# Force 3.5 Firmware Update

# Compatibility

This release is for Force hardware.

## **Downloading the Firmware Update**

To download the 3.5 Firmware Update, use the online updater or navigate to Force Software & Firmware Downloads and select the appropriate download.

For instructions on installing these updates, please visit our support page here.

Please note: Projects created or saved in 3.5 Firmware are *not* backward-compatible with 3.3 Firmware.

**Plugin Instrument and Effects** - Force now supports new plugin releases from AIR, Akai and Native Instruments. Go to your Preferences > Activations for the full list.

#### **Stem Separation**

The latest update to Force introduces powerful Stem Separation capability.

- Stem Tracks:
  - Split any track into distinct stems: vocals, bass, drums, or other instrumental elements.
  - Isolate vocals for acapellas, discover new drum breaks with the Drum stem, or use the 'Other' stem for crafting melodic instrumental content for creative manipulation.
- Purchasing and Activating Stem Separation:
  - o Visit
  - •
  - <u>MPC Stems Separation | Akai Pro</u> to purchase the MPC Stem Separation feature. Important: If you have already purchased Stems for Desktop you do not need to purchase again for Standalone. Your existing licence is valid for 3 devices.
  - After acquiring your Stem Separation license, follow these steps to activate it on your MPC standalone device:

- Access Preferences:
  - From the MODE MENU, go to **Preferences**.
- Activate and Download:
  - In the Activation tab, find the Stems entry.
  - Activate and then download the Stem Separation feature.
- Performance Considerations:
  - RAM Usage:
    - The stem separation process requires approximately 200MB of RAM of free memory, plus additional memory to create the stemmed samples.

The latest update in the Force introduces a powerful Stem Separation capability.

#### **Performing Stem Separation:**

#### Assigning Four Stems to Sample Pool:

- 1. Load any song into the sample pool via the Browser.
- 2. Access Sample Edit and initiate the stem separation process from the TUI's Sample Edit toolbar
- 3. In the popup, select which stems you wish to render into new audio files using the Vocal, Bass, Drums, Other buttons.
- 4. Ensure the 'Assign to Pad' checkbox is unticked.
- 5. Enable 'Use Trimmed Sample' to trim the source sample between Start and End points before the stem separation process. If unticked, Force will maintain any existing slices in the new stemmed samples.
- 6. Click 'Do It.'

Assigning Four Stems to a Single Drum Track Pad:

- 1. Load any song onto a pad of a drum program via the Browser mode.
- 2. Access the stem separation process by clicking the 'Create Stems' icon in the Track Edit Mode toolbar or using the shortcut in the Sample Edit mode toolbar.
- 3. In the popup, choose the stems you want to render into new audio files using the Vocal, Bass, Drums, Other buttons (for now, leave all four stems selected).
- 4. Utilize the Track and Pad fields to assign the new stems to a track and pad.
- 5. Tick the 'Assign to Pad' checkbox to automatically assign the stems to the chosen pads' four layers. Unticking loads the stems into the sample pool exclusively.
- 6. Similar to the previous process, decide on 'Use Trimmed Sample' based on your preference.
- 7. Click 'Do It.'

Now, manipulate and explore different stems by adjusting the four sample layers' volume levels.

#### Editing Start and End Points for All Four Layers Simultaneously:

- 1. Access the TUI Track Edit mode and from the TUI toolbar enable 'Edit All Layers'.
- 2. Modify sample parameters like Start and End points or layer-specific automation parameters such as Semi or Fine tuning. Changes made here will apply uniformly to all four layers.

Experiment freely with the Start and End points on Layer 1, knowing that these adjustments will be mirrored across all four layers simultaneously.

#### **Tempo Automation**

You can now program the tempo of an arrangement or clip row.

#### To input tempo automation into an arrangement

- 1. List Edit Mode:
  - Go to the Tempo tab.
  - Use the INSERT f-key to add a tempo event at the current playhead position.
- 2. Grid View Mode:
  - On any track, open the automation panel.
  - From the dropdown menu, select Add New, then choose Sequence Tempo from the Global section.

#### **Row Launch Tempo:**

- You can now launch a row with a tempo change event.
- In Matrix Mode, press and hold on a row to bring up the Edit Row selector. Choose Settings and go to the Tempo section. Tick Set Tempo and input the desired BPM value.

#### Follow Actions:

To set **Follow Actions** for a Force row.

• In Matrix Mode, press and hold on a row to access the Edit Row selector. Choose Settings, then go to the Follow Actions section and select a Follow Action from the dropdown menu.

#### **MPC Sequence Support for Force**

Force now supports MPC Sequences, unlocking new possibilities for arranging and experimenting with your music. With this update, you can explore two powerful new modes:

- Next Sequence Mode
- Song Mode

#### Create different arrangement ideas

Record different clip matrix performances into separate sequences. For example:

- Record a performance into Sequence 001's arrangement.
- Switch to Sequence 002 and record an alternative performance.

Use **Next Sequence Mode** to seamlessly switch between sequences, comparing and contrasting your arrangements. Your clip matrix remains consistent across all sequences, letting you experiment freely.

You can also change sequence from the pull down menus Sequence field.

#### Use sequences to try out different song structures

- Use sequences as modular building blocks for your songs (e.g., intro, verse, chorus).
- Chain sequences together in any order to create full arrangements.
  - Experiment with chaining sequences in realtime using Next Sequence mode using the TUI to trigger sequence changes.
  - Use Song mode to chain together sequences in a list.
  - Convert songs back into a single sequence using the **Convert > Seq** F-key, selecting an empty sequence for the conversion.

**New Advanced Keygroup synthesis engine** - Experience a significant advancement with the introduction of the new keygroup multi-sample synth engine. Boasting a deep and feature rich synthesis section teeming with sound design opportunities, this engine opens up a world of creative possibilities.

New to Force a whole new advanced keygroup synthesis engine. Load any MPC2 or Force keygroup and go to Track Edit, from the TUI Toolbar click the LEGACY button OFF. Force preserves your existing sample keymap but switches out the legacy keygroup synthesiser for the new Advanced Keygroup engine.

• Automatable Parameters: All synthesis parameters within Keygroup XL are fully automatable and assignable to Q-Links for real-time control.

- **Dual Filter Section**: Allows parallel or series configuration of two filters with a blend control for mixing between them.
- Advanced Envelopes: Includes Amp, Filter, Pitch, and Aux envelopes with options for global or per-voice behavior.
- **Multiple LFOs**: Two per-voice LFOs and two global LFOs offer extensive modulation options.
- Note Counter Modulation: The Note Counter enables stepped modulation, such as alternating pan positions for different voices.
- Modulation Enhancements:
  - **Two Ramps**: For additional modulation shaping.
  - **Timbreshift**: Adjusts the timbre of a sample across the keyrange without affecting pitch.
  - Global and Per-Voice Drift LFOs: Adds subtle detuning for natural variation.
- **Portamento**: Smooth pitch transitions between notes.
- Unison / Harmonizer: Adds unison voices or harmonizes the sound.
- **32-Cell Modulation Matrix**: Provides extensive routing options for complex modulation setups.

This engine significantly expands the sound design capabilities of the Force, offering flexibility for creating dynamic, evolving sounds.

#### Modifiers in Drum and Keygroup tracks.

Each Note event can now contain a modifier value for each modifier type. Previously in Force each note could only contain a single modifier event. Each note in a drum or keygroup track can have its own value for each of the following modifier types

- Tuning(coarse)
- Tuning(fine)
- Cutoff
- Resonance
- Filter Env Amount
- Pan
- Level
- Envelope Attack
- Envelope Decay
- Envelope Release
- Sample Layer
- Sample Slice

This gives you the potential to craft each note to have its own distinct sound and timbre.

A modifier is different to an automation event an automation event is a value automation value thats tied to a point in time on Force timeline. A modifier event an automation event attached to a note and is moved with a note and lasts for the duration of the note.

#### Modifiers can have their playback mode set to absolute or relative values.

In List Edit Mode from the toolbar press on the modifier icon to open the Modifier settings popup.

- All modifier types can now have their 'modifier playback mode' set to Absolute/Relative
- Modifications settings are performed in groups:
  - 'Tuning' affects: Tuning (coarse), Tuning (fine)
    - 'Filter' affects: Cutoff, Resonance, Filter Env Amount
    - 'Mix' affects: Pan, Level
    - 'Envelope' affects: Attack, Decay, Release
    - 'Sample' affects: Sample Layer, Sample Slice
- When a modifier type is set to 'ABSOLUTE', a note with a modifier active for that modifier type will:
  - Use the modified value specified by the note event directly, ignoring any values set in track edit, sample edit, or the pad mixer which would affect the modified value.
  - Ignore pad automation that would affect the modified value.
- When a modifier type is set to 'RELATIVE', a note with a modifier active for that modifier type will:
  - Use the modified value as an offset (or a scale, in the case of Level) of the existing state, taking into account any values set in track edit, sample edit, or the pad mixer which affect the modified value.
  - $\circ$   $\;$  Be affected by pad automation that affects the modified value.
- Switching between 'ABSOLUTE' and 'RELATIVE' does not make any destructive changes to note events. The 'knob position' for each modifier will not move when changing settings. Returning to your previous setting will sound the same as prior to the settings change, assuming you have not changed any modifier values in the meantime.
- Modifiers in 'RELATIVE' mode may be set beyond the limit of the underlying value. For example, a pad with an Env Attack value of 10 could have a modifier with an Env Attack modifier of -100. In this case, the note will be played back with the minimum/maximum possible value, e.g. in the case above the note would be played back with an Attack value of 0.
- Modifier playback mode settings for all modifier groups are saved with your project.
- The default modifier playback mode settings for all new projects are:
  - Tuning: RELATIVE
  - All other groups: ABSOLUTE
- The default modifier playback mode settings for all new projects can be changed by setting up your preferred configuration and hitting the MAKE DEFAULT button.
  - This can be reset by resetting your preferences.

- Legacy projects are loaded with
  - Sample: ABSOLUTE
  - Envelope: ABSOLUTE
  - All other groups: RELATIVE
- Envelope modifiers for legacy projects will *not* ignore automation despite being set to ABSOLUTE. This is to ensure the sound of old projects is retained. Interacting with the modifier playback Envelope setting in any way will remove this behaviour and from that point on Envelope modifiers will ignore automation as normal.

#### Warp Algorithm Choice

Force now offers the choice to timestretch or repitch an audio sample to synchronize it with the Force tempo.

#### **Key Features:**

- **Default Algorithm**: set the default timestretch algorithm to Pro Ten or Repitch.
  - You can find this setting under: Preferences > Audio/Export > Audio Warp and BPM Detect > Default Warp Algorithm.
  - Once set to **Repitch**, all newly created tracks, and any loaded MPC2 or Force programs/projects with warp enabled, will automatically use this algorithm.

#### **Customization:**

- Drum Tracks: Override the default algorithm in Track Edit > Samples Tab > Algorithm Field and select another option.
- Audio Tracks: Change the algorithm in Grid Edit Mode > Algorithm Field.

#### **Important Notes:**

• Your choice of algorithm will be saved and recalled with the project, track, or program files.

#### New Record Launch Mode: Record to Selection

A new mode, **Record to Selection**, is now available in the **Record Launch** combobox.

- Accessing the Mode: Hold the H/W REC button to open the Record Config settings. Select Record to Selection from the Record Launch dropdown menu.
- Automatic Record Destination: In this mode, the Record Destination automatically updates to the currently selected event list. Whether a clip or arrangement is selected or displayed in Main Mode, pressing Rec and then Play will begin recording to the current selection.
  - This also supports recording to **empty clips**. If you've scrolled to an empty clip in Main Mode and press **Rec > Play**, recording starts for that selected clip, allowing for a smoother workflow across different modes.
- Clip Behavior: By default, the current recording or playing clip won't update if you change the clip in Main Mode during playback or recording. To enable clip switching during playback, From Main Mode Clip Tab tap the clip index (next to the clip name) and select Launch selected clip during playback from the dropdown.
- Clip Matrix Mode: If an empty clip is selected or highlighted (surrounded by a white line) after stopping clips, pressing **Rec** prepares the track for recording. Tapping the clip or pressing **Play** will start recording for that selected clip.
  - When **Rec** is pressed, the clip will flash red in a "prepare" state, indicating that it's armed for recording. The actual recording will begin when **Play** is triggered, or the clip is activated.

#### **Export Drum Pads as Separate Stems**

Exporting individual drum pad stems is now more streamlined, allowing greater flexibility in mixing and post-production. You can render an audio stem for each pad with events in a drum track. To export drum pads as stems:

- 1. Load a drum kit and record your pattern into the sequencer.
- 2. With the drum track and the arrangement selected press MENU and then choose SAVE.
- 3. In the SAVE selector, choose Drum Pads as Stems.
- 4. Specify your preferred audio format and destination for the stems.
- 5. Hit EXPORT to render your stems for easy mixing in your DAW.

Note : this feature only works on the arrangement event list.

#### **Faster Sample Loading**

- **Improved Performance:** Sample loading now runs on a background thread, significantly reducing load times for programs, tracks, and projects.
- **Streamlined Program Handling:** Replacing programs and samples is now more efficient, especially when loading a new program file into a track that already contains existing samples.

#### **Sliced to Audio Track**

This Force 3.4 update introduces a powerful new feature allowing users to export a Sliced Audio sample directly to an audio track. This feature is designed to maintain the original bar-beat-pulse (BBP) start and length positions of audio regions, making it easier to slice unwarped audio and adjust sequence tempos without altering the audio content within the regions or introducing time stretching artifacts.

#### How to Use the Sliced to Audio Track Feature on a drum break:

- 1. Prepare the Drum Break:
  - In **Sample Edit Chop**, trim a drum break so it's a whole number of bars in length.
- 2. Slice the Drum Break:
  - Use the **Threshold** or **Manual** slicing methods to add slices for each drum hit.
- 3. Convert to Audio Track:
  - Hold the **SHIFT** hardware button and press the **CONVERT** f-key on the TUI.
  - In the Convert or Assign popup, select Audio Track from Samples in the Convert To field.
- 4. Assign the Sample:
  - To assign the sliced audio sample to an existing audio track, untick the Create New Track option.
  - To preserve the sound of individual drum hits and avoid introducing timestretching artifacts, make sure **Warp Enabled** is **unticked**.

#### 5. Set Length:

• Adjust the **Bars** field to match the length of your drum break, then press **DO IT**.

#### Result

- The sliced audio sample is added to the selected audio track as a series of sliced regions.
- You can adjust the sequencer tempo (slow down or speed up) while the drum hits retain their bbp start and length. The audio content inside the regions will adapt in length, allowing tempo changes without introducing artifacts associated with time stretching.

#### **Track View**

Force now includes MPC's Track View mode.

#### New Main Mode

Discover Main Mode on Force, designed to improve workflow efficiency and provide better visual feedback for your projects. To enter Main Mode press MATRIX + NAVIGATE or use the Mode Menu > Main Mode icon.

#### **Visual Interface**

The main interface is now divided into two tabs: Track and Arrange, streamlining access to crucial information and editing functions.

- **Track Tab**: Displays essential details for the current track type and facilitates track-specific editing operations.
- Arrange Tab: Showcases recorded events and provides easy access to editing functions.

#### Track Tab

- **Track Edit Selector**: Use the Pencil icon to bring up the Track Edit selector. Choose from a list of edit commands that apply to the current track.
- **Duplicate Track**: Press the ++ icon to duplicate the current track without events.

If the current track is a drum track:

- The waveform for the current pad's current layer is shown, with Start and End markers for easy coarse adjustment.
- Zoom in or out using a pinch gesture.
- For an empty pad, the overlay provides quick shortcuts to Browse (to go to Browse mode) and Record (to go to Sampler mode).
- Pad/Track Radio Button: Changes the primary strip shown by the XL Channel Strip.
- **Track Settings Popup**: Push and hold on the name area of the Track combo box to bring up the Track Settings popup.
- **Convert Track Type**: Press on the Track number to convert the current track to a different track type.

#### Arrange Tab

- **Grid Component**: Displays an overview of recorded events. Use a pinch gesture to zoom and a touch drag gesture to scroll.
- Punch In Settings and Locators: Displayed above the grid.
- Clip Edit Selector: Use the Pencil icon to bring up the Clip Edit selector. Choose from a list of edit commands that apply to the arrange event list.
- **Copy Arrangement to Clip**: With the Arrangement selected push hold on the icon to the left of 'Arrangement' from the call out menu choose Copy Arrangement to Clip.
- **Copy to Arrangement**: With a Clip selected push hold on the icon to the left of the clip name from the call out menu choose Copy to Arrangement.
- Launch Selected Clip During Playback Press and hold the icon to the left of the clip name to open the callout menu. From there, enable Launch Selected Clip During Playback. Now, selecting a different clip will automatically launch it during playback.

#### Main Mode - XL Channel Strip

Effortlessly manage all your mixing tasks using the dual Channel Strip within Main Mode.

- **Expanded Functionality**: Tap the top corner of the Channel Strip to expand or hide the dual Channel Strip.
- Adaptive Display: The first channel strip mirrors the current track or pad, while the second strip dynamically adjusts to display relevant information based on your actions. For example, selecting a send option in the first channel strip will prompt the second strip to show the corresponding return channel strip. Adjusting the level fader in the first strip will set the secondary strip to display the track or pad output strip, enabling seamless access to audio routing options.
- Enhanced Effect Management: Easily add insert effects directly into each of the four slots from the effect tab. Tapping an empty slot opens the insert effect selection pop-up, while tapping a slot with an effect opens its editor. Pressing and holding on an insert slot will bypass the effect.
- **Streamlined Navigation**: Use the icons above the insert slots to access the factory/user library of FX racks and the insert overlay.
- **Rearrange insert effects:** From the insert overlay use the arrow buttons to reorder effects.

For drum tracks, use the radio button in the bottom right corner of Main Mode TUI to switch the channel strip between Pad and Track strips.

#### **Sounds Mode**

Explore enhanced functionality within Sounds Mode for better browsing and auditioning capabilities.

#### **Extended Browsing**

• **Browse Expansion Packs**: Easily browse expansion packs or folders containing tracks, programs, or presets directly from Sounds Mode.

#### Audition Mode

- Easily Audition: Listen to tracks or programs with audition files without loading them.
- Activate Audition Mode: Press the headphone icon in the top right corner of Sounds Mode. Then, press and hold on the tile to play the audition file.

#### **Track Edit Improvements**

#### Drum/Keygroup Track

- 8 Layers:
  - Force drum and keygroup tracks now support up to 8 layers.
  - From the **Track Edit > Samples Tab**, you can assign and layer up to 8 samples on a pad/keygroup, allowing for larger velocity splits or more cycle layers.

#### Slice Motion

#### • Functionality:

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- When Slice Motion is On, each time a pad is triggered a different slice from the sample plays.
- Example: Slice a hi-hat or Tamborine loop in Sample Edit Chop and assign it to a pad in a drum track. From Track Edit > Samples Tab set the Slice field to 1 and the press the Slice Motion icon next to it, to open the Slice Motion popup.
  - Setting Motion to
    - Increment, increments the Slice number with each new note event.
    - Random, plays your slices in a random order
  - Tap a pad repetitively or turn Note Repeat On and hold the pad to hear the slices play of your chopped loop play.
  - The Cycles menu lets you choose how many of the slices are played.

#### Repeats

- Setting Repeats
  - You can now set a sample to play a number of times.
  - Load a Drum Track and go to Track Edit > Samples Page.
  - Choose pad with a sample already assigned
  - o Turn Pad Loop On
  - Set the **Repeats** parameter to the number of repeats you want to hear, for example a value of four would play the sample four times.
- Note:
  - Repeats after the first play will play between the Sample Loop and End point
  - The behaviour difference been Repeats = 0 or 1 is only evident when a Pads Sample Play parameter is set to Note On. Now when holding a note 0 = infinite repeats and 1 will play a sample once through.

### Smaller enhancements and changes

List Edit

• List Edit gains Events and Tempo tabs

#### **Pad Color**

• Pad Color is now its own mode accessible from the Mode Menu

#### Mode Menu

- Force Mode Menu can now span multiple pages.
- The layout of the mode menu can be customised using a press-drag gesture.
- To move a mode from one page to another hold the mode over the <> arrows until the mode menu moves the the next page.

#### Pull Down Menu

• Redesigned for improved visual clarity and ease of navigation.

#### Looper

- The Looper now Exports to Audio Tracks.
- Note : Export to Pad is on a SHIFT F-Key.

#### **Step Sequencer Mode**

• The Step Sequencer now includes an Auto-Scroll option. In Step Sequencer mode, the settings icon provides Auto-Scroll options: **OFF** and **Page**.

#### **Recording to arrangement**

• Recording a clip performance into the arrangement is no longer quantised by the TC settings.

#### **MPC2 Project Import improvements**

#### Overview

Force can load MPC3 projects and import MPC2 projects.

#### **Key Changes and Import Process**

- Importing MPC2 Projects:
  - Force includes an MPC2 Project Import feature that attempts to recreate MPC2 projects as accurately as possible.

- Upon loading an MPC2 project, Force displays an MPC2 Project Import dialogue.
- Default Import Behavior:
  - All Sequences Import: By default, the Import field is set to "All Sequences."
    - Force will attempt to import all sequences and tracks from the MPC2 project.
    - If a single track was assigned to a single program in MPC2, Force will create a corresponding track of the same type as the original program.
    - If multiple tracks were assigned to the same program in MPC2, Force will create one primary track of the same type as the program and subsequent tracks will be MIDI tracks with their SEND TO field pointing to the primary track.
- Importing Selected Sequences:
  - Selected Sequences Import: Users can choose to import only specific sequences.
    - Setting the Import field to "Selected Sequences" displays a list of sequences used in the source project.
  - Users can tick the sequences they wish to import.
  - The selected sequences will load into their original locations within the sequence list.

#### **Explode Track**

The "Explode Track" feature can be used to break down a Drum Track containing samples and events into multiple new tracks, making it easier to mute individual drum elements using Track Mute.

From Main Mode, Track Tab press the Pencil icon to bring up the Track Edit selector and choose 'Explode track'

- Explode, leaves the current track in place muting its channel strip so that its not heard.
- Multiple new tracks are created. Each new track corresponds to a distinct pad or note that has events on the original drum track.
- The new tracks keep the pad and track insert effects from the original source track
- Where pads with events are assigned to a mute group those pads are copied to a single track.

#### **Bug Fixes**

- Loading a program over an existing MIDI/CV track that is muted no longer causes the mute state to be retained persistently for the track
- Improved loading times for larger programs and keygroups

- In Track Edit for drum and keygroup tracks, samples can be assigned to layers for multiple pads when selected in Edit Zones
- Sample Edit retains the last sample selected after switching modes and tracks
- When using copy functions, the "From Track" is set to the current track by default
- Resolved an issue where samples were not loaded with audio tracks
- In Track Edit for a drum track, changes to Drum FX are saved correctly with track and project files
- When loading a sample to an audio track in grid view, when "place at start" is unticked the position defaults to the current playhead position
- Custom Q-link macros for plugin tracks no longer reset when the plugin preset is changed

#### **Known Issues**

- Activations list not accurate on first start up after updating
- Click in audio when switching sequence in Song/Next Sequence mode
- Pattern files from 3.3 do not load in 3.5
- In Preferences, setting the default mode to Main Mode in 3.5 will show an old version of the main mode page if the Firmware is returned to 3.3. This can be resolved by resetting preferences or setting the preference back to clip matrix.
- Recording clips to the arrangement with loop off restarts after the sequence length is reached
- Recording to an audio clip freezes shortly when fixed length is off and quantize is set to none
- Recording an audio clip to the arrange records from start of sample regardless of clip start
- Freeze can occur after loading certain projects and attempting to load another
- Loading a Drum track into an existing project and using Save does not save the samples for the loaded track. Save As does save the samples to the project
- Pressing HW buttons whilst a pop-up is open in the New Project Dialog can cause a crash
- Recording an audio clip to the arrangement with loop on overwrites existing data when it loops
- Progress bar occasionally hangs on the screen when loading a project with multiple plugins. Can be dismissed with a swipe gesture
- In Create Stems, tapping a pad changes the sample that is being processed
- Toggling effects on/off for 2 or more simultaneously causes UI to become out of sync
- Using Bounce to Audio Track does not Mute the original track
- Metronome doesn't sound when set to Mono Output
- Multiple uses of Double Length with Events on Arrangement causes UI to freeze
- Load to Pool not working for Splice files on external drives
- Setting External drive as the Temp File location causes saving issues if the drive is disconnected and reconnected
- Track Mute automation at 1:1:0 is not copied with Copy Bars
- Arrangement stops when changing internal track types while in sync mode