

MPC 3 Firmware Update

Compatibility

This release is for MPC Key 37, MPC One+, MPC X Special Edition, MPC Key 61, MPC One, MPC Live II, MPC X and MPC Live hardware.

Desktop Software

In controller mode MPC remains compatible with the MPC 2.15 desktop software. However, please note that projects created in Standalone Mode on version 3.4 are not backward-compatible with the MPC 2.15 desktop software.

Downloading the Firmware Update

To download the 3.4 Firmware Update, use the online updater or navigate to [MPC Software & Firmware Downloads](#) and select the appropriate download.

For instructions on installing these updates, please visit our support page [here](#).

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 MPC3 a whole new advanced keygroup synthesis engine. Load any MPC2 keygroup and go to Track Edit, from the TUI Toolbar click the LEGACY button OFF. MPC preserves your existing sample keymap but switches out the legacy MPC2 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 MPC, 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. In MPC2 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 MPC 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.
 - 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

MPC now offers the choice to timestretch or repitch an audio sample to synchronize it with the MPC sequence 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 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.
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Track Mute: Event vs. Audio Mute

Track Mute now offers greater flexibility with a new option to toggle between **Audio Mute** and **Event Mute** for supported track types. This enhancement applies to tracks containing both MIDI events and an audio path, including:

- **Drum Tracks**
- **Plugin Tracks**
- **Keygroup Tracks**

For **MIDI** and **CV tracks**, **Event Mute** will always be applied, while **Audio Tracks** will always use **Audio Mute**, regardless of the selected option.

- **Event Mute** silences new MIDI events but allows any currently playing events to ring out naturally.
 - You can seamlessly switch between **Event Mute** and **Audio Mute** via the **Track Mute Toolbar**, giving you more control over how your tracks behave during muting.
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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 MPC sequencer.
 2. With the drum track 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.
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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.
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Track Mute Per Sequence

The MPC 3 update introduces a highly requested feature—**Track Mute Per Sequence**, allowing users to have different tracks muted per sequence for more dynamic and customizable arrangements.

How to Enable Track Mute Per Sequence:

1. **Access Track Mute:**
 - Navigate to the **Track Mute** screen.
2. **Enable Track Mute State Per Sequence:**
 - Tap the settings icon in the top right corner.
 - In the popup menu, turn **Track Mute State Per Sequence** to **On**.

This feature allows you to create unique mute setups for each sequence, providing greater flexibility in live performance and arrangement creation. You can now switch between sequences with different muted tracks, enhancing creative control over your music.

Sliced to Audio Track

This MPC 3 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 timestretching.

Stem Separation - Minor algorithm improvements for better audio quality and stem separation.

Note: These improvements result in increased processing time on standalone devices.

New Project Feature

When starting MPC 3.4 or selecting 'New Project', MPC will now automatically load a small Factory Project by default. The configuration of this Factory Project varies depending on the type of MPC device in use:

MPCs Without a Keyboard:

- **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.

MPC Key61:

- **Drum Track Preset:** Same as MPCs without a keyboard.
- **Plugin Instrument Tracks:** Four plugin instrument tracks are added before the drum track.
- **Effects:** AIR Reverb and AIR Delay are preloaded on Returns 1 and 2.

MPC Key37:

- **Drum Track Preset:** Same as MPCs without a keyboard.
- **Plugin Instrument Track:** A single plugin instrument track is added before 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 > New Project Behaviour` field.

Important Note: When importing projects into MPC3, we strongly recommend that you do not save over your existing MPC2 projects. Doing so will render them incompatible with MPC2, preventing you from reopening them in the previous version.

New Main Mode

Discover the enhanced Main Mode in MPC, designed to improve workflow efficiency and provide better visual feedback for your projects.

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.

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.

Sample Directly into a Pad

On a Drum Track, you can now sample directly into an empty pad.

How to Record into a Pad

1. **Record Ready:** From Main Mode, push the transport RECORD button to put the transport in record-ready state.
2. **Sampling Modes:**
 - **Moment Toggle:** Press and hold an empty pad to start recording. The sampler records for the exact duration the pad is pressed.
 - **Toggle:** Tap a pad to arm it for recording. Tap again to stop recording. If the sampler did not start, the pad remains empty as before.

While a pad is recording (or waiting to start recording due to threshold settings), it illuminates red.

Note: Sample recording adheres to the setup in the sampler page, respecting the inputs and threshold values.

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.
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Arrange Mode

MPC now features Force's Arrange Mode, offering a comprehensive visual overview of your linear arrangement.

Arrange Mode is a fully-featured linear sequencer. In standalone mode, you can now:

- **Create an Arrangement:** Construct a song arrangement on a linear timeline.
- **Edit and Arrange:** Utilize MPC's powerful Arrange Edit commands.
- **Mixdown:** Export your arrangement to a stereo audio file or stem it into separate tracks.
- **Edit Tracks:** Use the pull-up Track Editor, Grid, or List editors to modify a single track from your arrangement.

Arrange: Getting Started

1. **Enter Arrange Mode:** Press MENU and select Arrange. The event editor's Arrange, Grid, and List tabs are displayed in the top left of the TUI for easy switching.
2. **Recording:**
 - Use the REC, OVERDUB, and PLAY buttons to record into MPC's arrangement timeline.
 - To replace a section, turn the Loop f-key On, then set the Loop Start and Loop End by dragging the Loop Region's edges. Dragging the middle moves both start and end points simultaneously. Press REC to start recording at the Loop Start and end at the Loop End, making it easy to replace a section.
3. **Playback:**
 - Press PLAY START to begin playback from 1:1:00, or from Loop Start if Loop is On.
 - Press PLAY to begin playback from the current playhead position.
 - Move the playhead by tapping the Bar Beat Tick field in the toolbar, then use the data wheel or +/- buttons to adjust. You can also touch the lower half of the timeline to set the playhead position.
4. **Locate Markers:** Arrange Mode includes six user-configurable locate markers. Hold the SHIFT button to reveal the Arrange Mode's shift f-keys labeled SET. Pressing a SET f-key adds a locate marker at the current playhead position. Pressing the f-key again jumps the playhead to the locate marker. For detailed configuration, use the Locate popup.

Editing Your Arrangement

To edit an arrangement, go to Arrange Mode and press the EDIT button in the toolbar to open the Sequence Edit selector. Edit options automatically set input ranges based on the Loop range. Choose the desired operation from the selector:

- **Erase:** Remove all or part of a track.
- **Clear:** Remove all events from the arrangement.
- **Trim:** Trim events to the bars value set in Arrange.
- **Delete Bars:** Remove a range of bars from the arrangement.

- **Insert Bars:** Add empty bars to an arrangement at a specified point.
- **Half Length:** Halve the length of the arrangement without deleting any note events.
- **Double Length:** Double the arrangement, copying all events from the first half to the second half.
- **Copy Bars:** Copy a range of bars and add them at a specified point.
- **Copy Events:** Copy a range of events or selected audio track regions to another point.
- **Copy Sequence:** Copy events from one sequence to another for experimenting with different arrangements.

Track Edit Options

- **Audio Track Header:** Push and hold to bring up a dropdown menu with options like Clear, Copy Track, Copy Events, Reset Channel Strip, Bounce to Sample, Flatten Track, and Flatten Track Elastique.
- **Drum/Keygroup/Plugin/MIDI/CV Track Header:** Push and hold to bring up a dropdown menu with options like Clear, Copy Track, Copy Events, Double-Speed, Half-Speed, Pitch Quantize, Bounce to Sample (not for MIDI or CV), and Bounce to Audio (not for MIDI or CV).

Arrange Bottom Panel Track Editor / Grid / List

In Arrange Mode, edit events from the selected track using the bottom panel Track Editor:

- **Open the Editor:** Push the arrow up button at the bottom of the TUI or double-tap within a track lane in the main arrangement view. Drag the separator bar or arrow to resize the editor. Tap the down arrow to close it.
- **Tab Buttons:** At the top of the Track Editor, use the GRID tab to edit MIDI events or audio regions. Use the AUTO tab to edit automation.

The Locate Popup

Open the Locate popup by double-tapping the Bar Beat Tick field on the Toolbar or pressing the LOCATE button on your MPC (specific to hardware model):

- **Time Tab:**
 - Use STEP <> buttons to move the playhead by the Timing Correct (TC) value.
 - Use BARS <> buttons to move the playhead by a whole bar.
 - Double-tap the Bar, Beat, or Tick fields to bring up the TUI Numeric keyboard for precise adjustment.
 - Set Auto Record to Record From Loop Start for automatic recording when the arrangement loops.
- **Locators Tab:**
 - Press the SET button to create a locate marker at the current playhead position.
 - Edit the Color and Name of a marker using the Keyboard and Color Dropper icons.
 - Touch the X button to delete a locate marker.

Mixdown or Stem Your Arrangement

Audio Mixdown

1. **Accessing Audio Mixdown:**
 - From the Mode Menu, press the SAVE button to open the Save popup.
 - Select the Audio Mixdown option from the popup.
2. **Setting Mixdown Parameters:**
 - **Audio Length:**
 - Set the region for mixdown using the Start Bar and End Bar parameters.
 - The Audio Tail parameter adds additional seconds to the mixdown after the End Bar to capture the tail of ringing notes or effects, such as reverb.
 - **Render Source:**
 - Tick the Stereo Output option to create a stereo audio file of the arrangement.
 - Tick the Separate Tracks option to render the arrangement as stems.
 - **Render Options:**
 - Configure advanced mixdown options in this section.
 - **File Settings:**
 - Choose the File Format (WAV/AIFF/MP3/FLAC/OGG), Bit Depth, and Sample Rate for the mixdown audio file.
3. **Export to Ableton Live Set:**
 - Use the Ableton Live Set export option to export the MPC arrangement as a clip row to an Ableton Live ALS project.
 - Press the SAVE button to open the Ableton Live Set Export popup.
 - Tick the Export Arrange as Clips option.
 - To recreate the arrangement in Ableton Live, copy and paste scene 1 from the Session View to the Arrangement View.

Arrange Mode Features

- **Track Headers:** Display Record Arm, Mute, Solo, Track Automation, and Crossfader Assign state. Adjust vertical zoom to ensure enough space to show these components.
- **Zooming:** Use a pinch-to-zoom gesture to zoom in or out on your arrangement.
- **Loop Region:** The Loop region is always displayed, regardless of whether Loop is On or Off.
- **Drum Pad Headers:** Improved in Grid and Arrange Bottom Panel Editor. Push and hold on a pad header to access a dropdown menu for Mute, Solo, and Pad Color mode.

Tempo Automation

You can now program the tempo of 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.
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Track Mixer and Pad Mixer improvements

The new vertical mixer layout makes it easier and faster to apply your mixing techniques.

Navigation and Layout

- **Swiping:**
 - Swiping within the mixer scrolls the mixer view.
 - Swiping at the end of the track list switches the mixer between tracks and buses.
 - **Mixer Layout:** Divided into six tabs for streamlined access:
 - **Volume:** Full-height faders prioritize volume adjustment for easy handling.
 - **Pan Volume:** Access volume, pan, record arm, mute, solo, and track automation controls.
 - **Sends:** Overview of four send channels.
 - **Effects:** Overview of four insert slots.
 - **I/O:** View all MIDI and audio input and output ports.
 - **Settings:** Especially useful in the Pad Mixer:
 - **Filter by Events:** Show only pad strips with note events.
 - **Filter by Samples:** Show only pad strips with samples assigned.
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Track Mute / Pad Mute

Track mute controls the Mute state of all of the tracks in you current project.

- **Track Mute Settings Popup:**
 - **Use Track Colors:** Switch the pads between showing track colors and the legacy mute colors.
 - Change whether the pads, mute or solo tracks, using the right hand f-key
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Mode Menu Customization

You can now edit the layout of the TUI Mode Menu for a more personalized workflow.

Editing Mode Menu Layout

1. **Rearrange Mode Icons:**
 - Go to the Mode Menu.
 - Press and hold a Mode icon, then drag it to your desired position.
2. **Reset to Default:**
 - Go to the Mode Menu Toolbar.
 - Press the X icon and select "Reset Mode Menu" from the dropdown menu.

TUI Mode Shortcut Panel

MPC now features a left-hand TUI Mode Shortcut Panel that can be customized to contain your favorite modes.

1. **Turning the Shortcut Panel On in Preferences**
 - From Preferences > General > Mode Menu set the Show Shortcut Panel field to ticked.
 2. **Accessing the Shortcut Panel:**
 - Drag the black touch handle from the left-hand side of the TUI to the right to fold out the Mode Shortcut Panel.
 3. **Editing Shortcut Panel Modes:**
 - Go to the Mode Menu.
 - Drag the modes to arrange them in your desired layout for the shortcut panel.
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Disk Streaming

Audio files can now be streamed directly from disk, providing enhanced performance and flexibility.

Enabling Disk Streaming

- **Enable Disk Streaming:**
 - Navigate to Preferences > Audio/Export.
 - Use the `Disk Streaming` checkbox to enable this feature.
 - Once enabled, any audio loaded or recorded onto an audio track will be streamed from disk.

Sample Management

- **Sample Storage Options:**
 - **Default Setting:** Drum and Keygroup samples are loaded into memory for rapid, on-demand triggering of multiple simultaneous voices.

- **Changing Sample Storage:**
 - Go to the Mode Menu and tap the Folder icon in the Toolbar to open the Project Overview.
 - Filter your sample pool to show samples that are either `Streaming` or in `Memory`.
 - **Icons:**
 - Green waveform icon: Samples streamed from disk.
 - White waveform icon: Samples in memory.
 - To switch a sample from memory to streaming, press and hold the sample's name and choose `Stream From Disk` from the callout menu.

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

Organizing Samples

- **Sample List Hierarchies:**
 - When displayed in a combo box, the sample list is now organized into `Streaming` and `Memory` hierarchies.
- **Project Handling:**
 - A sample's streaming or memory state is saved and recalled with the project.
 - If a project is too large to load into memory, MPC loads the project and displays missing samples in the Project Overview with a waveform and a red minus icon.
 - To load missing samples, free up memory and then use the Project Overview screen. Press and hold the sample's name and choose `Load To Memory` from the callout menu.

Disk Performance and Best Practices

- **Optimal Performance:**
 - Disk streaming relies on the performance of the disk. For best results, use an SSD drive attached to MPC's internal SATA port (if your MPC has an internal SATA port).
 - Save projects to your SSD drive to stream files from that location.
 - For unsaved projects, MPC uses a temporary file location to stream audio files.
- **Setting Temporary File Location:**
 - Go to `Preferences > Project Load/Save`.
 - Set the `Temporary File Location` field to your SSD drive.

Note: Removing storage media containing your Temporary File Location will revert temporary file storage to MPC's internal default location. To restore external directory usage, remount the storage media and reboot MPC.

Here's the revised version of your software release notes for the Buses (Submixes>Returns/Masters) section:

Bus Automation (Submixes>Returns/Masters)

Buses can now be fully automated, providing enhanced control over your mixes.

Automating Buses

- **Automate Parameters:**
 - Automation recording, playback, and editing on buses follow the same workflow as other tracks.
 - You can create, record, or play clips containing automation data for buses.
 - Select a bus like a normal track to view, edit, and input automation.
- **Viewing Automation:**
 - Push the `Buses` f-key to select buses and view automation in Arrange mode.
- **Track Settings:**
 - Double tap on a bus track header to bring up the Track Settings dialog. From here, you can rename the bus or change the color of the track header.

FX Racks on Buses

- **FX Rack Integration:**
 - FX Racks and their FX Rack Q-Link assignments are now functional on buses, allowing for more complex and dynamic effects processing.
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Q-Link Edit - Macros

MPC expands the power of the Q-Links, giving the ultimate control over automation parameters within your projects.

Q-Links

- **Multiple Parameter Control:**
 - Each Q-Link can now control multiple automation parameters. Customize input and output ranges and toggle behaviors for each assigned parameter.
 - Navigate to Q-Link Edit mode to manage your Q-Link assignments.
- **Learn Modes:**

- Use Learn mode to assign multiple parameters to a Q-Link. You can learn multiple parameters to a Q-Link in all the user configurable Q-Link modes: Track, Project 1, Project 2, and Track FX Rack.
- To learn multiple automation parameters to a Q-Link, go to Q-Link Edit, Q-Link tab and from the toolbar set the Q-Link Mode field to Project 1. When in any of the user assignable Q-Link modes the Learn and Momentary buttons will be present in the top right hand corner of the TUI. Click the Learn button On, by default the drop down field next to Learn will have the Add option ticked, on MPC models with Q-Link OLED screens they will show the message LEARNING. Now navigate to a mode such as Track Edit that contains the parameters you want to learn and move the parameters via the Track Edit TUI. The TUI displays feedback that your learn operation has been successful. To protect your assignment return back to Q-Link Edit mode and tap Learn again to turn the feature Off.
- To Learn a single parameter to a Q-Link so that any new assignment will replace the previous one, press the drop down arrow next to the Learn button and untick Add.
- To use a single Q-Link to mute/unmute multiple tracks you can learn multiple parameters as toggles to speed up the assignment process. Press the drop down arrow next to the Learn button and tick Toggle now any parameter will be set to Toggle between min/max values.
- To Learn a parameter and set its range during the learn process press the drop down arrow next to the Learn button and tick Range. Now when Learn is On the range of the parameter learned will be set according to the range you move a parameter by.
- A Q-Link control can be configured to send a scene of parameters values such that moving the control sends the maximum value of each assigned parameter. Press the drop down arrow next to the Learn button and tick Trigger now any parameter will be automatically learned with the Toggle parameter set to Trigger. When the Toggle parameter is set to Trigger the assigned parameter will always send the maximum value that has been set in the Parameter Range section.
- To make learning parameters easy in any TUI Mode the Learn functionality can be accessed from the second page of the pull down menu.
- **Momentary modes**
 - To set a macro to have momentary behaviour in Macros mode set the Momentary button (next to the Learn button) to On, now when releasing a Q-Link, or XY Pad positions the macro control will return its assigned parameters to a previous value. The type of previous value is set in the Momentary drop down :
 - When Previous is ticked the assigned parameters will return back to the values they were set to before the control gesture started.
 - When Minimum is ticked the assigned parameters will return back to the minimum value set in the Parameter Range section.

Editing a control's assignments

- To edit a Q-Links assignments from the Q-Link Edit modes Q-Link page use the left hand component to select the Q-Link you want to edit. The right hand panel is split into two areas: the upper part displays the parameters that have been learned to the control, the lower area is the parameter inspector which displays the settings for the currently selected learned parameter. To edit a parameter's settings from the right hand panel touch a parameter to give it selection (indicated with the light grey selection highlight). Use the Control Input range to set the percentage of the control that will be active, use the drop down menu to set its response to Linear, Logarithmic or Exponential curves. Use the Parameter Range (Output) to set the minimum and maximum values that will be sent when adjusting the Q-Link across its full range. Lastly the Toggle field sets the behavior to: OFF = moving a control sends a continuous range of values, Toggle = moving a control toggles between the Parameter Range min and max values, and Trigger = moving a control sends the max value.
- You can rename a Q-Link in one of the user assignable Q-Link modes by pressing the keyboard icon in the toolbar.
- To manually add a parameter assignment when in any of the user assignable Q-Link configurations push the + button in the right hand side of the TUI and navigate through the hierarchical list of automation parameters.
- To remove a parameter assignment use the Trash can icon

XY Pad

- **Parameter Assignments:**
 - Learn automation parameters to MPC's assignable XY pads. Configure X axis, Y axis, columns, rows, or quadrants within the XY Pad interface.
 - Access XY Pad settings from Q-Link Edit mode by pressing the XY Pad f-key.

Other Macro features

- **Copying Assignments:**
 - Copy existing macro assignments between controls. Navigate to the control tab, press the + button, select "Copy Existing Macro," and choose between Replace or Merge options.

New Q-Link modes:

- **Q-Link mode MIDI:**
 - A selection of MIDI performance controls. Use Q-Link mode MIDI in conjunction with the MPC pads to control modulation, pitch bend, sustain and other common MIDI messages as you play notes.
- **Q-Link Mode Project 2:**

- Access a second project mode for additional customization.
 - **Q-Link Mode Track FX Rack:**
 - Control FX Rack presets seamlessly within this new mode for enhanced control over effects.
-

Pull Down Menu

You can now easily access key MPC parameters in any mode using the TUI Pull Down menu.

- **Accessing the Pull Down Menu:**
 - Drag from the top middle of the TUI to reveal the Pull Down menu.
 - **Parameter Pages**
 - The pull down menu has two pages of parameters use the < > arrows to move between pages
 - **Dismissing the Menu:**
 - Simply swipe upwards to dismiss the Pull Down menu.
 - **Global Automation Button:**
 - **Recording Automation:** Toggle the global automation state between Read and Write by pressing the Global Automation button from the Pull Down menu.
 - **Setting Automation to Off:** Hold SHIFT and press the automation button to set it to Off.
 - **Push hold gesture**
 - The Time Correct, Metronome buttons support a push hold gesture to open their accompanying popup of settings.
-

Track Edit

Track Edit replaces Program Edit: Tracks and programs have been combined into a single container to simplify the user experience.

Drum/Keygroup Track

- **8 Layers:**
 - MPC 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:**

- 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 then 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
 - 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 between 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.

MPC2 Project Import

Overview

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 results in MPC2 projects not being loadable into MPC3 with identical behavior.

Key Changes and Import Process

- Unified Track Container:
 - MPC3 merges tracks and programs, simplifying the project structure and enhancing workflow efficiency.
 - This change means that MPC2 projects cannot be loaded directly into MPC3 with their original behavior intact.
- Importing MPC2 Projects:

- MPC3 includes an MPC2 Project Import feature that attempts to recreate MPC2 projects as accurately as possible.
 - Upon loading an MPC2 project, MPC3 displays an MPC2 Project Import dialogue.
 - Default Import Behavior:
 - **All Sequences Import:** By default, the Import field is set to "All Sequences."
 - 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 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.
-

Smaller enhancements and changes

Grid View

- Grid View mode has been updated to work with the 1:1 track layout.
- After making a recording and entering Grid View mode, by default grid view will zoom and scroll to show the recorded events.
- The Shift f-key row now includes options for Delete or Duplicate events.
 - Use the Duplicate f-key to duplicate a selection of events after the last selected event.

List Edit

- List Edit mode has been updated to work with the 1:1 track layout.
- List Edit is now grouped with Arrange and Grid Edit modes.
- List Edit gains Events and Tempo tabs

Track View

- Track View mode has been updated to work with the 1:1 track layout.
- Track View now contains f-keys for New Track and Rec Arm.
- Track View now contains a Shift f-key row. Hold SHIFT to access
 - Duplicate Track
 - TC
 - Click
 - Track Settings

Step Seq

- Step Sequencer mode has been updated to work with the 1:1 track layout.
- Independent track length can be set in bar beats pulses from the Toolbar Track Length field.

Pad Color

- Pad Color is now its own mode accessible from the Mode Menu
- You can now give all track types their own color maps.
- There is now the option for a tracks pads to follow a Pad Color map (PAD) or the Track Color (FOLLOW TRACK)

Mode Menu

- MPC3 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 to the next page.

Key ranges

- Has been updated to work with the 1:1 track layout
- Tracks are now drawn using the tracks color

Browser

- Browser mode has been updated to work with the 1:1 track layout.
- By default loading a drum program onto an existing Drum Track replaces the track and its sample content with the new kit. This enables a fast workflow where drum kits can be loaded over each other without filling your memory with unused samples (This behaviour can be toggled Off by pressing the Settings icon and from Browser Options, untick Clear Unused Samples On Load).
- Use the data dial and push enter to load a drum kit or use +/- buttons to load the next previous item in the list with one click.
- Load To New Track f-key loads a program or track file to a new track.

Looper

- The Looper now Exports to Audio Tracks.

Arpeggiator

- A new **Arpeggiator Modifier** section has been added to allow dynamic adjustments of arpeggiated notes using incoming MIDI controller messages.

Key Features:

- **Arpeggiator Modifier Controls:**
The new section enables modification of arpeggiated notes based on MIDI input from the following controllers:
 - **Channel Pressure**
 - **Aftertouch**
 - **Mod Wheel**
 - **Expression**
- **Adjust Modifier Settings:**
Use the **Arpeggiator Modifier Settings** section to define the target amounts and control how the incoming MIDI data influences the arpeggiation.

User Level

- The **User Level** feature replaces the previous **Half Level** functionality, providing the ability to specify a custom velocity value.

Key Features:

- **Setting the User Level:**
Hold down the **FULL LEVEL** button to adjust and set the desired User Level velocity value.
 - **Enabling User Level:**
Press **SHIFT + FULL LEVEL** to activate the User Level function.
 - **Default Settings:**
To set a default velocity for new projects, navigate to **Preferences > Project Defaults**, then adjust the **Default Pads User Level Velocity** field.
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Ongoing Improvements

We deeply appreciate the feedback from our MPC 3 beta users. Two key areas—**Time Signature Support** and the **MIDI Note Off issue**—have been at the forefront of your input. Please rest assured that we are actively working to address these concerns in a future update.

Bug Fixes

- Key and Tempo detection now occurs when importing samples
- Loop brace can now be moved and resized in Grid view
- Drum Pads as Stems option now appears correctly in save selection after changing the current track's type
- Samples with the same file names will now have their name appended on import and can be saved correctly
- Sample combobox callout menu has been resized to view longer sample names
- Keygroup Portamento time can now be adjusted correctly with the data dial
- In the Copy Sequence function, the “To” field will now be set to the next available unused sequence
- No longer possible to create a trackless project after updating to 3.4
- Bouncing audio no longer resets the MIDI Output port for MIDI tracks
- Projects with high memory plugins can now be saved and loaded without error
- Using Stems multiple times on new samples no longer causes a saving error
- Warning pop-out now appears when attempting to save when using a sample from an external drive that has been removed
- MIDI and CV tracks can now be recorded to when in a muted state
- Export in Song Mode now operates correctly first time
- In Convert Song to Sequence, the “Ignore track mutes” parameter now works correctly regardless of the Track Mutes per Sequence setting
- Resolved an issue with imported MPC2 Projects loading with samples missing from drum tracks
- In grid view with a melodic track the keyboard notes displayed on the grid will now play back when tapped

- In grid view with a drum track the pad previews can now be triggered when tapped for Note On and Note Off settings
- Resolved an issue where certain track volumes were not saved with the project
- Progress pop-out now appears whilst Convert to Audio Track is processing
- In the Copy Pads function, the “From Track” is now set to the currently selected track
- Resolved an issue with Sample Edit preview where playback would fail if tail length is set for the sample in track edit
- Resolved an issue where certain notes would not playback correctly after recording beyond the track length when set independently from the sequence length
- MIDI Control setup now saves with the project
- Resolved an issue where samples are not assigned when loading an Audio track

Known issues

- In Activations, a license error can occur which deactivates previously activated plugins
- Whilst offline, unit startup can take longer to complete
- Certain plugins are not shown on the activations list immediately after updating. This resolves after restarting the device.
- Re-saving an existing project after target storage medium has been force ejected and replaced results in missing samples on re-load
- Loading a demo project from the Demo launch page opens the project with no tracks armed for recording
- Loading a drum track containing a very large sample - around 1GB in size - to RAM can cause MPC to crash
- Keygroups:
 - When changing a track to a keygroup track, the instance does not load the expected default Keygroup template of parameter values
 - Note Counter routed to Pan does not spread correctly
 - The values of Aftertouch to Cutoff or Pressure to Filter parameters in duplicated keygroup tracks follow the value set in the original track, not their own value
 - AKP files will not load