mode, make sure playback is stopped, then press **Menu**, and then tap **Song**.



In Song Mode, each of the sequences you've created in this project are assigned to a pad. The sequence playlist is to the left of the pads, showing the song's structure.

As a song plays, it moves through each step of the sequence playlist. Each step contains a sequence you assigned. Each step can be repeated, determined by the value in the **Repeat** column (the **repeat icon**; a value of **1** means the sequence will play through only once). The **Bars** column on the right indicates the length of that sequence.

Each step can be set to play its sequence at an independent tempo, determined by the value in the **BPM** column.

Important: Each sequence has its own tempo, while the project itself may use a different global tempo. The BPM value for each sequence may be different from the global tempo. As long as playback is set to follow the global tempo, each sequence's individual tempo will be ignored. By default, each project is set to use the sequence tempo. We recommend tapping the **SEQ**/**GBL** button at the top of the screen (so the button displays **GBL**) and entering a global tempo to ensure all sequences use the same tempo.

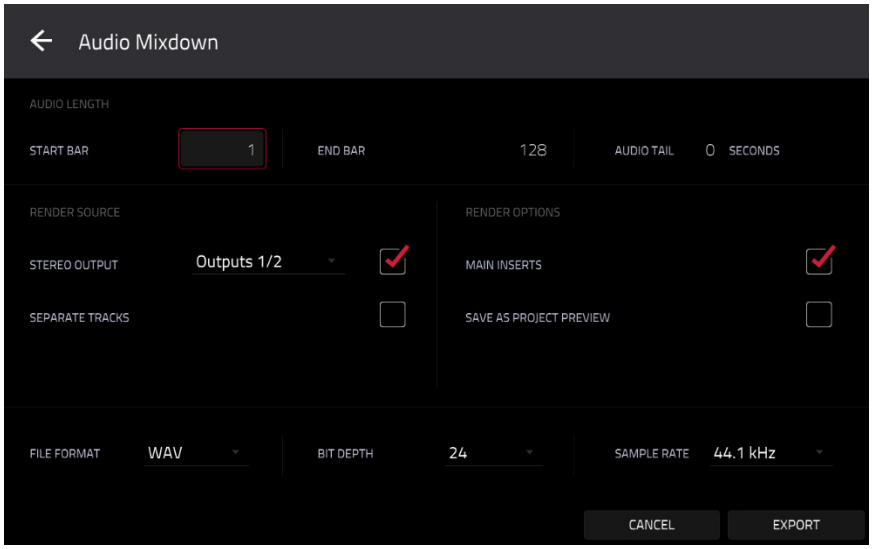
Tap **Insert** to insert a step at the current position.

Tap **Delete** to delete the currently selected step.

To set which sequence plays for a step, tap the step's **Sequence** field, and then turn the **data dial** to select a sequence.

To set how many times a sequence repeats, tap the step's **Repeat** field (next to the sequence name), and then turn the **data dial** to select a number.

Want to share your new song? Just export it first.



To export a song:

1. While in Song Mode, tap **Export** at the bottom of the screen.
2. In the **Audio Mixdown** screen that appears, do the following:
    - Make sure the **Start** field is set to **1**, and set the **End** field to the last bar of your song.
    - Tap the **Audio Tail** field and turn the **data dial** to set it to **2** seconds.
    - As you'll likely share the song online, tap the **mp3** file format option in the lower-left corner.
3. Tap **Export**. Choose where you want to save the song.

    To name the song, tap the **File Name** field, and use the virtual keyboard that appears to enter a new name, and then tap **Save** to start exporting.

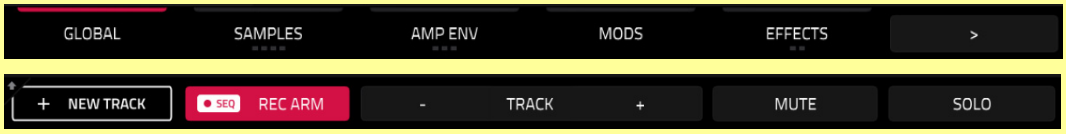
Operation

This chapter explains the complete features and functions of your Force hardware. For a breakdown of the hardware controls on your Force hardware, see the following ***Hardware Features*** section.

Important:

- When the left-most button at the bottom of the screen shows an upward arrow (⬆), it means there are additional buttons you can use when you press and hold **Shift**. Press and hold **Shift** to show the secondary buttons. Release **Shift** to return to the previous buttons.

- Many modes shown on the screen have 1–6 buttons at the bottom. Each of these buttons select a different tab in that mode or perform a specific function in that mode. If there are more than six tabs available, use the **<** and **>** buttons to scroll between them.



- As an alternative to double-tapping an item on the screen to "enter" it, you can press the **data dial**.

- When a parameter is highlighted and has a red outline, this means that it is selected. You can then change it by turning the hardware's **data dial** or using the **–/+** buttons. If the parameter is a number, double-tap it to show a numeric keypad on the screen to enter a specific value.

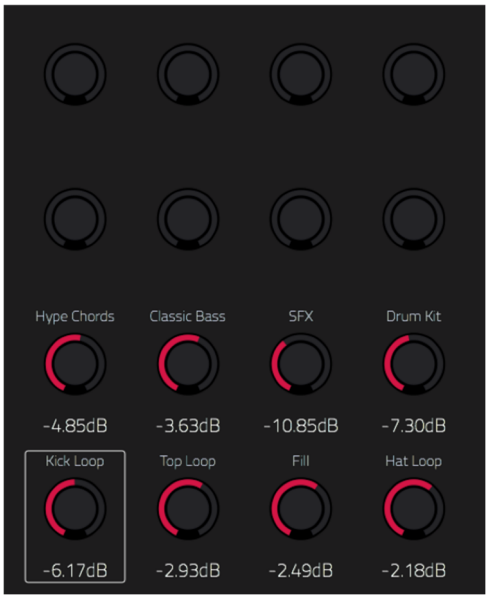
General Features

Control Types

The Force touchscreen uses the following types of control elements:

Knobs

To set the value for a knob, do any of the following:



- Tap and drag the knob up or down.
- Tap the knob to select it, and then use the **data dial** or **–/+** buttons to adjust the value.
- Double-tap the knob to show it in a larger screen. Alternatively, press **data dial** when the knob is selected.

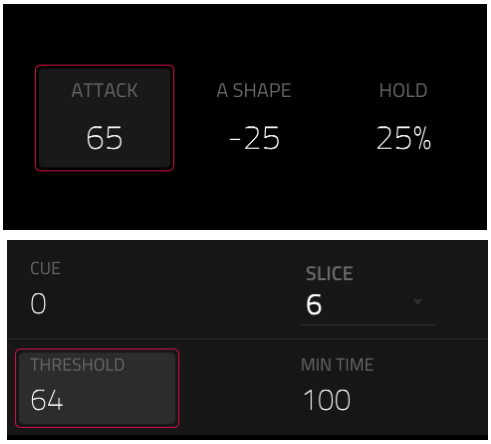
  Tap and drag the larger version that appears, or use the **data dial** or **–/+** buttons to adjust the value.

  If the knob is bipolar (has positive and negative values with the center as the default position), double-tap the larger version to reset it to the center/0 position.

  Tap anywhere else to return to the previous screen.
- Press and hold **Shift** while turning the **data dial** to adjust a value by smaller increments.

Parameter Values

To set the value for a parameter, do either of the following:



- Tap the field to select it, and then use the **data dial** or **–/+** buttons to adjust the value.

  When the value has decimal places, you can sometimes press and hold **Shift** and then use the **data dial** or **–/+** buttons to adjust the value by smaller increments.

- Double-tap the field or hold your finger on it for a second. In the screen that appears, type in a value using the number pad, or use the **data dial** or the **–/+** buttons to adjust the value. Alternatively, tap and drag the value up or down.

  You can also tap **/2** to halve the value or **x2** to double it.

  To confirm the value and remain on this screen, tap **Apply**.

  To confirm the value and return to the previous screen, tap **Do It**.

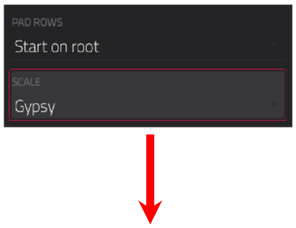
  To return to the previous screen, tap the gray area in the upper-left corner of the screen. Unsaved changes made using the number pad will not be applied. All other changes will be saved.

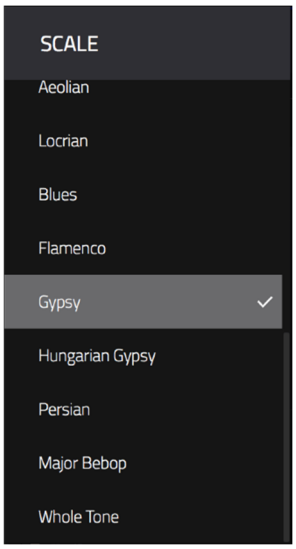
Drop-Down Menus / Lists

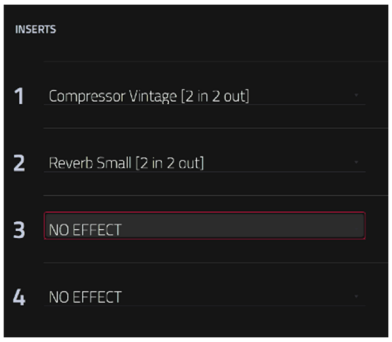
To select an option for a drop-down menu, do any of the following:

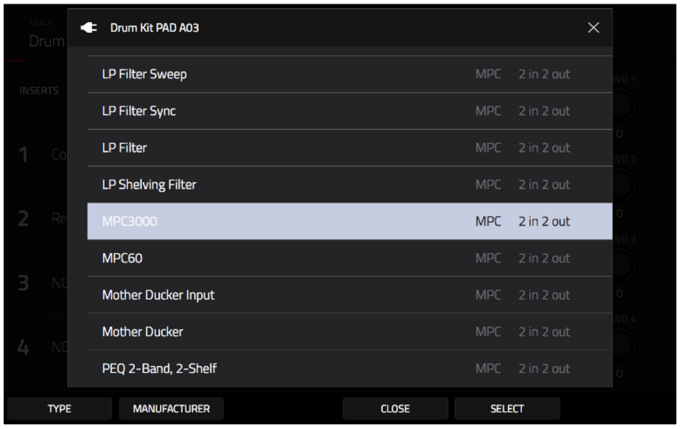
- Tap the field to select it, and then use the **data dial** or **–/+** buttons to select an option.
- Double-tap the field. In the list that appears (examples below), tap the desired option. Alternatively, use the **data dial** or the **–/+** buttons to select an option.

  In some windows, tap the relevant button at the bottom of the screen to confirm your selection or to cancel without changing anything.









Selectors

Selectors show all available options. One of them is always selected. The selected option is highlighted while the others are dark.

To select an option, tap it.

Buttons

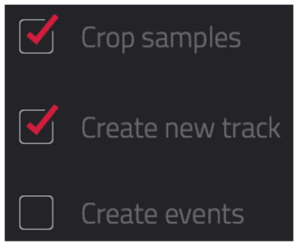
Buttons usually have two states: selected and deselected (active or inactive, respectively). Some may have more than two states.

To switch between or cycle through a button's states, do either of the following:

- Tap it.
- If it is outlined in red (and is not a mute button), use the **data dial** or **–/+** buttons.

Checkboxes

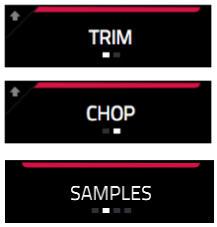
Checkboxes have two states: checked and unchecked (enabled or disabled, respectively).



To check or uncheck a checkbox, tap it.

Tabs

Some modes have buttons at the bottom of the screen that let you cycle through several similar tabs For example, you can toggle between **Trim** and **Chop** modes in ***Sample Edit Mode***, or cycle between the **Samples** tabs in ***Track Edit Mode***. With each tap, you will move to the next tab, indicated by the squares below it.



To select a tab, tap it. Each time you tap it, it will select the next tab.

Sliders

To adjust the position of a slider, do any of the following:

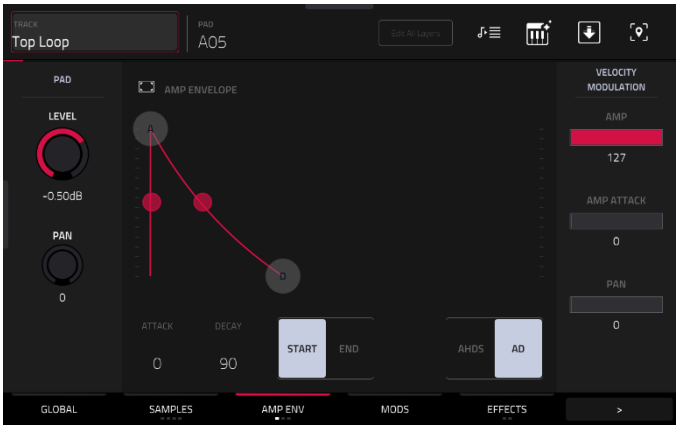
- Tap and drag the slider to the desired position.
- Tap the desired position (this works only on some sliders).
- Tap the slider to select it, and then use the **data dial** or **–/+** buttons to adjust the position (this works only on some sliders).
- Double-tap the slider, and then tap and drag the larger version that appears, or use the **data dial** or **–/+** buttons to adjust the value. Tap anywhere else to return to the previous screen.

Envelopes

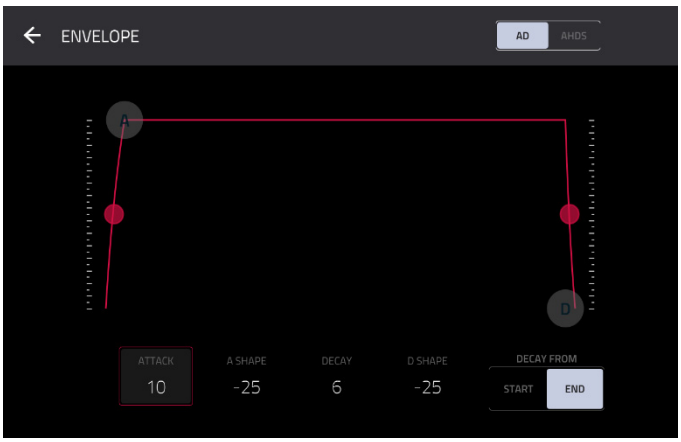
To set the stages of an envelope, do either of the following:

Tip: Tap the **expand-rectangle icon** above the envelope to show a close-up view.

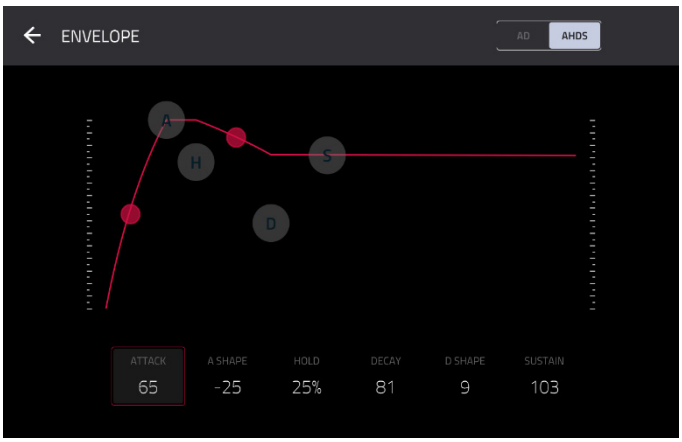
- Tap and drag a "handle" of an envelope stage in the desired direction.
- Set the numeric value of an envelope stage by adjusting or entering it as a parameter value (described ***earlier***).



The Envelopes tab in Track Edit Mode (Drum Track).



Close-up of an AD-type filter envelope.



Close-up of an AHDS-type amp envelope.

Grid View Tools

When viewing a MIDI clip in ***Grid View***, these four icons enable you to use different functions in the grid.

Tap one to select its mode:

Pencil: Draw Mode:

To enter a note in an empty grid square, tap the grid square.

To select a note, tap it.

To move a note, tap and drag it to another grid square.

To erase a note, double-tap it.

To edit velocity or draw automation, open the velocity/automation lane and tap and drag.

Eraser: Erase Mode:

To erase a note, tap it. You can also tag and drag to erase multiple notes in the same row.

Select Box: Select Mode:

Note: Notes will remain selected if you switch to another mode. The selection will change, however, if you press a pad while **Hitting Pad Selects All Events** is set to **On**.

To select a note, tap it.

To select multiple notes, tap and drag across the grid to create a box around them.

To move a note, tap and drag it to another grid square.

To move multiple notes, select them as described above, and tap and drag them.

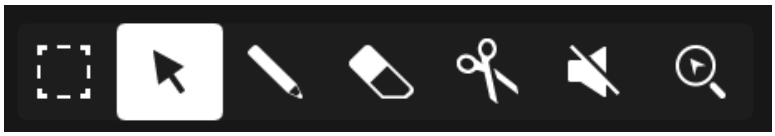
To erase multiple notes, select them as described above, and then select the **eraser tool** and tap any of the selected notes.

Magnifying Glass: Navigation Mode:

To move to another part of the grid, tap and drag it.

To zoom in or out, spread or pinch your fingers (respectively) on the grid. You can do this vertically, horizontally, or both at the same time.

When viewing an audio clip in ***Grid View***, these seven tool icons enable you to use different functions in the waveform.



Tap one to select its mode:

Marquee: Marquee Mode:

To select a track region, tap the upper third of it.

To select multiple track regions, tap and drag across the grid to create a box that highlights them.

To move a track region (or multiple selected track regions), tap and drag the upper third of it left or right.

To split the track at two specific points (creating a track region on either side and between them), tap and drag across the middle third of it to create a translucent white box, and then tap the upper third of that box.

To shorten or lengthen a track region (or multiple selected track regions), tap and drag the lower third of it left or right.

Arrow: Selection Mode:

To select a track region, tap it.

To move a track region (or multiple selected track regions), tap and drag the upper third of it left or right.

To shorten or lengthen a track region (or multiple selected track regions), tap and drag the lower third of it left or right.

Pencil: Draw Mode:

To draw automation, open the velocity/automation lane and tap and drag.

Eraser: Erase Mode:

To erase a track region (or multiple selected track regions), tap it.

Scissors: Split Mode:

To split the track at a specific point (creating a track region on either side), tap that point in the track.

To select a track region, tap its left-most edge.

Mute: Mute Mode:

To mute or unmute a track region (or multiple selected track regions), tap it.

Magnifying Glass: Navigation Mode:

To move to another part of the track, tap and drag it.

To zoom in or out, spread or pinch your fingers (respectively) on the grid. You can do this vertically, horizontally, or both at the same time.

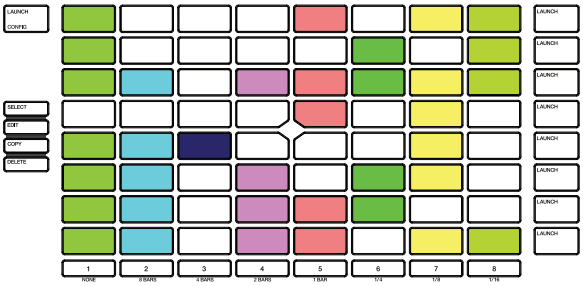
Pad Modes

In addition to the various control functions used in the display, Force features three different control modes for the 8x8 grid of **clip launch pads**: **Launch Mode**, **Note Mode**, and **Step Sequencer Mode**. You can also control Launch and Note Modes at the same time using **Launch & Note Mode**.

These modes are accessed by pressing their respective **Launch/Config**, **Note/Config**, and **Step Seq/Config** buttons on the Force hardware. At any time, you can also temporarily view any of the pad modes by pressing and holding the **Launch**, **Note**, or **Step Seq** buttons. This allows you to quickly make changes such as launching a different clip or editing the step sequencer.

Launch Mode

Launch Mode is used for launching and working with clips. The image to the right shows the pads in Launch Mode. The brightly lit pads each represent clips in the respective track columns.



To enter Launch Mode, press the **Launch** button. In Launch Mode, you can do any of the following:

To launch a clip, press the clip launch pad.

To select a clip, hold **Select** and press a pad.

To create a new clip, hold **Select** and double-press an empty pad.

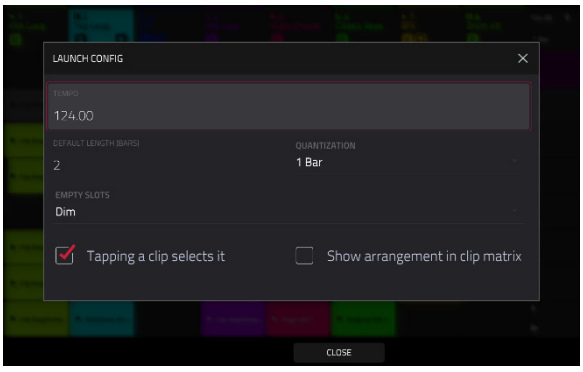
To copy a clip, hold **Copy** and press the pad you want to copy. Keep holding **Copy** and press the pad where you want to copy the clip.

To delete a clip, hold **Delete** and press the pad you want to delete.

To set the quantization of launching clips, hold **Shift** and press one of the **Track Select** buttons. The time division values are printed beneath them.

Launch Configuration

Press and hold **Shift** and press the **Launch/Config** button to open the Launch Configuration window.



Use the **Default Length (Bars)** field to set the default length of new clips in bars.

Use the **Quantization** field to set the launch quantization. This determines how long after you press a clip launch pad or row launch pad that the clip(s) begin playing, according to the set tempo.

Use the **Empty Slots** field to set the appearance of the **clip launch pads** that do not have a clip loaded.

Check **Tapping a clip selects it** to automatically select a clip for editing when tapped. When unchecked, tapping a clip will only launch it.

Check **Show arrangement in clip matrix** to enable the Arrangement row at the top of the clip matrix.

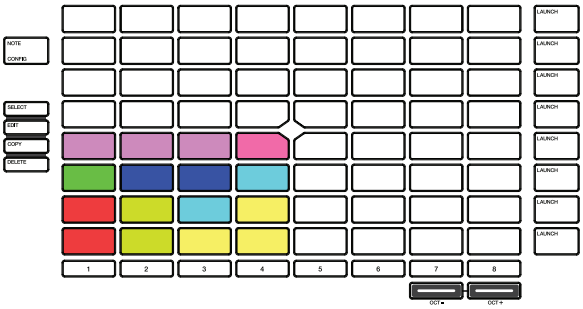
Note Mode

Note Mode is used for playing drum kits or melodic tracks like keygroups or plugins.

To enter Note Mode, press the **Note** button while a drum, keygroup, plugin, MIDI or CV track is selected. The appearance of the clip launch pads will change depending on the type of track selected. When a drum track is selected, the clip launch pads will appear in **Drum Note Mode**; when a keygroup, plugin, MIDI or CV track is selected, the clip launch pads will appear in **Melodic Note Mode**.

Drum Note Mode

In Drum Note Mode, each quadrant of clip launch pads can be used like a traditional 4x4 drum pad layout to play samples. The image to the right shows a traditional layout when using Drum Note Mode.



In Drum Note Mode, you can do the following:

To play a sample, press any of the lit clip launch pads.

To change pad banks, hold **Shift** and press the **Track Assign** buttons labeled **Oct-** and **Oct+**.

To select a pad, hold **Select** and press it.

To edit a sample in Track Edit Mode, hold **Edit** and press a pad.

To create a keygroup from a sample, hold **Shift+Edit** and press a pad. The keygroup will be created on a new track automatically.

To copy a sample, hold **Copy** and press the pad you want to copy. Keep holding **Copy** and press the pad where you want to copy the sample.

To delete a pad, hold **Delete** and press the pad you want to delete.

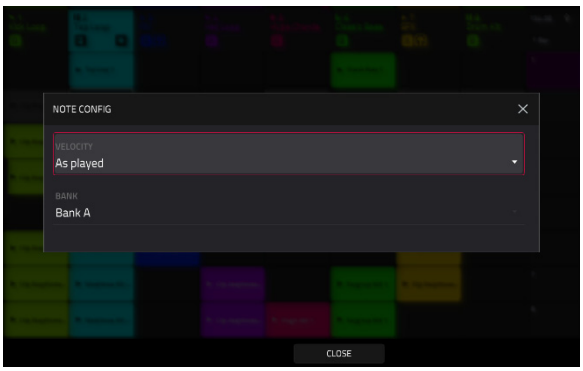
To mute a pad, hold **Mute** and press the pad you want to mute.

To solo a pad, hold **Solo** and press the pad you want to solo.

To set the quantization of launching clips, hold **Shift** and press one of the **Track Select** buttons. The time division values are printed beneath them.

Drum Note Configuration

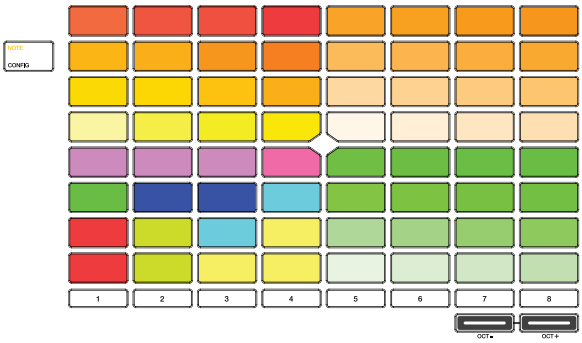
Press and hold **Shift** and press the **Note/Config** button to open the **Drum Note Configuration** window, where you can adjust the settings of the drum pads.



Use the **Velocity** field to set the velocity level of the drum pads. Select **As Played** for responsive velocities, or select **Half level** or **Full level** for fixed level velocities.

Use the **Bank** field to select the drum bank currently in view in the bottom left quadrant.

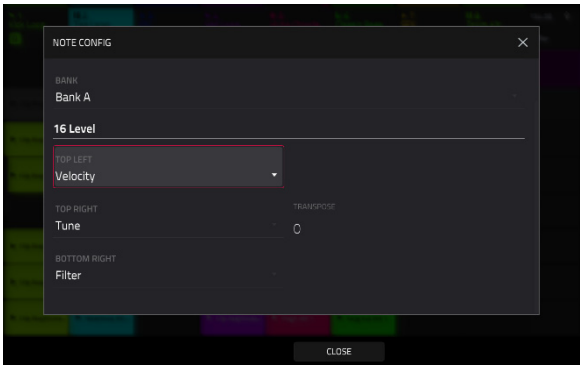
16 Levels Drum Note Mode



In 16 Levels Drum Note Mode, the bottom-left quadrant of clip launch pads can be used like a traditional 4x4 drum pad layout just like Drum Note Mode. The other three quadrants, however, can be set to control a selectable parameter that is fixed at values that increase as the pad numbers increase (e.g., Pad 1 is the minimum, Pad 16 is the maximum), regardless of how hard you press them.

To enter 16 Level mode, select a drum track and press **Note** until **16 Level** appears on the screen.

16 Level Drum Note Configuration



While in 16 level mode, press and hold **Shift** and press the **Note/Config** button to open the **Drum Note Configuration** window. In addition to the standard Drum Note Configuration settings mentioned ***above***, you can use this to adjust what the 16 level quadrants control.

Use the **Top Left**, **Top Right**, and **Bottom Right** fields to set what type of 16 Level control is used in each quadrant:

Velocity: The sample velocity increases from lowest (7) to highest (127).

Tune: The sample tuning increases from the lowest pitch to highest pitch. By default, the first pad in the quadrant is the base pitch and the next 12 pads increase by one semitone each. Use the **Transpose** field to transpose the original sample down up to 12 semitones for increased range.

Filter: The cutoff value for the filter increases from lowest to highest. You can set the filter type for the pad in Track Edit mode.

Layer: Each row of four pads covers a range of velocity from lowest to highest: 0-31, 32-64, 65-96 and 97-127. Pads with multiple samples will play back each layer according to the **Velocity Start** and **Velocity End** settings for each layer.

Attack: The attack envelope of the sample increases from lowest to highest.

Decay: The decay envelope of the sample increases from lowest to highest.

Probability: The probability that the note is played increases from lowest to highest.

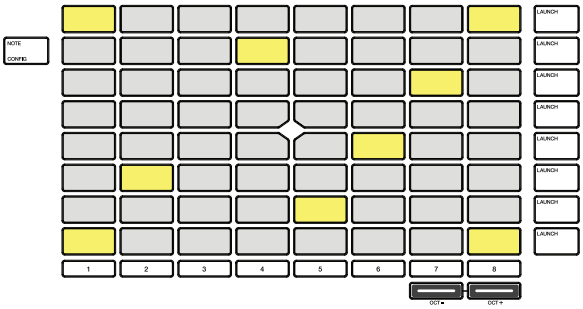
Ratchet: The number of note subdivision ratchets increases from lowest to highest.

Slice: The slices of the sample assigned to the pad increase, starting from Slice 1 in the lower-left corner. If less than 16 slices of the sample exist, the remaining pads will not trigger anything.

Articulation: Starting from the lower-left corner of the quadrant, Pad 1 will play the original sample unchanged, and Pads 2–16 will play the first 15 articulations in the Articulation list. See ***Track Edit Mode > Drum Tracks > Effects*** to learn more about articulations.

Melodic Note Mode

In Melodic Note Mode, the clip launch pads can be used like a traditional keyboard controller to play melodic notes and chords. For instance, the image to the right shows the clip launch pads set to play a scale in Melodic Note Mode. The pads with bright colors are the root notes of the scale, and the white pads in between are the other degrees of the scale.

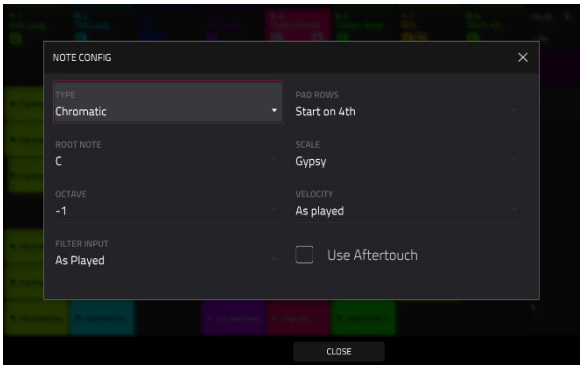


To play a note, press a clip launch pad.

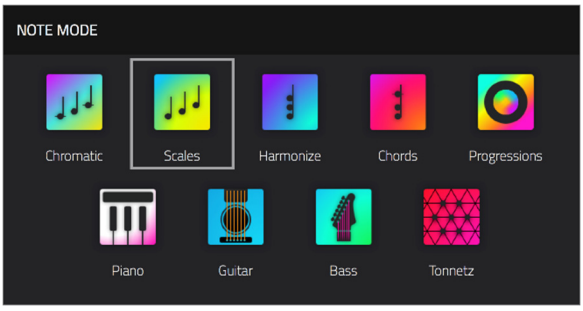
To change the starting octave, hold **Shift** and press the **Track Assign** buttons marked **Oct-/Oct+**.

Melodic Note Configuration

Press and hold **Shift** and press the **Note/Config** button to open the **Melodic Note Configuration** window, where you can adjust the settings of how the notes or chords are laid out on the clip launch pads.



Use the **Type** selector to determine what will be mapped over the pads:



- **Chromatic**: Each pad is assigned a note, ascending by one semitone with each pad.
- **Scales**: Each pad is assigned a note, ascending by one scale degree with each pad.
- **Harmonize**: Each pad is assigned a chord, with the root note ascending by one scale degree with each pad. All available chords will play in the key determined by the **Scale**.
- **Chords**: Each pad is assigned a chord, with the root note ascending by one scale degree with each pad. You can play any chord type regardless of the key determined by the **Scale**. Essentially, this is like the Harmonize setting but with more options to play chords out of the set key.
- **Progressions**: Each pad is assigned a chord in a chord progression. You can play the pads in (or out of) order to construct songs quickly. The available chords are determined by the **Progression** field.
- **Tonnetz**: Each pad is assigned a note, ascending by a perfect fifth (7 semitones) going left to right along each row of pads, and ascending by a minor third (3 semitones) going from bottom to top along each column of pads.
- **Guitar**: The bottom six rows of pads are organized like a six-string guitar, with notes ascending E-A-D-G-B-E from bottom to top in the first column of pads, and ascending by one semitone with each pad in each row.
- **Bass**: The bottom six rows of pads are organized like a six-string bass, with notes ascending B-E-A-D-G-B from bottom to top in the first column of pads, and ascending by one semitone with each in pad in each row.
- **Piano**: Every two rows of clip-launch pads are organized like the traditional white-and-black keys layout of a piano, with the lower row representing the white keys and the upper row representing the black keys.

  Note: For Guitar, Bass, and Piano types, changing the Root Note or Scale will not affect the layout of notes on the pads, but will change the highlighted root and scale notes according to the selection.
- **Custom:** Each pad is assigned a custom note. Tap the **Edit Note Map** button to begin editing. Tap a pad or use the **Pad** field to select a pad, and then use the **MIDI Note** field to set the desired note. When you are finished editing, tap **Close**, the **X**, or anywhere outside the window. You can also choose from three Custom presets: **Chromatic C1**, **Chromatic C2**, or **Classic MPC**.

Note: You can also press and hold the **Note** button while in Note Mode to quickly select a Type on the display (except Custom).

Use the **Pad Rows** field to determine how the notes are laid out on Force's 8x8 pad grid:

Continuous	Start on 5th	Start on 3rd
Start on root	Start on 4th	Start on 2nd

Use the **Root Note** and **Octave** fields to set the starting point of the scale (pitch and register). The available notes are all chromatic notes across the range of the pads. The pad that's assigned the root note will be lit differently to indicate where the scale starts in each octave.

Use the **Scale** field to set the scale or mode based on the root note (this is disabled when **Type** is set to **Progressions**). The available scales are:

Major	Pentatonic Minor	Hungarian Gypsy	Chromatic
Natural Minor	Blues	Persian	Dorian
Harmonic Minor	Flamenco	Major Bebop	Phrygian
Pentatonic Major	Gypsy	Whole Tone	Lydian

Use the **Velocity** field to set the velocity of the pads when played:

As played	26%	53%	80%
6%	33%	60%	86%
13%	40%	66%	93%
20%	Half	73%	Full

Use the **Scale Chord** and **Chromatic Chord** fields to determine what chord type will play when pressing a pad. The chord will use those scale degrees based off of the pad's root note. You can use this only when the **Type** is set to **Harmonize** or **Chords**.

When set to **Harmonize**, the available **Scale Chords** are:

1-3-5 (major/minor)	1-3-5-7 (major7/minor7)
1-4-5 (sus4)	1-3-5-7b (dominant)
1-2-5 (sus2)	

When set to **Chords**, the available **Chromatic Chords** are:

Major	Sus2	Major7	Major9	Augmented
Minor	Sus4	Minor7	Minor9	Diminished

Use the **MIDI Input** field to select how the incoming MIDI data is handled:

Select **As Played** for MIDI notes to remain unfiltered.

Select **Snap to Scale** for MIDI notes outside the scale to be transposed to the closest scale degree.

Select **Filter to Scale** for MIDI notes outside the scale to be filtered out completely.

Check the **Use Aftertouch** box to enable aftertouch messages from the clip launch pads.

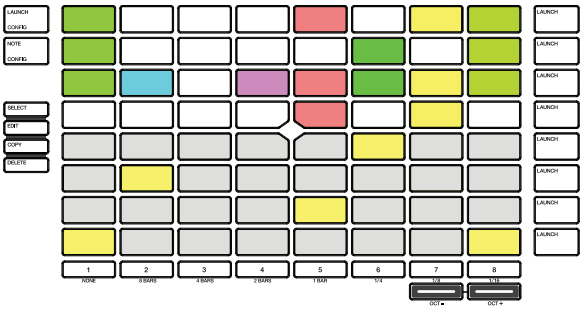
Launch & Note Mode

In addition to using the entire 8x8 pad matrix for Launch Mode or Note Mode, you can split the rows of clip launch pads into half Launch Mode and half Note Mode.

To enter Launch & Note Mode, press the **Launch** and **Note** buttons at the same time.

The top four rows of pads can be used for launching clips, and the bottom four rows of pads can be used for melodic or drum note playing, depending on the track selected.

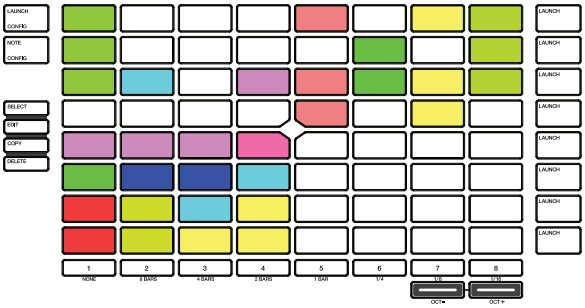
In this mode, you can perform any of the same actions that you would in either ***Launch Mode*** or ***Note Mode***.



Launch & Note Mode
(Melodic Note Mode)

Press and hold the **Note** button to adjust the **Timing Correct** value (for Drum tracks) or **Note Mode** scale type (for Plugin, MIDI and Keygroup tracks).

Hold **Shift** and press the **Launch** or **Note** button to open its respective settings.

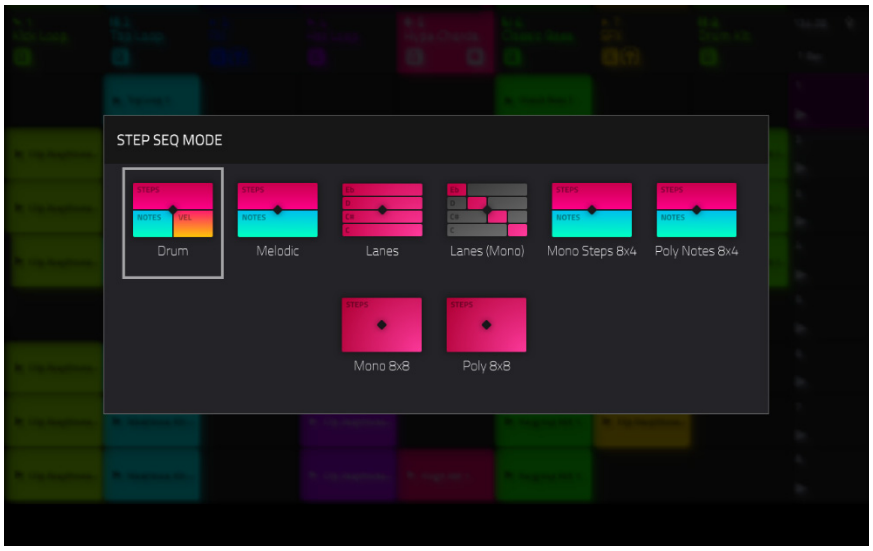


Launch & Note Mode
(Drum Note Mode)

Step Sequencer

The Step Sequencer pad mode is used to create or edit clips by using the pads as "step buttons," simulating the experience of a traditional step-sequencer-style drum machine. This pad mode is often used in conjunction with the **Step Sequencer** mode on the display, but can be used while any mode is on the display.

To enable Step Sequencer pad mode, press the **Step Seq** button. Each time you press this button, the pads will cycle through the different modes. See below for more details.



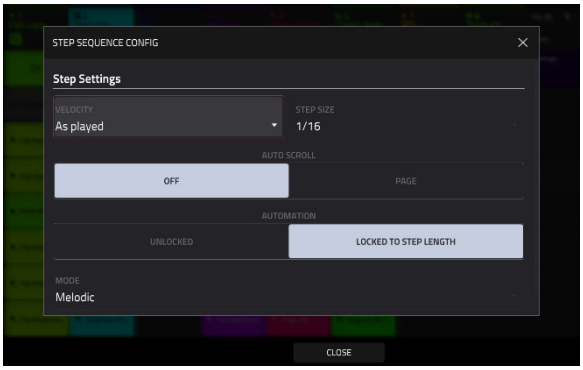
Press and hold the **Step Seq** button to do any of the following:

Quickly select a Step Sequencer Mode using the **Step Seq Mode** window that appears.

Use the top row(s) of pads to select the active page of the step sequencer. The number of pages available depends on the selected step size and the number of bars in the clip.

Use the bottom row of pads to select the beat division for the **Step Size**. The right-most pad can be used to enable or disable **Triplet** beat divisions.

Hold **Shift** and press button to open the Step Sequence Configuration window, where you can adjust the following parameters for the Step Sequencer:



Use the **Velocity** field to set the velocity of new steps being entered. Select **As Played** for responsive velocity, or select one of the preset levels for fixed velocity of all steps.

Use the **Step Size** field to set the beat division for each step.

Use the **Auto Scroll** selector to set the pad behavior when the steps are contained on multiple pages. Set to **Off** for the pads to stay on the selected page, or select **Page** for the pages to scroll during playback.

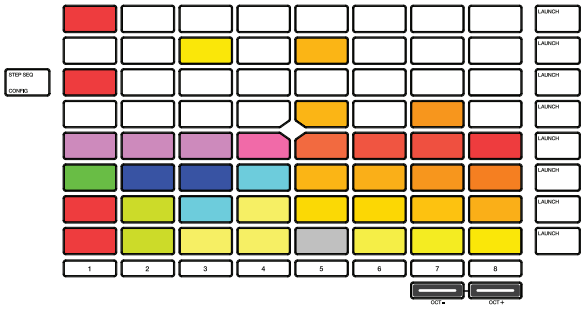
Use the **Automation** selector to determine whether Step Automation is **Unlocked** from the grid or **Locked to Step Length**. When set to the latter, changes to automation will only affect the current step.

Use the **Mode** field to set the Step Sequencer pad mode: **Drum**, **Melodic** or **Lanes**.

Check the **Use Aftertouch** box to enable aftertouch messages from the clip launch pads (available for melodic tracks only, not for drum tracks).

In addition to these common settings, some Step Sequencer modes have additional settings available in this window, described below.

Drum Mode



In Drum Step Sequencer Mode, the lower-left quadrant of pads is used like a traditional 4x4 drum pad layout to play samples.

Press a **clip launch pad** to select it. Doing so will also play back the pad's sample. If you would like to select a pad without sounding the sample, hold **Select** and press the pad.

Hold **Shift** and press the **Track Assign** buttons marked **Oct-/ Oct+** to change the active pad bank.

The lower-right quadrant of pads is used to quickly set the velocity of new steps.

Press the lower-left pad to select **As Played** for responsive velocity, or press the other pads to set a fixed velocity from low (**6%**) to high (**Full**), going left-to-right.

The top 4 rows of pads represent the steps in the clip. The number of pads available depends on the **Step Size** setting.

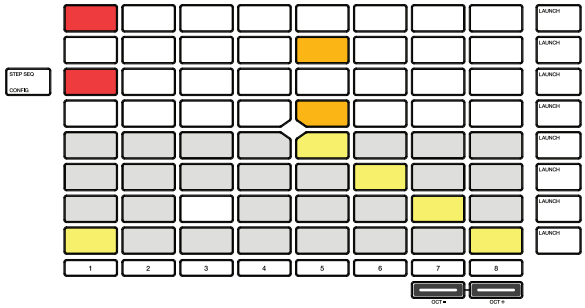
Press a pad to insert a step at that beat for the selected drum sample. The top 4 rows will be lit dimly with the color of the selected drum sample.

Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold **Shift** and press **Step Seq** while in Drum Step Sequencer Mode to configure its settings. These are the same as mentioned ***above***.

Melodic Mode



In Melodic Step Sequencer Mode, the bottom 4 rows of the pads are used like **Melodic Note Mode**, with the pads representing notes in a scale.

Press a **clip launch pad** to select a note. The currently selected note will be lit bright white.

Hold **Shift** and press the **Track Assign** buttons marked **Oct-/ Oct+** to change the octave.

The top 4 rows of pads represent the steps in the clip. The number of pads available depends on the **Step Size** setting.

Press a pad to insert a step at that beat for the selected note.

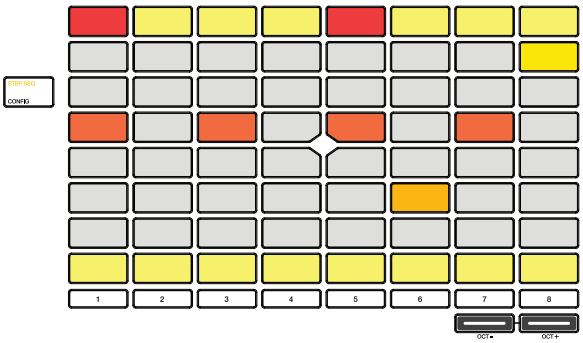
Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold **Shift** and press **Step Seq** to open the **Configuration** window. In addition to the fields mentioned ***above***:

Use the **Note Settings** fields to set configure the **Root Note**, **Scale**, starting **Octave**, and **Filter Input**.

Lanes Mode



In Lanes Step Sequencer Mode, each column of pads represents one beat division, and each row of pads represents one drum sample in a drum bank or one note in a scale, depending on the type of track selected.

Press a **clip launch pad** to insert a step at that beat division for the respective drum sample or note.

Hold **Shift** and press the **Track Assign** buttons marked **Oct-/ Oct+** to change the octave or starting pad.

Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold Shift and press **Step Seq** to open the **Configuration** window. In addition to the fields mentioned ***above***:

- When a drum track is selected:

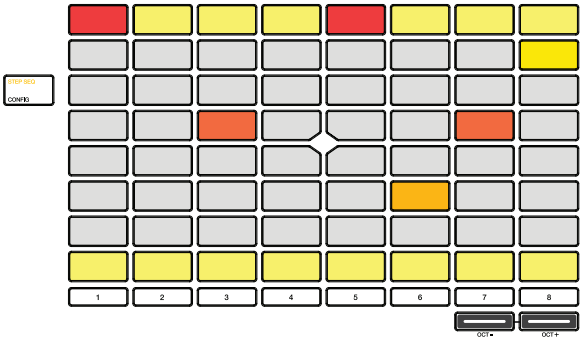
  Use the **Base Pad** field to set the starting pad for the 8 rows of clip launch pads.

- When a keygroup, plugin, MIDI or CV track is selected:

  Use the **Base Note** field to set the starting note for the 8 rows of clip launch pads.

  Use the **Note Settings** fields to set configure the **Root Note**, **Scale**, and **Filter Input**.

Lanes (Mono) Mode



Similar to Lanes Mode, in Lanes (Mono) Mode, each column of pads represents one beat division, and each row of pads represents one drum sample in a drum bank or one note in a scale, depending on the type of track. Unlike Lanes mode, however, only one note may be entered at a time.

Press a clip launch pad to insert a step at that beat division for the respective drum sample or note. If you press another clip launch pad in the same column, the previous note will be removed.

Hold **Shift** and press the **Track Assign** buttons marked **Oct-/Oct+** to change the octave or starting pad.

Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold Shift and press **Step Seq** to open the **Configuration** window. In addition to the fields described ***above***:

- When a drum track is selected:

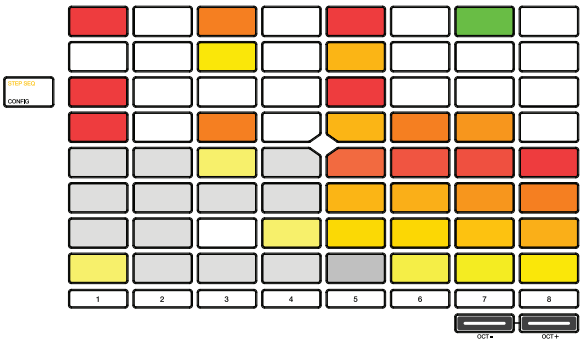
  Use the **Base Pad** field to set the starting pad for the 8 rows of clip launch pads.

- When a keygroup, plugin, MIDI or CV track is selected:

  Use the **Base Note** field to set the starting note for the 8 rows of clip launch pads.

  Use the **Note Settings** fields to set configure the **Root Note**, **Scale**, and **Filter Input** setting.

Mono Steps 8x4 Mode



In Mono Steps 8x4 Mode, the lower-left quadrant of pads represents notes in a scale.

Press a **clip launch pad** to select a note. The currently selected note will be lit bright white.

Hold **Shift** and press the **Track Assign** buttons marked **Oct-/Oct+** to change the octave or starting pad.

The lower-right quadrant of pads is used to quickly set the velocity of new steps.

Press the lower-left pad to select **As Played** for responsive velocity, or press the other pads to set a fixed velocity from low (**6%**) to high (**Full**), going left-to-right.

The top 4 rows of pads represent the steps in the clip. The number of pads available depends on the **Step Size** setting.

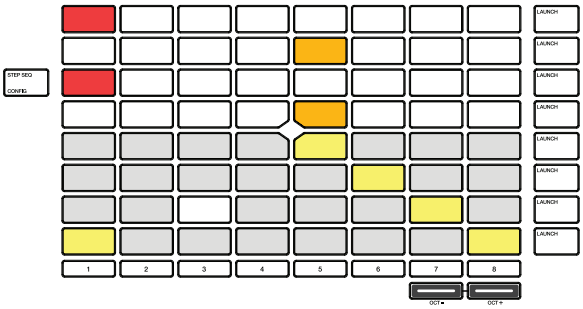
Press a pad to insert a step at that beat for the selected note. Only one note can be added per step.

Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold **Shift** and press **Step Seq** while in Mono Steps 8x4 Sequencer Mode to configure its settings. These are the same as mentioned ***above***.

Poly Notes 8x4 Mode



Similar to Melodic Step Sequencer Mode, in Poly Notes 8x4 Mode, the bottom 4 rows of the pads are used like **Melodic Note Mode**, with the pads representing notes in a scale.

Press a **clip launch pad** to select a note. The currently selected note will be lit bright white.

Hold **Shift** and press the **Track Assign** buttons marked **Oct-/Oct+** to change the octave.

The top 4 rows of pads represent the steps in the clip. The number of pads available depends on the **Step Size** setting. Poly Notes 8x4 Mode differs from Melodic Mode in that only steps for the selected note are shown in these rows, rather than all steps with any note.

Press a pad to insert a step at that beat for the selected note.

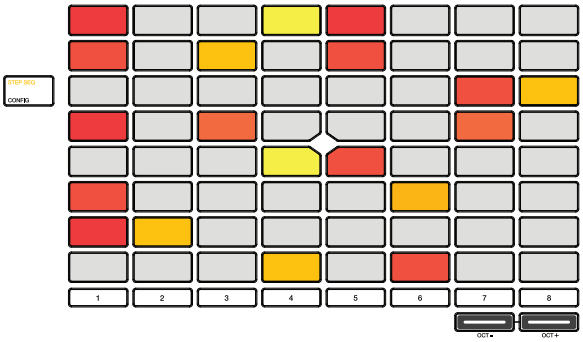
Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold **Shift** and press **Step Seq** to open the **Configuration** window. In addition to the fields mentioned ***above***:

Use the **Note Settings** fields to set configure the **Root Note**, **Scale**, starting **Octave**, and **Filter Input**.

Mono 8x8 Mode



In Mono 8x8 Mode, the entire 8x8 pad grid represents one beat division in the current clip. Like Mono Lanes mode, however, only one note may be entered at a time. This mode can also be useful for inputting step automation.

Press a clip launch pad to insert a step at that beat division for the respective drum sample or note. If you press another clip launch pad in the same column, the previous note will be removed.

Press and hold **Note** to temporarily switch the pad launch matrix to Note mode. While holding, press a pad to select a new note.

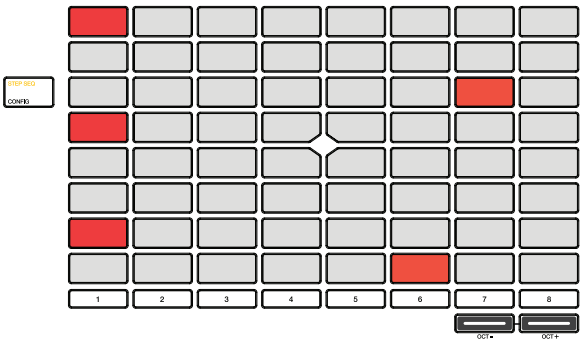
Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold Shift and press **Step Seq** to open the **Configuration** window. In addition to the fields described ***above***:

Use the **Note Settings** fields to set configure the **Root Note**, **Scale**, and **Filter Input** setting.

Poly 8x8 Mode



In Poly 8x8 Mode, the entire 8x8 pad grid represents one beat division in the current clip. Unlike Mono 8x8 mode, however, multiple notes may be entered at a time.

Press a clip launch pad to insert a step at that beat division for the respective drum sample or note. If you press another clip launch pad in the same column, the previous note will be removed.

Press and hold **Note** to temporarily switch the pad launch matrix to Note mode. While holding, press a pad to select a new note.

Press and hold **Clip Select** and tap one of the pads containing an event to select a step event.

Press and hold **Shift** and **Clip Select** at the same time, and then tap the pads containing events to select multiple step events.

Hold **Shift** and press **Step Seq** to open the **Configuration** window. In addition to the fields mentioned ***above***:

Use the **Note Settings** fields to set configure the **Root Note**, **Scale**, starting **Octave**, and **Filter Input**.

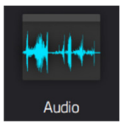
Tracks

About Tracks

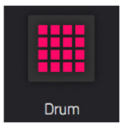
Each clip you create within a project is routed through a **track**. There are six types of tracks, each of which determines how the clip sounds or what it is used for. A single project can hold up to 128 tracks.

This chapter covers how to create each track type.

To learn about editing your tracks to your preference, see the ***Modes*** > ***Track Edit Mode*** chapter.



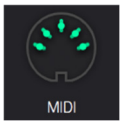
An **Audio track** lets you record audio from an external source or by resampling another track to create a clip. See ***Audio Tracks*** for more information.



A **drum track** uses one or more samples as its sound source. It contains (**1**) a list of samples and (**2**) the settings for each sample (i.e., pad assignments, loop points, pitch tuning, effects, etc.). Drum tracks are used mostly for creating drum parts and quickly and easily assigning samples to pads. See ***Drum Tracks*** for more information.

A **keygroup track** uses one or more samples as its sound source. It contains (**1**) a list of samples and (**2**) the settings for each sample (i.e., pitch tuning, effects, etc.). Keygroup tracks are used to play samples chromatically with a MIDI keyboard or the Force pads. See ***Keygroup Tracks*** for more information.

A **plugin track** contains an instance of a plugin through which you can send your track's MIDI data. See ***Plugin Tracks*** for more information.



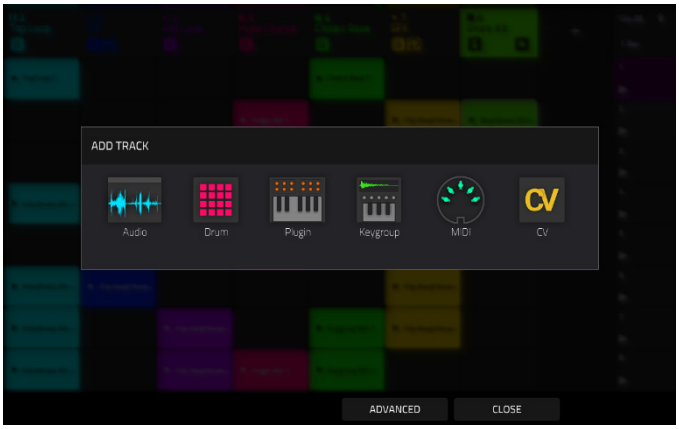
A **MIDI track** lets you send your track's MIDI data to an external MIDI device like a synth or drum machine. See ***MIDI Tracks*** for more information.

A **CV track** lets you send your track's MIDI data to an external device that uses control voltage (CV), like a synth. See ***CV Tracks*** for more information.

To create a new track, do any of the following:

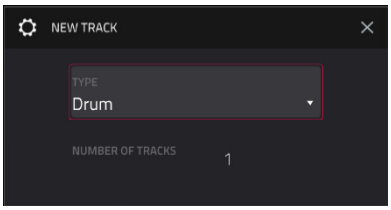
- Press and hold the **track select** button of an unused track.
- Open ***Clip Matrix Mode*** or the ***Channel Mixer***, and then tap the **+ icon** at the top of the screen to add a new track. If you cannot see the **+ icon**, press the **right cursor** to move the matrix view until it is shown.

  You can also tap the **+ icon** at the bottom of the screen in ***Arrange Mode***.
- Open ***Main Mode*** or ***Track View***, and then tap **New Track** at the bottom of the screen.

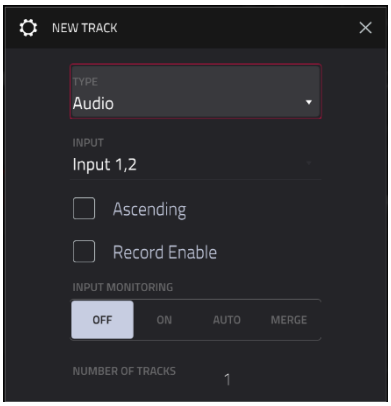


Next, a window will appear where you can select the track type. Tap to select a track type, which will be instantly added to your project.

Alternatively, tap the **Advanced** button at the bottom of the screen. In this window, use the **Type** field to select the track type. You can also use the **Number of Tracks** field to add multiple tracks of the selected type.



For Audio Tracks, you can also adjust the following options:



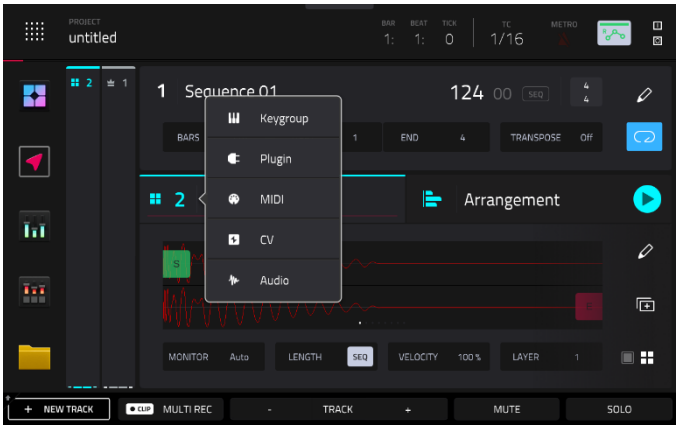
Use the **Input** field to select which inputs the audio track will use.

Check the **Ascending** box to determine if the channel numbers of the input sources will ascend across the new audio tracks you create. When checked, the first new audio track will use the input source you set above (e.g., **Input 1**), the second new audio track will use the next input source (e.g., **Input 2**), etc. When unchecked, all of the new audio tracks you create in this instance will use the same input source. This feature is relevant only if you are creating more than one new audio track (determined by **Number of Tracks** below).

Check the **Record Enable** box to set the new track to be automatically record enabled.

Use the **Input Monitoring** field to set the monitoring behavior: **Off**, **On**, **Auto**, or **Merge**.

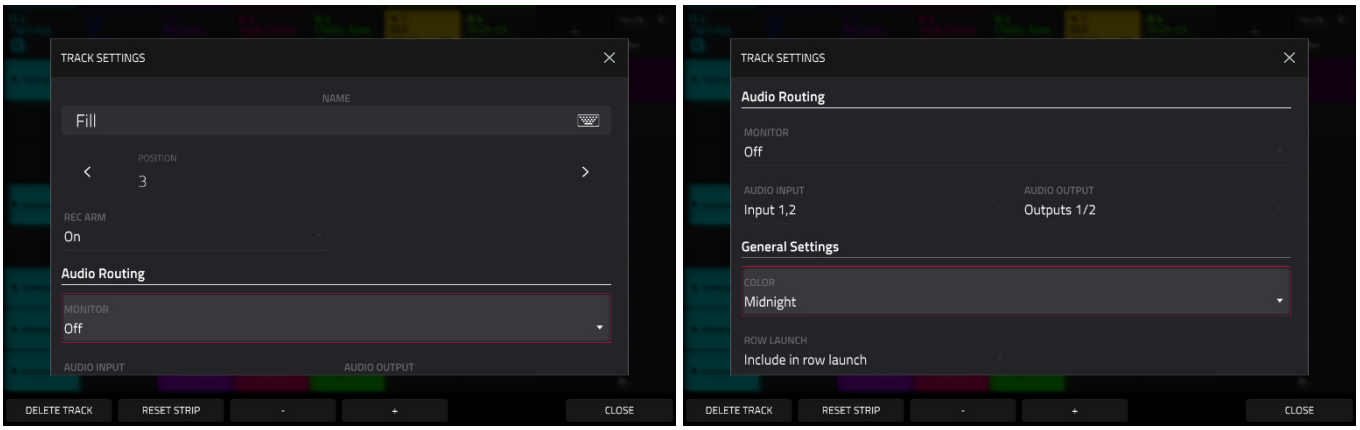
To change a track from one type to another, tap the **track type icon/track number** in the ***Track Section*** of **Main Mode**. A selector will appear where you can select from the five remaining track types.



To access the **Track Settings** window, described for each track type below, do either of the following:

- Tap and hold on the **Track Name** in the ***Track Section*** of **Main Mode**.
- Double-tap the track header in ***Clip Matrix Mode***, ***Channel Mixer*** Mode, or ***Arrange Mode***.

Audio Tracks



Settings:

Tap the track **name** field to rename the track. Use the virtual keyboard that appears to enter a new name, and then tap **Do It** to confirm or the gray bar at the top of the screen to cancel.

Use the **Position** field to change the location of the track, moving the other tracks in relation.

Use the **Rec Arm** field to arm (**On**) or disarm (**Off**) the track for recording.

Use the **Monitor** field to set the monitoring behavior of the track:

When set to **Off**, you will never hear any incoming audio.

When set to **In**, you will hear incoming audio whether or not the track is record-enabled.

When set to **Auto**, you will hear incoming audio while the track is record-enabled only.

When set to **Merge**, the track's input is always monitored, and you will hear playback of recorded events.

Use the **Audio Input** field to set the input source for the track.

Use the **Audio Output** field to set the output destination for the track.

Use the **Color** field to change the track color.

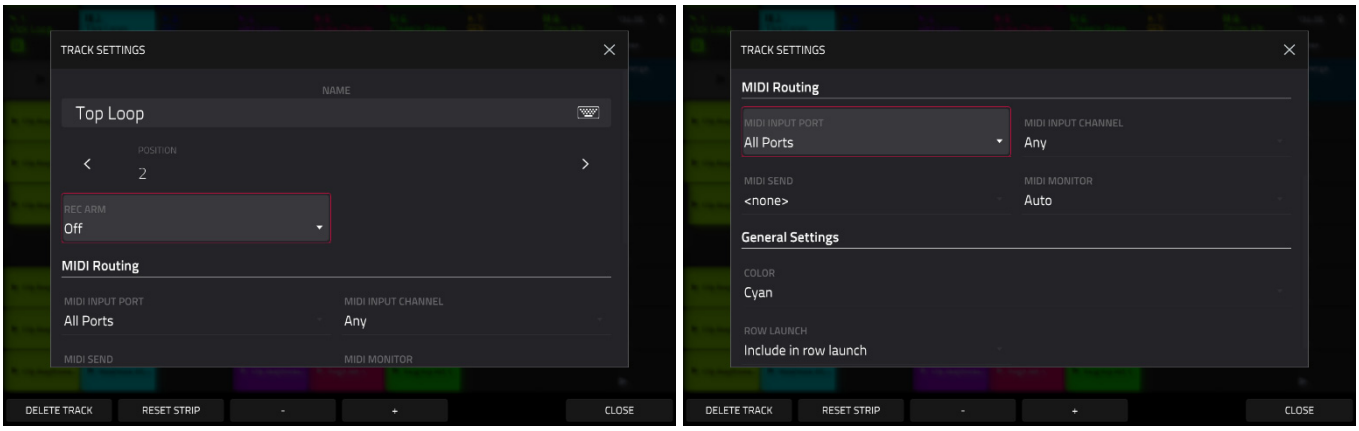
Use the **Row Launch** field to determine the behavior of clips in the track when launching rows. Select **Include in row launch** to launch the track's clips when launching rows, or select **Exclude from row launch** to stop the track's clips from launching with the row.

Tap **Delete Track** at the bottom of the screen to remove the track.

Tap **Reset Strip** at the bottom of the screen to reset all mixer settings for the track.

Tap the **-/+** buttons at the bottom of the screen to move to the previous or next track.

Drum Tracks



Settings:

Tap the track **name** field to rename the track. Use the virtual keyboard that appears to enter a new name, and then tap **Do It** to confirm or the gray bar at the top of the screen to cancel.

Use the **Position** field to change the location of the track, moving the other tracks in relation.

Use the **Rec Arm** field to arm (**On**) or disarm (**Off**) the track for recording.

Use the **MIDI Routing** fields to edit the MIDI routing for the track:

MIDI Input Port: Select the MIDI port from which to receive MIDI data. When set to **All Ports**, the track will receive all incoming MIDI Data from any connected port. To view and edit the available ports, go to ***Preferences*** > ***MIDI / Sync***.

MIDI Input Channel: Sets the MIDI Channel from which to receive MIDI data. Select **Any** to receive from any MIDI channel, or select **1–16**.

MIDI Send: Sets where the MIDI data is sent. You can use this to send the MIDI data from one track to another track.

Use the **MIDI Monitor** field to set the monitoring behavior of the track:

Off: The track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

In: The track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

Auto: The track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

Merge: The track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Color** field to change the track color.

Use the **Row Launch** field to determine the behavior of clips in the track when launching rows. Select **Include in row launch** to launch the track's clips when launching rows, or select **Exclude from row launch** to stop the track's clips from launching with the row.

Tap **Delete Track** at the bottom of the screen to remove the track.

Tap **Reset Strip** at the bottom of the screen to reset all mixer settings for the track.

Tap the **-/+** buttons at the bottom of the screen to move to the previous or next track.

To load a kit into a drum track:

1. Press **Menu** and tap **Browser** to show the Browser.
2. Tap the **Drums** content icon on the left side of the screen to display the factory kits, or navigate to another file location and use the **four-squares** icon above the file list to show only kit files.
3. Find and select a kit, and then tap **Load** to load it to the track.

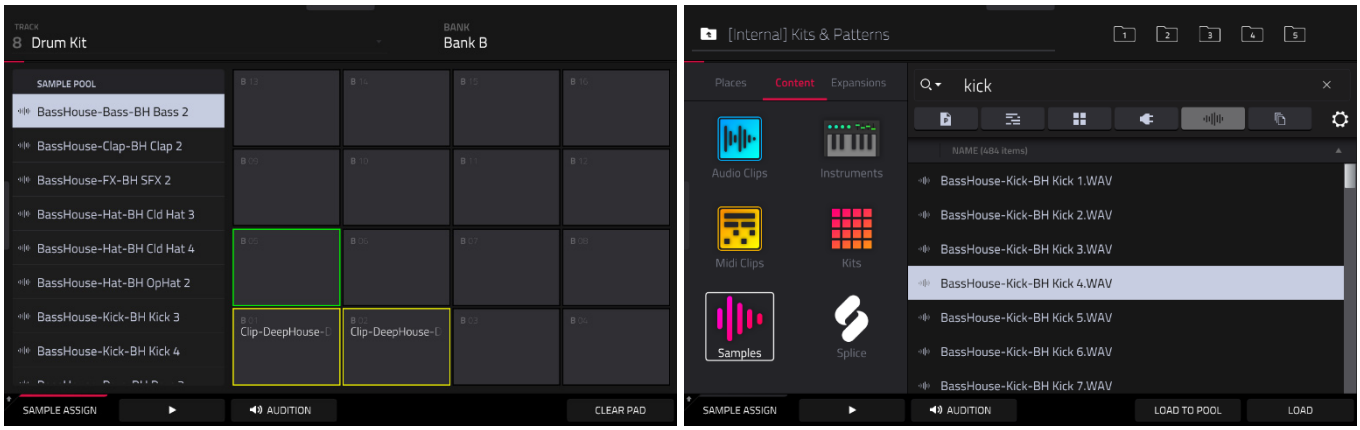
To load a sample into a drum track:

1. Press **Menu** and tap **Browser** to show the Browser.
2. Find and select a sample, and then tap **Load** to load it to the track. Repeat this for any other samples you want to load into the project. (See ***Modes*** > ***Browser*** to learn more about using the Browser specifically.)
3. Tap **Sample Assign** to view the pads and project's sample pool.
4. Press or tap a pad to select it. The pad will be lit green.
5. In the **Sample Pool** list, tap a sample to assign it to the pad.

   To clear the assigned sample from a selected pad, tap **Clear Pad**.

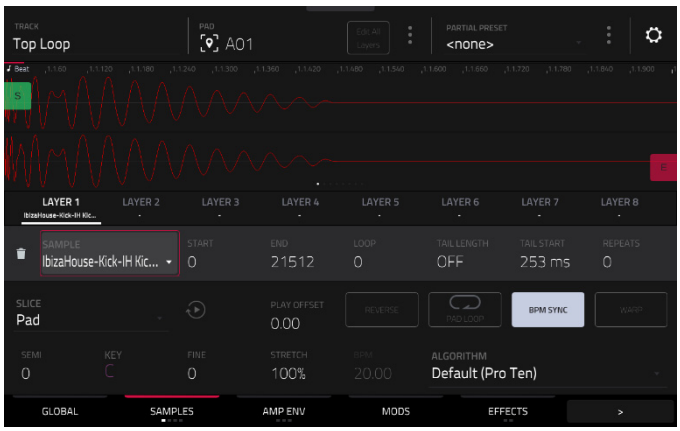
   To assign samples to additional pads, repeat Steps 3–4.

Tip: Remember that a drum track has 128 pads total—16 pads across eight banks.



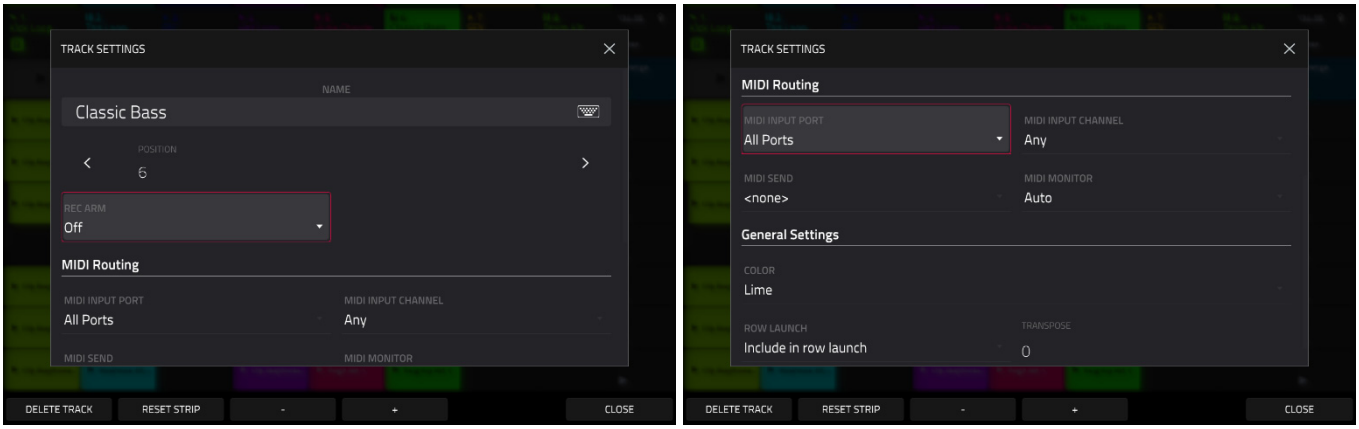
Alternatively, assign samples in a drum track in Track Edit Mode in one of these two ways:

1. Press **Menu**, and then tap **Track Edit** to enter Track Edit Mode.
2. Tap the **Samples** tab. This lets you view the samples assigned to all eight layers of the current pad as well as tuning and level parameters for each layer.
3. Tap a pad to select it (and play its assigned samples, if any).
4. Tap one of the **Layer 1–8** fields under the sample waveform to select a layer. Tap the **Sample** field, and then use the **data dial** or **–/+** buttons to select a sample. Alternatively, double-tap the field for a layer, and then tap a sample to select it.



1. Press **Menu**, and then tap **Track Edit** to enter Track Edit Mode.
2. Tap the **Samples** tab until one of the last three pages are selected. This lets you view the samples assigned to all eight layers of the current pad as well as other parameters for each layer depending on the page.
3. Tap a pad to select it (and play its assigned samples, if any).
4. Tap the **Layer 1–4/5–8** button to toggle between groups of layers. Tap a **Sample** field, and then use the **data dial** or **–/+** buttons to select a sample. Alternatively, double-tap the field for a layer, and then tap a sample to select it.

Keygroup Tracks



Settings:

Tap the track **name** field to rename the track. Use the virtual keyboard that appears to enter a new name, and then tap **Do It** to confirm or the gray bar at the top of the screen to cancel.

Use the **Position** field to change the location of the track, moving the other tracks in relation.

Use the **Rec Arm** field to arm (**On**) or disarm (**Off**) the track for recording.

Use the **MIDI Routing** fields to edit the MIDI routing for the track:

MIDI Input Port: Select the MIDI port from which to receive MIDI data. When set to **All Ports**, the track will receive all incoming MIDI Data from any connected port. To view and edit the available ports, go to ***Preferences*** > ***MIDI / Sync***.

MIDI Input Channel: Sets the MIDI Channel from which to receive MIDI data. Select **Any** to receive from any MIDI channel, or select **1**–**16**.

MIDI Send: Sets where the MIDI data is sent. You can use this to send the MIDI data from one track to another track.

Use the **MIDI Monitor** field to set the monitoring behavior of the track:

Off: The track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

In: The track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

Auto: The track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

Merge: The track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Color** field to change the track color.

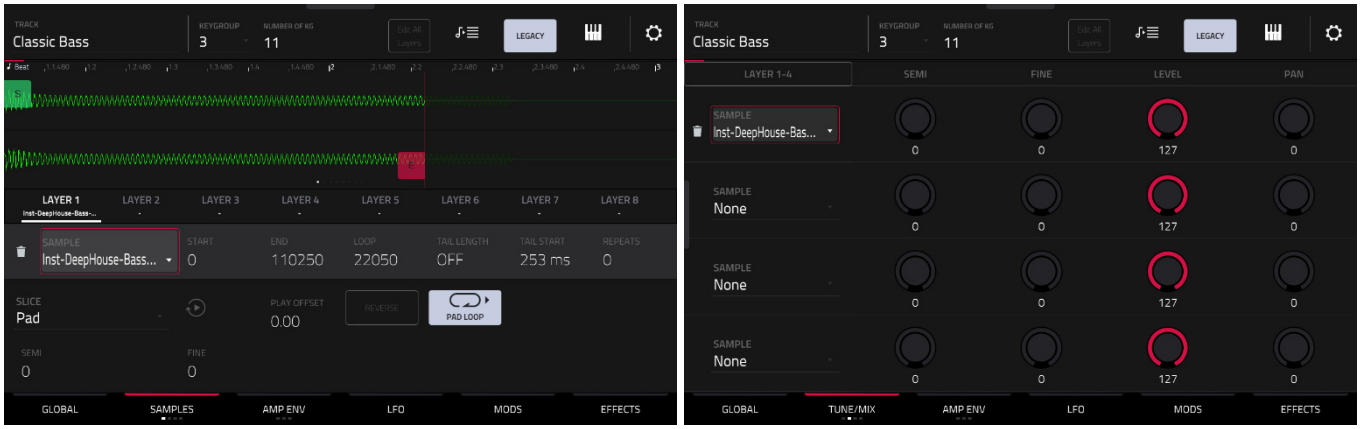
Use the **Row Launch** field to determine the behavior of clips in the track when launching rows. Select **Include in row launch** to launch the track's clips when launching rows, or select **Exclude from row launch** to stop the track's clips from launching with the row.

Use the **Transpose** field to adjust the transposition amount of the track.

Tap **Delete Track** at the bottom of the screen to remove the track.

Tap **Reset Strip** at the bottom of the screen to reset all mixer settings for the track.

Tap the **-/+** buttons at the bottom of the screen to move to the previous or next track.



To assign samples in a keygroup track:

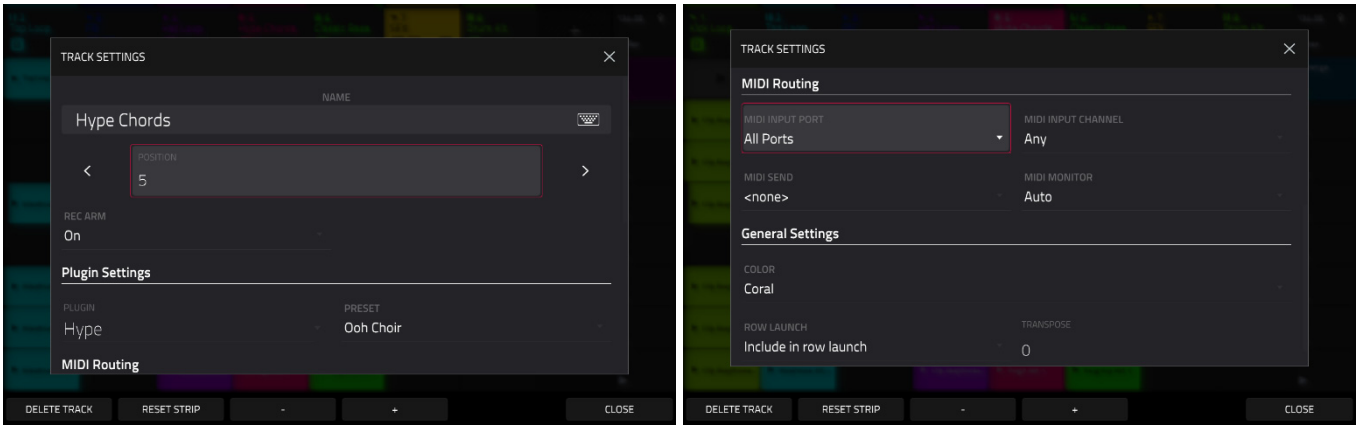
1. Press **Menu**, and then tap **Track Edit** to enter Track Edit Mode.
2. Tap the **Samples** tab. This lets you view the samples assigned to all eight layers of the current keygroup as well as other parameters for each layer depending on the selected page.
3. Use the **Number of KG** field to set the number of keygroups in the track (**1–128**).
4. Use the **Keygroup** field to select a keygroup.
5. Tap the **Layer 1–4/5–8** button to toggle between groups of layers. Tap a **Sample** field, and then use the **data dial** or **–/+** buttons to select a sample. Alternatively, double-tap the field for a layer, and then tap a sample to select it.

To create complex keygroup track, you can add more keygroups (up to 128). This is useful when working with multi-samples (e.g., when programming a real piano).

Tip: Remember that a keygroup track offers up to 128 keygroups, and each keygroup can hold up to eight samples (Layers 1–8). This is a total of 1024 samples.

Plugin Tracks

To learn more about the plugins included with Force, see ***Appendix > Plugins***.



Settings:

Tap the track **name** field to rename the track. Use the virtual keyboard that appears to enter a new name, and then tap **Do It** to confirm or the gray bar at the top of the screen to cancel.

Use the **Position** field to change the location of the track, moving the other tracks in relation.

Use the **Rec Arm** field to arm (**On**) or disarm (**Off**) the track for recording.

Use the **Plugin** field to open the Plugin window to select a plugin for the track.

Tap **Type** or **Manufacturer** to sort your plugins by type or maker.

Tap **Select** to select the plugin, or tap **Close** to cancel.

Use the **Preset** field to select a Preset from the loaded plugin.

Use the **MIDI Routing** fields to edit the MIDI routing for the track:

MIDI Input Port: Select the MIDI port from which to receive MIDI data. When set to **All Ports**, the track will receive all incoming MIDI Data from any connected port. To view and edit the available ports, go to ***Preferences > MIDI / Sync***.

MIDI Input Channel: Sets the MIDI Channel from which to receive MIDI data. Select **Any** to receive from any MIDI channel, or select **1–16**.

MIDI Send: Sets where the MIDI data is sent. You can use this to send the MIDI data from one track to another track.

Use the **MIDI Monitor** field to set the monitoring behavior of the track:

Off: The track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

In: The track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

Auto: The track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

Merge: The track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Color** field to change the track color.

Use the **Row Launch** field to determine the behavior of clips in the track when launching rows. Select **Include in row launch** to launch the track's clips when launching rows, or select **Exclude from row launch** to stop the track's clips from launching with the row.

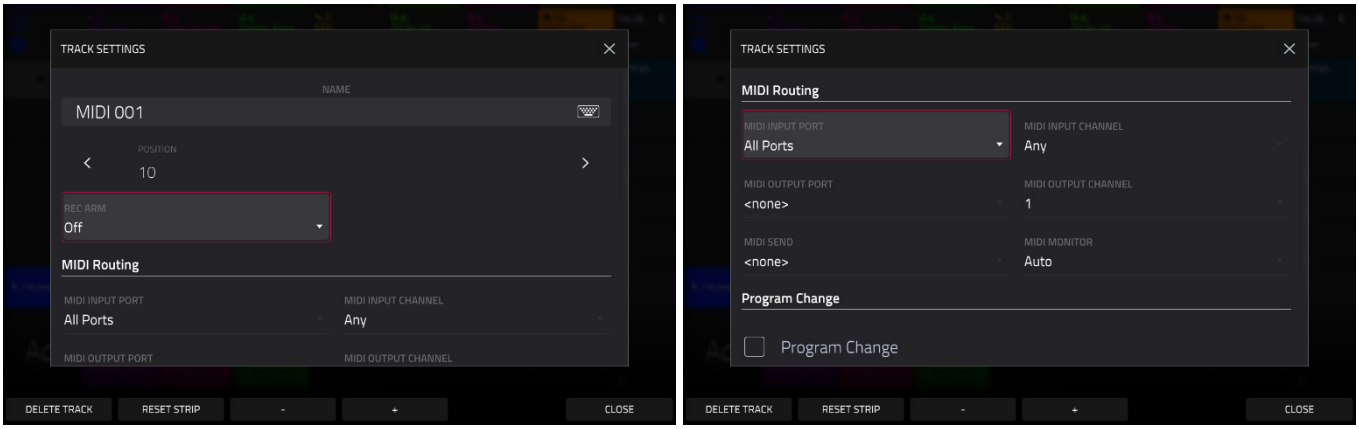
Use the **Transpose** field to adjust the transposition amount of the track.

Tap **Delete Track** at the bottom of the screen to remove the track.

Tap **Reset Strip** at the bottom of the screen to reset all mixer settings for the track.

Tap the **-/+** buttons at the bottom of the screen to move to the previous or next track.

MIDI Tracks



Settings:

Tap the track **name** field to rename the track. Use the virtual keyboard that appears to enter a new name, and then tap **Do It** to confirm or the gray bar at the top of the screen to cancel.

Use the **Position** field to change the location of the track, moving the other tracks in relation.

Use the **Rec Arm** field to arm (**On**) or disarm (**Off**) the track for recording.

Use the **MIDI Routing** fields to edit the MIDI routing for the track:

MIDI Input Port: Select the MIDI port from which to receive MIDI data. When set to **All Ports**, the track will receive all incoming MIDI Data from any connected port. To view and edit the available ports, go to ***Preferences*** > ***MIDI / Sync***.

MIDI Input Channel: Sets the MIDI Channel from which to receive MIDI data. Select **Any** to receive from any MIDI channel, or select **1–16**.

MIDI Output Port: Select the MIDI port to send MIDI data to. To view and edit the available ports, go to ***Preferences*** > ***MIDI / Sync***.

MIDI Output Channel: Sets the MIDI Channel to send MIDI data to. Select **Any** to receive from any MIDI channel, or select **1–16**.

MIDI Send: Sets where the MIDI data is sent. You can use this to send the MIDI data from one track to another track.

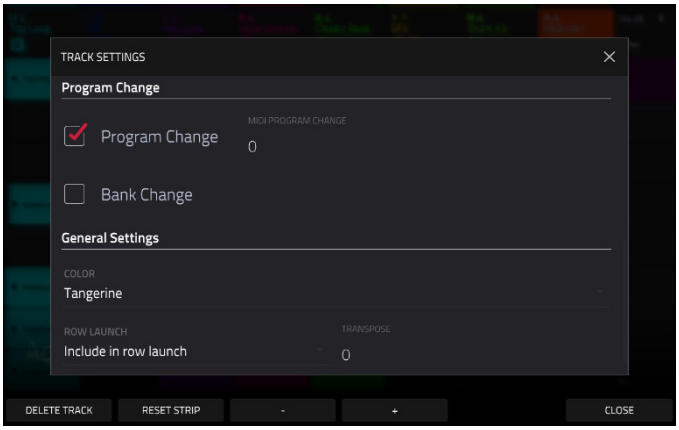
Use the **MIDI Monitor** field to set the monitoring behavior of the track:

Off: The track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

In: The track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

Auto: The track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

Merge: The track's MIDI input is always monitored, and playback of recorded events will be heard.



To select a MIDI program change value for the track to send, check the **Program Change** box to enable program changes, and then double-tap the **MIDI Program Change** field. Use the number pad that appears to enter a value from **1**–**127**, then tap **Do It**. The track will send this value when played. Once enabled, you can also select a MIDI bank change value by checking the **Bank Change** box to enable bank changes, and then use the **MIDI Bank MSB** and **MIDI Bank LSB** fields to set the bank change values.

Use the **Color** field to change the track color.

Use the **Row Launch** field to determine the behavior of clips in the track when launching rows. Select **Include in row launch** to launch the track's clips when launching rows, or select **Exclude from row launch** to stop the track's clips from launching with the row.

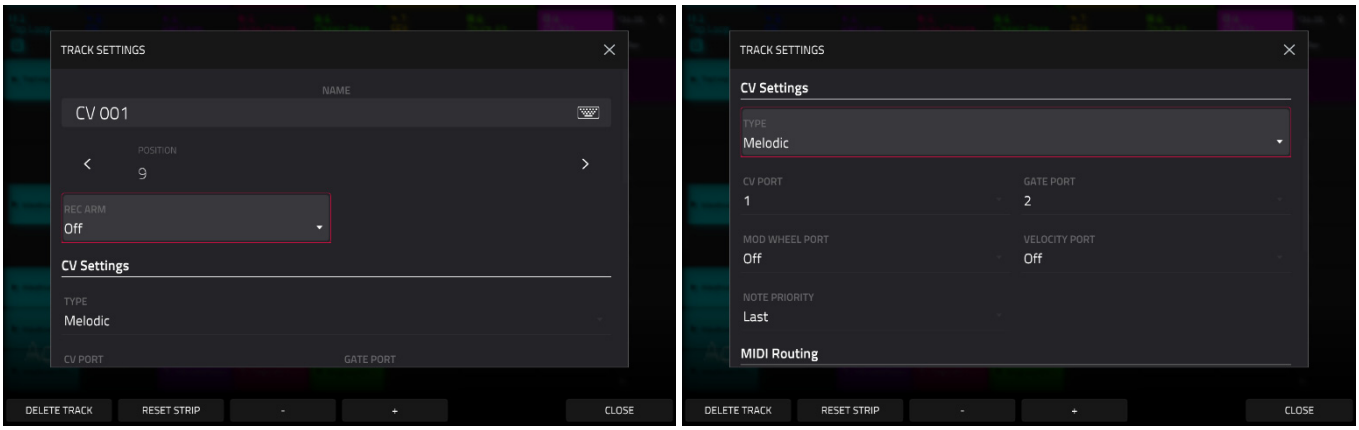
Use the **Transpose** field to adjust the transposition amount of the track.

Tap **Delete Track** at the bottom of the screen to remove the track.

Tap **Reset Strip** at the bottom of the screen to reset all mixer settings for the track.

Tap the **-/+** buttons at the bottom of the screen to move to the previous or next track.

CV Tracks



Settings:

Tap the track **name** field to rename the track. Use the virtual keyboard that appears to enter a new name, and then tap **Do It** to confirm or the gray bar at the top of the screen to cancel.

Use the **Position** field to change the location of the track, moving the other tracks in relation.

Use the **Rec Arm** field to arm (**On**) or disarm (**Off**) the track for recording.

Use the **Type** field to select **Melodic** or **Drum** CV track operation. Melodic CV tracks behave the same as previous Force versions. Drum CV tracks can be used to configure any pad to output on any CV port.

When Melodic type is selected, there are five additional settings to configure for a CV track: the **CV Port**, the **Gate Port**, the modulation wheel port (**Mod Wheel Port**), **Velocity Port** and **Note Priority**. Tap each field and use the **data dial** or **-/+** buttons to edit the setting.

When **Drum** type is selected, tap the **Edit Map** button to assign each pad to a specific CV port and data type.

Use the **MIDI Routing** fields to edit the MIDI routing for the track:

MIDI Input Port: Select the MIDI port from which to receive MIDI data. When set to **All Ports**, the track will receive all incoming MIDI Data from any connected port. To view and edit the available ports, go to ***Preferences*** > ***MIDI / Sync***.

MIDI Input Channel: Sets the MIDI Channel from which to receive MIDI data. Select **Any** to receive from any MIDI channel, or select **1–16**.

MIDI Send: Sets where the MIDI data is sent. You can use this to send the MIDI data from one track to another track.

Use the **MIDI Monitor** field to set the monitoring behavior of the track:

Off: The track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

In: The track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

Auto: The track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

Merge: The track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Color** field to change the track color.

Use the **Row Launch** field to determine the behavior of clips in the track when launching rows. Select **Include in row launch** to launch the track's clips when launching rows, or select **Exclude from row launch** to stop the track's clips from launching with the row.

Use the **Transpose** field to adjust the transposition amount of the track.

Tap **Delete Track** at the bottom of the screen to remove the track.

Tap **Reset Strip** at the bottom of the screen to reset all mixer settings for the track.

Tap the **-/+** buttons at the bottom of the screen to move to the previous or next track.

Menu

The Menu displays the available modes in Force, as well as project information, hardware information, preferences, save and load options, and more.

To open the Menu, press **Menu**, or tap the icon in the upper-left corner of the screen while in ***Main Mode***.

When viewing the Menu, do any of the following:

To enter a mode, tap it.

To return to the previous mode, tap ← in the upper-left corner, or press **Menu** again.

To change menu pages, tap the **<** or **>** arrows.

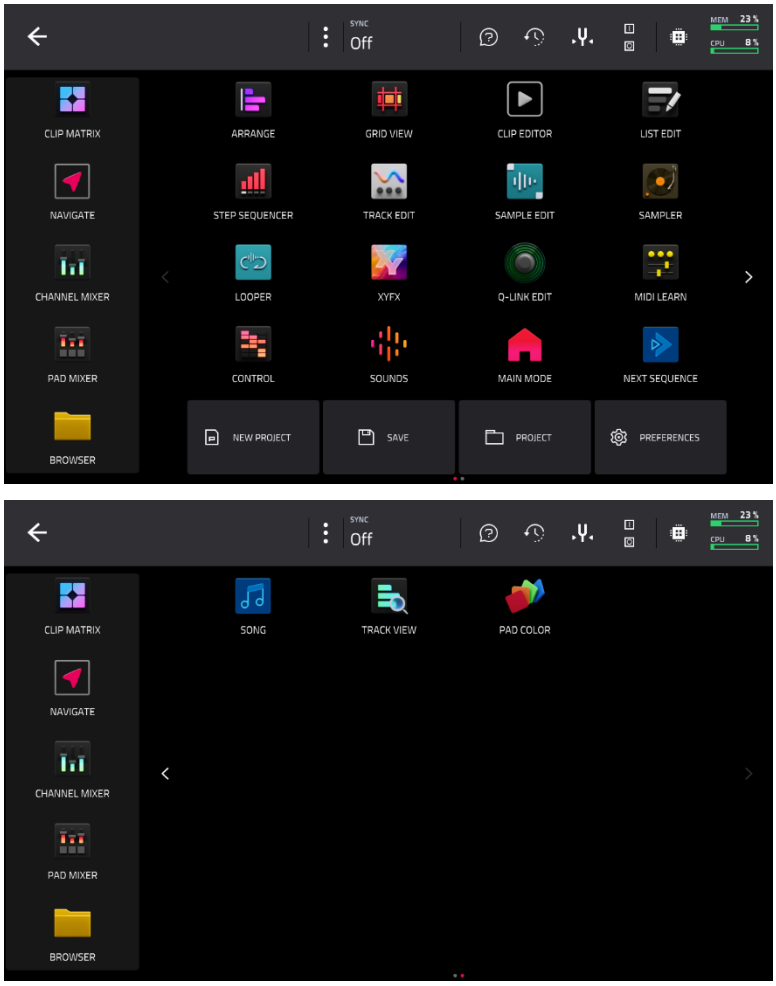
Tap **New Project** to open a new project.

Tap **Save** to open the ***Save Window***.

Tap **Project** to open the ***Project*** window.

Tap **Preferences** to open the ***Preferences*** menu.

To rearrange the menu layout, tap and drag a mode icon to the desired location. All other mode icons will shift to accommodate the new positioning. The five modes on the left side are also available to access in most screens by swiping the black touch handle to the right from the left edge of the touchscreen. Tap the **three-dots icon** next to the **Sync** setting and then tap **Reset Mode Menu** to revert all layout changes.



Click a part of the screen above to skip directly to that part of this user guide.

Toolbar

Sync

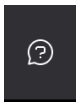
Tap the **Sync** field (in the center of the top of the screen) and then turn the **data dial** or use the **–/+** buttons to set whether your Force receives MIDI Clock information (**MIDI Clock**), MIDI Time Code information (**MTC**), communication from **Ableton Link**, or none of these (**Off**). Alternatively, double-tap **Sync** and tap the desired option to select it.

This is the same setting as the **Receive** menu in the ***Preferences*** > ***MIDI / Sync*** tab.

Note: Ableton Link is a technology that synchronizes beat, phase, and tempo of Ableton Live and Ableton Link-enabled applications over a wireless or wired network. See ***Preferences*** > ***Wi-Fi*** or ***Preferences*** > ***Ethernet*** to learn how to connect to a network.

Help

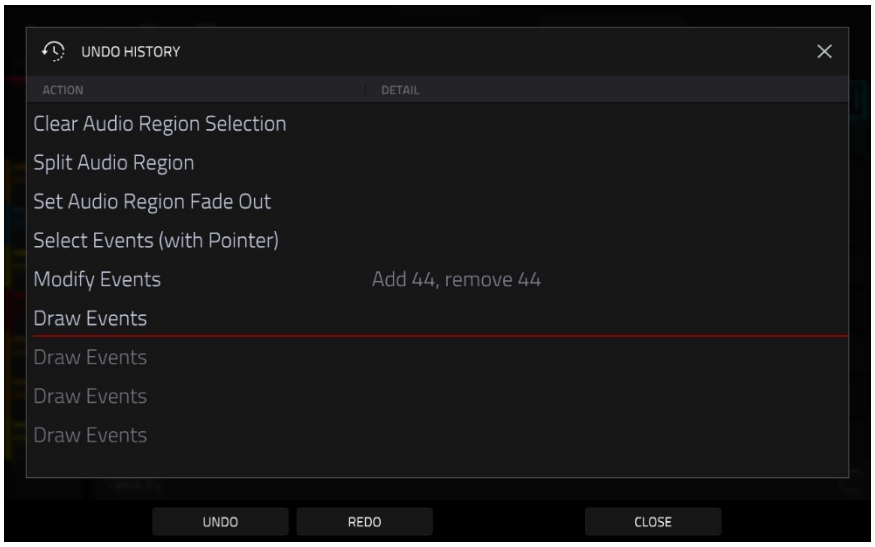
Tap the **?** icon to open the Help window. Scan the QR code that appears to open this User Guide.



Tap **Close** or the **X** to close the Help window.

Undo History

To open the Undo History window, tap the **clock icon** at the top of the screen. In the Undo History window, you can view a list of recent actions along with a detail about the action if applicable.



Tap **Undo** to undo an action.

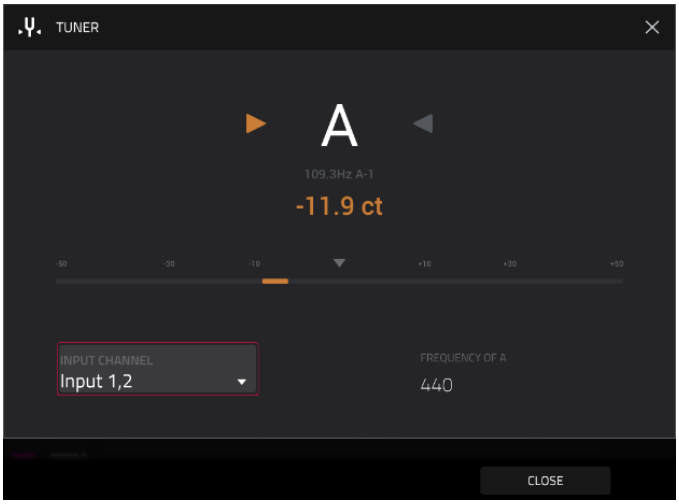
Tap **Redo** to redo an action.

Alternatively, tap and drag the **red line** in the action list to quickly undo or redo multiple actions. Actions below the red line in grey have been undone.

Tap **Close** or the **X** to close the Undo History window.

Tuner

Tap the **tuning fork** at the top of the screen to open the built-in tuner. The tuner allows you to easily tune any connected audio sources such as guitars, basses, synth modules, and other pitched instruments.



To tune your instrument, play a note and use the indicator to adjust your instrument to the correct pitch.

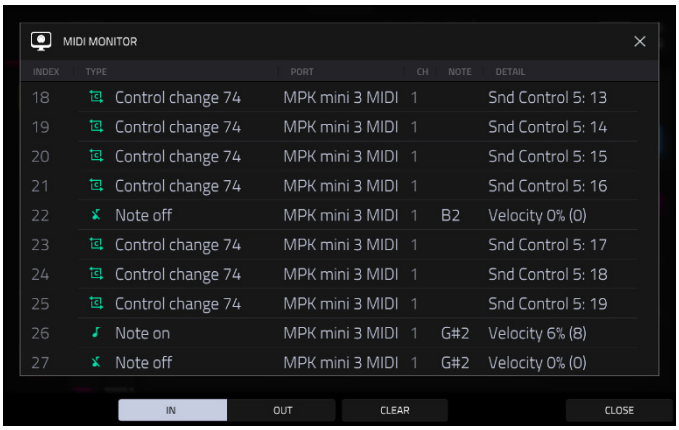
Use the **Input Channel** field to select the input for the instrument you would like to tune.

Use the **Frequency of A** field to set the base tuning frequency.

Tap **Close**, the **X** in the upper-right corner, or anywhere outside the window to close the tuner screen.

MIDI Monitor

Tap the **I/O icons** to open Force's MIDI monitor. You can use this to view incoming and outgoing MIDI data from devices connected to your Force.



Tap the **In** button to view incoming MIDI data.

Tap the **Out** button to view outgoing MIDI data.

Tap the **Clear** button to clear the list of MIDI data.

Tap the **Close** button or the **X** to close the MIDI Monitor.

Mode

Tap this icon to switch Force to Computer Mode. It is recommended to save your project before switching to Computer Mode since you cannot freely switch between Standalone and Computer Modes without also closing your current project.

In Standalone Mode:

- The Force hardware will **not** communicate with a computer over a USB connection.
- Any files (projects, samples, etc.) that you save or load are in the internal hard drive on your Force or a connected USB drive or SD card.

In Computer Mode:

- Force will communicate with a computer over USB connection.
- Force can be used as an audio interface.

To enter Computer Mode:

1. Make sure the **USB-B Port** on Force is connected to your computer.
2. If Force is powered off, press the **power button** to turn it on.
3. With Force in Standalone Mode, press **Menu** to open the Menu, and then tap the **computer icon** in the upper-right corner.
4. Follow the directions on screen to continue. **Looking for computer** may appear briefly on the display before your computer recognizes the USB connection.

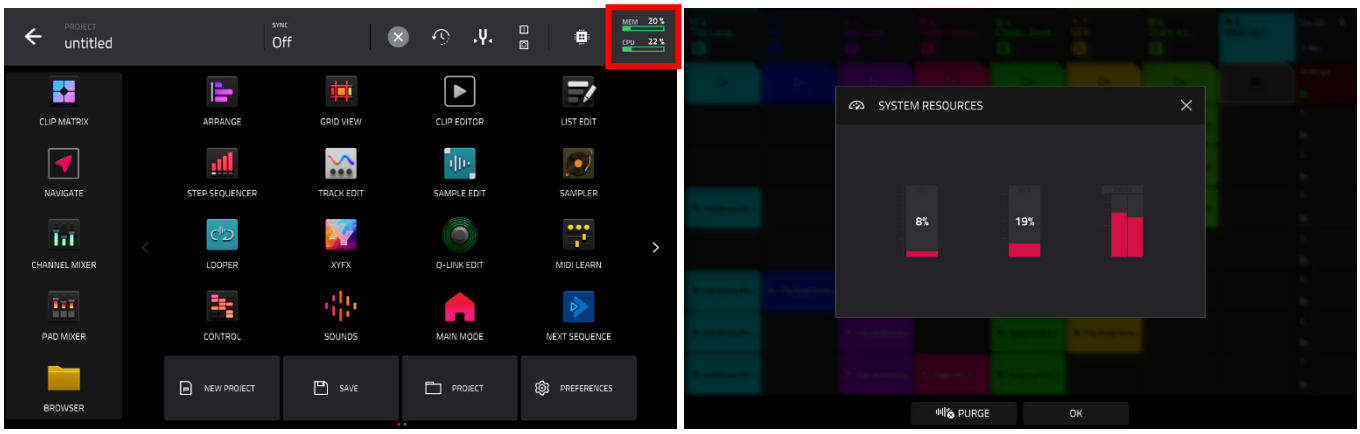
   Once connected, the display will show **Computer Mode** with a monitor icon and a button to return to Standalone Mode.

To return to Standalone Mode:

1. If Force is powered off, press the **power button** to turn it on.
2. With Force in Computer Mode, press **Standalone**.
3. A confirmation window will appear. Make sure that you have safely ejected all drives connected to Force, and then tap **Yes** to continue. (If you tap **Cancel**, you can continue using Force in Computer Mode.)
4. Force will restart into Standalone Mode.

System Resources

Tap one of these icons to show the System Resources window for Force.



The indicators in this window show current usage statistics:

CPU: The **CPU** indicator shows the current **CPU** as a percentage.

RAM Usage: The **Mem** indicator shows your Force's current RAM usage.

Important: If you encounter a warning that there is not enough memory to complete an action while using your Force, do the following to make more memory available:

Make sure all audio tracks in your project are **not** record-armed.

Remove unused samples from your project's sample pool that were there before the warning appeared, and discard unused regions of samples that have been loaded within the project.

If you are still seeing the warning, do the following:

1. **Manually** undo the last action you performed before seeing the warning (you may not be able to use the **Undo** button for this due to how the undo history is stored in RAM).
2. Save your project.
3. Do one of the following, and then load your saved project again.
   - Open the **Menu**, and then tap **New Project** at the bottom of the screen.
   - Power your Force off and then on again.
   - Press **Menu** and then tap the **gear icon** to open the **Preferences**. In the Preferences, tap **Reset** at the bottom of the screen, tap **OK**, and then tap **Restart** to reset the Preferences.
   - Enter Computer Mode and then re-enter Standalone Mode.

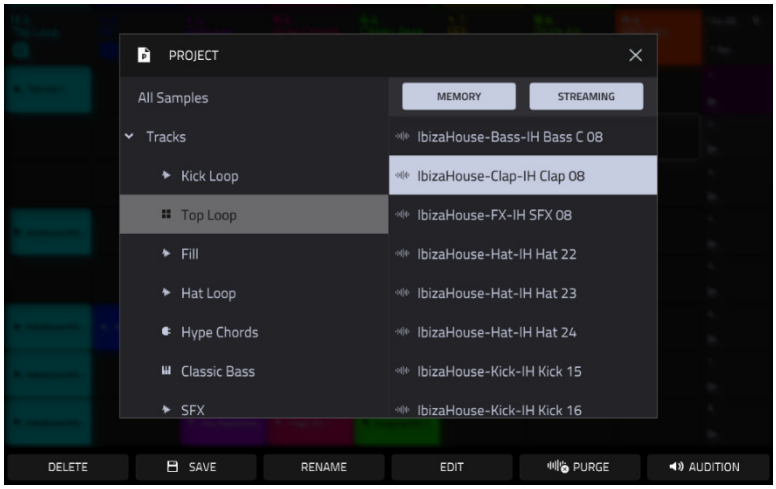
Important: Although you can load multiple files at once, any samples you load into a project will be automatically converted to full-quality uncompressed audio files, so they may use more storage space than they do on your external storage device. If you are unable to load multiple files at once due to this, select fewer files and try again.

Drives: The **Drives** indicator shows the available storage space on any detected external storage devices or the internal drive of your Force.

To delete samples from the project (to create more free RAM space for sampling time, audio recording, etc.), tap **Purge**. In the screen that appears, tap **Unused Samples** to delete all unused samples from the project, tap **All Samples** to delete all samples from the project (from all tracks, sequences, and audio or MIDI tracks), or tap **Cancel** to return to the previous screen.

To close the System Resources window, tap **OK**, the **X** in the upper-right corner, or anywhere outside the window.

Project



To open the Project window, tap the **Project** button at the bottom of the Menu. The Project window shows an overview of all samples and tracks in the current project.

Tap **Purge** to delete samples from the project (to create more free RAM space for sampling time, audio recording, etc.). In the screen that appears, tap **Unused Samples** to delete all unused samples from the project, tap **All Samples** to delete all samples from the project (from all kits and audio or MIDI tracks), or tap **Cancel** to return to the previous screen. Alternatively, tap to select a sample and then tap **Delete** at the bottom of the screen.

Tap **Memory** and **Streaming** to show or hide files in memory or streaming from disk. Before doing this, you must first enable Disk Streaming by going to **Menu > Preferences > Audio/Export** and checking the **Enable Disk Streaming** box. Disk streaming allows audio files to be streamed from a disk drive rather than from memory.

Note: Disk streaming relies on the performance of the disk you are streaming from. For best operation, it is recommended to use an SSD (solid-state drive) connected to Force's internal SATA port. Once you have saved a project to your SSD, your files will stream from that location. For an unsaved project, Force uses a temporary file location to stream audio files from. Go to ***Menu > Preferences > Project Load/Save*** and set the **Temporary File Location** to your SSD for best results.

To change a sample from streaming from memory to streaming from disk, tap and hold on a sample name in the **Project** list, and then select **Stream From Disk** in the menu that appears. A sample's streaming or memory state will be saved and recalled with your project.

Note: Using streamed samples with Drum and Keygroup tracks may cause performance issues when triggering multiple samples or retriggering at high rates.

If a project is too large to be loaded into memory, your Force will load the project and display the missing samples in the **Project** window with a waveform with a red minus icon. Once enough memory has been freed up, the missing samples can then be loaded from the Project window. Tap and hold on the sample name and then select **Load To Memory** from the menu that appears.

Tap a sample or select it using the **data dial** or **-/+** buttons to preview it.

Tap **Save** at the bottom of the screen to save the selected sample.

Tap **Rename** at the bottom of the screen to rename the selected sample. Use the keyboard that appears to enter a name and then tap **Do It** to confirm.

Tap **Edit** at the bottom of the screen to open Sample Edit mode to edit the selected sample.

Tap **Audition** at the bottom of the screen to open the Audition settings.

Tap **Auto** to enable or disable automatic audition when a sound is selected.

Tap and drag the **level slider** up or down to set the audition volume level.

Tap **Sync** to enable or disable auditioning samples at the beginning of the next bar of the sequence when playback is active.

Tap **Warp** to enable or disable samples with an embedded tempo to be warped to the project tempo. Samples with no embedded tempo or externally-embedded tempo will not be affected by this setting.

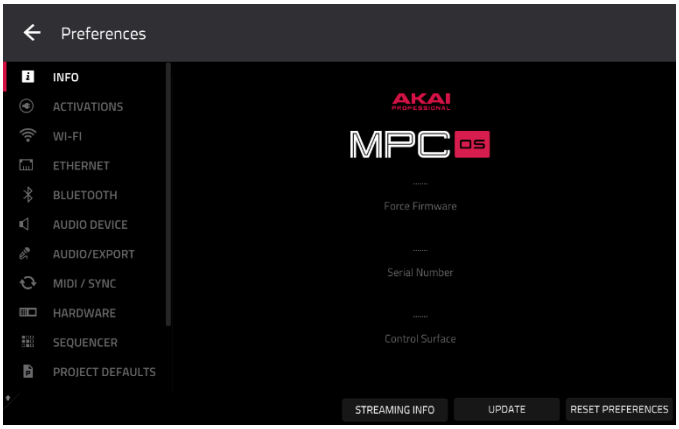
Tap the **Audition icon** once more to hide the window.

Preferences

To open the Preferences, tap the **Preferences** at the bottom of the Menu.

To return to the Menu, tap the ← **icon** in the upper-left corner. Changes to the **Preferences** are saved automatically.

To restore your Force's default settings, tap **Reset Preferences**. In the screen that appears, tap **OK** to continue or **Cancel** to return to the Preferences. In the next window, tap **Save** to save your current project before restoring the default settings; tap **Cancel** to return to the Preferences; or tap **Don't Save** to restore the default settings without saving your current project.



Info

This screen shows current information about your Force: its current firmware version, which includes its standalone operating system (**Force Firmware**); it's hardware **Serial Number**; and its current firmware for the **Control Surface**.

Tap **Streaming Info** to open the Disk Streaming Status window.

Tap **Update** to update your Force.

Select **Online Update** to automatically download and install the latest update (you must enable a network connection for this to work).

Select **USB Drive Update** to update from a file on a connected USB drive.

Select **Switch to Update Mode** to connect your Force to your computer for updating. In the screen that appears, tap **Save** to save your current project before entering Update Mode; tap **Cancel** to return to the Preferences; or tap **Don't Save** to enter Update Mode without saving your current project.

Tap **Reset Preferences** to reset all Force preferences to their default settings.

To view legal information relevant to Force, press and hold **Shift** and tap **Legal Info**. For complete legal information, visit **akaipro.com/product-legal**.

To view additional version information, press and hold **Shift** and tap **Version Info**.

Activations

The settings on this screen allow you to sign in to your inMusic Profile to activate purchased plugin licenses.

1. First, make sure you are connected to a Wi-Fi network.
2. In the Activate Plugins menu, tap the **Log In** button to log into your inMusic Profile. You can scan the QR code with a mobile device or open the URL shown on the page in a browser of your choice. Enter the code shown on your device and log into your account. If you do not already have an account, you will be prompted to create one.
3. Once you have been logged in, you can try out plugin instruments through a free trial, or activate your purchases.

   To register a purchase, use the **Enter Serial** field to enter your serial number and then tap **Register**.

   To refresh the page with your latest purchases or activations, tap **Refresh**.

   To sort this list of purchases or activations, tap the **All**, **Instruments**, **FX**, or **Features** categories at the top of the list.

   To start a trial, tap the **Get Trial** button next to the desired plugin.

   To activate a plugin on your device, tap the **Activate** button next to its name. Tap **Deactivate** to remove the plugin activation from your device.

   To download a purchase to your device, first tap the **Change** button at the bottom of the touchscreen to select a Content Download Drive. This can be the internal storage drive or a connected SATA drive, USB drive, or SD card. Then, tap the **download icon** to begin downloading the plugin to your drive. The download icon will change to show the installation progress. Once the process is complete, you can use your plugin with Force.

   To log out of your account, tap **Log Out**.

Wi-Fi

The settings on this screen will determine how your Force's wireless connection works, so you can use Ableton Link, a technology that synchronizes beat, phase, and tempo of Ableton Live and Ableton Link-enabled applications over a wireless or wired network.

Tap the **On/Off** selector to activate or deactivate wireless connectivity on your Force. The available wireless networks will appear in the panel below it.

Tap the desired wireless network to select it, then tap **Connect** to connect to it. If the Wi-Fi network is password-protected, use the virtual keyboard that appears to enter the correct password to connect to it. Tap **Show** to display the password as you type it.

To view the information of a selected wireless network, press and hold **Shift** and tap **Info**. The **Network Information** window that appears will show the network name, IPv4/IPv6 address (including the subnet mask and gateway), type of security, and signal strength (as a percentage).

To disconnect from a connected wireless network, select it and then tap **Disconnect**.

To clear the connection information (e.g., the password) **from a selected wireless network**, select it and then tap **Forget**.

To reset all Wi-Fi settings, press and hold **Shift** and tap **Reset**.

Ethernet

The settings on this screen will determine how your Force hardware connects to a wired network using an Ethernet cable connected to the **Link** port. This allows you to maintain a tighter network connection when using Ableton Link or the Akai Network Driver.

To activate or deactivate Ethernet connectivity on your Force, tap the **Enabled** box.

To determine how your Force connects to the network, use the **Address Method** dropdown. Select **Automatic** to have your Force set the Ethernet connection, or **Manual** to set it yourself.

When setting the Ethernet connection manually, tap the **IP Address**, **Subnet Mask**, **Gateway**, and **DNS** fields to input the values.

Bluetooth

The settings on this screen will determine how your Force hardware's Bluetooth connection works, so you can use Bluetooth MIDI controllers (e.g., LPD8 Wireless or LPK25 Wireless) or a Bluetooth computer keyboard with it. These settings are available only when used in Standalone Mode.

To activate or deactivate Bluetooth connectivity on your Force, tap the **On/Off** selector. The available Bluetooth devices will appear in the panel below it under **Available Devices**. The Bluetooth devices that have already paired to your Force will appear under **Paired Devices**.

To select a Bluetooth device, tap it.

To pair a selected Bluetooth device (in the Available Devices section), tap **Pair**.

To connect to a selected Bluetooth device (in the Paired Devices section), tap **Connect**.

To disconnect from a connected Bluetooth device (in the Paired Devices section), tap **Disconnect**.

To return an available Bluetooth device to its original state, tap **Remove**.

Audio Device

The settings on this screen allow you to set up an external USB and Linux class-compliant audio interface for use with your Force. Audio devices must also be set to 44.1 kHz sample rate and 128 sample buffer size.

Note: If you are unsure of your audio interface's compatibility, check with the original equipment manufacturer for more information.

Audio Device: This determines whether you are using the **Internal** sound device, or a selected class-compliant audio interface connected to your Force.

32 Inputs/Outputs: Check this box to enable use of up to 32 simultaneous inputs and outputs.

Note: Increasing the number of simultaneous inputs and outputs will also increase CPU overhead.

Audio/Export

The settings on this screen determine the settings for audio, recording, and exporting.

Enable Disk Streaming: This determines whether disk streaming is enabled or disabled. Force will require a restart after disk streaming is enabled or disabled, which may require you to save or discard changes to the current project. Once enabled, a sample can be set to stream from disk or memory using the ***Project*** window. By default, Drum and Keygroup samples are loaded into memory, as this works better for on-demand, rapid triggering of multiple, simultaneous voices**.**

Note: Disk streaming relies on the performance of the disk you are streaming from. For best operation, it is recommended to use an SSD (solid-state drive) connected to your Force's internal SATA port, if available. Once you have saved a project to your SSD, your files will stream from that location. For an unsaved project, your Force uses a temporary file location from which to stream audio files. Go to **Preferences > Project Load/Save** and set the **Temporary File Location** to your SSD for best results.

Recording Bit Depth: This determines the bit depth of recorded audio.

Bounce/Extract Bit Depth: This determines the bit depth of audio bounced or extracted: **16**-bit or **24**-bit.

Default Audio Warp Algorithm: This determines the default time-stretching algorithm, which determines how a sample is "warped" when you adjust the length of a sample without changing its pitch (e.g., the **Warp** function in Audio Region Edit Mode for audio tracks or in Track Edit Mode for Drum/Keygroup tracks). Select **Pro Ten** or **Repitch**. When using Repitch, warping an audio sample will adjust its pitch to synchronize it with the Force tempo. You can override the default algorithm by selecting another option in the **Samples Tab** or ***Track Edit Mode*** or by changing the algorithm in ***Grid View***.

Note: The Pro Ten and Repitch Warp algorithms can be very CPU-intensive, and can result in audio drop-outs during playback if used too freely. Be mindful of how (and how often) you use the warp function.

Audio Track Auto Warp: This determines how recorded audio track regions are warped. When set to **On**, any audio track region that you record will be warped automatically to match the current project tempo. You can then adjust the project tempo while the audio track region remains in time.

Note: When you record an audio file, the current project tempo will be embedded with it. This information is stored within the sample file when you save the project. When you warp an audio track region, the warping algorithm uses this project tempo and the current value in the **BPM** field to generate the "stretch factor."

BPM Auto Detection: This enables automatic detection of BPM from loaded samples.

BPM Detection Range: This defines the range of detectable BPM values when you use any automatic BPM detection function in the software or when you press the **Tap** button to enter a new tempo.

MIDI / Sync

The settings on this screen determine how your Force uses and synchronizes with connected USB and MIDI devices.

Input Ports: This displays all available MIDI input ports in a list. Double-tap the **keyboard icon** to rename a port to a custom name. When **Global** is enabled, MIDI data from this port will always go to the current track. When **Control** is enabled, MIDI data from this port will be sent to MIDI Learn. When **Track** is enabled, this MIDI port will appear in the list of available MIDI Inputs. Click the **reset arrow** to reset the MDI Port settings.

Output Ports: This displays all available MIDI output ports in a list. Double-tap the **keyboard icon** to rename a port to a custom name. When **Sync** is enabled, the MIDI output port will send MIDI sync messages according to the type set under Sync ***Send***, below. When **Track** is enabled, this MIDI port will appear in the list of available track MIDI outputs. Click the **reset arrow** to reset the MDI Port settings.

Enable MIDI Ports When Discovered: When enabled, any time a MIDI device is plugged in the Track option is automatically enabled so the ports can be selected as an available MIDI input or output.

MIDI Control Mode Output: This determines which MIDI port the Force is using to send MIDI messages to external MIDI devices.

Receive: This determines whether your Force receives MIDI Clock information (**MIDI Clock**), MIDI Time Code information (**MIDI Time Code** (**MTC**)), communication from Ableton Link (**Ableton Link**), or none of these (**Off**).

Important: Audio recording is disabled when receiving MIDI Clock sync. Use MIDI Time Code to record audio while receiving MIDI sync.

Ableton Start/Stop Sync: When enabled, this allows devices connected with Ableton Link to share start/stop commands.

Receive MMC: When enabled, your Force will be able to receive MIDI Machine Control (MMC) information. When disabled, your Force will not receive this information. See ***Appendix > MIDI Machine Control (MMC)*** to learn about this.

Send: This determines whether your Force sends MIDI Clock information (**MIDI Clock**), MIDI Time Code information (**MIDI Time Code** (**MTC**)), or neither (**Off**).

Send MMC: When enabled, your Force will be able to send MIDI Machine Control (MMC) information. When disabled, your Force will not send this information. See ***Appendix > MIDI Machine Control (MMC)*** to learn about this.

MTC Frame Rate: This determines the frame rate used by MIDI Time Code (MTC), which is important for correct timing, especially when working on film scoring projects. In most cases, you should select **25**.

Start Time: This is the starting time that will be sent when **Send MIDI** is set to anything other than **Off**. The time is formatted in **hours**:**minutes**:**seconds**:**frames**.

Filter 'All Notes Off' CC: When enabled, "All Notes Off" ("MIDI panic") messages will be ignored. This is useful if you are using an external MIDI device that can send these types of messages, but you want to filter them out. When disabled, "All Notes Off" messages will be received normally.

Program Change: This determines what an incoming MIDI program change message will change: a **Program**, **Sequence**, or **Track**.

Hardware

The settings on this screen determine the behavior of your Force's pads and touchscreen.

Empty Slots: This determines how the clip launch pads appear when no clip is loaded.

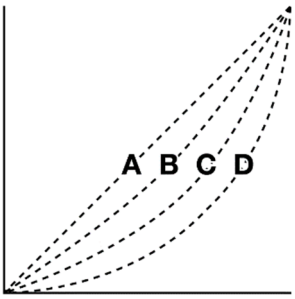
Track Select Buttons: This determines the behavior of the Track Select buttons

Pad Brightness: This determines the overall brightness of your Force's pads.

Pad Threshold: This determines how much force is required to strike the pads for them to trigger.

Pad Sensitivity: This determines how the pads respond to touch. At lower values, you need to use more force to generate a high-velocity note. At higher values, it is easier to generate high-velocity notes, even if you do not use much force while pressing a pad.

Pad Curve: This determines how striking the pads translates into velocity values. The **A** curve is essentially linear, while the **B**, **C**, and **D** curves are exponential (see graphic here).



Velocity & **Aftertouch**: View these meters when striking and pressing the pads to help gauge the force and pressure you are applying to them. These meters are useful when adjusting the Pad Threshold and Pad Sensitivity parameters (above).

Screen Dimming: This determines how much time must pass before your Force automatically dims its touchscreen (if it uses a battery, this can help preserve battery life).

Screen Brightness: This determines the brightness of the screen during normal operation: normal brightness (**Day**) or dimmed (**Night**).

Tap Tempo: This determines how many times you must press the **Tap** button before the new tempo is recognized.

Flash Tap Tempo Light: When enabled, the **Tap** button's light will flash in time with the tempo. When disabled, the **Tap** button's light will be off.

Global Pitch Bend: Enable this option to override the pitch bend settings of all tracks, so that those with pitch bend disabled or set to different ranges will only use the Global Range instead. When disabled, all tracks may use their individual pitch bend settings.

Range Down / Range Up: Use these fields to determine the range of pitch bend in semitones.

Date: This is the current date, formatted as **Month** / **Day** / **Year**. When saving files on Force in Standalone Mode, the file will include the current date in its metadata. If you use Force in Computer Mode, this setting will be overwritten with the current date of the host computer.

Time: This is the current time, formatted as **Hour** : **Minute**. When saving files on Force in Standalone Mode, the file will include the current time in its metadata. If you use Force in Computer Mode, this setting will be overwritten with the current time of the host computer.

Time Zone: This is the current time zone, formatted as **Continent** / **City**, which you can change here.

Sequencer

The settings on this screen determine how sequencing works in the Grid View and in the Step Sequencer.

Note Length (Playback): This determines if/how events are cropped if they exceed the length of the current track during playback.

As Recorded: Events will play back exactly as they were recorded, even if they overlap themselves when the sequence loops.

Truncate Length: If the length of an event exceeds the length of the sequence, it will be truncated. This ensures that the event will not overlap itself when the sequence loops.

Track Mute State Per Sequence: When enabled, you can maintain separate track mute statuses when changing sequences. This can allow you to create unique mute setups for each sequence, providing greater flexibility in live performance and arrangement creation.

Solo Behavior: This determines the behavior of the Solo buttons. When set to **Single**, only one track can be soloed at a time by default. However, you can still press and hold **Shift** to solo multiple tracks at the same time. When set to **Multi**, you can solo multiple tracks at the same time by default.

Rec Arm Behavior: This determines the behavior of the Record Arm buttons. When set to **Single**, selecting a different track will automatically arm that track and disarm all other tracks. This is the default mode and is the same as previous Force releases. You can also arm multiple tracks on **Single** mode by holding **Shift** and tapping each track's record button. When set to **Multi**, you can tap any track's record button to add it to the group of armed tracks.

Record Track Mute and Solo Events: When enabled, track mute and solo events are recorded when you are in Track Mute Mode (timing correct settings will affect the recorded position events). When disabled, track mute and solo events will not be recorded while in Track Mute Mode. This feature is useful if you want to use Track Mute Mode to record track mutes or solos into your sequences as opposed to using Track Mute Mode for performance or listening purposes only.

Record Pad Aftertouch Events: When enabled, pad aftertouch data (from the Force's pressure-sensitive pads) will be recorded. When disabled, pad aftertouch data will be ignored.

Place Events Recorded During Count-In at Start Point: When enabled, pressing a pad during the recording's pre-count will record that note event at the start of the recording (this is how the MPC3000 worked). When disabled, no notes will be recorded until the pre-count is finished and recording has begun.

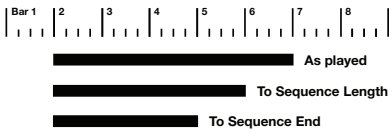
Note: This setting is ignored when recording with the Arpeggiator active.

Note Length (Recording): This determines if/how events are cropped if they exceed the length of the current Sequence during recording:

Truncate To Sequence Length: If the length of an event exceeds the length of the sequence, it will be truncated. This ensures that the event will not overlap itself when the sequence loops.

Truncate To Sequence End: If an event exceeds the length of the sequence, it will be truncated to the end of the current sequence. In other words, the event will stop playing when the sequence ends or loops.

As Played: Events will play back exactly as they were recorded, even if they overlap themselves when the sequence loops.



For example, if you record a note starting on the second bar of a 4-bar loop and hold it for 5 bars, the note will end: at bar 7 (As Played), at bar 6 (To Sequence Length), or bar 4 (To Sequence End). See image for details.

Q-Link Playhead Increment: This determines how the playhead moves when controlled by the **Q-Link** knob. Select **1/16 Note** to lock playhead movement to 1/16 notes, or select **TC Division** to have the playhead movement tied to the current Timing Correct division. This value can be set in the Timing Correct window in Grid View by tapping the **clock icon** at the bottom-left of the grid.

Q-Link Swing Control Applies TC Settings on Release: When enabled, turning the Q-Link knob assigned to **Swing** and then releasing it will immediately apply that Swing setting. When disabled, you must use the Timing Correct window to apply the Swing setting.

Display Resolution: This is the display resolution (in PPQN—pulses per quarter note) of pulse values in certain areas of the operating system. Please note that this setting affects the display resolution, not the timing.

Project Defaults

The settings on this screen determine various default values for any new project that you create.

Default Tempo: This is the default tempo in BPM.

Default Global Tempo: When enabled, the default tempo value will be used for the global tempo. When disabled, the default tempo will be used for sequences.

Default Mode: This determines the default mode when Force is powered on; **Main Mode**, **Clip Matrix** (default), or **Sounds** mode.

Default Q-Link Mode: This determines the default Q-Link Mode: **Screen**, **Project 1–2**, **Track**, **Pad Scene**, **Pad Parameter**, **Track FX Rack**, **MIDI**, **Volume** (default), **Pan**, **Send 1–4**.

Default Sequence Bars: This determines the default number of bars of a new sequence.

Default Sequence Loop: This determines whether loop is enabled by default or not.

Default Playback/Selection To: This determines whether the default selection is a **Clip** or the **Arrangement**.

Default Record Destination: This determines whether the record function defaults to recording to a **Clip** or the **Arrangement**.

Record and Overdub Shift Behavior: This determines the default function when pressing **Shift** plus the **REC** button. Select **Retrospective Record** to use this to capture recently played MIDI events, or select **Alternative Recording Destination** to set recording to either Clip or Arrangement, depending on the current default recording destination.

Main Mode – Launch Selected Clip During Playback: When enabled, selecting a clip during playback will launch that clip. This is useful in conjunction with Legato mode to dynamically insert fills and other clip variations.

Default Time Signature Numerator: This determines the default number of beats per bar in the time signature.

Default Time Signature Denominator: This determines the default note value of each beat in the time signature.

Default Pad Slice: This determines how new samples will play when you load them or record them into a project. When set to **Pad**, the **Slice** menu in Track Edit Mode will be set to **Pad**, which lets you set the start point, end point, etc. for the layer. When set to **All**, the **Slice** menu in Track Edit Mode will be set to **All**, in which the entire sample plays.

Default Drum Filter: This determines the default type of filter that drum and keygroup tracks will use. See ***Appendix*** > ***Glossary*** > ***Filter*** to learn about this.

Default Plugin Synth: This determines the default instrument plugin that a new plugin track will use. Use the window that appears to select it.

Default Audio Monitor: This determines the default audio monitoring behavior: **Off** (default), **In**, **Auto**, or **Merge**.

Default MIDI Monitor: This determines the default MIDI monitoring behavior: **Off**, **In**, **Auto** (default), or **Merge**.

Use Fixed Track/Row Color: Check this box to enable all tracks to be created using a fixed color.

Default Track/Row Color: Use this option to select the default color used when the **Use Fixed Track/Row Color** option is enabled.

Enable Pads User Level By Default: Check this box to enable all pads to play at the set user level by default. Leave this box unchecked to use standard velocity response.

Default Pads User Level Velocity: This sets the default pad velocity that is used when the **Enable Pads User Level By Default** setting is on.

Project Load/Save

The settings on this screen determine if (and how) projects are automatically saved. If you are using Force as a controller, you can also define files to load automatically.

New Project Behavior: This determines what is loaded when a New Project is selected: and **Empty Project**, the default **Factory Project**, or the **User Auto Load Project** file.

User Auto Load File: Use this field to select a project (**.xpj**) or program (**.xpm**) to load automatically anytime you open Force.

Note: If the New Project Dialog setting under **Project Defaults** is set to Demo or Demo/Template/Recent, selecting **Empty Project** will load the Auto Load project if one is selected. If no Auto Load project is selected, choosing **Empty project** will load an empty project. If you have an Auto Load project selected and would still like to create an empty project, press and hold **Shift** and then tap **Empty project**. If the **Project Defaults** is set to **Off**, the Auto Load project will be loaded on startup.

New Project Dialog: This determines what options you see when you start a new project. When set to **Off**, a new project will be empty with no preconfigured settings except for the project defaults shown here. When set to **Demo**, you can choose to load a demo project (from several different genres) as a starting point or an empty project. When set to **Recent,** you can select from recently loaded projects. When set to **Demo/Template/Recent**, you can choose to load a demo project, a project template file, or a recently loaded project. You must have a project in the **Template File** field of the **Project Load/Save** tab to select a template in this window.

Template File: Use this field to select a project template that will load automatically when you select **User Template** in the **New Project Dialog** window. (If you select the **Save as Template** box when saving a file, it will be shown in this field.) For the **User Template** option to be available, **New Project Dialog** (in the **Project Defaults** tab) must be set to **Demo** or **Demo/Template/Recent**.

Temporary File Location: Use this field to select a location on your device or connected external media as a record path for temporary files.

Auto Save Enabled: When enabled, your project will automatically save after each **Timeout** interval. When disabled, your project will not be automatically saved; you may save only manually.

Auto Save Timeout: Use this field to select how often your project will automatically save.

General

The settings on this screen determine how other features work in the hardware and operating system.

Vintage Mode: This determines the type of emulation applied to the audio output. You can apply the particular sonic qualities of, for example, the **MPC3000** or **MPC60**, or of course no emulation (**None**).

Audition Auto Play: This determines how long a sample will sound when auto-previewing it.

Audition Outputs: This determines which pair of outputs will play any auditioned sounds (**Out 1,2–3,4** in Standalone Mode, **Out 1,2–31,32** in Computer Mode; as available). These sounds include: samples, tracks, and projects in the Browser; sample playback, **Cue Preview**, and **Slice Preview** in Sample Edit Mode; and sample playback in the **Keep or Discard Sample** window in the Sampler.

Cue Preview: This determines if/how audio is played as you move the cue playhead. As you move the cue playhead through a sample waveform, you can set it to play the small part of the sample before the cue playhead (**Before**), play the small part of the sample after the cue playhead (**After**), or not play at all (**Off**). You can also set this in Sample Edit Mode (see ***Modes*** > ***Sample Edit Mode*** > ***Settings***).

Slice Preview: This determines if/how audio is played as you move a slice marker. As you move the slice marker through a sample waveform, you can set it to play the small part of the sample before the slice marker (**Before**), play the small part of the sample after the slice marker (**After**), or not play at all (**Off**). You can also set this in Sample Edit Mode (see ***Modes*** > ***Sample Edit Mode*** > ***Settings***).

Show Mode Shortcut Panel: When enabled, you can access the mode shortcut panel by swiping to the right on the grey bar on the left-edge of the screen. You can use the Mode Menu layout editing to put your five most-used modes in this shortcut panel for easy access. This is disabled by default.

Automation Lane Follows Q-Links: When enabled, touching a Q-Link will automatically show the current automation status in the Grid View automation lane.

Collect Usage Statistics: This determines whether or not your usage statistics will be sent occasionally to us, enabling us to improve the Force experience.

Splice

The settings on this screen control integration with the Splice platform.

To access Splice from this page:

1. First, make sure your Force is connected to a Wi-Fi network. See ***Preferences > Wi-Fi*** to learn how to connect to a wireless network. You will also need access to a web browser.
2. Tap the **Get Login Code** button. (If you are not connected to a network, you will be prompted to do so before the Get Login Code button appears.)
3. Follow the on-screen instructions to link your Force to your Splice account via a web browser. It may take your Force a few moments to successfully link.
4. A message will appear on screen when the link has been successfully established. Tap **OK** to continue and return to the Splice Preferences page.
5. Once the process is complete and your Force has been paired to your Splice account, tap the **Sync Files** button to download samples from your Splice account via Wi-Fi to a drive of your choice.

   By default, files will be stored on the Internal drive. You can change the selected drive by tapping the **Change** button under **Sync Files To Drive**.

To browse samples imported from Splice:

1. Open the **Browser**.
2. Under the **Content** tab, tap the **Splice** shortcut icon to view samples downloaded from your Splice account.

   If nothing appears, make sure that you have connected your Splice account and synced your files by following the directions ***above***.
3. The right-side of the browser will display your Splice samples organized into a series of top-level folders, allowing you to easily browse your sample library by BPM, Instrument, Key, Pack or Tag. The **All Your Samples** folder will show a list of all samples you have downloaded.

Note: The original sample files are stored in the **By Pack** folder on your drive. Other folders such as By Instrument contain internal links to help sort the samples by various tags. If the By Pack folder on your drive is deleted, the files in the remaining folders will become unusable. To fully remove all files, the entire Splice directory should be deleted.

IMPORTANT: Drives formatted using the FAT32 system do not support these internal links. For these drives, samples will only be sorted in the **By Pack** folder. We recommend using an exFAT file system on external drives used with Force, as it is the most robust one supported by both Windows and macOS.

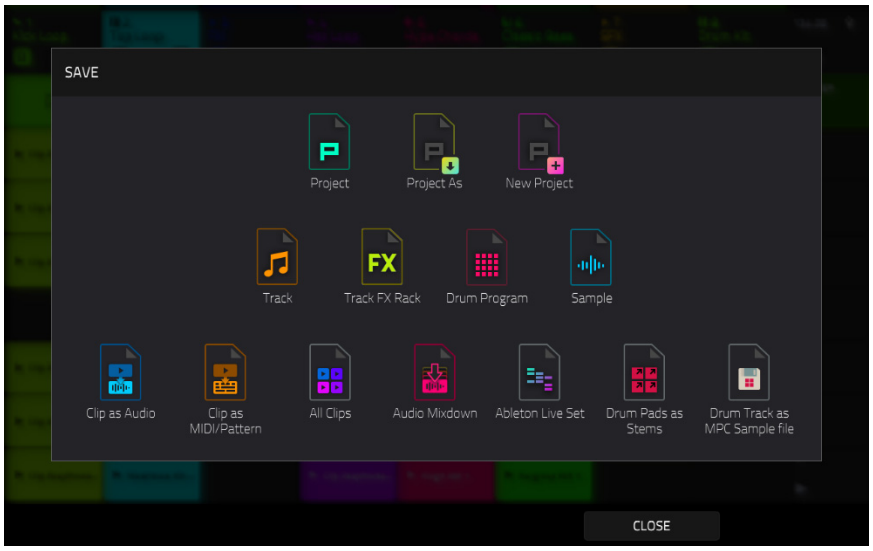
To view the number of samples available to download from your account, tap the **Check For Update** button.

To log out of a Splice account, tap the **Log Out** button.

Save Window

The Save Window lets you save your project, tracks, and samples in a variety of ways.

To open the Save window, press the **Save** button. Alternatively, press **Menu** to open the Menu and then tap **Save** at the top of the screen.



To save a project, tap **Project** or **Project As**. If a project has not been saved before, both options will open the Save window, described below. If a project has been saved before, tapping **Project** will automatically overwrite the most recently saved version.

Tap **New Project** to open a new project.

Tap **Track** to save the current track.

Tap **Track FX Rack** to save the current track inserts.

Tap **Drum Program** when a Drum track is selected to save the current drum kit.

Tap **Plugin Program** when a Program track is selected to save the current plugin program.

Tap **Keygroup** when a Keygroup track is selected to save the current keygroup.

Tap **MIDI Program** when a MIDI track is selected to save the current MIDI program.

Tap **CV Program** when a MIDI track is selected to save the current CV program.

Tap **Sample** when an audio sample is selected to save it.

Tap **Clip as Audio** to save the currently selected clip as audio.

Use the **Base File Name** field to name the resulting export based on the **Clip name** or **Track name**.

Check the **Include Track Volume/Pan Settings** box to include these settings in the export.

Check the **Bypass Track Effects Plugins** box to not include track effects plugins in the export.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

Use the **Bit Depth** field to set the bit depth to **8**, **16** or **24**.

Use the **Sample Rate** field to set the sample rate to **44.1**, **48**, **88.2** or **96 kHz**. In most cases, we recommend selecting **44.1 kHz**.

Tap **Clip as MIDI/Pattern** when a MIDI clip is selected to save it as a MIDI pattern file.

Use the **Export MIDI As** field to set the export the track as **MIDI** files or MPC **Pattern** files.

Use the **Base File Name** field to name the resulting export based on the **Clip name** or **Track name**.

Tap **All Clips** to save all current clips in the project.

Use the same settings for **Clip as Audio** or **Clip as MIDI/Pattern** depending on how you would like to save the clips.

Tap **Audio Mixdown** to save the project as an ***Audio Mixdown***.

Use the **Start Bar** and **End Bar** fields under Audio Length to set the time range that you want to mix down. You can add a number of seconds to the end of the mixdown to capture any ringing notes or effects (such as a reverb tail) by adjusting the **Audio Tail** field.

Use the fields under **Render Source** and **Render Options** to set the parameters for the audio mixdown. Check the **Separate Tracks** box to render each track of the arrangement as stems.

Use the fields at the bottom of the screen to configure the audio mixdown settings. You can set the **File Format**, **Bit Depth**, and **Sample Rate**.

Tap **Ableton Live Set** to save the project as an Ableton Live set.

Use the **Export MIDI As** settings to choose how MIDI tracks are exported, either as **Audio** files or **MIDI** files. When using Plugin, Drum or Keygroup tracks, you can render sequences as **Audio** to preserve the sound of the instruments, or render sequences as **MIDI** data.

Check the **Include Track Volume/Pan Settings** box to include these settings in the export. When disabled, the volume and pan settings will be set to **0 dB** and center (**C**), respectively.

Check the **Bypass Track Effects Plugins** box to deactivate any third-party effect plugins used with the track for the export. When disabled, those effects will be activated.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

Use the **Bit Depth** field to set the bit depth to **8**, **16** or **24**.

Use the **Sample Rate** field to set the sample rate to **44.1**, **48**, **88.2** or **96 kHz**.

Tap **Drum Pads as Stems** when a drum track is selected while viewing the Arrangement to render an audio stem for each pad with events in the drum track. This allows you to export your stems to a DAW for greater flexibility in mixing and post-production.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio stem files.

Use the fields at the bottom of the screen to configure the audio mixdown settings. You can set the **File Format**, **Bit Depth**, and **Sample Rate**.

Tap **Drum Track as MPC Sample file** when a drum track is selected to export the track's sample and note data for use with the MPC Sample hardware.

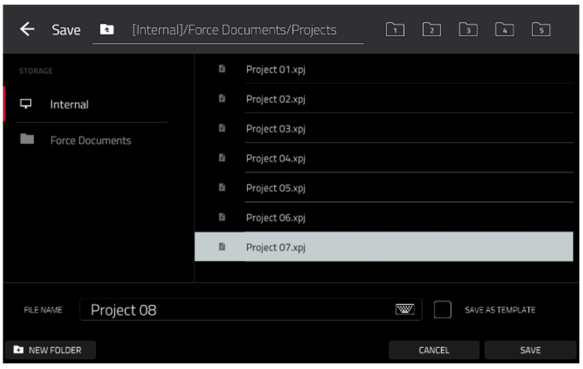
Check the **Use Insert FX** box to render samples with the Insert FX for each pad enabled.

Check the **Use volume and pan settings** box to render samples with each pad's volume and pan settings enabled.

Use the **Tail Length** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio samples.

All rendered samples will be loaded to the MPC Sample pads, and note events will be exported as sequence data.

After selecting the save type, use the following to select a save location:



Tap a device from the **Storage** column on the left side to select it.

Internal is the internal drive of Force.

Force Documents is a shortcut to the **Force Documents** folder on the internal drive of Force.

If you have storage devices connected to USB ports or SD card slot of Force, they will appear in this column, as well.

Double-tap a folder to enter it. You can also tap one of the five **folder buttons** in the upper-right to jump immediately to pre-assigned file paths set in the ***Browser***.

Tap **New Folder** to create a new folder. Use the virtual keyboard that appears to enter a name, and then tap **Do It**. You will immediately enter the new folder.

Tap the **folder/↰ icon** in the upper-left corner to move up one folder level.

Tap the **File Name** field at the bottom of the screen to name the file.

Tap **Save** to save the file.

Check the **Save as Template** checkbox before tapping **Save** to save the file as a project template file. This file will be shown in the **Template File** field in the Preferences' **Project Load/Save** tab.

Tap **Cancel** to cancel and return to the Menu. Alternatively, tap the **← icon** in the upper-left corner.

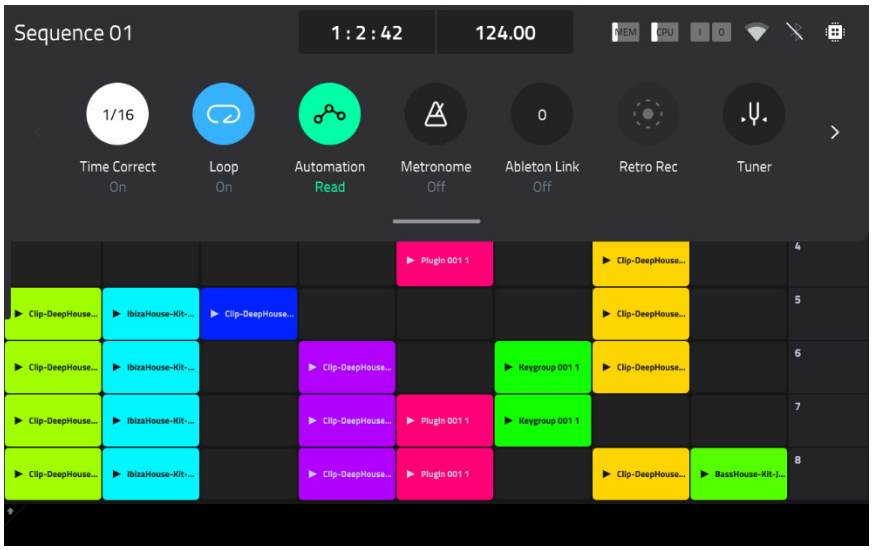
Pull-Down Menu

The pull-down can be accessed from any Force mode, giving you quick and easy access to a variety of commonly used tools and information.

To open the pull-down menu, tap and drag from the middle-top of the screen.

Use the **>** and **<** buttons to cycle between the two pull-down menu pages.

To close the menu, simply swipe it back upwards to the top of the screen.



The pull-down menu contains the following controls on the first page:

The **Project Name** is shown at the top-left corner of the menu.

The **time counter** shows the current playhead position. Tap here to open the ***Locate*** window, which allows you to adjust the playhead position and quickly jump to specific points in your project.

The **BPM** field displays the tempo of the sequence. Tap here to open the **Tempo** window to adjust the BPM.

The **Mem** indicator shows your Force's current RAM usage, and the **CPU** indicator shows your Force's current **CPU** usage. Tap here to open the ***System Resources*** window.

The **In** and **Out** boxes indicate your Force is receiving or sending (respectively) MIDI messages from or to your computer. Tap here to open the ***MIDI Monitor*** and view the latest incoming or outgoing MIDI messages.

The **Wi-Fi** and **Bluetooth** icons display the current network and Bluetooth connection status. Tap each icon to open their respective setup pages in the ***Preferences***.

The **chip icon/computer icon** shows whether you are in Standalone or Computer Modes. Tap here to switch modes.

The **TC icon** enables or disables global timing correct. Tap and hold this icon to open the ***Timing Correct (TC)*** window, which contains various settings to help quantize the note events in your sequence.

The **Loop** button enables or disables sequence looping.

The **Automation button** indicates the global automation state. Tap to cycle between **Read** and **Write**. Press and hold **Shift** and tap here to turn global automation **Off**.

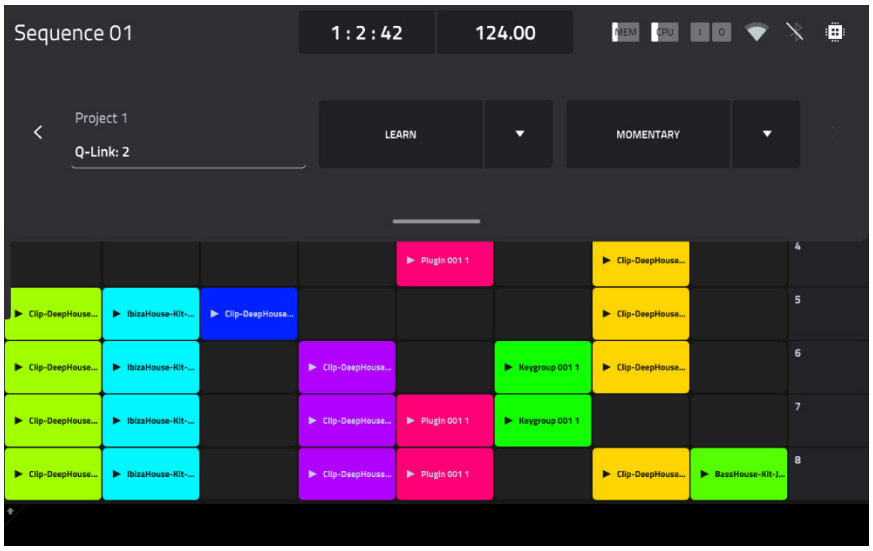
The **Metronome button** enables or disables the metronome. Tap and hold this icon to open the ***Metronome (Click/Metro)*** settings window.

The **Ableton Link** button displays the current Ableton Link status. Tap to turn Ableton Link on or off.

The **Retro Rec** button enables retrospective recording. Your Force will capture MIDI events in the background, so you can recall a performance when record was not enabled. Select an empty slip slot, and then tap this button to capture the recently played notes.

The **Tuner** button opens the built-in ***Tuner***, which allows you to easily tune any connected audio source.

On the second page of the pull-down menu are controls for creating macro controls. This allows you to set up controls for parameters that might not be shown in a particular mode, or set up controls with multiple parameters across different modes for expressive performances.



Tap the **Current Control** field to select the type of control you want to create an assignment for.

Tap the **Learn** button to activate MIDI learning. Once activated, the **Q-Link Bank LED** on your Force will blink. Navigate to the mode that displays the parameter you would like to learn, and then adjust that parameter. The screen will show a message, "Learned [*parameter*] to [*macro control*]." To lock in the assignment, tap the **Learn** button again.

To learn multiple parameters to a macro, simply navigate to more parameters while **Learn** is engaged (step 4).

To learn another parameter to a macro that replaces the previous parameter, tap the **down arrow** next to the **Learn** button, and then uncheck the **Add** box. Repeat the steps above to replace the previously learned parameter with a new one.

To learn a new parameter while also setting it to a range of values, tap the **down arrow** next to the **Learn** button, and then check the **Range** box. While Learn is engaged (step 4 above), adjust the parameter to the low and high points of the value range that you want to control. When the assignment is locked in, the macro will control the parameter in the set value range.

To use a single macro to, for example, mute/unmute multiple tracks at the same time, tap the **down arrow** next to the **Learn** button, and then check the **Toggle** box. Repeat the steps above to learn a parameter, which will toggle on/off when the control is touched or moved.

To use a macro to send the max value of a parameter, tap the **down arrow** next to the **Learn** button, and then check the **Trigger** box. Repeat the steps above to learn a parameter, which will send its maximum value when the control is touched or moved.

Tap the **Momentary** button to turn momentary behavior on or off.

When **on**, moving the knob will adjust its parameter, but the parameter will immediately return to its original position (when you turned Momentary on) when you release the knob.

When **off**, moving the knob will adjust its parameter, and the parameter will remain at its new setting when you release the knob.

Tap the **arrow** next to the Momentary to adjust additional settings for when the macro control is released:

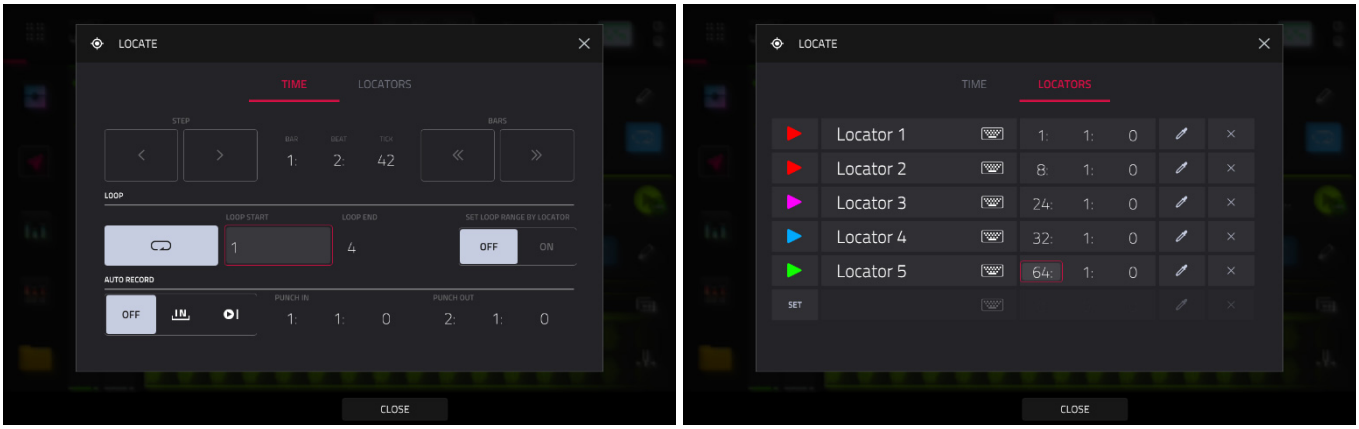
To revert the macro parameter(s) to its minimum value on release, check the **Go to Minimum** box.

To revert to the last value state before the macro was changed on release, check to **Go to Previous** box.

Time Counter / Locate

Many Force modes feature a **time counter** in the toolbar. This displays the current playhead position in **Bars:Beats:Ticks**.

In ***Arrange Mode***, ***Main Mode***, and ***Track View***, double-tapping the time counter opens the **Locate** window, where you can adjust the playhead position, manage loop and record settings, and quickly jump to specific points in your project.



The Locate popup is divided into two sections:

The **Time** tab is used to adjust the position of the playhead in the arrangement, as well as adjust Loop and Record settings.

Use the **Bars:Beats:Ticks** fields to move the playhead in the arrangement. You can also tap the **Step** and **Bars** arrow buttons to move the playhead by the specified amount.

Tap the **Loop** button to enable loop in the arrangement. Use the **Loop Start** and **Loop End** fields to set the length of the loop. Alternatively, you can set the loop length according to the Locator markers in the timeline. When **Set Loop Range By Locator** is set to **On**, the loop range will automatically adjust to the length between the selected Locator and the next Locator. The current loop region is always displayed in the timeline of the arrangement whether it is activated or not.

Use the **Auto Record** field to enable automatic recording when the loop starts. When enabled, recording will begin immediately when the arrangement loops.

The **Locators** tab is used to edit the six Locator markers which can be applied to the timeline.

Tap **Set** to add a locator.

To rename a locator, tap the **keyboard icon**, and then use the keyboard to enter a new name.

Use the **Bars:Beats:Ticks** fields to adjust the position of the locator.

To edit the color of the locator, tap the **eyedropper icon**, and then select a color from the list.

Tap the **X** icon to delete the locator.

To close the Locate window, tap **Close**, the **X** in the upper-right corner, or anywhere outside the window to return to the arrangement.

Timing Correct (TC)

The **Timing Correct** window contains various settings to help quantize the events in your project. You can quantize note events on MIDI tracks or track regions on audio tracks (though you cannot apply all types of quantization to audio tracks).

To open the Timing Correct settings:

In ***Arrange Mode***, ***Clip Editor***, or the ***Step Sequencer***: Tap **TC** at the bottom of the screen.

Also in **Arrange Mode:** Tap the **timing correct value** in the upper-left corner, below the toolbar.

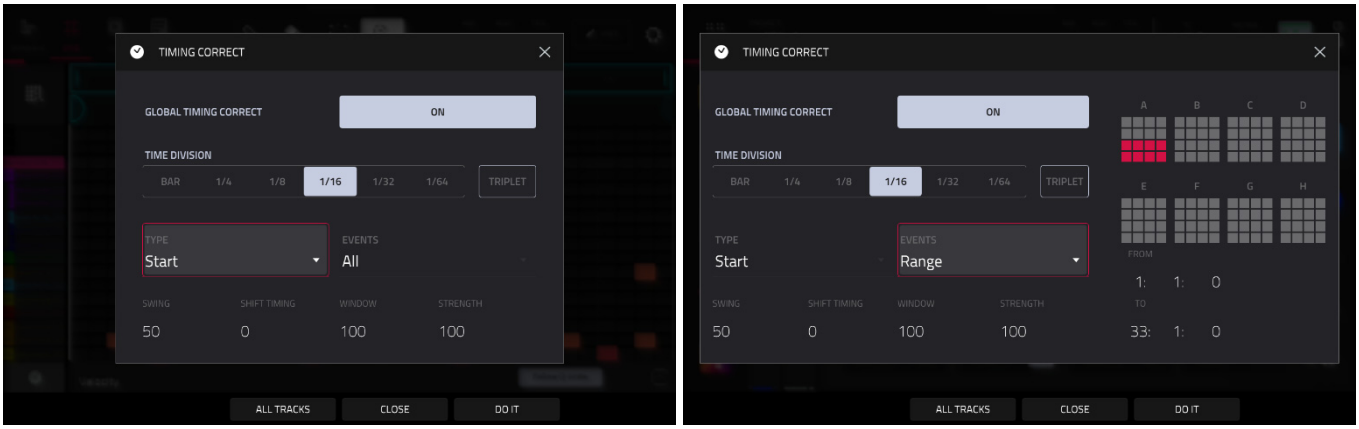
In ***Grid View*** or the **Clip Editor**: Tap the **clock icon** in the bottom-left corner of the screen.

In ***List Edit Mode*** or ***Main Mode***: Tap the **TC** field at the top of the screen.

In ***Track View***: Press and hold **Shift** and tap **TC** at the bottom of the screen.

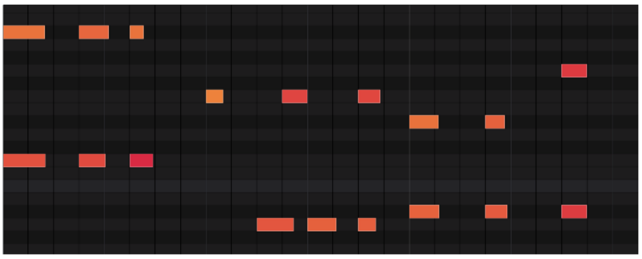
To enable or disable global timing correct, tap the **Global Timing Correct** button so it is on. Alternatively, press and hold **Shift** and press the track 6 **Track Assign** button.

Tap **Do It** to apply the settings you selected, or tap **Close** to cancel and return to the previous screen.

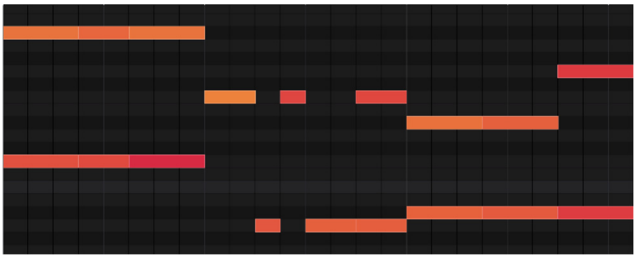


Use the **Type** selector to set how timing corrections are applied.

- **Start**: The entire note event or audio track region will be nudged forward or backward so the start point aligns with the closest time division marker in the grid. You can apply this to MIDI tracks or audio tracks.
- **End**: The end points of note events will be extended or shortened to align with the closest time division marker in the grid. The start points will remain untouched. You can apply this to MIDI tracks only.
- **Length**: The end points of note events will be extended or shortened so that each event's length is a multiple of the time division, regardless of where it is in the grid. The start points will remain untouched. You can apply this to MIDI tracks only.
- **Legato**: The end points of note events will be extended or shortened to create a long, unbroken phrase from the first note event's start point to the last note event's end point. Each note event will sustain until another note event starts. If multiple note events start at the same time (and are not the last note events), their lengths will become identical. Selecting **Legato** disables all other options in this window. You can apply this to MIDI tracks only.



Without legato applied.



With legato applied.

Use the **Time Division** selector to set the quantization value. Events will "snap" to these time divisions on the grid. The **T** indicates a triplet-based value.

Use the **Swing** field to set the amount of swing from **50%** to **75%**. Swing lets you "shuffle" your beats—from subtle to extreme.

Use the **Shift Timing** field to shift all events by clock ticks.

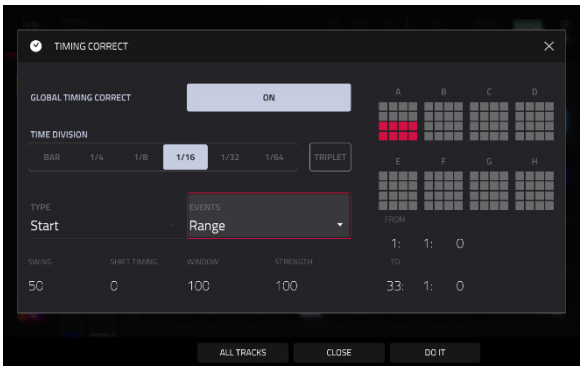
Use the **Window** field to set how many events around a quantize value will be quantized. Any events outside this range will not be quantized; events inside will.

Use the **Strength** field to set how strictly events will be quantized (i.e., shifted toward the quantize value). Lower values move events a little bit towards the closest quantize value, resulting in a less mechanical feel than a strict quantization (a higher value).

Use the **Events** selector to set the target range for the time correction. You can apply the time correction to **All** note events or to just the **Selected** ones.

To select note events to which to apply time correction, either use the various tools in Event View or Region View or press the pad with the desired events (while **Hitting Pad Selects All Events** is set to **On**). You must do this **before** opening the Timing Correct window.

When **Range** is selected, you can define the locations (**From** and **To**) as well as the pads or keys that will be quantized.



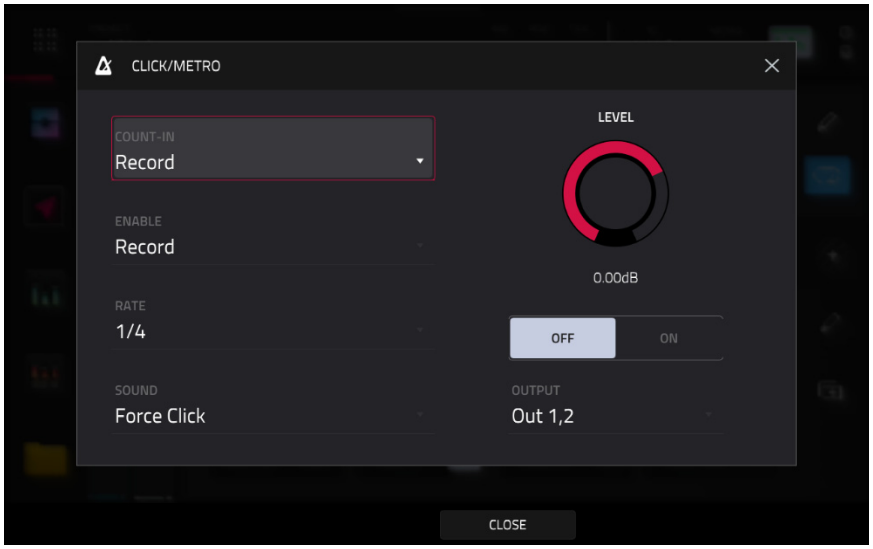
Metronome (Click/Metro)

The **Click**/**Metro** window contains all settings regarding the metronome (click track).

To enable or disable the metronome, tap the **Metronome** icon in the ***Pull-Down Menu***.

To open the metronome settings:

- In the ***Pull-Down Menu***: Tap and hold the **Metronome** icon
- In ***Main Mode***: Tap the **Metro** icon at the top of the screen.
- In ***Track View***: Press and hold **Shift** and tap **Click** at the bottom of the screen.



Use the **Count-In** field to set if/when the metronome counts before recording.

- **Off** disables the metronome pre-count.
- **Record** enables the pre-count during recording only.
- **Record + Play** enables pre-count in both Record and Playback Modes.

Use the **Enable** field to set if/when the metronome is enabled.

- **Off** disables the metronome.
- **Play** enables the metronome sound during playback only.
- **Record** enables the metronome sound during recording only.
- **Record + Play** enables the metronome to happen in both Record and Playback Modes.

Use the **Rate** field to select the metronome click's time division: **Auto**, **1/4**, **1/4T**, **1/8**, **1/8T**, **1/16**, **1/16T**, **1/32** or **1/32T**. **T** indicates a triplet-based time division. When set to **Auto**, the Metronome will automatically adjust to the current time signature's denominator value.

Use the **Sound** field to select the sound that you want to hear for the metronome: **Sidestick 1**, **Sidestick 2**, **Clap**, **Metroclick**, **Shake**, **Tambourine**, or **Force Click**.

Use the **Volume** knob to set the volume of your metronome click.

Tap the **On**/**Off** button to enable or disable the metronome.

Use the **Output** field to set which pair of outputs will play the metronome click: **Out 1,2**, **Out 3,4** or an individual **Out 1–4**.

Automation

You can set the global automation setting, or individual tracks' automation settings, to be “written,” “read,” or disabled entirely by using the automation buttons described below.

Global

Global automation buttons change the automation state for all tracks in the project. These buttons can be found in the toolbar of modes like ***Main Mode*** and ***Arrange Mode***, and in the project ***Pull-Down Menu***.

When you tap this button to change its state, it will change the automation state for all tracks in the project.

Tap the **global automation button** to cycle through its two states.

- When set to **Read** (**R**), automation data will be read but not recorded. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)
- When set to **Write** (**W**), automation can be recorded and will overwrite any existing automation. (Make sure not to touch the XY pad accidentally while you are recording.)

Press and hold **Shift** and tap the **global automation button** to disable global automation. When **off**, automation data will be ignored. Tap the **global automation button** again to enable global automation.

Important: If you have already recorded automation and turn it off, the track will still use the effect and its parameter values at the point where you turned it off.

Tracks

In addition to global automation, you can set automation for individual tracks by using the track automation buttons. These are found in channel strips, such as those in ***Main Mode*** or in the ***Channel Mixer***.

Note: Remember that tapping the global automation button will change the automation state for all tracks in the project; if they were originally different, all of them will then match the global automation state.

Tap the **track automation button** to cycle through its two states.

- When set to **Read** (**R**), the track will read automation data but will not record any additional automation over it. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)
- When set to **Write** (**W**), the track can record automation. (If you have any Q-Link knobs assigned to automatable parameters, make sure not to touch any accidentally while you are recording.)

Press and hold **Shift** and tap the **track automation button** to disable track automation. When **off**, the track will ignore automation data. If you have already recorded or entered automation, tapping this will switch between **Read** (**R**) and **Write** (**W**) only, but you can override this and turn it off by pressing and holding **Shift** while pressing or tapping the button.

Important: If you have already recorded automation and turn it off, the track will still use the effect and its parameter values at the point where you turned it off.

To record automation to a track:

1. Make sure the Global or Track automation state is set to **Write (W)**.
2. Press the **Play** button to start recording. Record automation using the Q-Links, XY Pad, or by adjusting the onscreen controls.

   Note: If you are recording MIDI CC automation, make sure the ● **SEQ REC ARM** button at the bottom of Main Mode is enabled, and then press the **REC** button on your Force to arm recording before playing.
3. When you are finished, press **Stop** to stop recording. Make sure to set the automation state back to **Read (R)** to listen back to your recorded automation.

You can also manually add and edit automation in ***Grid View***, ***List Edit Mode***, and the ***Step Sequencer***. See these sections to learn more about how automation functions in each mode.

To quickly clear automation from a track:

1. Make sure the track is selected by pressing and holding its **Track Select** button.
2. Hold **Shift** and press the **Track 4 Track Assign** button, with **Clear Automation** written underneath.
3. All automation on the track will be immediately removed.

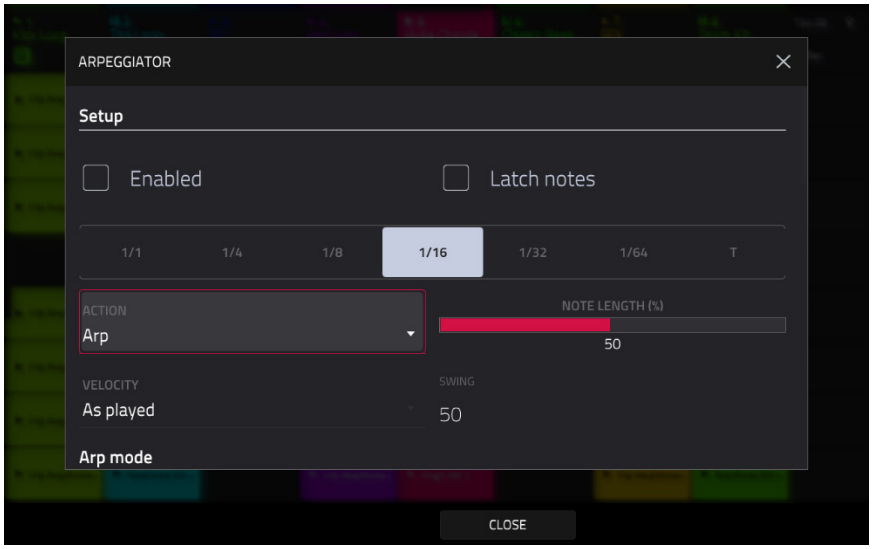
Alternatively, you can delete individual automation events using ***Grid View***, ***List Edit Mode***, and the ***Step Sequencer***.

Arpeggiator

Force includes a full-featured arpeggiator and phrase player for melodic track types, as well as traditional note repeat functionality.

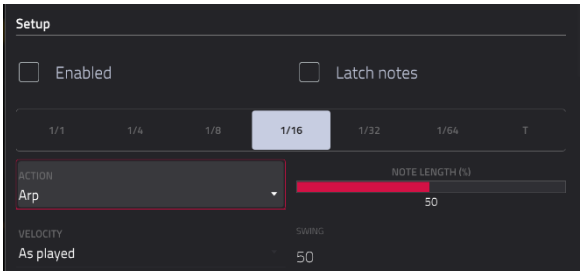
To enable the arpeggiator, press the **Arp** button.

To configure the arpeggiator setting, hold **Shift** and press the **Arp** button to open the Arpeggiator window.



Tap **Enable** so it is checked to activate the Arpeggiator. Tap again to **Disable** the Arpeggiator.

Tap **Latch** so it is checked to latch the Arpeggiator. Tap again to **Disable** Latch.



The **Setup** section of the Arpeggiator window sets what kind of arpeggiator will be used and its functions:

Use the **Action** field to set the type: **Arp**, **Note Repeat**, **Rhythm,** and **Pattern**. See ***below*** for more details about these types and their additional parameters.

Use the **Time Division** selector to set the note value of each arpeggiator step from **1/1–1/64** beats, including T (triplet) variations. This parameter is not available when **Action** is set to **Pattern**.

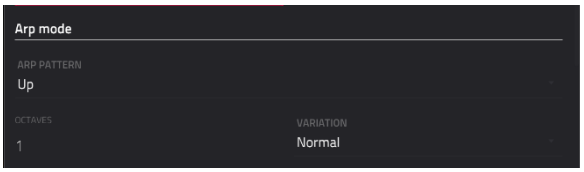
Note: This setting is tied to the project's Time Division setting, and will not function if Time Division has been set to **Off**.

Use the **Note Length** slider to set the length of the played note in each step, from **1–100%**.

Use the **Velocity** field to set the velocity of the arpeggiator notes. Choose **As played**, **From first note**, **Accented**, **Full**, **3/4**, **Half** or **1/4**.

Use the **Swing** field to set the amount of swing in the arpeggiator from **50%** to **75%**. Swing lets you "shuffle" your beats—from subtle to extreme.

The **Arp mode** section of the Arpeggiator window is available when the **Action** is set to **Arp**. When this action is selected, hold down a chord and the arpeggiator will play a pattern based on the notes held.

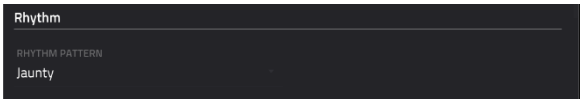


Use the **Arp Pattern** field to set how the arpeggiator triggers the held notes.

Use the **Octaves** field to set how many octaves of the held notes the arpeggiator will cycle through.

Use the **Variation** field to apply rhythmic variation to the set pattern.

The **Rhythm** section of the Arpeggiator window is available when **Action** is set to **Rhythm**. When this arpeggiator action is selected, hold down a chord and the arpeggiator will play the held notes in a rhythmic pattern.

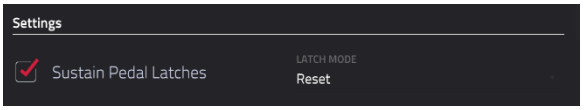


Use the **Rhythm Pattern** field to choose the pattern played when notes are held.

The **Pattern** section of the Arpeggiator window is available when the **Action** is set to **Pattern**. When this arpeggiator action is selected, hold down a single note to trigger a melodic phrase. As you change what note is held, the melodic phrase will be transposed.

Use the **Pattern** field to choose the pattern.

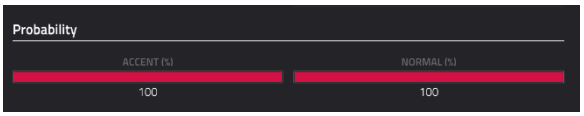
The **Settings** section of the Arpeggiator window offers additional options to control the arpeggiator.



If you have a sustain pedal connected, you can enable **Sustain Pedal Latches** to use it to control latching.

Use the **Latch Mode** setting to set the action of the sustain pedal, either **Reset** or **Add**.

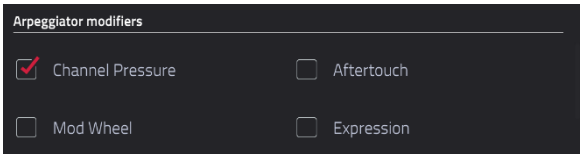
The **Probability** section of the Arpeggiator window lets you add further variation to your arpeggiator by adjusting the probability of how notes are played.



Use the **Accent (%)** field to set the percent probability that a note in the arpeggio is accented.

Use the **Normal (%)** field to set the percent probability that a note in the arpeggio is normally articulated.

The **Arpeggiator modifiers** section of the Arpeggiator window enables additional controls to modify the arpeggiator.



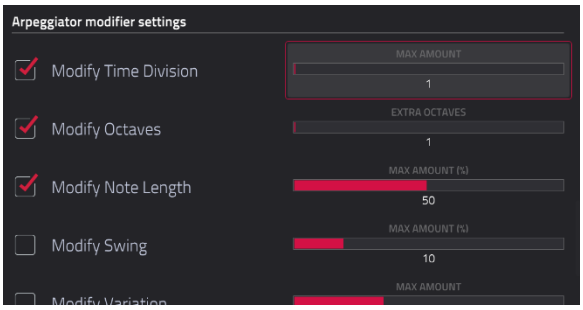
Tap the **Channel Pressure** box so it is checked to enable Channel Pressure messages from external MIDI controllers to modify the arpeggiator.

Tap the **Expression** box so it is checked to enable Expression messages (MIDI CC #11) from external MIDI controllers to modify the arpeggiator.

Tap the **Aftertouch** box so it is checked to enable Aftertouch messages from the **clip launch pads** or external MIDI controllers to modify the arpeggiator.

Tap the **Mod Wheel** box so it is checked to enable Modulation messages (MIDI CC #1) from external MIDI controllers to modify the arpeggiator.

Use the Arpeggiator modifier settings field to select what arpeggiator settings are modified by the selected controls, and by how much.



Tap the **Modify Time Division** box so it is checked to enable modification of the arpeggiator time division. Use the **Max Amount** to set by how much the time division can be changed, from **1**–**4**. For example, if the Time Division is set to **1/8** and the **Max Amount** is set to **2**, adjusting the selected modifier control will increase the Time Division to 1/8T and 1/16, which are the next two higher time divisions.

Tap the **Modify Octaves** box so it is checked to enable modification of the arpeggio octave range. Use the **Extra Octaves** field to select how many additional octaves (on top of what the current **Octaves** setting is) can be added with the modifier control, from **1**–**4**. For example, if the current Octaves setting is **1** and the **Extra Octaves** is set to **2**, adjusting the selected modifier control will increase the total octaves up to 3.

Tap the **Modify Note Length** box so it is checked to enable modification of the arpeggio note length. Use the **Max Amount (%)** field to select by how much percentage the note length is increased, from **1**–**100%**. For example, if the current Note Length setting is **50%** and the **Max Amount (%)** is set to **20%**, adjusting the selected modifier control will increase the note length up to 60%.

Tap the **Modify Swing** box so it is checked to enable modification of the arpeggio swing amount. Use the **Max Amount (%)** field to select by how much percentage the swing amount is increased, from **1**–**50%**. For example, if the current Note Length setting is **50%** and the **Max Amount (%)** is set to **20%**, adjusting the selected modifier control will increase the swing amount up to 60%.

Tap the **Modify Variation** box so it is checked to enable modification of the arpeggio Variation setting. Use the **Max Amount** field to select by how the variation setting can be changed, from **1**–**4**. For example, if the current Variation setting is **Variation 1** and the **Max Amount** is set to **2**, adjusting the selected modifier control will increase the Variation setting up to **Variation 3**.

Tap the **Modify Probability** box so it is checked to enable modification of the arpeggio probability amount. Use the **Max Amount (%)** field to select by how much percentage the probability amount is increased, from **1**–**100%**. For example, if the current Probability setting is **50%** and the **Max Amount (%)** is set to **20%**, adjusting the selected modifier control will increase the probability amount up to 60%.

Effects

You can apply various effects to the pads, keygroups, tracks, main outputs and submixes, using **insert** and **send/return** effects. This chapter can help you get a good overall understanding of how the effects work.

See ***Appendix*** > ***Effects & Parameters*** for a list of all available effects (with a brief description of each) and their editable parameters.

Overview

Insert Effects can be added to specific ***Pads and Keygroups***, or to entire ***Tracks, Submixes, and Outputs***. Each location can have up to **four insert effects** applied to them.

Apply insert effects to specific pads or keygroups if you want to apply a particular effect to a single sound in a Drum Track (like a vocal sample), or a particular part of a keygroup (like the section that is providing the melody).

Apply insert effects to an entire track if you want all the track's sounds to have the effect applied in the same way.

For even further flexibility, apply insert effects to a submix and you can then route pads, keygroups, or tracks to that submix, which is then routed to a main output.

You can also apply insert effects directs to an output, which is particularly useful when working with mastering effects like a limiter.

Additionally, ***Send/Return Effects*** allow both ***Pads and Keygroups*** and entire ***Tracks and Submixes*** to be sent to (up to) **four return channels**, each of which can have up to **four insert effects** of their own. Their audio will be routed through the insert effects on those returns, and the processed audio will be sent to a main output.

When you create an audio mixdown of a sequence or song, you can choose whether or not main insert effects are included or send/return effects are included, depending on what you are mixing down:

If you are creating an audio mixdown of a pair of **main outputs**, you can choose whether or not **main insert effects** will be included in the mixdown.

If you are creating an audio mixdown of **separate tracks** or **exploded tracks**, you can choose whether or not **send/return effects** will be included in the mixdown.

See ***Audio Mixdown*** to learn about these options.

There are three other modes that manage effects differently:

- The ***Sampler*** can use up to **four insert effects**, which are applied to the audio as you record it. This means that the effects cannot be "removed" from the sound later.
- Similarly, the ***Looper*** can use up to **four insert effects**, which are applied to the audio as you record it. This means that the effects cannot be "removed" from the sound later.
- In ***XYFX Mode***, the effects act like a single insert effect on that track. In fact, **XYFX** is the name of the insert effect you have to load to the track before you can use this mode.

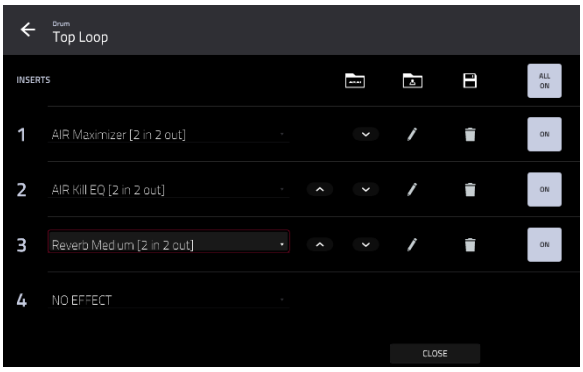
Finally, there is a special effect type called ***TouchFX***, which can be controlled using the onscreen touch slider or assigned to an external MIDI controller.

To view, load, edit, or clear effects, tap the **Inserts** button. This usually appears in a channel strip (next to a **level slider** and **pan knob**).

To view and edit an effect, tap the effect name below the Inserts button.

When viewing loaded effects, you will see this window:

To select an effect, use the field for each insert slot. A window (described below) will appear.



Tap the **arrows** next to the insert slot rearrange the insert effects. The selected effect will move up or down, and other loaded effects will be moved accordingly.

Tap the **pencil icon** next to the insert slot to edit the parameters of a loaded effect.

Tap the **trash can icon** to clear the insert slot.

Tap the **On**/**Off** button to enable or disable an effect slot.

Tap the **All On**/**All Off** button in the upper-right corner **to disable all four effect slots** at the same time. Tap it again to reactivate the previously active effects.

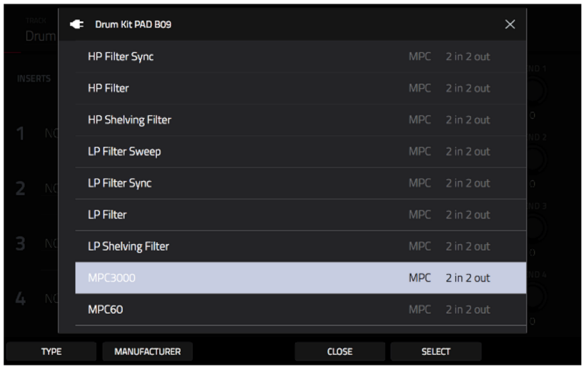
Tap the **Akai folder icon** to load a **factory FX rack**. Select the desired FX rack from the options and all associated effects will be added to the insert slots.

Tap the middle **folder icon** to load a **user FX rack**.

Tap the **Save disk icon** to save an **FX rack**.

When selecting an effect, you will see this window:

Swipe up or down to move through the list. Alternatively, use the **data dial** or **–/+** buttons.

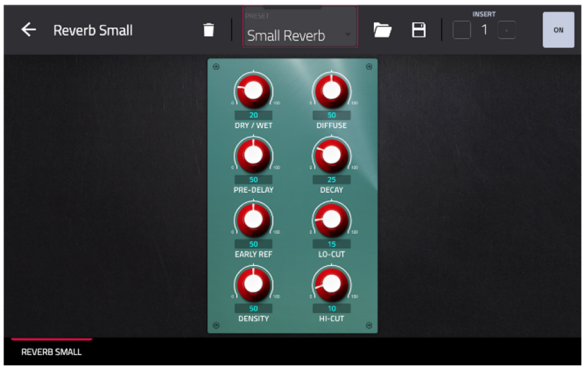


Tap **Type** or **Manufacturer** in the lower-left corner to sort or unsort the effects by type or manufacturer.

Double-tap an effect name to load it, or tap **Select**.

Tap **Close** or anywhere outside the list to cancel.

When you edit an effect, you will see this window:



Tap and drag a control to adjust a parameter. Alternatively, use the **data dial** or **–/+** buttons. To make finer adjustments, double-tap the control and adjust the larger version of it that appears.

Tip: Turn the **Q-Link knobs** to quickly adjust the corresponding four parameters.

Use the **Preset** dropdown menu at the top of the screen to select an effect preset.

Tap the **folder icon** at the top of the screen to load a saved preset.

Tap the **disk** icon at the top of the screen to save a preset.

Tap the tabs at the bottom of the screen to select another page of parameters, if available.

Tap the **trash can** icon to remove the effect from the insert slot.

Tap the **On/Off** button in the upper-right corner to enable or disable the effect.

Tap the **Folder icon** to load an effect preset.

Tap the **Save disk icon** to save an effect preset.

Tap the **Insert -/+** buttons at the top of the screen to edit parameters for another insert effect on the same pad, track, etc.

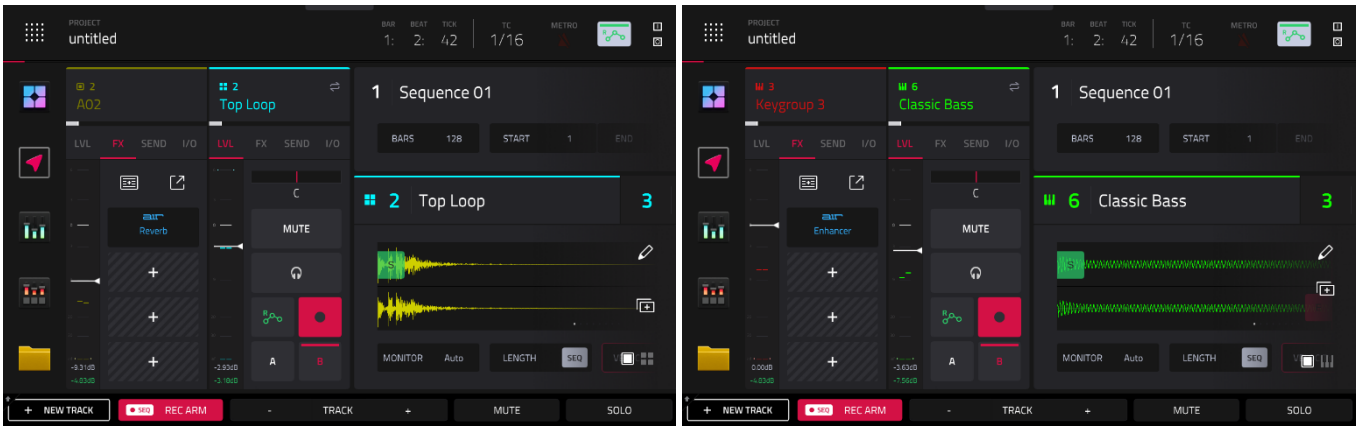
Tap the ← icon at the top of the screen to close the effect window and return to the previous page.

Insert Effects

Pads and Keygroups

You can load up to four insert effects to each pad or keygroup. You can do this in ***Main Mode***, ***Pad Mixer***, or ***Track Edit Mode***.

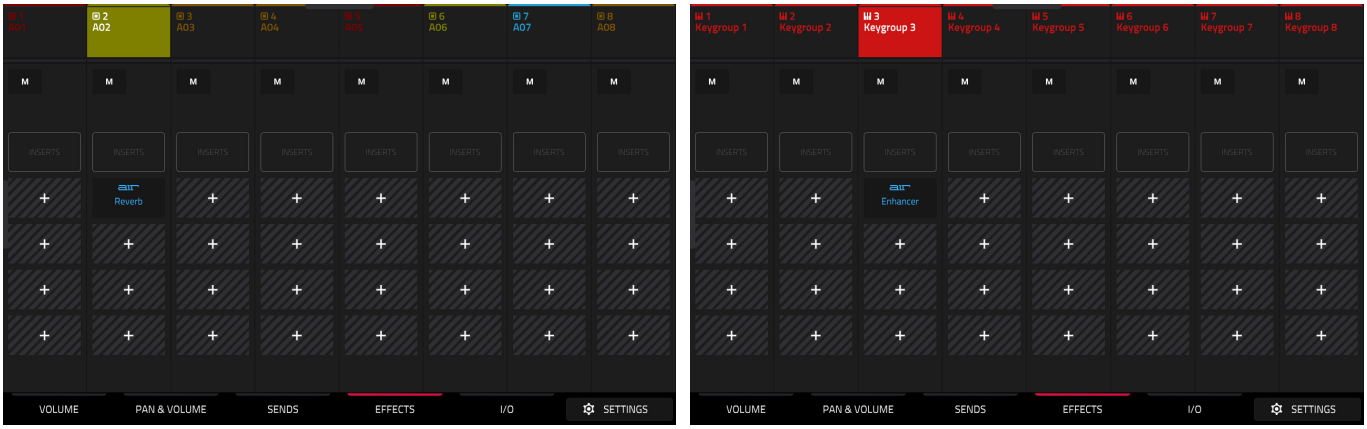
Tip: When using pad insert effects, they will be applied to the selected pad or specific keygroup only. This means that you could apply unique combinations of effects to each pad within a kit, or load insert effects to multiple keygroups with overlapping note ranges and the effects will overlap in that range as well. If you want to apply the same effect to all pads and keygroups at the same time, do this with a track insert effect (see ***Insert Effects > Tracks, Submixes, and Outputs***).



To load a pad or keygroup insert effect in Main Mode:

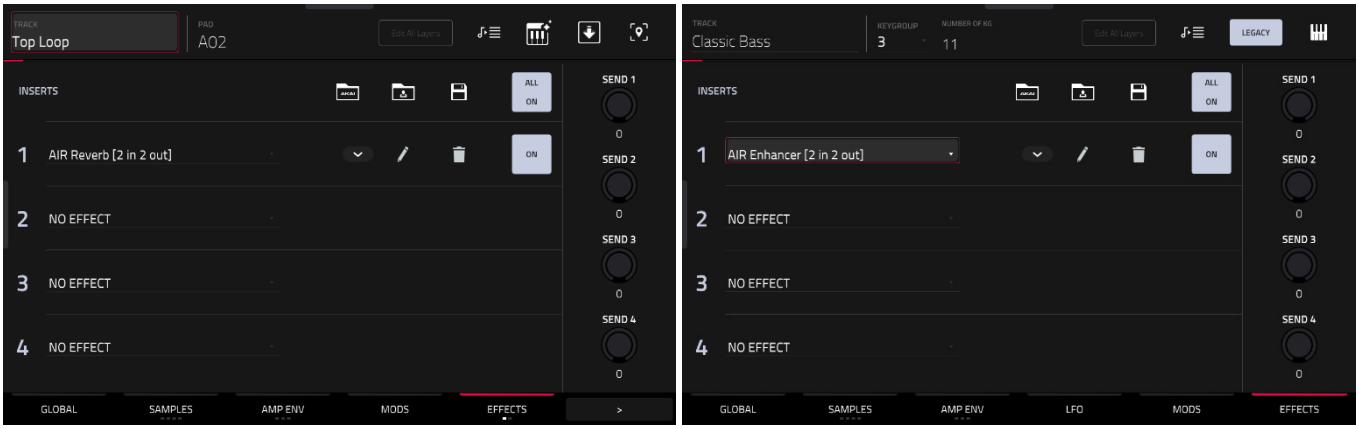
1. Use the **Track** field to select the track that uses the desired pad or keygroup.
2. If the channel strip is not already shown, tap the icons at the top of the channel strips to expand them.
3. For pad effects, tap the **single-pad / four-squares icons** in the bottom-right corner of the Track/Arrangement Section to switch from showing the track channel strip to the pad channel strip.

   For keygroup effects, tap the **single-pad / keyboard icons** in the bottom-right corner of the Track/Arrangement Section to switch from showing the track mixer strip to the keygroup mixer strip.
4. Press a **pad** to select it or its corresponding keygroup.
5. Tap the **FX** header to show the insert effects controls in the channel strip.
6. Tap an empty insert slot, indicated by a **+**, to add an insert effect. You can also tap the **expand window icon** to open the **Inserts** window, where you can load, change, and enable or disable the effects.



To load a pad or keygroup insert effect in the Pad Mixer:

1. Tap the **Effects** tab at the bottom of the screen.
2. Press the desired **pad** to select it or the corresponding keygroup, or tap it on the screen. Swipe your finger to the left to scroll through the banks of pads or keygroups.
3. Tap an insert slot to open the effects window and use it to load or edit effects, or tap the **Inserts** box to open the Inserts window.



To load a pad or keygroup insert effect in Track Edit Mode:

1. While using the desired track, press the desired **pad** to select it or the corresponding keygroup.
2. Tap the **Effects** tab in the lower-right corner, and use it to load or edit effects.

Note: This tab is only available for Keygroups when using the **Legacy** Track Edit view.

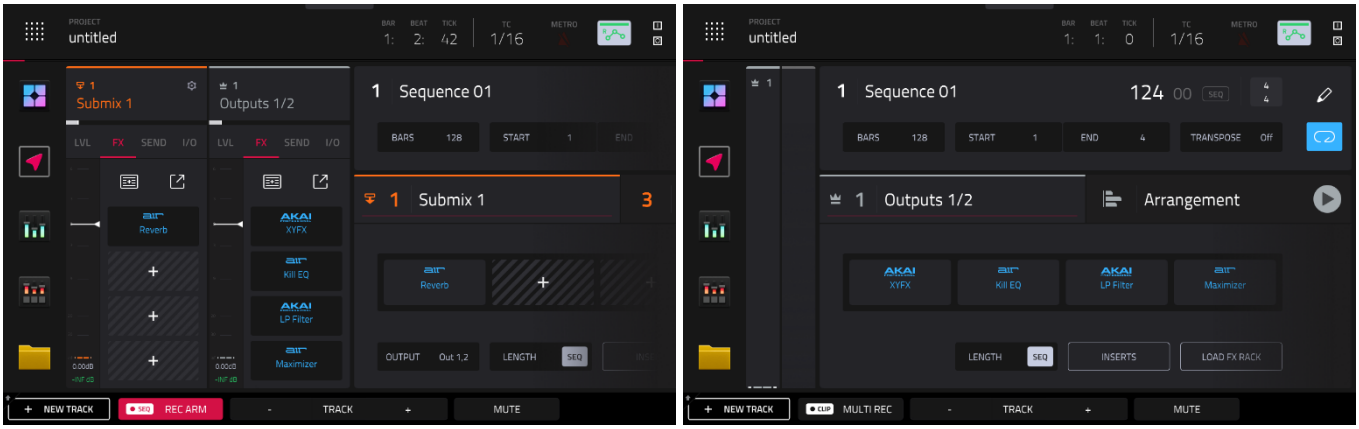
Tracks, Submixes, and Outputs

You can load up to four insert effects to each track (Drum, Keygroup, Plugin, or Audio type), Submix 1–8, or the Outputs (a stereo pair of channels: **Outputs 1/2** or **Outputs 3/4**). You can do this in ***Main Mode***, the ***Channel Mixer***, or ***XYFX Mode***.

Note: In XYFX Mode, the effects act like a single insert effect on that track. In fact, **XYFX** is the name of the insert effect that is loaded when use this mode.

To load a track insert effect in Main Mode:

1. Use the **Track** field to select the desired track.
2. If the channel strip is not already shown, tap the icons at the top of the channel strips to expand them.
3. If needed, tap the **single-pad / four-squares icons** in the bottom-right corner of the Track/Arrangement Section so the track channel strip is selected.
4. Tap the **FX** header to show the insert effects controls in the mixer strip.
5. Tap an empty insert slot, indicated by a **+**, to add an insert effect. You can also tap the **expand window icon** to open the **Inserts** window, where you can load, change, and enable or disable the effects.



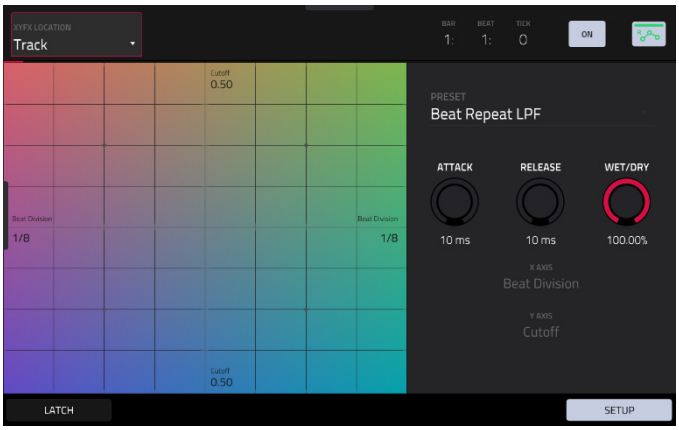
To load a submix or output insert effect in Main Mode:

1. Use the **Track** field to select the desired track, submix, or output.
2. The Track/Arrangement section will automatically display the four insert effects slots.

   Alternatively, you can use the channel strips by expanding them. When a Submix channel is selected, it will automatically be shown alongside the Main Output in the channel strips. When a Main Output is selected, it will automatically be shown by itself in the channel strip.
3. Tap an empty insert slot, indicated by a **+**, to add an insert effect. You can also tap the **expand window icon** to open the Inserts window, where you can load, change, and enable or disable the effects.

To load a track, submix, or output insert effect in the Channel Mixer:

1. Tap the **Effects** tab at the bottom of the screen.
2. Tap to select the desired track. Swipe left to display the **Submix** tracks and **Outputs** to select one.
3. Tap an insert slot to open the effects window and use it to load or edit effects. You can also tap the **Inserts button** to open the Inserts window, where you can load, change, and enable or disable the effects.



To load XYFX for a track, submix, or output in XYFX Mode:

1. If you have not yet used XYFX Mode for this track, tap **Insert XYFX** on the screen to load it and show the XY pad.

   Note: If you already have four insert effects loaded, you will need to clear one of the insert effect slots before doing this.

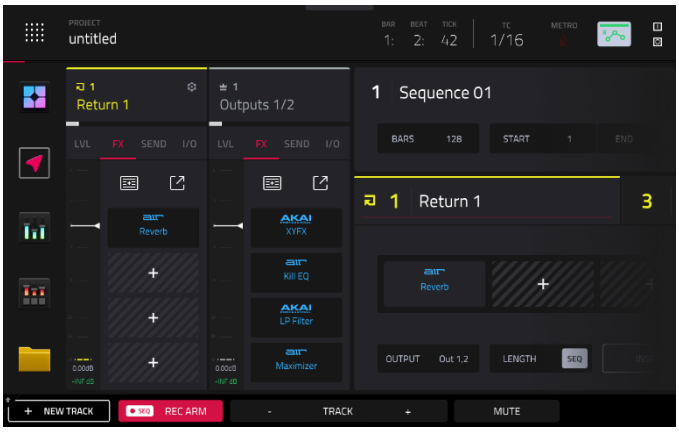
   If you have already used XYFX Mode for the selected track, the XY pad will appear.
2. Tap **XYFX Location** in the upper-left corner, and select a **Track**, **Submix**, or **Output**.
3. If the **Setup** panel is not shown, tap **Setup** in the lower-right corner to show it.
4. Use the **Preset** field to load an effect. Use the controls below the **Preset** field to edit the effect.

Send/Return Effects

Send/return effects work in the following way:

1. A **pad**, **keygroup**, **track**, or **submix** sends its audio to a **return** at a designated **send level**.
2. That audio is processed by the effects on the return. Each return can have up to **four insert effects** loaded and activated.
3. The processed audio is sent to a pair of main outputs (stereo) or a single main output (mono).

You can load send/return effects and set return levels in ***Main Mode*** and the ***Channel Mixer***, described below. The rest of this section describes the different ways to set the desired send levels for pads or tracks.



To load a send/return effect to a return in Main Mode:

1. Tap the **Track** header and use the **data dial** or **+/-** buttons to change tracks until you reach the **Return 1–4** buses. Alternatively, use the **Track -/+** buttons at the bottom of the screen.
2. Use the **Inserts** boxes to add or view inserts effects. Tap the **+** icon in an empty slot to add a new effect. Tap an insert slot with a loaded effect to view the effect's controls.

You can also add send/return effects using the ***Mixer Strips*** in Main Mode.

To load a send/return effect to a return in the Channel Mixer:

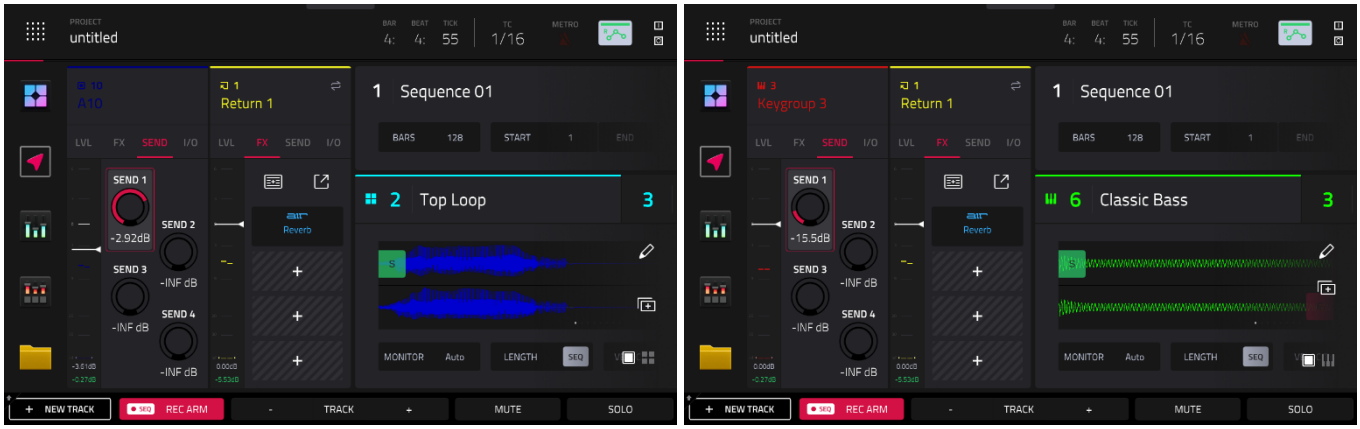
1. In the Channel Mixer, swipe left to show the **Returns** (between the **Submixes** and **Main Outputs**).
2. Tap the **Effects** tab at the bottom of the screen.
3. Tap an insert slot to open the effects window and use it to load or edit effects. You can also tap the **Inserts button** to open the Inserts window, where you can load, change, and enable or disable the effects.

To set the return level:

1. In the Channel Mixer, swipe left to show the **Returns** (between the **Submixes** and **Main Outputs**).
2. Tap the **Volume** or **Pan & Volume** tab in the lower-left corner.
3. In the screen, tap the **track** that corresponds to the desired return.
4. Use the **level slider** in the channel strip to adjust the level of the currently selected return. **To make finer adjustments**, double-tap the **level slider** on the screen and adjust the larger version of the slider that appears.

Pads and Keygroups

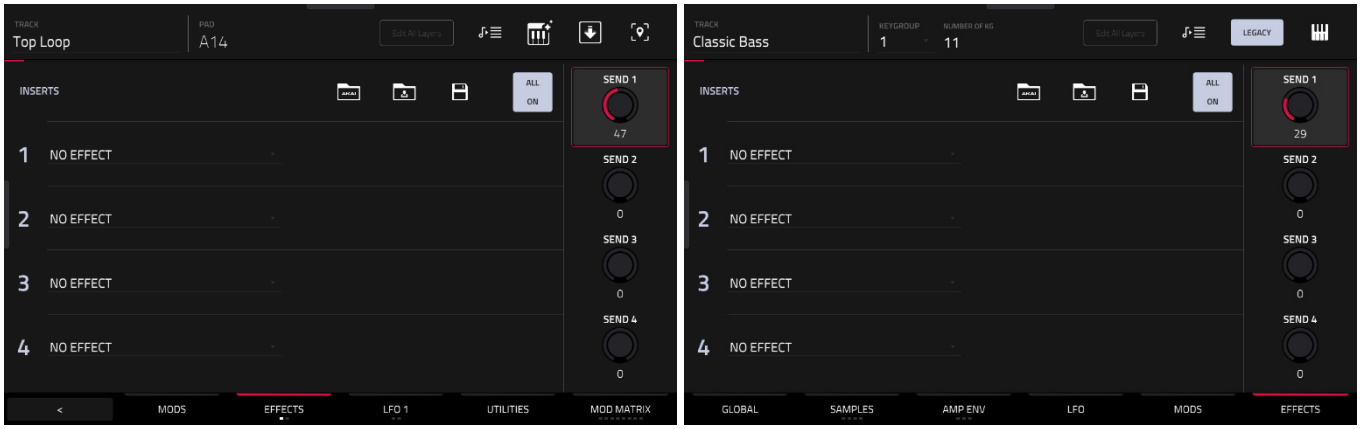
You can set the send levels for individual pads in ***Main Mode***, ***Track Edit Mode***, or the ***Pad Mixer***.



To set the send levels for a pad or keygroup in Main Mode:

1. Use the **Track** field to select the track that uses the desired pad or keygroup.
2. If the channel strip is not already shown, tap the icons at the top of the channel strips to expand them.
3. For pad effects, tap the **single-pad / four-squares icons** in the bottom-right corner of the Track/Arrangement Section to switch from showing the track channel strip to the pad channel strip.

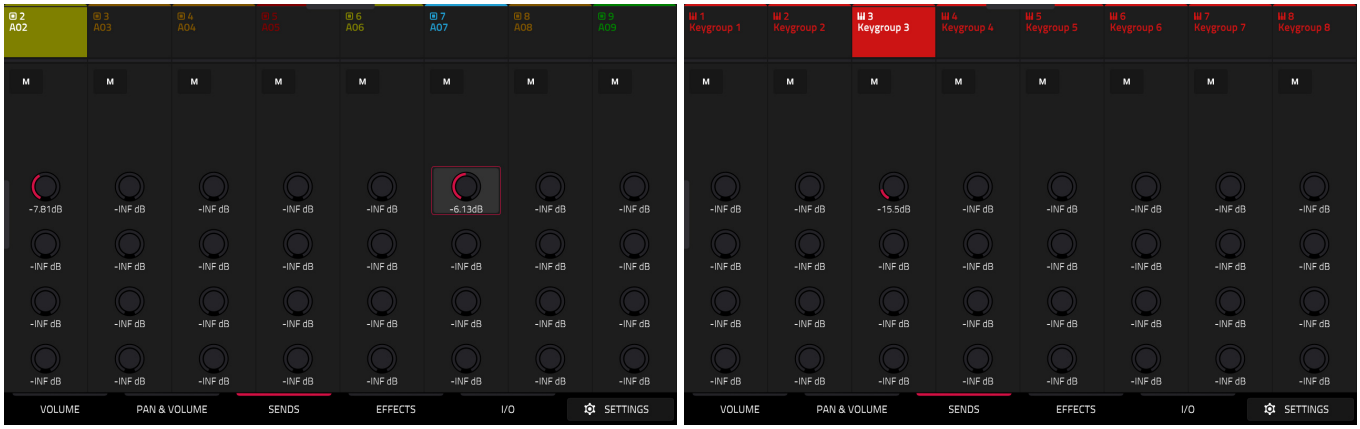
   For keygroup effects, tap the **single-pad / keyboard icons** in the bottom-right corner of the Track/Arrangement Section to switch from showing the track mixer strip to the keygroup mixer strip.
4. Press a **pad** to select it or its corresponding keygroup.
5. Tap the **SEND** header to show the insert effects controls in the channel strip.
6. Use the **Send** knobs to set the send level for each return. **To make finer adjustments**, double-tap the **knob** on the screen and adjust the larger version of the knob that appears.



To set the send levels for a pad or keygroup in Track Edit Mode:

1. While editing the desired track in Track Edit Mode, press the desired **pad** to select it or the corresponding keygroup.
2. Tap the **Effects** tab in the lower-right corner.

   Note: This tab is only available for Keygroups when using the **Legacy** Track Edit view.
3. Use the **Send** knobs to set the send level for each return. **To make finer adjustments**, double-tap the **knob** on the screen and adjust the larger version of the knob that appears.



To set the send levels for a pad or keygroup in the Pad Mixer:

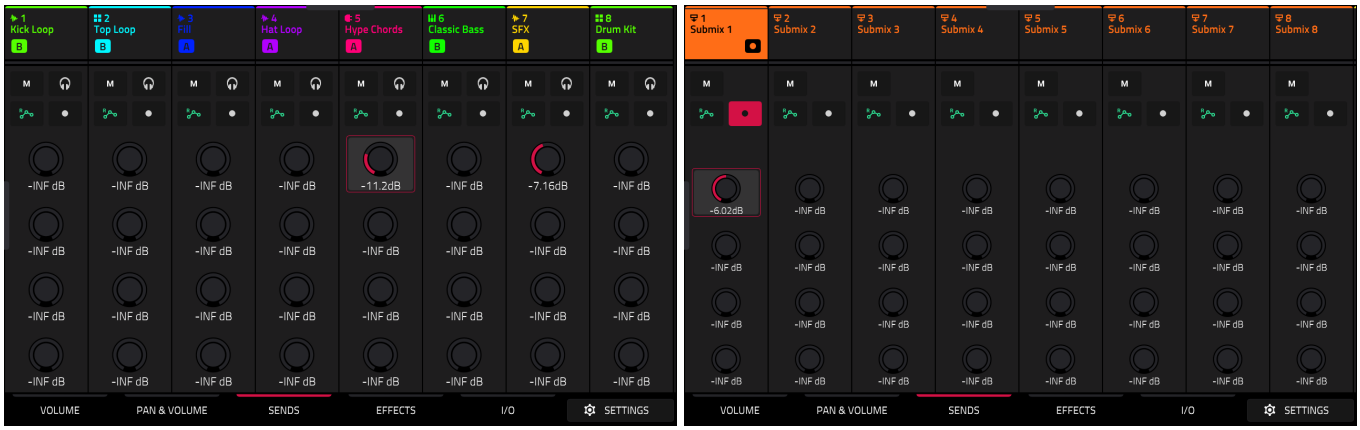
1. Tap the **Sends** tab at the bottom of the screen.
2. Press a **pad** to select it or the corresponding keygroup, or tap it on the screen.
3. Use the **Send** knobs to set the send level for each return. **To make finer adjustments**, double-tap the **knob** on the screen and adjust the larger version of the knob that appears.

Tracks and Submixes

You can set the send levels for Drum, Keygroup, Plugin, or Audio type tracks, plus Submix 1–8, in ***Main Mode*** and the ***Channel Mixer***.

To set the send levels for a track or submix in Main Mode:

1. Use the **Track** field to select the desired track or submix.
2. If the channel strip is not already shown, tap the icons at the top of the channel strips to expand them.
3. If needed, tap the **single-pad / four-squares icons** in the bottom-right corner of the Track/Arrangement Section so the track channel strip is selected.
4. Tap the **SEND** header to show the insert effects controls in the mixer strip.
5. Use the **Send** knobs to set the send level for each return. **To make finer adjustments**, double-tap the **knob** on the screen and adjust the larger version of the knob that appears.



To set the send levels for a track or submix in the Channel Mixer:

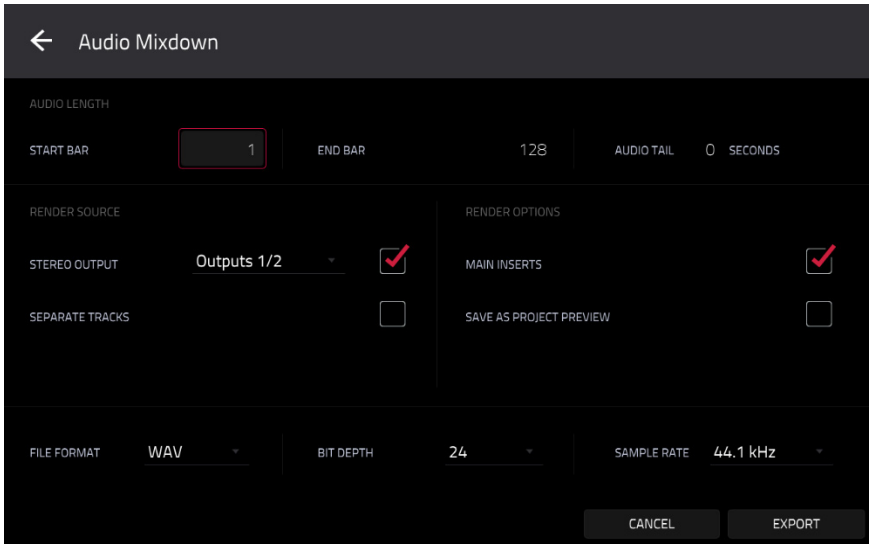
1. Tap the **Sends** tab at the bottom of the screen.
2. In the screen, tap the **send knob** in the desired track.
3. Use the **Send** knobs to set the send level for each return. **To make finer adjustments**, double-tap the **knob** on the screen and adjust the larger version of the knob that appears.

Audio Mixdown

The Audio Mixdown screen lets you render and export either the current sequence or song as an audio file.

To open the Audio Mixdown screen, press the **Save** button to open the ***Save Window***, and then select **Audio Mixdown**. You can also open the Save window by tapping **Save** at the bottom of the ***Menu***.

To open the Audio Mixdown screen in Song Mode, tap **Export** at the bottom edge of the screen.



Audio Length

Use the **Start Bar** and **End Bar** fields to define where the resulting audio file will start and end, respectively.

Use the **Audio Tail** field to add extra seconds to the end of the resulting audio file. This is useful if you are using effects or samples whose sounds exceed the defined audio length (e.g., long reverb or delay, one-shot samples with long decays, etc.). We recommend using an audio tail of at least a couple of seconds.

Render Source

Check **Stereo Output** and use the adjacent field to select a pair of outputs (**Out 1,2–31,32** and **Submix 1–8**). The mixdown will be taken from these outputs.

Check **Separate Tracks** to create a mixdown of each track used in the sequence or song.

Important: Each pad or keygroup must have their output routed to **Track** to be included in the mixdown. This is the typical (and default) setting. See ***Modes*** > ***Pad Mixer*** > ***I/O*** to learn about this.

Render Options

If your **Render Source** is set to **Stereo Output**, check **Main Inserts** to include main insert effects in the mixdown.

If your **Render Source** is set to **Separate Tracks**, check **Export Submixes** to export the submix channel signals as separate files, and **Export Returns** to export the return channel signals as separate files.

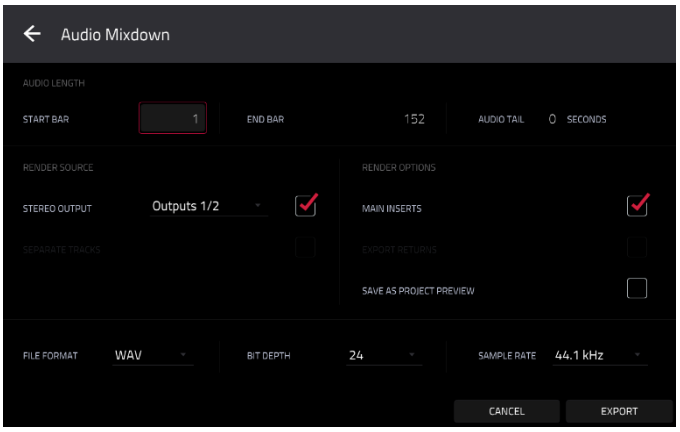
If your **Render Source** is set to **Stereo Output**, tap **Save as Project Preview** to save the sequence or song as a project preview file (which you can play for reference in the Browser). If you check this box, **Stereo Output** will automatically be checked, as well.

File Formats

Tap **WAV**, **AIFF**, **MP3**, **FLAC**, or **OGG** to select the file format of the mixdown.

For **WAV** and **AIFF** files, use the **Bit Depth** field to select a bit depth of **8**, **16**, or **24** bits, or **32** bits, floating point (**32 F**). For **FLAC** files, you can select a bit depth of **16** or **24** bits. For **MP3** and **OGG** files, you can select a **Bitrate** of **128**, **160**, **192**, or **320** kbps.

Use the **Sample Rate** field to select a sample rate of **44.1 kHz**, **48 kHz**, **88.2 kHz**, or **96 kHz**. In most cases, we recommend selecting **44.1 kHz**.



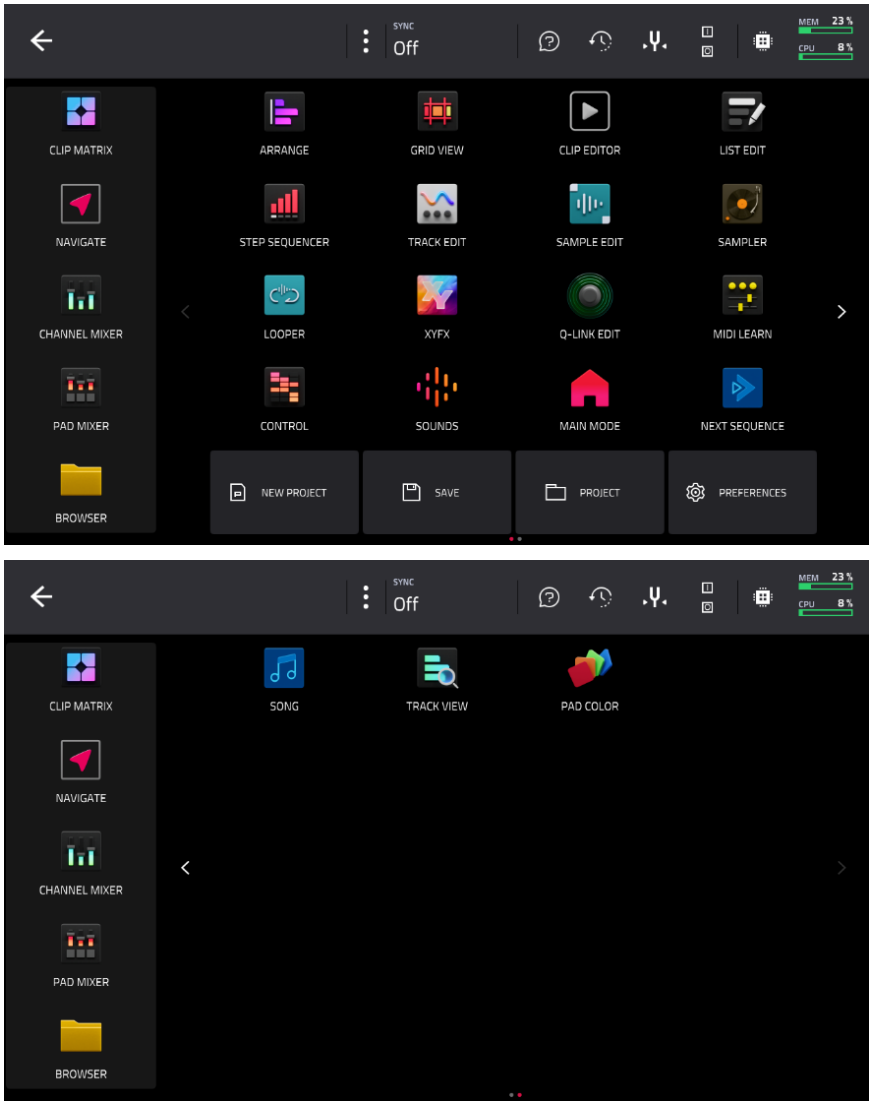
Tap **Export** to enter the **Save** screen where you can select a name and location to save your audio mixdown.

Tap **Cancel** or the **← icon** in the upper-left corner to return to the previous screen.

Modes

The Force has a ***Menu*** page that lets you select from the available modes. This chapter describes the various features and functions of each one.

Click a button below to skip directly to that chapter.



To change menu pages, tap the **<** or **>** arrows.

You can also edit the Menu layout by tapping and dragging the menu icons to your preferred location. This is useful for putting your most-used modes in the left-most column so that they are easily accessed in any mode by swiping to the right from the left edge of the touchscreen.

> **To reset the Menu layout,** tap the **three dots icon** next to the Project name at the top of the screen, and then tap **Reset Mode Menu**.

Clip Matrix Mode

Clip Matrix Mode gives you an overview of your tracks and clips.

To enter Clip Matrix Mode, do one of the following:

- Press **Matrix**.
- Press **Menu**, and then tap **Clip Matrix**.

Double-tap an empty clip slot to create a new clip. Alternatively, tap and hold on an empty clip slot, and then tap **Create**.

Tap an existing clip to launch it.

Tap the **row launch icons** on the far right of the display to launch a row.

Use the hardware **cursor** buttons to move the current matrix display view. To move the display by eight rows or columns at a time, hold **Shift** and use the **cursor arrows**.

Tap the **+** icon at the top of the display to add a new track. If your project already has 8 tracks, move the Matrix view to the right to show this icon.

To edit track settings, double-tap the track name at the top of the display. See ***General Features*** > ***Tracks*** for more information on editing track settings.

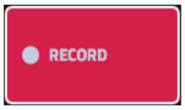
To view the Returns and Output tracks, press **Master**. You can create and launch clips for automation on these tracks using the same methods as above.

The clips in Clip Matrix Mode will change appearance based on their current status:

Stopped, playback stopped

Prepared to record

Stopped, playback active



Recording

(flashing)

Prepared to play

Overdubbing

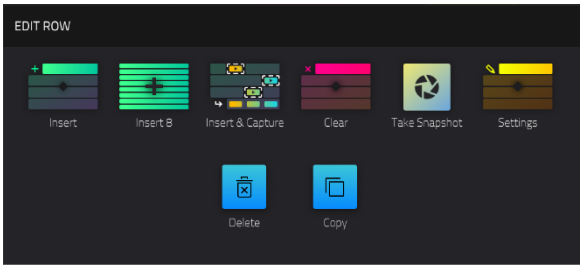
Playing

Exiting recording

(flashing)

Prepared to stop

To insert a new row or clear a row, hold **Edit** and press a **Row Launch** button on your hardware to open the **Edit Row** window. Alternatively, tap and hold on the **row launch** button on the touchscreen.



Tap **Insert** to insert one new row.

Tap **Insert 8** to insert 8 new rows.

Tap **Insert & Capture** to capture any clips currently playing in other rows and add it to the new row.

Tap **Clear** to clear the currently selected row.

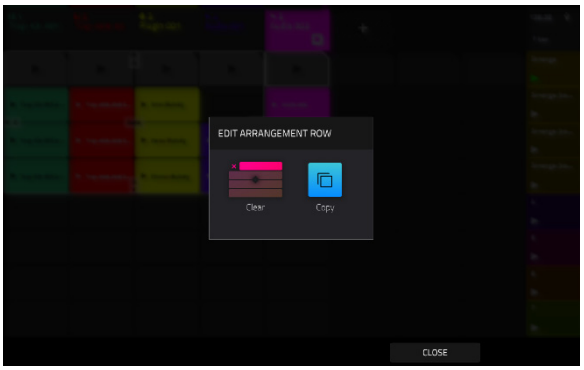
Tap **Snapshot** to take a snapshot of all automation parameters in each row using the Row Launch buttons. Once a snapshot has been captured to a row, the saved state of all automation settings will be relaunched with the event data on that row. **To clear a snapshot from a row,** tap **Clear Snapshot** from the Edit Row window.

Tap **Settings** to open the ***Row Settings*** window.

Tap **Delete** to delete the currently selected row, including all clips. All subsequent rows below this will be moved up.

Tap **Copy** to copy the currently selected row and all clips. Once a row has been copied, tap **Paste** from the **Edit Row** window to copy the it and its contents to the selected row.

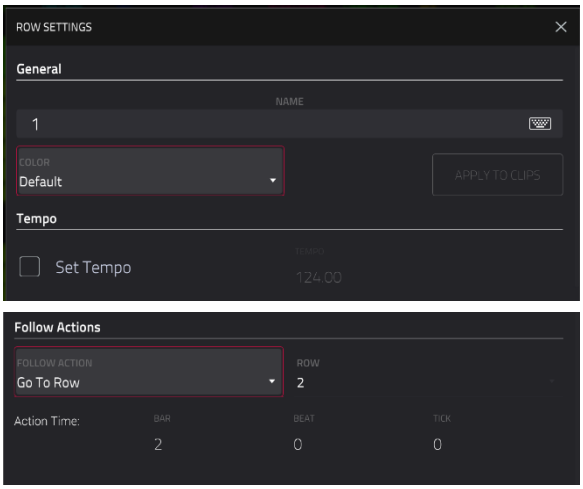
To clear or copy the arrangement, tap and hold on the **Arrangement Row Launch** button to open the **Edit Arrangement Row** window.



Tap **Clear** to clear the arrangement row.

Tap **Copy** to copy the arrangement row. You can then paste the arrangement event list to a clip row by opening the **Edit Row** window (described ***above***) and selecting **Paste**. Any loop regions from the arrangement row will automatically be matched in the new clips. This can allow you to take sections of your arrangement to create new clip rows.

The Row Settings window (accessed from the Edit Row window, ***above***) allows you to configure settings for the selected row.



Use the **Name** field to rename the row. Tap it and use the virtual keyboard that appears.

Use the **Color** field to set the row color. Tap the **Apply to Clips** button to apply this color to all clips in the row.

Check the **Set Tempo** box to change the sequence tempo when the row is launched. Use the **Tempo** field to set the new tempo in beats per minute. If the tempo is set to **GBL** (global), then row tempo settings will be ignored and the tempo will remain at the global setting.

Use the **Follow Action** field to apply one of the following behaviors to the row after it is launched. Once a Follow Action is selected, use the **Action Time** field to set when the action is triggered, in Bars:Beats:Ticks.

Go To Row: Move to the Row set by the **Row** field.

To Previous: Move to the previous row. If the row playing is the first row in the Matrix, playback will stop after the action time is reached.

To Previous or Last: Move to the previous row, or to the last row in the Matrix if the row playing is the first row in the Matrix.

To Next: Move to the next row. If the row playing is the last row in the Matrix, playback will stop after the action time is reached.

To Next or First: Move to the next row, or back to the first row if the row playing is the last row in the Matrix.

To Previously Playing: Move to the last played row.

To Random (Include This): Move to a random row, including the one currently playing.

To Random (Exclude This): Move to a random row, not including the one currently playing.

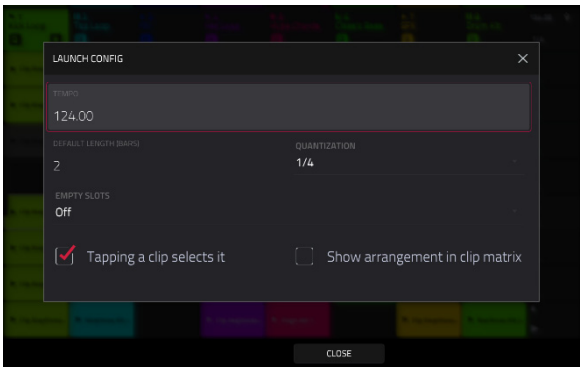
Back to Arrange: Return to the arrangement after the action time is reached.

Stop: Stop playback after the action time is reached.

Tap the **Apply to All Rows** field to apply the Follow Action to all rows in the matrix.

Tap the **Clear All** button to clear all set Follow Actions.

To open the Launch Configuration window, tap the upper-right corner of the display where the BPM and Launch Quantization are located. You can also press and hold **Shift** and press the **Launch/Config** button. You can then do any of the following:



Use the **Tempo** field to set the project tempo. Use the **data dial** or **-/+** buttons to change the tempo, or double-tap the field to open the number pad. Alternatively, use the **tap tempo** button to set the tempo.

Use the **Default Length** field to set the default clip length for the project.

Use the **Quantization** field to set the global quantization amount for launching all clips.

Use the **Empty Slots** field to determine the appearance of clip launch pads without clips. Select **Dim** for the pads to be dimly lit in the track color, or **Off** for the pads to be completely dark.

Check the **Tapping a clip selects it** box to automatically select a clip when pressed. When enabled, this allows you to instantly view the triggered clip in other modes once tapped. When unchecked, clip focus will remain on the selected pad, which can be chosen by holding **Clip Select** or **Shift** and tapping a clip launch pad.

Check the **Show arrangement in clip matrix** box to view the arrangement row in the clip matrix.

Tap **Close**, the **X**, or outside the window to close the Launch Configuration window and return to Clip Matrix Mode.

You can also tap and hold your finger on a clip slot to quickly access the following functions. For clip slots with clips in them:

Tap **Copy** to copy the selected clip.

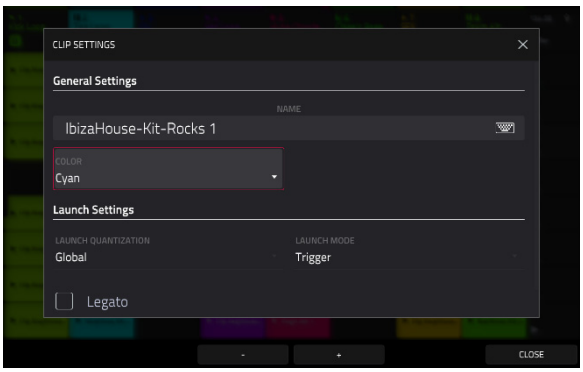
Tap **Copy To Arrangement** to copy the selected clip contents to the linear arrangement timeline.

Tap **Delete** to delete the selected clip.

Tap **Edit Clip** to open the **Clip Editor** for the selected clip.

Tap **Edit Event** to open Grid View for the selected clip.

Tap **Settings** to open the Clip Settings window.



Use the **Name** field to rename the clip. Tap it and use the virtual keyboard that appears.

Use the **Color** field to set the clip color.

Use the **Launch Quantization** field to set the quantization amount for launching the clip.

Use the **Launch Mode** field to set the clip launch behavior. Select **Toggle** for the clip to start or stop with each successive press. Select **Trigger** for the clip to start at the beginning with each press.

Check the **Legato** box to enable legato mode for the clip. When enabled, launching the clip will pick up playback from the same position of the previously playing clip, depending on the launch quantization value. For example, if launch quantization is set to 1 bar, launching a legato clip at Bar 1, Beat 2 of another playing clip will cause the legato clip to begin playing at Bar 2, Beat 1. If legato is off, the clip would begin playing from the start.

Tap **-/+** at the bottom of the screen to move to the previous or next clip in the track.

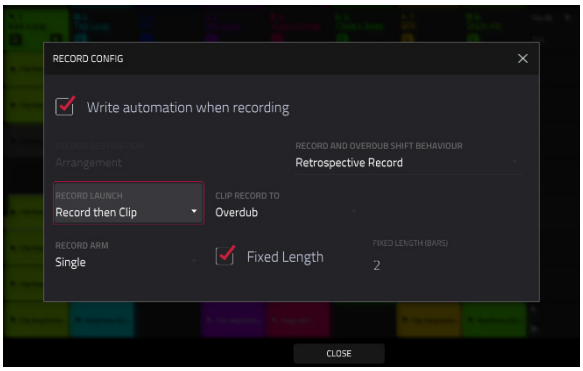
Tap **Close,** the **X**, or anywhere outside the window to close the Clip Settings window.

For empty clip slots:

Tap **Create** to create a new clip.

Tap **Paste** to paste a copied clip.

To open the Record Configuration window, press and hold **Record**, and then tap **Settings**.



Check the **Write automation when recording** box to capture automation while recording.

Use the **Record Launch** field to set how recording is initiated:

Clip: Tap any clip launch pad while the track is armed to begin recording.

Record or Clip: Tap any clip launch pad while the track is armed to begin recording, or press the **Record** button to begin recording on the highlighted clip slot.

Record then Clip: First press the record button, then tap any clip launch pad to begin recording.

Record to Selection: The record destination automatically updates to the currently selected event list. Whether a clip or the Arrangement is selected, pressing the **Record** button and then Play will begin recording to the current selection (This is the default mode when Force is powered on).

Use the **Clip Record To** field to set the behavior when recording is completed, entering either **Overdub** or **Play**.

Use the **Record Arm** field to set the arming behavior of the **Rec Arm** button. When set to **Single**, Force automatically record arms the current track when changing tracks and disarms any others. When set to **Multi**, Force can record arm multiple tracks at the same time.

When using Single Record Arm, it is still possible to record arm multiple tracks. To do so, press and hold the **Select** button and then press the **Track Assign** buttons for the tracks you want to arm.

Check the **Fixed Length Recording** box to stop recording after the clip length set in the **Fixed Length (Bars)** field. Leave unchecked to record for any desired clip length.

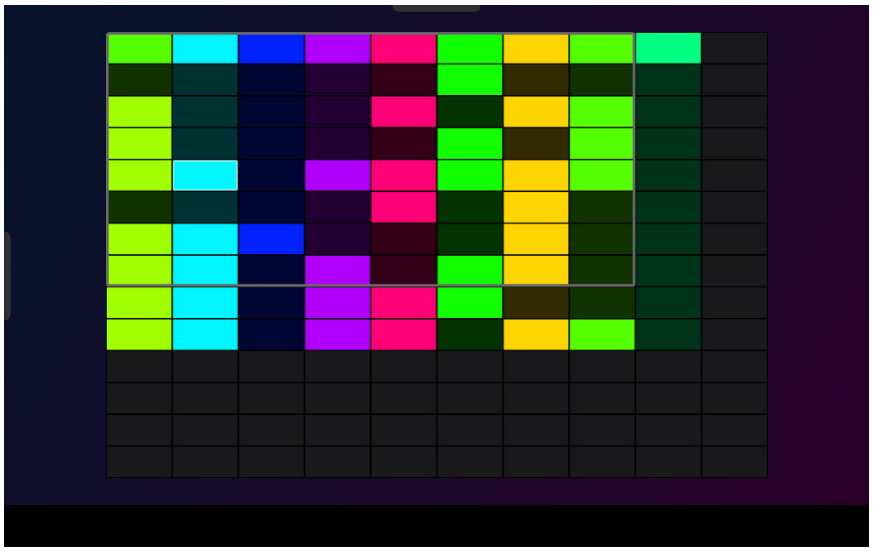
Tap **Close**, the **X**, or outside the window to close the Record Configuration window and return to Clip Matrix Mode.

Navigate Mode

Navigate Mode lets you quickly select which 8x8 grouping of clips is currently in focus for the **clip launch pads** and ***Clip Matrix Mode***.

To enter Navigate Mode, do one of the following:

- Press **Navigate**.
- Press **Menu**, and then tap **Navigate**.

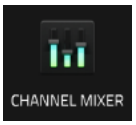


To move the matrix view, do any of the following:

Use the **cursor arrows** to move the view one row or column at a time. You can also hold **Shift** and use the cursor arrows to move eight rows or columns at a time.

Use your finger to tap or drag to the desired location.

Channel Mixer



In the Channel Mixer, you can set levels, stereo panning, and other settings for your tracks, submixes, returns and main outputs.

To open the Channel Mixer, do either of the following:

- Press **Menu**, and then tap **Channel Mixer**.
- Press **Mixer**.

The Channel Mixer works like an audio mixer with various settings for each track, with up to 8 tracks shown on the display at once. The name of the track is displayed at the top of each one.

Tap a **track header** to select it.

Use the left or right **cursor arrows** to view more tracks. Alternatively, drag your finger left or right on the display.

Swipe your finger to the left on the display to view the **Submixes**.

Press the **Master** track select button to view the **Return** and **Main Output** tracks. Alternatively, quickly swipe your finger to the left on the display until the Returns and Main Output tracks are shown.

Tap the **Settings** icon in the lower-right corner of the screen to open the Mixer configuration to edit the following settings:

Use the **Solo Button** field to set the behavior of the solo buttons. They can be used to either **Solo Tracks** or **Cue Tracks**.

Use the **Crossfader** field to set the **Profile** of the crossfader, either **Linear**, **Exponential** or **Logarithmic**.

Use the **MIDI Track Input Metering** fields to adjust how MIDI inputs are displayed in the Channel Mixer.

The **Meter** field determines when the MIDI Input meter is active: **Always**, **When Record Armed**, **When Record Armed or Monitoring**, or **Never**.

The **Meter** field determines what MIDI data is shown with the meters: **User Input** or **User Input and Playback**.

Use the **Audio Track Input Metering** field to determine when the Audio Track meter is active: **Always**, **When Record Armed**, **When Record Armed or Monitoring**, or **Never**.

Double-tap the **track headers** to open the **Track Settings** window. See ***Operation > General Features > About Tracks*** to learn more about track settings.

Volume

The **Volume** tab gives you an overview of the volume level of your tracks.

Tap and drag a **level slider** to adjust the volume level.

The level sliders and meters in each pad show a visual representation of the level. Double-tap a **track** on the screen to open a large version of the level slider and meter.

Pan & Volume

The **Pan & Volume** tab gives you a number of mixing options for your tracks.

Use the **M** and **S** buttons to mute and solo the track. When **Cue Tracks** is enabled, the **S** button will become a **Headphones** button.

Use the **automation button** to set the ***Automation*** status of the track.

Use the **record button** to arm the track for recording.

The **pan sliders** in each track show a visual representation of the pan. Tap and drag the pan slider to adjust the panning of the currently selected track, return or main output. Double-tap a pan slider on the screen to open a large version of the slider.

Tap and drag a **level slider** to adjust the volume level of the currently selected track, return or main output. Double-tap a level slider on the screen to open a large version of the slider.

Tap the **A** or **B** icons to assign the track to the crossfader A or B grouping.

Sends

The **Sends** tab gives you an overview of the **Sends 1–4** level of your tracks.

Use the **M** and **S** buttons to mute and solo the track. When **Cue Tracks** is enabled, the **S** button will become a **Headphones** button.

Use the **automation button** to set the ***Automation*** status of the track.

Use the **record button** to arm the track for recording.

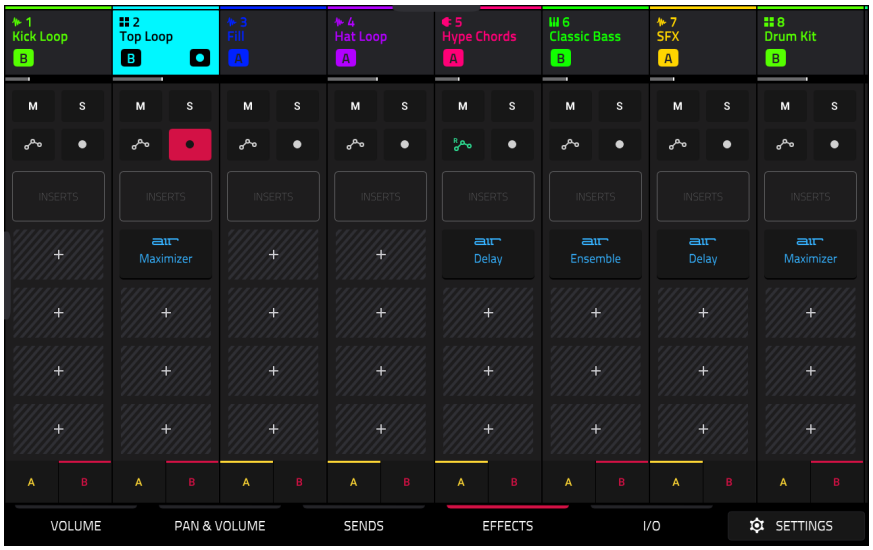
Use the **send knobs** to adjust the send level of tracks.

To learn how to use send effects, please see ***General Features*** > ***Effects*** > ***Send/Return Effects***.

Important: When using send channels, make sure you have already loaded at least one effect to it using the return mixer. Swipe left to view the Return channels and then select the **Effects** tab, described ***below***.

Effects

The **Effects** tab lets you view and edit insert effects for your tracks.



Use the **M** and **S** buttons to mute and solo the track. When **Cue Tracks** is enabled, the **S** button will become a **Headphones** button.

Use the **automation button** to set the ***Automation*** status of the track.

Use the **record button** to arm the track for recording.

Tap the **Inserts** button to open the Inserts window.

Use the four **insert** fields to add insert effects to the track. Empty insert slots will show a **+** icon. Inserts with a loaded effect will show the name of the effect.

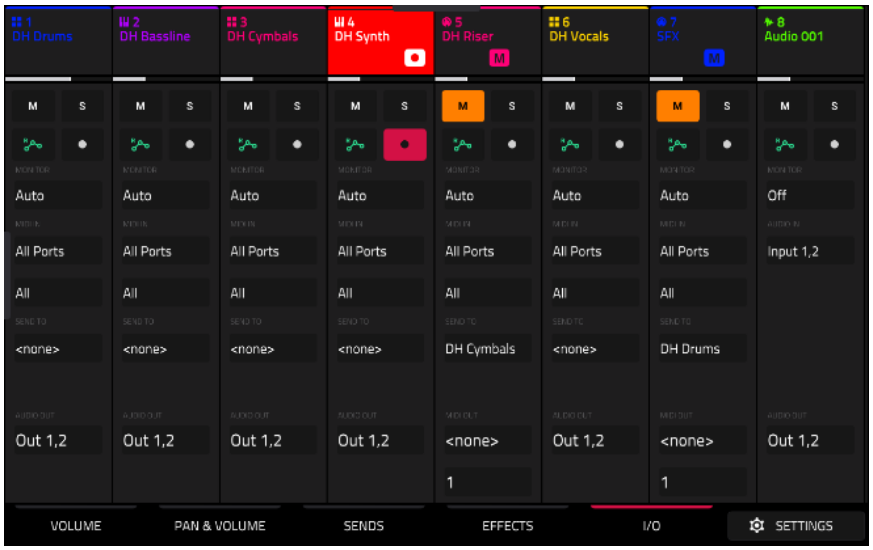
> **To learn how to use insert effects**, please see ***General Features*** > ***Effects*** > ***Insert Effects***.

Tap the **A** or **B** icons to assign the track to the crossfader A or B grouping.

Press the **Master** button, or swipe left, while viewing the Effects tab to view the Return and Output Insert effects slots.

I/O

The **I/O** tab lets you view and edit audio and MIDI routing for your tracks.



Use the **M** and **S** buttons to mute and solo the track. When **Cue Tracks** is enabled, the **S** button will become a **Headphones** button.

Use the **automation button** to set the ***Automation*** status of the track.

Use the **record button** to arm the track for recording.

Tap the **Monitor** button to set the monitoring behavior.

For Audio tracks:

Off: The track's audio input is not monitored.

In: The track's audio input is monitored whether the track is record-enabled or not.

Auto: The track's audio input is monitored while the track is record-enabled only.

For MIDI tracks:

Off: The track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

In: The track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

Auto: The track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

Merge: The track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Input** fields to select the input routing for the track.

For Audio tracks:

Use the **Audio In** field to configure the input source of the external audio signal, which you can set to a pair of inputs (Input 1,2) or a single input (Input 1, Input 2).

For MIDI tracks:

Use the **MIDI Input** and **Channel** fields to configure the MIDI input settings.

Use the **Send To** field to send the track's MIDI output to another track.

Use the **Output** field to set the output routing for the track.

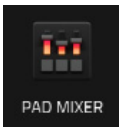
For Audio tracks:

Use the **Audio Out** field to configure where the track is routed, which you can set to a submix (Sub 1–8), a pair of outputs (Out 1,2–Out 3,4), or a single output (Out 1–4).

For MIDI tracks:

Use the **MIDI Output** and **Channel** fields to configure the MIDI output settings.

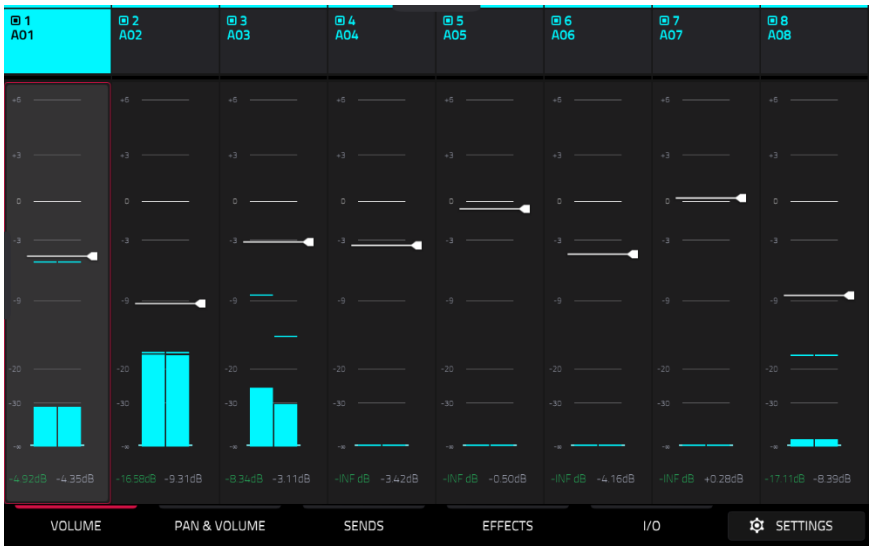
Pad Mixer



In the Pad Mixer, you can set levels, stereo panning, and other settings for individual pads. This mode is only available for Drum and Keygroup tracks.

To open the Pad Mixer, do either of the following:

- Press **Menu**, and then tap **Pad Mixer**.
- Press and hold **Shift** and press **Mixer**.



Just like the track Mixer, the Pad Mixer works like an audio mixer with various settings for each pad, with up to 8 pads shown on the display at once. The name of the pad is displayed at the top of each one.

To select a pad, tap the respective **clip launch button** on your Force while in **Note Mode**, or tap the channel strip header.

To view more pads, drag your finger left and right on the display.

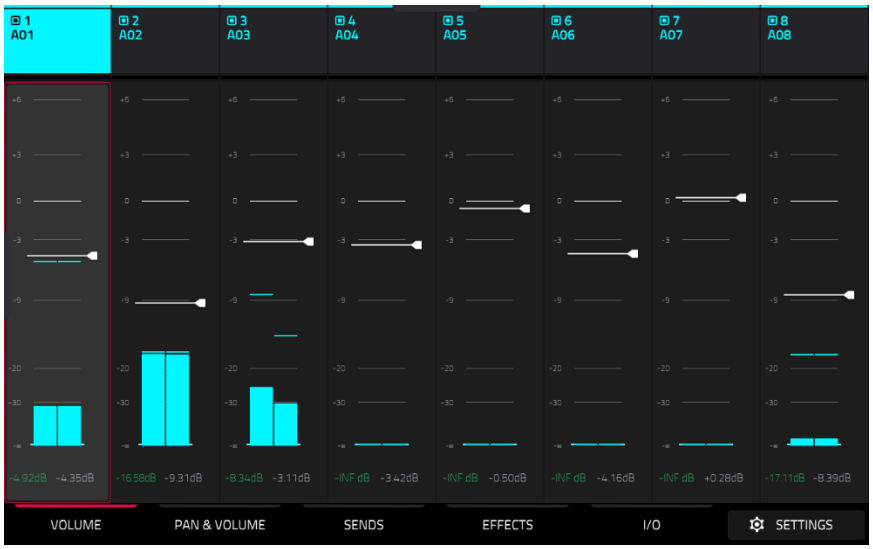
To open the Pad Mixer configuration, tap the **Settings** icon in the lower-right corner of the screen to edit the Pad Mixer configuration.

Check the **Filter by events** box to show only pads with events.

Check the **Filter by samples** box to show only pads with samples assigned.

Check the **Write automation when recording** box to set automation to always write when recording.

Volume



The **Volume** tab gives you an overview of the volume level of your pads.

Tap and drag the **level slider** to adjust the volume level of the currently selected pad.

The level sliders and meters in each pad show a visual representation of the level. Double-tap a **track** on the screen to open a large version of the level slider and meter.

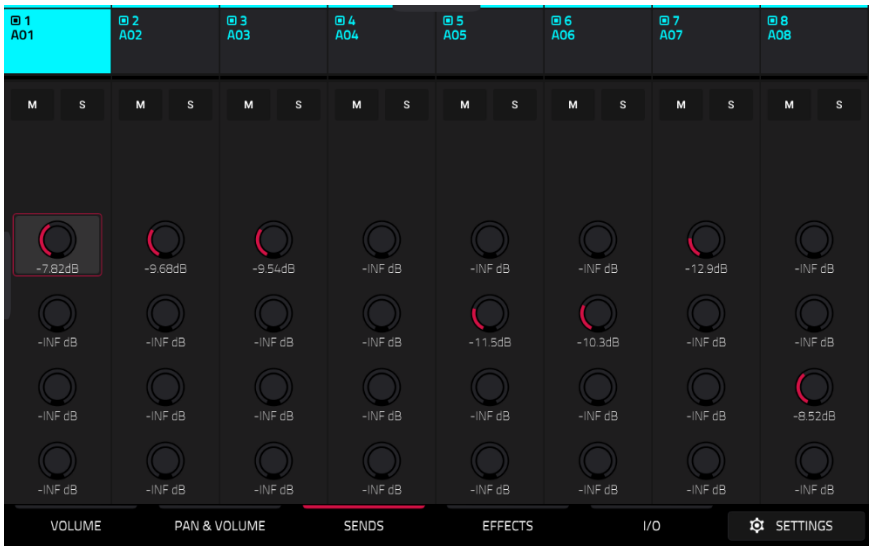
Pan & Volume

Use the **M** and **S** buttons to mute and solo the pad.

The **pan sliders** in each track show a visual representation of the pan. Tap and drag the pan slider to adjust the panning of the currently selected pad.

Tap and drag the **level slider** to adjust the volume of the currently selected pad.

Sends



Use the **M** and **S** buttons to mute and solo the pad.

Use the **send knobs** to adjust the send level of the pads.

To learn how to use send effects, please see ***General Features*** > ***Effects*** > ***Send/Return Effects***.

Important: When using send channels, make sure you have already loaded at least one effect to it using the return mixer.

Effects

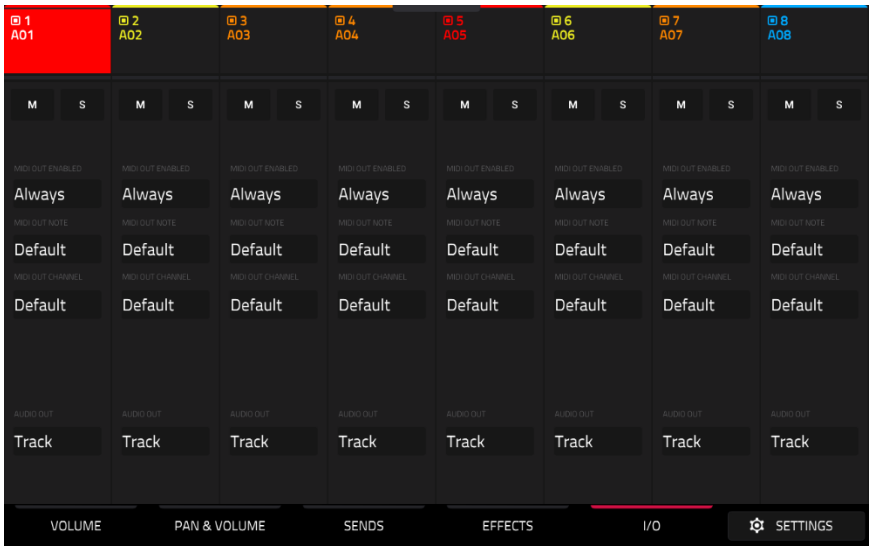
Use the **M** and **S** buttons to mute and solo the pad.

Tap the **Inserts** button to open the Inserts window.

Use the four **insert** fields to add insert effects to the pad. Empty insert slots will show a **+** icon. Inserts with a loaded effect will show the name of the effect.

To learn how to use insert effects, please see ***General Features*** > ***Effects*** > ***Insert Effects***.

I/O



Use the **M** and **S** buttons to mute and solo the pad.

Use the **Audio Out** field to set the output routing for the pad. Select **Track** to output the pad to the track, or send it directly to one of the outputs.

Browser

The Browser lets you navigate your Force hardware's internal and external hard disks to load samples, clips, songs, etc. Using filter buttons and user-definable folders, you can easily adapt it to your preferred workflow. You can also audition (preview) your samples before loading them.

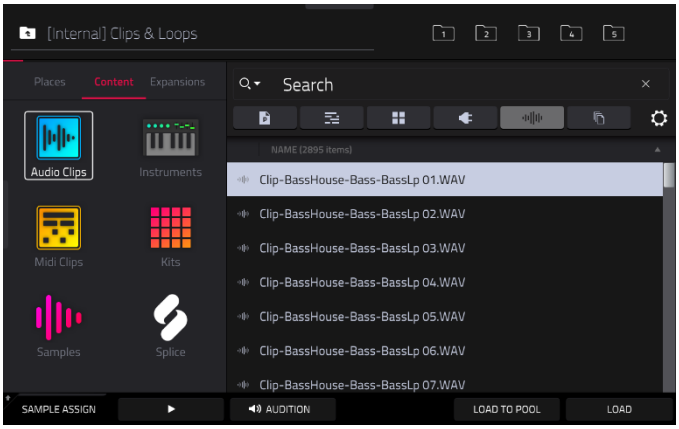
Important: You can install an additional SATA drive in your Force hardware, allowing for even more storage space. See ***Appendix > SATA Drive Installation*** to learn more about this.

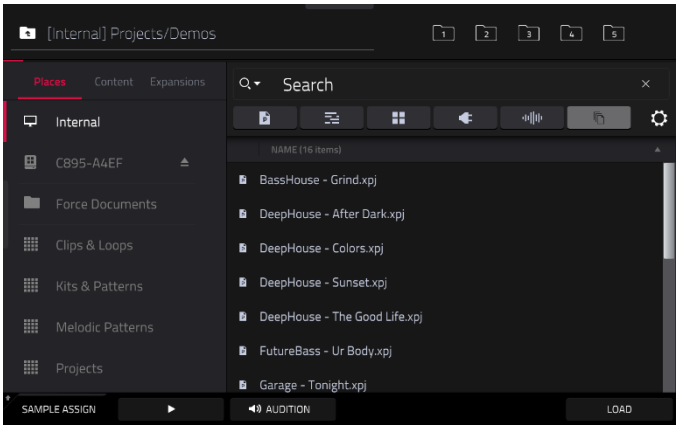
Important: Force supports read and write capability for **exFAT**, **FAT32**, **NTFS**, and **EXT4** file systems as well as read-only capability for **HFS+** file systems. We recommend using an exFAT file system as it is the most robust one supported by both Windows and macOS.

To show the Browser, do any of the following:

- Press **Menu** and then tap **Browser**.
- Press **Load**.

To view the project's sample pool and pads, tap **Sample Assign** in the lower-left corner. See the ***Sample Assign*** section to learn about this.





In the **Browser**, you can do any of the following:

Tap **Places** on the left side of the screen to browse your files by location.

Internal is the internal drive of your Force.

Force Documents is a shortcut to the **Force Documents** folder on the internal drive of your Force.

If you have storage devices connected to USB ports or SD card slot of your Force, they will appear in this column, as well.

Tap **Content** to browse your files by content, and then select the type of file: **Audio Clips**, **Instruments**, **Midi Clips**, **Kits**, **Samples** or **Splice** (see ***below*** to learn about these content buttons).

Tap **Expansions** to browse your Expansions.

Tap the **folder/↑ icon** in the upper-left corner to move up one folder level.

To move through a list, do any of the following:

- Swipe up or down
- Turn the **data dial**
- Use the **–/+** buttons

Tap one of the file list headers to sort the list: **Name**, **Size**, **Date Modified** or **Date Created**. Tap the header again to change the sorting direction. These can be added or removed using the ***Browser Options*** window.

To select a file or folder, tap it once.

To enter a folder, double-tap it or tap **Open** in the lower-right corner. You can also tap one of the **folder buttons** (**1**–**5**) in the upper-right corner to jump immediately to those pre-assigned file paths (see ***below*** to learn how to assign these file paths).

To load a selected file, double-tap it or tap **Load**. If the file is a sample, it will be loaded to the project's sample pool. If the file is a project, it will be loaded in its entirety (you will be asked if you want to close your current project).

To load all files in a folder, select the folder (so it is highlighted in the list), press and hold **Shift**, and then tap **Load All** in the lower-right corner.

Important: Although you can load multiple files at once, any samples you load into a project will be automatically converted to full-quality uncompressed audio files, so they may use more storage space than they do on your external storage device. If you are unable to load multiple files at once due to this, select fewer files and try again.

Press and hold **Shift** and then tap **Delete File** at the bottom of the screen to delete a selected file or folder.

Tap and hold **Play** (▶) at the bottom of the screen to preview a selected sound.

To adjust audition settings, tap the **Audition speaker icon** at the bottom of the screen. In the screen that appears:

Tap **Auto** to enable or disable automatic audition when a sound is selected.

Tap and drag the **level slider** up or down to set the audition volume level.

Tap **Sync** to enable or disable auditioning samples at the beginning of the next bar of the sequence when playback is active.

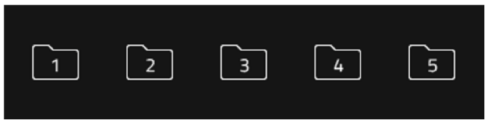
Tap **Warp** to enable or disable samples with an embedded tempo to be warped to the project tempo. Samples with no embedded tempo or externally-embedded tempo will not be affected by this setting.

Tap the **Audition icon** once more to hide the window.

To show the information for the current storage device, press and hold **Shift** and then tap **Drive Info** at the bottom of the screen. The drive's information will appear in a new window. Tap **OK** to return to the previous screen.

To format a storage device to use an exFAT file system, select it in the **Browser**, press and hold **Shift** and then tap **Format Drive** at the bottom of the screen. In the window that appears, tap **OK** and then **Format** in the next window to format the device, or tap **Cancel** to return to the previous screen without formatting. This formatting process will set the device to use the exFAT file system, remove any partitions from the drive, and erase all of its content. (Devices that are uninitialized or do not have a file system will not be recognized by the Force and consequently cannot be formatted.)

To get the most efficient use of the Browser, set the file paths to your favorite drive locations first. There are five **folder buttons** labeled **1**–**5** in the upper-right corner. You can set these to be shortcuts to five locations on your Force's internal drive and/or any connected storage devices, giving you quick access to your files.



To assign the current location to a folder button, press and hold **Shift**, and then tap one of the **folder buttons** (**1**–**5**). Now, when you tap that folder button again, the Browser will show that folder's content immediately.

Use the six filter buttons to show only specific types of files in the list below. Folders will still be shown in the list.

Tap the **P/page icon** to show project files only.

Tap the **bars icon** to show pattern files only.

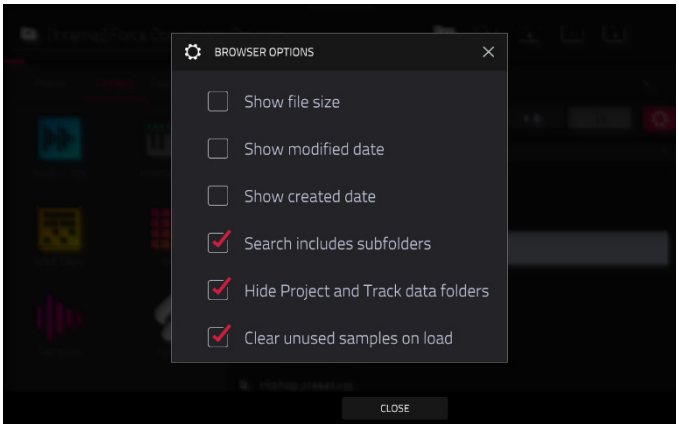
Tap the **four-squares icon** to show kit files only.

Tap the **plug icon** to show plugin preset files only.

Tap the **waveform icon** to show sample files only.

Tap the **three-pages icon** to show all file types.

Tap the **gear icon** to open the Browser Options window:



Check the **Show file size** box to display file size in the file list.

Check the **Show modified date** box to show the last date the file was modified in the file list.

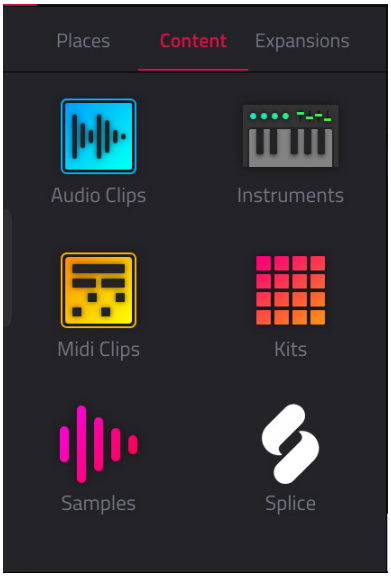
Check the **Show created date** to show the date the file was created in the file list.

Check the **Search includes subfolders** box to enable recursive searching. When enabled, all files, including those in subfolders, will be appear in the search.

Check the **Hide Project and Track data folders** box to disable project and track folders from appearing in the file list.

Check the **Clear unused samples on load** box to remove samples that are not in use when loading a sample, track, or program over an existing one.

Use the six **Content** buttons to show specific locations in the internal drive of Force and filter them automatically by file type:



Audio Clips: Tap this button to enter the **Expansions** folder on the internal drive, viewing **audio** files only.

Instruments: Tap this button to enter the **Expansions** folder on the internal drive, viewing **plugin preset** files only.

Midi Clips: Tap this button to enter the **Expansions** folder on the internal drive, viewing **pattern** files only.

Kits: Tap this button to enter the **Expansions** folder on the internal drive, viewing **kit** files only.

Samples: Tap this button to enter the **Expansions** folder on the internal drive, viewing **sample** files only.

Splice: Tap this button to enter the **Splice** folder on the selected drive, where you can view samples that have been downloaded from a linked Splice account. The right-side of the browser will display your Splice samples organized into a series of top-level folders, allowing you to easily browse your sample library by BPM, Instrument, Key, Pack or Tag. The **All Your Samples** folder will show a list of all samples you have downloaded.

Note: The original sample files from Splice are stored in the **By Pack** folder on your selected drive. Other folders such as By Instrument contain internal links to help sort these samples by various tags. If the By Pack folder on your drive is deleted, the files in the remaining folders will become unusable. To fully remove all files, the entire Splice directory should be deleted.

IMPORTANT: Drives formatted using the FAT32 system do not support these internal links. For these drives, samples will only be sorted in the **By Pack** folder. We recommend using an exFAT file system on external drives used with Force, as it is the most robust one supported by both Windows and macOS.

See ***Operation > General Features > Menu > Preferences > Splice*** for more information on how to connect to your Splice account.

You can also load Ableton Live projects directly into Force.

To import an Ableton Live project:

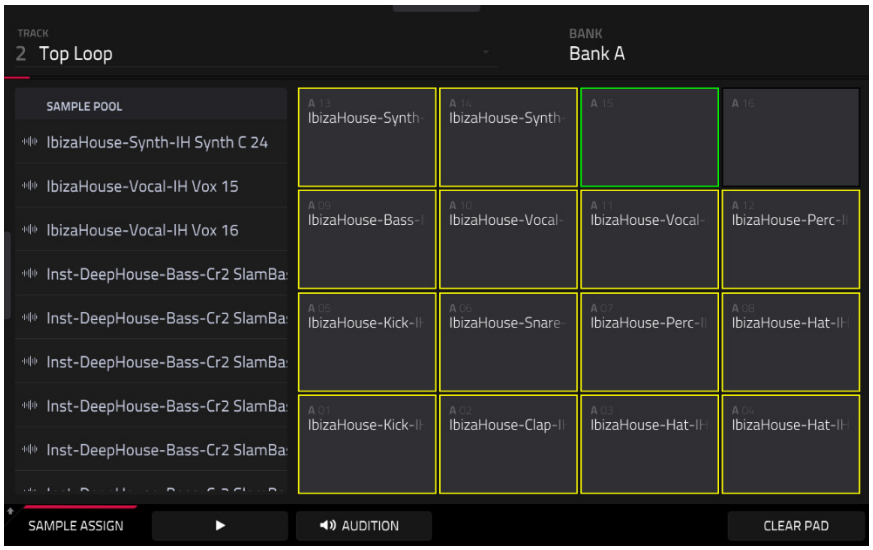
1. On your Force hardware, press **Load** or open the ***Browser*** from the ***Menu***.
2. Navigate to the drive that contains your Ableton Live projects.
3. Select an Ableton Live Project (**.als** file) and then tap **Load**.

   Important: For an Ableton Live project to be successfully imported with all assets, you must use the **Collect All and Save** option in Ableton Live to collect all of your project resources together.

Force will attempt to import and convert the following:

- Launch Matrix Tracks/Clips to Tracks/Clips
- Arrangement View Sequence to Arrange tracks.
- ALS Colors to Force Colors for pads.
- Audio Clips to Audio Clips (with Looping points, names, warp, volume, pan, and pitch adjustment).
- MIDI Notes to MIDI Notes at 960 PPQ units, with looping points and names.
- Basic conversion of ALS Drum Rack to XPJ Drum Kit. Only one “Selection” is handled. A maximum of four velocity variations per instrument.
- Basic conversion of ALS Impulse Instrument to XPJ Drum Kit.
- Basic conversion of ALS Sampler to XPJ Keygroup (128 keygroup limit). Only one “Selection” is handled.
- Basic conversion of ALS Simpler to XPJ Keygroup.
- Plugin instrument tracks are converted to Force MIDI tracks.

Sample Assign



When the **Sample Assign** tab is selected, you can do any of the following:

Double-tap the **Track** field at the top of the screen to select a track in the project. In the list that appears, tap the desired track. Alternatively, tap the **Track** field and then use the **data dial** or the **–/+** buttons to select a location.

To move through the sample pool, swipe up or down, turn the **data dial**, or use the **–/+** buttons.

Tap and hold **Play** (▶) at the bottom of the screen to preview a selected sound.

Tap **Audition** at the bottom of the screen to enable or disable the audition function and set its volume level. In the screen that appears, tap **Auto** to enable or disable it, and tap and drag the **level slider** up or down to set the volume level. Tap **Audition** once more to hide the window.

To assign a sample to a pad, press it or tap it on the screen so it lights **green**. Then, in the **Sample Pool** list, double-tap the desired sample. Alternatively, use the **data dial** or **–/+** buttons to select a sample, and press the **data dial** to assign it. You can also tap and drag from the sample name to the desired pad. Hold **Shift** while tapping and dragging to move the sample to a specific layer on the pad, indicated by the red bar.

To clear a sample from a pad, press it or tap it on the screen so it lights **green**. Then, tap **Clear Pad** at the bottom of the screen.

Tap and hold on a sample name in the Sample Pool to display the following additional options:

Tap **Delete Sample** to remove the sample from the Sample Pool.

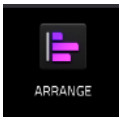
If a sample is loaded to memory, tap **Stream From Disk** to remove it from memory and stream it from a disk drive. Disk streaming samples will be marked with a green waveform icon.

If a sample is streaming from disk, tap **Load To Memory** to disable streaming the sample from a disk drive and return it to memory. Samples loaded to memory will be marked with a grey waveform icon.

Note: Disk streaming relies on the performance of the disk you are streaming from. For best operation, it is recommended to use an SSD (solid-state drive) connected to your Force's internal SATA port (if available). Once you have saved a project to your SSD, your files will stream from that location. For an unsaved project, Force uses a temporary file location from which to stream audio files. Go to **Menu > Preferences > Project Load/Save** and set the **Temporary File Location** to your SSD for best results.

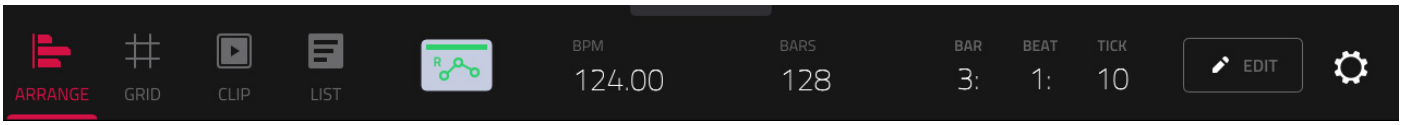
To return to the main Browser window, tap **Sample Assign** again.

Arrange Mode



Arrange Mode is a fully-featured linear sequencer where you can record a performance or live input (MIDI or audio) into a linear timeline to create an arrangement of a song. You can use the powerful Arrange Edit commands to edit and arrange your song and then mix it down to a stereo audio file, or stem it as separate tracks.

To enter Arrange Mode, press **Menu** and then tap **Arrange**. The event editor's Arrange, ***Grid View***, ***Clip Editor***, and ***List Edit Mode*** views are displayed as tabs in the top left of the screen to make it easy to jump between them.



The toolbar at the top of Arrange Mode lets you switch between the different edit modes as well as showing project and timing information.

Use the **Arrange**, **Grid**, **Clip**, and **List** icons to switch between the different modes.

Tap the **automation icon** to toggle between **Read** and **Write**. To disable or enable global automation entirely, press and hold **Shift** and tap this icon.

Use the **BPM** field to adjust the tempo of the project.

Use the **Bars** field to set the length of the arrangement.

The time counter at the top of the screen indicates the current playhead position. Double-tap this field to open the ***Locate Window***.

Tap the **pencil Edit** icon to open the ***Sequence Edit*** window.

Tap the **gear icon** to open the ***Grid Settings***.

The project's tracks are displayed in Arrange Mode on a linear timeline. Tap a track to select it.

Each track header will show **Record Arm**, **Mute**, **Solo**, **Track Automation**, and **Crossfader Assign** states. Note that this requires the vertical zoom to be adjusted so there is enough space to show all components. Use the pinch and expand gestures to change the zoom level of the arrangement.

Tap **TC** at the bottom of the screen to open the ***Timing Correct*** window. Alternatively, tap the timing correct value shown above the track headers.

Tap **Buses** or press the **Master** button to view Submix, Return, and Output bus tracks. You can then record, edit, and view automation data on these tracks in your Arrangement the same way you can with other tracks.

Tap the **MIDI Rec Erase** button to enable or disable MIDI record erasing in Arrange Mode. When enabled, the new recording will replace existing MIDI data in the arrangement. When disabled, recording MIDI will overdub on existing MIDI data in the track arrangement.

Tap **Loop** to enable or disable loop. The loop region is always displayed, regardless of whether Loop is on or off.

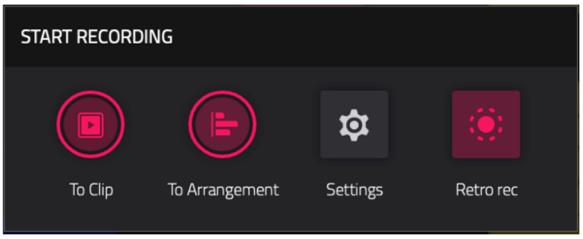
Tap the **Back to Arrange** button to return playback of all tracks to the recorded arrangement.

The Arrangement timeline also features six user-controllable Locate markers. Press and hold **Shift** to show the six Locator buttons at the bottom of the screen.

> **To add a locator at the playhead position,** tap one of the six Locator buttons. You can also use the ***Locate Popup*** to edit these markers.

Recording Arrangements

To record a clip performance into Force's arrangement timeline:



1. You must first configure the **Record** button to point to the linear arrangement rather than the clip matrix. You can set this by doing either of the following:
   - Hold **Shift** and press the **REC** button.
   - Press and hold the **REC** button to open the Start Recording Selector window, and then tap **To Arrangement**.
2. Next, enter Arrange mode by pressing **Menu** and tapping Arrange.
3. Trigger a clip or row to begin recording. As clips are triggered, Arrange Mode will draw regions containing audio or MIDI data into the track lanes.

To replace a section of the arrangement with a new performance:

1. Tap the **Loop** button at the bottom of the screen to activate loop.
2. Set the **Loop Start** and **Loop End** points by tapping and dragging the beginning and end of the loop region in the timeline. Tapping and dragging in the middle of the loop region moves both the Loop Start and Loop End points at the same time.
3. Enable arrangement recording by following the directions above.
4. Press **Play** to begin recording. The recording will begin at the Loop Start point, and once it reaches the Loop End Point, will switch to Overdubbing mode.

You can also use the **Auto Record** and **Punch In/Punch Out** functions of the ***Arrangement Section*** of Main Mode to easily replace part of a recording.

To play the arrangement:

- Press **Play** to begin playback of the arrangement from 1:1:00, or if **Loop** is activated, from the Loop Start.
- Hold **Shift** and press **Play** to begin playback from the current playhead position.

To move the playhead position, tap the **Playhead Position** field in the toolbar to select it, and then use the **data dial** or **-/+** buttons to adjust the value. Alternatively, you can set the playhead position by tapping in the lower-half of the timeline.

Switching Between the Arrangement and Clips

For each track in Force, you can play a clip or play the linear arrangement, but never both at the same time. When you trigger a clip, the arrangement on that track will stop playing; conversely, if you are triggering clips and then play the arrangement, the clips will stop.

In Arrange Mode, a track will show the **Back to Track** icon (a square with a play symbol shown on the right side of the track lane) when either there is a clip playing or the **Stop All** button has been pressed.

To return playback of a track to its linear arrangement, simply tap the **Back to Track** icon.

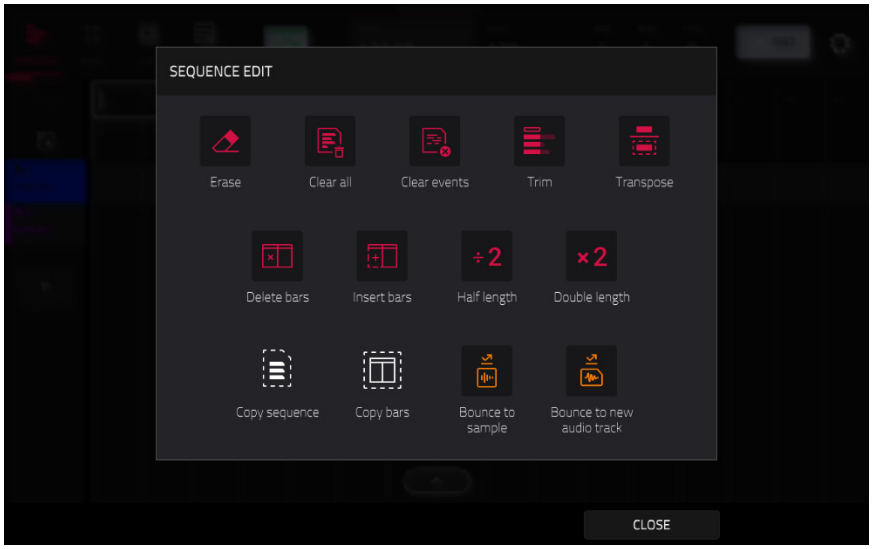
To return *all* tracks to the linear arrangement, tap the **Back to Arrange** button at the bottom of the screen in Arrange Mode.

You can also set the track's playback type from Clip Matrix Mode or Force's launch pad mode. Hold **Shift** and press the **Launch** button to open the **Launch Config** window. Select the **Show arrangement in clip matrix** option so it is enabled. The arrangement row will appear as the top row of pads above the first row of clips in Matrix/Launch mode. Tapping a pad in the arrangement row will stop playing any clips on the respective track and play the linear arrangement. Tapping the **Row Launch** button for the arrangement row will play the linear arrangement for all tracks.

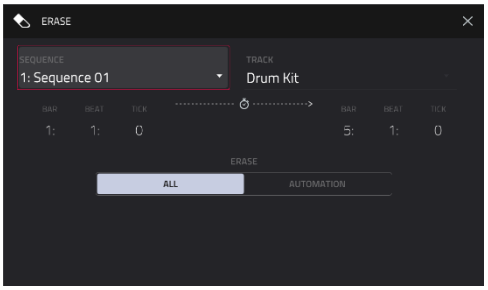
Editing Arrangements

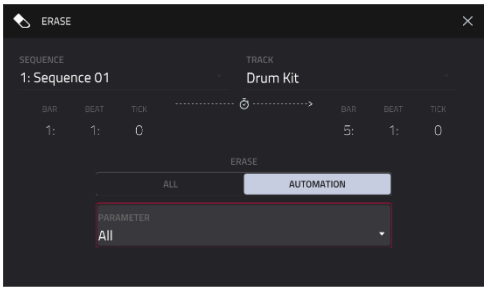
You can edit your linear arrangement using Force's powerful Sequence Edit commands.

To edit an arrangement, tap the **pencil icon** in the Arrange Mode toolbar to open the Sequence Edit window, and then select one of the following tools.



The **Erase** function erases all or part of the sequence.





Use the **Track** field to select the track you want to erase within the sequence.

Use the **Bar**, **Beat**, and **Tick** fields to set the time range of the sequence you want to erase. The left fields set the start of the time range, and the right fields set the end of the time range.

To select what types of events you erase, select one of the **Erase** options:

All erases all pad events from the designated time range and reset all of its settings.

Automation erases only automation from the designated time range. Use the **Parameter** field to select what type of automation is erased.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.

The **Clear All** function erases **all** events from the sequence and resets **all** of its settings.

Tap **Clear All** to confirm your choice.

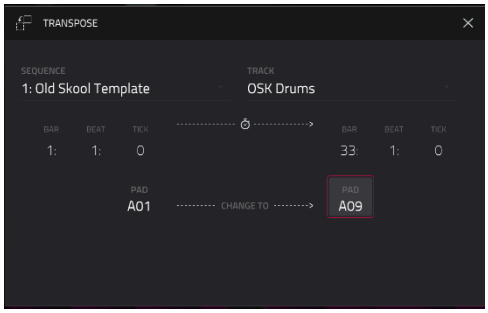
Tap **Cancel** to return to the previous screen.

The **Clear Events** function only erases **all** events from the sequence.

Tap **Clear Events** to confirm your choice.

Tap **Cancel** to return to the previous screen.

The **Trim** function immediately crops the arrangement to the **Bars** value in the main Arrangement Mode window.



The **Transpose** function transposes a range of events on a track in an arrangement. The events within that range will shift accordingly in the Grid View. This option is available for MIDI tracks only.

Use the **Track** field to select the track you want to transpose within the arrangement.

Use the two sets of **Bar**, **Beat**, and **Tick** fields to set the time range of the arrangement you want to transpose. The left fields set the start of the time range, and the right fields set the end of the time range.

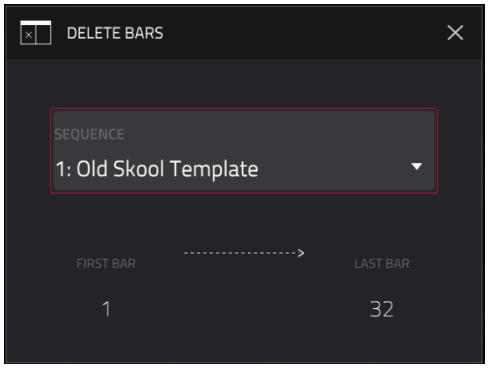
For drum tracks, use the two **Pad** fields to select the "source" pad (whose events you want to move) and "destination" pad (where the events will be placed). Tap each field and then press the desired pad.

For keygroup tracks, plugin tracks, and MIDI tracks, set the range and amount of transposition:

Range: Use the two **Note** fields to set the range of notes of the events you want to transpose. Note events within this range will be transposed, while note events outside of this range will remain unchanged.

Transpose: Use this field to set how many semitones up or down you want to transpose the note events.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.

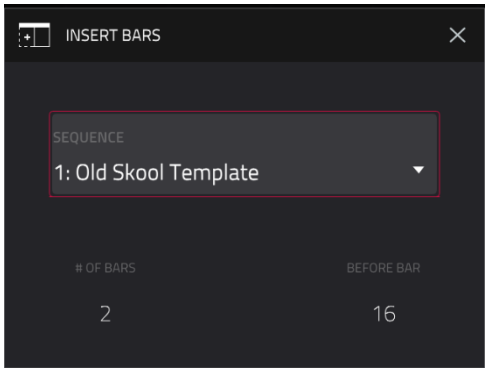


The **Delete Bars** function removes a range of bars from the arrangement.

Use the **First Bar** and **Last Bar** fields to set the range of bars to delete from the arrangement.

To confirm your choice, tap **Do It**.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.



The **Insert Bars** function adds a number of bars to the arrangement.

Use the **# of bars** field to set how many bars to add.

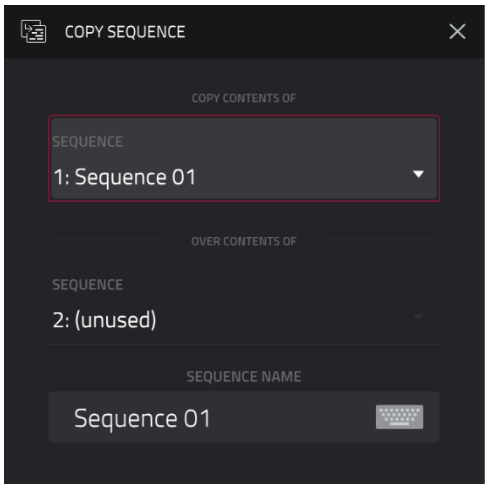
Use the **Before Bar** field to set where the bars are added. The bars will be inserted before this bar.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.

The **Half Length** function **immediately** halves the length of the arrangement.

The **Double Length** function **immediately** doubles the length of the arrangement.

The **Copy Sequence** function copies the contents of one sequence to another.



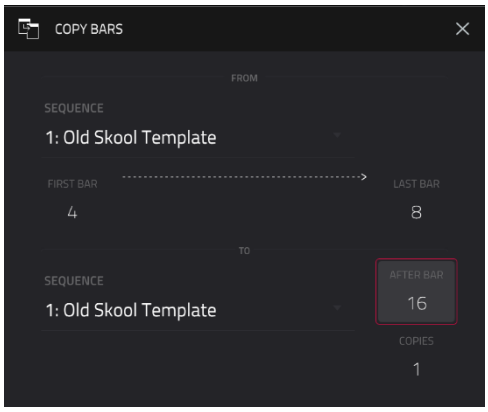
Use the **Copy Contents of Sequence** field to select the "source" sequence. This is the sequence whose events you want to copy.

Use the **Over Contents of Sequence** field to select the "destination" sequence. This is the sequence where the source sequence will be copied.

Tap **Do It** to confirm your choice.

Tap **Cancel** to cancel and return to Arrange Mode.

The **Copy Bars** function copies a range of bars from the arrangement and adds them at a specified point.



Use the **First Bar** and **Last Bar** fields to set the range of bars to copy from the arrangement.

Use the **After Bar** field. The copied bars will be inserted after this one to set where you want to add the copied bars.

Use the **Copies** field to set how many instances of the copied bars you want to add.

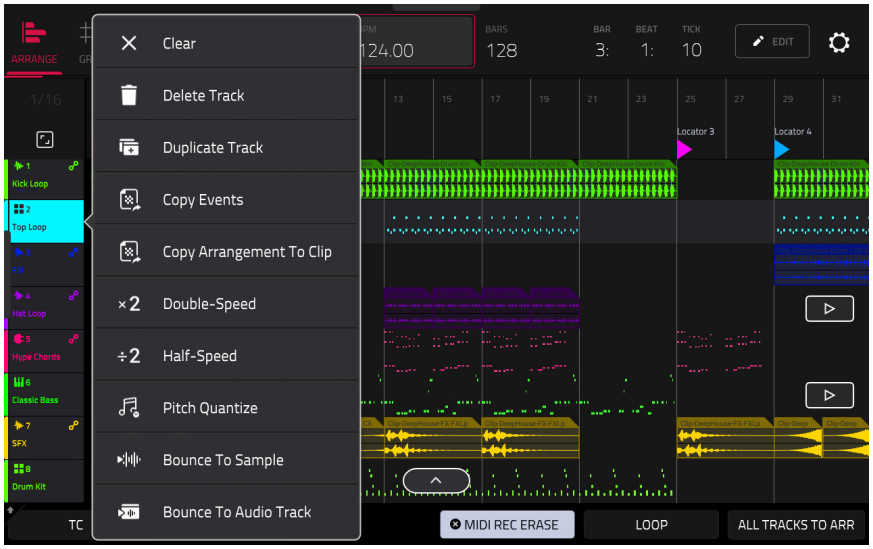
Tap **Replace** to overwrite the arrangement at the destination.

Tap **Merge** to add the events to the destination without erasing anything.

Tap **Cancel** to cancel and return to Arrange Mode.

The **Bounce to Sample** function **immediately** renders the track as an audio sample and places it in the project's sample pool. By default, it will be named **Bounce -** and appended with the track name. This function does not work for MIDI or CV tracks.

The **Bounce to Audio Track** function **immediately** renders the track as an audio track in the project. By default, it will be named **Audio** and appended with a number (e.g., **Audio 002**). This function does not work for MIDI or CV tracks.



In Arrange Mode, you can tap and hold on the header for a MIDI track (on the left side of the screen) to open a drop-down menu of Track Edit options for MIDI tracks.

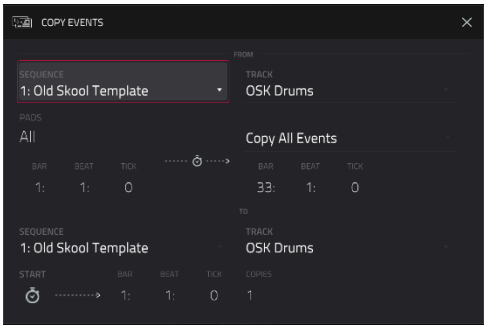
The **Clear** function erases **all** events from the track.

Tap **Clear** to confirm your choice.

Tap **Cancel** to return to the previous screen.

The **Delete Track** function instantly removes the track and all of its contents.

The **Duplicate Track** function **immediately** duplicates the selected track to a new track.



The **Copy Events** function copies a range of events from a MIDI track in the arrangement and adds them to another at a specified point.

Use the **From Track** field to select the “source” track. This is the track whose content you want to copy.

Use the field below the **From Track** field to set what content is copied. **Copy All Events** will copy and paste all events in the track. **Copy Only Selected Events** will copy and paste only the events that are currently selected.

Use the **Bar**, **Beat**, and **Tick** fields to set the time range of the events or the audio track you want to copy. The left fields set the start of the time range, and the right fields set the end of the time range.

Use the **To Track** field to select the “destination” track. This is the track where the content of the source track will be copied.

Use the **Bar**, **Beat**, and **Tick** fields to set where you want to add the copied events or audio track. The events or audio track will be added after this point.

Use the **Copies** field to set how many instances of the copied events or audio track you want to add.

Tap **Replace** to overwrite the arrangement at the destination.

Tap **Merge** to add the events to the arrangement at the destination without erasing anything.

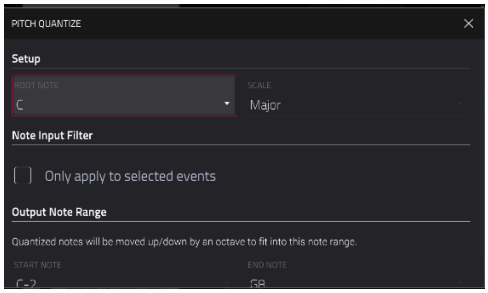
Tap **Cancel** to cancel and return to Arrange Mode.

The **Copy Arrangement to Clip** function copies the entire track arrangement to a new clip. Use the **Clip** field to select a clip slot for the new clip. Empty clips will show as "**(unused)**."

The **Double-Speed Events** function **immediately** halves the lengths of all note events on the track in the arrangement as well as the distance between them. In other words, the track's notes are pressed closer together so the track sounds like it is playing at twice the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Half-Speed Events** function **immediately** doubles the lengths of all note events on the track in the arrangement as well as the distance between them. In other words, the track's notes are spread further apart so the track sounds like it is playing at half of the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Pitch Quantize** function forces the pitches of note events into a specific scale.



Use the **Root Note** field to select the desired root note of the scale.

Use the **Scale** field to select a type of scale.

To determine which note events will be quantized, tap the **Only apply to selected events** checkbox.

When **on**, only the currently selected note events will be quantized.

When **off**, **all** pitches in the current track will be quantized.

Use the **Start Note** and **End Note** fields to set lowest-possible and highest-possible pitches where the quantized note events will be placed (respectively). If a note event is originally outside of this range, it will be forced to the nearest pitch (within the scale) inside the range.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.

The **Bounce to Sample** function **immediately** renders the track as an audio sample and places it in the project's sample pool. By default, it will be named **Bounce -** and appended with the track name. This function does not work for MIDI or CV tracks.

The **Bounce to Audio Track** function **immediately** renders the track as an audio track in the project. By default, it will be named **Audio** and appended with a number (e.g., **Audio 002**). This function does not work for MIDI or CV tracks.

You can also tap and hold on the header for an audio track (on the left side of the screen) to open a drop-down menu of Track Edit options for audio tracks.

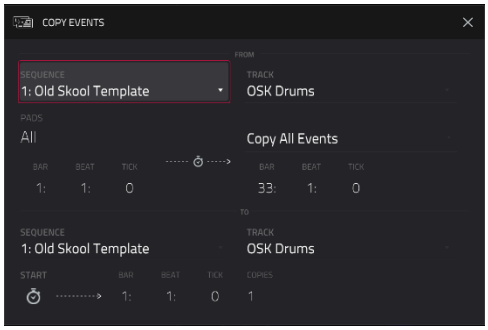
The **Clear** function erases **all** events from the track.

To confirm your choice, tap **Clear**.

To return to the previous screen, tap **Cancel**.

The **Delete Track** function instantly removes the track and all of its contents.

The **Duplicate Track** function **immediately** duplicates the selected track to a new track.



The **Copy Events** function copies selected audio track regions from the track and adds them to another at a specified point.

Use the **From Track** field to select the “source” track. This is the track whose content you want to copy.

Use the field below the **From Track** field to set what content is copied. **Copy All Events** will copy and paste all events in the track. **Copy Only Selected Events** will copy and paste only the events that are currently selected.

Use the **Bar**, **Beat**, and **Tick** fields to set the time range of the events or the audio track you want to copy. The left fields set the start of the time range, and the right fields set the end of the time range.

Use the **To Track** field to select the “destination” track. This is the track where the content of the source track will be copied.

Use the **Bar**, **Beat**, and **Tick** fields to set where you want to add the copied events or audio track. The events or audio track will be added after this point.

Use the **Copies** field to set how many instances of the copied events or audio track you want to add.

Tap **Replace** to overwrite the arrangement at the destination.

Tap **Merge** to add the events to the arrangement at the destination without erasing anything.

Tap **Cancel** to cancel and return to Arrange Mode.

The **Copy Arrangement to Clip** function copies the entire track arrangement to a new clip. Use the **Clip** field to select a clip slot for the new clip. Empty clips will show as "**(unused)**."

The **Reset Channel Strip** function **immediately**:

- clears all **Insert** effect slots;
- turns **Mute**, **Solo**, automation, and **Monitor** off;
- resets the **pan knob** to the center;
- resets the **level slider** to **0.00 dB**; and
- turns the **Record Arm** button off.

The **Bounce to Sample** function **immediately** renders the track as an audio sample and places it in the project's sample pool. By default, it will be named **Bounce -** and appended with the track name.

The **Flatten Track** function renders all edits and regions within the current track's arrangement to a new audio file.

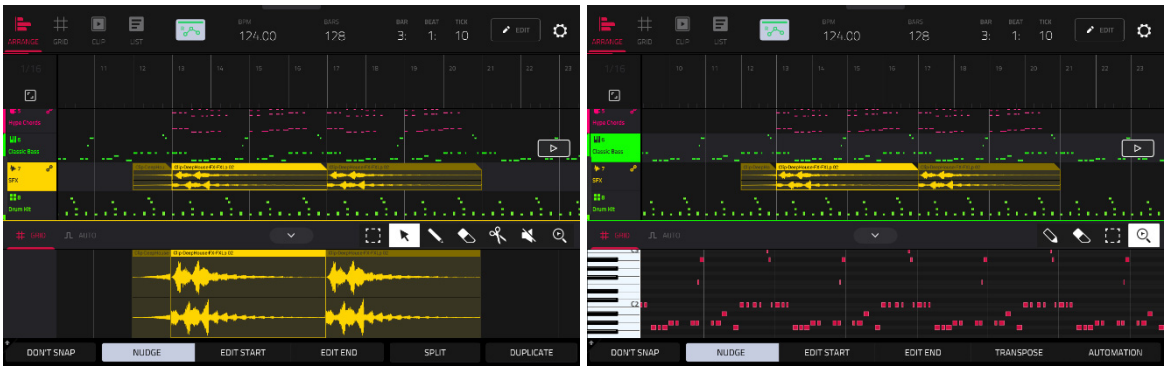
The **Flatten Track Elastique** function also renders all edits and regions within the current track's arrangement to a new audio file, but renders any time-stretching or pitch-shifting using the Elastique Pro algorithm, providing higher-quality results with less artifacts than Force's standard algorithm.

Arrangement Track Editor

When in Arrange Mode, events from the currently selected track can be edited using the bottom panel track editor.

To open the track editor, do either of the following:

- Tap the arrow up icon at the bottom of the screen.
- Double-tap inside a track lane in the main arrangement view.



Once opened, you can also adjust the height of the track editor by tapping and dragging the arrow icon or anywhere in the editor toolbar.

For drum tracks, you can tap and hold on a pad header in the track editor to open a drop-down menu where you can quickly **Mute**, **Solo**, or change the **Color** of the pad.

To close the track editor, tap the down arrow icon.

At the top of the Track Editor are two tabs, **Grid** and **Auto**. Use the **Grid** tab to edit MIDI events or audio regions. Use the **Auto** tab to edit automation for the track. The editing workflow in the arrangement track editor is the same as in ***Grid View***.

Press and hold **Shift** to view additional editing options for the Track Editor.

Tap **Select All** to select all events.

Tap **Cut** to cut the selected events.

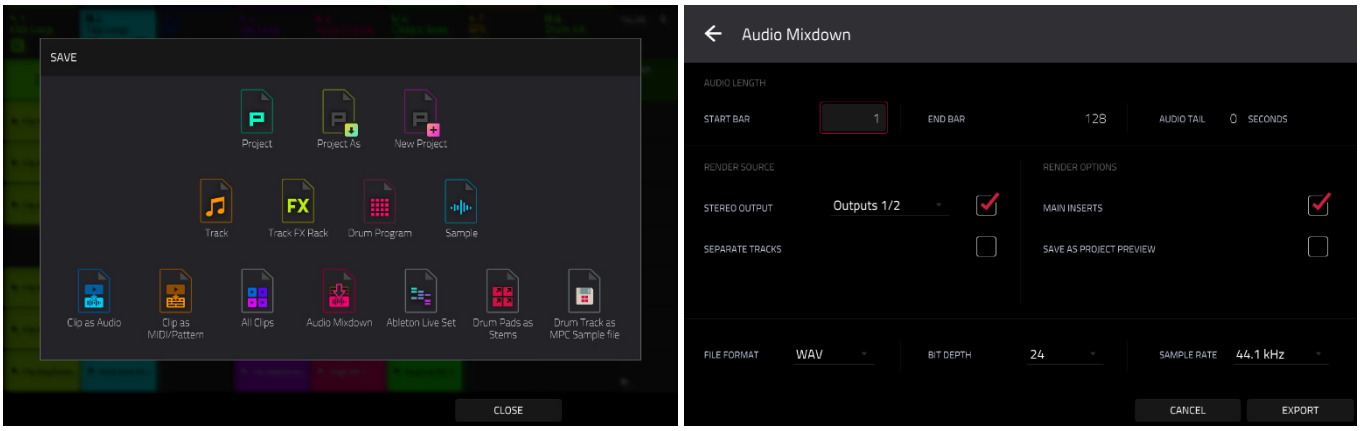
Tap **Copy** to copy the selected events.

Tap **Paste** to paste the selected events at the playhead location.

Tap **Delete** to delete the selected events.

Tap **Duplicate** to duplicate the selected events. The events will be added after the last selected event.

Saving and Exporting the Arrangement



To save and export your arrangement, press the **Menu** button, and then tap **Save**. In the Save window, select **Audio Mixdown** to mixdown or stem your arrangement into individual files.

Use the **Start Bar** and **End Bar** fields under Audio Length to set the time range that you want to mixdown. You can add a number of seconds to the end of the mixdown to capture any ringing notes or effects (such as a reverb tail) by adjusting the **Audio Tail** field.

Use the fields under **Render Source** and **Render Options** to set the parameters for the audio mixdown. Check the **Separate Tracks** box to render each track of the arrangement as stems.

To configure the audio mixdown file settings, use the fields at the bottom of the screen to set the **File Format**, **Bit Depth**, and **Sample Rate**.

You can also export the arrangement as an ALS file to use with Ableton Live.

To export the arrangement for Ableton, press the **Menu** button and then tap **Save**. In the Save window, select **Ableton Live Set** to bring up the Ableton Live Set Export popup.

Use the **Export MIDI As** settings to choose how MIDI tracks are exported, either as **Audio** files or **MIDI** files. When using Plugin, Drum, or Keygroup tracks, you can render the arrangement as **Audio** to preserve the sound of the instruments, or render the arrangement as **MIDI** data.

Check the **Include Track Volume/Pan Settings** box to include these settings in the export. When disabled, the volume and pan settings will be set to **0 dB** and center (**C**), respectively.

Check the **Bypass Track Effects Plugins** box to deactivate any third-party effect plugins used with the track for the export. When disabled, those effects will be activated.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

Use the **Bit Depth** field to set the bit depth to **8**, **16** or **24**.

Use the **Sample Rate** field to set the sample rate to **44.1**, **48**, **88.2** or **96 kHz**. In most cases, we recommend selecting **44.1 kHz**.

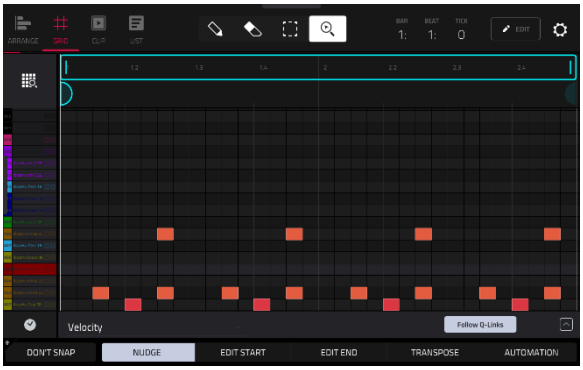
Grid View

The Grid View lets you view and edit the note events or audio regions of each track in a project and their velocities. This mode has three different appearances: one for audio tracks, one for drum tracks and one for keygroup tracks, MIDI tracks, and plugin tracks.

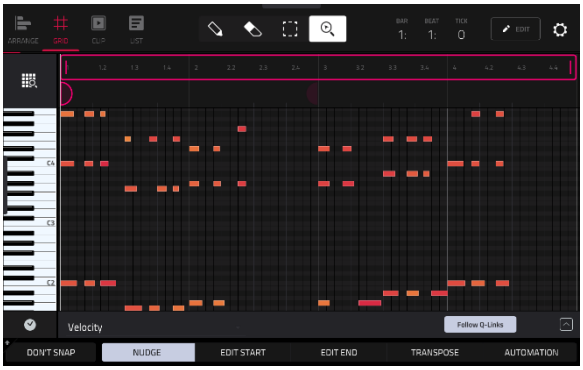
To enter Grid View, press **Menu** and then tap **Grid**. You can also tap **Grid** at the top of the screen in ***Arrange Mode***, ***Clip Editor***, or ***List Mode***.

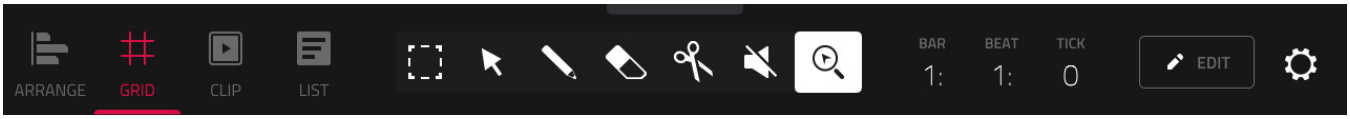
For audio tracks, the waveform of the audio sample is shown.

For drum tracks, the left column shows you all available pads in a vertical view with their corresponding events in the grid to the right.



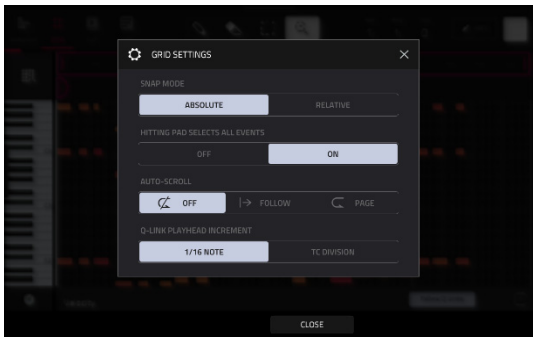
For keygroup, plugin, MIDI and CV tracks, the left column shows a vertical “piano roll” keyboard with the corresponding events in the grid to the right.





In all views, the time counter at the top of the screen indicates the current playhead position.

Tap the **gear icon** to open the **Grid Settings** window to configure the following Grid View settings:



Use the **Snap Mode** selector to set how events "snap" to the grid.

Absolute: Events will "snap" to the nearest time division on the grid (as determined by the **TC** field or **Time Correct** window). This is the typical and traditional method of using the snap/quantization feature.

Relative: Events will "snap" to the nearest time division on the grid (as determined by the **TC** field or **Time Correct** window) **plus** the original time position of the event (e.g., an event that is originally three ticks past a time division on the grid will snap only to positions that are three ticks past every time division).

Use the **Hitting Pad Selects All Events** selector to turn the feature on or off. When **On**, pressing a pad will automatically select all note events for that pad on that track. When set to **Off**, pressing a pad will simply play its sound without selecting any note events.

This setting is not available when using audio tracks.

Use the **Auto-Scroll** selector to set how the screen behaves relative to the audio playhead.

Follow: The list will scroll along in the background while keeping the audio playhead centered.

Page: The list will move to the "next page" to follow the audio playhead.

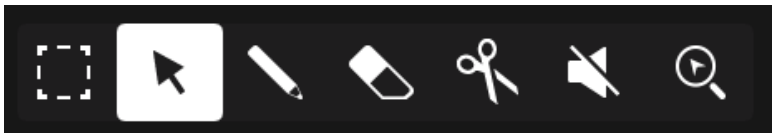
Off: The list will not move at all.

Use the **Q-Link Playhead Increment** selector to set how much the playhead moves by when using the Q-Link controls. Select **1/16 Note** to lock playhead movement to 1/16 notes, or select **TC Division** to have the playhead movement tied to the current Timing Correct division. This value can be set in the Timing Correct window in Grid View by tapping the **clock icon** at the bottom-left of the grid.

These functions also apply to ***Arrange Mode***.

Audio Tracks

When viewing audio samples in Grid View, these seven tool icons at the top of the screen enable you to use different functions in the sample.



Tap one to select its mode:

Marquee: Marquee Mode:

To select a sample region, tap the upper third of it.

To move a sample region (or multiple selected sample regions), tap and drag the upper third of it left or right.

To split the sample at two specific points (creating a sample region on either side and between them), tap and drag across the middle third of it to create a translucent white box, and then tap the upper third of that box.

To shorten or lengthen a sample region (or multiple selected sample regions), tap and drag the lower third of it left or right.

Arrow: Selection Mode:

To select a sample region, tap it.

To move a sample region (or multiple selected sample regions), tap and drag the upper third of it left or right.

To shorten or lengthen a sample region (or multiple selected sample regions), tap and drag the lower third of it left or right.

Pencil: Draw Mode:

To draw automation, open the velocity/automation lane and tap and drag.

Eraser: Erase Mode:

To erase a sample region (or multiple selected sample regions), tap it.

Scissors: Split Mode:

To split the sample at a specific point (creating a sample region on either side), tap that point in the sample.

To select a sample region, tap its left-most edge.

Mute: Mute Mode:

To mute or unmute a sample region (or multiple selected sample regions), tap it.

Magnifying Glass: Navigation Mode:

To move to another part of the sample, tap and drag it.

To zoom in or out, spread or pinch your fingers (respectively) on the grid. You can do this vertically, horizontally, or both at the same time.

Regardless of which tool is selected, you can do any of the following to edit the selected audio regions.

Tip: If you want to hear only the audio track while editing, press the **Solo** button and press the relevant **Track Assign** button to solo it.

To select an audio region, tap the arrow icon to enter Selection Mode and tap an audio region. When an audio region is selected, all region parameters will be available to edit.

Press **Undo** on your Force to undo your last action.

Press **Shift** and **Undo** on your Force to redo the last action you undid.

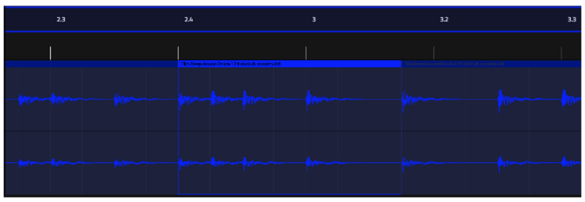
To move the selected audio region, tap **Nudge** at the bottom of the screen, and then use the **data dial or –/+** buttons to shift the audio region left or right. Alternatively, if the **arrow tool** or **marquee tool** are selected, tap and drag the upper third of the selected audio region left or right. By default, you can move an audio region only by quantization values defined by the ***Time Correct (TC)*** value.

To move the selected audio region without restricting ("snapping") **it to the quantization grid**, tap **Don't Snap** in the lower-left corner of the screen, and then use the **data dial or –/+** buttons to shift the audio region. In this case, each nudge is equivalent to four ticks.

To adjust the start point or end point of the selected audio region (without changing its position), tap **Edit Start** at the bottom of the screen, and then use the **data dial or –/+** buttons.

Tap **Split** at the bottom of the screen to split the audio region at the current playhead position (creating an audio region on either side).

To copy, cut, or paste the selected audio region, press and hold **Shift**, and then tap **Copy** or **Cut**. Turn the **data dial** to move the highlighted audio region, and then press the **data dial** to paste it at its current location. Alternatively, press and hold **Shift**, and then tap **Paste** (respectively).

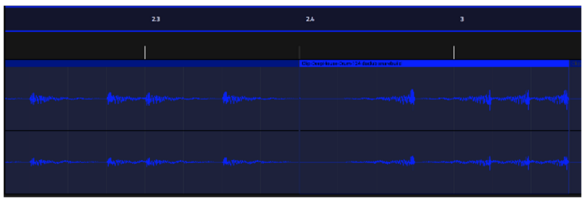


Tap **Duplicate** at the bottom of the screen to duplicate the selected audio region. The duplicate audio region will appear immediately after the original one.

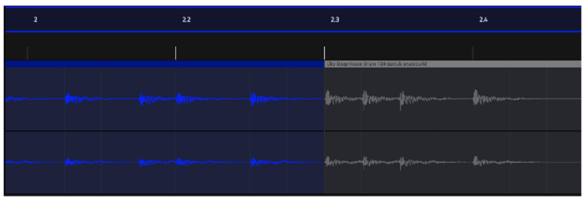
Use the **Fade In** or **Fade Out** fields to create a fade-in or fade out for the selected audio region, respectively. The fades will be shown as a sloped line at the start or end of the audio region.

Use the **Level** field to set the level of the selected audio region. The waveform amplitude will change accordingly.

Tap **Reverse** to reverse the selected sample region.



Tap **Mute** to mute the selected sample region.



To lengthen or shorten the selected audio region without changing its pitch, tap **Warp**, which will enable the **Semi**, **Fine**, and **BPM** fields below it.

Use the **BPM** field to change the tempo, which will change the length of the audio region accordingly.

To have Force analyze the tempo of the region, tap the **Detect BPM** button. In the **Edit BPM** window that appears, you can do any of the following:

- Use the **BPM** field to enter a tempo manually. This is the same as the **BPM** field on the previous page.
- Tap **Detect** to detect the tempo automatically.
- Tap **Tap Tempo** at the bottom of the screen at the desired rate to use it as the tempo.
- Tap **Close**, the **X**, or anywhere outside the window to close it.

Use the **Semi** and **Fine** fields if you want to change the pitch (this is useful for matching the durations of two samples with different pitches).

Use the **Algorithm** field to set the Warp algorithm for the sample. By default, this will be set to whatever is selected as the **Default Audio Warp Algorithm** under ***Menu > Preferences > Audio/Export***. Adjusting the setting here will override the default selection. Select **Pro Ten** or **Repitch**. When using Repitch, warping an audio sample will adjust its pitch to synchronize it with the Force tempo.

Tip: You can configure audio track recording to ensure the resulting audio region is warped automatically. You can then adjust the project tempo while audio region remains in time. See ***Menu > Preferences > General*** to learn about this.

Note: When you record an audio file, the current project tempo will be embedded with it. This information is stored within the sample file when you save the project. When you warp an audio region, the warping algorithm uses this project tempo and the current value in the BPM field to generate the "stretch factor."

Note: The Warp algorithms are very CPU-intensive and can result in audio drop-outs during playback if used too freely. Be mindful of how (and how often) you use the warp function. You can reduce the CPU resources required by doing any/all of the following:

Minimize the amount of pitch adjustment (e.g., the **Semi** and **Fine** fields).

Avoid warping very small audio regions.

Warp as few tracks or audio regions as possible (i.e., reduce the number of total number of voices [of the polyphonic limit] that use the warp algorithm at a given time), especially instances where the warped regions start at the same time.

If you have warped samples used in a drum kit, consider using the **Flatten Pad** function to consolidate the affected pad's layers into one audio sample. After you flatten the pad, its sample/samples no longer need to be warped.

To open the *Timing Correct (TC)* window, press and hold **Shift**, and then tap **TC** at the bottom of the screen. Alternatively, tap the **clock icon** next to the automation lane.

To clear all automation from the track, press and hold **Shift**, and then tap **Clear Auto**.

To solo the track, press and hold **Shift**, and then tap **Solo** at the bottom of the screen.

Tap the **pencil Edit** icon in the toolbar to open the Clip Edit window for audio regions:

The **Clear** function erases **all** audio from the track and resets **all** of its settings.

Tap **Clear** to confirm your choice, or tap **Cancel** to return to the previous screen.

The **Half Clip** function **immediately** halves the length of the clip.

The **Double Clip** function **immediately** doubles the length of the clip, without copying any audio samples.

The Double Length with Events function **immediately** doubles the length of the clip and duplicates any audio samples.

The **Trim to Length** function trims the audio samples to the length of the clip.

The **Flatten** and **Flatten Elastique** functions flatten the audio track when transport playback is stopped, rendering all the edits and regions within the clip to a single new audio file. The Elastique Pro algorithm can be used for time-stretching or pitch-shifting, providing higher-quality results with less artifacts than Force's standard algorithm.

The **Bounce to Sample** and **Bounce to Audio Track** functions export the audio regions to a new sample added to the project sample pool or a new audio track in the project.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

MIDI Tracks

When viewing MIDI tracks in Grid View, use these four tool icons at the top of the screen to use different functions in the grid.

Tap one to select its mode:

Pencil: Draw Mode:

To enter a note in an empty grid square, tap the grid square.

To select a note, tap it.

To move a note, tap and drag it to another grid square.

To erase a note, double-tap it.

To edit velocity or draw automation, tap and drag in the velocity/automation lane.

Eraser: Erase Mode:

To erase a note, tap it. You can also tap and drag to erase multiple notes in the same row.

Select Box: Select Mode:

Note: Notes will remain selected if you switch to another mode. The selection will change, however, if you press a pad while **Hitting Pad Selects All Events** is set to **On**.

To select a note, tap it.

To select multiple notes, tap and drag across the grid to create a box around them.

To move a note, tap and drag it to another grid square.

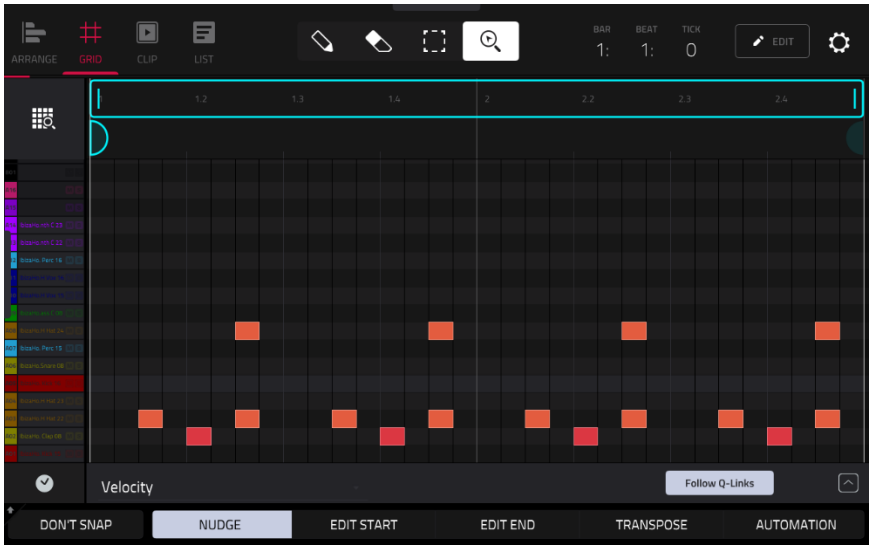
To move multiple notes, select them as described above, and tap and drag them.

To erase multiple notes, select them as described above, and then select the **eraser tool** and tap any of the selected notes.

Magnifying Glass: Navigation Mode:

To move to another part of the grid, tap and drag it.

To zoom in or out, spread or pinch your fingers (respectively) on the grid. You can do this vertically, horizontally, or both at the same time.



Regardless of which tool is selected, you can do any of the following to move, lengthen, shorten, or transpose any selected note/notes.

Tap the **grid-and-magnifying-glass icon** in the lower-left corner to automatically set the grid to view the active area, up to three pad banks and 32 bars.

Press **Undo** on your Force to undo your last action.

Press **Shift** and **Undo** on your Force to redo the last action you undid.

Press the desired **pad** to select all notes for a pad.

To move the selected notes, tap **Nudge** at the bottom of the screen, and then use the **data dial** or **–/+** buttons to shift the notes left or right. By default, you can position notes only by quantization values defined by the **Time Correct** value.

To move the selected notes without restricting ("snapping") **them to the quantization grid**, tap **Don't Snap** in the lower-left corner of the screen, and then use the **data dial** or **–/+** buttons to shift the notes. By default, each nudge is equivalent to one tick.

To adjust the start point or end point of the selected notes (without changing their position), tap **Edit Start** or **Edit End** at the bottom of the screen, and then use the **data dial** or **–/+** buttons.

To transpose the selected notes up or down, tap **Transpose** at the bottom of the screen, and then use the **data dial** or **–/+** buttons.

To adjust an automation parameter for the selected notes, tap **Automation** at the bottom of the screen, and then use the **data dial** or **–/+** buttons to adjust the selected automation parameters.

To select all notes in the grid instantly, press and hold **Shift** and then tap **Select All** at the bottom of the screen.

To copy, cut, or paste the selected notes, press and hold **Shift**, and then tap **Copy** or **Cut**. Once the notes have been copied or cut, press and hold **Shift**, and then tap **Paste** to add them to the current playhead position.

To delete the selected notes, press and hold **Shift** and then tap **Delete** at the bottom of the screen.

To duplicate the selected notes instantly, press and hold **Shift** and then tap **Duplicate** at the bottom of the screen. The duplicate notes will appear immediately after the original ones.

Press and hold **Shift** and then tap **TC** at the bottom of the screen to open the ***Timing Correct (TC)*** window. Alternatively, tap the **clock icon** next to the automation lane.

Tap the pencil **Edit** icon next to the time counter to open the event editing window. You can use any of these functions as described below.

To return to Grid View, tap **Cancel** or tap at the top of the screen.

The **Clear Events** function erases **all** events from the track.

Tap **Clear** to confirm your choice, or tap **Cancel** to return to the previous screen.

The **Half Clip** function **immediately** halves the length of the clip.

The **Double Clip** function **immediately** doubles the length of the clip, without copying any events.

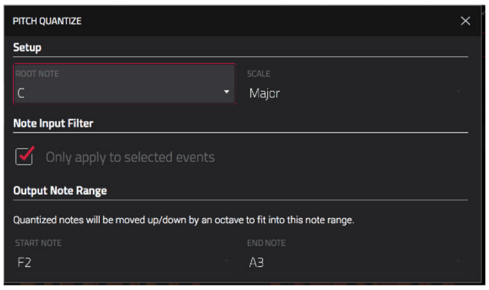
The **Double Length with Events** function **immediately** doubles the length of the arrangement and duplicates the events.

The **Half-Speed Events** function **immediately** doubles the lengths of all note events in the sequence as well as the distance between them. In other words, all notes are spread further apart so the sequence sounds like it is playing at half of the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Double-Speed Events** function **immediately** halves the lengths of all note events in the sequence as well as the distance between them. In other words, all notes are pressed closer together so the sequence sounds like it is playing at twice the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Trim to length** function **immediately** cuts all note events from outside the sequence bounds.

The **Pitch Quantize** function forces the pitches of note events into a specific scale.



Use the **Root Note** field to select the desired root note of the scale.

Use the **Scale** field to select a type of scale.

To determine which note events will be quantized, tap the **Only apply to selected events** checkbox.

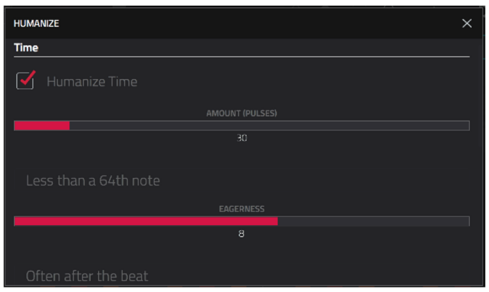
When **on**, only the currently selected note events will be quantized.

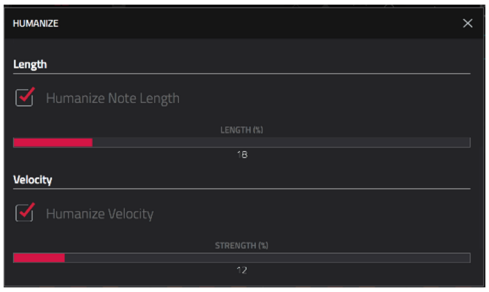
When **off**, **all** pitches in the current sequence will be quantized.

Use the **Start Note** and **End Note** fields to set lowest-possible and highest-possible pitches where the quantized note events will be placed (respectively). If a note event is originally outside of this range, it will be forced to the nearest pitch (within the scale) inside the range.

Tap **Do It** to continue and quantize the note events, or tap **Close**, the **X**, or anywhere outside the window to cancel.

The **Humanize** function applies randomization to the timing, length, and/or velocity of note events.





Tap the **Humanize Time** checkbox to select whether or not humanization will be applied to the timing of note events.

Use the **Amount** (**Pulses**) slider to select the maximum number of pulses by which the timing of an event will be adjusted.

Use the **Eagerness** slider to set how dramatically the humanization effect is applied to the timing. Negative values correspond to playing "ahead of the beat" while positive values correspond to playing "behind the beat."

Tap the **Humanize Note Length** checkbox to set whether or not humanization will be applied to the duration of note events.

Use the **Length** (%) slider to set how dramatically the humanization effect is applied to note lengths.

Tap the **Humanize Velocity** checkbox to set whether or not humanization will be applied to the velocities of note events.

Use the **Strength** (%) slider to set how dramatically the humanization effect is applied to note velocities.

Tap the **Only Apply to Selected Events** checkbox to determine which notes will use these humanization values:

When **on**, just the currently selected notes will be humanized.

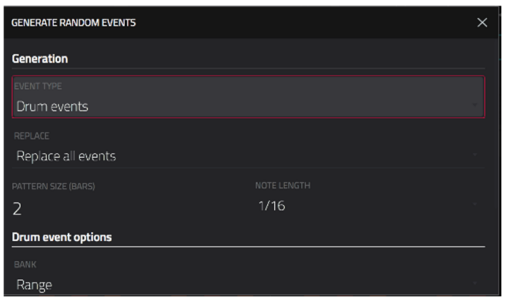
When **off**, all notes in the sequence will be humanized.

Tap **Apply** to apply humanization and keep this window open.

Tap **Do It** to apply humanization and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window without making any changes.

The **Generate Random Events** function creates random melodic or drum patterns in the current sequence.



Use the **Event Type** field to select **Drum Events** or **Melodic Events** to select the type of events you want to create.

Use the **Replace** field to select how the events will be created relative to the existing events on the track:

Replace All Events: Select this option to replace all events in the sequence with the randomly generated ones.

Replace Events in Note Range: Select this option to replace all events in the designated note range in the sequence with the randomly generated ones. Use the **Bank** or **Start Pad** and **End Pad** menus to set the note range for drum events or the **Start Note** and **End Note** menus to set the note range for melodic events.

Add to Existing Events: Select this option to add the randomly generated events to the sequence without replacing or overwriting the existing ones.

Use the **Pattern Size** (**Bars**) field to set how many bars the events will use. The highest possible value is the number of bars in the current sequence.

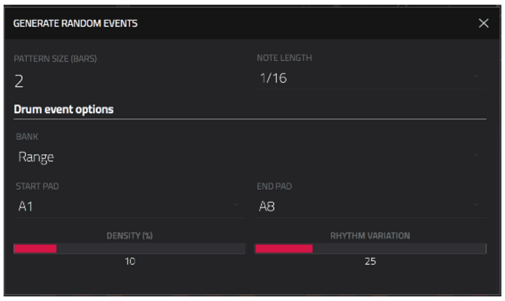
Use the **Note Length** field to select the duration of the events. (This feature is nonfunctional if **Legato** is enabled while generating melodic events.)

Tap **Apply** to generate the events and keep this window open.

Tap **Do It** to generate the events and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window without generating any events.

If **Event Type** is set to **Drum Events**:



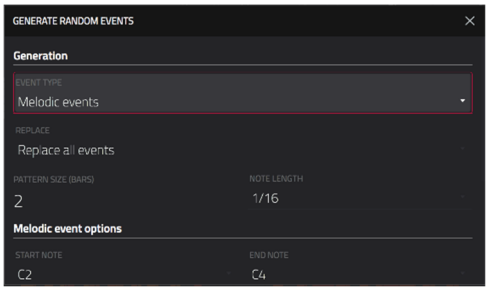
Use the **Bank** field to select the pad bank that will be used to generate the events, or select **Range** to use the **Start Pad** and **End Pad** menus to define a specific pad range instead.

Use the **Start Pad** or **End Pad** fields to define a specific pad range over which the events will be generated. You can use these fields only if the **Bank** menu is set to **Range**.

Use the **Density** (**%**) slider to set how closely together the events will be placed in the sequence.

Use the **Rhythm Variation** slider to set how widely or narrowly the rhythmic patterns of the generated notes vary.

If **Event Type** is set to **Melodic Events**:

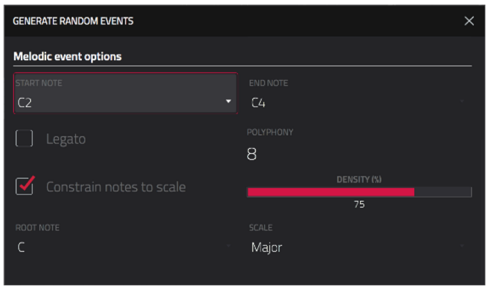


Use the **Start Note** or **End Note** fields to define a specific note range over which the events will be generated.

Tap the **Legato** checkbox to enable or disable legato.

When **on**, the generated notes will be extended or shortened to create a long, unbroken phrase from the first note event's start point to the last note event's end point. Each note event will sustain until another note event starts. If multiple note events start at the same time (and are not the last note events), their lengths will become identical.

When **off**, the generated notes will use the duration set by the **Note Length** menu.



Use the **Polyphony** field to select to set the maximum number of note events that can be sounding simultaneously in the track (**1**–**8**).

Tap the **Constrain Notes to Scale** checkbox to determine whether or not the notes will use a scale.

When **on**, the notes will be within the scale determined by the **Scale** menu.

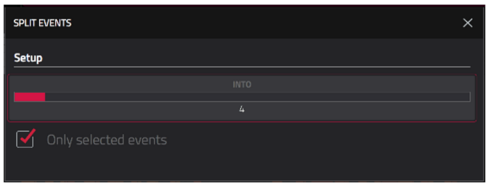
When **off**, the notes will be chromatic.

Use the **Density** (**%**) slider to set how closely together the events will be placed in the sequence.

Use the **Root Note** field to set the root note of the scale that the notes will use.

Use the **Scale** field to select the scale or mode that the generated notes will use.

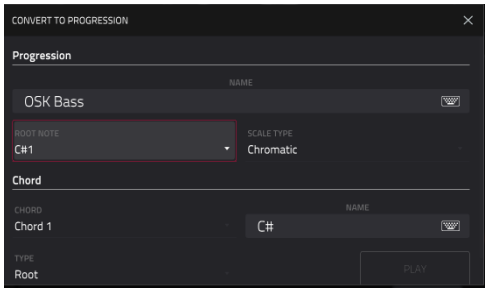
The **Split Events** process divides note events into an equal number of parts.



Use the **Into** field to set the number of parts note events will be split into.

Tap the **Only selected events** checkbox to set the process to only affect selected notes. When unchecked, all note events in the sequence will be split.

The **Convert to Progression** function creates a custom Progression from a melodic MIDI track that you can use to perform with Progressions Note mode.



To set the parameters of the new Progression, use the **Progression** fields:

- Use the **Name** field to set the progression name.
- Use the **Root Note** field to set the root note.
- Use the **Scale Type** field to set the scale type.

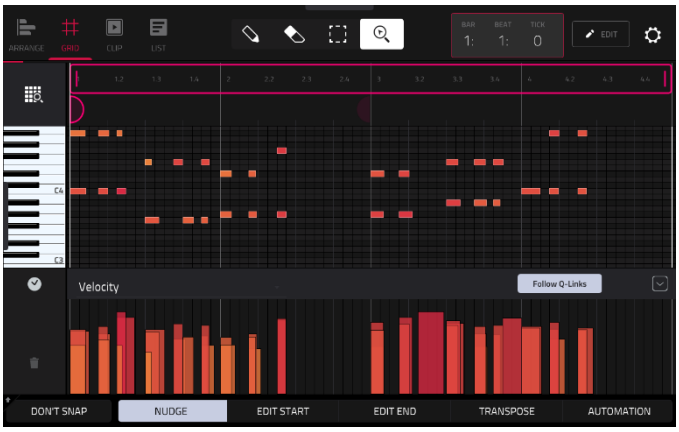
To set the parameters for the chords in the Progression, use the **Chord** fields:

- Use the **Chord** field to select a chord from the progression to edit.
- Use the **Name** field to rename the selected chord.
- Use the **Type** field to select to set the type of chord: **Root**, **Normal** or **Below Root**.
- Tap the **Play** button to play the selected chord.

Tap **Do It** to convert the progression and close the window, or tap the **X**, **Close** or anywhere outside the window to close the window and return to the previous screen.

Velocity/Automation Lane

Grid View also contains a velocity/automation lane where you can easily adjust note velocities and automation parameters.



The velocity/automation lane in Grid View.

To show or hide the velocity/automation lane:

1. Tap the up **arrow** (∧) button in the lower-right corner to show the velocity/automation lane.
2. Tap the **down arrow** (∨) to hide the velocity/automation lane.

Tap the **Parameter** field to select an automation parameter to control. When the **Follow Q-Links** button is enabled, the current automation parameter selection will match the currently selected Q-Link control.

When editing velocity, each note's velocity is represented by a vertical bar. The higher and redder the bar is, the higher the velocity is. Yellow bars indicate a lower velocity. Bars with a gray line at the top indicate a currently selected note.

To adjust the velocity of the selected notes, tap **Velocity** at the bottom of the screen, and then use the **data dial** or **–/+** buttons.

To add automation to a track:

1. Select a **MIDI Track** or **Audio Track**, and then press **Menu** and tap **Grid View** to open Grid View.
2. Tap the **up arrow** on the parameter bar to expand the velocity/automation lane.
3. By default, **Velocity** is shown in this lane for MIDI tracks and **TRK: Volume** is shown for Audio tracks. Double-tap this field to open the **Parameter** drop-down menu.
4. In the menu that appears, tap **Add New** to add an automation parameter. You can choose from a variety of parameters depending on the type of track, insert effects added, and other options.

To edit automation, do any of the following in Grid View:

- Use the **pencil** tool to draw your automation in the automation lane.
- Use the **eraser** tool to erase automation points. If you erase all automation points, the parameter will be removed.
- Tap the **trash can icon** to delete all automation for the selected parameter at once.

When editing **Probability** automation, the blue bars represent the probability that the note will play. When editing **Ratchet** automation, the blue bars represent the ratchet subdivisions for the selected notes, shown as dotted lines on the original note.

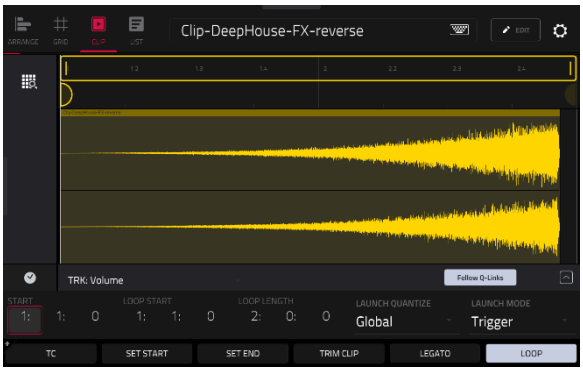
Clip Editor

The Clip Editor lets you view and edit the parameters of the clip container itself. This view has three different appearances: one for audio tracks, one for drum tracks and one for keygroup, plugin, MIDI and CV tracks.

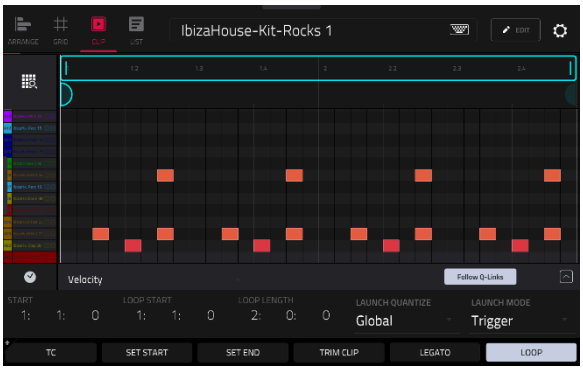
To enter the Clip Editor, do either of the following:

- Press the **Clip** button.
- Press **Menu** and then tap **Clip Editor**.
- Tap **Clip** at the top of the screen in ***Arrange Mode***, ***Grid View***, or ***List Edit Mode***.

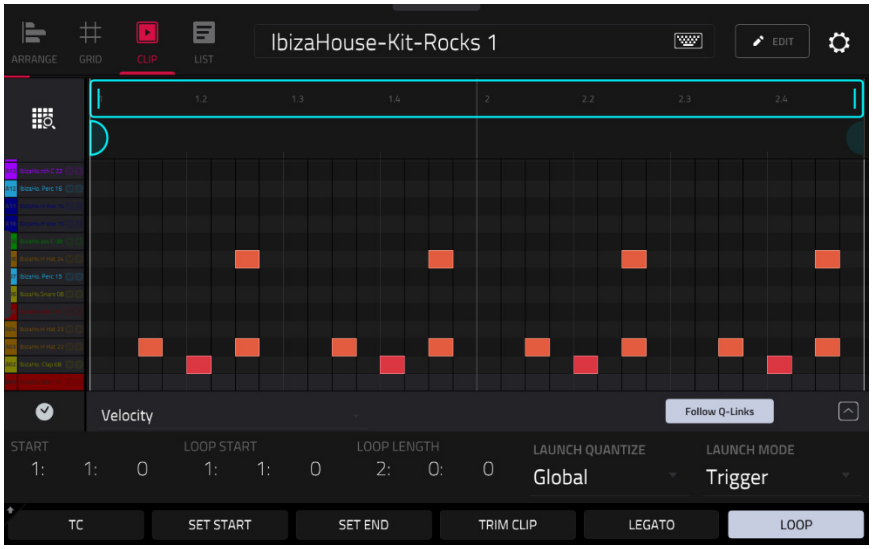
For audio tracks, the waveform of the audio clip is shown.



For drum tracks, the left column shows you all available pads in a vertical view with their corresponding events in the grid to the right.



For keygroup, plugin, MIDI and CV tracks, the left column shows a vertical “piano roll” keyboard with the corresponding events in the grid to the right.



Use the **Start** fields to set the starting location of the clip when launched. Alternatively, drag the start marker.

Use the **Loop Start** fields to set the starting location of the clip loop. Alternatively, drag the loop start marker.

Use the **Loop Length** fields to set the total length of the loop. Alternatively, drag the loop end marker

Use the **Launch Quantize** field to set the quantization for launching the clip. This can be set separately from the global launch quantization.

Use the **Launch Mode** field to set how the clip is launched. Select **Toggle** for the clip to start or stop with each successive press. Select **Trigger** for the clip to start at the beginning with each press.

Tap **TC** at the bottom of the screen to open the ***Timing Correct (TC)*** window. Alternatively, tap the **clock icon** next to the automation lane.

Tap **Set Start** or **Set End** while the clip is playing to adjust the clip start or end points. The starting point or ending point will be set at the playhead location.

To trim a clip, use the **Loop Length** fields to set the preferred length, then tap **Trim Clip** to trim the whole clip to this size.

Tap **Legato** to enable or disable legato. When Legato is active, the playhead will continue from the same position as it was in the previous clip of the same track when switching between clips. This is useful for creating seamless fills in drum breaks or when using an a capella track.

Tap **Loop** to toggle the clip loop on or off. Generally, turn Loop on for complete phrases and turn it off for one shots.

To shift the entire loop area left or right, press and hold **Shift** and tap **<< Loop** or **Loop >>**.

To halve or double the loop size, press and hold **Shift** and tap **/2** or **2X**.

Tap the up **arrow** (^) button in the lower-right corner to view the velocity/automation lane. Velocity and automation can be edited in the ***Grid View***. To hide the velocity/automation lane, tap the **down arrow** (v) when it is expanded. Tap the **Follow Q-Links** button to automatically update the current automation parameter to the selected Q-Link parameter.

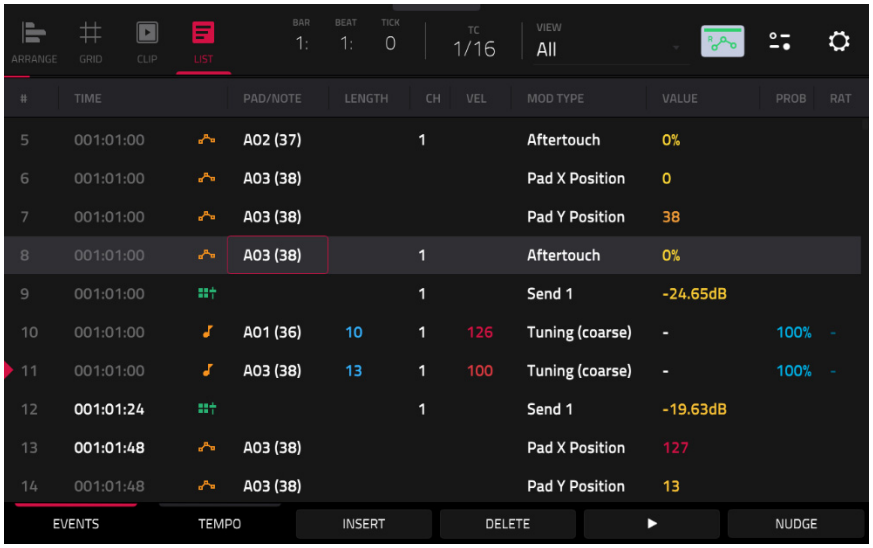
The **Settings** window lets you configure certain ***Grid View*** settings.

To view the Settings, tap the **gear icon**.

List Edit Mode

List Edit Mode has some of the features of Grid View—as well as some additional ones—but with a different interface/workflow.

To enter List Edit Mode, press **Menu** and then tap **List Edit**. You can also tap **List** at the top of the screen in ***Arrange Mode***, ***Grid View***, or the ***Clip Editor***.



When viewing main **Events** screen, tap the **Tempo** tab at the bottom of the screen to switch to the Tempo screen, where you can add and adjust tempo change events.

The ***Time Counter*** at the top of the screen indicates the current playhead position.

The **TC icon** opens the ***Timing Correct (TC)*** window, which contains various settings to help quantize the note events in your sequence.

Press and hold **Shift** and tap the **TC icon** to enable or disable global timing correct.

The **View** menu lets you select what type of events are shown in the list.

All: Select this option to show all event types.

Notes: Select this option to show only notes.

Aftertouch: Select this option to show only aftertouch messages.

MIDI Automation: Select this option to show only MIDI automation events.

Track Automation: Select this option to show only track automation events.

Pitch Bend: Select this option to show only pitch bend events.

Control Change: Select this option to show only MIDI CC messages.

Program Change: Select this option to show only MIDI program change messages.

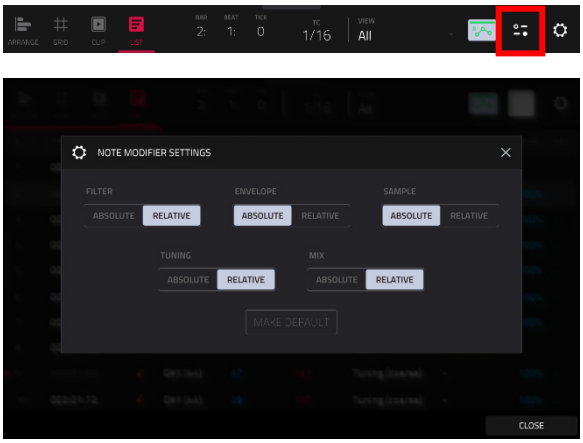
Ch Pressure: Select this option to show only channel pressure messages.

Mute: Select this option to show only mute events for tracks and pads.

MPCe: Select this option to show only MPCe events such as Pad X/Y position.

The **automation button** indicates the global ***Automation*** state.

Tap the **modifier icon** to open the **Note Modifier Settings** window, where you can adjust the modifier playback mode for the following modifier types:



Filter (Cutoff, Resonance, Filter Envelope Amount)

Envelope (Attack, Decay, Release)

Sample (Sample Layer, Sample Slice)

Tuning (Coarse Tuning, Fine Tuning)

Mix (Pan, Level)

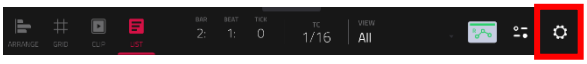
When the modifier type is set to **Absolute**, a note with an active modifier for that type will use the modified value specified by the note event directly, ignoring any values set in Track Edit, Sample Edit, or Pad Mixer which would affect the modifier value, and ignore pad automation that would affect the modified value.

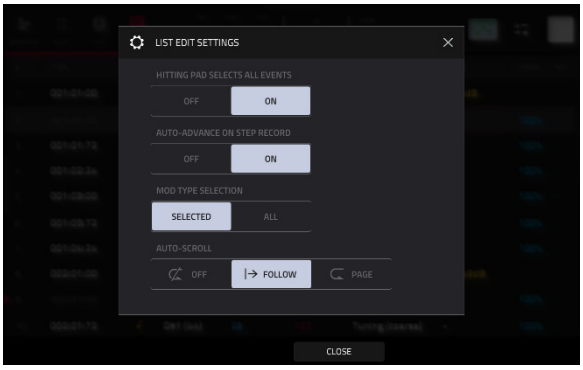
When the modifier type is set to **Relative**, a note with an active modifier for that type will use the modified value as an offset (or scale, in the case of Level) of the existing state, taking into account any values set in Track Edit, Sample Edit, or Pad Mixer which would affect the modifier value, as well as be affected by pad automation that affects the modified value. Relative modifier may be set beyond the limit of the underlying value. For example, a pad with an **Envelope Attack** value of 10 could have a -100 modifier, in which case the note would be played back with an Attack value of 0.

Modifier playback mode settings will save with your project. Tap the **Make Default** button to make the current configuration the default modifier playback mode setting for all new projects. This can be reset using the **Reset Preferences** function in the ***Preferences*** menu.

Note: Legacy Force projects are loaded with **Sample** and **Envelope** set to **Absolute**, and all other groups set to **Relative**. Envelope modifiers for legacy projects will also *not* ignore automation even despite being set to **Absolute**. This is to ensure the sound of old projects is retained. Interacting with the modifier playback **Envelope** setting in any way will remove this behavior, and from that point the Envelope modifiers will ignore automation as normal.

Tap the **gear icon** to open the List View settings window, where you can configure the following settings:





Use the **Hitting Pad Selects All Events** selector to turn the feature on or off. When **On**, pressing a pad will automatically select all note events for that pad in the selected sequence on that track. When set to **Off**, pressing a pad will simply play its sound without selecting any note events.

Use the **Auto-Advance on Step Record** selector to turn the feature on or off. When set to **On**, pressing a pad when the track is record-armed will move the audio playhead forward by a length determined by the current **Time Division** setting in the ***Timing Correct (TC)*** window. When set to **Off**, pressing a pad when the track is record-armed will not change the audio playhead position.

Use the **Mod Type Selection** field to set whether changing the **Mod Type** changes only the **Selected** event or **All** events of the selected type.

Use the **Auto-Scroll** selector to set how the screen behaves relative to the audio playhead.

Follow: The list will scroll along in the background while keeping the audio playhead centered.

Page: The list will move to the "next page" to follow the audio playhead.

Off: The list will not move at all.

These functions also apply to ***Grid View*** and ***Sample Edit Mode***.

The contents of the sequence will be shown as a list of events, with the following parameters:

#: This is the number of the note event.

Time: This is the position of the note event in bars, beats, and ticks. If multiple note events occur at the same time, additional note events will be listed immediately below, but their **Time** values will be grayed out.

The **Event Type** icon indicates the type of event (e.g., **Note**, **Aftertouch**, **Track Automation**, etc.). See the list of icons below showing the different types of events.

Pad/**Note**: This is the pad and/or corresponding MIDI note number. For drum tracks, you will see the pad number. For keygroup tracks, plugin tracks, and midi tracks, you will see the note.

Length: This is the length of the note event in ticks.

CH: This is the MIDI Channel of the event.

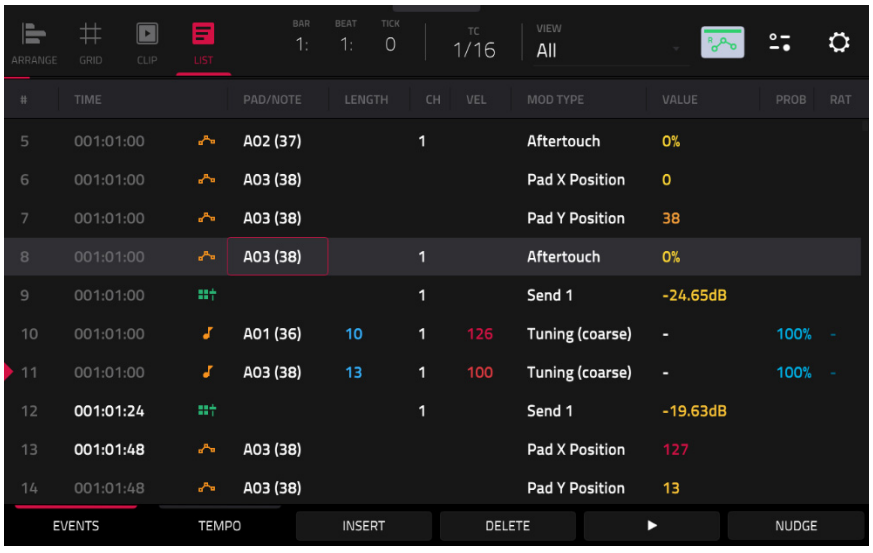
Velocity: This is the velocity of the note event with its corresponding color.

Mod Type: This is the type of modifier used on the note event via automation.

Value: This is the value of the modifier automation.

Prob: This is the probability percentage of the event.

Rat: This is the ratchet value of the event.



The **red arrow** (▶) on the left side of the list represents the audio playhead's current position. If your sequence is playing, the arrow will move accordingly.

The following icons indicate the corresponding types of events:

Note

MIDI Automation (**Volume**, **Pan**, **Mute**, **Solo**)

MIDI CC Automation (**0**–**127**)

MIDI Parameter Automation (**Aftertouch**, **Pitchbend**, **Channel Pressure**, or **Program Change**)

Mixer Automation (**Volume**, **Pan**, **Mute**, **Solo**, or **Send 1**–**4**)

Mixer Parameter Automation (options vary based on the type of track)

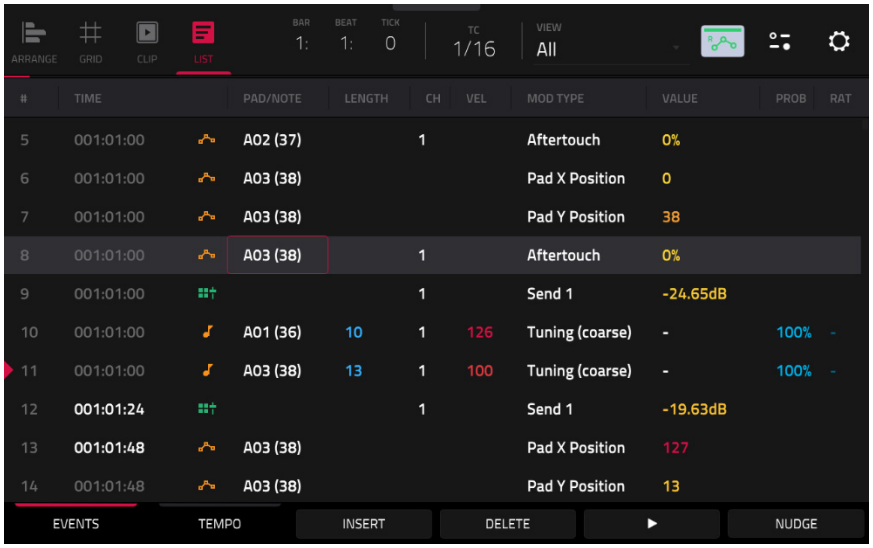
Track Insert Effect Automation (options vary based on the effect)

Pad/Keygroup Mixer Automation (**Level**, **Pan**, **Pad Mute**, **Pad Solo**, or **Send 1**–**4**)

Pad/Keygroup Parameter Automation (options vary based on the type of track)

Pad/Keygroup Insert Effect Automation (options vary based on the effect)

Sequence Tempo Automation

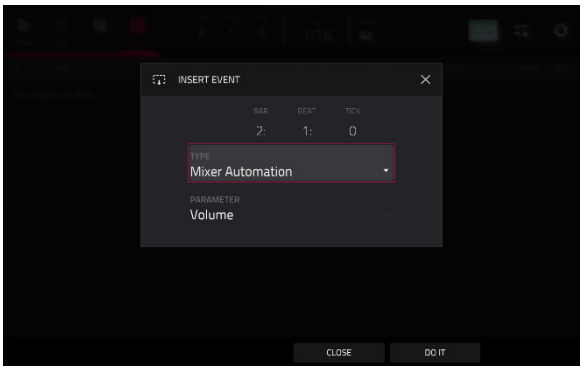


Tap an event to select it. Press and hold **Shift** to select multiple events.

To insert a note event, press **Rec** so the button is lit, and then press a **pad**. A note event will be created at the current location using the pad you pressed. You can keep pressing additional pads, which will continue to insert each press as a single note event in the order you pressed them (similar to a step sequencer). Press **Stop** to exit this function.

Note: Depending on the **Auto-Advance on Step Record** setting, the current time position will either advance each time you press a pad or remain in place. See the earlier description of ***Auto-Advance on Step Record*** to learn about this.

Alternatively, press the **Insert** button at the bottom of the screen to open the **Insert Event** window:



Use the **Bar:Beat:Tick** fields to set the location where you want to add an event.

Use the **Type** field to set what kind of event you would like to add: **Note**, **Pad Automation**, **Mixer Automation** or **MIDI Automation**. When the **Tempo** tab is selected, this field is locked to **Sequence Automation**.

Use the **Pad** or **Parameter** fields to set the additional values or settings based on the type of event. When the **Tempo** tab is selected, this field is locked to **Parameter > Sequence Tempo**.

Tap **Do It** to add the event.

Tap **Cancel**, the **X** or anywhere outside the window to close the Insert Event window and return to List Mode.

To edit the Pad/Note, **Length**, **Velocity, Tempo, or numeric Value of an event**, tap the value to select it, and then use the **data dial** or **–/+** buttons to change the value. When multiple items are selected, you can adjust the values at the same time by holding **Shift**. Alternatively, double-tap a setting and use the numeric keypad that appears to enter a value (for **Length**, **Velocity**, or numeric **Value** only).

To edit the Length of an event according to your Timing Correct settings, tap the value to select it, and then press and hold **Shift** and use the **data dial** or **–/+** buttons to change the value.

To shift the Pad/Note of an event by pad bank, tap the value to select it, and then press and hold **Shift** and use the **data dial** or **–/+** buttons to change the pad bank.

To turn a Solo/Mute event on or off, tap the desired setting on the **On/Off** switch. Alternatively, tap the **On/Off** switch to select it, and then use the **data dial** or **–/+** buttons to change the value.

To move an event, tap it to select it, tap **Nudge** at the bottom of the screen, and then use the **data dial** or **–/+** buttons to shift the event up or down. Repeat this for other events, or tap **Nudge** again to turn the feature off.

To move an event according to your Timing Correct settings, tap the **Time** value to select it, and then press and hold **Shift** and use the **data dial** or **–/+** buttons to change the value.

To play an event, tap it to select it, and then tap **Play** (▶) at the bottom of the screen. This works with note events only.

To delete an event, tap it to select it, and then tap **Delete** at the bottom of the screen.

Step Sequencer

The Step Sequencer lets you create or edit sequences by using the pads as “step buttons,” simulating the experience of a traditional step-sequencer-style drum machine. This is available for MIDI tracks only, not audio tracks.

You can also create and edit automation using the Step Sequencer.

To enter the Step Sequencer, press **Menu**, and then tap **Step Sequencer**.

The top of the screen shows the track name and information as well as project and timing information.

The **Track** field shows the name of the current track.

Use the **BPM** field to adjust the tempo of the project.

The time counter at the top of the screen indicates the current playhead position.

Click the **gear icon** to open the Step Sequencer configuration window:

Use the **Velocity** field to set the default step velocity. This applies to notes added using the hardware pads or by tapping the step buttons on the screen.

Use the **Step Size** field to set the value that determines how many steps each bar of the sequence will have. The **T** indicates a triplet-based value. This will also adjust the current ***Timing Correct (TC)*** value, which can be accessed by tapping **TC** at the bottom of the Step Sequencer screen.

Use the **Auto-Scroll** selector to set how the screen behaves relative to the audio playhead:

Off: The grid will not move at all.

Page: The grid will move to the "next page" to follow the audio playhead.

Use the **Automation** field to determine whether Step Automation is **Unlocked** from the grid or **Locked to Step Length**. When set to the latter, changes to automation will only affect the current step. See the ***following*** section for more about sequencing automation.

The **TC icon** opens the ***Timing Correct (TC)*** window, which contains various settings to help quantize the note events in your sequence.

Use the **Bar –/+** buttons at the bottom of the screen to select the bar of the sequence whose steps you want to enter or delete. The current bar number is shown in the upper-left corner.

Use the **Pad –/+** buttons at the bottom of the screen to select the pad whose steps you want to enter or delete. The current pad number is shown in the upper-left corner.

Hold **Shift** and use the **Track -/+** buttons to select a track to sequence on.

Hold **Shift** and tap the **Clear** button to clear all steps in the current sequence.

Hold **Shift** and tap the **Clear Page** button to clear all steps in the current page view.

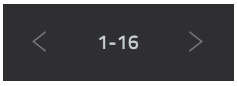
To enter or delete steps in a sequence:

1. Use the **Pad –/+** buttons at the bottom of the screen to select the pad whose steps you want to enter or delete. The current pad number is shown in the upper-left corner.

   Alternatively, use the Pad Select feature: Tap and hold **Pad Sel**, press the desired pad, and then release **Pad Sel**. You can also use Pad Select as a "latching" feature: tap **Pad Sel** so it is activated, press the desired pad, and then tap **Pad Sel** once more so it is deactivated.
2. Use the **Bar –/+** buttons at the bottom of the screen to select the bar of the sequence whose steps you want to enter or delete. The current bar number is shown in the upper-left corner.
3. Press the **pads** of your Force, or tap a button at the bottom of the sequencer. Each pad corresponds to a step in the bar and will light with a color corresponding to its velocity.

   Keep in mind that for time divisions larger than 16, the bar's steps will be represented by multiple pad banks. In this case, use **Pad Bank Buttons** to view all the steps within a bar.

For time divisions larger than 16, the bar's steps will be represented by multiple pad banks. In this case, use the left and right arrows (**<** and **>**) by the step numbers (**1**–**16**, **17**–**32**, etc.) to change which steps are shown in the sequencer.



Alternatively, use the **Pad Bank Buttons**.

To adjust the velocities of the steps, do any of the following:

- Tap anywhere on the **velocity bar** of a step. The top of the velocity bar will jump to that point.
- Use the **slider** on the right edge of the screen to increase or decrease the velocities of all steps.
- Turn the **Q-Link knob** that corresponds to that step (the Q-Link knobs must be in the **Screen** edit mode). Setting a value of **0** (**Off**) will delete the step.

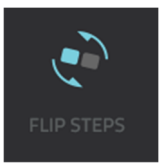
Use the **Nudge <** and **Nudge >** arrows to shift the entire pattern left or right (respectively) by one step. This is useful for experimenting with different rhythmic permutations.

For clips, events will wrap between the Clip Start or Clip Loop Start (whichever comes first) and the total Clip Loop Length after the Clip Start.

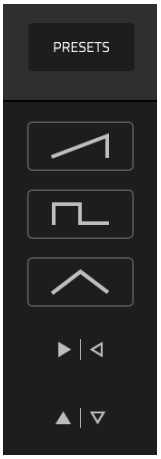
For Sequences, events will wrap between the **1:1:00** position on the timeline and the end of the sequence. Sequence loops will not affect event wrapping. If **Independent Track Length** is enabled, events will wrap within each track's own length instead of the main sequence length (still starting at **1:1:00**).

Use the **slider** on the right edge of the screen to increase or decrease the velocities of all steps.

Use the **Flip Steps** button to switch which steps have notes entered and which do not have notes. Steps that previously had no notes will now have notes at full velocity (**127**). Steps that previously had notes will now be empty.



Tap **Presets** to show or hide the preset velocity controls. These controls let you manipulate and transform the velocities of the current bar in the sequence.



The **first** button will apply ascending or descending velocities to the steps. Each time you tap it, it will cycle through these options:

- The velocities will ascend to a single peak at the end of the bar.
- The velocities will ascend to two peaks—one after each half of the bar.
- The velocities will ascend to four peaks—one after each quarter of the bar.
- The velocities will descend from a single peak at the start of the bar.
- The velocities will descend from two peaks—one after each half of the bar.
- The velocities will descend from four peaks—one at the start each quarter of the bar.

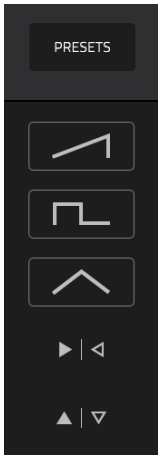
The **second** button will set the velocities of the steps to be at the maximum value (**127**) or minimum values (**1**), depending on their position in the bar. Each time you tap it, it will cycle through these options:

- The velocities of the first half of the bar will be set to **1**. The velocities of the second half will be set to **127**.
- The velocities of the first and third quarters of the bar will be set to **1**. The velocities of the second and fourth quarters will be set to **127**.
- The velocities of the first, third, fifth, and seventh eighths of the bar will be set to **1**. The velocities of the second, fourth, sixth, and eighth eighths will be set to **127**.
- The velocities of the first half of the bar will be set to **127**. The velocities of the second half will be set to **1**.
- The velocities of the first and third quarters of the bar will be set to **127**. The velocities of the second and fourth quarters will be set to **1**.
- The velocities of the first, third, fifth, and seventh eighths of the bar will be set to **127**. The velocities of the second, fourth, sixth, and eighth eighths will be set to **1**.

The **third** button will apply ascending or descending velocities to the steps. Each time you tap it, it will cycle through these options:

- Across the entire bar, the velocities will ascend to a peak and then descend from it.
- In each half of the bar, the velocities will ascend to a peak and then descend from it.
- In each quarter of the bar, the velocities will ascend to a peak and then descend from it.
- Across the entire bar, the velocities will descend from a peak into a valley and then ascend back up to the peak.
- In each half of the bar, the velocities will descend from a peak into a valley and then ascend back up to the peak.
- In each quarter of the bar, the velocities will descend from a peak into a valley and then ascend back up to the peak.

The **fourth** button will swap the first half and second half of the bar. In other words, the first half of the bar will become a mirrored image of the second half, and vice versa.



The **fifth** button will invert the velocities of all steps with entered notes. The sum of the old and new velocities will equal **127**. The exception is a velocity of **127** or **1** as a step with a note cannot have a velocity of **0**.

Examples:

Steps with velocities of **40** will now have velocities of **87**, and vice versa.

Steps with velocities of **75** will now have velocities of **52**, and vice versa.

Steps with velocities of **127** will now have velocities of **1**, and vice versa.

Step Automation

You can also create and edit automation using the Step Sequencer.

To add a step automation parameter:

1. By default, the **Parameter** field of the Step Sequencer displays **Velocity** for MIDI tracks and **TRK: Volume** for audio tracks. Double-tap this field to open the drop-down menu.
2. In the menu that appears, tap **Add New** to add an automation parameter. You can choose from a variety of parameters depending on the type of track, insert effects added and other options.

To edit step automation, do any of the following:

- Tap and drag your finger in the step area to freely draw step values.
- Press and hold the **Knobs** button, and then tap **Screen** to set the Q-Link knobs to Screen Mode. While viewing the step sequencer, you can use the Q-Link knobs for tactile control of each step's automation value, emulating traditional knob-based step sequencers. While it is being adjusted, the current automation value will be shown next to the **Parameter** field, as well as in the display strip above the Q-Link knobs.
- Press and hold **Shift** and tap **Clear** to clear all automation for the selected parameter in the selected sequence.
- Press and hold **Shift** and tap **Clear Page** to clear all automation for the selected parameter in the current page view of the selected sequence.
- Use the **Nudge <** and **>** buttons to shift the current automation parameter to the left or right at the current Timing Correct value.
- Use the **slider** on the right side to increase or decrease the parameter values for all automation steps in the visible time range.
- Tap **Presets** and use the buttons to apply the presets to the step automation.

Note: When editing step automation, if a step is not activated, a darkened step bar will indicate the current parameter value at that step, based on the last active step.

Track Edit Mode

Track Edit Mode contains all parameters for editing your Tracks.

To enter Track Edit Mode, do either of the following:

- Press **Menu**, and then tap **Track Edit**.
- Press and hold **Shift** and press **Clip**.

For **drum tracks**, this mode includes the parameters of four layers as well as all synthesis parameters and insert effect settings. See the ***Drum Tracks*** section to learn more.

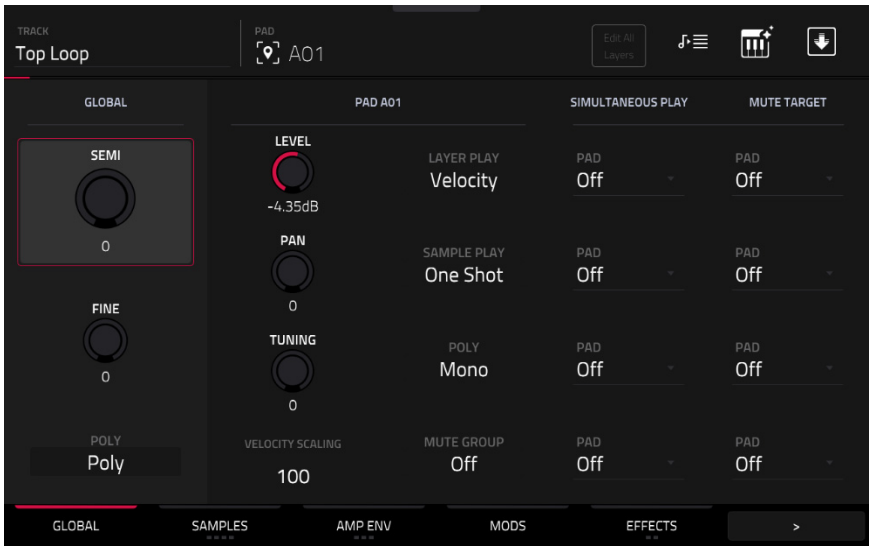
For **keygroup tracks**, this mode contains slightly more parameters than drum tracks. See the ***Keygroup Tracks*** section to learn more.

For **plugin tracks**, skip to ***Plugin Tracks*** to learn more.

For **MIDI tracks** and **CV tracks**, skip to ***MIDI Tracks*** and ***CV Tracks*** to learn more.

Double-tap the **Track** field at the top of the touchscreen to open the **Track Settings** window. To learn more about these settings, and for more general information on the differences between the types of tracks, please see ***General Features*** > ***Tracks***.

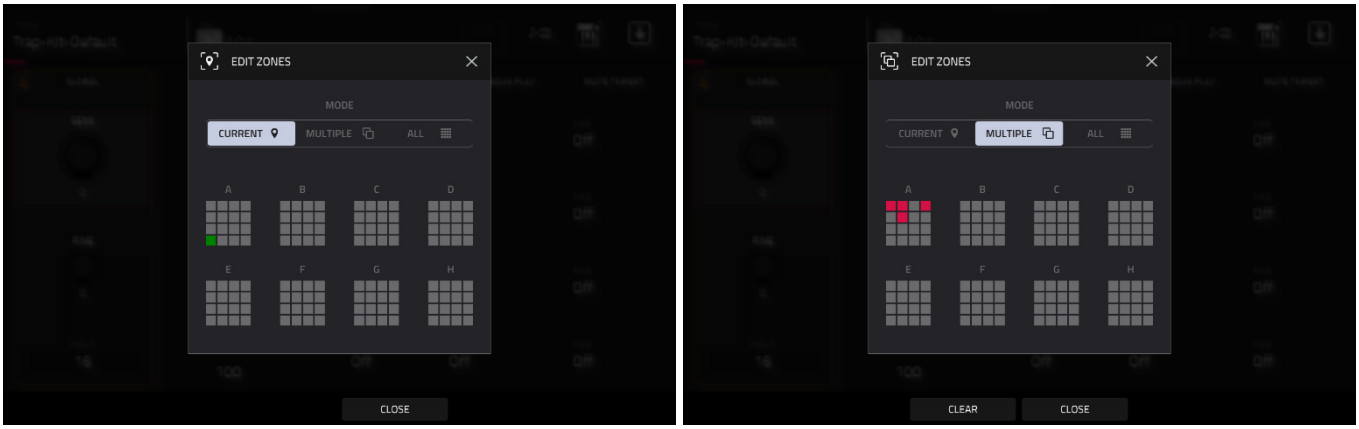
Drum Tracks



When using drum tracks, Track Edit Mode lets you edit the parameters for each pad.

To select a pad, press it. Its parameters will appear on the screen immediately.

To view a specific tab of parameters, tap the **Global**, **Samples**, **Envelopes**, **LFO**, **Modulations**, or **Effects** button at the bottom of the screen. You can tap the **Samples**, **Envelopes** or **Effects** buttons multiple times to cycle through the available tabs.



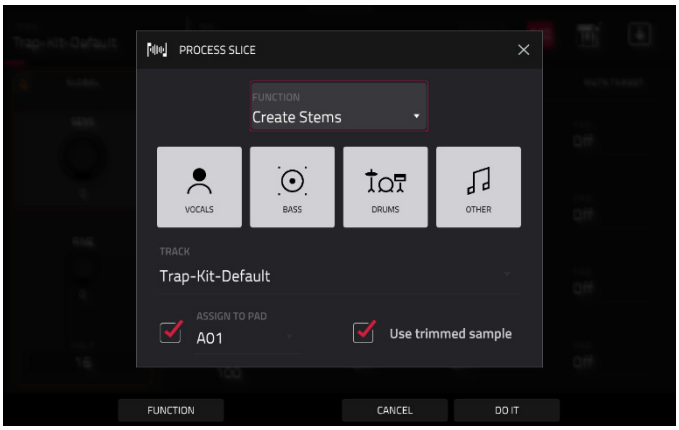
Tap the **location icon** at the top of the screen (next to the selected pad name) to open the **Edit Zones** window, which is a feature for drum tracks. This window displays an overview of any selected pads. Use the **Mode** selector to set how the selected pads will be edited:

- **Current**: Only the currently selected pad can be edited.
- **Multiple**: All selected pads can be edited simultaneously.
  Tap **Clear** at the bottom of the screen to clear the current selection.
- **All**: All pads can be edited simultaneously.

To close the window, tap **Close**, the **X**, or anywhere outside the window.

Tap the **Edit All Layers** button to enable or disable editing control of all sample layers at the same time. When this is enabled, edits made to sample parameters such as **Start/End** points or **Semi/Fine** tuning on any one layer are automatically applied uniformly to all eight layers at once (even if some layers are empty).

Tap the **Stems** icon to open the Create Stems Function in the Process Sample window. You can use this process to isolate different parts of the sample and separate them into new stem samples.



Click the icons to select or deselect from the following elements to create stems of:

- **Vocals:** Isolate vocal elements of the track into a stem.
- **Bass:** Isolate bass elements of the track into a stem.
- **Drums:** Isolate percussive elements of the track into a stem.
- **Other:** Isolate other musical textures, such as keys or guitars, into a stem.

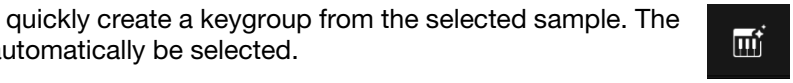
Use the **Track** dropdown menu to select the track where the stems will be added.

The **Assign to Pad** function determines where the stem separated samples are added. When checked, you can select a pad in the chosen Track using the dropdown menu, and the stems will be added to the four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

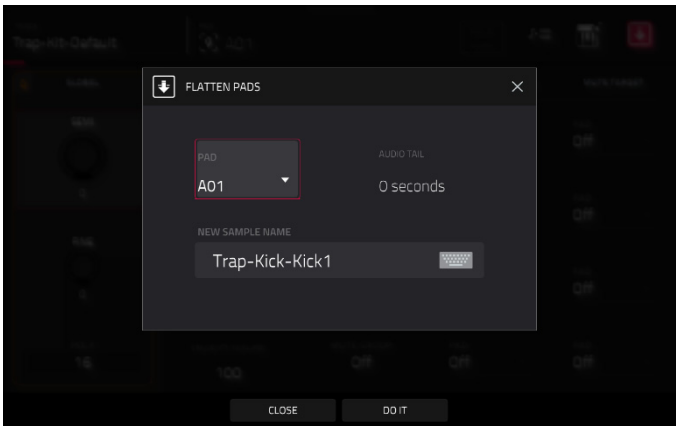
Tap the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Note: To purchase MPC Stems, visit **akaipro.com/stems**, and then activate your purchase in the ***Menu > Preferences > Activate Plugins*** menu.

Tap the **keyboard+** icon at the top of the screen to quickly create a keygroup from the selected sample. The new keygroup will be created on a new track and automatically be selected.



Tap the **down-arrow icon** at the top of the screen (next to the **Track** field) to open the **Flatten Pad** window, which renders all samples on a pad as an audio sample and places it on the first layer of that pad.



The resulting sample is the audio signal produced by that pad at full velocity (**127**) after the pad channel strip, which means that it includes any assigned pad insert effects and the results of warping the sample.

This function is useful if you need to reduce how CPU-intensive a pad or track is by essentially “embedding” the warping and effects in the sample itself. By default, it will use the name of the first sample. This function works for drum tracks only.

To select the pad, press it or use the **Pad** menu.

Use the **Audio Tail** field to set the length of the audio tail. This will add extra seconds to the end of the resulting audio file. This is useful if you are using effects or samples whose sounds exceed the defined audio length (e.g., long reverb or delay, one-shot samples with long decays, etc.). We recommend using an audio tail of at least a couple of seconds.

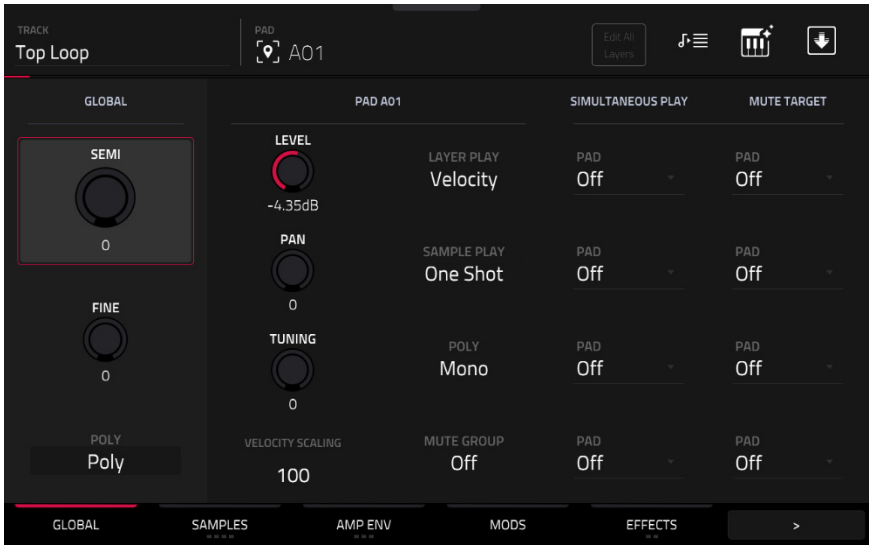
Tap the **Edit Name** field and use the virtual keyboard that appears to name the new sample.

Tap **Do It** to confirm your choice.

Tap **Cancel** to cancel and return to the previous screen.

Global

In the Global tab, you can set the playback mode and tuning for the overall Track.



Global Semi lets you transpose the track up to 36 semitones up or down.

Global Fine provides fine-tuning of the track up to 99 cents up or down.

Global Poly (Polyphony) sets the playback mode for the track's pads. In **Mono** Mode, only one pad will sound at a time. If a pad is played while another (or the same one) is still playing its sample/samples, the new pad will immediately mute all other currently playing pads in that track. In **Poly** Mode, several pads can be triggered at the same time (limited only by the total number of voices available).

Level controls the overall volume level of the loaded sample/samples.

Pan controls the overall panning of the loaded sample/samples in the stereo field.

Pad Tuning controls the overall tuning of the loaded sample/samples.

Use the **Velocity Scaling** field to apply scaling to the incoming velocity. For example, if the scaling is set to 50 and the incoming note velocity is 120, the note velocity would be 60 instead.

Use the **Layer Play** selector to determine how multiple samples assigned to the same pad are played:

- **Cycle** (**Cyc**): Each time the pad is played, it will play the next layer's sample. In other words, the samples will cycle through the layers as follows: 1, 2, 3, 4, 1, 2, 3, 4… etc.
- **Velocity** (**Vel**): The pad will switch between layers depending on how hard you press a pad.
- **Random** (**Ran**): Each time the pad is played, it will play one of its layer's samples at random. When selected, the **Random Seed** field displays a value between **1**–**999,999**. You can copy and reuse this value to reproduce the same random sequence.
- **Crossfade:** Crossfade between sample layers using modulation sources like envelopes and LFOs in the **Mod Matrix**, allowing for wave sequencing or vector synthesis-like effects.

Use the **Sample Play** selector to determine how much of the sample is played.

- **One Shot**: The entire sample will play from start to end. Use this when you want to play short sounds.
- **Note Off:** The entire sample will play from start to end after the pad has been pressed and released.
- **Note On**: The sample will play only as long as the pad is held. This is better for longer samples so you can control a sound's duration by pressing and holding its corresponding pad.

Use the **Pad Polyphony** field to determine how the pad's sound behaves when multiple hits are registered. When set to **Mono**, only one pad will sound at a time. If a pad is played while another (or the same one) is still playing its sample/samples, the new pad will immediately mute all other currently playing pads in that track. When set to **Poly**, several pads can be triggered at the same time (limited only by the total number of voices available). You can also select a specific number of pads (**2**–**32**) so that you can trigger up to this many pads at the same time (unless they exceed the total number of voices available).

Use the **Mute Group** field to assign the selected pad to one of the 32 available groups. When pads assigned to the same mute group receive MIDI notes, the last pad played will silence all other pads in that mute group. A mute group affects pads within that track only; mute groups do not affect pads in other tracks.

Tip: This feature is useful for programming realistic hi-hats, so only the open or closed hat is heard.

The **Simultaneous Play** section lets you set up to four pads that can be triggered by pressing one pad only. This function is useful for triggering a stack of sounds (e.g., layered kick drums). Use each **Pad** field to select the desired pad.

The **Mute Targets** tab lets you select up to four pads (in the same track) for the currently selected pad. When the currently selected pad is played, it will immediately silence its mute targets. Use each **Pad** field to select the desired mute target.

Tips:

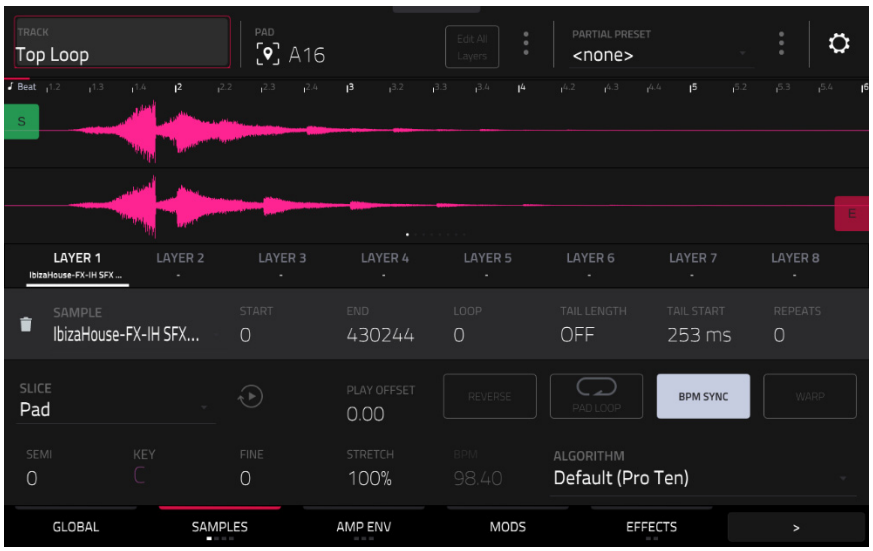
This feature is useful for programming realistic hi-hats, especially if only the open or closed hat should be heard.

This feature is similar to the mute group feature, available for both drum tracks and keygroup tracks.

Samples

Each pad can trigger up to eight samples, which are assigned in eight individual layers. Each layer has identical, independently assignable parameters.

Tap **Samples** to cycle through its four available tabs.

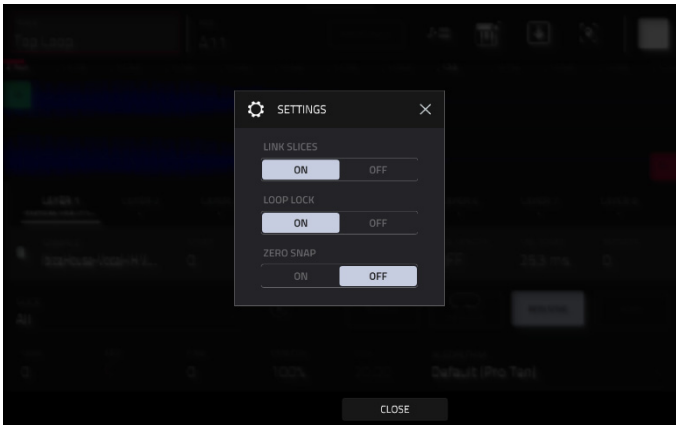


Use the **Partial Preset** field to save and load partial pad presets. These can be used to save and load the complete state of the synthesis engine that processes a pad, along with a selection of setup parameters, including filter and drum effect chains and expressive Mod Matrix routings.

Tap the **three dots icon** and then select **Save** to save the current pad state as a partial preset.

Tap the **three dots icon** and then select **Load** to load a partial preset saved on the internal drive or any connected external drives.

You can access the **Settings** window, which lets you configure certain settings in the Samples tab, from any of the four tabs by tapping the **gear icon**.



Use the **Link Slices** selector to set how the start point and end point of a slice in a larger sample is set. You can create these slices in Sample Edit Mode (Chop Mode).

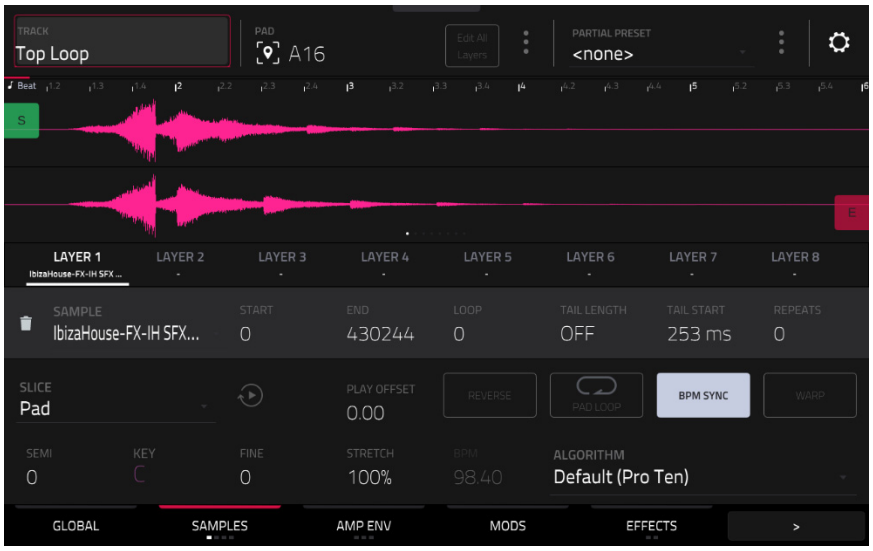
When on, changing the start point of a slice will also change the end point of the previous slice. Similarly, changing the end point of a slice will also change the start point of the next slice. Disable **Link Slices** if you are trying to create slices that use non-contiguous parts of the sample. This is the same as the **Link Slices** button in Sample Edit Mode.

Use the **Loop Lock** selector to “link” or “unlink” the loop point from the start point. When on, the loop point is the same as the start point. When off, the loop point is independent from the start point and indicated by a separate loop marker. This is the same as the **Loop Lock** button in Sample Edit Mode.

Use the **Zero Snap** selector to enable or disable the Zero Snap feature, which forces start points, end points, and loop points to occur only at the waveform’s “zero-crossings.” This can help to avoid clicks and glitches when playing a sample. This is the same as the **0 Snap** button in Sample Edit Mode.

To close the Settings window, tap **Close**, the **X** in the upper-right corner, or anywhere outside the window.

The **first Samples** tab contains the sample waveform for each layer and controls for its pitch, timing, and playback.



The upper half of the screen shows the waveform of the sample on the currently selected layer. The lower half shows the editing controls.

The waveform display shows the "active" section of the sample waveform. Swipe left or right on the waveform to move through it, or use **Q-Link knob 15** in Screen mode.

Above the waveform is the timeline, shown in bars, beats, and ticks.

Spread or pinch with two fingers to zoom in or out of the sample waveform, or use **Q-Link knob 16** in Screen mode.

Tap each layer number (**Layer 1–8**) under the waveform to select it. When selected, its sample waveform will be shown in the upper half of the screen and its settings will be shown in the lower half.

Use the **Sample** field to select the sample file for that layer. Remember that the sample has to be loaded into the project's sample pool beforehand. For information on how to load samples into a project, please see the ***Browser*** chapter.

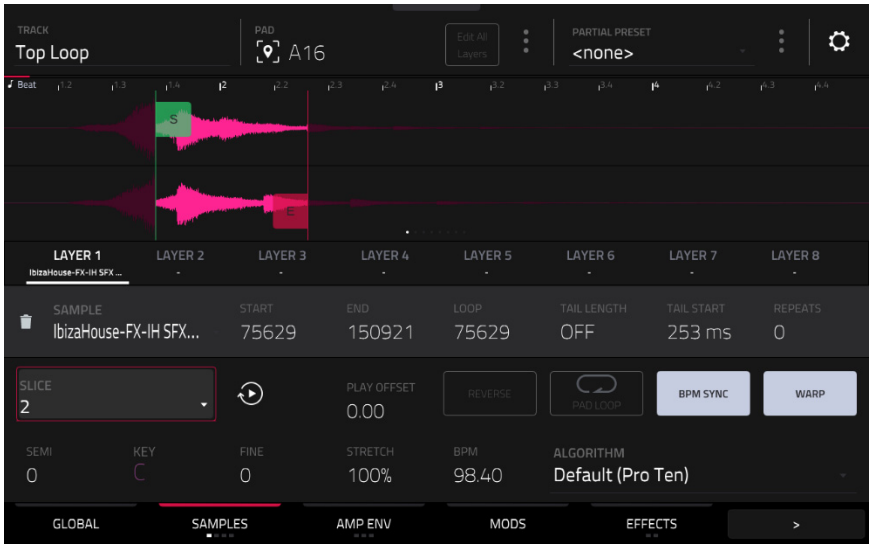
Important: The parameters in the **Samples** tabs work in conjunction with Chop Mode (in ***Sample Edit Mode***). Here's how it works:

When working in Sample Edit Mode and using Chop Mode to divide a sample into slices for your pads, you can convert a slice using **Non-Destructive Slice** or **Pad Parameters**.

A **Non-Destructive Slice** will let its pad to refer to that slice when you press it; the original sample remains intact, and each slice marker is like a "bookmark" for a pad. In Track Edit Mode, you'll see that the pad/layer to which it's assigned has its **Slice** drop-down menu set to the corresponding **slice number** in the original sample. Playing that pad will cause it to refer to that slice marker like a "bookmark" instead of creating an entirely new sample of that slice. This means that you no longer have to clutter your project with a new sample for every slice (though you can still use this earlier method, if you prefer).

A slice converted using **Pad Parameters** is very similar to a non-destructive slice described above. The difference is that in Track Edit Mode, the pads/layers they're assigned to have their **Slice** drop-down menus set to **Pad** (instead of the slice number), and the **start** and **end points** will correspond to the slice markers in the original sample.

Tap the **trash can icon** next to the sample field to remove the file from the layer.



The **green**/**S** marker and **red**/**E** marker are the start point and end point (respectively). These two points define the region of the sample that will be played.

To move the start point or end point, do any of the following:

- Tap and drag the **S** or **E** marker left or right.
- Use the **Start** or **End** fields shown below the waveform.
- When the **Q-Link knobs** are set to **screen** mode, use **Q-Link Knobs 1**-**4** to adjust the start point or **Q-Link Knobs 5– 8** to adjust the end point. The knobs move from coarse to fine adjustment going left to right.

Note: When **Loop Lock** is on, the loop position (as determined by the **Loop** field, if enabled) is the same as the sample's start point. When off, the loop position is independent from the start point.

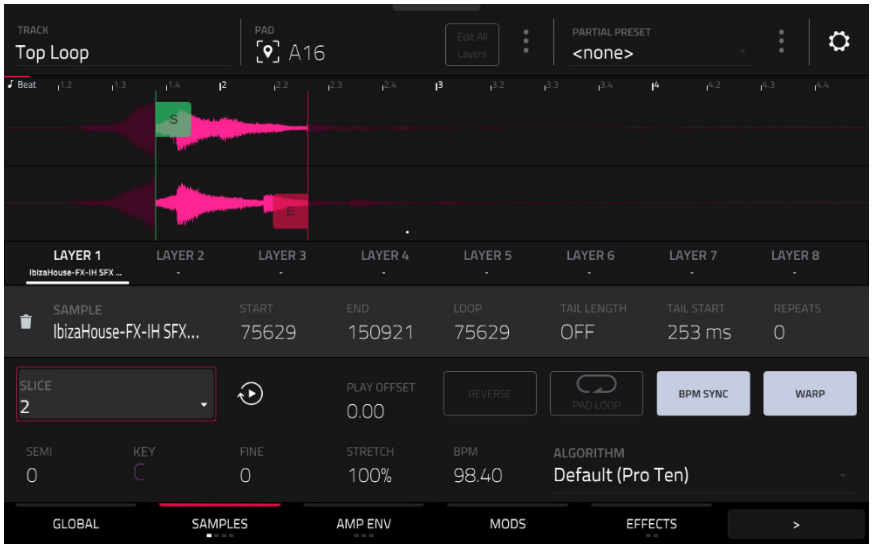
Use the **Loop** field to determine the position where the sample's playback will repeat when **Pad Loop** is activated.

Note: When **Loop Lock** is on, the loop position is the same as the sample's start point. When off, the loop position is independent from the start point.

Use the **Tail Length** and **Tail Start** fields to add extra audio tail to any chopped sample. This is useful for things like making an abrupt end to a sample sound more natural or adding experimental looping effects to a sample. The **Tail Length** parameter enables the sample tail and set its total length, and the **Tail Start** parameter sets the starting point within the tail for looping.

Use the **Repeats** field to set a sample to play a specified number of times. First make sure **Pad Loop** is set to **On**, then use this field to set the number of times you want to have the sample loop between the Sample Loop and End points. For example, a value of 4 would repeat the selected area of the sample 4 times.

Note: The behavior difference between Repeats set to 0 and 1 is only evident when a Pad's Sample Play parameter is set to **Note On**. Then, when hold a note, a Repeat value of 0 will create infinite repeats, and a value of 1 will play a sample one time through.

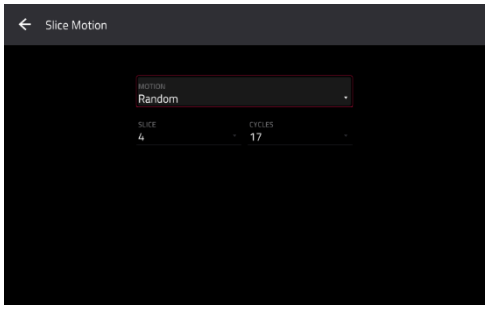


Use the **Slice** field to select what part/parts of the sample will play:

- **All**: The entire sample will play.
- **Pad**: The sample will play from the **Pad Start** position to the **Pad End** position, described ***earlier***. This also lets you activate ***Pad Loop*** (if the **Sample Play** field in the **LFO Modulation** tab is set to **Note On**).
- **Slice 1, 2, 3, etc.**: If you have sliced the sample in Chop Mode, you can select which slice will play when you trigger the pad.

You can also use **Q-Link Knob 13** when in Screen mode to select the slice.

When **Slice** is selected, you can tap the **Slice Motion** icon to trigger a different sample slice each time a pad is played.



Use the **Motion** setting to select **Increment**, which increments the slice number with each new note event, or **Random**, which plays your slices in a random order.

Use the **Slice** field to set the starting slice.

Use the **Cycles** field to select how many of the slices are played.

Tap the pad repeatedly, or turn **Note Repeat** on and hold the pad, to hear the slices of your chopped loop play.

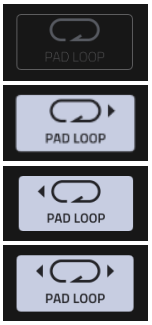
Use the **Play Offset** field to shift a sample window between the **Start**, **End**, and **Loop** points across the sample without altering their relative positions. For example, if you set these points to frame the first 1/16th note of a one-bar sample, you can use the **Play Offset** to shift that window to different 1/16th note positions within the sample. You must retrigger the sample to hear offset changes.

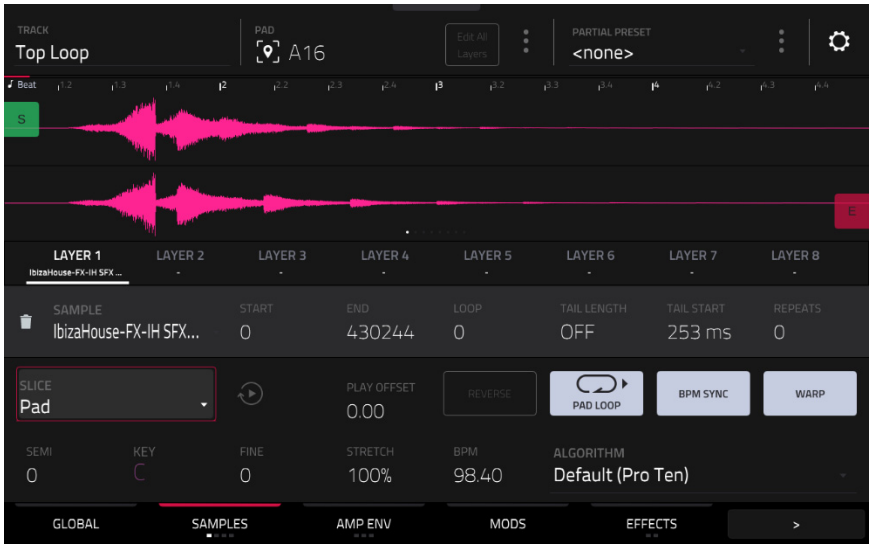
Use the **Reverse** button to select in which direction the sample will play. When on, the sample will play in reverse. When off, the sample will play in the normal forward direction.

Use the **Pad Loop** button to cycle through the available Pad Loop modes.

Important: For Pad Loop to work, you must (**1**) set the **Sample Play** field (in the **Global** tab) to **Note On** instead of One Shot and (**2**) set the **Slice** field (in the first **Samples** tab) to **Pad** instead of All or a slice number.

- **Off**: The sample will not loop.
- **Forward**: You can hold down the **pad** to cause that sample to repeat from the **Loop Position** to the end of the sample. Release the **pad** to stop the repeating playback.
- **Reverse**: You can hold down the **pad** to cause that sample to play in reverse, repeating from the end of the sample to the **Loop Position**. Release the **pad** to stop the repeating playback.
- **Alternating**: You can hold down the **pad** to cause that sample to play from the **Loop Position** to the end of the sample and then play in reverse until it reaches the **Loop Position** again. This will repeat as long as you are holding the pad down. Release the **pad** to stop the repeating playback.





Tap **BPM Sync** to enable or disable BPM Sync.

When BPM Sync and **Warp** are both enabled, the sample's BPM will be "locked" to the tempo of the project.

When BPM Sync is disabled but **Warp** is enabled, the sample will be independent of the tempo of your project—use the **Stretch** field to lengthen or shorten a sample.

Tap **Warp** to enable or disable warping of the sample.

When enabled, lengthening or shortening the sample (based on the BPM) will not change its pitch.

When disabled, lengthening or shortening the sample will also change its pitch and vice versa.

Note: The Warp algorithms are very CPU-intensive and can result in audio drop-outs during playback if used too freely. Be mindful of how (and how often) you use the warp function. You can reduce the CPU resources required by doing any/all of the following:

- Avoid using extreme **Stretch** values.
- Minimize the amount of pitch adjustment (e.g., the **Semi** and **Fine** parameters) of warped audio.
- Avoid warping very small sample regions.
- Warp as few samples or sample regions as possible (i.e., reduce the number of total number of voices of the polyphonic limit that use the Warp algorithm at a given time), especially instances where the warped regions start at the same time.
- Avoid rapidly triggering samples that are warped.
- If you have warped samples used in a drum kit, consider using the **Flatten Pad** function to consolidate the affected pad's layers into one audio sample (see ***here*** to learn about this). After you flatten the pad, its sample/samples no longer need to be warped.

Semi lets you transpose the selected layer up to 36 semitones up or down. This will affect the length of the sample (if **Warp** is off). This is the same as the **Semi** knob on the second Samples tab. The analyzed **Key** of the sample is displayed next to the **Semi** field and will adjust based on this value.

Fine provides fine-tuning of each layer by cents. This will affect the length of the sample (if **Warp** is off). This is the same as the **Fine** knob on the second Samples tab.

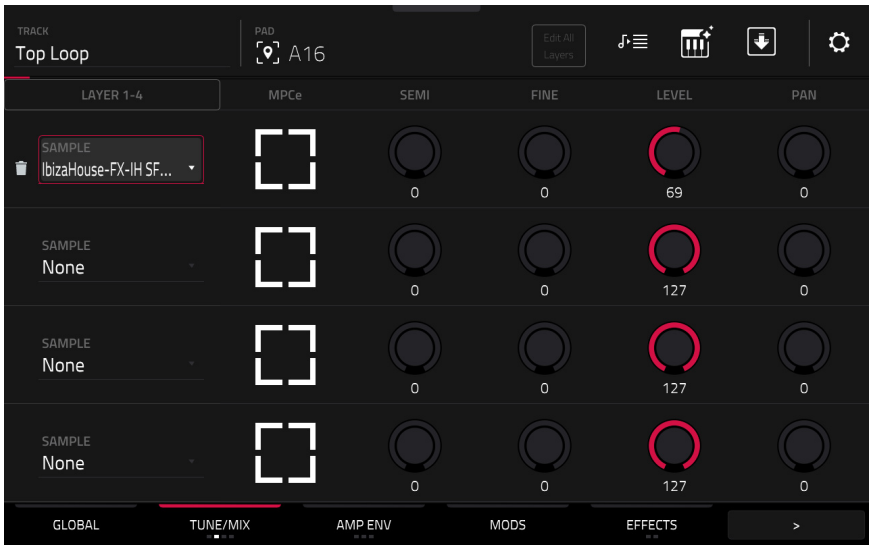
Use the **Stretch** field to set the "stretch factor," which affects how the sample is warped (if **Warp** is on).

Use the **BPM** field to enter a tempo, which affects how the sample is warped (if **Warp** is on).

Use the **Algorithm** field to select the audio warp algorithm for the sample: **Default**, **Pro Ten**, or **Repitch**. The **Default** algorithm can be set in the ***Preferences > Audio/Export*** menu.

Note: Changing the Algorithm setting here will override the Preferences setting.

The **second Samples** tab (**Tune/Mix**) contains controls for its pitch, volume level and panning.



Tap the **Layer 1–4/Layer 5–8** button to toggle between visible layers.

Use the **Sample** field to select the sample file for that layer. Tap the **trash can icon** next to the sample field to remove the file from the layer.

Use the **MPCe** field to enable or disable individual quadrants on each layer of the pad. MPCe quadrants can be specified using automation for a pad, or you can use the ***Mod Matrix*** to set up expressive routings.

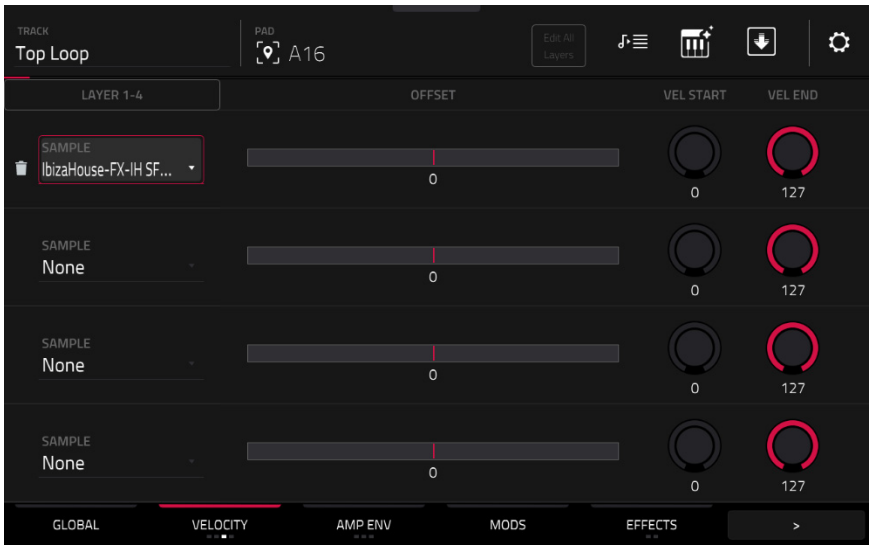
Semi lets you transpose the selected layer up to 36 semitones up or down. This will affect the length of the sample (if **Warp** is off). This is the same as the **Semi** field on the first Samples tab.

Fine provides fine-tuning of each layer by cents. This will affect the length of the sample (if **Warp** is off). This is the same as the **Fine** field on the first Samples tab.

Level lets you adjust each layer's volume, letting you control the "balance" of the samples assigned to the pad.

Pan adjusts the stereo placement of the respective layer.

The **third Samples** tab (**Velocity**) contains the control for its offset and velocity range.



Tap the **Layer 1–4/Layer 5–8** button to toggle between visible layers.

Use the **Sample** field to select the sample file for that layer. Tap the **trash can icon** next to the sample field to remove the file from the layer.

Use the **Offset** slider to determine a time offset for the sample's playback.

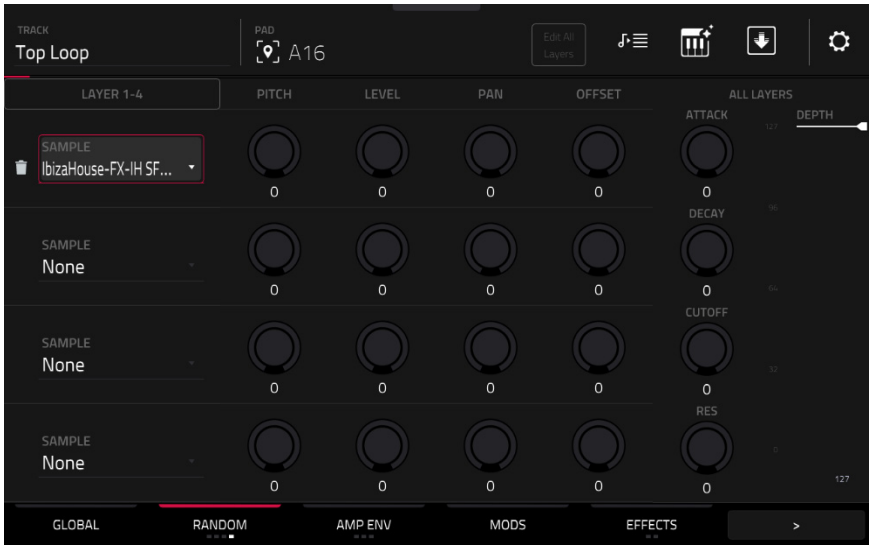
- **Positive values** (right of center): When the pad is played, playback will start immediately but at a later point in the sample specified by the offset value.
- **Negative values** (left of center): When the pad is played, playback will be delayed by the amount specified by the offset value.

Use the **Vel Start** and **Vel End** knobs to define the velocity range of each layer.

A range from **0** to **127** lets the layer respond to the entire velocity range which is input from the respective pad while, for example, a range from **100** to **127** lets the layer respond only to higher velocity levels. By assigning several samples of one instrument, you can create a realistic-sounding "multi-sample" by adjusting the velocity ranges of each layer accordingly.

For example, you may have three samples of a drum hit with low force, medium force, and high force. You can set each sample to a layer and set the Velocity ranges so only low velocities trigger the low-force sample, only mid-range velocities trigger the medium-force sample, and only high velocities trigger the high-force sample.

The **fourth Samples** tab (**Random**) contains the controls for adding randomization to sample parameters such as pitch, level and panning.



Tap the **Layer 1–4/Layer 5–8** button to toggle between visible layers.

Use the **Sample** field to select the sample file for that layer. Tap the **trash can icon** next to the sample field to remove the file from the layer.

Use the **Pitch** knobs to adjust the amount of randomization applied to each sample layer's pitch.

Use the **Level** knobs to adjust the amount of randomization applied to each sample layer's volume.

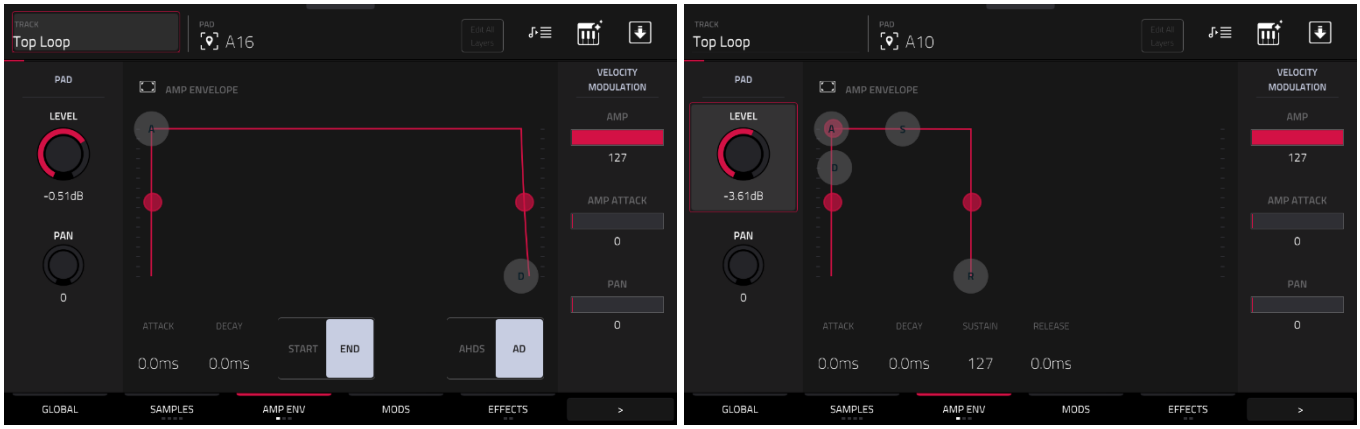
Use the **Pan** knobs to adjust the amount of randomization applied to each sample layer's stereo placement.

Use the **Offset** sliders to adjust the amount of randomization applied to each sample layer's time offset.

The **All Layers** section will apply randomization to all sample layers for the following envelope parameters: **Attack**, **Decay**, **Cutoff** and **Resonance**. Use the **Depth** slider to control the amount of envelope randomization applied overall.

Envelopes

Tap **Envelopes** to cycle through its three available tabs.



The **first Envelope** tab contains the amplitude modulation envelope.

Pad Level controls the overall volume level of the loaded sample/samples.

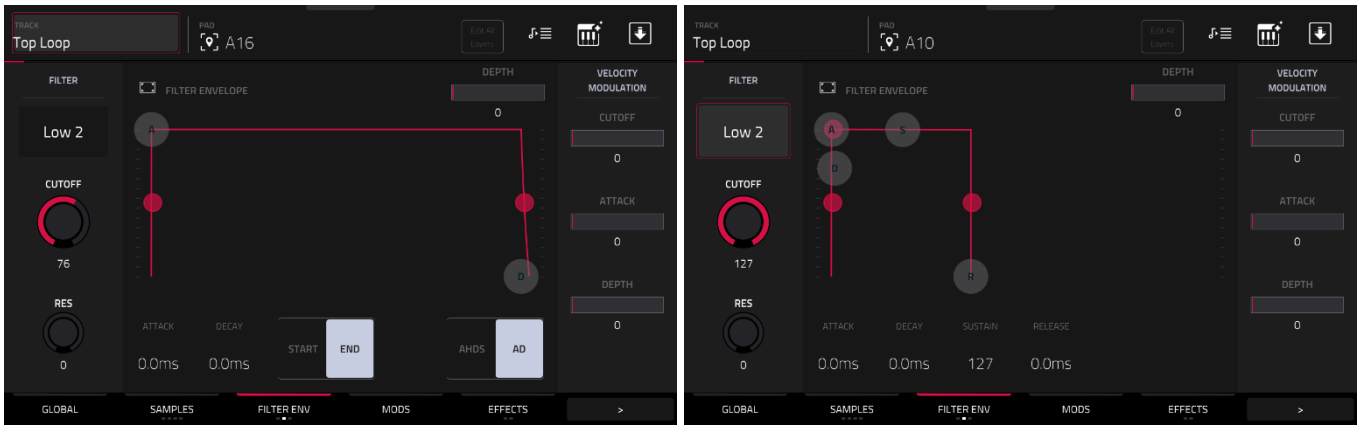
Pad Pan controls the overall panning of the loaded sample/samples in the stereo field.

The **Amp Envelope** controls affect level changes over time. Use the fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope’s influence on the filter frequency with the **Env** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Velocity Modulation** controls determine how much the velocity affects the volume level of the amplitude envelope (**Amp**), the attack of the amplitude envelope (**Amp Attack**), and/or the panning of the sound (**Pan**).

When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding slider.

The **second Envelope** tab contains the filter modulation envelope.



Use the **Type** field to select a filter for the selected pad. See ***Appendix*** > ***Glossary*** > ***Filter*** for an explanation of the available filter types.

Use the **Cutoff** knob to set the cutoff frequency for low-pass and high-pass filter types or the center frequency for band-pass and band-stop filter types.

Use the **Reso** knob to set the resonance/emphasis of the frequencies around the cutoff point.

Tip: Use values lower than **80** to give more brilliance to the sound. At values higher than **80**, the sound will result in a strong audible boost around the cutoff frequency.

The **Filter Envelope** controls affect the filter frequency. Use the fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope’s influence on the filter frequency with the **Depth** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

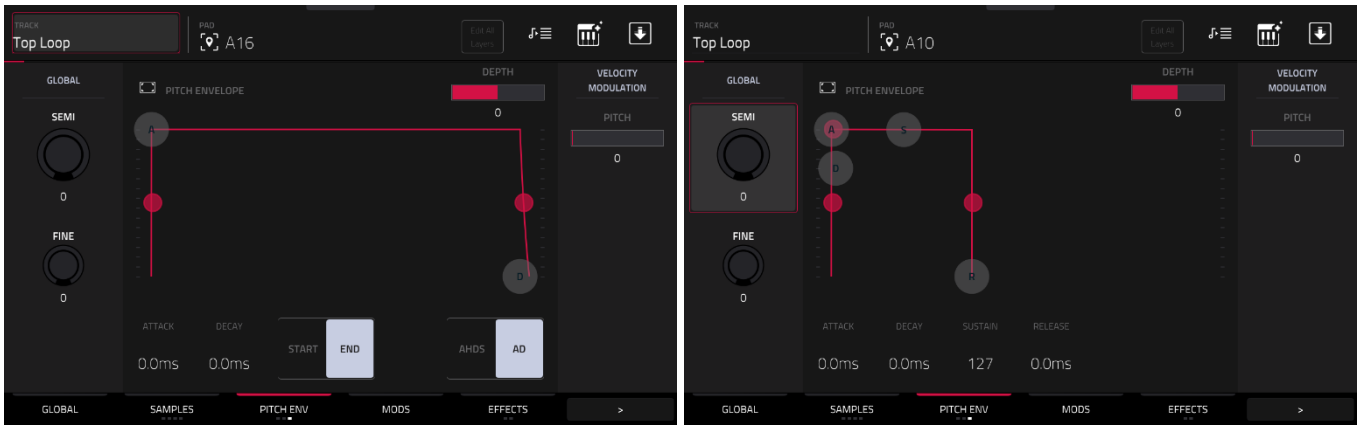
Use the **Depth** slider to determine the amount of influence the filter envelope has on the cutoff frequency. Higher settings will increase the modulation of the filter by the envelope; lower settings will result in only subtle changes of the filter **Cutoff** over time.

Tip: **To give a sound a more distinctive attack**, increase the **Depth** setting and set low **Atk** and **Decay** values as well as a medium-low **Sust** value of the **Filter Envelope**. This will start a sound with the filter opened and close it shortly afterward, giving it a bright start followed by a darker sustain. String sounds, on the other hand, can sound much more “alive” with low **Depth** settings and a high **Atk** value, resulting in a slight fade-in of the higher frequencies.

The **Velocity Modulation** controls determine how much the velocity affects the cutoff frequency of the filter envelope (**Cutoff**), the attack phase of the filter envelope (**Attack**), and/or depth of influence the filter envelope has on the cutoff frequency (**Depth**).

When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding slider.

The **third Envelope** tab contains the pitch modulation envelope.



Global Semi lets you transpose the pad up to 36 semitones up or down. This will affect the length of the sample (if **Warp** is off). This is the same as the **Semi** field on the **Global** tab.

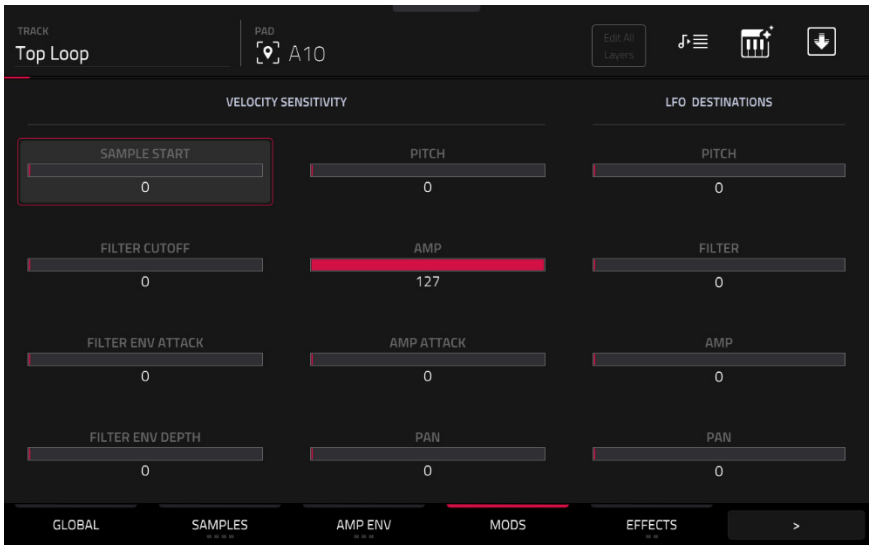
Global Fine provides fine-tuning of each layer by cents. This will affect the length of the sample (if **Warp** is off). This is the same as the **Fine** field on the **Global** tab.

The **Pitch Envelope** controls affect the pad's pitch. Use the fields or tap and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope's influence on the pitch with the **Depth** slider. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Velocity Modulation** control determines how much the velocity affects the pitch envelope (**Pitch**).

When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the **Pitch** slider.

Mods (Modulations)



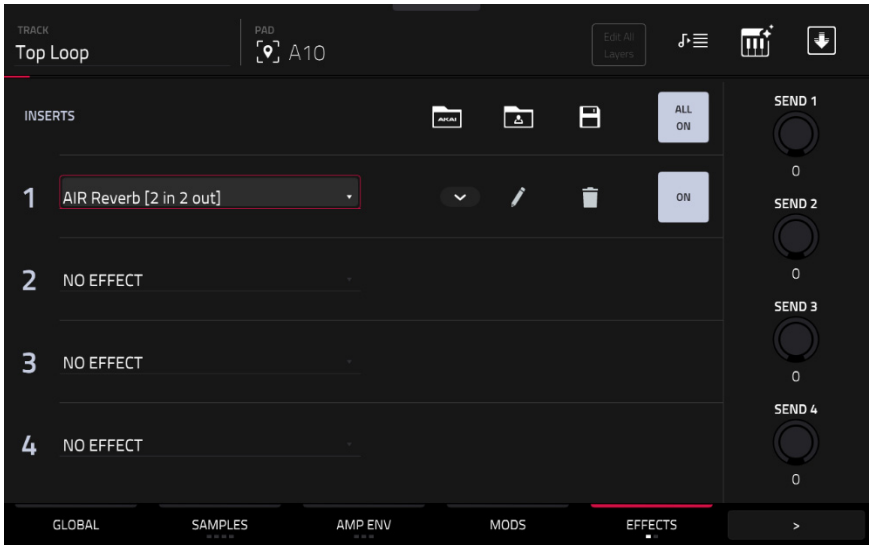
Use the **Velocity Sensitivity** sliders to set how much velocity is required to modulate certain other parameters:

- **Sample Start** sets how much velocity is needed (for a triggered pad) to modulate the sample start point.
- **Filter Cutoff** uses the velocity of a pad to modulate the cutoff frequency directly.
- **Filter Env Attack** sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Filter envelope.
- **Filter Env Depth** enables velocity information to control the amount of the filter envelope's effect on the cutoff frequency.
- **Pitch** uses the velocity of a pad to modulate the sample pitch.
- **Amp** uses the velocity of a pad to change the sample level. Lower this value to reduce the effect of velocity on the amplitude.
- **Amp Attack** sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Amp envelope.
- **Pan** uses the velocity of a pad to control the stereo panning.

Use the **LFO Destinations** sliders to determine how much the LFO affects the pitch of the sound (**Pitch**), the cutoff frequency of the filter (**Filter**), the volume level of the sound (**Amp**) and panning of the sound (**Pan**).

Effects

Tap **Effects** to cycle through its two available tabs.



Inserts

In the first Effects tab, you can select up to four insert effects for each pad. To learn how to use insert effects, please see ***General Features*** > ***Effects*** > ***Insert Effects***.

To add an effect:

1. Double-tap the desired **Inserts** slot. A list of effects will appear.
2. Swipe up or down to move through the list.

   You can tap the **Type** and **Manufacturer** buttons to sort your effects by those categories.
3. **To load an effect, double-tap it**, or tap **Select**.

   To close the list, tap **Close**.

Tap the **Akai folder** icon to load a factory FX rack. You can choose from a number of preset combinations of insert effects by applications like Drums and Percussion, Voice, LoFi, Mastering, and more.

Tap second **folder** icon to load a saved FX rack.

Tap the **disk** icon to save an FX rack.

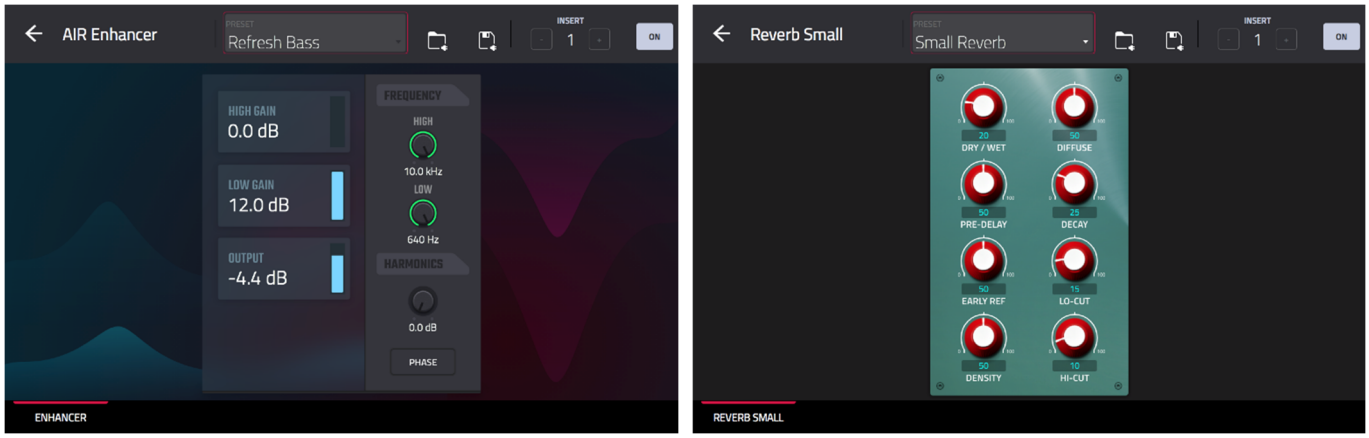
Tap the **All On**/**Off** button in the upper-right corner to enable or disable all four insert effects.

Tap the **arrows** next to the insert slot to rearrange an insert effect. Adjacent effects will be moved up or down in relation.

Tap the **pencil icon** to adjust the effect's parameters. Use the controls to set the value of each parameter. These values affect only this instance of the effect; insert effects are not global.

Tap the **trash can icon** to remove an effect from its slot.

Tap the **On**/**Off** button for the slot to enable or disable the effect.



Tap the **trash can icon** to remove the effect from its slot.

Tap the **folder** icon next to the preset name at the top of the display to open the file browser and load an effect preset.

Tap the **disk** icon next to the insert selector at the top of the display to save a new effect preset.

Tap the **-/+** buttons to rearrange the insert effect. Adjacent effects will be moved up or down in relation.

Tap the **On/Off** button to enable or disable the effect.

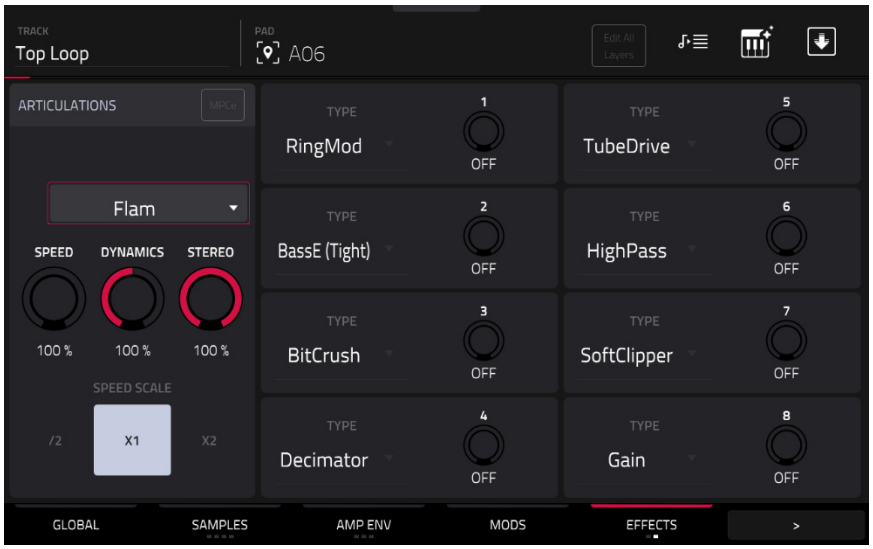
Sends

The audio of the pad will be routed to send effects (if you have any loaded) at their designated send levels. The return channels will then send the audio to an assigned main output at the designated return levels.

Use the **Send** knobs to set the volume level of the signal the pad will route to each send effect.

Important: To learn about send effects, please see ***General Features*** > ***Effects*** > ***Send/Return Effects***.

The **second Effects** tab contains controls for **Articulations** and **Drum FX**.



The **Articulations** section lets you apply variable drum articulations and rudiments like flams, paradiddles, and other dynamic phrases.

Tap the **MPCe** button to enable MPCe articulation control. This allows you to assign up to four different articulations for dynamic articulation switching. When enabled, tap the **1**–**4** buttons below to select pad quadrants. MPCe quadrants and X/Y values can be input as automation for a pad, or you can use the ***Mod Matrix*** to set up routings to use the different articulation layers.

Tap the dropdown menu to select the type of articulation applied to the pad or pad quadrant. Articulations are grouped into eight categories: **Default Articulations**, **Standard Rudiments**, **Dotted Rudiments**, **Triplet Rudiments**, **Rolls**, **Pitched Rolls**, **Metric Rudiments**, and **Note Repeats**.

Use the **Speed** knob to adjust the length of the articulation (**25**–**400%**). You can also use the **Speed Scale /2**, **x1**, and **x2** buttons to quickly modify the set articulation speed.

Use the **Dynamics** knob to apply velocity modulation to the articulation (**0**–**200%**).

Use the **Stereo** knob to adjust the stereo spread of the articulation (**0**–**100%**).

The **Drum FX** section lets you add and control up to eight additional, simplified effects per pad in a Drum track.

Use the **Type** dropdown menu to select the effect in each slot:

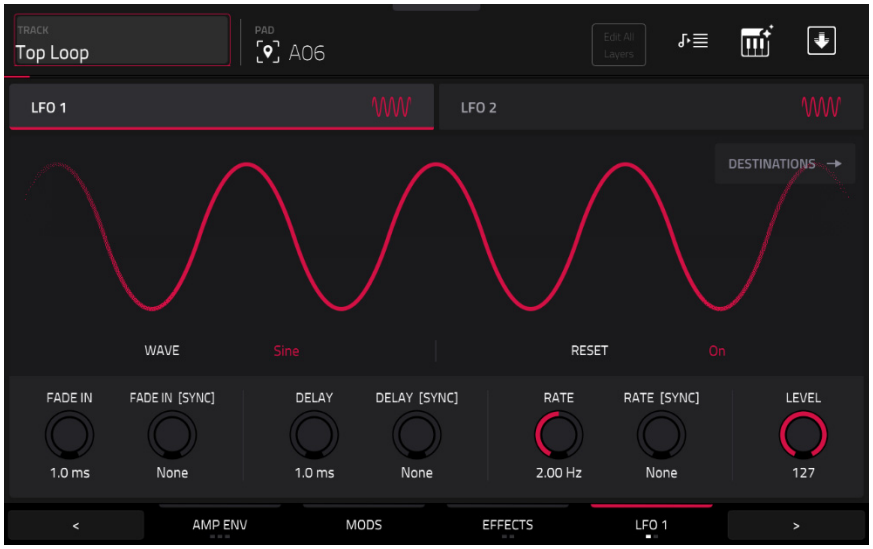
- Ring Mod
- Bit Crush
- Decimator
- Tube Drive
- Soft Clipper
- Hard Clipper
- Low Pass
- High Pass
- Rectifier
- Bass Enhancer (Tight)
- Bass Enhancer (Medium)
- Bass Enhancer (Wide)
- Wave Folder
- Gain

Use each knob to adjust the selected effect parameter.

LFO

Tap **LFO** to cycle between the **LFO 1** and **LFO 2** controls. You can also tap the **LFO 1** and **LFO 2** headers to toggle between them.

A low-frequency oscillator (LFO) generates a periodic waveform with an adjustable frequency and shape which can be used for modulation purposes.



Use the **Wave** field to select the LFO waveform type:

- **Sine**: Best suited for smooth modulations.
- **Tri** (Triangle): Best suited for smooth modulations.
- **S&H**: Samples a random value and holds it until the next value is generated.
- **Saw:** Can generate interesting filter or volume changes.
- **SawD** (Saw Down): Can generate interesting filter or volume changes.
- **Sqr** (Square): Interesting results with hard-panning modulations.
- **Noise**: Generates random values and glides.

Use the **Reset** field to determine whether the LFO retriggers on each note played (**On**) or not (**Off**).

Use the **Fade In** knob to set the length of time for the LFO to reach full level once triggered.

Use **Fade In [Sync]** to synchronize the fade in with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the fade in length is determined by the **Fade In** knob.

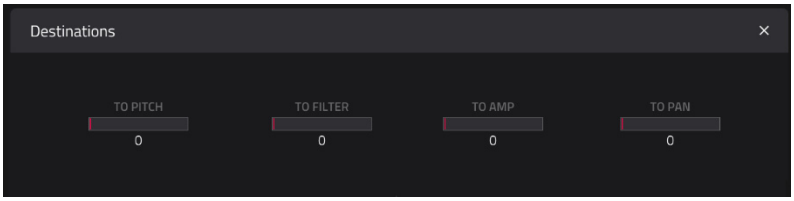
Use the **Delay** knob to set the length of time between when the note is triggered and when the LFO is triggered.

Use **Delay [Sync]** to synchronize the delay time with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the delay length is determined by the **Fade In** knob.

Use the **Rate** knob to determine the LFO frequency. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

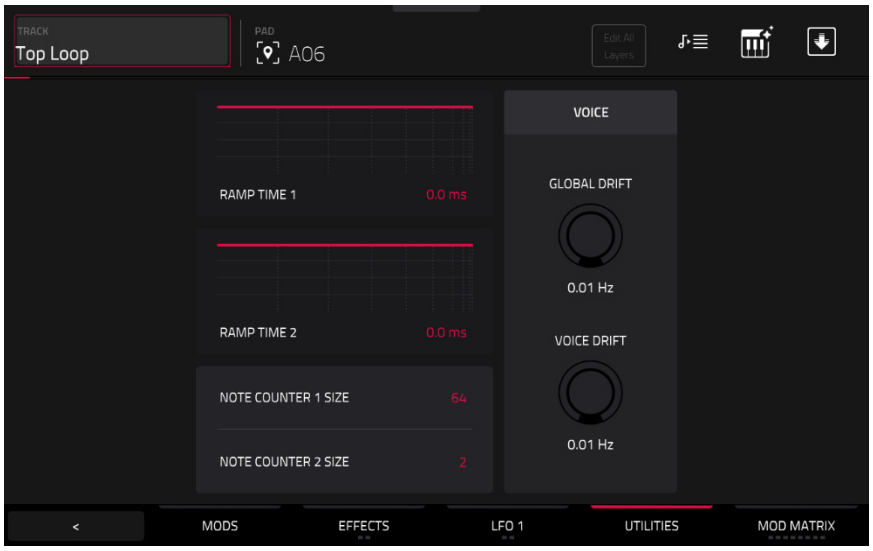
Use **Rate [Sync]** to synchronize the LFO's rate with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the frequency is determined by the **Rate** knob.

Use the **Level** knob to set the overall amount of modulation applied by the LFO. At lower values, the modulation is more subtle, and at higher values it is more extreme.



Tap the **Destinations** → button in the LFO window to display the **Destinations** sliders. Use these sliders to determine how much the LFO affects the pitch of the sound (**Pitch**), the cutoff frequency of the filter (**Filter**), the volume level of the sound (**Amp**) and panning of the sound (**Pan**).

Utilities



Use the **Ramp Time 1/2** fields to adjust the ramp length. These can be used to apply additional modulation shaping to other parameters via the ***Mod Matrix***.

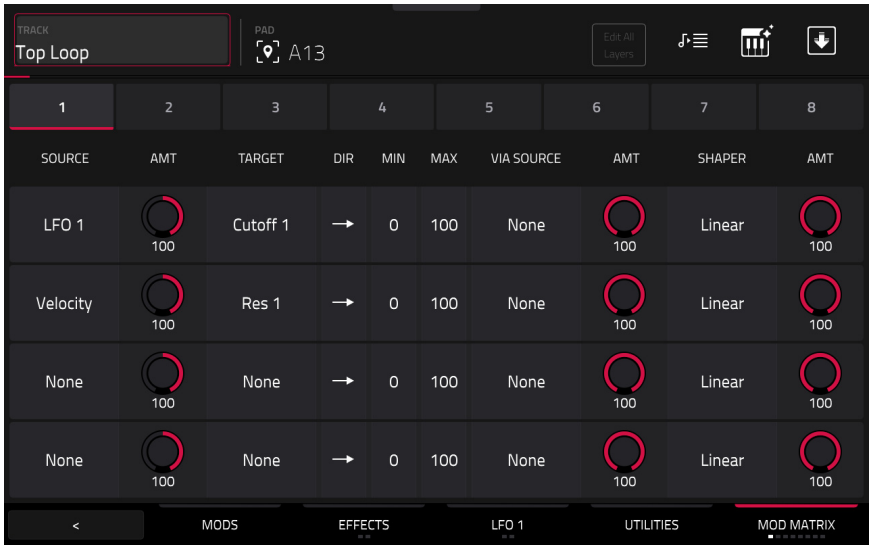
Use the **Note Counter 1/2 Size** fields to set stepped modulation values. These can be used as part of the ***Mod Matrix*** to change parameter values based on the number of voices selected (**2**–**64**).

The **Voice** section allows you to add additional free running LFOs which can be used for subtle modulations in the ***Mod Matrix***. Use the **Global Drift** knob to set the amount of drift applied to the entire drum track, or use the **Voice Drift** knob to set the amount of drift applied to the selected pad.

Mod Matrix

Tap the **Mod Matrix** tab to cycle through its eight available tabs. Alternatively, tap the numbered headers below the toolbar to select that tab.

The 32 available modulation points can be configured to add a wide variety of sound shaping tools.



Use the **Source** field to select the modulation source.

Use the first **Amt** (Amount) field to set how much modulation is applied by the source.

Use the **Target** field to select the output target for modulation.

Use the **Direction** field to set whether the modulation direction is **bipolar** or **unipolar**.

Use the **Min** and **Max** fields to set the minimum and maximum modulation levels of the selected target.

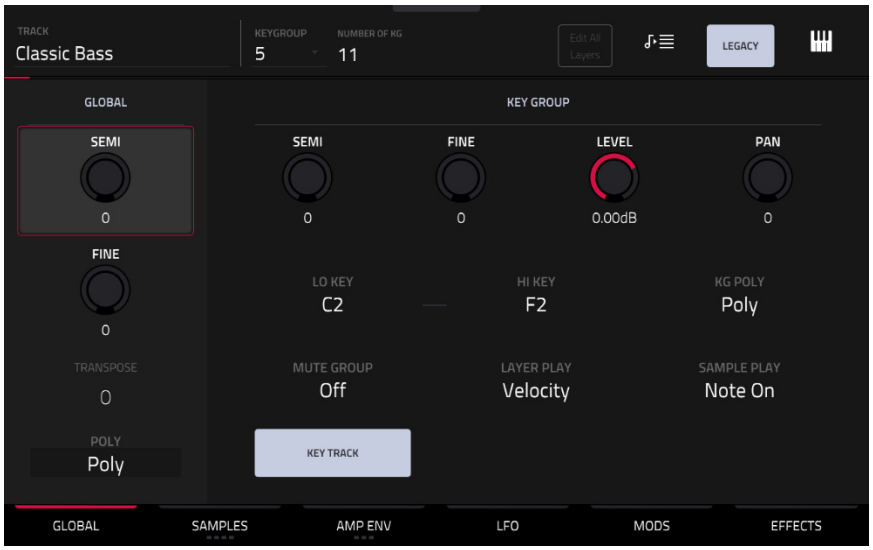
Use the **Via Source** field to add a secondary modulation shaper using another source.

Use the second **Amt** (Amount) field to set how much modulation is applied by the secondary source.

Use the **Shaper** field to apply an additional modifier that affects the modulation relationship between the source and target.

Use the third **Amt** (Amount) field to set how much modulation is applied by the shaper.

Keygroup Tracks



When using keygroup tracks, Track Edit Mode lets you edit the parameters for each keygroup.

Tap the **Legacy** button to enable or disable the Legacy Keygroup editing functions. When this button is enabled, keygroup editing functions the same as it has in previous Force releases. When this button is disabled, the new Advanced keygroup synthesis engine is enabled. Legacy mode is enabled by default. The following sections are labeled as being available in **Legacy** mode, **Advanced** Mode, or both **Legacy and Advanced** modes.

Press a pad to select its keygroup. Its parameters will appear on the screen immediately. Alternatively, use the **Keygroup** field at the top of the screen.

Tap the tabs at the bottom of the screen to view its specific parameters, such as **Global** or **Samples**. For tabs with multiple pages, tap the buttons multiple times to cycle through the available parameters.

Tap the **Keygroup** field to select a keygroup to edit. You can also select **All** to edit all keygroups simultaneously.

Number of KG (keygroups) lets you create up to 128 keygroups within a keygroup track. This is useful when working with multi-samples. For example, if you want to create a realistic piano, you can use different keygroups (e.g., 88 for a grand piano) with every keygroup containing its own sampled note (with up to four possible velocity layers).

Tap the **Edit All Layers** button to enable or disable editing control of all sample layers at the same time. When this is enabled, edits made to sample parameters such as **Start/End** points or **Semi/Fine** tuning on any one layer are automatically applied uniformly to all four layers at once (even if some layers are empty).

Tap the **Stems** icon to open the Create Stems Function in the Process Sample window. You can use this process to isolate different parts of the sample and separate them into new stem samples.

Click the icons to select or deselect from the following elements to create stems of:

- **Vocals:** Isolate vocal elements of the track into a stem.
- **Bass:** Isolate bass elements of the track into a stem.
- **Drums:** Isolate percussive elements of the track into a stem.
- **Other:** Isolate other musical textures, such as keys or guitars, into a stem.

Use the **Track** dropdown menu to select the track where the stems will be added.

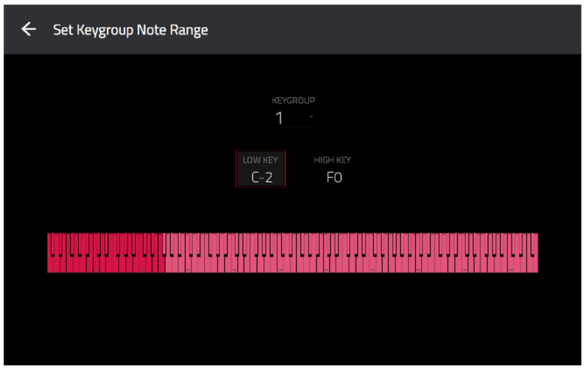
The **Assign to Pad** function determines where the stem separated samples are added. When checked, you can select a pad in the chosen Track using the dropdown menu, and the stems will be added to the four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

Tap the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Tip: Uncheck this box if you want to retain slices with the stemmed results, otherwise, they will be bypassed.

Note: To purchase MPC Stems, visit **akaipro.com/stems**, and then activate your purchase in the ***Menu > Preferences > Activate Plugins*** menu.

Tap the **piano-keys icon** to edit the note range of the current keygroup. This will open the **Set Keygroup Note Range** window. This lets you restrict the key range used for a sample's playback. Only notes with a key number higher or equal (**Low Key**) or lower and equal (**High Key**) to the selected value will trigger a sound.



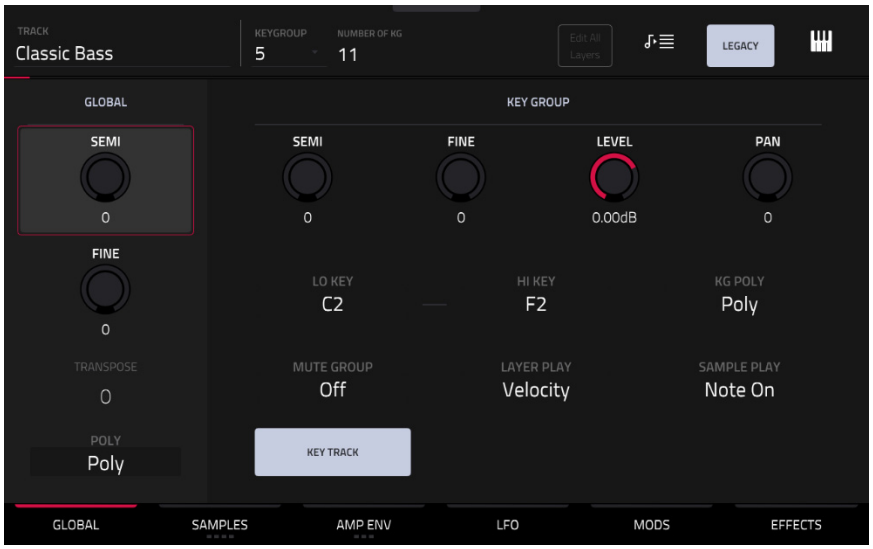
Tips:

Alternatively, you can set the current keygroup's note range by using the **Lo** and **Hi** fields under **Note Range** in the **Global** tab.

Set the **Lo** parameter to **A0** and the **Hi** parameter to **C8** to emulate the range of a standard 88-key piano.

Global (Legacy and Advanced)

In the Global tab, you can set the playback mode and tuning for the overall track. This tab has the same features and functions in both **Legacy** and **Advanced** editing.



Global Semi lets you tune the track up to 36 semitones up or down.

Global Fine provides fine-tuning of the track up to 99 cents up or down.

Transpose shifts the pitch of the MIDI notes sent to the track up to 36 semitones up or down.

Poly (polyphony) sets the playback mode for the track's keygroups. In **Mono** Mode, only one keygroup will sound at a time. If a keygroup is played while another (or the same one) is still playing its sample/samples, the new keygroup will immediately mute all other currently playing keygroups in that track. In **Poly** Mode, several keygroups can be triggered at the same time (limited only by the total number of voices available).

The **Key Group Semi** field lets you transpose the sample up to 36 semitones up or down, while **Fine** provides fine-tuning of each layer up to 99 cents up or down.

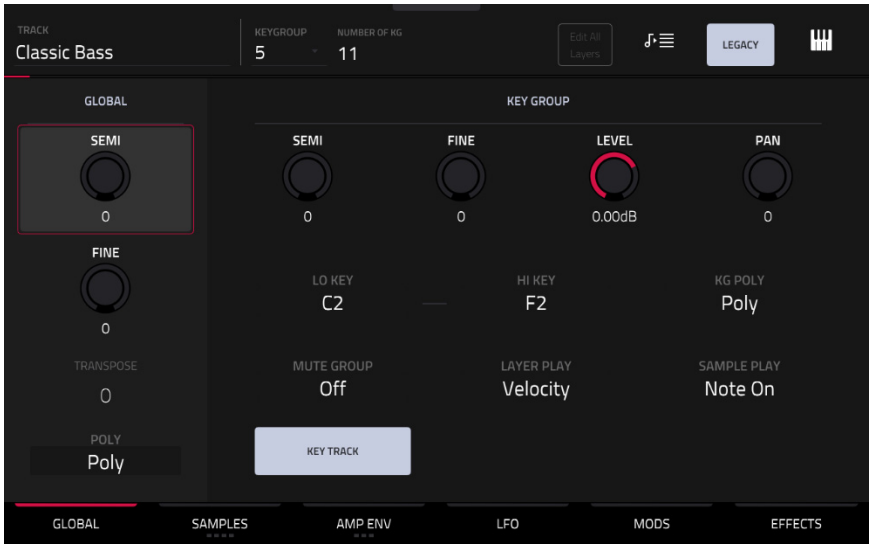
Tip: The **Edit Layers** section has some parameters similar to those in this section (**Level**, **Pan**, **Semi**, **Fine**, **Note Range**). Remember that **Key Group** parameters control the overall settings for the sample, while **Edit Layer** parameters control the settings for each layer (up to 4).

Key Group Level controls the overall volume level of the loaded sample/samples.

Key Group Pan controls the overall panning of the loaded sample/samples in the stereo field.

The **Lo Key** and **Hi Key** fields let you restrict the key range used for a sample's playback. Only notes with a key number higher or equal (**Lo**) or lower and equal (**Hi**) to the selected value will trigger a sound. The settings for **Lo** and **Hi** are also shown in the virtual keyboard in the **Edit Layers** section. Alternatively, tap the **piano-keys icon** to open the **Set Keygroup Note Range** window.

Tip: Set the **Lo** parameter to **A0** and the **Hi** parameter to **C8** to emulate the range of a standard 88-key piano.



Use the **KG Polyphony** (keygroup polyphony) field to determine how the keygroup will play. When set to **Mono**, only one pad will sound at a time. If a pad is played while another (or the same one) is still playing its sample/samples, the new pad will immediately mute all other currently playing pads in that track. When set to **Poly**, several pads can be triggered at the same time, limited only by the total number of voices available. You can also select a specific number of pads (**2**–**32**) so that you can play up to this many pads at the same time (unless they exceed the total number of voices available).

Use the **Mute Group** field to assign the selected keygroup to one of the 32 available mute groups. When keygroups assigned to the same mute group receive MIDI notes, the last keygroup played will silence all other keygroups in that mute group. A mute group affects keygroups within that track only; mute groups do not affect keygroups in other tracks.

Key Track allows you to switch a sample's automatic transposition on or off. If this is off, you will always hear the same pitch of the sample, no matter which note is triggered by pads or a connected MIDI keyboard.

Layer Play determines how multiple samples assigned to the same pad are played:

- **Cycle** (**Cyc**): Each time the pad is played, it will play the next layer's sample. In other words, the samples will cycle through the layers as follows: 1, 2, 3, 4, 1, 2, 3, 4… etc.
- **Velocity** (**Vel**): The pad will switch between layers depending on how hard you press a pad.
- **Random** (**Ran**): Each time the pad is played, it will play one of its layer's samples at random. When selected, the **Random Seed** field displays a value between **1**–**999,999**. You can copy and reuse this value to reproduce the same random sequence.
- **Crossfade:** Crossfade between sample layers using modulation sources like envelopes and LFOs in the **Mod Matrix**, allowing for wave sequencing or vector synthesis-like effects.

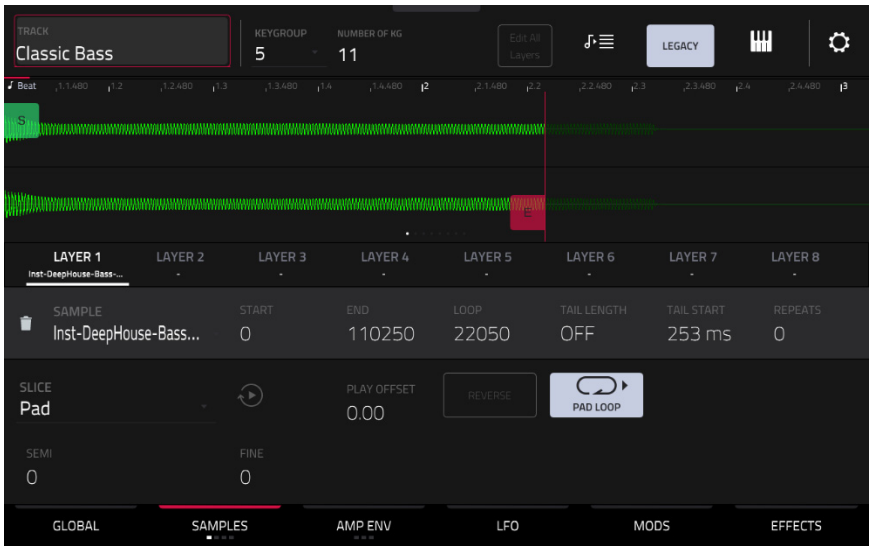
Sample Play determines how much of the sample is played:

- **One Shot**: The entire sample will play from start to end. Use this when you want to play short sounds.
- **Note Off:** The entire sample will play from start to end after the pad has been pressed and released.
- **Note On**: The sample will play only as long as the pad is held. This is better for longer samples so you can control a sound's duration by pressing and holding its corresponding pad.

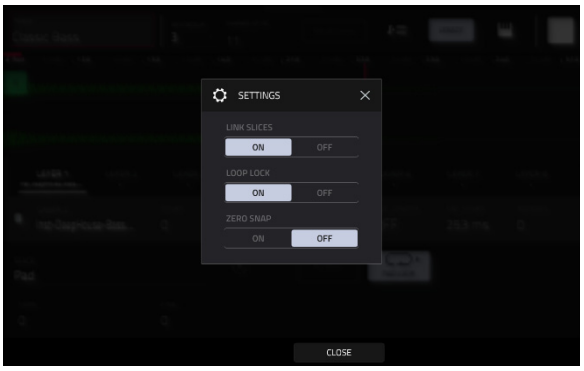
Samples (Legacy and Advanced)

Each keygroup can trigger up to four samples, which are assigned in four individual layers. Each layer has identical, independently assignable parameters.

Tap **Samples** to cycle through its available tabs. The first three tabs have identical features and functions in both **Legacy** and **Advanced** editing. **Legacy** features a fourth tab (**Random**), which is a separate tab in **Advanced** mode (see ***Randomize (Advanced)***).



You can access the **Settings** window, which lets you configure certain settings in the Samples tab, from any of the three tabs by tapping the **gear icon**.



Use the **Link Slices** selector to set how the start point and end point of a slice in a larger sample is set. You can create these slices in Sample Edit Mode (Chop Mode).

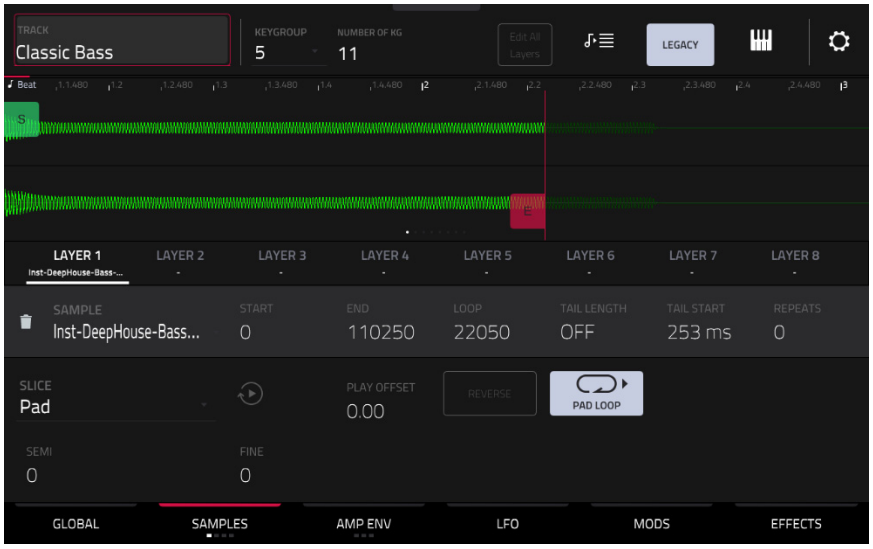
When on, changing the start point of a slice will also change the end point of the previous slice. Similarly, changing the end point of a slice will also change the start point of the next slice. Disable **Link Slices** if you are trying to create slices that use non-contiguous parts of the sample. This is the same as the **Link Slices** button in ***Sample Edit Mode***.

Use the **Loop Lock** selector to “link” or “unlink” the loop point from the start point. When on, the loop point is the same as the start point. When off, the loop point is independent from the start point and indicated by a separate loop marker. This is the same as the **Loop Lock** button in Sample Edit Mode.

Use the **Zero Snap** selector to enable or disable the Zero Snap feature, which forces start points, end points, and loop points to occur only at the waveform’s “zero-crossings.” This can help to avoid clicks and glitches when playing a sample. This is the same as the **0 Snap** button in Sample Edit Mode.

Tap **Close**, the **X** in the upper-right corner, or anywhere outside the window to close the Settings window.

The **first Samples** tab contains the sample waveform for each layer and controls for its pitch, timing, and playback.



The upper half of the screen shows the waveform of the sample on the currently selected layer. The lower half shows the editing controls.

The waveform display shows the “active” section of the sample waveform. Swipe left or right on the waveform to move through it.

Above the waveform is the timeline, shown in bars, beats, and ticks.

Tap each layer number (**Layer 1**–**8**) under the waveform to select it. When selected, its sample waveform will be shown in the upper half of the screen and its settings will be shown in the lower half.

Use the **Sample** field to select the sample file for that layer. Remember that the sample has to be loaded into the project’s sample pool beforehand. For information on how to load samples into a project, please see the ***Browser*** chapter.

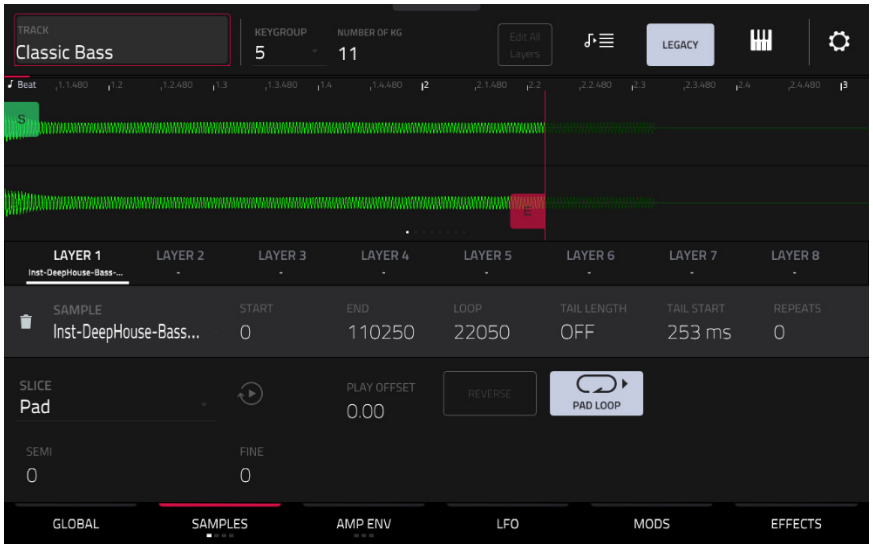
Important: The parameters in the **Samples** tabs work in conjunction with Chop Mode (in Sample Edit Mode). Here’s how it works:

When working in Sample Edit Mode and using Chop Mode to divide a sample into slices for your pads (keygroups), you can convert a slice using **Non-Destructive Slice** or **Pad Parameters**.

A **Non-Destructive Slice** will let its keygroup to refer to that slice when you press a pad in that keygroup; the original sample remains intact, and each slice marker is like a “bookmark” for a keygroup. In Track Edit Mode, you’ll see that the layer to which it’s assigned has its **Slice** drop-down menu set to the corresponding **slice number** in the original sample. Playing that keygroup will cause it to refer to that slice marker like a “bookmark” instead of creating an entirely new sample of that slice. This means that you no longer have to clutter your project with a new sample for every slice (though you can still use this earlier method, if you prefer).

A slice converted using **Pad Parameters** is very similar to a non-destructive slice described above. The difference is that in Track Edit Mode, the layers they’re assigned to have their **Slice** drop-down menus set to **Pad** (instead of the slice number), and the **start** and **end points** will correspond to the slice markers in the original sample.

Tap the **trash can icon** next to the sample field to remove the file from the layer.



The **green**/**S** marker and **red**/**E** marker are the start point and end point (respectively). These two points define the region of the sample that will be played.

To move the start point or end point, do any of the following:

- Tap and drag the **S** or **E** marker left or right.
- Use the **Start** or **End** fields shown below the waveform.
- When the **Q-Link knobs** are set to **screen** mode, use **Q-Link Knobs 1** and **5** to adjust the start point or **Q-Link Knobs 2** and **6** to adjust the end point. Q-Link Knobs 1 and 2 provide fine adjustment and Q-Link Knobs 5 and 6 provide coarse adjustment.

Note: When **Loop Lock** is on, the loop position (as determined by the **Loop** field, if enabled) is the same as the sample's start point. When off, the loop position is independent from the start point.

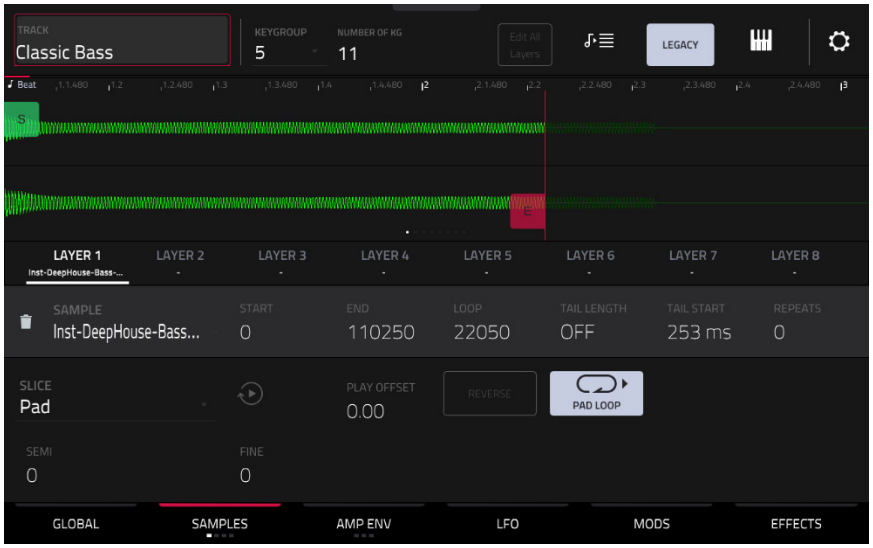
Use the **Loop** field to determine the position where the sample's playback will repeat when **Pad Loop** is activated.

Note: When **Loop Lock** is on, the loop position is the same as the sample's start point. When off, the loop position is independent from the start point.

Use the **Tail Length** and **Tail Start** fields to add extra audio tail to any chopped sample. This is useful for things like making an abrupt end to a sample sound more natural or adding experimental looping effects to a sample. The **Tail Length** parameter enables the sample tail and set its total length, and the **Tail Start** parameter sets the starting point within the tail for looping.

Use the **Repeats** field to set a sample to play a specified number of times. First make sure **Pad Loop** is set to **On**, then use this field to set the number of times you want to have the sample loop between the Sample Loop and End points. For example, a value of 4 would repeat the selected area of the sample 4 times.

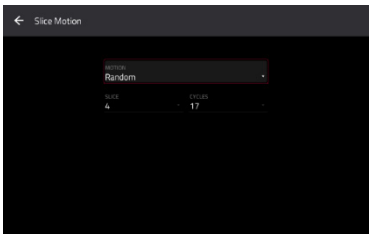
Note: The behavior difference between Repeats set to 0 and 1 is only evident when a Pad's Sample Play parameter is set to **Note On**. Then, when hold a note, a Repeat value of 0 will create infinite repeats, and a value of 1 will play a sample one time through.



Use the **Slice** field to select what part/parts of the sample will play:

- **All**: The entire sample will play.
- **Pad**: The sample will play from the **Pad Start** position to the **Pad End** position, described ***earlier***. This also lets you activate ***Pad Loop*** (if the **Sample Play** field in the **Global** tab is set to **Note On**).
- **Slice 1, 2, 3, etc.**: If you have sliced the sample in Chop Mode, you can select which slice will play when you trigger the pad.

When **Slice** is selected, you can tap the **Slice Motion** icon to trigger a different sample slice each time a pad is played.



Use the **Motion** setting to select **Increment**, which increments the slice number with each new note event, or **Random**, which plays your slices in a random order.

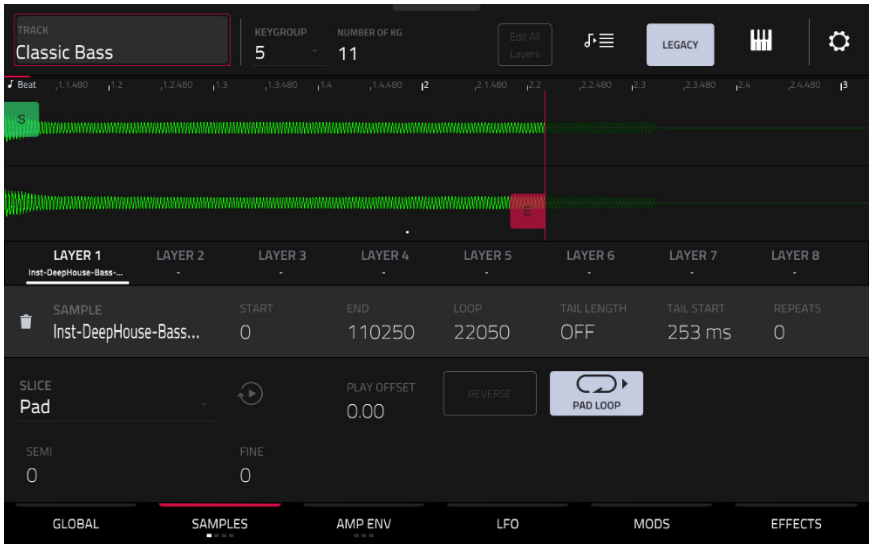
Use the **Slice** field to set the starting slice.

Use the **Cycles** field to select how many of the slices are played.

Tap the pad repeatedly, or turn **Note Repeat** on and hold the pad, to hear the slices of your chopped loop play.

Use the **Play Offset** field to shift a sample window between the **Start**, **End**, and **Loop** points across the sample without altering their relative positions. For example, if you set these points to frame the first 1/16th note of a one-bar sample, you can use the **Play Offset** to shift that window to different 1/16th note positions within the sample. You must retrigger the sample to hear offset changes.

Use the **Reverse** button to select in which direction the sample will play. When on, the sample will play in reverse. When off, the sample will play in the normal forward direction.



Use the **Pad Loop** button to cycle through the available Pad Loop modes.

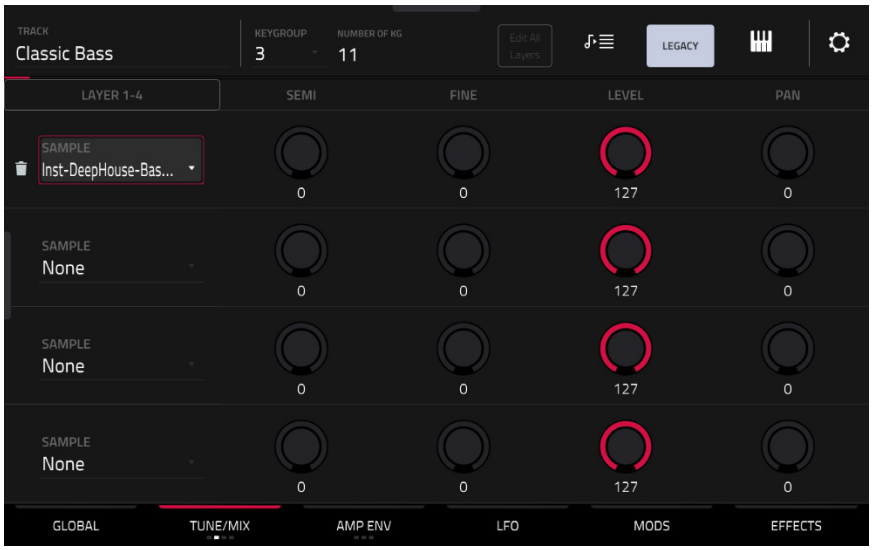
Important: For Pad Loop to work, you must (**1**) set the **Sample Play** field (in the **Global** tab) to **Note On** instead of One Shot and (**2**) set the **Slice** field (in the first **Samples** tab) to **Pad** instead of All or a slice number.

- **Off**: The sample will not loop.
- **Forward**: You can hold down the **pad** to cause that sample to repeat from the **Loop Position** to the end of the sample. Release the **pad** to stop the repeating playback.
- **Reverse**: You can hold down the **pad** to cause that sample to play in reverse, repeating from the end of the sample to the **Loop Position**. Release the **pad** to stop the repeating playback.
- **Alternating**: You can hold down the **pad** to cause that sample to play from the **Loop Position** to the end of the sample and then play in reverse until it reaches the **Loop Position** again. This will repeat as long as you are holding the pad down. Release the **pad** to stop the repeating playback.

Semi lets you transpose the selected layer 36 up to semitones up or down. This is the same as the **Semi** knob on the second **Samples** tab.

Fine provides fine-tuning of each layer by cents. This is the same as the **Fine** knob on the second **Samples** tab.

The **second Samples** tab (**Tune/Mix**) contains controls for its pitch, volume level, and panning.



Tap the **Layer 1–4/Layer 5–8** button to toggle between visible layers.

Use the **Sample** field to select the sample file for that layer. Tap the **trash can icon** next to the sample field to remove the file from the layer.

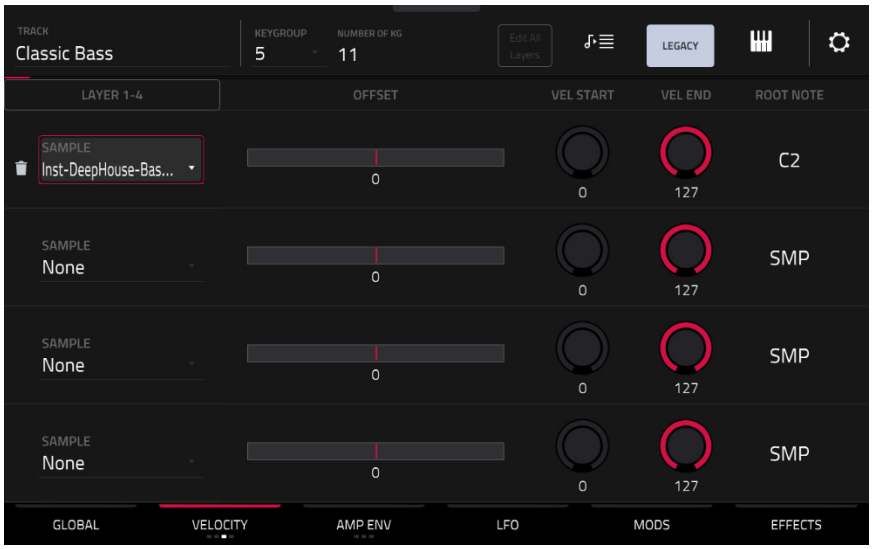
Semi lets you transpose the selected layer 36 up to semitones up or down. This will affect the length of the sample (if **Warp** is off). This is the same as the **Semi** field on the first Samples tab.

Fine provides fine-tuning of each layer by cents. This will affect the length of the sample (if **Warp** is off). This is the same as the **Fine** field on the first Samples tab.

Level lets you adjust each layer's volume, letting you control the "balance" of the samples assigned to the pad.

Pan lets you adjust the stereo placement of the respective layer.

The **third Samples** tab (**Velocity**) contains the control for its offset, velocity range, and root note.



Tap the **Layer 1–4/Layer 5–8** button to toggle between visible layers.

Use the **Sample** field to select the sample file for that layer. Tap the **trash can icon** next to the sample field to remove the file from the layer.

Use the **Offset** slider to determine a time offset for the sample's playback.

- **Positive values** (right of center): When the pad is played, playback will start immediately but at a later point in the sample specified by the offset value.
- **Negative values** (left of center): When the pad is played, playback will be delayed by the amount specified by the offset value.

Use the **Vel Start** and **Vel End** knobs to define the velocity range of each layer.

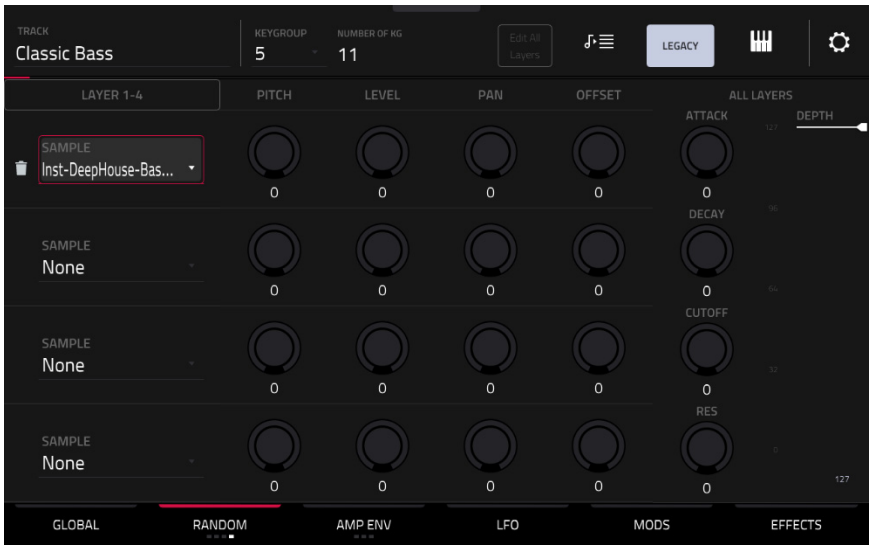
A range from **0** to **127** lets the layer respond to the entire velocity range which is input from the respective pad while, for example, a range from **100** to **127** lets the layer respond only to higher velocity levels. By assigning several samples of one instrument, you can create a realistic-sounding "multi-sample" by adjusting the velocity ranges of each layer accordingly.

For example, you may have three samples of a piano key with low force, medium force, and high force. You can set each sample to a layer and set the Velocity ranges so only low velocities trigger the low-force sample, only mid-range velocities trigger the medium-force sample, and only high velocities trigger the high-force sample.

Use the **Root Note** menu to set the starting note of each loaded sample. **Smp** denotes the sample's default pitch.

The **fourth Samples** tab (**Random**) contains the controls for adding randomization to sample parameters such as pitch, level and panning.

Note: This tab is only available in **Legacy** mode. In **Advanced** mode, use the separate ***Randomize*** tab.



Tap the **Layer 1–4/Layer 5–8** button to toggle between visible layers.

Use the **Sample** field to select the sample file for that layer. Tap the **trash can icon** next to the sample field to remove the file from the layer.

Use the **Pitch** knobs to adjust the amount of randomization applied to each sample layer's pitch.

Use the **Level** knobs to adjust the amount of randomization applied to each sample layer's volume.

Use the **Pan** knobs to adjust the amount of randomization applied to each sample layer's stereo placement.

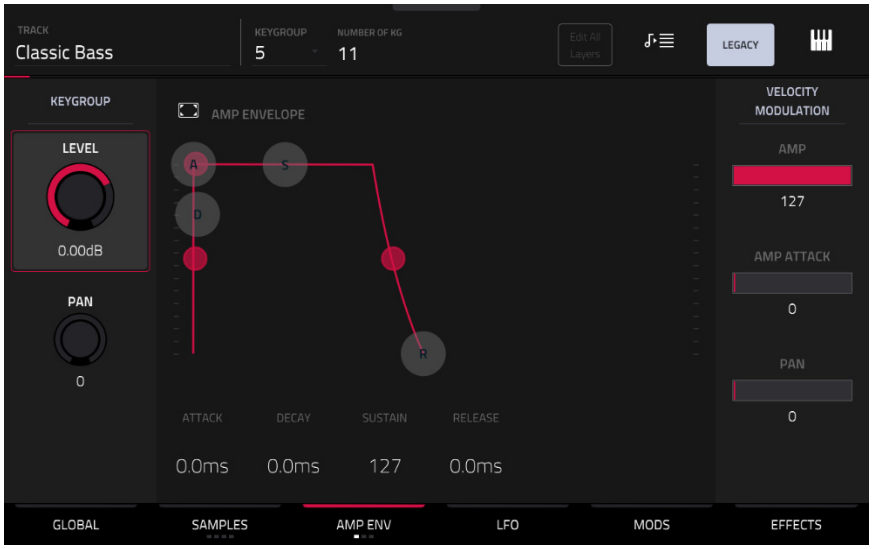
Use the **Offset** knobs to adjust the amount of randomization applied to each sample layer's time offset.

The **All Layers** section will apply randomization to all sample layers for the following envelope parameters: **Attack**, **Decay**, **Cutoff** and **Resonance**. Use the **Depth** slider to control the amount of envelope randomization applied overall.

Envelopes (Legacy)

Tap **Envelopes** to cycle through its three available tabs.

The **first Envelope** tab contains the amplitude modulation envelope.



Keygroup Level controls the overall volume level of the loaded sample/samples.

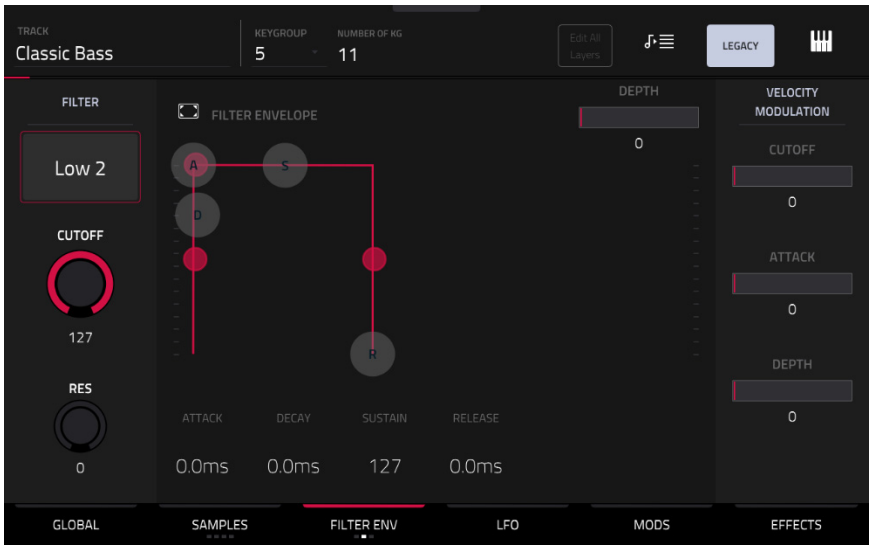
Keygroup Pan controls the overall panning of the loaded sample/samples in the stereo field.

The **Amp Envelope** controls affect level changes over time. Use the fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope’s influence on the filter frequency with the **Env** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Velocity Modulation** controls determine how much the velocity affects the volume level of the amplitude envelope (**Amp**), the attack of the amplitude envelope (**Amp Attack**), and/or the panning of the sound (**Pan**).

When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding slider.

The **second Envelope** tab contains the filter modulation envelope.



Use the **Type** field to select a filter for the selected pad. See ***Appendix*** > ***Glossary*** > ***Filter*** for an explanation of the available filter types.

Use the **Cutoff** knob to set the cutoff frequency for low-pass and high-pass filter types or the center frequency for band-pass and band-stop filter types.

Use the **Reso** knob to set the resonance/emphasis of the frequencies around the cutoff point.

Tip: Use values lower than **80** to give more brilliance to the sound. At values higher than **80**, the sound will result in a strong audible boost around the cutoff frequency.

The **Filter Envelope** controls affect the filter frequency. Use the fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope’s influence on the filter frequency with the **Depth** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

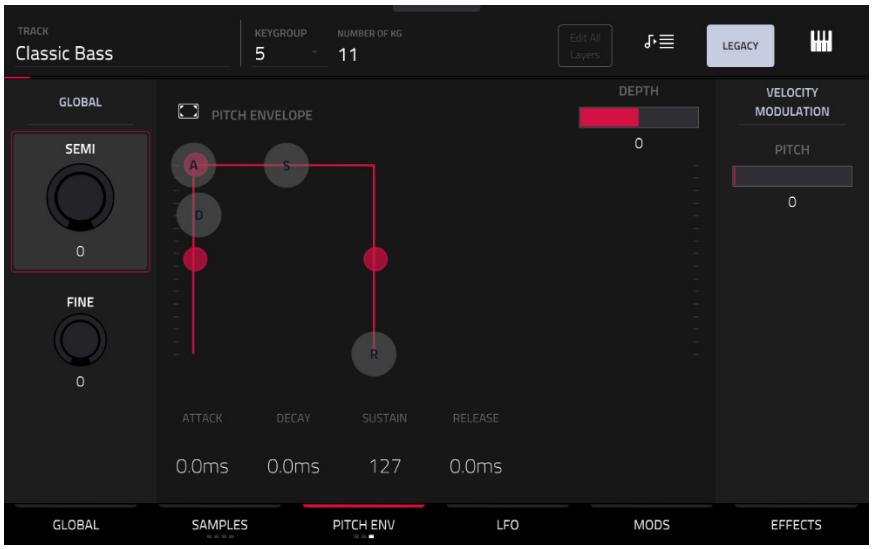
Use the **Depth** slider to determine the amount of influence the filter envelope has on the cutoff frequency. Higher settings will increase the modulation of the filter by the envelope; lower settings will result in only subtle changes of the filter **Cutoff** over time.

Tip: **To give a sound a more distinctive attack**, increase the **Depth** setting and set low **Atk** and **Decay** values as well as a medium-low **Sust** value of the **Filter Envelope**. This will start a sound with the filter opened and close it shortly afterward, giving it a bright start followed by a darker sustain. String sounds, on the other hand, can sound much more “alive” with low **Depth** settings and a high **Atk** value, resulting in a slight fade-in of the higher frequencies.

The **Velocity Modulation** controls determine how much the velocity affects the cutoff frequency of the filter envelope (**Cutoff**), the attack phase of the filter envelope (**Attack**), and/or depth of influence the filter envelope has on the cutoff frequency (**Depth**).

When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding slider.

The **third Envelope** tab contains the pitch modulation envelope.



Global Semi lets you transpose the keygroup up to 36 semitones up or down. This will affect the length of the sample (if **Warp** is off). This is the same as the **Semi** field on the **Global** tab.

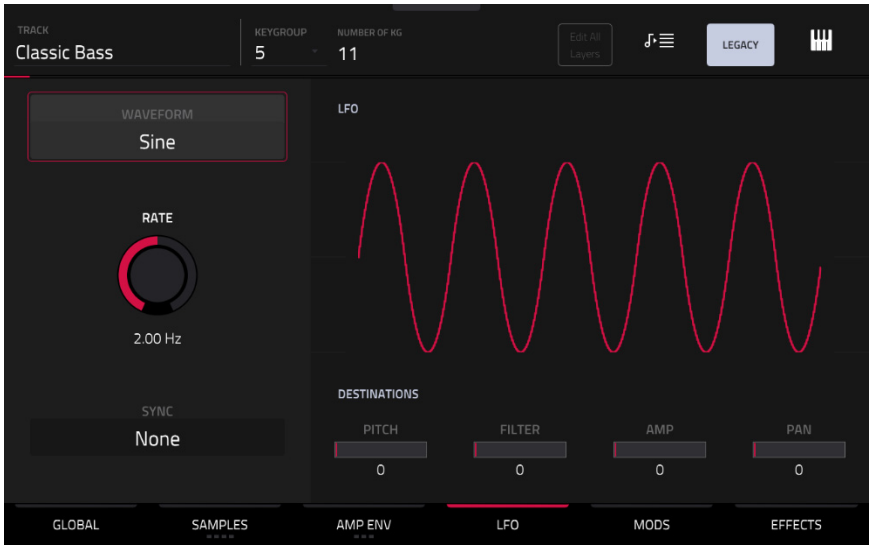
Global Fine provides fine-tuning of each layer by cents. This will affect the length of the sample (if **Warp** is off). This is the same as the **Fine** field on the **Global** tab.

The **Pitch Envelope** controls affect the keygroups's pitch change over time. Use the fields or tap and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope's influence on the pitch with the **Depth** slider. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Velocity Modulation** control determines how much the velocity affects the pitch envelope (**Pitch**).

When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the **Pitch** slider.

LFO (Legacy)



A low-frequency oscillator (LFO) generates a periodic waveform with an adjustable frequency and shape which can be used for modulation purposes.

Use the **Waveform** field to select the LFO waveform type:

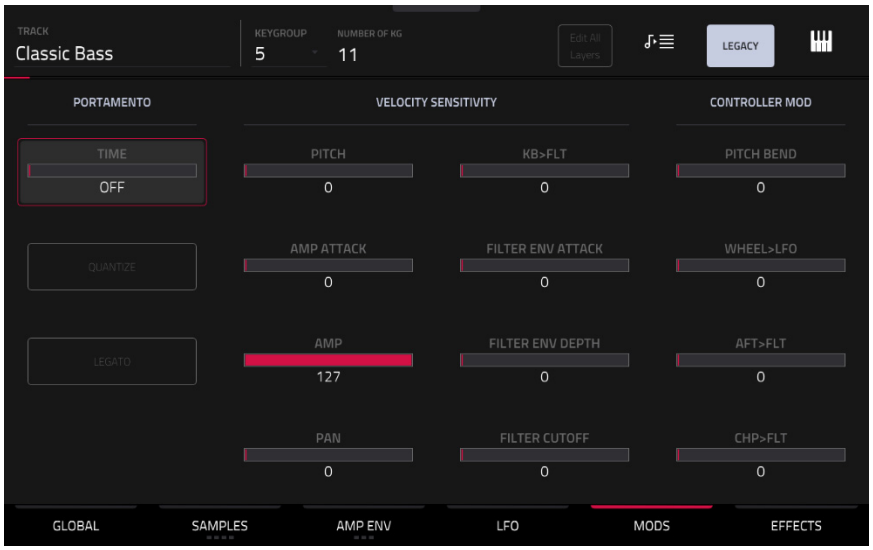
- **Sine**: Best suited for smooth modulations.
- **Tri** (Triangle): Best suited for smooth modulations.
- **S&H**: Samples a random value and holds it until the next value is generated.
- **Saw:** Can generate interesting filter or volume changes.
- **SawD** (Saw Down): Can generate interesting filter or volume changes.
- **Sqr** (Square): Interesting results with hard-panning modulations.
- **Noise**: Generates random values and glides.

Use the **Rate** field to determine the LFO frequency. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

Use the **Sync** field to set if the LFO's rate is synchronized with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off.

Use the **Destinations** sliders to determine how much the LFO affects the pitch of the sound (**Pitch**), the cutoff frequency of the filter (**Filter**), the volume level of the sound (**Amp**) and panning of the sound (**Pan**).

Mods (Legacy)



Use the **Portamento** fields to adjust the settings for pitch gliding.

The **Time** slider sets the length of the glide between notes.

Tap the **Quantize** button to synchronize the portamento time with the project tempo.

Tap the **Legato** button to enable or disable pitch gliding for all triggered notes or just legato notes.

Use the **Velocity Sensitivity** sliders to set how much velocity is required to modulate certain other parameters:

- **Pitch** enables velocity information to control the pitch of the sample.
- **Amp Attack** sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Amp envelope.
- **Amp** enables velocity information to control the overall amplitude (level) of the sample.
- **Pan** enables velocity information to control the stereo panning of the sample.
- **KB>FLT** sets how much the note value will be added to the filter cutoff. This allows samples to sound brighter as they are played higher on the keyboard.
- **Filter Env Attack** sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Filter envelope.
- **Filter Env Depth** enables velocity information to control the amount of the filter envelope's effect on the cutoff frequency.
- **Filter Cutoff** uses the velocity of a pad to modulate the cutoff frequency directly.

The **Controller Mod** section determines the influence of additional play controllers on various sound parameters.

Important: To use these parameters, make sure that a connected MIDI device can send pitch bend messages as well as aftertouch and modulation wheel data.

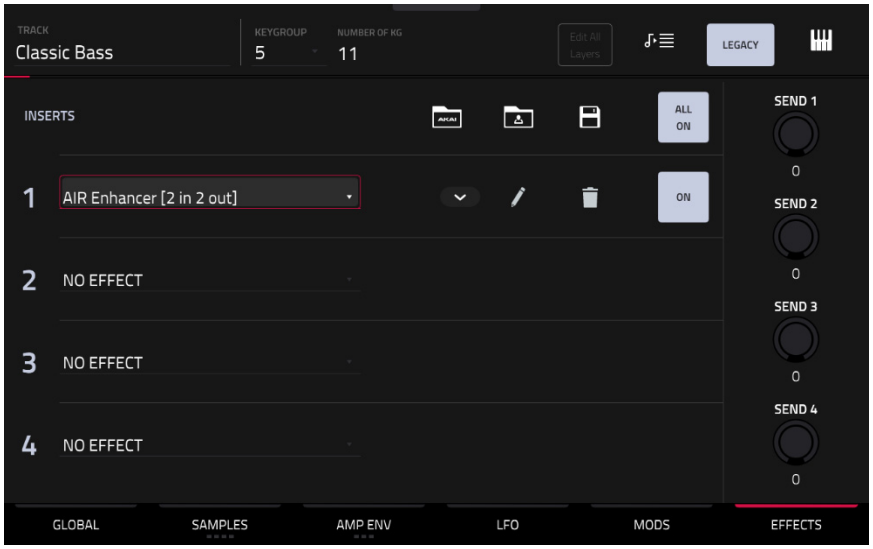
Pitch Bend sets the range (in semitones) of a connected MIDI keyboard's pitch-bend wheel.

Wheel>LFO determines how much a connected MIDI keyboard's modulation wheel affects the LFO intensity.

Aft>Filt (Aftertouch→Filter Cutoff) determines how much a connected MIDI keyboard's aftertouch data affects the filter cutoff.

Chp>Filt (Channel Pressure→Filter Cutoff) determines how much a connected MIDI keyboard's channel pressure data affects the filter cutoff.

Effects (Legacy)



Inserts

You can select up to four insert effects for each keygroup. To learn how to use insert effects, please see ***General Features*** > ***Effects*** > ***Insert Effects***.

Important: When using keygroup insert effects, they will be applied to that keygroup only. Keep this in mind if you load insert effects to multiple keygroups with overlapping note ranges—the effects will overlap in that range as well.

To add an effect:

1. Double-tap the desired **Inserts** slot. A list of effects will appear.
2. Swipe up or down to move through the list.

   You can tap the **Type** and **Manufacturer** buttons to sort your effects by those categories.
3. **To load an effect**, double-tap it, or tap **Select**.

   To close the list, tap **Close**.

Tap the **trash can icon** to remove an effect from its slot.

Tap the **On**/**Off** button for the slot to enable or disable the effect.

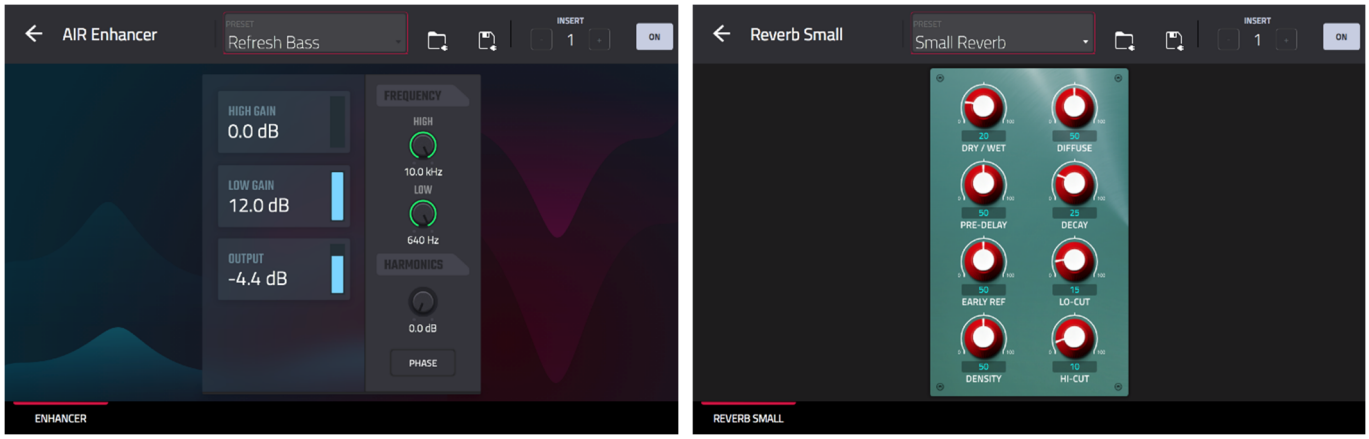
Tap the **All On**/**Off** button in the upper-right corner to enable or disable all four insert effects.

Tap the **arrows** next to the insert slot to move the selected effect up or down to rearrange an insert effect.

Tap the **Akai folder** icon to load a factory FX rack. You can choose from a number of preset combinations of insert effects by applications like Drums and Percussion, Voice, LoFi, Mastering, and more.

Tap second **folder** icon to load a saved FX rack.

Tap the **disk** icon to save an FX rack.



Tap the **trash can icon** to remove the effect from its slot.

Tap the **folder** icon next to the preset name at the top of the display to open the file browser and load an effect preset.

Tap the **disk** icon next to the insert selector at the top of the display to save a new effect preset.

Tap the **-/+** buttons to rearrange the insert effect. Adjacent effects will be moved up or down in relation.

Tap the **On/Off** button to enable or disable the effect.

Sends

The audio of the track will be routed to send effects (if you have any loaded) at their designated send levels. The return channels will then send the audio to an assigned main output at the designated return levels.

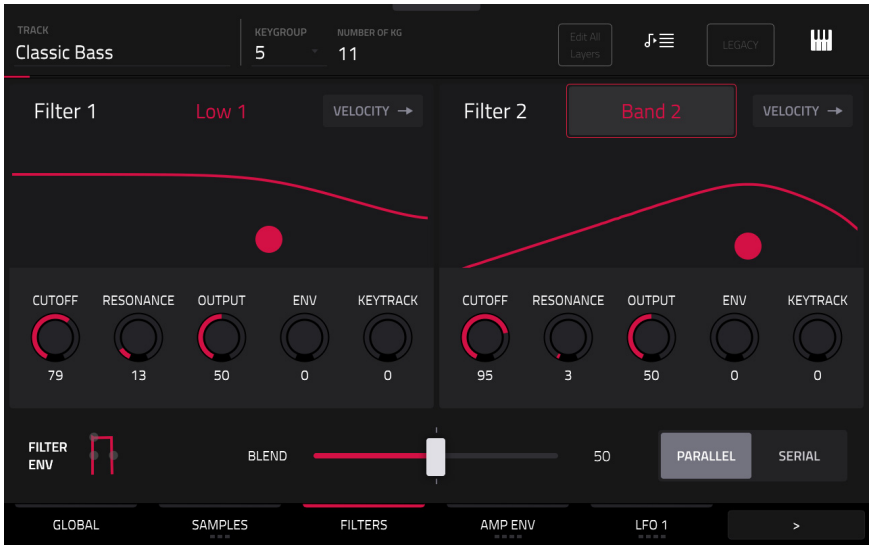
Use the **Send** knobs to set the volume level of the signal the track will route to each send effect.

You can select up to four send effects for each keygroup, but remember that they will be applied to that keygroup only. Keep this in mind if you load insert effects to multiple keygroups with overlapping note ranges—the effects will overlap in that range as well.

Important: **To use a send effect**, you have to load an effect into the corresponding send effect slot in the Mixer. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more how to do this.

Filters (Advanced)

The Filters tab features two filters which can be run in either parallel or series configuration, with a blend control for mixing between them.



Use the **Filter 1/2 Type** fields to select each filter for the selected keygroup. See ***Appendix*** > ***Glossary*** > ***Filter*** for an explanation of the available filter types.

Use the **Cutoff** knob to set the cutoff frequency for low-pass and high-pass filter types or the center frequency for band-pass and band-stop filter types.

Use the **Resonance** knob to set the resonance/emphasis of the frequencies around the cutoff point.

Tip: Use values lower than **80** to give more brilliance to the sound. At values higher than **80**, the sound will result in a strong audible boost around the cutoff frequency.

Use the **Output** knob to set the output level of the filter.

Use the **Env** knob to set the amount of effect the **Filter Envelope** has on the **Cutoff** frequency.

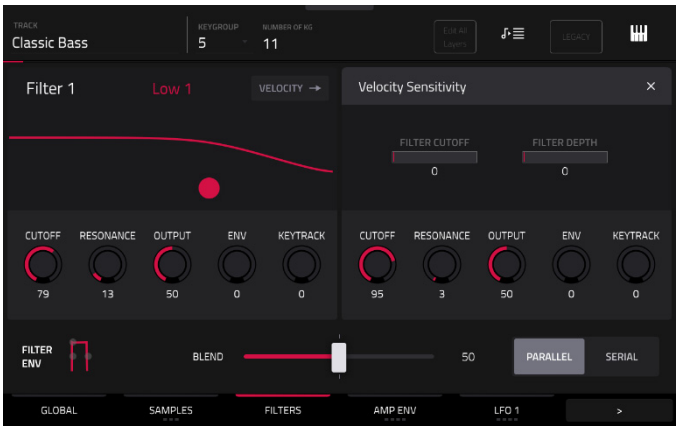
Use the **Keytrack** knob to adjust how the filter cutoff is tied to the pitch being played. At higher levels, the amount of cutoff reduction is more noticeable as the pitch is raised.

Tap the **Filt Env** icon to open the Filter Envelope. This is the same Filter Envelope that can be adjusted in the Envelopes (Advanced) section. Adjusting in either view will automatically update the other view. Tap the **minimize** icon to close the expanded filter window.

Use the **Blend** knob to adjust the mix between the two filters.

Use the **Parallel/Serial** button to toggle whether the filters run side-by-side (Parallel) or one into the other (Serial).

Tap the **Velocity** ➝ button to access the **Velocity Sensitivity** control for each filter. These modulation controls determine how much the velocity affects the cutoff frequency of the filter envelope (**Cutoff**), and depth of influence the filter envelope has on the cutoff frequency (**Depth**).



Envelopes (Advanced)

Tap the Advanced **Envelopes** tab to cycle through its four available tabs. Alternatively, tap the filter headers below the toolbar to select that tab: **Amp**, **Filter**, **Pitch**, and **Aux**.

The **first Advanced Envelope** tab contains the amplitude modulation envelope.

Use the **Looped** field to enable or disable looping of the envelope. When set to **On**, the envelope will restart once it has reached its end. The length of the envelope is determined by the **Tempo Sync** value, or the total envelope length, as set by the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** knobs. When set to **Off**, the envelope triggers on each note-on only.

Use the **Tempo Sync** field to synchronize the envelope loop with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the loop length is determined by the total length of the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** settings.

Use the **Time Scaling** field to apply an additional time adjustment to the loop length. At 100%, the total loop length is unchanged. The loop length is shorted when set to below 100%, and lengthened when set to above 100%.

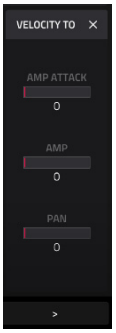
Use the **Global** field to determine whether the envelope is applied to only the current voice (**Off**) or to the entire keygroup (**On**).

The **Amp Envelope** controls affect level changes over time. Use the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope’s influence on the filter frequency with the **Env** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

Keygroup Level controls the overall volume level of the loaded sample/samples.

Keygroup Pan controls the overall panning of the loaded sample/samples in the stereo field.

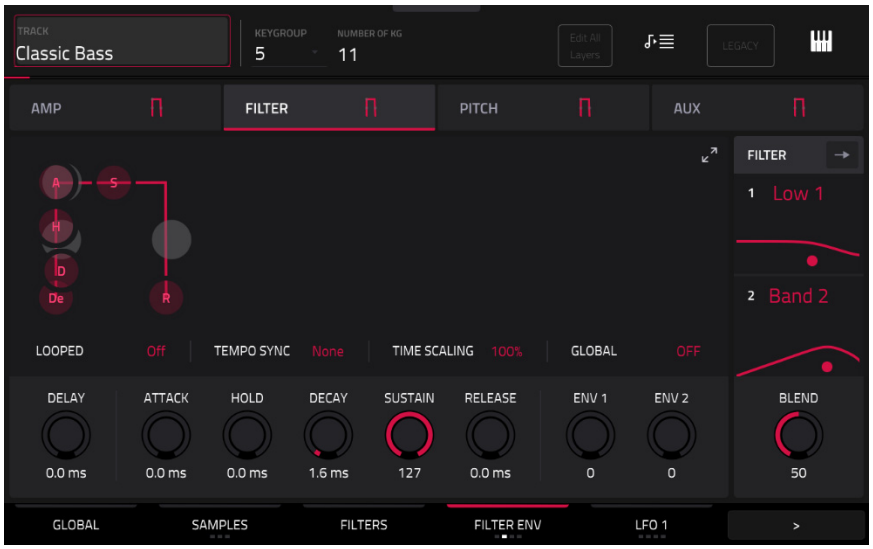
Tap the **Keygroup** ➝ button to access the **Velocity To** controls. These modulation controls determine how much the velocity affects the attack of the amplitude envelope (**Amp Attack**), the volume level of the amplitude envelope (**Amp**), and/or the panning of the sound (**Pan**).



When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding slider.

Tap the **X** to exit the **Velocity To** controls.

The **second Advanced Envelope** tab contains the filter modulation envelope.



Use the **Looped** field to enable or disable looping of the envelope. When set to **On**, the envelope will restart once it has reached its end. The length of the envelope is determined by the **Tempo Sync** value, or the total envelope length, as set by the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** knobs. When set to **Off**, the envelope triggers on each note-on only.

Use the **Tempo Sync** field to synchronize the envelope loop with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the loop length is determined by the total length of the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** settings.

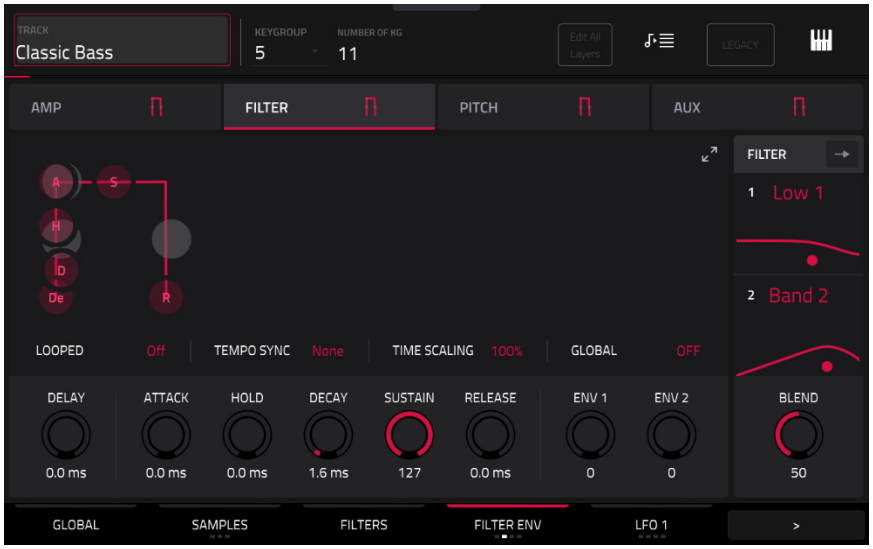
Use the **Time Scaling** field to apply an additional time adjustment to the loop length. At 100%, the total loop length is unchanged. The loop length is shorted when set to below 100%, and lengthened when set to above 100%.

Use the **Global** field to determine whether the envelope is applied to only the current voice (**Off**) or to the entire keygroup (**On**).

The **Filter Envelope** controls affect the filter frequency. Use the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output. Adjust the envelope’s influence on the filter frequency with the **Depth** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

Use the **Env** knobs to determine the amount of influence the filter envelope has on the cutoff frequency. Higher settings will increase the modulation of the filter by the envelope; lower settings will result in only subtle changes of the filter **Cutoff** over time.

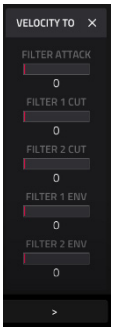
Tip: **To give a sound a more distinctive attack**, increase the **Env** setting and set low **Atk** and **Decay** values as well as a medium-low **Sust** value of the **Filter Envelope**. This will start a sound with the filter opened and close it shortly afterward, giving it a bright start followed by a darker sustain. String sounds, on the other hand, can sound much more “alive” with low **Depth** settings and a high **Atk** value, resulting in a slight fade-in of the higher frequencies.



Use the **Type** field to select up to two filter types for the selected keygroup. These are the same filters as set in the ***Filters (Advanced)*** tab. See ***Appendix*** > ***Glossary*** > ***Filter*** for an explanation of the available filter types.

Use the **Cutoff** knob to set the cutoff frequency for low-pass and high-pass filter types or the center frequency for band-pass and band-stop filter types.

Tap the **Filter** ➝ button to access the **Velocity To** controls. These modulation controls determine how much the velocity affects the attack phase of the filter envelope (**Attack**), the cutoff frequency of the filter envelope (**Filter 1/2 Cut**), and/or depth of influence the filter envelope has on the cutoff frequency (**Filter 1/2 Env**).



When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding slider.

Tap the **X** to exit the **Velocity To** controls.

The **third Advanced Envelope** tab contains the pitch modulation envelope.

Use the **Looped** field to enable or disable looping of the envelope. When set to **On**, the envelope will restart once it has reached its end. The length of the envelope is determined by the **Tempo Sync** value, or the total envelope length, as set by the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** knobs. When set to **Off**, the envelope triggers on each note-on only.

Use the **Tempo Sync** field to synchronize the envelope loop with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the loop length is determined by the total length of the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** settings.

Use the **Time Scaling** field to apply an additional time adjustment to the loop length. At 100%, the total loop length is unchanged. The loop length is shorted when set to below 100%, and lengthened when set to above 100%.

Use the **Global** field to determine whether the envelope is applied to only the current voice (**Off**) or to the entire keygroup (**On**).

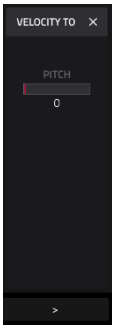
The **Pitch Envelope** controls affect the keygroups's pitch change over time. Use the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** fields or tap and drag the "handles" of the envelope to shape the envelope or time-variant modulation output.

Adjust the envelope's influence on the pitch with the **Env Depth** knob. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

Global Semi lets you transpose the keygroup up to 36 semitones up or down. This will affect the length of the sample (if **Warp** is off). This is the same as the **Semi** field on the **Global** tab.

Global Fine provides fine-tuning of each layer by cents. This will affect the length of the sample (if **Warp** is off). This is the same as the **Fine** field on the **Global** tab.

Tap the **Filter** ➙ button to access the **Velocity To** controls. This modulation control determines how much the velocity affects the pitch envelope (**Pitch**).



When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the **Pitch** slider.

Tap the **X** to exit the **Velocity To** controls.

The **fourth Advanced Envelope** tab contains the aux modulation envelope. This can be used as part of the **Modulation matrix** to apply an envelope to other parameters.

Use the **Looped** field to enable or disable looping of the envelope. When set to **On**, the envelope will restart once it has reached its end. The length of the envelope is determined by the **Tempo Sync** value, or the total envelope length, as set by the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** knobs. When set to **Off**, the envelope triggers on each note-on only.

Use the **Tempo Sync** field to synchronize the envelope loop with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the loop length is determined by the total length of the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** settings.

Use the **Time Scaling** field to apply an additional time adjustment to the loop length. At 100%, the total loop length is unchanged. The loop length is shorted when set to below 100%, and lengthened when set to above 100%.

Use the **Global** field to determine whether the envelope is applied to only the current voice (**Off**) or to the entire keygroup (**On**).

The **Aux Envelope** controls adjust the shape of the envelope, which can be used to apply envelope shaping to other parameters in the Modulation Matrix. Use the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** fields or tap and drag the “handles” of the envelope to shape the envelope or time-variant modulation output.

LFO (Advanced)

Tap the Advanced **LFO** tab to cycle through its four available tabs. Alternatively, tap the filter headers below the toolbar to select that tab: **LFO 1**, **LFO 2**, **Global LFO 1**, and **Global LFO 2**.

A low-frequency oscillator (LFO) generates a periodic waveform with an adjustable frequency and shape which can be used for modulation purposes. There are two per-voice LFOs and two global LFOs for extensive modulation options.

The **first** and **second Advanced LFO** tabs contain the per-voice LFOs.

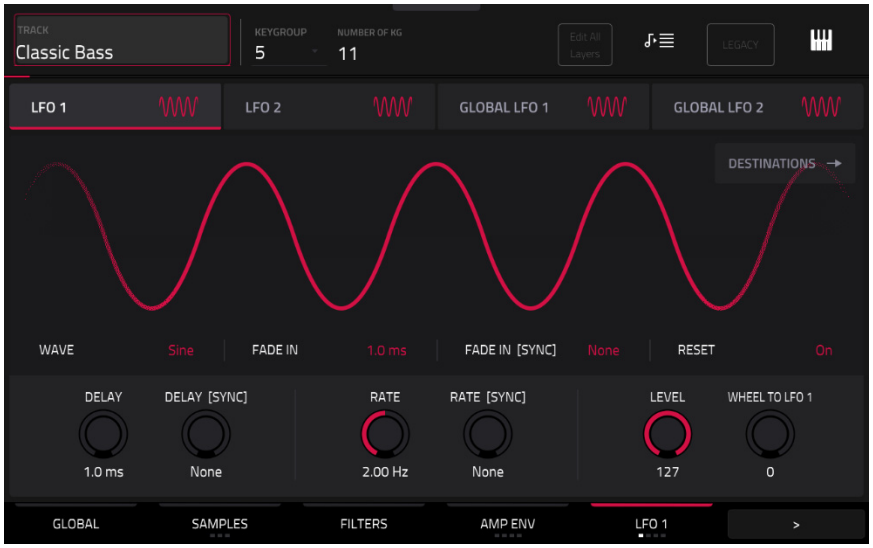
Use the **Wave** field to select the LFO waveform type:

- **Sine**: Best suited for smooth modulations.
- **Tri** (Triangle): Best suited for smooth modulations.
- **S&H**: Samples a random value and holds it until the next value is generated.
- **Saw:** Can generate interesting filter or volume changes.
- **SawD** (Saw Down): Can generate interesting filter or volume changes.
- **Sqr** (Square): Interesting results with hard-panning modulations.
- **Noise**: Generates random values and glides.

Use the **Fade In** field to set the length of time for the LFO to reach full level once triggered.

Use the **Fade In [Sync]** to synchronize the fade in with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the fade in length is determined by the **Fade In** knob.

Use the **Reset** field to determine whether the LFO retriggers on each note played (**On**) or not (**Off**).



Use the **Delay** knob to set the length of time between when the note is triggered and when the LFO is triggered.

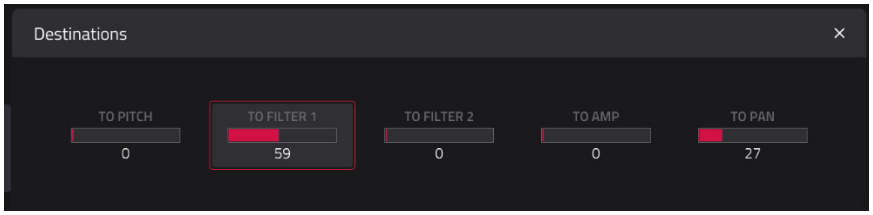
Use the **Delay [Sync]** to synchronize the delay time with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the delay length is determined by the **Fade In** knob.

Use the **Rate** knob to determine the LFO frequency. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

Use the **Rate [Sync]** knob to set if the LFO's rate when synchronized with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the frequency is determined by the **rate** knob.

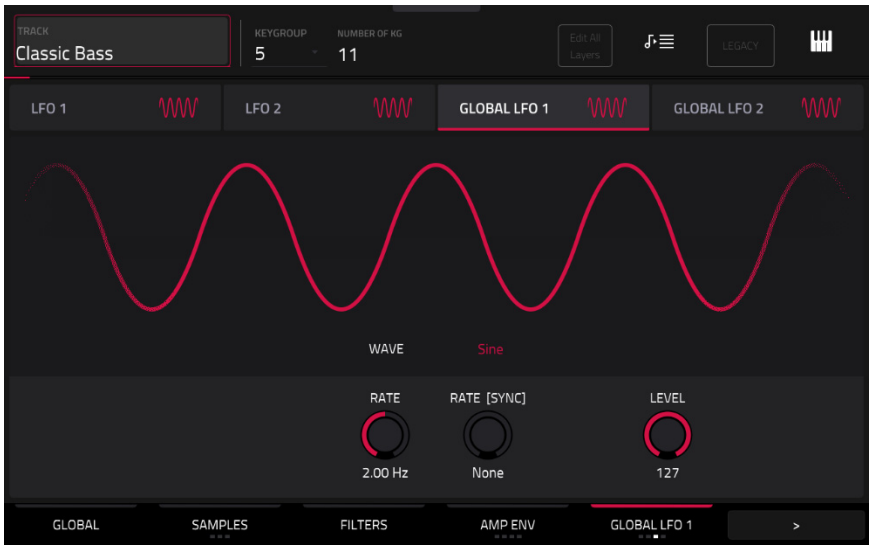
Use the **Level** knob to set the overall amount of modulation applied by the LFO. At lower values, the modulation is more subtle, and at higher values it is more extreme.

Use the **Wheel to LFO** knob to adjust how much control mod wheel data (MIDI CC1) has over the LFO. When set to 0, the mod wheel has no effect on the LFO level. When set to **100**, the LFO is fully controlled by the mod wheel.



Tap the **Destinations** ➜ button to access the destination controls. These sliders to determine how much the LFO affects the pitch of the sound (**To Pitch**), the cutoff frequency of the filter (**To Filter 1/2**), the volume level of the sound (**To Amp**) and panning of the sound (**To Pan**).

The **third** and **fourth Advanced LFO** tabs contain the Global LFOs.



Use the **Wave** field to select the LFO waveform type:

- **Sine**: Best suited for smooth modulations.
- **Tri** (Triangle): Best suited for smooth modulations.
- **S&H**: Samples a random value and holds it until the next value is generated.
- **Saw:** Can generate interesting filter or volume changes.
- **SawD** (Saw Down): Can generate interesting filter or volume changes.
- **Sqr** (Square): Interesting results with hard-panning modulations.
- **Noise**: Generates random values and glides.

Use the **Rate** knob to determine the LFO frequency. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

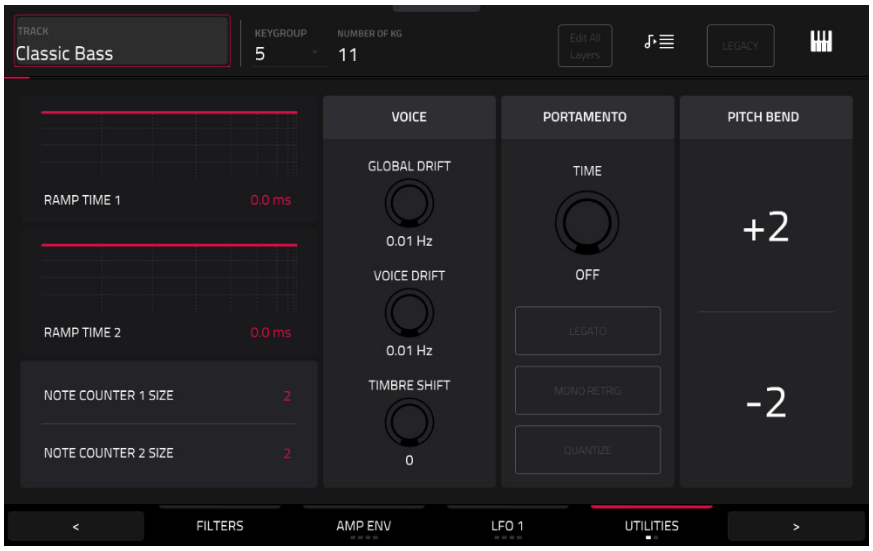
Use the **Rate [Sync]** knob to set if the LFO's rate when synchronized with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the frequency is determined by the **rate** knob.

Use the **Level** knob to set the overall amount of modulation applied by the LFO. At lower values, the modulation is more subtle, and at higher values it is more extreme.

Utilities/Sensitivity (Advanced)

Tap the Advanced **Utilities/Sensitivity** tab to cycle through the two tabs.

The **Utilities** tab contains additional modulation parameters, as well as portamento and pitch bend controls.



Use the **Ramp Time 1/2** fields to adjust the ramp length. These can be used to apply additional modulation shaping to other parameters via the ***Mod Matrix***.

Use the **Note Counter 1/2 Size** field to set a stepped modulation value. These can be used as part of the ***Mod Matrix*** to change parameter values based on the number of voices selected (**2**–**64**).

Use the **Global Drift** knob to set the amount of pitch drift applied to the entire keygroup.

Use the **Voice Drift** knob to set the amount of pitch drift applied to the selected keygroup voice.

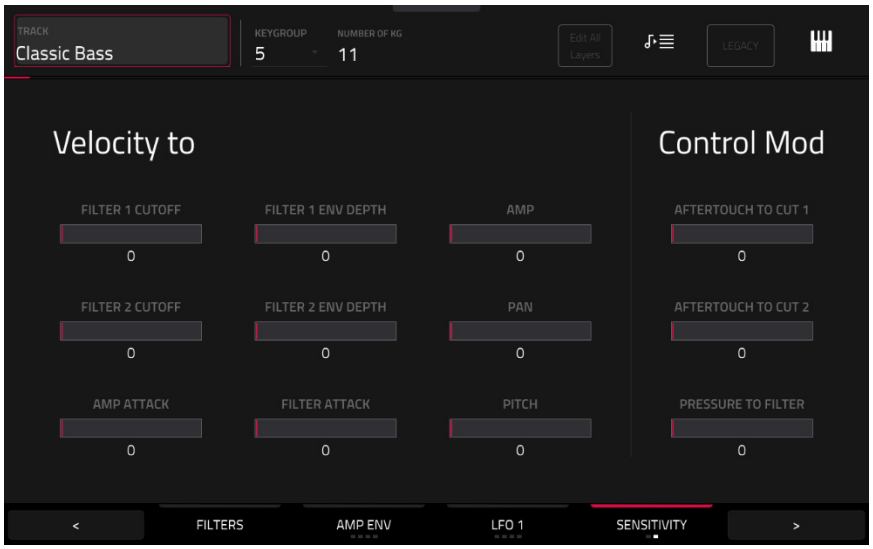
Use the **Timbre Shift** knob to adjust the amount of tonal character shaping applied to the keygroup.

Use the **Portamento** parameters to adjust the settings for pitch gliding.

- The **Time** knob sets the length of the glide between notes.
- Tap the **Legato** button to enable or disable pitch gliding for all triggered notes or just legato notes.
- Tap the **Mono Retrig** button to allow the portamento to retrigger on every key press when using mono polyphony.
- Tap the **Quantize** button to synchronize the portamento time with the project tempo.

Use the **Pitch Bend** fields to set the number of semitones shifted up or down when pitch bend if applied.

The **Sensitivity** tab contains settings for velocity sensitivity and external controller modulation.



Use the **Velocity To** sliders to set how much velocity is required to modulate certain other parameters:

- **Filter 1/2 Cutoff** uses the velocity of a pad to modulate the cutoff frequency directly.
- **Amp Attack** sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Amp envelope.
- **Filter 1/2 Env Depth** enables velocity information to control the amount of the filter envelope's effect on the cutoff frequency.
- **Filter Env Attack** sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Filter envelope.
- **Amp** enables velocity information to control the overall amplitude (level) of the sample.
- **Pan** enables velocity information to control the stereo panning of the sample.
- **Pitch** enables velocity information to control the pitch of the sample.

The **Controller Mod** section determines the influence of additional play controllers on various sound parameters.

Important: To use these parameters, make sure that a connected MIDI device can send pitch bend messages as well as aftertouch and modulation wheel data.

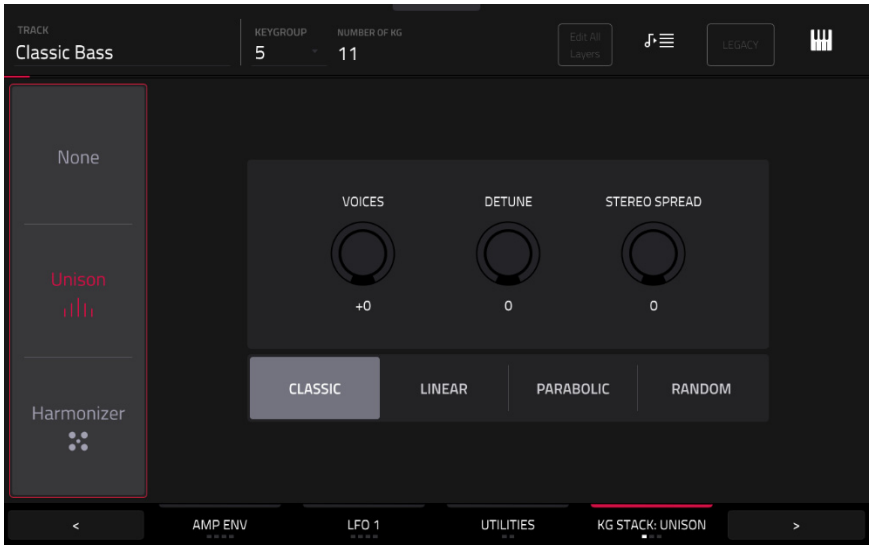
Aftertouch To Cut 1/2 determines how much a connected MIDI keyboard's aftertouch data affects the filter cutoff.

Pressure To Filter determines how much a connected MIDI device's channel pressure data affects the filter envelope.

KG Stack (Advanced)

Tap the Advanced **KG Stack** tab to cycle through its three available tabs. You must first enable a Keygroup Stack effect to show the selected controls: **Unison** or **Harmonizer**. Only one stack effect may be used at a time.

The **first Advanced KG Stack** tab contains the Unison controls.



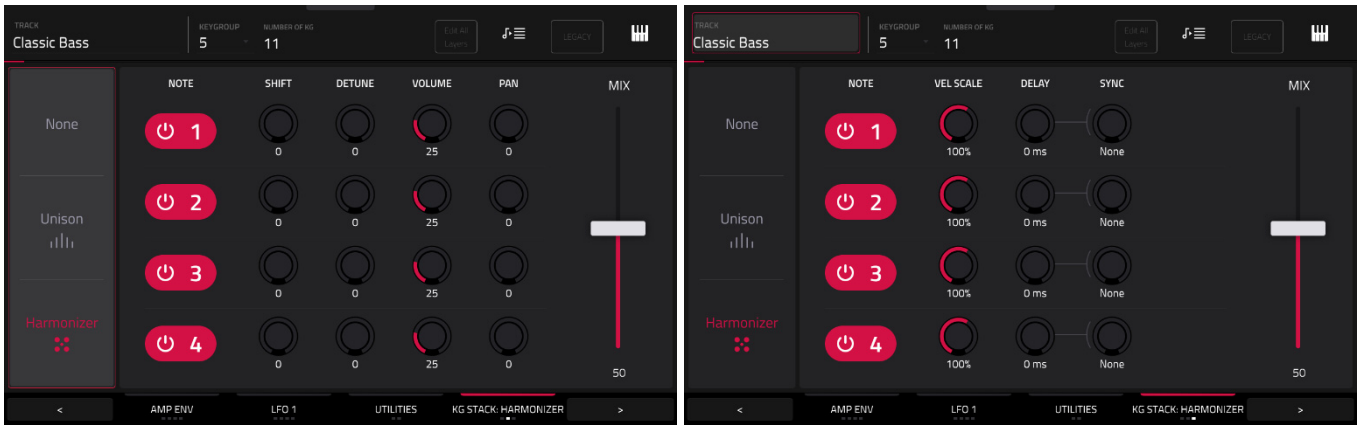
Use the **Voices** knob to adjust the number of unison voices.

Use the **Detune** knob to adjust the amount of fine-tuning applied to the unison voices in cents.

Use the **Stereo Spread** knob to adjust the width of the unison voices in the left-right stereo field.

Use the **type** selector to select the type of unison voice stacking applied (**Classic**, **Linear**, **Parabolic**, or **Random**).

The **second** and **third Advanced KG Stack** tab contains the Harmonizer controls.



Tap the **Note** number to enable each harmonizer voice.

Use the **Shift** field to set the amount of pitch shifting applied to the voice in semitones.

Use the **Detune** knob to adjust the amount of detuning to the voice in cents.

Use the **Volume** knob to set the level of the voice.

Use the **Pan** knob to set the stereo panning of the voice.

Use the **Vel Scale** knob to adjust the ratio of the harmonized voice velocity with the incoming note velocity.

Use the **Delay** knob to add an additional time delay between the note start and the harmonized voice start.

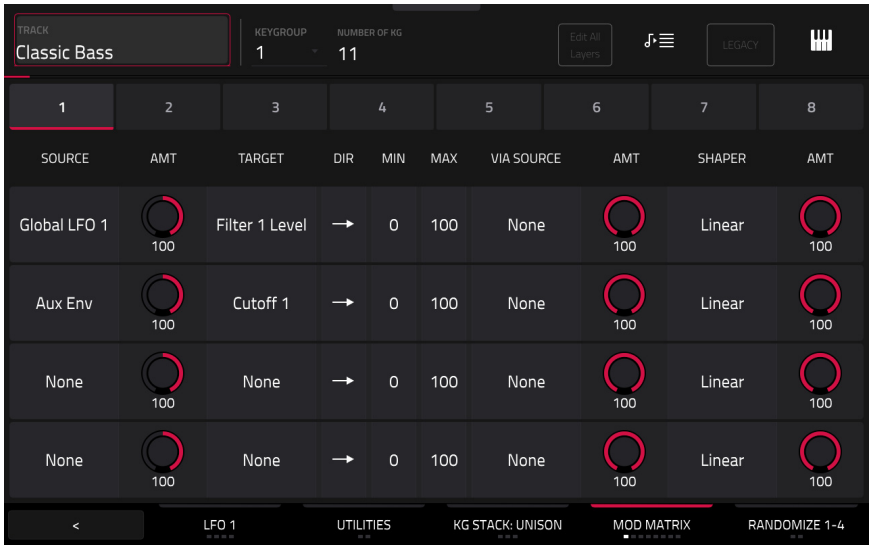
Use the **Sync** knob to set the Delay time when synchronized with the tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, **Sync** is off, and the delay time is determined by the **Delay** knob.

Use the **Mix** slider to set the overall wet/dry mix between the original note and the harmonized voices.

Mod Matrix (Advanced)

Tap the Advanced **Mod Matrix** tab to cycle through its eight available tabs. Alternatively, tap the numbered headers below the toolbar to select that tab.

The 32 available modulation points can be configured to add a wide variety of sound shaping tools.



Use the **Source** field to select the modulation source.

Use the first **Amt** (Amount) field to set how much modulation is applied by the source.

Use the **Target** field to select the output target for modulation.

Use the **Direction** field to set whether the modulation direction is **bipolar** or **unipolar**.

Use the **Min** and **Max** fields to set the minimum and maximum modulation levels of the selected target.

Use the **Via Source** field to add a secondary modulation shaper using another source.

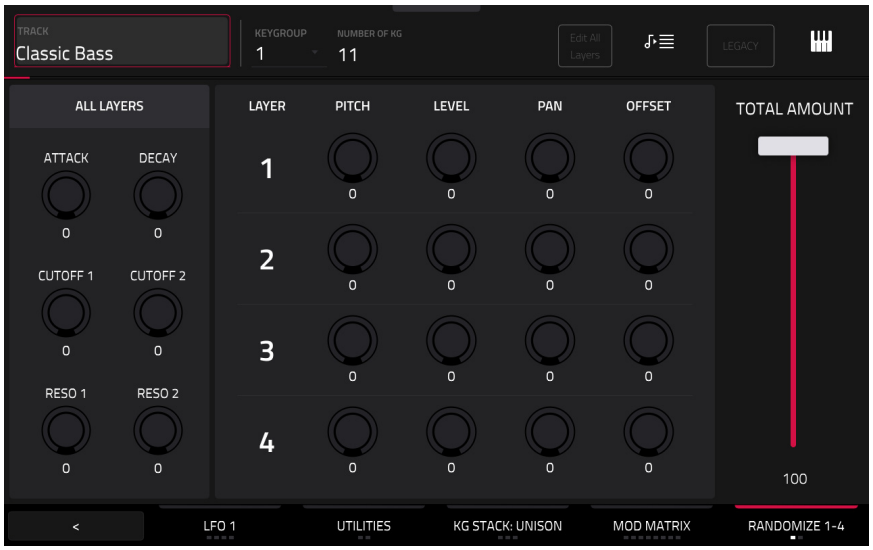
Use the second **Amt** (Amount) field to set how much modulation is applied by the secondary source.

Use the **Shaper** field to apply an additional modifier that affects the modulation relationship between the source and target.

Use the third **Amt** (Amount) field to set how much modulation is applied by the shaper.

Randomize (Advanced)

Tap the Advanced **Randomize** tab to cycle through its two available tabs. On these tabs you can apply randomization to the eight keygroup layers, as well as to all layers globally. The first tab controls layer 1–4, and the second tab controls layers 5–8.



The **All Layers** section will apply randomization to all sample layers for the following envelope parameters: **Attack**, **Decay**, **Cutoff 1/2,** and **Resonance 1/2**.

Use the **Pitch** knobs to adjust the amount of randomization applied to each sample layer's pitch.

Use the **Level** knobs to adjust the amount of randomization applied to each sample layer's volume.

Use the **Pan** knobs to adjust the amount of randomization applied to each sample layer's stereo placement.

Use the **Offset** knobs to adjust the amount of randomization applied to each sample layer's time offset.

Use the **Total Amount** slider to control the depth of envelope randomization applied overall.

Plugin Tracks

For plugin tracks, you will see an overview of all available plugin parameters with a slider for each, or a visual representation of the plugin interface.

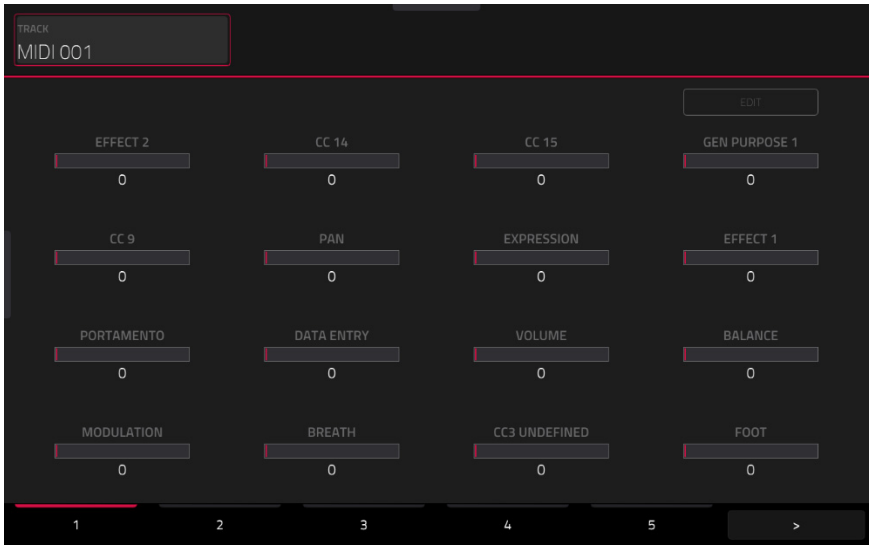
Use the **sliders** to set the value of each parameter, or use the plugin interface.

Use the **tabs** at the bottom of the screen to access the available parameters.

To load a plugin preset, tap the **folder** icon next to the preset name at the top of the display to open the file browser.

To save a new plugin preset, tap the **disk** icon next to the insert selector at the top of the display.

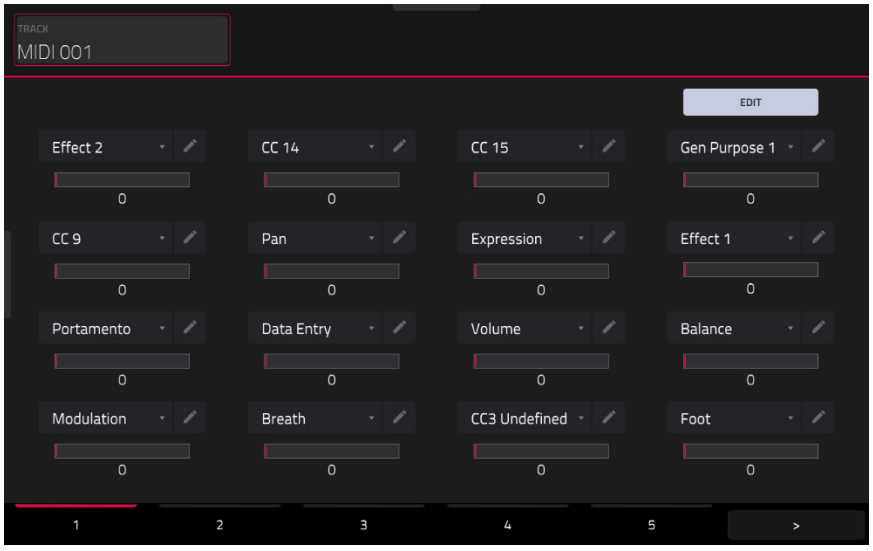
MIDI Tracks



For MIDI tracks, you will see an overview of all available MIDI CCs with a slider for each.

Use the **sliders** to set the value of each parameter.

Use the six **tabs** at the bottom of the screen to access the available parameters.

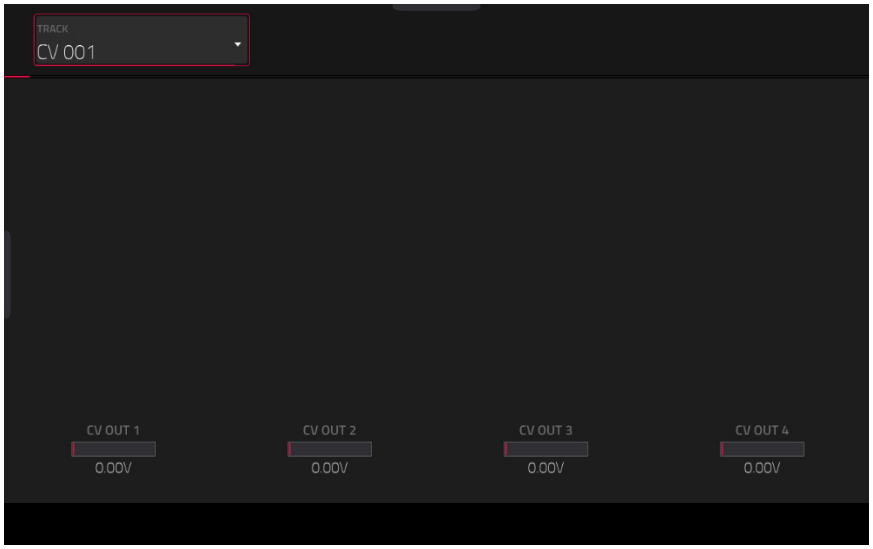


Tap the **Edit** button in the top-right of the page to edit the MIDI track assignments and naming.

To assign a parameter, tap the **dropdown menu** and use the **data dial** or **+/-** buttons to scroll through the available MIDI assignments. You can also double-tap the menu to view a list of assignments.

To rename a parameter, tap the **pencil icon** next to the dropdown menu, and then use the keyboard that appears to enter a new name. Once renamed, you can save the track and use it with other projects to retain your custom naming.

CV Tracks



For CV tracks, you will see an overview of all available CV outputs with a slider for each.

Use the **sliders** to set the value of each parameter.

Use the six **tabs** at the bottom of the screen to access the available parameters.

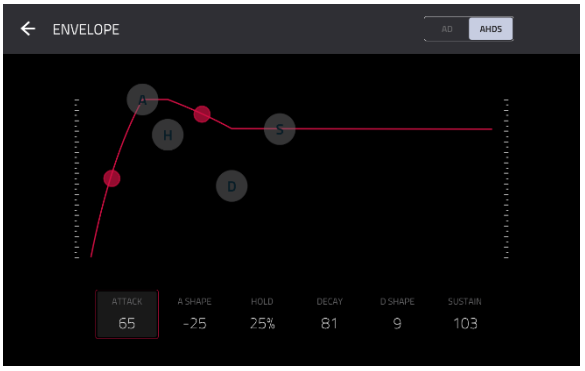
Anatomy of an Envelope

An envelope creates a variable control signal. It can be used, for instance, to modulate the filter settings of a sound over a given period of time.

For drum tracks, use the **AD**/**AHDS** selector to select an AD or AHDS envelope. When **Sample Play** is set to **Note-On**, it will use an ADSR envelope.

Keygroup tracks always use **AHDS** envelopes. When **Sample Play** is set to **Note-On**, it will use an **ADSR** envelope.

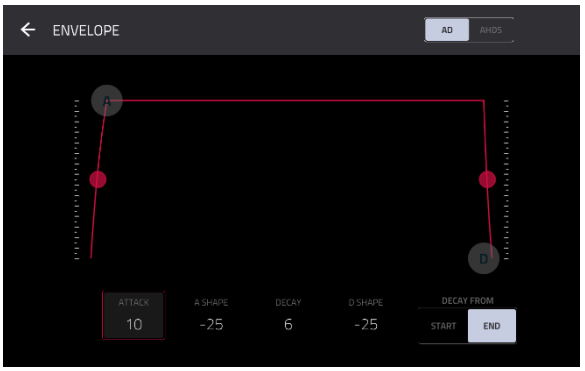
With **AHDS** envelopes, the following happens when you trigger a sample:



1. Within the period of time you have defined with the attack (**Atk**), the sample volume rises to its maximum value.
2. The sample's maximum volume will be maintained during the **Hold** phase.
3. During the **Decay** phase, the sample's volume will gradually drop to the sustain level.
4. The sample's volume will stay at the sustain level (**Sust**) until the pad is released.

Use the **A Shape** and **D Shape** fields to adjust the curve of the **Attack** and **Decay** phases, respectively.

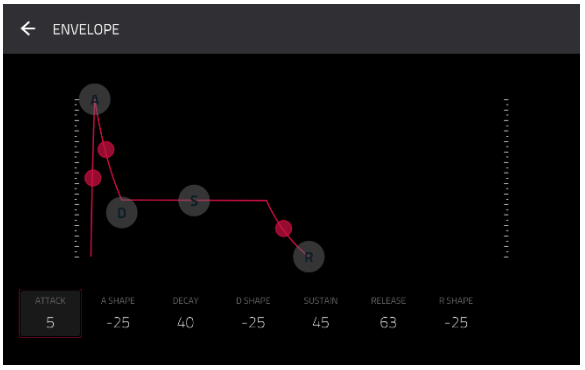
With **AD** envelopes, the following happens when you trigger a sample:



1. Within the period of time you have defined with the attack (**Atk**), the sample volume rises to its maximum value.
2. The sample's maximum volume will be maintained until its **Decay** phase, when the sample's volume will gradually drop to zero over the set duration. Tap the **Type** drop-down menu to select how the decay functions:
    - **Decay From Start**: The volume will start decreasing immediately after reaching its maximum level.
    - **Decay From End**: The maximum volume will be maintained for a hold phase until it reaches the decay phase.

Use the **A Shape** and **D Shape** fields to adjust the curve of the **Attack** and **Decay** phases, respectively.

With **ADSR** envelopes, the following happens when you trigger a sample:



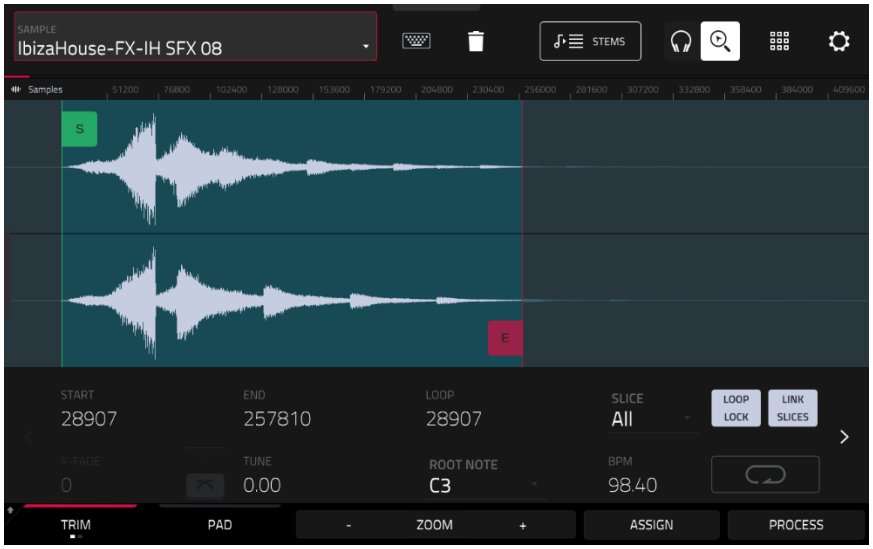
1. Within the period of time defined by **Attack**, the sample volume rises to its maximum value.
2. During the **Decay** phase, the sample's volume will gradually drop to the **Sustain** level.
3. The sample's volume will stay at the **Sustain** level until the note is released.
4. The sample's volume will drop to "zero" over the duration set by **Release**.

Use the **A Shape**, **D Shape** and **R Shape** fields to adjust the curve of the **Attack**, **Decay** and **Release** phases, respectively.

Sample Edit Mode

Sample Edit Mode lets you edit samples using various functions.

To enter Sample Edit Mode, press **Menu**, and then tap **Sample Edit**.



To select a sample to edit, use the **Sample** field at the top of the screen.

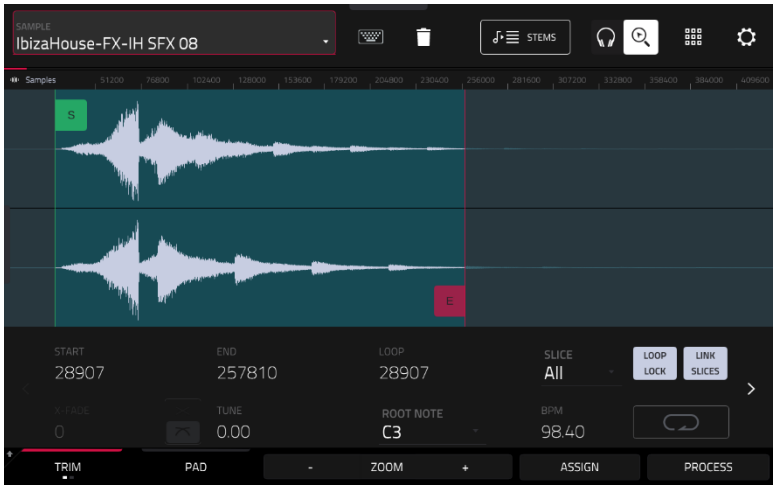
To edit the name of the sample, tap the **keyboard icon** next to the name at the top of the screen, and use the virtual keyboard that appears.

To delete the sample, tap the **trash-can icon** next to the name at the top of the screen. In the screen that appears, you will see the tracks that use this sample within your project. Tap **Delete Sample** to continue, or tap **Cancel** to return to the previous screen.

Tap the **Stems** icon to open the Create Stems Function in the Process Sample window. Learn more about this in ***Processing Slices & Samples***.

Note: To purchase MPC Stems, visit **akaipro.com/stems**, and then activate your purchase in the ***Menu > Preferences > Activate Plugins*** menu.

The upper half of the screen shows the waveform. The lower half shows the editing controls.



The waveform display shows the "active" section of the sample waveform. Swipe left or right on the waveform to move through it.

Above the waveform is the timeline, shown in **Samples**, **Time** (in seconds and milliseconds), or **Beats**. You can select the measurement units you want to show in the ***Settings***.

To zoom in or out, do any of the following:

- When the **magnifying-glass icon** (in the upper-right corner) is selected, spread or pinch your fingers (respectively) on the waveform.
- Tap the **Zoom +** or **Zoom –** buttons (respectively) at the bottom of the screen.
- Turn **Q-Link Knob 8** when the Q-Link knobs are set to **screen** mode.

To scroll through the waveform, do either of the following:

- When the **magnifying-glass icon** (in the upper-right corner) is selected, swipe the waveform left or right.
- Turn **Q-Link Knob 7** when the Q-Link knobs are set to **screen** mode.

The green marker and red marker are the start point and end point (respectively). These two points define the region of the sample that will be played.

To move the start point or end point of the selected region, do any of the following:

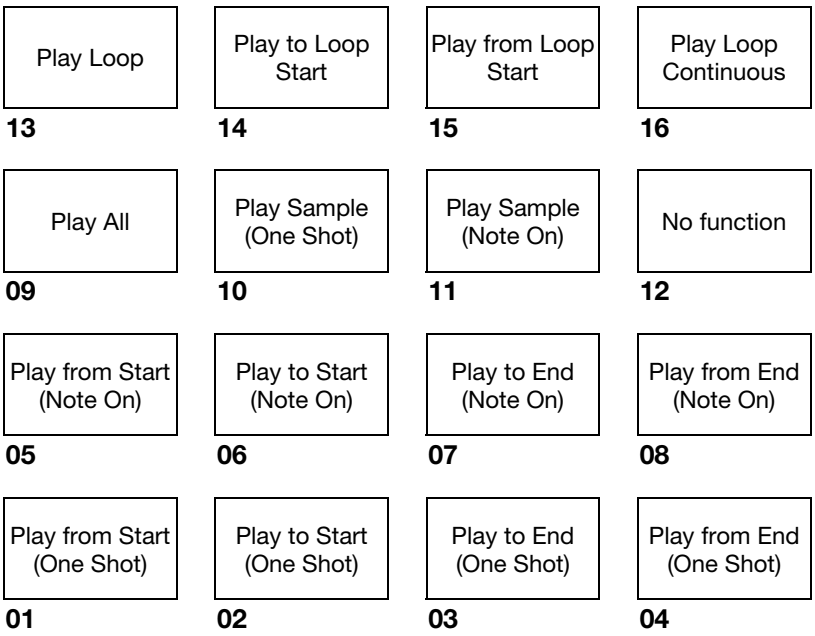
- Tap and drag its marker left or right.
- Use the **Start** or **End** fields shown below the waveform.
- When the **knobs** are set to **screen** mode, use **Knobs 1** and **2** to adjust the start point or **Knobs 3** and **4** to adjust the end point. Knobs 1 and 3 provide fine adjustment and Knobs 2 and 4 provide coarse adjustment.

Tip: A recorded sample may have some silence at the beginning or end, which makes it difficult to time it correctly in a musical context. Fix this by adjusting the start point. You can also adjust end point to remove any extra silence or unwanted audio at the end. In addition to making your workflow easier, having a "tight," well-edited sample can enhance your production or performance.

You can use Sample Edit Mode in two different ways: **Trim Mode** or **Chop Mode**. The options for each mode are slightly different. Please refer to the following ***Trim Mode*** and ***Chop Mode*** parts of this chapter to learn how each works. Before using these modes, though, you may want to configure your settings—see the following ***Settings*** chapter to do this.

Tap the **pads** icon next to the name at the top of the screen to enable the Sample Edit pad controls.

When in Trim Sample Edit Mode, the lower-left quadrant of pads can be used to audition certain parts of the selected sample:



Play Sample (**One Shot**) (**Pad 10**) plays the sample once from the start point to the end point. Press the pad once to play it.

Play Sample (**Note On**) (**Pad 11**) plays the sample once from the start point to the end point. Press and hold the pad to play it, and release the pad to stop playing it. Alternatively, select the **headphones icon** in the upper-right corner, and then tap and hold your finger on the waveform.

Play Loop Continuous (**Pad 16**) plays the sample repeatedly using the mode set by the **Loop** button (**Forward**, **Reverse**, or **Alternating**; if the **Loop** button is **off**, the sample will loop forward repeatedly).

Play Loop (**Pad 13**) plays the sample repeatedly using the mode set by the **Loop** button (**Forward**, **Reverse**, or **Alternating**; if the **Loop** button is off, the sample will loop forward repeatedly). Press and hold the pad to play it, and release the pad to stop playing it.

Play to Loop Start (**Pad 14**) plays the part of the sample just before the loop point. Press and hold the pad to play it, and release the pad to stop playing it.

Play from Loop Start (**Pad 15**) plays the sample from the loop point to the end of the sample regardless of the end point. Press and hold the pad to play it, and release the pad to stop playing it.

Play All (**Pad 9**) plays the entire sample.

Pads 1–**4** have the same respective functions as **Pads 5**–**8**, but **Pads 1**–**4** play the sample part as "**One Shots**" (pressing the pad once will play the entire part) while **Pads 5**–**8** play the sample part as "**Note Ons**" (pressing the pad and holding it will play the part; releasing it will stop playback):

Play from Start (**Pad 1**, **Pad 5**) plays the sample from the start point to the end point.

Play to Start (**Pad 2**, **Pad 6**) plays the part of the sample just before the start point to the start point.

Play to End (**Pad 3**, **Pad 7**) plays the part of the sample just before the end point to the end point.

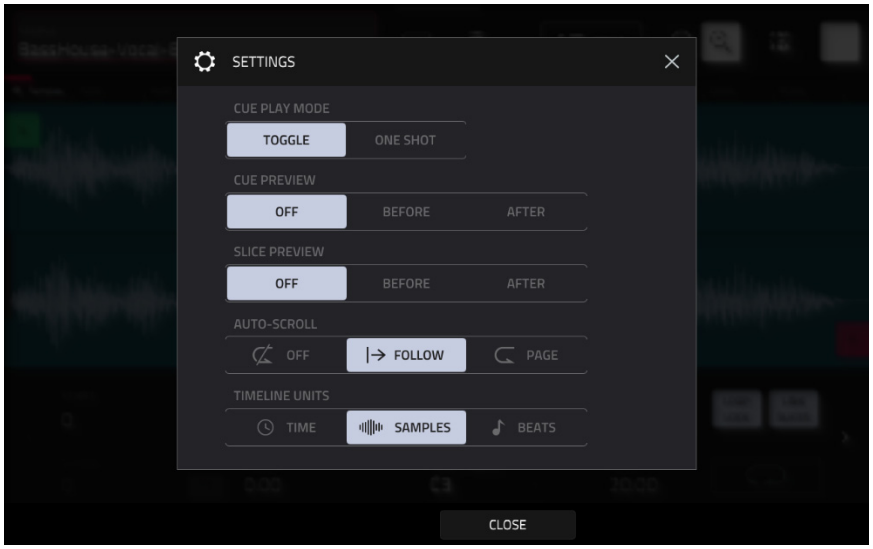
Play from End (**Pad 4**, **Pad 8**) plays the part of the sample from the end point to the end of the sample.

When in Chop Sample Edit Mode, you can use the pads, starting in lower-left quadrant, to add slices to the current sample or trigger existing slices. If you have more than 16 slices, you can continue to use the lower-right quadrant, then the upper-left and upper-right.

When the current Track is a Drum Track and Pad Sample Edit Mode is selected, you can use the lower-left quadrant of pads to audition the current sample of the current pad, similar to using Notes mode with a Drum Track.

Settings

Tap the **gear icon** to open the Settings window, where you can configure certain Sample Edit Mode settings.



Use the **Cue Play Mode** selector to set how the cue playhead will play audio.

One Shot: Tapping **Play Cue** will play the entire sample from the cue playhead.

Toggle: Tapping **Play Cue** once will start playback from cue playhead. Tapping it once more will stop playback.

Use the **Cue Preview** selector to set if any audio plays as you move the cue playhead. As you move the cue playhead through the sample waveform, you can set it to play the small part of the sample before the cue playhead (**Before**), play the small part of the sample after the cue playhead (**After**), or not play at all (**Off**). You can also set this in your overall Preferences (see ***General Features*** > ***Menu*** > ***Preferences*** > ***General***).

Use the **Slice Preview** selector to set if any audio plays as you move a slice marker. As you move the slice marker through the sample waveform, you can set it to play the small part of the sample before the slice marker (**Before**), play the small part of the sample after the slice marker (**After**), or not play at all (**Off**). You can also set this in your overall Preferences (see ***General Features*** > ***Menu*** > ***Preferences*** > ***General***).

Use the **Auto-Scroll** selector to set how the screen behaves relative to the audio playhead.

Follow: Depending on the zoom setting, the waveform will scroll along in the background, keeping the audio playhead centered.

Page: The waveform display will move to the “next page” to follow the audio playhead.

Off: The waveform display will not move at all.

These functions also apply to the sample waveform in the Grid View.

Use the **Timeline Units** selector to set the measurement units shown above the sample waveform. You can select one of the following options:

Time: hours:minutes:seconds:frames

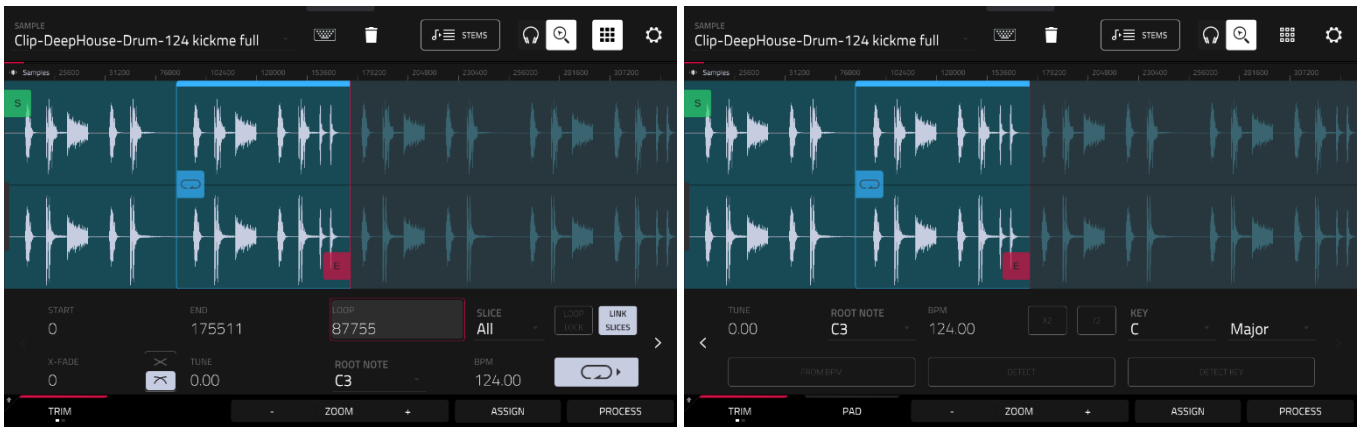
Samples: number of samples

Beats: bars:beats:ticks

Trim Mode

We recommend using Trim Mode to crop the start and/or ends from a sample.

To enter Trim Mode, tap the **Trim/Chop** button in the lower-left corner so it says **Trim**. There are two pages of parameters in Trim Mode, which can be accessed by tapping the **>** or **<** arrows on the sides of the page.



Use the **Start** and **End** fields to set the position of the start point and end point of the sample (respectively). Alternatively, tap and drag the start (**S**) or end (**E**) marker left or right, or use **Knobs 1** and **2** to adjust the start point or **Knobs 3** and **4** to adjust the end point when the knobs are in **screen** mode.

Trim Mode includes a loop function. When on, the region of the sample between the loop point and end point will repeat. This is useful when trying to find an ideal spot to begin the sample. The loop cannot be earlier than the start point.

To adjust the loop point, do any of the following:

- Use the **Loop** field.
- Tap and drag the start (**S**) marker (if **Loop Lock** is on) or the **loop** marker (if **Loop Lock** is off).
- When the **knobs** are in **screen** mode, use Knobs 5 and 6 to adjust the loop marker. Knob 5 provides fine adjustment and Knob 6 provides coarse adjustment.

Tap the **Loop Lock** button to turn Loop Lock on or off. When on, the loop point is the same as the start point. When off, the loop point is independent from the start point and indicated by a separate loop marker.

Tap the **Loop** button to turn the loop function on or off and cycle between the four modes:

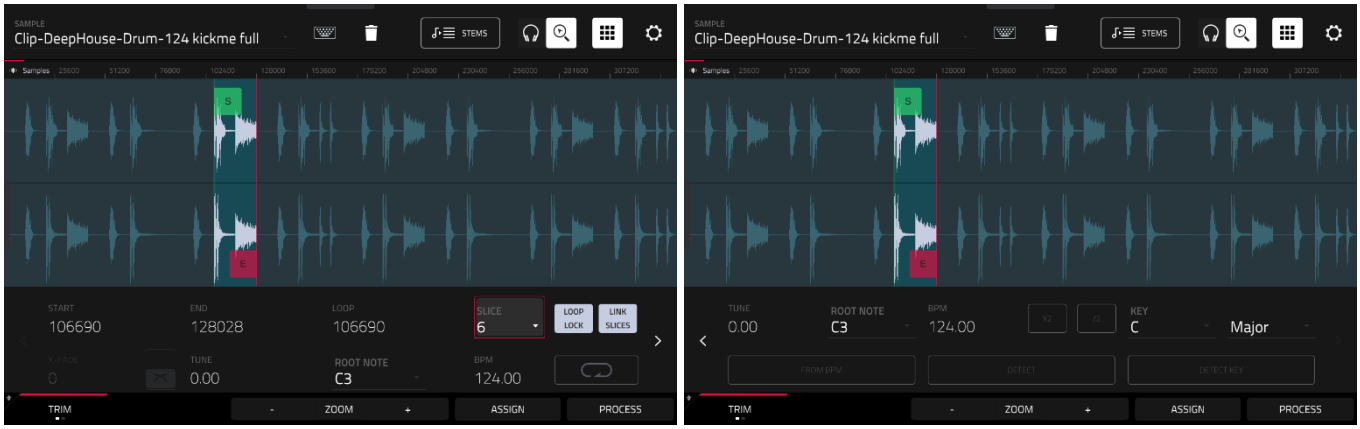
Off: The sample will not loop.

Forward: When the loop reaches its end point, it will start playing again from the loop point.

Reverse: When the loop reaches its end point, it will play in reverse. When it reaches the loop point again, it will return to the end point and continue playing in reverse.

Alternating: When the loop reaches its end point, it will play in reverse. When it reaches the loop point again, it will start playing forward again from the loop point.

To switch between Forward and off, press and hold **Shift**, and then tap **Loop** at the bottom of the screen.



To select a slice to edit, do either of the following (after you have created slices in Chop Mode):

- Use the **Slice** field.
- Turn **Q-Link Knob 16** when the Q-Link knobs are set to **screen** mode.

When **Link Slices** is enabled (after you have created slices in Chop Mode), changing the start point of a slice will also change the end point of the previous slice. Similarly, changing the end point of a slice will also change the start point of the next slice. Disable **Link Slices** if you are trying to create slices that use non-contiguous parts of the sample.

To enable or disable this feature, tap the **Link Slices** button.

Important: **Link Slices** must be disabled to make slices non-sequential, noncontiguous, or overlapping.

Use the **X-Fade** field to apply real-time crossfade looping to sample playback. To apply a crossfade, make sure the **Loop** starting point is greater than zero. Then, you can set the **Length** of the crossfade and the **Type**, either **Equal Power** or **Linear**.

Use either of the **Tune** fields to transpose the sample up or down from its original pitch.

Use either of the **Root Note** fields to set the root note of the sample. This defines which note will play the sample at its original pitch when in a keygroup track.

Use either of the **BPM** fields to manually set the BPM of the sample. On the second Trim Mode page, use the **X2** and **/2** buttons to double of halve the current tempo.

Use the **Key** fields to enter a sample key manually. One field selects the key root note, and the other field selects whether the key is **Major**, **Minor,** or off (--).

Tap **Detect Key** to detect the key automatically.

0 Snap forces start points, end points, and loop points to occur only at the waveform's "zero-crossings." This can help to avoid clicks and glitches when playing a sample.

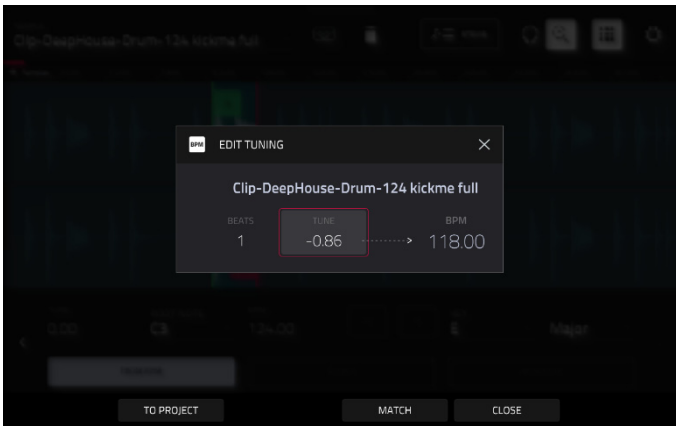
To enable or disable 0 Snap, press and hold **Shift**, and then tap **0 Snap** at the bottom of the screen.

Tip: You can use Trim Mode for a specific slice of the sample, previously created and selected in Chop Mode. This allows for a more detailed view of a single slice than in Chop Mode and gives you more options for auditioning the slice. You can easily switch between Trim Mode and Chop Mode while doing this.

To use both Trim Mode and Chop Mode to edit a sample slice:

1. Tap **Trim**/**Chop** at the bottom of the screen so it says **Chop**.
2. Set all fields as desired to create your sample slices.
3. Select the desired slice using the Slice field.
4. Tap **Trim**/**Chop** at the bottom of the screen so it says **Trim**. The region you are now editing is indicated by the normal start point and end point markers rather than slice markers.
5. Tap **Trim**/**Chop** at any time to return to Chop Mode.

Tap **From BPM** to open the **Edit Tuning** window, which lets you tune a sample to the project.



Use the **Beats** field to match the number of beats in the sample.

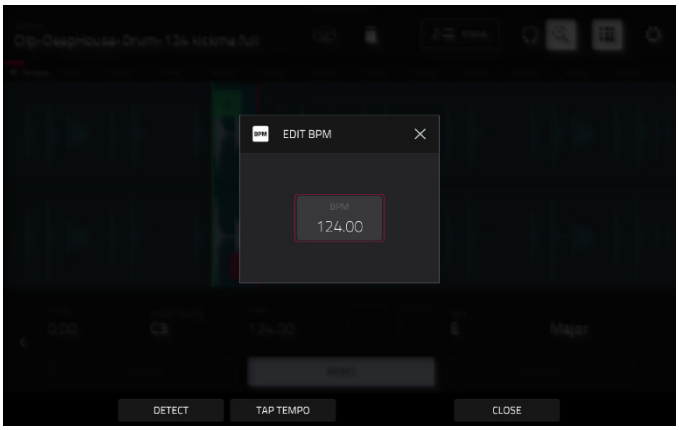
Tap **Match** to tune the sample to the project. The **Tune** field will adjust automatically and close the window. The sample is now tuned to the project.

Tap **To Project** to tune the sample to the project and adjust the project tempo. This is the same as tapping Match, but it also changes the project's tempo to the BPM shown in the Tempo field on the right.

Tap **Close** to close the window.

Use the **BPM** field to enter a tempo manually.

Tap **Detect** to detect the tempo automatically. In the **Edit BPM** window that appears, you can do any of the following:



- Use the **BPM** field to enter a tempo manually.
- Tap **Detect** to detect the tempo automatically.
- Tap **Tap Tempo** at the bottom of the screen at the desired rate to use it as the tempo.
- Tap **Close**, the **X**, or anywhere outside the window to close it.

Assigning Samples

You can assign your new sample directly to a pad from Trim Mode.

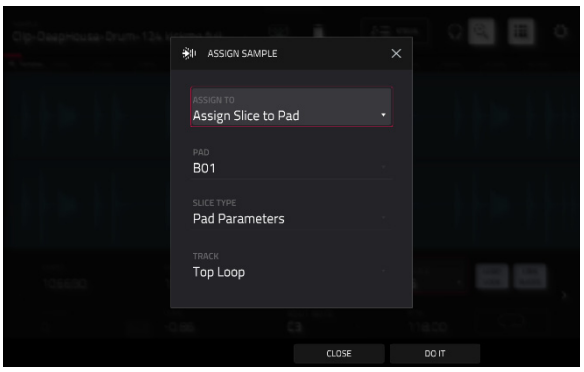
To assign a sample, tap **Assign** at the bottom of the screen to open the Assign Sample window.

Important: Assigning a sample to a pad in this way will replace the sample on the first layer of the pad.

Tap **Do It** to assign the sample using the selected process.

Tap **Close**, the **X**, or anywhere outside the window to cancel the operation.

If you set the **Assign To** field to **Assign slice to Pad**, the pad will simply refer to the slice in this sample instead of creating a new sample. This is useful for reducing clutter in your project.



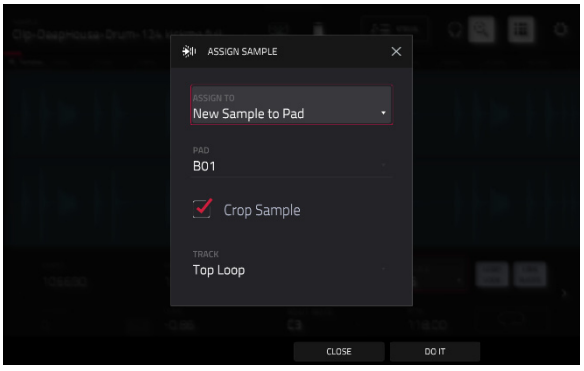
Use the **Pad** field to select the desired pad. Alternatively, press the desired pad.

Use the **Slice Type** field to select how the pad's layer settings will be set when the slice is assigned to it (see ***Track Edit Mode*** to learn more about the parameters mentioned below):

- **Non-Destructive Slice**: The pad's **Slice** setting will be set to the slice number.
- **Pad Parameters**: The pad's **Slice** setting will be set to **Pad**. The **Pad Start** and **Pad End** will be set to the slice's start point and end point values, and the **Loop Position** will be set to the slice's start point but with **Pad Loop** deactivated.

Use the **Track** field to specify the track to which you want to add the slice.

If you set the **Assign To** field to **New Sample to Pad**, this will create a new sample in your project. (The original sample will remain as it is.)



Use the **Pad** field to select the desired pad. Alternatively, press the desired pad.

Check the **Crop Sample** box to delete the unused parts from the sample when it's created and assigned. This feature is destructive, though the project will still contain your original sample.

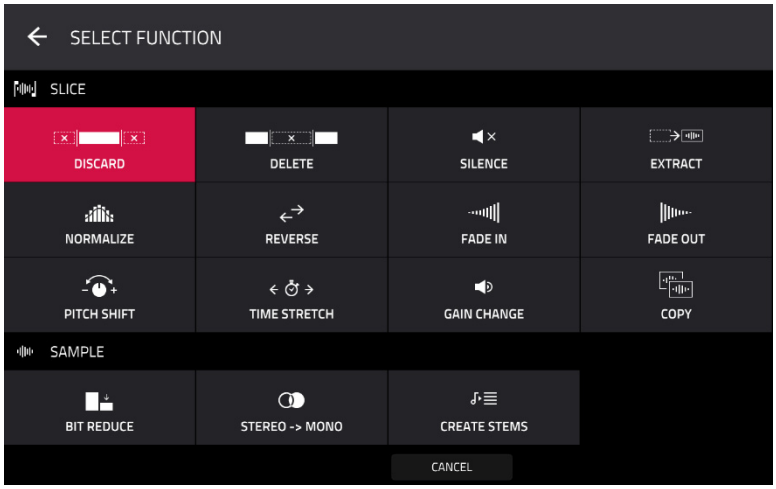
Leave this box unchecked to keep the unused parts of the sample when it is created and assigned. This way, you will still be able to edit the entire sample further even though you are using only part of it at the moment.

Use the **Track** field to specify the track to which you want to add the slice.

Processing Slices & Samples

Tap the **Process** button to open the Process window, where you can select an editing option for the sample.

Use the **Function** field to select an editing process. Double-tap it or tap **Function** at the bottom of the screen to open the Function window, which displays an overview of all available editing processes.



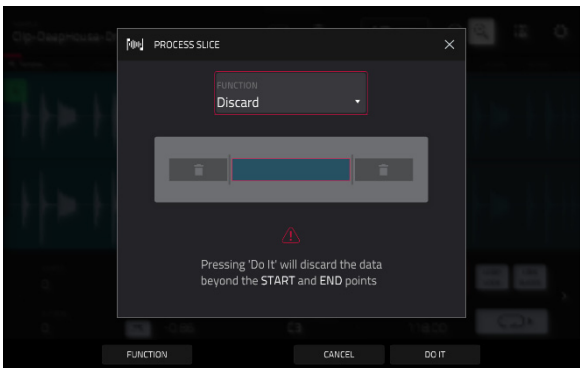
You can use any of these functions as described below.

Tap **Cancel** to return to Sample Edit Mode.

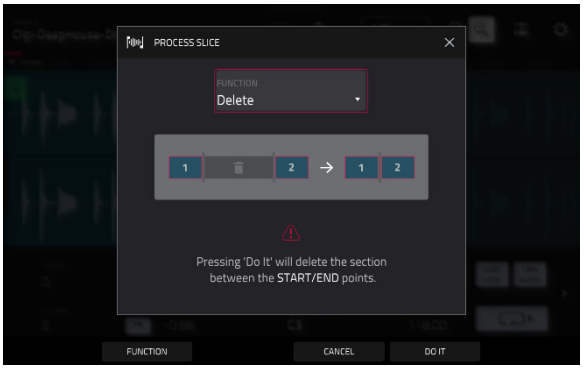
Tap the top of the screen to return to the Process window.

Note: All **Slice** processes will affect only the part of the sample between the start point and the end point. The **Sample** processes (**Bit Reduce** and **Stereo -> Mono**) will affect the **entire** sample regardless of its start point or end point.

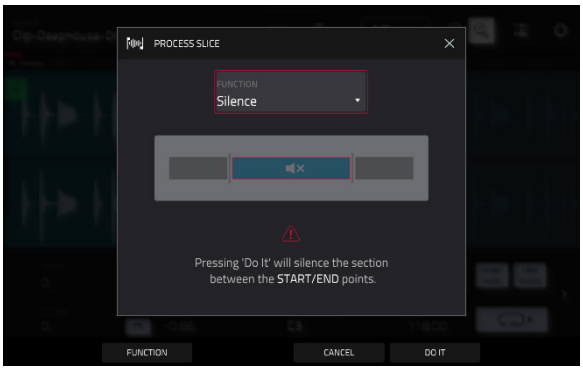
The **Discard** process deletes the regions before the start point and after the end point.



The **Delete** process deletes the region between the start point and end point and closes the gap between them.



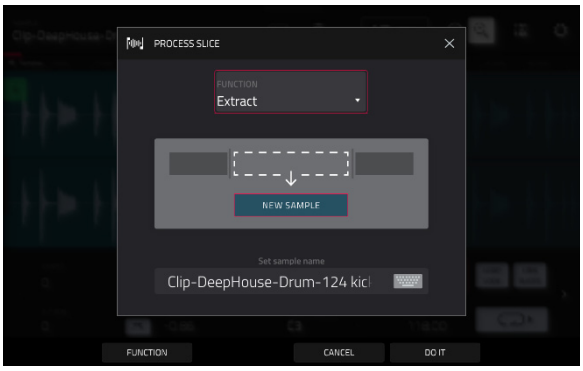
The **Silence** process replaces the region between the start point and end point with silence.



The **Extract** process deletes the regions before the start point and after the end point and saves it as a new sample in your current project.

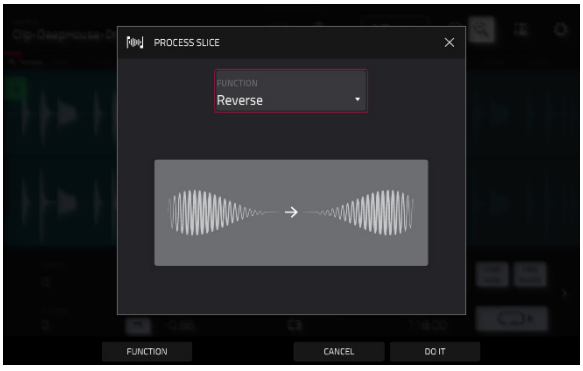
Use the **Edit Name** field (and the virtual keyboard that appears) to name the new sample.

Tip: This is useful if you recorded a drum loop and wanted to remove just a snare drum hit, a kick drum hit, etc. to use separately in the project.

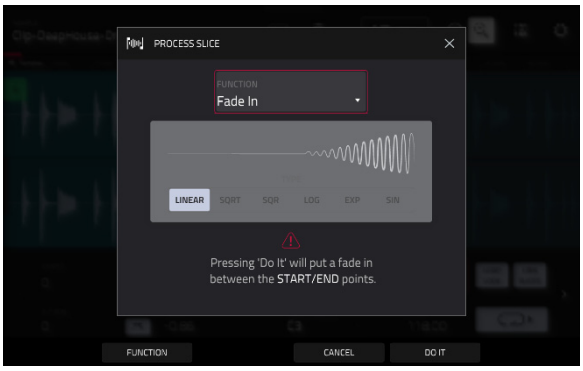


The **Normalize** process increases a sample's level to the highest level possible without distortion. This is essentially a kind of digital gain optimization, so you do not have to worry about excessive level settings when working with samples with a wide range of amplitudes.

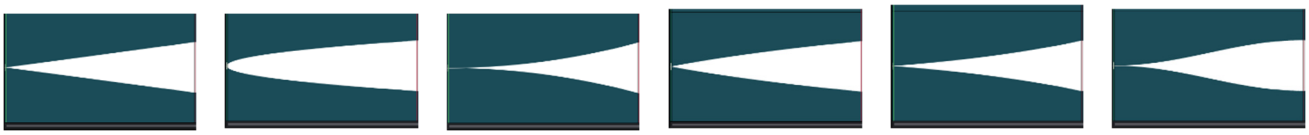
The **Reverse** process reverses the region between the start point and end point.



The **Fade In** process sets a fade-in between the start point and end point. The following types are available:

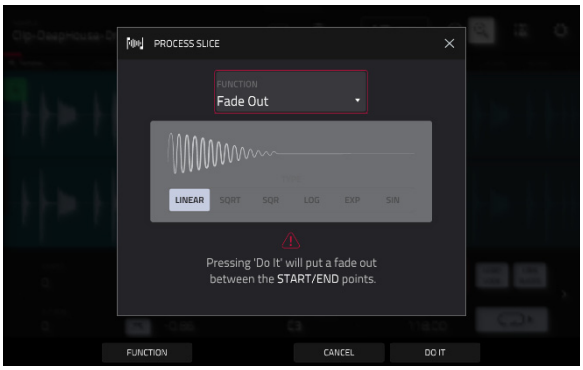


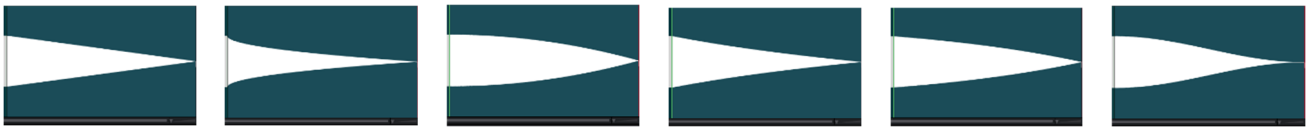
- **Linear** fades the audio in with a linear curve—a straight line between the start and end.
- **Square Root** fades the audio in with a square root curve—a half-parabola that is similar to the logarithmic curve but steeper.
- **Square** fades the audio in with a curve opposite the square root curve. This is similar to the **exponential** curve but steeper.
- **Log** fades the audio in with a logarithmic curve—quickly rising at the start and flattening out towards the end.
- **Exp** fades the audio in with an exponential curve—slowly rising in the beginning and growing steeper towards the end.
- **Sine** fades the audio in with a sine curve—like a sine wave, it slowly rises, gets steeper in the middle, and flattens out at the end.



Linear Square Root Square Log Exp Sine

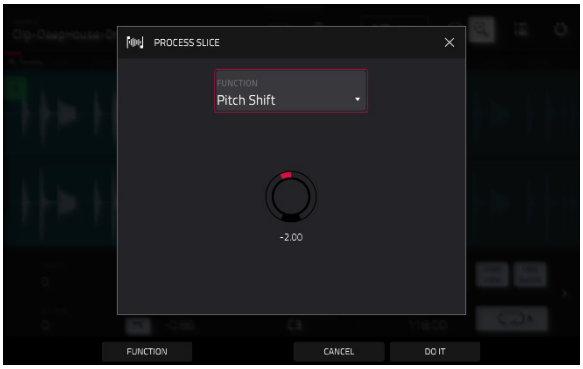
The **Fade Out** process sets a fade-out between the start point and end point. These are the same as the **Fade In** curves, but fade the audio out instead of in.





Linear Square Root Square Log Exp Sine

The **Pitch Shift** process changes the pitch of the sample without changing its length. This lets you set the sample's pitch to your project without affecting the sample's tempo or duration. You can adjust it up to 12 semitones, up or down. Keep in mind that the audio quality may decrease at more extreme settings.

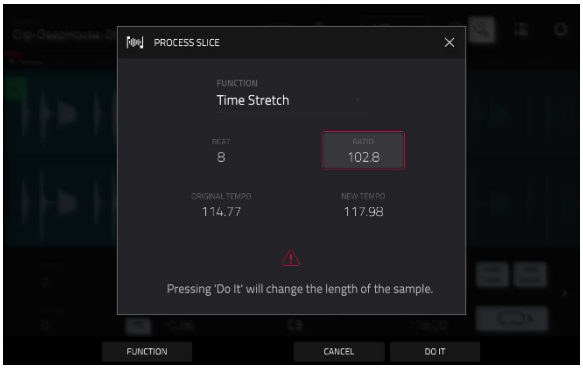


The **Time Stretch** process lengthens or shortens the sample without changing its pitch. This is useful for matching the durations of two samples with different pitches. You can enter the original tempo of the sample and the desired tempo after processing.

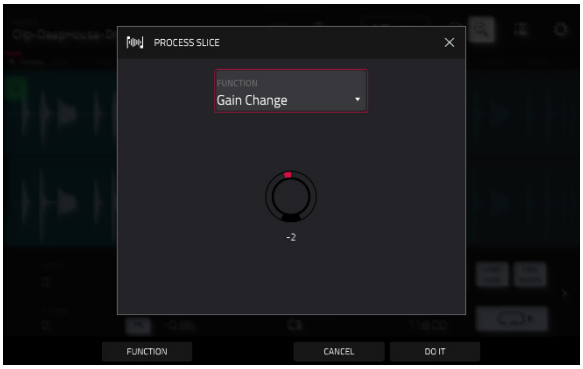
Use the **Beat** field to set the desired value number of beats.

Use the **New Tempo** field to set the new tempo. The **Ratio** field will then automatically show the time stretch factor.

Alternatively, to adjust the ratio instead, use the **Ratio** field to set the desired ratio. The **New Tempo** field will then change automatically based on the new time stretch factor.

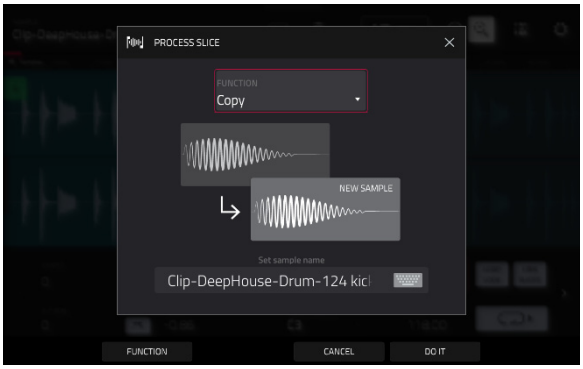


The **Gain Change** process raises or lowers the volume of the sample. You can adjust it up to 18 dB, higher or lower. This function is different than Normalize because it will allow volumes beyond clipping level. This may be a desired effect, but remember to watch your output level!

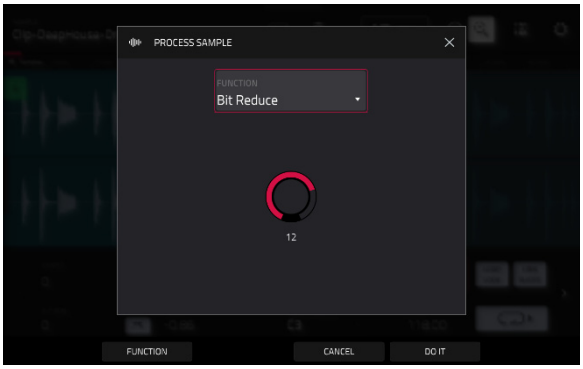


The **Copy** process saves a copy of the sample.

Use the **Edit Name** field (and the virtual keyboard that appears) to name the new sample. Otherwise, the process will add a consecutive number after the sample name.



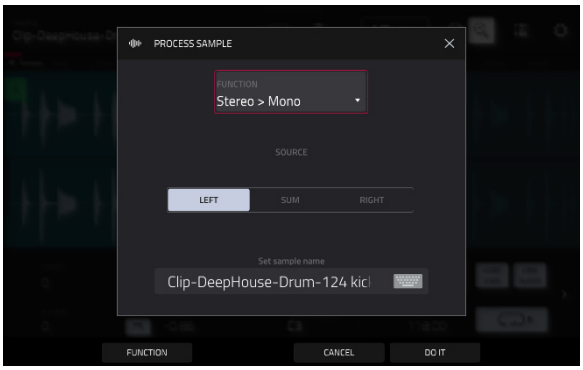
The **Bit Reduce** process lowers the bit resolution of a sample, effectively reducing its degree of faithful reproduction. You can reduce it down to **1 bit**. (The sound is similar to the Resampler effect, but Bit Reduce will permanently alter the sample.)



Tip: Use this on drum loops to get a dirty, "old-school" sizzle but with a digital "edge."

Note: This process affects the **entire** sample regardless of its start point or end point.

The **Stereo -> Mono** process converts a stereo sample to a new mono sample and saves it as a new sample.



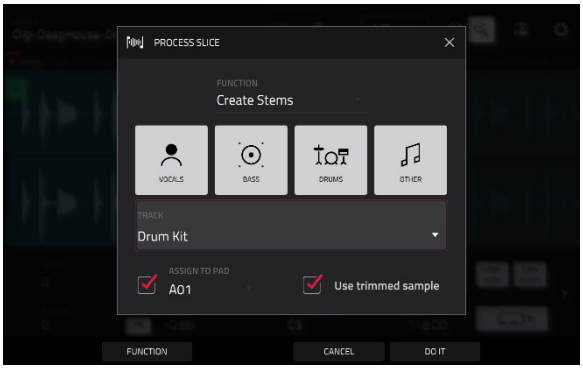
Use the **Edit Name** field (and the virtual keyboard that appears) to name the new sample. Otherwise, the process will add a consecutive number after the sample name.

The following options are available:

- **Left** will convert the left channel only.
- **Right** will convert the right channel only.
- **Sum** will combine the left and right audio channels to a single mono channel.

Note: This process affects the **entire** sample regardless of its start point or end point.

The **Stems** process isolates different parts of the sample and separates them into new stem samples.



Click the icons to select or deselect from the following elements to create stems of:

- **Vocals:** Isolate vocal elements of the track into a stem.
- **Bass:** Isolate bass elements of the track into a stem.
- **Drums:** Isolate percussive elements of the track into a stem.
- **Other:** Isolate other musical textures, such as keys or guitars, into a stem.

Use the **Track** dropdown menu to select the track where the stems will be added.

The **Assign to Pad** function determines where the stem separated samples are added. When checked, you can select a pad in the chosen Track using the dropdown menu, and the stems will be added to the first four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

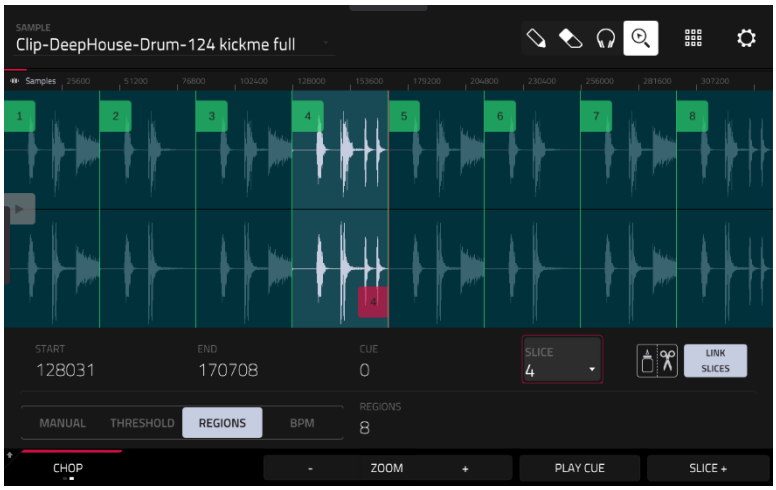
Tap the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Note: To purchase MPC Stems, visit **akaipro.com/stems**, and then activate your purchase in the ***Menu > Preferences > Activate Plugins*** menu.

Chop Mode

Whereas Trim Mode crops only the start and/or end off of a sample, Chop Mode divides the sample into multiple regions called **slices**. We recommend using Chop Mode when working with a long sample with different sounds throughout (e.g., a drum loop or a long melodic or harmonic passage).

To enter Chop Mode, tap the **Trim**/**Chop** button in the lower-left corner so it says **Chop**.



Use the **Start** and **End** fields to set the position of the start point and end point (respectively) of the currently selected slice. Alternatively, tap and drag the start (**S**) or end (**E**) marker left or right, or use **Knobs 1** and **2** to adjust the start point or **Knobs 3** and **4** to adjust the end point when the knobs are in **screen** mode.

Use the selector in the lower-left corner of the screen to choose how you want to use Chop Mode:

Manual

This method lets you insert slices at locations you select.

Threshold

This method uses an adjustable detection algorithm that derives the number of slices created from the volume levels present in the sample.

Use the **Threshold** field to set the threshold level. The higher the selected value, the more slices will be created.

Use the **Min Time** field to set the minimum length of a slice in milliseconds.

Regions

This method divides a sample into several slices of equal length.

Use the **Regions** field to set how many regions the sample will be divided into. The higher the selected value, the more slices will be created.

BPM

This method divides a sample into several slices based on the tempo (beats per minute).

Use the **Bars** field to set how many bars are in the sample.

Use the **Beats** field to set how many beats are in each bar.

Use the **Time Div** field to set a note division. The slice markers will be placed according to this setting. You can select **1**/**4**, **1**/**8**, **1**/**16**, or **1**/**32**. (In most cases, you should set this parameter to **1**/**16**.)

To play a slice, do either of the following:

- When the **headphones icon** (in the upper-right corner) is selected, tap a **slice** in the waveform.
- When Sample Edit pad controls are enabled, press the **pad** that corresponds to the slice.

When the **One Shot** feature is enabled, you can press a pad once to play the entire slice. When this is disabled, pressing the pad and holding it will play the slice; releasing it will stop playback.

To enable or disable One Shot, press and hold **Shift**, and then tap **One Shot**.

To select a slice to edit, do any of the following:

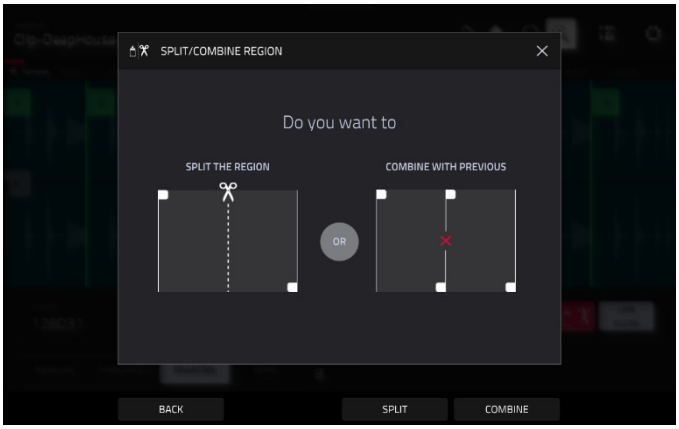
- Use the **Slice** field.
- When the **Q-Link knobs** are in **Screen** mode, turn **Knob 6**.
- When the **headphones icon** (in the upper-right corner) is selected, tap a **slice** in the waveform.

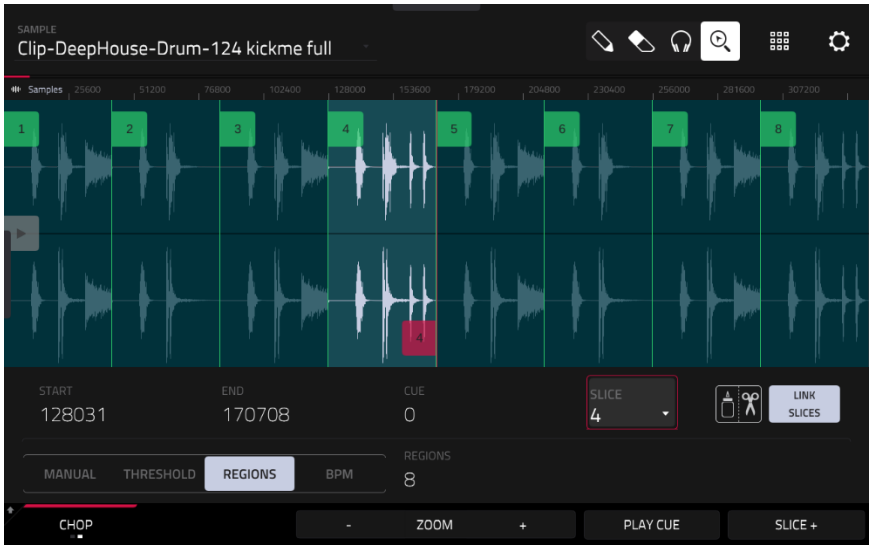
To add a slice at the current playhead position, tap **Slice+** at the bottom of the screen. You can do this at any point during sample playback.

To insert a slice marker during sample playback, first make sure Sample Edit pad controls are enabled (**pads icon** at the top of the screen). Press the **green pad** in the center of the pad matrix to begin playback of the entire sample, or press the **amber pad** below it to begin playback of the sample between the Start and End points. Then, press the bottom-left pad to insert the first slice at the current playhead location. (You can also begin playback by inserting the first slice at the sample starting point.) The pad of the most recently inserted slice will be green. Continue pressing **unlit pads**, going left to right and bottom to top in the lower-left pad quadrant, to continue adding slices at the playhead location. Pads with slices inserted before the current slice will be yellow. If you press a lit pad, playback will restart from that pad's corresponding slice marker.

To split or combine slices, tap the **glue-and-scissors icon**. In the **Split/Combine Region** screen that appears, tap one of the following buttons:

- **Split**: This splits the currently selected region into two equal slices.
- **Combine**: This combines the currently selected region with the one before it.
- **Back**: This closes the window.





When **Link Slices** is enabled, changing the start point of a slice will also change the end point of the previous slice. Similarly, changing the end point of a slice will also change the start point of the next slice. Disable **Link Slices** if you are trying to create slices that use non-contiguous parts of the sample.

To enable or disable this feature, tap the **Link Slices** button.

Important: **Link Slices** must be disabled to make slices non-sequential, noncontiguous, or overlapping.

To remove all slices from a sample, press and hold **Shift** and tap **Clear All**.

The cue playhead is useful when manually inserting slice markers. You can set its position and behavior to suit your workflow.

Use the **Cue** field to adjust the position of the cue playhead. Alternatively, tap and drag the translucent marker with the triangle (▶).

To play the sample from the cue playhead, tap **Play Cue** at the bottom of the screen.

To create a slice marker at the cue playhead position, tap **Slice+** at the bottom of the screen.

To set how the cue playhead behaves, use the **Settings** window (described ***earlier***).

0 Snap forces start points and end points to occur only at the waveform's "zero-crossings." This can help to avoid clicks and glitches when playing a sample.

To enable or disable 0 Snap, press and hold **Shift**, and then tap **0 Snap** at the bottom of the screen.

Converting or Assigning Slices

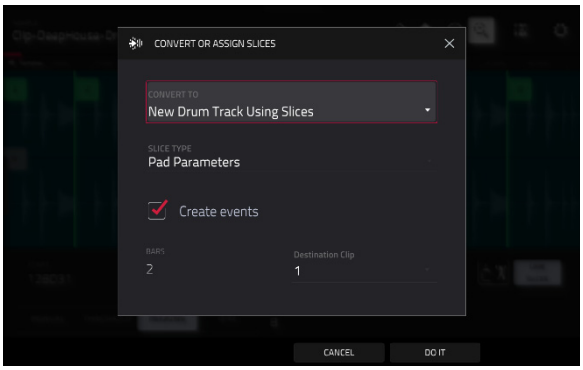
You can assign your new sample directly to a pad from Chop Mode. You can also convert it into a new track or patched phrase.

To convert or assign a sample, press and hold **Shift**, and then tap **Convert** at the bottom of the screen to open the Convert or Assign Slices window.

To convert the sample using the selected process, tap **Do It**.

To cancel the operation, tap **Close**.

If you set the **Convert To** field to **New drum track using slices**, this will create a new track and assign the sample's slices to its pads. The pads will simply refer to the slices in this sample instead of creating new samples. This is useful for reducing clutter in your project. The new track will be named after the sample and appended with **ch**.



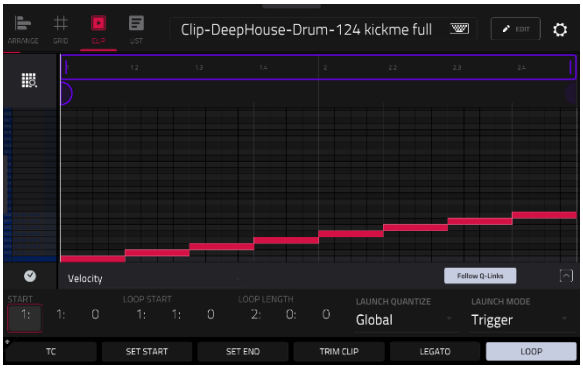
Use the **Slice Type** field to select how each pad's layer settings will be set when the slices are assigned to them (see ***Track Edit Mode*** to learn more about the parameters mentioned below):

- **Non-Destructive Slice**: Each pad's **Slice** setting will be set to the slice number.
- **Pad Parameters**: Each pad's **Slice** setting will be set to **Pad**. The **Pad Start** and **Pad End** parameters will be set to the slice's start point and end point values, and the **Loop Pos** parameter will be set to the slice's start point but with **Pad Loop** deactivated.

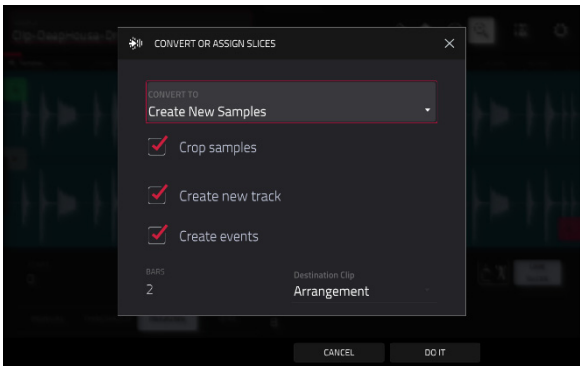
Check the **Create Events** box to automatically create a new sequence in which each pad plays its corresponding slice in ascending sequence by pad number.

If **Create Events** is checked, use the **Bars** field to set how many bars the slices' events will occupy.

Use the **Destination Clip** field to select a clip in the new drum track where the events will be added, or select **Arrangement** to add the events to the arrangement.



If you set the **Convert To** field to **Create New Samples**, this will create a new sample from each slice and assign them to pads in a new track.



The new track will be named after the sample and appended with **ch**. The new samples will be appended with **SI-#** (where **#** is a consecutive number).

Check the **Crop Samples** box to delete the unused parts from the sample when they are created and assigned. This feature is destructive, though the project will still contain your original sample.

Leave this box unchecked to keep the unused parts of the samples when they're created and assigned. This way, you will still be able to edit the entire samples further even though you are using only part of them at the moment.

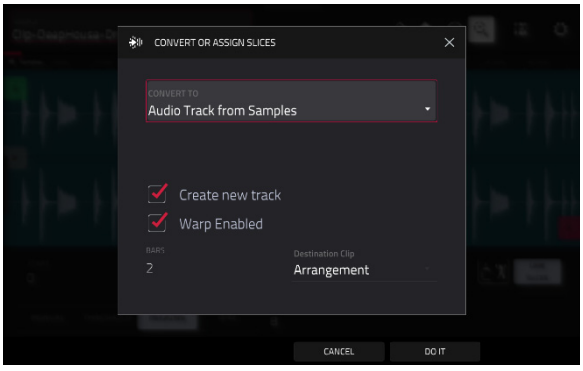
By default, this option already will create a new track. You can **uncheck** the **Create new track** box to convert each slice into a sample that is placed in the project's sample pool but not assigned to a track or pad.

If **Create new track** is checked, check the **Create events** box to automatically create a new track in which each pad plays its corresponding slice in ascending sequence by pad number.

If **Create Events** is checked, use the **Bars** field to set how many bars the slices' events will occupy.

Use the **Destination Clip** field to select a clip in the track where the events will be added, or select **Arrangement** to add the events to the arrangement.

If you set the **Convert To** field to **Audio Track from Samples**, this will create a new audio track with the converted samples. The new track will be named after the sample.



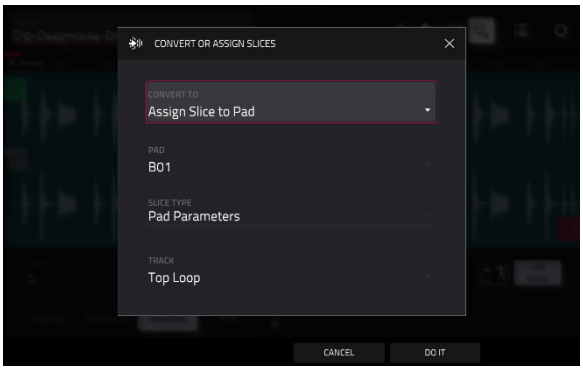
By default, this option already will create a new track. You can **uncheck** the **Create new track** box to select an existing Audio track in the project where the samples will be added.

Check the **Warp Events** box to warp the converted samples to the project tempo. To preserve the sound of individual drum hits and avoid introducing time-stretching artifacts, leave this unchecked.

Use the **Bars** field to set how many bars the slices' events will occupy.

Use the **Destination Clip** field to select a clip in the new audio track where the events will be added, or select **Arrangement** to add the events to the arrangement.

If you set the **Convert To** field to **Assign Slice to Pad**, the pad will simply refer to the slice in this sample instead of creating a new sample. This is useful for reducing clutter in your project.



Important: Assigning a sample to a pad in this way will replace the sample on the first layer of the pad.

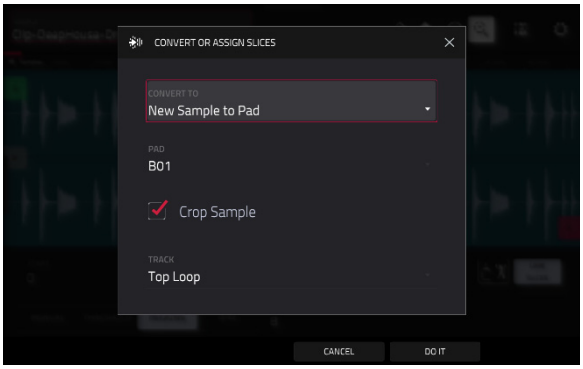
Use the **Pad** field to select the desired pad. Alternatively, press the desired pad.

Use the **Slice Type** field to select how the pad's layer settings will be set when the slice is assigned to it (see ***Track Edit Mode*** to learn more about the parameters mentioned below):

- **Non-Destructive Slice**: The pad's **Slice** setting will be set to the slice number.
- **Pad Parameters**: The pad's **Slice** setting will be set to **Pad**. The **Pad Start** and **Pad End** will be set to the slice's start point and end point values, and the **Loop Position** will be set to the slice's start point but with **Pad Loop** deactivated.

Use the **Track** field to specify the track to which you want to add the slice.

If you set the **Convert To** field to **New Sample to Pad**, this will create a new sample in your project. (The original sample will remain as it is.)



Important: Assigning a sample to a pad in this way will replace the sample on the first layer of the pad.

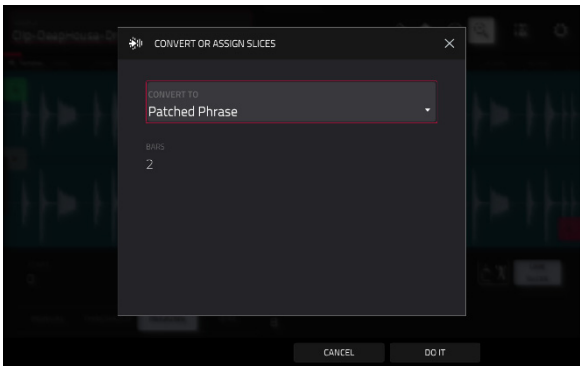
Use the **Pad** field to select the desired pad. Alternatively, press the desired pad.

Check the **Crop Sample** box to delete the unused parts from the sample when it's created and assigned. This feature is destructive, though the project will still contain your original sample.

Leave this box unchecked to keep the unused parts of the sample when it is created and assigned. This way, you will still be able to edit the entire sample further even though you are using only part of it at the moment.

Use the **Track** field to specify the track to which you want to add the slice.

If you set the **Convert To** field to **Patched phrase**, this will create a new sample that will play based on the tempo of your project, and places it in the current project. The patched phrase will have the same name as the original sample but appended with **pp** and will use a different icon when viewing your project information.



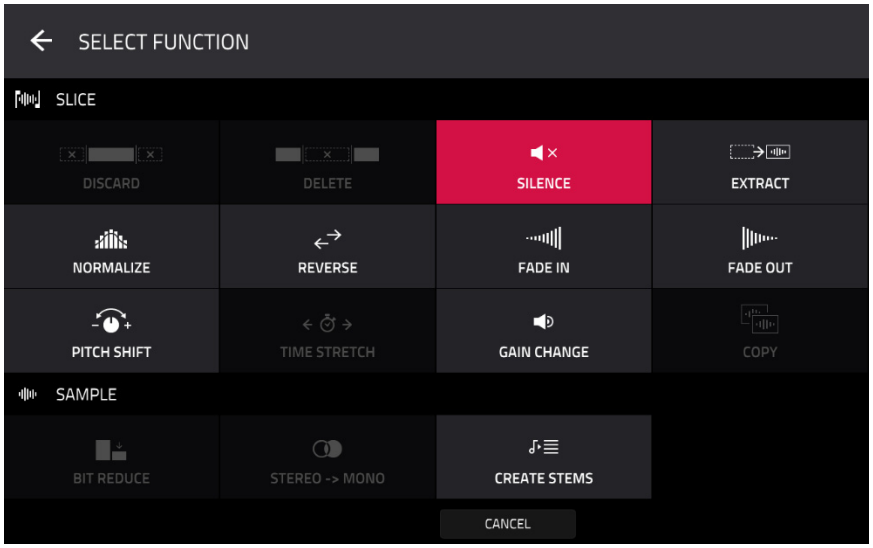
Use the **Bars** field to set how many bars long the patched phrase is meant to be.

Processing Slices

Press and hold **Shift**, and then tap the **Process** button to open the Process window, where you can select an editing option for the currently selected slice. (This has fewer options than Trim Mode. Unavailable ones are darkened.)

Use the **Function** field to select an editing process. Double-tap it or tap **Function** at the bottom of the screen to open the Function window, which displays an overview of all available editing processes.

Important: Chop Mode is non-destructive: You can choose the slice/edit behavior without destroying your original sample, giving you more control over sample playback; you can save your sliced sample and but also reuse all of the slice data in another project. See the ***Track Edit Mode*** chapter to learn more about setting a pad to play the entire sample, a specific slice of a sample, or a specific region of the sample (independent of its slice markers).



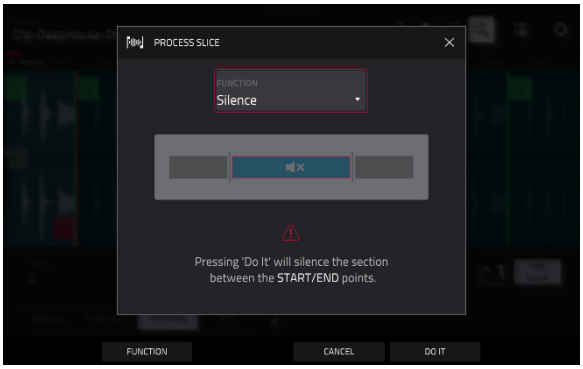
You can use any of these functions as described below.

To return to Sample Edit Mode, tap **Cancel**.

To return to the Process window, tap the top of the screen.

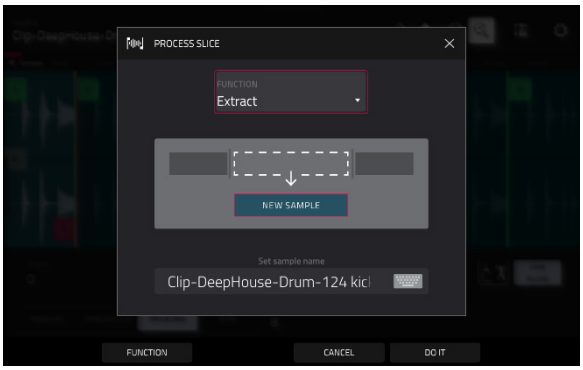
Note: All processes here will affect only the currently selected slice.

The **Silence** process replaces the region between the start point and end point with silence.

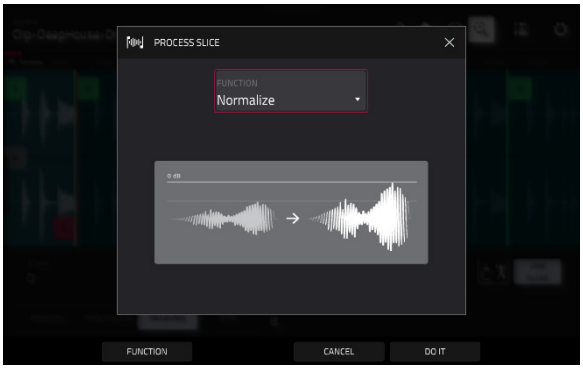


The **Extract** process deletes the regions before the start point and after the end point and saves it as a new sample (with a name you enter) in your current project.

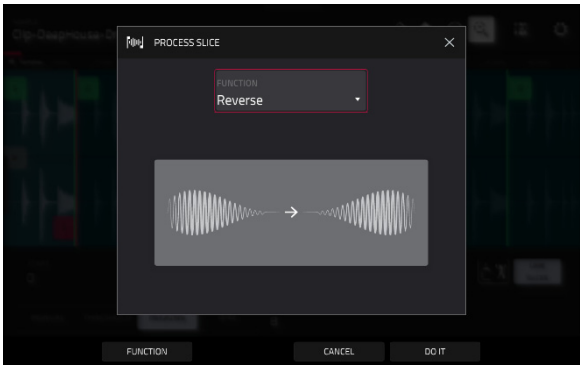
Tip: This is useful if you recorded a drum loop and wanted to remove just a snare drum hit, a kick drum hit, etc. to use separately in the project.



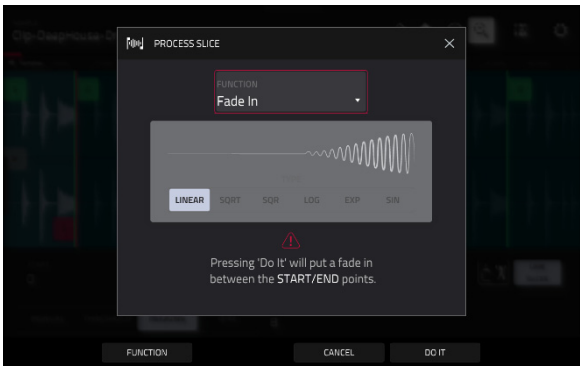
The **Normalize** process increases a sample's level to the highest level possible without distortion. This is essentially a kind of digital gain optimization, so you do not have to worry about excessive level settings when working with samples with a wide range of amplitudes.



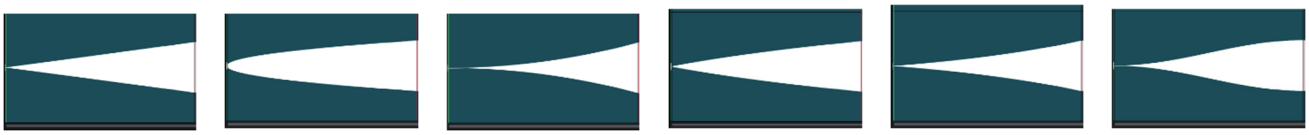
The **Reverse** process reverses the region between the start point and end point.



The **Fade In** process sets a fade-in between the start point and end point. The following types are available:

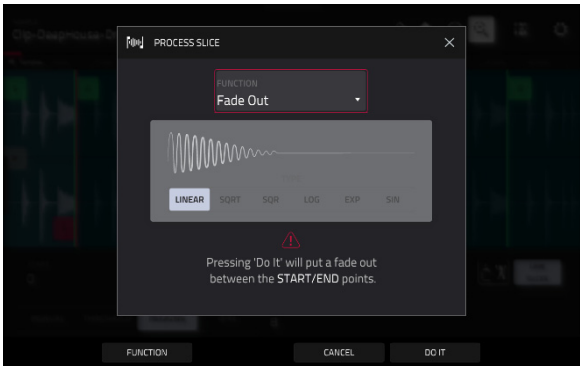


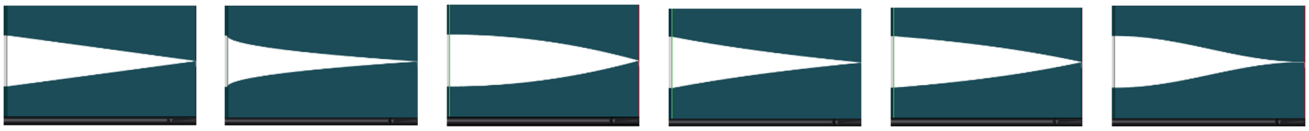
- **Linear** fades the audio in with a linear curve—a straight line between the start and end.
- **Square Root** fades the audio in with a square root curve—a half-parabola that is similar to the logarithmic curve but steeper.
- **Square** fades the audio in with a curve opposite the square root curve. This is similar to the **exponential** curve but steeper.
- **Log** fades the audio in with a logarithmic curve—quickly rising at the start and flattening out towards the end.
- **Exp** fades the audio in with an exponential curve—slowly rising in the beginning and growing steeper towards the end.
- **Sine** fades the audio in with a sine curve—like a sine wave, it slowly rises, gets steeper in the middle, and flattens out at the end.



Linear Square Root Square Log Exp Sine

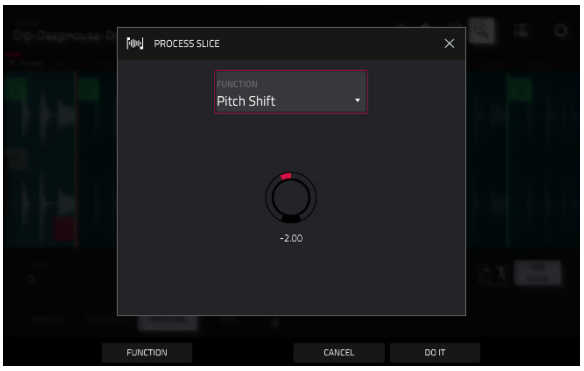
The **Fade Out** process sets a fade-out between the start point and end point. These are the same as the **Fade In** curves, but fade the audio out instead of in.



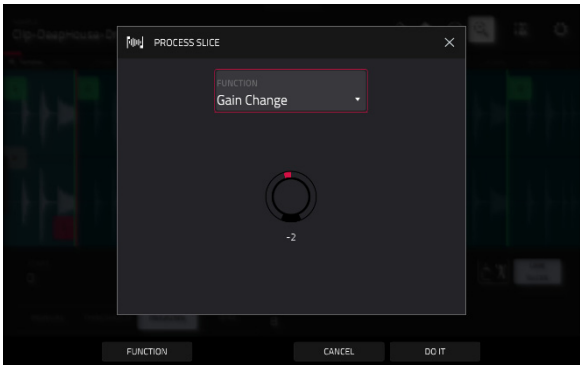


Linear Square Root Square Log Exp Sine

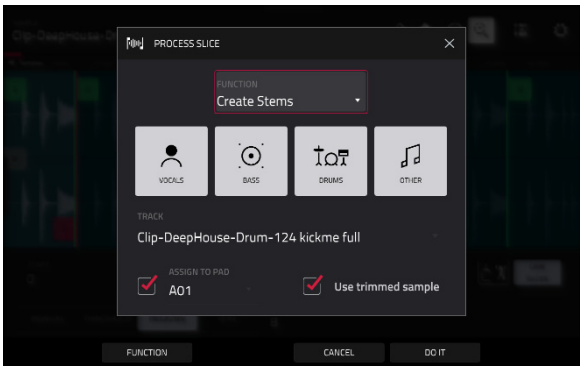
The **Pitch Shift** process changes the pitch of the sample without changing its length. This lets you set the sample's pitch to your project without affecting the sample's tempo or duration. You can adjust it up to 12 semitones, up or down. Keep in mind that the audio quality may decrease at more extreme settings.



The **Gain Change** process raises or lowers the volume of the sample. You can adjust it up to 18 dB, higher or lower. This function is different than Normalize because it will allow volumes beyond clipping level. This may be a desired effect, but remember to watch your output level!



The **Stems** process to isolates different parts of the sample and separate them into new stem samples.



Click the icons to select or deselect from the following elements to create stems of:

- **Vocals:** Isolate vocal elements of the track into a stem.
- **Bass:** Isolate bass elements of the track into a stem.
- **Drums:** Isolate percussive elements of the track into a stem.
- **Other:** Isolate other musical textures, such as keys or guitars, into a stem.

Use the **Track** dropdown menu to select the track where the stems will be added.

The **Assign to Pad** function determines where the stem separated samples are added. When checked, you can select a pad in the chosen Track using the dropdown menu, and the stems will be added to the first four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

Tap the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Tip: Uncheck this box if you want to retain slices with the stemmed results, otherwise, they will be bypassed.

Note: To purchase MPC Stems, visit **akaipro.com/stems**, and then activate your purchase in the ***Menu > Preferences > Activate Plugins*** menu.

Pad Mode

Pad Mode lets you edit a sample in the context of the track in which you'll use it. You can adjust the pad parameters as though you were in Track Edit Mode, auditioning and hearing how it will sound in the track's audio path.

To enter Pad Mode, tap the **Pad** button at the bottom of the screen. The pads will show their assigned samples in the current Track.

Use the **Start** and **End** fields to set the position of the start point and end point of the sample (respectively). Alternatively, tap and drag the start (**S**) or end (**E**) marker left or right, or use **Knobs 1** and **2** to adjust the start point or **Knobs 3** and **4** to adjust the end point when the knobs are in **screen** mode.

Pad Mode includes a loop function. When on, the region of the sample between the loop point and end point will repeat. This is useful when trying to find an ideal spot to begin the sample. The loop cannot be earlier than the start point.

To adjust the loop point, do any of the following:

- Use the **Loop** field.
- Tap and drag the start (**S**) marker (if **Loop Lock** is on) or the **loop** marker (if **Loop Lock** is off).
- When the **knobs** are in **screen** mode, use **Knobs 5** and **6** to adjust the loop marker. Knob 5 provides fine adjustment and Knob 6 provides coarse adjustment.

To turn Loop Lock on or off, tap the **Loop Lock** button. When on, the loop point is the same as the start point. When off, the loop point is independent from the start point.

To turn the loop function on or off, tap the **Loop** button to cycle between the four modes:

Off: The sample will not loop.

Forward: When the loop reaches its end point, it will start playing again from the loop point.

Reverse: When the loop reaches its end point, it will play in reverse. When it reaches the loop point again, it will return to the end point and continue playing in reverse.

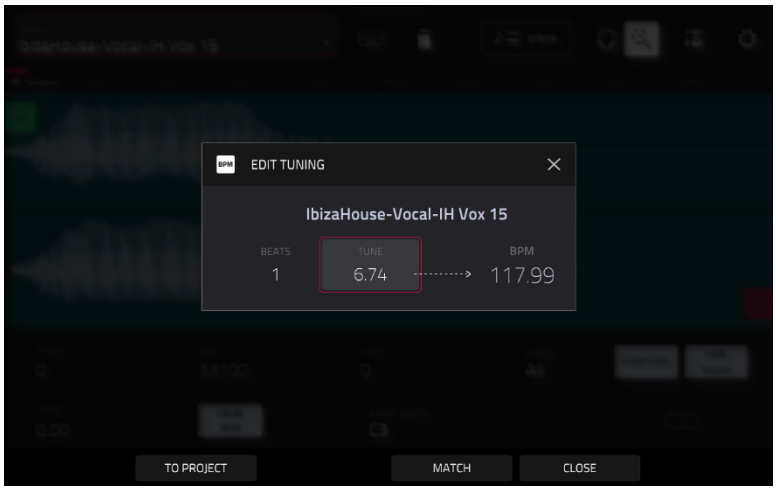
Alternating: When the loop reaches its end point, it will play in reverse. When it reaches the loop point again, it will start playing forward again from the loop point.

To switch between Forward and off, press and hold **Shift**, and then tap **Loop** at the bottom of the screen.

Tap each **pad** while in Note pad mode to hear its sample/samples. The sample on its first layer will automatically appear in the waveform display for editing.

Use the **Tune** field to transpose the sample up or down from its original pitch.

Tap **From BPM** to open the **Edit Tuning** window, which lets you tune a sample to the current sequence.



Use the **Number of Beats** field to match the number of beats in the sequence.

To tune the sample to the project, tap **Match**. The **Tune** field will adjust automatically and close the window. The sample is now tuned to the sequence.

To tune the sample to the project and adjust the project tempo, tap **To Project**. This is the same as tapping Match but it also changes the project's tempo to the BPM shown in the **Tempo** field on the right.

To close the window, tap **Close**.

Use the **Root Note** field to set the root note of the sample. This defines which note will play the sample at its original pitch when in a keygroup track.

Use the **Slice** field, or use **Knob 16** while the Q-Link knobs are in screen mode, to display either the sample as it has been edited (**Pad**) or the entire sample (**All**)

If the **Slice** field is set to **All**, you can display the sample as it has been edited but keep the start point and end point. **To do this**, press and hold **Shift**, and then tap **To Pad** at the bottom of the screen. The **Slice** field will change to **Pad**, but the start point and end point will remain in their current locations.

The **Link Slices** button does not have a function in Pad Mode.

0 Snap forces start points, end points, and loop points to occur only at the waveform's "zero-crossings." This can help to avoid clicks and glitches when playing a sample.

To enable or disable 0 Snap, press and hold **Shift**, and then tap **0 Snap** at the bottom of the screen.

To enable or disable the loop function, press and hold **Shift**, and then tap **Loop** at the bottom of the screen. This switches the loop function between **Forward** and **off**. The loop function is described ***earlier***.

Assigning Samples

You can assign your new sample directly to a pad from Pad Mode.

To assign a sample, tap **Assign** at the bottom of the screen to open the Assign Sample window.

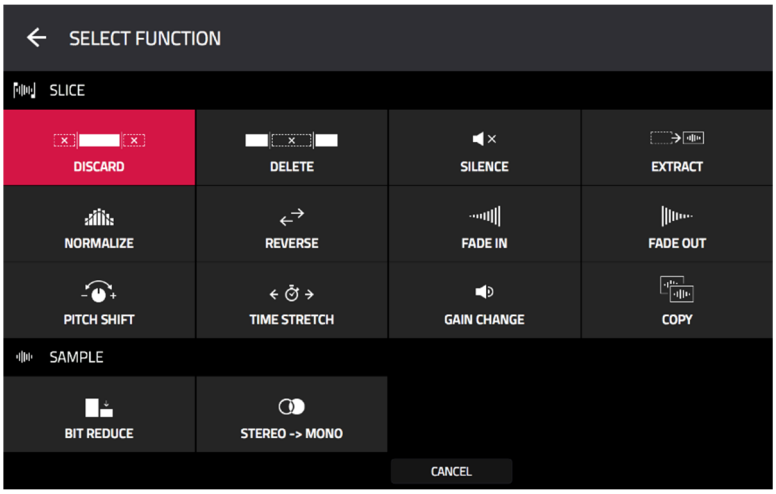
Important: Assigning a sample to a pad in this way will replace the sample on the first layer of the pad.

The Pad Mode Assign functions are identical to Trim Mode. See ***Trim Mode > Assigning Samples*** to learn more.

Processing Slices & Samples

Tap the **Process** button to open the Process window, where you can select an editing option for the sample.

Use the **Function** field to select an editing process. Double-tap it or tap **Function** at the bottom of the screen to open the Function window, which displays an overview of all available editing processes.



You can use any of these functions as described below.

To return to Sample Edit Mode, tap **Cancel**.

To return to the Process window, tap the top of the screen.

Note: All **Slice** processes will affect only the part of the sample between the start point and the end point. The **Sample** processes (**Bit Reduce** and **Stereo -> Mono**) will affect the **entire** sample regardless of its start point or end point.

The Pad Mode Functions are identical to Trim Mode. See ***Trim Mode > Processing Slices & Samples*** to learn more.

Sampler

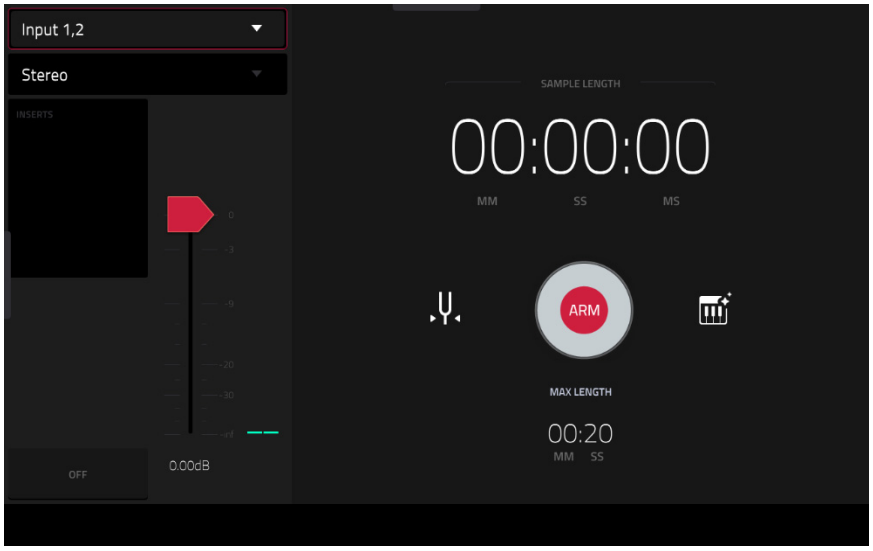
The Sampler lets you record audio samples to use in your projects.

To open the Sampler, do any of the following:

- Press **Menu** and then tap **Sampler**.
- In ***Main Mode***, select an empty pad in a Drum Track. Then, tap the **Record** icon in the Track Section.

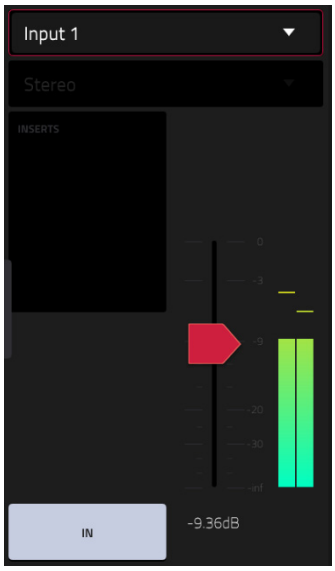
Tap the **tuning fork icon** to open the ***Tuner***.

The Sampler page also contains the ***Auto Sampler,*** which lets you capture and convert any plugin preset or external instrument preset into a Keygroup sampler patch.



To set up the Sampler before recording:

1. Make sure to reduce the volume levels of your audio source and speakers, headphones, and/or monitors before you make any connections to avoid “pops” or feedback.
2. Connect a synthesizer or other line-level audio source to the input/inputs of your Force.
3. Turn the **Gain** knob to set the input level while playing your audio source. You should now see the level in the meter. Make sure it does not exceed the maximum level (the meter should not be “peaking” constantly).
4. Set the recording controls as desired (described in this chapter).
5. Tap the **Arm** button to record-arm the Sampler.



The upper-left **Input Source** field defines whether you are going to record an external audio signal, which you can set to the pair of inputs (**Input 1,2**) or a single input (**Input 1–2**). You can also select an internal signal from within your Force (**Resample L**, **Resample R**, or **Resample L+R**).

Resampling does not require an audio connection because the source is internal and is therefore recorded without any loss in audio quality. You can, for example, use Resample to record two or more samples by pressing the corresponding pads simultaneously.

Use the second upper-left **Mono**/**Stereo** field to choose whether your recorded samples will be monaural (**Mono**) or binaural (**Stereo**).

The **Inserts** field shows any enabled or disabled effects for the Sampler. Tap the area under **Inserts** to open a window where you can load, change, and enable or disable the effects.

Important: These effects are applied to the audio as you record it. This means that the effects cannot be "removed" from the sound later. Learn more about how effects work in ***General Features*** > ***Effects***.

Tap the **Monitor** button to enable or disable input monitoring. When on, the audio you hear in your headphones will be taken **before** it reaches the Sampler, ensuring zero latency. When off, the audio you hear in your headphones will be taken **after** it is processed in the Sampler, so there may be some latency, but you will hear the audio source as it sounds in the recording.

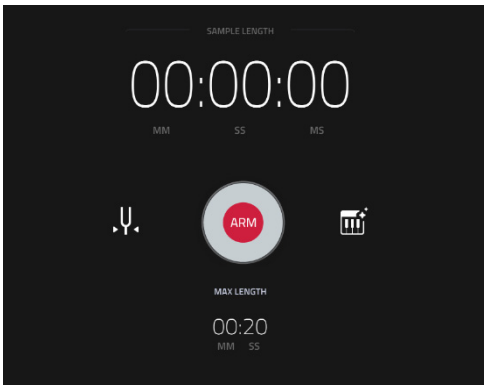
Tip: **To avoid possible clicks or feedback while input monitoring**, reduce the level of the audio sources.

Use the **threshold slider** to adjust the threshold. Alternatively, turn **Q-Link 1** when the Q-Links are set to **screen mode**.

When the Sampler is record-armed, it automatically starts recording when the level of the incoming source exceeds this setting. If you set it too high, the recording may not start when you play the input source, or the start of the material you wanted to record may be missing. If you set it too low, the recording may start too early, before you play the external source. Set this parameter to an appropriate level using the level meter.

To reset the "**peak hold**," which shows the highest level of your input signal in the level meter, tap it.

For reference, the **Sample Length** counter shows you the length of your sample during the recording procedure.



Tap **Arm** to record-arm the Sampler. The button will then change to **Record** and show **Waiting for signal**.

At that point, start recording by doing either of the following:

- Start performing so that the incoming audio level exceeds the level of the **threshold slider**.
- Tap **Record** under the **Sample Length** counter.

To disarm the track instead, tap **Cancel**.

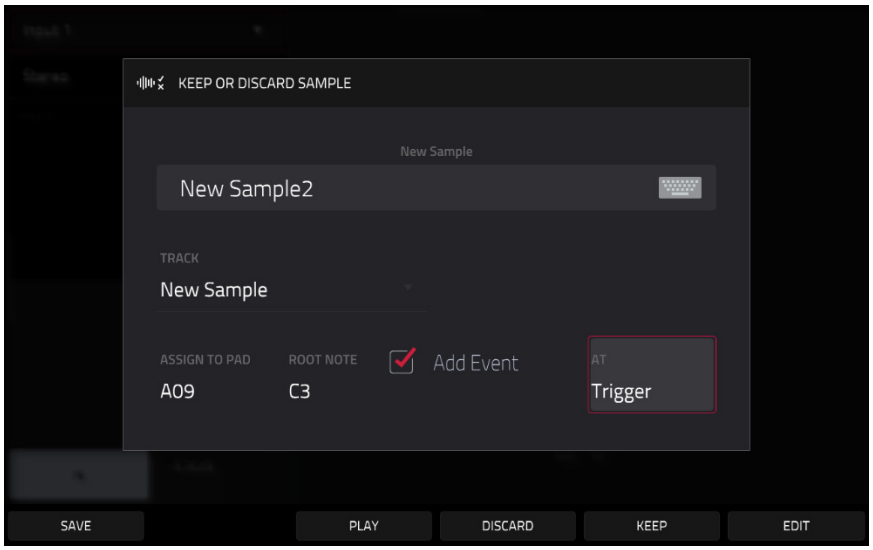
To insert a slice marker in a sample while recording, tap **Slice+** (in the lower-right corner) as the sample records. Each time you tap it, a slice marker will be placed at that location.

To stop recording, tap **Stop** under the **Sample Length** counter.

Use the **Max Length** field to define the maximum sampling time.

You can record up to 15 minutes and 59 seconds (**15**:**59**) per sample. We recommend setting these to values that roughly match your estimated recording duration. The default value is 20 seconds.

After you stop your recording, the **Keep or Discard Sample** window will appear.



Use the **Edit Name** field to name the new sample. Tap it and use the virtual keyboard that appears.

Use the **Track** field to assign the new sample to a track. Select <**none**> if you want to save it to the project without assigning it to a track. You can also tap **Save** at the bottom of the screen to save the sample to the general sample pool.

Use the **Assign to Pad** field to assign the sample to a pad in the track.

Use the **Root Note** field to set where the sample's original pitch will be on the keyboard.

If you recorded a sample while a sequence was playing, the **Keep or Discard Sample** window will show a few more options after you select a pad.

Check the **Add Event** box to automatically add the sample to the currently playing sequence.

Use the **At** field to select where you want the event to start:

- **Start**: The sample will be a note event at the start of the currently playing sequence.
- **Trigger**: The sample will be a note event where you began recording it in the currently playing sequence.

Tap **Keep** at the bottom of the screen to confirm your selections.

Tap **Discard** at the bottom of the screen to discard the recording and return to the Sampler.

Tap **Play** at the bottom of the screen to play the recording.

Tap **Edit** to save the sample and open ***Sample Edit Mode*** to edit your recorded sample.

Auto Sampler

The Sampler page also contains the Auto Sampler, which lets you capture and covert any plugin preset or external instrument preset into a keygroup sampler patch.

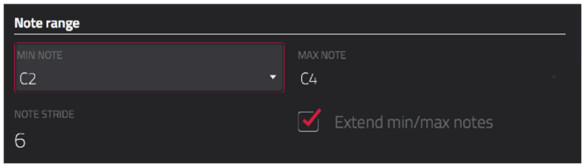
To open the auto sampler, tap the **keyboard icon** next to the record button in Sampler View. The current track will be selected as the auto sample source.

Sample Source Information

Use the **Track name** field to select the target auto sampler source.

Use the **Record from** field to select an input to record from. Select one of the **Input** options to auto sample an external instrument, or select one of the **Resample** options to auto sample from an internal source.

Note Range



Use the **Min Note** and **Max Note** fields to set the range of notes that will be created.

Use the **Note Stride** field to set the number of semitones between each new sample.

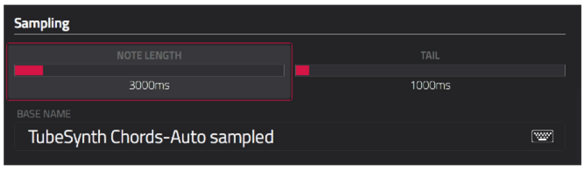
Check the **Extend min/max notes** box to sample all the way to the lowest and highest notes, regardless of the **Min Note** and **Max Note** settings.

Velocity

Tap the boxes next to **Layers 1–8** to select how many layers will be used to create the sampler patch.

Use the **Velocity** value sliders to set the velocity of each layer.

Sampling

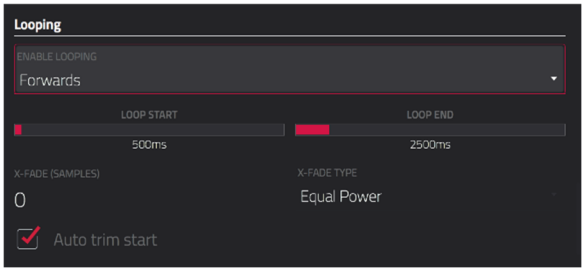


Use the **Note length** slider to set the length of the sampled note in seconds.

Use **Tail** slider to set the length of the Audio Tail in seconds. This will add extra seconds to the end of the resulting audio file. This is useful if you are capturing samples whose sounds exceed the defined audio length (e.g., long reverb or delay, one-shot samples with long decays, etc.). We recommend using an audio tail of at least a couple of seconds.

Use **Base name** to set the naming convention for the samples that will be created by the Auto Sampler.

Looping



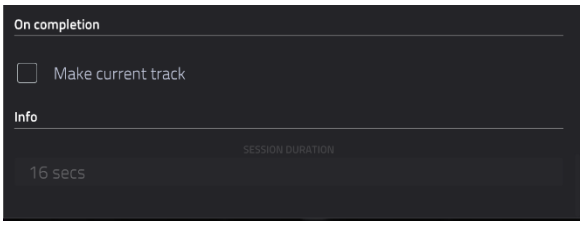
Use the **Enable looping** field to select how the resulting samples can or cannot be looped:

- **Off**: The sample will not loop.
- **Forward**: You can hold down the **pad** to cause that sample to repeat from the **Loop Position** to the end of the sample. Release the **pad** to stop the repeating playback.
- **Reverse**: You can hold down the **pad** to cause that sample to play in reverse, repeating from the end of the sample to the **Loop Position**. Release the **pad** to stop the repeating playback.
- **Alternating**: You can hold down the **pad** to cause that sample to play from the **Loop Position** to the end of the sample and then play in reverse until it reaches the **Loop Position** again. This will repeat as long as you are holding the pad down. Release the **pad** to stop the repeating playback.

Use the **Loop start** and **Loop end** sliders to set the starting and ending points in the sample where the loop will occur.

Use the **Crossfade** slider to set the amount of crossfade between the loop end and loop start in seconds.

Use the **Crossfade Type** field to select **Equal Power** or **Linear** crossfade.



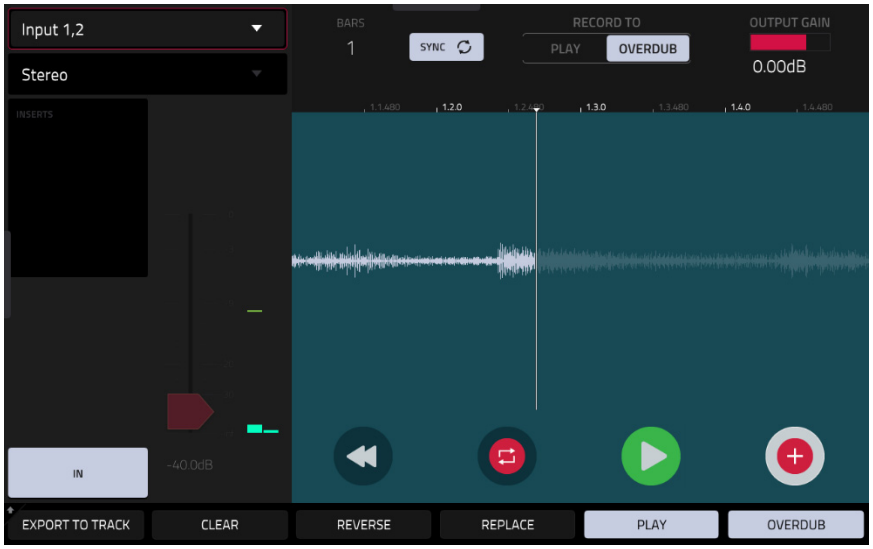
Under **On completion**, check **Make current track** to load the completed sampler patch as the current track.

Under **Info**, the **Session Duration** field provides an estimate of how long the auto sampling process will take.

Looper

The Looper lets you record and overdub audio in real time—a great tool for live performance as well as spontaneous moments in the studio. You can export the loop as a sample to use in your project.

To open the Looper, press **Menu**, and then navigate to **Looper** on the second page of modes and tap it.



Below is a brief step-by-step process so you can get started quickly. Continue reading the rest of this chapter to learn how to use the Looper in different cases.

To get started using the Looper:

1. Make sure to reduce the volume levels of your audio source and speakers/headphones/monitors before you make any connections to avoid “pops” or feedback.
2. Connect your audio source to the input/inputs of your Force.

   For line-level devices such as a synthesizer, set the **Line/Inst** switch to **Line**; for instrument-level devices such as a guitar, set the switch to **Inst**.

   If you are using a microphone that requires phantom power, set the **+48V** switch to **On**.
3. Turn the **Gain** knob to set the input level while playing your audio source. You should now see the level in the meter. Make sure it does not exceed the maximum level (the meter should not be “peaking” constantly).
4. Set the recording controls as desired (described in this chapter).
5. If the **Sync** button at the top of the screen is enabled, Looper recording will only be active during sequence playback. Tap it to disable transport sync, allowing you to freely record with the Looper.
6. Tap the **Record To** selector so **Overdub** is selected.
7. Tap the **Rec**/**Record** button in the lower-right corner to record-arm the Looper.
8. Play your audio source. The Looper will start recording immediately when the input level reaches the threshold value. Alternatively, tap ▶/**Play** at the bottom of the screen to manually start recording.

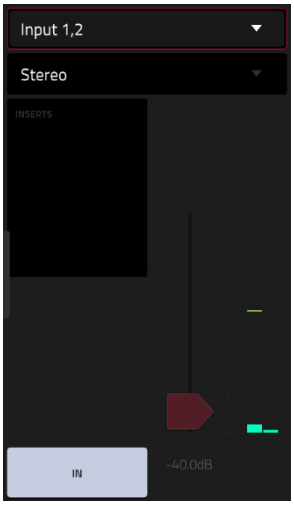
   Each time the Looper repeats, its contents are being overdubbed—a new layer of audio will be added each time you let the Looper repeat as it records.

   Tip: You can record a loop while playing one or more tracks in the background for reference.
9. Tap ▶/**Play** at the bottom of the screen to stop recording.

   Tap **Export to Track**, or hold **Shift** and tap **Export to Pad**, to open the **Keep or Discard Sample** window and export your loop as a sample to a track or pad.

   Tap **Clear** to clear the contents of the Looper.

The upper-left **Input Source** field defines whether you are going to record an external audio signal, which you can set to the pair of inputs (**Input 1,2**) or a single input (**Input 1–2**). You can also select an internal signal from within your Force (**Resample L**, **Resample R**, or **Resample L+R**).



Resampling does not require an audio connection because the source is internal and is therefore recorded without any loss in audio quality. You can, for example, use Resample to record two or more samples by pressing the corresponding pads simultaneously.

Use the second upper-left **Mono**/**Stereo** field to choose whether your recorded loop will be monaural (**Mono**) or binaural (**Stereo**).

The **Inserts** field shows any enabled or disabled effects for the Looper. Tap the area under **Inserts** to open a window where you can load, change, and enable or disable the effects.

Important: These effects are applied to the audio as you record it. This means that the effects cannot be "removed" from the sound later. Learn more about how effects work in ***General Features*** > ***Effects***.

Tap the **Monitor** button to enable or disable input monitoring.

When set to **In**, the audio you hear in your headphones will be taken **before** it reaches the Looper, ensuring zero latency. You can turn input monitoring on only if the **Input Source** field is set to an input, not to a **Resample** setting.

When set to **Off**, the audio you hear in your headphones will be taken **after** it is processed in the Looper, so there may be some latency, but you will hear the audio source as it sounds in the recording.

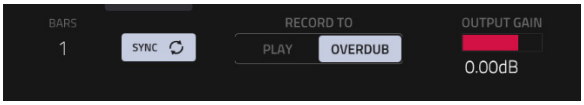
Tip: **To avoid possible clicks or feedback while input monitoring**, reduce the level of the audio sources.

Use the **threshold slider** to adjust the threshold. Alternatively, turn **Q-Link Knob 1** when the Q-Link knobs are set to **screen mode**. The threshold slider will work only when **Sync** is **off** (see ***below***).

When the Looper is record-armed, it automatically starts recording when the level of the incoming source exceeds this setting. If you set it too high, the recording may not start when you play the input source, or the start of the material you wanted to record may be missing. If you set it too low, the recording may start too early, before you play the external source. Set this parameter to an appropriate level using the level meter.

To reset the "**peak hold**," which shows the highest level of your input signal in the level meter, tap it.

Use the **Bars** field to define the length of your loop. Regardless of how much or how little audio you record, this is how long your loop will be.



Use the **Sync** button to sync or un-sync the looper with transport playback. When on, the Looper will stay in step with your project. When you play or record into the Looper, it will wait until the transport starts playing to start.

Use the **Record To** selector to determine the loop recording behavior:

- **Play**: Before recording, you must first tap the ▶/**Play** button on the screen, which will start playing the Looper.
- **Overdub**: Before recording, you must first tap the **Rec**/**Record** button in the lower-right corner to record-arm the Looper.

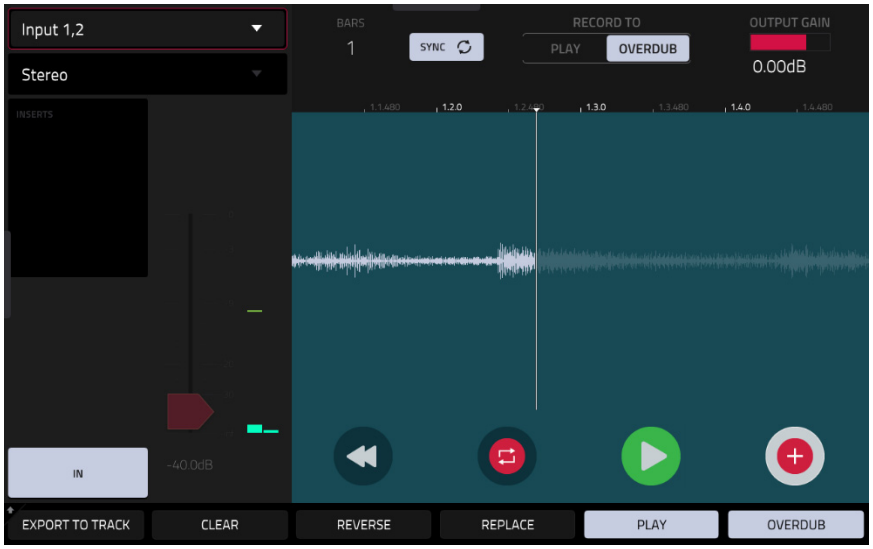
Use the **Output Gain** slider to set the output signal level of the Looper.

To record with the Looper:

Important:

Use the **Overdub** button to record without erasing any audio you've already recorded in the loop.

Use the **Replace** button to overwrite the audio you've already recorded.



If **Record To** is set to **Play**:

Tap the **Replace** or **Overdub** button as the loop is playing to start recording. The Looper will start recording immediately.

Tap the **Replace** or **Overdub** button to stop recording. The Looper will stop recording but continue playing.

Tap the ▶/**Play** button to stop playback and recording.

If **Record To** is set to **Overdub**:

Tap the ▶/**Play** button on the screen to start recording.

If **Sync** is off, you can also play your audio source so that the input level reaches the threshold value.

If **Sync** is on, you can also press the **Play** or **Play Start** button to start transport playback; recording will start when the transport starts playing.

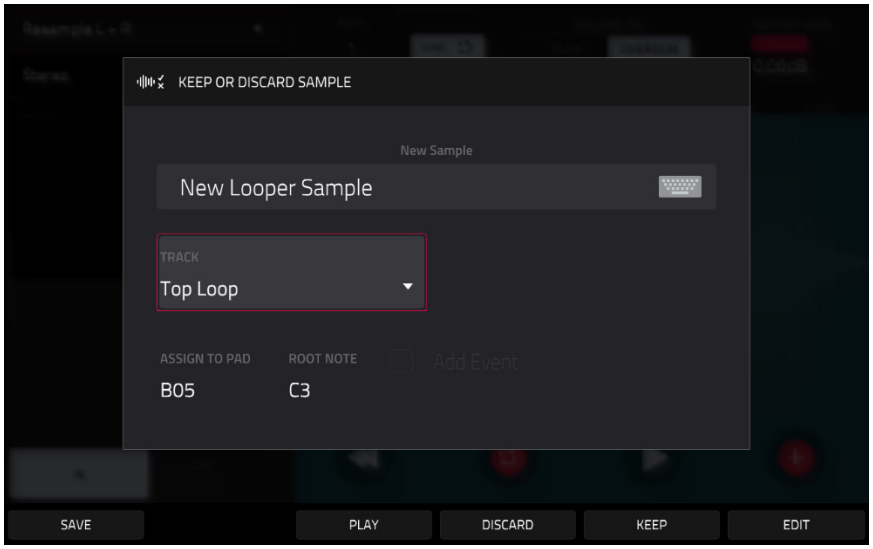
Tap **Overdub** to stop recording. The Looper will stop recording but continue playing.

Tap the ▶/**Play** button, or press **Stop**, to stop transport playback and recording.

To play or stop the loop (without recording), tap the ▶/**Play** button on the screen.

To reverse loop playback, tap **Reverse**. If **Sync** is **on**, playback will reverse once the Looper's playhead reaches the end of the loop. If **Sync** is **off**, playback will reverse immediately.

To erase the loop immediately, tap **Clear**.



To export the loop to an audio track:

1. Tap **Export to Track** at the bottom of the screen to open the **Looper Export** window.
2. Use the **Audio Track** field to select the audio track where you would like to export the sample.

   Use the **Clip** field to select the clip in the selected track where the exported sample will be placed, or select **Arrangement** to add it to the arrangement.
3. Tap **Export to Track** to confirm your choice, or **Cancel** to cancel.

   When your loop is done exporting, it is assigned to the track you selected.

To export the loop to a pad:

1. Press and hold **Shift** and tap **Export to Pad** at the bottom of the screen to open the **Keep or Discard Sample** window.
2. Use the **Track** field to assign the new sample to a track. Select <**none**> if you want to save it to the project without assigning it to a track. You can also tap **Save** at the bottom of the screen to save the sample to the general sample pool.

   Use the **Assign to Pad** field to assign the sample to a pad in the track.

   Use the **Root Note** field to set where the sample's original pitch will be on the keyboard.

   If you recorded a sample while a sequence was playing, the **Keep or Discard Sample** window will show a few more options after you select a pad:

   Check the **Add Event** box to automatically add the sample to the currently playing sequence.

   Use the **At** field to select where you want the event to start:

   - **Start**: The sample will be a note event at the start of the currently playing sequence.
   - **Trigger**: The sample will be a note event where you began recording it in the currently playing sequence.
3. Tap **Keep** at the bottom of the screen to confirm your selections.

   Tap **Discard** at the bottom of the screen to discard the recording and return to the Sampler.

   Tap **Play** at the bottom of the screen to play the recording.

   Tap **Edit** to save the sample and open ***Sample Edit Mode*** to edit your recorded sample.

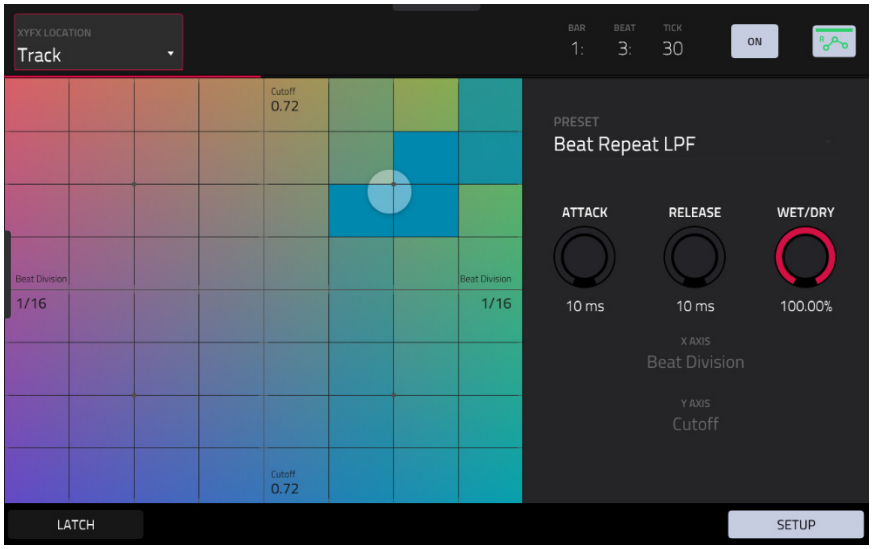
XYFX Mode

XYFX Mode turns the touchscreen into an XY pad where each axis represents the range of an effect parameter. As you move your finger on the XY pad, the current position will determine the current value of the two parameters. You can use this mode to create interesting effect automation on your tracks.

The effect you control in XYFX Mode acts like an insert effect on that track. In fact, **XYFX** is the name of the insert effect you have to load to the track before you can use this mode. Learn more about this in ***General Features*** > ***Effects***.

To enter XYFX Mode, do either of the following:

- Press **Menu**, and then tap **XYFX**.
- Press and hold **Shift** and press **Navigate**.



When you first enter this mode in a project, you may be prompted to load XYFX to the track. Tap **Insert XYFX** to do this.

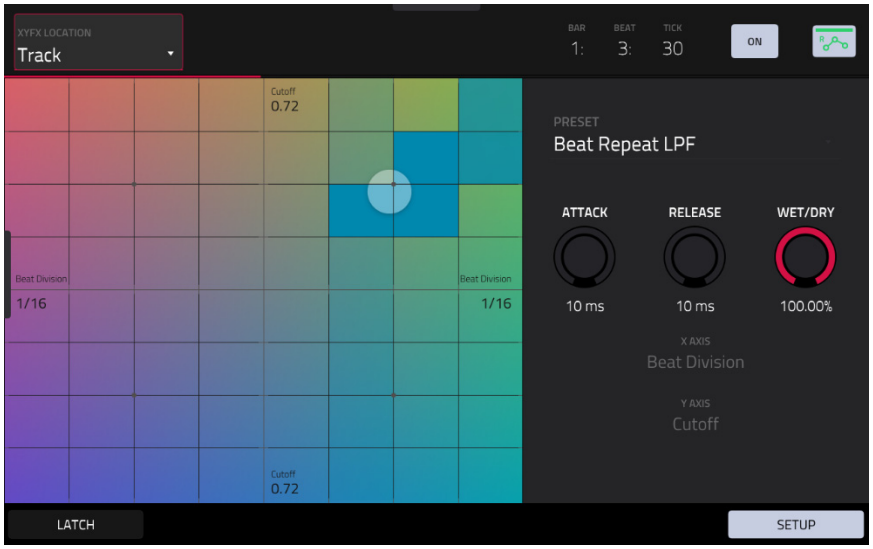
Note: If you already have four insert effects loaded, you will need to clear one of the insert effect slots before doing this.

Use the **XYFX Location** field to select the signal to which the effects will be applied: the current track (**Track**) or a main output (a stereo pair of channels: **Output 1/2** or **Output 3/4**).

Touch or move your finger on the gridded part of the screen. A marker will follow your finger to indicate the current position. The X axis is the horizontal axis, increasing in value as you move right. The Y axis is the vertical axis, increasing in value as you move up. Each axis is labeled with its assigned parameter.

When an effect has a beat division parameter, the current division will be highlighted as an entire column.

Effects are differently colored for easy visual distinction: beat-synchronized effects are **blue**, while manually controlled effects are **green**.

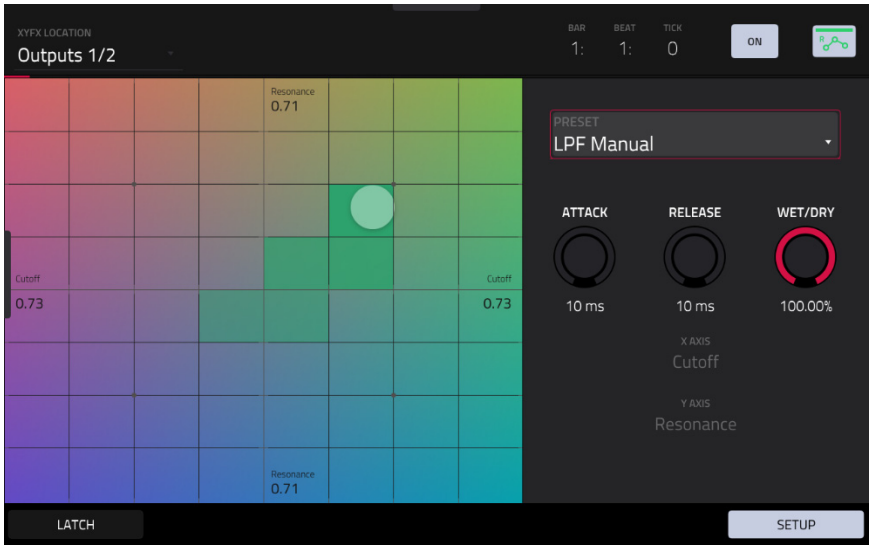


XY Mode with a beat-synchronized effect.

While touching the **XY pad**, tap **Latch** in the lower-left corner to keep the marker on the XY pad even after you release it. The marker will remain there until you touch another part of the XY pad or until you tap **Latch** again.

Use the **Setup** button to show or hide the Setup panel, which controls how the XY pad behaves.

Use the **Preset** field to select the effect you want to use in XYFX Mode.



XY Mode with a manually controlled effect.

Use the **Attack** knob to set the length of the attack phase of the envelope, which is triggered when you touch the XY pad. In other words, this determines how long it takes the effect to fully respond to your touch.

Use the **Release** knob to set the length of the release phase of the envelope, which is triggered when you release the XY pad. In other words, this determines how long it takes the effect to fully deactivate after you stop touching the XY pad.

Use the **Wet/Dry** knob to set the blend the original signal (dry) and the effect signal (wet).

The **X Axis** and **Y Axis** fields show which parameters are controlled by each axis. This varies depending on the effect you are using.

Q-Link Edit

Q-Link Edit mode (formerly *Macros* or *Knobs* mode) lets you determine what the various hardware controls can be used for in other modes. You can use Macros Mode to set up controls for parameters that might not be shown in a particular mode, or set up controls with multiple parameters across different modes for expressive performances.

To enter Q-Link Edit Mode, press **Menu** and then tap **Q-Link Edit**.

You can also press and hold the **Knobs** button on your Force to open the Q-Link window. From here, tap **Q-Link Edit** at the bottom of the screen to open Q-Link Edit Mode.

Use the tabs at the bottom of the screen to select a control to assign parameters to:

- ***Q-Links***
- ***XY Pad***
- ***Crossfader***
- ***Pad Grid***
- ***Envelope Follower / LFO***

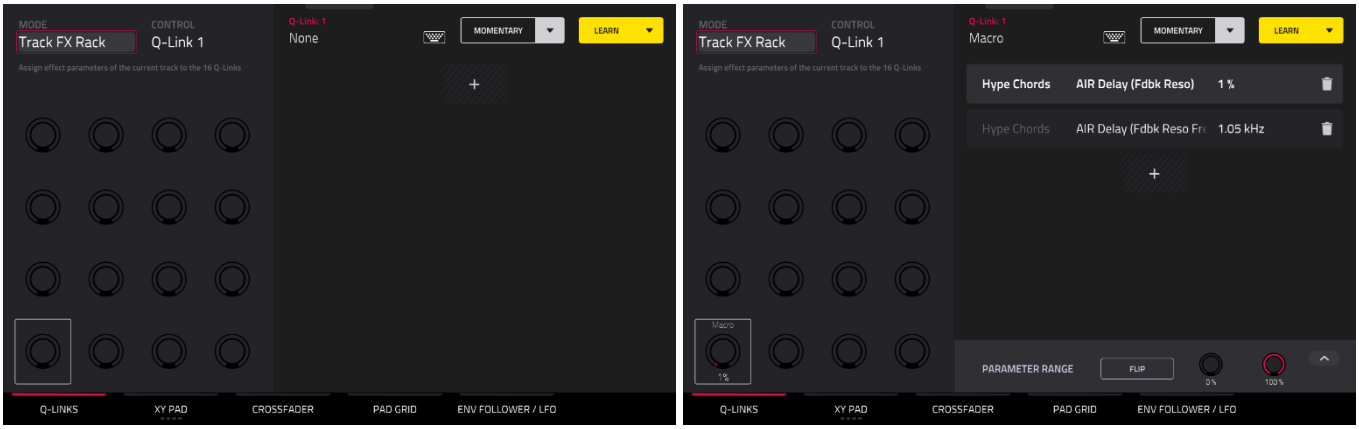
Click on the links above to jump to that section.

On the left side of the screen, use the **Mode** field to switch between the different modes for each control. Some Modes cannot be edited using Macros mode, but you can view their assignments here.

Use the **Control** field to select or view the active control for editing.

The right side of the screen shows the parameters assigned to the selected controls, and the tools for adding and editing these parameters.

Learning Macro Assignments



To learn parameters to a Macro control in user assignable modes:

1. Select a control type by tapping one of the buttons at the bottom of the screen: ***Q-Links***, ***XY Pad***, ***Crossfader***, ***Pad Grid*** or ***Envelope Follower / LFO***. See the following sections for more information on either control type.
2. If available, select the desired mode for the control by using the **Mode** field at the top of the screen. See each following section for explanation of the available modes for each control in Q-Link Edit mode.
3. Use the **Control** field to select the control to learn parameters to. In some modes like Q-Links, you can also directly tap to select the control below this field or move the desired control.
4. When one of these editable modes is selected, the yellow **Learn** button and the **learn add** (+) button will appear on the screen.

   To learn a single parameter to the control, tap the yellow **Learn** button so it is highlighted. The OLED screen above the selected knob will show **LEARNING…**.
5. Next, navigate to the mode that displays the parameter you would like to learn, and then adjust that parameter. The screen will show a message, "Learned [*parameter*] to [*Q-Link*]."
6. **To lock in the assignment,** return to Q-Link Edit mode and tap the yellow **Learn** button again. The assigned parameters will be shown when the macro control is selected.

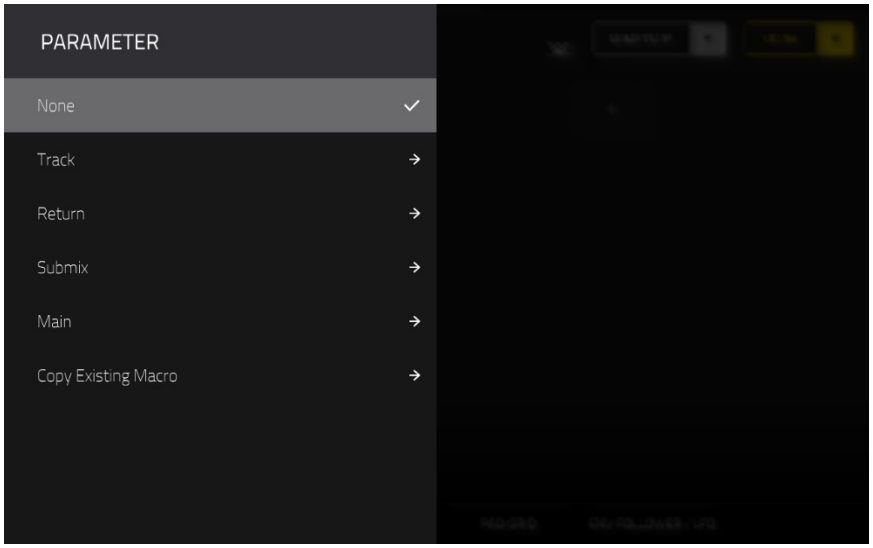
To learn multiple parameters to a knob, simply navigate to more parameters while **Learn** is engaged (step 4).

To learn another parameter to a macro that replaces the previous parameter, tap the **down arrow** next to the yellow **Learn** button, and then uncheck the **Add** box. Repeat the steps above to replace the previously learned parameter with a new one.

To learn a new parameter while also setting it to a range of values, tap the **down arrow** next to the yellow **Learn** button, and then check the **Range** box. While Learn is engaged (step 4 above), adjust the parameter to the low and high points of the value range that you want to control. When the assignment is locked in, the macro will control the parameter in the set value range.

To use a single macro to, for example, mute/unmute multiple tracks at the same time, tap the **down arrow** next to the yellow **Learn** button, and then check the **Toggle** box. Repeat the steps above to learn a parameter, which will toggle on/off when the control is touched or moved.

To use a macro to send the max value of a parameter, tap the **down arrow** next to the yellow **Learn** button, and then check the **Trigger** box. Repeat the steps above to learn a parameter, which will send its maximum value when the control is touched or moved.



Alternatively, you can add parameters by tapping the **learn add** (+) button, and then using the menu that appears to select a parameter from your project. The following parameters are available, depending on the selected Mode and the tracks in your project:

When an **Audio Track** is selected:

Mixer: Volume, Pan, Mute, Solo, Send 1–4

Insert 1–4: Available parameters depending on the effect

When a **Drum Track** is selected, and **Parameter** is set to **Track**:

Mixer: Volume, Pan, Mute, Solo, Send 1–4

Edit: Global Semi Tune, Global Fine Tune

Insert 1–4: Off, other available parameters depending on the effect

When a **Drum Track** is selected, and **Parameter** is set to **Pad**:

Mixer: Pan, Level, Send 1–4, Pad Mute, Pad Solo

Edit:

Pad X Position	Pitch Env Decay	LFO to Pitch	Decay Random
Pad Y Position	Pitch Env Sustain	LFO to Filter	Cutoff Random
Tuning	Pitch Env Release	LFO to Amp	Resonance Random
Filter Cutoff	Pitch Env Decay Mode	LFO to Pan	Total Random Amount
Filter Resonance	Pitch Env Attack Curve	LFO Wave	LFO Level (1–2)
Filter Env Amount	Pitch Env Release Curve	LFO Rate	LFO Delay (1–2)
Amp Env Attack	Pitch Env Depth	LFO Sync	LFO Fade In (1–2)
Amp Env Decay	Pitch Env Type	Velocity to Pitch	LFO 2 Wave
Amp Env Release	Ramp 1 Time	Velocity to Amp Attack	LFO 2 Rate
Amp Env Hold	Ramp 2 Time	Velocity to Amp	LFO 2 Sync
Amp Env Sustain	Note Counter 1 Size	Velocity to Pan	LFO 2 Reset
Filter Env Attack	Note Counter 2 Size	Velocity to Start	Global Drift Speed
Filter Env Hold	Layer Play Offset (1–8)	Layer Slice (1–8)	Voice Drift Speed
Filter Env Decay	Velocity Scaling	Layer Reverse (1–8)	LFO Delay Sync (1–2)
Filter Env Sustain	DrumFX (1–8)	Layer Offset (1–8)	LFO Fade In Sync (1–2)
Filter Env Release	DrumFX Type(1–8)	Layer Loop Xfade (1–8)	Layer Crossfade Mode
Amp Env Attack Curve	Layer Level (1–8)	Layer Loop Xfade Type (1–8)	Layer Crossfade X/Y
Amp Env Decay Curve	Layer Sample Pan (1–8)	Layer Slice Tail Length (1–8)	Articulation Speed (1–4)
Amp Env Release Curve	Layer Semi Tune (1–8)	Layer Slice Tail Start (1–8)	Articulation Dynamics (1–4)
Filter Env Attack Curve	Layer Fine Tune (1–8)	Layer Pitch Random (1–8)	Articulation Stereo (1–4)
Filter Env Decay Curve	Vel to Filter Attack	Layer Level Random (1–8)	Articulation Speed Scale (1–4)
Filter Env Release Curve	Velocity to Filter Depth	Layer Pan Random (1–8)	
Pitch Env Attack	Vel to Filter Cutoff	Layer Offset Random (1–8)	
Pitch Env Hold	Filter Type	Attack Random	

Insert 1–4: Off, other available parameters depend on the effect

When a **Keygroup Track** is selected, and Parameter is set to **Track**:

Mixer: Volume, Pan, Mute, Solo, Send 1–4

Edit: Program Polyphony, Global Semi Tune, Global Fine Tune, Portamento Time, Port Legato, Port Quantize

Insert 1–4: Available parameters depending on the effect

When a **Keygroup Track** is selected, and Parameter is set to **Keygroup**:

Mixer: Pan, Level, Send 1–4, Pad Mute, Pad Solo

Edit:

Tuning	Filter Env Attack Curve	Layer Fine Tune (1–8)	Layer Slice (1–8)
Filter Cutoff	Filter Env Decay Curve	Vel to Filter Attack	Layer Reverse (1–8)
Filter Resonance	Filter Env Release Curve	Velocity to Filter Depth	Layer Offset (1–8)
Filter Env Amount	Pitch Env Attack	Vel to Filter Cutoff	Layer Loop Xfade (1–8)
Amp Env Attack	Pitch Env Hold	Filter Type	Layer Loop Xfade Type (1–8)
Amp Env Decay	Pitch Env Decay	LFO to Pitch	Layer Slice Tail Length (1–8)
Amp Env Release	Pitch Env Sustain	LFO to Filter	Layer Slice Tail Start (1–8)
Amp Env Hold	Pitch Env Release	LFO to Amp	Layer Pitch Random (1–8)
Amp Env Sustain	Pitch Env Decay Mode	LFO to Pan	Layer Level Random (1–8)
Filter Env Attack	Pitch Env Attack Curve	LFO Wave	Layer Pan Random (1–8)
Filter Env Hold	Pitch Env Release Curve	LFO Rate	Layer Offset Random (1–8)
Filter Env Decay	Pitch Env Depth	LFO Sync	Attack Random
Filter Env Sustain	Pitch Env Type	Velocity to Pitch	Decay Random
Filter Env Release	Layer Play Offset (1–8)	Velocity to Amp Attack	Cutoff Random
Amp Env Attack Curve	Layer Level (1–8)	Velocity to Amp	Resonance Random
Amp Env Decay Curve	Layer Sample Pan (1–8)	Velocity to Pan	Total Random Amount
Amp Env Release Curve	Layer Semi Tune (1–8)	Velocity to Start	

Insert 1–4: Available parameters depending on the effect

When a **Plugin Track** is selected:

Mixer: Volume, Pan, Mute, Solo, Send 1–4

Track: Available parameters depending on the plugin

Insert 1–4: Available parameters depending on the effect

When a **MIDI Track** is selected:

MIDI CC: Standard MIDI control change assignments

When a **CV Track** is selected:

Edit: CV Out 1–4

When a **Return** is selected, the following options are available:

Mixer: Volume, Pan, Mute

Insert 1–4: Available parameters depend on the effect

When a **Submix** is selected, the following options are available:

Mixer: Volume, Pan, Mute

Insert 1–4: Available parameters depend on the effect

When a **Main Output** is selected, the following options are available:

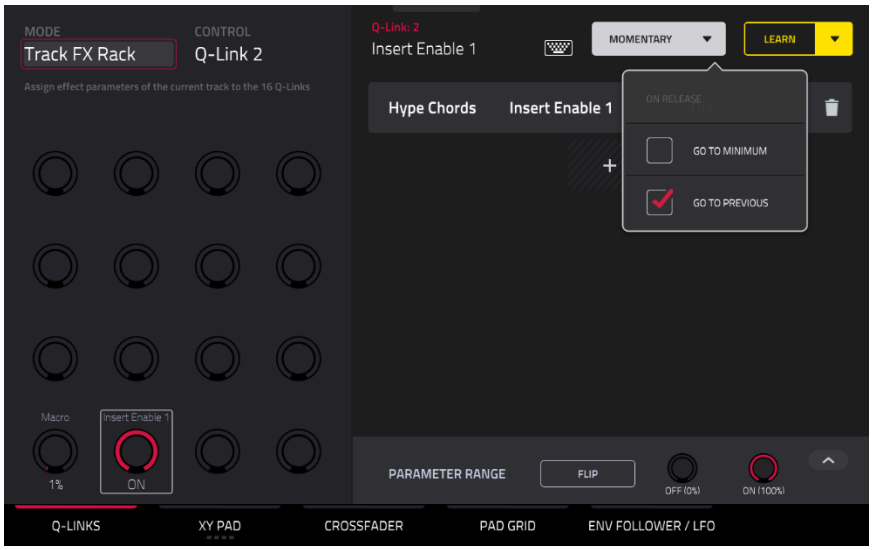
Mixer: Volume, Pan, Mute

Insert 1–4: Available parameters depend on the effect

To copy an existing macro assignment:

1. Tap the **learn add (+)** button to open the parameter menu.
2. Select **Copy Existing Macro**.
3. To replace the current macro settings with the copied macro settings, select **Replace**.
4. To merge the current macro settings with the copied macro settings, select **Merge**.
5. Use the menu to select the existing macro you would like to copy.

Note that you can copy between different macro control types, such as knobs and crossfader.



Tap the **Momentary** button to turn momentary behavior on or off.

When **on**, moving the Q-Link will adjust its parameter, but the parameter will immediately return to its original position (when you turned Momentary on) when you release the Q-Link.

When **off**, moving the Q-Link will adjust its parameter, and the parameter will remain at its new setting when you release the Q-Link.

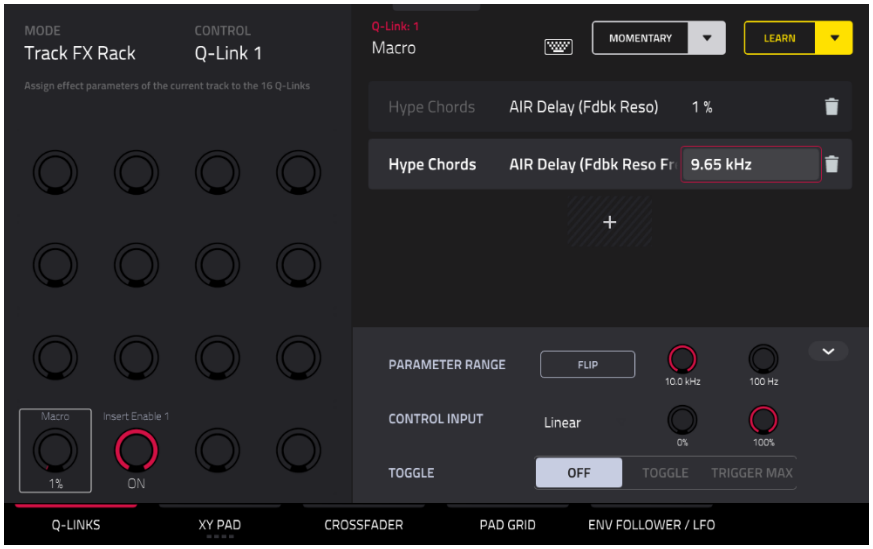
Tap the **arrow** next to the Momentary to adjust additional settings for when the macro control is released:

Check the **Go to Minimum** box to revert the macro parameter(s) to its minimum value on release.

Check to **Go to Previous** box to revert to the last value state before the macro was changed on release.

To rename a macro, tap the **keyboard icon** in the toolbar, and then use the keyboard to enter a new name.

Editing Macro Assignments



Above the Q-Link Edit control tabs on the right side of the touchscreen, the collapsible parameter inspector displays the settings for the currently selected learned parameter assignment. These settings can be edited for further customization of the macro.

To edit the parameters assigned to a macro:

1. Tap the macro control on the left side of the screen, or touch or move the control on your Force, to select it.
2. Tap the learned parameter that you would like to adjust on the left side of the screen, so it is highlighted gray.
3. Use the parameter inspector to view and adjust the settings for the assignment. Tap the **arrow** to view additional settings.

    To reverse the polarity of the knob, tap the **Flip** button.

    To adjust the minimum and maximum values sent by the knob, use the two **Parameter Range** knobs.

    To set the response curve of the macro, use the **Control Input** field to select **Linear**, **Logarithmic** or **Exponential**. Use the knobs next to this field to set the percentage of the control that will be active.

    To adjust the behavior of the macro, use the **Toggle** selector. When set to **Off**, moving the control sends a continuous range of values. When set to **Toggle**, moving the control toggles between the minimum and maximum values set above. When set to **Trigger Max**, moving the control always send the maximum value.

To remove a parameter assignment, tap the **trash can** icon. If all parameters are removed, the macro will no longer appear.

Q-Links

In this tab, you can view and/or edit Q-Link macro assignments, depending on the **Mode** selected.

To enter Q-Links mode, do either of the following:

- In Q-Link Edit Mode, tap the **Q-Links** button at the bottom of the screen.
- You can also press and hold the **Knobs** button on your Force to open the Q-Link window. Then, tap **Q-Link Edit** at the bottom of the screen to open Q-Link Edit Mode.

To select a mode for the Q-Links, use the **Mode** field at the top of the display to select one of the following options:

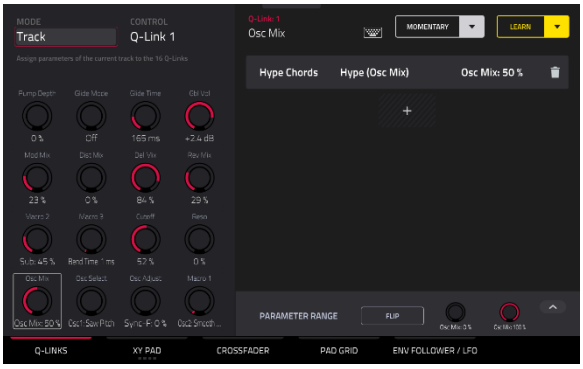
Screen: In this mode, the Q-Links are fixed to control a parameter or group of parameters in your currently selected mode (e.g., Pad Mixer, Sample Edit Mode, etc.).

Project 1–2: In these edit modes, the Q-Link knobs can control 16 parameters within the current project overall.

Any available parameter, including Track, Pad, Keygroup, Insert, Return, Submix or Main Output parameters, can be selected as part of a macro control.

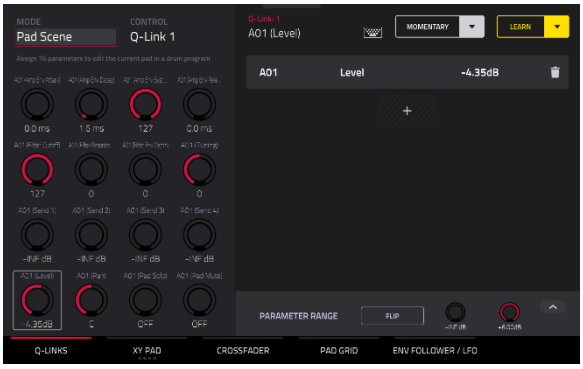
Track: In this edit mode, the Q-Link knobs can control 16 track parameters.

Only parameters for the current track, any Pads or Keygroups on the current track, or any Inserts on the current track can be selected as part of a macro control. This does not include Return, Submix or Main Output parameters.



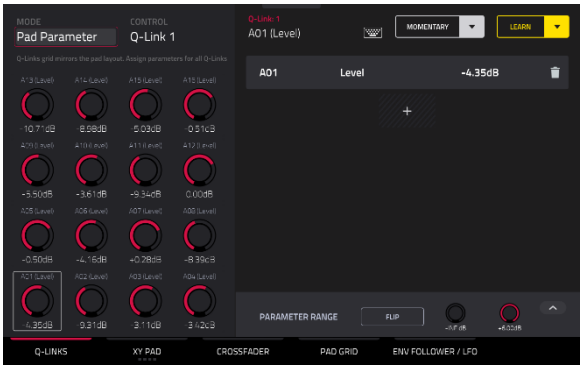
Pad Scene: In this edit mode, the Q-Link knobs can control 16 parameters for the currently selected pad.

You can select another pad simply by pressing it, allowing you to adjust the same 16 parameters for that new pad. (These assignments are automatically saved with other user settings. Any project you load will use these assignments.)



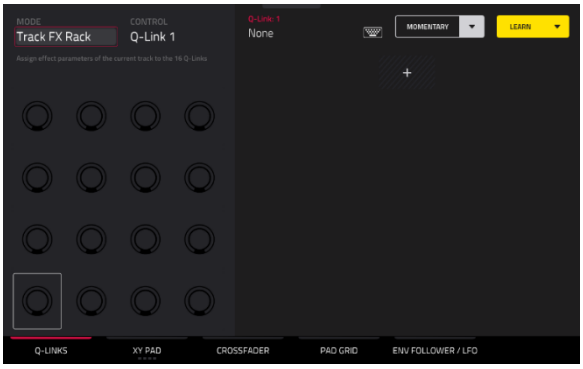
Pad Parameter: In this edit mode, the Q-Link knobs control the same pad parameter for the each of the 16 pads in the current pad bank.

For example, if the **Parameter** is set to **Level**, the 16 Q-Link knobs will adjust the 16 independent **Level** settings for each pad in the current pad bank. You could then set the **Parameter** to **Pan** and use the Q-Link knobs to adjust the panning of all 16 pads.

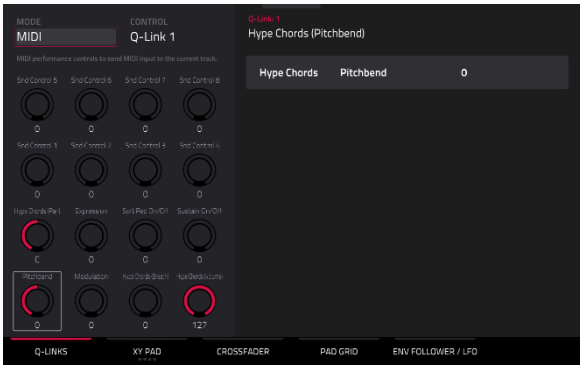


Track FX Rack: In this edit mode, the Q-Link knobs can control 16 FX Rack parameters. The assignments can be saved as part of an FX Rack preset.

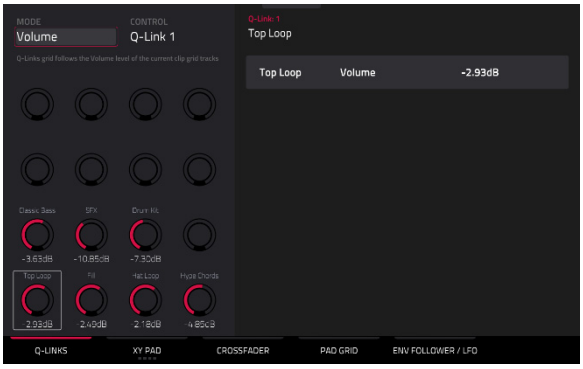
Only parameters available in the currently selected track's Insert effects can be selected as part of a macro control.



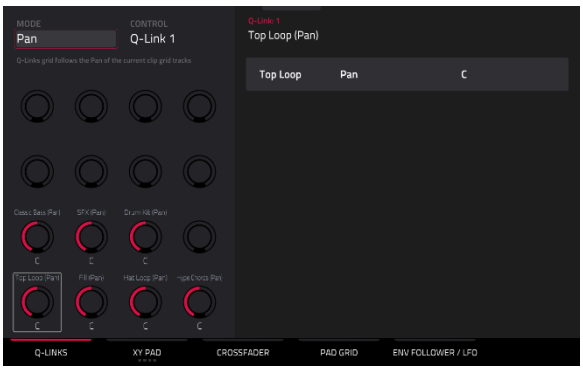
MIDI: In this mode, the Q-Links are fixed to a selection of MIDI performance controls, allowing you to control modulation, pitch bend, sustain and other common MIDI messages as you play.



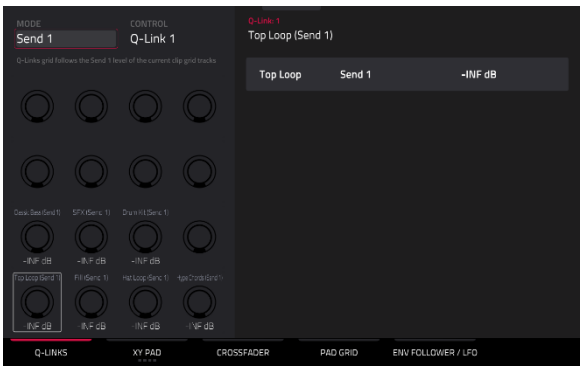
Volume: In this mode, the Q-Links are fixed to controlling the volume level of the available tracks.



Pan: In this mode, the Q-Links are fixed to controlling the stereo panning of the available tracks.



Send 1–4: In these modes, the Q-Links are fixed to controlling each Send control on the available tracks.



At any time, in any mode, you can show the **Q-Links** window over the screen's current contents. This lets you quickly select between the knob modes.

To show the Q-Links window, press and hold the **Knobs** button.

Tap the respective icon to select a Q-Link mode: **Volume**, **Pan**, **Send 1–4**, **Project 1–2**, **Track**, **Track FX Rack**, **Pad Scene**, **Pad Parameter**, **MIDI**, or **Screen**.

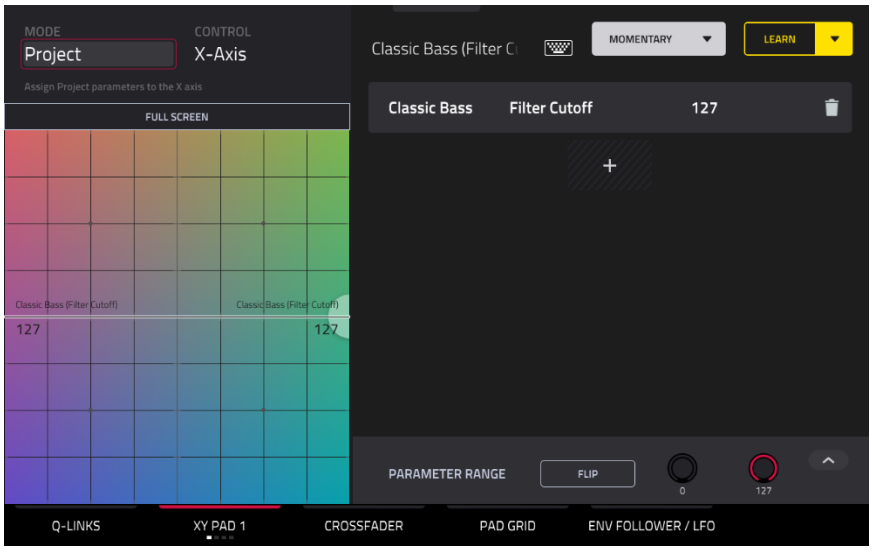
Tap **Q-Link Edit** at the bottom of the window to open Q-Link Edit mode.

To close the Q-Links window, release the **Q-Link** button.

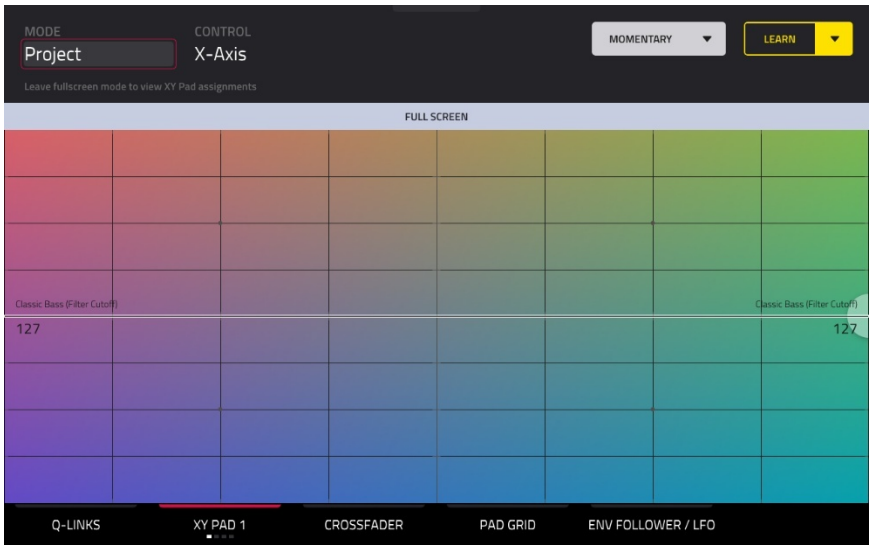
XY Pad

In the **XY Pad** tab, you can learn any automation parameter from within your project to one of four assignable XY Pads.

To cycle between the four available XY Pad assignments, tap the **XY Pad** tab.



Use the **Control** field at the top left of the touchscreen to select the part of the XY Pad that you would like to assign parameters to. This functions like a collection of different macros, allowing you to assign parameters to the X-Axis, Y-Axis, Columns 1–8, Rows 1–8, or even different to the axes of the Quadrants in the XY Pad.

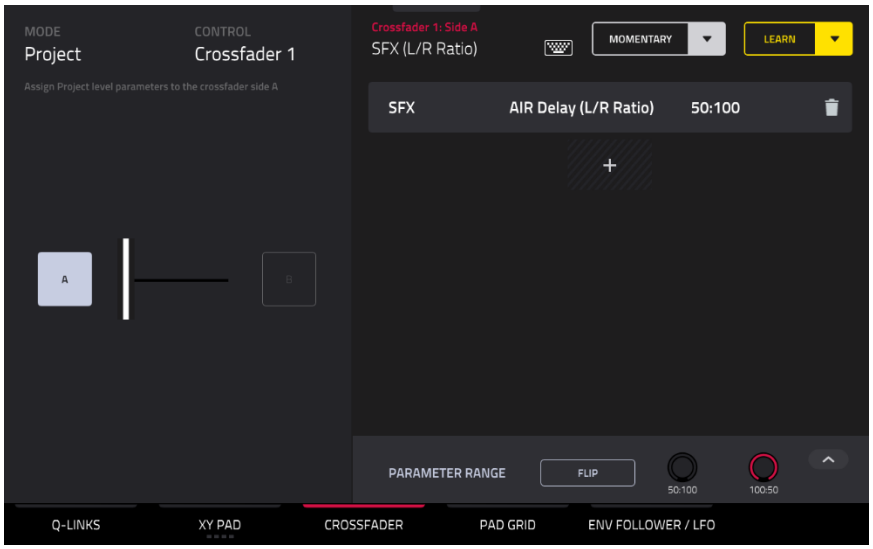


Use the **Full Screen** button to make the current XY Pad fill the entire screen.

To learn a parameter to the XY Pad, follow the directions ***above***.

Crossfader

In the Crossfader tab, you can learn any automation parameter from within your project to Force's Crossfader.



To enter Crossfader mode, do either of the following:

- In Q-Link Edit Mode, tap the **Crossfader** button at the bottom of the screen.
- Press and hold **Edit** and then press **Assign A** or **Assign B**.

There are 16 available crossfader scenes, which can be selected using the **Control** field at the top left of the screen. Each scene can be assigned to one or more parameters.

> **To change crossfader scenes directly from the hardware,** press and hold **Assign A** and then press **Assign B** to move to the next scene. To move to the previous scene, press and hold **Assign B** and then press **Assign A**.

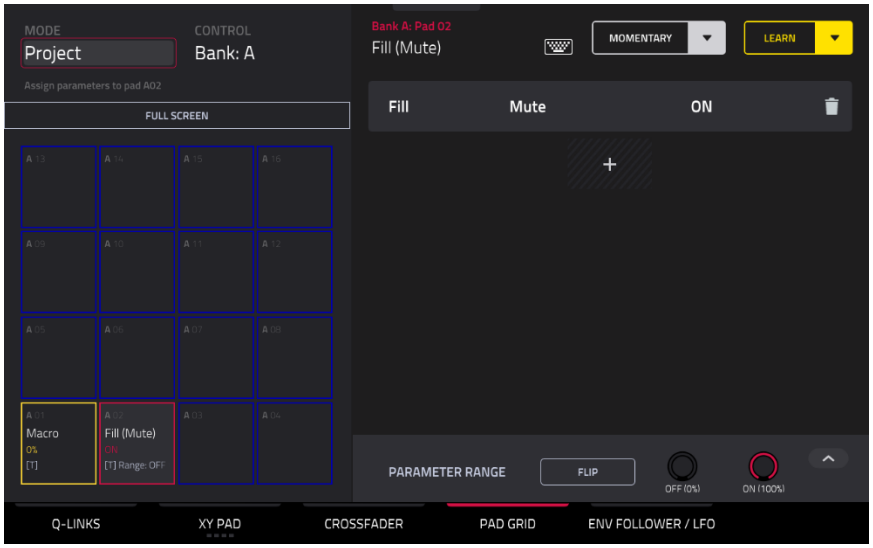
To learn a parameter to the crossfader:

1. Make sure Force is not currently in playback.
2. Select the parameter you would like to assign to the crossfader. Any available parameter, including Track, Pad, Keygroup, Insert, Return, Submix or Main Output parameters, can be selected as part of a macro control.
3. Hold down either the **Assign A** or **Assign B** buttons on Force, and then move any parameter on the touchscreen. When holding **Assign A**, the parameter will be assigned to the crossfader with the minimum value to the left side and the maximum value to the right side. When holding **Assign B**, the parameter will be reversed with the maximum value on the left side and the minimum value on the right side.

To edit the crossfader assignment, press and hold **Edit** and then press **Assign A** or **Assign B**. This will take you to the **Crossfader** tab of the **Macros** page, where you can use the instructions ***above*** to edit the assignment.

Pad Grid

In the **Pad Grid** tab, you can learn any automation parameter from within your project to Force's pad matrix. Assigning automation parameters to the pads gives you a more performative way of controlling effects and mixer parameters. For example, you can assign a pad to mute a group of tracks, or to toggle insert effects on and off.



Use the **Control** field at the top left of the touchscreen to select the pad **Bank** to assign parameters to.

Use the **Full Screen** button to make the current pad **Bank** fill the entire screen.

To access the Pad Grid macros directly from the hardware, do any of the following:

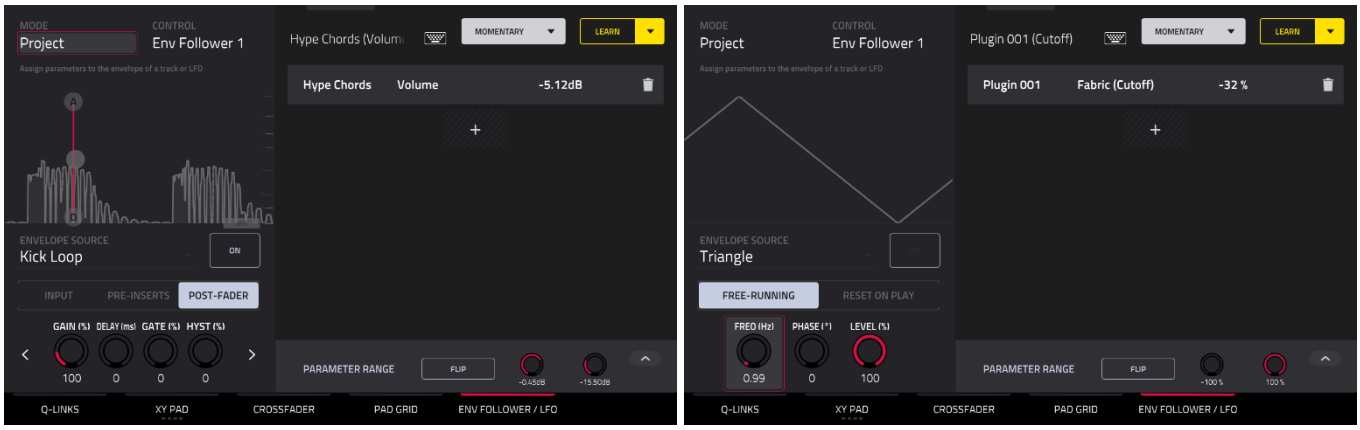
- Press and hold the **Knobs** button, and then press the **Launch/Config** button to split the pad matrix between launching clips and triggering the Pad Grid macros.
- Press and hold the **Knobs** button, and then press the **Notes/Config** button to split the pad matrix between playing notes and triggering the Pad Grid macros.
- Press and hold the **Knobs** button, and then press the **Launch/Config** and **Notes/Config** buttons at the same time to split the pad matrix between launching clips in the top quadrants and playing notes and triggering the Pad Grid macros in the bottom quadrants.

When the Pad Grid macros are active in the pad matrix, you can use the **Edit** buttons to edit, copy and delete macros from these controls directly from the hardware.

To learn a parameter to the pad grid, follow the directions ***above***.

Envelope Follower / LFO

In the **Envelope Follower / LFO** tab, you can use an audio signal (such as a kick drum) as a control signal to create side-chain or modulation effects.



There are 16 available envelope followers, which can be selected using the **Control** field at the top left of the touchscreen.

Tap the **On** button next to the Mode field to enable or disable the envelope.

Use the **Envelope Source** field to select the audio signal that will be used as the control signal for the envelope. This can be audio from a track, or, if you choose a Drum track, audio from a specific pad. You can also select the **Returns**, **Submixes**, and **Main Output** tracks, as well as dedicated **LFO** (low frequency oscillator) shapes.

After selecting the Envelope Source, you can use the additional fields on the left side of the touchscreen to configure the envelope parameters. The available parameters when a track, pad or keygroup is selected as the Envelope Source are as follows:

Use the selector below the Envelope Source field to set where the envelope is applied:

- **Input:** The envelope is applied at the audio input source. This option is not available for individual Pads or Keygroups.
- **Pre-Inserts:** The envelope is applied before any insert effects.
- **Post-Fader:** The envelope is applied at the end of the channel strip after any insert effects and after the set volume level.
- **Playback:** The envelope is applied on playback of the selected track. This option is only available for MIDI and CV tracks.

Use the knobs below the envelope selector to adjust the parameters of the envelope. Tap the arrows to move between the pages of parameters when applicable.

- **Gain (%)** adjust the amount of gain applied to the envelope.
- **Delay (ms)** adjusts the amount of delay in milliseconds after which the envelope is triggered.
- **Gate (%)** adjusts the amount of gate applied to the envelope
- **Hyst (%)** adjusts the level at which the gate closes after opening.
- **Attack** adjusts the amount of attack for the envelope gate. This can also be adjusted by tapping and dragging the **A** handle in the envelope display.
- **Decay** adjusts the amount of decay for the envelope gate. This can also be adjusted by tapping and dragging the **D** handle in the envelope display.

When **LFO** is selected as the Envelope Source, the available parameters are as follows:

Use the selector to configure how the LFO is applied to the envelope. Select **Free-Running** for the LFO to continue even when not triggered, or select **Reset On Play** for the LFO to revert to its starting configuration when triggered.

Use the knobs below the selector to adjust the parameters of the LFO:

- **Freq (Hz)** adjusts the frequency, in Hertz, of the LFO.
- **Phase (º)** adjust the starting phase of the LFO.
- **Level (%)** adjusts the amount of LFO applied.

When the LFO envelope is engaged, you will see a representation of the LFO signal.

Once you have configured the envelope follower source, use the right side of the screen to select the parameter(s) that it will modulate using the same directions as ***above***.

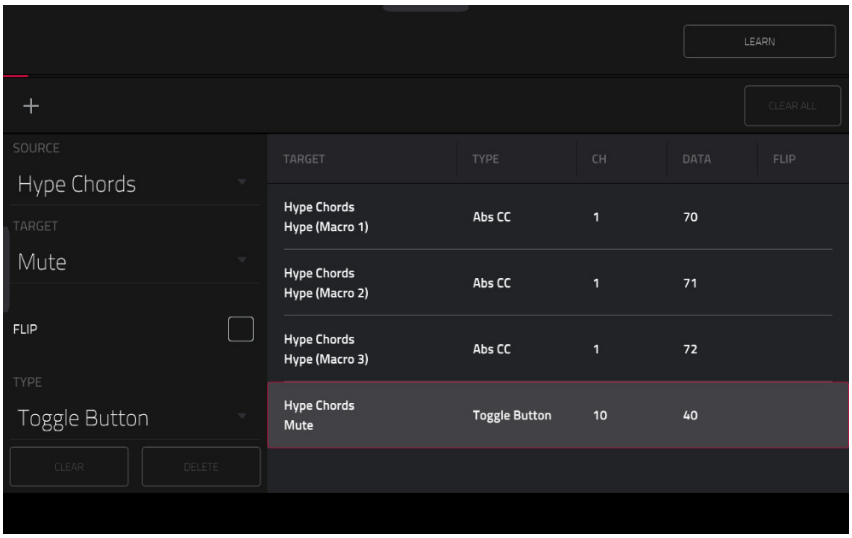
MIDI Learn

You can use the MIDI Learn function to assign external MIDI controllers to various parameters in your specific Force project:

- Mixer parameters such as volume, pan, mute, and solo for tracks, returns, submixes, and main outputs.
- Pad parameters (for drum tracks only) such as tuning, filter and amp envelopes, layer settings, LFO settings, and velocity.
- Track parameters, which depend on the track type.
- Insert effects parameters, which depend on the effect type.

These assignments will be saved with your Force project.

To enter MIDI Learn Mode, press **Menu**, and then tap **MIDI Learn**.



Each assignment has the following settings:

Source: This is the name or number of the track, return, submix, or main output.

Target: This is the name of the assigned command or parameter.

Type: This is the type of message:

- **Toggle Button**: When the control is a button, pressing it will activate or deactivate its command or parameter. It will remain in that state until you press it again.
- **Momentary Button**: When the control is a button, pressing and holding it down will activate its command or parameter. Releasing the button will deactivate it.
- **Fixed Button**: When the control is a button, pressing it will send its command.
- **Note**: When the control is a button, pressing it will send the MIDI note (determined by the **Data** field).
- **Abs CC**: When the control is a knob, turning it will send its CC message (determined by the **Data** field) according to the precise physical position of the knob. (When you start turning it, the value may "jump" from its current value to the one corresponding to the knob's position.) This is for use with knobs that have a maximum and minimum position.
- **Rel CC Offset**: When the control is a knob, turning it will send the CC message (determined by the **Data** field), starting from the current value. This is for use with 360° knobs controlling parameters that have a maximum and minimum position.
- **Rel CC 2's Complement**: When the control is a knob, turning it will send the CC message (determined by the **Data** field), starting from the current value. This is for use with 360° knobs controlling bipolar parameters where there is a center (12:00) position (e.g., panning).

Type is automatically detected based on the **Source** and **Target** fields, though you can use this field to assign it manually if it does not detect it properly.

Ch: This is the MIDI channel the control is using.

Data: This is the MIDI note number or CC number.

Flip: Tap this box to select or deselect it. When selected, the control's polarity will be reversed (e.g., a button's "off" state will become its "on" state and vice versa).

To assign a parameter to a hardware control:

1. Tap **Learn** in the upper-right corner so it is **on**.
2. Tap **+** on the left side of the touchscreen to create an "empty" assignment (its Target menus will be set to **None** and **Off**).

   Alternatively, tap an assignment that is already in the list if you want to change it.
3. Move or press the desired control on your MIDI controller. The **Type**, **Ch**, and **Data** fields will be automatically assigned.
4. Use the **Source** field to select a track, return, submix, or main output (for drum tracks, you can select the entire track or a single pad within it). The **Target** menu will indicate the source you selected.
5. Use the **Target** menu to select the parameter. Your selection will be shown under **Target** in the list, as well.

   The control on your MIDI controller will now control the Target parameter.

   To assign more controls, repeat **Steps 2–5**.

   To stop assigning controls, tap **Learn** again so it turns **off**.

To clear an assignment, tap it in the list, and then tap **Clear** in the bottom-left corner. Alternatively, follow the steps above to reassign its **Source** field to **None** and assign its **Target** field to **Off**.

To clear all assignments, tap **Clear All** in the upper-right corner.

To delete an assignment (the entire slot), tap it in the list, and then tap **Delete** in the lower-right corner.

Live Control Mode

In Ableton Live Control Mode, Force's screen will show a dynamic representation of the Ableton Live software.

To get started with Ableton Live Control, you will need to follow the directions in the sections below to download, install and configure the necessary and software.

Setup

Akai Network Driver

The Akai Network Driver will allow your Force to seamlessly communicate with and control Ableton Live.

1. Download the Akai Network Driver from **akaipro.com** and install it by following the directions.
2. Once the installation has completed, restart your computer.
3. Power on your Force.
4. Press **Menu** and tap **Preferences** to open the **Preferences** menu.
5. Tap **Wi-Fi** to open the Wi-Fi settings. Make sure Wi-Fi is set to **On**, and then connect to your local wireless network.

   Alternatively, you can connect Force to your network using an Ethernet connection. In this case, select **Ethernet** from the **Preferences** menu and make sure the **Enabled** option is checked.
6. Open the **Akai Network Driver** application.
7. In the **Configured Remote Device** field, locate the IP address and Serial Number of your Force and select it. If you need to verify you are selecting the correct unit, you can view network information on your Force in the **Wi-Fi** menu by holding **Shift** and tapping **Info**.
8. If you still do not see your unit's Serial Number and IP, click the **Add a Device** button to manually enter your unit's IP address.
9. Once your unit has been successfully configured, you can rename it by pressing the **Rename a Selected Device** button. When you are finished, you can close the Akai Network Driver application and open Ableton Live.

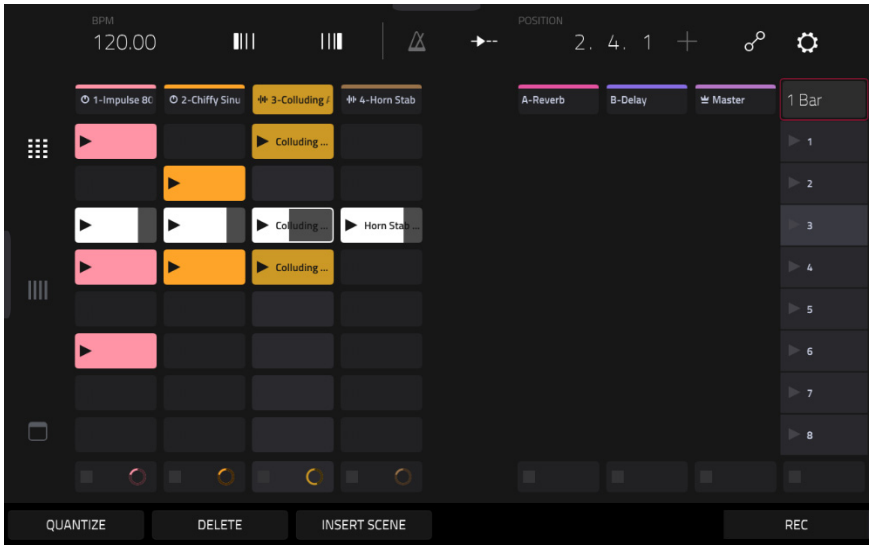
Configuring Ableton Live

1. **Important:** To use Force v3.0.4 to control Ableton Live, you will need to download and install Ableton Live 10.1.2 or later.
2. Open Ableton Live 10.1.2 or later.
3. Open the **Preferences** menu by selecting **Live > Preferences**.
4. Make sure you have selected your preferred **Audio Device** in the **Audio** tab.
5. In the **Link / MIDI** tab, click the first available **Control Surface** field and select **Akai Force MPC**.
6. In the same row, select **Akai Network – DAW Control** as the **Input** and **Output**.
7. Under the **MIDI Ports** section, set **Remote** for the **Akai_Force_MPC Input** and **Akai_Force_MPC Output** to **On**.

Once the previous steps have been completed, you can begin controlling Ableton Live with your Force.

To open Live Control mode, press **Menu** on your Force and then tap **Live Control**. Alternatively, hold **Shift** and press **Matrix**.

To exit Live Control mode, press **Menu** on your Force and then select another mode. Alternatively, hold **Shift** and press **Matrix** to return to Clip Matrix Mode.



Live Control Mode consists of three main views, which can be selected by tapping the tabs on the left side of the display: ***Matrix View***, ***Mixer View*** and ***Device Control View***. Click the links to jump to that section.

In each of these modes, you will always have access to the following controls and functions on the display:

Tap a track name to select it.

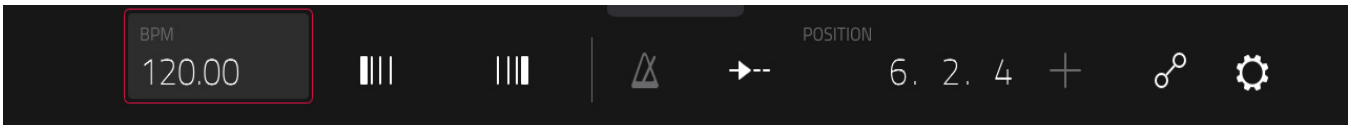
Tap the **stop icons** at the bottom of the display to stop clips in the selected track.

Tap the **Launch Quantize** field (above the row launch arrows) to set the **Launch Quantize** value.

Tap the **Row Launch arrows** on the right side of the display to launch all clips in that row.

Additionally, Force's hardware controls are pre-mapped to give you hands-on control of parameters and functions. See ***Control Map*** for the complete mapping.

Control Bar



At the top of the interface is the **Control Bar**. This toolbar can be configured to one of three presets based on typical Ableton Live use cases in the **Settings** window.

To open the Settings window, tap the **gear icon** in the top-right corner of the display.

Use the **Control Bar** field to select one of the three preset configurations: **Settings**, **Arrangement** or **Performance**.

- **Session:** The Session View configuration is ideal for working in Ableton Live's 8x8 clip launch matrix.

  Use the **BPM** field to adjust the tempo in Ableton Live.

  Tap the **Phase Nudge Down** and **Phase Nudge Up** icons to temporarily decrease or increase the tempo in Ableton Live.

  Tap the **metronome icon** to enable to disable the metronome in Ableton Live.

  Tap the **follow icon** to turn following on or off. When set to on, your Ableton Live software display will move along with playback to keep the current playback position in view. You can adjust the **Follow Behavior** in Ableton Live's Preferences.

  Use the **Position** field to select the playback position.

  Tap the **+ icon** to enable or disable MIDI Arrangement Overdubbing.

  Tap the **automation icon** to enable to disable automation recording.

- **Arrangement:** The Arrangement configuration is ideal for working with Ableton Live's linear Arrangement view.

  Use the **BPM** field to adjust the tempo in Ableton Live.

  Use the **Position** field to select the playback position.

  Use the **Start** field to select the Arrangement loop start point.

  Tap the **loop icon** to enable or disable Arrangement looping.

  Use the **Length** field to select the Arrangement loop length.

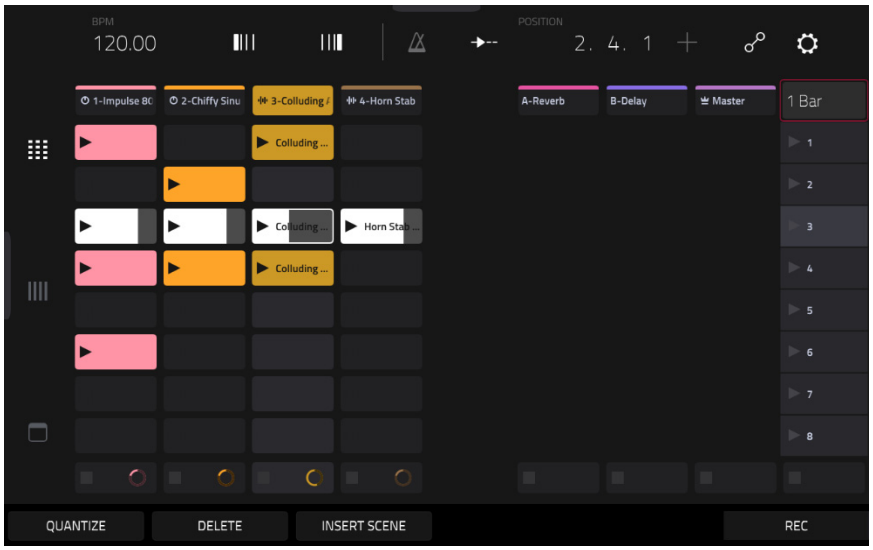
- **Performance:** The Performance configuration is ideal for real-time performance with Ableton Live.

  Use the **BPM** field to adjust the tempo in Ableton Live.

  Tap the **Phase Nudge Down** and **Phase Nudge Up** icons to temporarily decrease or increase the tempo in Ableton Live.

Use the **Quantize To** field to set the time division for quantization: **1/4**, **1/8**, **1/8T**, **1/8 and 1/8T**, **1/16**, **1/16T**, **1/16 and 1/16T** or **1/32**.

Matrix View



The Matrix View provides an overview of the clip matrix from Ableton Live's Session view, displaying up to eight tracks and eight rows of clips. The tracks displayed on Force will be shown in Ableton Live with a colored box outline.

Use the **cursor** buttons to move the Matrix view by one row or column at a time.

Press the **Master** button to select the Main Output track. This will also bring the Main Output and Sends tracks into view if they are not already.

All tracks, clips and scenes will display the same color and names as assigned in Ableton Live. The clip launch pads on Force will also change color depending on the playback or recording state:

When a clip is stopped, it will display the color set in Ableton Live on both the hardware pads and display.

When a clip is playing, the hardware pad will blink green, and the clip on the display will fill with white based on the clip length.

When a clip is preparing to record, it will flash red on both the hardware pads and display until the launch quantization value is reached.

When a clip is recording, it will blink red on the hardware pads and be lit red on the display.

You can also access the following controls and features by tapping the buttons at the bottom of the display:

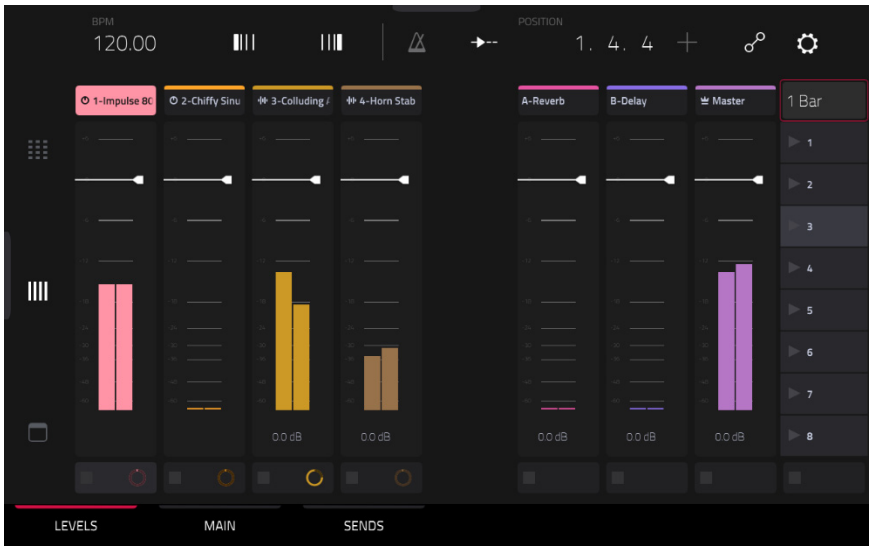
Tap **Quantize** at the bottom of the screen to quantize the currently selected clip according to the **Quantize To** value (set in the Ableton Live Control ***Settings***).

Tap **Delete** at the bottom of the screen to delete the currently selected clip.

Tap **Insert Scene** at the bottom of the screen to insert a new scene after the currently selected clip.

Tap **Rec** at the bottom of the screen to enable or disable Ableton Live's Arrangement Record. Use this to capture your Session performance into the Arrangement view.

Mixer View



The Mixer View gives you control of Ableton Live's key mixing features, such as levels, stereo panning, sends and returns and more. Use the tabs at the bottom of the display to select what information is shown on Force's display.

- **Levels:** The Levels tab gives you an overview of the volume level of your tracks, including the Returns and the Main Output track.

  Tap a **level slider** and then use the **data dial** or **–/+** buttons to adjust the volume level of the currently selected track, return or main output. Alternatively, tap and drag a **level slider** to adjust the volume level.

  The level sliders and meters in each pad show a visual representation of the level. Double-tap a **track** on the screen to open a large version of the level slider and meter.

- **Main:** The Main tab gives you a full channel strip with a number of mixing options for your tracks.

  Tap the **track activator** (under the track name) to enable or disable (mute) the track.

  Tap the **S** button to solo the track.

  Tap the **record button** to arm the track for recording.

  The **pan sliders** in each track show a visual representation of the pan. Tap a pan slider and then use the **data dial** or **–/+** buttons to adjust the panning of the currently selected track, return or main output. Alternatively, tap and drag the **pan slider** to adjust the panning. Double-tap a pan slider on the screen to open a large version of the slider.

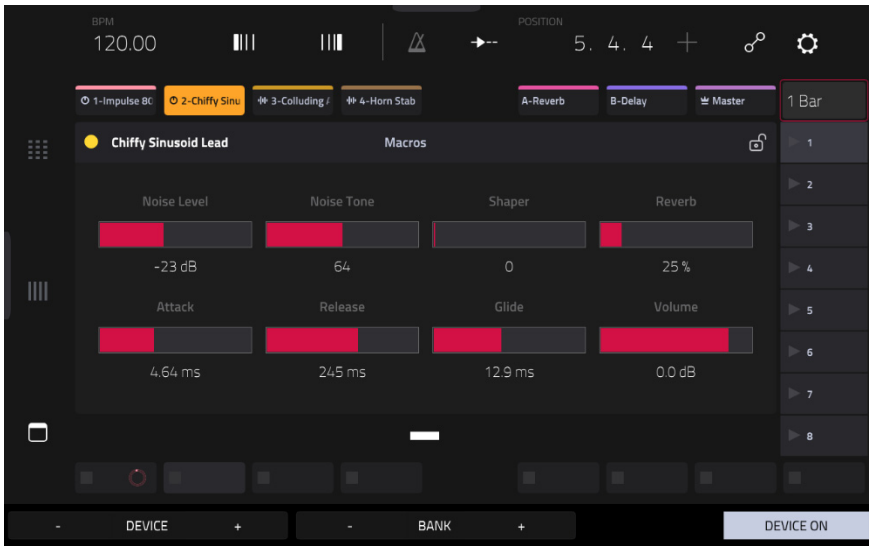
  Tap a **level slider** and then use the **data dial** or **–/+** buttons to adjust the volume of the currently selected track, return or main output. Double-tap a level slider on the screen to open a large version of the slider. Alternatively, tap and drag a **level slider** to adjust the volume level.

- **Sends:** The **Sends** tab gives you an overview of the Send and Return controls in Ableton Live.

  Use the **send knobs** to adjust the send level of tracks. Tap the knob and use the **data dial** or **–/+** buttons to adjust the level. Alternatively, tap and drag the **send knob** to adjust the send level.

  Tap the **A** or **B** icons to assign the track to the Ableton Live's A or B cue mix.

Device Control View



The Device Control View allows you to control MIDI Instruments, Audio Effects and other Devices in Ableton Live directly from your Force. The current view of the Device Control Tab is determined by the "blue hand" remote control icon in Ableton Live's Detail View.

Tap the **Track Name** under the Control Bar to select the Track. If there is a Device(s) associated with the Track, the first will be shown below.

Tap the **lock icon** on the right side to lock parameter changes to the device.

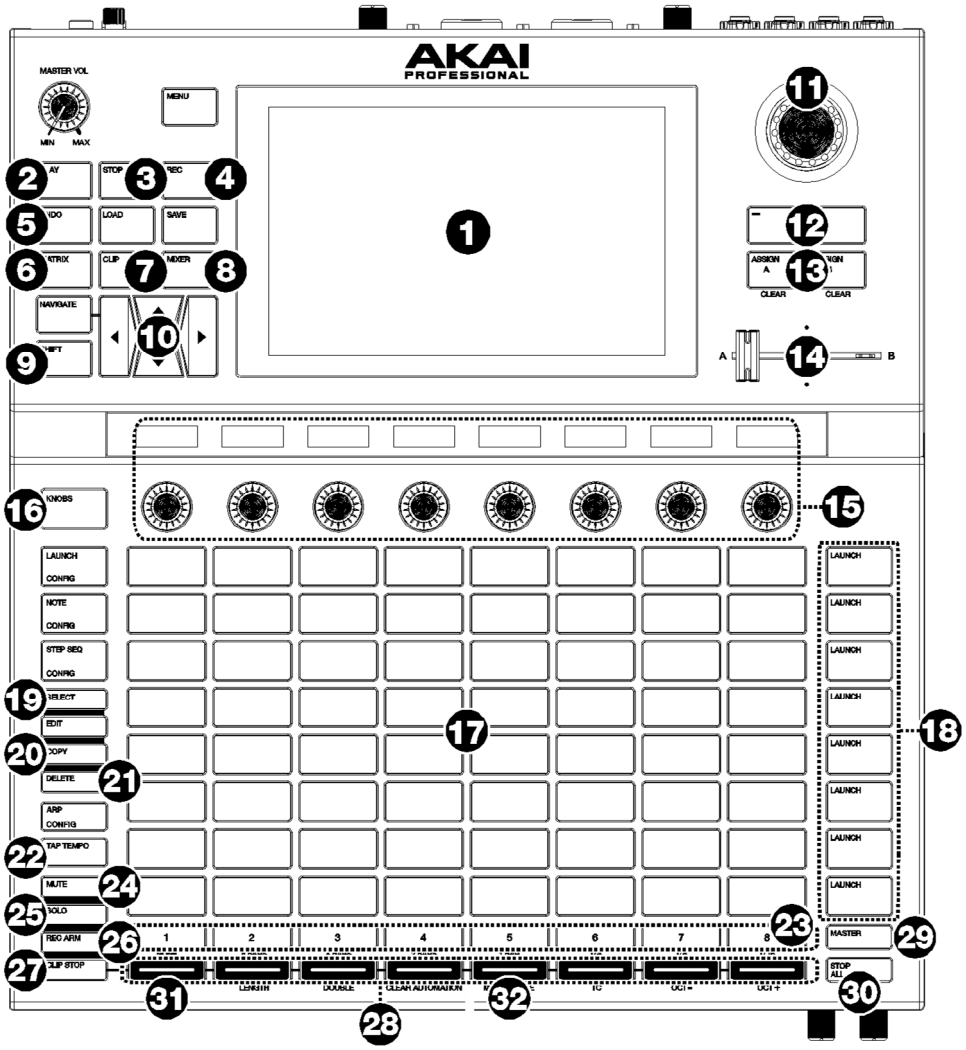
Use the **sliders** to adjust the parameters of the device. Tap a **slider** and then use the **data dial** or **–/+** buttons to adjust the parameter. Alternatively, tap and drag a **slider** to adjust the parameter.

Use the **Device –** and **+** buttons to change devices on the same track. The white and grey boxes below the parameter sliders represent the number of available Devices.

Use the **Bank –** and **+** buttons to cycle through banks of controls for the device, if available. For internal Ableton Live plugins, you will see the name of the current bank. For third party plugins, you will see the number of the current bank.

Tap **Device On** to enable or disable (bypass) the device.

Control Map



Basic Controls

#	Device Control	Ableton Live Function
1	Display	In Ableton Live Control Mode, Force's display will show a dynamic representation of Ableton Live's software.
2	Play	Start playback.
3	Stop	Stop playback.
4	Rec	Enable and disable Session Record.
5	Undo	Undo the last action.
6	Matrix	Opens the Ableton Clip Launch Matrix tab
7	Clip	Opens the Ableton Device Control tab
8	Mixer	Opens the Ableton Mixer tab.
9	Shift	Hold this button to access secondary button functions. See ***Shift Controls*** for more details.
10	Directional Cursor arrows	Moves the 8x8 Session Matrix by one row or one column. The clip slots currently being controlled by Force's clip launch pad grid are shown in Ableton Live with a red border.
11	Data Dial	Adjusts the highlighted field.

#	Device Control	Ableton Live Function
12	-/+	Decreases or increases the value of the highlighted field.
13	Assign A / Assign B	Press and hold one of these buttons and then press a **Track Assign Button** to assign the track to one of Ableton Live's cue mixes.
14	Crossfader	Controls Ableton Live's crossfader to blend between Cue Mixes A and B.
15	Knobs	Adjusts the parameters displayed in the OLED screens above. Use the **Knobs Button** to toggle between **Knobs 1–8** (which control Track Level for the eight tracks currently viewed) and **Knobs 9–16** (which are mapped to control the device on the current track, based on the location of the "blue hand" in Ableton Live's Detail View).
16	Knobs Button	Toggles between **Knobs 1–8** and **Knobs 9–16**.
17	Clip Launch Pads	Force's pads are fixed to clip launching in Ableton Live Control Mode.
18	Launch Buttons	Launch all clips in the row.
19	Select	Press and hold this button and tap a clip to select it without launching it
20	Copy	Duplicates the selected clip into the next available clip slot.
21	Delete	Deletes the selected clip.
22	Tap Tempo	Tap this button at the desired rate to set a new tempo in Ableton Live.
23	Track Selectors	Select one of the current eight tracks. The selected track will be highlighted white.
24	Mute	Sets the Track Assign buttons to Mute for the current eight tracks.
25	Solo	Sets the Track Assign buttons to Solo/Cue for the current eight tracks.
26	Rec Arm	Sets the Track Assign buttons to Record Arm for the current eight tracks.
27	Clip Stop	Sets the Track Assign buttons to Stop Clips for the current eight tracks.
28	Track Assign	Performs the selected action (Mute, Solo, Rec Arm or Clip Stop) for the current eight tracks.
29	Master	Selects the Main Output track and Sends. Press again to return to the previously selected track.
30	Stop All	Stops all clips that are playing or recording.

Shift Controls: Press and hold Force's **Shift** button, and then press the following buttons for additional actions:

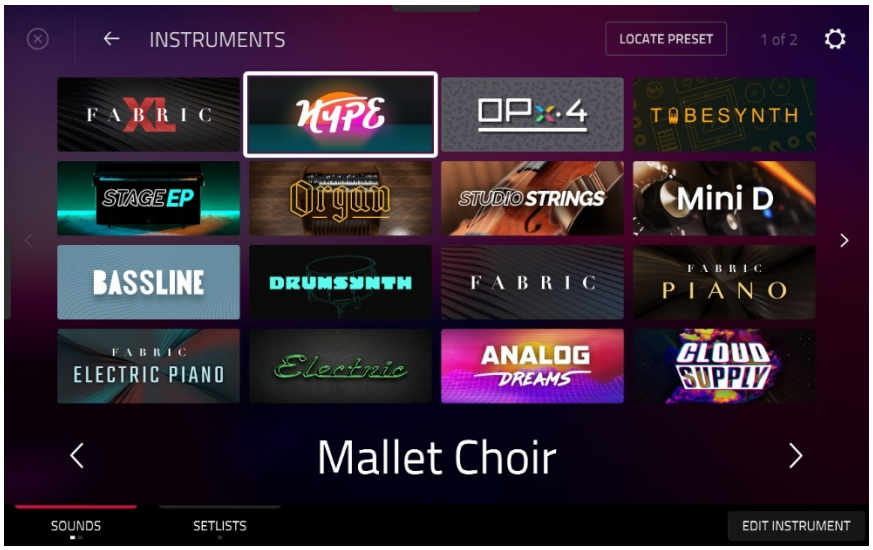
#	Device Control	Ableton Live Function
2	Play	Continue playback.
3	Stop	Stop playback and return song position to 1:1:1.
5	Undo	Redo the last action.
10	Directional Cursor arrows	Moves the 8x8 Session Matrix by eight rows or eight columns.
23	Track Selectors	Sets the Global Launch Quantization to the value shown beneath the corresponding button. The current value will be lit white while Shift is held.
31	Quantize	Quantizes the currently selected clip to the grid value set by Force. To set this value, tap the Setting **gear icon** in the top-right of the display, then use the **Quantize To** field to set the value.
32	Metronome	Enable or disable Ableton Live's metronome.

Sounds Mode

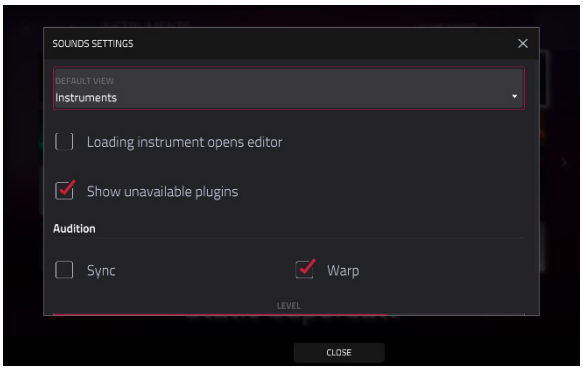
Sounds Mode allows you to easily browse plugin instruments, save favorite presets, and build setlists to quickly recall projects for live performances.

To enter the Sounds Mode, press **Menu**, and then tap **Sounds**.

When viewing either the Sounds or Favorites menu, you can swap to the other menu by tapping the first tab at the bottom of the touchscreen.



Tap the **gear icon** at the top of the screen to open the Sounds menu settings.



Use the **Default View** field to set Sounds mode to open viewing **Instruments** or the **Current Preset** by default.

Check the **Loading instrument opens editor** box to enable opening ***Track Edit Mode*** when loading an instrument.

Check the **Show unavailable plugins** box to enable displaying all Force compatible plugins in the list. Plugins that are not currently activated or installed on your device will be shown in black and white.

Use the **Audition** fields to determine how samples are auditioned.

Tap **Sync** to enable or disable auditioning samples at the beginning of the next bar of the sequence when playback is active.

Tap **Warp** to enable or disable samples with an embedded tempo to be warped to the project tempo. Samples with no embedded tempo or externally-embedded tempo will not be affected by this setting.

Tap and drag the **level slider** up or down to set the audition volume level.

Tap **Locate Preset** at the top of the touchscreen to open the preset list for the currently selected plugin instrument.

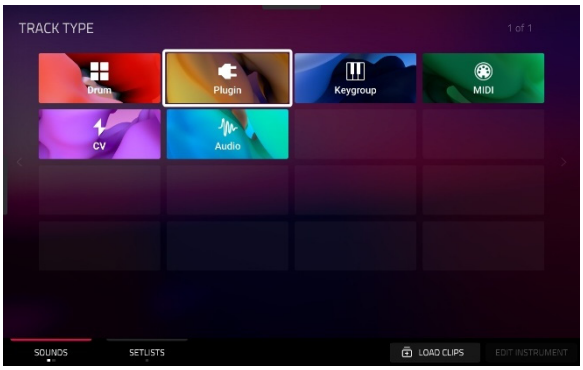
Tap **Load Clips** at the bottom of the screen to load associated clips with the preset, if available.

Tap **Edit Instrument** at the bottom of the touchscreen to open ***Track Edit Mode*** to adjust the instrument parameters.

Tap **Track -/+** at the bottom of the touchscreen to switch to another track.

Tap the ← **Instruments** button to select another track type to search for using the Sounds interface. You can search for **Drum**, **Plugin**, **Keygroup**, **MIDI**, **CV**, and **Audio** track types in any factory expansions or user expansions on any attached drives. When browsing an expansion or user folder, tap a cell to load the selected program.

When searching for non-Plugin tracks, you can also tap and hold on an empty space to set a preferred folder location for your saved tracks.



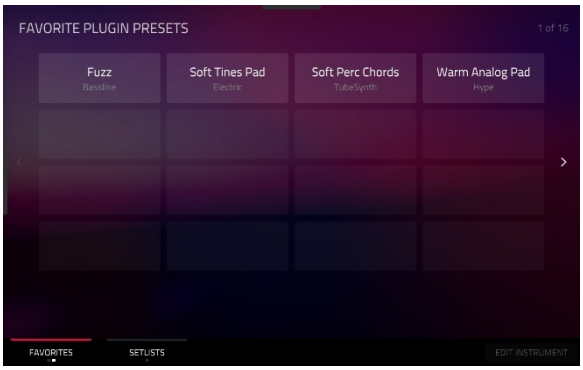
When viewing **Drum** and **Keygroup** track samples, tap the **headphones** icon to enable auditioning. Once enabled, tap and hold on a cell's **play icon** to audition the selected sound.

Favorites

When viewing the Sounds menu, tap the **Sounds** tab at the bottom of the screen to switch to the Favorites screen, where you can save, load, and organize your most-used presets.

To save a preset as a favorite:

1. Select the desired plugin and preset using the Sounds menu.
2. Open the Favorites menu by tapping the bottom-left tab in the Sounds menu.
3. Press and hold on an empty Favorites slot to save the preset in the selected slot.



To edit an existing Favorite slot, tap and hold on a filled Favorite slot. In the menu that appears:

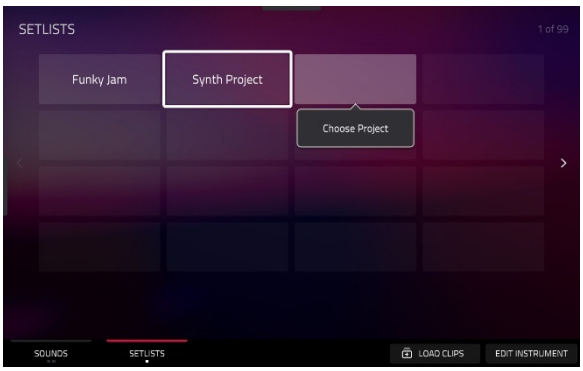
- Tap **Clear** to clear the slot.
- Tap **Overwrite** to replace the favorite with the currently selected preset.

Setlists

Use the Setlists tab to create a list of projects to easily recall, such as for a live performance.

To create a Setlist:

1. Open the Setlist tab from the Sounds page.
2. Tap and hold on an empty Setlist slot, and then tap **Choose Project**.
3. In the file browser that appears, locate the project you would like to add and then tap **Select** to load it.



To edit an existing Setlist slot, tap and hold on a filled slot. In the menu that appears:

- Tap **Choose Project** to select a different project for the same slot.
- Tap **Clear** to empty the selected slot.
- Tap **Copy** to copy the project to another slot. Then, tap and hold on an empty slot and tap **Paste**.

Main Mode

Main Mode gives you an overview of the most-used functions.

To enter Main Mode, do one of the following:

- Press the **Matrix** and **Navigate** buttons at the same time.
- Press **Menu**, and then tap **Main**.

Overview

Click or tap on part of the image below to jump directly to that section.

Toolbar

The top of the screen shows the project name and timing information.

The **Project** field shows the name of the current project.

The time counter shows the current playhead position, in **bars:beats:ticks**. This is shown in most of the modes. Double-tap to open the ***Locate*** window, where you can adjust the playhead position, manage loop and record settings, and quickly jump to specific points in your project.

The **TC icon** opens the ***Timing Correct (TC)*** window, which contains various settings to help quantize the note events in your sequence.

Press and hold **Shift** and tap the **TC icon** to enable or disable global timing correct.

The **Metro/metronome icon** opens the ***Metronome (Click/Metro)*** menu, which contains all settings regarding the metronome (click track).

Press and hold **Shift** and tap the **Metro/metronome icon** to enable or disable the metronome.

The automation button indicates the global ***Automation*** state. This is shown in several modes.

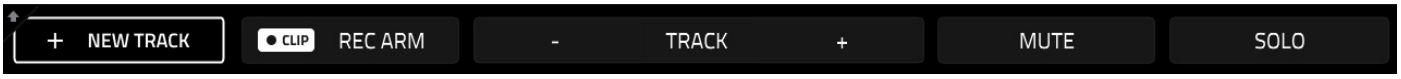
The **In** and **Out** boxes indicate your Force is receiving or sending (respectively) MIDI messages from or to your computer. Tap here to open the ***MIDI Monitor*** and view the latest incoming or outgoing MIDI messages.

Shortcuts

The five Mode Icons on the left side of the screen provide shortcuts to some of the most-used modes. By default, these are **Browser Mode**, **Channel Mixer Mode**, **Pad Mixer Mode**, **Sounds Mode**, and **XY Mode**.

You can change what mode icons appear here by going to the ***Menu*** and tapping and dragging the mode icons to rearrange them. Mode icons dragged into the left-most column will appear in the shortcuts on the Main menu and when sliding out the tab on the left side of the screen in other modes.

Function Buttons



The buttons at the bottom of the screen perform different functions depending on the current mode. In Main Mode, these functions are as follows:

New Track: Tap this button to add a new track to the project.

Rec Arm: Tap this button to arm Sequence recording.

Track –/+: Tap one of these buttons to switch to the previous or next track, respectively.

Mute: Tap this button to mute the current track.

Solo: Tap this button to solo the current track.

Press and hold **Shift** to access these additional options:

Back to Arr: Tap this button to return the selected track back to arrangement playback.

All Track to Arr: Tap this button to return all tracks back to arrangement playback.

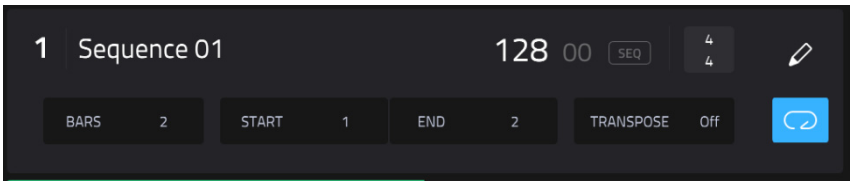
Clip -/+: Tap one of these buttons to switch to the previous or next clip, respectively.

Clip Stop: Tap this button to stop the current clip from playback.

Stop All: Tap this button to stop all clips from playback.

Sequence Section

The **Sequence** section shows the current sequence and its information.



Use **Sequence** field to select a sequence.

Tap and hold the **Sequence** name to open the **Sequence Settings** window.

Use the **Name** field to edit the Sequence name.

Use the **Auto-Select Track** field to specify which track is selected when switching sequences. Select **None** to keep the current track selected when changing sequences, or select a specific track from your project.

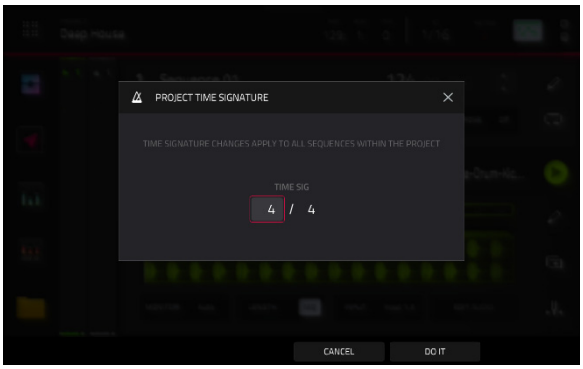
Use the **BPM** field to adjust the tempo of the sequence.

To set whether the sequence follows its own tempo (**Sequence**) **or a global tempo** (**Global**), tap the **Sequence/Global** button under the **BPM** field. Alternatively, press and hold **Shift** and **Tap**.

Tap the **Time Signature** fields to adjust the time signature of the project. The numerator (top number) indicates the number of beats per bar (**1**–**16**). The denominator (bottom number) indicates the note value of each beat (**4**, **8**, **16**, **32**). Time signature changes apply to all sequences within the project.

Tap **Do It** to apply the Time Signature change.

Tap **Cancel**, the **X**, or anywhere outside the window to close it.



Use the **Bars** field to adjust the length of the sequence in bars.

The **Loop** button shows whether the sequence (or a part of it) will loop or not.

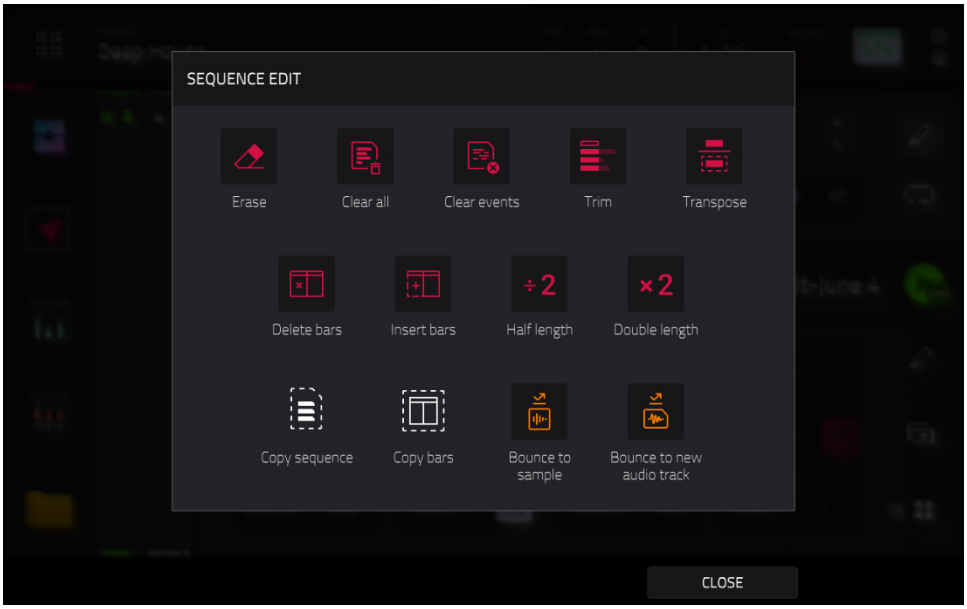
To enable or disable looping, tap the button.

To set the start point and end point of loop, tap the **Start** or **End** field (respectively) and then use the **data dial** or the **–/+** buttons, or double-tap the field and use the numeric keyboard that appears.

Note: The **Last Bar** value of the **Delete Bars** and **Copy Bars** processes depends on the total length of the sequence.

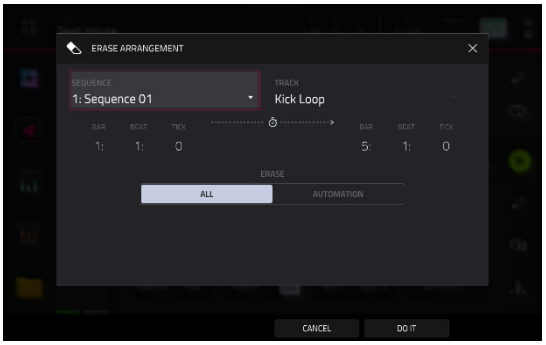
Use the **Transpose** field to set the transposition (in semitones) of the entire sequence.

To edit the sequence, tap the **pencil icon** on the right edge of the section. The **Sequence Edit** window will open.



You can use any of these functions as described below, though there are fewer options for audio tracks than for MIDI tracks.

The **Erase** function erases all or part of a track in a specific sequence.



Use the **Sequence** field to select the sequence you want to erase.

Use the **Track** field to select the track you want to erase within the sequence.

Use the **Bar**, **Beat**, and **Tick** fields to set the time range of the sequence you want to erase. The left fields set the start of the time range, and the right fields set the end of the time range.

To select what types of events you erase, select one of the **Erase** options:

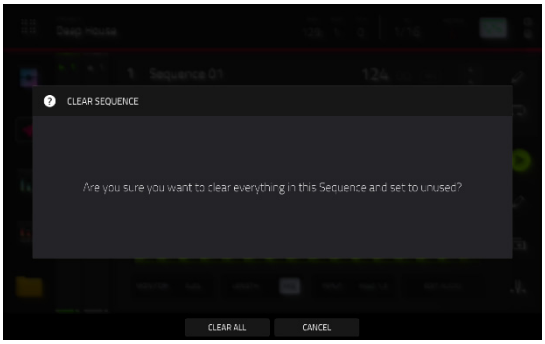
All erases all pad events from the designated time range and reset all of its settings.

Automation erases only automation from the designated time range.

Tap **Do It** to confirm your choice.

Tap **Cancel**, the **X**, or anywhere outside the window to return to the previous screen.

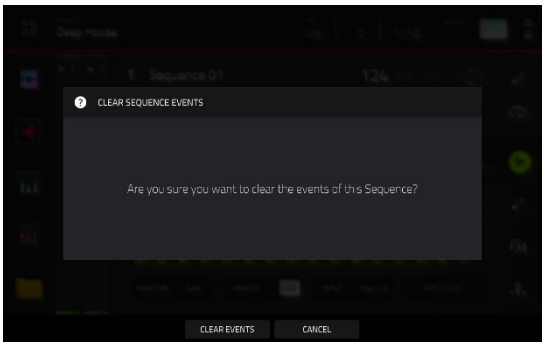
The **Clear All** function erases **all** events from the sequence and resets **all** of its settings.



Tap **Clear All** to confirm your choice.

Tap **Cancel** to return to the previous screen.

The **Clear Events** function only erases **all** events from the sequence.

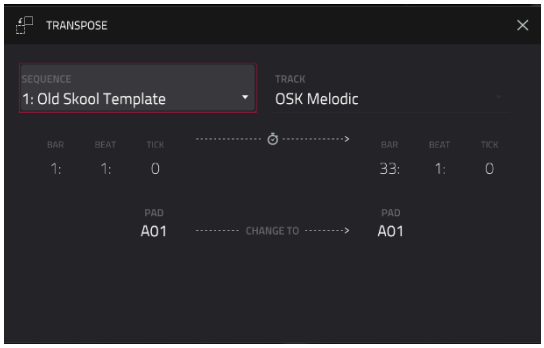


Tap **Clear Events** to confirm your choice.

Tap **Cancel** to return to the previous screen.

The **Trim** function immediately crops the sequence to the length of the **Bars** value.

The **Transpose** function transposes a range of events on a track in a sequence. The events within that range will shift accordingly in the Grid View. This option is available for MIDI tracks only.



Use the **Sequence** field to select the sequence you want to transpose.

Use the **Track** field to select the track you want to transpose within the sequence.

Use the two sets of **Bar**, **Beat**, and **Tick** fields to set the time range of the sequence you want to transpose. The left fields set the start of the time range, and the right fields set the end of the time range.

For drum tracks, use the two **Pad** fields to select the "source" pad (whose events you want to move) and "destination" pad (where the events will be placed). Tap each field and then press the desired pad.

For keygroup tracks, plugin tracks, and MIDI tracks, set the range and amount of transposition:

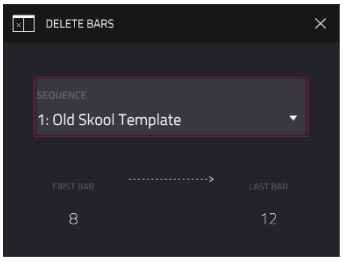
Range: Use the two **Note** fields to set the range of notes of the events you want to transpose. Note events within this range will be transposed, while note events outside of this range will remain unchanged.

Transpose: Use this field to set how many semitones up or down you want to transpose the note events.

Tap **Do It** to confirm your choice.

Tap **Cancel**, the **X**, or anywhere outside the window to return to the previous screen.

The **Delete Bars** function removes a range of bars from a sequence.



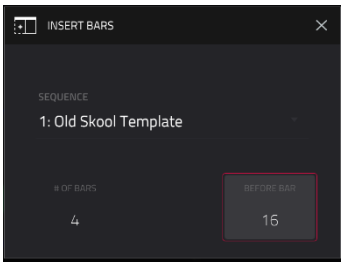
Use the **Sequence** field to select the sequence whose bars you want to delete.

Use the **First Bar** and **Last Bar** fields to set the range of bars you want to delete. The bar in each field and all bars in between them will be deleted.

Tap **Do It** to confirm your choice.

Tap **Cancel**, the **X**, or anywhere outside the window to return to the previous screen.

The **Insert Bars** function adds empty bars to a sequence at a specified point.



Use the **Sequence** field to select the desired sequence.

Use the **# of Bars** field to set how many bars you will insert.

Use the **Before Bar** field to set where you will insert the bars. The bars will be inserted before this one.

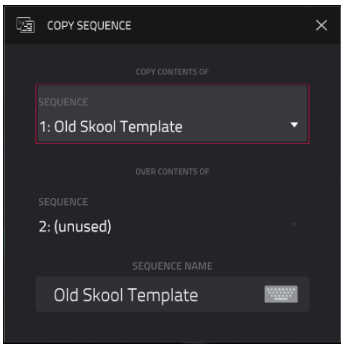
Tap **Do It** to confirm your choice.

Tap **Cancel**, the **X**, or anywhere outside the window to return to the previous screen.

The **Half Length** function will **immediately** halve the length of the sequence (without deleting any note events).

The **Double Length** function will **immediately** double the sequence and copy all events from the first half to the second half.

The **Copy Sequence** function copies the contents of one sequence to another.



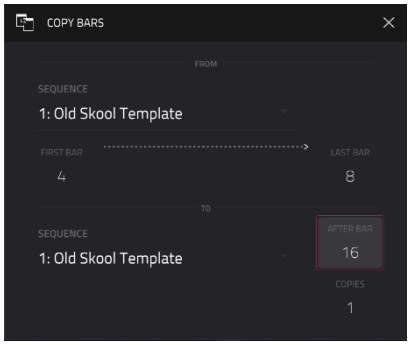
Use the **Copy Contents of Sequence** field to select the “source” sequence. This is the sequence whose events you want to copy.

Use the **Over Contents of Sequence** field to select the “destination” sequence. This is the sequence where the source sequence will be copied.

Tap **Do It** to confirm your choice.

Tap **Cancel**, the **X**, or anywhere outside the window to return to the previous screen.

The **Copy Bars** function copies a range of bars from a sequence and adds them to another at a specified point.



Use the **From Sequence** field to select the “source” sequence. This is the sequence whose bars you want to copy.

Use the **First Bar** and **Last Bar** fields to set the range of bars to copy in the source sequence.

Use the **To Sequence** field to select the “destination” sequence. This is the sequence where the source sequence bars will be copied.

Use the **After Bar** field to set where you want to add the copied bars. The copied bars will be inserted after this one.

Use the **Copies** field to set how many instances of the copied bars you want to add.

Tap **Replace** to overwrite the destination sequence.

Tap **Merge** to add the events to the destination sequence without erasing anything.

Tap **Cancel**, the **X**, or anywhere outside the window to return to the previous screen.

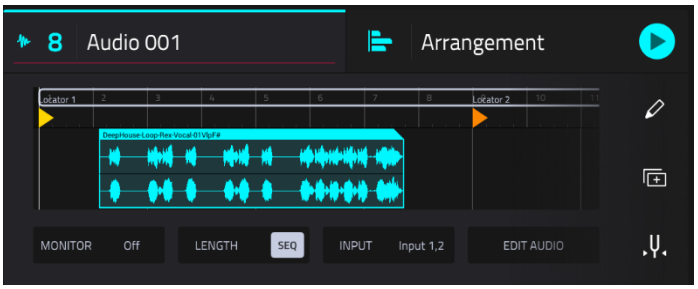
The **Bounce to Sample** function renders the current sequence as an audio sample and places it in the project’s sample pool. By default, it will be named **Bounce** and appended with the sequence name.

The **Bounce to Audio Track** function renders the current sequence and adds it as a new audio track in the project. The Main Mode will automatically switch to the **Audio** track. By default, it will be named **Audio 001** or the next available audio track number.

Track Section

The **Track** section displays essential details for the current track type and facilitates track-specific editing operations.

Example **Track** section while using a Drum track.



Example **Track** section while using an Audio track.

The track field shows the track number and its name.

To edit the name of the track, tap and hold on the track name to open the **Track Settings** window, and then use the **Name** field.

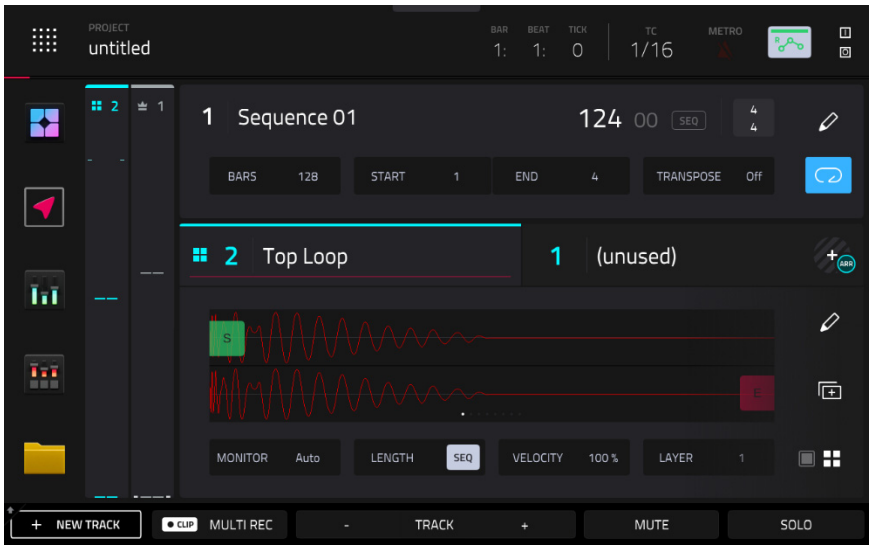
To change tracks, use the **Track -/+** buttons at the bottom of the screen. Alternatively, tap the **Track** header and use the **data dial** or **+/-** buttons.

From this window, you can also tap **Tracks**, **Submixes**, **Returns**, and **Outputs** to display the selected track types in the window, and then select one in the same way.

To change track type, tap the track type icon next to the track number, and then select the track type from the menu that appears.

Drum Tracks

To select a pad, simply tap the pad on your Force.



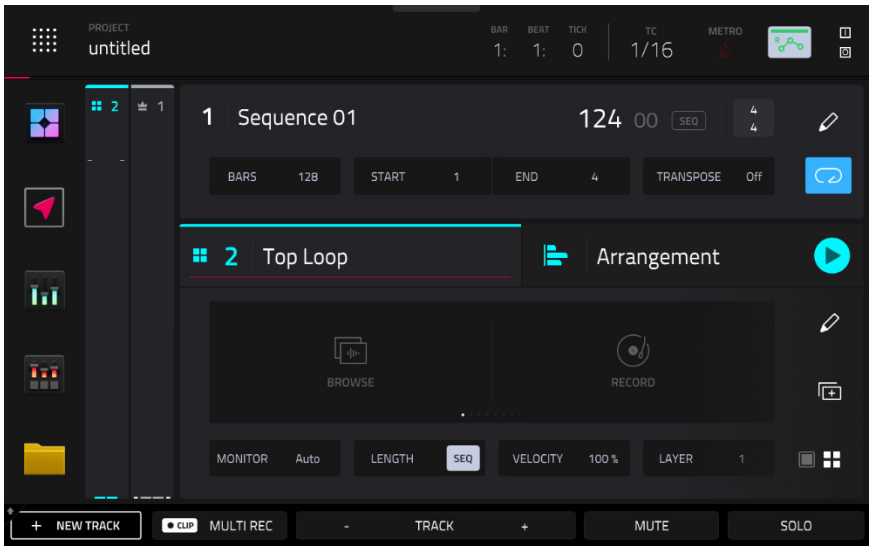
When a sample is loaded to the selected pad:

The **waveform** displays the sample loaded to the selected pad on the selected layer.

In the waveform preview, pinch in or out to adjust the zoom level. You can also adjust the start (**S**) marker (if **Loop Lock** is on), **loop** marker (if **Loop Lock** is off), and end (**E**) marker by tapping and dragging.

Double-tap the waveform preview to open the **Samples** tab of ***Track Edit Mode***.

To change layers, use the **Layer** field at the bottom of the track section.



If no sample is loaded to the selected pad:

Tap **Browse** to open the ***Browser*** to search for and select a sample to load.

Tap **Record** to open the ***Sampler*** to record and load a new sample. Alternatively, you can record a sample directly to the pad from Main Mode:

1. Press the **Rec** button on your Force to arm recording.
2. Tap an empty pad to arm it for recording. Recording will follow the settings established in the ***Sampler*** mode regarding active inputs and threshold. When you are finished recording, tap the pad again. You can also press and hold a pad, and recording will continue as long as the pad is held.

Use the **Monitor** field to set how your track will be monitored. Double-tap this field to open the menu, or tap to select the field and then use the **data encoder** or **+/-** buttons to cycle through its four states:

When set to **Off**, the track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

When set to **In**, the track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

When set to **Auto**, the track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

When set to **Merge**, the track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This feature lets you maintain tracks of different lengths. For instance, you could play a 1-bar drum sequence repeatedly under a 4-bar bass line.

Use the **Velocity** field to set how loudly or quietly a track plays relative to its recorded levels. When set to **50%**, the track will be played with half the velocity it was originally played. When set to **200%**, the track will play twice as loud. The maximum velocity level is still **127**, though.

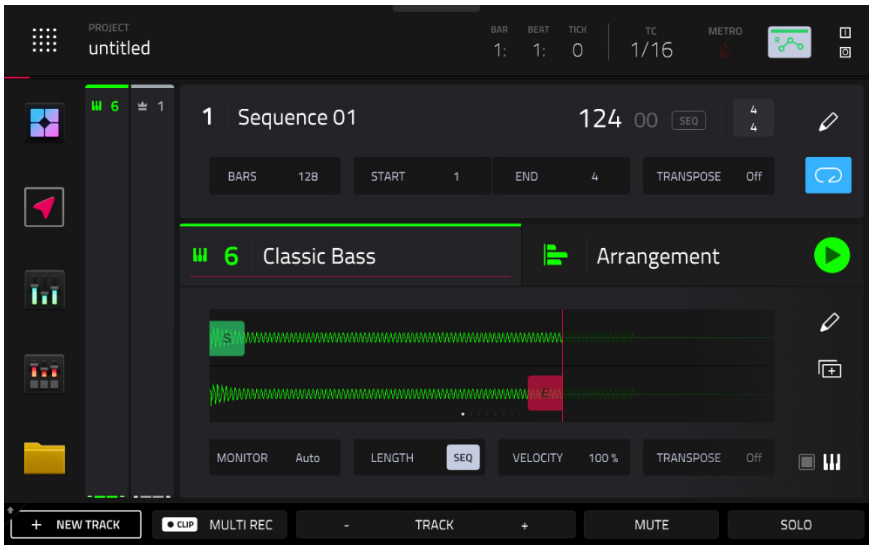
Use the **Layer** field to select which of the eight available sample layers are shown. The layer number is shown here, and the dots in the waveform preview indicate the layer shown.

Tap the **pencil icon** to open the **Track Edit** window. See ***Track Edit*** to learn more.

Tap the **Duplicate Track** icon to immediately create an identical track on a new track.

Tap the **pad / four pads** icons to swap the Mixer Channel Strip between showing **Track** and **Pad** settings. See ***Mixer Strips*** to learn more.

Keygroup Tracks



The **waveform** displays the sample loaded to the selected pad on the selected layer.

In the waveform preview, you can adjust the start (**S**) marker (if **Loop Lock** is on), **loop** marker (if **Loop Lock** is off), and end (**E**) marker by tapping and dragging.

Double-tap the waveform preview to open the **Samples** tab of **Track Edit** mode.

Use the **Monitor** field to set how your track will be monitored. Double-tap this field to open the menu, or tap to select the field and then use the **data encoder** or **+/-** buttons to cycle through its four states:

When set to **Off**, the track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

When set to **In**, the track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

When set to **Auto**, the track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

When set to **Merge**, the track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This feature lets you maintain tracks of different lengths. For instance, you could play a 1-bar drum sequence repeatedly under a 4-bar bass line.

Use the **Velocity** field to set how loudly or quietly a track plays relative to its recorded levels. When set to **50%**, the track will be played with half the velocity it was originally played. When set to **200%**, the track will play twice as loud. The maximum velocity level is still **127**, though.

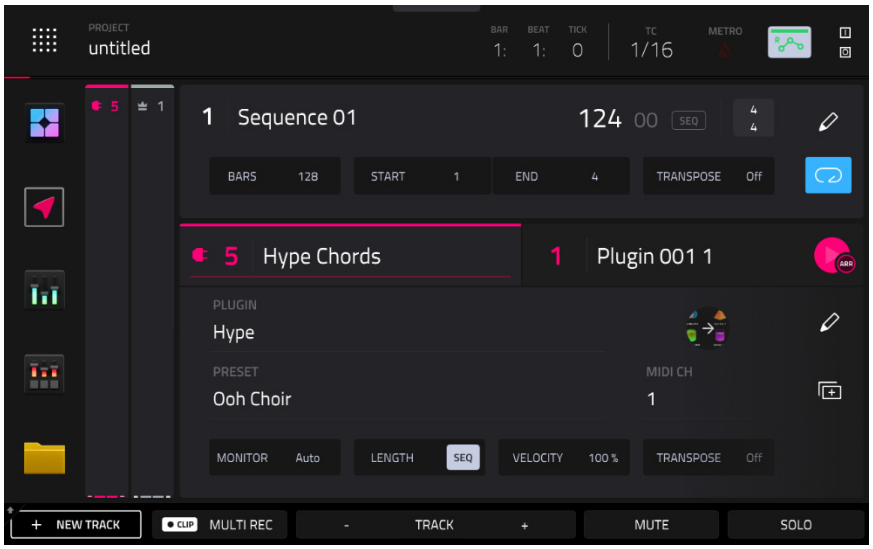
Use the **Transpose** field to set the transposition (in semitones) of the entire track.

Tap the **pencil icon** to open the **Track Edit** window. See ***Track Edit*** to learn more.

Tap the **Duplicate Track** icon to immediately create an identical track on a new track.

Tap the **pad / keyboard** icon to swap the Mixer Channel Strip between showing **Track** and **Keygroup** settings.

Plugin Tracks



Use the **Plugin** field to select the plugin the track is using. In the screen that appears, you can tap the **Type** or **Manufacturer** button at the bottom of the screen to enable or disable sorting of your plugins by type or maker.

Use the **Preset** field to select a preset (if any) within the plugin the track is using.

Tap the **plugin preview icon** to open ***Track Edit Mode*** and view the plugin interface.

Use the **MIDI Ch** field to select the MIDI channel over which the track sends its MIDI data.

Use the **Monitor** field to set how your track will be monitored. Double-tap this field to open the menu, or tap to select the field and then use the **data encoder** or **+/-** buttons to cycle through its four states:

When set to **Off**, the track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

When set to **In**, the track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

When set to **Auto**, the track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.

When set to **Merge**, the track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This feature lets you maintain tracks of different lengths. For instance, you could play a 1-bar drum sequence repeatedly under a 4-bar bass line.

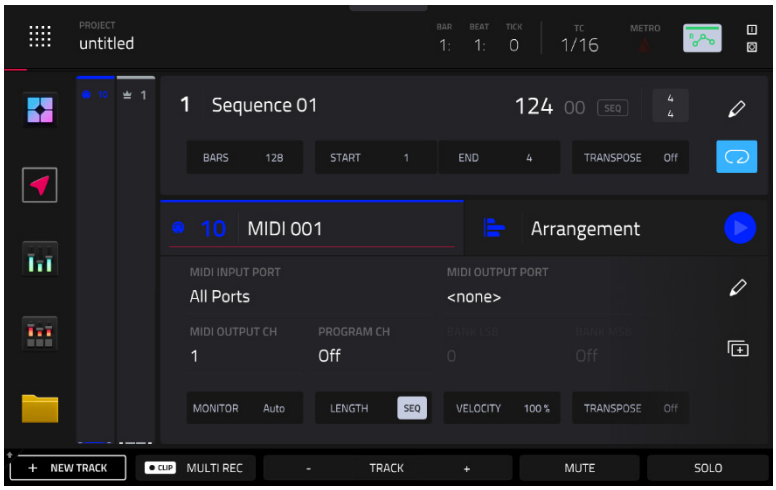
Use the **Velocity** field to set how loudly or quietly a track plays relative to its recorded levels. When set to **50%**, the track will be played with half the velocity it was originally played. When set to **200%**, the track will play twice as loud. The maximum velocity level is still **127**, though.

Tap the **pencil icon** to open the **Track Edit** window. See ***Track Edit*** to learn more.

Use the **Transpose** field to set the transposition (in semitones) of the entire track.

Tap the **Duplicate Track** icon to immediately create an identical track on a new track.

MIDI Tracks



Use the **MIDI Input Port** field to select the port over which the track receives its MIDI data.

Use the **MIDI Output Port** field to select the port over the track sends its MIDI data.

Use the **MIDI Output Ch** field to select the MIDI channel over which the track sends its MIDI data.

Use the **Program Ch** field to select the program change message the track sends out.

Use the **Bank LSB** and **Bank MSB** fields to select the messages for Least Significant Byte and Most Significant Byte (respectively) that the track sends out.

Use the **Monitor** field to set how your MIDI track will be monitored. Double-tap this field to open the menu, or tap to select the field and then use the **data encoder** or **+/-** buttons to cycle through its four states:

- When set to **Off**, the track's MIDI input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.
- When set to **In**, the track's MIDI input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.
- When set to **Auto**, the track's MIDI input is monitored when the track is record armed, and playback of recorded events will be heard.
- When set to **Merge**, the track's MIDI input is always monitored, and playback of recorded events will be heard.

Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This feature lets you maintain tracks of different lengths. For instance, you could play a 1-bar drum sequence repeatedly under a 4-bar bass line.

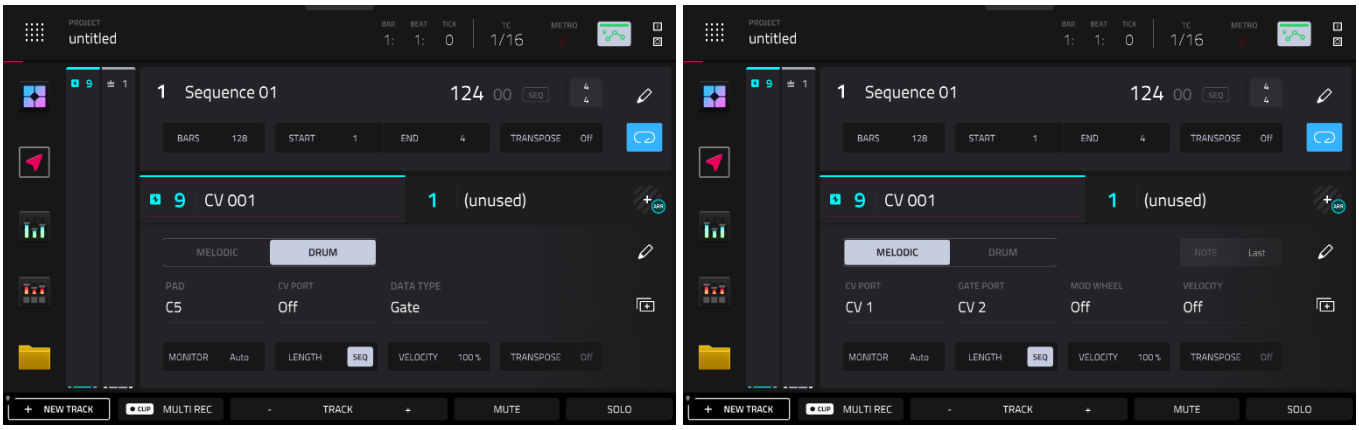
Use the **Velocity** field to set how loudly or quietly a track plays relative to its recorded levels. When set to **50%**, the track will be played with half the velocity it was originally played. When set to **200%**, the track will play twice as loud. The maximum velocity level is still **127**, though.

Use the **Transpose** field to set the transposition (in semitones) of the entire track.

Tap the **pencil icon** to open the **Track Edit** window. See ***Track Edit*** to learn more.

Tap the **Duplicate Track** icon to immediately create an identical track on a new track.

CV Tracks



Use the **Melodic / Drum** buttons to set the CV operation type.

When set to **Melodic** type, you can adjust the Note Priority (**Note**/**Last**), the **CV Port**, the **Gate Port**, the modulation wheel port (**Mod Wheel Port**), and **Velocity Port**.

When set to **Drum** type, you can configure any **Pad** to output on any **CV Port**, as well setting the **Data Type**.

Use the **Monitor** field to set how your track will be monitored. Double-tap this field to open the menu, or tap to select the field and then use the **data encoder** or **+/-** buttons to cycle through its four states:

When set to **Off**, the track's input is not monitored, and playback of recorded events will be heard. This setting is useful when using keyboards with Local Control active.

When set to **In**, the track's input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

When set to **Auto**, the track's input is monitored when the track is record armed, and playback of recorded events will be heard.

When set to **Merge**, the track's input is always monitored, and playback of recorded events will be heard.

Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This feature lets you maintain tracks of different lengths. For instance, you could play a 1-bar drum sequence repeatedly under a 4-bar bass line.

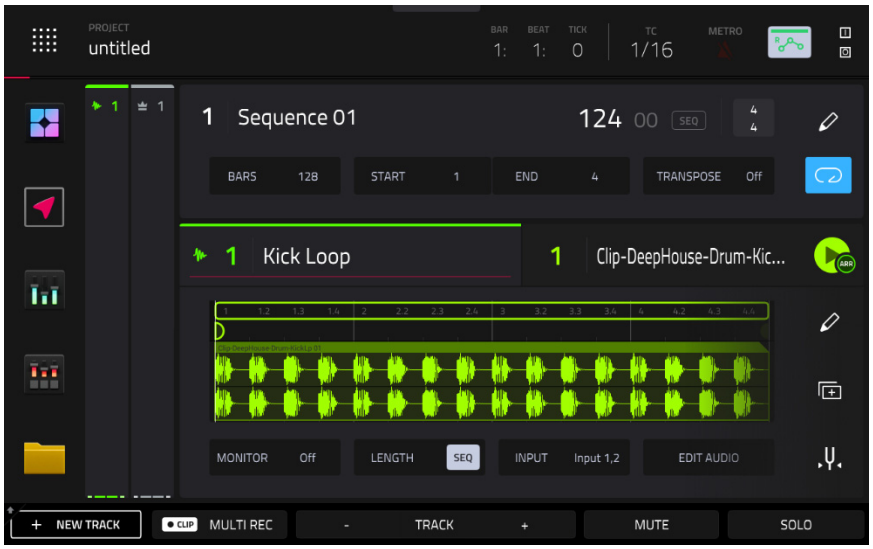
Use the **Velocity** field to set how loudly or quietly a track plays relative to its recorded levels. When set to **50%**, the track will be played with half the velocity it was originally played. When set to **200%**, the track will play twice as loud. The maximum velocity level is still **127**, though.

Use the **Transpose** field to set the transposition (in semitones) of the entire track.

Tap the **pencil icon** to open the **Track Edit** window. See ***Track Edit*** to learn more.

Tap the **Duplicate Track** icon to immediately create an identical track on a new track.

Audio Tracks



Tap and drag the **Loop marker** to adjust the loop length. Dragging from either end will extend or shorten the loop. Dragging from the middle of the loop marker will move the entire loop.

Tap and drag on the **Start marker** to set the starting location of the audio region when launched.

Double-tap the audio sample timeline to open **Grid View** for the audio track, where you can edit the audio regions.

Use the **Monitor** field to set how your audio track will be monitored. Double-tap this field to open the menu, or highlight this field and then use the **data dial** or +/- buttons to choose from the following:

When set to **Off**, you will never hear any incoming audio.

When set to **In**, you will hear incoming audio whether or not the track is record-enabled.

When set to **Auto**, you will hear incoming audio while the track is record-enabled only.

When set to **Merge**, the track's input is always monitored, and you will hear playback of audio.

Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This feature lets you maintain tracks of different lengths. For instance, you could play a 1-bar drum sequence repeatedly under a 4-bar bass line.

Use the **Input** field to select which inputs the audio track will use.

Use the **Edit Audio** button to open the audio **Grid View** for the audio track, where you can edit the audio regions.

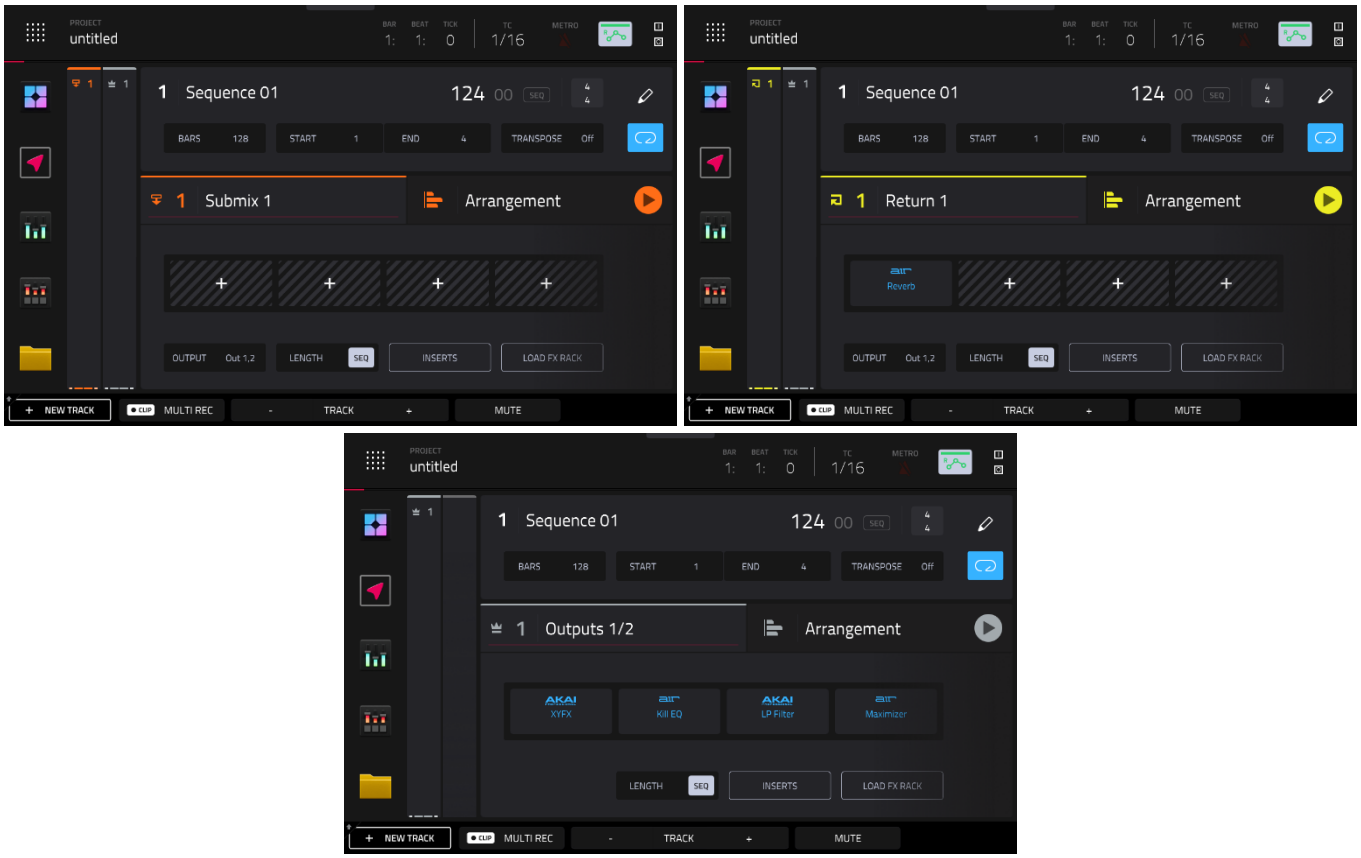
Tap the **pencil icon** to open the **Track Edit** window. See ***Track Edit*** to learn more.

Tap the **Duplicate Track** icon to immediately create an identical track on a new track.

Tap the **Tuner** icon to open the built-in tuner, which allows you to easily tune any connected audio source.

Buses

In addition to the previous track types, you can also view and edit bus tracks including **Submixes**, **Returns**, and **Outputs** in this section.



Use the **Inserts** boxes to add or view inserts effects. Tap the **+** icon in an empty slot to add a new effect. Tap an insert slot with a loaded effect to view the effect's controls.

Use the **Output** field to set the output routing for the bus. This is not available when viewing the **Outputs**.

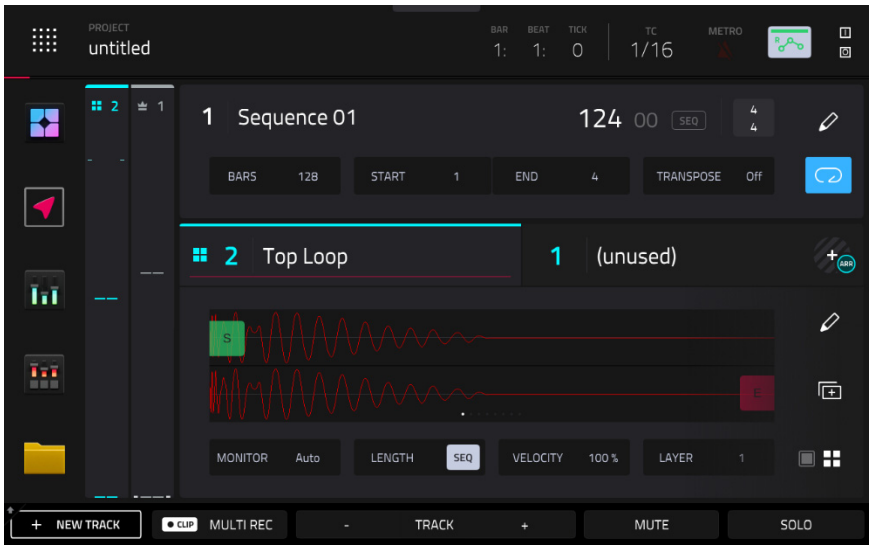
Use the **Length** field to set how long the track is in beats. When the **SEQ** button is on, the track length will follow the Sequence length. When this button is off, use the **Bars:Beats:Ticks** values to set the exact track length.

Tip: This is useful when creating automation on your bus track.

Tap the **Inserts** button to open a window where you can load, change, and enable or disable the effects.

Tap the **Load FX Rack** to load a factory or user-saved FX rack to the track.

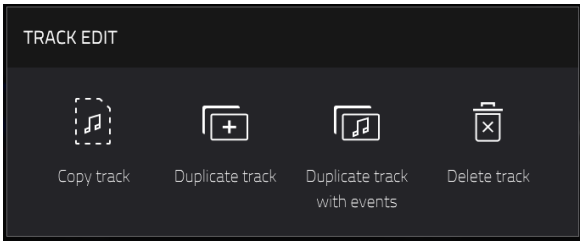
Track Edit



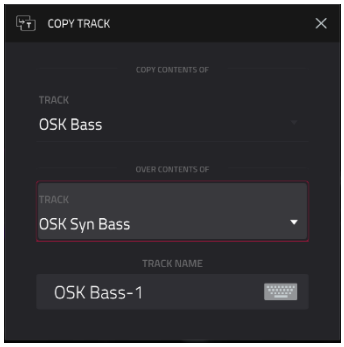
To edit the track, tap the **pencil icon** on the right edge of the section. The Track Edit window will open.

> **To return to Main Mode**, tap **Cancel** or the left arrow (←) in the upper-left corner of the screen. Alternatively, press **Main**.

The available functions in the Track Edit depend on the type of track selected. The following functions are available for all tracks:



The **Copy Track** function copies the contents of one track to another.



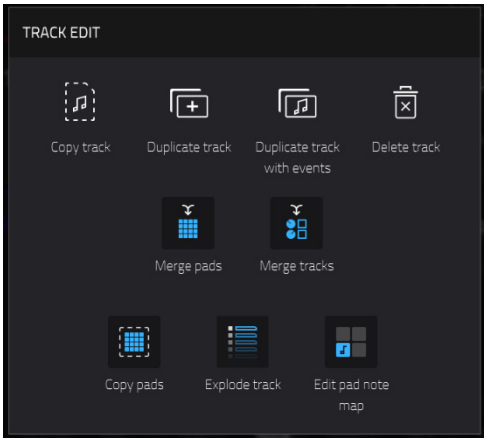
> Use the **Copy Contents of Track** field to select the "source" track. This is the track whose events you want to copy.
>
> Use the **Over Contents of Track** field to select the "destination" track. This is the track where the source track will be copied.
>
> Tap **Do It** to confirm your choice, or tap **Cancel** to cancel and return to Main Mode.

The **Duplicate Track** function immediately creates an identical track on a new track.

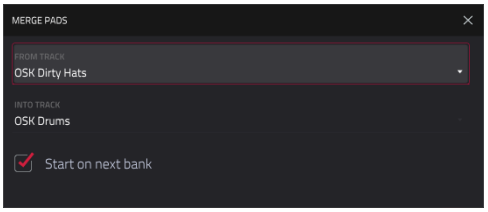
The **Duplicate Track with Events** function immediately creates an identical track, including all existing events on that track, on a new track.

The **Delete Track** function instantly removes the track and all of its contents.

Additionally, when a **Drum** track is selected, the following options are available.



The **Merge Pads** function allows you to merge samples and settings from two drum tracks together.



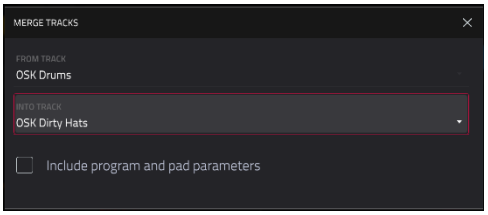
Use the **From Track** field to select the track from which the pads will be copied.

Use the **Into Track** field to select the track to which the copied pads will be merged.

Check the **Start on next bank** field to merge the samples and settings at the start of the next unused bank.

Tap **Do It** to merge the pads, or tap **Cancel** to close the window and return to the previous screen.

The **Merge Tracks** function lets you combine the contents of one drum track into another.



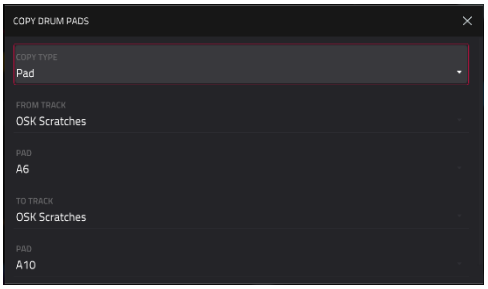
Use the **From Track** field to select the track whose contents will be copied.

Use the **Into Track** field to select the track to which the copied track will be merged.

Check the **Include program and pad parameters** field to merge the track settings into the new track.

Tap **Do It** to merge the tracks, or tap **Cancel** to close the window and return to the previous screen.

The **Copy Pads** function allows you to copy one or more pads from one drum track to another.



Use the **Copy Type** menu to select whether you want to copy an individual **Pad**, a **Bank** of pads, or a **Range** of pads. Use the fields that appear to select the **Pad**, **From Bank** or **Start**/**End Pads** that will be copied.

Use the **From Track** field to select the track from which the pads are copied.

Use the **To Track** field to select the track to which the copied pads are added.

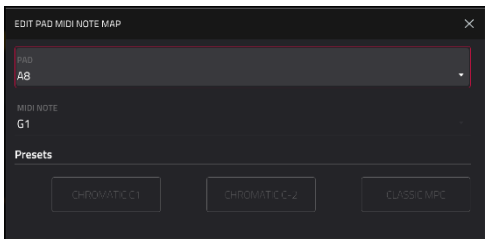
Use the **Pad**, **To Bank** or **Start Pad** fields to set the starting point where the copied pads are added.

Tap **Apply** to copy the pads and keep this window open.

Tap **Do It** to copy the pads and close the window, or tap **Close** to close the window without making any changes.

The **Explode Track** function immediately breaks down a Drum track containing samples and events into multiple new tracks, making it easier to mute individual drum elements using Track Mute mode. Each new track will keep the pad and track insert effects of the original source track. Where pads with events are assigned to a mute group, those pads are copied to a single track.

The **Edit Pad Note Map** function lets you assign specific MIDI notes to your Force pads.

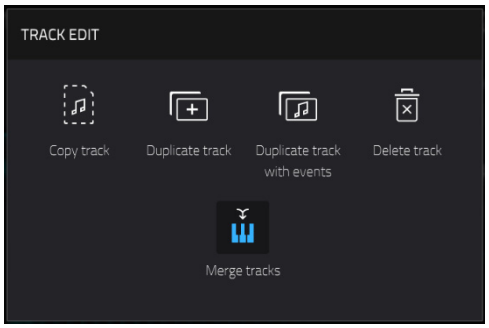


Use the **Pad** field to select a pad, or press the pad on your hardware.

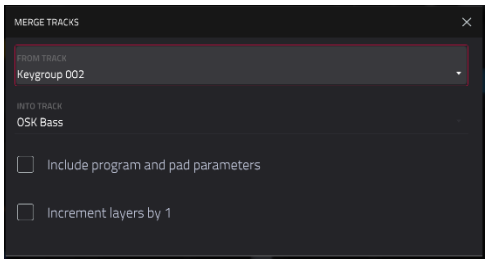
Use the **MIDI Note** field to set the desired MIDI note value for the pad.

Use the **Presets** buttons to assign a preset layout to the pads: **Chromatic C1** (an ascending chromatic scale, beginning with C1), **Chromatic C-2** (an ascending chromatic scale, beginning with C-2), or **Classic MPC** (the default MIDI note map of classic MPCs).

When a Keygroup track is selected, you can also access the **Merge tracks** function.



The **Merge Tracks** function lets you combine the contents of one keygroup track into another.



Use the **From Track** field to select the track whose contents will be copied.

Use the **Into Track** field to select the track to which the copied track will be merged.

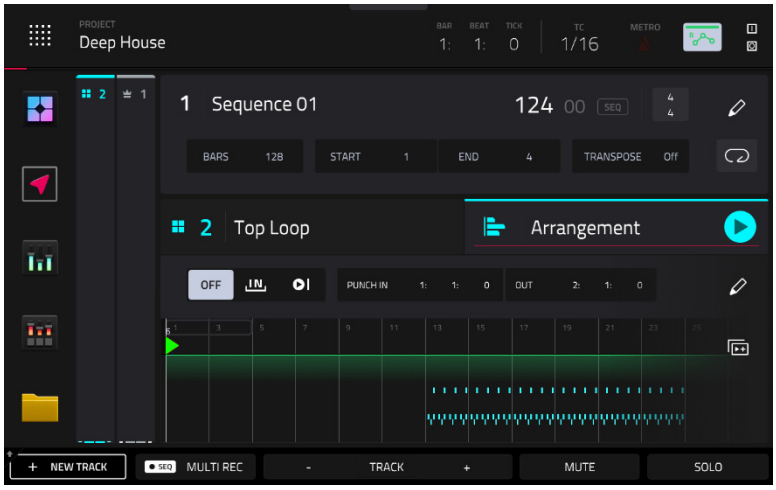
Check the **Include program and pad parameters** field to merge the track settings into the new track.

Check the **Increment layers by 1** to append the **From Track**'s keygroup sample layer(s) to the next available layer in the **Into Track**.

Tap **Do It** to merge the tracks, or tap **Cancel** to close the window and return to the previous screen.

Arrangement & Clip Section

The **Arrangement & Clip** section displays recorded events from the linear arrangement timeline or the selected clip and provides easy access to their editing functions.



The **Arrangement & Clip** header shows either the arrangement or the selected clip number and name.

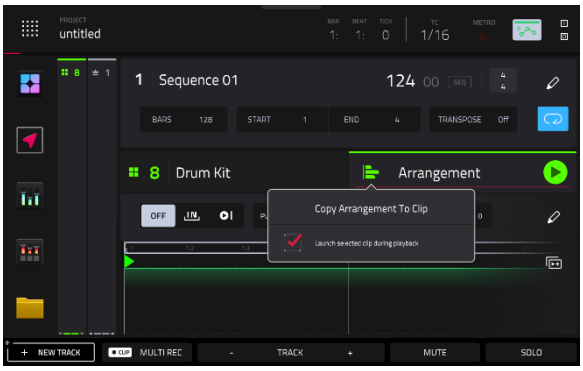
To change clips, tap the **Arrangement & Clip** header and use the **data dial** or **+/-** buttons. You can also hold the **Select** button and press a **clip launch pad** to select a clip.

Arrangement

Tap and hold on the **Arrangement icon** to access the following functions:

Tap **Copy Arrangement To Clip** to copy the linear arrangement for the current track to a new clip. Use the window that appears to select the clip slot destination, and then tap **Do It** to continue, or **Cancel** to return to the previous page.

Check the **Launch selected clip during playback** option to enable automatically launching selected clips or the arrangement when selected. This can be used in conjunction with **Legato** mode to vary clips in real time with fills.



Tap the **play icon** to begin playback of the linear arrangement.

Use the **Auto Record** buttons to determine how punch in auto recording is enabled:

Off: Auto Record at Punch In is turned off.

In: Auto Record at Punch In is enabled. Once playback reaches the Punch In point, recording will begin automatically.

Loop Start: Once playback reaches the Loop Start point, recording will begin automatically.

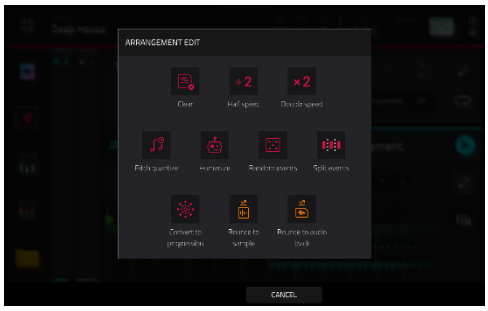
Use the **Punch In** and **Out** field to set the start and end points for Punch In Auto Recording.

Double-tap on the linear timeline to open ***Grid View*** displaying the current track.

Tap the **duplicate icon** to immediately duplicate the arrangement to the next empty clip slot on the current track.

When an audio track is selected, tap the **tuning fork icon** to open the ***Tuner***.

Tap the **pencil icon** to open the **Arrangement Edit** options for the arrangement.



The following function is available for all track types:

The **Clear** function erases **all** events from the sequence for the current track.

Tap **Clear** to confirm your choice.

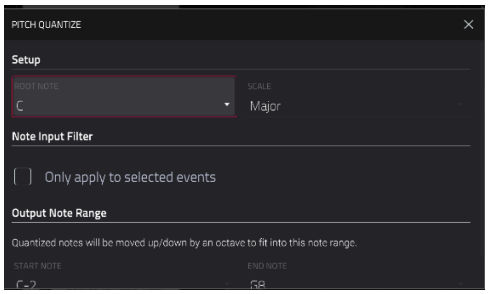
Tap **Cancel** to return to the previous screen.

The following functions are available for all track types except Audio:

The **Half-Speed** function **immediately** doubles the lengths of all note events in the arrangement as well as the distance between them. In other words, all notes are spread further apart so the arrangement sounds like it is playing at half of the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Double-Speed** function **immediately** halves the lengths of all note events in the arrangement as well as the distance between them. In other words, all notes are pressed closer together so that the arrangement sounds like it is playing at twice the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Pitch Quantize** function forces the pitches of MIDI note events into a specific scale.



Use the **Root Note** field to select the desired root note of the scale.

Use the **Scale** field to select a type of scale.

To determine which note events will be quantized, tap the **Only apply to selected events** checkbox.

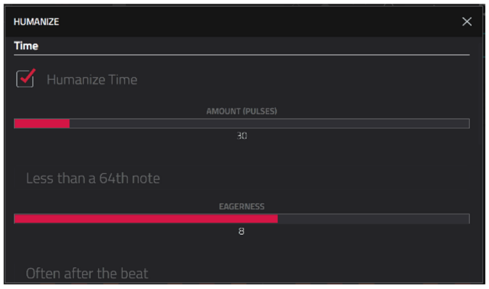
When **on**, only the currently selected note events will be quantized.

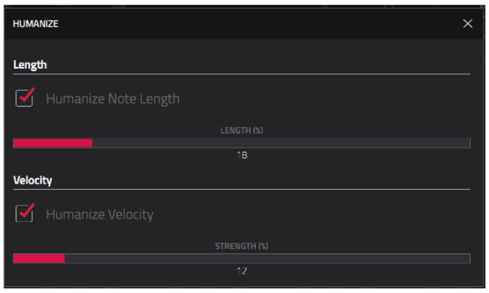
When **off**, **all** pitches in the current track will be quantized.

Use the **Start Note** and **End Note** fields to set lowest-possible and highest-possible pitches where the quantized note events will be placed (respectively). If a note event is originally outside of this range, it will be forced to the nearest pitch (within the scale) inside the range.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.

The **Humanize** function applies randomization to the timing, length, and/or velocity of note events.





Tap the **Humanize Time** checkbox to select whether or not humanization will be applied to the timing of note events.

Use the **Amount** (**Pulses**) slider to select the maximum number of pulses by which the timing of an event will be adjusted.

Use the **Eagerness** slider to set how dramatically the humanization effect is applied to the timing. Negative values correspond to playing "ahead of the beat" while positive values correspond to playing "behind the beat."

Tap the **Humanize Note Length** checkbox to set whether or not humanization will be applied to the duration of note events.

Use the **Length** (**%**) slider to set how dramatically the humanization effect is applied to note lengths.

Tap the **Humanize Velocity** checkbox to set whether or not humanization will be applied to the velocities of note events.

Use the **Strength** (**%**) slider to set how dramatically the humanization effect is applied to note velocities.

Tap the **Only Apply to Selected Events** checkbox to determine which notes will use these humanization values:

When **on**, just the currently selected notes will be humanized.

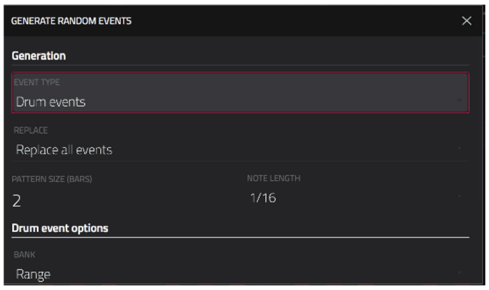
When **off**, all notes in the arrangement will be humanized.

Tap **Apply** to apply humanization and keep this window open.

Tap **Do It** to apply humanization and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window without making any changes.

The **Random Events** function creates random melodic or drum patterns in the current arrangement.



Use the **Event Type** field to select **Drum Events** or **Melodic Events** to select the type of events you want to create.

Use the **Replace** field to select how the events will be created relative to the existing events on the track:

Replace All Events: Select this option to replace all events in the arrangement with the randomly generated ones.

Replace Events in Note Range: Select this option to replace all events in the designated note range in the arrangement with the randomly generated ones. Use the **Bank** or **Start Pad** and **End Pad** menus to set the note range for drum events or the **Start Note** and **End Note** menus to set the note range for melodic events.

Add to Existing Events: Select this option to add the randomly generated events to the arrangement without replacing or overwriting the existing ones.

Use the **Pattern Size** (**Bars**) field to set how many bars the events will use. The highest possible value is the number of bars in the current arrangement.

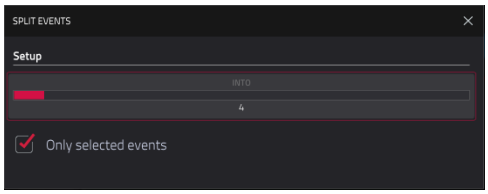
Use the **Note Length** field to select the duration of the events. (This feature is nonfunctional if **Legato** is enabled while generating melodic events.)

Tap **Apply** to generate the events and keep this window open.

Tap **Do It** to generate the events and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window without generating any events.

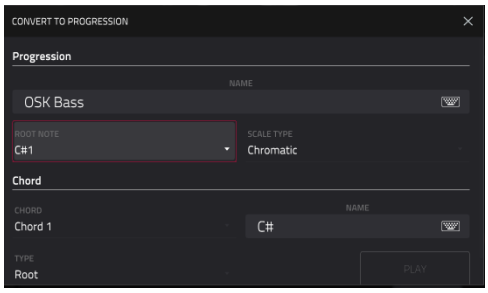
The **Split Events** process divides note events into an equal number of parts.



Use the **Into** slider to select the number of parts the event(s) will be split into.

Tap the **Only selected events** checkbox to apply the process only to currently selected events. When unchecked, all events will be split.

The **Convert to Progression** function creates a custom Progression from a melodic MIDI track that you can use to perform with Progressions Note mode.



Use the **Progression** fields to set the parameters of the new Progression:

Use the **Name** field to set the progression name.

Use the **Root Note** field to set the root note.

Use the **Scale Type** field to set the scale type.

Use the **Chord** fields to set the parameters for the chords in the Progression:

Use the **Chord** field to select a chord from the progression to edit.

Use the **Name** field to rename the selected chord.

Use the **Type** field to set the type of chord: **Root**, **Normal** or **Below Root**.

Tap the **Play** button to play the selected chord.

Tap **Do It** to convert the progression and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window and return to the previous screen.

The following functions are available for **Drum**, **Keygroup**, **Plugin,** and **Audio** tracks:

The **Bounce to Sample** function renders the current track in the arrangement as an audio sample and places it in the project's sample pool. By default, it will be named **Bounce** and appended with the track name.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

The **Bounce to Audio Track** function renders the current track in the arrangement and adds it as a new audio track in the project. The Main Mode will automatically switch to the **Audio** tab. By default, it will be named **Bounce** and appended with the track name. This function does not work for MIDI tracks or CV tracks.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

The following functions are available for **Audio** tracks only:

The **Flatten** and **Flatten Elastique** functions flatten the audio track when transport playback is stopped, rendering all the edits and regions within the arrangement to a single new audio file. The Elastique Pro algorithm can be used for time-stretching or pitch-shifting, providing higher-quality results with less artifacts than Force's standard algorithm.

Clips

Tap the **Clip Number** in the header to access the following clip edit actions.

For clip slots with clips in them:

- Tap **Copy** to copy the selected clip.
- Tap **Copy To Arrangement** to copy the clip contents to the linear arrangement.
  - Use the **Position Bar** field to select where in the timeline the clip should be added.
  - Select **Replace** to replace contents of the arrangement with the clip contents at the selected location.
  - Select **Merge** to add the clip contents to the existing arrangement content at the selected location.
- Tap **Delete** to delete the selected clip.
- Tap **Edit Clip** to open the ***Clip Editor***.
- Tap **Edit Event/Edit Region** to open ***Grid View***.
- Tap **Settings** to open the **Clip Settings** window (explained ***below***).
- Tap **Flatten Clip** or **Flatten Clip Elastique** to flatten an audio clip, rendering all the edits and regions within the arrangement to a single new audio file. The Elastique Pro algorithm can be used for time-stretching or pitch-shifting, providing higher-quality results with less artifacts than Force's standard algorithm.

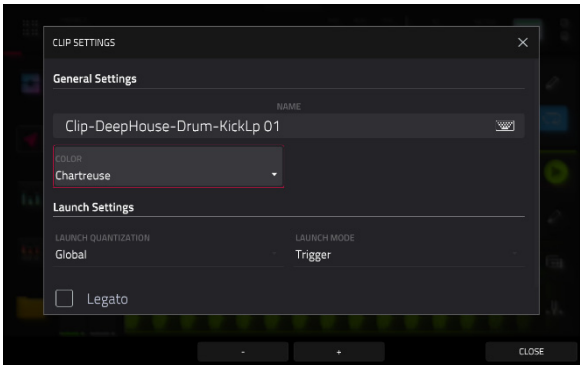
For empty clip slots:

- Tap **Create** to create a new clip.
- Tap **Paste** to paste a copied clip.

For both filled and empty clip slots:

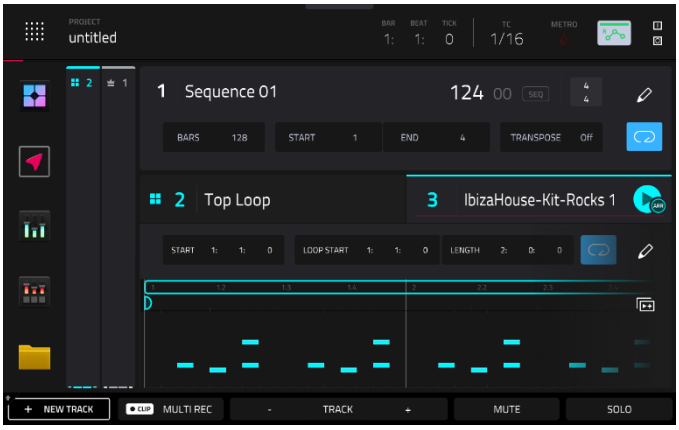
- Check the **Launch selected clip during playback** option to enable automatically launching clips when selected. This can be used in conjunction with **Legato** mode to vary clips in real time with fills.

To edit clip settings, tap and hold on the clip name and then tap **Settings:**



- Use the **Name** field to rename the clip. Tap it and use the virtual keyboard that appears.
- Use the **Color** field to set the clip color.
- Use the **Launch Quantization** field to set the quantization amount for launching the clip.
- Use the **Launch Mode** field to set the clip launch behavior. Select **Toggle** for the clip to start or stop with each successive press. Select **Trigger** for the clip to start at the beginning with each press.
- Check the **Legato** box to enable legato mode for the clip. When enabled, launching the clip will pick up playback from the same position of the previously playing clip, depending on the launch quantization value. For example, if launch quantization is set to 1 bar, launching a legato clip at Bar 1, Beat 2 of another playing clip will cause the legato clip to begin playing at Bar 2, Beat 1. If legato is off, the clip would begin playing from the start.
- Tap the **-/+** button at the bottom of the screen to move to the previous or next clip in the track.
- Tap **Close**, the **x**, or anywhere outside the window to close the Clip Settings window.

The appearance of the clip section changes based on whether there is a loaded clip or not.



For filled clip slots:

Tap the **play icon** to begin playback of the clip.

Use the **Start** fields to set the starting location of the clip when launched. Alternatively, drag the start marker.

Use the **Loop Start** fields to set the starting location of the clip loop. Alternatively, drag the loop start marker.

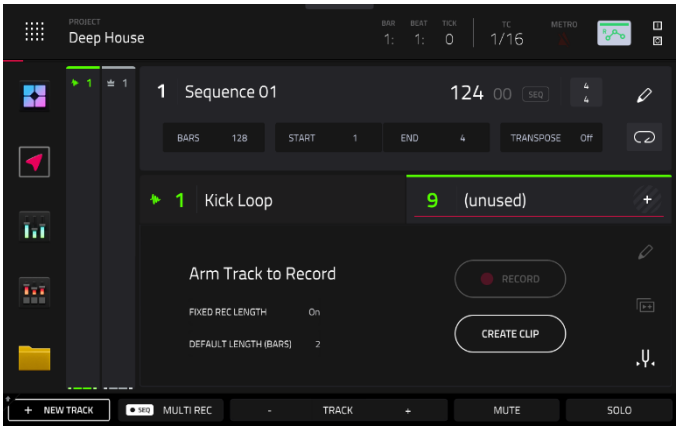
Use the **Loop Length** fields to set the total length of the loop. Alternatively, drag the loop end marker.

Tap **Loop** to toggle the clip loop on or off. Generally, turn Loop on for complete phrases and turn it off for one shots.

Double-tap on the clip timeline to open ***Grid View*** displaying the current clip.

Tap the **duplicate icon** to immediately duplicate the clip to the next empty clip slot on the current track.

When an audio track is selected, tap the **tuning fork icon** to open the ***Tuner***.



For empty clip slots:

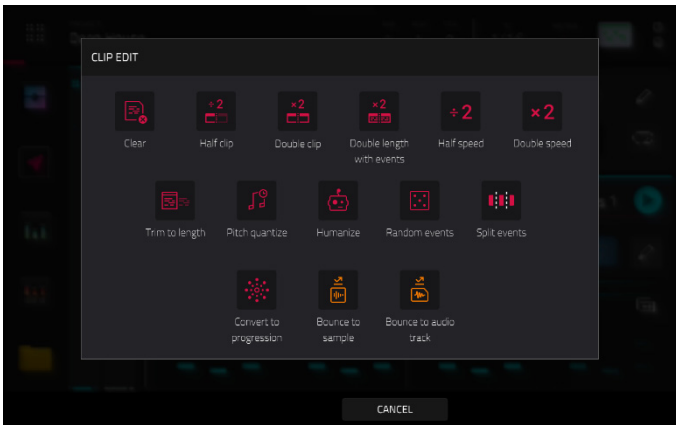
Tap the **+** icon in the header to create an empty clip in the current slot. Alternatively, tap **Create Clip** in the clip area below.

When **Clip Recording** is armed, this will turn into a **record icon**. Tap it to begin recording a new clip in the current slot. Alternatively, tap **Record** in the clip area below. Once recording begins, the clip area will switch to the filled clip appearance.

Set the **Fixed Length Recording** field to **On** to stop recording after the clip length set in the **Default Length (Bars)** field. Set to **Off** to record for any desired clip length.

When an audio track is selected, tap the **tuning fork icon** to open the ***Tuner***.

Tap the **pencil icon** to open the **Clip Edit** options for the selected clip.



The following functions are available for all track types:

The **Clear** function erases **all** events from the clip.

Tap **Clear** to confirm your choice.

Tap **Cancel** to return to the previous screen.

The **Half clip** function immediately reduces the clip length by half.

The **Double clip** function immediately doubles the clip length, without doubling the events or regions in the clip.

The **Double Length with Events** function **immediately** doubles the length of the clip and duplicates the events.

The **Double length with events** function immediately doubles the clip length along with all clip events or regions.

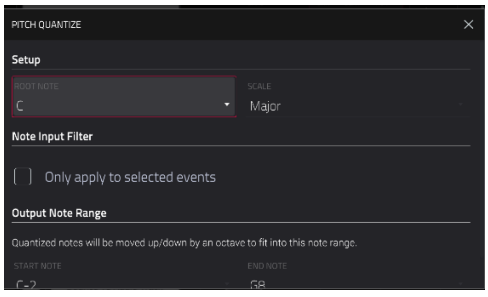
The **Trim to length** function immediately trims any clip events or regions from outside the clip length.

The following functions are available for all track types except Audio:

The **Half-Speed** function **immediately** doubles the lengths of all note events in the clip as well as the distance between them. In other words, all notes are spread further apart so the clip sounds like it is playing at half of the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Double-Speed** function **immediately** halves the lengths of all note events in the clip as well as the distance between them. In other words, all notes are pressed closer together so that the clip sounds like it is playing at twice the previous speed. This does not actually affect the pitches of notes or the tempo.

The **Pitch Quantize** function forces the pitches of MIDI note events into a specific scale.



Use the **Root Note** field to select the desired root note of the scale.

Use the **Scale** field to select a type of scale.

To determine which note events will be quantized, tap the **Only apply to selected events** checkbox.

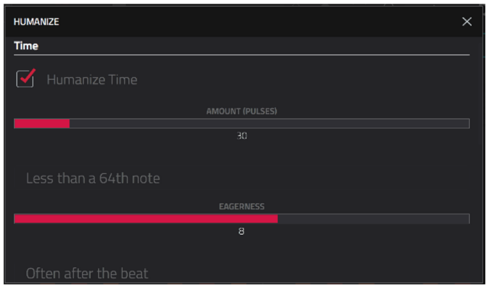
When **on**, only the currently selected note events will be quantized.

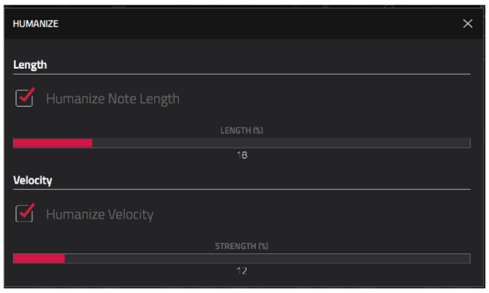
When **off**, **all** pitches in the current track will be quantized.

Use the **Start Note** and **End Note** fields to set lowest-possible and highest-possible pitches where the quantized note events will be placed (respectively). If a note event is originally outside of this range, it will be forced to the nearest pitch (within the scale) inside the range.

Tap **Do It** to confirm your choice, or tap the **X**, **Cancel**, or anywhere outside the window to cancel and return to the previous screen.

The **Humanize** function applies randomization to the timing, length, and/or velocity of note events.





Tap the **Humanize Time** checkbox to select whether or not humanization will be applied to the timing of note events.

Use the **Amount** (**Pulses**) slider to select the maximum number of pulses by which the timing of an event will be adjusted.

Use the **Eagerness** slider to set how dramatically the humanization effect is applied to the timing. Negative values correspond to playing “ahead of the beat” while positive values correspond to playing “behind the beat.”

Tap the **Humanize Note Length** checkbox to set whether or not humanization will be applied to the duration of note events.

Use the **Length** (**%**) slider to set how dramatically the humanization effect is applied to note lengths.

Tap the **Humanize Velocity** checkbox to set whether or not humanization will be applied to the velocities of note events.

Use the **Strength** (**%**) slider to set how dramatically the humanization effect is applied to note velocities.

Tap the **Only Apply to Selected Events** checkbox to determine which notes will use these humanization values:

When **on**, just the currently selected notes will be humanized.

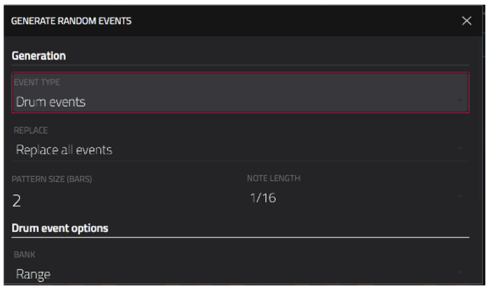
When **off**, all notes in the arrangement will be humanized.

Tap **Apply** to apply humanization and keep this window open.

Tap **Do It** to apply humanization and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window without making any changes.

The **Random Events** function creates random melodic or drum patterns in the current clip.



Use the **Event Type** field to select **Drum Events** or **Melodic Events** to select the type of events you want to create.

Use the **Replace** field to select how the events will be created relative to the existing events on the track:

Replace All Events: Select this option to replace all events in the arrangement with the randomly generated ones.

Replace Events in Note Range: Select this option to replace all events in the designated note range in the clip with the randomly generated ones. Use the **Bank** or **Start Pad** and **End Pad** menus to set the note range for drum events or the **Start Note** and **End Note** menus to set the note range for melodic events.

Add to Existing Events: Select this option to add the randomly generated events to the clip without replacing or overwriting the existing ones.

Use the **Pattern Size** (**Bars**) field to set how many bars the events will use. The highest possible value is the number of bars in the current clip.

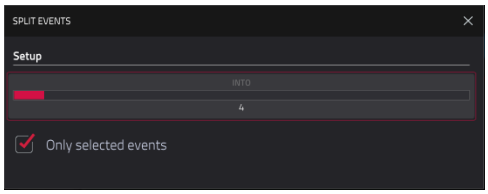
Use the **Note Length** field to select the duration of the events. (This feature is nonfunctional if **Legato** is enabled while generating melodic events.)

Tap **Apply** to generate the events and keep this window open.

Tap **Do It** to generate the events and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window without generating any events.

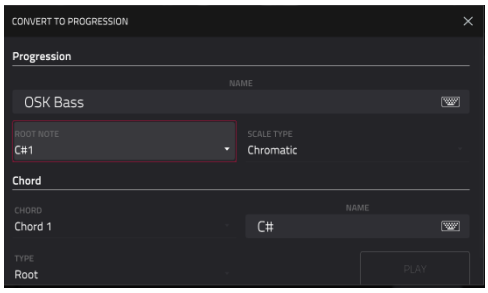
The **Split Events** process divides note events into an equal number of parts.



Use the **Into** slider to select the number of parts the event(s) will be split into.

Tap the **Only selected events** checkbox to apply the process only to currently selected events. When unchecked, all events will be split.

The **Convert to Progression** function creates a custom Progression from a melodic MIDI track that you can use to perform with Progressions Note mode.



Use the **Progression** fields to set the parameters of the new Progression:

Use the **Name** field to set the progression name.

Use the **Root Note** field to set the root note.

Use the **Scale Type** field to set the scale type.

Use the **Chord** fields to set the parameters for the chords in the Progression:

Use the **Chord** field to select a chord from the progression to edit.

Use the **Name** field to rename the selected chord.

Use the **Type** field to set the type of chord: **Root**, **Normal** or **Below Root**.

Tap the **Play** button to play the selected chord.

Tap **Do It** to convert the progression and close the window.

Tap **Close**, the **X**, or anywhere outside the window to close the window and return to the previous screen.

The following functions are available for **Drum**, **Keygroup**, **Plugin,** and **Audio** tracks:

The **Bounce to Sample** function renders the current clip as an audio sample and places it in the project's sample pool. By default, it will be named **Bounce** and appended with the track name.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

The **Bounce to Audio Track** function renders the current clip and adds it as a new audio track in the project. The Main Mode view will automatically switch to the **Audio** tab. By default, it will be named **Bounce** and appended with the track name. This function does not work for MIDI tracks or CV tracks.

Use the **Audio Tail** field to set the amount, in **seconds**, of extra time added to the end of the resulting audio files.

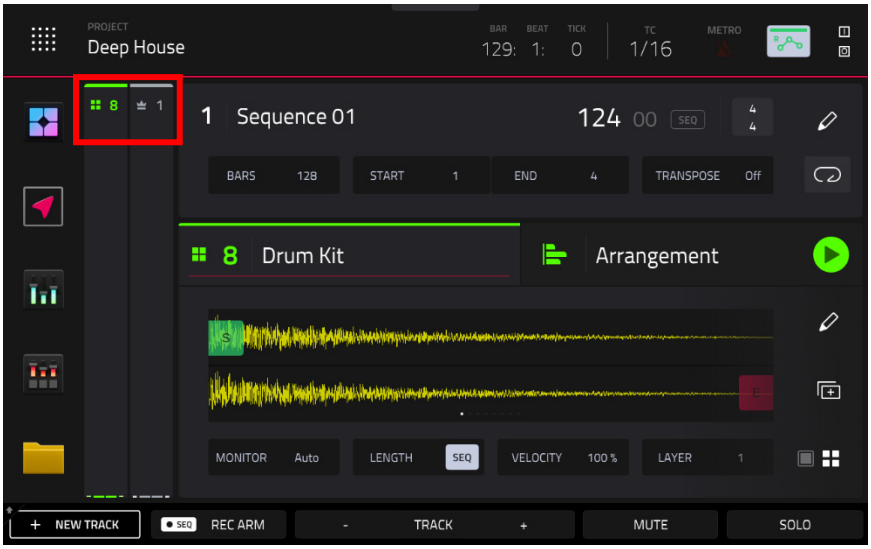
The following functions are available for **Audio** tracks only:

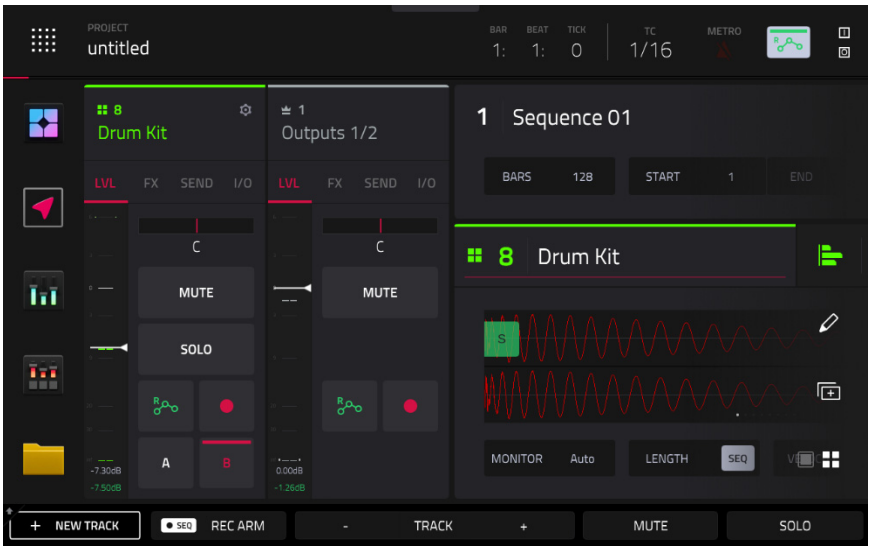
The **Flatten** and **Flatten Elastique** functions flatten the audio clip, rendering all the edits and regions within the arrangement to a single new audio file. The Elastique Pro algorithm can be used for time-stretching or pitch-shifting, providing higher-quality results with less artifacts than Force's standard algorithm.

Mixer Strips

On the left edge of the screen, next to the five mode icons, are the *XL Channel Strips*, which allow you to effortlessly manage all your mixing tasks with access to important settings for the current pad, track, and main output.

To show or hide the mixer channel strips, tap the icons at the top of the condensed strips.



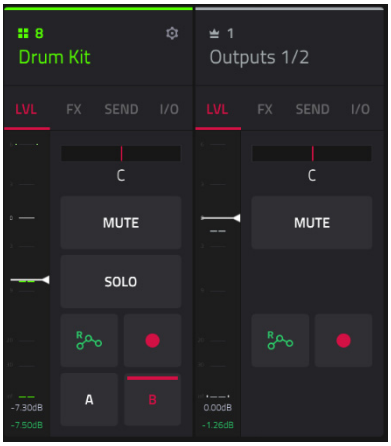


On the left side is the **track** or **pad** channel strip. When viewing a **Drum** track, you can tap the **single-pad / four-squares icons** in the bottom-right corner of the Track/Arrangement Section to cycle between track or pad mixer strips. When viewing a **Keygroup** track, tap the **single-pad / keyboard icons** in the same location to toggle between track or keygroup mixer strips.

The right side will dynamically adjust to display relevant information based on your actions. For example, selecting a send option in the left channel strip will prompt the right channel strip to show the corresponding return channel. When a track is shown on the left side, this will show the main output, and when a pad is shown on the left side, this will show the corresponding track. This allows for seamless access to audio routing options and streamlined navigation.

Both mixer channel strip types feature four views:

LVL: This view contains common mixer parameters.



The **Level** meter displays track volume and incoming MIDI. Use the **white line** to adjust the track level.

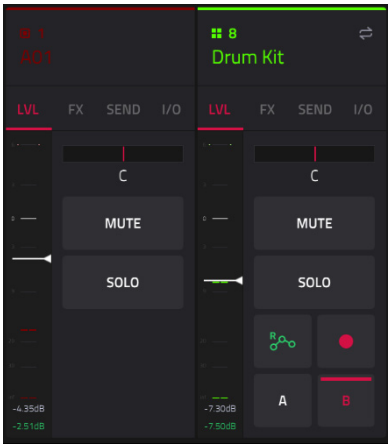
Use the **pan slider** to adjust the track panning.

Tap the **Mute** button to mute the track.

Tap the **Solo** button to solo the track, muting all other tracks. (Not shown for Main Output)

Tap the **Automation** button to toggle between the three automation states: **Read (R)**, **Write (W)**, and **Off**. (Not shown for Pad.)

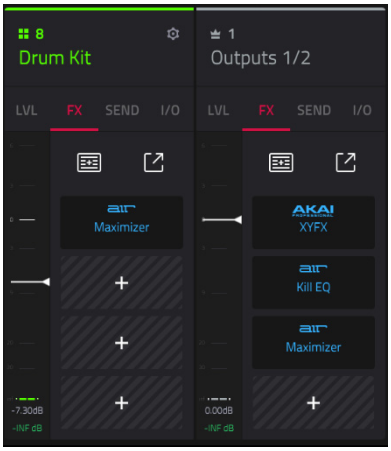
Tap the **Record** button to arm the sequence for recording. (Not shown for Pad or Main Output)



The first field shows the current pad number. Press a pad or tap the field to select a different pad.

Tip: This is useful for mixing your pads without having to enter the Pad Mixer.

FX: This view displays insert effects.



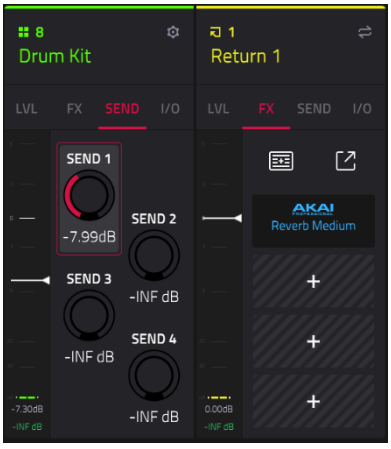
Tap the **FX Racks** icon to load an FX rack.

Tap the **expand window** icon to open the **Inserts** window, where you can load, change, and enable or disable the effects. Here, you can also easily rearrange insert effects using the arrow buttons to shift their order.

Tap an empty insert slot (indicated by a **+**) to open the plugin browser window.

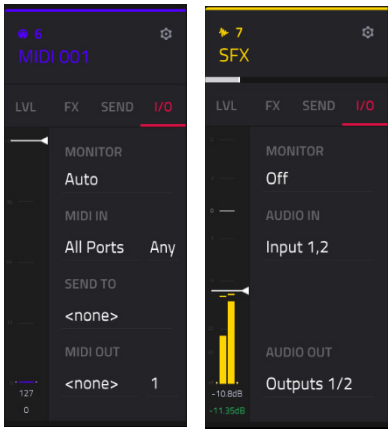
If an effect is loaded, tap the insert slot to open the plugin effect interface.

SEND: This view displays Sends 1–4. (Not shown for Main Output)



Use the **Send** knobs to adjust the send level. When a Send knob is adjusted, the associated **Return** track will be shown in the adjacent mixer strip.

I/O: This view displays routing options. (Not shown for Main Output)



Tap the **Monitor** button to change the monitor behavior for the track. When the track is being monitored, the meter on the left side will show the incoming audio level or MIDI velocity.

Use the **MIDI Input** and **Channel** fields to configure the MIDI input settings. (Not available for Audio tracks.)

Use the **Send To** field to send the track's MIDI output to another track. (Not available for Audio tracks.)

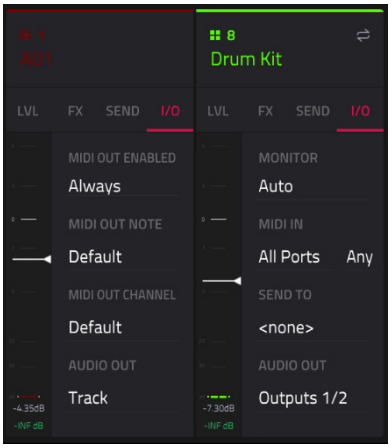
Use the **MIDI Output** and **Channel** fields to configure the MIDI output settings. (Not available for Audio tracks.)

Use the **Audio In** field to configure the input source of the external audio signal, which you can set to a pair of inputs (Input 1,2) or a single input (Input 1, Input 2). (Audio tracks only.)

Use the **Audio Out** field to configure where the track or pad is routed, which you can set to a submix (**Sub 1**–**8**), a pair of outputs (**Out 1,2**–**Out 3,4**), or a single output (**Out 1**–**4**). (Audio, Drum, and Plugin tracks only.)

Note: When set to a mono channel, the left and right channels are summed post-pan knob. If the pan knob is set to the center position, the left and right channels will be summed and padded. If the pan knob is set to the maximum left or right positions, only the respective channel will be sent to the output.

When viewing a Pad Channel strip, the following options are also available:



Use the **MIDI Out Enabled** field to determine when a MIDI note is sent to the MIDI Output. This can be used for triggering external gear, lighting, or video systems. Select **Never** (no MIDI note is sent), **Always** (MIDI note is sent every time the pad is triggered), or **When Empty** (MIDI note is only sent if the pad has no internal sample or MIDI event).

Use the **MIDI Out Note** to select the specific MIDI note to send for the selected pad.

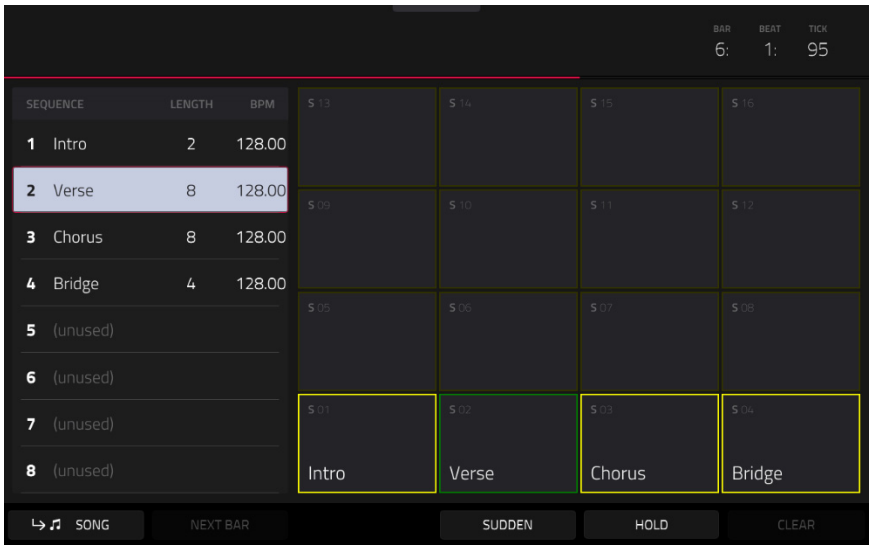
Use the **MIDI Out Channel** to select the MIDI Channel where the output is sent.

Next Sequence Mode

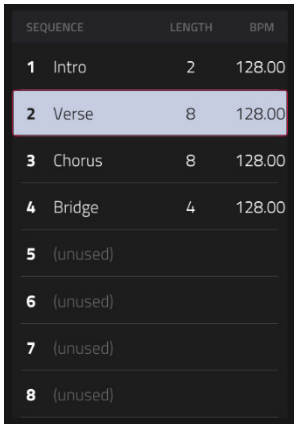
Next Sequence Mode lets you trigger different sequences simply by playing the pads. This is useful for live performances, letting you change a song's structure in real time.

To enter Next Sequence Mode, do either of the following:

- Press **Menu**, and then tap **Next Sequence**.



The ***Time Counter*** in the upper-right corner the current playhead position.



The sequence playlist on the left side shows a list-style overview of **all** used sequences in your project:

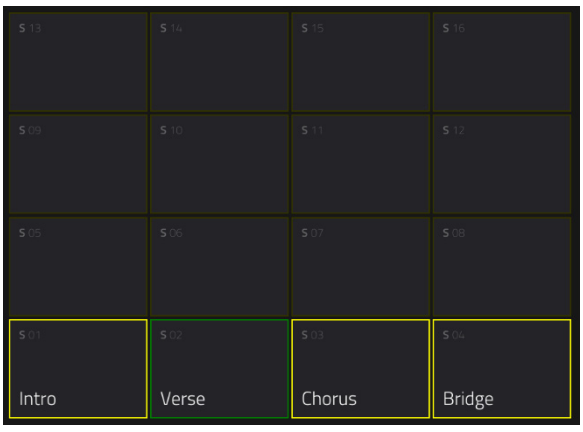
The **Sequence** column shows the name of the song's sequences.

The **Length** column shows the bar length of a sequence.

The **BPM** column shows the tempo of a sequence in beats per minute.

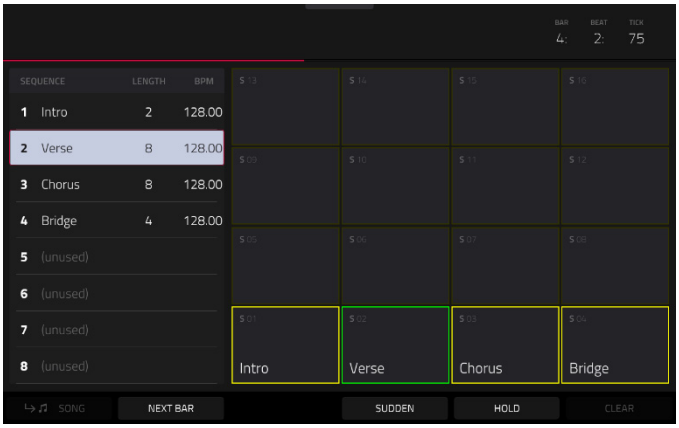
The currently selected sequence is highlighted in the list. Tap a sequence in the list to select it.

In Next Sequence Mode, every pad is assigned to a sequence, starting from **Pad A01** with **Sequence 1,** and ascending from there. The pads with corresponding sequences will show the name of the sequence and be lit **bright yellow**. Empty pads correspond to unused sequences and will be lit **dim yellow**. The currently selected pad will flash **green** while awaiting playback, and will remain lit green during playback.



During playback, change the next sequence that will play by pressing the corresponding pad or tapping it on the screen. If you do not select another sequence, the current sequence will repeat indefinitely.

As a sequence plays, you can use the buttons at the bottom of the screen to change how playback works:



Tap **Next Bar** to switch to the currently selected sequence at the beginning of the next bar. This is useful if you want to switch to another sequence before the current one ends without having to worry about timing issues.

Tap **Sudden** to switch to the currently selected sequence immediately. The new sequence will start playing whether or not the current sequence is done. This is useful in live performances if you need to switch to the next sequence instantly at a certain cue.

Tap **Clear** to delete the currently selected sequence from the sequence playlist. This option is available only if that sequence is not playing at that moment.

Tap **Hold** to repeat the current sequence indefinitely and temporarily ignore pad presses. This is useful if you want to select other pads without selecting them to play next. Tap **Hold** again to return to normal operation.

To copy the sequence playlist to a song, tap ↳ **Song** while playback is stopped.

In the **Copy to Song** screen that appears, select a song, and then tap **Do It** to continue or **Close** to cancel.

To read more about Song Mode, please see the ***Song Mode*** chapter.

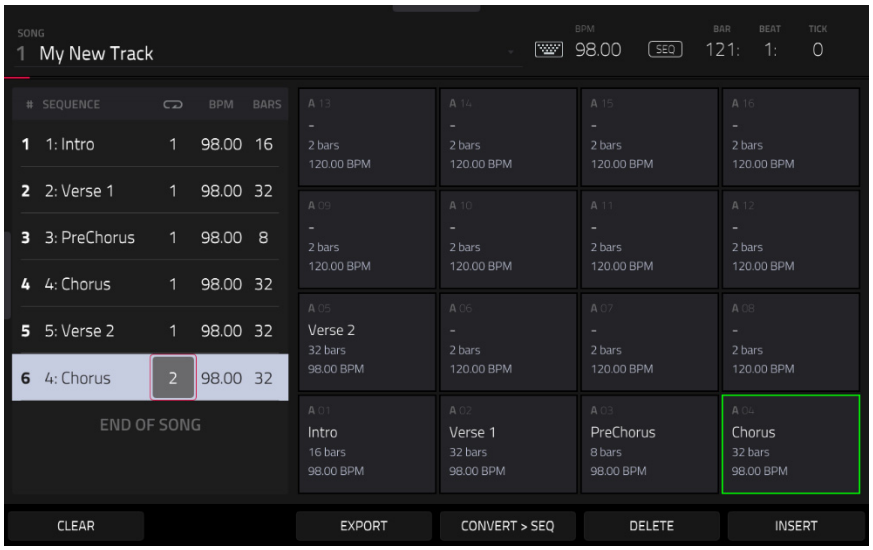
Song Mode

Song Mode lets you arrange sequences in a specific order and/or repetition to create songs. You can edit the structure of a song during playback for easy, on-the-fly composing.

A project can contain up to 32 songs, each consisting of up to 999 “steps.” Each step can have an assigned sequence as well as the number of times that sequence will repeat.

To open Song Mode, press **Menu**, and then navigate to **Song** on the second page of modes and tap it.

Important: If a sequence is currently playing, stop playback before entering Song Mode during playback.

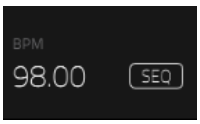


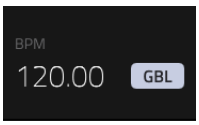
Use the **Song** field to select the song you want to show.

Tap the **keyboard** icon to rename the current song.

Use the **BPM** field to adjust the tempo of the sequence.

Tap the **Seq/Gbl** button to set whether the sequence follows its own tempo (**Seq**) or a global tempo (**Gbl**). Alternatively, press **Shift** and **Tap/Master**.



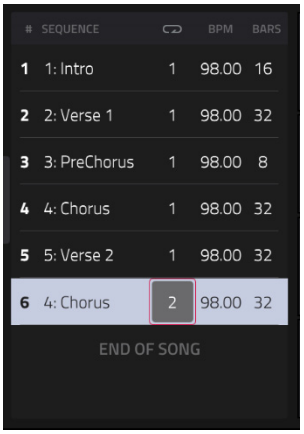


The time counter shows the current playhead position, in **bars:beats:ticks**.

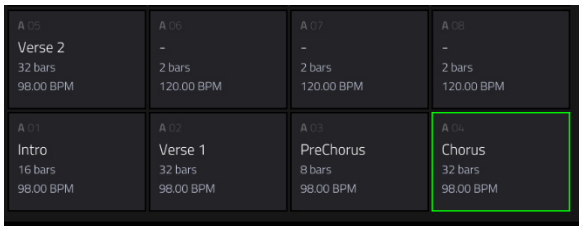
The sequence playlist on the left lists of the “steps” of a song.

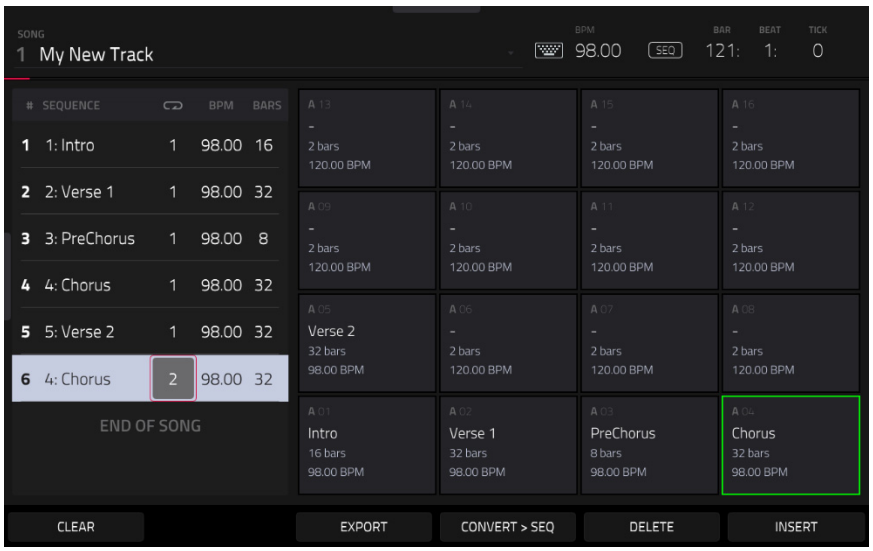
Each step has (in columns, left to right):

- the step number (each song can contain up to 999 steps)
- a sequence number and name
- how many times the sequence plays (each step can play up to 999 times; set it to **Hold** [the lowest/minimum value] to set the sequence to repeat indefinitely until you stop playback)
- the tempo of the sequence
- the number of bars the step occupies (based on how many times it plays)



Each used sequence is assigned to a pad. Empty pads correspond to unused sequences.





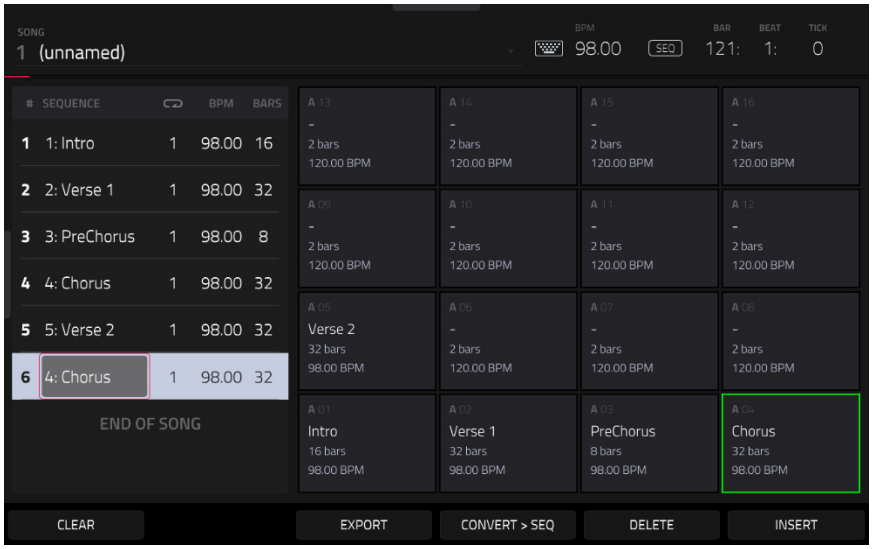
To insert a step:

1. Tap a **step** in the sequence playlist after which you want to insert a step.
2. Tap **Insert** in the lower-right corner of the screen.

Alternatively, “record” a song using the pads:

Note: The sequences or song will not play back as you use the pads to create your song in this way. Pressing the pads just enters their corresponding sequences as steps.

1. Press **Rec** or **Overdub** to “record-arm” the song.
2. Press or tap the **pad** that corresponds to the first sequence you want to use. That sequence will appear in the sequence playlist as the first step.
3. Repeat **Step 2** for each additional step you want to add to the sequence playlist. Press or tap a **pad** multiple times to add to the number of times it plays.
4. Press **Stop** to stop “recording.”



To change a step's sequence:

1. In the desired step, tap the **sequence name**.
2. Use the **data dial** or **–/+** buttons to select another sequence.

Tap **Clear** to erase the entire sequence playlist (delete all steps).

To delete a step, tap it, and then tap **Delete** in the lower-right corner of the screen.

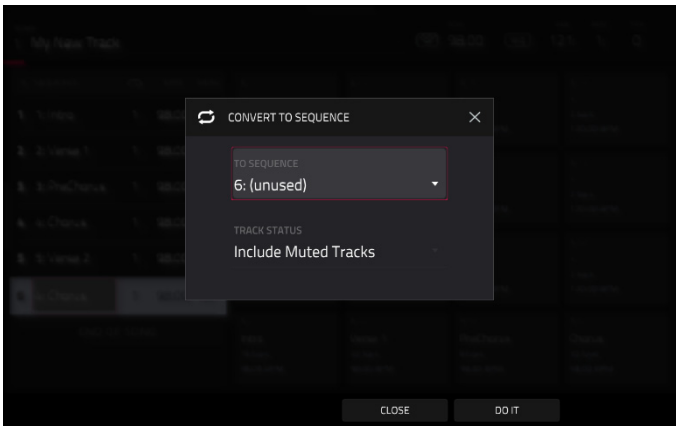
Tap **Next** to switch to the next sequence at the beginning of the next bar during playback. This is useful if you want to switch to another sequence before the current one ends without having to worry about timing issues.

Tap **Sudden** to switch to the next sequence immediately during playback. The new sequence will start playing whether or not the current sequence is done. This is useful in live performances if you need to switch to the next sequence instantly at a certain cue.

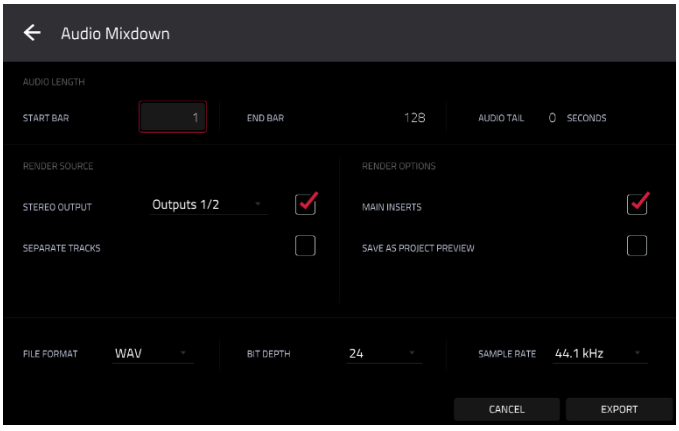
To convert the current song to a single sequence:

1. Tap **Convert** > **Seq** to open the **Convert to Sequence** window.
2. Use the **To Sequence** field to select which sequence you want the song to export to.
3. Use the **Track Status** field to select whether you want the song to **Exclude Muted Tracks** or **Include Muted Tracks** in the new sequence.
4. Tap **Do It** to confirm your selections.

   Tap **Close** to cancel the process.



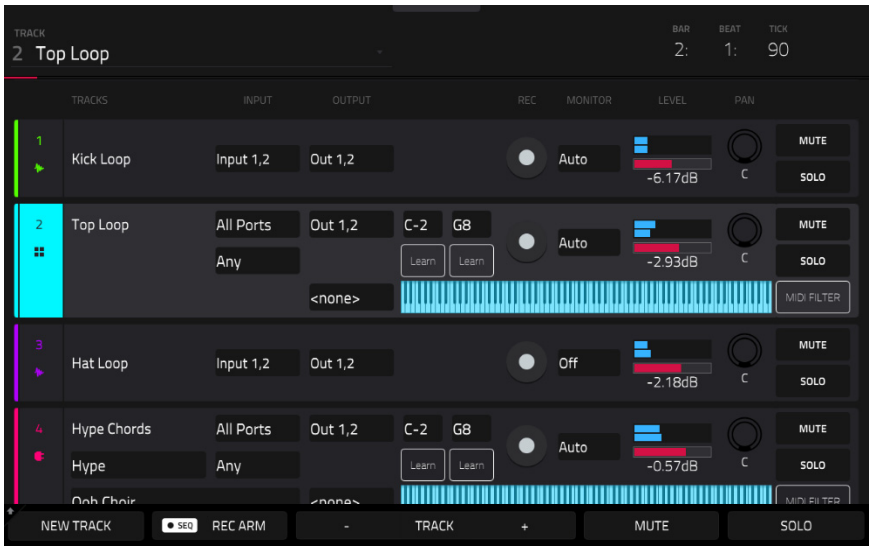
Tap **Export** to open the ***Audio Mixdown*** screen, where you can render/export your song as an audio file.



Track View

Track View gives you an overview of the tracks of each sequence. Use this mode to edit tracks and sequences simultaneously.

To enter the Track View, press **Menu**, and then navigate to **Track View** on the second page of modes and tap it.



Each horizontal strip represents a track in the current sequence.

To move through the list of tracks, swipe up or down. You can also use the **Track** field at the top of the screen.

The top of the screen shows the track name and timing information.

Use the **Track** field to select the track in focus.

The ***Time Counter*** at the top of the screen indicates the current playhead position.

The bottom of the Track View screen contains the following functions:

Tap the **New Track** button to add a new track.

Tap the **Rec Arm** button to arm the sequence for recording.

Tap the **Track –** or **Track +** buttons to select the previous or next track (respectively) of the same type (MIDI or audio). Alternatively, tap the track in the main part of the screen.

Tap **Mute** to mute the current track.

Tap **Solo** to solo the current track, muting all other tracks.

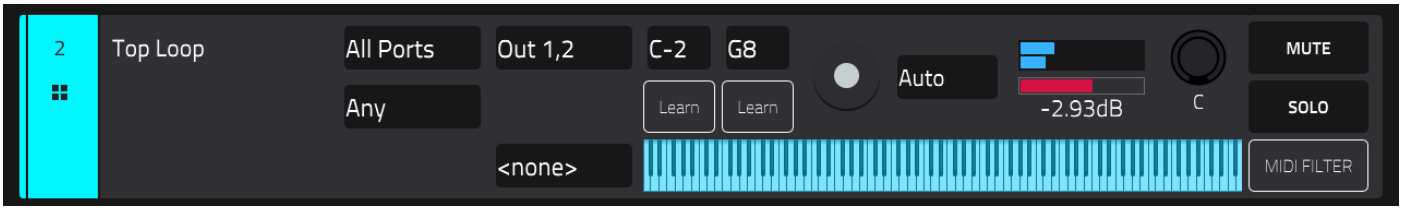
Press and hold **Shift** to access the following additional functions:

Tap **Duplicate Track** to immediately create an identical track on a new track.

Tap **TC** to open the ***Timing Correct (TC)*** settings.

Tap **Click** to open the ***Metronome (Click/Metro)*** settings.

Tap **Track Settings** to open the Track Settings window for the current track. See ***Operation > General Features > Tracks*** to learn more about the settings for each track type.



Use the **Input** field to set the track's MIDI or Audio input/inputs. For MIDI Inputs, you can also select the channel that the track will use.

Use the **Output** field to set the track's MIDI or Audio output/outputs. For MIDI Inputs, you can also select the channel that the track will use.

Use the **Key Range** fields to set the incoming range of notes that will be sent to the track (not available for Audio tracks). You can tap the low and high key fields and then use the **data dial** or **+/-** buttons, or tap the **Learn** button and use a connect MIDI device to set the key range. The set range will be shown in the keys diagram.

Use the **Arm** button to record-enable the track. When you begin recording, the MIDI input will be recorded to this track. You can select multiple tracks by pressing and holding **Shift** while tapping the **Arm** button to each track.

Use the **Monitor** button to set how your track will be monitored. Tapping it will cycle through its four states:

When set to **Off**, the track's input is not monitored, and playback of recorded events will be heard.

When set to **In**, the track's input is always monitored regardless of the track's Record Arm state, and playback from recorded events will not be heard.

When set to **Auto**, the track's input is monitored when the track is record armed, and playback of recorded events will be heard.

When set to **Merge**, the track's input is always monitored, and playback of recorded events will be heard.

Use the **level slider** to change the level of the track. The level meter above the slider shows the track's current level.

Use the **pan knob** to change the stereo panning of the track (not available for CV tracks).

Use the **Solo** and **Mute** buttons to solo or mute the track (respectively).

Alternatively, tap **Mute** or **Solo** (respectively) at the bottom of the screen to mute the currently selected track.

Tap the **MIDI Filter** button to open the Track MIDI Perform Settings window, where you can set parameters for incoming MIDI data.

- **Note Range:** This determines the **Note Min** and **Note Max** range that passes MIDI. Notes outside this range will not be heard in the track. You can also adjust this directly from Track View by using the **Keyrange** fields. Tap **Learn** and press the desired note for the Min and Max values.
- **Velocity Range:** This determines the **Velocity Min** and **Velocity Max** that passes MIDI. Velocities outside this range will not be heard in the track.
- **MIDI CC Filter:** Check these boxes to allow the listed MIDI Control Change messages to pass through the track. When unchecked, the MIDI CC message type will be ignored by the track. You can filter the following MIDI CC messages:

CC1 Modulation	CC65 Pmento (Portamento) On/Off
CC2 Breath	CC66 Sost (Sostenuto) On/Off
CC3 Undefined	CC67 Soft Ped (Soft Pedal) On/Off
CC4 Foot	CC68 Legato Switch
CC5 Portamento	CC128 Pitchbend
CC7 Volume	CC130 Program Change
CC10 Pan	CC129 Channel Pressure
CC11 Expression	CC131 Aftertouch
CC64 Sustain On/Off	

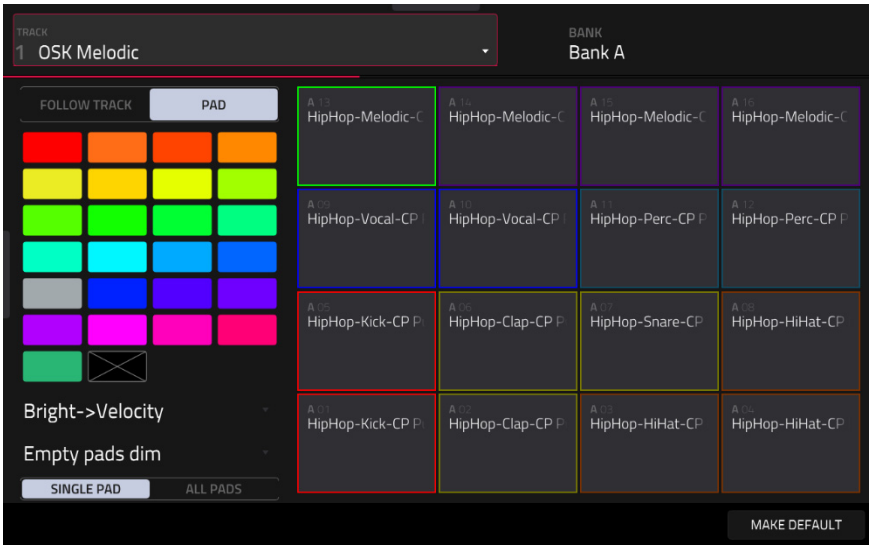
Pad Color Mode

Pad Color Mode lets you assign specific colors to your pads in a track.

To enter Pad Color Mode, press **Menu**, and then navigate to **Pad Color** on the second page of modes and tap it.

Use the **Track** field at the top of the screen to select the desired track. Keygroup, Plugin, MIDI, and CV tracks will use the Note Mode pad color layout by default. To create a custom pad color layout for these tracks, tap the pad area on the screen after selecting the track. This will enable custom pad colors for all tracks using Note Mode.

Use the **Bank** field to select the desired bank of pads in the current track.



Use the field in the lower-left corner to set how the pad lights will display:

- **Off**: The pads will be unlit whether you are playing them or not.
- **Classic Velocity**: The pads will be unlit while you are not playing them. When you press them, they will light with colors according to the velocity: red indicates a high velocity, yellow indicates a low velocity.
- **Fixed**: The pads will be lit with their assigned colors whether you are playing them or not.
- **Off->Velocity**: The pads will be unlit when you are not playing them. When you press them, they will light with their assigned color with a brightness that corresponds with the velocity.
- **Dim->Velocity**: The pads will be dimly lit when you are not playing them. When you press them, they will light with their assigned color with a brightness that corresponds with the velocity.
- **Bright->Velocity**: The pads will be brightly lit when you are not playing them. When you press them, they will light with their assigned color with a brightness that corresponds with the velocity.

Use the **Empty Pads** field in the upper-left corner to set how empty pads will display:

- **Empty pads off**: Pads without any sounds will remain off.
- **Empty pads dim**: Pads without any sounds will remain more dimly lit than pads with sounds assigned.
- **Empty pads normal**: Pads without any sounds will appear the same as pads with sounds assigned.

Use the **Single Pad/All Pads** select to determine whether you are setting the color for a **Single Pad** or **All Pads**.

Tip: **To quickly assign that color to all pads in the track**, press and hold **Shift** while tapping a color button.

Use the **color buttons** to select which color you are assigning.

Tip: **To select the color button corresponding to a specific pad's color**, press and hold **Shift**, and then press the pad or tap it on the screen.

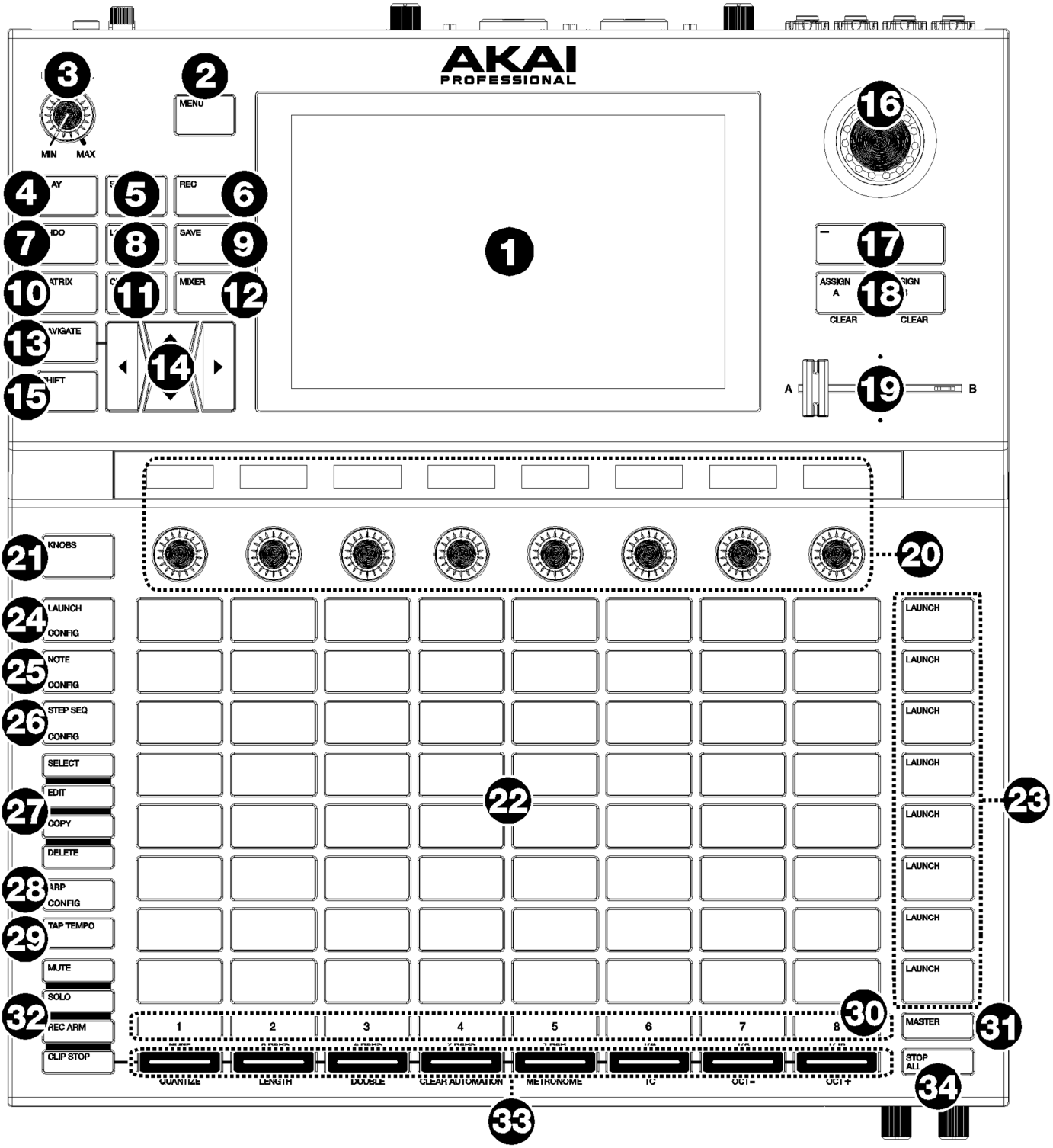
Press a **pad** on your Force or tap it on the screen to assign the selected color to it.

Tap **Make Default** to make the current pad color settings the defaults for all tracks on the same type (e.g., drum tracks, keygroup tracks, etc.). In the window that appears, tap **Do It** to confirm your choice or **Cancel** to cancel.

Hardware Features

This chapter explains the features and functions of your Force.

Top Panel



1. **Display:** This full-color multi-touch display shows information relevant to Force's current operation. Touch the display (and use the hardware controls) to control the Force interface. See ***Display*** to learn how to use some basic functions.
2. **Menu:** Press this button to open the ***Menu***. You can tap an option on the menu screen to enter that mode, view, etc.
3. **Master Volume**: Turn this knob to adjust the volume level of the **Main L/R outputs**.
4. **Play:** Press this button to start transport playback.

   Press and hold **Shift** and press this button to start transport playback from the current playhead position.
5. **Stop:** Press this button to stop transport playback. Double-press this button to immediately stop all sound.

   Press and hold **Shift** and press this button to stop transport playback and return the playhead to the beginning.
6. **Record:** Press this button to start or stop clip recording.

   Press and hold this button to view the Start Recording window, where you can select the record destination and adjust record settings.

   Press and hold **Shift** and press this button to start or stop arrangement recording.
7. **Undo:** Press this button to undo your last action.

   Press and hold **Shift** and press this button to redo the last action you undid.
8. **Load:** Press this button to open the ***Browser***, where you can load projects, clips, and more.
9. **Save:** Press this button to open the ***Save Window***, where you can save your project, tracks, clips and more.
10. **Matrix:** Press this button to open ***Clip Matrix Mode***, an overview of your project with an 8x8 view of your clips.
11. **Clip:** Press this button to open ***Grid View***, which gives you finer detail of a single clip.

    Press and hold **Shift** and press this button to open ***Track Edit Mode***, where you can edit parameters of your drum kit, plugin, MIDI or CV tracks.
12. **Mixer:** Press this button to open the ***Channel Mixer***, where you can control each track's volume, pan and send controls, as well as add plugin insert effects.

    When using a drum track, press and hold **Shift** and press this button to open the ***Pad Mixer***, where you can control each pad's volume, pan and send controls, as well as add plugin insert effects.

Tip: While in any of the pad modes, you can press and hold the button for another mode to momentarily switch to that mode. You will return to the previous mode when you release the button.

13. **Navigate:** Press this button to open ***Navigate*** mode, which gives you an overview of the entire project. Tap a section to jump the Matrix view directly to that section, or use the **cursor arrows** to move the Matrix view.

    Press and hold **Shift** and press this button to open ***XYFX Mode***.
14. **Cursor Arrows**: Press these buttons to move the Matrix view and the pads by one row or column at a time.

    Press and hold **Shift** and press these buttons to move by eight rows or columns at a time.
15. **Shift:** Press and hold this button to access secondary functions on some buttons and display modes.
16. **Data Dial**: Turn this dial to scroll through the available menu options or adjust the parameter values of the selected field in the display. Pressing the dial also functions as an **Enter** button.

    Press and hold **Shift** and turn this dial to adjust parameters in finer detail.
17. **–/+**: Press these buttons to increase or decrease the value of the selected field in the display.
18. **Assign A/Assign B:** Press one of these buttons and a **Track Assign button** to assign the corresponding track to the crossfader A or B grouping.

    Press and hold **Shift** and press one of these buttons to clear all crossfader A or B assignments.

    Press and hold **Edit** and press one of these buttons to open the Crossfader assignments in ***Q-Link Edit*** mode.
19. **Crossfader:** Use this crossfader to mix between clips assigned to the A or B grouping.
20. **Q-Link Knobs:** Use these knobs controls track panning, track send levels, or other user-assignable parameters. Use the **Knobs** button to change the active knob bank or mode (described below). The display strip above each knob indicates the parameter it is controlling and its current value or setting.
21. **Knobs Button:** Press this button to cycle between up to two banks of knobs for the currently active mode. The display strip above the knobs will indicate the currently active parameters.

    Press and hold this button to quickly select one of several preset knob control modes.

    Press and hold the **Edit** button and then press this button to open ***Q-Link Edit*** Mode, where you can edit macro control assignments.
22. **Clip Launch Pads:** Use the velocity-sensitive pads in this 8x8 to launch clips, play notes, and more, depending on the active mode.

    Use the **Edit Buttons** in conjunction with the clip launch pads to select, edit, copy or delete pads.

23. **Row Launch Buttons:** Press one of these buttons to launch the corresponding row, represented by the row of clips to its left.

    Press and hold the **Edit button** and one of these buttons to quickly insert a new row, capture the currently playing clip(s) as a new row or clear a row.

24. **Launch/Config:** Press this button to set the **Clip Launch Pads** to Launch mode. In Launch mode, each pad represents a single clip slot. The eight columns represent eight tracks while the eight rows represent eight rows. You can launch the entire row by pressing the **Row Launch** buttons to the right of the row of clips.

    Press and hold **Shift** and press this button to configure the Launch mode settings.

25. **Note/Config:** Press this button to set the **Clip Launch Pads** to Note mode. In Note mode, you can use the pads to play a configurable scale of MIDI notes.

    When in Note mode and using a Keygroup, Plugin, MIDI or CV track, press and hold this button to select different play modes, such as scales, chords, progressions and more. When in Note mode and using a Drum track, press and hold this button to select a time division for note repeat.

    Press and hold **Shift** and press this button to configure the Note mode settings, such as scale and root note. You can also press and hold this button to quickly select a mode.

26. **Step Seq/Config:** Press this button repeatedly to cycle through the different pad views for using the Step Sequencer pad mode.

    When in Step Sequencer mode, press and hold this button to quickly select a step sequencer view, select a Step Sequence page, or change the step size.

    Press and hold **Shift** and press this button to configure the Step Sequencer's settings.

27. **Edit Buttons:** Press and hold one of these buttons to edit a clip or track according to the following:

    - **Select:** Press and hold this button to view the currently select clip. While holding, tap another **Clip Launch Pad** to select another clip. This button can also be used to select a drum pad in a drum kit or select a note in the Step Sequencer without sounding the note.
    - **Edit:** Press and hold this button then tap a **Clip Launch Pad** or **Track Selector** button to edit a clip or track, respectively.

      Hold this button and press any **Row Launch** button to open the Edit Row window, where you can quickly add or clear rows in the Matrix.
    - **Copy:** Press and hold this button to copy a clip or track. While holding, tap the **Clip Launch Pad** or **Track Selector** button of the clip or track you would like to copy, then tap a new pad or button to copy it.
    - **Delete:** Press and hold this button then tap a **Clip Launch Pad** or **Track Selector** button to delete it.

28. **Arp/Config:** Press this button to enable or disable the internal ***Arpeggiator***, whose rate is based on the current Tempo and Time Division settings.

    Press and hold **Shift** and press this button to configure the Arpeggiator's settings.

29. **Tap Tempo:** Tap this button at the desired rate to enter a new tempo.

    Press and hold **Shift** and press this button to open the Tempo window, where you can enter a new tempo.

30. **Track Selectors:** Press one of these buttons to select a track, represented by the column of clips just above it. The right-most button (labeled **Master**) selects the bus tracks, including Returns and Outputs.

    Press and hold **Shift** and press one of these buttons to select a Global Quantization setting: **None**, **8 Bars**, **4 Bars**, **2 Bars**, **1 Bar**, **1/4**, **1/8**, or **1/16**.

31. **Master:** Press this button to view the Main Output and Return channels.

32. **Assign Mode Buttons:** Press one of these buttons to set the function of the **Track Assign** buttons when pressed:

    - **Mute:** Press this button to mute the track.
    - **Solo:** Press this button to solo the track.
    - **Rec Arm:** Press this button to record-arm the track.
    - **Clip Stop:** Press this button to stop the clip that is playing in the track.

    Tip: Hold **Shift** and press **Mute** or **Solo** to open the Mixer Config window, where you can set the solo button and crossfader behaviors.

33. **Track Assign:** Press one of these buttons to apply an assignment to a track, represented by the column of clips just above it. Use the **Assign Mode buttons** to set the assign function.

    Press and hold **Shift** and press one of these buttons to access secondary functions, printed below the buttons.

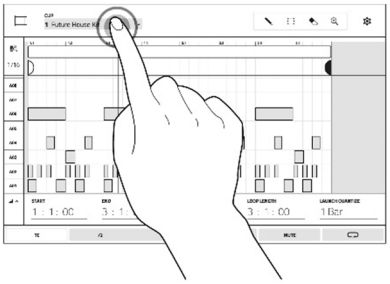
34. **Stop All Clips:** Press this button to stop all clips when they reach the end.

Display

Here is some general information about how to use the Force **display**:

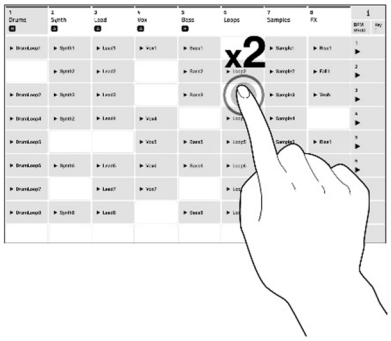
Tap a button or option to select it. Use the **data dial** or **–/+** buttons to change its setting or value.

In Matrix View, tap a filled clip slot to launch the clip.

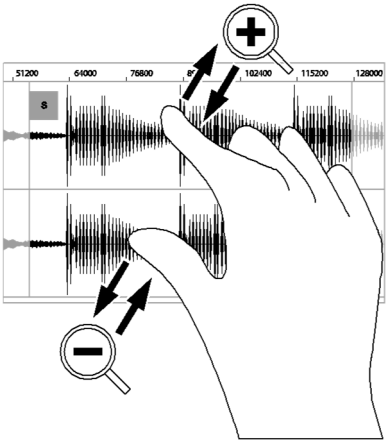


Double-tap a control to access advanced editing options. In some cases, this will show a numeric keypad that you can use to enter a value (an alternative to the **data dial** or **–/+** buttons). Tap the upper-left part of the display to return to the previous view.

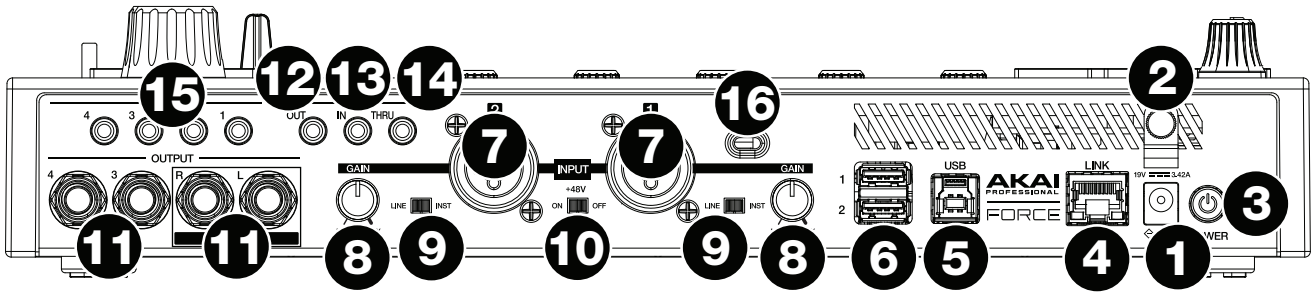
In Matrix View, double-tap an empty clip slot in your track to create a new clip.



Spread two fingers to zoom in (into a section of a waveform, for example). Pinch two fingers to zoom out.



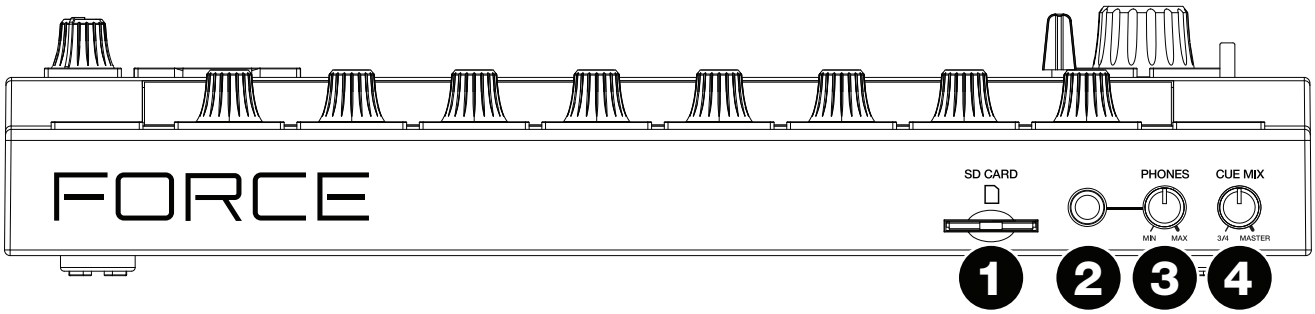
Rear Panel



1. **Power Input**: Connect the included power adapter (19 V, 3.42 A, center-positive) to this jack then into an electrical outlet.
2. **Power Adapter Restraint**: Secure the power adapter cable to this restraint to prevent it from accidentally unplugging.
3. **Power Switch**: Press this button to turn Force's power on or off.
4. **Link:** Connect a standard Ethernet cable to this port to use Ableton Link and other compatible devices with Force. See ***Operation*** > ***General Features*** > ***Menu*** > ***Preferences*** > ***MIDI / Sync*** for more information.
5. **USB-B Port**: Use the included USB cable to connect this high-retention-force USB port to an available USB port on your computer.
6. **USB-A Ports**: Connect USB flash drives to these USB ports to access their files directly using Force.
7. **Input 1/2** (XLR or 1/4" / 6.35 mm): Use standard XLR or 1/4" (6.35 mm) TRS cables to connect these inputs to audio sources (microphone, mixer, synthesizer, etc.). When using a 1/4" cable, the Mic preamp is removed from the circuit, and the **Line/Inst** switch can be used to set the impedance.

   Turn the **Gain** knobs to set the input level of each one.
8. **Gain:** Use these knobs to adjust the gain of the incoming signal from **Input 1/2** on the rear panel. Be careful when setting this knob at higher levels, which can cause the signal to distort.
9. **Line/Inst:** Use these switches to set **Input 1/2** to accept either a Line-level or Instrument-level sound source when using a 1/4" (6.35 mm) connection.
10. **Phantom Power** (**+48V**): This switch activates and deactivates phantom power for **Inputs 1/2** when using an XLR connection. When activated, +48V of phantom power will be supplied to both inputs. Note that most dynamic microphones do **not** require phantom power, while most condenser microphones **do**. Refer to your microphone's documentation to check if it needs phantom power.
11. **Outputs** (1/4" / 6.35 mm): Use standard 1/4" (6.35 mm) TRS cables to connect these outputs to your monitors, mixer, etc. The **Main L/R** outputs are the same as **Outputs 1,2**.
12. **MIDI Out**: Connect compatible 1/8" (3.5 mm) MIDI devices to this output, or use the included 1/8"-to-MIDI adapter to connect a standard 5-pin MIDI cable from this output to the MIDI input of an external MIDI device (synthesizer, drum machine, etc.).
13. **MIDI In**: Connect compatible 1/8" (3.5 mm) MIDI devices to this input, or use the included 1/8"-to-MIDI adapter to connect a standard 5-pin MIDI cable from this input to the MIDI output of an external MIDI device (synthesizer, drum machine, etc.).
14. **MIDI Thru:** Connect compatible 1/8" (3.5 mm) MIDI devices to this thru-port, or use the included 1/8"-to-MIDI adapter to connect a standard 5-pin MIDI cable from this input to the MIDI output of an external MIDI device (synthesizer, drum machine, etc.). Incoming MIDI from the **MIDI In** port will be passed along to this output.
15. **CV/Gate Out**: Use standard 1/8" (3.5 mm) TS cables to connect these outputs to optional modular devices. Force will send control voltage (CV) and/or Gate data over this connection.
16. **Kensington® Lock Slot**: You can use this slot to secure your Force to a table or other surface.

Front Panel



1. **SD Card Slot**: Insert a standard SD/SDHC card into this slot to access its files directly using Force.
2. **Phones** (1/4” / 6.35 mm): Connect standard 1/4” (6.35 mm) stereo headphones to this output.
3. **Phones Volume:** Turn this knob to adjust the volume of the **phones output**.
4. **Cue Mix**: Turn this knob to adjust the balance between the **Master** and **3/4** signals in your headphones. **Master** is the signal sent from the **Main outputs**. **3/4** is the signal sent from the **Outputs 3/4**.

Appendix

Glossary

This glossary briefly defines and explains many of the technical terms used throughout this manual.

Aftertouch The majority of contemporary keyboards are capable of generating aftertouch messages. On this type of keyboard, when you press harder on a key you are already holding down, a MIDI aftertouch message is generated. This feature makes sounds even more expressive (e.g., through vibrato).

Aliasing Aliasing is an audible side effect arising in digital systems as soon as a signal contains harmonics higher than half the sampling frequency.

Amount Describes to which extent a modulation source influences a given parameter.

Amplifier An amplifier is a component that influences the volume level of a sound via a control signal. It can be modulated by a control signal (e.g., generated by an ***envelope*** or an ***LFO***).

Attack An ***envelope*** parameter. This term describes the ascent rate of a time-relevant process (e.g., an envelope from its starting point to the point where it reaches its highest value). The attack phase is initiated immediately after a trigger signal is received (e.g., after you play a note on a trigger pad or a keyboard).

Bit Rate Bit rate (also known as **word length**), is the number of bits used to store the level information of each single sample slice within a whole sample. The higher the bit rate, the more precise the information about a sample (i.e., its dynamics' resolution). Normal audio CDs are 16-bit. The Force hardware supports full 24-bit resolution.

Clip A clip is a container for recorded audio or MIDI information. Clips that share a common type, such as clips of a particular drum kit or plugin, are grouped into ***tracks***. Clips across multiple tracks can also be grouped into ***rows***.

Each **MIDI clip** contains MIDI note events and controller data. In this case, the clip contains no audio information—only MIDI information that uses the samples in a track (or an external MIDI sound module) to generate its audio. You can edit your performance in many different ways once the performance has been captured.

Each **audio clip** contains an audio signal that has been recorded or imported into your project. You can edit this audio within the software and incorporate it into your projects alongside your MIDI clips.

Clipping Clipping is a sort of distortion that occurs when a signal exceeds the maximum value that can be handled by a signal processing system it is fed into. The curve of a clipped signal is dependent on the system where the clipping occurs. In the analog domain, clipping effectively limits the signal to a given maximum level. In the digital domain, clipping is similar to a numerical overflow, resulting in negative polarity of the signal's portions exceeding the maximum level.

Control Change (Controllers) MIDI messages enable you to manipulate the behavior of a sound generator to a significant degree. This message essentially consists of two components:

- The controller number, which defines the parameter to be influenced. It can range from **0** to **127**.
- The controller value, which determines the extent of the modification.

Controllers can be used for effects such as slowly swelling vibrato, changing the stereo panning position and influencing filter frequency.

Cutoff The cutoff frequency is a significant factor for a ***filter***. A low-pass filter for example dampens the portion of the signal that lies above this frequency. Frequencies below this value are allowed to pass through without being processed.

CV

CV stands for **control voltage**, an analog method of sending control messages to external synthesizers, drum machines, etc. CV messages are typically used in conjunction with ***Gate*** messages (CV messages determine the pitch of notes while Gate messages determine note activation and length). CV messages are sent from the CV out ports of your Force hardware and to the CV in ports of your external device.

Please note that each external device uses a specific control voltage range, which determines how many volts are used in each octave (e.g., **1V/oct**). Be mindful of this when setting it up with the Force software and/or controller hardware—mismatched voltage ranges can produce unusual/undesirable "re-scaling" of the octaves.

Decay

Decay describes the descent rate of an ***envelope*** once the attack phase has reached its maximum and the envelope drops to the level defined by the sustain value.

Envelope

An envelope is used to modulate a sound-shaping component within a given time. For instance, an envelope that modulates the cutoff frequency of a filter opens and closes this filter over a period of time. An envelope is started via a trigger, usually a MIDI note.

The classic **ADSR** envelope consists of four individually variable phases: **attack**, **decay**, **sustain**, and **release**. Attack, decay and release are time or slope values, while sustain is an adjustable level. Once an incoming trigger is received, the envelope runs through the attack and decay phases until it reaches the programmed sustain level. This level remains constant until the trigger is terminated. The envelope then initiates the release phase until it reaches the minimum value.

You can see and read about the envelopes used in Force in ***Operation*** > ***Modes*** > ***Track Edit Mode*** > ***Anatomy of an Envelope***.

Filter

A filter is a component that allows some of a signal's frequencies to pass through it and dampens other frequencies. The most important aspect of a filter is the filter cutoff frequency. Filters generally come in four categories: **low-pass**, **high-pass**, **band-pass**, and **band-stop**. These are the available filters:

A **low-pass** filter (the most common type) dampens all frequencies above the cutoff frequency.

A **high-pass** filter in turn dampens the frequencies below the cutoff.

A **band-pass** filter allows only those frequencies around the cutoff frequency to pass. All others are dampened.

A **band-stop** filter does the opposite of a band-pass: it dampens only the frequencies around the cutoff frequency.

A **band-boost** filter boosts the frequencies around the cutoff frequency, similar to what a band on an equalizer would do. All other frequencies pass through normally.

The number of **poles** in a filter's "slope" determines how extreme or subtle the effect of the filter will be. Filters with one or two poles produce a subtler sound while filters with six or eight poles are much more pronounced.

The **Model** filters are analog-style emulations of famous vintage synth filters. **Model1** is a four-pole filter that distorts at high input levels. **Model2** uses a mellow resonance with a "fattening" distortion in the lower frequencies. **Model3** can produce howling, piercing resonances and extreme sub frequencies—watch your speakers!

The **Vocal** filters are formant filters that emulate the human voice. **Vocal1** produces "ah" and "ooh" vowel sounds. **Vocal2** uses three bands to produce "oh" and "ee" vowel sounds. **Vocal3** uses five bands to emulate an idealized model of the vocal tract.

MPC3000 LPF is a dynamic, resonant low-pass filter (12 dB/oct) that was used on the original MPC3000, released in 1994.

Please also see the entry for ***Resonance***, an essential characteristic of a filter's sound.

Gate

Gate messages are analog messages sent to external synthesizers, drum machines, etc. Gate messages are typically used in conjunction with ***CV*** messages (CV messages determine the pitch of notes while Gate messages determine note activation and length). Gate messages are sent from the CV out ports of your Force hardware and to the CV/Gate in ports of your external device.

LFO — **LFO** is an acronym for **low-frequency oscillator**. The LFO generates a periodic oscillation at a low frequency and features variable waveshapes. Similar to an envelope, an LFO can be used to modulate a sound-shaping component.

MIDI — **MIDI** stands for **musical instrument digital interface**. Developed in the early 1980s, MIDI enables interaction between various types of electronic music instruments from different manufacturers. At the time a communications standard for heterogeneous devices did not exist, so MIDI was a significant advance. It made it possible to link various devices with one another through simple, standardized connectors.

Essentially, this is how MIDI works: One sender is connected to one or several receivers. For instance, if you want to use a computer to play a MIDI synthesizer, the computer is the sender and the synthesizer acts as the receiver. With a few exceptions, the majority of MIDI devices are equipped with two or three ports for this purpose: MIDI In, MIDI Out and in some cases MIDI Thru. The sender transfers data to the receiver via the MIDI Out jack. Data are sent via a cable to the receiver's MIDI In jack.

MIDI Thru has a special function. It allows the sender to transmit to several receivers. It routes the incoming signal to the next device without modifying it. Another device is simply connected to this jack, thus creating a chain through which the sender can address a number of receivers. Of course, it is desirable for the sender to be able to address each device individually. To achieve this, a MIDI channel message is sent with each MIDI event.

MIDI Channel — This is a very important element of most messages. A receiver can only respond to incoming messages if its receive channel is set to the same channel as the one the sender is using to transmit data. Subsequently, the sender can address specific receivers individually. MIDI Channels 1–16 are available for this purpose.

MIDI Clock — The MIDI clock message transmits real-time tempo information to synchronize processes among several connected devices (e.g., a sound generator's delay time to a MIDI sequencer).

Modulation — A modulation influences or changes a sound-shaping component via a modulation source. Modulation sources include envelopes, LFOs or MIDI messages. The modulation destination is a sound-shaping component such as a filter or a VCA.

Note On & **Note Off** — This is the most important MIDI message. It determines the pitch and velocity of a generated note. A note-on message will start a note. Its pitch is derived from the note number, which can range from **0** to **127**. The velocity ranges from **1** to **127**. A velocity value of **0** is equivalent to a note-off message.

Normalize — Normalization is a function to raise the level of a sample to its maximum (**0 dB**) without causing distortion. This function automatically searches a sample for its maximum level and consequently raises the entire sample's level until the previously determined maximum level reaches 0 dB. In general, this results in a higher overall volume of the sample.

Panning — The process or the result of changing a signal's position within the stereo panorama.

Pitch-Bend — Pitch-bend is a MIDI message. Although pitch-bend messages are similar in function to control change messages, they are a distinct type of message. The resolution of a pitch-bend message is substantially higher than that of a conventional controller message. The human ear is exceptionally sensitive to deviations in pitch, so the higher resolution is used because it relays pitch-bend information more accurately.

Program Change — These are MIDI messages that select sound programs. Programs **1**–**128** can be changed via program change messages.

Release — An ***envelope*** parameter. This term describes the descent rate of an envelope to its minimum value after a trigger is terminated. The release phase begins immediately after the trigger is terminated, regardless of the envelope's current status. For instance, the release phase may be initiated during the attack phase.

Resonance Resonance or emphasis is an important ***filter*** parameter. It emphasizes the frequencies around the filter cutoff frequency by amplifying them with a narrow bandwidth. This is one of the most popular methods of manipulating sounds. If you increase the emphasis to a level where the filter enters a state of self-oscillation, it will generate a relatively pure sine waveform.

Root Key The root key defines the original pitch of a recorded instrument or of a sample. Samples in Force contain the dedicated root key information. This information will be created automatically during recording or importing.

Row A group of ***clips*** across multiple tracks which can be launched at the same time using Row Launch.

Sample When you tap the pads on your Force hardware, you can trigger sounds that we call **samples**. Samples are digitized snippets of audio that can be recorded using the recording (sampling) function of your Force hardware or loaded from the Browser.

You can edit and process a sample in different ways. For example, a sample can be trimmed, looped, pitch-shifted or processed, using various effects. When you have finished editing your sample, you can assign it to one or more drum pads to play it. Samples can be either mono or stereo.

Sample Rate This is the frequency representing the amount of individual digital sample scans per second that are taken to capture an analog signal digitally. For normal CD audio recordings, **44100** samples per second are used, also written as **44.1 kHz**.

Stretch Factor The stretch factor is a value generated by the ***Warp*** algorithm in the software. When you record an audio file, the current project tempo will be embedded with it. This information is stored within the sample file when you save the project. When you warp an audio track region, the warping algorithm uses this project tempo and the current value in the **BPM** field to generate the stretch factor.

Sustain This term describes the level of an ***envelope*** remaining constant after it has passed the attack and decay phases. Once reached, the sustain level is kept until the trigger is terminated.

Time-Stretch See ***Warp*** below.

Track A project on your Force hardware can contain **128** MIDI tracks and **8** audio tracks.

Each **MIDI track** contains MIDI note events and controller data. In this case, the track contains no audio information—only MIDI information that uses the samples in a drum track or keygroup track (or an external MIDI sound module) to generate its audio. You can edit your performance in many different ways once the performance has been captured.

Each **audio track** contains an audio signal that has been recorded or imported into your project. You can edit this audio within the software and incorporate it into your project alongside your MIDI tracks.

Trigger A trigger is a signal that initiates events. Trigger signals are very diverse. For instance, a MIDI note or an audio signal can be used as a trigger. The events a trigger can initiate are also very diverse. A common application for a trigger is its use to start an envelope.

Warp

The Warp feature lengthens or shortens a region of an audio track or sample without changing its pitch. This enables you to fit the length of an audio track or sample to the length of a clip, a bar in your clip, etc. while maintaining its original key.

Please note that the Warp algorithms are very CPU-intensive and can result in audio drop-outs during playback if used too freely. Be mindful of how (and how often) you use the warp function. You can reduce the CPU resources required by doing any/all of the following:

Minimize the amount of pitch adjustment of warped audio.

In Track Edit Mode, avoid using extreme **Stretch** values.

Avoid warping very small audio regions.

Warp as few tracks or track regions as possible (i.e., reduce the number of total number of voices of the polyphonic limit that use the Warp algorithm at a given time), especially instances where the warped regions start at the same time.

Avoid rapidly triggering samples that are warped.

If you have warped samples used in a drum track or keygroup track, consider using the **Flatten Pad** function to consolidate the affected pad's layers into one audio sample (see ***here*** to learn about this). After you flatten the pad, its sample/samples no longer need to be warped.

Effects & Parameters

This chapter lists the available effects. To learn more about how effects work with Force, please see ***General Features > Effects***.

Effects with a * next to their name are not included with Force and are available for purchase from **thempcstore.com**.

Note: Some of these effects have a "sync" version (e.g., **Flanger Sync**, **Autopan Sync**, etc.) whose rates will be affected by the current tempo. While viewing the rate of these effects, a "**.**" next to the time division indicates a triplet-based rate.

Delay/Reverb

Options: ***AIR Delay***, ***AIR Diff Delay***, ***AIR Multitap Delay***, ***AIR Non-Lin Reverb***, ***AIR Reverb***, ***AIR Spring Reverb***, ***Delay Analog Sync***, ***Delay Analog***, ***Delay HP***, ***Delay LP***, ***Delay Mono Sync***, ***Delay Mono***, ***Delay Multi-Tap***, ***Delay Ping Pong***, ***Delay Stereo***, ***Delay Sync (Stereo)***, ***Delay Tape Sync***, ***Reverb In Gate***, ***Reverb Large 2***, ***Reverb Large***, ***Reverb Medium***, ***Reverb Out Gate***, ***Reverb Small***, ***Sample Delay***

AIR Delay

This is a classic delay line effect with a variable feedback filter. Additional Ratio and Width parameters enable you to achieve a wide range of stereo delay effects.

Parameter	Value Range	Default Value
Time		
Sync Off	1 ms – 2.00 s	388 ms
Sync On	1/32 – 8/4	1/8D
Sync	Off, On	Off
Feedback	0–100%	40%
Mix	0–100% (dry–wet)	50%
Delay Ratio	50:100 – 100:50	100:100
Delay HPF	20.0 Hz – 1.0 kHz	20.0 Hz
Delay Width	0–100%	100%
Feedback Damp	1.0 – 20.0 kHz	20.0 kHz
Feedback Reso	0–100%	0%
Fdbk. Reso Freq	100 Hz – 10.0 kHz	1.0 kHz

AIR Diff Delay

This is a delay line effect that is synchronized to your session tempo and uses an adjustable amount of diffusion to emulate the dissipation of echoes in reverberant space.

Parameter	Value Range	Default Value
Time		
Sync Off:	1 – 1000 ms	161 ms
Sync On:	1/64 – 4/4 (including Triplet and Dotted variations)	1/16D
Sync	Off, On	On
Width	0–100%	100%
Mix	0–100% (dry–wet)	40%
Feedback	0–100%	50%
Fdbk. Diffusion	0–100%	40%
Fdbk. High Damp	0–100%	35%
Low Cut	20.0 Hz – 1.00 kHz	20.0 Hz
Pan	-100 – 0 – +100%	0%

AIR Multitap Delay

This effect is a versatile, creative delay plugin with a wide range of applications from subtle stereo delays to complex repeating patterns.

Parameter	Value Range	Default Value
Delay		
Sync On:	1/16 – 8/4	4/4
Sync Off:	0 ms – 4.00 s	2.25 s
Feedback	0–100%	50%
Mix	-100.0 – 0.0 dB	-50.0 dB
From/To	Varies	Tap 5 / Input
Sync	Off, On	On
Low Cut	20.0 Hz – 1.00 kHz	500 Hz
High Cut	1.00 kHz – 20.0 kHz	2.00 kHz
1–5	Off, On	On
Tap Delay	10.0 ms – 10.0 s	Varies
Pan	L100 – C – R100	Varies
Level	-Inf – 0.0 dB	0.0 dB

AIR Non-Lin Reverb

This is a spatial effect, designed to produce synthetic, processed ambience with special gated and reversed reverb effects.

Parameter	Value Range	Default Value
Pre-Delay	0–250 ms	0 ms
Dry Delay	0–1500 ms	0 ms
Time	0–1000 ms	250 ms
Mix	0–100% (dry–wet)	50%
Diffusion	0–100%	100%
Width	0–100%	50%
Shape	Gated, Reverse	Gated
Low-Cut	20.0 Hz–1.00 kHz	141 Hz
High-Cut	1.00–20.0 kHz	9.46 kHz

AIR Reverb

This is a spatial effect, with a wide range of reverb types to add space or room to your audio signal.

Tab	Parameter	Values	Default Value
Reverb	Pre-Delay	0–250 ms	0 ms
	Room Size	0–100%	100%
	Time	0.4 ms – +inf s	1.9 s
	Mix	0–100%	50%
Early Reflection	Type	Off, Booth, Club, Room, Small Chamber, Medium Chamber, Large Chamber, Small Studio, Large Studio, Scoring Stage, Philharmonic, Concert Hall, Church, Opera House, Vintage 1, Vintage 2	Off
	Length	0–100%	100%
	ER / Tail Mix	0–100%	50%
Reverb	Input Width	0–100%	0%
	Output Width	0–100%	0%
	Delay	0–250 ms	0 ms
Room	Ambience	0–100%	0%
	Density	0–100%	100%
Hi/Lo Freq			
Hi Freq	Time	-100 – 0 – 100%	0%
	Freq	2.00 – 20.0 kHz	6.32 kHz
	Cut	1.0 – 20.0 kHz	9.46 kHz
Lo Freq	Time	-100 – 0 – 100%	0%
	Freq	20.0 Hz – 2.00 kHz	200 Hz
	Cut	1 – 1000 Hz	1 Hz

AIR Spring Reverb

This is a spatial effect, designed to emulate the sound of a spring reverb tank.

Parameter	Value Range	Default Value
Pre-Delay	0–250 ms	3 ms
Time	1.0–10.0 s	4.0 s
Mix	0–100 (dry–wet)	50%
Diffusion	0–100%	100%
Width	0–100%	0%
Low Cut	20.0 Hz –1.0 kHz	141 Hz

Delay Analog Sync

Analog Delay is similar to Mono Delay, except that it's designed to emulate an analog "Bucket Brigade"-style delay. This delay has a unique character to it that gives a warmer sound by adding subtle inaccuracies in phase and timing.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	1 bar – 1/16 triplets	1/4
Feedback	0–100	50
Ramp	0–100	50

Delay Analog

Analog Delay is similar to the Mono Delay, except that it's designed to emulate an analog "Bucket Brigade"-style delay. This delay has a unique character to it that gives a warmer sound by adding subtle inaccuracies in phase and timing.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	2–2000 ms	100
Feedback	0–100	25

Delay HP

HP Delay is identical to the Mono Delay, but it uses a resonant high-pass filter in the delay line.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	2–2000 ms	100
Feedback	0–100	50
Cutoff	0–100	33
Resonance	0–100	33

Delay LP

LP Delay is identical to the Mono Delay, but it uses a resonant low-pass filter in the delay line.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	2–2000 ms	500
Feedback	0–100	50
Cutoff	0–100	50
Resonance	0–100	20

Delay Mono Sync

This mono effect delays the original signal for a specified period of time (synced to the project tempo) and plays it back over an adjustable period of time.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	1 bar – 1/16 triplets	1/4
Feedback	0–100	50
Damping	0–100	100

Delay Mono

This mono effect delays the original signal for a specified period of time and plays it back over an adjustable period of time.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	2–2000 ms	100
Feedback	0–100	25
Damping	0–100	100

Delay Multi-Tap

This delay is a mono delay which has three delay generators with independently adjustable delay times and stereo position.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time 1	2–2000 ms	100
Time 2	2–2000 ms	100
Time 3	2–2000 ms	100
Feedback	0–100	25
Pan 1	0–100	50
Pan 2	0–100	50
Pan 3	0–100	50
Damping	0–100	100
Gain 1	0–100	25
Gain 2	0–100	25
Gain 3	0–100	25

Delay Ping Pong

This stereo delay allows you to set different delay times for its left and right repeats.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time, Left	2–2000 ms	100
Time, Right	2–2000 ms	100
Feedback	0–100	25
Damping	0–100	100

Delay Stereo

Stereo Delay operates similarly to Mono Delay but in true stereo.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	2–2000 ms	100
Feedback	0–100	25
Damping	0–100	100

Delay Sync (Stereo)

This effect is the same as Delay Stereo but is synced to the project tempo.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	1 bar – 1/16 triplets	1/4
Feedback	0–100	50
Damping	0–100	100

Delay Tape Sync

Tape Delay emulates a delay system using an analog tape loop and a series of tape heads to produce an echo effect. This delay type yields a very distinct echo sound often heard in reggae and dub-style music.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Time	1 bar – 1/16 triplets	1/4
Feedback	0–100	50
Ramp	0–100	50
Head 1	0–100	100
Head 2	0–100	0
Head 3	0–100	0
Head 4	0–100	0
Tone	0–100	50
Spread	0–100	50
Wow & Flutter	0–100	50

Reverb In Gate

This is a hall reverb with an additional control. The reverb effect is cut off when the input drops below the level set in the **Gate In** parameter.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Pre-Delay	1–100	50
Early Reflection	0–100	50
Density	0–100	50
Diffuse	0–100	50
Decay	0–100	75
Lo-Cut	0–100	10
Hi-Cut	0–100	10
Gate In	0–100	0

Reverb Large 2

This is a less CPU-intensive spatial effect, emulating the sound of a large hall.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Pre-Delay	1–100	50
Early Reflection	0–100	50
Density	0–100	50
Diffuse	0–100	50
Decay	0–100	75
Lo-Cut	0–100	10
Hi-Cut	0–100	10

Reverb Large

This is a spatial effect, designed to emulate the sound of a large hall.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Pre-Delay	1–100	50
Early Reflection	0–100	50
Density	0–100	50
Diffuse	0–100	50
Decay	0–100	75
Lo-Cut	0–100	10
Hi-Cut	0–100	10

Reverb Medium

This is a spatial effect, designed to emulate a medium room.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Pre-Delay	1–100	50
Early Reflection	0–100	50
Density	0–100	50
Diffuse	0–100	50
Decay	0–100	50
Lo-Cut	0–100	15
Hi-Cut	0–100	10

Reverb Out Gate

This is a hall reverb that has an additional control. The reverb effect is cut off when the output drops below the level set in the **Gate Out** parameter.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Pre-Delay	1–100	50
Early Reflection	0–100	50
Density	0–100	50
Diffuse	0–100	50
Decay	0–100	75
Lo-Cut	0–100	10
Hi-Cut	0–100	10
Gate Out	0–100	0

Reverb Small

This is a spatial effect, designed to emulate a small room.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	50
Pre-Delay	1–100	50
Early Reflection	0–100	50
Density	0–100	50
Diffuse	0–100	50
Decay	0–100	50
Lo-Cut	0–100	15
Hi-Cut	0–100	10

Sample Delay

This effect is a utility delay plugin that can delay the left and right channels by different, small amounts to loosen percussion elements or add stereo width.

Parameter	Value Range	Default Value
Left / Right	0–11025 Samples or 0.0–250.0 ms	0 Samples or 0.0 ms
Samples / MS	Samples, MS	Samples
Link	Off, On	Off

Dynamics

Options: ***AIR Channel Strip***, ***AIR Compressor***, ***AIR Limiter***, ***AIR Maximizer***, ***AIR Noise Gate***, ***AIR Pumper***, ***AIR Transient***, ***Bus Compressor***, ***Compressor Opto***, ***Compressor VCA***, ***Compressor Vintage***, ***Mother Ducker Input***, ***Mother Ducker***, ***Transient Shaper***

AIR Channel Strip

This specially-designed plugin combines multiple effects with a fast interface. The EQ section provides a highpass filter, low and high shelves, and a fully parametric mid-band. For dynamics, the AIR Compressor and Gate algorithms are perfect for achieving hard-hitting drum sounds.

Tab	Parameter	Value Range	Default Value
	EQ Enable	Enabled, Bypass	Enabled
	Gate Enable	Enabled, Bypass	Enabled
	Comp Enable	Enabled, Bypass	Enabled
	Output	-Inf – +24.00 dB	0.00 dB
EQ	High Shelf Gain	-12.0 – +12.0 dB	0.0 dB
	High Shelf Freq	1.20 – 20.0 kHz	6.00 kHz
	Mid Gain	-18.0 – +18.0 dB	0.0 dB
	Mid Freq	40.0 Hz – 16.0 kHz	247 Hz
	Mid Q	0.40 – 10.00	1.00
	Low Shelf Gain	-12.0 – +12.0 dB	0.0 dB
	Low Shelf Freq	20.0 Hz – 1.00 kHz	100 Hz
	HP Filter	0 – 1000 Hz	0 Hz
Gate/Comp	Gate Thresh	-120.0 – 0.0 dB	-120.0 dB
	Gate Depth	0 – -120.0 dB	-120.0 dB
	Gate Attack	0.01 – 1000.00 ms	0.18 ms
	Gate Release	1.00 – 3000.00 ms	7.40 ms
	Comp Thresh	0.0 – -60.0 dB	0.0 dB
	Comp Ratio	1.0:1 – 100.0:1	3.9:1
	Comp Attack	100 us – 300 ms	5.48 ms
	Comp Release	10.0 ms – 4.00 s	200 ms

AIR Compressor

This basic compressor effect changes the dynamic range of a signal by automatically reducing its gain if it exceeds a certain level (the threshold).

Parameter	Value Range	Default Value
Threshold	-60.0 – 0 dB	-48.0 dB
Ratio	1.0:1 – 100.0:1	3.9:1
Output	0.0 – 30.0 dB	15.0 dB
Mix	0–100% (dry-wet)	100%
Knee	0–100%	50%
Attack	100 us – 300 ms	5.48 ms
Release	10.0 ms – 4.00 s	200 ms

AIR Limiter

This is a lookahead limiter perfect for mastering or mixing.

Parameter	Value Range	Default Value
Gain	-12.0 – 36.0 dB	0.0 dB
Ceiling	-24.0 – 0.0 dB	0.0 dB
Look Ahead	0.0 – 20.0 ms	0.0 ms
Release	10.0 ms – 10.0 s	316 ms
LF Mono	10.0 Hz – 1.00 kHz	10.0 Hz

AIR Maximizer

This effect is a limiter optimized for professional mastering.

Parameter	Value Range	Default Value
Threshold	-40.0 – 0.0 dB	-20.0 dB
Ceiling	-20.0 – 0.0 dB FS	-5.0 dB FS
Look Ahead	0.0 – 20.0 ms	0.0 ms
Knee	Hard, Soft	Hard
Release	10.0 ms – 10.0 s	316 ms
LF Mono	10.0 Hz – 1.00 kHz	10.0 Hz

AIR Noise Gate

This effect is similar to a compressor, but instead of attenuating audio signal that rises above a threshold, a noise gate attenuates audio signal that falls below a threshold by a set amount. This can help reduce background noise in your audio signal.

Parameter	Value Range	Default Value
Threshold	-120.0 – 0.0 dB	-48.0 dB
Depth	0 dB – -120.0 dB	-120 dB
Denoise Filter	Off, On	Off
Denoise Thresh	-120.0 – 0.0 dB	-60.0 dB
Attack	0.01 – 1000.00 ms	0.18 ms
Hold	0 – 1000 ms	250 ms
Release	1.00 – 3000.00 ms	7.40 ms

AIR Pumper

This effect creates a rhythmic pumping effect, similar to that of sidechain compression.

Parameter	Value Range	Default Value
Depth	0–100%	80%
Speed	Bar, 1/2 – 1/32T	1/4
Release Shape	0–100%	10%
Trigger Offset	-100.0 – +100.0 ms	0.0 ms
Attack	0–100%	5%
Hold	0–100%	10%
Release	0–100%	60%

AIR Transient

This effect is used to enhance or soften the Attack and Release phases of audio material.

Parameter	Value Range	Default Value
Attack	-100 – 0 – +100%	0%
Attack Shape	0–100%	50%
Sustain	-100 – 0 – +100%	0%
Output	-20.0 – +20.0 dB	0.0 dB
Limit	Off, On	On

Bus Compressor

This is the most transparent compressor, able to perform substantial volume adjustments without artifacts.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Attack	0–100	50
Release	0–100	50
Threshold	-50 – 0 dB	0
Ratio	1–20	1
Oldskool	Off, On	Off
Output	-6 – 24 dB	0

Compressor Opto

The Opto Compressor is modeled after a vintage compressor type using an optical circuit to control the volume reduction of the input signal. These compressors are usually associated with soft and unobtrusive attack and release characteristics.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Input	-6 – 18 dB	0
Attack	0–100	50
Release	0–100	50
Threshold	-50 – 0 dB	0
Ratio	1–20	1
Knee	1–100	1
Output	-6 – 24 dB	0

Compressor VCA

This compressor is more modern-sounding, with a slightly more transparent sound. A VCA Compressor tends to have quicker attack and release times than an Opto Compressor.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Input	-6 – 18 dB	0
Attack	0–100	50
Release	0–100	50
Threshold	-50 – 0 dB	0
Ratio	1–20	1
Knee	1–100	1
Output	-6 – 24 dB	0

Compressor Vintage

This compressor has a sound similar to classic tube compressors, with their gentle yet pumping response and a dash of tube saturation.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Input	-6 – 18 dB	0
Attack	0–100	50
Release	0–100	50
Threshold	-50 – 0 dB	0
Ratio	1–20	1
Knee	1–100	1
Output	-6 – 24 dB	0

Mother Ducker Input

Add this effect as an insert to the track you want to use as a trigger input, such as a kick drum track.

Parameter	Value Range	Default Value
To	Bus 1–8	Bus 1

Mother Ducker

Add this effect as an insert to the track you want to have the ducking effect applied to. Use the meters to monitor the level from your trigger input and tweak the Threshold and Ratio parameters to adjust the amount of ducking. The Attack and Release parameters can be used to sculpt the envelope of the gain reduction to achieve exactly the pumping effect you are after. Mother Ducker has eight internal buses so you can set up multiple channel strips with ducking effects from different sources.

Parameter	Value Range	Default Value
Ratio	1.00:1 – 60.00:1	6.00:1
Knee	0.000 – 6.000 dB	0.000 dB
Attack	1.0 – 1000.0 ms	10.0 ms
Release	1.0 – 1000.0 ms	100.0 ms
Threshold	-100.000 – 0.000 dB	-6.021 dB
Gain	-100.000 – +12.000 dB	-0.000 dB
Auto Gain	On, Off	On
From	Bus 1–8	Bus 1

Transient Shaper

A transient shaper can be used to enhance or soften the Attack and Release phases of audio material.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Attack	0–100	50
Release	0–100	50
Output	0–100	50

EQ/Filter

Options: ***AIR Enhancer***, ***AIR Filter Gate***, ***AIR Filter***, ***AIR Kill EQ***, ***AIR Para EQ***, ***AIR Vintage Filter***, ***HP Filter Sweep***, ***HP Filter Sync***, ***HP Filter***, ***HP Shelving Filter***, ***LP Filter Sweep***, ***LP Filter Sync***, ***LP Filter***, ***LP Shelving Filter***, ***PEQ 2-Band, 2-Shelf***, ***PEQ 4-Band***

AIR Enhancer

This effect enhances the low and high broadband frequencies of the audio signal.

Parameter	Value Range	Default Value
High Gain	0.0 – 12.0 dB	0.0 dB
Low Gain	0.0 – 12.0 dB	0.0 dB
Output	- Inf – 0.0 dB	0.0 dB
Freq. High	1.0 – 10.0 kHz	3.16 kHz
Freq. Low	40.0 – 640 Hz	160 Hz
Harmonics	0.0 – 12.0 dB	0.0 dB
Phase	+ (positive), - (negative)	+

AIR Filter Gate

This effect chops your audio signal into rhythmic patterns with variable filtering, amplitude and panning.

Parameter	Value Range	Default Value
Pattern	Straight, Pulse, Pumper, Marching, Fader, Offbeats, Off+Pan, L/R Pan, LL/RR Pan, Slow Pan, Rand Pan, Shorter, Longer, Reverse, Random, Keyed 1–2, Half Time, 12-Step, Ducked, Trance 1–6, Tech 1–6	Straight
Rate	1/2–1/32, including Dotted and Triplet	1/16
Swing	50.0–66.7%	50.0%
Mix	0–100%	100%
Filter Mode	Off, LP, BP, HP, Phaser	LP
Filter Cutoff	-100 – 0 – 100%	0%
Filter Reso	-100 – 0 – 100%	0%
Gate Attack	0–100%	25%
Gate Hold	0–100%	50%
Gate Release	0–100%	25%
Mod LFO Wave	Random; 2–12, 16, 24, 32, 48, 64, 96, 128, 192, 256 Steps	Random
Mod Env	-100 – 0 – 100%	0%
Mod LFO	0–100%	0%

AIR Filter

This effect applies a filter to the audio signal and then applies selectable saturation or reduction to the filtered signal.

Parameter	Value Range	Default Value
Cutoff Freq	55.0 Hz – 20.0 kHz	20.0 kHz
Reso Factor	0.7 – 20.0	1.0
Type	LP4–1, BP2, BP4, HP2_LP1, HP3_LP1, HP4–1, BR2, BR4, BR2_LP1, BR2_LP2, HP1_BR2, BP2_BR2, HP1_LP2, HP1_LP3, AP3, AP3_LP1, HP1_AP3	LP4
Output Gain	-Inf dB – 0.0 dB	0.0 dB
Saturation Type	Resample, Bit Crush, Rectify, Hard Clip, Distort, Overdrive	Overdrive
Saturation Drive	0.0 – 12.0 dB	0.0 dB
Saturation Mode	DCF, CVF	DCF

AIR Kill EQ

This effect can zap out the Low, Mid or High broadband frequency from an audio signal.

Parameter	Value Range	Default Value
High	Thru, Kill	Thru
Mid	Thru, Kill	Thru
Low	Thru, Kill	Thru
Output	-20.0 – +20.0 dB	0.0 dB
High Gain	-Inf – +12.0 dB	0.0 dB
Mid Gain	-Inf – +12.0 dB	0.0 dB
Low Gain	-Inf – +12.0 dB	0.0 dB
High Freq.	500 Hz – 8.00 kHz	2.00 kHz
Offset	-100 – +100%	0%
Low Freq.	50.0 – 800 Hz	200 Hz

AIR Para EQ

This effect is a powerful four-band parametric equalizer with four independent EQ ranges, adjustable Low and High EQ filter types, and dedicated Low Cut and High Cut.

Parameter	Value Range	Default Value
High Freq	1.2 – 20.0 kHz	6.00 kHz
High Q		
Shelf	0.40 – 2.00	1.00
Bell	0.40 – 10.00	1.00
High Gain		
Shelf	-12.0 – +12.0 dB	0.0 dB
Bell	-18.0 – 18.0 dB	0.0 dB
High Type	Shelf, Bell	Shelf
High Out/In	Out, In	
High Mid Freq	120 Hz – 16.0 kHz	2.00 kHz
High Mid Q	0.40 – 10.00	1.00
High Mid Gain	-18.0 – 18.0 dB	0.0 dB
High Mid Out/In	Out, In	
Low Mid Freq	40.0 Hz – 16.00 kHz	247 Hz
Low Mid Q	0.40 – 10.00	1.00
Low Mid Gain	-18.0 – 18.0 dB	0.0 dB
Low Mid Out/In	Out, In	
Low Freq	20.0 Hz – 1.00 kHz	100 Hz
Low Q		
Shelf	0.40 – 2.00	1.00
Bell	0.40 – 10.00	1.00
Low Gain		
Shelf	-12.0 – +12.0 dB	0.0 dB
Bell	-18.0 – 18.0 dB	0.0 dB
Low Type	Shelf, Bell	Shelf
Low Out/In	Out, In	
Output	-20.0 – +20.0 dB	0.0 dB
High Cut Freq	120 Hz – 20.0 kHz	20.0 kHz
High Cut Type	6, 12, 18, 24 dB	12 dB
High Cut Out/In	Out, In	
Low Cut Freq	20.0 Hz – 8.00 kHz	100 Hz
Low Cut Type	6, 12, 18, 24 dB	12 dB
Low Cut Out/In	Out, In	

AIR Vintage Filter

This effect is a powerful filter plugin for bringing those classic analog filter sounds to your tracks, perfect for synths, guitars plus loads more.

Parameter	Value Range	Default Value
Cutoff	20.0 Hz – 20.0 kHz	878 Hz
Resonance	0–100%	0%
Fat	0–200%	200%
Mode	LP24, LP18, LP12, BP, HP	LP18
Attack	10.0 ms – 10 s	10.0 ms
Release	10.0 ms – 10 s	966 ms
Env. Depth	-100 – 0 – +100%	+37%
Sync	Off, On	On
Rate		
Sync On:	16 – 8/4	4T
Sync Off:	0.01–10.0 Hz	2.54 Hz
LFO Depth	0–100%	61%
Output	–Inf dB — 0.0 dB	0.0 dB

HP Filter Sweep

This effect is a high-pass filter with its cutoff frequency modulated by an LFO.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	80
Low Frequency	0–100	50
High Frequency	0–100	100
Resonance	0–100	33
Rate	0–100	10

HP Filter Sync

This effect is a high-pass filter with its cutoff frequency modulated by an LFO.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Low Frequency	0–100	0
High Frequency	0–100	100
Resonance	0–100	50
Rate	8 bars – 1/32	1/4

HP Filter

This effect is a static filter without modulation.

Parameter	Value Range	Default Value
Frequency	10–19999 Hz	1500
Resonance	0–100	0

HP Shelving Filter

This filter differs from the standard filter type, as it attenuates all frequencies after the cutoff point equally.

Parameter	Value Range	Default Value
Frequency	10–19999 Hz	1500
Resonance	0–100	0
Gain	-18.0 – 18.0 dB	0.0

LP Filter Sweep

This effect is a low-pass filter with its cutoff frequency modulated by an LFO.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	80
Low Frequency	0–100	0
High Frequency	0–100	100
Resonance	0–100	33
Rate	0–100	10

LP Filter Sync

This effect is a low-pass filter with its cutoff frequency modulated by an LFO.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Low Frequency	0–100	0
High Frequency	0–100	100
Resonance	0–100	50
Rate	8 bars – 1/32	1/4

LP Filter

This effect is a static filter without modulation.

Parameter	Value Range	Default Value
Frequency	10–19999 Hz	1500
Resonance	0–100	0

LP Shelving Filter

This filter differs from the standard filter type, as it attenuates all frequencies after the cutoff point equally.

Parameter	Value Range	Default Value
Frequency	10–19999 Hz	1500
Resonance	0–100	0
Gain	-18.0 – 18.0 dB	0.0

PEQ 2-Band, 2-Shelf

This effect is a combination of one two-band parametric equalizer and two shelving filters.

Parameter	Value Range	Default Value
Low Frequency	22–1000 Hz	220
Frequency 1	82–3900 Hz	820
Frequency 2	220–10000 Hz	2200
High Frequency	560–19999 Hz	5600
Q1	0–100	0
Q2	0–100	0
Low Gain	-18.0 – 18.0 dB	0.0
Gain 1	-18.0 – 18.0 dB	0.0
Gain 2	-18.0 – 18.0 dB	0.0
High Gain	-18.0 – 18.0 dB	0.0

PEQ 4-Band

This effect is a powerful four-band parametric equalizer with four independent EQ ranges.

Parameter	Value Range	Default Value
Low Frequency	22–1000 Hz	220
Frequency 1	82–3900 Hz	820
Frequency 2	220–10000 Hz	2200
High Frequency	560–19999 Hz	5600
Q1	0–100	5
Q2	0–100	5
Q3	0–100	5
Q4	0–100	5
Gain 1	-18.0 – 18.0 dB	0.0
Gain 2	-18.0 – 18.0 dB	0.0
Gain 3	-18.0 – 18.0 dB	0.0
Gain 4	-18.0 – 18.0 dB	0.0

Harmonic

Options: ***AIR Amp Sim***, ***AIR Diode Clip***, ***AIR Distortion***, ***AIR Flavor***, ***AIR Freq Shift***, ***AIR Lo-Fi***, ***AIR Talk Box***, ***AIR Tube Drive***, ***Decimator***, ***Distortion Amp***, ***Distortion Custom***, ***Distortion Fuzz***, ***Distortion Grimey***, ***Distortion Overdrive***, ***Frequency Shifter***, ***Granulator***, ***Resampler***, ***TouchFX***, ***XYFX***

AIR Amp Sim

This effect simulates guitar and bass amplifiers with a wide range of available cabinet models and tone shaping options.

Parameter	Value Range	Default Value
Cab Model	D.I., Brit, 1x8”, 1x12”, 2x10”, 2x12”, 4x10”, 4x12”, 1x15” Bass, 4x10” Bass, Radio	4x10”
Drive	0.0–11.0	0.0
Mode	Mono, Stereo	Stereo
Output	-12.0 – 0.0 – +12.0 dB	0.0 dB
Soft Clip	0–100%	0%
Top Boost	0–100%	0%
Bias	0–100%	0%
Bass	-12.0 – 0.0 – +12.0 dB	-12.0 dB
Mid	-12.0 – 0.0 – +12.0 dB	0.0 dB
Mid Freq	250 Hz – 4.00 kHz	1.00 kHz
Treble	-12.0 – 0.0 – +12.0 dB	0.0 dB

AIR Diode Clip

This is a distortion effect that can be used for anything from adding subtle grit to drum breaks to aggressive distorted mayhem.

Parameter	Value Range	Default Value
Input HP	200 – 800 Hz	500 Hz
Env Speed	0–100%	50%
Output HP	1000 – 4000 Hz	2000 Hz
Output LP	1000 – 12000 Hz	6000 Hz
Wide	Off, On	Off
Solo	Off, On	Off
Oversampling	Off, On	On
Level	-inf – 0.0 – +12.0 dB	0.0 dB

AIR Distortion

This effect is a multi-type distortion that adds color to your audio signal with varying types and amounts of distortion.

Parameter	Value Range	Default Value
Mode	Hard, Soft, Wrap	Hard
Drive	0 – 60 dB	15 dB
Output	0–100%	100%
Mix	0–100% (dry-wet)	100%
Tone Pre-Shape	-100 – 0 – +100%	0%
Tone High Cut	1.00 – 20.0 kHz	20.0 kHz
Stereo	On, Off	Off
Clipping Thresh.	-20.0 – 0.0 dB FS	-10.0 dB FS
Clipping Edge	0–100%	0%

AIR Flavor

This effect applies EQ simulations of radios, phones, tape machines, and more to dramatically change the timbre of your sound.

Parameter	Value Range	Default Value
Timbre	Varies	Neutral
Timbre Depth	0–100%	100%
Vinyl Distortion	0–100%	0%
Vinyl Noise	0–100%	0%
Flutter	0–100%	0%
Monofy	0–100%	0%

AIR Freq Shift

This effect shifts the audio signal's individual frequencies for unique effects.

Parameter	Value Range	Default Value
Mode	Up, Down, Up & Down, Stereo	Up
Frequency	10.0 mHz – 10.0 kHz	316 mHz
Feedback	0–100%	0%
Mix	0–100% (dry–wet)	100%

AIR Lo-Fi

This effect is used to bit-crush, down-sample, clip, rectify and mangle an audio signal.

Tab	Parameter	Value Range	Default Value
Lo-Fi	Bit Depth	1.0 – 16.0 bit	16.0 bit
	Sample Rate	500 Hz – 50.0 kHz	50.0 kHz
	Mix	0–100%	100%
Distortion	Clip	0.0 – 40.0 dB	0.0 dB
	Rectify	0–100%	0%
	Noise Mod	0–100%	0%
Anti-Alias	Pre	0.125 – 2.000 Fs	0.5000 Fs
	Post	0.125 – 2.000 Fs	1.000 Fs
	Enable	On, Off	Off
LFO / Env	Wave	Sine, Tri, Saw, Square, Morse, S&H, Random	Sine
	Rate Sync Off: Sync On:	 0.01 – 10.0 Hz 8/4 – 16	 1.00 Hz 2T
	Sync	On, Off	Off
	Depth	-100 – 0 – 100%	0%
	Attack	0.1 – 10.0 s	0.5 s
	Release	0.1 – 10.0 s	0.5 s
	Depth	-100 – 0 – 100%	0%

AIR Talk Box

This effect adds voice-like resonances to audio signals.

Parameter	Value Range	Default Value
Vowel	OO, OU, AU, AH, AA, AE, EA, EE, EH, ER, UH, OH, OO	AH
Env Depth	-100 – 0 – +100%	0%
Formant	-12.00 – +12.00	0.00
Mix	0–100%	100%
LFO Wave	Sine, Tri, Saw, Square, S&H, Random	Sine
LFO Rate Sync Off: Sync On:	 0.01 – 10.0 Hz 8/4 – 16	 1.00 Hz 2T
LFO Sync	Off, On	Off
LFO Depth	-100 – 0 – +100%	0%
Env Thresh	-60.0 – 0.0 dB	-30.0 dB
Env Attack	0.1 – 10.0 s	0.5 s
Env Release	0.1 – 10.0 s	0.5 s

AIR Tube Drive

This effect is designed to reproduce the sound of an overdriven tube amplifier.

Parameter	Value Range	Default Value
Drive	0–100%	0%
Headroom	-30.0 – 0.0 dB	-15.0 dB
Saturation	0–100%	50%
Output	-20.0 – +20.0 dB	0.0 dB

Decimator

Decimator down-samples the incoming signal by removing bits from the digital signal. The difference between decimation and resampling is that Decimator does not use any filtering to mask or correct digital artifacts. The result is an effect ranging from mild to almost completely pure digital distortion, depending on the setting and the source material.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Decimate	0–100	0
Bit Reducer	4–32	32

Distortion Amp

This effect is designed to reproduce the sound of a tube amplifier at high volumes.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Drive	0–100	50
Tone	0–100	50
Dynamics	0–100	50
Output	0–100	50

Distortion Custom

This effect is a highly customized distortion, capable of a wide range of useable sounds.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Drive	0–100	50
+Soft	5–75	2
+Clip	5–50	25
–Soft	5–75	2
–Clip	5–50	25
Low	-18.0 – 18.0 dB	0.0
Mid	-18.0 – 18.0 dB	0.0
High	-18.0 – 18.0 dB	0.0
Output	-18.0 – 18.0 dB	50

Distortion Fuzz

This popular effect uses hard clipping of the audio signal, which, at extreme settings, can turn a standard waveform into a square wave, producing a “razor” effect.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Drive	0–100	50
Output	0–100	50
Low	0–100	50
Low-Mid	0–100	50
High-Mid	0–100	50
High	0–100	50

Distortion Grimey

This is a unique distortion effect that distorts a frequency range in a selectable band.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Drive	0–100	50
Grime	0–100	50
Center	0–100	50
Width	0–100	50
Resonance	0–100	50
Output	0–100	50

Distortion Overdrive

This distortion is designed to sound like a mildly distorting amplifier at medium volumes. It is the smoothest distortion type available.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Drive	0–100	50
Tone	0–100	50
Output	0–100	50

Frequency Shifter

A frequency shifter changes the frequencies of an input signal by a fixed amount and alters the relationship of the original harmonics. This can produce a chorus-like effect as well as very crazy artificial timbres.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Frequency	-1000 – 1000	0
Asynchrony	0–1000	0
A Pan	0–100	0
B Pan	0–100	100
A Gain	0–100	75
B Gain	0–100	75

Granulator

This effect turns your incoming audio into small grains of sound that can be looped, pitch shifted, and manipulated in new and interesting ways.

Parameter	Value Range	Default Value
Grain Density	1.0–300.0 grains/sec	68.0 grains/sec
Grain Window	20.0–1000.0 ms	608.0 ms
Grain Length	10.0–200.0 ms	171.9 ms
Grain Feedback	-99.9 – 0.0 – 99.9%	0.0%
Trigger Randomization	0–100%	0.0%
Pitch Randomization	0–100%	0.0%
Pitch	-12.0 – 0.0 – 12.0 semitones	0.0 semitones
Fine	-50.0 – 0.0 – 50.0%	0.0%
Stereo	0–100%	0.0%
Mix	0–100%	34.6%
Freeze	Off, On	Off

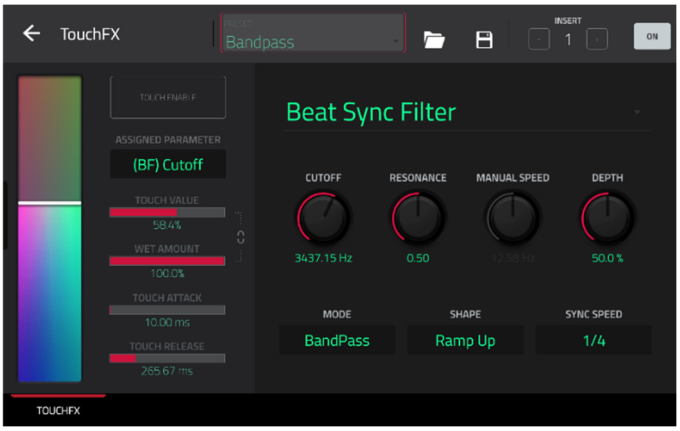
Resampler

Resampler is similar to ***Decimator*** in that it removes bits from an incoming signal. The difference is that Resampler applies a complex suite of filters and anti-aliasing to attempt to retain the original sound quality. This is a method used by popular vintage samplers and sampling drum machines from the 1980s. Resampler can be used to achieve a “dirty” sound on drum loops, without the harshness of distortion.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	0–100	0
Decimate	0–100	0

TouchFX

TouchFX can be controlled using the onscreen touch slider or an external MIDI device. The effect you control acts like an insert effect on the selected output. You can control the Touch Strip by assigning it to a MIDI control or by using the virtual touch strip on the touchscreen.



Use the controls on the left side of the TouchFX plugin window to adjust the

Touch Strip: This strip can be controlled manually by tapping and dragging from the touchscreen, or by assigning it a MIDI control. Use this to control the selected Touch FX.

Touch Enable: Tap this box to enable touch control for the currently selected Touch FX.

Assigned Parameter: Use this field to select a preset parameter to be controlled by the touch strip. This can be separate from or in addition to controlling the **Wet/Dry** amount, depending on the **Touch > Wet/Dry** setting.

Touch Value: Use this slider to control the value of the **Assigned Parameter** controlled by the **touch strip**.

Wet Amount: Use this slider to set the blend the original signal (dry) and the effect signal (wet).

Touch Value / Wet/Dry Lock: Tap the **lock icon** to use the touch strip to control the **Wet/Dry** amount in addition to the touch value of the **Assigned Parameter**.

Touch Attack: Use this slider to set the length of the attack phase of the envelope, which is triggered when you move the touch strip control.

Touch Release: Use this slider to set length of the release phase of the envelope, which is triggered when you release the touch strip control.

Use the controls on the right side of the Touch FX plugin window to select a Touch FX type and adjust its settings. You can also select from the included presets at the top of the window. The following effects can be selected:

Manual Filter

The touch strip controls a static, multi-mode filter without modulation.

Parameter	Value Range	Default Value
Cutoff	40.00–10000 Hz	2530.00 Hz
Resonance	0.00–1.00	0.50
Mode	LowPass, BandPass, HiPass	LowPass

Beat Sync Filter

The touch strip controls a multi-mode filter with its cutoff frequency modulated by an LFO, which can be synced to the project tempo.

Parameter	Value Range	Default Value
Cutoff	40.00–10000 Hz	34737.15 Hz
Resonance	0.00–1.00	0.50
Manual Speed	Off, 0.10–50.00 Hz	Off
Depth	0.0–100.0%	50.0%
Mode	LowPass, BandPass, HiPass	BandPass
Shape	Ramp Up, Ramp Down, Triangle, Sine, Square, Random1, Random2	Ramp Up
Sync Speed	Off, 2 Bars, 1 Bar, 1/2, 1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	1/4

Beat Sync Delay

The touch strip controls repeated instances of the original signal that decay over a period of time that is synced to the project tempo.

Parameter	Value Range	Default Value
Cutoff	40.00–10000 Hz	3052.90 Hz
Resonance	0.00–1.00	0.50
Feedback	-99.00 – 0.00 – 99.00	49.50
Diffusion	0.00–1.00%	0.50%
Mode	LowPass, BandPass, HiPass	LowPass
Delay Time	1 Bar, 1/2, 1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	1/4
Delay Mode	Normal, Cross-Feedback, Ping-Pong	Normal
Octave Mode	Off, On	Off

Beat Repeat

The touch strip controls an effect that will slice and repeat the source audio according to a tempo-synced beat value.

Parameter	Value Range	Default Value
Cutoff	40.00–10000 Hz	2530.00 Hz
Resonance	0.00–1.00	0.50
Mode	LowPass, BandPass, HiPass	LowPass
Delay Time	1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	1/4
Reverse	Off, On	Off

Tape Stop

The touch strip controls a tape stop effect that emulates the slowing down of analog tape playback.

Parameter	Value Range	Default Value
Cutoff	40.00–10000 Hz	2530.00 Hz
Manual Stop Time	1.00 – 4.00 s	2.50 s
Sync Stop Time	Off, 1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	Off

Phaser

The touch strip controls a phaser effect, created by multiple ganged all-pass filters to create “notches,” or sharp spikes, in the frequency spectrum. The frequencies of these all-pass filters can be modulated by an LFO to create a sweeping sound.

Parameter	Value Range	Default Value
Feedback	0.0–100.0%	100.0%
Manual Speed	0.10–50.00 Hz	Off
Sync Speed	Off, 2 Bars, 1 Bar, 1/2, 1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	1/4

Comb Filter

The touch strip controls a comb filter, which creates “notches” in the frequency spectrum, similar to the phaser, by delaying the audio signal and adding it back to itself.

Parameter	Value Range	Default Value
Feedback	0.0–100.0%	100.0%
Manual Speed	0.10–50.00 Hz	Off
Sync Speed	Off, 2 Bars, 1 Bar, 1/2, 1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	1/4

Washout

The touch strip controls an echo effect that is useful for creating transitions.

Parameter	Value Range	Default Value
Cutoff	40.00–9000 Hz	1160.00 Hz
Resonance	0.00–100.00%	0.50%
Feedback	0.00–100.00%	0.50%
Diffusion	0.0–10000.0%	5000.0%
Delay Time	1 Bar, 1/2, 1/4, 1/4t, 1/8, 1/8t, 1/16, 1/16t, 1/32, 1/64	1 Bar

Granulator

The touch strip controls a granulator effect, which turns your incoming audio into small grains of sound that can be looped, pitch-shifted, and manipulated.

Parameter	Value Range	Default Value
Density	1.0–300.0 grains/sec	150.0 grains/sec
Window Length	20.0–1000.0 ms	510.0 ms
Grain Length	10.0–200.0 ms	105.0 ms
Grain Feedback	-99.00 – 0.00 – 99.00	0.0%
Pitch	-12.0 – 0.0 – 12.0 semi	0.0 semi
Stereo Spread	0.0–100.0%	0.0%

Manual Flanger

The touch strip controls a flanger effect, a modulated delay that emulates the sound created when running two analog tape machines in parallel with a slight time misalignment.

Parameter	Value Range	Default Value
Frequency	100.00–4000.00 Hz	4000.00 Hz
Feedback	0.0–100.0%	100.0%

XYFX

See ***Operation > Modes > XYFX Mode*** for more information.

Modulation

Options: ***AIR Chorus***, ***AIR Ensemble***, ***AIR Flanger***, ***AIR Fuzz-Wah***, ***AIR Half Speed***, ***AIR Multi-Chorus***, ***AIR Phaser***, ***AIR Pitch Shifter***, ***AIR Stereo Width***, ***AIR Stutter***, ***Auto Wah***, ***Autopan Sync***, ***Autopan***, ***Chorus 2-Voice***, ***Chorus 4-Voice***, ***Flanger Sync***, ***Flanger***, ***Phaser 1***, ***Phaser 2***, ***Phaser Sync***, ***Tremolo Sync***, ***Tremolo***

AIR Chorus

This effect is a compact but powerful plugin for classic chorus warmth and depth.

Parameter	Value Range	Default Value
Rate	0.01 – 10.0 Hz	1.01 Hz
Depth	0.00 – 24.00 ms	7.10 ms
Mix	0–100%	50%
Feedback	0–100%	0%
Pre-Delay	0.00–24.00 ms	2.00 ms
Wave	Triangle, Sine	Sine
Offset	-180 – 0 – +180 deg.	+90 deg.

AIR Ensemble

This effect applies fluid, shimmering modulation effects to the audio signal.

Parameter	Value Range	Default Value
Rate	0.01 – 10.0 Hz	1.00 Hz
Depth	0.00 – 24.00 ms	6.00 ms
Width	0–100%	100%
Mix	0–100% (dry–wet)	75%
Mod. Delay	0.00 – 24.00 ms	0.00 ms
Mod. Shimmer	0–100%	50%

AIR Flanger

This effect applies a short, modulating delay to the audio signal.

Parameter	Value Range	Default Value
Rate	0.02 – 10.00 Hz	0.40 Hz
Depth	0–100%	50%
Feedback	0–100%	50%
Mix	0–100% (dry–wet)	50%
Headroom	-20.0 – 0.0 dB FS	-10.0 dB FS

AIR Fuzz Wah

This is a multi-effect that combines transistor-like distortion and wah.

Tab	Parameter	Value Range	Default Value
Fuzz-Wah	Mix	0–100% (dry–wet)	100%
	Order	Fuzz>Wah, Wah>Fuzz	Fuzz>Wah
	Fuzz Mix	0–100% (dry–wet)	100%
	Wah Mix	0–100% (dry–wet)	100%
	Fuzz Drive	0 – 40 dB	20 dB
	Fuzz Tone	1.00 – 10.0 kHz	3.16 kHz
	Fuzz Output	-Inf – 0.0 dB	0.0 dB
	Fuzz Enable	Off, On	Off
	Wah Pedal	0–100%	50%
	Wah Filter Mode	Lowpass, Bandpass, Highpass	Bandpass
	Min. Freq.	50.0 Hz – 4.00 kHz	428 Hz
	Max Freq.	50.0 Hz – 4.00 kHz	2.07 kHz
	Min. Resonance	0–100%	55%
	Max Resonance	0–100%	33%
	Wah Enable	Off, On	On
Modulation	Mode	LFO, Env	LFO
	Rate LFO Env	 8/4 – 16 0–100%	 4T 75%
	Depth	-100 – 0 – 100%	0%

AIR Half Speed

This effect can quickly create half-speed versions from any input material. Filter the processed audio using the built-in high pass and low pass filter to create dramatic transitions, and use the fade in and fade out parameters to create synchronized transitions between dry and effected audio.

Parameter	Value Range	Default Value
	Start, Stop	
Loop Length	1/16 – 4 Bars	1 Bar
Mode	*1.5, *2, *4	*2
Mix	0–100%	100%
Loop Fade	1.00 – 200 ms	4.90 ms
Fade In	Hard, Soft, 1/16–4 Bars	Hard
Fade Out	Hard, Soft, 1/16–4 Bars	Hard
HPF	Off, 20.0 Hz – 20.0 kHz	Off
LPF	20.0 Hz – 19.9 kHz, Off	Off
Band	Off, On	Off

AIR Multi-Chorus

This effect applies a thick, complex chorus effect to your audio signal.

Parameter	Value Range	Default Value
Rate	0.01 – 10.0 Hz	1.00 Hz
Depth	0.00 – 24.00 ms	6.00 ms
Voices	3, 4, 6	4
Mix	0–100% (dry–wet)	50%
Chorus Low Cut	20.0 Hz – 1.00 kHz	20.0 Hz
Chorus Width	0–100%	100%
Mod Wave	Sine, Tri	Tri
Mod Delay	0.00 – 24.00 ms	6.0 ms

AIR Phaser

This effect applies a phaser to your audio signal, for that wonderful "wooshy," "squishy" sound.

Parameter	Value Range	Default Value
Rate	0.10 – 10.00 Hz	1.00 Hz
Depth	0–100%	50%
Feedback	0–100%	0%
Mix	0–100% (dry–wet)	50%
Phaser Model	Vibe, Stone, Ninety, Tron,	Ninety
Offset		
Phase	-180 – +180 deg.	0 deg.
Rate	25–400%	100%
Type	Phase, Rate	Phase

AIR Pitch Shifter

This effect alters the pitch of the audio signal and can be adjusted based on the source or style of the signal.

Parameter	Value Range	Default Value
Mode	Vocal, Bass, Beats, Chords, Textures	Vocal
Shift	-24.0 – 0 – 24.0	0.0
Mix	0–100%	100%

AIR Stereo Width

This effect creates a wider stereo presence in an audio signal.

Parameter	Value Range	Default Value
Width	0–200%	100%
Delay	0.0 – 8.0 ms	0.0 ms
Level Trim	-Inf – 0.0 – +12.0 dB	0.0 dB
Pan Trim	L100 – <C> – R100	<C>
High	0–200%	100%
Mid	0–200%	100%
Low	0–200%	100%

AIR Stutter

This effect creates mind-blowing glitch effects using a wide range of volume, pan and pitch stutter effects.

Parameter	Value Range	Default Value
Intervals	1/64 – ¼	1/16
Sync	Off, On	On
Steps	2–64	5
Step Length	0–100%	100%
Freeze	Off, On	Off
Decay	50.0 ms – 100 s	6.99 s
Volume	-12.0 – 0.0 – 6.0 dB	-1.2 dB
Mix	0–100%	100%
Pan Mod	0–100%	50%
Pitch Mod	-100 – 0 – +100%	0%

Auto Wah

This effect is a low-pass filter modulated by an envelope that yields a classic funky “wah-wah”- like sound. The envelope is triggered by the incoming signal’s amplitude. The amount of the envelope on the cutoff frequency is user-definable.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Resonance	0–100	75
Attack	0–100	30
Release	0–100	30
Center	0–100	50
Sensitivity	0–100	50

Autopan Sync

This effect uses an LFO (tempo-synced to your project) to move the incoming signal back and forth across the stereo field, creating a rotary effect.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	8 bars – 1/32	1/4

Autopan

This effect uses an LFO to move the incoming signal back and forth across the stereo field, creating a rotary effect.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	0–100	10

Chorus 2-Voice

This effect uses an LFO to modulate the pitch and a delay of the input signal, which are then added to the dry signal. In small amounts, this creates the illusion of multiple voices playing at once. Turn up the **Feedback** and **Amount** for more pronounced “shimmering” and “watery” sounds.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Delay	0–100	20
Amount	0–100	80
Width	0–100	80
Feedback	0–100	50
Rate	0–100	10

Chorus 4-Voice

This effect is the same as Chorus 2-Voice, but adds additional voices for more pronounced modulation.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Delay	0–100	20
Amount	0–100	80
Width	0–100	80
Feedback	0–100	50
Rate	0–100	10

Flanger Sync

This effect is the same as Flanger, but syncs to your project tempo.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	8 bars – 1/16 triplets	1/4
Feedback	-100 – 100	0
Delay	0–100	20
Width	0–100	80

Flanger

A flanger is a modulated delay to emulate the sound created when running two analog tape machines in parallel with a slight time misalignment. Slow **Rate** settings can produce a “whooshing” jet engine sound, while faster rates result in more of a “warble.”

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	0–100	10
Feedback	-100 – 100	0
Delay	0–100	20
Width	0–100	80

Phaser 1

This effect applies multiple ganged all-pass filters to create “notches,” or sharp spikes, in the frequency spectrum. The frequencies of these all-pass filters are usually modulated by an LFO to create a sweeping sound.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	0–100	10

Phaser 2

This effect is a variation on Phaser 1.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	0–100	10

Phaser Sync

This effect is similar to Phaser 1/Phaser 2, but the LFO is synced to the project tempo.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	1 bar – 1/16 triplets	1/4

Tremolo Sync

This effect uses an LFO (synced to project tempo) to increase and decrease the volume of the signal. Depending on the LFO shape, this can produce a smooth wave effect (sine wave) or a stuttering “on-off” effect (square wave).

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	1 bar – 1/16 triplets	1/4
Sine to Square	0–100 (sine–square)	0

Tremolo

This effect is the same as Tremolo sync, but the LFO is not synced to project tempo.

Parameter	Value Range	Default Value
Dry/Wet	0–100 (dry–wet)	100
Rate	0–100	10
Sine to Square	0–100 (sine–square)	0

Vocal

Options: ***AIR Vocal Doubler***, ***AIR Vocal Harmonizer***, ***AIR Vocal Tuner***

AIR Vocal Doubler

This effect creates realistic vocal doubles to add width or thickness to a vocal line.

Parameter	Value Range	Default Value
Voices	1–8	4
Stereo Spread	0–100%	70%
Lead Volume	-Inf – +6.0 dB	0.0 dB
Doubler Volume	-Inf – +6.0 dB	0.0 dB
Pitch	+/- 0–250%	+/- 38%
Pitch Speed	0–100%	75%
Timing	0–800 ms	63 ms

AIR Vocal Harmonizer

This effect can create up to four-part realistic vocal harmonies and complex doubling effects. Each vocal part has its own level, delay, formant, mode, and interval parameters.

Parameter	Value Range	Default Value
Key	A–G#	C
Scale	Major, Minor, Harm Minor, Melo Minor, Dorian, Phrygian, Lydian, Mixo, Locrian, Chromatic, Penta, Maj Triad, Min Triad, Root	Major
Lead Volume	-Inf – 0.0 dB	0.0 dB
Harmony Volume	-Inf – 0.0 dB	-2.5 dB
Timing	0–100%	42%
Tuning	0–100%	14%
Smooth	5–200 ms	8 ms
Voice Range	Very Low, Low, Mid, High, Very High	Mid
Root Mode Split	A–G#	E
Reference	420.0–460.0 Hz	440.0 Hz
Delay Sync	Off, On	On
Harmony 1–4	Off, On	1 On

AIR Vocal Tuner

This effect applies pitch correction for natural sounding or hard-tuned vocal effects.

Parameter	Value Range	Default Value
Detection	Unworried, Default, Selective, Picky, Blind	Default
Voice Range	Very Low, Low, Mid, High, Very High	Mid
Key	A–G#	A
Scale	Major, Minor, Harm Minor, Melo Minor, Dorian, Phrygian, Lydian, Mixo, Locrian, Chromatic, Penta, Maj Triad, Min Triad, Root	Minor
Retune Time	1–1000 ms	32 ms
Reference	420.0–460.0 Hz	440.0 Hz

Plugins

Plugins included with your Force purchase are described below. For plugins purchases separately for use with Force, refer to the plugin's own User Guide.

Bassline

The AIR Bassline plugin emulates the sound of classic mono synths, with a contemporary twist.

Osc / Filter / Envelope

Use this tab to adjust the settings for the oscillators, as well as their filter and envelope settings.

Parameter		Description	Value Range
Oscillator	Waveform	Continuously variable waveshape for the oscillator.	Saw Octave, Saw, Square, Sine
	Sub-Octave	Amount of sub-octave oscillator.	0–100%
	Fifth	Amount of fifth-oscillator.	0–100%
	Start Phase	Position of the waveform when a note is triggered.	Free, 0 degr., 180 degr.
	Glide Time	Amount of time to slide from the pitch of one note to the next note played.	10.0 ms – 2.00 s
	Boost	Boosts the signal of the oscillator.	0.0 dB – 48.0 dB
	Boost Freq.	Center frequency of the boost.	* 1.0 – * 240.0
	Boost Envelope	Amount of effect of the envelope on the Boost section. Adjust **Gain** to control the amount of boost. Adjust **Frequency** to control the width of the boosted frequency.	Gain 100–0%, Off, Frequency 0–100%
Filter	LP Cutoff	Cutoff frequency for the low-pass filter.	20.0 Hz – 20.0 kHz
	Reso	Resonance of the filter.	0–100%
	Filter Env	Envelope of the filter. At negative values, decreases the cutoff value based on the filter decay value. At positive values, increases the cutoff value based on the filter decay value.	-100% – 0 – 100%
	HP Cutoff	Cutoff frequency for the high-pass filter.	10.0 Hz – 500 Hz
Envelope	Amp Attack	Length of time for the note to reach full volume.	100–0% Soft to 0–100% Hard
	Amp Decay	Length of time for the note to reach the sustained volume.	0–100%
	Filter Decay	Length of time for the filter to reset after being released.	0–100%
	Pitch Mod	Amount of pitch modulation applied to the envelope.	0–100%

Velocity / Global / Chorus

Use this tab to adjust the Velocity Control settings, and Global volume. You can also apply and adjust the settings for the built-in Chorus effect.

Parameter		Description	Value Range
Velocity	Amp Control	The amount of effect velocity has on amplitude control.	0–100%
	Filter Control	The amount of effect velocity has on filter control.	0–100%
	Boost Control	The amount of effect velocity has on boost control.	0–100%
	Env Retrigger	Sets whether the envelope will retrigger when a note is played while another note is being held.	Off, On
Global	Global Volume	Sets the volume level.	-inf dB – +6.0 dB
	Drive Type	Choose one of two drive algorithms.	Overdrive, Clip
	Drive Amount	Amount of drive applied.	0–100%
	Bend Range	Number of semitones up or down controlled by MIDI pitch bend messages	0–12
Chorus	Rate	Modulation speed of the chorus effect.	0.40 Hz – 3.20 kHz
	Depth	Modulation depth of the chorus effect.	0–100%
	Mix	Wet/dry amount of the chorus effect.	0–100%
	On/Off	Enables or disables the effect.	Off, On

Delay

Use this tab to apply and adjust the settings for the built-in delay effect.

Parameter	Description	Value Range
Time	Length of time of the delayed signal. When **Sync** is set to **Free:** When **Sync** is set to **Sync:**	 1 ms – 2.00 s 1/32 – 8/4
Sync	Set to **Free** to adjust **Time** by milliseconds, or set to **Sync** to match the Delay **Time** to the **Global Tempo**.	Free, Sync
Mix	Wet/dry amount of the delay effect.	0–100%
Feedback	Amount of signal fed back into the delay line.	0–100%
Damp	Center frequency of where the delay signal will be dampened.	1.00 – 20.0 kHz
Reso	Amount of resonance of the feedback signal.	0–100%
Reso Freq	Center frequency for feedback resonance.	100 Hz – 10.0 kHz
Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	L 50:100, R 50:100
HPF	Center frequency for delay signal high-pass filter.	20.0 Hz – 1.0 kHz
Width	Stereo width of delay signal. Higher values give wider stereo separation.	0–100%
On/Off	Enables or disables the effect.	Off, On

Compressor / Hype

Use this tab to apply and adjust the settings for the built-in Compressor and Hype effects.

Parameter		Description	Value Range
Compressor	Threshold	Signal level after which the compressor will be applied.	0.0 – -60. dB
	Ratio	Amount of compression applied.	1.0:1 – 100.0:1
	Output	Amount of additional output gain for the compressed signal.	0.0 – +30.0 dB
	Mix	Wet/dry mix of the compressor effect.	0–100%
	Knee	How gradually the compressor reacts as the threshold is reached. Lower values apply a "soft" knee (compression is applied more slowly as signal approaches the threshold), and higher values apply a "hard" knee (compression is immediately applied when the threshold is reached).	0–100%
	Attack	Length of time to apply the compression.	100 us – 300 ms
	Release	Length of time for compressed signal to return to original level.	10 ms – 4.00 s
	On/Off	Enables or disables the effect.	Off, On
Hype	High	Dampens or maximizes high end frequencies.	-100 – 0 – +100%
	Low	Dampens or maximizes low end frequencies.	-100 – 0 – +100%
	On/Off	Enables or disables the effect.	Off, On

Electric

The AIR Electric plugin emulates the sound of classic electric pianos.

While viewing any of the tabs listed below, you can quickly enable or disable the **Bell** and **Noise** sounds, as well as the built-in effects (**Tremolo**, **Tube**, **Chorus**, **Delay** and **Spring Reverb**).

When viewing a specific tab, you can enable or disable the sound or effect by pressing the circle in the upper-right corner of each section.

Pickup / Env

Use this tab to edit the settings for the emulated pickup and the sound envelope.

Parameter		Description	Value Range
Pickup	Type	Type of pickup emulated.	Pickup, 0–100% Electro-Static, 0–100% Electro-Magnetic
	Height	Height of the pickup to the tines.	0.0 – 5.0 mm
	Distance	Distance of the pickup to the tines.	0.1 – 10.0 mm
	Clip	Amount of clipping applied to the signal.	0–100%
	Keytrack	Ties the pickup parameters to the pitch being played. At higher values, the **Distance** is increased as the pitch is increased.	0–100%
Envelope	Attack	Length of time for the note to reach full volume.	100–0% Hard, 0–100% Soft
	Decay	Length of time for the note to reach the sustained volume.	100 ms – 20.0 s
	Release	Length of time for the note to become silent after being released.	100 ms – 5.0 s
	Peak Length	Length of time full volume is held before decaying.	3 – 50 ms
	Keytrack	Ties the envelope parameters to the pitch being played. At higher values, the envelope time is decreased as the pitch is increased.	0–100%

Bell / Noise

Use this tab to apply and adjust the settings for the Bell and Noise sounds.

Parameter		Description	Value Range
Bell	Tune	Pitch of the bell sound, in semitones above the root pitch.	0– 60 semitones
	Dry/PU	Mix of Dry versus Pickup signal for the bell sound.	-100% – 0% – +100%
	Volume	Level of the bell sound.	-inf dB – +6.0 dB
	Tune Keytrack	Ties the tuning of the bell sound to the pitches played.	0–100%
	Decay	How long it takes for the bell sound to dissipate	100 ms – 7.0 s
	Keytrack	Ties the amount of bell sound to the pitch being played. At negative values, the bell sound is increased as the pitch increases. At positive values, the bell sound is increased as the pitch decreases.	-100% – 0% – +100%
Noise	Freq	Center frequency of the noise effect	200 Hz – 16.0 kHz
	Random	Amount of randomization applied to the noise effect	0–100%
	Mix	Level of noise effect present	-inf dB – +6.0 dB
	Attack	Length of time for the noise effect to reach full level	1–50 ms
	Decay	Length of time for the noise effect to dissipate	100 ms – 3.00 s
	Keytrack	Ties the **Freq** to the pitch being played.	0–100%

Setup

Use this tab to adjust general settings for the plugin.

Parameter	Description	Value Range
Polyphony	Number of voices available.	1–16 Voices
Level	Overall level of the plugin.	-inf dB – +6.0 dB
Velo Level	Adjusts how much incoming velocity is applied.	0–100%
Velo Tone	Ties the incoming velocity to tone. At higher values, increased velocity increases tone brightness.	0–100%
Velo Attack	Ties the incoming velocity to the attack envelope. At higher values, low velocities feature longer attack times.	0–100%

Trem / Tube / Chorus

Use this tab to apply and adjust the settings for the built-in Tremolo, Tube (Over Drive), and Chorus effects.

Parameter		Description	Value Range
Tremolo	Rate	Modulation speed of the effect.	
		When **Sync** is set to **Free:**	0.25 – 13.00 Hz
		When **Sync** is set to **Sync:**	8/4 – 1/16
	Sync	Sync the Tremolo **Rate** to the **Global Tempo** or let it run **Free**.	Free, Sync
	Mode	Select **Pan** for stereo field modulation, or **Tremolo** for amplitude modulation.	Pan, Tremolo
	Depth	Amount of modulation applied.	0–100%
Tube	Drive	Amount of drive applied.	0–100%
	Headroom	Amount of gain reduction between the clean signal and the driven signal.	-30.0 – 0.0 dB
	Saturation	Amount of saturation applied.	0–100%
	Output	Output level of the tube driven signal.	-20.0 – 0.0 – +20.0 dB
Chorus	Rate	Modulation speed of the effect.	0.40 – 3.20 Hz
	Depth	Amount of pitch modulation of the effect.	0–100%
	Mix	Wet/dry amount of the chorus effect.	0–100%

Delay

Use this tab to apply and adjust the settings for the built-in Delay effect.

Parameter	Description	Value Range
Time	Amount of time between the dry signal and the delayed signal.	
	When **Sync** is set to **Free:**	1 ms – 2.00 s
	When **Sync** is set to **Sync:**	1/32 – 8/4
Sync	Sync the Delay **Time** to the **Global Tempo** or set to **Free** to adjust **Time** by milliseconds.	Free, Sync
Mix	Wet/dry amount of the delay effect.	0–100%
Feedback	Amount of signal fed back into the delay line.	0–100%
Damp	Center frequency of where the delay signal will be dampened.	1.00 – 20.0 kHz
Reso	Amount of resonance of the feedback signal.	0–100%
Reso Freq	Center frequency for feedback resonance.	100 Hz – 10.0 kHz
Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	L 50:100, R 50:100
HPF	Center frequency for delay signal high-pass filter.	20.0 Hz – 1.0 kHz
Width	Stereo width of delay signal. Higher values give wider stereo separation.	0–100%

Spring Reverb

Use this tab to apply and adjust the settings for the built-in Spring Reverb effect.

Parameter	Description	Value Range
Pre-Delay	Length of time between dry signal and reverberated signal.	0 ms – 250 ms
Time	Length of reverb tail.	1.0 – 10.0 s
Mix	Wet/dry amount of the reverb effect.	0–100%
Diffusion	Rate of increasing density of reverb reflections. At lower settings, the sound of individual reflections is more present. At higher settings, reflections are more uniform.	0–100%
Width	Stereo width of reverb signal. Higher values give wider stereo separation.	0–100%
Low Cut	Center frequency for reverb signal low-cut filter.	20.0 Hz – 1.00 kHz

Hype

The AIR Hype plugin is a modern style dual-oscillator synthesizer that includes a wide variety of built-in effects for endless combinations of sound, as well as convenient macro controls for lightning-fast adjustments.

Macro

Use this tab to adjust the macro settings for the plugin. You can access the Effect on/off switches in all tabs.

Parameter	Description	Value Range
Macros	These six macro controls are unique to each preset.	Varies
Cutoff	Amount of filter cutoff applied.	0–100%
Reso	Amount of filter resonance applied.	0–100%
Mod	Amount of modulation effect applied.	0–100%
Distortion	Amount of distortion effect applied.	0–100%
Delay	Amount of delay effect applied.	0–100%
Reverb	Amount of reverb effect applied.	0–100%
Pumper	Amount of pumper effect applied.	0–100%
Volume	Main output volume.	-inf – +6.0 dB

Filter / Amp

Use this tab to adjust the filter and amplitude envelope settings.

Parameter		Description	Value Range
Filter	Cutoff	Cutoff frequency for the filter.	0–100%
	Reso	Amount of resonance of the filter.	0–100%
Filter Envelope	Attack	Length of time for the filter to reach full level.	0–100%
	Decay	Length of time for the filter to reach sustain level.	0–100%
	Sustain	Length of time for the filter to hold sustain level.	0–100%
	Release	Length of time for the filter to dissipate when released.	0–100%
	Envelope Depth	Amount of Filter Envelope added to the filter cutoff.	0–100%
	Envelope Velocity	Amount of effect the note velocity has on the filter envelope.	0–100%
Amp	Spike	Applies additional velocity to the amplitude attack.	0–100%
	Spike Decay	Length of time for the Spike to decay.	0–100%
Amp Envelope	Attack	Length of time for the note to reach full level.	0–100%
	Decay	Length of time for the note to reach sustain level.	0–100%
	Sustain	Length of time for the note to hold sustain level.	0–100%
	Release	Length of time for the note to dissipate when released.	0–100%
	Fade	Amount added to the envelope sustain level.	0–100%
	Velocity	Amount of effect the note velocity has on the amplitude envelope.	0–100%

Effects 1

Use this tab to adjust the settings for the Low-Frequency Oscillator and Modulation, Distortion and Hype effects.

Parameter		Description	Value Range
LFO	Rate	Speed of the low frequency oscillator.	
		When **Sync** is set to **1st Note** or **Each Note**:	0.03 – 30.00 Hz
		When **Sync** is set to **Temp+Note** or **Tempo+Beat**:	8/4 – 1/64
	Sync	Enables or disables LFO sync, and sets how it is synced when enabled.	Off, 1st Note, Each Note, Tempo+Note, Tempo+Beat
	Depth	Amount of LFO modulation applied.	0–100%
Mod	Rate	Speed of modulation.	0.05 – 20.00 Hz
	Adjust	Length of time the wet signal is offset from the dry signal.	0.0 – 24.0 ms
	Depth	Amount of modulation applied.	0–100%
	Mix	Wet/dry mix of the modulation effect.	0–100%
Distortion	Drive	Amount of drive applied.	0–100%
	Bias	Emulates amount of voltage sent to a tube power-amp.	-100 – 0 – 100%
	Output	Output level of the distorted signal.	0–100%
	Mix	Wet/dry mix of the distortion effect.	0–100%
Hype	Low	Dampens or maximizes low end frequencies.	-12.0 – +12.0 dB
	Lo-Mid	Dampens or maximizes low-mid frequencies.	-20.0 – +20.0 dB
	Hi-Mid	Dampens or maximizes high-mid frequencies.	-20.0 – +20.0 dB
	High	Dampens or maximizes high end frequencies.	-12.0 – +12.0 dB

Effects 2

Use this tab to adjust the settings for the Delay, Reverb, Compressor, Pumper, and Limiter effects.

Parameter		Description	Value Range
Delay	Time	Amount of time between the dry signal and the delayed signal.	1/32 – 8/4
	Feedback	Amount of signal fed back into the delay line.	0–100%
	Freq	Adjusts the filter cutoff frequency of the delayed signal.	0–100%
	Mix	Wet/dry amount of the delay effect.	0–100%
	L/R	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	L 50:100 – R 100:50
Reverb	Pre-Delay	Length of time between dry signal and reverberated signal.	0.0 – 250.0 ms
	Time	Length of reverb tail.	0.0 – 30.0 s
	Mix	Wet/dry amount of the reverb effect.	0–100%
Compressor	Threshold	Signal level after which the compressor will be applied.	-30.0 – +10.0 dB
	Ratio	Amount of compression applied.	1.0:1 – 20.0:1
	Attack	Length of time to apply the compression.	0–100%
	Output	Amount of additional output gain for the compressed signal.	-20.0 – +20.0 dB
Pumper	Rate	Speed of the pumper effect.	Bar, 1/2 – 1/32T
	Depth	Amount of signal attenuation by the effect.	0–100%
	Release	Amount of time to release the effect.	0–100%
Limiter	Drive	Amount of drive added after the limiter effect.	0.0 – 32.0 dB

Setup

Use this tab to adjust the plugin setup parameters.

Parameter		Description	Value Range
Setup	Transpose	Transposition of the plugin, in semitones.	-36 – +36
	Tune	Fine tuning of the plugin, in cents.	-100 – +100
	Glide Time	Amount of time to slide from the pitch of one note to the next note played.	0 ms – 32 s
	Glide Mode	Enables or disables pitch gliding for all triggered notes or legato notes.	Off, Legato, On
	Mode	Sets the plugin to polyphonic or monophonic	Poly, Mono
	Del-Rev	Level of the delay and reverb signals.	-inf – +6.0 dB
	Volume	Overall level of the plugin.	-inf – +6.0 dB
MIDI Control			
Mod Wheel	Destination	Send Mod Wheel data to one of the following control destinations.	Pitch, Cutoff, Reso, Amp, Pan
	Depth	Amount of modulation applied. When **Destination** is set to **Pitch**: When **Destination** is set to **Cutoff**, **Reso**, **Amp** or **Pan:**	 -12.0 – +12.0 -100 – 0 – 100%
	LFO	Ties the modulation to the Control LFO.	Off, On
Aftertouch	Destination	Send Aftertouch data to one of the following control destinations.	Pitch, Cutoff, Reso, Amp, Pan
	Depth	Amount of modulation applied. When **Destination** is set to **Pitch**: When **Destination** is set to **Cutoff**, **Reso**, **Amp** or **Pan:**	0–100% -12.0 – +12.0 -100 – 0 – 100%
	LFO	Ties the modulation to the Control LFO.	Off, On
Control LFO	Sync	Enables or disables Control LFO sync, and sets how the Control LFO is synced when enabled.	Off, First Note, Each Note, BPM & Note, BPM & Beat
	Rate	Speed of modulation of the Control LFO. When **Sync** is set to **First Note** or **Each Note**: When **Sync** is set to **BPM & Note** or **BPM & Beat**:	 0.03 – 30.00 Hz 8/4 – 1/64
	Shape	Waveshape of the Control LFO.	Sine, Triangle, Sawtooth, Square, S&H Random, S&H Alternate, Random Drift, Slow Drift

TubeSynth

The AIR TubeSynth plugin emulates the sound of classic vintage anal
acclaimed AIR Vacuum Pro desktop synth plugin and also includes 5

Oscillator

Use this tab to adjust the settings for the two variable Oscillators and the Sub Oscillator.

Parameter		Description	Value Range
Oscillator 1	Octave	Coarse tuning of the oscillator by octaves. The **Wide** setting provides additional **Fine** tuning controls.	Wide, 32', 16', 8', 4', 2'
	Fine	Fine tuning of the oscillator by semitones. When **Octave** is set to **Wide**: When **Octave** is set to 32'–2':	 -70.00 – 0.00 – +70.00 -12.00 – 0.00 – +12.00
	Shape	Waveshape of Oscillator 1 (continuously variable)	Triangle, Saw, Square, Pulse
	F-Env➔Shape	Amount of Filter Envelope output subtracted from or added to the value defined by the Osc 1 **Shape** parameter.	-100 – 0 – +100%
	Quad	Enables or disables four-voice emulation for the oscillator.	Off, On
	Detune	Adjusts tuning of the additional **Quad** voices.	0–100%
Oscillator 2	Octave	Coarse tuning of the oscillator by octaves, all the way down to LFO speed.	LFO, 32', 16', 8', 4', 2'
	Fine	Fine tuning of the oscillator. When **Octave** is set to **LFO**: When **Octave** is set to 32'–2':	 0.01 – 20.00 Hz -12.00 – 0.00 – +12.00 semitones
	Shape	Waveshape of Oscillator 2 (continuously variable)	Noise, Saw, Square, Pulse
	F-Env➔Shape	Amount of Filter Envelope output subtracted from or added to the value defined by the Osc 2 **Shape** parameter.	-100 – 0 – +100%
	Sync	Enables of disables syncing of Oscillator 2 to Oscillator 1.	Off, On
	Micro Detune	Additional detuning of Oscillator 2.	0–100%
	Phase	Position of the waveshape when the sound is triggered.	0 – 360 degrees
Sub Oscillator	Shape	Waveshape of the sub oscillator (continuously variable).	Triangle, Saw, Square, Pulse

Mixer / Filter

Use this tab to control EQ for Oscillator 2, set the levels of the oscillators and effects, and edit the low-pass filter.

Parameter		Description	Value Range
Osc 2 EQ	Gain	Amount of gain applied to the selected **Frequency**.	-48 – 0 – +48 dB
	Frequency	Center frequency for the equalization band.	25 – 10,000 Hz
	Drive	Amount of drive added to the EQ signal.	0–100%
	Keytrack	Ties the EQ settings to the pitch being played	0–100%
Mixer	Osc 1	Level of Oscillator 1.	0–100%
	Osc 2	Level of Oscillator 2.	0–100%
	Sub Osc	Level of the Sub Oscillator.	0–100%
	Ring Mod	Level of Ring Modulation effect.	0–100%
	Drive	Level of Drive effect.	0–100%
LP Filter	Cutoff	Center frequency of the low-pass filter cutoff.	0–100%
	Reso	Amount of resonance of the low-pass filter.	0–100%
	Slope	Amount of attenuation applied above the cutoff frequency.	0 – 24 dB/oct
	Saturation	Amount of saturation applied to the low-pass filter.	0–100%
	Env	Percentage of the envelope output subtracted from or added to the LP Filter **Cutoff**.	-100 – 0 – +100%
	Keytrack	Ties the LP Filter **Cutoff** to the pitch being played.	0–100%

Envelope

Use this tab to adjust the various envelope settings.

Parameter		Description	Value Range
Filter Envelope	Attack	Length of time for the filter to reach full level.	1.00 ms – 100 s
	Decay	Length of time for the filter to reach sustain level.	1.00 ms – 100 s
	Sustain	Level that a sustained note is held at, as a percentage of the maximum level.	0–100%
	Release	Length of time for the filter to dissipate when released.	1.00 ms – 100 s
Amp Envelope	Attack	Length of time for the note to reach full level.	1.00 ms – 100 s
	Decay	Length of time for the note to reach sustain level.	1.00 ms – 100 s
	Sustain	Level that a sustained note is held at, as a percentage of the maximum level.	0–100%
	Release	Length of time for the note to dissipate when released.	1.00 ms – 100 s
Envelope 3	Start Level	Initial velocity level of the envelope.	0–100%
	Start Time	Length of time for the envelope to start.	0–5000 ms
	Slope Hold	Amount of Envelope subtracted from or added to the **Destination** when a note is held.	-100 – 0 – +100%
	Slope Rel	Amount of Envelope subtracted from or added to the **Destination** when a note is released.	-100 – 0 – +100%
	Destination	Where the envelope will be applied to.	Off, Pitch, Osc 2 Pitch, LFO 1/2 Rate, Osc1 Quad Det., Osc 1/2 Shape, Osc 1/2 Level, Ring Level

LFO

Use this tab to adjust the settings for the low-frequency oscillators.

Parameter		Description	Value Range
LFO 1/LFO 2	Shape	Waveshape of the low-frequency oscillator.	Sine, Square. Saw Up, Saw Down, Pump, S&H, Drift
	Destination	Where the low-frequency oscillator is sent.	
		LFO1:	Off, Pitch, Filter, Level, Pan
		LFO2:	Pitch, Osc 1/2 Shape, Osc 1/2 Pitch, LPF, Quad Detune, Osc 2 EQ Freq, Osc 2 EQ Gain, Ring Level
	Rate	Speed of modulation.	
		When **Sync** is **Off**:	0.01 – 20.00 Hz
		When **Sync** is **On**:	8/4 – 1/32
	Depth	Amount of modulation applied.	0–100%
	Fade	Apply a fade-in or fade-out of the LFO signal.	0.00 – 20.00 s out, No fade, 0.00 – 20.00 s in
	Sync	Sync the LFO **Rate** to the **Global Tempo** or turn **Off** to adjust **Rate** by Hertz.	Off, On
Modulation	Source	Where the modulation signal is sent from.	Filter Env, Amp Env, Osc 1, Osc 2
	Destination	Where the modulated signal is received.	Pitch, Osc 1/2 Shape, Osc 1/2 Pitch, LPF, Quad Detune, Osc EQ 2 Freq, Osc 2 EQ Gain, Ring Level
	Depth	Amount of modulation applied.	-100 – 0 – 100%

Setup

Use this tab to adjust plugin setup parameters.

Parameter		Description	Value Range
Controller Destinations			
	Velocity 1	Send Velocity data to one of the following control destinations.	Amp, Cutoff, Osc1 Shape, Osc2 Shape, Osc1&2 Shape
	Depth	Amount of modulation applied.	0–100%
	Velocity 2	Send Velocity data to one of the following control destinations.	Amp, Cutoff, Osc1 Shape, Osc2 Shape, Osc1&2 Shape
	Depth	Amount of modulation applied.	0–100%
	Modwheel	Send Modwheel data to one of the following control destinations.	Amp, Cutoff, Osc1 Shape, Osc2 Shape, Osc1&2 Shape
	Depth	Amount of modulation applied.	-100 – 0 – 100%
	Aftertouch	Send Aftertouch data to one of the following control destinations.	LFO 1 Depth, Cutoff, Osc1 Shape, Osc2 Shape, Osc1&2 Shape
	Depth	Amount of modulation applied.	-100 – 0 – 100%
Setup	Polyphony	Number of allowable voices, and how voices are triggered.	Legato, Retrigger, 2, 3, 4
	Bend Range	Number of semitones up or down controlled by MIDI pitch bend messages	2–12 (semitones)
	Glide Time	Amount of time to slide from the pitch of one note to the next note played.	1.00 ms – 100 s
	Glide All	Enables or disables pitch gliding for all triggered notes, not just legato notes.	Off, On
	Detune	Amount of detuning applied. This setting is only applied when **Doubling** is enabled.	0–100%
	Doubling	Enables or disables voice doubling.	Off, On
Output	Shape	Amount of signal sent to a Tube Drive.	0–100%
	Width	Stereo width of the audio signal. Higher values give wider stereo separation.	0–100%
	Level	Overall output volume of the plugin.	-inf dB – +12.0 dB

Chorus

Use this tab to apply and adjust the settings for the built-in Chorus effect.

Parameter	Description	Value Range
Rate	Modulation speed of the effect.	0.01 – 10.0 Hz
Delay	Length of time the wet signal is offset from the dry signal.	0.00 – 24.00 ms
Voices	Number of voices used in the chorus effect.	3, 4, 6
LFO Wave	Waveshape of the low-frequency oscillator for the chorus effect.	Tri, Sine
Depth	Amount of pitch modulation of the effect.	0.00 – 24.00 ms
Width	Stereo width of the chorus effect. Higher values give wider stereo separation.	0–100%
Lo Cut	Center frequency for the chorus low-cut filter.	20.0 Hz – 1.0 kHz
Mix	Wet/dry amount of the chorus effect.	0–100%

Delay

Use this tab to apply and adjust the settings for the built-in delay effect.

Parameter	Description	Value Range
Time	Length of time between the dry signal and the delayed signal. When **Sync** is set to **Free:** When **Sync** is set to **Sync:**	 1 ms – 2.00 s 1/32 – 8/4
Sync	Enable to sync the Delay **Time** to the **Global Tempo**, disable to set the **Time** in milliseconds.	Off, On
Feedback	Amount of delay signal fed back into the delay line.	0–100%
Mix	Wet/dry amount of the delay effect.	0–100%
Damp	Center frequency of where the delayed signal will be dampened.	1.00 – 20.0 kHz
Reso	Amount of resonance of the feedback signal.	0–100%
Reso Freq	Center frequency for feedback resonance.	100 Hz – 10.0 kHz
Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	L 100:50, R 50:100
HPF	Center frequency for delay signal high-pass filter.	20.0 Hz – 1.0 kHz
Width	Stereo width of delay signal. Higher values give wider stereo separation.	0–100%

Reverb / Compressor / Hype

Use this tab to apply and adjust the settings for the built-in Reverb, Compressor and Hype effects.

Parameter		Description	Value Range
Reverb	Mode	Type of reverb applied.	Hall, Stadium, Room, Abstract
	Time	Length of reverb tail.	0.4 s – +inf s
	Lo Cut	Center frequency for the reverb low-pass filter.	1 – 1000 Hz
	Hi Cut	Center frequency for the reverb high-pass filter.	1.0 – 20.0 kHz
	Mix	Wet/dry mix of the reverb effect.	0–100%
Compressor	Threshold	Signal level after which the compressor will be applied.	0.0 – -60. dB
	Output	Amount of additional output gain for the compressed signal.	0.0 – +30.0 dB
	Mix	Wet/dry mix of the compressor effect.	0–100%
	Ratio	Amount of compression applied.	1.0:1 – 100.0:1
	Knee	How gradually the compressor reacts as the threshold is reached. Lower values apply a "soft" knee (compression is applied more slowly as signal approaches the threshold), and higher values apply a "hard" knee (compression is immediately applied when the threshold is reached).	0–100%
	Attack	Length of time to apply the compression.	100 us – 300 ms
	Release	Length of time for compressed signal to return to original level.	10 ms – 4.00 s
Hype	High	Dampens or maximizes high end frequencies.	-100 – 0 – +100%
	Low	Dampens or maximizes low end frequencies.	-100 – 0 – +100%

DrumSynth

The AIR DrumSynth plugins emulate the sound of classic drum machines and feature multiple synthesis types, advanced modeling and carefully crafted, built-in effects to create powerful contemporary drum sounds.

You can add the following drum types as individual plugins per track: **Clap**, **Crash**, **HiHat**, **Kick**, **Perc**, **Ride**, **Snare** and **Tom**. Each of these instruments has comprehensive synthesis and effects sections described below.

In each plugin, you can quickly enable or disable the built-in effects (**Transient**, **Distortion**, **EQ** and **Compressor**) while viewing any of the tabs listed below by tapping the buttons on the right side of the touchscreen under **FX**.

Drum Sound

Use this tab to adjust the basic settings for the drum sound. You can also use the knobs on this tab to quickly adjust up to eight parameters specifically chosen for each sound.

Parameter		Description	Value Range
Model		Type of drum sound emulated.	Varies
One-Shot		Allows the drum sound to play entirely when triggered or only for how long the note length is set.	Enabled, Disabled
Velocity		Amount of incoming Velocity applied. When set to 0, all notes will sound as if Full Level.	0–100%
Velocity 2		Amount of additional Velocity envelope that can be used to control a parameter.	-100 – 0 – +100%
	Target	Select the Parameter where the Velocity 2 information is sent.	Param 1–8
Gain		Volume level of the drum sound.	-Inf, -68.0 – 0 – +12.0 dB
Parameter Knobs		Each drum sound has up to eight associated parameters that can be used to further shape the sound. The available parameters vary based on the type of drum sound selected. Use the knobs to adjust the selected parameter.	Varies

Trans/Dist

Use this tab to adjust the settings for the Transient and Distortion effects.

Parameter		Description	Value Range
Transient	Attack	Decreases or increases the amount of transient attack applied to the signal.	-100 – 0 – +100%
	Shape	Adjusts the shape of the processed transient.	0–100%
	Sustain	Percentage of sustain envelope subtracted from or added to the transient effect.	-100 – 0 – +100%
Distortion	Pre-Shape	Increases or decreases the high-end tone of the incoming audio signal pre-distortion.	-100 – 0 – +100%
	Drive	Amount of drive applied.	0–60 dB
	Threshold	Signal level after which the distortion will be applied.	-20.0–0.0 dB FS
	High Cut	Center frequency of the distortion signal high-cut filter.	1.00–20.0 kHz
	Mix	Wet/dry amount of the distortion effect.	0–100%

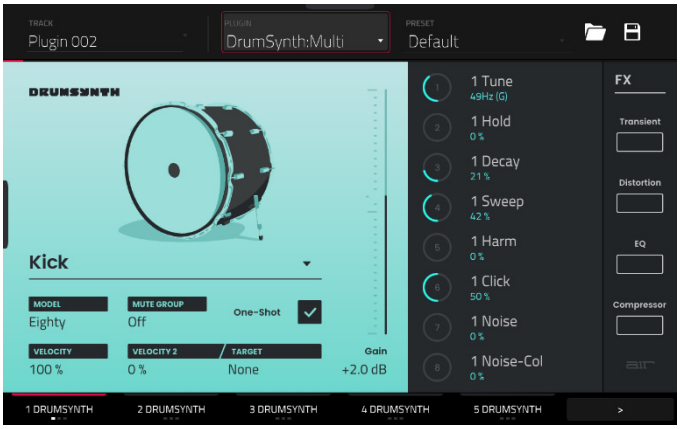
EQ/Comp

Use this tab to adjust the settings for the EQ and Compressor effects.

Parameter		Description	Value Range
EQ	High Freq	Center frequency for the High EQ band.	1.20 – 20.0 kHz
	High Gain	Amount of gain applied to the High EQ band.	Cut, -12.0 – 0 – +12.0 dB
	High Mid Freq	Center frequency for the High Mid EQ band.	120 Hz – 16.0 kHz
	High Mid Q	Width of the High Mid EQ band.	0.40–10.00
	High Mid Gain	Amount of gain applied to the High Mid EQ band.	-18.0 – 0 – +18.0 dB
	Low Mid Freq	Center frequency for the Low Mid EQ band.	40.0 Hz – 8.00 kHz
	Low Mid Q	Width of the Low Mid EQ band.	0.40–10.00
	Low Mid Gain	Amount of gain applied to the Low Mid EQ band.	-18.0 – 0 – +18.0 dB
	Low Freq	Center frequency for the Low EQ band.	20.0 Hz – 1.00 kHz
	Low Gain	Amount of gain applied to the Low EQ band.	Cut, -12.0 – 0 – +12.0 dB
Compressor	Ratio	Amount of compression applied.	1.0:1 – 100.0:1
	Attack	Length of time to apply the compression.	100 us – 300 ms
	Threshold	Signal level after which the compressor will be applied.	-60.0–0.0 dB
	Output	Amount of additional output gain for the compressed signal.	0.0–30.0 dB

You can also use the **DrumSynth:Multi** plugin to access all DrumSynth sounds from one plugin, which includes additional dedicated effects and mixing controls.

Note: You can only have one DrumSynth:Multi plugin active per project.



DrumSynth 1–8 / Trans/Dist / EQ/Comp

Use the first eight tabs in the Multi to control the same parameters as the individual DrumSynth plugins. Tap each tab to cycle between the ***Drum Sound*** view, the ***Trans/Dist*** view, and the ***EQ/Comp*** view.

Send FX

Use this tab to adjust the settings for the Delay, Diffuser and Reverb effects.

Parameter		Description	Value Range
Delay	Time	Length of time between the dry signal and the delayed signal.	1/32 – 8/4
	Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	L 100:50, R 50:100
	Feedback	Amount of delay signal fed back into the delay line.	0–100%
	Filter Freq	Sets the center frequency of the filtered delay signal.	1.00 – 20.0 kHz
	Reso	Amount of resonance of the feedback signal.	0–100%
	Reso Freq	Center frequency for feedback resonance.	100 Hz – 10.0 kHz
Diffuser	Delay	Delay time between the dry signal and the diffused signal.	1/64 – 4/4
	Feedback	Amount of diffused signal sent back into the delay line.	0–100%
	Diffusion	Rate of increasing density of reverb reflections. At lower settings, the sound of individual reflections is more present. At higher settings, reflections are more uniform.	0–100%
	Bright	Adjusts the high-end tone of the diffused signal.	0–100%
Reverb	Mode	Type of reverb applied.	Hall, Stadium, Room, Abstract
	Time	Length of reverb tail.	0.4 s – +Inf s
	Low Cut	Center frequency for the reverb low-pass filter.	1 – 1000 Hz
	High Cut	Center frequency for the reverb high-pass filter.	1.00 – 20.0 kHz

Mixer / FX / Sends

Use this tab to mix the individual drum sounds as well as control their effects. The **Mixer / FX / Sends** tab contains three different views that can be accessed by tapping the tab at the bottom of the display.

Use the **Mixer** view to adjust the volume, panning, muting, and soloing for each drum.

Tap the **1**–**8** icons to mute or unmute the selected drum.

Tap the **S** icon to solo the selected drum.

Tap and drag the **pan slider** to adjust the drum panning. Alternatively, tap the slider and use the encoder, or use the appropriate knob in Screen mode.

Tap and drag the **volume slider** to adjust the drum volume. Alternatively, tap the slider and use the encoder, or use the appropriate knob in Screen mode.

Use the **FX** view to enable or disable the Transient, Distortion, EQ and Compressor effects for each drum sound.

Tap the **FX box** to enable or disable the selected FX on the selected drum.

Use the **Sends** view to adjust the send levels for the Delay, Diffuser and Reverb Send FX.

Tap and drag the **Send knob** to adjust the send level for the selected effect on the selected drum. Alternatively, tap the knob and use the encoder, or use the appropriate knob in Screen mode.

Mellotron

The AIR Mellotron plugin is a software recreation of the classic tape keyboard, including reproductions of the original tape samples in both clean and dirty versions.

Model

Use this tab to adjust the settings for the tape sample.

Parameter	Description	Value Range
Sample	Select the tape loop sample.	8 Voice Choir, Boys Choir, Flute, Violins 1, Violins 2, Violin
Clean	Enables or disables a cleaner sample sound.	Off, On
Formant	Decreases or increases the harmonic resonance of the formant frequency.	-12 – 0 – +12
Age	Amount of sound degradation applied.	0–100%
Smpl Start	Starting point of the tape loop sample.	0–100%
Cutoff	Amount of filter cutoff applied.	0–100%
Attack	Length of time for the sound to reach full level.	0 ms – 32 s
Release	Length of time for the sound to dissipate when the note is released.	0 ms – 32 s
Vel > Amp	The amount of effect velocity has on amplitude control.	0–100%
MW Vib	Amount of vibrato applied from the mod wheel.	0–100%
AT Vib	Amount of vibrato applied from aftertouch.	0–100%
Vib Speed	Modulation speed of the vibrato effect.	0.03 – 30.00 Hz
Key On	Enables or disables key action noise on note on.	Off, On
Key Off	Enables or disables key action noise on note off.	Off, On
On Vol	Amount of key-on noise.	0–100%
Off Vol	Amount of key-off noise.	0–100%
Smpl Poly	Number of voices available.	1–40
Level	Overall level of the plugin.	0–100%

Flavor / Compressor / EQ

Use this tab to adjust the settings for the flavor, compressor, and EQ effects. Each effect can be turned on and off by using the buttons on the right side.

Parameter		Description	Value Range
Flavor		Use the button in the upper-right corner to enable or disable the flavor effect.	Off, On
	Timbre	Selects an emulation type to color the sound.	Varies
	Timbre Depth	Amount of timbre emulation applied to the sound.	0–100%
	Flutter	Amount of speed fluctuation of the sound playback.	0–100%
	Vinyl Distortion	Amount of vinyl distortion noise applied to the signal.	0–100%
	Vinyl Noise	Amount of vinyl noise such as clicks and pops applied to the signal.	0–100%
Compressor		Use the button in the upper-right corner to enable or disable the compression effect.	Off, On
	Threshold	Signal level after which the compressor will be applied.	-30.0 – 0.0 – +10.0 dB
	Ratio	Amount of compression applied.	1.0:1 – 20.0:1
	Attack	Length of time to apply the compression.	0–100%
	Makeup	Amount of additional output gain for the compressed signal.	-20.0 – 0.0 – +20.0 dB
EQ		Use the button in the upper-right corner to enable or disable the EQ effect.	Off, On
	Low	Amount of attenuation or boost applied to the low frequency band.	-12.0 – 0.0 – +12.0 dB
	Low Mid	Amount of attenuation or boost applied to the low-mid frequency band.	-20.0 – 0.0 – +20.0 dB
	High Mid	Amount of attenuation or boost applied to the high-mid frequency band.	-20.0 – 0.0 – +20.0 dB
	High	Amount of attenuation or boost applied to the high frequency band.	-12.0 – 0.0 – +12.0 dB

Delay / Spring Reverb

Use this tab to adjust the settings for the delay and spring reverb effects. Each effect can be turned on and off by using the buttons on the right side.

Parameter		Description	Value Range
Delay		Use the button in the upper-right corner to enable or disable delay.	Off, On
	Time	Amount of time between the dry signal and the delayed signal.	1/16 – 16/4
	L/R Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	50:100 – 100:100 – 100:50
	Feedback	Amount of signal fed back into the delay line.	0–100%
	Mix	Wet/dry amount of the delay effect.	0–100%
	Reso LP Freq	Low pass frequency for feedback resonance.	100 – 16000 Hz
	Reso Bell Freq	Center frequency for feedback resonance.	100 – 16000 Hz
	Reso Bell Gain	Amount of gain applied to the resonant frequency.	0–100%
Spring Reverb		Use the button in the upper-right corner to enable or disable the spring reverb effect.	Off, On
	Pre-Delay	Length of time between dry signal and reverberated signal.	0 – 250 ms
	Time	Length of reverb tail.	1.00 – 10.00 s
	Low Cut	Center frequency for reverb signal low-cut filter.	20 – 1000 Hz
	Diffusion	Rate of increasing density of reverb reflections. At lower settings, the sound of individual reflections is more present. At higher settings, reflections are more uniform.	0–100%
	Width	Stereo width of reverb signal. Higher values give wider stereo separation.	0–100%
	Mix	Wet/dry amount of the reverb effect.	0–100%

Solina

The AIR Solina plugin is a software recreation of the classic string synthesizer.

Ensemble

Use this tab to adjust the voice and ensemble settings.

Parameter	Description	Value Range
Voice	Click each button to enable or disable the selected voice.	Contra Bass, Cello, Viola, Violin, Trumpet, Horn
Voice Volume	Volume of the selected voice.	-Inf – 0 – +12
Voice Panning	Stereo panning of the selected voice.	L64 – C – R64
Voice Octave	Octave adjustment for the selected voice.	-2, -1, 0 (Contra Bass) 0, +1, +2 (Violin) -1, 0, +1 (All others)
Ensemble	Enables or disables the ensemble effect.	Off, On
Bass Volume	Adjusts the volume of the bass voices.	0–100
Dual	When enabled, both bass and upper voices will play on every key, regardless of the octave. When disabled, the voices will be split so that the bass voices play on lower octaves and the upper voices play on higher octaves.	Off, On
Upper Volume	Adjusts the volume of the upper voices.	0–100
Level	Overall level of the plugin.	0–100%

Sound

Use this tab to adjust additional settings for the plugin sound.

Parameter	Description	Value Range
Crescendo	Length of time for the sound to reach full volume.	0 ms – 32 s
Sustain	Length of time for the sound to remain playing after the key is released.	0 ms – 32 s
Formant	Decreases or increases resonant frequencies to adjust the timbre of the sound.	-12 – 0 – +12
Filter	Adjusts the low-pass filter frequency.	0–100%
Age	Amount of detuning and drift applied.	0–100%
Velocity to Amp	The amount of effect velocity has on amplitude control.	0–100%
MW Vibrato	Amount of vibrato applied from the mod wheel.	0–100%
AT Vibrato	Amount of vibrato applied from aftertouch.	0–100%
Vibrato Speed	Modulation speed of the vibrato effect.	1.00–30.00 Hz
Sample Poly	Number of voices available.	1–50

Flavor

Use this tab to adjust the settings for the flavor and vinyl effects.

Parameter		Description	Value Range
Flavor		Enables or disables the flavor effect.	Off, On
	Timbre	Selects an emulation type to color the sound.	Varies
	Timbre Depth	Amount of timbre emulation applied to the sound.	0–100%
	Vinyl Distortion	Amount of vinyl distortion noise applied to the signal.	0–100%
	Vinyl Noise	Amount of vinyl noise such as clicks and pops applied to the signal.	0–100%
	Flutter	Amount of speed fluctuation of the sound playback.	0–100%
	Monofy	Reduces the stereo spread.	0–100%

Chorus / EQ

Use this tab to adjust the settings for the chorus and EQ effects. Use the buttons on the right side to enable or disable each effect.

Parameter		Description	Value Range
Chorus	Rate	Modulation speed of the chorus effect.	0.05 – 20 Hz
	Depth	Modulation depth of the chorus effect.	0–100%
	Tone	Decreases or increases the brightness of the chorus effect.	-100 – 0 – +100%
	Mix	Wet/dry amount of the chorus effect.	0–100%
EQ	Low	Amount of attenuation or boost applied to the low frequency band.	-12.0 – 0.0 – +12.0 dB
	Low Mid	Amount of attenuation or boost applied to the low-mid frequency band.	-20.0 – 0.0 – +20.0 dB
	High Mid	Amount of attenuation or boost applied to the high-mid frequency band.	-20.0 – 0.0 – +20.0 dB
	High	Amount of attenuation or boost applied to the high frequency band.	-12.0 – 0.0 – +12.0 dB

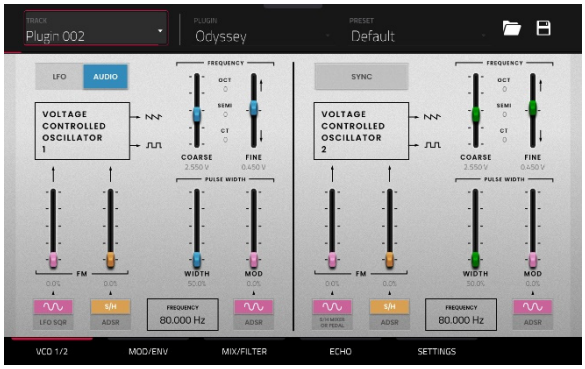
Delay / Spring Reverb

Use this tab to adjust the settings for the delay and spring reverb effects. Use the buttons on the right side to enable or disable each effect.

Parameter		Description	Value Range
Delay	Time	Amount of time between the dry signal and the delayed signal.	1/16 – 16/4
	L/R Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	50:100 – 100:100 – 100:50
	Feedback	Amount of signal fed back into the delay line.	0–100%
	LP Freq	Low pass frequency for feedback resonance.	100 – 16000 Hz
	Bell Freq	Center frequency for feedback resonance.	100 – 16000 Hz
	Bell Gain	Amount of gain applied to the resonant frequency.	0–100%
	Mix	Wet/dry amount of the delay effect.	0–100%
Spring Reverb	Pre-Delay	Length of time between dry signal and reverberated signal.	0 – 250 ms
	Time	Length of reverb tail.	1.00 – 10.00 s
	Low Cut	Center frequency for reverb signal low-cut filter.	20 – 1000 Hz
	Diffusion	Rate of increasing density of reverb reflections. At lower settings, the sound of individual reflections is more present. At higher settings, reflections are more uniform.	0–100%
	Width	Stereo width of reverb signal. Higher values give wider stereo separation.	0–100%
	Mix	Wet/dry amount of the reverb effect.	0–100%

WayOutWare Odyssey

The WayOutWare Odyssey plugin is a software recreation of the classic analog synthesizer that captures the character and nuance of the original Odyssey using WayOutWare's experience and expertise in circuit modeling and signal processing.



VCO 1/2

Use this tab to adjust the settings for the voltage-controlled oscillators.

Parameter		Description	Value Range
LFO/Audio		When set to **Audio**, standard pitches will be produced as indicated by the **Oct**, **Semi** and **CT** values for the Frequency setting. When set to **LFO**, the VCO will be controlled by an LFO and may be used for modulating VCO2.	LFO, Audio
Frequency		Determines the pitch adjustment for the oscillator. The total frequency range depends on the **LFO/ Audio** setting, and is shown at the bottom of this section.	0.174 – 1478.852 Hz
	Coarse	Coarse pitch adjustment.	-0.200 – 6.333 V
	Fine	Fine pitch adjustment.	0.000 – 0.875 V
VCO 1 FM	Source 1 Waveform	Type of frequency modulation waveform applied by the LFO.	LFO Sine, LFO Square
	Depth 1	Depth of frequency modulation.	0.0–100.0%
	Source 2	Determines the frequency modulation source.	S/H, ADSR
	Depth 2	Depth of Source 2 modulation.	0.0–100.0%
VCO 1 Pulse Width	Width	Width of pulse width modulation.	50.0–90.0%
	Mod	Depth of pulse width modulation.	0.0–100.0%
	Source	Determines the pulse width modulation source.	LFO Sine, ADSR
Sync		Determines whether VCO 2 is synced with the frequency of VCO 1. When disabled, you can use both VCOs to produce separate pitches.	Off, On
Frequency		Pitch adjustment for the oscillator.	8.706 – 1478.852 Hz
	Coarse	Coarse pitch adjustment.	-0.200 – 6.333 V
	Fine	Fine pitch adjustment.	0.000 – 0.875 V
VCO 2 FM	Source 1	Type of modulation source. When S/H Mixer or Pedal is selected, the modulation can be controlled by the Sample and Hold mixer or by an optional external expression pedal.	LFO Sine, S/H Mixer or Pedal
	Depth 1	Depth of Source 1 modulation.	0.0–100.0%
	Source 2	Type of modulation source.	S/H, ADSR
	Depth 2	Depth of Source 2 modulation.	0.0–100.0%
VCO 2 Pulse Width	Width	Width of pulse width modulation.	50.0–90.0%
	Mod	Depth of pulse width modulation.	0.0–100.0%
	Source	Type of source for pulse width modulation.	LFO Sine, ADSR

Mod/Env

Use this tab to adjust the settings for the low frequency oscillator, sample and hold generator, and envelope generator.

Parameter		Description	Value Range
LFO	LFO Tempo Sync	Determines whether LFO speed is free floating or synced to project tempo.	Off, On
	LFO Speed	Speed of the low frequency oscillator. When **Sync** is **Off**: When **Sync** is **On**:	 0.0925 – 20.0000 Hz 4/4 – 1/64 beats
Sample/Hold	Trigger	Determines the source signal for triggering the Sample and Hold mixer, either the Low Frequency Oscillator or the pitched Keyboard output.	LFO Trigger, Kybd Trigger
	Source 1	Selects the VCO-1 waveform or pulse width modulation as Sample and Hold input.	Saw, Pulse
	Source 2	Selects a noise generator or the VCO-2 pulse width modulation as Sample and Hold input.	Noise, Pulse
	VCO-1	Level of the VCO-1 input.	0.0–100.0%
	Depth	Level of the noise or VCO-2 input.	0.0–100.0%
	Lag	Adjusts the smoothing of the Sample and Hold output voltage.	0.0–100.0%
AR	Attack	Attack time of the AR envelope generator.	0.003 – 10.000 seconds
	Release	Release time of the AR envelope generator.	0.003 – 10.000 seconds
	Trigger Source	Determines the input source sent to the AR envelope generator. When set to **KYBD Gate**, the envelope generator is triggered by key input. When set to **LFO Repeat**, the envelope generator is trigger by the LFO pulse wave.	KYBD Gate, LFO Repeat
ADSR	Attack	Attack time of the ADSR envelope generator.	0.003 – 10.000 seconds
	Decay	Decay time of the ADSR envelope generator.	0.003 – 10.000 seconds
	Sustain	Sustain time of the ADSR envelope generator.	0.000 – 10.000 V
	Release	Release time of the ADSR envelope generator.	0.003 – 10.000 seconds
	Trigger Source	Type of input to trigger the envelope generator.	KYBD Gate, LFO Repeat
	Repeat	When **Trigger Source** is set to **LFO Repeat**, select **KYBD Repeat** for the LFO to trigger only when a key is pressed, or select **Auto Repeat** for the LFO to trigger automatically without key input.	KYBD Repeat, Auto Repeat

Mix/Filter

Use this tab to adjust the audio mixing and routing, as well as adjust the voltage-controlled filter, high-pass filter, and voltage-controlled amplitude.

Parameter		Description	Value Range
VCF	VCF Cutoff	Cutoff frequency of the filter.	0.680 – 10.645 V, or 16.02 - 16012.70 Hz
	VCF Res	Resonance of the filter.	0.000 – 0.800 Q
Audio Mixer	Noise/Ring Mod	Select the noise generator or ring modulation input for the mixer.	Noise, Ring Mod
	Noise/Ring Mod Level	Level of the noise generator or ring modulation into the mixer.	0.0–100.0%
	VCO-1 Input	Select the VCO-1 input type for the mixer.	Saw, Pulse
	VCO-1 Level	Level of VCO-1 into the mixer.	0.0–100.0%
	VCO-2 Input	Select the VCO-2 input type for the mixer.	Saw, Pulse
	VCO-2 Level	Level of VCO-2 into the mixer.	0.0–100.0%
VC Filter	VCO-1 Filter Modulation Source	Set the input source for VCO-1 filter modulation. Select **KYBD CV** to use key input as the source. Select **S/H Mixer or Pedal** to use the Sample and Hold generator or optional external pedal.	KYBD CV, S/H Mixer or Pedal
	CV Modulation Level	Level of VCO-1 filter modulation.	0.0–100.0%
	VCO-2 Filter Modulation Source	Set the input source for VCO-2 filter modulation.	S/H, LFO Sine
	CV Modulation Level	Level of VCO-2 filter modulation.	0.0–100.0%
HP Filter	Filter Modulation Source	Select which envelope generator to use as a filter modulation source.	ADSR, AR
	CV Filter Modulation Level	Amount of envelope filter modulation applied to the VC Filter.	0.0–100.0%
	HPF Cutoff	Cutoff frequency of the high-pass filter.	0.680 – 10.645 V, or 16.02 - 16012.70 Hz
VC Amp	Mod Source	Select which envelope generator to use as an amplitude modulation source.	ADSR, AR
	Mod	Amount of envelope modulation applied to the output signal.	0.0–100.0%
	VCA Gain	Amount of gain applied to the VC Amp.	0.0–100.0%

Echo
Use this tab to adjust the settings for the tape echo effect.

Parameter		Description	Value Range
Delay		Use the switch in the bottom-left corner to enable or disable the delay effect.	Off, On
	Sync	Enable to sync the **Echo Time** to the **Global Tempo**, or disable to adjust the **Echo Time** by milliseconds.	Off, On
	Sustain	Length of time that the echo continues playing.	0.0–100.0%
	Echo Mix	Adjusts the wet/dry amount between the original sound and the echo.	100% Synth – 50/50% – 100% Echo
	Echo Time	Amount of time between the dry signal and the delayed signal. Use the slider or the Echo Time field to change the value. When **Sync** is **Off**: When **Sync** is **On**:	 0.02 – 5.00 seconds 1/64 – 4/4

Settings

Use this tab to adjust general settings such as voice count, portamento and performance parameters.

Parameter		Description	Value Range
Voice Count		Number of voices available. When set to Duo, each VCO controls a separate note.	Duo, 2–4
Portamento		Length of time to slide between notes.	0.000 – 1.500 seconds
	Exp Pedal	Enables or disables the use of an expression pedal to control portamento.	Off, On
	Footswitch	Enable or disables the use of a footswitch to activate portamento.	Off, On
Transpose		Amount of transposition applied to the keyboard.	-2, 0, +2 octaves
Noise		Type of noise used for the noise generator.	White, Pink
Performance Velocity Depth	MW Vib LFO	Amount of vibrato LFO applied by the mod wheel.	0.0–100.0%
	MW PWM	Amount of pulse width modulation applied by the mod wheel.	0.0–100.0%
	KYBD Filter	Amount that the filter is tied to the pitch being played.	0.0–100.0%
	KYBD Amp	Amount that the amplitude is tied to the pitch being played.	0.0–100.0%

MPC Instrument Collection

The following additional plugins may be purchased from **thempcstore.com** for use with your Force:

AIR OPx-4 is the brand-new four operator FM powerhouse, delivering the ultimate in FM synthesis sound shaping. The instrument includes:

- Advance FM Synthesis: Four Operators, each capable of producing complex waveforms through feedback, formant shaping, FM filtering and FM shaping parameters.
- Dual-mode filter path with 23 different filter types.
- Six envelopes with tempo-synchronized looping.
- Two LFOs and two Ramps.
- Three insert effect slots and two global effect slots, with a huge library of 27 AIR effects including reverbs, delays, modulations, and distortions.
- Modulation Matrix with 32 slots.
- Sample layer for adding percussive attacks.
- Over 670 factory presets included.

AIR Stage Piano is the brand-new flagship acoustic piano instrument. With an elegant interface, you can tweak the sound of each piano model to your taste by changing the dynamics, age, and formants of the piano timbre and adjust note release samples and sustain resonance to increase realism. From the depth and richness of a concert grand to the upright jazz feel of the most vibrant club, Stage Piano and its inspiration selection of carefully crafted presets are perfect for capturing the moment. The instrument includes:

- Advanced acoustic piano sound engine
- Up to six velocity layers.
- Four multi-sampled acoustic pianos: Yamaha C7, Steinway D, Bechstein Upright, and Workstation.
- Sympathetic resonance.
- Hammer fall and staccato release layers.
- Equal and stretched tunings.
- Five built-in AIR effects: Flavor, Compressor, EQ, Delay, and Reverb.

AIR Stage EP is the brand-new flagship electric piano instrument, delivering the lush and rich sounds of the most desirable electric pianos at your fingertips. Stage EP includes five detailed electric piano models, including acoustic mechanics and an FM tine synth, to capture the magic and warm smoothness of the originals, while also adding the full spectrum of modern and classic electronic sounds. This instrument includes:

- Advanced electric piano sound engine.
- Up to twelve velocity layers.
- Five multi-sampled electric pianos: Rhodes, Rhodes Hot, Suitcase, Wurlitzer, Pianet.
- Acoustic and FM mechanics layer.
- Seven built-in AIR effects: Chorus, Tremolo, Amp Sim, Compressor, EQ, Delay, and Reverb.

AIR Studio Strings is the brand-new orchestral strings instrument, bringing the rich and elegant sounds of orchestral, chamber, and solo strings inside your Force. Create beautifully articulated masterpieces from a powerful sampled library featuring combined and individual strings, including Violin, Cello, Bass, and Viola.

This instrument includes:

- Advanced four-part, sample-based string ensemble engine.
- Orchestral, chamber, and solo sample sets.
- Unique intelligent legato engine.
- Four built-in AIR effects: Flavor, EQ, Delay, and Reverb.

AIR Organ is the brand-new organ instrument for Force, delivering advanced drawbar organ additive synthesis for every musical occasion. With ten incredible tonewheel sets, all gathered from authentic vintage organs, and the award-winning rotary speaker simulation from AIR DB33, AIR Organ will bring you a rich, expressive experience in a stunning user interface.

This instrument includes:

- Advanced drawbar organ additive synthesis engine.
- 10 different drawbar models sampled from vintage organs.
- Percussion layer and key click sounds.
- Scanner vibrato.
- Four built-in AIR effects: Rotary, EQ, Delay, and Reverb.

AIR Mini D is a four-voice poly synth based on the classic American synthesizer legend. A painstakingly-modeled oscillator section includes eight authentic oscillator waveforms and multiple LFO shapes with 19 sections, including ramps, sine, square, triangle, random, and steps. Ladder and modern style filters feature cutoff, resonance, and contour controls, along with a dedicated feedback path. A built-in creative effects chain allows you to apply EQ, Chorus, and Delay to further sculpt your sound. Over 400 presets are included, ranging from basses, leads, percussion, and synth FX.

The Fabric Series includes four new plugin instruments: Fabric XL, Fabric, Fabric Piano, and Fabric Electric Piano.

Fabric XL is the brand-new flagship sample-based synthesizer from AIR Music Technology and delivers the ultimate sounds for all your production needs. Fabric XL brings a stunning collection of cutting-edge presets, including everything from twisted and dark motion pads, drone and sub-basses, acoustic and electric guitars, acoustic and electric pianos, classic poly and lead synths, and much more.

Fabric is almost identical to Fabric XL, but removes the largest sample keymaps to reserve less of your Force's memory.

Fabric Piano and **Fabric Electric Piano** deliver the sonic characteristics of the flagship Stage Piano and Stage EP instruments, respectively, but in less CPU-intensive forms. Each includes a comprehensive set of editing features and built-in effects, such as the AIR Flavor effect for adding grit for a lo-fi sound.

SATA Drive Installation

To create more internal storage space on your Force hardware, you can purchase a **SATA** (Serial ATA) drive and install it yourself, but read this chapter first.

Your Force can support nearly any standard 2.5" SATA drive on the market—either a solid-state drive (SSD) or hard-disk drive (HDD). Make sure it uses a **2.5**" (63.5 mm) form factor and uses (or can use) one of these file systems: **exFAT**, **FAT32**, **NTFS**, or **EXT4** (for read and write capability) or **HFS+** (for read-only capability).

Note: We recommend using an exFAT file system as it is the most robust one supported by both Windows and macOS.

Note: Alternatively, you could install an **mSATA** (mini-SATA) drive, but make sure you also purchase an adapter that enables it to fit into a typical 2.5" SATA interface.

1. Make sure your Force hardware is powered **off**.
2. Locate the **SATA drive panel** in the center of the bottom panel of your Force hardware. Use a Phillips-head screwdriver to remove the screws (don't lose them!), and remove the SATA drive panel.
3. Gently pull the **SATA connector and cable** out from inside your Force hardware. Be careful not to disturb anything inside—handle just the SATA connector and cable.
4. Connect your **SATA drive** to the **SATA connector**. Make sure the connection is secure.
5. Use four **3x5mm mounting screws** (included with Force hardware or with your SATA drive) to secure the SATA drive to the SATA drive panel. Do not overtighten the screws, but make sure the drive is secure and does not shake.
6. Place the SATA drive panel back onto the bottom panel of your Force hardware, and use the original screws to secure it in place.

   You can now access this drive while using your Force hardware!

MIDI Machine Control (MMC)

Your Force hardware can send and receive MIDI Machine Control (MMC) messages, a standard protocol for transport controls.

The Force hardware can send these messages:

Force Button	MMC Command Sent
Record	MMC Record Strobe (when recording starts), then MMC Record Exit
Stop	MMC Stop
Play	MMC Deferred Play
Data Dial, –/+	MMC Locate values

To set up your Force hardware to send MMC messages to an external device:

1. Use an included 1/8"-to-MIDI adapter and a standard 5-pin MIDI cable (not included) to connect your Force hardware's **MIDI Out** to the MIDI input of your external device.
2. Press **Menu** to show the menu, and tap **Preferences** to enter the **Preferences**.
3. Tap the **Sync** tab.
4. Tap the **Send Port 1** field, and use the **data dial** or **–/+** buttons to select **Midi Out**.
5. Tap the **Send MMC** box so it is enabled (checked).
6. Exit the **Preferences**.
7. Configure your other device properly so it can receive MMC messages.

The Force hardware can receive these messages:

Force Command Received	Force Function
MMC Deferred Play	Play
MMC Locate Zero, then Deferred Play	Play Start
MMC Stop	Stop
MMC Record Strobe	Record (Rec)
MMC Pause	Stop
MMC Locate values	Change location in clip

To set up your Force hardware to receive MMC messages from an external device:

1. Use an included 1/8"-to-MIDI adapter and a standard 5-pin MIDI cable (not included) to connect your Force hardware's **MIDI In** to the MIDI output of your external device.
2. Press **Menu** to show the menu, and tap **Preferences** to enter the **Preferences**.
3. Tap the **Sync** tab.
4. Tap the **Receive MMC** box so it is enabled (checked).
5. Exit the **Preferences**.
6. Configure your other device properly so it can send MMC messages.

Technical Specifications

Specifications are subject to change without notice.

Mechanical	**Pads**	(64) velocity- and pressure-sensitive pads, RGB-backlit
	Knobs	(8) 360° touch-sensitive Knobs (1) 360° encoder for display navigation and selection via push (5) 270° knobs for gain, mix & level adjustment
	Buttons	(56) dedicated function buttons; red-, amber-, or green-backlit
	Display	6.9” / 176 mm (diagonal) 5.9” x 3.7” / 150 x 93 mm (width x height) Full-color LED-backlit display with touch interface
Memory	**RAM**	2 GB
	Internal Storage	16 GB (6 GB user storage + 10 GB pre-installed content) Expandable via SATA connections
File System Compatibility	exFAT (read & write) (recommended) FAT32 (read & write) NTFS (read & write) EXT4 (read & write) HFS+ (read only) Audio Files: AIF/AIFF, FLAC, MP3, OGG, WAV	
Connections	(2) XLR+1/4” (6.35 mm) TRS inputs (Input 1/2) (4) 1/4” (6.35 mm) TRS outputs (2 stereo pairs) (1) 1/8” (3.5 mm) stereo headphone output (1) 1/8" (3.5 mm) MIDI input (1) 1/8" (3.5 mm) MIDI output (1) 1/8" (3.5 mm) MIDI thru port (4) 1/8” (3.5 mm) CV/Gate outputs (1) Ethernet link port (2) USB Type-A ports (1) USB Type-B port (1) SD card slot (1) power adapter input	
Power	via power adapter: 19 V, 3.42 A, center-positive, included	
Dimensions (width x depth x height)	13.8” x 15.3” x 2.85” 350 x 389 x 72.5 mm	
Weight	8.53 lbs. 3.87 kg	

Digital Audio System	**ADCs**	32-bit @ 44.1kHz
	DACs	32-bit @ 44.1kHz
	Digital Signal Processing	32-bit floating point
Inputs	(2) combo XLR / balanced 1/4” (6.35 mm) TRS	
XLR	**Dynamic Range**	111 dB
	SNR	111 dB
	THD+N	0.003% (1 kHz, +4 dBu, -1 dBFS)
	Preamp EIN	-128 dBu (max gain, 150-ohm source, unweighted)
	Frequency Response	20 Hz – 20 kHz (+0.0/-0.1 dB)
	Maximum Input Level	+12.5 dBu
	Sensitivity	-46.5 dBu
	Gain Range	59 dB
Line	**Dynamic Range**	111 dB
	SNR	111 dB
	THD+N	0.006% (1kHz, +4 dBu, -1 dBFS)
	Frequency Response	20 Hz – 20 kHz (+0.0/-0.2 dB)
	Maximum Input Level	20 dBu
	Sensitivity	-10.5 dBu
	Gain Range	30.5 dB
Instrument	**Dynamic Range**	111 dB
	SNR	111 dB
	THD+N	0.005%
	Frequency Response	20 Hz – 20 kHz (+0.0/-0.2)
	Maximum Input Level	+16 dBu
	Sensitivity	-14.5 dBu
	Gain Range	30.5 dB
	Input Impedance	~1 M-ohm

Main Outputs 1–2 (2) impedance-balanced 1/4” (6.35 mm) TRS	**Dynamic Range**	114 dB (A-weighted)
	THD+N	0.003% (1 kHz, -1 dBFS)
	Frequency Response	20 Hz – 20 kHz (+0.0 / -0.2 dB)
	Maximum Output Level	+20 dBu
	Output Impedance	51-ohm
Outputs 3–4 (2) impedance-balanced 1/4” (6.35 mm) TRS	**Dynamic Range**	114 dB (A-weighted)
	THD+N	0.003% (1 kHz, -1dBFS)
	Frequency Response	20 Hz – 20 kHz (+0.0 / -0.2 dB)
	Maximum Output Level	+20 dBu
	Output Impedance	51-ohm
Headphone Output (1) 1/8” (3.5 mm) stereo headphone	**Dynamic Range**	108 dB (A-weighted)
	THD+N	0.007% (1 kHz, -1 dBFS, 10 mW/channel into 32-ohms)
	Frequency Response	20 Hz – 20 kHz (+0.0/-0.3 dB)
	Maximum Power Delivered	80 mW (< 1% THD, into 32-ohms)

Trademarks & Licenses

Akai Professional and MPC are trademarks of inMusic Brands, Inc., registered in the U.S. and other countries.

Force incorporates élastique Pro V3 by zplane.development.

Ableton is a trademark of Ableton AG.

The *Bluetooth* word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by Akai Professional is under license.

Kensington and the K & Lock logo are registered trademarks of ACCO Brands.

macOS is a trademark of Apple Inc., registered in the U.S. and other countries.

SD and SDHC are registered trademarks of SD-3C, LLC.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

All other product names, company names, trademarks, or trade names are those of their respective owners.

This product contains technologies that are used under license. For more information, please visit **akaipro.com/product-legal**.

Addenda

MPC Pro Pack

The MPC Pro Pack can be purchased as an upgrade for all Force hardware running MPC v3.6 or later.

To purchase the MPC Pro Pack, visit **thempcstore.com** / **akaipro.com**. You can unlock the MPC Pro Pack on up to three supported devices.

To unlock the MPC Pro Pack, use the **Activations** tab of the Preferences.

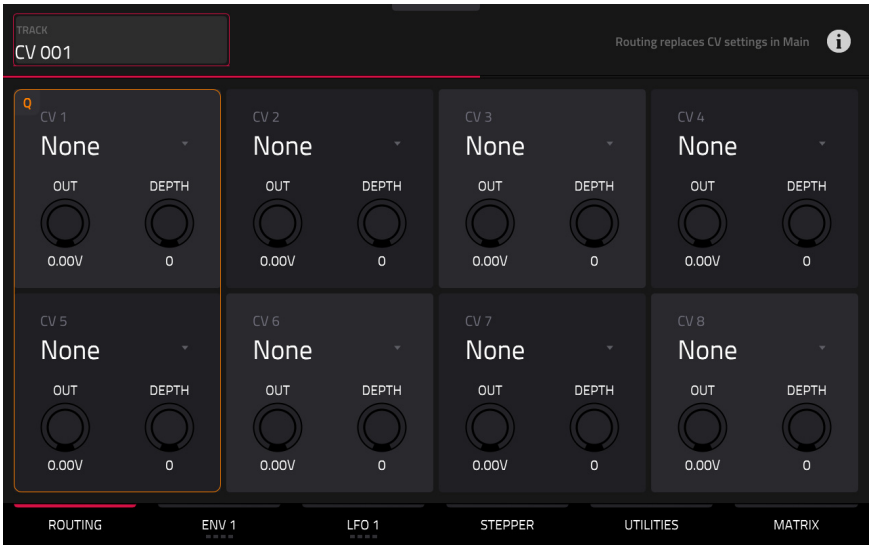
Advanced CV Track Edit

The MPC Pro Pack includes an advanced CV track editing playground, with a comprehensive set of modulators and utilities to greatly enhance control over CV-enabled devices.

Routing

In the Routing tab, you can set the routing options for the CV outputs.

Note: Changes made on this screen replace CV settings in ***Main Mode***. You can dismiss this message at the top of the screen by tapping the **i icon**.



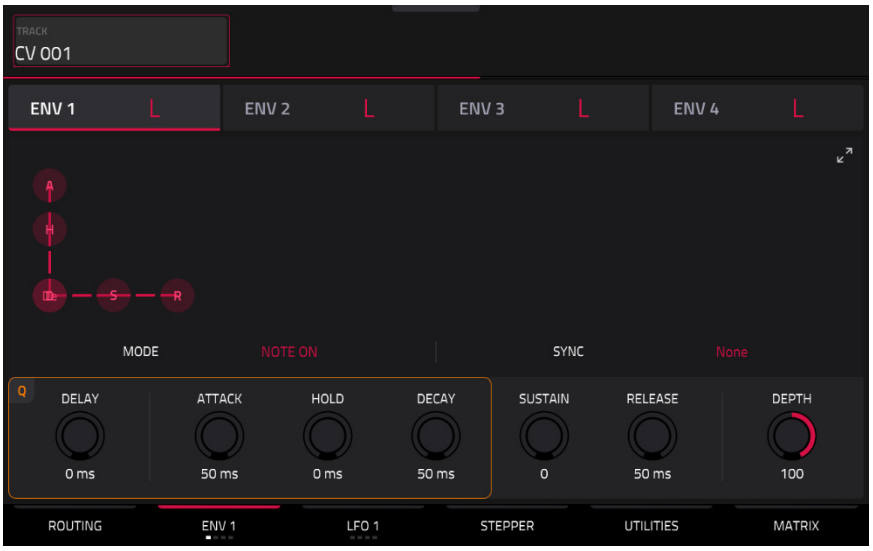
Use the **CV** field to select a routing destination for each CV Out.

Use the **Out** knobs to set the output voltage.

Use the **Depth** knob to apply additional modulation depth to the output.

Env 1–4

Tap **Envelopes** to cycle through its four tabs for the available envelopes which can be used to create a variable control signal to modulate the filter, amplitude, or pitch settings of a sound over a given period of time. You can also tap on the **Env 1–4** headers to switch between pages.



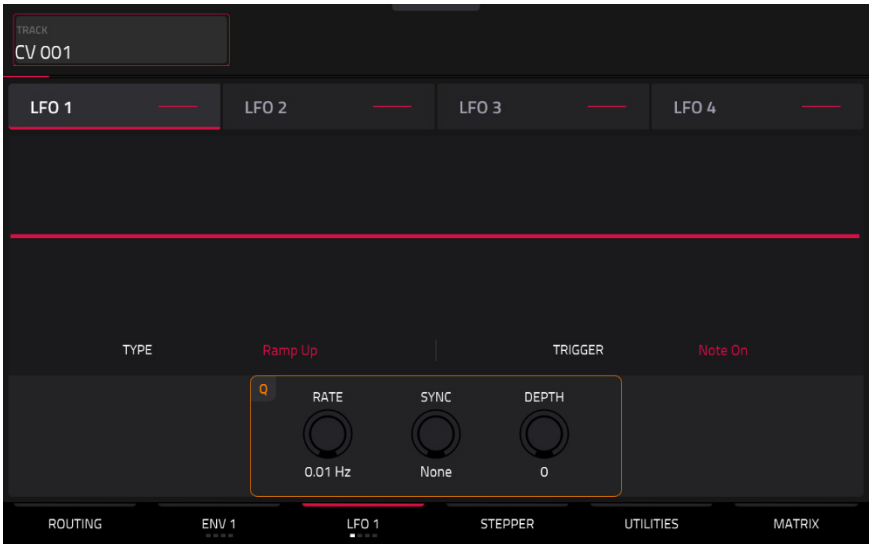
Use the **Mode** field to select how the envelope is triggered. Select **Note On** to restart the envelope with each Note On message. Select **Loop** to continuously cycle the envelope. Select **One Shot** to play through the envelope once.

Use the **Sync** field to synchronize the envelope to the MPC sequence for precise timing control.

Use the **Delay**, **Attack**, **Hold**, **Decay**, **Sustain**, and **Release** fields or click and drag the “handles” of each envelope to shape the envelope or time-variant modulation output. See the ***Anatomy of an Envelope*** section to learn about the envelope parameters.

Use the **Depth** knob to set the overall amount and direction in which the envelope is applied.

LFO 1–4



Tap **LFO** to cycle through its four tabs for the available LFOs, which can be used to generate a periodic waveform with an adjustable frequency and shape for modulation purposes. You can also tap on the **LFO 1–4** headers to switch between pages.

Use the **Type** field to select the LFO waveform type: **Ramp Up**, **Ramp Down**, **Triangle**, **Sine**, **Square**, **Random 1**, **Random 2**.

Use the **Trigger** field to determine how the LFO phase resets. Select **Free Running** for the LFO to run continuously without resetting. Select **Play Start** to reset the LFO at the start of the sequence. Select **Note On** to reset the LFO each time a note is triggered in the CV track's grid.

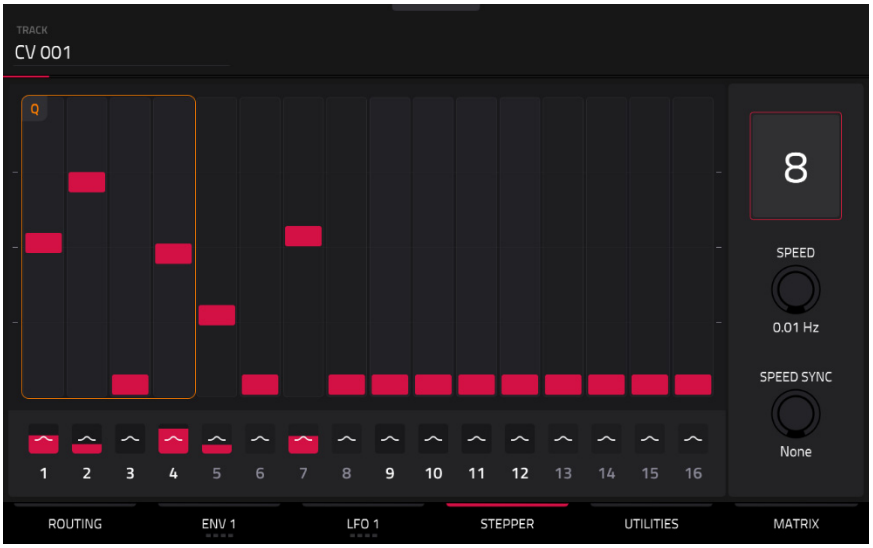
Use the **Rate** knob to determine the LFO frequency. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

Use the **Sync** knob to synchronize the LFO's rate with the MPC sequence tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When **None** is selected, Sync is off, and the frequency is determined by the **Rate** knob.

Use the **Depth** knob to set the overall amount of modulation applied by the LFO. At lower values, the modulation is more subtle, and at higher values it is more extreme.

Stepper

The **Stepper** section lets you create a step sequence for CV control.



Use the **Steps** field to set the length of the sequence.

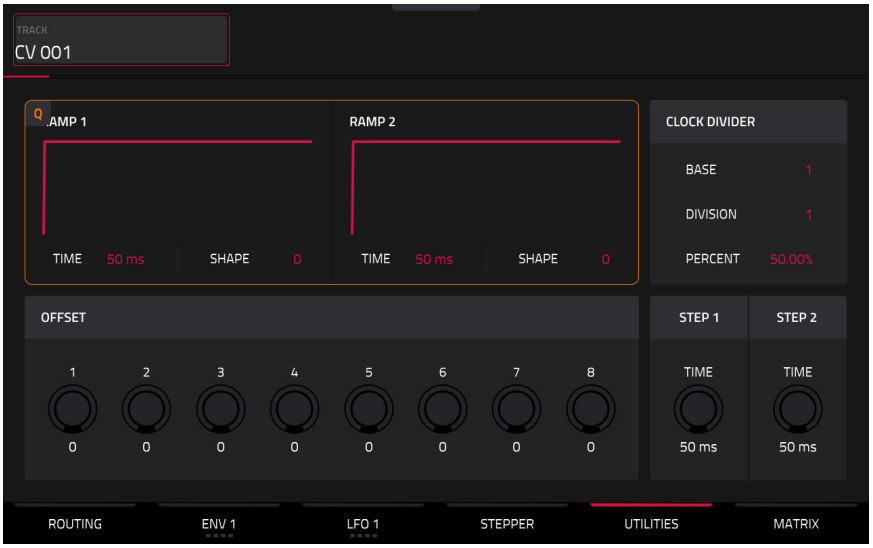
Use the **Speed** field to set how quickly the sequence is played.

Use the **Speed Sync** field to synchronize the speed with the MPC sequence tempo. You can select one of several time divisions (a **.** indicates a dotted note; a **T** indicates a triplet-based time division). When set to **None**, Sync is off, and the sequence timing is determined by the **Speed** field.

Tap and drag the **step handles** to set step values.

Tap and drag the **smoothing values**, above the step number, to apply additional smoothing to each step.

Utilities



The **Ramp** section lets you create rising or falling modulation signals.

Use the **Time** fields to adjust the length of the ramps.

Use the **Shape** fields to adjust the curve of the ramps. Positive values rise or fall more quickly, while negative values rise or fall more slowly.

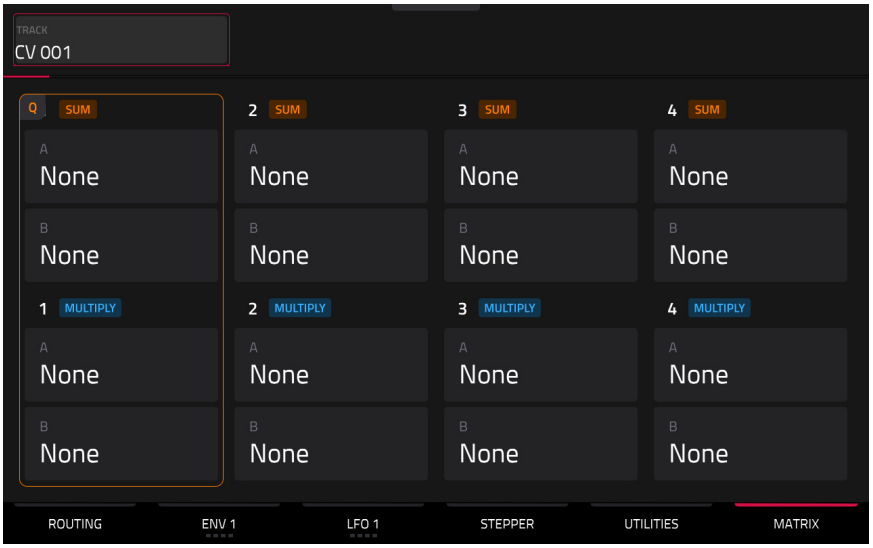
Use the **Offsets** knobs to adjust voltage levels to modulate external gear.

The **Clock Divider** section divides the incoming clock to allow for slower modulation rates.

Use **Step Time** knobs to set Step lengths for modulation purposes.

Matrix

The **Matrix** section allows you to modulate different sources and sum or multiply them for complex signals.



Super Warp Algorithm

MPC Pro Pack includes a new **Super** Warp algorithm, offering high-quality FFT-based time stretching and pitch shifting.

To use the **Super** algorithm, open the **Preferences** menu and navigate to the **Audio/Export** tab, then set the **Default Warp Algorithm** setting to **Super**. Your choice of algorithm will be saved and recalled with the project, track, or program files.

The Warp algorithm can also be adjusted individually in the **Samples** tab of ***Track Edit Mode*** for Drum Tracks, or in ***Grid View*** for Audio Tracks.

MPC Pro Pack Plugins

The MPC Pro Pack includes three new Insert effects:

- ***AIR Visual EQ4*** is a highly versatile EQ plugin providing four bands of equalization with a wide range of EQ tabs, and The spectrum analyzer gives clear visual
- ***AIR Reverb Pro*** delivers realistic, dynamic reverbs suitable for a variety of sound design tasks, from subtle room reverbs to rich, expansive modulated tails.

  Note: When used with standalone Force, AIR Reverb Pro is limited to four instances.
- ***AIR Utility*** provides all your basic gain, mono, and stereo utility needs in a single plugin.

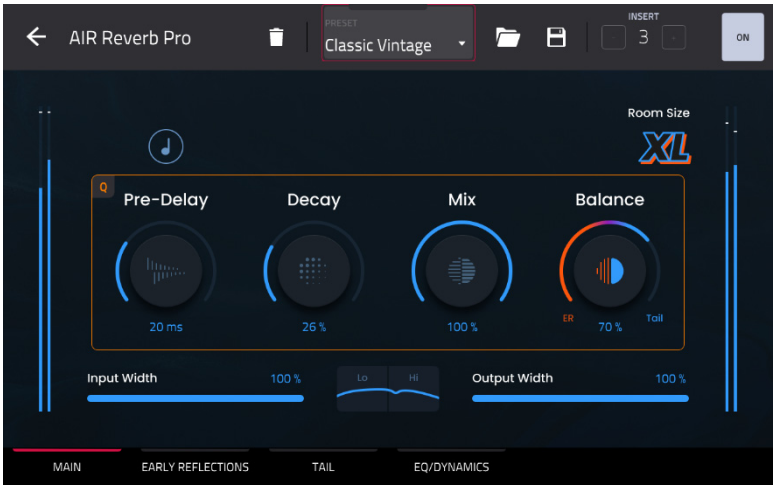
The MPC Pro Pack also includes the ***AIR Fabric Select*** instrument plugin. Fabric Select gives you access to all of the bread and butter sounds you need. Fabric Select has been built from Fabric XL using a smaller selection of its incredible sounding sample keymaps.

AIR Visual EQ4

Parameter	Description	Value Range
Band	Tap the power button next to each band to turn it on or off.	Off, On
Freq	Center frequency of the EQ band.	20.0 Hz – 20.00 kHz
Gain	When **Type** is set to **LowShelf**, **Peak**, or **HighShelf**, this adjusts the output level of the EQ band.	-30.0 – 0.0 – +30.0 dB
Q	Width of the EQ band.	0.10–18.00
Type	Shape of the selected EQ band.	LowShelf, LowPass, HighPass, BandPass, Notch, Peak, HighShelf
Gain	Output level of the post-EQ audio.	-inf – 0.0 – +12.0 dB

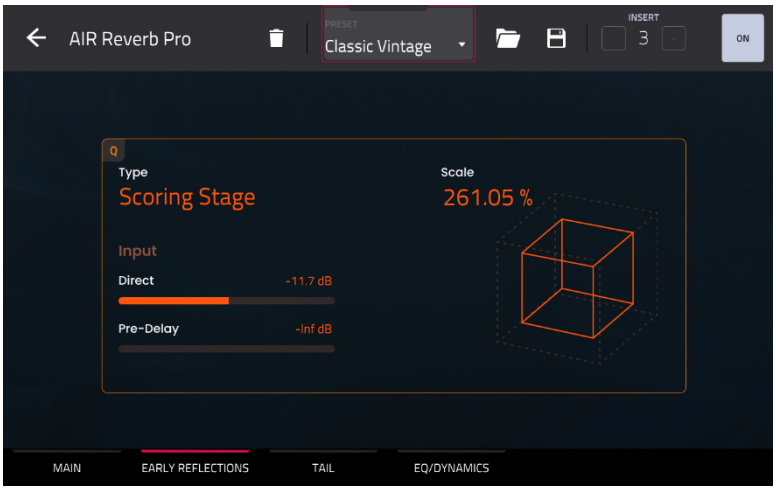
AIR Reverb Pro

Main



Parameter	Description	Value Range
Room Size	Size of the simulated room which helps determine the reverberation length.	XXXS, XXS, XS, S, M, L, XL, XXL, XXXL
Pre-Delay	Length of time between dry signal and reverberated signal. Tap the **music note icon** to enable or disable **Sync**.	
		When **Sync** is **Off**: 0–250 ms
		When **Sync** is **On**: 0, 1/32, 1/16T, 1/32D, 1/16, 1/8T, 1/16D, 1/8, 1/4T, 1/8D, 1/4,
Decay	Rate at which the reverberation decays after the original direct signal stops.	0–100%
Mix	Wet/dry amount of the reverb effect.	0–100%
Balance	Mix between the Early Reflections signal and Tail signal.	0–100%
Input Width	Adjusts the spread of the incoming audio signal in the stereo field. A setting of 0% means the incoming audio will be processed in mono. A setting of 100% means the incoming audio will be processed as a full stereo image.	0–100%
Output Width	Adjusts the spread of the outgoing processed audio signal in the stereo field. A setting of 0% means the audio will be ouput in mono. A setting of 100% produces an open, panned stereo image.	0–100%

Early Reflections

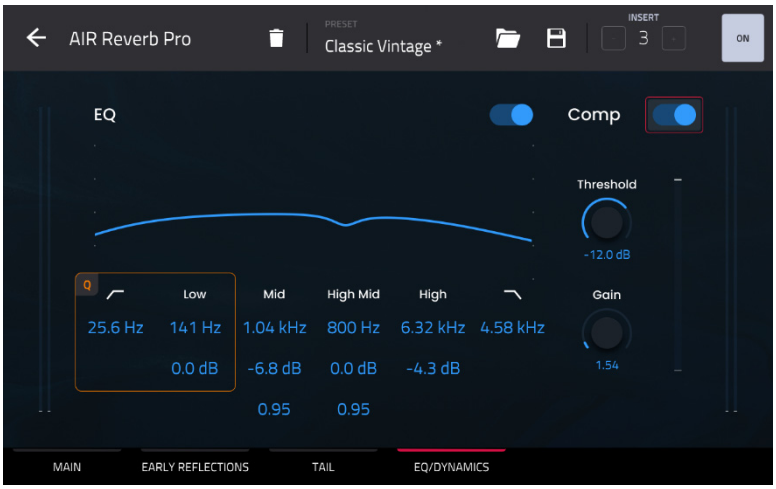


Parameter	Description	Value Range
Type	Simulated physical environment used for modeling the early reflections. • **Off:** No early reflections. • **Booth:** Simulates a vocal recording booth. • **Club:** Simulates a small, clear, natural-sounding club ambience. • **Room:** Simulates the center of a small room without many reflections. • **Small Chamber:** Simulates a bright, small-sized room. • **Medium Chamber:** Simulates a bright, medium-sized room. • **Large Chamber:** Simulates a bright, large-sized room. • **Small Studio:** Simulates a small, live, empty room. • **Large Studio:** Simulates a large, live, empty room. • **Scoring Stage:** Simulates a scoring stage in a medium-sized hall. • **Philharmonic:** Simulates the space and ambience of a large, symphonic, concert hall. • **Concert Hall:** Simulates the space and ambience of a large concert hall. • **Church:** Simulates a medium-sized space with natural, clear-sounding reflections. • **Opera House:** Simulates the space and ambience of an opera house. • **Vintage 1:** Simulates a vintage digital reverb effect. • **Vintage 2:** Simulates a vintage digital reverb effect.	See Description
Direct	Incoming audio level of the unprocessed signal into the Early Reflection.	-inf – 0.0 dB
Pre-Delay	Incoming audio level of the Pre-Delay processed signal into the Early Reflection.	-inf – 0.0 dB
Scale	Adjusts the size of the early reflection reverb. You can also click and drag the cube to adjust the size.	-50.0 – 400.00%

Tail

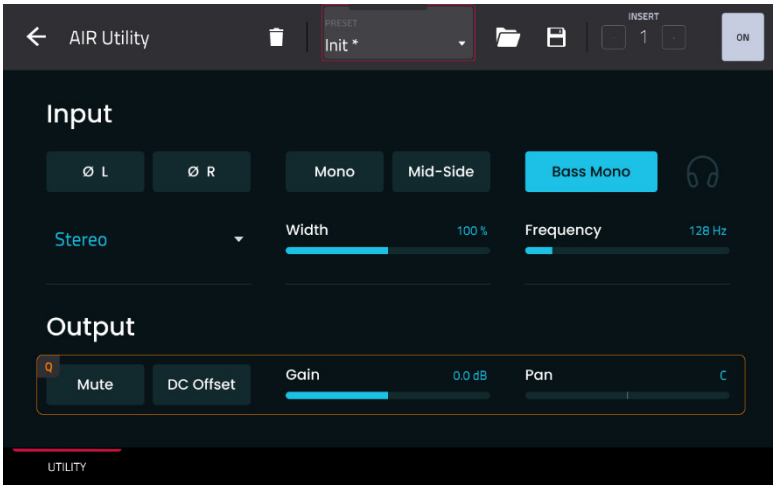
Parameter		Description	Value Range
Tail	Distance	Adjusts the distance that sound travels for reflections during the tail. The higher the distance, the more you can hear distinct reflections in the tail.	0–100%
	Density	Adjusts the rate at which the sound density of the reverb tail increases over time. Higher Density settings create a smoother reverberated sound. Lower settings result in more fluttery echo.	0–100%
Input	Direct	Incoming audio level of the unprocessed signal into the Tail.	-inf – 0.0 dB
	Pre-Delay	Incoming audio level of the Pre-Delay processed signal into the Tail.	-inf – 0.0 dB
	Early Reflections	Incoming audio level of the Early Reflections processed signal into the Tail.	-inf – 0.0 dB
Mod	On/Off	Tap the switch in the upper-right corner of this section to enable modulation.	Off, On
	Mod – Depth	Amount of modulation applied to the Tail processed signal	0–100%
	Mod – Rate	Speed of modulation applied to the Tail processed signal.	0–100%
Damping	Low	Center frequency at which low-frequency damping is applied to the Tail signal.	10–2000 Hz
	Early	Center frequency at which high-frequency damping is applied to the early Tail reverberations.	500–30000 Hz
	Late	Center frequency at which high-frequency damping is applied to the late Tail reverberations.	500–30000 Hz

EQ/Dynamic



Parameter		Description	Value Range
EQ	On/Off	Tap the switch next to the EQ heading to turn it on or off.	Off, On
	Low Cut	Center frequency of the low cut filter.	10.0 Hz – 1.00 kHz
	Low Freq	Center frequency of the low EQ band.	20.0 Hz – 1.00 kHz
	Low Gain	Level of the low EQ band.	-15.0 – 0.0 – +15.0 dB
	Mid Freq	Center frequency of the mid EQ band.	40.0 Hz – 16.0 kHz
	Mid Gain	Level of the mid EQ band.	-15.0 – 0.0 – +15.0 dB
	Mid Q	Width of the mid EQ band.	0.50–10.00
	High Mid Freq	Center frequency of the mid EQ band.	40.0 Hz – 16.0 kHz
	High Mid Gain	Level of the mid EQ band.	-15.0 – 0.0 – +15.0 dB
	High Mid Q	Width of the mid EQ band.	0.50–10.00
	High Freq	Center frequency of the high EQ band.	2.00 – 20.0 kHz
	High Gain	Level of the high EQ band.	-15.0 – 0.0 – +15.0 dB
	High Cut	Center frequency of the high cut filter.	200 Hz – 20.0 kHz
Compressor		Tap the switch next to the Compressor heading to turn it on or off.	Off, On
	Threshold	Volume level at which compression will be applied.	-40.0 – 0.0 dB
	Gain	Adjusts the output level of the compressed signal.	0.00–30.00

AIR Utility



Parameter		Description	Value Range
Input	Left Phase	Tap to invert the phase of the left stereo channel.	Off, On
	Right Phase	Tap to invert the phase of the right stereo channel.	Off, On
	Mode	Tap the drop-down menu to adjust the Stereo processing mode. • **L:** Left channel only • **L+R (-3dB):** Summed left and right channels, with a -3 dB pad. • **L+R (-6dB):** Summed left and right channels, with a -6 dB pad. • **L-R (+3dB):** Inter-channel difference, with a -3 dB pad. • **L-R (+6dB):** Inter-channel difference, with a -6 dB pad. • **R:** Right channel only • **Stereo:** Standard stereo image • **Swapped:** Reverses the left and right stereo channels	See Description
	Mono	Converts a Stereo signal to Mono. This is only available when **Type** is set to **L-R (+3dB)**, **L-R (+6dB)**, **Stereo**, or **Swapped**.	Off, On
	Mid-Side	Enables Mid-Side encoding, where the Left + Right channel sum is centered in the stereo image, and the Left - Right channel difference is panned to each side. This is only available when **Type** is set to **Stereo** or **Swapped**.	Off, On
	Width	Adjusts the stereo width of the input signal. Higher values give wider stereo separation.	0–200%
	Bass Mono	Enables converting the low frequency audio signal to mono.	Off, On
	Bass Mono Frequency	Center frequency of the low-pass filter used for the Bass Mono function.	50 – 500 Hz
	Bass Mono Audition	Tap the headphones icon to isolate the low frequencies, useful when adjusting the Bass Mono Frequency.	Off, On

Parameter		Description	Value Range
Output	Mute	Mutes the outgoing audio.	Off, On
	DC Offset	Applies a high-pass filter to remove extreme low frequencies that may cause audio issues.	Off, On
	Gain	Adjust the output level of the processed signal.	-inf – 0.0 – 25.0 dB
	Pan	Adjust the stereo panning of the output signal.	L (100:0) – C (0:0) – R (0:100)

AIR Fabric Select

The all-new AIR Fabric Select is a streamlined edition of AIR Fabric, offering a curated selection of its most popular and versatile patches. AIR Fabric Select is perfect as an introduction of Fabric's sound palette, with fewer presets but the same high-quality sound engine you know from the full version.

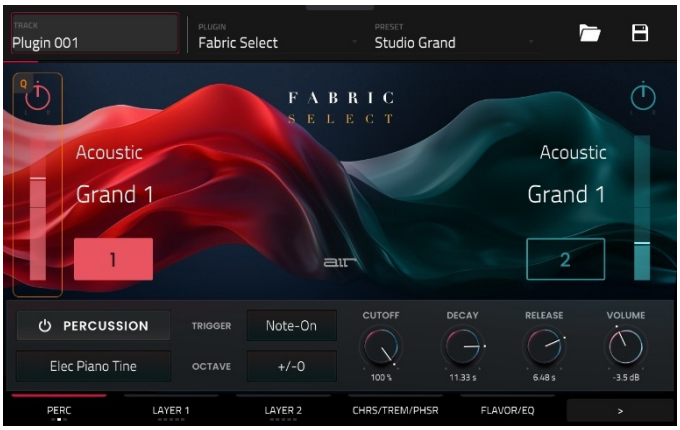
Main / Perc / Settings

Use this tab to select layer sounds and adjust main layer parameters, add a percussion layer, and edit global settings. Tap the tab to cycle between the three pages.

Main

Parameter		Description	Value Range
Layer 1/2	Pan	Stereo panning of the layer.	L64 – C – R64
	Volume	Level of the layer.	0–100%
	Category	Sound category of the layer.	Varies
	Preset	Preset sound within the selected category.	Varies
	Enable/Disable	Enable or disable the layer.	Off, On
Cutoff		Filter cutoff frequency of the layer.	-100 – 0 – +100%
Reso		Amount of resonance/emphasis of the filter cutoff point for the layer.	-100 – 0 – +100%
Attack		Amount of amplitude attack reduced from or added to the sound.	-100 – 0 – +100%
Release		Amount of amplitude release reduced from or added to the sound.	-100 – 0 – +100%
Formant		Decreases or increases resonant frequencies to adjust the timbre of the sound.	-100 – 0 – +100%
Sample Start		Starting point of the sample.	-100 – 0 – +100%
Delay		Enable or disable the delay effect.	Off, On
Delay Mix		Wet/dry amount of the delay effect.	0–100%
Reverb		Enable or disable the reverb effect.	Off, On
Reverb Mix		Wet/dry amount of the reverb effect.	0–100%

Perc



Parameter		Description	Value Range
Percussion		Enables or disables percussion sample.	Off, On
	Sample	Select the percussion sample used.	Varies
	Trigger	Selects when the percussion sample is triggered.	Note-On, Note-Off
	Octave	Adjust pitch of the percussion sample.	-4 – 0 – +4
	Cutoff	Cutoff frequency of the percussion sample.	0–100%
	Decay	Length of time for the percussion sample to decay.	0.0 ms – 32.0 s
	Release	Length of time for the percussion sample to become silent after being released.	0.0 ms – 32.0 s
	Volume	Level of the percussion sample.	-inf – 0.0 – +12.0 dB

Settings

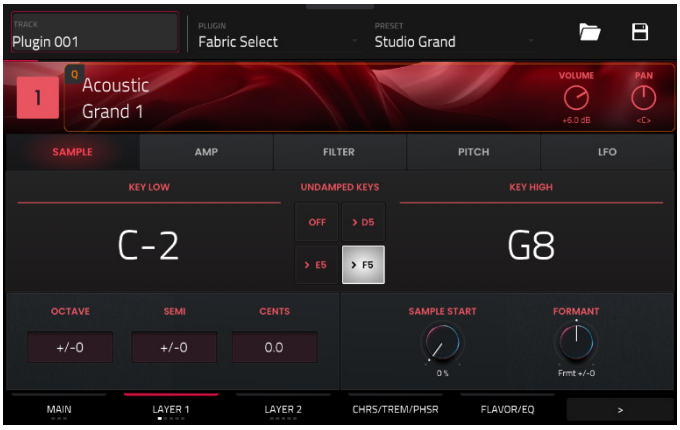
Parameter		Description	Value Range
Settings	Transpose	Transposition of the plugin, in semitones.	-36 – 0 – +36
	Tune	Fine tuning of the plugin, in cents.	-100 – 0 – +100
	Pitch Bend	Number of semitones up or down controlled by MIDI pitch bend messages.	0–24 (semitones)
	Poly	Number of allowable voices, and how voices are triggered.	Dynamic Poly, Legato, Retrigger, 2–6 Notes
	Glide Mode	Enables or disables pitch gliding for all triggered notes or legato notes.	Off, Legato, All
	Glide Time	Amount of time to slide from the pitch of one note to the next note played.	0.0 ms – 32.0 s
	Main Volume	Overall level of the plugin.	-Inf dB – 0.0 – +6.0 dB

Layer 1/2

Use these tabs to adjust specific layer properties, including sample properties; amplitude, filter, and pitch envelopes; and low frequency oscillator modulation.

Tap the tab to cycle through the available pages, or tap the headers below the layer controls.

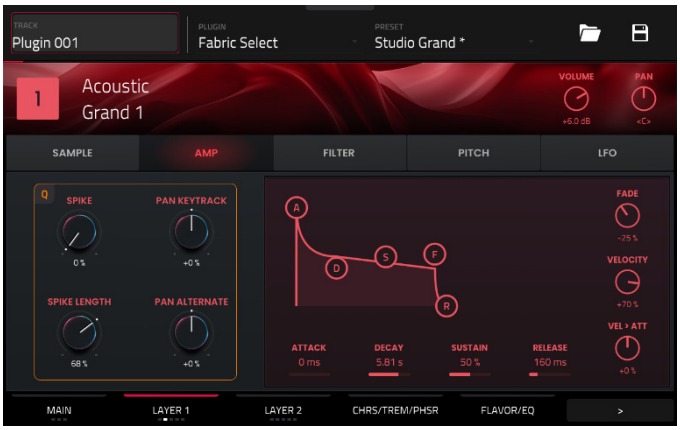
The available parameters for each layer are identical.



Sample

Parameter		Description	Value Range
Layer 1/2		Enable or disable the selected layer.	Off, On
	Category	Sound category of the layer.	Varies
	Preset	Preset sound within the selected category.	Varies
	Volume	Level of the layer.	0–100%
	Pan	Stereo panning of the layer.	L64 – C – R64
Sample	Key Low	Set the lowest key for the layer key range.	C-2 – G8
	Undamped Keys	Set the starting note above which all notes are undamped.	Off, >D5, >E5, >F5
	Key High	Set the highest key for the layer key range.	C-2 – G8
	Octave	Coarse tuning of the layer in octaves.	-4 – 0 – +4
	Semi	Transposition of the layer in semitones.	-12 – 0 – +12
	Cents	Fine tuning of the layer in cents.	-50.0 – 0.0 – +50.0
	Sample Start	Starting point of the selected sample.	0–100%
	Formant	Decreases or increases resonant frequencies to adjust the timbre of the sound.	-12 – 0 – +12

Amp

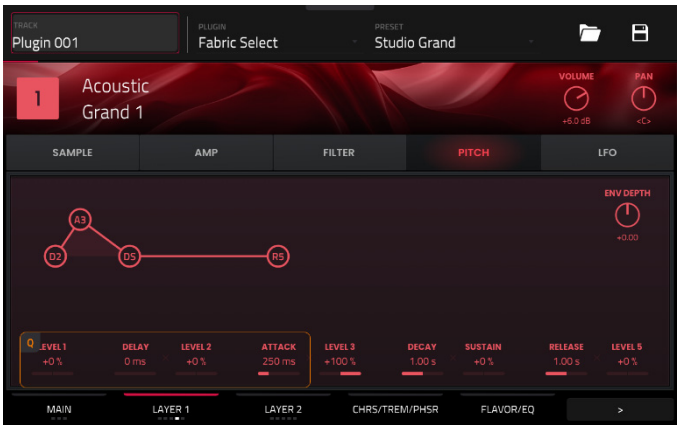


Parameter	Description	Value Range
Spike	Applies additional velocity to the amplitude attack.	0–100%
Spike Length	Length of time for the spike to decay.	0–100%
Pan Keytrack	Ties the stereo panning to the pitch being played. At negative values, the lower notes will be stereo right, and higher notes stereo left. At positive values, lower notes will be stereo left, and higher notes stereo right.	-100 – 0 – +100%
Pan Alternate	Alternate successive notes between stereo left and right.	-100 – 0 – +100%
Attack	Length of time for the sound to reach full level.	0 ms – 32 s
Decay	Length of time for the note to reach sustain level.	0 ms – 32 s
Sustain	Level of the sound while the note is held.	0–100%
Release	Length of time for the note to dissipate when released.	0 ms – 32 s
Fade	Level decrease or increase to the envelope sustain level.	-100 – 0 – +100%
Velocity	Amount of effect the note velocity has on the amplitude envelope.	-100 – 0 – +100%
Vel > Att	The amount of effect velocity has on the amplitude attack.	-100 – 0 – +100%

Filter

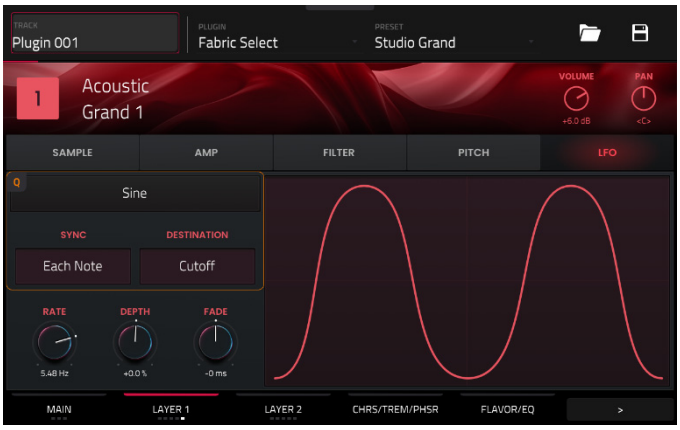
Parameter	Description	Value Range
Mode	Type of filter applied.	Off, Lowpass 24dB, Lowpass 12 dB, Band 18, Band 12, High 12, Peak EQ, Presence, Damper
Cutoff	Cutoff frequency of the filter.	0–100%
Reso	Resonance of the filter.	0–100%
Keytrack	Ties the envelope parameters to the pitch being played. At higher values, the envelope time is decreased as the pitch is increased.	0–100%
Velocity	The amount of effect velocity has on filter control.	-100% – 0 – +100%
Env Depth	Envelope depth of the filter. At negative values, decreases the cutoff value based on the decay value. At positive values, increases the cutoff value based on the decay value.	-100% – 0 – +100%
Attack	Length of time for the filter to reach full level.	0 ms – 32 s
Decay	Length of time for the filter to reach sustain level.	0 ms – 32 s
Sustain	Level of the filter while the note is held.	0–100%
Release	Length of time for the filter to dissipate when released.	0 ms – 32 s
Fade	Level decrease or increase to the envelope sustain level.	-100 – 0 – +100%
Velocity	Amount of effect the note velocity has on the filter envelope.	-100 – 0 – +100%
Vel > Att	The amount of effect velocity has on the filter attack.	-100 – 0 – +100%

Pitch



Parameter	Description	Value Range
Level 1	Pitch level (relative to the **Env Depth**) at the start of the note.	-100 – 0 – +100%
Delay	Length of time to reach Level 2.	0 ms – 32 s
Level 2	Pitch level (relative to the **Env Depth**) at the start of the note.	-100 – 0 – +100%
Attack	Length of time between **Levels 2** and **3**.	0 ms – 32 s
Level 3	Pitch level (relative to the **Env Depth**) at the start of the note.	-100 – 0 – +100%
Decay	Length of time for the note to reach sustain level after the Attack.	0 ms – 32 s
Sustain	Pitch level (relative to the **Env Depth**) as the note is held.	-100 – 0 – +100%
Release	Length of time for the note to dissipate when released.	0 ms – 32 s
Level 5	Pitch level (relative to the **Env Depth**) when the note is released.	-100 – 0 – +100%
Env Depth	Sets the range of pitch adjustment in semitones.	-12.00 – 0.00 – +12.00

LFO



Parameter	Description	Value Range
Mode	Waveshape of the low frequency oscillator.	Off, Constant, Sine, Triangle, Sawtooth, Square, S+H Random, S+H Alternate, Random Drift, Slow Drift
Sync	Disable or enable and select how the LFO is synced to the global tempo.	Off, First Note, Each Note, BPM & Note, BPM & Beat
Destination	Where the low frequency oscillator is applied.	Pitch, Cutoff, Reso, Amp, Pan,
Rate	Speed of the low frequency oscillator. When **Sync** is set to **Off**, **First Note** or **Each Note**: When **Sync** is set to **BPM & Note** or **BPM & Beat**:	 0.03 – 30.00 Hz 8/4 – 1/64
Depth	Amount of LFO modulation applied.	-100 – 0 – +100%
Fade	Level decrease or increase to the LFO level.	-100 – 0 – +100%

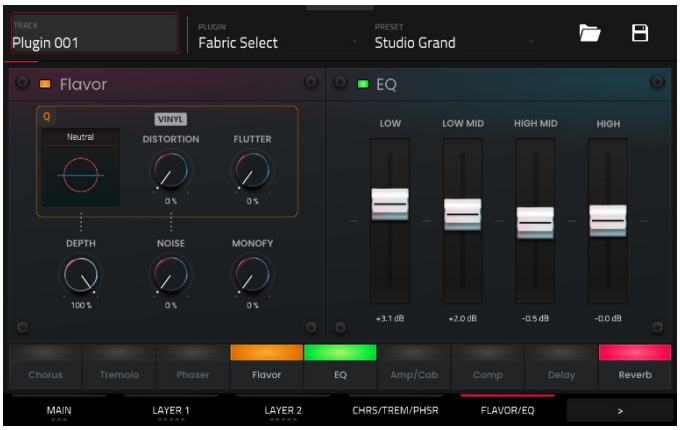
Chrs / Trem / Phsr

Use this tab to adjust the settings for the chorus, tremolo, and phaser effects. Each effect can be turned on and off by using the buttons on the bottom of the screen.

Parameter		Description	Value Range
Chorus		Use the button in the upper-left corner to enable or disable the chorus effect.	Off, On
	Rate	Modulation speed of the chorus effect.	0.05 – 20.00 Hz
	Mix	Wet/dry amount of the chorus effect.	0–100%
Tremolo		Use the button in the upper-left corner to enable or disable the tremolo effect.	Off, On
	Modwheel	Enable or disable tremolo control by the modwheel.	Off, On
	Rate	Modulation speed of the effect.	0.05 – 20.00 Hz
	Shape	Adjusts the modulation waveshape.	-100 – 0 – +100%
	Stereo	Degree of stereo spread of the effect.	0–360 deg.
	Depth	Amount of modulation applied.	0–100%
Phaser		Use the button in the upper-left corner to enable or disable the phaser effect.	Off, On
	Rate	Modulation speed of the effect.	0.05 – 20.00 Hz
	Depth	Amount of modulation applied.	0–100%
	Mix	Wet/dry amount of the chorus effect.	0–100%
	Feedback	Amount of phaser signal fed back into the phaser circuit.	0–100%
	Stereo	Degree of stereo spread of the effect.	0–360 deg.
	Center	Center frequency of the phaser filter.	0–100%

Flavor/EQ

Use this tab to adjust the settings for the flavor and EQ effects. Each effect can be turned on and off by using the buttons on the bottom of the screen.



Parameter		Description	Value Range
Flavor		Use the button in the upper-left corner to enable or disable the flavor effect.	Off, On
	Timbre	Selects an emulation type to color the sound.	Varies
	Timbre Depth	Amount of timbre emulation applied to the sound.	0–100%
	Vinyl Distortion	Amount of vinyl distortion noise applied to the signal.	0–100%
	Vinyl Noise	Amount of vinyl noise such as clicks and pops applied to the signal.	0–100%
	Flutter	Amount of speed fluctuation of the sound playback.	0–100%
	Monofy	Reduces the stereo spread of the sound to mono.	0–100%
EQ		Use the button in the upper-left corner to enable or disable the EQ effect.	Off, On
	Low	Amount of attenuation or boost applied to the low frequency band.	-12 – 0 – +12 dB
	Low Mid	Amount of attenuation or boost applied to the low-mid frequency band.	-20 – 0 – +20 dB
	High Mid	Amount of attenuation or boost applied to the high-mid frequency band.	-20 – 0 – +20 dB
	High	Amount of attenuation or boost applied to the high frequency band.	-12 – 0 – +12 dB

Amp/Cab/Comp

Use this tab to adjust the settings for the amp/cab and compressor effects. Each effect can be turned on and off by using the buttons on the bottom of the screen.

Parameter		Description	Value Range
Amp | Cab		Use the button in the upper-left corner to enable or disable the amp/cab effect.	Off, On
	Cabinet	Type of amplifier simulated.	D.I., Brit, 1x8”, 1x12”, 2x10”, 2x12”, 4x10”, 4x12”, 1x15” Bass, 4x10” Bass, Radio
	Mono/Stereo	Determines whether the simulation is mono or stereo.	Mono, Stereo
	Drive	Amount of overdrive applied to the amp signal.	0–100%
	Soft-Clip	Amount of softening applied to the clipped signal to decrease high-frequency harmonics and add warmth.	0–100%
	Volume	Output level of the amp signal.	-12.0 – 0.0 – 12.0 dB
	Bass	Amount of bass-range tone reduction or boost.	-100 – 0 – +100%
	Mid	Amount of mid-range tone reduction or boost.	-100 – 0 – +100%
	High	Amount of high-range tone reduction or boost.	-100 – 0 – +100%
Compressor		Use the button in the upper-left corner to enable or disable the compression effect.	Off, On
	Threshold	Signal level after which the compression will be applied.	-30.0 – 0.0 – +10.0 dB
	Ratio	Amount of compression applied.	1.0:1 – 20.0:1
	Attack	Length of time to apply the compression.	0–100%
	Makeup	Amount of additional output gain for the compressed signal.	-20.0 – 0.0 – +20.0 dB

Delay/Reverb

Use this tab to adjust the settings for the delay and reverb effects. Each effect can be turned on and off by using the buttons on the bottom of the screen.

Parameter		Description	Value Range
Delay		Use the button in the upper-left corner to enable or disable delay.	Off, On
	Time	Amount of time between the dry signal and the delayed signal.	1/16 – 16/4
	L/R Ratio	Reduces the delay **Time** in either the **Left** or **Right** stereo field. This is useful for creating offset, panned delays.	50:100 – 100:100 – 100:50
	Feedback	Amount of signal fed back into the delay line.	0–100%
	Mix	Wet/dry amount of the delay effect.	0–100%
	Reso LP Freq	Low pass frequency for feedback resonance.	100 – 16000 Hz
	Reso Bell Freq	Center frequency for feedback resonance.	100 – 16000 Hz
	Reso Bell Gain	Amount of gain applied to the resonant frequency.	0–100%
Reverb		Use the button in the upper-left corner to enable or disable the reverb effect.	Off, On
	Pre-Delay	Length of time between dry signal and reverberated signal.	0 – 250 ms
	Time	Length of reverb tail.	0.3 – 60.00 s
	Size	Size of the reverberation environment.	0–100%
	Mix	Wet/dry amount of the reverb effect.	0–100%
	Shape	Shape of the reverberation environment, which will alter the density of reverb reflections. At lower settings, the sound of individual reflections is more present. At higher settings, reflections are more uniform.	0–100%
	Damp	Amount of frequency dampening applied to the reverberated signal.	100–0%
	HPF Freq	Center frequency for reverb signal high-pass filter.	0 – 2000 Hz
	Brightness	Amount of high frequency decay.	-100–0%

MIDI Settings

Use this tab to adjust the MIDI settings for the plugin.

Parameter		Description	Value Range
Modwheel	Destination	Send Mod Wheel data to one of the following control destinations.	Pitch, Cutoff, Reso, Amp, Pan
	Depth	Amount of modulation applied.	
		When **Destination** is set to **Pitch**:	-12.0 – +12.0
		When **Destination** is set to **Cutoff**, **Reso**, **Amp** or **Pan:**	-100 – 0 – 100%
	LFO	Ties the modulation to the Control LFO.	Off, On
Aftertouch	Destination	Send Aftertouch data to one of the following control destinations.	Pitch, Cutoff, Reso, Amp, Pan
	Depth	Amount of modulation applied.	0–100%
		When **Destination** is set to **Pitch**:	-12.0 – +12.0
		When **Destination** is set to **Cutoff**, **Reso**, **Amp** or **Pan:**	-100 – 0 – 100%
	LFO	Ties the modulation to the Control LFO.	Off, On
Expression	Destination	Send Expression data to one of the following control destinations.	Pitch, Cutoff, Reso, Amp, Pan
	Depth	Amount of modulation applied.	0–100%
		When **Destination** is set to **Pitch**:	-12.0 – +12.0
		When **Destination** is set to **Cutoff**, **Reso**, **Amp** or **Pan:**	-100 – 0 – 100%
	LFO	Ties the modulation to the Control LFO.	Off, On
Footswitch 2	Destination	Send Footswitch 2 data to one of the following control destinations.	Pitch, Cutoff, Reso, Amp, Pan
	Depth	Amount of modulation applied.	0–100%
		When **Destination** is set to **Pitch**:	-12.0 – +12.0
		When **Destination** is set to **Cutoff**, **Reso**, **Amp** or **Pan:**	-100 – 0 – 100%
	LFO	Ties the modulation to the Control LFO.	Off, On

MIDI Settings *(continued)*

Parameter		Description	Value Range
Control LFO	Shape	Waveshape of the Control LFO.	Sine, Triangle, Sawtooth, Square, S&H Random, S&H Alternate, Random Drift, Slow Drift
	Rate	Speed of the low frequency oscillator. When **Sync** is **Off**: When **Sync** is **On**:	 0.03 – 30.00 Hz 8/4 – 1/64
	Sync	Enables or disables Control LFO sync, and sets how the Control LFO is synced when enabled.	Off, First Note, Each Note, BPM & Note, BPM & Beat

AKAI PROFESSIONAL

akaipro.com