AKAI PROFESSIONAL

MPC

User Guide

English

Beta v3.5

Manual RevA

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Introduction

Welcome to the beta release of MPC3 desktop software—a major evolution in the MPC platform. MPC3 delivers a significant upgrade in both workflow efficiency and feature depth, introducing a streamlined approach to music production through an all-new unified track architecture.

By merging tracks and programs into a single 1:1 track model, MPC3 simplifies complex workflows and accelerates creative momentum. Whether you're composing, editing, or mixing, MPC3 is designed to help you move faster and stay inspired.

Highlights of the MPC3 Beta:

- **1:1 Track Model** — Tracks and programs are now unified, streamlining routing and editing.
- **VST3 Plugin Support** — Expanded plugin compatibility for modern production environments.
- Improved **drum tracks**.
- **Advanced Keygroup Synthesis** engine.
- More **timestretch** options.

Please note: This is an early beta build.

This beta version includes core elements of the MPC3 architecture, but does not represent the final feature set. It is designed to give users early access to the new workflow and provide feedback as we move toward a full release.

Planned Features Not Yet Included in This Beta:

- **Q-Link Setup UI**
- **Arranger View** (GUI replacement for Track View)
- **Time Signature Support**
- **Various GUI Enhancements**

We’re excited to bring you into the future of MPC, and we can’t wait to hear what you create with MPC3.

Akai Professional

MPC2 vs. MPC3

MPC3 installs alongside MPC2, allowing you to use both versions independently.

The transition from MPC2 to MPC3 introduces significant architectural changes, most notably the unification of tracks and programs into a single track container. This redesign aims to streamline and accelerate workflow, but also means that MPC2 projects are not loadable into MPC3 with identical behavior, and projects created in MPC3 are not backwards-compatible with MPC2. Because of this, we strongly recommend saving a **new copy** of all MPC2 projects before importing to preserve editing capabilities and ensure you can still reopen the existing MPC2 projects in the previous software.

Upon loading an MPC2 project, MPC3 will display a Project Import dialog. By default, the **Import** field is set to **All Sequences**. Using this method:

- MPC3 will attempt to import all sequences and tracks from the MPC2 project.
- If a single track was assigned to a single program in MPC2, MPC3 will create a corresponding track of the same type as the original program.
- If multiple tracks were assigned to the same program in MPC2, MPC3 will create one primary track of the same type as the program, and subsequent tracks will be converted to MIDI tracks with their **Send To** field pointing to the primary track.

Alternatively, you can set the Import field to **Selected Sequences Import**. Using this method:

- A list of sequences from the source MPC2 project will be displayed, and you can tick the sequences you wish to import into MPC3.
- The selected sequences will load into their original locations within the sequence list.

MPC3 also introduces a refreshed, darker visual design across the interface, including updated mixer and channel strip views. The overall look and feel have been enhanced to improve visual clarity and user experience, offering a more modern and refined workflow environment.

When starting MPC3, or when selecting **File > New Project**, it will automatically load a small factory project by default, including: The configuration of this project varies depending on the type of MPC device in use.

- **Drum Track Preset:** A single drum track with samples loaded on Pad Bank A.
- **Q-Link Track Layout:** Configured to control the sound of the drum track.
- **Effects:** AIR Reverb and AIR Delay are preloaded on Returns 1 and 2.

You can change the default behavior of the new project to load an **Empty Project** or use an **Autoload Project** from the ***Preferences > Project Load/Save*** menu.

Your **inMusic Profile** is now visible in the top-right corner of the MPC3 interface. Clicking on your profile provides quick access to the ***Preferences > Activations*** menu, where you can easily activate and install newly purchases plugin instruments and effects, including the MPC3 beta activation.

About This User Guide

This user guide will get you up to speed on the latest changes in the MPC3 software. For details on any features or functions not covered in this manual, refer to the MPC2 User Guide or the MPC Standalone OS User Guide.

For consistency, the terminology throughout is based on the MPC 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: Click the **Play Start** button.

Turn **Q-Link Knob 4**.

Click the **Mute** button.

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

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

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

Some parts of this manual refer to other relevant chapters or sections, which are cited in ***bold, italic blue*** characters.

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

See ***Operation > General Features > Menu > MIDI/Sync*** for more information.

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

Important Notes

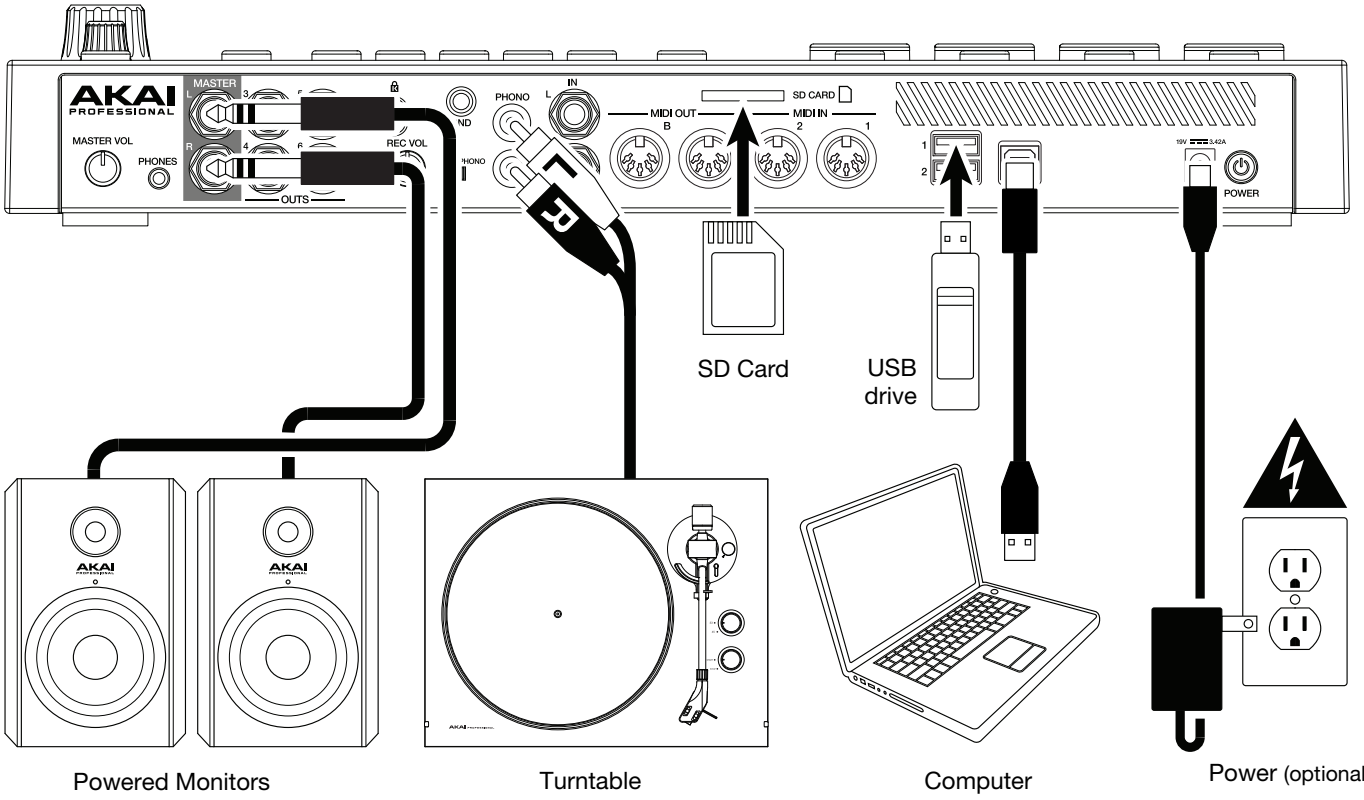
Before installing the MPC3 software, make sure your computer meets the system requirements.

Before connecting your MPC hardware to your computer, make sure you have installed the latest drivers and software. Visit **akaipro.com** to download the latest versions.

Setup

1. Connection

Here is just an example of how to use MPC hardware in your setup (MPC Live, in this case). Items not listed in your included *Quickstart Guide* are sold separately.



2. Registration and Installation

1. Go to **profile.inmusicbrands.com** and log into your inMusic Brands Profile.
2. Click **Register New Product** and use the unlock code provided by the beta team to register the MPC3 software to your account.
3. Once MPC3 is registered, download the MPC3 software package.
4. Open the file and double-click the installer application.
5. Follow the on-screen instructions to complete the installation. MPC3 will install alongside any previous MPC2 installation, ensuring you can use both versions as needed.

Note: By default, the MPC3 software will be installed in [your hard drive]**Program Files\Akai Pro\MPC3** (Windows®) or **Applications** (macOS®). You can also create a shortcut on your Desktop.

3. Getting Started

1. Power on your MPC hardware.
2. On your computer, open the **MPC3** software.
3. Click **Sign In** to sign into your inMusic Brands Profile account. Follow the on-screen instructions to activate your MPC3 software.
4. **MPC X, MPC X SE, MPC Live, MPC Live II, MPC One, MPC One+, MPC Key 61, & MPC Key 37 users**: Check the upper-right corner of the window:

   - If you see a **monitor/cable icon**, then your MPC hardware is already in Controller Mode. Continue to **Step 6**.

   - If you see a **chip icon**, then your MPC hardware is in Standalone Mode. Follow these steps:
     i. Press **Menu** to enter the Menu.
     ii. Tap the **MPC chip icon** in the upper-right corner.
     iii. In the **Enter Controller Mode** window that appears, tap **Controller Mode**. **Looking for computer** may appear briefly in the window before your MPC hardware recognizes the USB connection as a controller.
5. In the MPC3 software, open the **Preferences**:

   Windows: Click the **menu icon** (≡), select **Edit**, and click **Preferences**.

   macOS: Click the **MPC** menu, and click **Preferences**.
6. In the **Preferences** window, click the **Audio** tab and select the sound card you want to use. Click **OK** when you are done.

Important: We highly recommend using your MPC hardware's sound card (**Akai Pro** [your MPC model] **ASIO**).

Windows users only: If you need to use your computer's internal sound card, we recommend downloading the latest ASIO4ALL driver at **asio4all.com**.

Operation

This chapter explains the complete features and functions of the MPC3 software.

General Features

Tracks

About Tracks

Each sequence you create within a project is made up of **tracks**. There are six main types of tracks, each of which determines how the track sounds or for what it is used. 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.

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 MPC 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, or to another MPC track. See ***MIDI Tracks*** for more information.

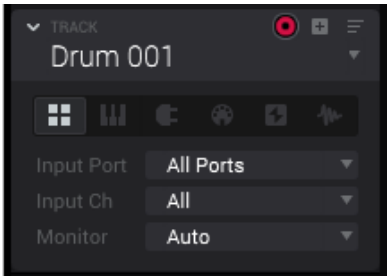
A **CV track** lets you send your track's MIDI data to an external MIDI device that uses control voltage (CV), like a synth. Although this option is selectable, it is usable only with MPC hardware that has CV outputs (e.g., **MPC X**). See ***CV Tracks*** for more information.

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

Drum Tracks

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.

To create a drum track, do either of the following in the ***Inspector*** (Click the ***i*** icon to show or hide the Inspector):



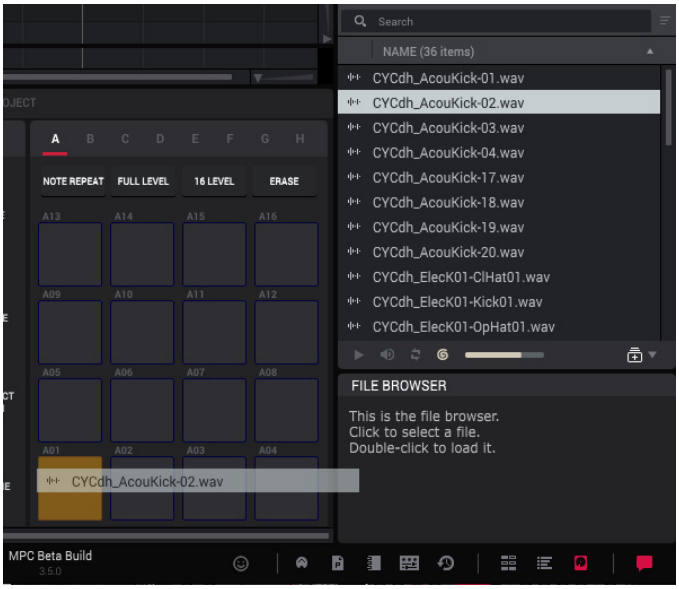
- Click the **four-squares icon** below the **Track Name** field, which indicates a drum track.
- Click the **+ icon** next to the **record arm** button in the Track section, or right-click the **Track Name** and select **New Track**, to open the New Track window. Then, select **Drum** as the track Type. Use the **Tracks** field to create multiple drum tracks at the same time.

A new drum track will be created and appended with a number (e.g., **Drum 002**).

To rename the track, double-click the **Track Name** field, type a name, and press **Enter**.

To load a sample into a drum track:

1. In the **File Browser**, find a sample you want to use. (Click the **hard-drive icon** in the lower-right corner to show or hide the File Browser. See ***Browser*** to learn more.)
2. Click and drag the sample from the Browser onto the desired pad. Alternatively, double-click the sample to load it to the sample pool without loading it to a specific pad.



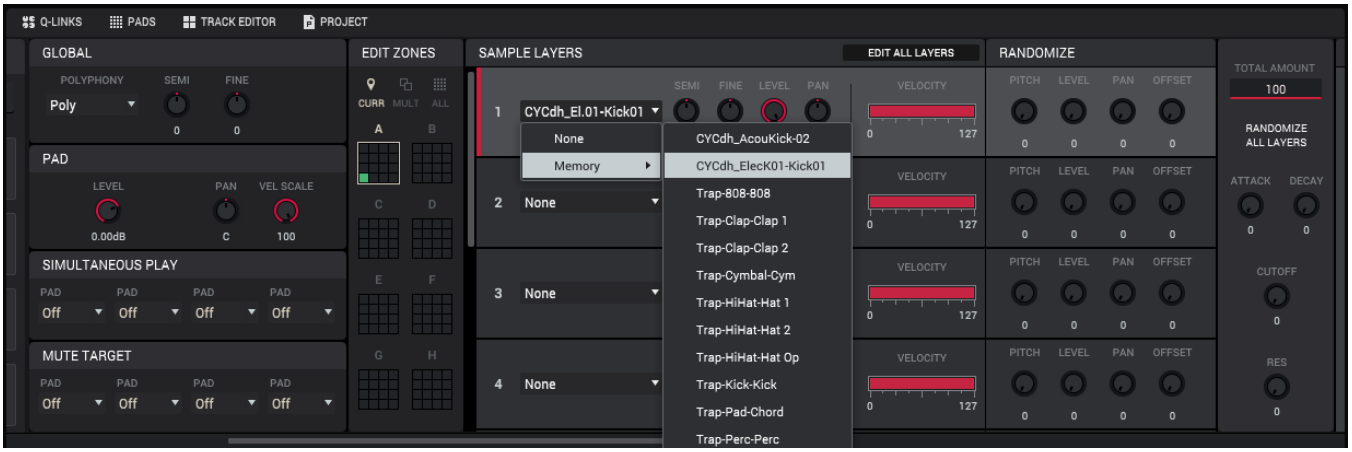
To assign samples to additional pads, repeat Steps 1–2.

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

Alternatively, assign samples in a drum track this way:

1. Click the **four-pads icon** in the toolbar to enter ***Track Edit Mode***.
2. In the bottom half of the window, scroll to the right to find the **Sample Layers** section. This lets you view the samples assigned to all eight layers of the drum track as well as tuning and level parameters for each layer.
3. Click a pad to select it (and play its assigned samples, if any). The pad will be lit green.
4. Click the menu for a layer, and select a sample.

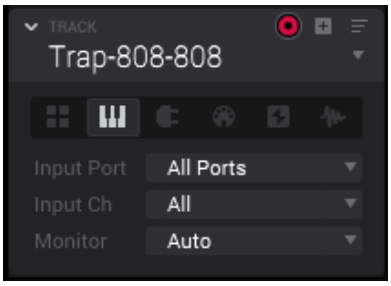
Tip: Remember that a drum track has 128 pads total—16 pads across eight banks.



Keygroup Tracks

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 MPC pads.

To create a keygroup track, do either of the following in the ***Inspector*** (Click the ***i*** icon to show or hide the Inspector):



- Click the **piano-keys icon** below the **Track Name** field, which indicates a keygroup track.
- Click the **+ icon** next to the **record arm** button in the Track section, or right-click the **Track Name** and select **New Track**, to open the New Track window. Then, select **Keygroup** as the track Type. Use the **Tracks** field to create multiple keygroup tracks at the same time.

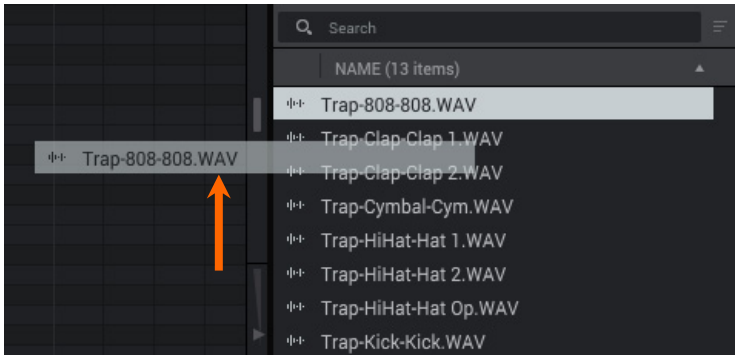
A new keygroup track will be created and appended with a number (e.g., **Keygroup 002**).

To rename the track, double-click the **Track Name** field, type a name, and press **Enter**.

To load a sample for your keygroup track into the project:

1. In the **File Browser**, find a sample you want to use. (Click the **hard-drive icon** in the lower-right corner to show or hide the File Browser. See ***Browser*** to learn more.)
2. Click and drag the sample from the Browser onto any space outside of the Browser. Alternatively, double-click the sample to load it to the sample pool.

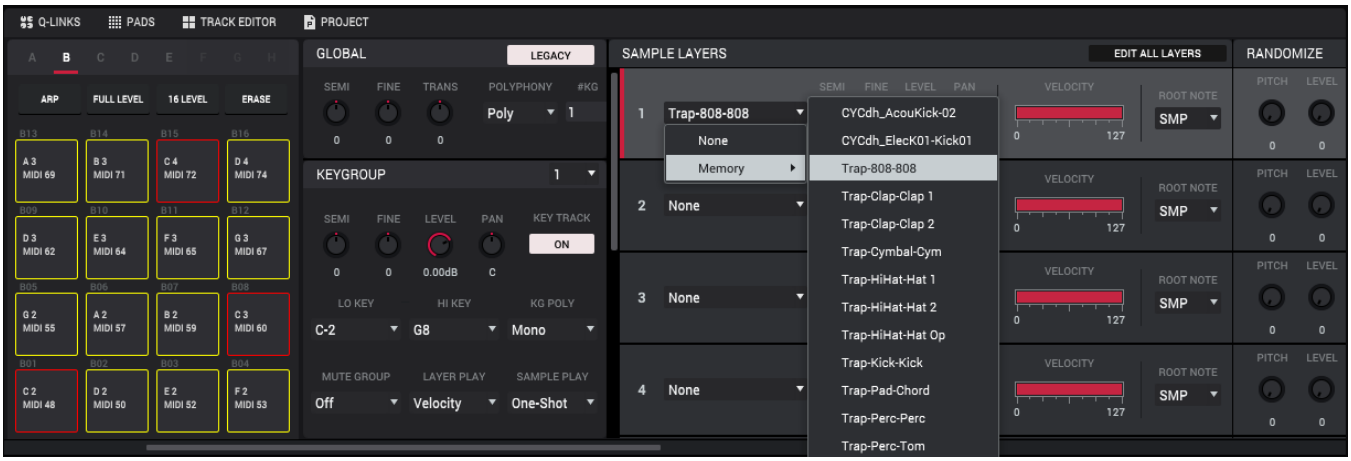
   To load additional samples, repeat Steps 1–2.



To assign samples in a keygroup track:

1. Click the **four-pads icon** in the toolbar to enter ***Track Edit Mode***.
2. In the bottom half of the window, scroll to the right to find the **Sample Layers** section. This lets you view the samples assigned to all eight layers of the current keygroup as well as tuning and level parameters for each layer.
3. Click a pad to select it (and play its assigned samples, if any). The pad will be lit green.

   Tip: In the **Pads** panel, click the **Pad Bank D** button and click **Pad 13**. You should hear the sample played back with its original pitch. You can use the other pads to play your sample chromatically.
4. Click the menu for a layer, and select a sample.



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

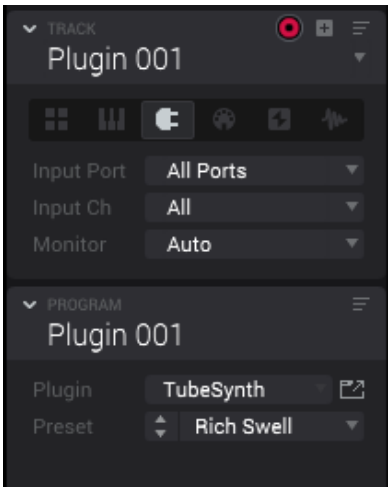
Tip: Remember that a keygroup track offers up to 128 keygroups, and each keygroup can hold up to four samples (Layers 1–4). This is a total of 512 samples.

Plugin Tracks

A plugin track contains an instance of a plugin through which you can send your track's MIDI data. This lets you use the same instance of a plugin with multiple tracks (rather than load an instance of a plugin on every track, which can be cumbersome and CPU-intensive). See the ***Plugins*** chapter to learn about scanning and selecting plugins.

To create a plugin track, do either of the following in the ***Inspector*** (Click the ***i*** icon to show or hide the Inspector):

- Click the **plug icon** below the **Track Name** field, which indicates a plugin track.
- Click the **+ icon** next to the **record arm** button in the Track section, or right-click the **Track Name** and select **New Track**, to open the New Track window. Then, select **Plugin** as the track Type. Use the **Tracks** field to create multiple plugin tracks at the same time.



A new plugin track will be created and appended with a number (e.g., **Plugin 002**).

To rename the track, double-click the **Track Name** field, type a name, and press **Enter**.

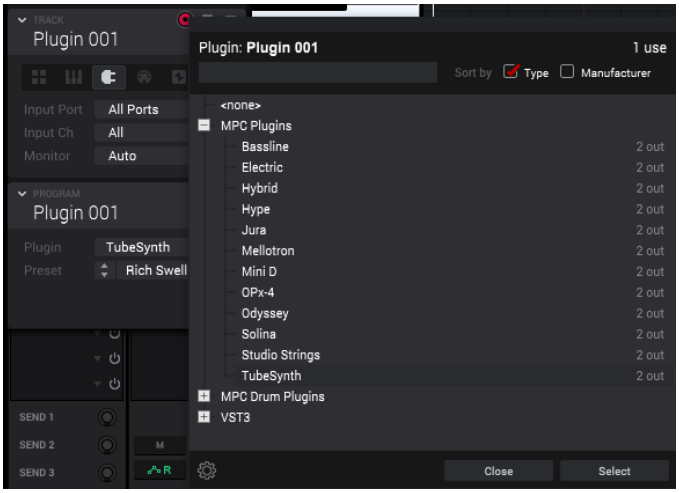
To select a plugin:

1. In the ***Program*** section, click the **Plugin** menu to open the Plugin window.
2. Use the **Search bar** to search for a plugin by name.

   Check the **Sort By** boxes for **Type** and/or **Manufacturer** to sort your plugins.

   Click the **+** or **–** icons to expand or contract the selected Plugin list.
3. Click the desired plugin, and then click **Select** to load it, or click **Close** to cancel.

   Note: You have to specify the disk directory where your plugins are located. This can be done in the software's ***Preferences***.

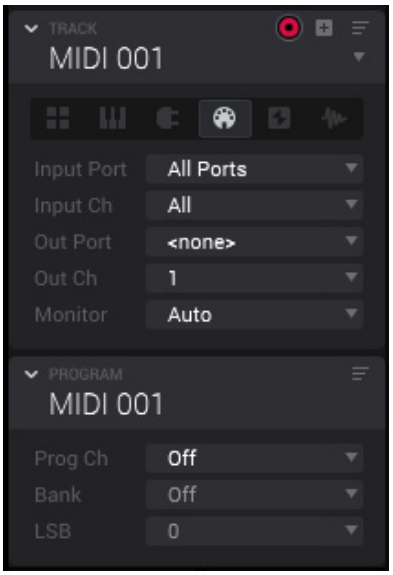


MIDI Tracks

A MIDI program lets you send your track's MIDI data to an external MIDI device like a synth or drum machine, or to another MPC track.

Note: Configure your MIDI ports in the software's ***Preferences***.

To create a MIDI track, do either of the following in the ***Inspector*** (Click the ***i*** icon to show or hide the Inspector):



- Click the **MIDI-jack icon** below the **Track Name** field, which indicates a MIDI track.
- Click the **+ icon** next to the **record arm** button in the Track section, or right-click the **Track Name** and select **New Track**, to open the New Track window. Then, select **MIDI** as the track Type. Use the **Tracks** field to create multiple MIDI tracks at the same time.

A new MIDI track will be created and appended with a number (e.g., **MIDI 002**).

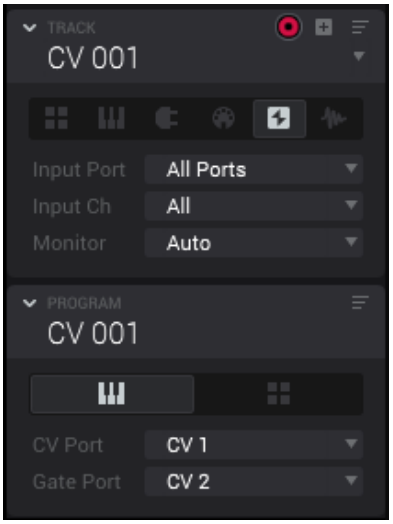
To rename the track, double-click the **Track Name** field, type a name, and press **Enter**.

CV Tracks

A CV track lets you send your control voltage (CV) signals to an external MIDI device like a synth or drum machine that uses CV.

Important: CV tracks are designed for use with an MPC model with CV outputs (e.g., **MPC X**).

To create a CV track, do either of the following in the ***Inspector*** (Click the ***i*** icon to show or hide the Inspector):



- Click the **CV icon** below the **Track Name** field, which indicates a CV track.
- Click the **+ icon** next to the **record arm** button in the Track section, or right-click the **Track Name** and select **New Track**, to open the New Track window. Then, select **CV** as the track Type. Use the **Tracks** field to create multiple CV tracks at the same time.

A new CV track will be created and appended with a number (e.g., **MIDI 002**).

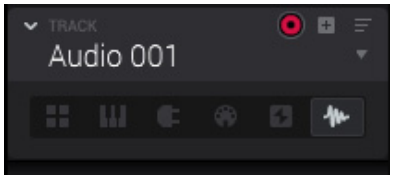
To rename the track, double-click the **Track Name** field, type a name, and press **Enter**.

There are two modes of CV operation: **Melodic** and **Drum**. In the Program section, click the **keys icon** to select Melodic operation, or click the **pads icon** to select Drum operation. See ***Inspector > Program*** to learn more about these settings.

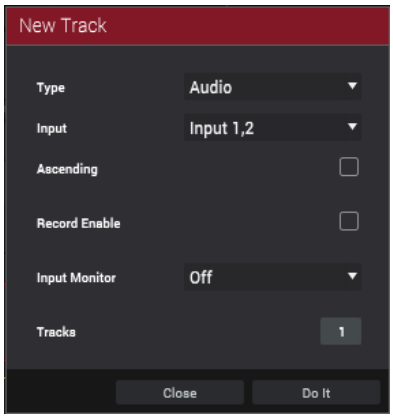
Audio Tracks

An audio track lets you record audio from an external source or insert audio files.

To create an audio track, do either of the following in the ***Inspector*** (Click the ***i*** icon to show or hide the Inspector):



- Click the **waveform icon** below the **Track Name** field, which indicates an Audio track.
- Click the **+ icon** next to the **record arm** button in the Track section, and then select **Audio** as the track Type. In this window, you can also configure the following settings.



  Use the **Input** field to select the input source of the external audio signal.

  Check the **Ascending** box to increment the assigned **Input** values when creating multiple audio tracks. For instance, if you create two Audio tracks starting with **Input 1,2**, the second audio track will automatically be assigned to **Input 3,4**.

  Check the **Record Enable** box to automatically enable the new audio track for recording.

  Use the **Input Monitor** field set how your audio track will be monitored:

    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 **Tracks** field to create multiple Drum tracks at the same time.

A new audio track will be created and appended with a number (e.g., **MIDI 002**).

To rename the track, double-click the **Track Name** field, type a name, and press **Enter**.

Toolbar

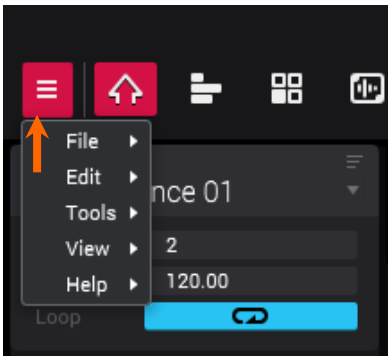
This chapter describes the available options in the toolbar at the top of the software window.

Not all elements of toolbar are shown by default. For instance, some mode icons and transport controls are hidden. Furthermore, you can choose to hide parts of the toolbar that are shown.

To select or deselect the items you want to see in the toolbar, click the **menu icon** (≡) in the upper-left corner and select **View**. See ***View > Toolbar*** for more information.

Menu

To access the software's menu, click the **menu icon** (≡) in the upper-left corner of the window.



macOS Users: Five items in this section appear differently on macOS than listed below: **Exit/Quit MPC**, **Preferences**, **Check for Updates**, **Expansion Store**, and **About MPC** are located in the **MPC** menu next to the **apple icon** (rather than the menus listed below).

Tip: Several selections in the menu can be made by using computer keyboard shortcuts. You can see these keyboard shortcuts next to these selections in the menu. Go to **Help** > **Software Information** and select **Keyboard Shortcuts** to view a complete list of shortcuts within the MPC3 software. Some of these shortcuts may not work if you are using the MPC3 software as a plugin (due to those shortcuts being used by your host DAW instead). Additionally, when using MPC as a plugin on Windows, some fields may not be able to be typed into.

File

- **New Project** creates an empty project. Use this command when you want to start a project from scratch.
- **New From Template** loads a user-defined project template. We recommend creating a project with the basic settings that suit your needs and saving it as a project template for easy access. See ***Preferences > Project Load/Save*** to learn how to set this template.
- **Load Recent** provides shortcuts to the last 10 files you have been recently working with. The list is chronological with the most recent file at the top.
- **Save Project** saves the current project. In the window that appears, name your project and select a save location. The samples in the **Project** panel will be automatically saved with the project. The project file (**.xpj**), and its information (samples, MIDI files, program files, etc.) will be saved in a folder with the same name on the same folder level.
- **Save Project As** is identical to the **Save Project** function but lets you save the current project with a new name.
- **Save All Programs** saves all programs of your project.
- **Save Current Track** saves only the current track (**.xtc**).
- **Export** lets you export your project or sequence data in various formats: a single project archive file, MPC formats, a standard MIDI file, or as an audio mixdown file. Select the desired option from the sub-menu.
    - **As Audio Mixdown** exports the sequence or song as an audio file. See the ***Export > Audio Mixdown*** chapter for more information about this process. If you are in Song Mode, it will affect the entire song. If you are in any other mode, it will affect the current sequence only.
    - **As Ableton Live Set** exports the current sequence as an Ableton Live Set (.ALS) file. See ***Export > Ableton Live Set Export*** for more information.
- **Exit** closes the software. (On macOS, this is named **Quit MPC** and is located in the **MPC** menu next to the **apple icon**.) If you have not saved any changes made to a currently open project, it will prompt you to do so before quitting.

Edit

- **Undo** undoes the last action you performed. When there are no actions left to undo, this command will be unavailable and appear grayed out.
- **Redo** undoes the Undo command. You can continue redoing actions until there are no items left to redo, in which case, the Redo command will be unavailable and appear grayed out.

  Important: If you perform a new action when the Redo command is available, you will no longer be able to redo. In other words, as soon as you perform an editing action other than Undo, Redo is no longer available.
- **Undo History** lets you view a list of previously executed commands in the **Undo History** panel. As you undo and redo commands, you can see your current "position" in the list of commands in the window.

  Tip: To revert to a previous "state" in your project, click and drag the point just after the last step. Any "undone" steps will be grayed out. You can do the same to redo grayed-out steps, as well.
- **Cut** removes selected events from the grid and copies it to the clipboard. After cutting events, you can paste or insert them at another location in the same or another sequence.
- **Copy** copies selected events from the grid to the clipboard without removing them. After copying events, you can paste or insert them at another location in the same or another sequence.
- **Paste** lets you paste the contents of the clipboard at the position marker's current location.
- **Nudge Event Left/Right by TC** shifts the selected event/events left or right (respectively) by the time division set in the Time Correct settings.
- **Nudge Event Left/Right by Tick** shifts the selected event/events left or right (respectively) by one tick.
- **Time Correct** displays options for using time correct (quantization):
  - **Apply** quantizes the currently selected note events. If no note events are selected, nothing will be quantized.
  - **Settings** opens the Time Correct window where you can configure its settings. See the ***Time Correct*** chapter for more information about this.
- **Humanize** applies randomization to the timing, length, and/or velocity of MIDI events. See ***Other Functions and Tools*** > ***Humanize*** for more information about this.
- **Pitch Quantize** forces the pitches of note events on a MIDI track into a specific scale. See ***Other Functions and Tools*** > ***Pitch Quantization*** for more information about this.
- **Audio Region** provides options related to editing the current audio track region:
  - **Duplicate** copies and pastes the track region immediately after the original one.
  - **Mute** silences the track region.
  - **Reverse** reverses the track region.
  - **Warp** lengthens or shortens the track region without changing its pitch.

    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.
- **Track** provides options related to editing the current track:
  - **Next Track** selects the next track.
  - **Previous Track** selects the previous track.
  - **Pad Color** opens the **Pad Color** window where you can assign specific colors to your pads in each program. See ***Pad Color*** for more information.
  - **Note Mapping** opens the **Note Mapping** window where you can assign a MIDI note to each pad in a program.

Preferences opens the **Preferences** window, which contains many customizable elements of the software. (On macOS, **Preferences** is located in the **MPC** menu next to the **apple icon**.) Click the corresponding tab on the left to select it (e.g., **MIDI**, **Sequencer**, etc.). Click the **OK** button to close the Preferences window. Preferences are automatically saved. See the following ***Preferences*** chapter for more information about this.

Tools

- **Metronome**
  - **Count-In** enables or disables the metronome pre-count 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.
  - **Enable** offers the settings for the metronome.
    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.
  - **Rate** lets you to select the metronome click's time division: **1/4**, **1/4T**, **1/8**, **1/8T**, **1/16**, **1/16T**, **1/32** or **1/32T** (**T** indicates a triplet-based time division).
  - **Sound** lets you to select the sound that you want to hear for the metronome: **Sidestick 1**, **Sidestick 2**, **Clap**, **Metroclick**, **Shake**, **Tambourine**, **Cowbell**, or **MPC Click**.
  - **Output** lets you set where the metronome signal will be heard: a pair of main outputs (**Out 1,2–31,32**) or a single main output (**Out 1–32**).
- **16 Level** opens the **16 Levels** window. See ***Other Functions and Tools > 16 Level*** for more information.
- **Arpeggiator** opens the **Arpeggiator** window, a fully featured arpeggiator and phrase player for melodic program types. See ***Other Functions and Tools > Arpeggiator*** for more information.
- **MIDI Keys** enables or disables the use of your computer keyboard to enter or play a range of 17 MIDI notes, starting from a C. This is the same as using the **Keyboard** button in the **toolbar**.

  On standard US/American computer keyboard, use the **A**, **S**, **D**, **F**, **G**, **H**, **J**, **K**, **L**, and **;** keys to play the white keyboard keys, and use the **W**, **E**, **R**, **T**, **Y**, **U**, **I**, **O**, and **P** keys to play the black keyboard keys. Press **[** or **]** to shift the range of playable notes up or down (respectively) by one octave.

  If the MIDI keyboard is shown, the corresponding computer keyboard character will be shown above each key (though you can still use MIDI keys even if it is hidden).

  Enabling MIDI Keys disables Pad Keys.

  Tip: Show the MIDI keyboard to visualize the keys in a traditional piano keyboard. See ***Panels > MIDI Keyboard*** to learn about this.
- **Pad Keys** enables or disables use of your computer keyboard to play the 16 pads of the current pad bank. This is the same as using the **Keyboard** button in the **toolbar**.

  On a standard US/American computer keyboard, use the keys as follows:
  the **Z**, **X**, **C**, and **V** keys plays **Pads 01**, **02**, **03**, and **04**
  the **A**, **S**, **D**, and **F** keys plays **Pads 05**, **06**, **07**, and **08**
  the **Q**, **W**, **E**, and **R** keys plays **Pads 09**, **10**, **11**, and **12**
  the **1**, **2**, **3**, and **4** keys plays **Pads 13**, **14**, **15**, and **16**

  Enabling Pad Keys disables MIDI Keys.

1	2	3	4
Q	W	E	R
A	S	D	F
Z	X	C	V

- **Delete Unused Samples** deletes any samples not assigned to a pad from the project.

  Important: The samples will be deleted immediately from the project. The software will not ask for confirmation or allow you to cancel, but you can undo this action (i.e., with the Undo command or hardware button), if needed.

  Tip: You can delete unused samples by clicking the **trash can icon** in the upper-right corner of the **Project** panel, as well.
- **Tuner** opens the built-in tuner for checking the pitch of an instrument connected to an audio input.
  Use the **Input** field to select the input for the instrument you would like to tune.
  Use the **Frequency** field to set the base tuning frequency.
  Play a note and use the indicator to adjust your instrument to the correct pitch.

  To close the tuner screen, click **Close** or anywhere outside the window.

- **Auto-Sampler** opens the **Auto-Sampler** window which lets you capture and convert any plugin preset or external instrument preset into a keygroup sampler patch. See ***Other Functions and Tools*** > ***Auto-Sampler*** for more information about this.
- **Generate Random Events** lets you create random melodic or drum patterns on the current MIDI track. See ***Other Functions and Tools*** > ***Generate Random Events*** for more information about this.
- **Convert To Progression** opens the **Convert Track to Progression** window that automatically detects the chords that are played on the currently selected track, which you can save as a chord progression. See ***Other Functions and Tools*** > ***Convert To Progression*** for more information about this.
- **Current Sample To Keygroup** immediately converts a selected drum sample to a new keygroup program on a new track.
- **Rebuild Media Browser Database** resets and rescans your Media Browser. See ***Browsers*** > ***Media Browser*** to learn more about the Media Browser.
- **Retrospective Record** immediately captures recently played MIDI events and adds them to the current track.
- **Stop All Sounds** immediately stops all sounds within the software.
- **Plugin Manager** opens the **Plugins** window which contains a list of all available plugins, based on your selected plugin folders. This is the same as clicking the **gear icon** in the lower-left corner of the effect selection menu. See the ***Plugins*** chapter to learn about this.
- **Expansion Manager** opens the **Expansions** window which contains a list of your MPC expansions. See the ***Expansions*** chapter to learn about this.

View

- **Mode** lets you select from any of the available software modes. See ***Modes*** to learn about these.
- **Toolbar** lets you select or deselect the items you want to see in the toolbar at the top of the window. This includes the ***Mode Icons***, the ***Timing Controls***, the ***Transport Controls***, and overall ***Status*** indicators.

  The **Toolbar Modes** submenu lets you select or deselect each mode icon. Selected ones will be shown in the toolbar. You can also select **All** to show all of them or **Default** to show the default ones (which we find are the most often used).
- **Inspector** lets you select or deselect the items you want to see in the Inspector on the left edge of the window. This includes the Inspector itself (**Show Inspector**), send effect knobs on the channel strips (**Sends**), and insert effect slots on the channel strips (**Inserts**). You can also select which channel strip you want to display: the pad channel strip (**Pad Channel**), or the track channel strip (**Track Channel**). See ***Inspector*** to learn more about this.
- **Browser** lets you select or deselect options that determine how the Browser is shown on the right edge of the window. You can hide or unhide the Browser (**Hidden**); show the **File Browser**, **Expansion Browser**, **Media Browser**, **MIDI Learn Browser**, or **MIDI Monitor**; **Project Information** Browser, **Project Notes** Browser, or **Undo History** Browser; show the **Quick Help** panel; or allow the Media Browser to show all tags. See ***Browser*** to learn more about this.
- **Editor** lets you select or deselect options that determine how the editor is shown in the top half of the window. You can show or hide the bottom panel (this is the same as clicking the two-panels icon in the lower-left corner of the main software window); show pad colors in the Grid Editor; show or hide the automation lane under the Grid Editor; or switch between the Grid Editor, Wave Editor, or List Editor (when each option is available, depending on the mode).
- **Show MIDI Keyboard** shows or hides a piano keyboard at the bottom of the window. You can use these keys to play or enter notes. See ***Panels*** > ***MIDI Keyboard*** to learn about this.
- **Zoom In At Playhead** and **Zoom Out At Playhead** zoom into or out of the Grid Editor or Wave Editor (respectively) while keeping the audio playhead or last-moved marker at the center.
- **Zoom In Vertically** and **Zoom Out Vertically** zoom into or out of the Grid Editor or Wave Editor (respectively).
- **Minimize** minimizes the MPC3 software window.
- **Full Screen** expands the MPC3 software window into a full-screen mode.

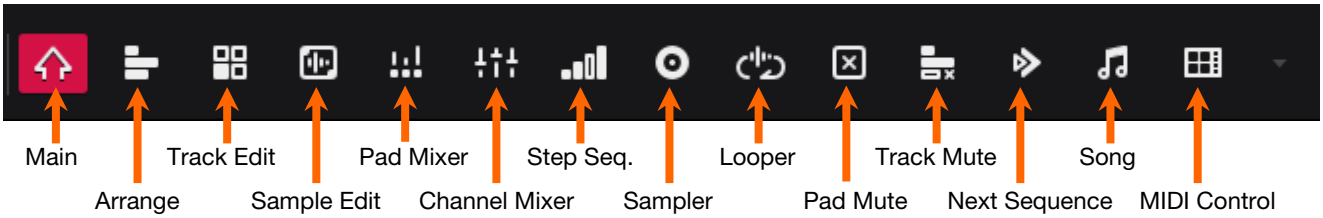
Help

- **Search** (macOS only) allows you to find results for specific search terms, which you can enter in this field.
- **Quick Help** shows or hides the **Quick Help** panel in the lower-right corner of the window under the Browser. This is the same as going to **View** > **Browser** > **Quick Help** or clicking the **? icon** in the lower-right corner of the window. This panel is visible only when one of the Browsers is shown.
- **Keyboard Shortcuts** opens a window with a list of all available keyboard shortcuts to execute various actions in the MPC3 software.

  Important: Some of the MPC3 software's keyboard shortcuts may not work if you are using the MPC3 software as a plugin (due to those shortcuts being used by your host DAW instead). Additionally, when using MPC as a plugin on Windows, some fields may not be able to be typed into. The delete shortcut to erase selected notes can still be used by pressing **Alt** + **Del**.
- **MPC Help** lets you open the user manual PDFs for the MPC3 software as well as the different types of MPC hardware that can control the MPC3 software.
- **Software Information** lets you open various items specific to this MPC3 software: the release notes PDF for this version of the MPC3 software (**MPC Release Notes**); the user manual PDF for Hybrid 3 (**Hybrid Instrument**).
- **Set Up Guides** lets you open a PDF with instructions on how to set up MMC control in this software (**MMC Control**).
- **Check for Updates** checks online for any available updates to the MPC3 software. (On macOS, **Check for Updates** is located in the **MPC** menu next to the **apple icon**.) You must have an internet connection to use this feature.
- **Deactivate License** allows you to deactivate MPC3 software authorization on the current device from your inMusic Profile, and log you out of your account. Click **Log Out** to continue, or **Cancel** to return to the MPC3 software. You can reauthorize the MPC3 software by opening it again, logging into your account, and activating it on your device.
- **Expansion Store** opens an online store of available MPC Expansions on the Akai Professional website. (On macOS, **Expansion Store** is located in the **MPC** menu next to the **apple icon**.) You must have an internet connection to use this feature.
- **About MPC** opens a window with information about this MPC3 software. (On macOS, **About MPC** is located in the **MPC** menu next to the **apple icon**.)

Mode Icons

The mode icons let you select the current software mode.



Click a **mode icon** to enter its corresponding mode.

Click the **down arrow** (▼) to show a menu of all modes, and click a mode to enter it.

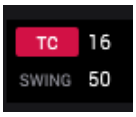
Timing Controls

Click the **metronome icon** at the top of the window to enable or disable the metronome.

Click and drag the **Metro** meter at the top of the window to set the volume of your metronome click.

The **Metronome** menu contains all settings regarding the metronome (click track).

> **To view the metronome settings**, click the **menu icon** (≡), select **Tools**, and click **Metronome**. See ***Metronome*** for more information about this.



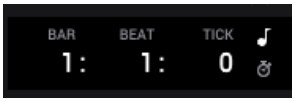
Click the **TC** icon to enable or disable Timing Correct.

Click the **TC** field to set the quantization value. Note events will "snap" to these time divisions on the grid. The **T** indicates a triplet-based value.

Click the **Swing** field to set the amount of swing from **50%** to **75%**. Swing lets you "shuffle" your beats—from subtle to extreme.

The **Timing Correct** window contains all settings to help quantize events in your sequence.

> **To open the Timing Correct settings**, click the **menu icon** (≡), select **Edit**, select **Time Correct**, and click **Settings…**. See ***Time Correct*** for more information about this.



The time counter indicates the current playhead position.

> **To adjust the position**, click and drag each field up or down.
>
> **To switch the time increments**, click the **note icon** or **stopwatch icon**.
>
> When set to **Beats** (**note icon**), the time is shown in **Bars**, **Beats**, and **Ticks**.
>
> When set to **Time** (**stopwatch icon**), the time is shown in hours (**HH**), minutes (**MM**), seconds (**SS**), and frames (**FF**).

Click the **Sync** field to determine whether the MPC3 software receives MIDI Clock information (**MIDI Clock**), MIDI Time Code information (**MTC**), communication from **Ableton Link**, or none of these (**Off**). This is the same setting as the **Receive** menu in **Sync** tab of your **Preferences**. See ***Preferences*** for more information.

Note: Audio recording is disabled when receiving MIDI Clock sync.

Note: Ableton Link is a new technology that synchronizes beat, phase and tempo of Ableton Live and Ableton Link-enabled applications over a wireless or wired network.

The MIDI monitor indicates incoming MIDI events.

Use the **BPM** field to adjust the tempo of the sequence. Click and drag it up or down, or double-click it, type a value, and press **Enter**. Alternatively, click **Tap** at the desired rate; the software will automatically detect the tempo.

Click the **Seq**/**Gbl** button to set whether each sequence follows its own tempo (**Seq**) or a global tempo (**Gbl**).

Transport Controls

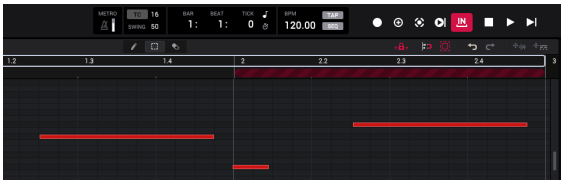
Click **Record** (●) to record-arm the sequence. Click **Play** (▶) or **Play Start** (▶|) to start recording. Recording in this way (as opposed to using **Overdub**) erases the events of the current sequence. After the sequence plays through once while recording, **Overdub** (⊕) will be enabled.

Click **Overdub** (⊕) to enable **Overdub**. When enabled, you can record events in a sequence without overwriting any previously recorded events. You can enable **Overdub** before or during recording.

Click **Retrospective Record** to immediately capture recently played MIDI events and add them to the current sequence at the playhead. This is useful for capturing performances when **Record** was not enabled.

After you record-arm the track and start playback, click **Record from Sequence Start** to start recording once the sequence loops back to its start. This is essentially a punch-in feature for the entire track, enabling you to start playing a record-armed track while allowing more time than the usual count-in to prepare for the actual recording to start.

Click **Punch In** to enable or disable the **Punch In** feature, which enables you to record over a specified length of time in the track. While recording, the entire sequence will play, but you will record over only the area between the Punch In and Punch Out markers, indicated by a **red striped** line below the timeline. Any part of the sequence before the Punch In marker or after the Punch Out marker will remain untouched, even if you perform over it during recording.



Click **Stop** (■) to stop playback. Alternatively, press the **space bar**. You can double-click this button to silence audio that is still sounding once a note stops playing. Quickly clicking this button three times will act as a “MIDI panic” and shut off all voices and stop all audio processing.

Click **Play** (▶) to play the sequence from the playhead’s current position.

Click **Play Start** (▶|) play the sequence from its start point.

Status

The **In** and **Out** boxes indicate the MPC3 software is receiving or sending (respectively) MIDI messages from or to your MPC hardware.

The **CPU** meter shows the software's current usage of your computer's CPU.

The **automation button** indicates the global automation state. See ***Automation*** to learn about this.

Use the **Auto-Scroll** selector to set how the editor behaves relative to the audio playhead.

Follow: Depending on the zoom setting, the editor will scroll along in the background while keeping the audio playhead centered.

Page: The editor will move to the "next page" to follow the audio playhead.

Off: The editor will not move at all.

Click the **Keyboard** button to cycle through three options:

Off: Pad Keys and MIDI Keys are off. Your computer keyboard will work normally.

Pad Keys: Pad Keys is on, enabling your computer keyboard to play the 16 pads of the current pad bank. See ***Menu*** > ***Tools*** > ***Pad Keys*** to learn about this.

MIDI Keys: MIDI Keys is on, enabling your computer keyboard to enter or play a range of 17 MIDI notes, starting from a C. See ***Menu*** > ***Tools*** > ***MIDI Keys*** to learn about this.

The **volume meter** shows the software's main output level. Click and drag the **volume slider** to adjust it.

The **user area** is active when you are logged into your inMusic profile.

Click **Log Out** to log out of your profile. This will also release all activations on the current device.

Click **My Activations** to access your downloads and manage your account. See ***Preferences > Activations*** for more information.

Preferences

The **Preferences** window contains many customizable elements of the software. Click the corresponding tab on the left to select it (e.g., **MIDI**, **Sequencer**, etc.). Click the **OK** button to close the **Preferences** window. Changes to the Preferences are saved automatically except for **Vintage Mode** (in the **General** tab) and **Start Time** (in the **MIDI / Sync** tab).

To open the Preferences:

Windows: Click the **menu icon** (≡), select **Edit**, and click **Preferences**.

macOS: Click the **MPC** menu, and click **Preferences**.

Audio

Audio Device Type and **Device** or **Output** & **Input:** Click these drop-down menus to select an audio hardware driver in your computer system.

Test: Click this button to play a test tone. This is for checking your audio output. Careful! You should lower the volume on your audio system beforehand.

Sample Rate: Click this to drop-down menu to select the desired sample rate for your project. This depends on the available sample rates of the type of MPC hardware you are using or of your audio interface (i.e., select **96000 Hz** only if your interface allows a 96 kHz sample rate).

Audio Buffer Size: Click this drop-down menu to set your audio system's latency. Lower values result in a more immediate playing response but also more CPU consumption. If you are working with larger projects, this may cause audible clicks and pops. Higher values are more CPU-friendly but can produce more delay between pressing a pad and hearing the corresponding sound. The ideal audio buffer size also depends on your computer's CPU performance. Experiment with this to find the best setting for your system.

Latency Adjust: This indicates the amount of latency (delay) in your audio system.

Audio/Export

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

Enable Disk Streaming: This determines whether disk streaming is enabled or disabled. MPC 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). Once you have saved a project to your SSD, your files will stream from that location. For an unsaved project, your MPC3 software 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 bit depth of the audio recorded from a sample.

Bounce Bit Depth: This determines bit depth of the audio file that is exported when you click the **Export Audio** icon: **16**-bit or **24**-bit.

Audio Export: This determines what part of the sequence is exported when you click the **Export Audio** icon.

Track: When this is selected, **Export Audio** will export the currently shown track in the current sequence.

Program: When this is selected, **Export Audio** will export all tracks in that sequence that use the currently shown program.

Main: When this is selected, **Export Audio** will export all tracks in that sequence that use programs routed to the main outputs.

Audio Tail Length: This determines the length of an audio tail (silence) that will be applied to the exported audio file. When set to **0**, the audio file will not have any additional audio tail.

Include Track Volume/Pan Settings: When enabled, the exported audio or MIDI file will include its volume and pan settings. When disabled, the volume and pan settings will be set to **0 dB** and center (**C**), respectively.

Bypass Program Effects Plugins: When enabled, the exported audio or MIDI file will include any third-party effect plugins that are used with it, but those effects will be bypassed (deactivated). When disabled, those effects will be activated.

MIDI Export: This determines what part of the sequence is exported when you click the **Export MIDI** icon.

Track: When this is selected, **Export MIDI** will export the currently shown track in the current sequence.

Sequence: When this is selected, **Export MIDI** will export all tracks in the current sequence.

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 (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 MPC tempo. You can override the default algorithm by selecting another option in ***Track Edit Mode*** or by changing the algorithm in the ***Audio Editor***.

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 sequence tempo. You can then adjust the sequence tempo while the audio track region remains in time.

Note: When you record an audio file, the current sequence 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 sequence 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 Tempo** button to enter a new tempo.

MIDI / Sync

The settings on this screen determine how the MPC3 software sends, receives and synchronizes with connected USB and MIDI devices.

Input Ports: This indicates the available installed MIDI Input ports on your computer system and any connected devices. Next to each port are three options:

Global: Enable this option to always send incoming MIDI data from this port to the current track.

Control: Enable this option to send incoming MIDI data from this port to MIDI Learn.

Track: Enable this option for this MIDI port to appear in the list of available track MIDI inputs.

Output Ports: This indicates the available MIDI Output ports. Next to each port are two options:

Sync: Enable this option to send MIDI Clock or MTC information over this output port, based on the Sync Output setting.

Track: Enable this option for this MIDI port to appear in the list of available track MIDI outputs.

Note: When using the MPC3 software as a plugin, the only option you can select for your **Midi Output Port** is your host software (DAW).

Click the **reset arrow** to reset the MDI Input/Output Port settings. Double-click the port name to rename it.

Enable MIDI ports when discovered: When enabled, the **Track** ports are automatically turned on when a MIDI device is plugged in so it can immediately be selected as an input or output.

MIDI Machine Control (**MMC) Receive:** When enabled, the MPC3 software will be able to receive MIDI Machine Control (MMC) information. When disabled, the MPC3 software will not receive this information.

Ableton Start/Stop Sync: When enabled, the MPC3 software will sync with Ableton Link to synchronize the beat, phase and tempo of Ableton Live and Ableton Link-enabled applications over a wireless or wired network.

Sync Receive: This determines whether the MPC3 software receives MIDI Clock information (**MIDI Clock**), MIDI Time Code information (**MIDI Time Code** (**MTC**)), communication from **Ableton Link**, or no synchronization information (**Off**).

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

MIDI Machine Control (**MMC**) **Send**: When enabled, the MPC3 software will be able to send MIDI Machine Control (MMC) information. When disabled, the MPC3 software will not send this information.

Sync Output: This determines whether the MPC3 software sends MIDI Clock information (**MIDI Clock**), MIDI Time Code information (**MIDI Time Code** (**MTC**)), or neither (**Off**).

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: **24**, **25**, **30 drop**, or **30 non-drop**. In most cases, you should select **25**.

Start Time: This is the starting time that will be sent when **Sync Output** 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**.

Activations

If you have purchased an MPC instrument or effect plugin, use this screen to activate your purchase. You can activate purchases on up to three devices.

Note: Activation requires an internet connection.

To activate plugins:

1. Click the **Log In** button to sign into your inMusic Profile through a browser. If you do not already have an account, you will be prompted to create one.
2. 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 click **Register**.

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

   To activate a plugin on your computer, click the **Activate** button next to its name. Click **Deactivate** to remove the plugin activation from your computer.

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

   To download a purchase to your device, tap the **download icon** to begin downloading the plugin to your computer. The download icon will change to show the installation progress. Once the process is complete, you can use your plugin with MPC.

   To log out of your account, click **Log Out**. All plugin activations associated with your device will be released and will need to be reactivated if you log back in.

Plugins

Here you can select up to four locations on your hard disk where the software will look for installed VST or AU plugins that you can use in the MPC3 software.

Click the **…** button to the right of the field to select a desired location. After selecting a new location, we recommend using the **Scan New** function. When you configure these **Plugin** tab settings for the first time, you should click **Rescan All** to perform a complete scan of all selected plugin locations.

See the ***Plugins*** chapter to learn about managing your plugins once they are scanned.

Sequencer

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

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.

Instant MIDI Track Mute: When disabled, if you mute a MIDI track, its Note On messages will be ignored, and samples and notes that are playing will finish playing their entire length (this is how legacy MPCs' track-muting worked). This is useful if you are using loops and want a loop to play to the end of a bar but **not** play the next time the sequence loops. When enabled, if you mute a track, the MIDI track volume (**0**) will be sent. The loop will continue to play but at zero volume, allowing the loop to continue playing when the track is unmuted. This is useful when you want to have the track muted immediately.

Instant Audio Track Mute: When disabled, if you mute an audio track, it's audio will continue playing for the length of the current sample. When enabled, the audio will be muted immediately.

Rec Arm: 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 it is the same as previous MPC releases. When set to **Multi**, you can tap any track's record button to add it to the group of armed tracks.

Solo: 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.

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.

Track Mute Events Write Automation: When enabled, track mute events can be captured when writing automation. Make sure the **global automation button** is set to **W (write)** before recording to capture track automation. When disabled, these events cannot be recorded with automation.

Track Mute and Solo Events Are Undoable: When enabled, track mutes and solos can be undone and will appear in the Undo History. When disabled, these actions will not be affected by pressing undo.

Track Mute Uses Track Colors: When enabled, each track's color will be applied to the respective pads in Track Mute Mode. When disabled, track mute pad colors are always yellow (unmuted) and red (muted).

Pad Mute and Solo Events Write Automation: When enabled, pad mute and solo events can be captured when writing automation. Make sure the **global automation button** is set to **W (write)** before recording to capture pad automation. When disabled, these events cannot be recorded with automation.

Pad Mute and Solo Events Are Undoable: When enabled, pad mutes and solos can be undone and will appear in the Undo History. When disabled, these actions will not be affected by pressing undo.

Pad Mute Uses Track Colors: When enabled, each pad's color will be applied to the respective pads in Pad Mute Mode. When disabled, pad mute pad colors are always yellow (unmuted) and red (muted).

Record Pad Aftertouch Events: When enabled, pad aftertouch data (from your MPC hardware'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.

Truncate Duration: This determines if/how events are cropped if they exceed the length of the current Sequence when recording:

- **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.
- **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 would end: at bar 7 (As Played), at bar 6 (To Sequence Length), or bar 4 (To Sequence End). See image for details.

Play Truncate Duration: 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.

Q-Link Playhead Increment: This determines whether turning **Q-Link Knob 2** (**Playhead**) in Main Mode will move the playhead location by 1/16th-note increments (**1/16 Note**) or according to the time division (**TC Division**).

Q-Link Swing Control Applies TC Settings On Release: When this box is selected, moving the **Swing** parameter assigned to a **Q-Link knob** will apply the timing correct settings (including the new **Swing** value) when you release the knob.

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.

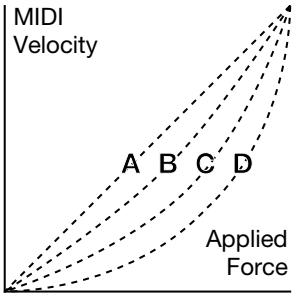
Hardware

The settings on this screen determine the behavior of your MPC hardware's pads as well as connected footswitches.

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.



Pad Response (**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).

Footswitch 1 & **Footswitch 2**: These determine how footswitches connected to your MPC hardware will work. You can select either transport commands (e.g., Play or Stop) or trigger commands for pads and other buttons.

Display: This determines how the display functions for a connected MPC Touch.

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

VU Meter Source (only when using MPC X/MPC X SE in Controller Mode): This determines what audio signal level is shown in the level meters (on the right side of the screen). When set to **Main**, the level meters show the audio signal sent out of **Outputs 1/2** (the **Main L/R outputs** on the rear panel). When set to **Current Program**, the level meters show the audio signal of the currently selected program (i.e., the program used by the currently selected track and any other tracks that also use it).

Show Hardware Info: Click this button to open a window with information about your connected MPC hardware (firmware version, driver version, etc.).

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

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

Bank Button Press: This determines how the **Pad Bank** buttons work.

- **Select A-D**: Pressing a **Pad Bank** button once will select the corresponding bank from Pad Banks A–D. Pressing and holding **Shift** while pressing a **Pad Bank** button will select the corresponding bank from Pad Banks E–H.
- **Select/toggle bank**: Pressing a **Pad Bank** button will alternate between the corresponding bank from Pad Bank A–D and Pad Bank E–H. In other words, you do not need to hold Shift to select one of Pad Banks E–H.

Shift + Q-Link Press: This determines the behavior of pressing Shift and the Q-Link button (if applicable) on your MPC hardware. Select **Q-Link Edit** to open the Q-Link Edit window, or **Cycle Backwards** to move backwards between the four Q-Link banks.

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

Range Down and **Range Up**: These determine the maximum shift of semitones up or down that will be applied when pitch bend is used.

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 set to **On**, the default tempo value will be used for the global tempo. When set to **Off**, the default tempo will be used for sequences.

Default Mode: This determines the default mode when connected MPC hardware is powered on; **Main Mode** or **Sounds** mode.

Default QLink Mode: This determines the default mode for the Q-Link knobs (default: Screen). See ***Panels > Q-Links*** to learn more about each mode.

Default Sequence Bars: This determines the default number of bars of a new sequence.

Default Sequence Loop: This determines whether the sequence has loop enabled (**On**) or disabled (**Off**) by default.

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/Keygroup 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 program will use. Use the window that appears to select it. See ***Plugins*** > ***Selecting Plugins*** to learn about this.

Default Audio Monitor: This determines the default monitor state for audio tracks.

Default MIDI Monitor: This determines the default monitor state for drum, keygroup, MIDI, and CV tracks.

Enable pads fixed user level velocity by default: When enabled, pads will send a fixed velocity value no matter how hard or soft they are hit.

Default pads user level velocity value: Use this to set the default velocity value when fixed user level velocity is enabled.

Project Load/Save

The settings on this screen determine if (and how) projects are automatically saved.

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: Click the **…** button to select a project (**.xpj**) or program (**.xpm**) on your hard disk to load automatically anytime a new project is created if **New Project Behavior** is set to **User Auto Load Project**.

Tip: To "bypass" or ignore the auto load file, you can also press and hold **Shift** while opening the MPC3 software. This will open an empty project instead of your selected Auto Load file.

Enabled: When enabled, the MPC3 software will automatically save your current project after each **Timeout** interval. When disabled, the MPC3 software will not automatically save your project; you must save your project manually.

Timeout: Use this field to select how often your project will automatically save.

Template File: Click the **…** button to select a project to load when you create a new project from a template. To do this, click the **menu icon** (≡) in the upper-left corner of the window, select **File**, and then click **New From Template**.

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**–**31,32**. These sounds include: samples, programs, 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**).

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 configure this setting in the Wave Editor (see ***Editors*** > ***Wave Editor***).

Show Mode Shortcut Panel: When enabled, you can use the mode shortcut panel on your MPC touchscreen hardware. To use this, swipe the black touch handle to the right from the left edge of the touchscreen while viewing any mode. The five modes from the left-most column of the Menu can be accessed here.

Allow Multiple Plugin Windows: This determines whether multiple plugin windows can be displayed at the same time (a feature added to MPC 2.1) or only one plugin window can be displayed at a time (how plugin windows worked prior to MPC 2.1).

Desktop Screensaver Disable: This determines if/when your computer's screensaver is disabled while using the MPC3 software (using your MPC hardware in Controller Mode):

Never: Your computer's screensaver will function normally.

When hardware used: As long as your MPC hardware is connected to your computer and being used, your computer's screensaver will be disabled.

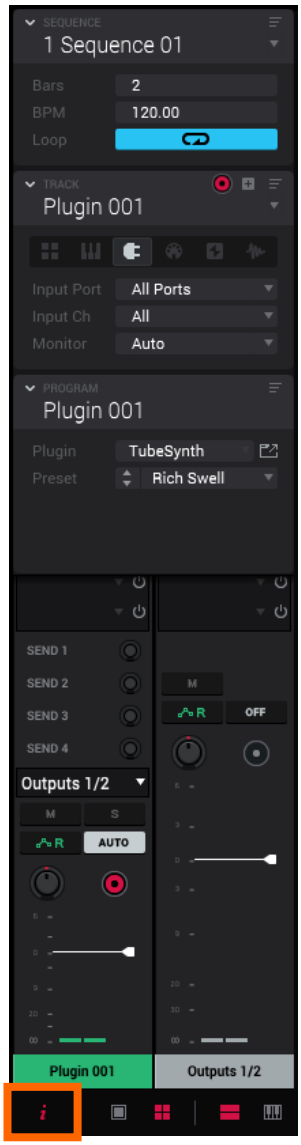
When hardware attached: As long as your MPC hardware is connected to your computer and powered on, your computer's screensaver will be disabled. It will function normally again if you power off or disconnect your MPC hardware from your computer.

Always: Your computer's screensaver will be disabled as long as the MPC3 software is open (whether or not your MPC hardware is connected or powered on).

Collect Usage Statistics: This determines whether or not your usage statistics will be sent occasionally to us, enabling us to improve the MPC experience.

Multi Process Threads: This determines how many cores of your computer's processor will be used to render audio. The available range depends on your processor.

Inspector



The "**Inspector**" is a panel on the left edge of the window shows information about the current sequence, track, and program as well as two "dynamic" channel strips for convenient monitoring and mixing.

To show or hide the Inspector, do one of the following:

- Click the ***i*** icon in the lower-left corner of the window.
- Click the **menu icon** (≡), go to **View** > **Inspector**, and select **Show Inspector**.

Sequence

Click the **>** or ∨ next to the **Sequence** field to collapse or expand this section.

Click the **Sequence** field or **down arrow** (▼) to select a sequence.

Double-click the **Sequence** field to rename the sequence.

Click the small **menu icon** (≡) to select or deselect which items are shown in this section:

Bars: the number of bars in the sequence

BPM: the sequence tempo (as opposed to the global tempo)

Trans (**Transpose)**: the transposition of the sequence in semitones

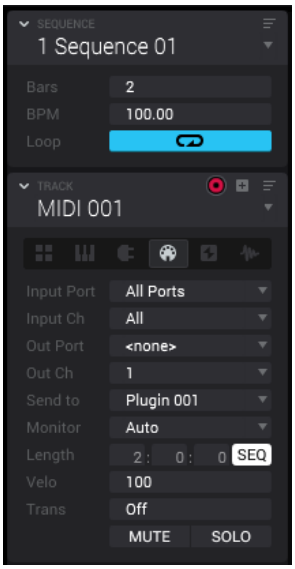
Loop: determines whether or not sequence playback will loop

Start: the first bar of the sequence loop

End: the last bar of the sequence loop

Right-click the **Sequence** field to show a menu of some editing processes. See ***Editing Processes*** > ***Sequence*** for more information.

Track



Click the **>** or **v** next to the **Track** field to collapse or expand this section.

Click the **Track** field or **down arrow** (▼) to select a track.

Double-click the **Track** field to rename the track.

Click the small **menu icon** (≡) to select or deselect which items are shown in this section.

For Drum, Keygroup, Plugin, and CV tracks:

Type: the type of program the track is using.

Midi Input Port: the input port where MIDI data is received.

Midi Input Ch: the MIDI channel that receives MIDI input data.

Midi Out Port: the output port where MIDI data is sent (MIDI tracks only).

Midi Out Ch: the MIDI channel that sends MIDI output data (MIDI tracks only).

Midi Send: an additional track where MIDI output data can be sent.

Monitor: 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.

Length: the length of the track in beats. When set to **Seq**, the track will use the length of the sequence.

Velo (**Velocity)**: the velocity of the track.

Trans/**Transpose**: the transposition of the track in semitones.

Mute/Solo: **Mute** or **Solo** buttons for the track.

For Audio Tracks:

Length: the length of the track in beats. When set to **Seq**, the track will use the length of the sequence.

Mute/Solo: **Mute** or **Solo** buttons for the track.

Right-click the **Track Name** field to show a menu of some editing processes. See ***Editing Processes*** > ***Track*** for more information.

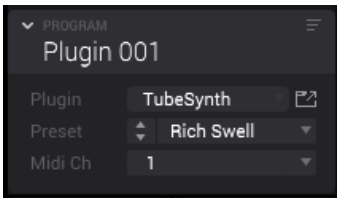
Program

The **Program** section is shown only when a **Plugin**, **MIDI**, or **CV** track is selected.

Click the **>** or **v** next to the **Program** field to collapse or expand this section.

Click the small **menu icon** (≡) to select or deselect which items are shown in this section, depending on the selected track type:

Plugin Track:

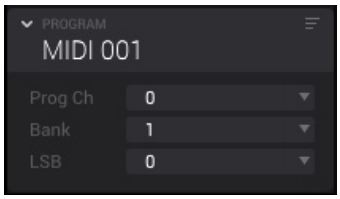


Plugin: the plugin that the program is using. See the ***Plugins*** chapter to learn about scanning and selecting plugins. Click the window icon next to the menu to show the plugin's graphical user interface in a separate window.

Preset: the preset/patch (if any) within the plugin.

MIDI Channel: the MIDI channel the program is using.

MIDI Track:



Prog Ch: the program change message the program sends out.

Bank: the Bank message (Most Significant Byte or MSB) that the program sends out.

LSB: the Least Significant Byte (LSB) message that the program sends out.

CV Program:

Melodic or Drum CV Program: Tap the **keys** icon to select **Melodic** operation or the **pads icon** to select **Drum** operation.

In **Melodic** operation:

CV Port: the CV port the program is using.

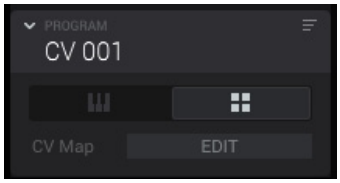
Gate Port: the Gate port the program is using.

Md.Wheel/Mod Wheel: the CV port the modulation wheel is using.

Vel Port/Velocity Port: the CV velocity port.

Note/Note Tracking: the CV program's note track: lowest, highest or last.

In **Drum** operation:



CV Map: click **Edit** to assign each pad in the program to a specific **CV Port** and **Data Type**.

Note: This window is currently only supported while using MPC hardware in controller mode.

Channel Strips

The Inspector can display two “dynamic” channel strips, which vary slightly in appearance depending on whether a MIDI track or Audio track is selected.

Click the **pad icon** at the bottom of the Inspector to show or hide the **pad channel strip**. When a drum track or keygroup track is selected, this will show the current pad or keygroup on the left side, and the corresponding track on the right side. For all other track types, this will show or hide the current track only.

Click the **four-pads icon** at the bottom of the Inspector to show or hide the **track channel strip**. This will show the current track or submix on the left side and the main output channel strip on the right side.

Pad & Keygroup Channel Strips

The number of the pad or keygroup is at the bottom of the channel strip. Press a pad or key to select a different pad or keygroup.

Tip: This is useful for mixing your pads or keygroups without having to enter the Pad Mixer.

The **Inserts** slots show any enabled or disabled effects for that pad or keygroup. See ***Effects*** > ***Insert Effects*** to learn more about pad or keygroup insert effects.

Click and drag the **Send** knobs, which control the send levels for the pad or keygroup. A **return channel strip** will automatically be shown on the right side. Click anywhere in the lower half of the **pad/keygroup channel strip** to show the program channel strip again. See ***Effects*** > ***Send/Return Effects*** to learn more about pad or keygroup send/return effects.

The menu below the Sends shows where the pad or keygroup is routed, which you can set to the current track (**Track**), a submix (**Submix** > **Sub 1–8**), a pair of main outputs (**Outputs 1,2–31,32**) or a single main output (**Output 1–32**). Usually, this is set to **Track**.

Click **M** or **S** to mute or solo the pad or keygroup (respectively).

Click the **monitor button** to change the monitor behavior of the pad or keygroup.

- **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 monito red, and playback of recorded events will be heard.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the pad or keygroup. The **green** level meter next to the slider shows the pad’s current volume level in **dB**.

See ***below*** for descriptions of the adjacent track channel strip.

Track Channel Strip

The name of the track is at the bottom of the channel strip. Click it to rename the track.

The **Inserts** slots show any enabled or disabled effects for that track. See ***Effects > Insert Effects*** to learn more about program insert effects.

Click and drag the **Send** knobs, which control the send levels for the track. A **return channel strip** will automatically be shown on the right side. Click anywhere in the lower half of the **track channel strip** to show the main or submix channel strip again. See ***Effects > Send/Return Effects*** to learn more about track send/return effects.

The menu below the Send knobs shows where the track is routed, which you can set to a submix (**Submix** > **Sub 1–8**), a pair of main outputs (**Outputs 1,2–31,32**) or a single main output (**Output 1–32**). Send knobs are not available for CV tracks.

Click **M** or **S** to mute or solo the track (respectively).

Click the **track automation button** to toggle between two possible states of track automation:

When set to **Read** (**R**), the program will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)

When set to **Write** (**W**), the program 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.)

To disable or enable track automation, hold **Shift** and click the **track automation button**. When **off**, the track will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks to the same automation by clicking the global automation button in the upper-right corner of the window, or in the Main Output Channel Strip.

Click the **monitor button** to change the monitor behavior of the track.

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.

For audio tracks:

- **Off**: The track's incoming audio is never monitored.
- **In**: The track's incoming audio is monitored whether or not the track is record-enabled.
- **Auto**: The track's incoming audio is monitored while the track is record-enabled only.
- **Merge**: The track's incoming audio is always monitored, and you will hear playback of recorded events.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the track. The level meter behind the slider shows the tracks's current volume level in **dB** (or **velocity level** for MIDI tracks). These controls are not available for CV tracks.

Important: If you copy a sequence, the volume and pan values will be copied with that sequence.

Click the **Record Arm** (⦿) button to record-enable the track.

Tip: You can record-enable multiple tracks in Track View Mode or in the Channel Mixer by pressing and holding **Ctrl** (Windows) or ⌘ (macOS) while clicking the **Arm** button to each track. You can also adjust the Record Arm behavior by changing the Rec Arm setting under ***Preferences*** > ***Sequencer***.

See ***below*** for descriptions of the adjacent main channel strip.

Main Output & Return Channel Strips

The main output pair or return channel is shown at the bottom of the channel strip. Click it to rename the track.

The **Inserts** slots show any enabled or disabled effects for those outputs or that submix. See ***Effects*** > ***Insert Effects*** to learn more about submix insert effects.

For return channel strips, the menu below the **Inserts** slots shows where the return is routed, which you can set to a pair of main outputs (**Outputs 1,2–31,32**) or a single main output (**Output 1–32**).

Click **M** to mute the main output or return.

Click the **global automation button** to toggle between two possible states of global automation:

When set to **Read** (**R**), automation data will be read but not recorded. You can still manually edit and enter automation. (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 Q-Link knobs accidentally while you are recording.)

To disable or enable global automation, hold **Shift** and click the **global automation button** in the ***Toolbar***. When **off**, automation data will be ignored.

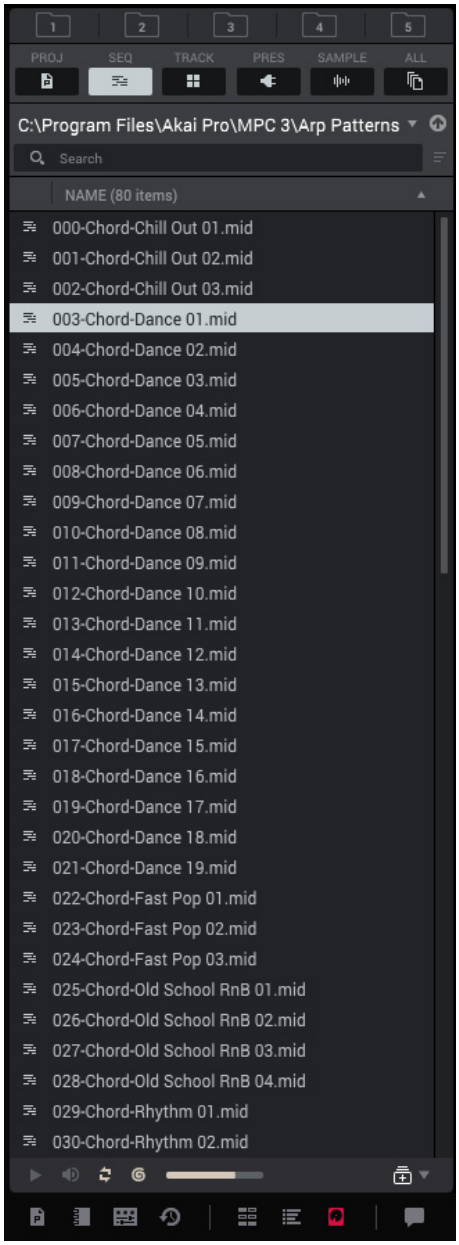
Important: If you have already recorded automation and turn it off, tracks will still use their effects and their parameter values at the point where you turned it off.

See ***Automation*** to learn about recording and editing automation.

Click the **Record Arm** (⦿) button to record-enable the main output or return channel.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the outputs or submix. The **green** level meter next to the slider shows the outputs' or submix's current volume level in **dB**.

Browser



You can use the ***Media Browser***, ***Expansion Browser***, and ***File Browser*** to navigate your hard disks and other storage devices to load samples, sequences, projects, MPC Expansions/instruments, and other media. Using filter buttons and user-definable folders, you can easily adapt it to your preferred workflow. You can also audition (preview) samples before loading them.

You can also use the ***Project Info Browser***, ***Project Notes Browser***, and ***Undo History Browser*** to access and edit additional information about your project overall.

The ***MIDI Learn Browser*** lets you assign areas of the MPC3 software to external MIDI controllers. Global MIDI mappings are helpful if you use certain MIDI controllers across multiple projects. Project MIDI mappings are saved within a project, which can be helpful if your MIDI controller usage is particular to each one.

The Browser also includes the **Quick Help** panel. This panel is visible only when one of the Browsers is shown. Click the **menu icon** (≡), select **Help**, and then click **Quick Help** to show or hide this panel. Alternatively, click the **? icon** in the lower-right corner.

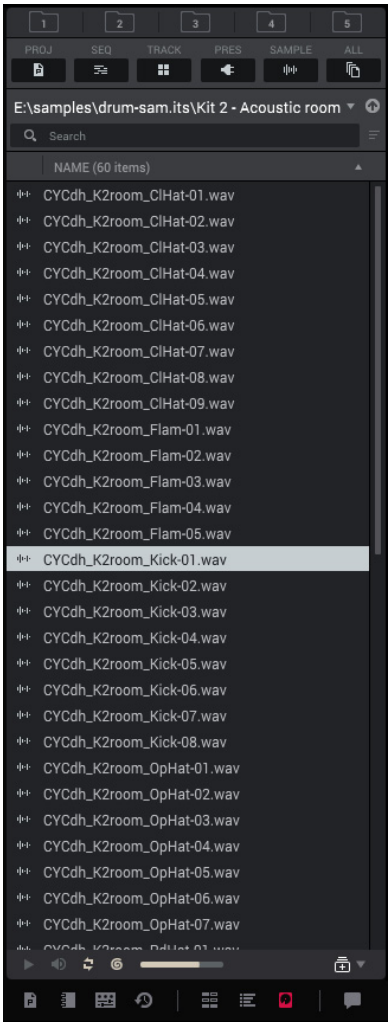
You can also click the feedback button (☺) to suggest a feature or report a bug. We always try to take your feedback into account as we continually improve the MPC experience!

To show or hide the Browsers, do one of the following:

- Click the **menu icon** (≡), select **View** > **Browser**, and then click the desired option: **Hidden**, **File Browser**, **Expansion Browser**, **Media Browser**, **MIDI Learn Browser**, **MIDI Monitor**, **Project Info**, **Project Notes**, or **Undo History**.
- In the lower-right corner, click the corresponding icon (as shown from right to left):
    - MIDI Monitor: **MIDI plug icon**
    - Project Info Browser: **P/page icon**
    - Project Notes Browser: **notebook icon**
    - MIDI Learn Browser: **MIDI-controller icon**
    - Undo History Browser: **clock-and-arrow icon**
    - Media Browser: **six-rectangles icon**
    - Expansion Browser: **list icon**
    - File Browser: **hard-drive icon**

File Browser

When the **File Browser** is selected, you can do any of the following:



To move up one folder level, click the **up arrow** (↑) next to the file path.

To select a file or folder, click it once.

To enter a folder, double-click it.

To load a sample directly to a pad, click and drag the sample onto a pad in the lower half of the window.

To load a sample directly to an audio track, click and drag the sample onto the **Grid Editor** when the **Audio** tab is selected or onto an audio track when one is shown in the upper half of the window.

To load a selected file to the project's sample pool, double-click it or click and drag it anywhere in the window outside of the File Browser. 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 selected folder, click and drag the folder onto anywhere in the window outside of the File Browser.

To preview a selected sound, click and hold **Play** (▶) in the lower-left corner of the Browser.

To enable or disable the audition function and set its volume level, click the **volume icon** in the lower-left corner of the Browser. Click and drag the **level slider** left or right to set the volume level.

To sync samples when auditioning, tap the **sync icon** in the lower-left corner of the Browser. When enabled, samples will be auditioned at the beginning of the next bar of the sequence when playback is active.

To warp samples when auditioning, tap the **warp icon** in the lower-left corner of the Browser. When enabled, samples with an embedded tempo will be warped to the project tempo.

To load included sequence events with track files, click the **+ file icon** and select **Load Sequence** so it is checked.

To browse your files by search term, click the **Search** field and type a search term.

To enable recursive searching, click the **menu** icon next to the **Search** field and select **Search includes subfolders**.

To view additional file information, click the **menu** icon next to the **Search** field. You can add the following information to each file entry: **File size**, **Modified date**, **Created date**. Click the option to enable or disable it from appearing in the Browser.

To hide or show project folders, click the **menu** icon next to the **Search** field and select **Hide project data folders**.

To get the most efficient use of the File Browser, set the file paths to your favorite drive locations first. There are five **folder buttons** labeled **1**–**5** at the top. You can set these to be shortcuts to five locations on your computer's hard drive 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 click one of the **folder buttons** (**1**–**5**). Now, when you click that folder button again, the File Browser will show that folder's content immediately.

Use the five filter buttons to show only specific types of files in the list below. Folders will still be shown in the list.

To show project files only, click the **Proj**/**page** button.

To show sequence files only, click the **Seq**/**bars** button.

To show program files only, click the **Prog**/**four-squares** button.

To show preset files only, click the **Preset/plug** button.

To show sample files only, tap the **Sample**/**waveform** button.

To show all file types, tap the **All** button.

Expansion Browser

When the **Expansion Browser** is selected:

Your available MPC Expansions will appear in the Browser, which you can expand or collapse.

MPC Expansions may have lists of patches that you can expand or collapse, as well.

To preview a selected sound, click and hold **Play** (▶) in the lower-left corner of the Browser.

To enable or disable the audition function and set its volume level, click the **volume icon** in the lower-left corner of the Browser. Click and drag the **level slider** left or right to set the volume level.

See ***Expansions*** to learn more about MPC Expansions.

Media Browser

When the **Media Browser** is selected:

Your MPC Expansions will appear under the **Expansions** panel, which you can expand or collapse.

You can filter through your media library in the **Filter** panel, which you can expand or collapse.

Use the **Search** field to browse your media by search term.

To preview a selected sound, click and hold **Play** (▶) in the lower-left corner of the Browser.

To enable or disable the audition function and set its volume level, click the **volume icon** in the lower-left corner of the Browser. Click and drag the **level slider** left or right to set the volume level.

Use the four filter buttons to show only specific types of files in the list below. Folders will still be shown in the list.

To show program files only, tap the **Program/four-squares** button.

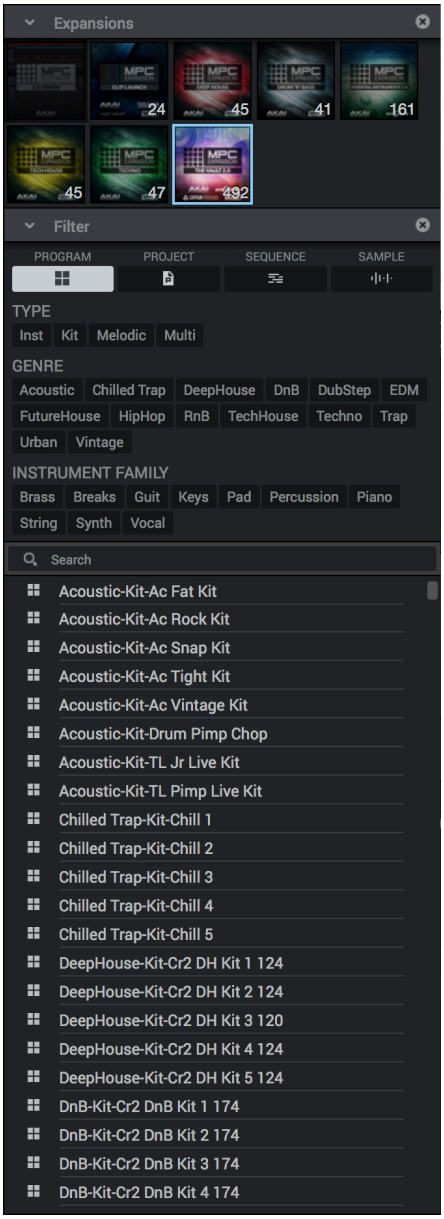
To show project files only, tap the **Project/page** button.

To show sequence files only, tap the **Sequence/bars** button.

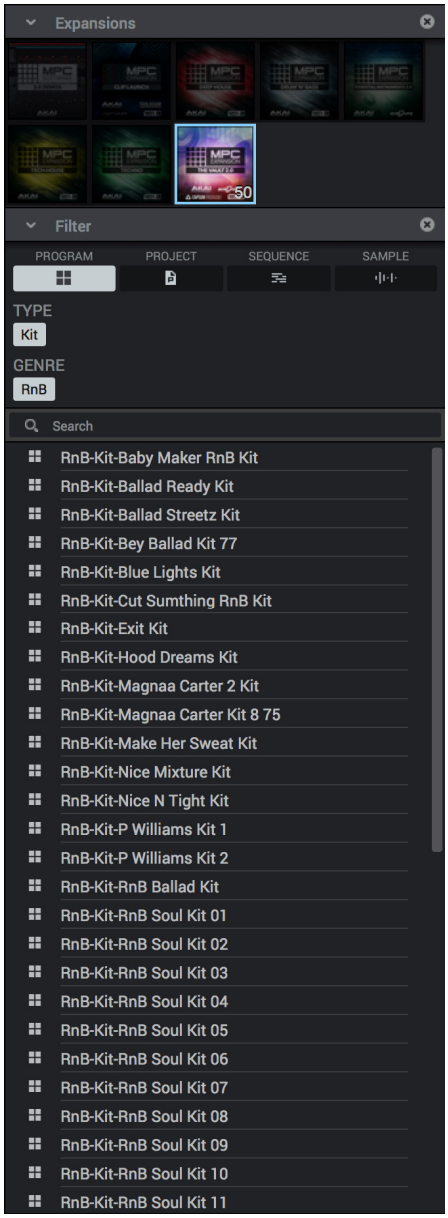
To show sample files only, tap the **Sample/waveform** button.

To enable or disable tags in the Media Browser, click the **menu icon** (≡), go to **View** > **Browser**, and select **Media Browser Shows All Tags**.

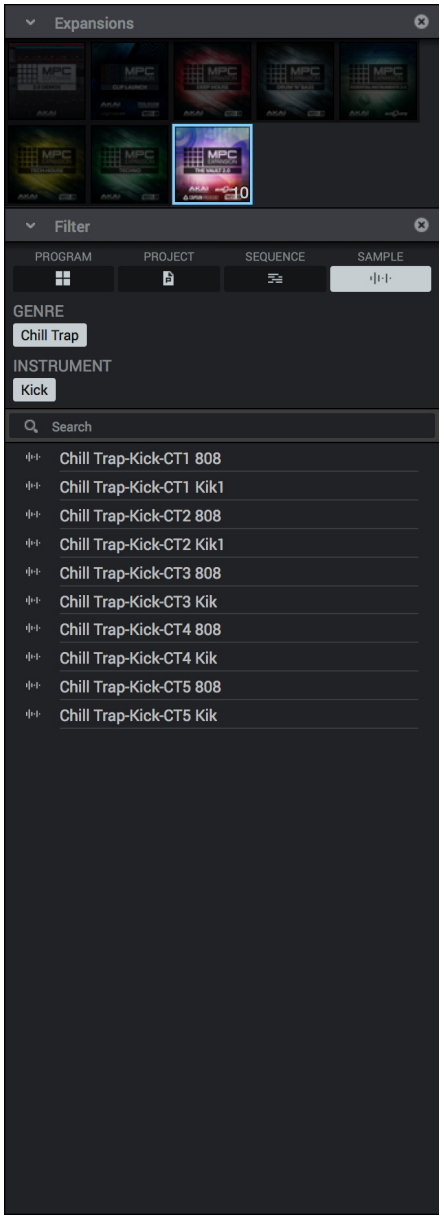
Program filter + no tags selected.



Program filter + **Kit** and **RbB** tags.



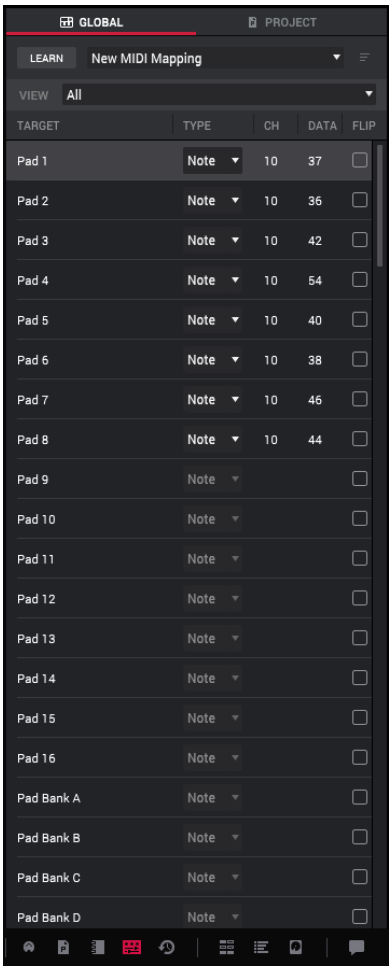
Sample filter + **Chill Trap** and **Kick** tags.

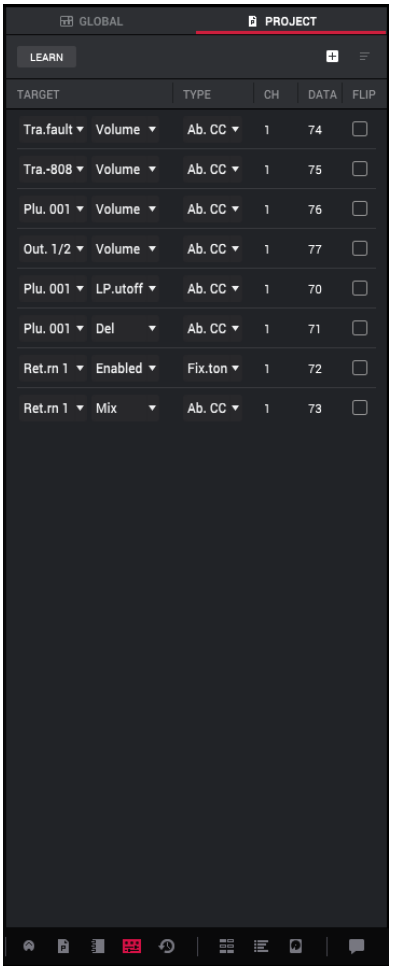


MIDI Learn Browser

The **MIDI Learn Browser** lets you assign areas of the MPC3 software to external MIDI controllers. Global MIDI mappings are helpful if you use certain MIDI controllers across multiple projects. Project MIDI mappings are saved within a project, which can be helpful if your MIDI controller usage is particular to each one.

To select a MIDI Learn mode, click **Global** or **Project** at the top of the browser to show its assignments below. Global MIDI mappings are helpful if you use certain MIDI controllers across multiple projects. Project MIDI mappings are saved within a project, which can be helpful if your MIDI controller usage is particular to each one. See ***Global*** or ***Project*** below.





Each assignment has the following settings:

Target: This is the assigned command or parameter. The list of targets in the Global tab is comprehensive, while the list of targets in the Project tab must be added and selected.

Type: This is the type of message: **Toggle Button**, **Momentary Button**, **Fixed Button**, **Note**, **Abs CC**, **Rel CC Offset**, **Rel CC 2's Complement**. This is automatically detected based on the parameter itself, but you can use this field to assign it manually if it does not detect it properly.

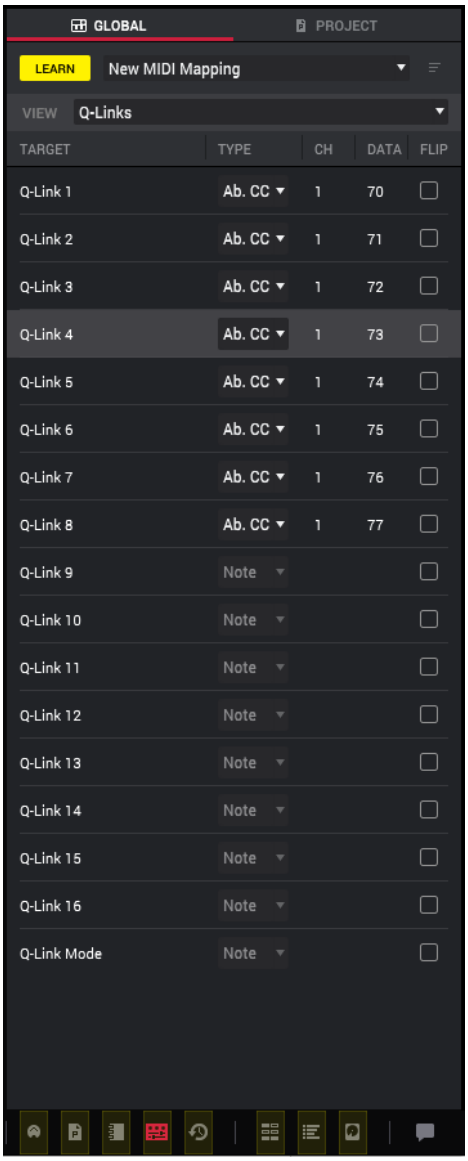
Ch: This is the MIDI channel the control is using.

Data: This is the MIDI note number or CC number.

Flip: Click 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).

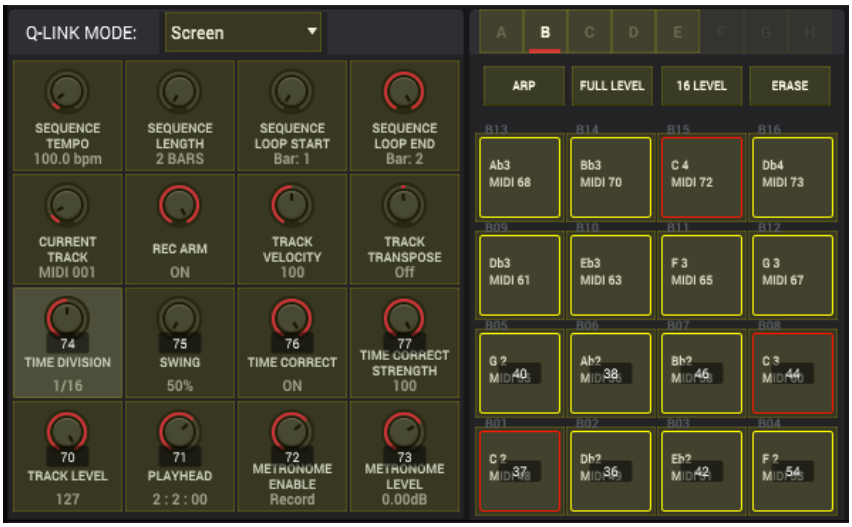
Global

Use the Global MIDI Learn feature to assign your MIDI controller to pads, Q-Link knobs, transport controls, or other assignable parameters in the MPC3 software.



To assign a global parameter to a hardware control:

1. Click **Learn** at the top of the MIDI Learn browser so it turns **yellow**.
2. Click a parameter that has a **yellow** overlay to select it. Alternatively, click it in the list in the MIDI Learn Browser.



3. Move or press the desired control on your MIDI controller.

   To assign more controls, repeat **Steps 2–3**.

   To stop assigning controls, click **Learn** again so it turns **gray**.

To clear an assignment, right-click or press and hold **Ctrl** (Windows) or **Control** (macOS) and click the assignment in the MIDI Learn browser. Click **Clear MIDI Mapping** to clear the assignment, or press **Esc** or click anywhere else to cancel.

To select an assignment, click **Learn** so it turns **yellow**, and then press and hold **Shift** while moving the control on your MIDI controller.

Each collection of these assignments is called a **MIDI map**, which you can export as a file (**.xmm**) to import into other MPC projects. You can also disable, re-enable, or switch between different MIDI maps while working with your project.

To select a MIDI map, click the menu next to **Learn**. Select **Factory** to view the available preset MIDI maps, or select **User** to view MIDI maps you have created.

To show only mappings for specific controls or commands, click the **View** menu above the list of assignments, and then click a type of control or command.

To show only mappings for the selected control type, click the **three-lines icon** next to the controller menu, and then click **List Follows Control** so it is selected.

To create a new MIDI map, click the **three-lines icon** next to the controller menu, and then click **New MIDI Map**.

To create a duplicate of the current MIDI map, click the **three-lines icon** next to the controller menu, and then click **Duplicate**. An identical MIDI map will be created and appended with **Copy**.

To clear all assignments from the current MIDI map, click the **three-lines icon** next to the controller menu, and then click **Clear**. In the window that appears, click **OK** to continue and clear the assignments, or click **Cancel** to close the window and keep them. (You can do this with MIDI maps from the list of **User** maps only, not the **Factory** list.)

To delete the current MIDI map, click the **three-lines icon** next to the controller menu, and then click **Delete**. In the window that appears, click **OK** to continue and delete the MIDI map, or click **Cancel** to close the window and keep it. (You can do this with MIDI maps from the list of **User** maps only, not the **Factory** list.)

To export the current MIDI map, click **three-lines icon** next to the controller menu, and then click **Export**. In the **Export MIDI Mapping** window that appears, do any of the following:

To select the storage device you want to view, click the **down arrow** (▼) next to the file path. If you have storage devices connected to your MPC hardware, they will appear in this column, as well.

To enter a folder, double-click it or press **Enter**.

To create a new folder, click **New Folder**, type a name for the new folder, and then click **OK** or press **Enter** to confirm the name, or click **Cancel** or press **Esc** to keep the original name. You will immediately enter the new folder.

To move up one folder level, click the **up arrow** (↑).

To name the file, click the **File** field at the bottom of the window, and type a name.

To save the file, click **Save** or press **Enter**.

To cancel, click **Cancel** or press **Esc**.

To import a different MIDI map, do any of the following:

- Click and drag a MIDI map file (**.xmm**) onto the software window and release it. That map will be selected immediately.
- Place a MIDI map file (**.xmm**) in the MIDI Learn folder on your computer, and then click the **three-lines icon** next to the controller menu, and then click **Refresh**.

  Windows: [your hard drive]**\Program Data\Akai\MPC\Midi Learn**

  macOS: [your hard drive]**\Users**[your user name]**\Library\Application Support\Akai\MPC\Midi Learn**
- Click the **three-lines icon** next to the controller menu, and then click **Import**. In the **Import MIDI Mapping** window that appears, do any of the following:

  To select the storage device you want to view, click the **down arrow** (▼) next to the file path. If you have storage devices connected to your MPC hardware, they will appear in this column, as well.

  To enter a folder, double-click it or press **Enter**.

  To move up one folder level, click the **up arrow** (↑).

  To import the file, click **Open** or press **Enter**.

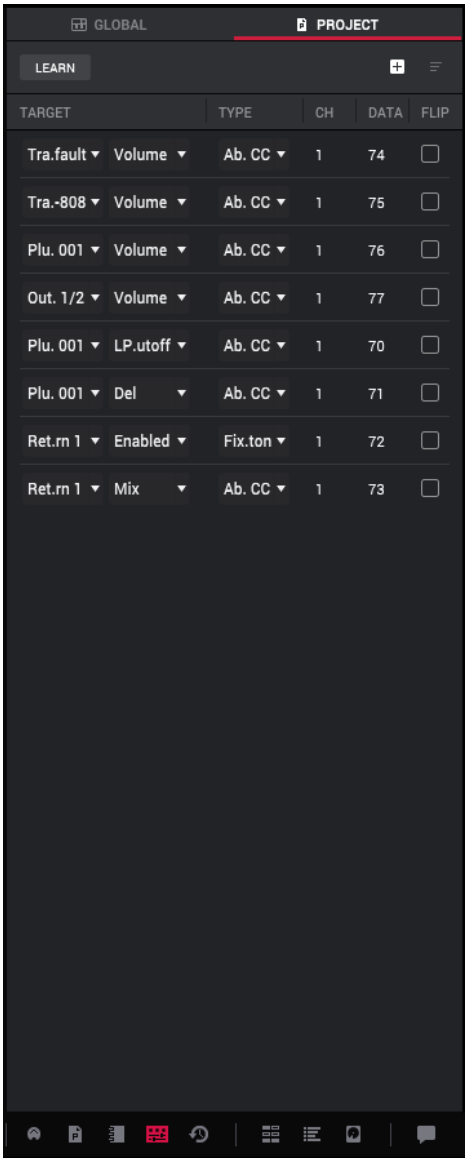
  To cancel, click **Cancel** or press **Esc**.

To refresh the list of MIDI maps, click the **three-lines icon** next to the controller menu, and then click **Refresh**. Do this if you have manually placed a MIDI map file (**.xmm**) in the **Midi Learn** folder (in the MPC application folder) and need it to appear in the list.

Project

Use the Project MIDI Learn feature to assign your MIDI controller to various parameters in your specific MPC project:

- Mixer parameters such as volume, pan, mute, and/or sends 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.
- Plugin instrument parameters, which depend on the plugin.



These assignments will be saved with your MPC project.

Tip: Because these MIDI assignments are saved within a project, you can use them while working with a project on both the desktop version of the MPC3 software **or** on your MPC hardware in Standalone Mode.

To assign a project parameter to a hardware control:

1. Click **Learn** at the top of the MIDI Learn browser so it turns **yellow**.
2. Click the **+ icon** in the upper-right corner of the browser to create an "empty" assignment (its Target menus will be set to **None** and **Off**).

   Alternatively, click an assignment that is already in the list if you want to change it.
3. Click a project-specific parameter (e.g., a mixer setting or program parameter) to select it. The two **Target** menus will indicate the parameter you selected.

   Alternatively, click the first **Target** menu to select a track, return, submix, or main output (for drum programs, you can select the entire track or a single pad within it). After that, click the second **Target** menu to select the parameter.
4. Move or press the desired control on your MIDI controller. You can press and hold **Alt** (Windows) or **Option** (macOS) while moving or pressing multiple controls to assign them simultaneously.

   To assign more controls, repeat **Steps 2–4**.

   To stop assigning controls, click **Learn** again so it turns **gray**.

To clear an assignment, right-click or press and hold **Ctrl** (Windows) or **⌘** (macOS) and click the assignment in the MIDI Learn browser. Click **Clear MIDI Mapping** to clear the assignment, or press **Esc** or click anywhere else to cancel.

To delete an assignment (the entire slot), right-click or press and hold **Ctrl** (Windows) or **⌘** (macOS) and click the assignment in the MIDI Learn browser. Click **Delete Assignment** to delete the assignment, or press **Esc** or click anywhere else to cancel.

To clear all assignments, click the **three-lines icon** next to the controller menu, and then click **Clear All Assignments**. In the window that appears, click **OK** to continue and delete the assignments, or click **Cancel** to close the window and keep them.

MIDI Monitor

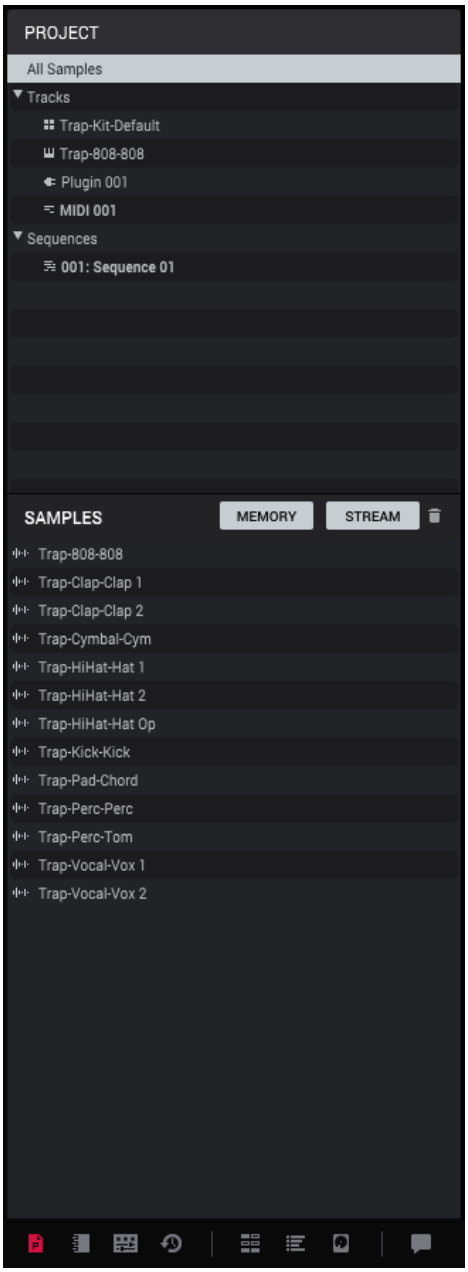
The **MIDI Monitor** lets you view incoming and outgoing MIDI messages as a list. While the MIDI Monitor panel is open, you can do the following:

Click **Input** to view incoming MIDI messages.

Click **Output** to view outgoing MIDI messages.

Click **Clear** to clear the current event view.

Project Info Browser



The Project Info browser contains information about the current project's tracks, sequences, and samples. This Browser is identical to the **Project** panel (see ***Panels*** > ***Project***) but in a vertical layout rather than horizontal.

All available tracks and sequences in the project will appear in the upper half of the Browser under **Projects**.

To duplicate a track in the project, right-click it and click **Duplicate**. An identical track will be created immediately. The duplicate track will use the same name but appended with a number (e.g., **Drum 002**).

To duplicate a track including its events, right-click it and click **Duplicate with events**. An identical track will be created immediately with the same events as the original track. The duplicate track will use the same name but appended with a number (e.g., **Drum 002**).

To delete a track, right-click it and click **Delete**.

To save a track, right-click it and click **Save**. Use the window that appears to enter a name for the track file (**.xtp**) and select a location. Click **Save** to confirm your choice, or **Cancel** to cancel saving.

To rename a program or sample, right-click it and click **Rename**. Enter a name in the window that appears, and then click **Do It** to confirm your choice, or **Cancel** to cancel saving.

To adjust the track position, right-click it and select **Move Up** or **Move Down**. Other tracks will be moved in relation to the new track position.

A list of samples will appear in the lower half under **Samples** (the samples that are listed are part of the selected track or sequence under the **Project** list).

To audition the sample, hover your cursor over the **waveform icon** so it turns into a **speaker icon**. Click this icon to hear the sample.

To delete samples from the project, click the **trash can icon**. In the screen that appears, select **Purge Unused Samples** to delete all unused samples from the project (from all tracks and sequences), or select **Delete All Samples** to delete all samples from the project.

To delete a sample, right-click it and click **Delete**. Click **Delete** or **Delete Sample** to confirm your choice, or **Cancel** to cancel the deletion.

To save a program or sample, right-click it and click **Save**. Use the window that appears to enter a name for the sample file (**.wav**) and select a location. Click **Save** to confirm your choice, or **Cancel** to cancel saving.

To rename a sample, right-click it and click **Rename**. Enter a name in the window that appears, and then click **Do It** to confirm your choice or **Cancel** to cancel saving.

To view a sample in Sample Edit Mode, right-click it and click **Edit**. Alternatively, double-click the sample. You will immediately enter ***Sample Edit Mode*** and show the sample's waveform in the Wave Editor.

You can also use this section to sort and assign samples to **Memory** or to **Stream** from disk. Click each header to show only samples in each category.

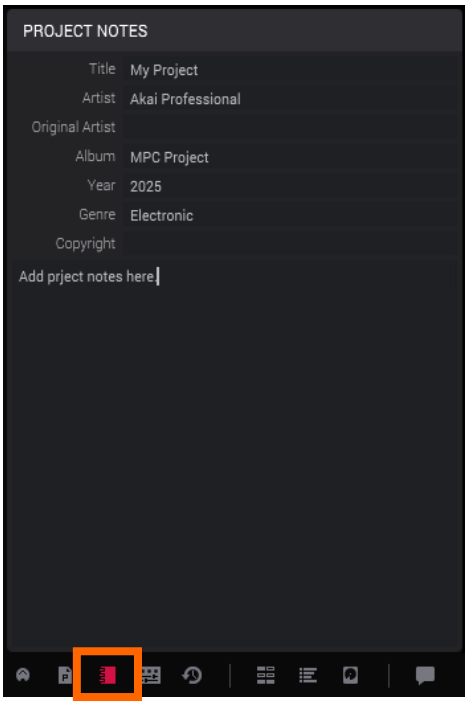
If a sample is loaded to memory, right-click it and select **Stream From Disk** to remove it from memory and stream it from a disk drive. Disk streaming samples will be marked with a green **waveform icon**.

If a sample is streaming from disk, right-click it and select **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 the best operation, it is recommended to use an SSD (solid-state drive). Once you have saved a project to your SSD, your files will stream from that location. For an unsaved project, MPC 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.

Project Notes Browser

When the **Project Notes Browser** is selected:



Information about the project will be shown in several fields: **Title**, **Artist**, **Original Artist**, **Album**, **Year**, **Genre**, and **Copyright**. Note that these are not ID3 tags.

You can also write notes in the lower panel.

To enter text into a field, click it and type.

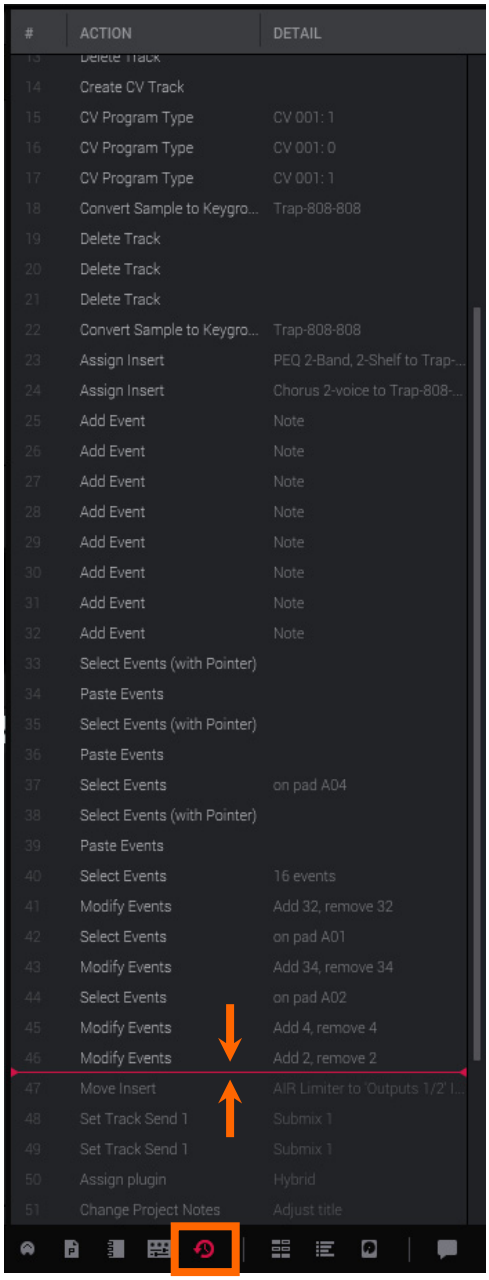
Undo History Browser

When the **Undo History Browser** is selected:

All undoable (and redoable) actions you have performed within the software will appear in this list in sequence. Each step is numbered in the **#** column. Each action is named in the **Action** column with additional information in the **Detail** column.

The magenta **action marker** indicates the current "undo state" location—the last-performed action.

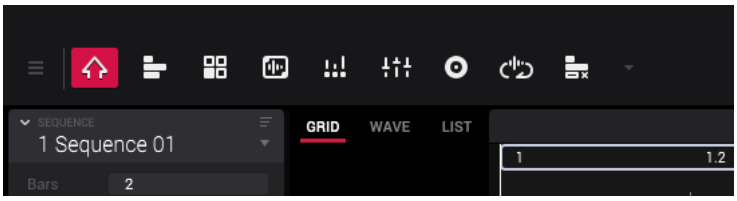
To undo or redo multiple actions at once, click and drag the **action marker** to the desired location in the list. The project will immediately revert to that state. Actions that can be redone (below the action marker) are grayed out.



Editors

You can switch the editor between the ***Grid Editor***, ***Wave Editor***, and ***List Editor***, depending on what mode you are in.

To enter each editor, click **Grid**, **Wave**, or **List** below the mode icons. You can do this only when editing MIDI tracks; audio tracks have only the Grid Editor that display the audio track waveform.



In all three editors, these buttons are available in the toolbar:

Click the **lock icon** to turn the **Link Track & Grid Views** feature on and off. When off, you set the zoom distances of the upper and lower halves of the window to be independent.

Note: This only applies when using MPC hardware in Controller Mode.

Click the magnet icon to switch between the two different modes of "snapping" note events to the grid: Absolute or Relative.

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).

Click the **Hitting Pad Selects All Events** icon to turn the feature on (**red**) or off (**gray**). When on, pressing a pad will automatically select all note events for that pad in the sequence on that track. When off, pressing a pad will simply play its sound without selecting any note events.

Click the **left-arrow icon** to undo your last action.

Click the **right-arrow icon** to redo the last action you undid.

Click the **Export Audio icon** (**star-and-waveform**) to export the track as an audio file (**.wav**). Once this is done, the icon will be **red**. You can then click and drag the icon onto your computer desktop or external storage device to copy it to that location. Press and hold **Shift** and click the icon to reset it to **gray**.

Click the **Export MIDI icon** (**star-and-bars**) to export the track as a MIDI sequence. Once this is done, the icon will be **red**. You can then click and drag the icon onto your computer desktop or external storage device to copy it to that location. Press and hold **Shift** and click the icon to reset it to **gray**.

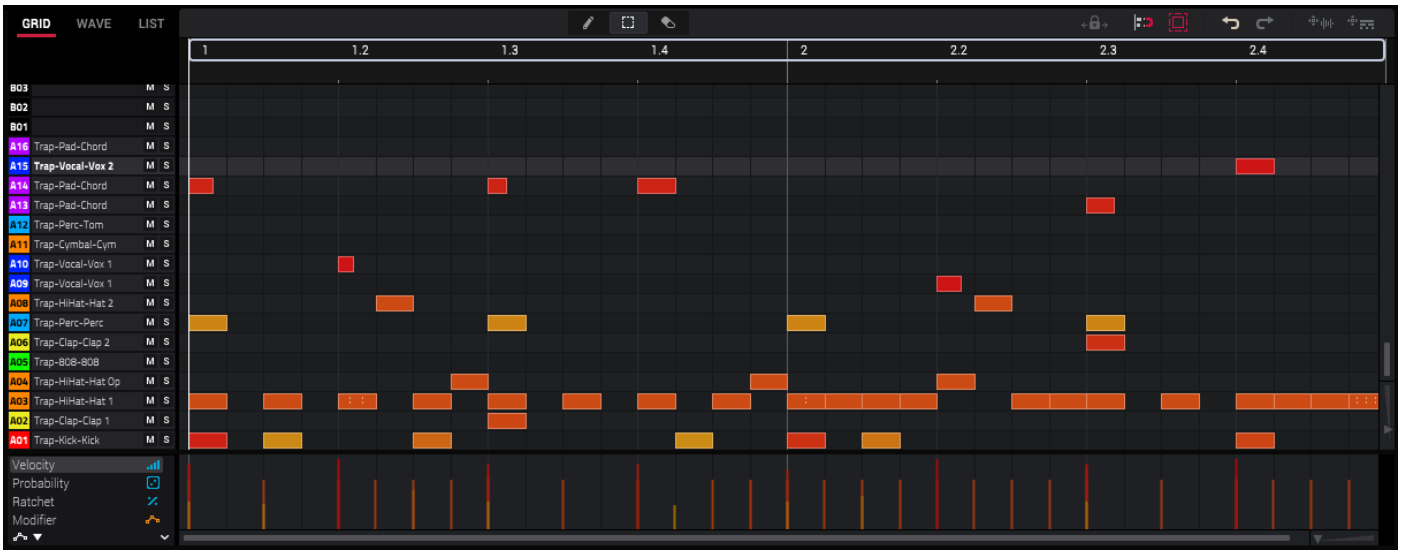
You can use the **Record/Export** tab in the **Preferences** to determine precisely what is exported with each of these features. See ***Preferences*** to learn about this.

Note: Audio tracks can be exported as 16-bit or 24-bit, 44.1 kHz **.wav** files, and MIDI tracks are exported as **.mid** files. These files placed in the [**Exports**] folder in [your hard drive]**Documents****MPC**.

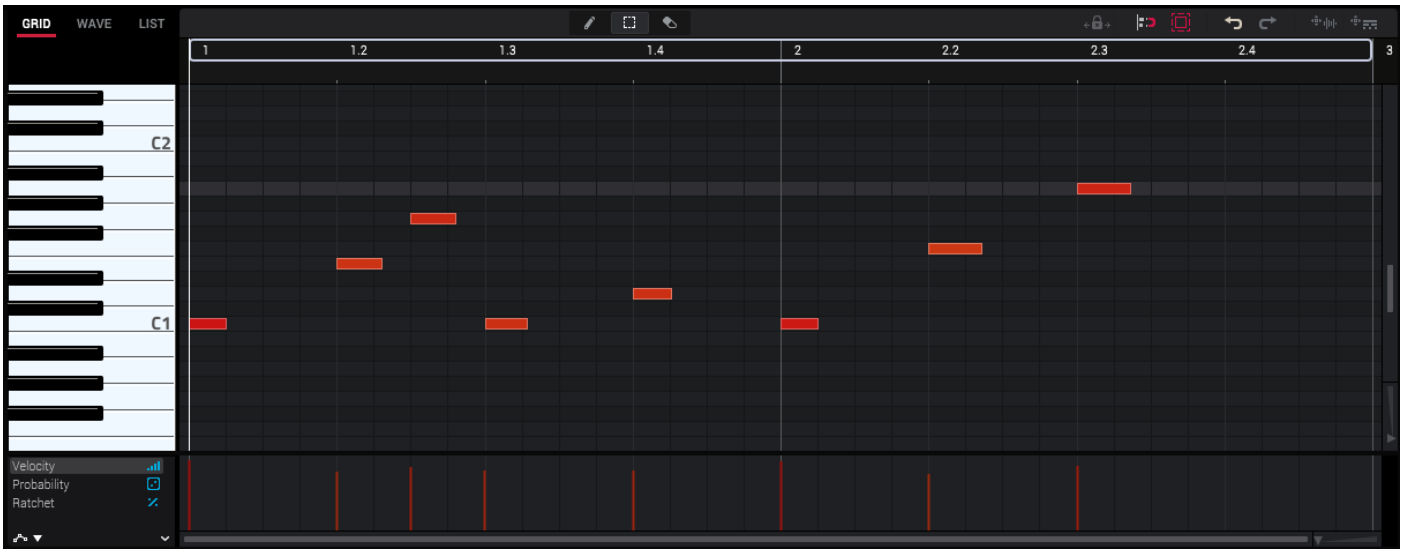
Grid Editor

The Grid Editor lets you view and edit the note events of each MIDI track of a sequence and their velocities.

For drum tracks, the left column shows you all available pads in a vertical view with their corresponding data.
For keygroup, plugin, MIDI, and CV tracks, the left column shows a vertical “piano roll” keyboard.



Grid Editor of a drum track.



Grid Editor of a keygroup track or MIDI track.

In the Grid Editor, these three icons enable you to use different functions in the grid. Click one to select its mode:

Pencil: Draw Mode:

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

To select a note, click it.

To move a note, click and drag it to another grid square. Press and hold **Shift** while doing this to move it without restricting ("snapping") it to the quantization grid.

To erase a note, double-click it.

To adjust the start or end point of a note, click and drag its left or right edge. Press and hold **Shift** while doing this to adjust the start or end point without restricting ("snapping") it to the quantization grid.

Marquee: Marquee Mode:

To select a note, click it.

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

To move a note, click and drag it to another grid square. Press and hold **Shift** while doing this to adjust the start or end point without restricting ("snapping") it to the quantization grid.

To move multiple notes, select them as described above, and then click and drag them. Press and hold **Shift** while doing this to move them without restricting ("snapping") them to the quantization grid.

To adjust the start or end point of a note, click and drag its left or right edge. Press and hold **Shift** while doing this to adjust the start or end point without restricting ("snapping") it to the quantization grid.

Eraser: Erase Mode:

To erase a note, click it.

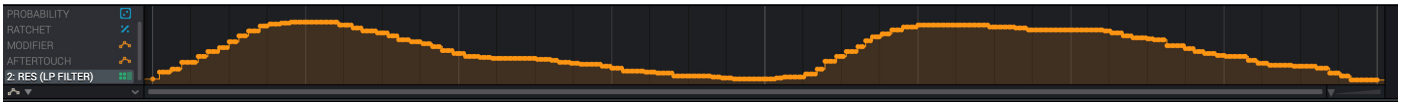
To zoom in or out, use the sliders in the lower-right corner of the Grid Editor (along each axis) or click the blue timeline and drag down or up.

To show or hide the automation lane, click the **up** or **down arrow** (∧ or ∨) button next to the horizontal scroll bar under the grid.

To adjust the velocity of the selected notes (manually), click **Velocity** in the automation lane below the grid to select it, and then click and drag the handle/handles below the note/notes. Each note's velocity is represented by a vertical bar. The higher and more red the bar is, the higher the velocity is. The current velocity value will appear next to the cursor.

Alternatively, select the **pencil tool** and click the desired height for each handle. You can also draw an automation curve across the entire automation lane.

The automation curve can contain points at the current Time Correct intervals. Press and hold **Shift** while creating and editing the automation curve to adjust it without restricting ("snapping") it to the quantization grid.



To show the automation of an automatable parameter, click the **down arrow** (▼) in the lower-left corner of the Grid Editor. You can select a track, program, or pad parameter—the parameter name will appear below **Modifier**. You can then use any of the **tools** to create and edit automation for this parameter in the automation lane.

To create a point in the automation curve, click the desired location with the **pencil tool**, or double-click the desired location with **any other tool**. Press and hold **Shift** while clicking to create it without restricting ("snapping") it to the quantization grid.

To draw part or all of an automation curve, click and drag the desired curve with the **pencil tool**. Press and hold **Shift** while clicking to draw it without restricting ("snapping") it to the quantization grid.

To erase a point in the automation curve, click and drag over it with the **eraser tool**, or double-click it with **any other tool**.

To erase part or all of an automation curve, click and drag over the desired section of the curve with the **eraser tool**.

To select a point in the automation curve, click it.

To move a point in the automation curve, click and drag it to another location in the automation lane. Press and hold **Shift** while clicking to move it without restricting ("snapping") it to the quantization grid.

Each parameter in the automation lane has an icon next to it that indicates the type of parameter it is:

 Velocity

 Track MIDI CC Automation (**0**–**127**)

 Track Parameter Automation (**Aftertouch**, **Pitchbend**, **Channel Pressure**, or **Program Change**) or Modifier Automation

 Track Automation (**Volume**, **Pan**, **Mute**, **Solo**, or **Send 1**–**4**)

 Track Parameter Automation (options vary based on the type of program)

 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 program)

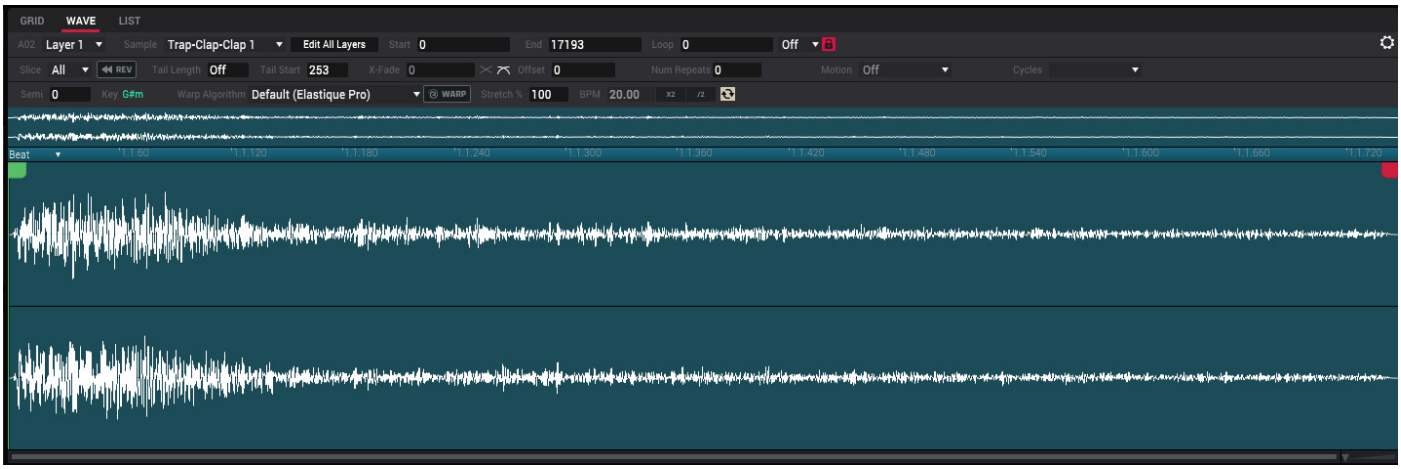
 Pad/Keygroup Insert Effect Automation (options vary based on the effect)

 Probability

 Ratchet

Wave Editor

The Wave Editor lets you view and edit the samples of drum tracks or keygroup tracks in a project.



The selected pad (e.g., **A01**, **B16**, etc.) is shown just below the **Grid Editor** tab. Click a pad in the **Pads** panel or press a **pad** to select it.

Use the **Layer** menu to select the layer (of the current pad) with the sample you want to view.

Use the **Sample** menu to change the sample assigned to the current pad layer.

Click 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).

Important: The following parameters 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 **Pad Start** and **Pad End** points will correspond to the slice markers in the original sample.

See ***Modes*** > ***Sample Edit Mode*** > ***Chop Mode*** to learn more about this.

Use the **Start** field to determine the position (in samples) where the pad's playback will start. The minimum value is **0**, and the maximum value is the **End** value.

Note: When **Loop Lock** is on, the loop position (as determined in the **Loop** field) is the same as the pad start. When off, the loop position is independent from the pad start.

Use the **End** field to determine the position (in samples) where the pad's playback will stop. The minimum value is the **Start** value, and the maximum value is the sample's total length (in samples).

Use the **Loop** menu to select the Pad Loop mode.

Important: For Pad Loop to work, you must (**1**) set the **Sample Play** field to **Note On** in the **Pad Play Modes** section of Track Edit Mode (see ***Modes*** > ***Track Edit Mode***) and (**2**) set the **Slice** field to **Pad**.

Off: The sample will not loop.

Fwd: 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.

Rev: 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.

Alt: 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.

Click the **lock icon** to turn Loop Lock on or off. When on, the lock icon will be red and the Loop field will be disabled.

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 **Start** position to the **End** position. This also lets you activate Pad Loop.

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.

Click **Rev** to reverse the sample's playback.

Use the **Tail Length** and **Tail Start** fields to add extra tail to the end of a sample.

Tail Length: Sets the overall length of time the tail is active.

Tail Start: Sets the point at which the tail starts looping.

Use the X-Fade field to add real-time crossfade looping to sample playback.

Use the **X-Fade** field to set the length of the crossfade in samples.

Click the icons next to the **X-Fade** field to select a **Linear** (straight lines) or **Equal Power** (curved lines) crossfade.

Use the **Offset** field to determine a time offset for the sample's playback.

Positive values: When the pad is played, playback will start immediately but at a later point in the sample specified by the offset value.

Negative values: When the pad is played, playback will be delayed by the amount specified by the offset value.

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.

When a **Slice** is selected, you can use the **Motion** field to trigger a different sample slice each time a pad is played. Select **Increment** to increase the slice number with each new note event, or select **Random** to play the slices in a random order.

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 **Semi** field to adjust the tuning of the sample. The sample's detected **Key** will be shown to the right and will change based on how the sample is tuned.

Use the **Warp Algorithm** field to select the preferred algorithm for warp for the selected sample: **Default**, **Elastique Pro**, **Pro Ten**, or **Repitch**. When using Repitch, warping an audio sample will adjust its pitch to synchronize it with the MPC tempo. The default setting can be adjusted in the **Audio Warp and BPM Detect** section in ***Preferences*** > ***Audio/Export***. Changing the setting for a sample will override the default Preferences setting.

Click **Warp** to lengthen or shorten the sample (based on the BPM) without changing its pitch.

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). You can also click **X2** to double the value or **/2** to halve it.

Click the **circular-arrows icon** 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 sequence. When BPM Sync is disabled but Warp is enabled, the sample will be independent of the tempo of your sequence—use the **Stretch** field to lengthen or shorten a sample.

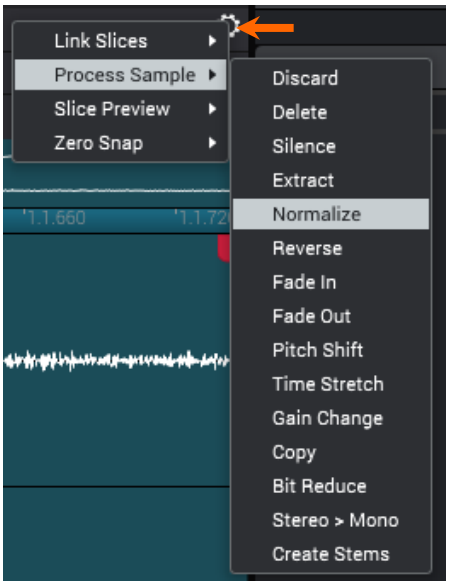
Tip: You can configure audio track recording to ensure the resulting track region is warped automatically. You can then adjust the sequence tempo while track region remains in time. See ***Preferences*** > ***General*** to learn about this.

Note: When you record an audio file, the current sequence 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 sequence tempo and the current value in the BPM field to generate the "stretch factor."

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. You can reduce the CPU resources required by doing any/all of the following:

- Avoid using extreme **Stretch** values, especially anything below **100**.
- Minimize the amount of pitch adjustment (e.g., the **Semi** and **Fine** parameters) of warped audio.
- Avoid warping very small track 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 program, 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.
- Use a Warp algorithm other than Elastique Pro, which is very CPU-intensive. See ***Preferences*** > ***General*** to learn how to change this.
- Using a higher buffer size (usually above **256**) can reduce the possibility of CPU issues. See ***Preferences*** > ***Audio*** to learn how to do this.

Click the **gear icon** to enable or disable **Link Slices** and **Zero Snap**, to select an editing process (**Process Sample**), to set the **Slice Preview** behavior:



Link Slices: When **Link Slices** is set to **On**, changing the start point of a slice (after you have created slices of a sample in Chop Mode) 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. When set to **Off**, you can create slices that are nonsequential, noncontiguous, or overlapping. This is the same as clicking the **Link Slices** button in the **Q-Links** panel in Sample Edit Mode.

Process Sample: Select an editing process to apply to the sample. These are the same processes available in Sample Edit Mode while in Track Mode (see ***Modes*** > ***Sample Edit Mode*** > ***Track Mode*** to learn more).

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 configure this setting in the Preferences (see ***Preferences*** > ***General***).

Zero Snap: Enable Zero Snap to force 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 clicking the **Zero Snap** button in the **Q-Links** panel in Sample Edit Mode.

The large waveform display shows the "active" section of the sample waveform. The strip above the large display shows an overview of the entire sample waveform. If the waveform display is showing only part of the entire sample waveform, a white box in the overview will indicate the current position.

The timeline provides a reference for the length of the sample. Click the **down arrow** (▼) or right-click anywhere on the timeline to select the increments it will use: **Time** (**secs**:**ms**), **Samples**, or **Beats**.

Scroll left or right on the waveform to move through it. Use the sliders in the lower-right corner or click the timeline and drag down or up to zoom in or out.

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.

List Editor

In the List Editor, you can perform the same operations as in the Grid Editor but with a different interface/workflow.

The List Editor has two views, which you can toggle between by pressing the **Events** and **Tempo** buttons. The **Tempo** view allows you to view and adjust sequence tempo automation. All other events and automation are shown on the **Events** tab.

The sequence for the track will be shown as a list of events, with the following parameters:

#: This is number of the note event.

Time: This is the position of the note event in bars, beats, and ticks. Hover the mouse over the value to see its equivalent in pulses. 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.

Event Type: This icon indicates the type of event (e.g., **Note**, **Aftertouch**, **Track Automation**, etc.). See the description of the **View** menu ***below*** for a list of types of events to learn how to show only specific ones.

Pad/Note: This is the pad and/or corresponding MIDI note number. For drum programs, you will see the pad number. For keygroup programs, plugin programs, and midi programs, you will see the note.

Length: This is the length of the note event in ticks. Click and drag the field to adjust it.

Velocity: This is the velocity of the note event with a velocity bar of corresponding color and length below it. Click and drag the field to adjust it.

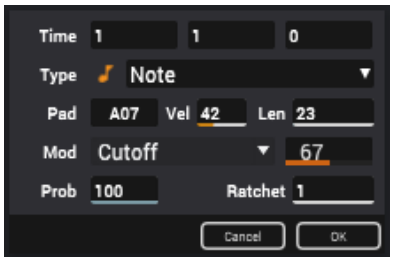
Mod Type: This is the type of modifier used on the note event. Modifiers are note-based and travel with the note, lasting for the full ringing duration of the note event. The available modifier types are **Tuning (coarse)**, **Tuning (fine)**, **Cutoff**, **Resonance**, **Filter Env Amount**, **Pan**, **Level**, **Env Attack**, **Env Decay**, **Env Release**, **Sample Layer**, and **Sample Slice**.

Value: This is the value of the modifier type. Click and drag the field to adjust it.

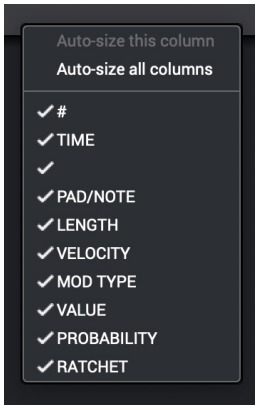
Probability: This is the probability percentage of the event. Click and drag the field to adjust it.

Ratchet: This is the ratchet value of the event. Click and drag the field to adjust it.

To edit the parameters of an event, double-click it. In the window that appears, use the fields and menus to edit the event. Click **OK** to confirm your edits or **Cancel** to close the window without changing anything.

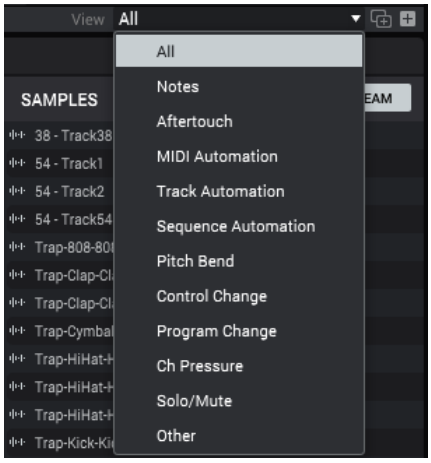


To show or hide specific parameter columns, right-click one of the parameter names, and select the parameter column to show or hide. You can also choose to **Auto-size this column** or **Auto-size all columns** to fit the contents.



The **red arrow** (▶) on the left side of the list represents the playhead's current position. If your sequence is playing, the arrow will move accordingly.

Click the **View** menu in the lower-right corner of the List Editor to select which types 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.

Sequence Automation: Select this option to show only sequence tempo automation events. Note that these events are only visible when the **Tempo** tab is selected.

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.

Ch Pressure: Select this option to show only channel pressure messages.

Solo/Mute: Select this option to show only solo and mute events for tracks, programs, and pads.

Other: Select this option to show other types of events not listed above, such as pad or keygroup parameters.

The following icons indicate the corresponding types of events:

 Note

 Track Mixer Automation (**Volume**, **Pan**, **Mute**, **Solo**)

 Track MIDI CC Automation (**0**–**127**)

 Track Parameter Automation (**Aftertouch**, **Pitchbend**, **Channel Pressure**, or **Program Change**)

 Track Mixer Automation (**Volume**, **Pan**, **Mute**, **Solo**, or **Send 1**–**4**)

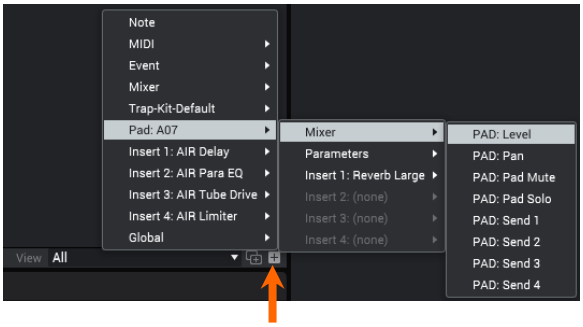
 Track Parameter Automation (options vary based on the type of program)

 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 program)

 Pad/Keygroup Insert Effect Automation (options vary based on the effect)



To insert a step in the list, click the **+ icon** in the lower-right corner, and select one of the options:

Note: Select this option to create a note in the list. The note will be at the earliest possible location **not** occupied by another note played by that pad. (This location takes the Time Correct settings into account.)

MIDI: Select this option to create a MIDI event in the list. You can select:

a MIDI CC: **0**–**127**

a MIDI-specific parameter: **Aftertouch**, **Pitchbend**, **Channel Pressure**, or **Program Change**

a MIDI track-specific parameter: **Volume** or **Pan**

Event: Select this option to add a **Track Mute** event in the list.

Mixer: Select this option to add a Track Mixer event in the list. You can select **Volume**, **Pan**, **Mute**, **Solo**, or **Send 1**–**4**.

Track: Select this option to create a track-specific automation event in the list. Options vary based on the type of track.

Pad/**Keygroup**: Select this option to create a pad or keygroup automation event in the list. You can select:

a pad or keygroup mixer parameter (**Mixer** > **Level**, **Pan**, **Pad Mute**, **Pad Solo**, or **Send 1**–**4**)

a pad or keygroup track parameter (options vary based on the type of track)

a pad or keygroup insert effect parameter (options vary based on the effect)

Insert 1–4: Select these options to create a track insert effect parameter (options vary based on the effect) in the list.

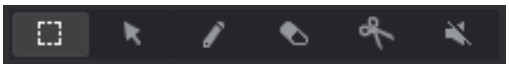
Global: Select this option to create a sequence tempo event in the list. Note that these are only visible when the **Tempo** tab is selected.

To duplicate the currently selected step in the list, click the **two-pages-and-+ icon** in the lower-right corner.

Audio Editor

When an audio track is selected, the Grid, Wave, and List editors will not be available. Instead, the audio editor is automatically selected, which lets you view and edit the audio waveform of the sample in the track.

In the Audio Editor, these six icons enable you to use different functions in the waveform timeline. Click one to select its mode:



Marquee: Marquee Mode:

To select a region of the audio track, click the light-blue strip at the top of it.

To move a track region (or multiple selected track regions), click the light-blue strip at the top of a track region and drag it to the desired location. Press and hold **Shift** after clicking it to move it without restricting ("snapping") it to the quantization grid. You can move multiple regions as well.

To duplicate a track region (or multiple selected track regions), press and hold **Alt** (Windows) or **Option** (macOS), click the light-blue strip at the top of a track region, and drag it to the desired location. Press and hold **Shift** after clicking it to move it without restricting ("snapping") it to the quantization grid. You can duplicate multiple regions as well.

To split a track region at two specific points (creating track regions on either side and between them), click and drag across anywhere in the upper two thirds of it to create a translucent white box, and then click the light-blue strip at the top of it. You can do this to multiple track regions as well.

To shorten or lengthen a track region (or multiple selected track regions), click and drag the lower third of its left or right edge. Press and hold **Shift** while dragging it to adjust the length without restricting ("snapping") it to the quantization grid.

Arrow: Selection Mode:

To select a region of the audio track, click anywhere in the upper two thirds of it.

To move a track region, click and drag anywhere in the upper two thirds of it. Press and hold **Shift** after clicking it to move it without restricting ("snapping") it to the quantization grid.

To duplicate a track region (or multiple selected track regions), press and hold **Alt** (Windows) or **Option** (macOS), click the light-blue strip at the top of a track region, and drag it to the desired location. Press and hold **Shift** after clicking it to move it without restricting ("snapping") it to the quantization grid. You can duplicate multiple regions as well.

To adjust the start or end point of a track region, click and drag anywhere in the lower third of its left or right edge. Press and hold **Shift** while doing this to adjust the start or end point without restricting ("snapping") it to the quantization grid.

Pencil: Draw Mode:

To create a point in the automation curve, click the desired location in the automation lane. Press and hold **Shift** while clicking to create it without restricting ("snapping") it to the quantization grid.

To draw part or all of an automation curve, click and drag the desired curve in the automation lane. Press and hold **Shift** while clicking to draw it without restricting ("snapping") it to the quantization grid.

To select a point in the automation curve, click it.

To move a point in the automation curve, click and drag it to another location in the automation lane. Press and hold **Shift** while clicking to move it without restricting ("snapping") it to the quantization grid.

To erase a point in the automation curve, double-click it.

Eraser: Erase Mode:

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

To copy a track region, press and hold **Alt** (Windows) or **Option** (macOS) and then click and drag it.

To erase part or all of an automation curve, click and drag over the desired section of the curve in the automation lane.

Scissors: Split Mode:

To select a track region, click its left or right edge.

To split the track at a specific point (creating a track region on either side), click that point in the track. Press and hold **Shift** while clicking to split the track without restricting ("snapping") it to the quantization grid.

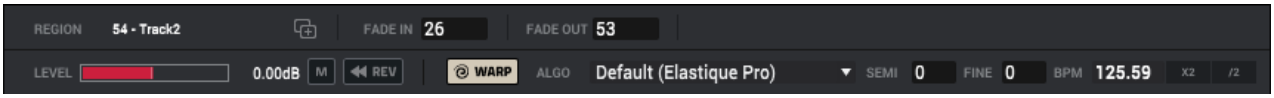
To copy a track region, press and hold **Alt** (Windows) or **Option** (macOS) and then click and drag it.

Mute: Mute Mode:

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

To copy a track region, press and hold **Alt** (Windows) or **Option** (macOS) and then click and drag it.

To zoom in or out, use the slider in the lower-right corner of the Audio Editor or click the timeline and drag down or up.



The **Region** field shows the name of the currently selected region of the audio track. Double-click it to rename the region.

Click the **two-pages-and-+ icon** to duplicate the currently selected region of the audio track. The duplicate 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 currently selected region of the audio track. The fades will be shown as a sloped line at the start or end of the region.

Use the **Level** slider to set the level of the currently selected region of the audio track. The waveform amplitude will change accordingly. Alternatively, click the **dB** value next to the slider and enter the desired level.

Click **M** to mute or unmute currently selected region of the audio track.

Click ◂◂**Rev** to reverse the currently selected region of the audio track.

To lengthen or shorten the currently selected region of the audio track without changing its pitch, click **Warp**, which will enable the **Semi**, **Fine**, and **BPM** fields next to it.

Use the **Warp Algorithm** field to select the preferred algorithm for warp for the audio track: **Default**, **Elastique Pro**, **Pro Ten**, or **Repitch**. When using Repitch, warping an audio sample will adjust its pitch to synchronize it with the MPC tempo. The default setting can be adjusted in the **Audio Warp and BPM Detect** section in ***Preferences > Audio/Export***. Changing the setting for a sample will override the default Preferences setting.

Use the **BPM** field to change the tempo, which will change the length of the region accordingly. You can also click **X2** to double the value or **/2** to halve 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).

Tip: You can configure audio track recording to ensure the resulting track region is warped automatically. You can then adjust the sequence tempo while track region remains in time. See ***Preferences*** > ***General*** to learn about this.

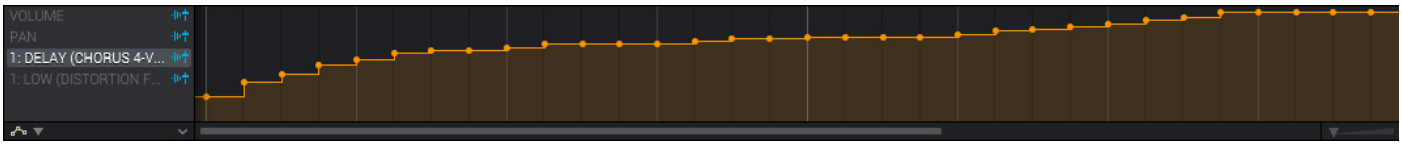
Note: When you record an audio file, the current sequence tempo will be embedded with it. This information is stored within the sample file when you save the project. When you warp an audio track region, the warping algorithm uses this sequence tempo and the current value in the BPM field to generate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

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. 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** parameters) of warped audio.
- Avoid warping very small track 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 program, 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.
- Use a Warp algorithm other than Elastique Pro, which is very CPU-intensive. See ***Preferences*** > ***General*** to learn how to change this.
- Using a higher buffer size (usually above **256**) can reduce the possibility of CPU issues. See ***Preferences*** > ***Audio*** to learn how to do this.

To show or hide the automation lane, click the **up** or **down arrow** (∧ or ∨) button next to the horizontal scroll bar under the grid.

The automation curve can contain points at the current Time Correct intervals. Press and hold **Shift** while creating and editing the automation curve to adjust it without restricting ("snapping") it to the quantization grid.



To show the automation of an automatable parameter, click the **down arrow** (▼) in the lower-left corner of the Grid Editor. You can select a track parameters only (for the mixer or insert effects)—the parameter name will appear below **Modifier**. You can then use any of the **tools** to create and edit automation for this parameter in the automation lane.

To create a point in the automation curve, click the desired location with the **pencil tool**, or double-click the desired location with **any other tool**. Press and hold **Shift** while clicking to create it without restricting ("snapping") it to the quantization grid.

To draw part or all of an automation curve, click and drag the desired curve with the **pencil tool**. Press and hold **Shift** while clicking to draw it without restricting ("snapping") it to the quantization grid.

To erase a point in the automation curve, click and drag over it with the **eraser tool**, or double-click it with **any other tool**.

To erase part or all of an automation curve, click and drag over the desired section of the curve with the **eraser tool**.

To select a point in the automation curve, click it.

To move a point in the automation curve, click and drag it to another location in the automation lane. Press and hold **Shift** while clicking to move it without restricting ("snapping") it to the quantization grid.

Each parameter in the automation lane has an icon next to it that indicates the type of parameter it is:

Audio Track Mixer Automation (**Volume**, **Pan**, **Mute**, **Solo**), Insert Effect Automation (options vary based on the effect), or Global Automation (Sequence Tempo).

Mixer Window

If you want to see channel strips for both the Pad Mixer and the Channel Mixer at the same time, you can open the Mixer Window, which provides an overview of the channel strips in both modes in one screen.

To open or close the mixer window, do one of the following:

- Click the **menu icon** (≡), and go to **View** and click **Show Mixer Window**.
- Click the **two-sliders icon** in the lower-left corner of the window.

The upper half of this window shows the Pad Mixer channel strips (see ***Modes*** > ***Pad Mixer*** to learn about these).

The lower half of the window shows the Channel Mixer channel strips (see ***Modes*** > ***Channel Mixer*** to learn about these).

All selectors and channel strips work as they normally do in their respective modes.

Tip: This window can be very helpful when using a dual-monitor computer setup.

Use the three icons at the top of the window to select which channel strips are shown:

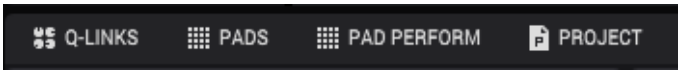
Click the **pad-and-slider icon** to show just the Pad Mixer channel strips.

Click the **two-sliders icon** to show just the Channel Mixer channel strips.

Click the **pad-and-three-sliders icon** to show both Pad Mixer and Channel Mixer channel strips.

Panels

In several modes, the lower half of the window shows several different panels.



To show or hide each panel, click its selector.

To show or hide the entire bottom panel, click the **two-panels icon** in the lower-left corner of the window.

This chapter describes the available panels.

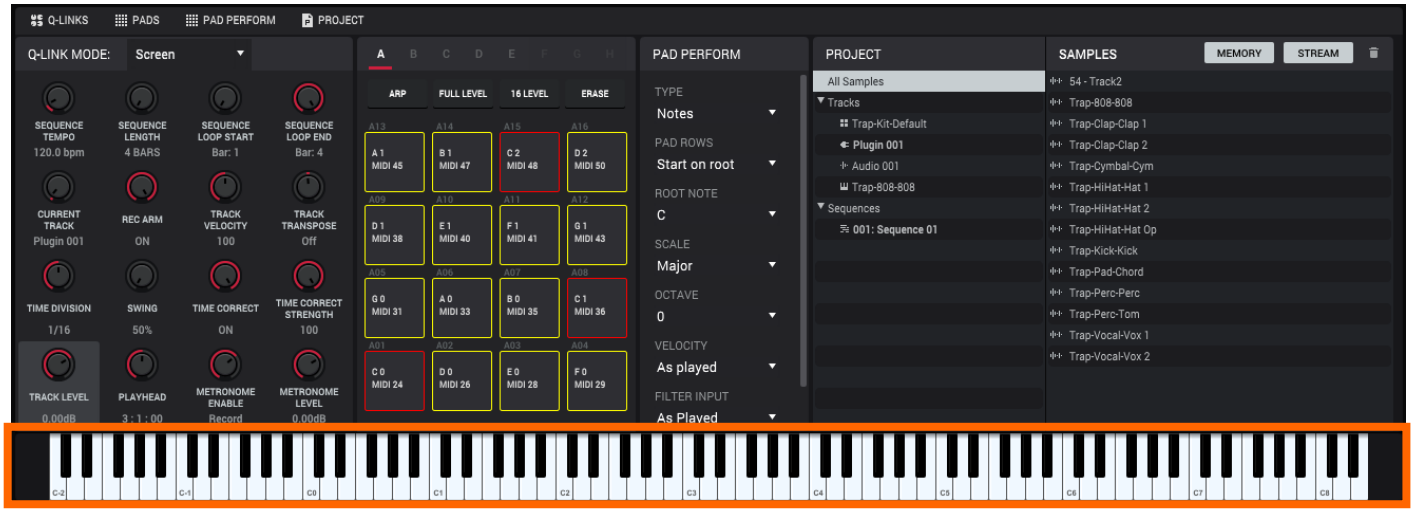
Note: Similar to these panels, the lower half of the window of the Pad Mixer and Channel Mixer shows several different channel strips, which you can show or hide by clicking the selectors. See ***Modes*** > ***Pad Mixer*** and ***Modes*** > ***Channel Mixer*** chapter to learn about these.

MIDI Keyboard

The **MIDI keyboard** feature is a graphical representation of a piano keyboard at the bottom of the window.

To show or hide the MIDI keyboard, do one of the following:

- Click the **menu icon** (≡), and go to **View** and click **Show MIDI Keyboard**.
- Click the **two-panels icon** in the lower-left corner of the window.



Whenever a note is played (by pressing a pad, playing the current sequence, etc.), the corresponding keys on the MIDI keyboard will be lit, appearing to be “played.” These keys will correspond to the notes played in the current track only.

Similarly, you can click keys on the MIDI keyboard to trigger those notes on the current track. This can be useful for auditioning the sound of the track’s program in different octaves.

Click the left-arrow or right-arrow button on either side of the MIDI keyboard to shift the range of the keys displayed in the window.

If the **MIDI Keys** feature is enabled, the corresponding computer keyboard character will be shown above each key, though you can still use MIDI keys even if it is hidden. Furthermore, you can use the MIDI keyboard even if MIDI Keys is disabled. See ***Toolbar*** > ***Menu*** > ***Tools*** to learn about this feature.

Q-Links

The **Q-Links** panel shows the 16 Q-Link knobs with their assigned parameters listed below.

Click the **Q-Link Mode** menu to select the current edit mode of the Q-Link knobs:

Screen: In this edit mode, the Q-Link knobs will control a default parameter or group of parameters in your currently selected mode (e.g., Main Mode, Sample Edit Mode, etc.).

Project: In this edit mode, the Q-Link knobs can control 16 parameters within the current project overall. See the following ***Project*** section to learn how to use this mode.

Track: In this edit mode, the Q-Link knobs control 16 track parameters. See the following ***Track*** section to learn how to use this mode.

Pad Scene (for drum programs only): In this edit mode, the Q-Link knobs can control 16 parameters for the currently selected pad. See the following ***Pad Scene*** section to learn how to use this mode.

Pad Parameters: In this edit mode, the 16 Q-Link knobs correspond to the 16 pads, each one controlling the same parameter for each pad. This is useful if you need to adjust the same parameter on multiple pads at once rather than having to select and edit each pad individually. See the following ***Pad Parameters*** section to learn how to use this mode.

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.

MIDI: In this edit 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 edit mode, the Q-Links are fixed to control the volume level of the available tracks.

Pan: In this edit mode, the Q-Links are fixed to control the stereo panning of the available tracks.

Send 1–4: In these edit modes, the Q-Links are fixed to control each Send control on the available tracks.

Note: When using MPC hardware with four Q-Link knobs (e.g., MPC Live, MPC One, etc.), a gold rectangle in this panel indicates the four knobs that can be controlled by that bank of four Q-Link knobs.

Project

In the **Project** Q-Link Edit Mode, the Q-Link knobs control 16 parameters within the current project.

These are the available sources for each Q-Link knob:

Track: track parameters—select one of the tracks in your project. For drum programs and keygroup programs, you can select either the entire track or a specific pad or keygroup within it.

Return: return mixer parameters (**Returns 1**–**4**).

Submix: submixer parameters (**Submixes 1**–**8**).

Main: main mixer parameters (**Outputs 1**/**2**–**31**/**32**).

These are the available parameters for each Q-Link knob:

Mixer: mixer parameters (options vary based on the **Source**)

Track: track parameters (options vary based on the type of track; available only if the **Source** is a drum track, keygroup track, MIDI track, or CV track)

Insert 1–**4**: insert effect parameters (options vary based on the effect; available only if the **Source** has an insert effect loaded)

Track

In the **Track** Q-Link Edit Mode, the Q-Link knobs control 16 parameters within the currently selected track.

These are the available sources for each Q-Link knob:

Track: track parameters—select the track. For drum tracks, you can select either the entire track or a specific pad within it.

These are the available parameters for each Q-Link knob:

Mixer: track mixer parameters (options vary based on the **Source**)

Track: track parameters (options vary based on the type of track; available only if the **Source** is a drum track, MIDI track, or CV track, not an audio track)

Insert 1–**4**: insert effect parameters (options vary based on the effect; available only if the **Source** has an insert effect loaded)

Pad Scene

In the **Pad Scene** Q-Link Edit Mode, the Q-Link knobs control your favorite 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 16 parameter assignments are automatically saved with other user settings. Any project you load will use these assignments.)

This option works for drum tracks only.

The only available sources for each Q-Link knob are pads within a drum track.

To select a pad, press it.

These are the available parameters for each Q-Link knob:

Mixer: pad mixer parameters (**Level**, **Pan**, **Pad Mute**, **Pad Solo**, or **Send 1**–**4**)

Track: pad parameters (i.e., parameters used in Track Edit Mode)

Pad Parameters

In the **Pad Parameters** Q-Link Edit Mode, the Q-Link knobs control the same pad parameter for 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.

This option works for drum tracks only.

The only available sources for each Q-Link knob are pads within a drum track.

To select a pad, press it.

These are the available parameters for each Q-Link knob:

- **Mixer**: pad mixer parameters (**Level**, **Pan**, **Pad Mute**, **Pad Solo**, or **Send 1–4**)
- **Track**: pad parameters (i.e., parameters used in Track Edit Mode)

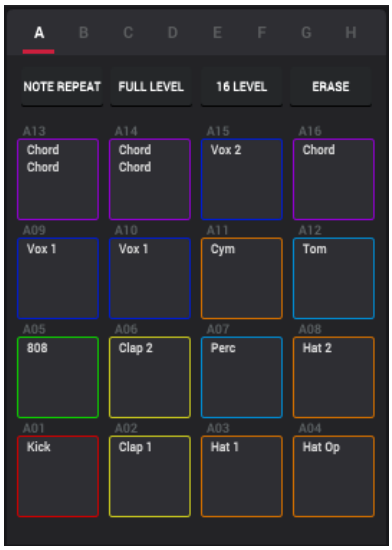
Pads

The **Pads** panel shows the 16 pads with their assigned samples. All pads will display their assigned colors.

Click a **Pad Bank** letter at the top of this panel to select a pad bank.

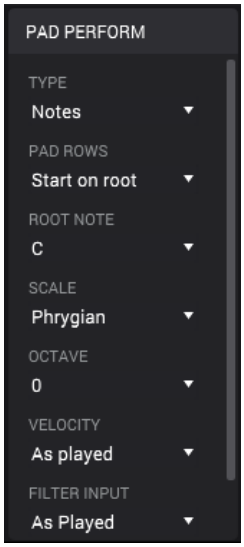
Each pad will display different contents, depending on the current mode. See the description of this panel in the chapter for each mode.

Each pad can also display a color, which you can customize for each track. See ***Pad Color*** to learn how to do this.



Pad Perform

The **Pad Perform** panel lets you assign musical scales/modes, chords, or progressions to the pads for more creative performance. Learn about the specific parameters in ***Modes > Main Mode > Pad Perform***.



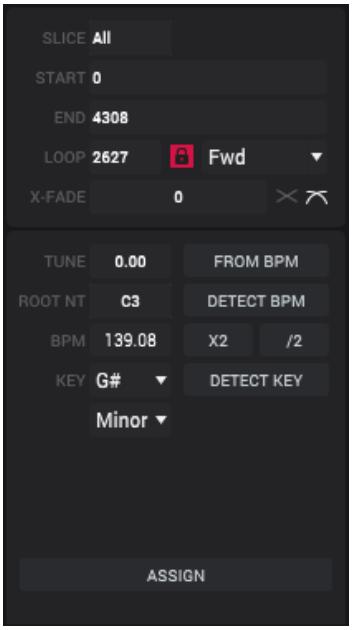
Track Editor

The **Track Editor** panel contains the parameters for Track Edit Mode, which vary depending on the type of track. Learn about the specific parameters for each program type in ***Modes*** > ***Track Edit Mode***.

Parameters

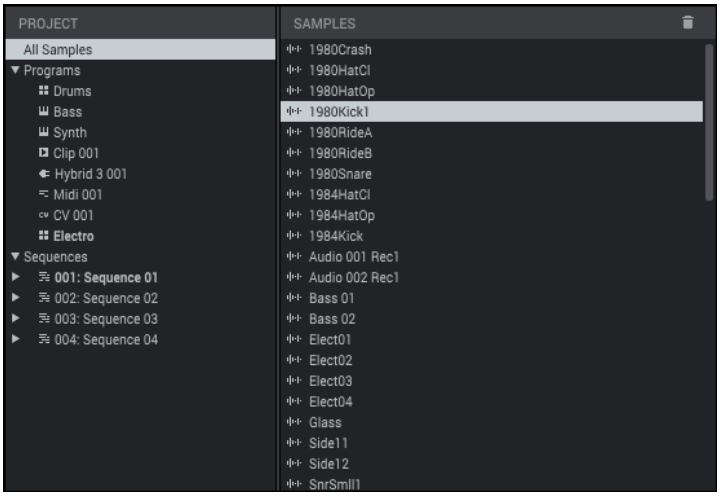
The **Parameters** panel shows the available parameters and editing processes in Sample Edit Mode.

See the ***Modes*** > ***Sample Edit Mode*** chapter to learn more about this panel and its different features in ***Trim Mode***, ***Chop Mode***, and ***Track Mode***.



Project

The **Project** panel is a list of all available tracks, sequences, and samples in the project. This panel is identical to the **Project Info Browser** (see ***Browser > Project Info Browser***) but in a horizontal layout rather than vertical.



To duplicate a track in the project, right-click it and click **Duplicate**. An identical track will be created immediately. The duplicate track will use the same name but appended with a number (e.g., **Drum 002**).

To duplicate a track including its events, right-click it and click **Duplicate with events**. An identical track will be created immediately with the same events as the original track. The duplicate track will use the same name but appended with a number (e.g., **Drum 002**).

To delete a track, right-click it and click **Delete**.

To save a track, right-click it and click **Save**. Use the window that appears to enter a name for the track file (**.xtp**) and select a location. Click **Save** to confirm your choice or **Cancel** to cancel saving.

To rename a program or sample, right-click it and click **Rename**. Enter a name in the window that appears, and then click **Do It** to confirm your choice or **Cancel** to cancel saving.

To adjust the track position, right-click it and select **Move Up** or **Move Down**. Other tracks will be moved in relation to the new track position.

A list of samples will appear to the right of the Project list under **Samples** (the samples that are listed are part of the selected track or sequence under the **Project** list).

To audition the sample, hover your cursor over the **waveform icon** so it turns into a **speaker icon**. Click this icon to hear the sample.

To delete samples from the project, click the **trash can icon**. In the screen that appears, select **Purge Unused Samples** to delete all unused samples from the project (from all tracks and sequences), or select **Delete All Samples** to delete all samples from the project.

To delete a sample, right-click it and click **Delete**. Click **Delete** or **Delete Sample** to confirm your choice or **Cancel** to cancel the deletion.

To save a program or sample, right-click it and click **Save**. Use the window that appears to enter a name for the sample file (**.wav**) and select a location. Click **Save** to confirm your choice or **Cancel** to cancel saving.

To rename a sample, right-click it and click **Rename**. Enter a name in the window that appears, and then click **Do It** to confirm your choice or **Cancel** to cancel saving.

To view a sample in Sample Edit Mode, right-click it and click **Edit**. Alternatively, double-click the sample. You will immediately enter ***Sample Edit Mode*** and show the sample's waveform in the Wave Editor.

You can also use this section to sort and assign samples to **Memory** or to **Stream** from disk. Click each header to show only samples in each category.

If a sample is loaded to memory, right-click it and select **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**.

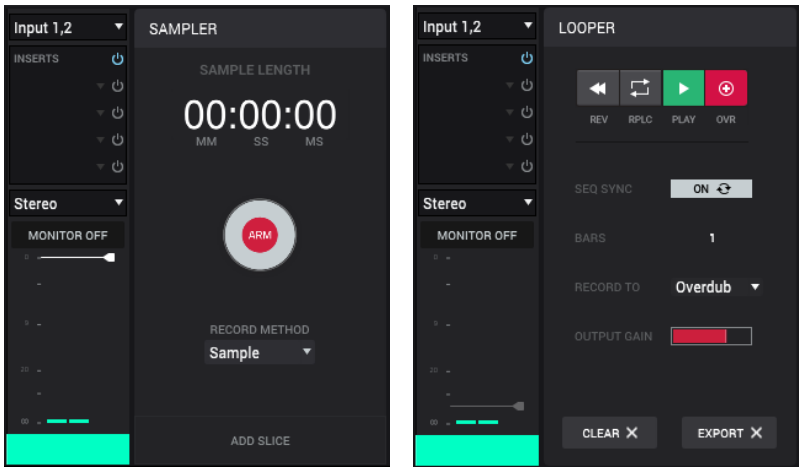
If a sample is streaming from disk, right-click it and select **Load To Memory** to disable streaming the sample from a disk drive and return it to memory. Samples loaded to memory will be marked with a grey waveform icon.

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). Once you have saved a project to your SSD, your files will stream from that location. For an unsaved project, MPC 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.

Sampler & Looper

The **Sampler** and **Looper** panels show similar controls for setting levels, monitoring, inputs, and effects of your incoming audio signal.

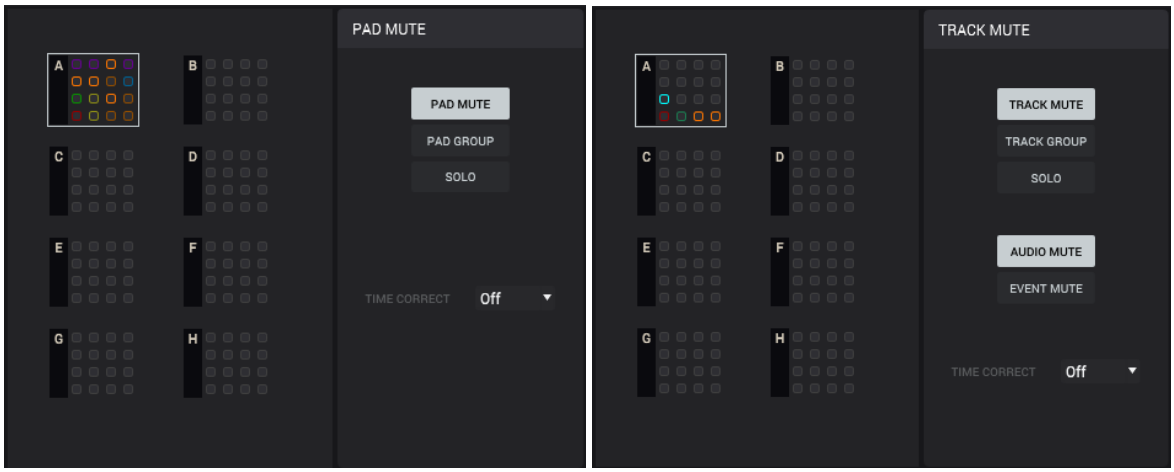
See ***Modes*** > ***Sampler*** and ***Modes*** > ***Looper*** to learn more about each one.



Pad Banks & Mute

The **Pad Banks** and **Mute** panels let you select pads, assign pad or track groups, and adjust timing correct settings in Pad Mute Mode and Track Mute Mode.

See ***Modes*** > ***Pad Mute Mode*** and ***Modes*** > ***Track Mute Mode*** to learn more about each one.

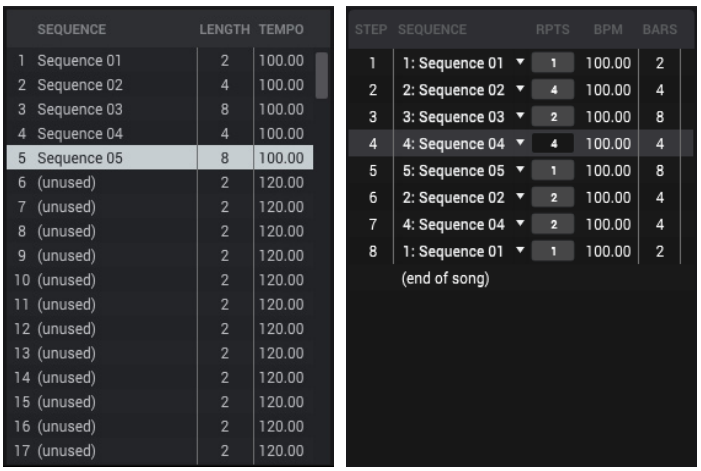


Sequence List

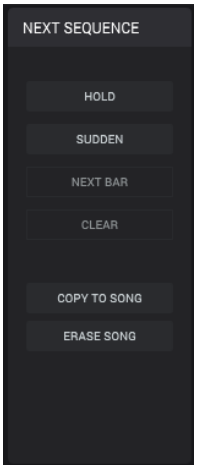
The **Sequence List** panel has different appearances in Next Sequence Mode and Song Mode.

In Next Sequence Mode, it shows a list of all available sequences in your project as well as their length and tempo. See ***Modes*** > ***Next Sequence Mode*** to learn about this.

In Song Mode, it shows the list of steps in the song, including the number of repeats, the tempo of each sequence, and the length of each step. See ***Modes*** > ***Song Mode*** to learn about this.



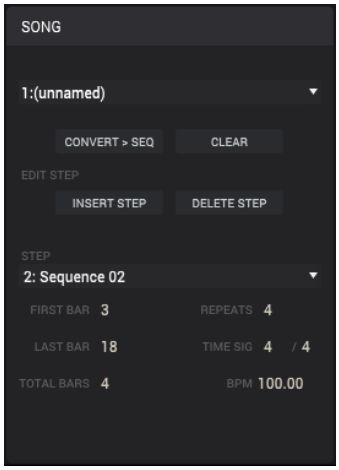
Performance Controls



The **Performance Controls** panel shows the available commands you can execute in Next Sequence Mode.

See ***Modes*** > ***Next Sequence Mode*** to learn about this.

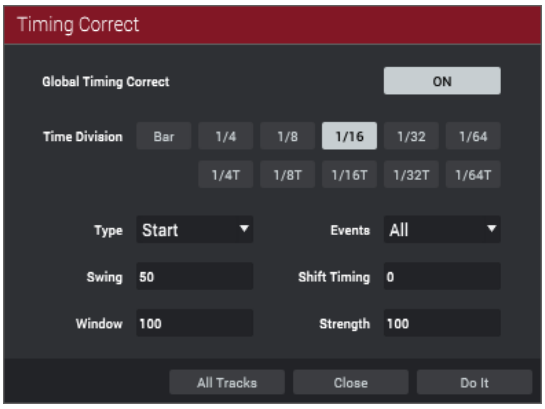
Song Parameters



The **Song Parameters** panel shows the available controls to create a song in Song Mode. This includes controls for inserting and deleting song steps, a sequence selector for the current step, and parameters that determine how long each step plays.

See ***Modes*** > ***Song Mode*** to learn about this.

Time Correct



The **Timing Correct** window contains various settings to help quantize events in your sequence. 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, click the **menu icon** (≡), select **Edit**, select **Time Correct**, and click **Settings**….

Click the **Global Timing Correct** button to enable or disable Global Timing Correct.

To apply the settings you selected to all tracks, click **All Tracks**.

To apply the settings you selected to the current track, click **Do It**.

To cancel and return to the previous screen, click **Close**.

You can also enable or disable **Global Timing Correct** by clicking the **TC** button in the ***Timing Controls*** section of the Toolbar at the top of the window.

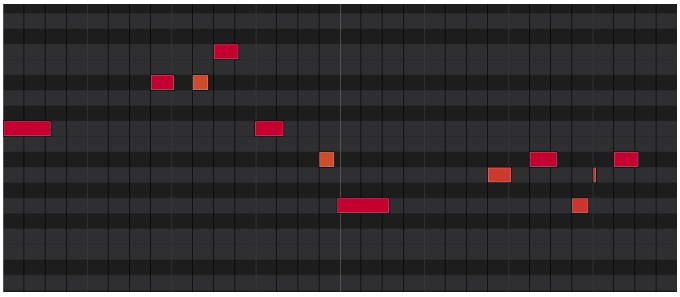
Use the **Type** selector to set how timing corrections are applied.

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.

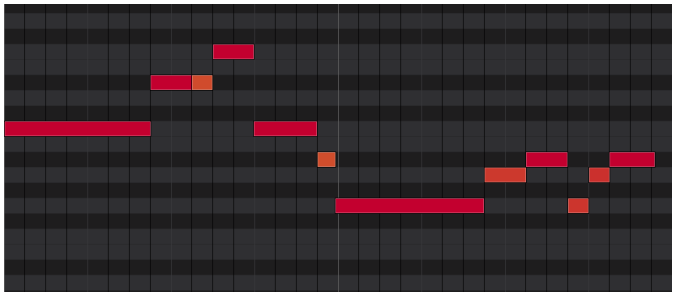
End: The end points of note events will be extended or shortened to align with the closest time division marker in the grid. The start points will remain untouched. You can apply this to MIDI tracks only.

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.

Alternatively, click the **TC** field in the ***Timing Controls*** section of the Toolbar at the top of the window and select a time division.

Use the **Swing** field to set the amount of swing from **50%** to **75%**. Swing lets you "shuffle" your beats—from subtle to extreme.

This value can also be set using the **Swing** field in the ***Timing Controls*** section of the Toolbar at the top of the window.

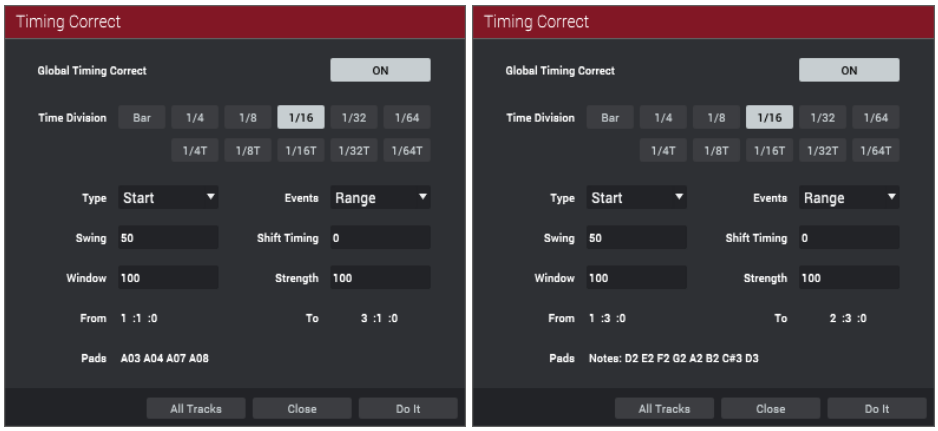
Use the **Shift Timing** field to shift all events by clock ticks.

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 the **editors**, or press or click the **pad** with the desired events (while **Hitting Pad Selects All Events** is set to **On**). You must do this **before** opening the Time 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. When applying time correction to an audio track region, you will not be able to specify pads or keys.



Metronome

The **Metronome** menu contains all settings regarding the metronome (click track).

To view the metronome settings, click the **menu icon** (≡), select **Tools**, and click **Metronome**.

Use the **Count-In** submenu 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** submenu 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** submenu to select the metronome click's time division: **1/4**, **1/4T**, **1/8**, **1/8T**, **1/16**, **1/16T**, **1/32** or **1/32T**. **T** indicates a triplet-based time division.

Use the **Sound** submenu to select the sound that you want to hear for the metronome: **Sidestick 1**, **Sidestick 2**, **Clap**, **Metroclick**, **Shake**, **Tambourine**, or **MPC Click**.

Use the **Output** menu to set where the metronome signal will be heard: a pair of main outputs (**Out 1,2**–**31,32**) or a single main output (**Out 1**–**32**).

Click the **metronome icon** in the ***Timing Controls*** section of the Toolbar at the top of the window to enable or disable the metronome.

Use the **Metro** meter next to this icon to set the volume of your metronome click.

Editing Processes

You can use the processes described in this chapter to edit an ***Audio Region***, ***Sequence***, ***Track***, or ***Program***.

Audio Region

You can use any of these functions when an audio track is selected and an audio region is selected in the **Audio Editor**. Click the **menu icon** (≡), select **Edit** > **Audio Region**, and select the following:

- The **Duplicate** function copies and pastes the track region immediately after the original one.
- The **Mute** function silences the track region.
- The **Reverse** function reverses the track region.
- The **Warp** function lengthens or shortens the track region without changing its pitch.

  Use the **BPM** field above the Audio Editor to change the tempo, which will change the length of the track region accordingly.

  Use the **Semi** and **Fine** fields above the Audio Editor to change the pitch (this is useful for matching the durations of two samples with different pitches).

  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 also do the following while editing an audio track by right-clicking the **Track** field in the Inspector and selecting the following:

- The **Clear Regions** function erases all **regions** from the audio track without erasing the track itself.
- The **Reset Channel Strip** function:
  - 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.

  It does not change the track's inputs or outputs.

  Click **Reset** to continue or **Cancel** to return to the previous screen.

Sequence

You can use any of these functions on the currently selected sequence. Right-click click the **Sequence** field in the ***Inspector*** to select the following:

- 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 **Clear Arrangement** function erases **all** events from the sequence and resets **all** of its settings.

- The **Erase** function erases all or part of a track in a specific sequence.

  To erase events in the track, click the **menu icon** (≡), select **Edit** > **Sequence**, and click **Erase**. Alternatively, right-click the **Sequence** field in the Inspector and click **Erase**.

  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 **Start** and **End** fields to set the time range (in bars, beats, and ticks) of the sequence you want to erase. The **Start** fields set the start of the time range, and the **End** fields set the end of the time range.

  Select one of the **Erase** options to select what types of events you erase:

  - **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.
  - **Note** erases only specific pad events from the designated time range. In the diagram of the eight pad banks that appears, press each pad in each bank to select or deselect its notes.
  - **Except Note** erases everything **except** pad events from the designated time range.

  Click **Do It** to continue or **Cancel** to return to the previous screen.

- The **Copy** 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.

  Use the **Sequence Name** field to rename the destination sequence.

  Click **Do It** to continue or **Cancel** 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.

  Click **Do It** to continue or **Cancel** 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.

  Click **Do It** to continue or **Cancel** 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 **Copy 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 **Paste 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.

  Click **Replace** to overwrite the destination sequence.

  Click **Merge** to add the events to the destination sequence without erasing anything.

  Click **Cancel** to return to the previous screen.

- The **Copy Events** function copies a range of events or selected audio track regions from a sequence and adds them to another at a specified point.

  Use the **Copy From** > **Sequence** field to select the "source" sequence. This is the sequence whose events you want to copy.

  Use the **Copy From** > **Track** field to select the "source" track. This is the track whose events you want to copy.

  Use the **Copy From** > **Time** fields to set the time range (in bars, beats, and ticks) of the events you want to copy. The **Time** fields set the start of the time range, and the **To** fields set the end of the time range.

  Click the **Copy All Events**/**Copy Only Selected Events** menu to select either option. Select **Copy All Events** to copy and paste all events in the track. Select **Copy Only Selected Events** to copy and paste only the events that are currently selected.

  Use the **Paste To** > **Sequence** field to select the "destination" sequence. This is the sequence where the source sequence events will be copied.

  Use the **Paste To** > **Track** field to select the "destination" track. This is the track where the source track events will be copied.

  Use the **Paste To** > **Time** fields to set where (in bars, beats, and ticks) you want to add the copied events. The events will be added after this point.

  Use the **Copies** field to set how many instances of the copied events you want to add.

  Click **Replace** to overwrite the destination sequence.

  Click **Merge** to add the events to the destination sequence without erasing anything.

  Click **Cancel** to return to the previous screen.

- **Export as MIDI** lets you export the current sequence as a standard MIDI (**.mid**) file.

  To export the sequence as a MIDI file, click the **menu icon** (≡), select **Edit** > **Sequence**, and click **Export as MIDI**. Alternatively, right-click the **Sequence** field in the Inspector and click **Export as MIDI**.

  In the **Export Current Sequence as Standard MIDI file** window, do any of the following:

  To select the storage device you want to view, click the **down arrow** (▼) next to the file path. If you have storage devices connected to your MPC hardware, they will appear in this column, as well.

  To enter a folder, double-click it or press **Enter**.

  To create a new folder, click **New Folder**, type a name for the new folder, and then click **OK** or press **Enter** to confirm the name, or click **Cancel** or press **Esc** to keep the original name. You will immediately enter the new folder.

  To move up one folder level, click the **up arrow** (↑).

  To name the file, click the **File** field at the bottom of the window, and type a name.

  To save the file, click **Save** or press **Enter**.

  To cancel, click **Cancel** or press **Esc**.

- The **Bounce to Sample** function **immediately** renders the sequence (all of its tracks) 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. If you have already used this function on this sequence, then it will create another audio sample appended with the next-highest number.

  To bounce the sequence to a sample, click the **menu icon** (≡), select **Edit** > **Sequence**, and click **Bounce to Sample**. Alternatively, right-click the **Sequence** field in the Inspector and click **Bounce to sample**. You can also press **Shift**+**Alt**+**S** (Windows) or **Shift**+**Option**+**S** (macOS).

- The **Bounce to New Audio Track** function **immediately** renders the sequence (all of its tracks) as an audio track in the project. The **Audio** tab will be automatically selected. By default, the sample will be named **Bounce -** and appended with a number. This function does not work for tracks that use MIDI programs or CV programs.

  To bounce the sequence to an audio track, click the **menu icon** (≡), select **Edit** > **Sequence**, and click **Bounce to New Audio Track**. Alternatively, right-click the **Sequence** field in the Inspector and click **Bounce to new audio track**. You can also press **Alt**+**S** (Windows) or **Option**+**S** (macOS).

Track

You can use any of these functions on the currently selected track. To access the following functions, click the **menu icon** (≡), select **Edit** > **Track**, and select the following:

- The **Next Track** and **Previous Track** options select the next or previous track in your sequence (respectively).
- The **Pad Color** option opens the **Pad Color** window where you can assign specific colors to your pads in each program. See the ***Pad Color*** chapter to learn how to use this.
- The **Note Mapping** option opens the **Note Mapping** window where you can where you can assign a MIDI note to each pad in a program. See the ***Note Mapping*** chapter to learn how to use this.

Right-click click the **Track** field in the ***Inspector*** to select the following:

- The **New Track** function opens the New Track window, where you can select the type of new track to add. This is the same as clicking the **+** icon in the track area.
- The **Save Track** function lets you save the current track.
- The **Delete** function erases the entire track.
- The **Clear** function erases all note events or audio from the current track.
- **Export as MIDI** lets you export the current track as a standard MIDI (**.mid**) file.

  To export the track as a MIDI file, click the **menu icon** (≡), select **Edit** > **Track**, and click **Export as MIDI**. Alternatively, right-click the **Track** field in the Inspector and click **Export as MIDI**.

  In the **Export Current Track as Standard MIDI file** window, do any of the following:

  To select the storage device you want to view, click the **down arrow** (▼) next to the file path. If you have storage devices connected to your MPC hardware, they will appear in this column, as well.

  To enter a folder, double-click it or press **Enter**.

  To create a new folder, click **New Folder**, type a name for the new folder, and then click **OK** or press **Enter** to confirm the name, or click **Cancel** or press **Esc** to keep the original name. You will immediately enter the new folder.

  To move up one folder level, click the **up arrow** (↑).

  To name the file, click the **File** field at the bottom of the window, and type a name.

  To save the file, click **Save** or press **Enter**.

  To cancel, click **Cancel** or press **Esc**.

- 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 sequence name. If you have already used this function on this sequence, then it will create another audio sample appended with the next-highest number.

  To bounce the track to a sample, click the **menu icon** (≡), select **Edit** > **Track**, and click **Bounce to Sample**. Alternatively, right-click the **Track** field in the Inspector and click **Bounce to sample**.

- The **Bounce to New Audio Track** function **immediately** renders the track (for the current sequence only) as an audio track in the project. The Main Mode will automatically switch to the **Audio** tab, and the original track will be muted. By default, it will be named **Audio** and appended with a number (e.g., **Audio 002**). This function does not work for tracks that use MIDI programs or CV programs.

  To bounce the MIDI track to an audio track, click the **menu icon** (≡), select **Edit** > **Track**, and click **Bounce to New Audio Track**. Alternatively, right-click the **Track** field in the Inspector and click **Bounce to new audio track**.

- The **Reset Channel Strip** function:
    - 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.

  It does not change the track's inputs or outputs.

  Click **Reset** to continue or **Cancel** to return to the previous screen.

  Note: This option is only available when an audio track is selected.

Effects

You can apply various effects to the pads, keygroups, audio tracks, programs, submixes, and main outputs, 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

In a program, each **pad** or **keygroup** can have up to **four insert effects** applied to it. An entire **program** can have up to **four insert effects** applied to it, as well.

An **audio track**, like a program, can have up to **four insert effects** applied to it, as well.

For even further flexibility, each **submix** can have up to **four insert effects** applied to it. You can route pads, keygroups, audio tracks, or programs to a submix, which is then routed to a main output.

Additionally, each **pad**, **keygroup**, **audio track**, **program**, and **submix** can be sent to (up to) **four return channels** (**returns**), 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.

Finally, you can apply up to **four insert effects** to each main output (a stereo pair of channels: **Outputs 1/2**, **Outputs 3/4**, etc.).

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 programs** 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.

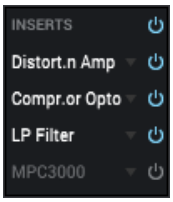
The Sampler and Looper handle effects differently:

- 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. Learn more about the Sampler in the ***Modes*** > ***Sampler*** chapter.
- 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. Learn more about the Looper in the ***Modes*** > ***Looper*** chapter.

Finally, there is a special effect type called ***TouchFX***, which is specially designed for use the **touch strip** controller on hardware such as MPC Key 61 and MPC Key 37, but can be used on any MPC hardware and controlled using the onscreen touch slider or an external MIDI device.

Please see the rest of this chapter to learn how to use insert effects as well as send/return effects.

You can load, edit, remove, and activate or deactivate effects in the **Inserts** section of a channel strip. Each **Inserts** section has four insert effect slots.



To load an effect, click an empty slot in the **Inserts** section of a channel strip. In the window that appears:

- Use the **Search** field at the top of the window to search for an effect by name.
- Click the **+** or **–** button to expand or collapse each category.
- The right edge of the window shows how many MIDI channels can be sent to and from each effect.
- Select **Sort by type** to sort the effects by type.
- Select **Sort by manufacturer** to sort the effects by manufacturer.
- Double-click an effect or click it and then click **Select** to load it.
- Click the **gear icon** to open the **Plugin Manager**. See ***Plugins*** > ***Plugin Manager*** to learn about this.
- Click **Close** or press **Esc** to close the window without loading any effect.

To remove a loaded effect, click the **down arrow** (▼) next to its name the **Inserts** section. In the window that appears, double-click the **<none>** option at the top of the list of effects, or click it once and then click **Select**.

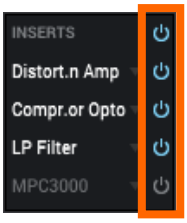
To edit an effect, click its name in the **Inserts** section of a channel strip. A window with the effect's parameters will appear.

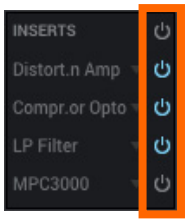
- **To adjust a parameter**, click and drag its knob up or down. **To make finer adjustments**, press and hold **Ctrl** (Windows) or **⌘** (macOS) and then click and drag its knob up or down.
- **To enable or disable the effect**, click the **On/Off** button in the upper-left corner.
- **To keep the window on top at all times**, click the **down arrow** (⬇) in the upper-right corner so it becomes an **up arrow** (⬆). Click it again to allow the window to be hidden under others.
- Click the menu icon to show additional options:
  - **To save the current preset,** click **Save Preset**. Alternatively, click the **disk icon** next to the preset name.
  - **To load a saved preset,** click **Load Preset**.
- **To change presets,** click the ▲/▼ buttons next to the preset name to move to the next or previous preset, respectively. Alternatively, click the preset name to open the preset browser, and then select a preset.
- **To close the window**, click the **X** in the upper-right corner.

To activate or deactivate an effect, click the **on**/**off** button next to it.

To deactivate all four effects, click the **on**/**off** button next to **Inserts** so it turns **gray** (**off**). Previously active effects will be off even though the button appears to be on.

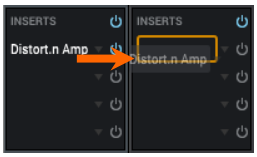
To reactivate the previously active effects, click the **on**/**off** button next to **Inserts** so it turns **blue** (**on**).

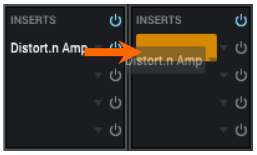




To move an effect from one slot to another, click and drag it from its original slot to another slot (the new slot will be outlined in **yellow** before you release it). The effect will retain all of its editable parameters.

To copy an effect from one slot to another, press and hold **Alt** (Windows) or **Option** (macOS) and then click and drag it from its original slot to another slot (the new slot will be **yellow** before you release it). The effect will retain all of its editable parameters.





Insert Effects

Insert effects can be applied to a **pad**, **track**, **submix** or **main output**. The audio signal produced by that source is processed by any insert effect/effects that are loaded to that source (in the **Inserts** section of its channel strip) and activated. Each one can have up to four insert effects loaded and activated.

Below is an outline of where you can set the effects for a pad, track, submix, or main output.

Note:

If the **Inserts** section is not shown in a channel strip in the **Inspector**, click the **menu icon** (≡), go to **View** > **Inspector**, and click **Inserts**.

If the **Inserts** section is not shown in a channel strip in the **Pad Mixer** or **Channel Mixer**, click the **box icon**.

Pad: You can load up to four insert effects to each pad. The **Inserts** section for a pad is available in two places:

- the **pad channel strip** in the **Inspector** (in any mode)
- the **pad channel strip** in the **Pad Mixer**

Tip: When using pad insert effects, they will be applied to the selected pad only. This means that you could apply unique combinations of effects to each pad within a program. If you want to apply the same effect to all pads, do this with a program insert effect.

Track: You can load up to four insert effects to each track. The **Inserts** section for a track is available in two places:

- the **track channel strip** in the **Inspector** (in any mode)
- the **track channel strip** in the **Channel Mixer**

Important: When using keygroup track 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.

Submix: You can load up to four insert effects to each submix. The **Inserts** section for a submix is available only in the **submix channel strip** in the **Channel Mixer**.

Main Output: You can load up to four insert effects to each main output (a stereo pair of channels: **Outputs 1/2**, **Outputs 3/4**, etc.). The **Inserts** section for a main output is available in two places:

- the **main channel strip** in the **Inspector**
- the **main channel strip** in the **Channel Mixer**

Send/Return Effects

Send/return effects work in the following way:

1. A **pad**, **track**, or **submix** can send 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).

There are four available returns. Any **pad**, **track**, or **submix** can send its audio to any combination of those returns at the same time.

You can load send/return effects and set the **return levels** in two places:

- the **return channel strip** in the **Inspector**
- the **return channel strip** in the **Channel Mixer**

Below is a description of where to set the desired send levels for a pad, track, or submix.

Note:

If the **Send** knobs are not shown in a channel strip in the **Inspector**, click the **menu icon** (≡), go to **View** > **Inspector**, and click **Sends**.

If the **Send** knobs are not shown in a channel strip in the **Pad Mixer** or **Channel Mixer**, click the **four-circles icon**.

Pad: The **Send** knobs for a pad are available in two places:

- the **pad channel strip** in the **Inspector** (in any mode)
- the **pad channel strip** in the **Pad Mixer**

Track: The **Send** knobs for a track are available in two places:

- the **track channel strip** in the **Inspector** (in any mode)
- the **track channel strip** in the **Pad Mixer**

Important: When using keygroup track send/return effects, they will be applied to that keygroup only. Keep this in mind if you use send/return effects with multiple keygroups with overlapping note ranges—the effects will overlap in that range as well.

Submix: The **Send** knobs for a submix are available only in the **submix channel strip** in the **Channel Mixer**.

Touch FX

MPC3 software also includes the **Touch FX** plugin, which is designed for use with Touch Strip controls on hardware such as the MPC Studio mk2 or MPC Key 61. This plugin gives you expressive control of 10 effects that can be used in any MPC project.

To load the Touch FX plugin:

1. Click an empty slot in the **Inserts** section of any channel strip.
2. Click the **+** or **–** button to expand the **Harmonic** category.
3. Select **TouchFX**.

To edit the effect, double-click its name in the **Inserts** section of the channel strip. Use the window that appears to edit the Touch FX parameters.

Use the controls on the left side to adjust the settings for compatible MPC hardware's **Touch Strip** control. For other hardware, you can control the Touch Strip by assigning it to a MIDI control or by using the virtual touch strip on the touchscreen.

Touch Strip: This strip represents the MPC Studio mk2's **touch strip** control, and can also be controlled manually by clicking and dragging from the software, tapping and dragging from a hardware touchscreen, or by assigning it a MIDI control. Use this to control the selected Touch FX.

Touch Enable: Click this box to enable 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: Click 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.

See ***Appendix > Effects & Parameters > Harmonic > TouchFX*** for a full list of TouchFX preset settings.

Automation

You can set the automation for tracks to be “written,” “read,” or disabled entirely. You can do this globally or for individual tracks.

Global

A button in the upper-right corner of the **toolbar** controls the global automation. When you click this button to change its state, it will change the automation state for all tracks in the project. (If you have changed the automation state of an individual track as described below, then this global automation button will indicate that rather than the global automation state.)

Click this **global automation button** to toggle between two states:

When set to **Read** (**R**), automation data will be read but not recorded. You can still manually edit and enter automation. (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 Q-Link knobs accidentally while you are recording.)

Press and hold **Shift** on your keyboard and click the **global automation button** to disable or enable global automation. When **off**, automation data will be ignored.

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

You can also set the automation for each track by using the track automation button in the channel strip for that track (shown in the Inspector, Pad Mixer, and Channel Mixer). Automation is available for all track types.

Note: Remember that clicking 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.

Click this **track automation button** to toggle between two states:

When set to **Read** (**R**), the track will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (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** on your keyboard and click the **track automation button** to disable or enable track automation. When **off**, the track will ignore automation data.

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.

Recording Automation

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

You can automate these types of parameters for tracks:

- **Track Parameters**:
  - the mixer parameters of the track (**Volume**, **Pan**, **Mute**, **Solo**, and **Send 1**–**4**)
  - the parameters of the track (options vary based on the type of track)
  - the parameters for insert effects (options vary based on the effect)
  - the MIDI CCs of the track (**0**–**127**)
  - aftertouch messages
  - pitch bend messages
  - channel pressure messages
  - program change messages
- **Pad Parameters** (for drum tracks and keygroup tracks):
  - the mixer parameters of the pad/keygroup (**Level**, **Pan**, **Pad Mute**, **Pad Solo**, or **Send 1**–**4**)
  - parameters of the pad/keygroup (options vary based on the type of program)
  - parameters for insert effects on the pad/keygroup (options vary based on the effect)

To enter automation for track parameters:

1. Select the track, and then click **Rec** (●) or **Overdub** (⊕) to record-arm it.
2. Click **Play** (▶) or **Play Start** (▶|) to start playback of the sequence.
3. Use whatever controls you want to adjust the parameter/parameters as the sequence plays. Your changes will be recorded in real time. Note that recording automation is **not** an overdub-style process (even if you clicked Overdub to record-arm the track); when the sequence repeats, it will overwrite/replace any automation that was previously recorded.
4. Click **Stop** (■) to stop the automation recording.

Alternatively, create the automation curves manually (see ***Editing Automation*** to learn how to do this).

To record automation of a track parameter or pad parameter:

1. Set the **track automation button** to the **red Write** (**W**) option for any track whose parameters (or pad parameters) you want to automate. Alternatively, click the **global automation button** in the upper-right corner of the window to change the state of all tracks.
2. Click **Play** (▶) or **Play Start** (▶|) to start playback of the sequence.
3. Use whatever controls you want to adjust the parameter/parameters as the sequence plays. Your changes will be recorded in real time. Note that recording automation is **not** an overdub-style process; when the sequence repeats, it will overwrite/replace any automation that was previously recorded.
4. Click **Stop** (■) to stop the automation recording.

   Once you are done, we recommend setting the **track automation button** for that track to the **green Read** (**R**) option. This ensures your track uses the automation you just recorded when you play it back (and will not be overwritten by any future adjustments you make to parameters during sequence playback).

Editing Automation

You can use automation editing tools to adjust or create automation curves for all available parameters.

To edit automation of a track parameter or pad parameter, use the automation lane in the **Grid Editor**:

1. In the **Grid Editor**, make sure the automation lane is shown. If it is not, click the **up arrow** (^) in the lower-left corner of the Grid Editor.
2. Click the **down arrow** (▼) in the lower-left corner of the Grid Editor. Use the menu and submenus that appear to select the desired parameter. The parameter name will then appear below **Modifier**.
3. Use the **pencil** and **marquee tools** described below to create and edit automation for this parameter in the automation lane.

Use these tools in the Grid Editor to create or edit the automation curve in the automation lane. See ***Editors*** > ***Grid Editor*** to learn more about using the Grid Editor in general.

Important: An automation curve consists of several **points** placed according to current time division—aligned with the quantization grid). You can create or move points without restricting them to the time division by pressing and holding **Shift**.

Pencil: Draw Mode:

To create a point, click the desired location in the automation lane.

To select a point, click it.

To move a point, click and drag it to another location in the automation lane. Press and hold **Shift** while doing this to move it without restricting ("snapping") it to the quantization grid.

To erase a point, double-click it.

Marquee: Marquee Mode:

To select a point, click it.

To select multiple points, click and drag across the automation lane to create a box around them.

To move a point, click and drag it to another location in the automation lane. Press and hold **Shift** while doing this to move it without restricting ("snapping") it to the quantization grid.

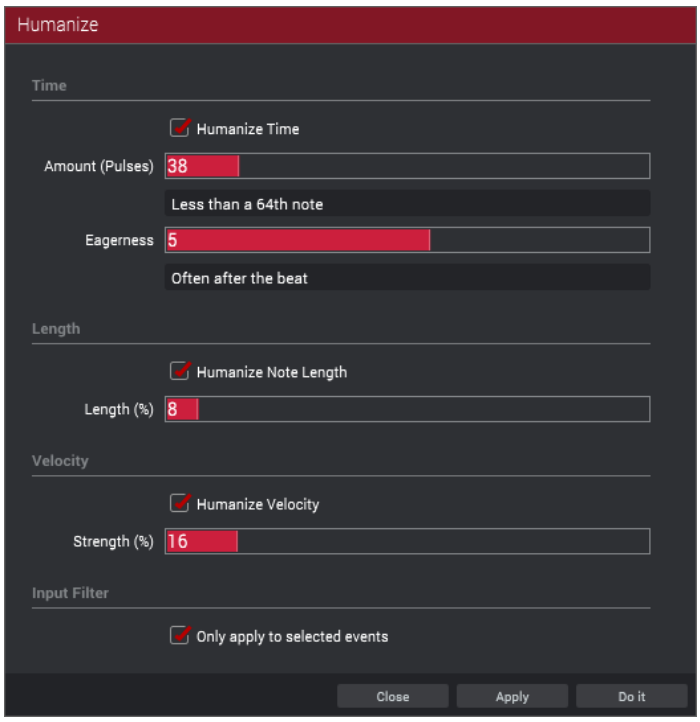
To move multiple points, select them as described above, and then click and drag them to another location in the automation lane. Press and hold **Shift** while doing this to move them without restricting ("snapping") them to the quantization grid.

Other Functions and Tools

Humanize

The Humanize function lets you apply randomization to the timing, length, and/or velocity of MIDI events.

To open the Humanize window, click the **menu icon** (≡), select **Edit**, and click **Humanize**.



Check the **Humanize Time** box to determine whether or not humanization will be applied to the timing of MIDI events.

Use the **Amount** (**Pulses**) slider to determine the maximum number of pulses by which the timing of an event will be adjusted.

Use the **Eagerness** slider to determine 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.”

Check the **Humanize Note Length** box to determine whether or not humanization will be applied to the duration of MIDI note events.

Use the **Length** (**%**) slider to determine how dramatically the humanization effect is applied to note lengths.

Check the **Humanize Velocity** box to determine whether or not humanization will be applied to the velocities of MIDI note events.

Use the **Strength** (**%**) slider to determine how dramatically the humanization effect is applied to note velocities.

Check the **Only apply to selected events** box to determine whether or not these humanization values will be applied to all notes in the track (deselected) or just the currently selected notes (selected).

Click **Apply** to apply the humanization values while keeping this window open.

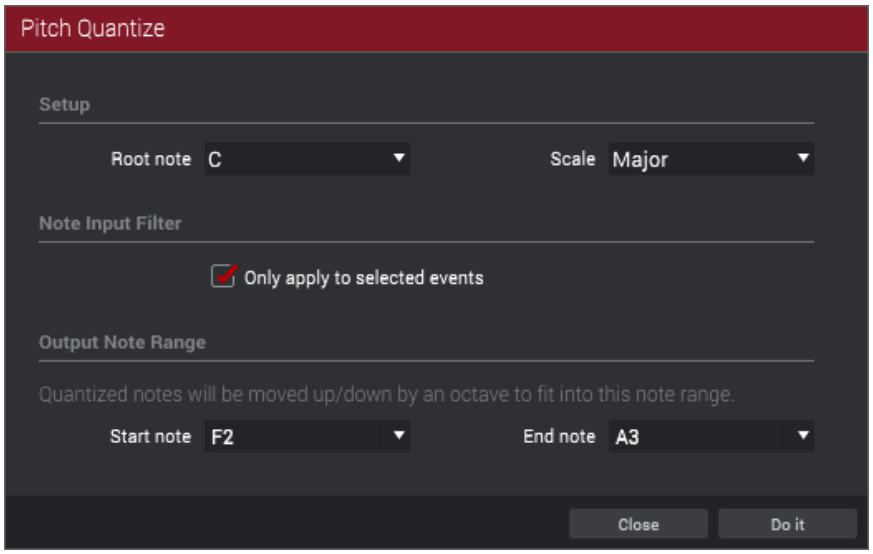
Click **Do It** to apply the humanization values and close the window.

Click **Close** to close the window without making any changes.

Pitch Quantization

The Pitch Quantize function lets you force the pitches of note events in a MIDI track into a specific scale.

To open the Pitch Quantize window, click the **menu icon** (≡), select **Edit**, and click **Pitch Quantize**.



Click the **Setup** menu and select the desired root note of the scale.

Click the **Scale** menu and select a type of scale.

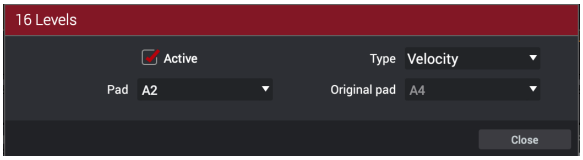
Click **Only apply to selected events** to select or deselect it. When selected, only the currently selected note events will be quantized. When deselected, **all** pitches in the current track will be quantized.

Click the **Start note** and **End note** menus and select the lowest-possible and highest-possible pitches (respectively) where the quantized note events will be placed. If a note event is originally outside of this range, it will be forced to the nearest pitch (within the scale) inside the range.

Click **Do It** to continue or **Close** to return to the previous screen.

16 Level

When 16 Level is first activated, the selected pad (**Pad A01** by default) will be temporarily copied to all 16 pads. The pads will now output the same note number as the initial pad, but a selectable parameter will be 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 show the 16 Level window, click the **menu icon** (≡), select **Tools**, and click **16 Level**. Alternatively, click the **16 Level** button above the **Pads** section in Main Mode or Track Edit Mode.

To select a pad, do one of the following:

- Press and hold **16 Level**, and then press the desired **pad**.
- Click the **16 Levels** box to deselect it (temporarily disabling the feature), press the desired **pad**, and then click the **16 Levels** box again to select it.
- Click the **Pad** field, and use the **data dial** or **–/+** buttons.
- Double-click the **Pad** field, and click the desired pad in the list that appears.

In the **16 Levels** window, click the **Type** menu to choose the parameter: **Velocity**, **Tune**, **Filter**, **Layer**, **Slice**, **Attack**, **Decay**, **Probability**, or **Ratchet**.

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

Tune: The sample tuning increases from the lowest pitch to highest pitch. Click the **Original pad** menu and select the pad that will contain the note at its original pitch (tuning).

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 increases from lowest to highest.

Decay: The decay envelope 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.

Arpeggiator

MPC includes a full-featured arpeggiator and phrase player for melodic program types.

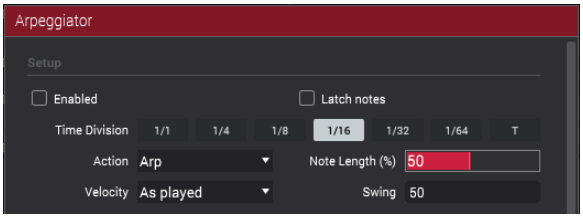
To open the arpeggiator setting window:

1. Set the current track type to **Plugin**, **Keygroup**, **MIDI**, or **CV**.
2. Click the **menu icon** (≡), select **Tools**, and click **Arpeggiator**.

To activate the arpeggiator, click **Enable** so it is checked. Click again to **Disable** the arpeggiator.
Alternatively, click the **ARP** button in the **Pads** panel when a **Plugin**, **Keygroup**, **MIDI**, or **CV** track is selected.

To latch the arpeggiator, click **Latch** so it is checked. Click 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.

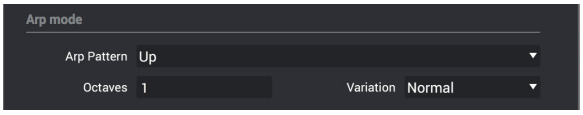
Use the **Step Size** field to set the note value of each arpeggiator step from **1/1**–**1/64** beats, including **T** (triplet) variations. This field is not used in Pattern mode.

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.

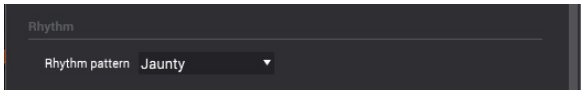


Use the **Pattern** field to set how the arpeggiator triggers the held notes.

Use the **Octaves** field to set how many octaves of the held notes the arpeggiator will cycle through.

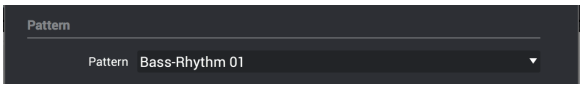
Use the **Variation** field to apply rhythmic variation to the set pattern.

The **Rhythm** section of the Arpeggiator window is available when **Action** is set to **Rhythm**. When the Rhythm arpeggiator action is selected, hold down a chord and the arpeggiator will play the held notes in a rhythmic pattern.



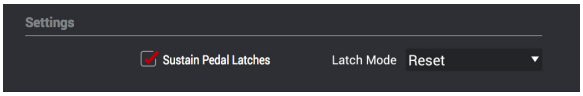
Use the **Rhythm Pattern** field to choose the pattern played when notes are held.

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.

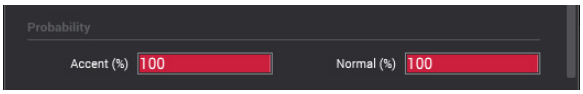
The **Settings** section of the Arpeggiator window offers additional options to control the arpeggiator.



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 latch behavior. When set to **Reset**, adding a new note(s) will reset the currently latched note(s). When set to **Add**, new notes will be added to currently latched notes.

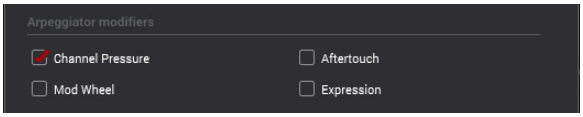
The **Probability** section of the Arpeggiator window lets you add further variation to your arpeggiator by adjusting the probability of how notes are played.



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.



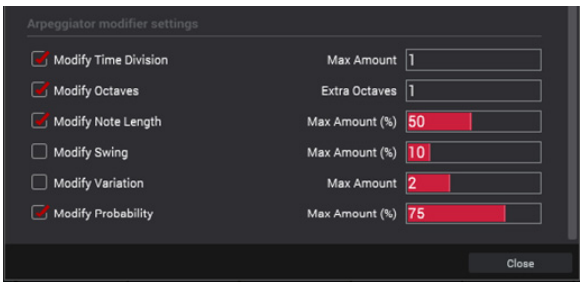
Click the **Channel Pressure** box so it is checked to enable Channel Pressure messages from external MIDI controllers to modify the arpeggiator.

Click the **Mod Wheel** box so it is checked to enable Modulation messages (MIDI CC #1) from external MIDI controllers to modify the arpeggiator.

Click the **Aftertouch** box so it is checked to enable Expression messages (MIDI CC #11) from external MIDI controllers to modify the arpeggiator.

Click the **Expression** box so it is checked to enable Expression messages (MIDI CC #11) 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.



Click 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.

Click 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.

Click 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%.

Click 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%.

Click 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**.

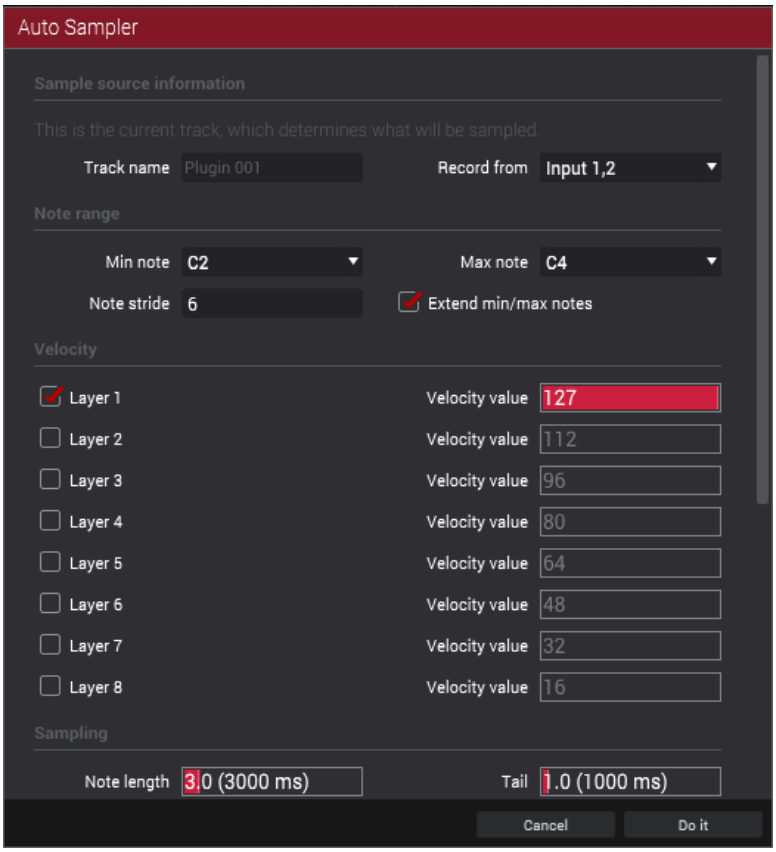
Click the **Modify Probability** box so it is checked to enable modification of the arpeggio probability amount. Use the **Max Amount (%)** field to select by how much percentage the probability amount is increased, from **1**–**100%**. For example, if the current Probability setting is **50%** and the **Max Amount (%)** is set to **20%**, adjusting the selected modifier control will increase the probability amount up to 60%.

Click **Close** to close the Arpeggiator window.

Auto Sampler

The Auto Sampler lets you capture and convert any plugin preset or external instrument preset into a keygroup sampler patch.

To open the Auto Sampler window, click the **menu icon** (≡), select **Tools**, and click **Auto Sampler**.



Sample Source Information

The **Track name** and **Program name** fields show the target track and program that will be sampled. This will be automatically selected as the active track and program when Auto Sampler is opened.

Use the **Record from** field to select an external or resample input to record from:

To capture the output of a plugin, simply select a Plugin track before opening Auto Sampler.

Note: When a plugin track is selected, the Auto Sampler will only sample the plugin track, regardless of the setting in the **Record From** field.

To capture a preset from an external instrument such as a sound module, select the **Input** that the external instrument is connected to.

Note Range

Use the **Min note** and **Max note** settings to determine the lowest and highest notes used to create the sampler patch.

Use the **Note stride** to determine the range of notes that each sample will cover. For instance, a note stride of **5** means that every 5 notes will utilize a different 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.

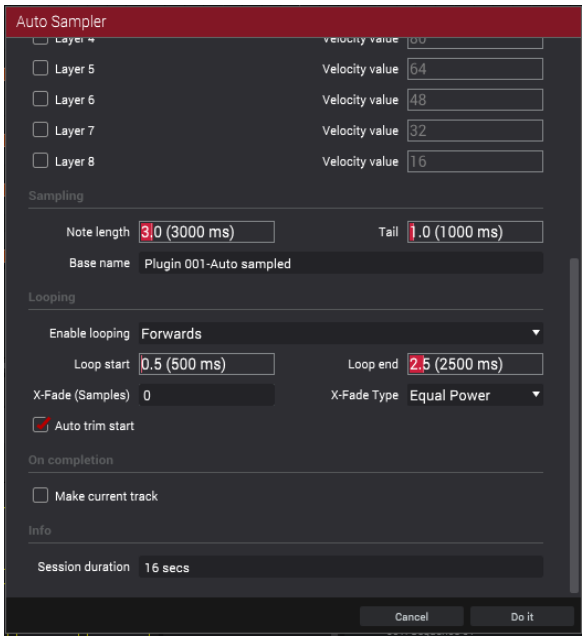
Sampling

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.

Click **OK** to initiate the auto sampling process. A Progress window will appear. Click **Cancel** to stop the auto sampling process. Any samples already created will be retained.

Click **Cancel** to close the Auto Sampler window without continuing.

Generate Random Events

The Generate Random Events function lets you create random melodic or drum patterns on the current MIDI track.

To open the Generate Random Events window, click the **menu icon** (≡), select **Tools**, and click **Generate Random Events**.

Click the **Event Type** menu to select the type of events you want to create: **Drum events** or **Melodic events**.

Click the **Replace** menu 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 on the track with the randomly generated ones.
- **Replace events in note range**: Select this option to replace all events in the designated note range on the track 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 track without replacing or overwriting the existing ones.

Click and drag the **Pattern size** (**bars**) field up or down to set how many bars the events will use. Alternatively, click it, type a value, and press **Enter**. The highest possible value is the number of bars in the current sequence.

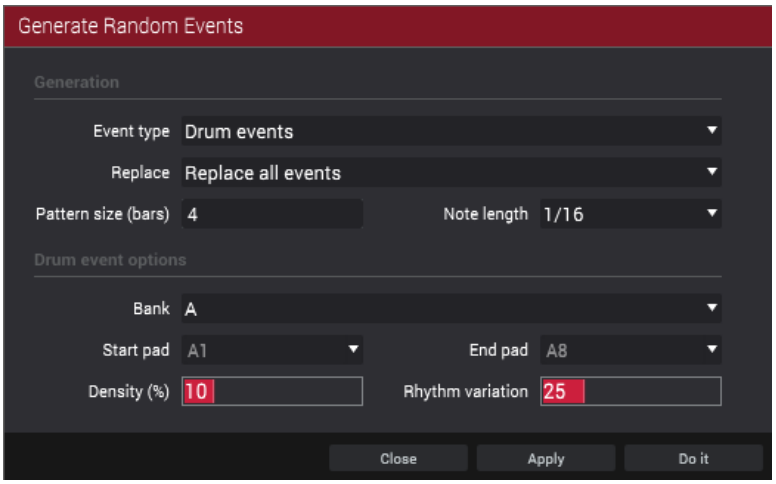
Click the **Note length** menu to select the duration of the events. (This feature is nonfunctional if **Legato** is enabled while generating melodic events.)

Click **Apply** to generate the events while keeping this window open.

Click **Do It** to generate the events and close the window.

Click **Close** to close the window without generating any events.

If **Event Type** is set to **Drum events**:



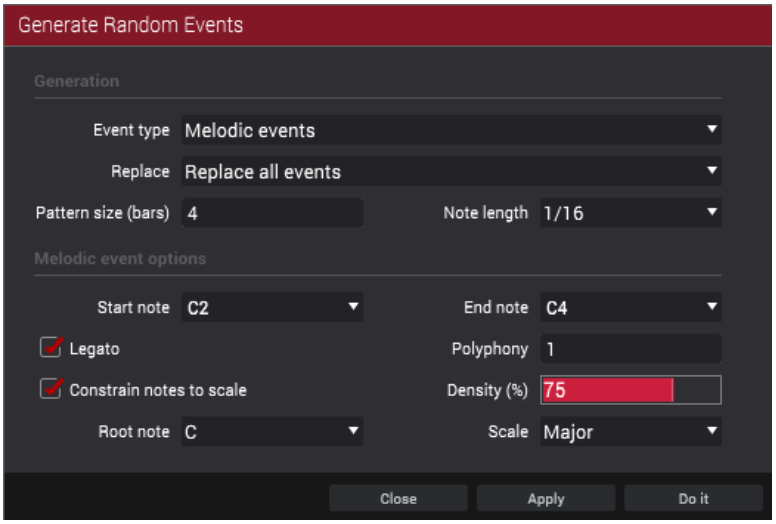
Click the **Bank** menu to select the pad bank that will be used to generate the events or select **Range** to use the **Start pad** and **End** pad menus to define a specific pad range instead.

Click the **Start pad** or **End pad** menus to define a specific pad range over which the events will be generated. You can use these menus only if the **Bank** menu is set to **Range**.

Click and drag the **Density** (**%**) slider left or right to set how closely together the events will be placed in the track. Alternatively, click anywhere along its length, or click it, type a value, and press **Enter**.

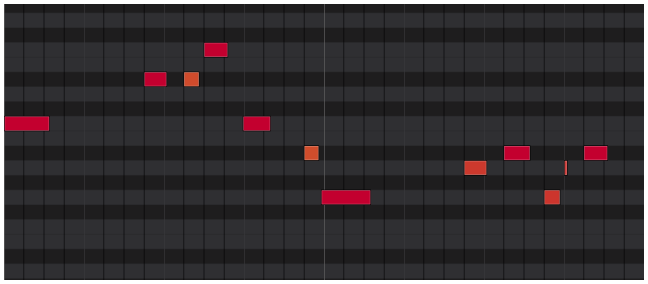
Click and drag the **Rhythm variation** slider left or right to set how widely or narrowly the rhythmic patterns of the generated notes vary. Alternatively, click anywhere along its length, or click it, type a value, and press **Enter**.

If **Event Type** is set to **Melodic events**:

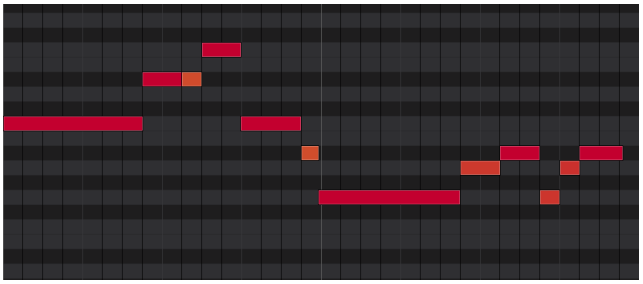


Click the **Start note** or **End note** menus to define a specific note range over which the events will be generated.

Click **Legato** to select or deselect it. When selected, 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 deselected, the generated notes will use the duration set by the **Note length** menu.



Without legato applied.



With legato applied.

Click and drag the **Polyphony** field up or down to set the maximum number of note events that can be sounding simultaneously in the track: **1**–**8**. Alternatively, click it, type a value, and press **Enter**.

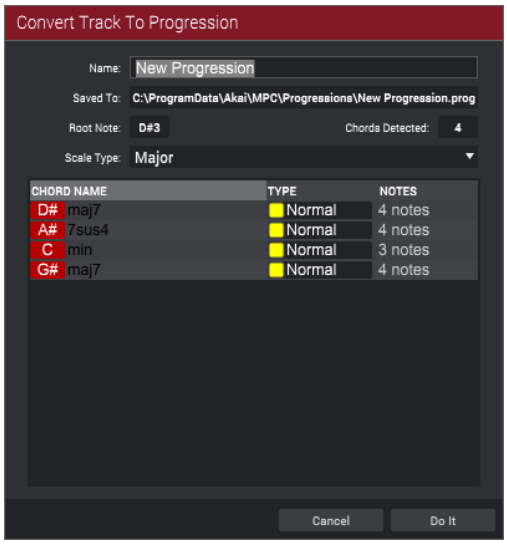
Click **Constrain notes to scale** to select or deselect it. When selected, the notes will be within the scale determined by the **Scale** menu. When deselected, the notes will be chromatic.

Click and drag the **Density** (%) slider left or right to set how closely together the events will be placed in the track. Alternatively, click anywhere along its length, or click it, type a value, and press **Enter**.

Click the **Root note** menu to set the root note of the scale that the generated notes will use.

Click the **Scale** menu to select the scale or mode that the notes will use (based on the **Root note** selection).

Convert To Progression



The **Convert Track to Progression** function automatically detects the chords that are played on the currently selected track, which you can save as a chord progression.

> **To open the Generate Random Events window**, click the **menu icon** (≡), select **Tools**, and click **Convert to Progression**.

Use the **Name** field to enter a name for the progression.

The **Saved To** field indicates where the file is saved. The file will be saved as a **.progression** file in the **Progressions** folder in [your hard drive]**Program Files\Akai Pro\MPC** (Windows) or [your hard drive]/**Users**/[your user name]/**Library**/**Akai**/**MPC**/**Progressions** (macOS).

Use the **Root Note** field to set the root note of the progression. This defines the starting note of the scale of the progression.

The **Chords Detected** field indicates how many chords were automatically detected in the track.

Use the **Scale Type** menu to select the scale or mode of the progression based on the **Root Note**.

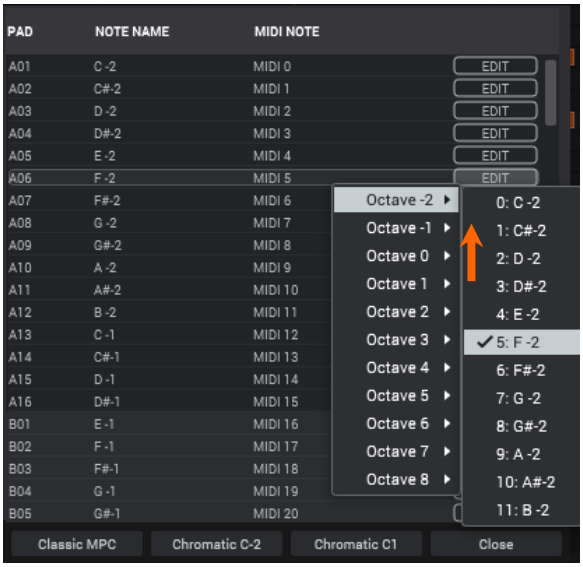
The panel below lists the chords in the order they are played.

> Click the **red** root note of a chord to play it. Click the text next to it to rename the chord.
>
> Click and drag the **Type** field up or down to select whether the chord is played at its root note (**Root**), in the octave range as it appears in the track (**Normal**), above its root note (**AboveRoot**), or below its root note (**BelowRoot**).
>
> The **Notes** column indicates how many notes were detected in the chord.

Click **Do It** to convert the track or **Cancel** to close the window without converting.

Note Mapping

Note Mapping lets you assign specific MIDI notes to your pads in each track except for keygroup tracks.



To show the Note Mapping window, click the **menu icon** (≡), select **Edit** > **Track**, and click **Note Mapping**.

Important: If the Note Mapping window is already open and you want to assign pad colors for another track, click **Close**, select a track that uses the desired track, and then open the Note Mapping window again.

The **Pad** column indicates the pad bank and number of each pad in the track.

The **Note Name** column indicates the note value (e.g., **G#3**, **A 4**, etc.).

The **MIDI Note** column indicates the MIDI note number (corresponding to the note value).

Click **Edit** next to each pad to open a submenu listing the available octaves. Select an octave and then select the note you want to assign to the pad.

Click **Classic MPC** to assign a preconfigured note mapping to the pads that was used on early MPCs.

Click **Chromatic C-2** or **Chromatic C1** to assign all notes to all pads chromatically in an ascending order, beginning with either **C-2/MIDI Note 0** or **C1/MIDI Note 36** assigned to **Pad A01**.

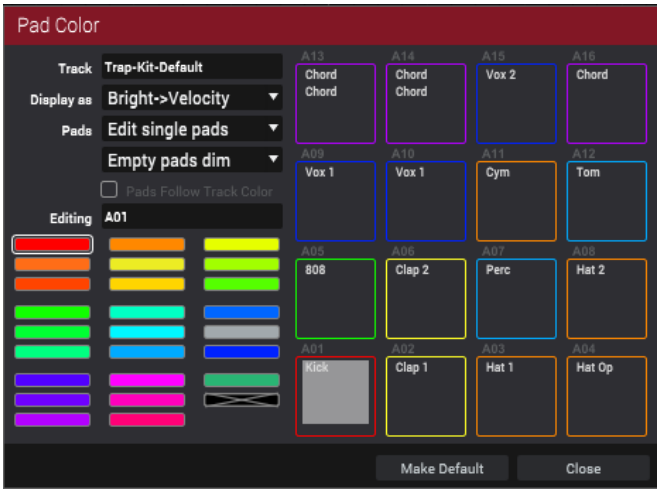
Click **Close** to close this window and use the current note mapping.

Pad Color

Pad Color lets you assign specific colors to your pads in each track.

To show the Pad Color window, click the **menu icon** (≡), select **Edit** > **Track**, and click **Pad Color**.

Important: If the Pad Color window is already open and you want to assign pad colors for another track, click **Close**, select a track that uses the desired track, and then open the Pad Color window again.



Use the **Display As** field 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 **Pads** field to determine whether you are setting the color for one pad (**Edit single pads**) or all pads (**Edit all pads**).

Tip: **To quickly assign that color to all pads in the track**, press and hold **Shift** while clicking a color button.

Use the **Empty pads** menu 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.

Check the **Pads Follow Track Color** to set all pads to the current track's color.

Click a **pad** to select it, and then click one of the **color buttons** to assign its color.

Tip: **To select the color button corresponding a specific pad's color**, press and hold **Shift**, and then press the pad or click it on the window.

To make the current pad color settings the defaults for all tracks on the same type (e.g., drum tracks, keygroup tracks, etc.), click **Make Default**.

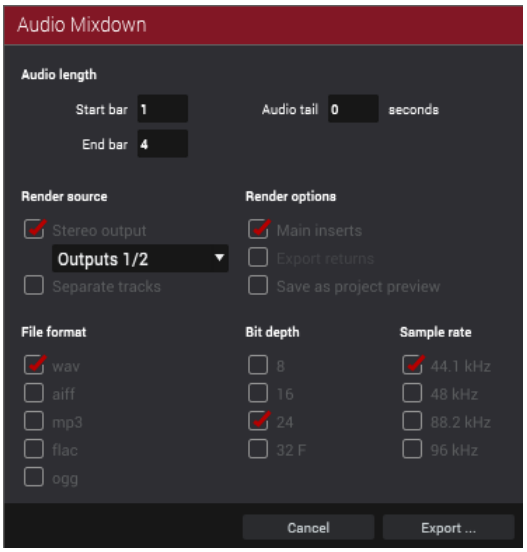
Click **Close** to close the window.

Export

Audio Mixdown

The Audio Mixdown window lets you render and export either the current sequence or song as an audio file. In Song Mode, this will export the entire song. In any other mode, this will export the current sequence only.

To open the Audio Mixdown window, click the **menu icon** (≡), and go to **File** > **Export** and click **As Audio Mixdown**.



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

Select **Stereo Output** and use the adjacent field to select a pair of outputs: **Out 1,2**–**31,32**. The mixdown will be taken from these outputs.

Select **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.

Render Options

If your **Render Source** is set to **Stereo Output**, select **Main Inserts** to include main insert effects in the mixdown.

If your **Render Source** is set to **Separate Tracks**, select **Export Returns** to include return buses in the mixdown.

If your **Render Source** is set to **Stereo Output**, click **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 select this box, **Stereo Output** will automatically be selected, as well.

File Formats

Click **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.

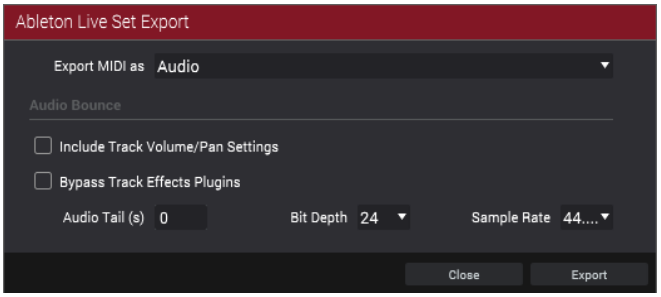
Use the **Sample Rate** field to select a sample rate of **44.1 kHz**, **48 kHz**, **88.2 kHz**, or **96 kHz**. In most cases, we recommend selecting **44.1 kHz**.

Click **Export** to enter the **Save** screen where you can select a name and location to save your audio mixdown.

Click **Cancel** to return to the previous screen.

Ableton Live Set Export

The Ableton Live Set Export function lets you can export the current MPC sequence as an Ableton Live Set (.ALS) file.



To Ableton Live Set export window, click the **menu icon** (≡), go to **File** > **Export** and then click **As Ableton Live Set…**.

Use the **Export MIDI As** settings to choose how MIDI tracks and clips are exported, either as **Audio** files or **MIDI** files. When using Plugin, Drum or Keygroup programs, you can render clips as **Audio** to preserve the sound of the instruments, or render clips as **MIDI** data.

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**.

Click **Export** to enter the **Save** screen where you can select a name and location to save your export.

Click **Close** to cancel and return to the previous screen.

Plugins

The MPC3 software enables you to scan third-party plugins (VST, VST3, or AU formats) to use within your projects.

Instrument plugins can be used with plugin tracks. See ***Tracks*** > ***Plugin Tracks*** to learn about this.

Effect plugins can be used as insert effects on pads, keygroups, audio tracks, most types of tracks, submixes, returns, and main outputs. See ***Effects*** > ***Insert Effects*** to learn about this.

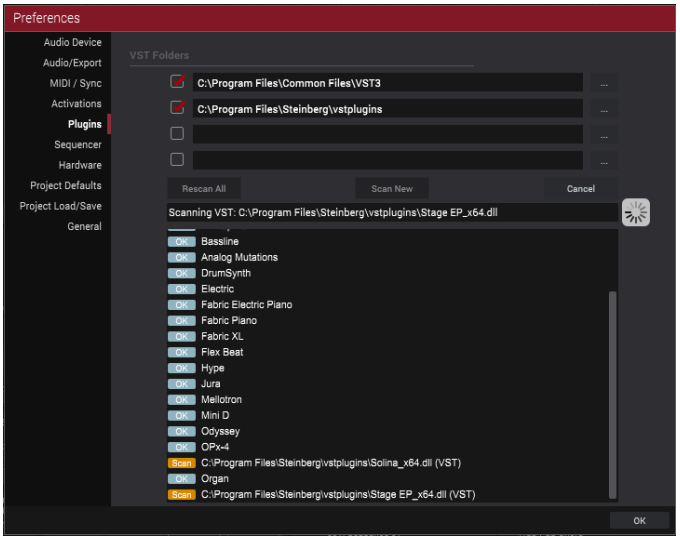
See the following ***Scanning Plugins*** section to learn how to scan your computer and external storage devices for the plugins you want to use.

See the ***Plugin Manager*** section to learn how to manage all of your scanned plugins.

See the ***Selecting Plugins*** section to learn how to select a plugin when using plugin tracks or insert effects.

Scanning Plugins

In order to use plugins in the MPC3 software, the software must scan any folders on your computer or external storage device where they are located.



To scan your plugins:

1. **Windows**: Click the **menu icon** (≡), select **Edit**, and click **Preferences**.

   macOS: Click the **MPC** menu and click **Preferences**.
2. In the **Preferences** window that appears, click the **Plugins** tab.
3. Click the **…** button next to one of the **VST Folders** fields.
4. In the window that appears, select the location where your plugins are stored. Select the folder and click **Open** (while not actually in the folder).
5. The file path will appear in the **VST Folders** field. Click the box next to it so it is selected.

   If you have plugins stored in other locations, you can repeat Steps 3–5 to select those locations.
6. Click **Scan New** to scan these recently selected locations. This is helpful if you have already scanned other locations and want to scan just the one/ones you recently added.

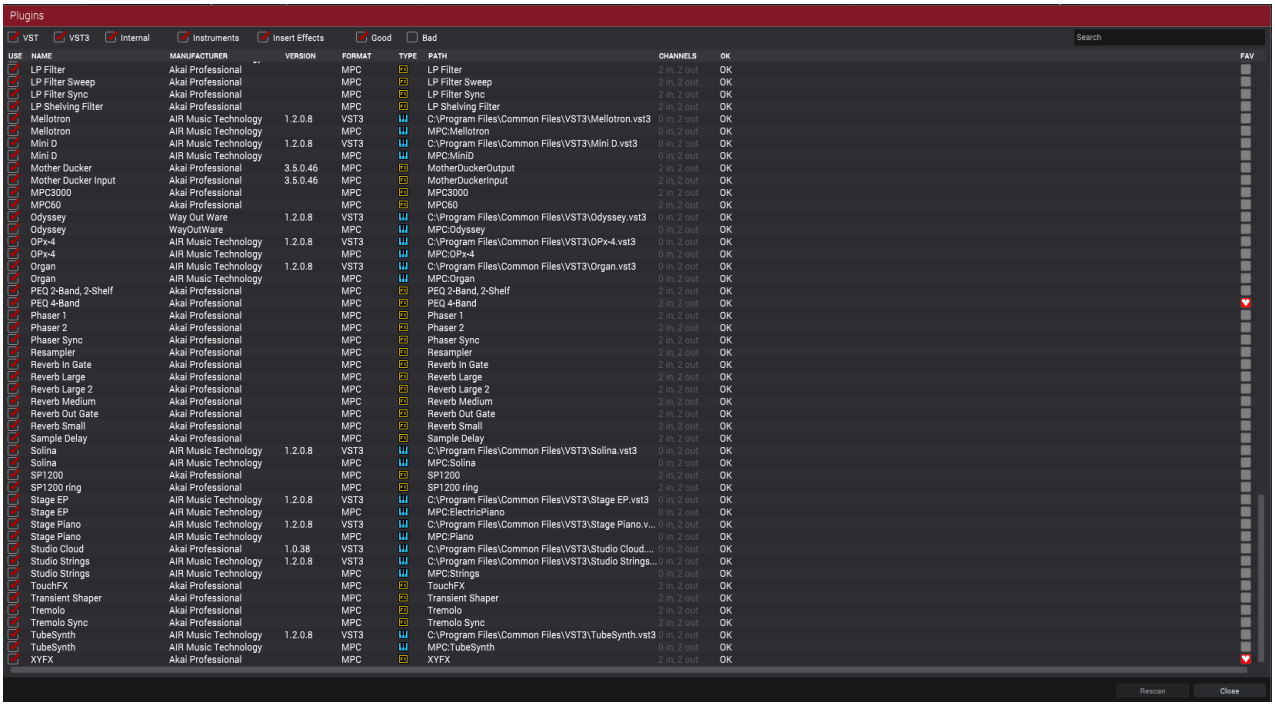
   Alternatively, click **Rescan All** to scan all four locations again.

   The list of scanned plugins will appear in the list below. When the scan is completed, the status bar above it will show **Done**.
7. Click **OK** to close the window.

Plugin Manager

The Plugin Manager lets you view and manage the status of all plugins in your MPC3 software.

To open the Plugin Manager, click the **menu icon** (≡), select **Tools**, and click **Plugin Manager**. The **Plugins** window will appear. Alternatively, click the **gear icon** in the lower-left corner of the window that appears when selecting a plugin or an insert effect.



Use these boxes and the **Search** field to filter the plugins shown in the list below.

VST: Select this box to show VST plugins.

VST3: Select this box to show VST3 plugins.

Instruments: Select this box to show instrument plugins.

Insert Effects: Select this box to show insert effect plugins.

Good: Select this box to show plugins that were successfully scanned.

Bad: Select this box to show plugins that failed to scan.

Search: Use this field to enter a search term. The results will appear in the list below.

The columns (described below, left to right) indicate the plugins' status. Click a column to sort the list by that category. Right-click the top of a column to **auto-size this column**, **auto-size all columns**, or to show or hide specific columns.

Note: The MPC3 software supports VST, VST3, or AU plugins.

Use: Select this box to allow the MPC3 software access to this plugin. If this box is deselected, it will not appear if you select an instrument plugin (to use for a plugin track) or an effect plugin (to use on an insert effect slot).

Name: This is the plugin's name.

Manufacturer: This is the plugin's manufacturer.

Version: This is the version of the plugin.

Type: This is the type of plugin. An **FX icon** indicates an effect plugin. A **keyboard icon** indicates an instrument plugin.

Path: This is where the plugin is located on your computer or external storage device.

Channels: This is how many MIDI channels can be sent to and from the plugin.

OK: This indicates whether the plugin has been successfully scanned or not. **OK** indicates that the plugin is properly scanned and can be used in the MPC3 software. **Failed** indicates that the plugin was not properly scanned. To rescan the plugin, click it and then click **Rescan** in the lower-right corner.

Fav: This indicates whether the plugin is a "favorite" or not. Favorites will appear in a separate category when you select an instrument or effect plugin. Click the box to select or deselect it.

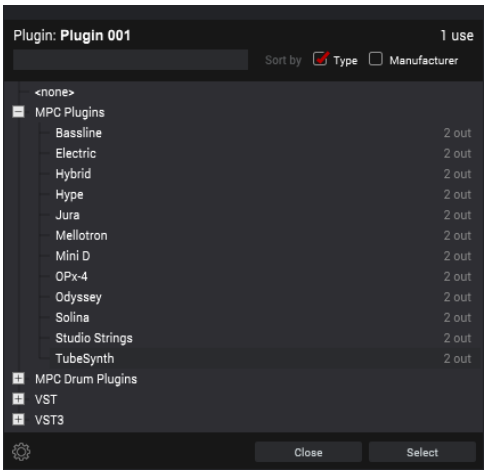
Rescan: Click this to prompt the MPC3 software to rescan the selected plugin.

Close: Click this to close the window. Alternatively, press **Esc**.

Selecting Plugins

Instrument plugins can be used with plugin tracks (see ***Tracks*** > ***Plugin Tracks*** to learn how to create a plugin track).

To select an instrument plugin for a plugin track, select the plugin track, and then click the **Plugin** field in the **Program** section of the **Inspector**.



In the window that appears:

Click the **+** or **–** button to expand or collapse each category. **Favorites** are instrument plugins whose **Fav** box is selected in the Plugin Manager.

The right edge of the window shows how many MIDI channels can be sent to and from each plugin.

Use the **Search** field to search for an instrument plugin by name.

Select **Sort by type** to sort the plugins by type.

Select **Sort by manufacturer** to sort the plugins by manufacturer.

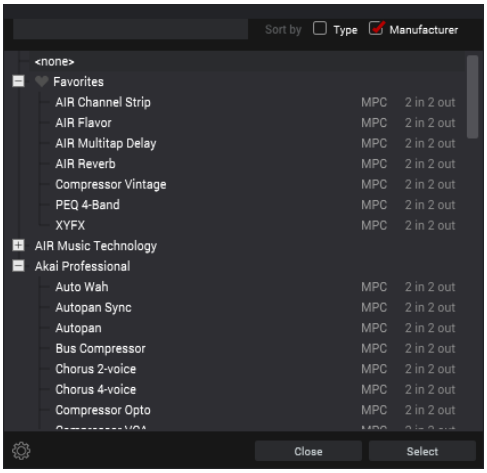
Double-click a plugin or click it and then click **Select** to load it.

Click the **gear icon** to open the **Plugin Manager**. See ***Plugin Manager*** to learn about this.

Click **Close** or press **Esc** to close the window without loading any plugin.

Effect plugins can be used as insert effects on pads, keygroups, audio tracks, most types of tracks, submixes, returns, and main outputs (see ***Effects*** > ***Insert Effects*** to learn how these work).

To load an effect plugin, double-click an empty slot in the **Inserts** section of a channel strip. In the window that appears:



Click the **+** or **–** button to expand or collapse each category. **Favorites** are effect plugins whose **Fav** box is selected in the Plugin Manager.

The right edge of the window shows how many MIDI channels can be sent to and from each effect.

Use the **Search** field to search for an effect plugin by name.

Select **Sort by type** to sort the effects by type.

Select **Sort by manufacturer** to sort the effects by manufacturer.

Double-click an effect or click it and then click **Select** to load it.

Click the **gear icon** to open the **Plugin Manager**. See ***Plugin Manager*** to learn about this.

Click **Close** or press **Esc** to close the window without loading any effect.

Expansions

The MPC3 software enables you to use MPC Expansions, collections of samples, loops, riffs, etc. available in the Akai Professional Expansion Store.

To open the Expansion Store:

Windows: Click the **menu icon** (≡), select **Help**, and select **Expansion Store**.

macOS: Click the **MPC** menu and click **Expansion Store**.

This opens an online store of available MPC Expansions on the Akai Professional website. You must have an internet connection to use this feature.

See the ***Expansion Manager*** chapter to learn how to manage all of your scanned MPC Expansions.

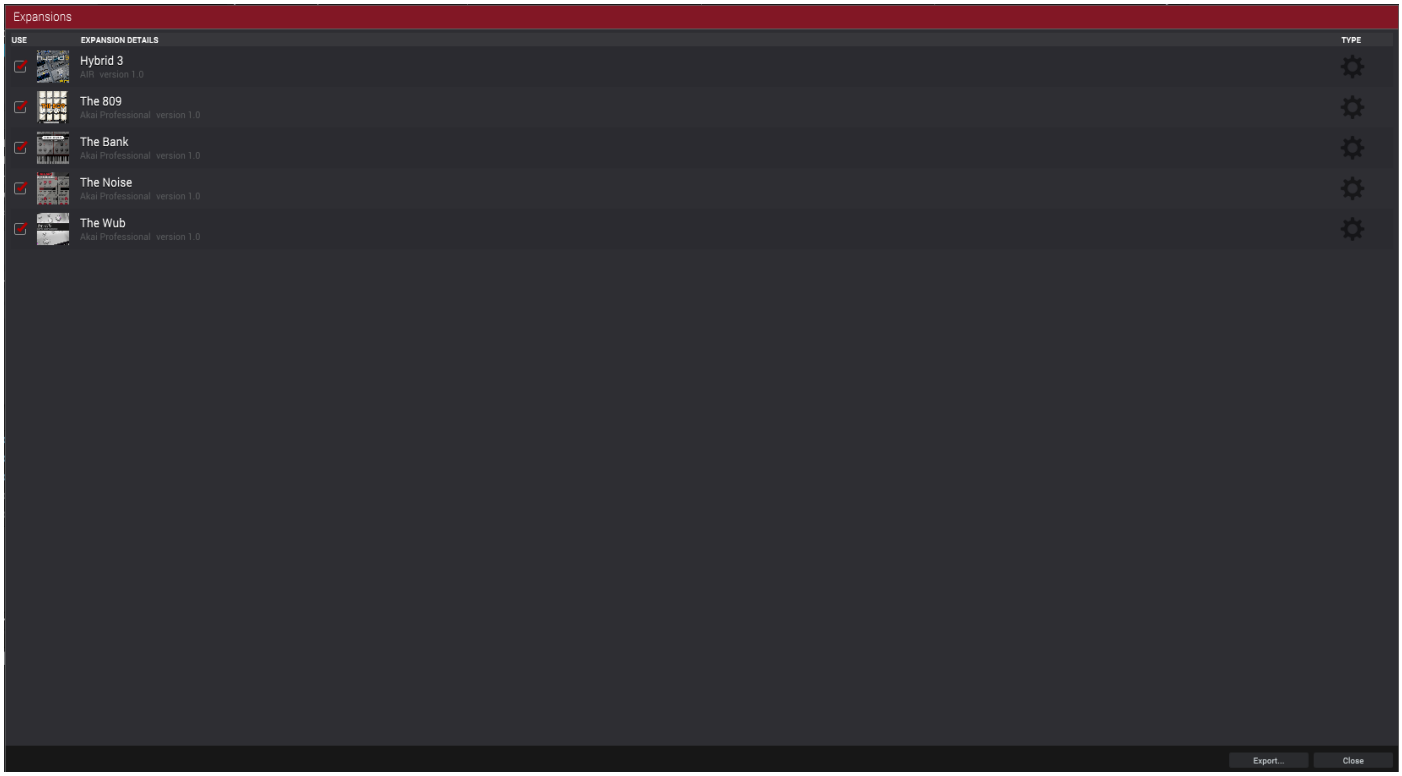
See the ***Selecting Expansions*** section to learn how to select an MPC Expansion when using plugin tracks.

See the ***Browser*** > ***Expansion Browser*** chapter to learn how to use the Expansion Browser.

Expansion Manager

The Expansion Manager lets you view and manage the status of all MPC Expansions in your MPC3 software.

To open the Expansion Manager, click the **menu icon** (≡), select **Tools**, and click **Expansion Manager**. The **Expansions** window will appear.



The columns (described below, left to right) indicate the MPC Expansions' status. Right-click the top of a column to **auto-size this column** or **auto-size all columns**.

Use: Select this box to allow the MPC3 software access to this MPC Expansion. If this box is deselected, it will not appear in the Expansion Browser.

Expansion Details: This shows the MPC Expansion's name, the manufacturer, and the version.

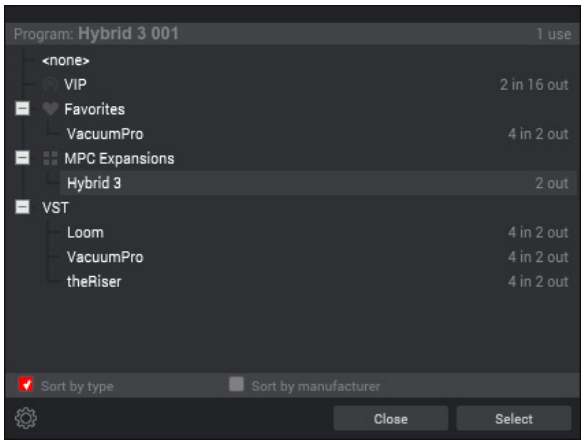
Type: This indicates the type of MPC Expansion. A gear icon indicates an MPC Expansion that is included by default with the MPC3 software.

Close: Click this to close the window. Alternatively, press **Esc**.

Selecting Expansions

MPC Expansions can be used with plugin tracks (see ***Tracks*** > ***Plugin Tracks*** to learn how to create a plugin track).

To select an MPC Expansion for a plugin track, select the plugin track, and then click the **Plugin** field in the **Program** section of the **Inspector**.



In the window that appears:

Click the **+** or **–** button to expand or collapse each category. **Favorites** are **instrument plugins** whose **Fav** box is selected in the Plugin Manager.

The right edge of the window shows how many MIDI channels can be sent to and from each plugin or MPC Expansion.

Select **Sort by type** to sort the list by type.

Select **Sort by manufacturer** to sort the list by manufacturer.

Double-click a plugin or MPC Expansion or click it and then click **Select** to load it.

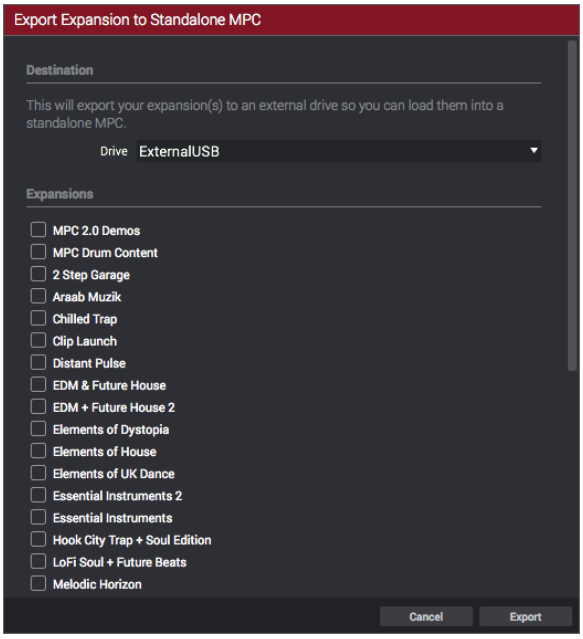
Click the **gear icon** to open the **Plugin Manager**. See ***Plugins*** > ***Plugin Manager*** to learn about this.

Click **Close** or press **Esc** to close the window without loading any plugin or MPC Expansion.

Exporting Expansions

You can export MPC Expansion Packs (installed on your computer) to your MPC X, MPC X SE, MPC Live, MPC Live II, MPC One, MPC One+, MPC Key 61, or MPC Key 37 for use in its Standalone Mode.

To export MPC Expansions:



1. Connect your standalone MPC hardware to your computer. Make sure both are powered on.
2. On your computer, open the MPC3 software.
3. On your MPC, enter Controller Mode.
4. In the MPC3 software window, click the **menu icon** (≡), select **File** > **Export**, and then click **Export…**.
5. In the **Export Expansion to Standalone MPC** window that appears, click the **Drive** menu and select a storage device that you will use with your MPC: the internal SATA drive (if you have installed one in your standalone MPC hardware), an SD card, or a USB flash drive.
6. In the **Expansions** list, click the box next to each one to select or deselect it. Only the selected ones will be exported. Click **Select all** to select all of them or **Select none** to deselect all of them.
7. Click **Export** to start exporting, or click **Cancel** to close the window and not export anything.

   The exporting process creates an **Expansions** folder at the root level of your storage device and copies your MPC Expansions into it.

Modes

The MPC3 software is always in one of 14 modes. This chapter describes the various features and functions of each one.

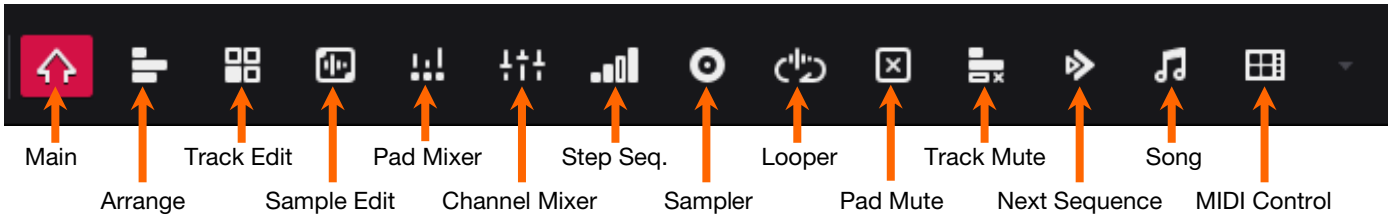
To enter a mode, click its **mode icon**. If its icon is not shown, click the **down arrow** (▼) to show a menu of all modes, and then click it.

You can customize which mode icons are shown here by click the **menu icon** (≡) in the upper-left corner and going to **View** > **Toolbar** > **Toolbar Modes**.

If you have MPC hardware connected, you can also press and hold the **Menu** button and press a pad to select a mode following the layout on the touchscreen.

Important: If a sequence is currently playing, you will not be able to enter Song Mode. Stop playback before entering Song Mode.

Click an icon below to skip directly to that chapter.



Main Mode

Main Mode provides access to all three editors as well as basic track editing functions.

To enter Main Mode, do any of the following:

- Click the **house icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Main Mode**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Main**.

The upper half of the window can display the Grid Editor, Wave Editor, or List Editor. Click the **Grid**, **Wave**, or **List** tab to enter the corresponding editor. See ***General Features*** > ***Editors*** to learn more about each one.

The lower half of the window can display the **Q-Links** panel, **Pads** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** to learn more about the ***Q-Links*** or ***Project*** panels. The **Pads** panel is described ***below***.

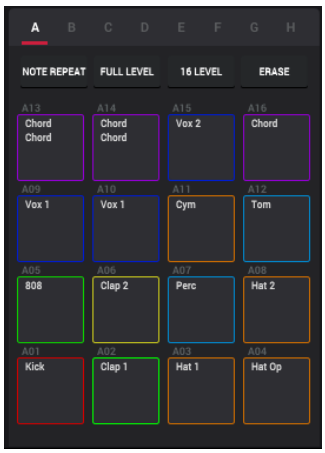
Pads

When the **MIDI** tab is selected in Main Mode, the **Pads** panel shows information for each pad, depending on the currently selected track.

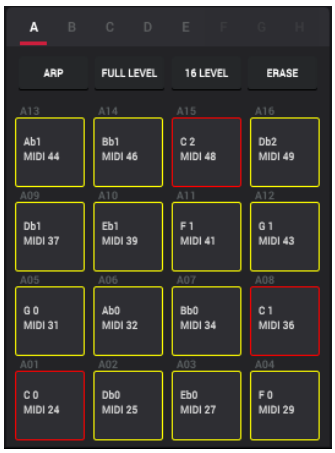
Drum Tracks: Each pad will show the samples assigned to it (all four layers). Click the **Pad Bank** letters to access additional pads or the full range of notes. For keygroup tracks, **Pad D13** plays the sample at its original pitch. Click a **pad** to play its sample/samples or note.

Keygroup Tracks, Plugin Tracks, **MIDI Tracks**, and **CV Tracks**: Each pad will show the note it will play as both a MIDI note number (**0–127**) and note value (e.g., **C-1**, **G#5**, etc.). Click the **Pad Bank** letters to access the full range of notes. Click a **pad** to play its note.

Drum Track



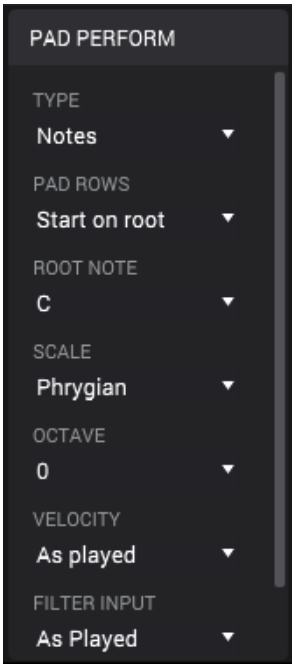
Keygroup, Plugin, MIDI, or CV Track



Each pad can also display a color, which you can customize for each track. See ***General Features*** > ***Pad Color*** to learn how to do this.

When the **Audio** tab is selected in Main Mode, the **Pads** panel is not available.

Pad Perform



In Main Mode, the **Pad Perform** panel is available for assigning the pads in a keygroup track, MIDI track, plugin track, or CV track to specific scales, chords, or progressions.

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

Off: The pads use standard mapping.

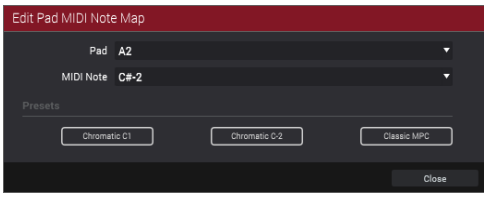
Chromatic: Each pad is assigned a note, ascending by one semitone with each pad. Pads with notes in the key determined by the **Scale** will be lit, while pads with notes between the scale degrees will be unlit.

Notes: Each pad is assigned a note, ascending by one scale degree with each pad.

Chords: Each pad is assigned a chord, the root note ascending by one scale degree with each pad. All available chords will play in the key determined by the **Scale**.

Chromatic Chords: Each pad is assigned a chord, 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 Chords 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 **Chord** field. You can also create and use your own progressing by using the **Convert to Progression** feature. See ***Menu > Tools*** for more information.



Custom: Each pad is assigned a custom MIDI note assignment. Click the **Edit Note Map** button to open the Edit MIDI Note Map window.

Use the **Pad** field to select the pad to edit.

Use the **MIDI Note** field to assign a note to the pad.

You can also choose from three presets by clicking the **Chromatic C1**, **Chromatic C-2**, or **Classic MPC** buttons.

Use the **Pad Rows** selector to determine how the notes are mapped across the pad banks.

Continuous: **Pad 01** of one bank is always one scale degree higher than **Pad 16** of the previous bank.

Start on Root: **Pad 01** will always be the root note of the scale in every pad bank.

Use the **Root Note** field to set the starting point of the scale. 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 (and highlighted on the screen) 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	Blues (minor)	Major Bebop	Lydian
Natural Minor	Flamenco	Whole Tone	Mixolydian
Harmonic Minor	Gypsy	Chromatic	Aeolian
Pentatonic Major	Hungarian Gypsy	Dorian	Locrian
Pentatonic Minor	Persian	Phrygian	

Use the **Octave** field to set the starting octave for the **Root Note**.

Use the **Velocity** field to set the pads to respond to velocity **As played**, or trigger at a fixed velocity for all note on messages at **12%, 18%, 25%, 31%, 37%, 43%, Half, 56%, 62%, 68%, 75%, 81%, 87%, 93%** or **Full** velocity.

When **Type** is set to **Chords**, use the **Scale Chord** field to determine what chord type will play when pressing a pad. The chord will use those scale degrees based off the pad's root note.

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 **Type** is set to **Chromatic Chords**, use the **Chromatic Chord** field to determine what chord type will play when pressing a pad. The chord will that chord shape based off the pad's root note.

Major	Major7	Augmented
Minor	Minor7	Diminished
Sus2	Major9	
Sus4	Minor9	

Use the **Filter Input** field to determine how specific notes are filtered. Select **As Played** to apply no filtering, **Snap to Scale** to shift non-scale notes played to the nearest scale degree, or **Filter to Scale** to disable non-scale notes from playing entirely.

Check the **Use Aftertouch** box to enable aftertouch.

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.

Arrange Mode is currently only supported when using compatible MPC hardware in controller mode. See the latest MPC Standalone OS User Guide for more information on using Arrange Mode.

Track Edit Mode

Track Edit Mode contains all parameters for editing your Tracks.

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.

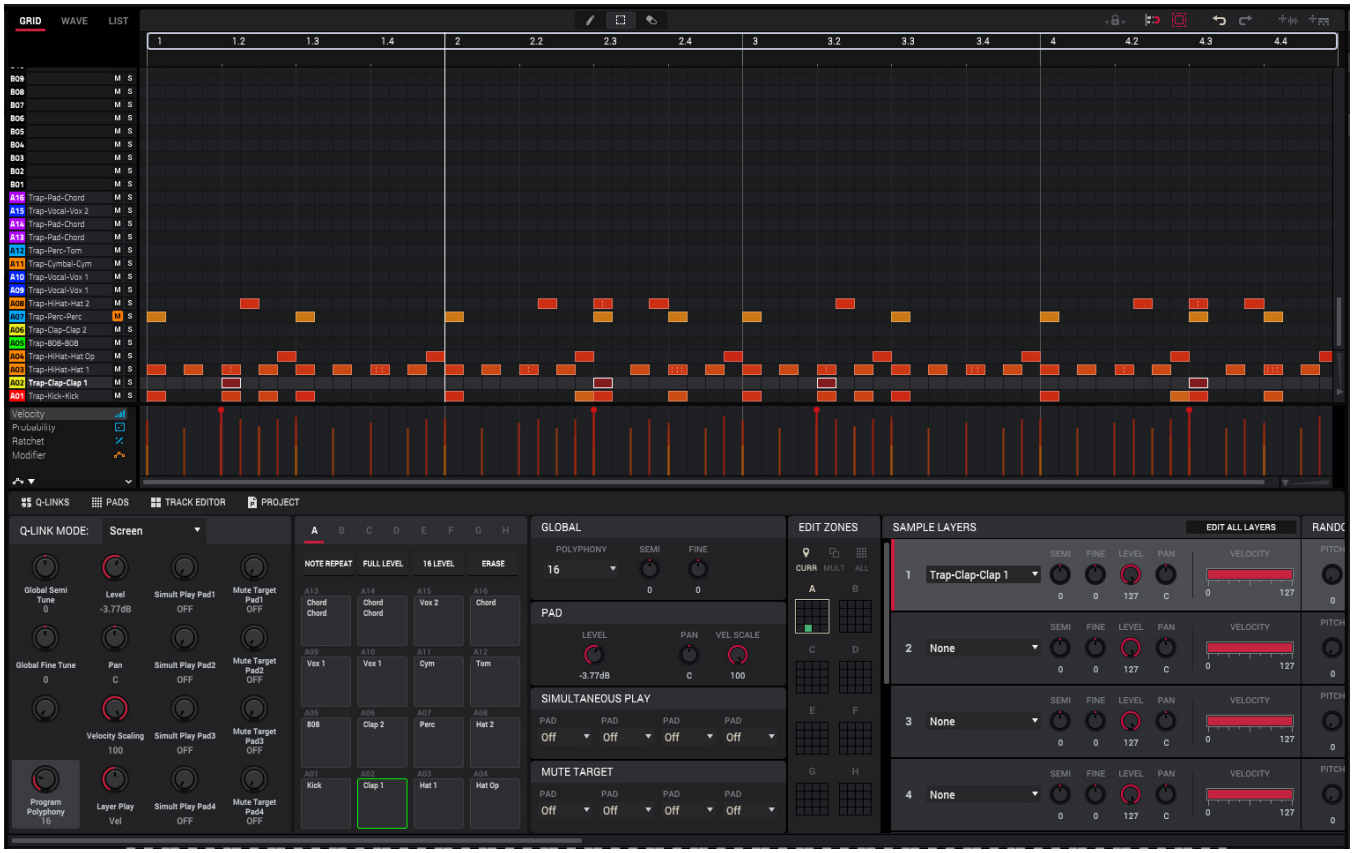
For **plugin tracks**, this mode shows the graphical user interface for the plugin. Skip to ***Plugin Tracks*** to learn more.

For **MIDI tracks** and **CV tracks**, skip to ***MIDI Tracks*** and ***CV Tracks***.

For general information on the differences between the types of tracks, please see ***General Features*** > ***Tracks***.

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

- Click the **four-pads icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Track Edit**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Track Edit**.



The upper half of the window can display the Grid Editor, Wave Editor, or List Editor. Click the **Grid**, **Wave**, or **List** tab to enter the corresponding editor. See ***General Features*** > ***Editors*** to learn more about each one.

The lower half of the window can display the **Q-Links** panel, **Pads** panel, **Track Editor** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** to learn more about the ***Q-Links*** or ***Project*** panels. The **Pads** panel is described in this chapter ***here***. The **Track Editor** panel is described in this chapter ***here***.

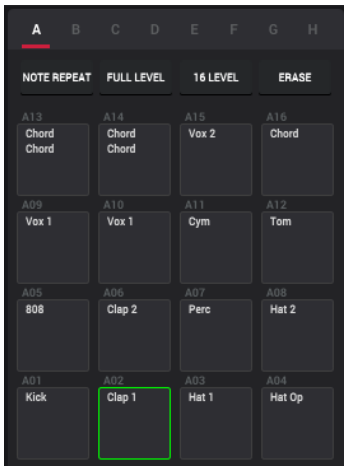
Pads

When the **MIDI** tab is selected in Track Edit Mode, the **Pads** panel shows information for each pad, depending on the currently selected track.

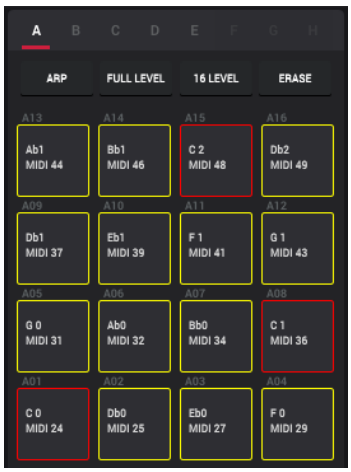
Drum tracks: Each pad will show the samples assigned to it (all four layers). Click the **Pad Bank** letters to access additional pads or the full range of notes.

Keygroup tracks, Plugin tracks, **MIDI tracks**, and **CV tracks**: Each pad will show the note it will play as both a MIDI note number (**0**–**127**) and note value (e.g., **C-1**, **G#5**, etc.). Click the **Pad Bank** letters to access the full range of notes. Click a **pad** to play its note.

Drum Track



Keygroup, Plugin, MIDI, or CV Track



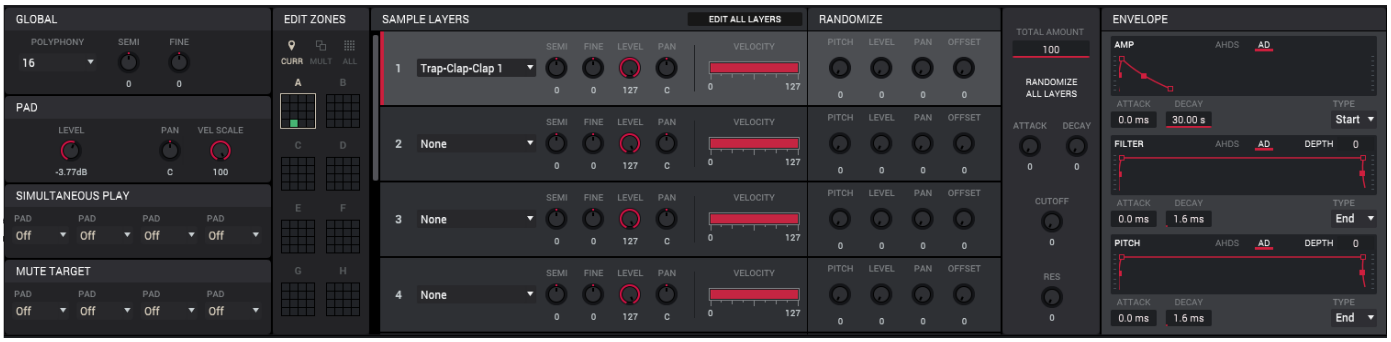
Each pad can also display a color, which you can customize for each track. See ***General Features*** > ***Pad Color*** to learn how to do this. In Track Edit Mode, these colors will be displayed only when the pad is being played.

When the **Audio** tab is selected in Track Edit Mode, the **Pads** panel is not available.

Track Editor

The Track Editor shows different settings depending on the type of track that is selected in Track Edit Mode. This is non-functional when an Audio track is selected.

Drum Tracks



When using a drum track, the Track Editor shows the parameters for each pad and the track overall.

To select a pad, press it. Its parameters will appear on the screen immediately.

In the **Global** section, set the playback mode and tuning for the overall track.

Note: The **Sample Layers** section has some parameters similar to those in this section (**Semi**, **Fine**). Remember that the **Global** section parameters control the overall settings for the sample, while **Sample Layers** controls the settings for each layer (up to eight).

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).

Semi lets you transpose the track up to 36 semitones up or down.

Fine provides fine-tuning of the track up to 99 cents up or down.

In the **Pad** section, set the volume and panning for the current pad.

Note: The **Sample Layers** section has some parameters similar to those in this section (**Level**, **Pan**). Remember that the **Pad** section parameters control the overall settings for the sample, while **Sample Layers** controls the settings for each layer (up to eight).

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.

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 bass drums). Use each **Pad** menu to select the desired pad.

The **Mute Targets** section 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** menu 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.

The **Edit Zones** section is an overview of any selected pads. Use the selector at the top to set how the selected pads will be edited:

Current: Only the currently selected pad will be edited.

Multiple: All selected pads will be edited simultaneously.

All: All pads will be edited simultaneously.

The **Sample Layers** section shows eight layers, each of which can use an assigned sample. Each layer has identical, independently assignable parameters.

Click the **Sample** menu to select the sample for that layer. Remember that the sample has to be loaded into the project's sample pool beforehand.

Semi lets you transpose the selected layer up to 36 semitones up or down.

Fine provides fine-tuning of each layer up to 99 cents up or down.

Level lets you adjust each layer's volume, letting you control the "balance" of the samples assigned to the pad.

Use the **pan knob** to adjust the stereo placement of the respective layer.

Use the **Velocity** slider 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.

Use 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).

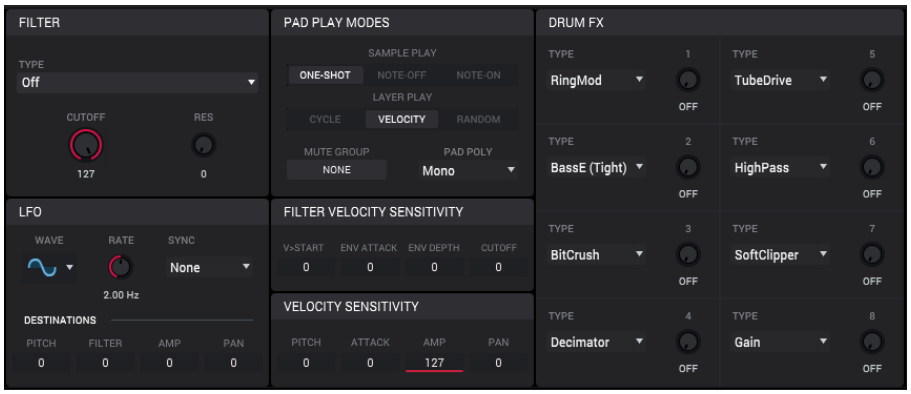
The **Randomize** section lets you add randomized variety to the **Pitch**, **Level**, **Pan**, and **Sample Offset** parameters of each layer sample. You can also adjust the **Envelope** (Attack, Decay, Cutoff, Resonance) parameters of all layers. Turn each knob to adjust the amount of randomization for the selected parameter. Use the **Total Amount** field to scale the total amount of randomization applied.

The **Envelope** section lets you create a variable control signal that can be used, for instance, to modulate the filter, amplitude, or pitch settings of a sound over a given period of time.

The **Filter Envelope** controls affect the filter frequency. Use the fields or click and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Amp Envelope** controls affect level changes over time. Use the fields or click and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Pitch** envelope controls affect the pitch of the sample. Use the fields or click and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.



The **Filter** section lets you set the type and characteristics of the filter.

Click the **Type** menu to select a filter for the selected pad. You can set the default Type setting for new drum tracks and keygroup tracks in **Project** tab of the **Preferences** (see ***General Features*** > ***Preferences***).

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 **Res** 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 **LFO** section lets you select a periodic waveform generated by the low-frequency oscillator. You can adjust the frequency and shape for modulation purposes.

Click the **Wave** menu to select the LFO waveform type:

Sine (best suited for smooth modulations)

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)

Saw Down (can generate interesting filter or volume changes)

Square (interesting results with hard-panning modulations)

Noise (generates random values and glides)

Use the **Rate** knobs to determine the LFO frequency when **Sync** is set to **None**. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

Click the **Sync** menu to set how the LFO's rate is synchronized with the tempo. You can select one of several time divisions. 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**).

The **Pad Play Modes** section lets you set the behavior for each pad's samples in a drum track.

Click the **Mute Group** menu 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, especially if only the open or closed hat should be heard.

Click the **Sample Play** menu 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. If this option is selected, the **Filter Envelope** and **Amp Envelope** will use an **ADSR** type rather than AD or AHDS (see ***Anatomy of an Envelope*** to learn about this).

Click the **Pad Poly** menu 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**–**64**) so that you can trigger up to this many pads at the same time (unless they exceed the total number of voices available).

Click the **Layer Play** menu to determine how multiple samples assigned to the same pad are played:

Cycle: 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: The pad will switch between layers depending on how hard you press a pad.

Random: Each time the pad is played, it will play one of its layer's samples at random.

The **Filter Velocity Sensitivity** section lets you set how much velocity is required to modulate certain other parameters as well as your filter envelope and amp envelope.

V>**Start** (Velocity➔Start) sets how much velocity is needed (for a triggered pad) to modulate the sample start point.

Env Attack (Envelope Attack) sets how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Amp envelope.

Env Depth (Envelope Depth) enables velocity information to control the amount of the filter envelope's effect on the cutoff frequency.

Cutoff uses the velocity to modulate the cutoff frequency directly.

The **Velocity Sensitivity** section determines how much the velocity affects the pitch of the sound (**Pitch**), the attack of the filter envelope (**Attack**), the volume level of the filter envelope (**Amp**) and or the panning of the sound (**Pan**). Use the sliders to adjust the setting of each.

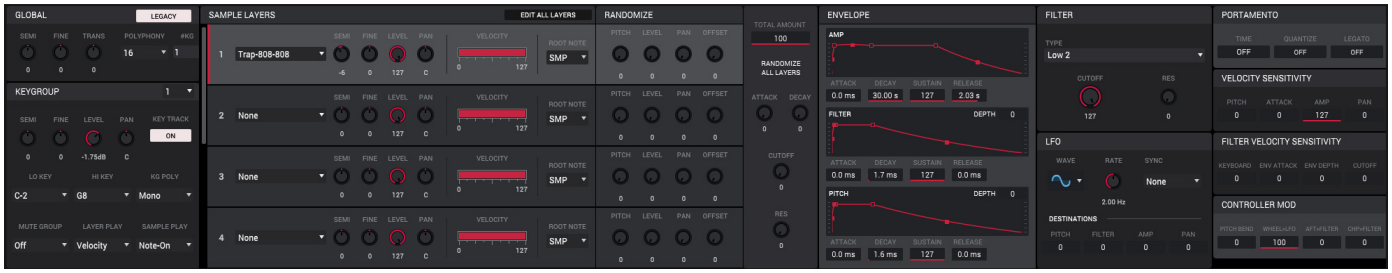
When you press a pad softly, only minimal modulation is applied. When you press it harder, the modulation amount also gets stronger depending on the setting of the corresponding knob.

The **Drum FX** section allows you to use up to eight dedicated effects for each pad. There are eight available Drum FX slots, each with an adjustable parameter:

- Ring Mod
- Bit Crush
- Decimater
- Tube Drive
- Soft Clipper
- Hard Clipper
- Low Pass
- High Pass
- Rectifier
- Bass Enhancer (Tight)
- Bass Enhancer (Medium)
- Bass Enhancer (Wide)
- Stereo Width
- Wave Folder
- Gain

Use the **Type** dropdown menu to select the effect in each slot and turn each knob to adjust the selected effect parameter.

Keygroup Tracks



When using a keygroup track, the Track Editor shows the parameters for each keygroup and the track overall.

Click 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 MPC 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.

To select a keygroup, press a **pad** within that keygroup. Its parameters will appear on the screen immediately.

Legacy and Advanced

In the **Global** section (Legacy and Advanced), set the playback mode and tuning for the overall track.

Semi lets you tune the track up to 36 semitones up or down.

Fine provides fine-tuning of the track up to 99 cents up or down.

Trans shifts the pitch of the MIDI notes sent to the track up to 36 semitones up or down.

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).

#KG (number of 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).

Use the **Keygroup** section (Legacy and Advanced) to set the playback modes, level, tuning, and other settings for the keygroup.

Note: The **Sample Layers** section has some parameters similar to those in this section (**Level**, **Pan**, **Semi**, **Fine**). Remember that **Keygroup** section parameters control the overall settings for the sample, while **Sample Layers** controls the settings for each layer (up to 4).

The **Keygroup Select** field lets you select a specific keygroup for editing. This parameter works in conjunction with the **#KG** (number of keygroups) parameter at the top of the window, which lets you create up to 128 keygroups within one keygroup track. A default keygroup track contains only one single keygroup. When you have created more than one keygroup with **#KG**, use **Keygroup Select** to select any keygroup for editing. **All** selects all available keygroups of a keygroup track for simultaneous editing.

Semi lets you transpose the selected keygroup up to 36 semitones up or down.

Fine provides fine-tuning of each keygroup up to 99 cents up or down.

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.

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.

Note Range lets 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.

Tip: Set the **Lo** parameter to **A0** and the **Hi** parameter to **C8** to emulate the range of a standard 88-key piano.

Click the **KG Poly** (keygroup polyphony) menu 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**–**64**) so that you can play up to this many pads at the same time (unless they exceed the total number of voices available).

Click the **Mute Group** menu 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.

Layer Play determines how multiple samples assigned to the same pad are played:

- **Cycle**: 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**: The pad will switch between layers depending on how hard you press a pad.
- **Random**: Each time the pad is played, it will play one of its layer's samples at random.

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. If this option is selected, the **Filter Envelope** and **Amp Envelope** will use an **ADSR** type rather than AD or AHDS (see ***Anatomy of an Envelope*** to learn about this).

The **Sample Layers** section (Legacy and Advanced) shows four layers, each of which can use an assigned sample. Each layer has identical, independently assignable parameters.

Click the **Sample** menu to select the sample for that layer. Remember that the sample has to be loaded into the project's sample pool beforehand.

Semi lets you transpose the selected layer up to 36 semitones up or down.

Fine provides fine-tuning of each layer up to 99 cents up or down.

Level lets you adjust each layer's volume, letting you control the "balance" of the samples assigned to the pad.

Use the **pan knob** to adjust the stereo placement of the respective layer.

Use the **Velocity** slider 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.

Root Note lets you set the key of the sample layer. This can be detected automatically by choosing **SMP** or manually by selecting a specific note.

Use 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).

Legacy

The **Randomize** (Legacy) section lets you add randomized variety to the **Pitch**, **Level**, **Pan**, and **Sample Offset** parameters of each layer sample. You can also adjust the **Envelope** (Attack, Decay, Cutoff, Resonance) parameters of all layers. Turn each knob to adjust the amount of randomization for the selected parameter. Use the **Total Amount** field to scale the total amount of randomization applied.

The **Envelope** (Legacy) section lets you create a variable control signal that can be used, for instance, to modulate the filter, amplitude, or pitch settings of a sound over a given period of time.

The **Filter Envelope** controls affect the filter frequency. Use the fields or click and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Amp Envelope** controls affect level changes over time. Use the fields or click and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Pitch** envelope controls affect the pitch of the sample. Use the fields or click and drag the "handles" of the envelope to shape the envelope or time-variant modulation output. See the later ***Anatomy of an Envelope*** section to learn about the envelope parameters.

The **Filter** (Legacy) section lets you set the type and characteristics of the filter.

Click the **Type** menu to select a filter for the selected keygroup. You can set the default Type setting for new drum tracks and keygroup tracks in the **Project** tab of the **Preferences** (see ***General Features*** > ***Preferences***).

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 **Res** 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 **Depth** field 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 **Attack** and **Decay** values as well as a medium-low **Sustain** 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 **Attack** value, resulting in a slight fade-in of the higher frequencies.

The **LFO** (Legacy) section lets you select a periodic waveform generated by the low-frequency oscillator. You can adjust the frequency and shape for modulation purposes.

Click the **Wave** menu to select the LFO waveform type:

Sine (best suited for smooth modulations)

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)

Saw Down (can generate interesting filter or volume changes)

Square (interesting results with hard-panning modulations)

Noise (generates random values and glides)

Use the **Rate** knobs to determine the LFO frequency when **Sync** is set to **None**. At lower values, it might take some time for the LFO to complete a cycle, while higher values will come closer to audible range.

Click the **Sync** menu to set how the LFO’s rate is synchronized with the tempo. You can select one of several time divisions. 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**).

The **Portamento** section (Legacy) lets you adjust the settings for pitch gliding.

Use the **Time** slider to set the length of the glide between notes.

Click the **Quantize** button to synchronize the portamento time with the project tempo.

Click the **Legato** button to enable or disable pitch gliding for all triggered notes or just legato notes.

The **Velocity Sensitivity** and **Filter Velocity Sensitivity** sections (Legacy) let you set how much velocity is required to modulate certain other parameters:

Use the **Pitch** slider to enable velocity information to control the pitch of the sample.

Use the **Attack** slider to set how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Amp envelope.

Use the **Amp** slider to enable velocity information to control the overall amplitude (level) of the sample.

Use the **Pan** slider to enable velocity information to control the stereo panning of the sample.

Use the **Keyboard** slider to set 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.

Use the **Env Attack** slider to set how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Filter envelope.

Use the **Env Depth** slider to enable velocity information to control the amount of the filter envelope's effect on the cutoff frequency.

Use the **Cutoff** slider to enable velocity information to modulate the cutoff frequency directly.

The **Controller Mod** section (Legacy) 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.

Use the **Pitch Bend** slider to set the range (in semitones) of a connected MIDI keyboard's pitch-bend wheel.

Use the **Wheel**>**LFO** slider to determine how much a connected MIDI keyboard's modulation wheel affects the LFO intensity.

Use the **Aft**>**Filt** (Aftertouch➔Filter Cutoff) slider to determine how much a connected MIDI keyboard's aftertouch data affects the filter cutoff.

Use the **Chp>Filt** (Channel Pressure➔Filter Cutoff) slider to determine how much a connected MIDI keyboard's channel pressure data affects the filter cutoff.

Advanced

The **Filter** (Advanced) section lets you set the type and characteristics of the dual filter section.

Click the **Type** menus to select the dual filter types for the selected keygroup.

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.

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 **KT** (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.

Use the **Blend** slider 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).

The **Envelope** (Advanced) section lets you create a variable control signal that can be used, for instance, to modulate the filter, amplitude, or pitch settings of a sound over a given period of time.

The **Amp Envelope** controls affect level changes over time.

The **Filter Envelope** controls affect the filter frequency.

The **Pitch** envelope controls affect the pitch of the sample.

The **Aux Envelope** can be used as part of the **Modulation matrix** to apply an envelope to other parameters.

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 later ***Anatomy of an Envelope*** section to learn about the envelope 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 **LFO** section (Advanced) lets you adjust settings for the low-frequency oscillators (LFO), which generate a periodic waveform with an adjustable frequency and shape and can be used for modulation purposes. There are two per-voice LFOs and two global LFOs for extensive modulation options.

In the LFO section:

Click the **1/2 icons** to select which of the two per-voice LFOs you are viewing and editing.

Use the **Shape** 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** 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 **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 **MW>LFO** (Mod 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.

Click 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**). Click the **X** to close the destination controls.

In the Global LFO section:

Click the **1/2 icons** to select which of the two global LFOs you are viewing and editing.

Use the **Shape** 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.

The **Ramp** (Advanced) section lets adjust settings for the two ramp modulators, which can be used to apply additional modulation shaping to other parameters in the modulation matrix.

Click the **1/2 icons** to select which of the two ramps you are viewing and editing.

Use the **Time** field to adjust the ramp length.

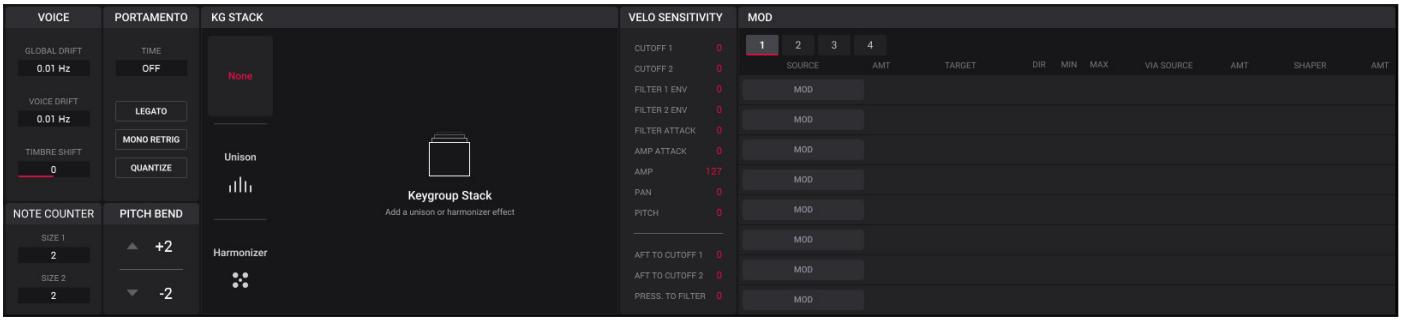
The **Voice** (Advanced) section lets you adjust settings for pitch drifting and tonal shaping.

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.

The **Note Counter** (Advanced) section lets you to set a stepped modulation value. This can be used as part of the Mod Matrix to change parameter values based on the **Size** selected (2–8).



The **Portamento** section (Legacy) lets you adjust the settings for pitch gliding.

Use the **Time** slider to set the length of the glide between notes.

Click the **Legato** button to enable or disable pitch gliding for all triggered notes or just legato notes.

Click the **Mono Retrig** to allow the portamento to retrigger on every key press when using mono polyphony.

Click the **Quantize** button to synchronize the portamento time with the project tempo.

The **Pitch Bend** (Advanced) section allows you to set the maximum number of semitones shifted up or down when pitch bend is applied.

The **KG Stack** (Advanced) section allows you to add and edit keygroup stacking effects for harmonization effects.

Click **Unison** or **Harmonizer** to add the selected effect. Click **None** to disable keygroup stack effects.

When **Unison** is selected:

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**).

When **Harmonizer** is selected:

Click 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** field to adjust the ratio of the harmonized voice velocity with the incoming note velocity.

Use the **Delay** field to add an additional time delay between the note start and the harmonized voice start.

Use the **Sync** field 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.

The **Velo Sensitivity** section (Advanced) let you set how much velocity is required to modulate certain other parameters:

Use the **Cutoff 1/2** sliders to adjust how the velocity of a pad to modulates the Filter 1/2 cutoff frequency directly.

Use the **Filter 1/2 Env** sliders to enable velocity information to control the amount of the filter envelope's effect on the cutoff frequency.

Use the **Filter Attack** slider to set how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Filter envelope.

Use the **Amp Attack** slider to set how much velocity is needed (for a triggered pad) to modulate the Attack phase for the Amplitude envelope.

Use the **Amp** slider to enable velocity information to control the overall amplitude (level) of the sample.

Use the **Pan** slider to enable velocity information to control the stereo panning of the sample.

Use the **Pitch** slider to enable velocity information to control the pitch of the sample.

Use the **Aftertouch To Cutoff 1/2** sliders to determine how much a connected MIDI keyboard's aftertouch data affects the filter cutoff.

Use the **Press. To Filter** slider to determine how much a connected MIDI device's channel pressure data affects the filter envelope.

The **Mod Matrix** section provides 32 modulation points which can be configured to add a wide variety of sound shaping tools.

Click the **1**/**2**/**3**/**4** icons to cycle between the available modulation points.

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 **Dir** (Direction) field to set the modulation direction:

- Select → for linear modulation.
- Select ± for bipolar modulation.

Use the **Min** and **Max** fields to set the minimum and maximum modulation levels of the selected target.

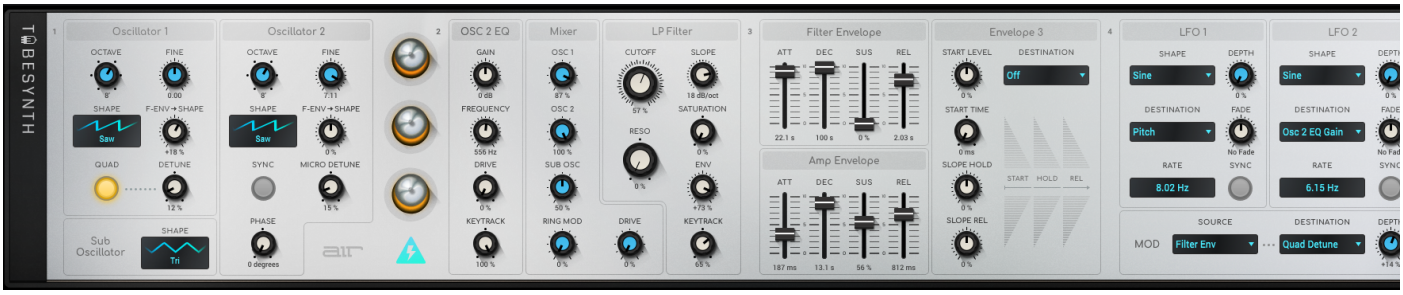
Use the **Via Source** field to add a secondary modulation shaper using another source.

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.

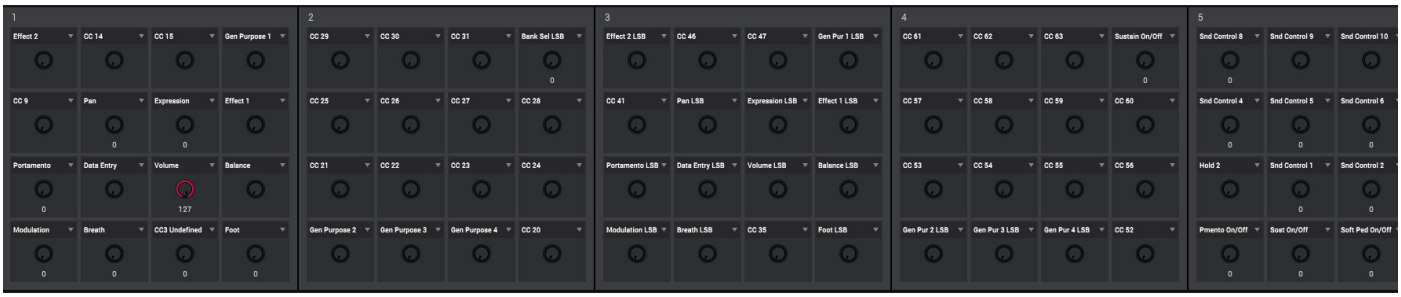
Use the third **Amt** (Amount) field to set how much modulation is applied by the shaper.

Plugin Tracks



When using a plugin track, the Track Editor shows the parameters of that plugin. Its appearance and available options depend on the plugin.

MIDI Tracks



When using a MIDI track, the Track Editor shows a series of knobs corresponding to MIDI CC values—six banks of knobs with 16 knobs in each bank (a total of 96 knobs).

To set the MIDI CC of a knob, click the area above it next to **down arrow icon** (▼) and select a number from the menu.

To adjust the value that each MIDI CC sends, click and drag its knob.

To rename a MIDI control, double-click the name above the knob, and then use your keyboard to enter a new name. Press enter or click elsewhere to set the new name. MIDI tracks can be saved with custom naming for use in multiple projects.

CV Tracks

When using a CV track, the Track Editor shows a series of knobs. The eight knobs correspond to CV Outputs 1–8. Although this option is selectable, it is usable only with MPC hardware that has CV outputs (e.g., **MPC X**).

To adjust the voltage of each one, click and drag its knob.

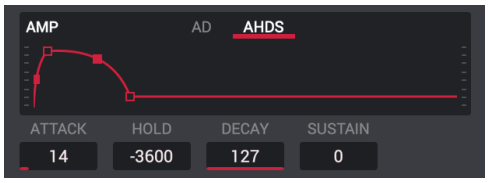
Anatomy of an Envelope

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 use **AHDS** envelopes. When **Sample Play** is set to **Note-On**, it will use an **ADSR** envelope.

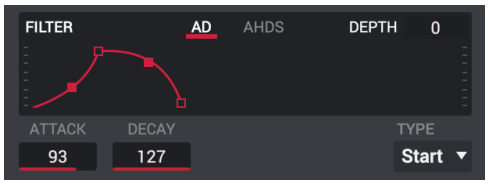
With **AHDS** envelopes, the following happens when you trigger a sample:



1. Within the period of time defined by **Attack**, 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 until the pad is released.

Use the additional **A Shape** and **D Shape** handles to adjust the curve of the **Attack** and **Decay** phases, respectively.

With **AD** envelopes, the following happens when you trigger a sample:



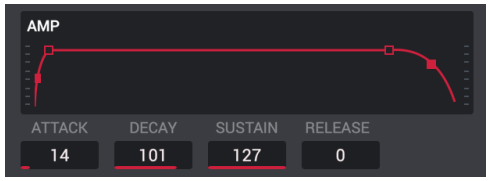
1. Within the period of time defined by **Attack**, the sample volume rises to its maximum value.
2. The sample's maximum volume will be maintained until its **Decay** phase, when the sample's volume will gradually drop to "zero" over the set duration. Click the **Type** drop-down menu to select how 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 additional **A Shape** and **D Shape** handles to adjust the curve of the **Attack** and **Decay** phases, respectively.

With **ADSR** envelopes, the following happens when you trigger a sample:

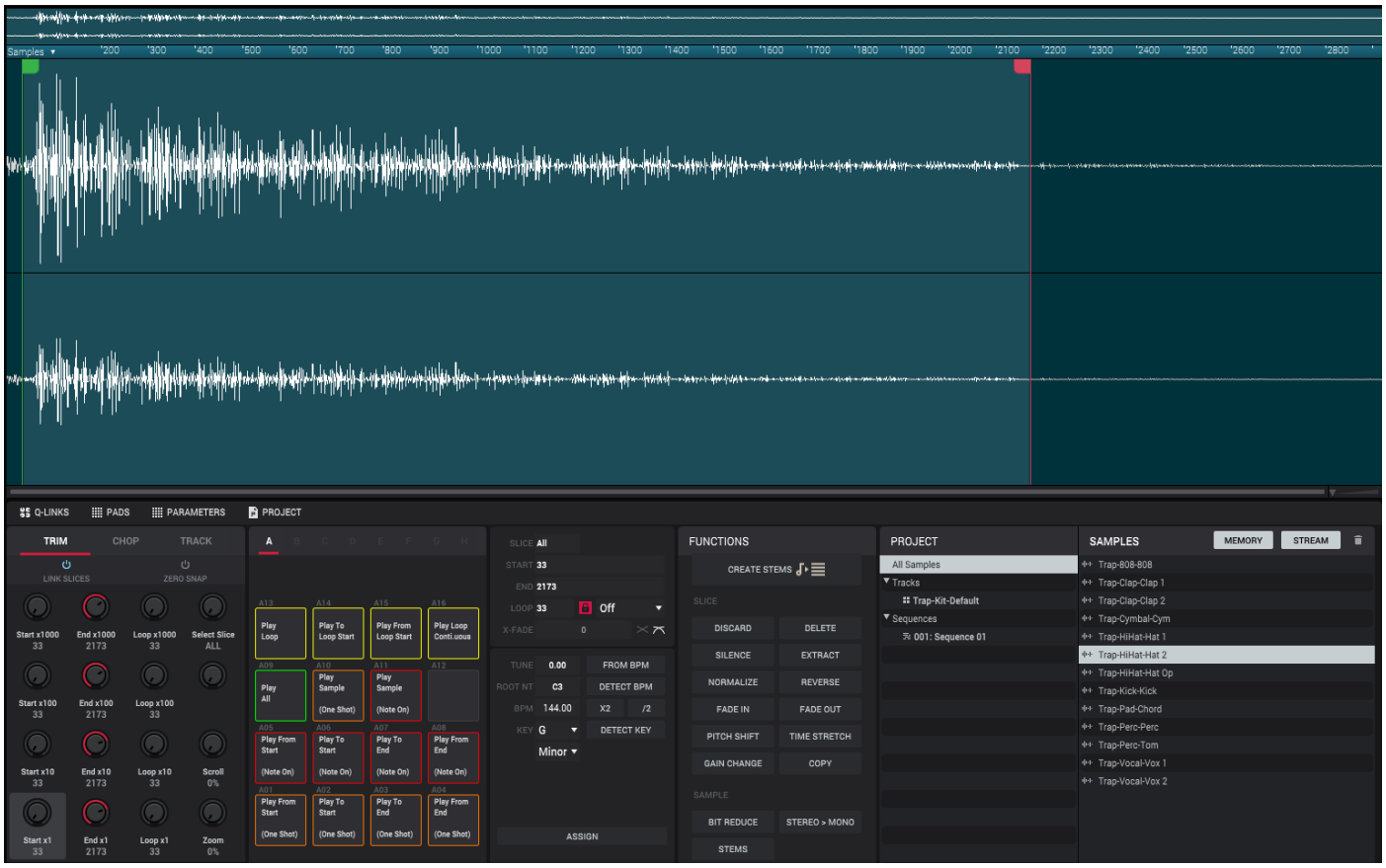


1. Within the period of time defined by **Attack**, the sample volume rises to its maximum value.
2. During the **Decay** phase, the sample's volume will gradually drop to the **Sustain** level.
3. The sample's volume will stay at the **Sustain** level until the **Release** phrase begins.
4. The sample's volume will drop to "zero" over the duration set by **Release**.

Use the additional **A Shape**, **D Shape** and **R Shape** handles 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, do any of the following:

- Click the **waveform-and-flags icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Sample Edit**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Sample Edit**.
- Double-click the desired sample in the **Project** panel or **Project Info** Browser.
- Right-click the desired sample in the **Project** panel or **Project Info** Browser, and click **Edit**.

To select a sample to edit, click it in the **Project** panel or **Project Info** Browser.

The upper half of the window shows the waveform. While you can edit the waveform in this part of the window, it is different from the standard Wave Editor.

The large waveform display shows the "active" section of the sample waveform. The strip above the large display shows an overview of the entire sample waveform. If the waveform display is showing only part of the entire sample waveform, a white box in the overview will indicate the current position.

The timeline provides a reference for the length of the sample. Click the **down arrow** (▼) or right-click anywhere on the timeline to select the increments it will use: **Time** (**secs**:**ms**), **Samples**, or **Beats**.

Scroll left or right on the waveform to move through it. Use the sliders in the lower-right corner or click the timeline and drag down or up to zoom in or out.

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 either of the following:

- Click and drag its marker left or right.
- Use the **Start** or **End** fields in the **Parameters** panel.
- Use the **first** column of **Q-Link knobs** to adjust the start point or the **second** column of **Q-Link knobs** to adjust the end point. The top-most Q-Link knob provides coarse adjustment (**x1000**), while the bottom-most one knob provides fine adjustment (**x1**).

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.

The lower half of the window can display the **Q-Links** panel, **Pads** panel, **Parameters** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel.

The other three panels vary based on the current editing method: **Trim Mode**, **Chop Mode**, or **Track Mode**. The options for each mode are slightly different. Please refer to the following ***Trim Mode***, ***Chop Mode***, and ***Track Mode*** parts of this chapter to learn how each works.

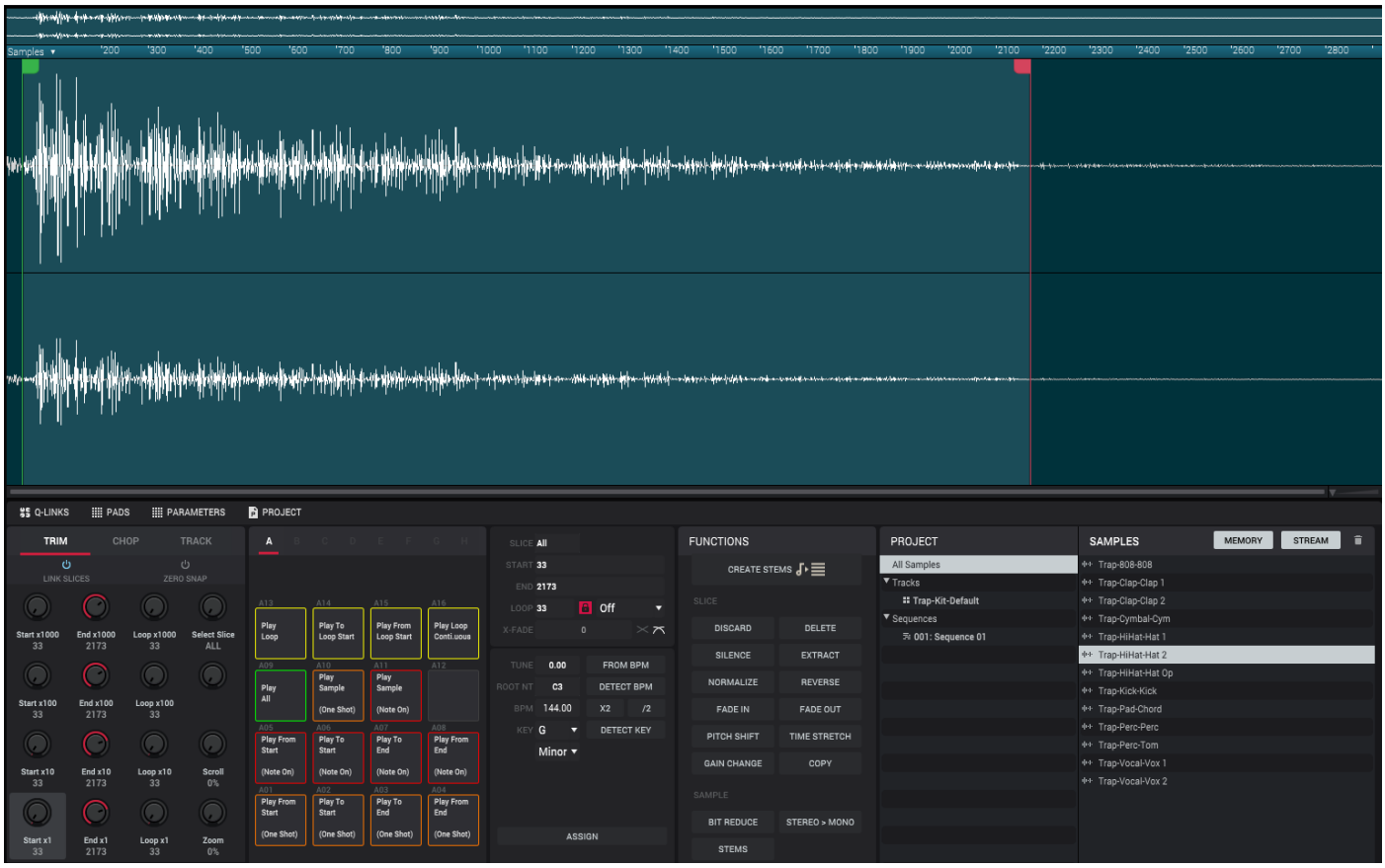
Tip: You can use Trim Mode for a specific slice of the sample, previously created and selected in Chop Mode. This allows for a more detailed view of a single slice than in Chop Mode and gives you more options for auditioning the slice. You can easily switch between Trim Mode and Chop Mode while doing this.

To use both Trim Mode and Chop Mode to edit a sample slice:

1. Click **Chop** in the **Q-Links** panel.
2. Set all fields as desired to create your sample slices.
3. Select the desired slice.
4. Click **Trim** in the **Q-Links** panel. The region you are now editing is indicated by the normal start point and end point markers rather than slice markers.

   Click **Chop** at any time to return to Chop Mode.

Trim Mode



We recommend using Trim Mode to simply crop the start and/or end from a sample.

To enter Trim Mode, click the **Trim** tab in the **Q-Links** panel.

Q-Links

In the **Q-Links** panel:

- Use the **first** column of **Q-Link knobs** to adjust the start point. This is the same as adjusting the **Start** field in the **Parameters** panel.
- Use the **second** column of **Q-Link knobs** to adjust the end point. This is the same as adjusting the **End** field in the **Parameters** panel.
- Use the **third** column of **Q-Link knobs** to adjust the loop point if **Loop Lock** is **off**. If **Loop Lock** is **on**, adjusting the loop point will also adjust the start point. This is the same as adjusting the **Loop** field in the **Parameters** panel.
- Use **Q-Link Knob 16** to select the desired slice, if the sample has been split into multiple slices in Chop Mode. This is the same as adjusting the **Slice** field in the **Parameters** panel.
- Use **Q-Link Knob 8** to scroll through the waveform in the large waveform display above.
- Use **Q-Link Knob 4** to zoom in or zoom out of the waveform.

For the first three columns, the top-most Q-Link knob provides coarse adjustment (**x1000**), while the bottom-most one knob provides fine adjustment (**x1**).

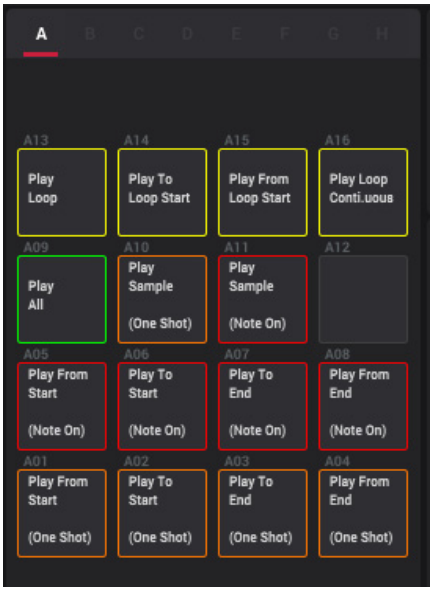
When **Link Slices** is enabled (after you have created slices in Chop Mode), changing the start point of a slice will also change the end point of the previous slice. Similarly, changing the end point of a slice will also change the start point of the next slice. Disable **Link Slices** if you are trying to create slices that use non-contiguous parts of the sample. This is the same as clicking the **gear icon** in the upper-right corner of the **Wave Editor** and using the **Link Slices** submenu.

Important: **Link Slices** must be disabled to make slices nonsequential, noncontiguous, or overlapping.

Enable **Zero Snap** to force 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 clicking the **gear icon** in the upper-right corner of the **Wave Editor** and using the **Zero Snap** submenu.

Pads

The **Pads** panel enables you to play 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, click and hold anywhere in the waveform display.

Play Loop Continuous (**Pad 16**) plays the sample repeatedly from the loop point to the end point.

Play Loop (**Pad 13**) plays the sample from the loop point to the end point. 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):

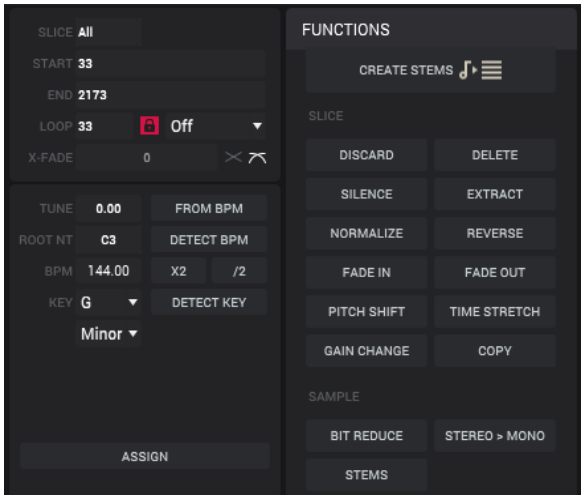
Play from Start (**Pad 1**, **Pad 5**) plays the sample from the start point to the end point.

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.

Parameters



The **Parameters** panel includes controls for editing the sample length and tuning as well as buttons for assigning the sample (see ***this section***) and processing the slice or sample (see ***this section***).

Use the **Slice** field to select the desired slice, if the sample has been split into multiple slices in Chop Mode. This is the same as adjusting **Q-Link Knob 16** in the **Q-Links** panel.

Use the **Start** field to adjust the start point. This is the same as adjusting the **first** column of **Q-Link knobs** in the **Q-Links** panel.

Use the **End** field to adjust the end point. This is the same as adjusting the **second** column of **Q-Link knobs** in the **Q-Links** panel.

Use the **Loop** field to adjust the loop point if **Loop Lock** is **off**. If **Loop Lock** is **on**, adjusting the loop point will also adjust the start point. This is the same as adjusting the **third** column of **Q-Link knobs** in the **Q-Links** panel.

Click the **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.

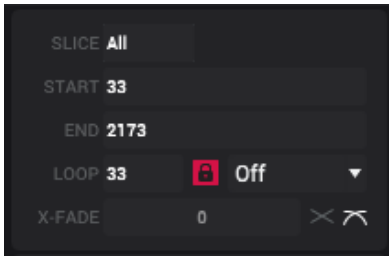
Click the **Loop** dropdown menu to select from the three loop modes:

Off: The sample will not loop.

Forward (**Fwd**): When the loop reaches its end point, it will start playing again from the loop point.

Alternating (**Alt**): 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.

Reverse (**Rev**): 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.



Use the **X-Fade** field to apply a crossfade to a looping sample. You must first make sure the loop **Lock** setting is set to **Off**, and then use the **Loop** menu to select a loop mode. Make sure there is at least 10 samples of space between the **Start** point and **Loop** point, then use the **X-Fade** field to set the length of the crossfade in samples.

Click the icons next to the **X-Fade** field to select a **Linear** (straight lines) or **Equal Power** (curved lines) crossfade.

Press **Pad A16 – Play Continuous Loop** to hear the crossfade applied to the sample.

Use the **Tune** field to transpose the sample from its original pitch up to **24.00** semitones up or down.

Use the **Root Nt** 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.

Click **From BPM** to tune a sample to the current sequence. Use the **Edit Tuning** window on connected MPC hardware to adjust the following:

Use the **Beats** field to match the number of beats in the sequence.

To tune the sample to the sequence, click **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 sequence and adjust the sequence tempo, click **To Sequence**. This is the same as clicking Match but it also changes the sequence's tempo to the BPM shown in the Tempo field on the right.

To close the window, click **Close**.

Use the **BPM** field to enter a tempo manually. You can also click **X2** to double the value or **/2** to halve it.

Click **Detect BPM** to automatically detect the tempo. Use the **Detect BPM** window on connected MPC hardware to adjust the following:

Use the **BPM** field to enter a tempo manually. You can also click **X2** to double the value or **/2** to halve it.

Click **Detect** to detect the tempo automatically.

Click **Tap Tempo** at the bottom of the window at the desired rate to use it as the tempo. You can play a sequence in the background to help with your timing.

Click **Close** to close the window.

Note: Before detecting tempo, it is recommended that you **Normalize** samples for best results.

Use the **Key** field to set the root note of the sample and the **Scale** field to set whether the key is **Major**, **Minor**, or off (**--**).

Click **Detect Key** to automatically detect the sample key.

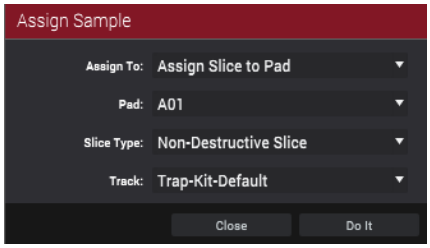
Assigning Samples

You can assign your new sample directly to a pad from Trim Mode.

Click **Assign** to assign a sample. In the **Assign Sample** window that appears, you can click the **Assign To** menu to select a different assignment, and then click **Do It** to assign the sample or **Cancel** to close the window without assigning the sample.

Important: Assigning a sample to a pad in this way will replace the sample on the first layer of the pad.

If you set the **Assign To** menu 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** menu to select the desired pad. Alternatively, press the desired pad.

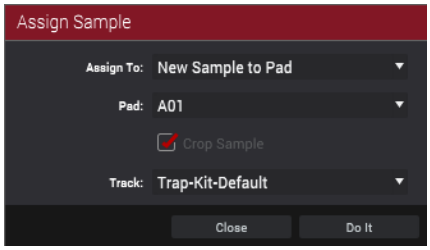
Use the **Slice Type** menu to select how the pad's layer settings will be set when the slice is assigned to it:

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** menu to specify the track to which you want to add the slice.

If you set the **Assign To** menu 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** menu to select the desired pad. Alternatively, press the desired pad.

Select 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 deselected 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** menu to specify the track to which you want to add the slice.

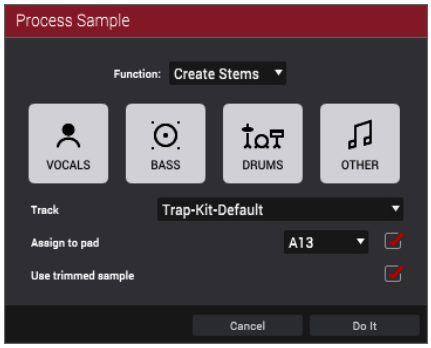
Processing Slices & Samples

Use the column of **Process** buttons to select an editing process. In the **Process Sample** window that appears, you can click the **Function** menu to select a different process, and then click **Do It** to apply the process or **Cancel** to close the window without processing the sample.

You can use any of these functions as described below.

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 **Create 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.

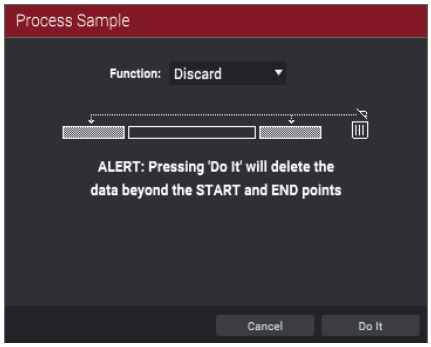
Use the **Track** dropdown menu to select the track where the stems will be added.

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 four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

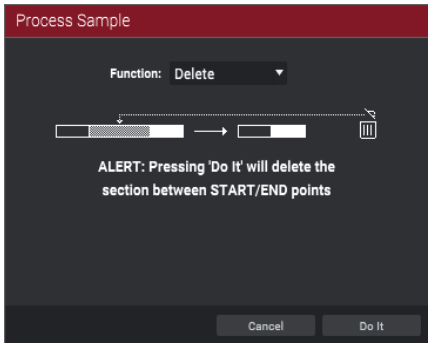
Click the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Note: Visit **thempcstore.com** to purchase MPC Stems, and then activate your purchase in the ***Preferences > Activation*** menu.

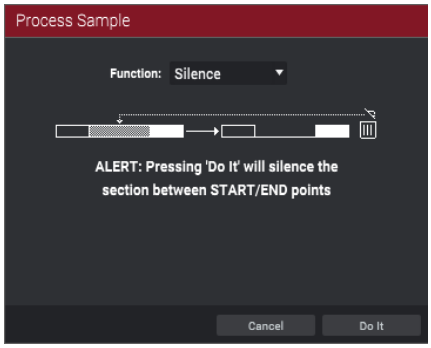
The **Discard** process deletes the regions before the start point and after the end point.



The **Delete** process deletes the region between the start point and end point and closes the gap between them.



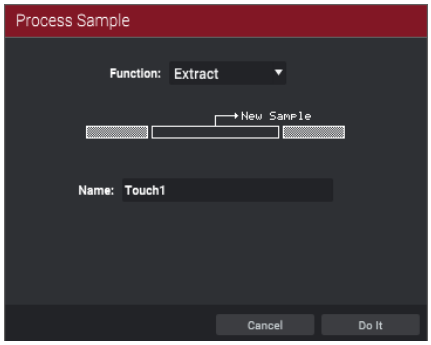
The **Silence** process replaces the region between the start point and end point with silence.



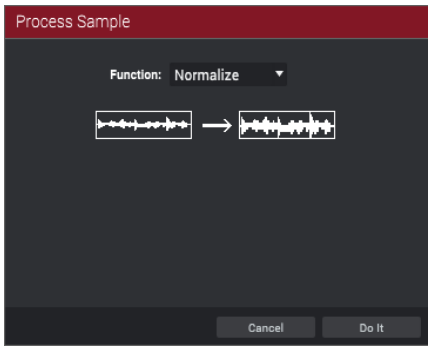
The **Extract** process deletes the regions before the start point and after the end point and saves it as a new sample in your current project.

Use the **Name** field to name the new sample.

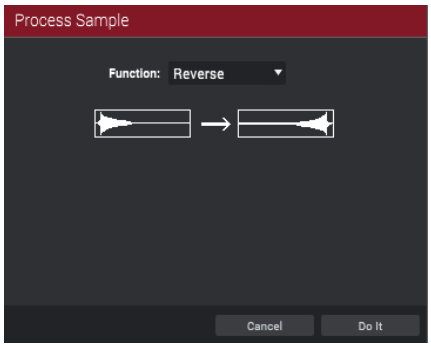
Tip: This is useful if you recorded a drum loop and wanted to remove just a snare drum hit, a kick drum hit, etc. to use separately in the project.



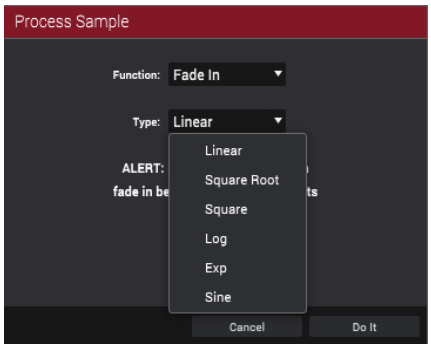
The **Normalize** process increases a sample's level to the highest level possible without distortion. This is essentially a kind of digital gain optimization, so you do not have to worry about excessive level settings when working with samples with a wide range of amplitudes.



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. Click the **Type** menu to select a type of fade:



Linear fades the audio in with a linear curve—a straight line between the start and end.

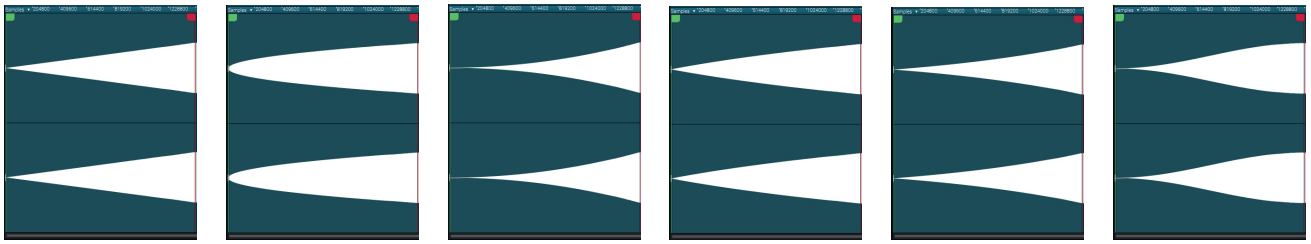
Square Root fades the audio in with a square root curve—a half-parabola that is similar to the logarithmic curve but steeper.

Square fades the audio in with a curve opposite to 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.

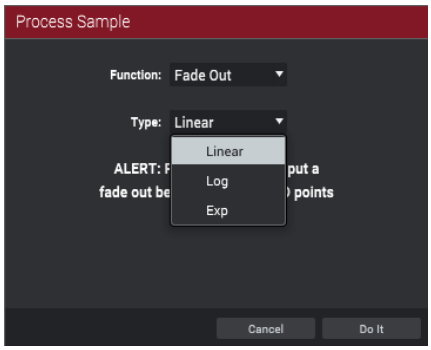
Exp fades the audio in with an exponential curve—slowly rising in the beginning and growing steeper towards the end.

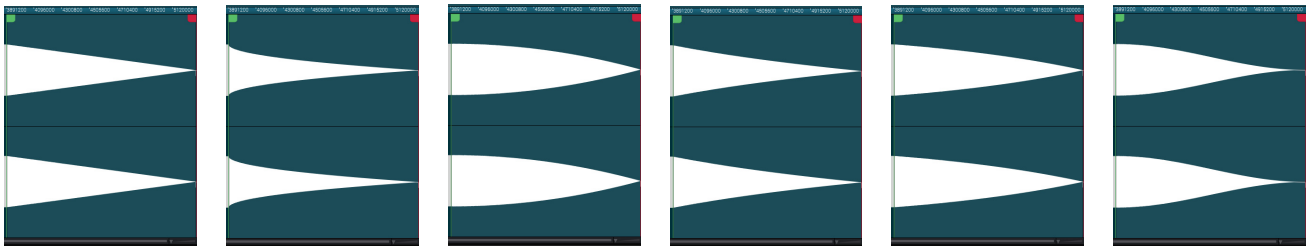
Sine fades the audio in with a sine curve—like a sine wave, it slowly rises, gets steeper in the middle, and flattens out at the end.



Linear Square Root Square Log Exp Sine

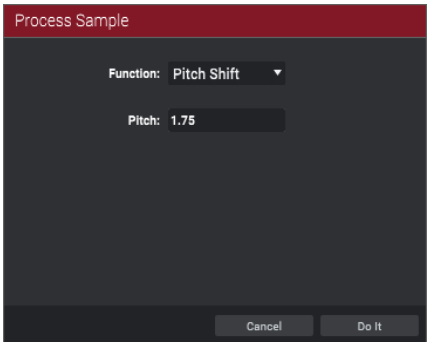
The **Fade Out** process sets a fade-out between the start point and end point. Click the **Type** menu to select a type of fade. These are the same as the **Fade In** curves, but fade the audio out instead of in.





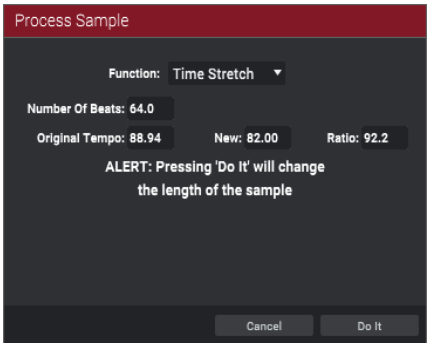
Linear Square Root Square Log Exp Sine

The **Pitch Shift** process changes the pitch of the sample without changing its length. This lets you set the sample's pitch to your sequence without affecting the sample's tempo or duration. Keep in mind that the audio quality may decrease at more extreme settings.



Use the **Pitch** field to shift the pitch up to **12.00** semitones up or down.

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.

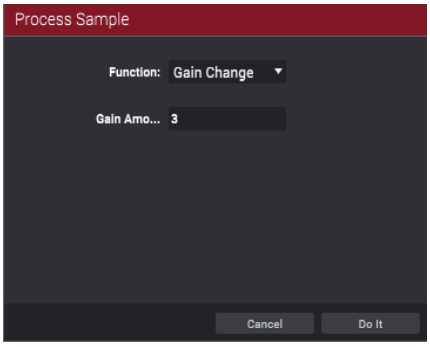


Use the **Number of Beats** field to set the desired value number of beats.

Use the **New** 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, and then the **New** field will change automatically based on the new time stretch factor.

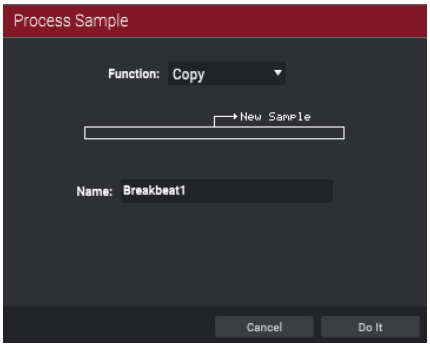
The **Gain Change** process raises or lowers the volume of the sample.



Use the **Gain Amount** field to adjust the gain up to **18 dB** up or down.

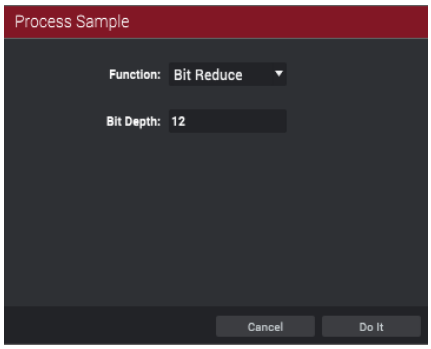
This function is different than Normalize because it will allow volumes beyond clipping level. This may be a desired effect, but remember to watch your output level!

The **Copy** process saves a copy of the sample.



Use the **Name** field 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.



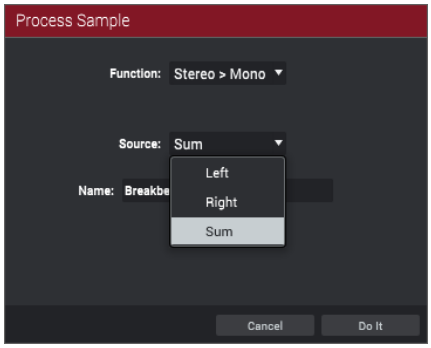
Use the **Bit Depth** field to set the bit depth from **1 bit** to **16 bits**.

The resulting 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.



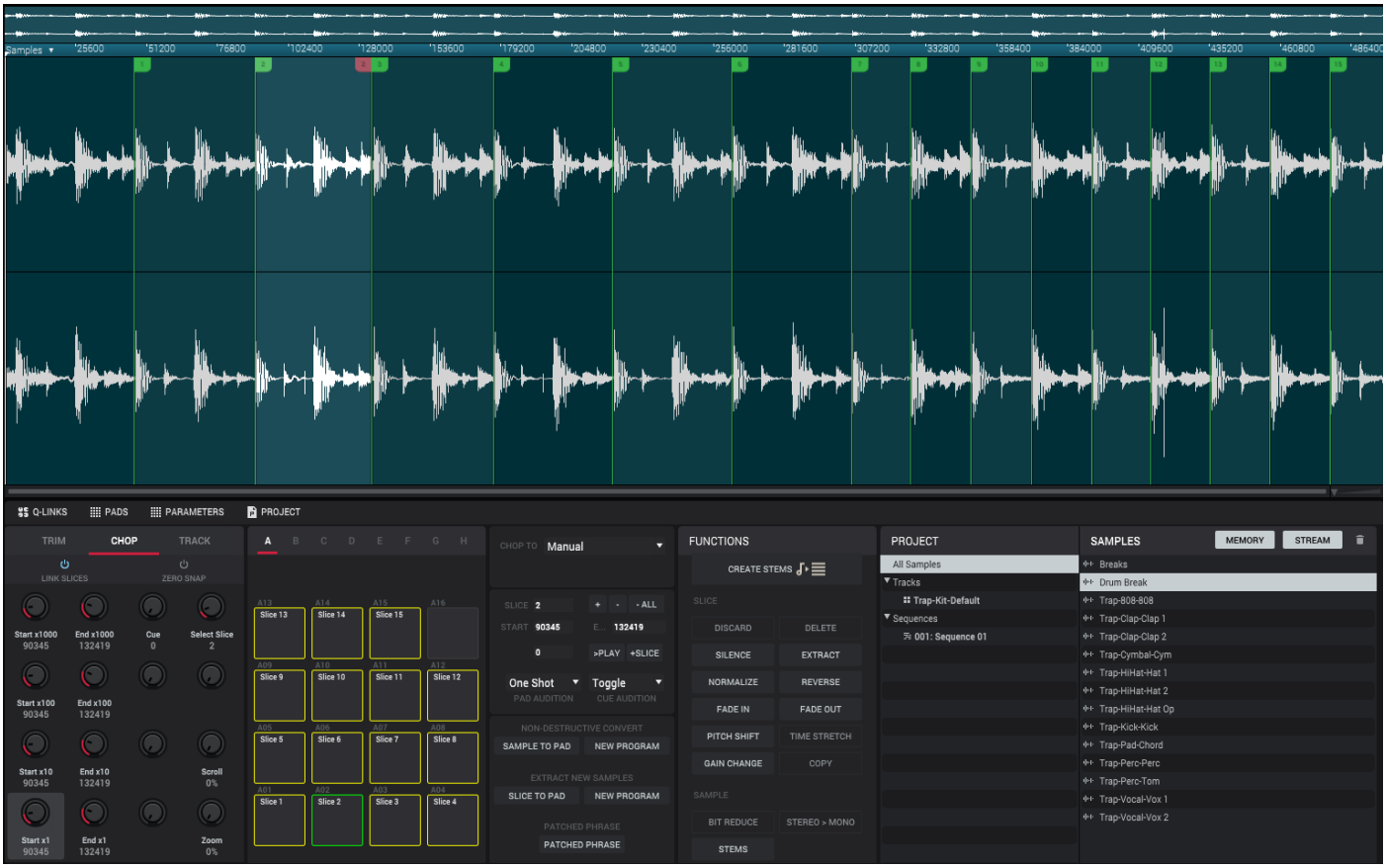
Click the **Source** menu to select which channels will be converted:

- **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.

Use the **Name** field to name the new sample. Otherwise, the process will add a consecutive number after the sample name.

Note: This process affects the **entire** sample regardless of its start point or end point.

Chop Mode



While 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, click the **Chop** in the **Q-Links** panel.

To select a slice to edit, do one of the following:

- Click the lower half of the slice in the waveform in the upper half of the window.
- Click the corresponding **pad** in the **Pads** panel.
- Use **Q-Link Knob 16**.
- Adjust the **Slice** field in the **Parameters** panel.

Q-Links

In the **Q-Links** panel:

Use the **first** column of **Q-Link knobs** to adjust the start point. This is the same as adjusting the **Start** field in the **Parameters** panel.

Use the **second** column of **Q-Link knobs** to adjust the end point. This is the same as adjusting the **End** field in the **Parameters** panel.

Use **Q-Link Knob 15** to adjust the cue playhead. This is the same as adjusting the **Cue** field in the **Parameters** panel.

Use **Q-Link Knob 16** to select the desired slice. This is the same as adjusting the **Slice** field in the **Parameters** panel or clicking or pressing the corresponding pad.

Use **Q-Link Knob 8** to scroll through the waveform in the large waveform display above.

Use **Q-Link Knob 4** to zoom in or zoom out of the waveform.

When the **Chop To** menu is set to **Regions**, use **Q-Link Knob 11** to set into how many regions the sample will be divided.

When the **Chop To** menu is set to **Threshold**, use **Q-Link Knob 11** to set the threshold level.

For the first three columns, the top-most Q-Link knob provides coarse adjustment (**x1000**), while the bottom-most one knob provides fine adjustment (**x1**).

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. This is the same as clicking the **gear icon** in the upper-right corner of the **Wave Editor** and using the **Link Slices** submenu.

Important: **Link Slices** must be disabled to make slices nonsequential, noncontiguous, or overlapping.

Enable **Zero Snap** to force 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 clicking the **gear icon** in the upper-right corner of the **Wave Editor** and using the **Zero Snap** submenu.

Pads

The **Pads** panel enables you to play and select each slice of the selected sample:

Press the **pad** to play and select its corresponding the slice. If your sample has more than 16 slices, use the additional pad banks. This is the same as turning **Q-Link Knob 16** in the **Q-Links** panel or using the **Slice** field in the **Parameters** panel.

Note: When the **Pad Audition** menu is set to **One Shot**, clicking or pressing the pad will play the slice from its start marker. When **Pad Audition** is set to **Note On**, clicking (or pressing) and then holding the pad will play the slice from its start marker—releasing the pad will stop playback.

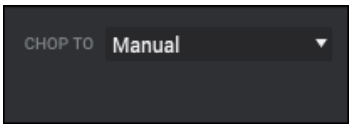
Parameters

The **Parameters** panel includes controls for editing the sample length and tuning as well as buttons for converting or assigning the sample (see ***this section***) and processing the slice or sample (see ***this section***).

Use the **Chop To** menu to choose how you want to use Chop Mode:

Manual

This method lets you insert slices at locations you select.

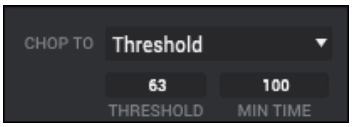


Threshold

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. Alternatively, turn **Q-Link Knob 11**. The higher the selected value, the more slices will be created.

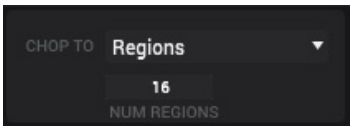
Use the **Min Time** field to set the minimum length of a slice in milliseconds.



Regions

This method divides a sample into slices of equal length.

Use the **Num Regions** field to set into how many regions the sample will be divided. Alternatively, turn **Q-Link Knob 11**. The higher the selected value, the more slices will be created.



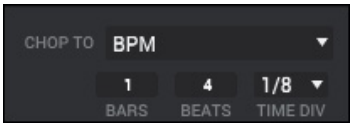
BPM

This method divides a sample into slices based on the tempo (beats per minute).

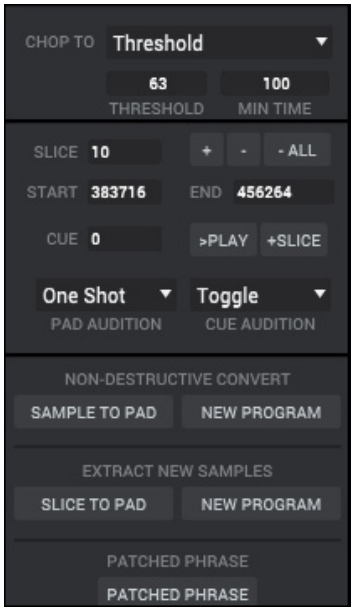
Use the **Bars** field to set how many bars are in the sample. Alternatively, turn the second **Q-Link knob** in the third bank.

Use the **Beats** field to set how many beats are in each bar. Alternatively, turn the third **Q-Link knob** in the third bank.

Use the **Time Div** field to set a note division. Alternatively, turn the bottom-most **Q-Link knob** in the third bank. 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**.)



Use the **Slice** field to select the desired slice. This is the same as turning **Q-Link Knob 16** field in the **Q-Links** panel or clicking or pressing the corresponding **pad**.



Use the **Start** field to adjust the start point. This is the same as turning the **first** column of **Q-Link knobs** in the **Q-Links** panel.

Use the **End** field to adjust the end point. This is the same as turning the **second** column of **Q-Link knobs** in the **Q-Links** panel.

Note: 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.

Click **+Slice** (under the **End** field) to add a slice at the current playhead position. You can do this at any point during sample playback.

To insert a slice marker manually, click the upper part of the waveform at the desired location (the cursor will appear as a **red** arrow with a **+** symbol: **🡻+**).

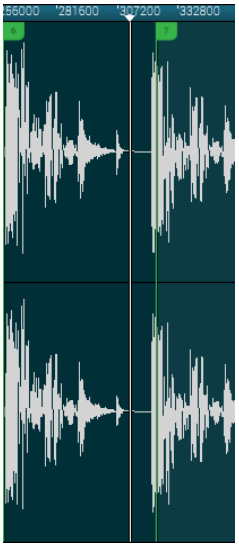
To insert a slice marker during sample playback, press an **unlit pad** (usually **Pad 1**) to start playback of the sample, and then press an **unlit pad** during playback to place a slice marker at each location of the playhead. (If you press a lit pad, playback will restart from that pad's corresponding slice marker.) The number of the pad that is lit **green** is the number of the most-recently inserted slice marker. The numbers of the pads that are lit **yellow** are the numbers of the slice markers that are already inserted.

Click the **–** button (to the right of the **Slice** field) to combine the currently selected slice with the one before it.

Click the **+** button (to the right of the **Slice** field) to split the currently selected slice into two slices of the same size.

Click **–All** (to the right of the **Slice** field) to remove all slices from a sample.

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 (below the **Start** field) to adjust the position of the cue playhead. Alternatively, click and drag the white marker with the triangle (▼) in the timeline.

Click **>Play** to play the sample from the cue playhead.

Click **+Slice** to create a slice marker at the cue playhead position.

Click the **Cue Audition** menu to select how the audio plays from the cue playhead:

One Shot: Clicking **>Play** will play the entire sample from the cue playhead.

Toggle: Clicking **>Play** once will start playback from cue playhead. Clicking it once more will stop playback.

Click the **Pad Audition** menu to select how each slice plays from each start marker when you press the corresponding **pad**:

One Shot: Clicking or pressing the **pad** will play the slice from its start marker.

Note On: Clicking (or pressing) and then holding the **pad** will play the slice from its start marker. Releasing the **pad** will stop playback.

Converting or Assigning Slices

In Chop Mode, you can assign your new sample directly to a pad or convert the new sample into a new track or patched phrase.

Use the buttons in the **Non-Destructive Convert** and **Extract New Samples** sections to select a conversion and assignment process. In the **Convert or Assign Slices** window that appears, you can click the **Convert To** menu to select a different process, and then click **Do It** to apply the process or **Close** to close the window without processing the sample.

Note: These features can be accessed with connected MPC hardware.

If you set the **Convert To** menu to **New** [program type] **program using slices**, this will create a new program 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 program will be named after the sample and appended with **ch**.

Use the **Slice Type** menu 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.

Select the **Create Events** box to automatically create a new track for the new program in which each pad plays its corresponding slice in ascending sequence by pad number.

If **Create Events** is selected, use the **Bars** field to set how many bars the slices' events will occupy.

If you set the **Convert To** menu to **New clip program**, this will create a new clip program and assign the sample's slices to its pads as clips. 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 program will be named after the sample and appended with **ch**.

Use the **Tempo** field to enter the tempo of the clips in the new program.

Select the **Create Events** box to automatically create a new track for the new program in which each pad plays its corresponding slice in ascending sequence by pad number.

If **Create Events** is selected, use the **Number of Bars** field to set how many bars the slices' events will occupy.

If you set the **Convert To** menu to **New program with new samples**, this will create a new sample from each slice and assign them to pads in a new program.

The new program will be named after the sample and appended with **ch**. The new samples will be appended with **Sl-#** (where **#** is a consecutive number).

Select 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 deselected 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 program. You can **deselect** the **Create New Program** box to convert each slice into a sample that is placed in the project's sample pool but not assigned to a program or pad.

If **Create New Program** is selected, select 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 selected, use the **Number of Bars** field to set how many bars the slices' events will occupy.

If you set the **Convert To** menu to **Assign slice to a 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** menu to select the desired pad. Alternatively, press the desired pad.

Use the **Slice Type** menu 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 **Program** menu to specify the program to which you want to add the slice.

If you set the **Convert To** menu 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** menu to select the desired pad. Alternatively, press the desired pad.

Select 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 deselected 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 **Program** menu to specify the program to which you want to add the slice.

If you set the **Convert To** menu to **Patched phrase**, this will create a new sample that will play based on the tempo of your Sequence, 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.

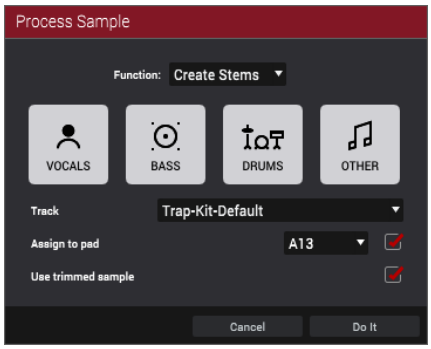
Processing Slices

Use the column of **Process** buttons to select an editing process. In the **Process Sample** window that appears, you can click the **Function** menu to select a different process, and then click **Do It** to apply the process or **Cancel** to close the window without processing the sample.

You can use any of these functions as described below.

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.

The **Create 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.

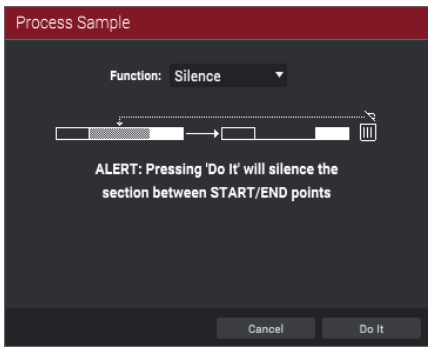
Use the **Track** dropdown menu to select the track where the stems will be added.

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 four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

Click the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Note: Visit **thempcstore.com** to purchase MPC Stems, and then activate your purchase in the ***Preferences > Activation*** menu.

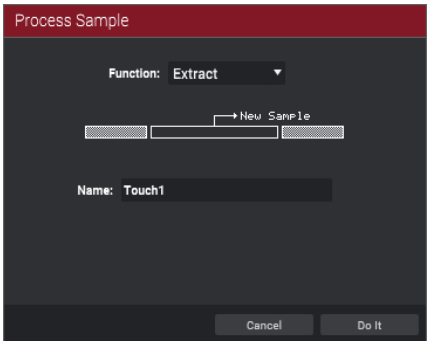
The **Silence** process replaces the region between the start point and end point with silence.



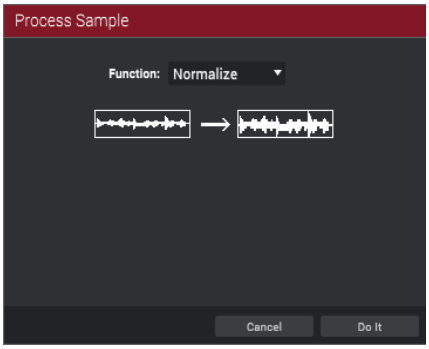
The **Extract** process deletes the regions before the start point and after the end point and saves it as a new sample in your current project.

Use the **Name** field to name the new sample.

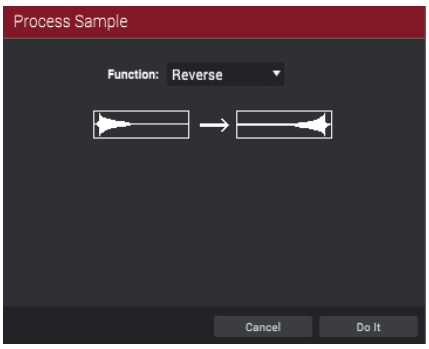
Tip: This is useful if you recorded a drum loop and wanted to remove just a snare drum hit, a kick drum hit, etc. to use separately in the project.



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.

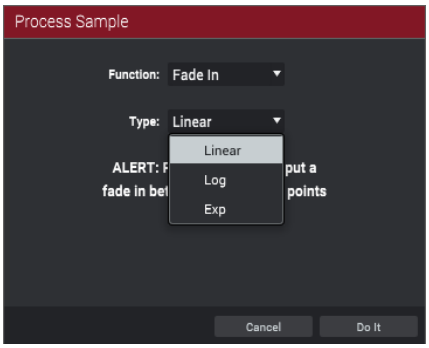


The **Fade In** process sets a fade-in between the start point and end point. Click the **Type** menu to select a type of fade:

Linear fades the audio in with a linear curve—a straight line between the start and end.

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.

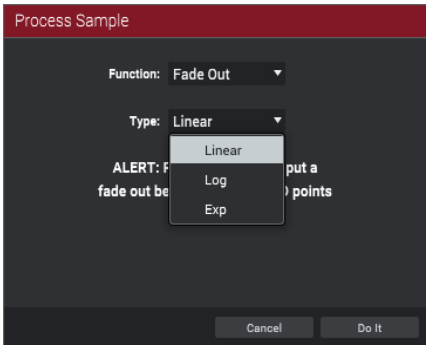


The **Fade Out** process sets a fade-out between the start point and end point. Click the **Type** menu to select a type of fade:

Linear fades the audio out with a linear curve—a straight line between the start and end.

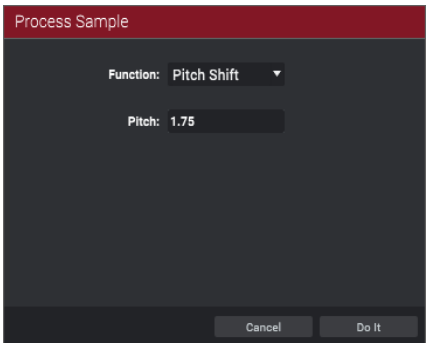
Log fades the audio out with a logarithmic curve—quickly rising at the start and flattening out towards the end.

Exp fades the audio out with an exponential curve—slowly rising in the beginning and growing steeper towards the end.



The **Pitch Shift** process changes the pitch of the sample without changing its length. This lets you set the sample's pitch to your sequence without affecting the sample's tempo or duration. Keep in mind that the audio quality may decrease at more extreme settings.

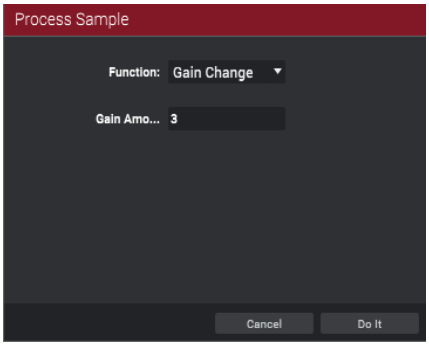
Use the **Pitch** field to shift the pitch up to **12.00** semitones up or down.



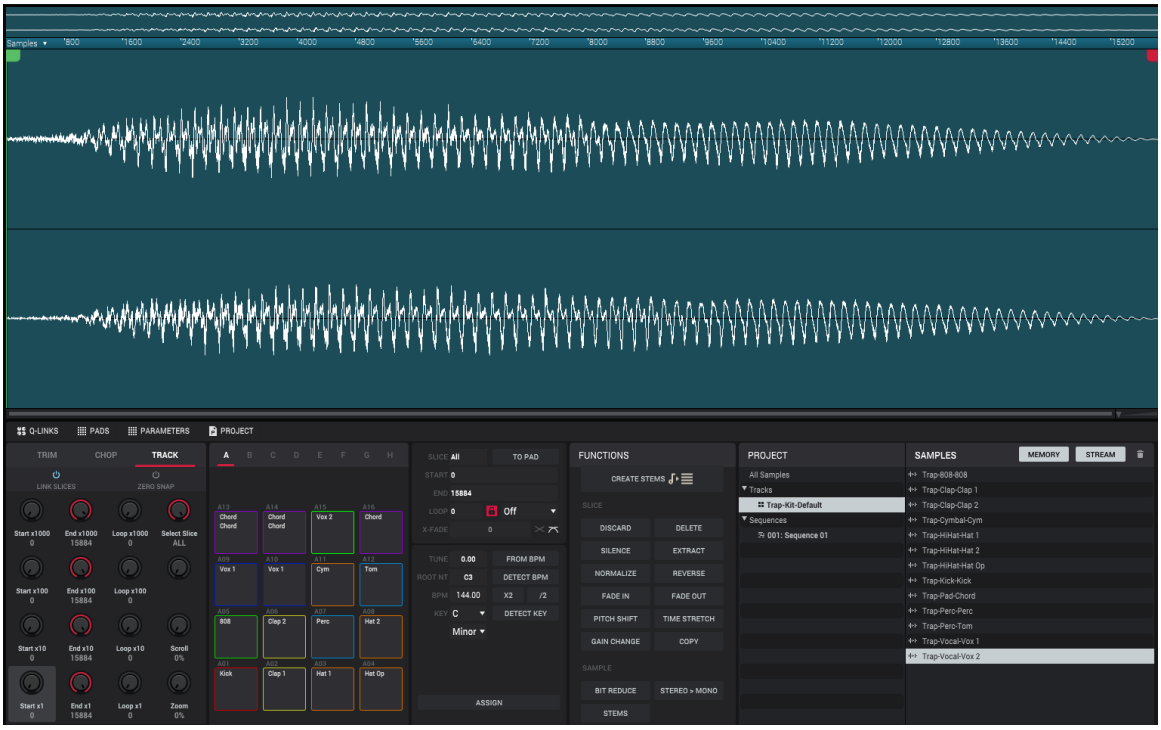
The **Gain Change** process raises or lowers the volume of the sample.

Use the **Gain Amount** field to adjust the gain up to **18 dB** up or down.

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!



Track Mode



Track Mode lets you edit a sample in the context of the track in which you will 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 Track Mode, click **Track** in the **Q-Links** panel.

Q-Links

In the **Q-Links** panel:

- Use the **first** column of **Q-Link knobs** to adjust the start point. This is the same as adjusting the **Start** field in the **Parameters** panel.
- Use the **second** column of **Q-Link knobs** to adjust the end point. This is the same as adjusting the **End** field in the **Parameters** panel.
- Use the **third** column of **Q-Link knobs** to adjust the loop point if **Loop Lock** is **off**. If **Loop Lock** is **on**, adjusting the loop point will also adjust the start point. This is the same as adjusting the **Loop** field in the **Parameters** panel.
- Use **Q-Link Knob 16** to display either the sample as it has been edited (**Pad**) or the entire sample (**All**). This is the same as adjusting the **Slice** field in the **Parameters** panel.
- Use **Q-Link Knob 8** to scroll through the waveform in the large waveform display above.
- Use **Q-Link Knob 4** to zoom in or zoom out of the waveform.

For the first three columns, the top-most Q-Link knob provides coarse adjustment (**x1000**), while the bottom-most one knob provides fine adjustment (**x1**).

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. This is the same as clicking the **gear icon** in the upper-right corner of the **Wave Editor** and using the **Link Slices** submenu.

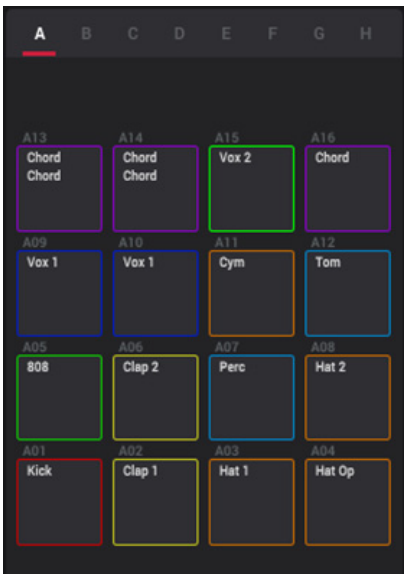
Important: **Link Slices** must be disabled to make slices nonsequential, noncontiguous, or overlapping.

Enable **Zero Snap** to force 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 clicking the **gear icon** in the upper-right corner of the **Wave Editor** and using the **Zero Snap** submenu.

Pads

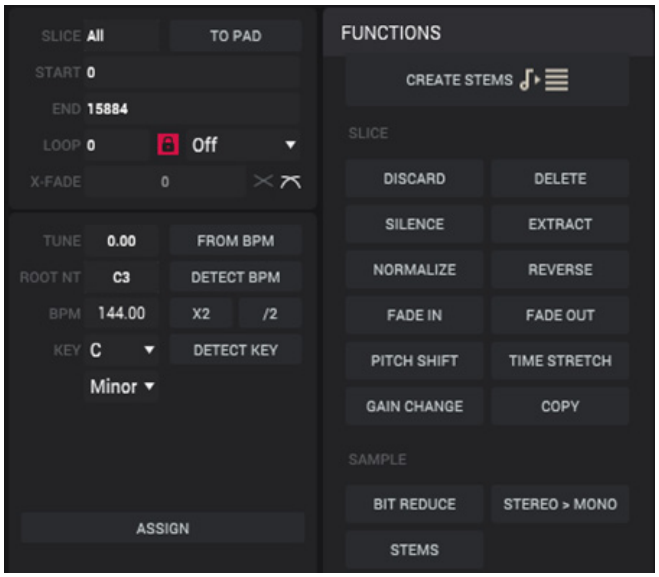
The **Pads** panel shows their assigned samples in the current track.

Click each **pad** to hear its sample/samples. The sample on its first layer will automatically appear in the waveform display for editing.



Parameters

The **Parameters** panel includes controls for editing the sample length and tuning as well as buttons for assigning the sample (see ***this section***) and processing the slice or sample (see ***this section***).



Use the **Slice** field to display either the sample as it has been edited (**Pad**) or the entire sample (**All**). This is the same as adjusting **Q-Link Knob 16** in the **Q-Links** panel.

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 by clicking **To Pad**. The **Slice** field will change to **Pad**, but the start point and end point will remain in their current locations.

Use the **Start** field to adjust the start point. This is the same as adjusting the **first** column of **Q-Link knobs** in the **Q-Links** panel.

Use the **End** field to adjust the end point. This is the same as adjusting the **second** column of **Q-Link knobs** in the **Q-Links** panel.

Use the **Loop** field to adjust the loop point if **Loop Lock** is **off**. If **Loop Lock** is **on**, adjusting the loop point will also adjust the start point. This is the same as adjusting the **third** column of **Q-Link knobs** in the **Q-Links** panel.

Click the **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.

Click the **Loop** menu to cycle between the three loop modes:

Off: The sample will not loop.

Forward (**Fwd**): When the loop reaches its end point, it will start playing again from the loop point.

Reverse (**Rev**): 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 (**Alt**): 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.

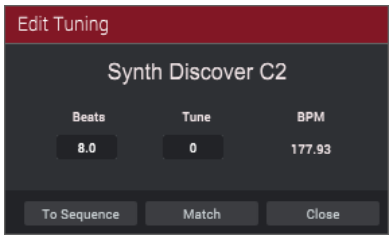
Use the **X-Fade** field to apply a crossfade to a looping sample. You must first make sure the loop **Lock** setting is set to **Off**, and then use the **Loop** menu to select a loop mode. Make sure there are at least 10 samples of space between the **Start** point and **Loop** point, then use the **X-Fade** field to set the length of the crossfade in samples.

Click the icons next to the **X-Fade** field to select a **Linear** (straight lines) or **Equal Power** (curved lines) crossfade.

Press **Pad A16 – Play Continuous Loop** to hear the crossfade applied to the sample.

Use the **Tune** field to transpose the sample from its original pitch up to **24.00** semitones up or down.

Use the **Root Nt** 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.



Click **From BPM** to tune a sample to the current sequence. Use the **Edit Tuning** window on connected MPC hardware to adjust the following:

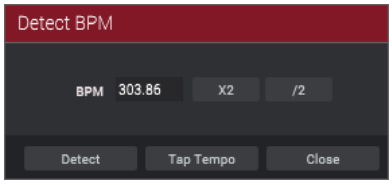
Use the **Beats** field to match the number of beats in the sequence.

To tune the sample to the sequence, click **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 sequence and adjust the sequence tempo, click **To Sequence**. This is the same as clicking Match but it also changes the sequence's tempo to the BPM shown in the Tempo field on the right.

To close the window, click **Close**.

Use the **BPM** field to enter a tempo manually. You can also click **X2** to double the value or **/2** to halve it.



Click **Detect BPM** to automatically detect the tempo. Use the **Detect BPM** window on connected MPC hardware to adjust the following:

Use the **BPM** field to enter a tempo manually. You can also click **X2** to double the value or **/2** to halve it.

Click **Detect** to detect the tempo automatically.

Click **Tap Tempo** at the bottom of the window at the desired rate to use it as the tempo. You can play a sequence in the background to help with your timing.

Click **Close** to close the window.

Note: Before detecting tempo, it is recommended that you **Normalize** samples for best results.

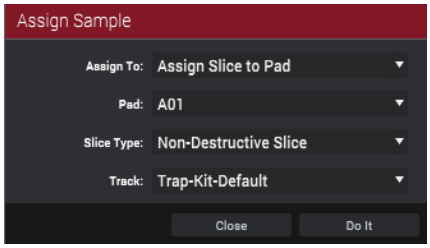
Assigning Samples

You can assign your new sample directly to a pad from Track Mode.

Click **Assign** to assign a sample. In the **Assign Sample** window that appears, you can click the **Assign To** menu to select a different assignment, and then click **Do It** to assign the sample or **Cancel** to close the window without assigning the sample.

Important: Assigning a sample to a pad in this way will replace the sample on the first layer of the pad.

If you set the **Assign To** menu 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** menu to select the desired pad. Alternatively, press the desired pad.

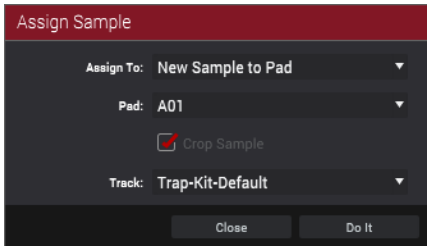
Use the **Slice Type** menu to select how the pad's layer settings will be set when the slice is assigned to it:

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** menu to specify the track to which you want to add the slice.

If you set the **Assign To** menu 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** menu to select the desired pad. Alternatively, press the desired pad.

Select 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 deselected 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** menu to specify the track to which you want to add the slice.

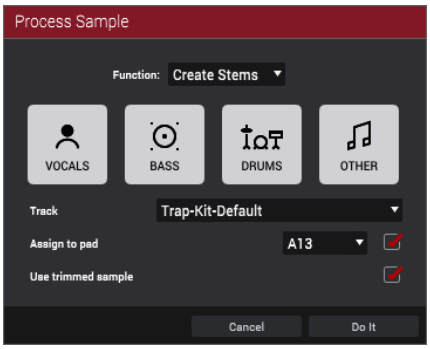
Processing Slices

Use the column of **Process** buttons to select an editing process. In the **Process Sample** window that appears, you can click the **Function** menu to select a different process, and then click **Do It** to apply the process or **Cancel** to close the window without processing the sample.

You can use any of these functions as described below.

Important: Track 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).

The **Create 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.

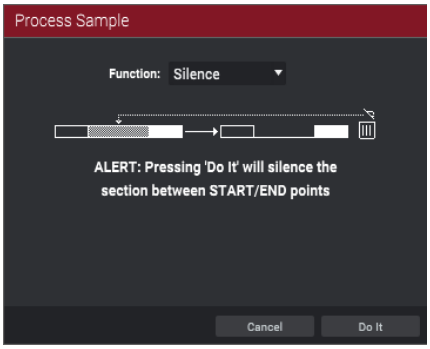
Use the **Track** dropdown menu to select the track where the stems will be added.

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 four layers of that pad. When unchecked, the stems will be added to the general project sample pool in the **Project Info** Browser.

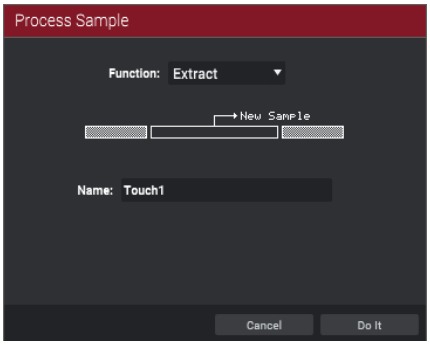
Click the **Use trimmed sample** box to trim the source sample between the **Start** and **End** points before applying the stem separation process.

Note: Visit **thempcstore.com** to purchase MPC Stems, and then activate your purchase in the ***Preferences > Activation*** menu.

The **Silence** process replaces the region between the start point and end point with silence.



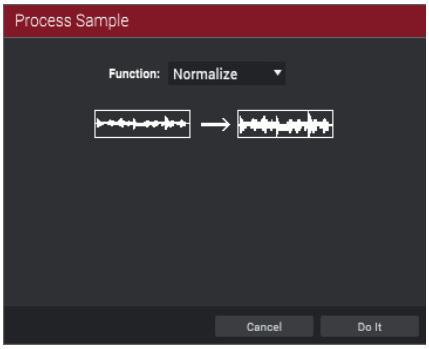
The **Extract** process deletes the regions before the start point and after the end point and saves it as a new sample in your current project.



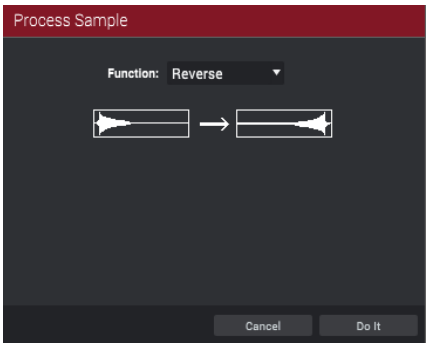
Use the **Name** field to name the new sample.

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.

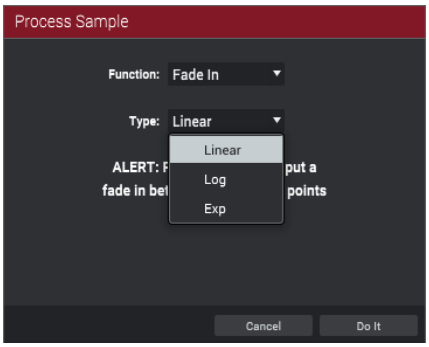


The **Fade In** process sets a fade-in between the start point and end point. Click the **Type** menu to select a type of fade:

Linear fades the audio in with a linear curve—a straight line between the start and end.

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.

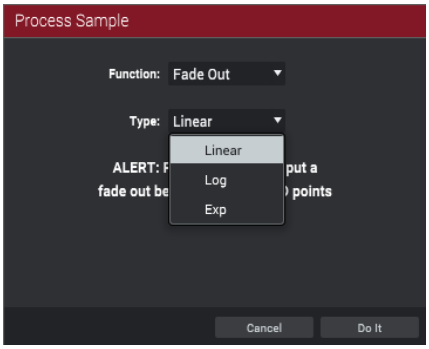


The **Fade Out** process sets a fade-out between the start point and end point. Click the **Type** menu to select a type of fade:

Linear fades the audio out with a linear curve—a straight line between the start and end.

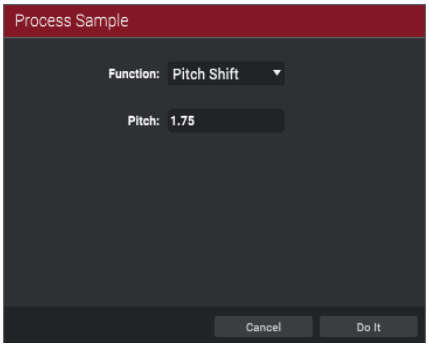
Log fades the audio out with a logarithmic curve—quickly rising at the start and flattening out towards the end.

Exp fades the audio out with an exponential curve—slowly rising in the beginning and growing steeper towards the end.



The **Pitch Shift** process changes the pitch of the sample without changing its length. This lets you set the sample's pitch to your sequence without affecting the sample's tempo or duration. Keep in mind that the audio quality may decrease at more extreme settings.

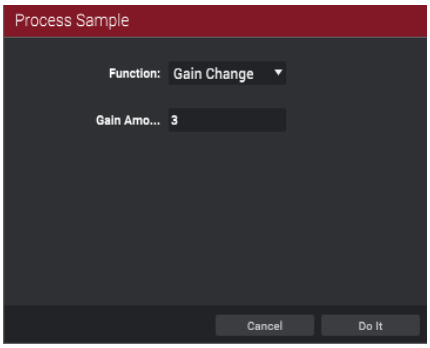
Use the **Pitch** field to shift the pitch up to **12.00** semitones up or down.



The **Gain Change** process raises or lowers the volume of the sample.

Use the **Gain Amount** field to adjust the gain up to **18 dB** up or down.

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!

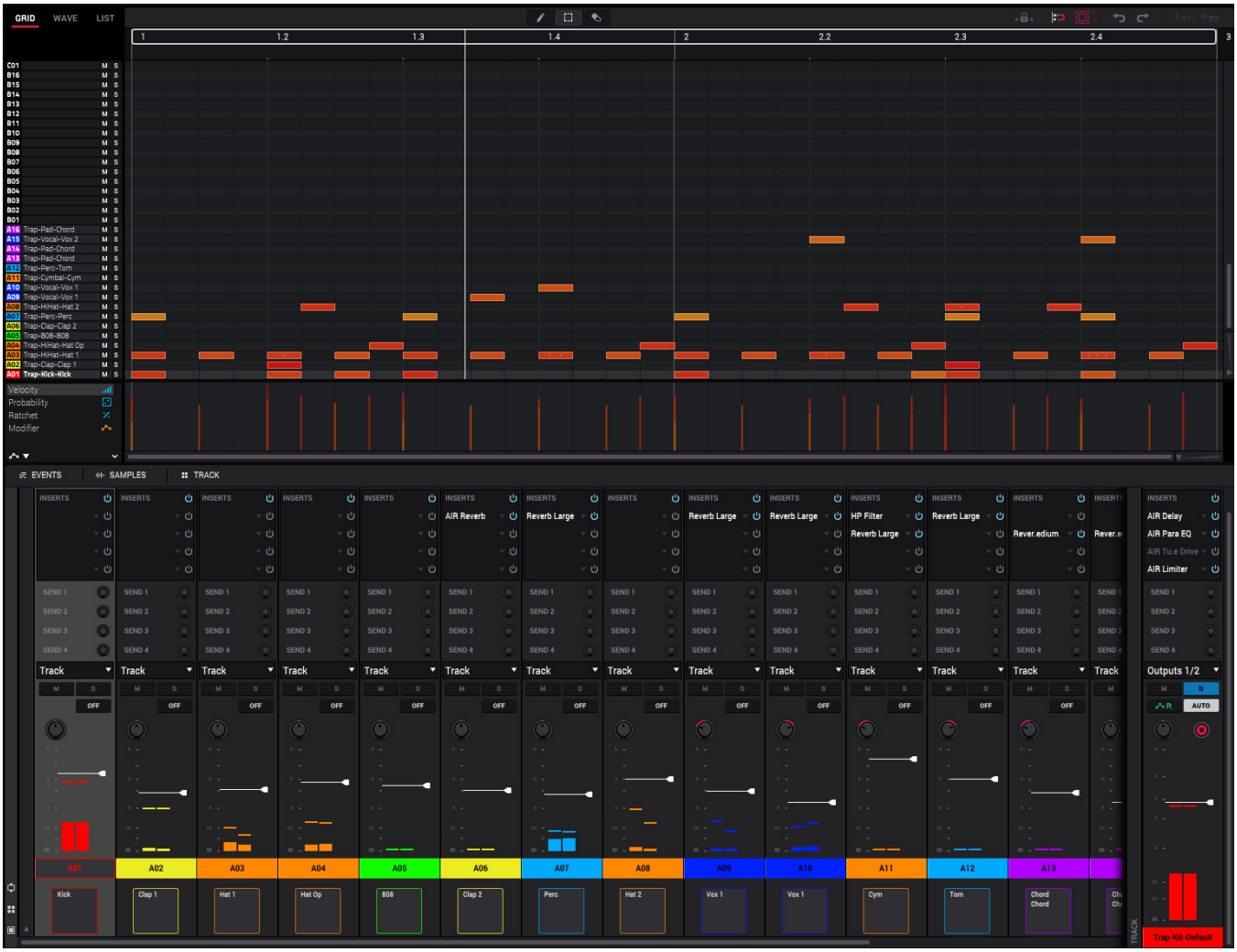


Pad Mixer

In the Pad Mixer, you can set a pad's levels, stereo panning, routing, and effects for drum tracks and keygroup tracks.

To enter the Pad Mixer, do any of the following:

- Click the **pad-and-sliders icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Pad Mixer**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Pad Mixer**.



The Pad Mixer works like an audio mixer with various settings for each pad.

The upper half of the window can display the Grid Editor, Wave Editor, or List Editor. Click the **Grid**, **Wave**, or **List** tab. See ***General Features*** > ***Editors*** to learn more about each one.

The lower half of the window displays channel strips representing the pads of the current track (used by the currently selected track) used in the current sequence. Each type has a slightly different appearance.

Tip: If you want to see channel strips for both the Channel Mixer and the Pad Mixer at the same time, use the **Mixer Window**, which provides an overview of the channel strips in both modes in one screen. See ***General Features*** > ***Mixer Window*** to learn about this.

Select a drum track or keygroup track to view the channel strips for its track and pads.

Use the buttons in the lower-left corner of this area to show or hide different parts of the channel strips:

Click the **box icon** to show or hide the **Inserts** slots on the channel strips.

Click the **four-circles icon** to show or hide the **Send** knobs on the channel strips.

Click the **pad icon** to show or hide the **pad** on the channel strips for drum tracks.

Use the selectors between the upper and lower halves of the window to filter which channel strips are shown or hidden:

Events: When **Events** is selected, channel strips whose pads play in the current sequence will be shown. All others will be hidden.

Samples: When **Samples** is selected, only channel strips whose pads or keygroups have samples assigned to them will be shown. When **Samples** is deselected, channel strips for all pads or keygroups will be shown.

Track: When **Track** is selected, the track channel strip will be shown on the right edge of the lower half of the window. When **Track** is deselected, the track channel strip will be hidden.

When a MIDI track is selected, the **pad channel strips** or **keygroup channel strips** for that track are grouped together on the left. The corresponding **track channel strip** will appear on the right. (When a MIDI track or CV track is selected, there will be no pad channel strips.)

Pad Channel Strip

When a track using a drum track is selected, the **pad channel strip** has these controls:

Click a pad channel strip to select it.

The number of the pad is at the bottom of the channel strip. If pads are shown at the bottom of the channel strips, you can click a **pad** to select its channel strip and play its sound.

The **Inserts** slots show any enabled or disabled effects for that pad. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about pad insert effects.

Click and drag the **Send** knobs, which control the send levels for the pad. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about pad send/return effects.

The menu below the **Send** knobs shows where the pad is routed, which you can set to the current track (**Track**), a submix (**Submix** > **Sub 1–8**), a pair of main outputs (**Stereo Output** > **Out 1,2–31,32**), or a single main output (**Mono Output** > **Out 1–32**). Usually, this is set to **Track**.

Click **M** or **S** to mute or solo the pad (respectively).

To change the panning or level of the pad, adjust the **pan knob** or **level slider**. The **green** level meter next to the slider shows the pad's current volume level in **dB**.

Keygroup Channel Strip

When a track using a keygroup track is selected, the **keygroup channel strip** has these controls:

Click a keygroup channel strip to select it. Alternatively, click the **KG** menu at the top of the channel strip and select one—that channel strip will then display that keygroup.

The number of the keygroup is at the bottom of the channel strip.

The **Inserts** slots show any enabled or disabled effects for that keygroup. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about keygroup insert effects.

Click and drag the **Send** knobs, which control the send levels for the keygroup. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about keygroup send/return effects.

The menu below the **Send** knobs shows where the keygroup is routed, which you can set to the current track (**Track**), a submix (**Submix** > **Sub 1–8**), a pair of main outputs (**Stereo Output** > **Out 1,2–31,32**), or a single main output (**Mono Output** > **Out 1–32**). Usually, this is set to **Track**.

Click **M** or **S** to mute or solo the keygroup (respectively).

To change the panning or level of the keygroup, adjust the **pan knob** or **level slider**. The **green** level meter next to the slider shows the keygroup's current volume level in **dB**.

Track Channel Strip

When a track using a drum track, keygroup track, or plugin track is selected, the **track channel strip** has these controls:

The name of the track is at the bottom of the channel strip.

The first menu shows the current track (which you can change).

The **Inserts** slots show any enabled or disabled effects for that track. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about track insert effects.

Click and drag the **Send** knobs, which control the send levels for the track. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about track send/return effects.

The menu below the **Send** knobs shows where the track is routed, which you can set to a submix (**Submix** > **Sub 1**–**8**), a pair of main outputs (**Stereo Output** > **Out 1,2**–**31,32**), or a single main output (**Mono Output** > **Out 1**–**32**).

Click **M** or **S** to mute or solo the track (respectively).

Click the **track automation button** to toggle between two possible states of track automation:

When set to **Read** (**R**), the track will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (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.)

To disable or enable track automation, hold **Shift** and press the **track automation button**. When **off**, the track will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

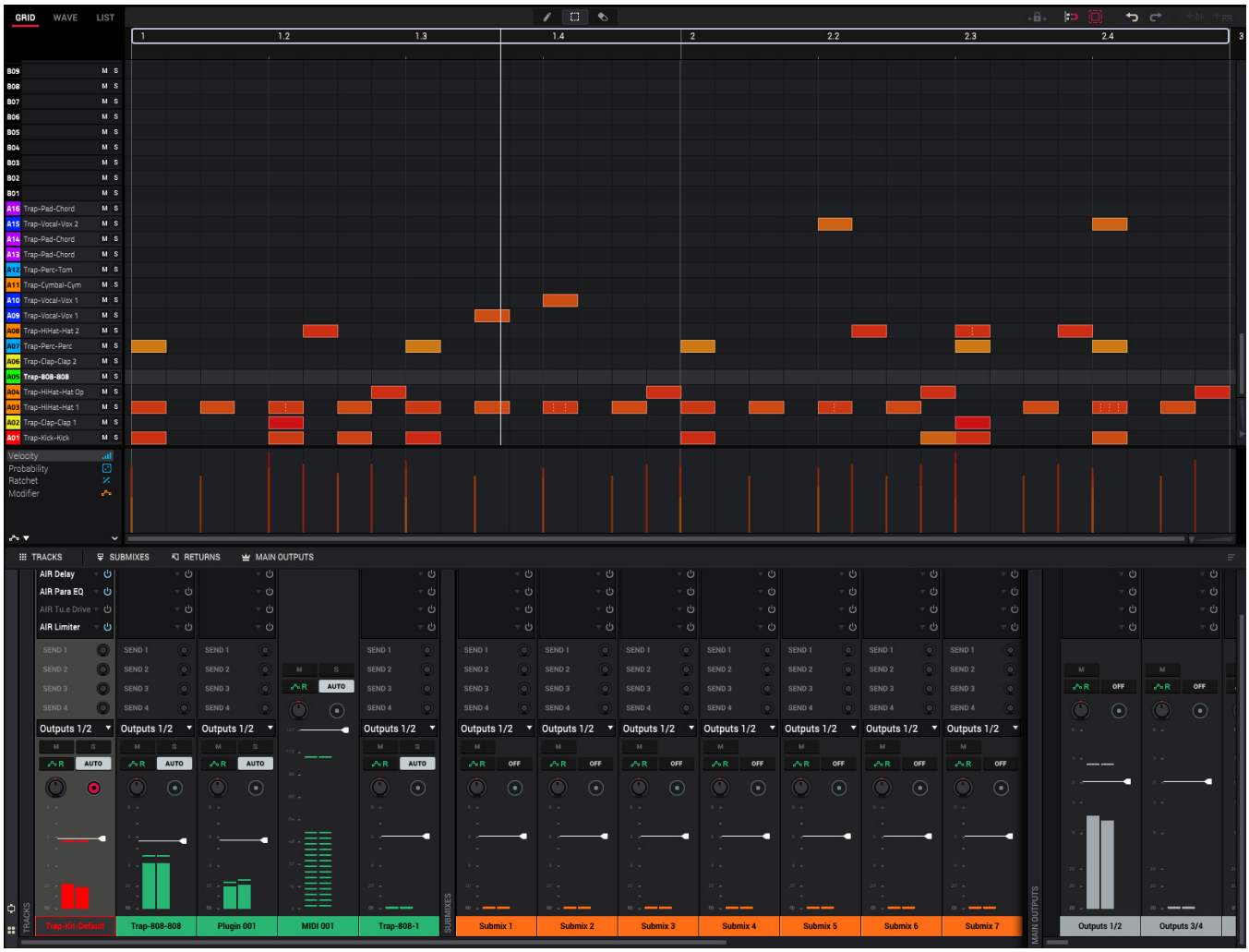
Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the track. The **green** level meter next to the slider shows the track's current volume level in **dB**.

Channel Mixer

In the Channel Mixer, you can set levels, stereo panning, and other settings for your tracks, returns, submixes, and mains.

To open the Channel Mixer, do any of the following:

- Click the **sliders icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Channel Mixer**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Channel Mixer**.



The Channel Mixer works like an audio mixer for the currently selected sequence with various settings for each track, submix, return, or main output.

The upper half of the window displays the Grid Editor. See ***General Features*** > ***Grid Editor*** to learn more about this.

The lower half of the window displays channel strips representing the tracks, submixes, returns, and main outputs used in the current sequence. Each type has a slightly different appearance.

Tip: If you want to see channel strips for both the Channel Mixer and the Pad Mixer at the same time, use the **Mixer Window**, which provides an overview of the channel strips in both modes on one screen. See ***General Features*** > ***Mixer Window*** to learn about this.

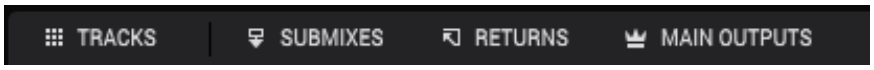
Select a sequence to view its channel strips.

Use the buttons in the lower-left corner of this area to show or hide different parts of the channel strips:

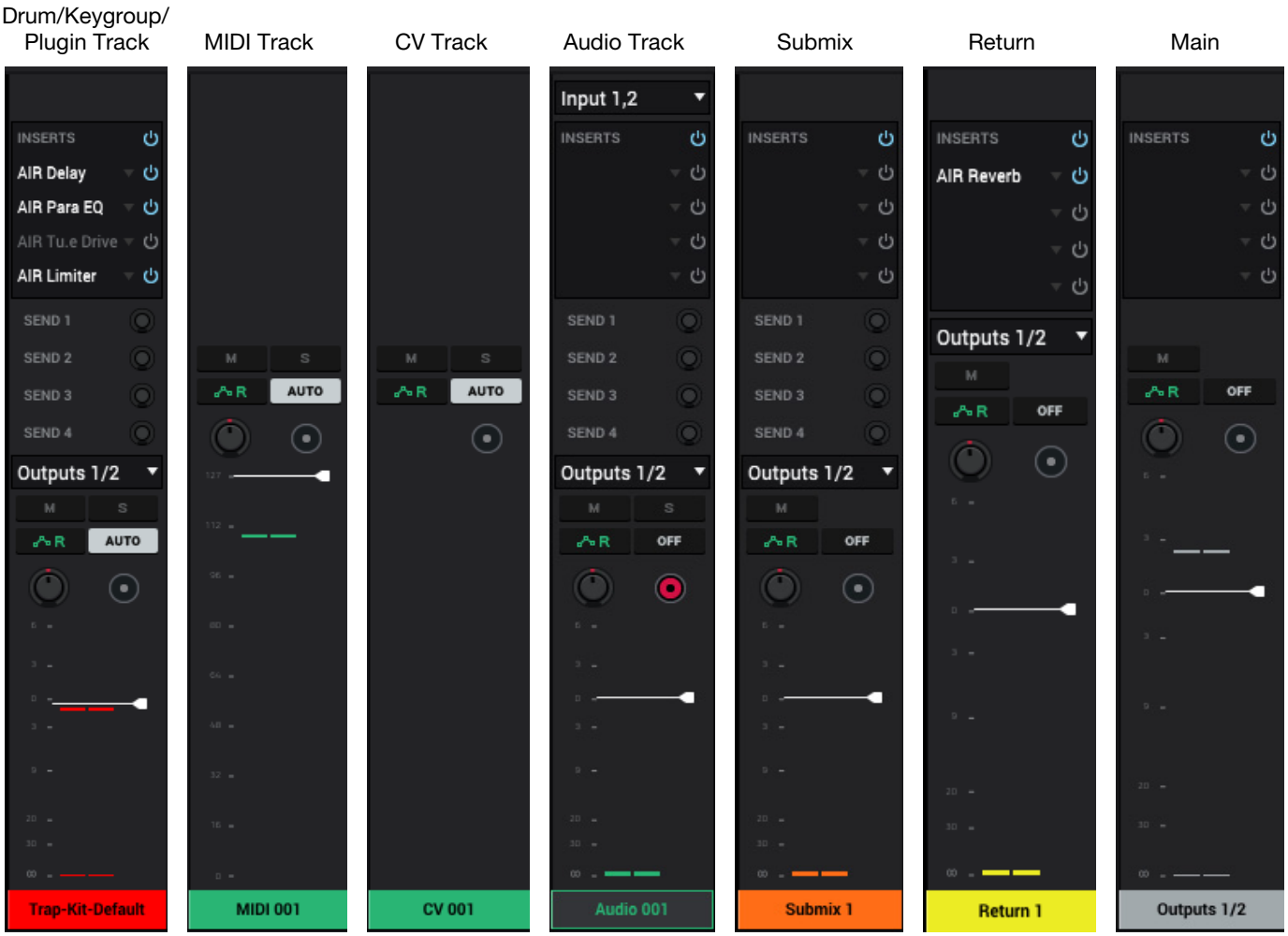
Click the **box icon** to show or hide the **Inserts** slots on the channel strips.

Click the **four-circles icon** to show or hide the **Send** knobs on the channel strips.

Click the **menu icon** (≡) in the upper-right corner of the channel strips, and select or deselect **Show Unused Tracks** and/or **Show Unused Tracks**.



Use the selectors between the upper and lower halves of the window to filter which channel strips are shown or hidden. When an option is selected, those channel strips will be shown. When it is deselected, its channel strips will be hidden.



Drum/Keygroup/Plugin Track Channel Strip

A **Drum / Keygroup / Plugin track channel strip** has these controls:

The name of the track is at the bottom of the channel strip.

The **Inserts** slots show any enabled or disabled effects for that program. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about program insert effects.

Click and drag the **Send** knobs, which control the send levels for the program. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about program send/return effects.

The menu below the **Send** knobs shows where the program is routed, which you can set to a submix (**Submix** > **Sub 1–8**), a pair of main outputs (**Stereo Output** > **Out 1,2–31,32**), or a single main output (**Mono Output** > **Out 1–32**).

Click **M** or **S** to mute or solo the track (respectively).

Click the **track automation button** to toggle between two possible states of track automation:

When set to **Read** (**R**), the track will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (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.)

To disable or enable track automation, hold **Shift** and click the **track automation button**. When **off**, the track will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks and audio tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your MIDI track will be monitored. Clicking it will cycle through its three states:

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.

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.

To change the panning or level of the track, adjust the **pan knob** or **level slider**. The **level meter** behind the slider shows the track's current velocity level (**0–127**).

Click the **Record Arm** (⊙) button to record-enable the track. When you begin recording, the MIDI date will be recorded to this track.

Tip: You can select record-enable multiple tracks by pressing and holding **Ctrl** (Windows) or **⌘** (macOS) while clicking the **Arm** button to each track (in the upper half of the window or in the channel strips). You can also adjust the **Rec Arm** behavior in the ***Preferences*** menu.

MIDI Track Channel Strip

A **MIDI track channel strip** has these controls:

The name of the track is at the bottom of the channel strip.

Click **M** or **S** to mute or solo the track (respectively).

Click the **track automation button** to toggle between two possible states of track automation:

When set to **Read** (**R**), the track will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (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.)

To disable or enable track automation, hold **Shift** and click the **track automation button**. When **off**, the track will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks and audio tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your MIDI track will be monitored. Clicking it will cycle through its three states:

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.

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.

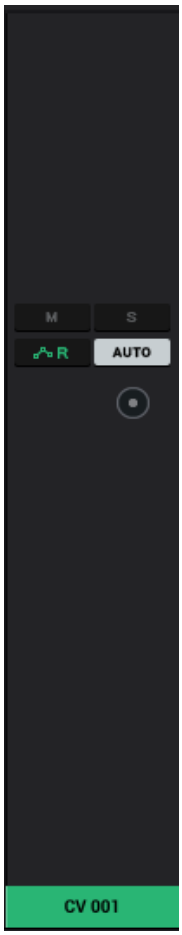
To change the panning or level of the track, adjust the **pan knob** or **level slider**. The **level meter** behind the slider shows the track's current velocity level (**0**–**127**).

Click the **Record Arm** (⊙) button to record-enable the track. When you begin recording, the MIDI date will be recorded to this track.

Tip: You can select record-enable multiple tracks by pressing and holding **Ctrl** (Windows) or **⌘** (macOS) while clicking the **Arm** button to each track (in the upper half of the window or in the channel strips). You can also adjust the **Rec Arm** behavior in the ***Preferences*** menu.

CV Track Channel Strip

A **CV track channel strip** has these controls:



The name of the track is at the bottom of the channel strip.

Click **M** or **S** to mute or solo the track (respectively).

Click the **track automation button** to toggle between two possible states of track automation:

When set to **Read** (**R**), the track will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (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.)

To disable or enable track automation, hold **Shift** and click the **track automation button**. When **off**, the track will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks and audio tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your MIDI track will be monitored. Clicking it will cycle through its three states:

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.

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.

Click the **Record Arm** (⦿) button to record-enable the track. When you begin recording, the MIDI date will be recorded to this track.

Tip: You can select record-enable multiple tracks by pressing and holding **Ctrl** (Windows) or **⌘** (macOS) while clicking the **Arm** button to each track (in the upper half of the window or in the channel strips). You can also adjust the **Rec Arm** behavior in the ***Preferences*** menu.

Audio Track Channel Strip

An **audio track channel strip** has these controls:

The name of the track is at the bottom of the channel strip.

The first menu defines the input source of the external audio signal, which you can set to a pair of inputs (**Stereo** > **Input 1,2–31,32**) or a single input (**Mono** > **Input 1–32**).

The **Inserts** slots show any enabled or disabled effects for that track. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about audio track insert effects.

Click and drag the **Send** knobs, which control the send levels for the track. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about audio track send/return effects.

The menu below the **Send** knobs shows where the track is routed, which you can set to a submix (**Submix** > **Sub 1–8**), a pair of main outputs (**Stereo Output** > **Out 1,2–31,32**), or a single main output (**Mono Output** > **Out 1–32**).

Click **M** or **S** to mute or solo the track (respectively).

Click the **audio track automation button** to toggle between two possible states of audio track automation:

When set to **Read** (**R**), the audio track will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)

When set to **Write** (**W**), the audio 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.)

To disable or enable audio track automation, hold **Shift** and press the **audio track automation button**. When **off**, the audio track will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your audio track will be monitored. Clicking it will cycle through its four states:

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.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the track. The **level meter** behind the slider shows the track's current volume level in **dB**.

Click the **Record Arm** (⊙) button to record-enable the track. When you begin audio recording, the audio signal will be recorded to this track.

Tip: You can select record-enable multiple tracks by pressing and holding **Ctrl** (Windows) or **⌘** (macOS) while clicking the **Arm** button to each track (in the upper half of the window or in the channel strips). You can also adjust the **Rec Arm** behavior in the ***Preferences*** menu.

Submix Channel Strip

A **submix channel strip** has these controls:

The name/number of the submix is at the bottom of the channel strip.

The **Inserts** slots show any enabled or disabled effects for that submix. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about submix insert effects.

Click and drag the **Send** knobs, which control the send levels for the submix. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about submix send/return effects.

The menu below the **Send** knobs shows where the submix is routed, which you can set to a pair of main outputs (**Stereo Output** > **Out 1,2–31,32**), or a single main output (**Mono Output** > **Out 1–32**).

Click **M** to mute the submix.

Click the **track automation button** to toggle between two possible states of submix automation:

When set to **Read** (**R**), the submix will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)

When set to **Write** (**W**), the submix 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.)

To disable or enable submix automation, hold **Shift** and press the **submix automation button**. When **off**, the submix will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your submix will be monitored. Clicking it will cycle through its four states:

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.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the submix. The **level meter** next to the slider shows the submix's current volume level in **dB**.

Return Channel Strip

A **return channel strip** has these controls:

The number of the return is at the bottom of the channel strip.

The **Inserts** slots show any enabled or disabled effects for that return. See ***General Features*** > ***Effects*** > ***Send/Return Effects*** to learn more about send/return effects.

The menu above the **M** button shows where the return is routed, which you can set to a pair of main outputs (**Stereo Output** > **Out 1,2–31,32**) or a single main output (**Mono Output** > **Out 1–32**).

Click **M** to mute the return.

Click the **track automation button** to toggle between two possible states of return automation:

When set to **Read** (**R**), the return will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)

When set to **Write** (**W**), the return 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.)

To disable or enable return automation, hold **Shift** and press the **return automation button**. When **off**, the return will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your return will be monitored. Clicking it will cycle through its four states:

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.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the return. The **green** level meter next to the slider shows the return's current volume level in **dB**.

Main Outputs Strip

A **main output channel strip** has these controls:

The number of the pair of main outputs is at the bottom of the channel strip.

The **Inserts** slots show any enabled or disabled effects for that pair of outputs. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about main output insert effects.

Click **M** to mute the outputs.

Click the **track automation button** to toggle between two possible states of main output automation:

When set to **Read** (**R**), the main output will read automation data but will not record any additional automation over it. You can still manually edit and enter automation. (Think of this as a protective feature to prevent accidental changes to your automation while recording.)

When set to **Write** (**W**), the main output 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.)

To disable or enable main output automation, hold **Shift** and press the **main output automation button**. When **off**, the main output will ignore automation data. If you have already recorded or entered automation, clicking 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 clicking 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.

See ***General Features*** > ***Automation*** to learn about recording and editing automation.

Tip: You can quickly set all tracks to the same automation by clicking the global automation button in the upper-right corner of the window.

Click the **Monitor** button to set how your main output will be monitored. Clicking it will cycle through its four states:

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.

Adjust the **pan knob** or **level slider** to change the panning or level (respectively) of the outputs. The **green** level meter next to the slider shows the outputs' current volume level in **dB**.

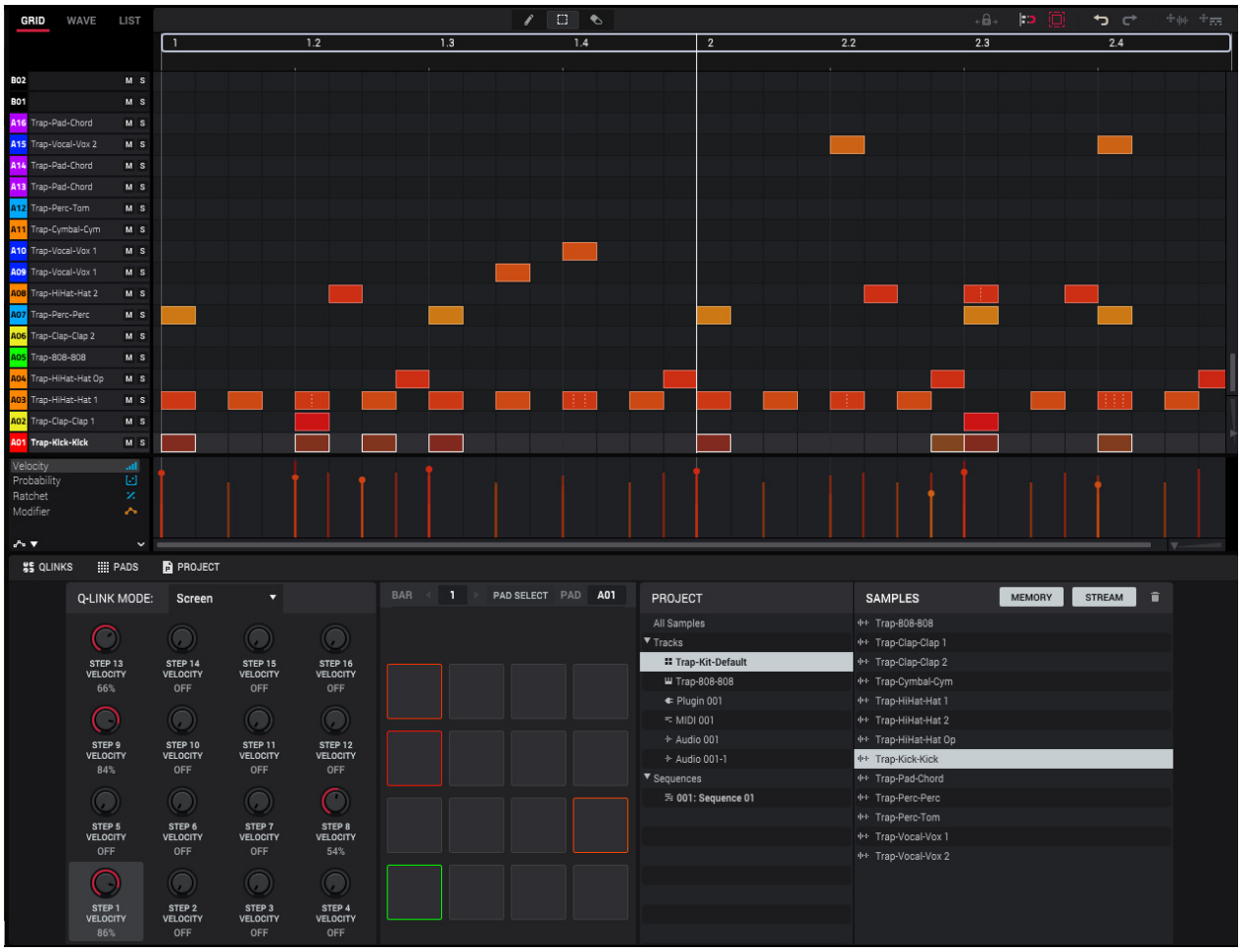
Step Sequencer

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.

To enter the Step Sequencer, do any of the following:

- Click the **step-bars icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Step Sequencer**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Step Sequencer**.



To enter or delete steps in a sequence:

1. Use the **Pad** field in the **Pads** area to select the pad whose steps you want to enter or delete. The current pad number is shown in the upper-left corner.
2. Use the **Bar** field in the **Pads** area 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. Click the **pads**. 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 A** and **B** to view all the steps within a bar.

The upper half of the window can display the Grid Editor, Wave Editor, or List Editor. Click the **Grid**, **Wave**, or **List** tab to enter the corresponding editor. See ***General Features*** > ***Editors*** to learn more about each one.

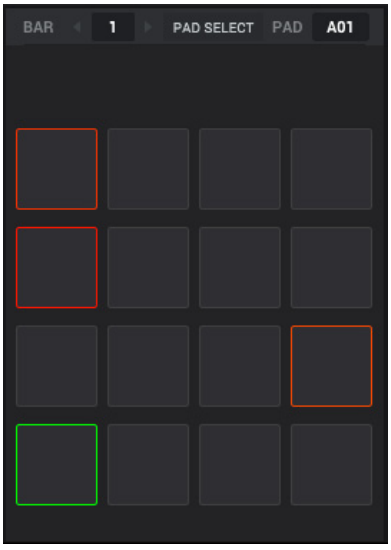
The lower half of the window can display the **Q-Links** panel, **Pads** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** to learn more about the ***Project*** panel. The ***Q-Links*** and ***Pads*** panels are described below.

Q-Links

The **Q-Links** panel (when **Q-Link Mode** is set to **Screen**) lets you to adjust the velocity of each step. The number of each step will be shown under the corresponding Q-Link knob.

Use each **Q-Link knob** to adjust the velocity (**1**–**127**) of its corresponding step. Setting a value of **0** (**Off**) will delete the note event from that step. Changing a velocity from **0** (**Off**) to a value of **1** or greater will enter a note event at that step.

Pads



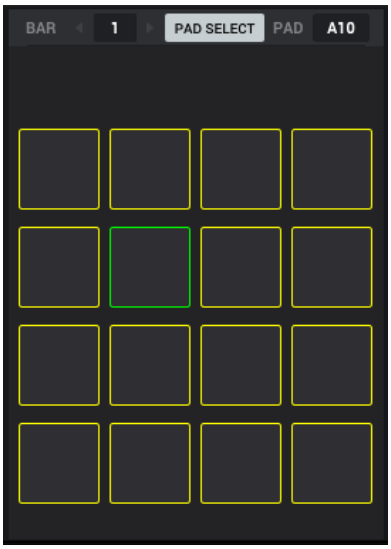
The **Pads** panel lets you quickly create and delete note events as “steps” by using the pads of your MPC hardware or MPC3 software, similar to step recording with drum machines in the 1980s.

Each pad represents a step in the bar. Keep in mind that the total number of steps depends on the Time Correct setting. For time divisions larger than 16 (e.g., 32), the bar’s steps will be represented by multiple pad banks. In that case, use the **Pad** field to view all the steps within a bar.

Use the **Bar** field or the arrows (◀ or ▶) on either side of it to select the bar whose steps you want to edit.

Use the **Pad Select** button to select the pad whose steps you want to edit. Click **Pad Select** to activate it, click a **pad** (the currently selected pad is lit **green**), and then click **Pad Select** again to deactivate it.

Alternatively, click and drag the **Pad** field up or down. You can also click a **pad** in the **Grid Editor**.



Click an **unlit pad** to enter a note event at that step. The pad will light up with a color corresponding to its velocity.

Click a **lit pad** to delete the note event from that step. The pad will be unlit.

The **green pad** indicates the current step (playhead position) in the sequence.

Sampler

The Sampler lets you record audio samples to use in your projects.

Important: To record any audio, you need to connect an audio source to your MPC hardware or to your computer's audio interface.

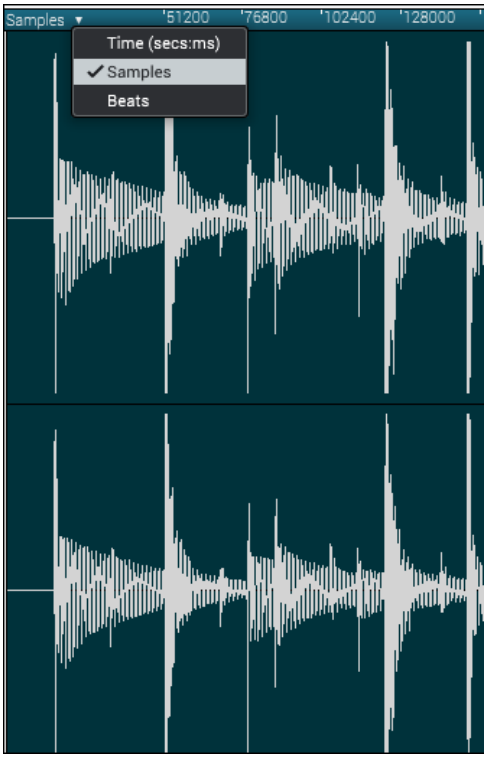
To open the Sampler, do any of the following:

- Click the **vinyl icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Sampler**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Sampler**.

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 MPC hardware or external audio interface.
3. On your MPC hardware or external audio interface, turn the **Rec Vol** 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. Click the **Arm** button to record-arm the Sampler.

The upper half of the window shows the waveform. Unlike other times the waveform is shown here, you cannot edit the waveform in this part of the window; you must use the Wave Editor in Main Mode or Sample Edit Mode instead.



The timeline provides a reference for the length of the sample. Click the **down arrow** (▼) or right-click anywhere on the timeline to select the increments it will use: **Time** (**secs**:**ms**), **Samples**, or **Beats**.

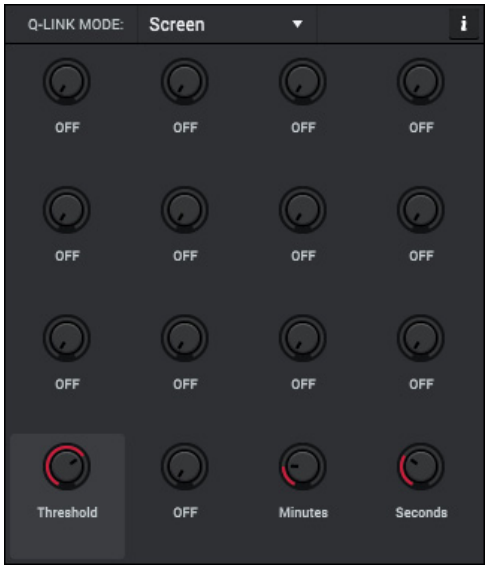
Scroll left or right on the waveform to move through it. Use the sliders in the lower-right corner or click the timeline and drag down or up to zoom in or out.

The lower half of the window can display the ***Q-Links*** panel, ***Pads*** panel, ***Sampler*** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel.

The **Pads** panel varies based on the four different recording methods: ***Sample***, ***Slice***, ***Pad Tap***, or ***Pad Hold***, all described in this chapter.

Q-Links

In the **Q-Links** panel:



Use **Q-Link Knob 1** to adjust the threshold. This is the same as adjusting the **threshold slider** in the **Sampler** panel.

Use **Q-Link Knobs 3** and **4** to define the maximum sampling time. This is the same as adjusting the **Max Length** field as shown on your MPC hardware. You can record up to 19 minutes and 59 seconds (**19**:**59**) per sample. We recommend setting these to values that roughly match your estimated recording duration.

Pads

The **Pads** panel has three different appearances, depending on the recording method:

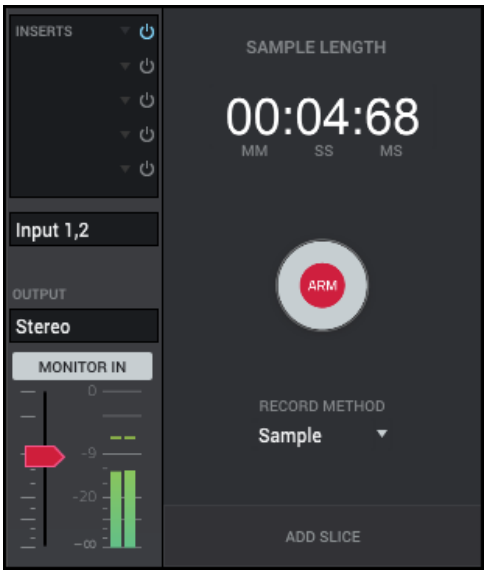
Sample Method | Slice Method | Pad Tap & Pad Hold Methods

While using the **Sample** Method, the **Pads** panel shows information for each pad, depending on the currently selected track. This is identical to how the Pads panel appears in Main Mode (see the ***Main Mode*** chapter to learn more).

While using the **Slice** Method, the pads correspond to slices of the currently recorded sample. See ***Recording Methods*** > ***Slice*** to learn how to use the Pads panel with this method.

While using the **Pad Tap** or **Pad Hold** Methods, clicking a pad or clicking and holding a pad immediately starts or continues recording directly to that pad. See ***Recording Methods*** > ***Pad Tap*** or ***Pad Hold*** to learn how to use the Pads panel with those methods.

Sampler



The **Input Source** menu in the upper-left corner of the **Sampler** panel defines whether you are going to record an external audio signal (**Stereo** or **Mono**) or an internal signal from within the MPC3 software (**Resample L**, **Resample R**, or **Resample L+R**).

Resampling does not require an audio connection because the source is within the MPC3 software 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 or by simply playing a sequence.

The **Inserts** slots show any enabled or disabled effects for the Sampler. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about insert 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.

Click the **Mono**/**Stereo** menu to choose whether your recorded samples will be monaural (**Mono**) or binaural (**Stereo**).

Click the **Monitor** button to set how the Sampler will be monitored:

When set to **In**, 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 Knob 1**.

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.

For reference, the **Sample Length** counter shows you the length of your sample during the recording procedure.

Click **Arm** to record-arm the Sampler. The button will then change to **Record**.

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**.
- Click the **Record** button under the **Sample Length** counter.

Click the **Record Method** menu to select the recording method you want to use: ***Sample***, ***Slice***, ***Pad Tap***, or ***Pad Hold***, all described in the following section.

Click **Add Slice** as the sample records to insert a slice marker in a sample while recording. Each time you press it, a slice marker will be placed at that location.

Recording Methods

Sample

Using this method, you can insert slice markers directly in your sample as you record it.

Slice markers divide the sample into multiple regions called **slices**, which you can adjust in the Chop Mode of Sample Edit Mode (see ***Sample Edit Mode*** > ***Chop Mode*** for more information). This is useful when working with a long sample with different sounds throughout (e.g., a drum loop or a long melodic or harmonic passage).

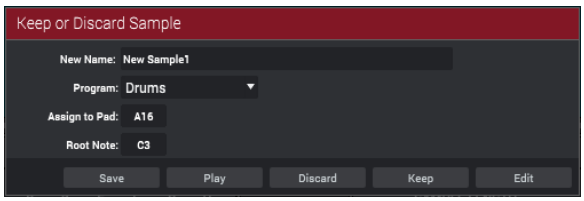
To start recording, do one of the following:

- Start performing so that the incoming audio level exceeds the level of the **threshold slider**.
- Click the **Record** button under the **Sample Length** counter.

To insert a slice marker in a sample while recording, click **Add Slice** as the sample records. Each time you press it, a slice marker will be placed at that location.

To stop recording, click the **Stop** button under the **Sample Length** counter.

After you stop your recording, the **Keep or Discard Sample** window will appear.



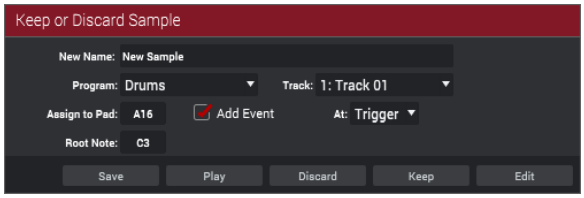
Use the **New Name** field to name the new sample. Otherwise, the process will add a consecutive number after the sample name.

Click the **Track** menu to assign the new sample to a drum track. Select **<none>** if you want to save it to the project without assigning it to a track.

Use the **Assign to Pad** field to assign the sample to a pad in the selected drum 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** menu 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.

Use the **Track** field to set which track will contain the new event.

To save the recording, click **Save**.

To play the recording, click **Play**.

To discard the recording and close the window, click **Discard**.

To confirm your selections, click **Keep**.

To edit the recording in Sample Edit Mode (recommended)**,** click **Edit**.

Slice

Using this method, the pads correspond to slices of the currently recorded sample. Slice markers divide the sample into multiple regions called **slices**, which you can adjust in the Chop Mode of Sample Edit Mode (see ***Sample Edit Mode*** > ***Chop Mode*** for more information). This is useful when working with a long sample with different sounds throughout (e.g., a drum loop or a long melodic or harmonic passage).

To start recording, do one of the following:

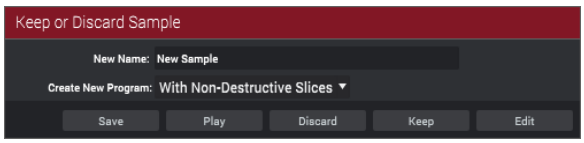
- Start performing so that the incoming audio level exceeds the level of the **threshold slider**.
- Click the **Record** button under the **Sample Length** counter.

To insert a slice marker in a sample while recording, press any **pad** as the sample records. Each time you press it, a slice marker will be placed at that location.

The number of the pad that flashes **red** is the number of the slice marker that will be inserted next. The numbers of the pads that are lit **yellow** are the numbers of the slice markers that are already inserted.

When you are done recording, you can name the sample and create a new track using the slices.

To stop recording, click the **Stop** button under the **Sample Length** counter.



After you stop your recording, the **Keep or Discard Sample** window will appear.

Use the **New Name** field to name the new sample. Otherwise, the process will add a consecutive number after the sample name.

Click the **Create New Track** menu to assign the new sample to a new track:

Off: No track will be created. The slices will still be added to your project's sample pool.

With Non-Destructive Slices: In the new track, each pad's **Slice** setting will be set to the corresponding slice number. This is identical to how you can assign samples in Sample Edit Mode (as described in ***Sample Edit Mode*** > ***Chop Mode***).

With Pad Parameters: In the new track, each 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. This is identical to how you can assign samples in Sample Edit Mode (as described in ***Sample Edit Mode*** > ***Chop Mode***).

To save the recording, click **Save**.

To play the recording, click **Play**.

To discard the recording and return to the Sampler, click **Discard**.

To confirm your selections, click **Keep**.

To edit the recording in Sample Edit Mode (recommended)**,** click **Edit**.

Pad Tap

Important: This mode works for **drum tracks only**; you must select a drum track before using this mode. Otherwise, this feature will not do anything, even though it may appear to work.

With this method, clicking or pressing a pad immediately starts or continues recording directly to that pad (make sure you are using the desired track before you start recording). Pads with assigned samples are lit **bright yellow**. Pads without samples are lit **dim yellow**.

To start recording to a pad, click or press it. Recording will start immediately, and the pad will flash **red**. If you click or press a new pad, the recording will stop on the previous pad, which will turn **green**, and start on the new pad, which will flash **red**.

Note: If you start recording by clicking **Record** under the **Sample Length** counter—or if the volume exceeds the level of the **threshold slider**—the sample will record to your project's sample pool, not to a pad.

To stop recording to a pad, click or press the currently recording **pad**, which is flashing **red**. The sample will continue recording. You can start recording on another **pad** at any time.

To stop all recording, click the **Stop** button under the **Sample Length** counter.

When you are done recording, each pad that you have clicked or pressed during recording:

- will have its **Slice** setting set to **Pad**;
- will have its **Pad Start** and **Pad End** set to the slice's start point and end point values; and
- will have its **Loop Position** set to the slice's start point but with **Pad Loop** deactivated.

This is identical to how you can assign samples in Sample Edit Mode (described in ***Sample Edit Mode*** > ***Chop Mode***).

Tip: We recommend editing your recorded sample in **Sample Edit Mode** (see ***Sample Edit Mode*** for more information).

Pad Hold

Important: This mode works for **drum tracks only**; you must select a drum track before using this mode. Otherwise, this feature will not do anything, even though it may appear to work.

With this method, clicking or pressing and holding a pad immediately starts or continues recording directly to that pad (make sure you are using the desired track before you start recording). Pads with assigned samples are lit **bright yellow**. Pads without samples are lit **dim yellow**.

To start recording to a pad, click and hold it, or press and hold it. Recording will start immediately, and the pad will light **red**.

Note: If you start recording by clicking **Record** under the **Sample Length** counter—or if the volume exceeds the level of the **threshold slider**—the sample will record to your project's sample pool, not to a pad.

To stop recording, release the **pad**. The pad will light **green**, and the sample will continue recording. You can start recording on another **pad** at any time.

To stop all recording, click the **Stop** button under the **Sample Length** counter.

When you are done recording, each pad that you have clicked or pressed during recording:

- will have its **Slice** setting set to **Pad**;
- will have its **Pad Start** and **Pad End** set to the slice's start point and end point values; and
- will have its **Loop Position** set to the slice's start point but with **Pad Loop** deactivated.

This is identical to how you can assign samples in Sample Edit Mode (described in ***Sample Edit Mode*** > ***Chop Mode***).

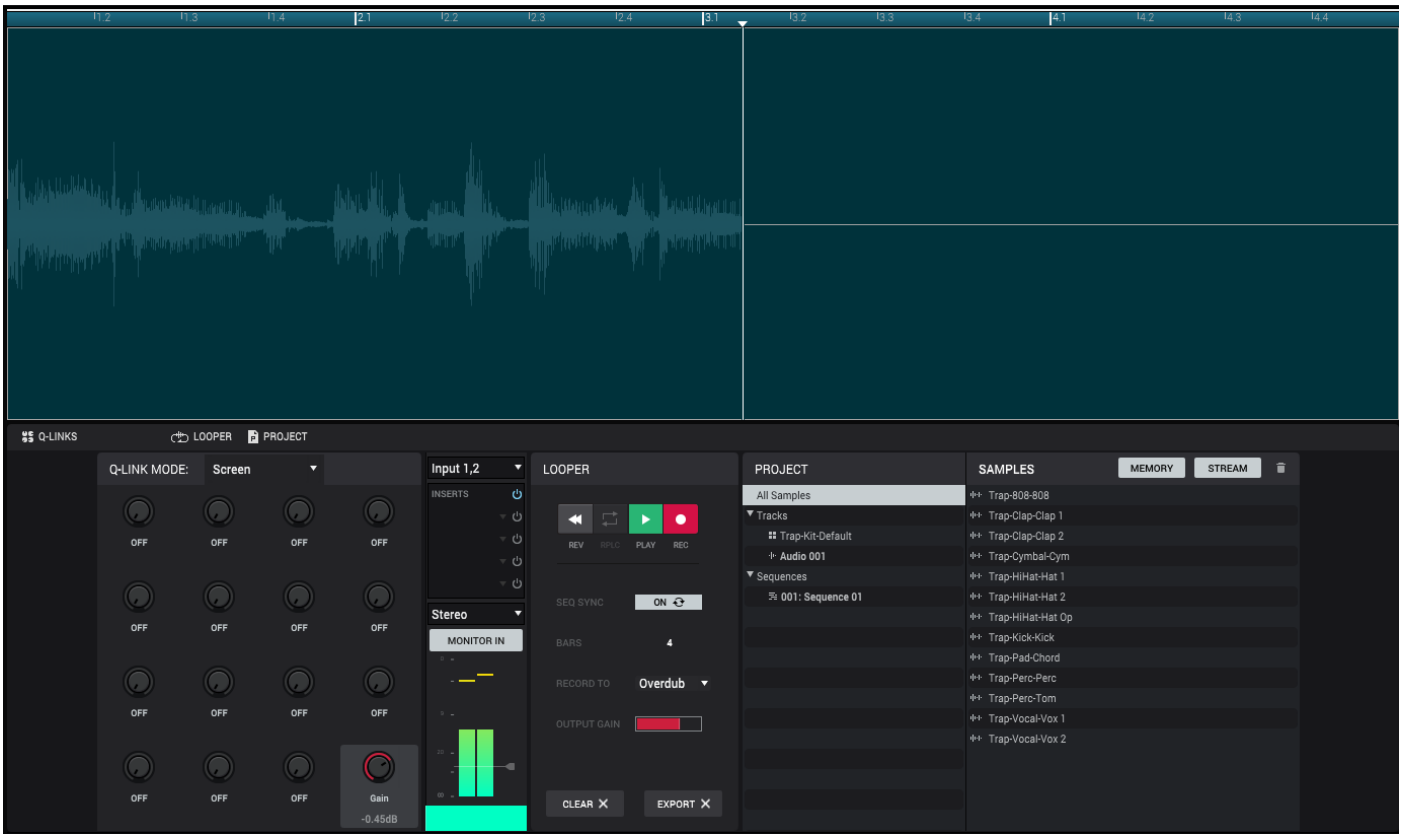
Tip: We recommend editing your recorded sample in **Sample Edit Mode** (see ***Sample Edit Mode*** for more information).

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.

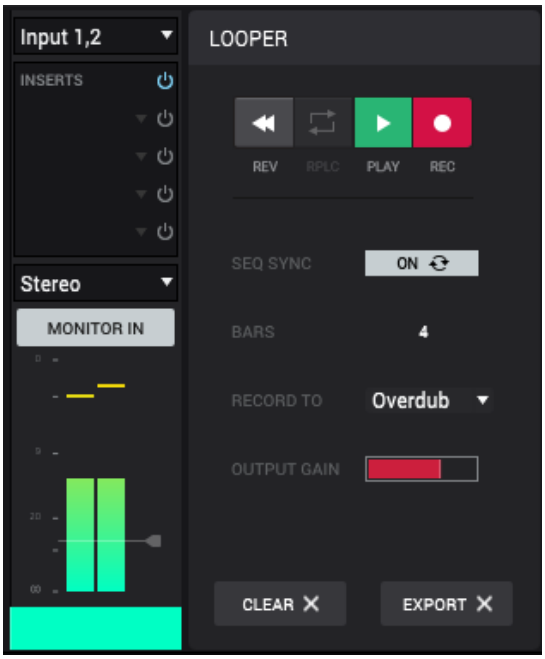
To open the Looper, do any of the following:

- Click the **loop-and-waveform icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Looper**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Looper**.



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:



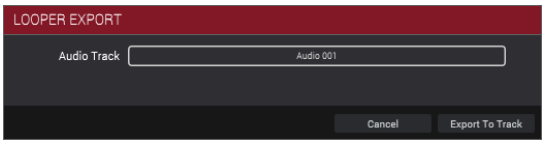
1. Make sure to reduce the volume levels of your audio source and speakers/headphones/monitors before you make any connections to avoid "pops" or feedback.
2. Connect a synthesizer, audio player, etc. to the input/inputs of your MPC hardware or external audio interface.
3. On your MPC hardware or external audio interface, turn the **Rec Vol** knob to set the input level while playing your audio source. You should now see the level in the meter in the **Looper** panel. Make sure it does not exceed the maximum level (the meter should not be "peaking" constantly).
4. In the **Looper** panel, set the recording controls as desired (described later in this chapter).
5. Click the **Record To** menu in the **Looper** panel and select **Overdub**.
6. Click the **Ovr** (⊕) button in the **Looper** panel to record-arm the Looper.
7. Play your audio source. The Looper will start recording immediately when the input level reaches the threshold value. Alternatively, click **Play** (▶) in the **Looper** panel to manually start recording.

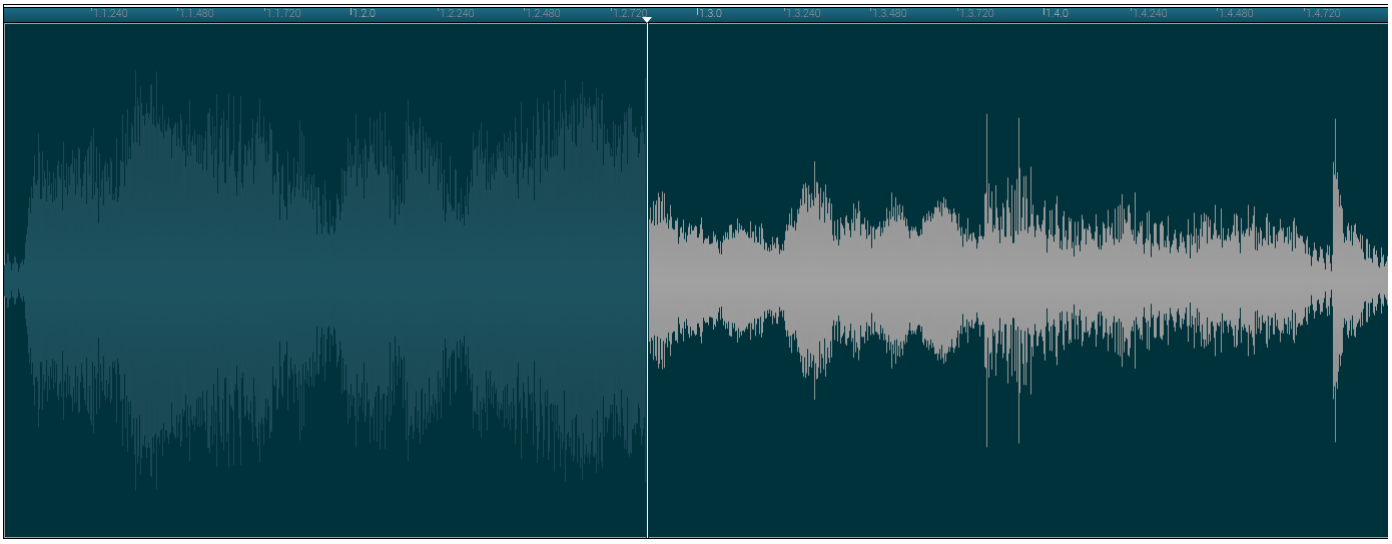
   Each time the Looper repeats, its contents are being overdubbed—a new layer of audio will be added each time you let the Looper repeat as it records.

   Tip: You can record a loop while playing a sequence in the background for reference.
8. **To stop recording**, click **Play** (▶) in the **Looper** panel.

   To export your loop as a new audio track, click **Export** to open the **Looper Export** window.

   To clear the contents of the Looper, click **Clear**.





The upper half of the window shows the real-time waveform of the Looper's audio. Unlike other times the waveform is shown here, you cannot edit the waveform in this part of the window.

The audio playhead indicates the Looper's current playback and/or recording position.

The timeline provides a reference for the length of the sample as **bars.beats.ticks**.

The lower half of the window can display the **Q-Links** panel, **Pads** panel, **Looper** panel, and **Project** panel. Click the corresponding selector to show or hide each one.

The **Pads** panel shows information for each pad, depending on the currently selected track. This is identical to how the Pads panel appears in Main Mode (see the ***Main Mode*** chapter to learn more).

See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel.

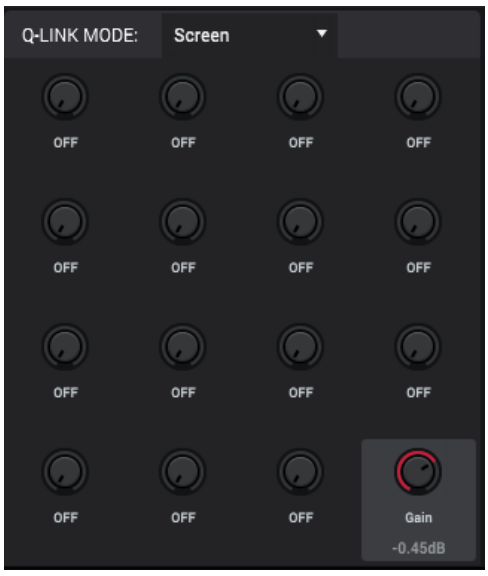
The ***Q-Links*** panel and ***Looper*** panel are described in the following sections.

Q-Links

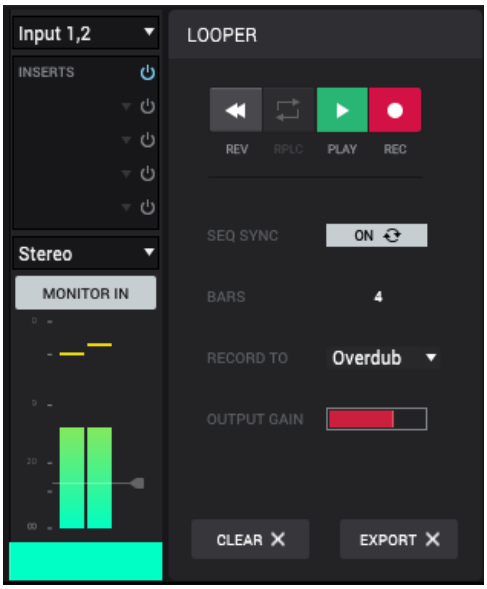
In the **Q-Links** panel:

Use **Q-Link Knob 1** to adjust the threshold. This is the same as adjusting the **threshold slider** in the **Looper** panel.

Use **Q-Link Knob 4** to adjust the Looper's output gain level. This is the same as adjusting the **Output Gain** slider in the **Looper** panel.



Looper



The **Input Source** menu in the upper-left corner of the **Looper** panel defines whether you are going to record an external audio signal (**Stereo** or **Mono**) or an internal signal from within the MPC3 software (**Resample L**, **Resample R**, or **Resample L+R**).

Resampling does not require an audio connection because the source is within the MPC3 software 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 or by simply playing a sequence.

The **Inserts** slots show any enabled or disabled effects for the Looper. See ***General Features*** > ***Effects*** > ***Insert Effects*** to learn more about insert 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.

Click the **Mono**/**Stereo** menu to choose whether your recorded loop will be monaural (**Mono**) or binaural (**Stereo**).

Click the **Monitor** button to set how the Looper will be monitored:

When set to **In**, 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 Knob 1**.

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.

Click **Rplc** or **Ovr** (⊕) to record-arm the Looper. The **Play** (▶) and **Ovr** (⊕) buttons will then flash.

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**.
- Click the **Play** (▶) button in the **Looper** panel.

Click **Rev** (⏮) to reverse playback and recording of the Looper.

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.

Click **Sync** button to sync or un-sync the looper with sequence playback. When **on**, the Looper will stay in step with your current sequence. When you play or record into the Looper, it will wait until the sequence starts playing Bar 1 to start.

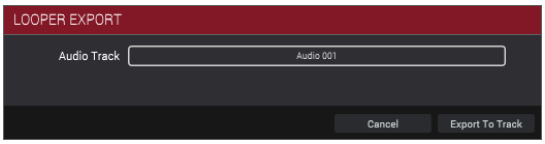
Use the **Record To** selector to determine the loop recording behavior:

Play: Before recording, you must first click the **Play** (▶) button on the window, which will start playing the Looper.

Overdub: Before recording, you must first click **Rplc** or **Ovr** (⊕) to record-arm the Looper.

Click **Clear ✕** to erase the loop immediately.

Click **Export ✕** to open the **Export Loop as a Sample** window.



To export to an audio track:

1. Select an existing audio track or create a new one.
2. Click the **Export ✕**button.
3. The current audio track will automatically be selected. Click **Export to Track** to export the looper audio to the track, or click **Cancel** to return.

Use the **Output Gain** slider to adjust the Looper's output gain level. This is the same as adjusting **Q-Link Knob 4** in the **Q-Links** panel.

Below are step-by-step instructions for using the Looper's functions.

To record with the Looper:

Important:

To record without erasing any audio you've already recorded in the loop, use the ⊕/**Ovr** button.

To overwrite the audio you've already recorded, use the **Rplc** button.

If **Record To** is set to **Play**:

To start recording, click the **Rplc** or **Ovr** (⊕) button as the loop is playing. The Looper will start recording immediately.

To stop recording, click the **Rplc** or **Ovr** (⊕) button. The Looper will stop recording but continue playing.

To stop playback and recording, click the **Play** (▶) button.

If **Record To** is set to **Overdub**:

To start recording, click the **Play** (▶) button on the window.

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 click the **Play** (▶) or **Play Start** (▶|) button in the toolbar to start playing a sequence; recording will start when the sequence starts on Bar 1.

To stop recording, click the **Ovr** (⊕) button. The Looper will stop recording but continue playing.

To stop playback and recording, click the **Play** (▶) button, or press stop to stop sequence playback.

To play or stop the loop (without recording), click the **Play** (▶) button on the window.

To reverse loop playback, click the **Rev** (◀◀) button. If **Seq Sync** is **on**, playback will reverse once the Looper's playhead reaches the end of the loop. If **Seq Sync** is **off**, playback will reverse immediately.

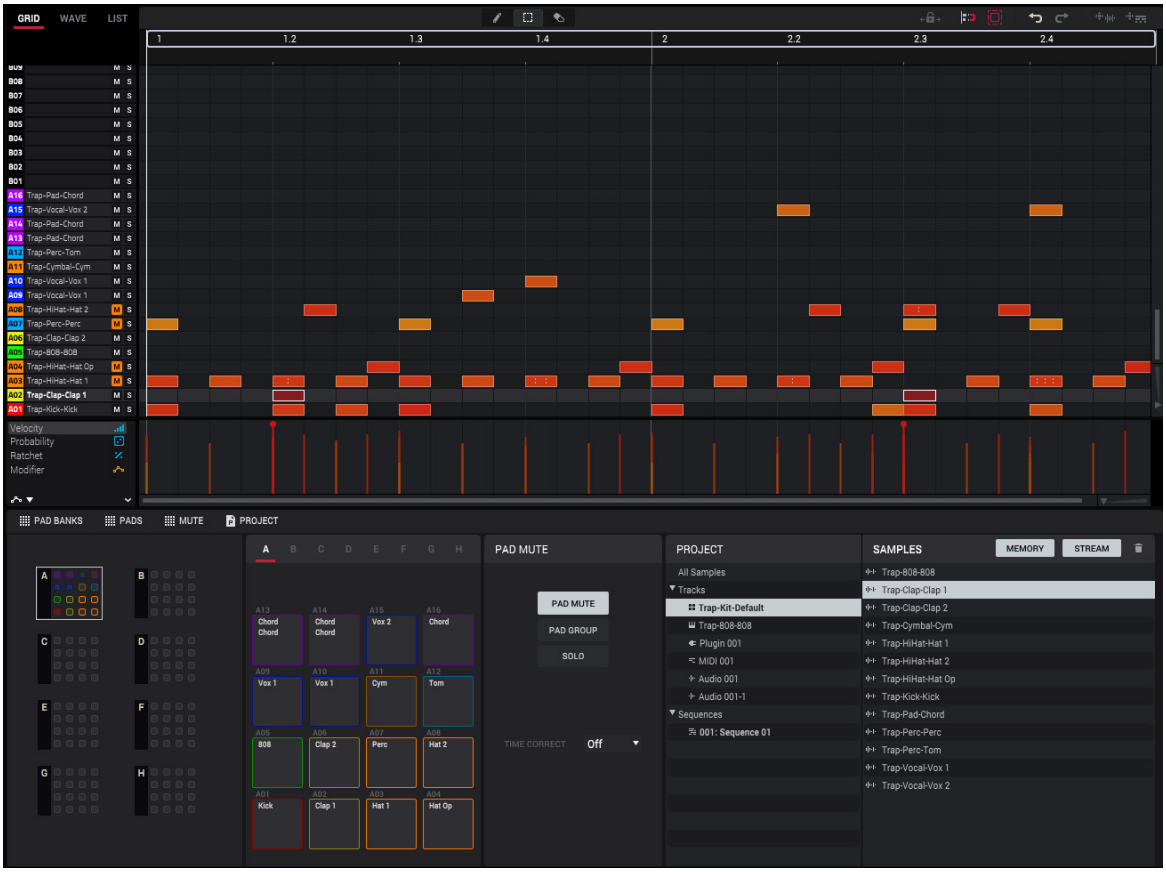
To erase the loop immediately, click **Clear ✕**.

Pad Mute Mode

Pad Mute Mode lets you easily mute pads within a track or set mute groups for each pad within a track.

To enter Pad Mute Mode, do any of the following:

- Click the **square-and-X icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Pad Mute**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Pad Mute**.



While **Pad Mute** is selected in the **Mute** panel, you can mute or unmute individual sounds (on a single track) in real time by pressing the pads. This is useful if you want to hear a track without a particular sound or if you want to isolate specific sounds or combinations of sounds.

While **Solo** is selected in the **Mute** panel, you can solo or unsolo individual sounds (on a single track) in real time by pressing the pads. This is also useful if you want to isolate particular sounds, and can be more effective if you have a large number of pads to mute.

Tip: These functions are similar to muting or soloing pads one at a time in the grid, but more convenient.

The **Pad Group** feature in the **Mute** panel extends the concept of pad mutes: you can mute or unmute multiple pads (on a single track) by pressing one pad that you have assigned to a group. This is useful if you want to hear a track without a particular group of sounds or if you want to isolate specific sounds in various combinations. You can create up to 16 different groups.

Tip: This function is similar to muting pads one at a time in the grid but more convenient.

The upper half of the window can display the Grid Editor, Wave Editor, or List Editor. Click the **Grid**, **Wave**, or **List** tab to enter the corresponding editor. See ***General Features*** > ***Editors*** to learn more about each one.

The lower half of the window can display the **Pad Banks** panel, **Pads** panel, **Mute** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel. The other panels are described below: ***Pad Banks***, ***Pads***, and ***Mute***.

Pad Banks

The **Pad Banks** panel is an overview of all pads in all eight pad banks.

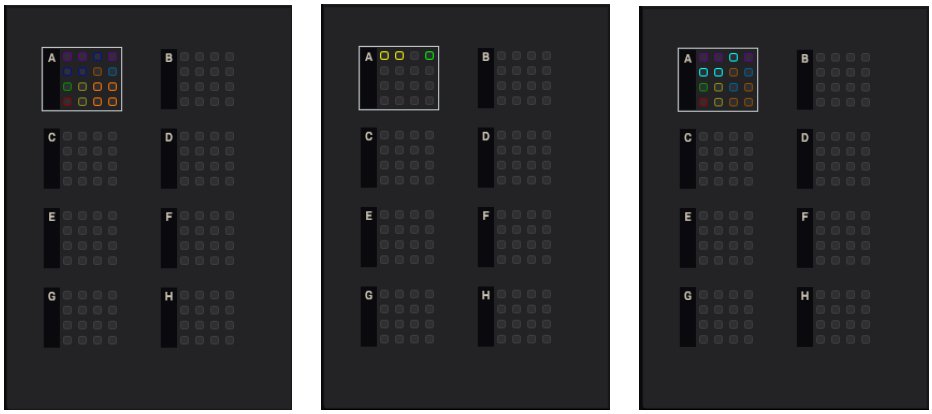
Click a **pad bank** to select it. That bank will also appear in the Grid Editor and the Pads panel.

While using the **Pad Mute** function (selected in the **Pad Mute** panel), click a **pad** to mute or unmute it. Muted pads are **orange**. The colors of other pads will not change when using this feature.

While using the **Pad Group** function (selected in the **Pad Mute** panel), click a **pad** to select it to assign to a group. The selected pad is **green**. Pads that belong to the same group flash **yellow**.

While using the **Solo** function (selected in the **Pad Mute** panel), click a **pad** to solo or unsolo it. Soloed pads are **blue**. The colors of other pads will not change when using this feature.

Pad Mute Pad Group Solo



Pads

The **Pads** panel represents the pads in the current bank. If a pad is assigned to a group, the group number will appear at the bottom of the pad.

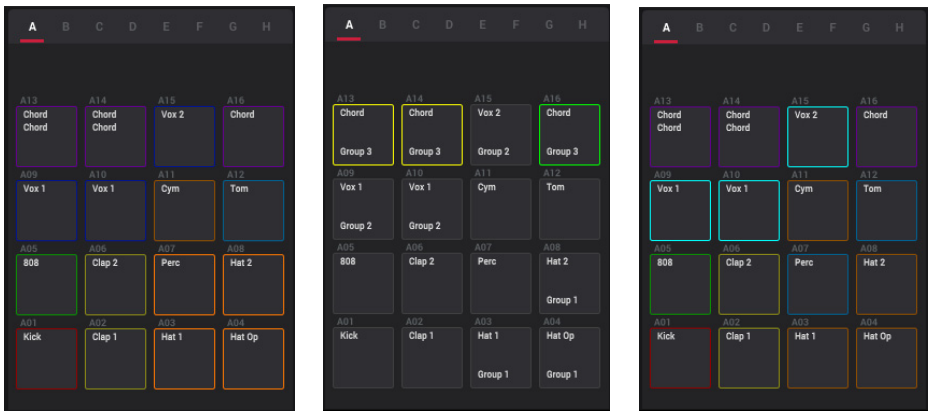
Click a **pad bank** to select it. That bank will also appear in the Grid Editor and the Pad Banks panel.

While using the **Pad Mute** function (selected in the **Pad Mute** panel), click a **pad** to mute or unmute it. Muted pads are **orange**. The colors of other pads will not change when using this feature.

While using the **Pad Group** function (selected in the **Pad Mute** panel), click a **pad** to select it to assign to a group. The selected pad is **green**. Pads that belong to the same group flash **yellow**.

While using the **Solo** function (selected in the **Pad Mute** panel), click a **pad** to solo or unsolo it. Soloed pads are **blue**. The colors of other pads will not change when using this feature.

Pad Mute Pad Group Solo



Pad Mute

The **Pad Mute** panel lets you configure how pad mutes work.

Click **Pad Mute** to use Pad Mute Mode normally. Clicking or pressing a **pad** will mute or unmute it (and any pads in the same group).

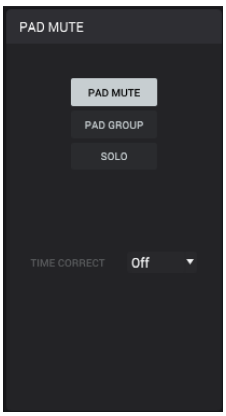
Click **Pad Group** to assign pads to groups. Clicking or pressing a **pad** will select it.

Click **Solo** to use Pad Mute Mode to solo pads. Clicking or pressing a **pad** will solo or unsolo it (and any pads in the same group).

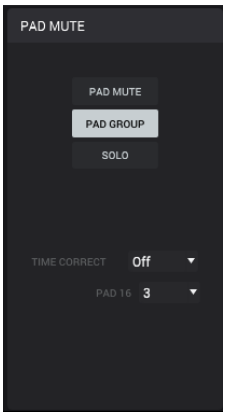
Click the **Time Correct** menu to select a time division to quantize pad mutes in this mode. For example, while set to **1 Bar**, your mutes will always align with the beginning of the measure immediately after you press the pad. Select **Off** to deactivate this feature.

While **Pad Group** is selected, click the **Pad** menu to assign the currently selected pad to a group. Select **Group Off** to un-assign the pad from any group.

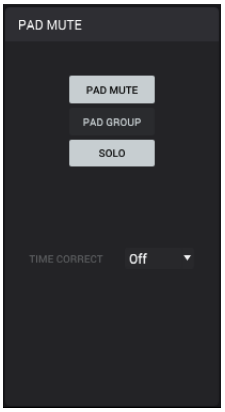
Pad Mute



Pad Group



Solo



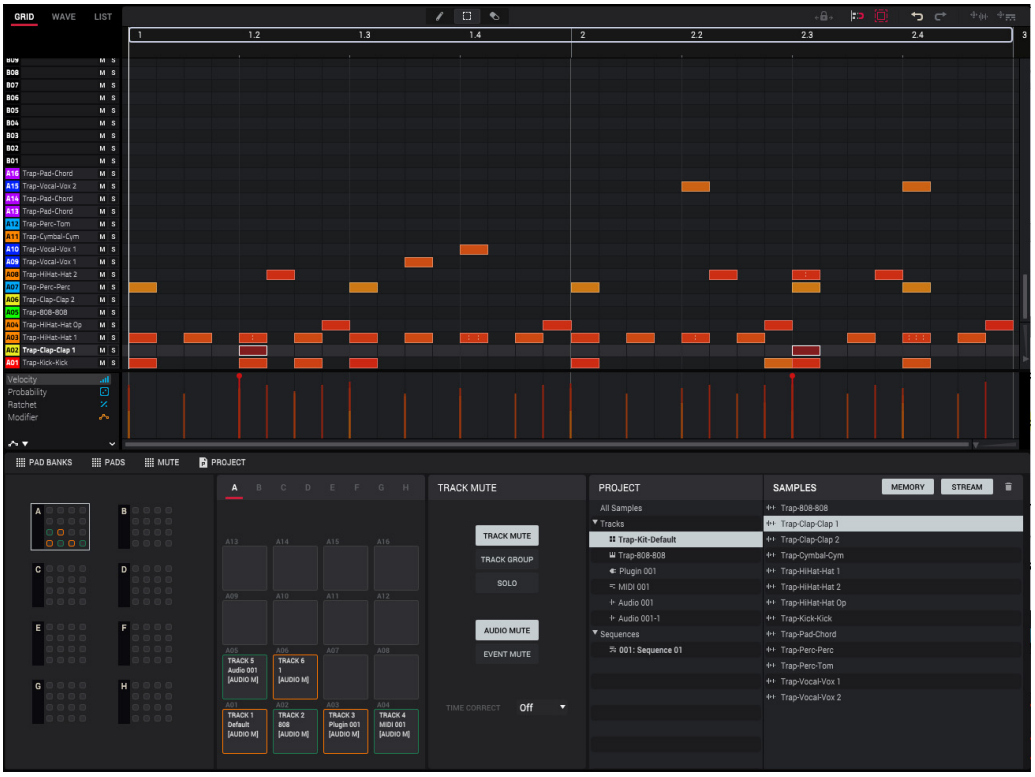
Track Mute Mode

Track Mute Mode lets you easily mute MIDI tracks within a sequence or set track groups, enabling you to mute multiple tracks at once.

Important: Track Mute Mode applies to MIDI tracks only—not audio tracks.

To enter Track Mute Mode, do any of the following:

- Click the **bars-and-X icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Track Mute**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Track Mute**.



While **Track Mute** is selected in the **Mute** panel, you can mute, unmute, or solo MIDI tracks (in a single sequence) in real time by pressing the pads. This is useful if you want to hear a sequence without a particular MIDI track (e.g., muting your keyboard track to focus on the bass) or if you want to isolate specific sounds or combinations of sounds that are separated by track.

While **Solo** is selected in the **Mute** panel, you can solo or unsolo individual sounds (on a single track) in real time by pressing the pads. This is also useful if you want to isolate particular sounds, and can be more effective if you have a large number of pads to mute.

Tip: This function is similar to, but more convenient than, muting MIDI tracks one at a time in the Track View.

The **Track Group** feature in the **Mute** panel extends the concept of track mutes: you can mute or unmute multiple MIDI tracks (in a single sequence) by pressing one pad that you have assigned to a track group. This is useful if you want to hear a track without a particular group of sounds or if you want to isolate specific sounds in various combinations. You can create up to 16 different track groups.

The upper half of the window displays the Grid Editor. See ***General Features*** > ***Editors*** > ***Grid Editor*** to learn more about this.

The lower half of the window can display the **Pad Banks** panel, **Pads** panel, **Mute** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel. The other panels are described below: ***Pad Banks***, ***Pads***, and ***Mute***.

Pad Banks

The **Pad Banks** panel is an overview of all pads in all eight pad banks. Each pad represents a MIDI track in the current sequence.

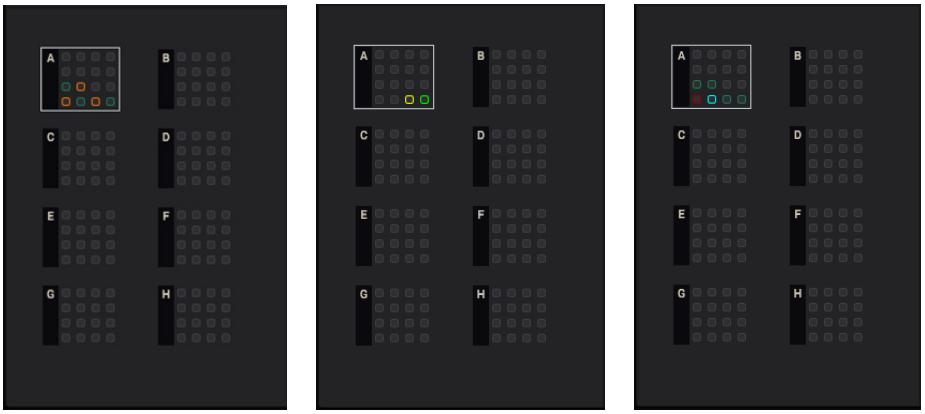
Click a **pad bank** to select it.

While using the **Track Mute** function (selected in the **Track Mute** panel), click a **pad** to mute or unmute its track. Pads with muted tracks are **red**. Pads with unmuted tracks are **yellow**.

While using the **Track Group** function (selected in the **Track Mute** panel), click a **pad** to select its track to assign to a group. The pad with the selected track is **green**. Pads with tracks that belong to the same group flash **yellow**.

While using the **Solo** function (selected in the **Track Mute** panel), click a **pad** to solo its track (muting all others). The pad with the soloed track is **green**. The colors of other pads will not change when using this feature.

Track Mute Track Group Solo



Pads

The **Pads** panel represents 16 MIDI tracks (per bank) in the current sequence. If a pad's track is assigned to a group, the group number will appear at the bottom of the pad.

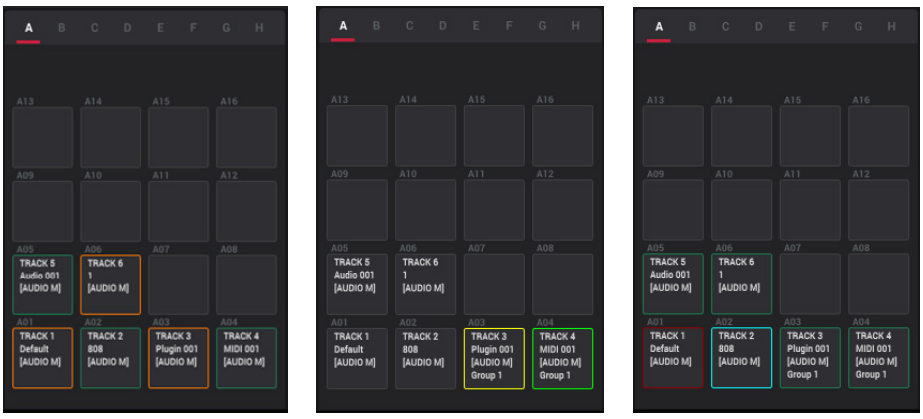
Click a **pad bank** to select it.

While using the **Track Mute** function (selected in the **Track Mute** panel), click a **pad** to mute or unmute its track. Pads with muted tracks are **red**. Pads with unmuted tracks are **yellow**.

While using the **Track Group** function (selected in the **Track Mute** panel), click a **pad** to select its track to assign to a group. The pad with the selected track is **green**. Pads with tracks that belong to the same group flash **yellow**.

While using the **Solo** function (selected in the **Track Mute** panel), click a **pad** to solo its track (muting all others). The pad with the soloed track is **green**. The colors of other pads will not change when using this feature.

Track Mute Track Group Solo



Mute

The **Mute** panel lets you configure how track mutes work.

Click **Track Mute** to use Track Mute Mode normally. Clicking or pressing a **pad** will mute or unmute its track (and any tracks in the same group).

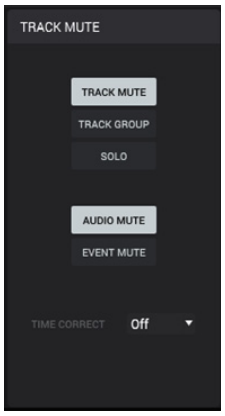
Click **Track Group** to assign tracks to groups. Clicking or pressing a **pad** will select its track.

Click the **Time Correct** menu to select a time division to quantize track mutes in this mode. For example, while set to **1 Bar**, your mutes will always align with the beginning of the measure immediately after you press the pad. Select **Off** to deactivate this feature.

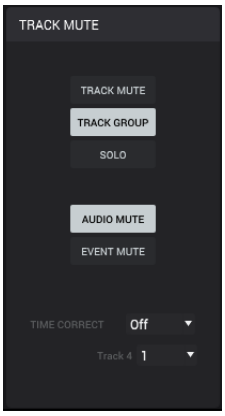
While **Track Group** is selected, click the **Track** menu to assign the track of the currently selected pad to a group. Select **Group Off** to un-assign the track from any group.

Click **Solo** to enable or disable the solo feature. When enabled, click a **pad** to solo its track (muting all others).

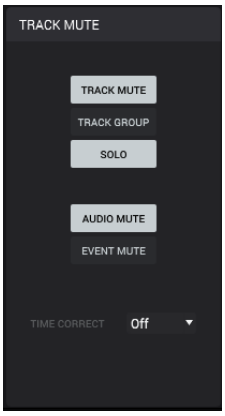
Track Mute



Track Group



Solo

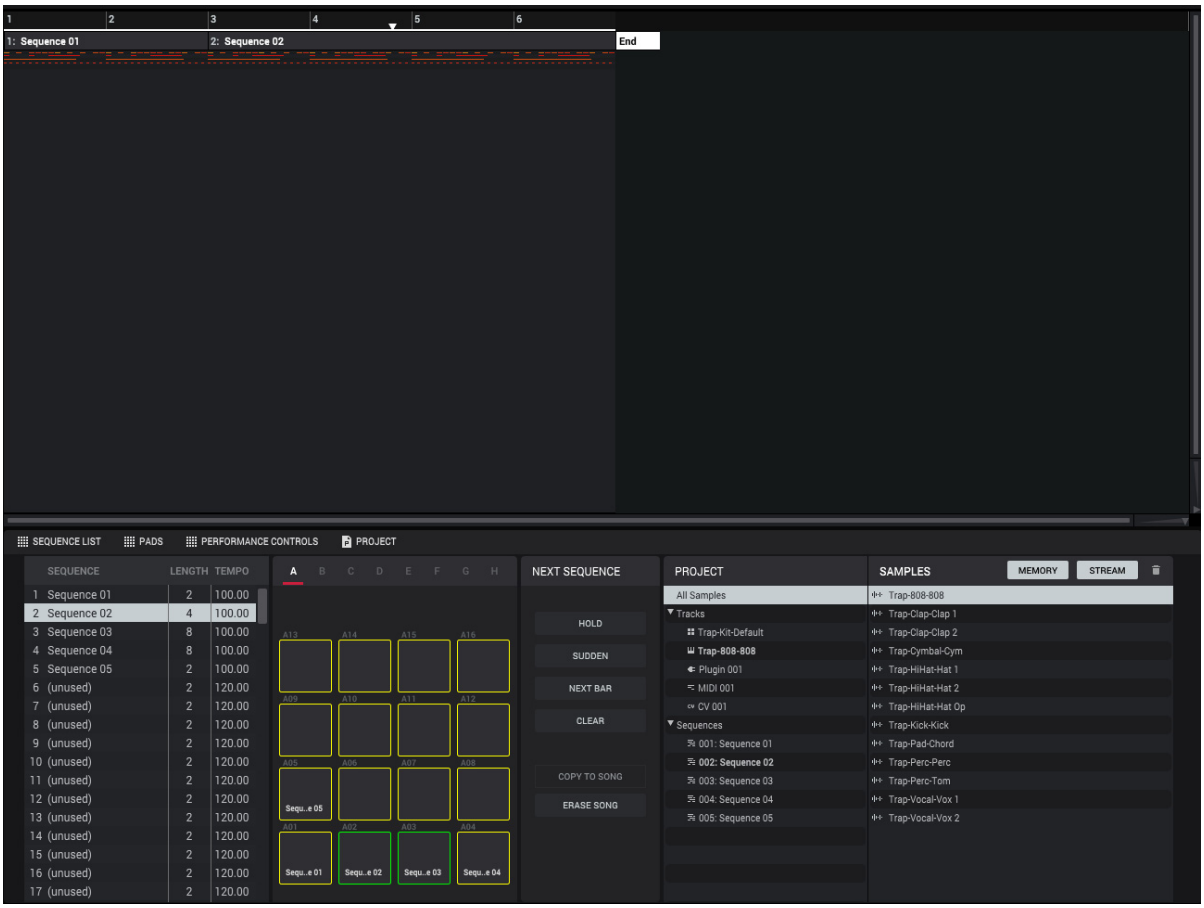


Next Sequence Mode

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 any of the following:

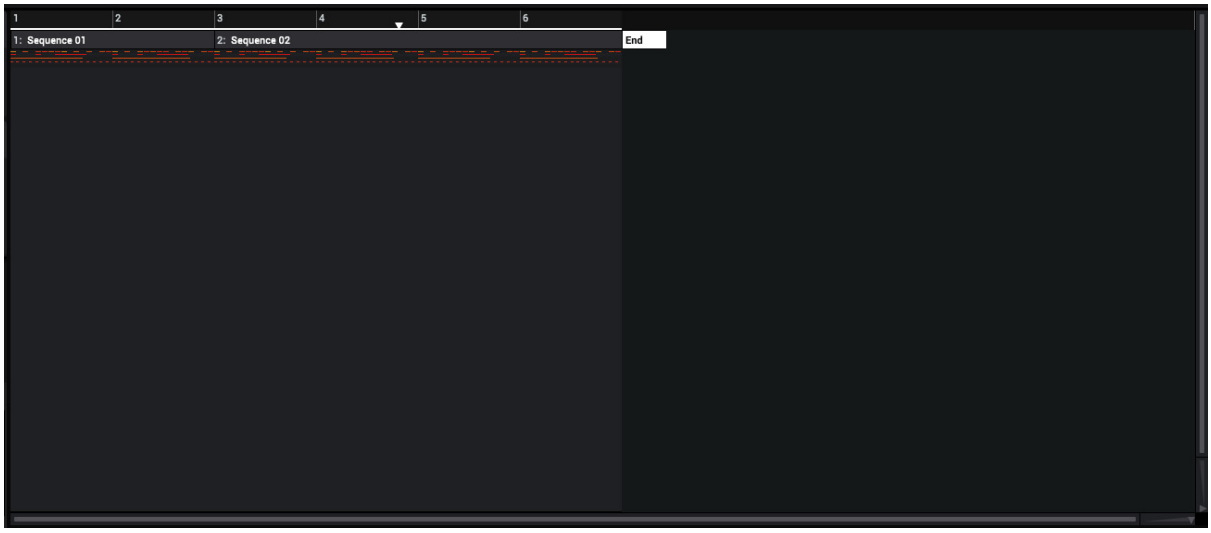
- Click the **double-arrow icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Next Sequence**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Next Sequence**.



In Next Sequence Mode, every pad is assigned to a sequence, starting from **Pad A01** with **Sequence 1** and ascending from there.

In this mode, you can start playback and choose the sequence that plays next in real time. Select the next sequence by pressing its corresponding pad. Alternatively, allow the current sequence to repeat indefinitely. When you stop playback, you can copy the order of sequences you played into Song Mode to export it.

The upper half of the window displays a representation of the sequences that have played.



The dark blue timeline at the top indicates the number of bars that have elapsed with each sequence. The **white arrow** (▼) is the audio playhead, indicating the current playback position.

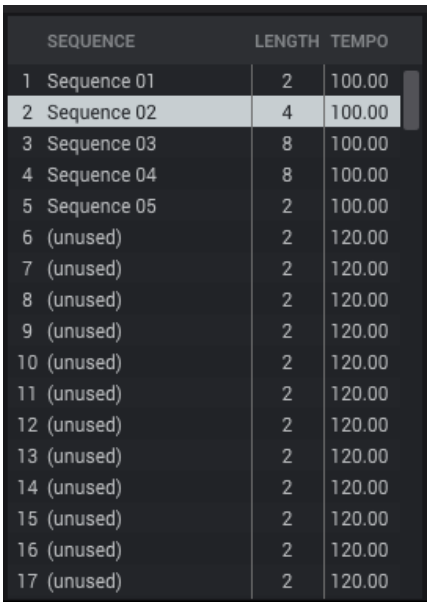
Each block represents a sequence with miniature track note events. The sequence number and name is at the top of each block. A repeat symbol (**‖:**) next to the sequence name indicates it is a repeat of the previous sequence.

Use the sliders in the lower-right corner of this area (along each axis) to zoom in or zoom out.

The lower half of the window can display the **Sequence List** panel, **Pads** panel, **Performance Controls** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel. The other panels are described below: ***Sequence List***, ***Pads***, and ***Performance Controls***.

Sequence List

The **Sequence List** panel shows a list of all available sequences in your project as well as their length and tempo. The currently selected one is highlighted. Select one by clicking or pressing its corresponding pad.



The **Sequence** column shows the name of the sequence.

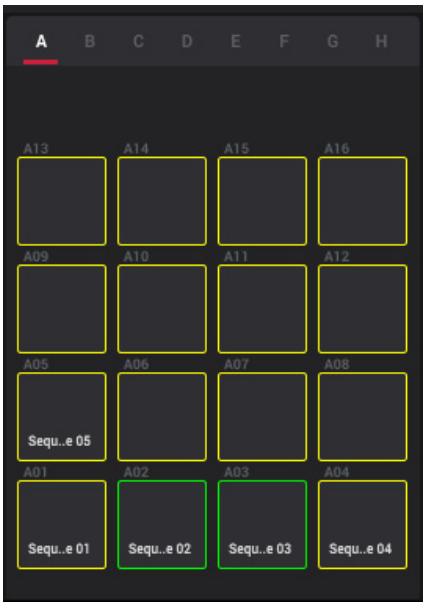
The **Length** column indicates the length of the sequence in **bars**.

The **Tempo** column indicates the tempo of the sequence in **BPM**. Keep in mind that each sequence will not play back at this tempo if the **Seq**/**Gbl** button in the **toolbar** is set to **Gbl**; if it is set to **Seq**, then each sequence follows its own tempo during playback.

Note: **To set the BPM of a sequence**, select that sequence and then use (**A**) the **BPM** field in its **Sequence** section of the **Inspector** or (**B**) the **BPM** field in the **toolbar** (when set to **Seq** instead of **Gbl**).

Pads

The **Pads** panel represents 16 sequences (per bank). Each pad shows the length of the sequence in **bars**, the tempo of the sequence in **BPM**, and the name of the sequence. (Keep in mind that each sequence will not play back at this tempo if the **Seq**/**Gbl** button in the **toolbar** is set to **Gbl**; if it is set to **Seq**, then each sequence follows its own tempo during playback.)



Click a **pad bank** to select it.

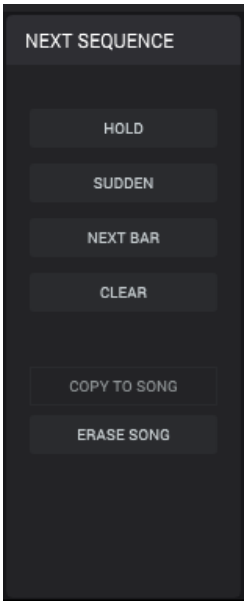
Click a **pad** to select its sequence.

If a sequence on another pad will play next, that pad will flash **green**.

During playback, the pad with the currently playing sequence will be lit **green**.

Performance Controls

The **Performance Controls** panel shows the available commands you can execute.



As a sequence plays, you can use the buttons in this panel to change how playback works in this mode:

Click **Hold** to repeat the current sequence indefinitely and temporarily ignore pad presses. Click it again to return to normal operation. This is useful if you want to select other pads without selecting them to play next.

Click **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.

Click **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.

If there is a sequence that will play next, you can click **Clear** to cancel it. The current sequence will continue playing or you can click or press a **pad** to select another sequence to play next. This option is available only if that sequence is not playing at that moment.

While playback is stopped, you can use these buttons:

While playback is stopped, click **Copy to Song** to copy the sequence playlist to a song (see the ***Song Mode*** chapter to learn about creating a song).

While playback is stopped, click **Erase Song** to clear all sequences from the upper half of the window.

Song Mode

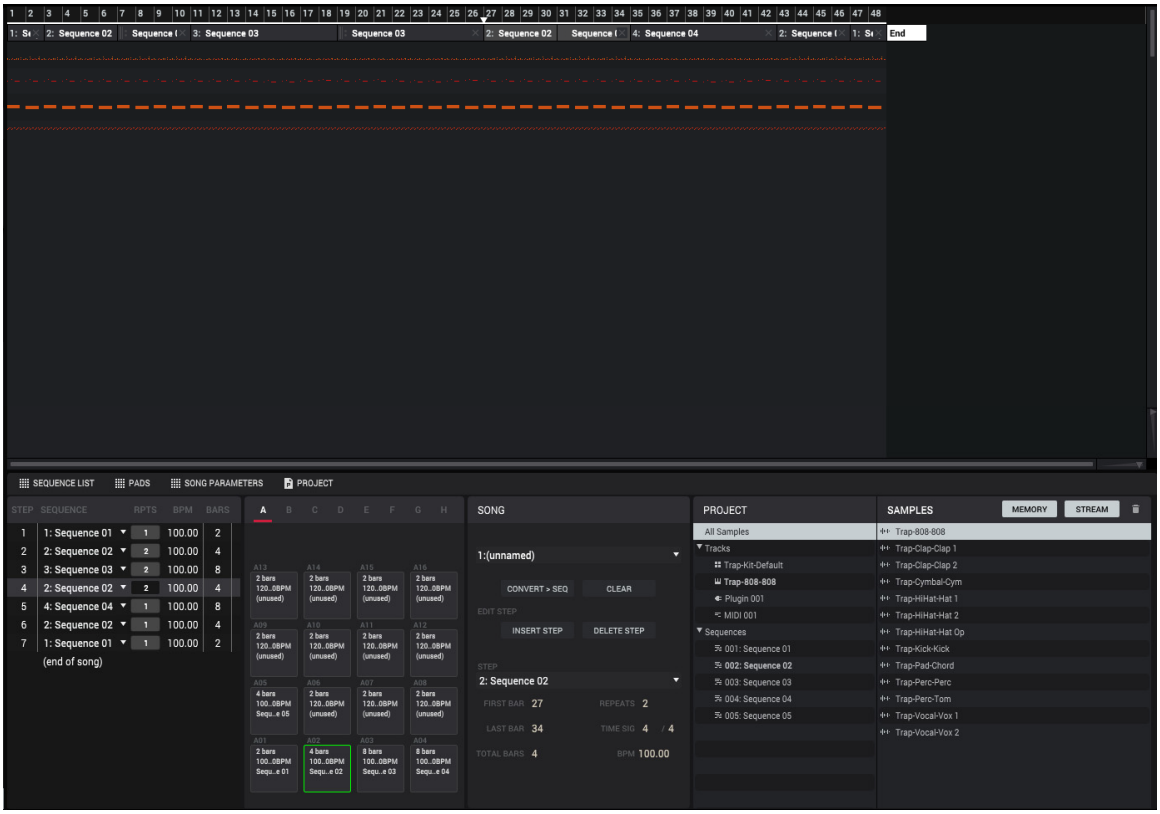
Song Mode lets you arrange sequences in a specific order and/or repetition to create songs. You can edit the structure of a song during playback for easy, on-the-fly composing.

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, do any of the following:

- Click the **musical-notes icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **Song**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **Song**.

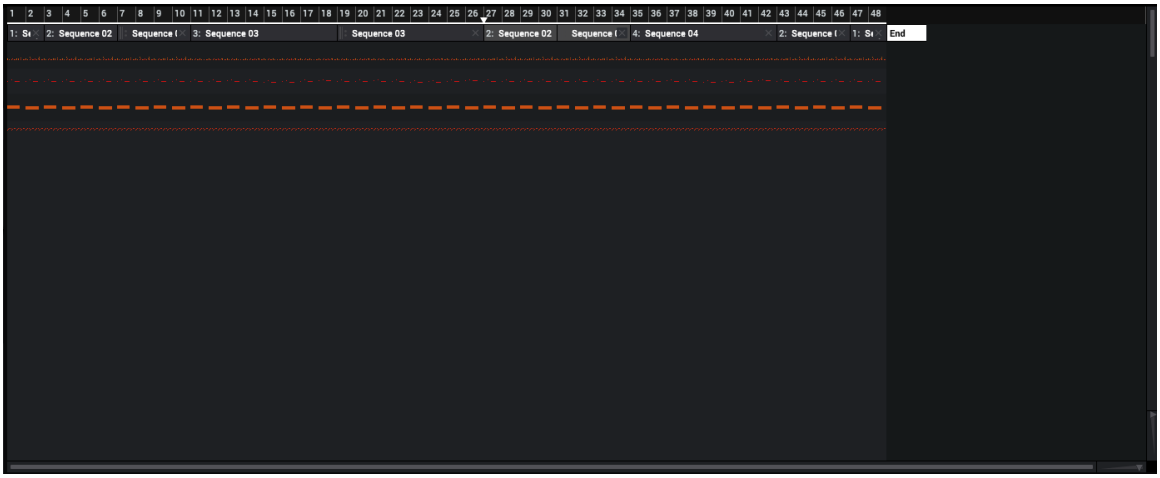
Important: If a sequence is currently playing, stop playback before entering Song Mode. You cannot enter Song Mode during playback.



In Song Mode, every pad is assigned to a sequence, starting from **Pad A01** with **Sequence 1** and ascending from there.

In this mode, you can create a song as a list "steps." Each step corresponds to a sequence and will play a certain number of times.

The upper half of the window displays a representation of the sequences in the song.



The dark blue timeline at the top indicates the number of bars that have elapsed with each sequence. The **white arrow** (▼) is the audio playhead, indicating the current playback position.

Each block represents a sequence with miniature track note events. The sequence number and name is at the top of each block. A repeat symbol (**||:**) next to the sequence name indicates it is a repeat of the previous sequence.

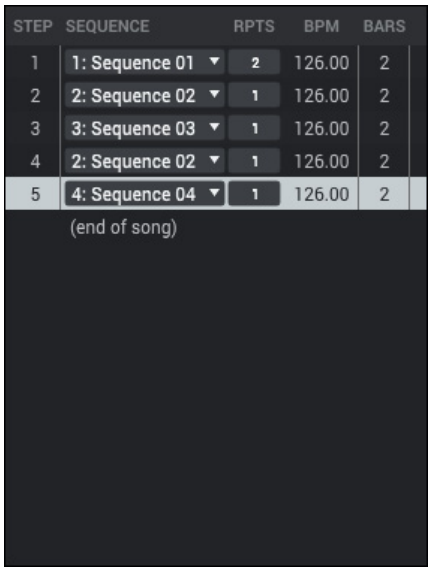
Click the **blue** bar at the top of each block to select that step in the song. The bar will be **yellow** when selected. If the step contains repetitions of a sequence, all repetitions in that step will be selected.

Click the **X** in the **blue** bar at the top of a block to delete that step in the song. If the step contains repetitions of a sequence, all repetitions in that step will be deleted.

Use the sliders in the lower-right corner of this area (along each axis) to zoom in or zoom out.

The lower half of the window can display the **Sequence List** panel, **Pads** panel, **Song Parameters** panel, and **Project** panel. Click the corresponding selector to show or hide each one. See ***General Features*** > ***Panels*** > ***Project*** to learn more about the **Project** panel. The other panels are described below: ***Sequence List***, ***Pads***, and ***Song Parameters***.

Sequence List



The **Sequence List** panel shows a list of the steps of the song. Each step can have one sequence assigned to it and will show its information. The currently selected one is highlighted. Select one by clicking it.

The **Step** column shows the number of the step. Each song can contain up to **999 steps**.

The **Sequence** column shows the number and name of the assigned sequence. Click this menu to select a different sequence. This is the same as the **Step** menu in the **Song Parameters** panel.

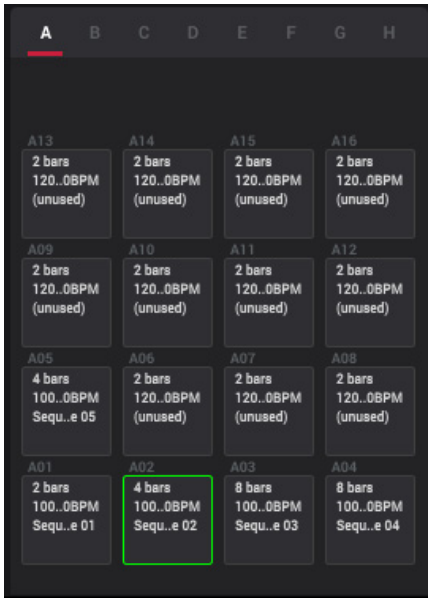
The **Rpts** column indicates how many times the sequence plays. Click and drag this field up or down to set the number of repeats. Each step can play up to **999 times**. You can set it to **Hld** (the lowest/minimum value) to set the sequence to repeat indefinitely until you stop playback.

The **BPM** column indicates the tempo of the sequence in **BPM**. Keep in mind that each sequence will not play back at this tempo if the **Seq**/**Gbl** button in the **toolbar** is set to **Gbl**; if it is set to **Seq**, then each sequence follows its own tempo during playback.

Note: **To set the BPM of a sequence**, select that sequence and then use (**A**) the **BPM** field in its **Sequence** section of the **Inspector** or (**B**) the **BPM** field in the **toolbar** (when set to **Seq** instead of **Gbl**).

The **Bars** column indicates the length of the sequence in **bars**.

Pads



The **Pads** panel represents 16 sequences (per bank). Each pad shows the length of the sequence in **bars**, the tempo of the sequence in **BPM**, and the name of the sequence. (Keep in mind that each sequence will not play back at this tempo if the **Seq**/**Gbl** button in the **toolbar** is set to **Gbl**; if it is set to **Seq**, then each sequence follows its own tempo during playback.)

The pad whose sequence is assigned to the currently selected step will flash **green**.

Click a **pad bank** to select it.

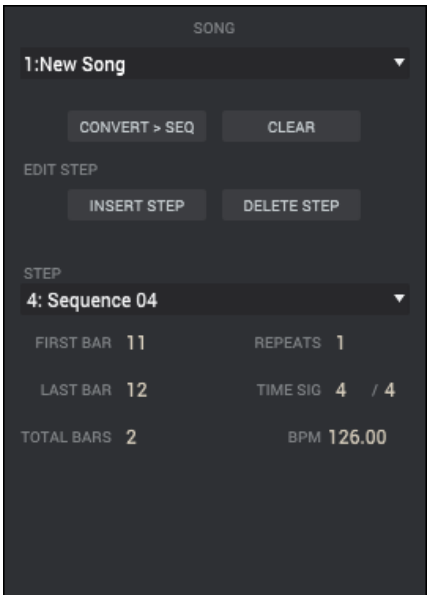
Click and drag a **pad** onto one of the following locations to use it in the song:

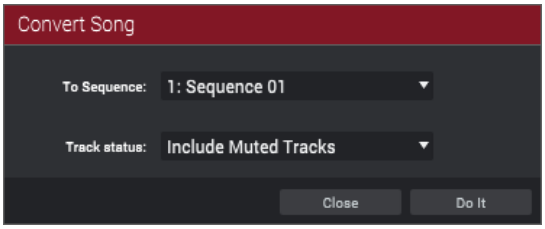
- onto a step in the **Sequence List** panel or onto a block in the upper half of the window. This will replace its currently assigned sequence with the one you clicked and dragged onto it.
- between two steps in the **Sequence List** panel or between two blocks in the upper half of the window. This will insert a step at that location and assign the sequence to it.

If a sequence on another pad will play next, that pad will flash **yellow**.

During playback, the pad with the currently playing sequence will be lit **green**.

Song Parameters





The **Song Parameters** panel shows the available controls for Song Mode. You can use the buttons in this panel to edit the song.

Click the **Song** menu to select the song you want to show.

Double-click the name in this menu to rename the song.

Click **Convert** > **Seq** to open the **Convert Song** window. In this window:

- Click the **To Sequence** menu to select the sequence that will use the converted song.
- Click the **Track Status** menu to select how you want to convert muted tracks. Select **Include Muted Tracks** if you want muted tracks to be included in the converted song. Select **Ignore Muted Tracks** if you want muted tracks to be excluded from the converted song.
- Click **Do It** to convert the song to that sequence, or click **Close** to close the window without converting.

Click **Clear** to clear the entire sequence playlist (delete all steps) and the name of the song.

Click **Insert Step** to insert a step after the currently selected one.

Click **Delete Step** to delete the currently selected step.

The **Step** menu shows the number and name of the sequence assigned to the currently selected step. Click this menu to select a different sequence. This is the same as the **Sequence** menu/column in the **Sequence List** panel.

- The **First Bar** and **Last Bar** values indicate the numbers of the bars (in the entire song) where the step starts and ends, respectively.
- The **Total Bars** value indicates the length of the sequence in **bars**.
- The **Repeats** value indicates how many times the sequence plays. Click and drag the **Rpts** field in the **Sequence List** panel up or down to set the number of repeats. Each step can play up to **999 times**. When this is set to **Hold** (the lowest/minimum value), the sequence to repeat indefinitely until you stop playback.
- The **Time Sig** value indicates the time signature of the sequence.
- The **BPM** value indicates the tempo of the sequence assigned to the currently selected step in **BPM**. Keep in mind that each sequence will not play back at this tempo if the **Seq**/**Gbl** button in the **toolbar** is set to **Gbl**; if it is set to **Seq**, then each sequence follows its own tempo during playback.

To render/export your song as an audio file, click the **menu icon** (≡), and go to **File** > **Export** and click **As Audio Mixdown**. See ***General Features*** > ***Audio Mixdown*** to learn how to use this screen to export your song.

MIDI Control Mode

You can use MIDI Control Mode to customize what MIDI messages are sent from certain controls on your MPC hardware. This custom "control map" will then work whenever you are in MIDI Control Mode. The edits you make in MIDI Control Mode will be retained with the current MPC project.

This is helpful when using the MPC3 software as a plugin: you can use MIDI Control Mode to use your MPC hardware to control your host software, and then switch back to any other mode to control the MPC plugin.

To enter MIDI Control Mode, do any of the following:

- Click the **MIDI-controller icon** in the toolbar (if shown).
- Click the **down arrow** (▼) next to the other mode icons in the toolbar, and click **MIDI Control**.
- Click the **menu icon** (≡), and go to **View** > **Mode** and click **MIDI Control**.

Important: Make sure your MPC hardware is connected to your computer and powered on. MIDI Control Mode is not functional without a connected MPC hardware unit.

In the window, use the following fields and selectors to set each control's parameters to your preference. The available parameters depend on its type: ***Pads***, ***Buttons***, ***Q-Link Knobs***, and ***XY Pad***. When you have set all of the parameters as desired, you can select another control or enter another mode.

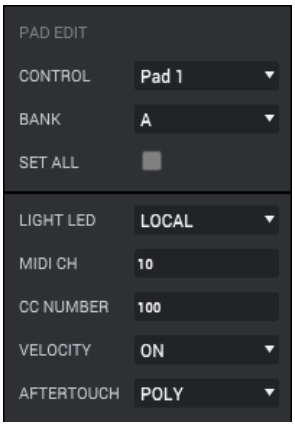
The software window will also display a graphical representation of your MPC hardware. Editable controls show their current MIDI message. Pads and Q-Link knobs show their current MIDI channels.

To select a control to edit, do one of the following:

- Press or turn it on your MPC hardware.
- Click it on the graphical representation of your MPC hardware.
- Click the **Control** menu in the upper-left corner of the window and select one.

Note: The **Control** menu may show many more hardware controls than are actually available on your MPC hardware. This is because the list includes all possible controls from all current MPC models (MPC Renaissance, MPC Studio, MPC Touch, etc.).

Pads



These are the MIDI parameters you can edit for each **pad**:

Control: This is the hardware control you are currently editing (**Pad 1**–**Pad 16**). Click this menu to select another control.

Bank: This is the pad bank of the current pad (**A**–**H**). If you select the **Set All** box, the pad's messages and parameters will be identical across all eight banks. Click this menu to select another bank.

Set All: Click this box to select or deselect it. When selected, the pad's messages and parameters will be identical across all eight banks. When deselected, the pad's messages and parameters will apply to the current pad only.

Light LED: This determines how the pad's LEDs will behave. Click this menu to select an option:

When set to **Never**, the LEDs will always be off.

When set to **MIDI Input**, the LEDs will light up when the software receives a MIDI message that matches the pad.

When set to **Local**, the LEDs will light up when you press the pad and/or MIDI input is received.

MIDI Ch: This determines which MIDI channel (**1**–**16**) the pad will use to send its message to the software.

CC Number: This determines what MIDI Control Change number the pad will send to the software when you press it.

Velocity: This determines whether the pad will be velocity-sensitive (**On**) or not (**Off**). When set to **Off**, pressing the pad will send a note at full-level (**127**) always.

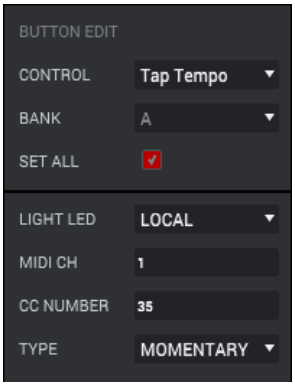
Aftertouch: This determines how the pad's aftertouch (pressure applied to the pad after the initial press) behaves.

Off: The pad will not send any aftertouch messages.

Channel: If you press multiple pads that have this setting, the aftertouch messages they send will be identical.

Poly: If you press multiple pads, the aftertouch message each pad sends will be independent from the others.

Buttons



These are the MIDI parameters you can edit for each **button**:

Control: This is the hardware control you are currently editing (**Erase**, **Tap Tempo**, **Undo**, **Copy**, etc.). Click this menu to select another option.

Light LED: This determines how the button's LED/LEDs will behave. Click this menu to select an option:

When set to **Never**, the LEDs will always be off.

When set to **MIDI Input**, the LEDs will light up when the software receives a MIDI message that matches the button.

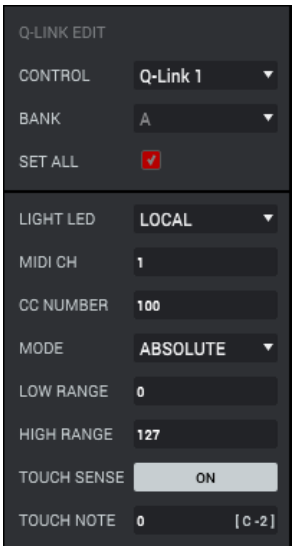
When set to **Local**, the LEDs will light up when you press the button and/or MIDI input is received.

MIDI Ch: This determines which MIDI channel (**1–16**) the button will use to send its message to the software.

CC Number: This determines what MIDI control change number the button will send to the software.

Type: This determines whether the button will behave as a **Momentary** switch or **Toggle** (latching) switch.

Q-Link Knobs



These are the MIDI parameters you can edit for each **Q-Link knob**:

Control: This is the hardware control you are currently editing (**Q-Link 1–16**). Click this menu to select another option.

Light LED: Although you can edit this parameter, it does not actually have a function on your MPC hardware. Click this menu to select an option:

When set to **Never**, the LEDs will always be off.

When set to **MIDI Input**, the LEDs will light up when the software receives a MIDI message that matches the Q-Link knob.

When set to **Local**, the LEDs will light up when you touch or turn the Q-Link knob and/or MIDI input is received.

MIDI Ch: This determines which MIDI channel (**1–16**) the Q-Link knob will use to send its message to the software.

CC Number: This determines what MIDI Control Change number the Q-Link knob will send to the software.

Mode: This determines how the Q-Link knob will control its parameter.

Absolute: The Q-Link knob's current position determines its parameter's value; moving it may cause its parameter to "snap" to a new position if you're using it to control different parameters in different modes.

Relative: Moving the Q-Link knob will increase or decrease its parameter regardless of its physical position.

Low Range: This is the Q-Link knob's lowest possible value (**0–127**).

High Range: This is the Q-Link knob's highest possible value (**0–127**).

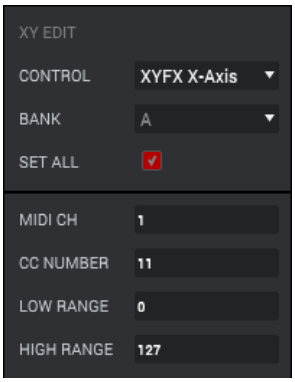
Touch Sense: This activates or deactivates the Q-Link knob's touch-capacitive circuitry.

On: You can touch the Q-Link knob to send a Note On message to the software (this is how your MPC hardware normally works).

Off: The Q-Link knob will not send any Note On messages; it will only send CC messages when you turn it.

Touch Note: This is the MIDI note number the Q-Link knob will send to the software when you touch it (**0–127** or **C-2** to **G8**). **Touch Sense** must be set to **On** for this to work.

XY Pad



These are the MIDI parameters you can edit for each axis of the **XY pad** of your MPC hardware:

Control: This is the axis you are currently editing (**XYFX X-Axis** or **XYFX Y-Axis**).

Mute: This button determines whether the axis is muted or not. When muted, its MIDI output is disabled. You must be viewing the **Settings** to do this.

MIDI Ch: This determines which MIDI channel (**1**–**16**) the axis will use to send its message to the software.

CC Number: This determines what MIDI Control Change number the axis will send to the software.

Low Range: This is the axis's lowest possible value (**0**–**127**).

High Range: This is the axis's highest possible value (**0**–**127**).

Appendix

Effects & Parameters

This chapter lists the available effects and their parameters. To learn more about how effects work in general in the MPC3 software, please see ***Operation*** > ***General Features*** > ***Effects***.

Effects with a * next to their name are not included with MPC 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 Expander****, ***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 Expander *

This effect is a vital dynamic processor to reduce and remove the unwanted quieter elements of your tracks.

Parameter	Value Range	Default Value
Threshold	-40.0 – 0.0 dB	-15.4 dB
Output	-20.0 – 0.0 – +20.0 dB	0.0 dB
Ratio	1:1.0 – 1:100	1:10
Range	0.0 – 40.0 dB	40.0 dB
Attack	10.0 us – 100 ms	1.00 ms
Release	10.0 ms – 10.0 s	166 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: **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

AIR Para EQ (continued)

Parameter	Value Range	Default Value
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 is specially designed for use the **touch strip** controller on hardware such as MPC Key 61 and MPC Key 37, but can be used on any MPC hardware and controlled using the onscreen touch slider or an external MIDI device. 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

Adds the XYFX effect for use with MPC touchscreen hardware.

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

AIR Bassline

The AIR Bassline plugin emulates the sound of classic mono synths, with a contemporary twist. Bassline also comes packaged with four integrated AIR effects (Chorus, Delay, Compressor and Hype), as well as two built-in distortion algorithms (Overdrive and Clip).

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 center frequency of the boost.	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 decay value. At positive values, increases the cutoff value based on the decay value.	-100% – 0 – 100%
	HP Cutoff	Cutoff frequency for the high-pass filter.	10.0 Hz – 500 Hz

AIR Bassline *(continued)*

Parameter		Description	Value Range
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	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
Volume		Sets the volume level.	-Inf dB – +6.0 dB
Drive	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.	20.0 Hz – 20.0 kHz
	Depth	Modulation depth of the chorus effect.	0–100%
	Mix	Wet/dry amount of the chorus effect.	-100% – 0 – 100%
	On/Off	Enables or disables the effect.	Off, On
Delay	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	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%
	On/Off	Enables or disables the effect.	Off, On

AIR Bassline *(continued)*

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

AIR Electric

The AIR Electric plugin emulates the sound of classic electric pianos. Dedicated Pickup, Envelope, Bell and Noise parameter sections provide a huge amount of flexibility to configure the timbre of the electric piano sound. Electric also includes five AIR effects: Tremolo, Tube Distortion, Chorus, Delay and Spring Reverb.

To enable or disable any sound or effect, press the circle in the upper-right corner of each section.

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%

AIR Electric *(continued)*

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 pitch being 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%
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, lower velocities feature longer attack times.	0–100%
Tremolo	Rate	Modulation speed of the effect. When **Sync** is set to **Free:** When **Sync** is set to **Sync:**	 0.25 – 13.00 Hz 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%

AIR Electric *(continued)*

Parameter		Description	Value Range
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	Time	Amount 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	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	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

AIR TubeSynth

The AIR TubeSynth plugin emulates the sound of classic vintage analog polysynths. TubeSynth is based on the highly acclaimed AIR Vacuum Pro desktop synth plugin and also includes 5 integrated AIR effects.

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 or 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.	Triangle, Saw, Square, Pulse

AIR TubeSynth *(continued)*

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%
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	Length of time for the filter to hold sustain 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	Length of time for the note to hold sustain 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

AIR TubeSynth *(continued)*

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 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 Freq, Osc 2 EQ Gain, Ring Level
	Depth	Amount of modulation applied.	0–100%

AIR TubeSynth *(continued)*

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

AIR TubeSynth *(continued)*

Parameter		Description	Value Range
Chorus	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	Time	Length 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	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%

AIR TubeSynth *(continued)*

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%

AIR 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

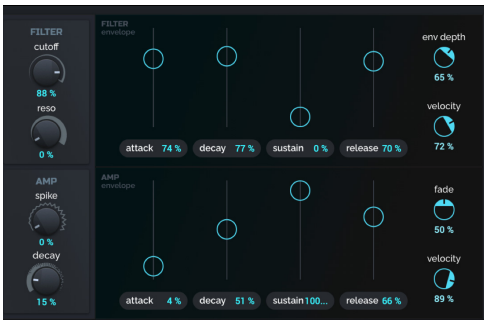
Use this tab to adjust the macro settings for the plugin. You can access the Effect on/off switches in all tabs.

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

AIR Hype *(continued)*

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%

AIR Hype *(continued)*

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**, **Each Note**, or **Off**:	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

AIR Hype *(continued)*

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.	1/16 – 16/4
	Feedback	Amount of signal fed back into the delay line.	0–100%
	Freq	Adjusts the filter cutoff frequency of the delayed signal.	100 – 16000 Hz
	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.	0.3 – 60.0 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 – 30.0 dB

AIR Hype *(continued)*

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, All
	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**:	-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
Control LFO	Sync	Enables or disables Control LFO sync, and sets how the Control LFO is synced when enabled.	Off, First Note, Each Note, Tempo + Note, Tempo + Beat
	Rate	Speed of modulation of the Control LFO.	
		When **Sync** is set to **First Note** or **Each Note**:	0.03 – 30.00 Hz
		When **Sync** is set to **BPM & Note** or **BPM & Beat**:	8/4 – 1/64
	Shape	Waveshape of the Control LFO.	Sine, Triangle, Sawtooth, Square, S&H Random, S&H Alternate, Random Drift, Slow Drift

AIR 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 model.

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	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%

AIR Mellotron *(continued)*

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 – +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

AIR Mellotron *(continued)*

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%

AIR 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%

AIR Solina *(continued)*

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

AIR Solina *(continued)*

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%

AIR Solina *(continued)*

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 – +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

AIR Solina *(continued)*

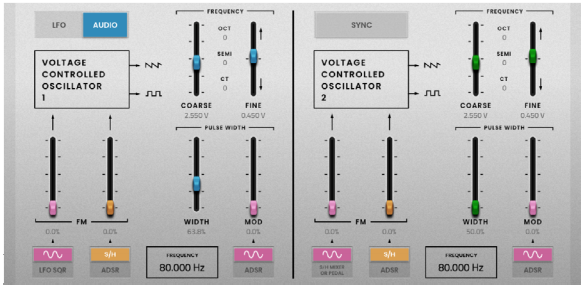
Delay / Spring Reverb

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

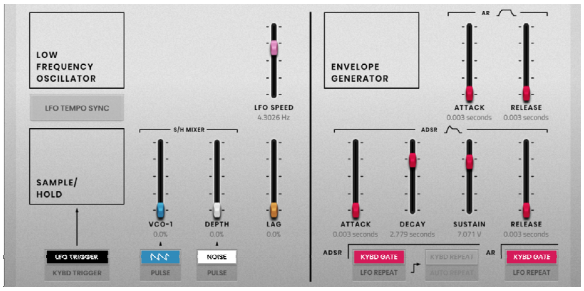
Use this tab to adjust the settings for the voltage-controlled oscillators.

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

WayOutWare Odyssey *(continued)*

Mod/Env

Use this tab to adjust the settings for the low frequency oscillator, sample and hold generator, and envelope generator.

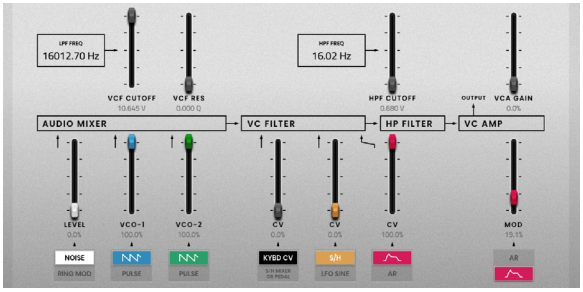


Parameter		Description	Value Range
LFO	LFO Tempo Sync	Determines whether LFO speed is free floating or synced to project tempo.	Off, On
	LFO Speed	Speed of the low frequency oscillator. When **Sync** is **Off**: When **Sync** is **On**:	 0.0925 – 20.0000 Hz 4/4 – 1/64 beats
Sample/Hold	Trigger	Determines 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

WayOutWare Odyssey *(continued)*

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%

WayOutWare Odyssey *(continued)*

Echo

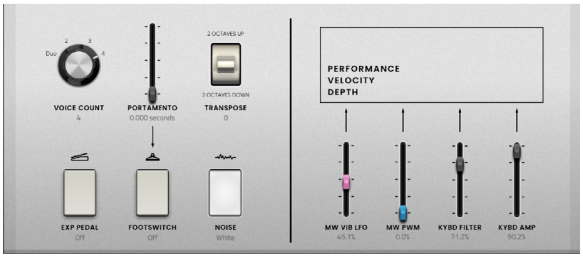
Use this tab to adjust the settings for the tape echo effect.

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**:	0.02 – 5.00 seconds
		When **Sync** is **On**:	1/64 – 4/4

WayOutWare Odyssey *(continued)*

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%

AIR 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.

Drum Sound

Use this section 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

Transient

Use this section to adjust the settings for the Transient effect.

Parameter	Description	Value Range
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

Use this section to adjust the settings for the Distortion effect.

Parameter	Description	Value Range
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

Use this section to adjust the settings for the EQ effect.

Parameter	Description	Value Range
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

Use this section to adjust the settings for the Compressor effect.

Parameter	Description	Value Range
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

At the right end of each DrumSynth single plugin, you can quickly enable or disable the built-in effects (**Transient**, **Distortion**, **EQ** and **Compressor**) by tapping the **Trans**, **Dist**, **EQ** and **Comp** buttons, as well as adjust the overall Volume of the plugin by using the **Volume slider**.

You can also use the **DrumSynth:Multi** plugin to access all DrumSynth sounds from one plugin, which includes additional dedicated effects and mixing controls.

DrumSynth 1–8 / Trans/Dist/EQ/Comp

Use the first eight sections in the Multi to control the same ***Drum Sound*** parameters as the individual DrumSynth plugins.

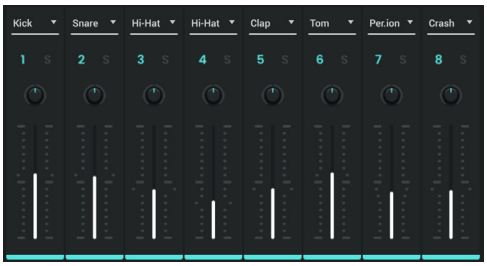
Use the **Del**, **Diff** and **Rev** knobs to adjust the level of the ***Send FX*** for each drum sound.

You can enable or disable the built-in effects (**Transient**, **Distortion**, **EQ** and **Compressor**) by tapping the **Trans**, **Dist**, **EQ** and **Comp** buttons for each DrumSynth.

Use the FX sections to control the same parameters as the ***Transient***, ***Distortion***, ***EQ*** and ***Compressor*** effects in the individual DrumSynth plugins.

Mixer

Use this section to adjust the volume, panning, muting and soloing for each drum.



Click the **1–8** icons to mute or unmute the selected drum.

Click the **S** icon to solo the selected drum.

Click and drag the **pan slider** to adjust the drum panning.

Click and drag the **volume slider** to adjust the drum volume.

Send FX

Use this section to adjust the parameters for the Delay, Diffuser and Reverb effects. Tap the **Del**, **Diff** and **Rev** buttons at the top of the section to enable or disable the selected send effect.

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

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