

# Loop Kong

## User Manual

*A clear, step-by-step guide for musicians, loopers and producers*

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# About this manual

This manual explains Loop Kong in simple English. It is written for musicians who want to use the application.
Loop Kong is a music application for Windows. It is designed around scenes, tracks, clips, layers, real-time recording, MIDI, audio files, plugins, monitoring, and live performance workflows. Some exact names, colors, menu entries, and tooltips may vary depending on your installation and settings. When this manual says "click", it normally means left-click. When it says "right-click", open the context menu.
Revision 1.6 is aligned with APP_3640 / 0.3.640. Earlier features introduced in APP_3507 include the current Scene Chain tools, STOP/CONTINUE restoration, Audio Spread, Warp editing/prepared playback gate, configurable default monitoring mode, and persistent English/Spanish UI language selection.

## How to read this manual

Start with the first chapters if you are new. They explain the main ideas slowly. Later chapters are reference chapters. You can open them when you need help with a specific area, such as MIDI editing, plugin loading, PFL monitoring, Scene Chain, or Preferences.

The manual uses a few repeated words:

- **Project**: the whole Loop Kong song/session that you save and load.
- **Scene**: a horizontal performance section. A scene can launch several tracks together.
- **Track**: an audio, MIDI, return, record/monitor, or master channel.
- **Cell**: the place where a track and a scene meet.
- **Layer**: an audio or MIDI take inside a cell.
- **Plugin**: a VST2 or VST3 instrument/effect loaded in a slot.
- **Master**: the final output section.
- **PFL**: a pre-fade listening/cue output, usually useful for headphones.

## What Loop Kong Is

Loop Kong is a live-oriented music workstation. It is not only a linear recorder and not only a loop player. It combines ideas from loopers, clip launchers, plugin hosts, audio recorders, MIDI sequencers, and mixing consoles.

The central idea is simple: you build music from tracks and scenes. A track can play audio, record audio, play MIDI, host instruments, host effects, or help you monitor sound. A scene can start several tracks together, so you can move from one musical section to another during performance or production.

Loop Kong is useful when you want to build a performance from loops, record takes into cells, trigger scenes, add effects, use VST instruments, control parts of the session with MIDI, and keep a clear view of what is playing. It is especially useful if you like live arrangement: start with one idea, add layers, duplicate tracks, move between scenes, and build a song by performing it.

The interface is split into practical areas. The top bar contains global controls such as transport, tempo, menus, and panel toggles. The session grid contains tracks and scenes. The bottom panel can show channel strips, the mixer, waveform editing, MIDI editing, and other detail views. The browser helps you find clips, templates, recordings, and files. The master and PFL areas help you control what goes to the audience output and what goes to your cue/headphone output.

Loop Kong also acts as a plugin host. You can use VST instruments on MIDI tracks and audio effects on audio-capable tracks. Because plugins are external pieces of software, different plugins can behave differently. This is normal in plugin-hosting applications. The safest approach is to load plugins deliberately, save after important setup steps, and test each instrument or effect before using it live.

Think of Loop Kong as a performance desk. Scenes are your song sections, tracks are your musical lanes, cells hold the material, layers hold takes, plugins shape the sound, and the master/PFL sections decide where the sound goes.

## The Main Window at a Glance

The main window is designed so you can keep the session visible while still editing details. The most important areas are:

| Area | What it is for |
|---|---|
| Top bar | Global menus, transport, tempo, metronome, panel visibility, CPU/activity information, and window controls. |
| Browser panel | Finding audio files, MIDI files, recordings, templates, and reusable material. |
| Session grid | Launching and organizing scenes, tracks, and cells. |
| Scene dock | Managing scene pads and the Scene Chain performance sequence. |
| Bottom panel | Editing the selected layer, MIDI notes, waveform, mixer/channel strip details, and track controls. |
| Master panel | Controlling the master output, PFL output, limiter, meters, and final routing. |
| Info bar | Showing status messages such as starting, loading, ready, saving, or MIDI learn waiting. |

A useful way to work is to keep the session grid visible most of the time and open details only when you need them. For example, you can launch clips and scenes from the grid, then use the bottom panel to edit the currently selected layer, then return to the grid without losing your musical place.

Some panels can be shown or hidden. This is useful on smaller screens. If the interface feels crowded, hide the browser, master panel, or lower detail views until you need them. If you are editing MIDI or a waveform, you may prefer to maximize the editor area and later restore the normal view.

Loop Kong uses status colors. Exact colors can vary with the selected theme, but in general green means ready or active, red means recording or danger, amber/orange means waiting or starting, and grey means inactive or disabled. When in doubt, read the tooltip or the status message in the Info bar.

The interface also has right-click menus. Many useful actions are not visible as large buttons because they belong to a specific object. Right-click a track, cell, scene, layer, or plugin slot to discover the actions that apply to that item.

## Basic Concepts: Projects, Scenes, Tracks, Cells and Layers

A **project** is the complete saved state of your work. It includes the song/session structure, scenes, tracks, layers, audio references or internal audio, MIDI data, plugin slots, preferences stored with the project, and other session information.

A **scene** is a performance row or section. You can use scenes like parts of a song: intro, verse, chorus, bridge, breakdown, ending, or any structure you prefer. When you fire a scene, Loop Kong starts the relevant material in that scene according to the current quantize behavior and engine state.

A **track** is a vertical lane. Tracks can have different jobs. An audio track plays audio layers. A MIDI track plays MIDI layers and normally needs a VST instrument before audio effects. A Record/Monitor track is useful for live input or independent capture. A Return track is useful for effect returns or shared processing. The Master track is the final output.

A **cell** is the intersection between a track and a scene. If a track is a musical player and a scene is a song section, the cell is the slot where that track's material for that section lives. A cell can be empty or can contain one or more layers.

A **layer** is a take or clip inside a cell. Audio layers contain audio material. MIDI layers contain MIDI notes. A cell may contain multiple layers depending on the track mode, recording mode, and workflow. Layers can have their own gain, pan, mute/solo state, region settings, playback behavior, and editing parameters.

This structure lets you build music flexibly. You can record multiple takes into a cell, choose or edit the layer you want, duplicate material between scenes, create variations, and perform with scene launches. The more you understand the relationship between scenes, tracks, cells, and layers, the easier Loop Kong becomes.

A good beginner rule is this: first choose the track type, then choose the scene, then put material into the cell, then edit the layer, then use scenes to perform the arrangement.

## First Start: Before You Make Sound

Before trying to record or perform, set up the basic audio and MIDI devices. This avoids most beginner problems.

Open **Preferences** and start with the **Audio** tab. Choose the audio host and device you want to use. On Windows, an ASIO device is usually the best choice for low latency when a proper ASIO driver is available. Select the input device, output device, sample rate, and frames per buffer. Smaller buffer sizes give lower latency but require more CPU stability. Larger buffer sizes are safer but feel less immediate.

Then open the **MIDI** tab if you use a MIDI keyboard, pad controller, foot controller, or external MIDI device. Select the input and output devices you need. The active MIDI port can be a single active port per direction, while the matrix may describe Track/Remote capabilities. Treat this as a setup page: make sure the device you actually play is enabled for the role you need.

Check the output routing. The **Master** output is the main sound you expect to hear through speakers or your audio interface. **PFL** is normally a cue/headphone route. If you do not hear sound, confirm that the Master output is routed to the correct physical outputs.

After setting devices, create or open a project. Watch the Info bar. It may show messages such as Loading, Starting, Project ready, or Loop Kong ready. Do not judge audio until the project is fully ready and plugins have finished restoring.

A safe first test is simple: create an empty project, add one audio track, import one WAV file, press Play, and confirm that the master meter moves and sound reaches your interface output.

## Creating, Opening and Saving Projects

A project is your full Loop Kong session. Use **New empty project** when you want a clean session. Use **New default project** when you want Loop Kong to create the default track and scene structure from your preferences. Use **Open** or the recent projects list to return to previous work.

When you create a new project, Loop Kong prepares the scene count, track count, track types, quantize modes, default MIDI layer length, recording settings, and other defaults from Preferences. This is why Preferences are important: they shape the starting point of every new session.

Use **Save project** often. Saving after a stable setup is especially important when you have loaded plugins, created a useful routing setup, or recorded audio/MIDI layers. If you experiment with plugin chains, scene structures, or MIDI maps, save a version before making risky changes.

A practical naming habit is to use clear project names and dates. For example: Live_Set_2026_04_25_A, Song_Idea_Guitar_Loops_01, or Template_Drum_Bass_MIDI. Clear names make the recent projects list useful and help you avoid overwriting your own work.

When opening a project with plugins, give Loop Kong time to restore the session. Plugin loading can be serialized and may take a moment. Some plugins show their editor only if configured to do so. Others load silently. Wait until the Info bar says the project is ready before launching scenes or recording critical takes.

If a project fails to sound after loading, do not immediately delete tracks. First check the master output, plugin slots, track mute/solo/PFL state, and whether audio devices are connected correctly.

## The Top Bar

The top bar is the main control strip at the top of the application. It gives you access to the global session actions.

Typical top bar controls include menus such as File, Project, View, Help, transport buttons, tempo controls, metronome controls, panel toggles, and window controls.

Use the transport controls to start, pause, resume, or stop playback. The Play button starts the transport or current scene workflow depending on context. Stop stops playback and should also clear stuck MIDI through panic-style All Notes Off behavior in Loop Kong. Pause keeps the current state closer to a temporary hold.

If “Stop pauses first” is enabled in Preferences, the first Stop click behaves like Pause and keeps the current position. A second Stop click performs the full stop and resets the counter. If the option is disabled, Stop keeps the classic behavior: stop and reset immediately.

The BPM area controls the song tempo. You may see controls for incrementing/decrementing BPM, tap tempo, half tempo, double tempo, reset tempo, and BPM via MIDI notes. If you are recording or editing MIDI, remember that tempo changes affect timing and musical positions.

Panel toggles let you show or hide sections such as the Browser, Mixer/Bottom panel, and Master panel. F11 toggles true Full Screen for the main LoopKong window and F11 again restores the previous window placement. Plugin editor windows keep their own keyboard focus.

The top bar can also show status indicators. If you see CPU activity, drop indicators, or warning-like messages, treat them as performance information. If the system is close to its limits, increase the audio buffer size, close heavy plugin editors, freeze or simplify plugin chains, or reduce live processing.

## The Info Bar and Status Messages

The Info bar is the status strip at the bottom of the main frame. It is there to tell you what Loop Kong is doing. It is especially useful during startup, project loading, saving, MIDI learn, and plugin operations.

Common messages include **Starting**, **Loading project**, **Project loaded**, **Project ready**, **Loop Kong ready**, **Saving project**, **MIDI learn waiting**, **MIDI learn cancelled**, or **MIDI learn failed**. Read these messages before assuming that a control is not working. Sometimes Loop Kong is simply busy finishing a safe operation.

When a project is loading, you may also see a central loading overlay with a progress bar. If the exact progress is unknown, the bar can be indeterminate. When real progress is available, the percentage is shown. This avoids the false impression that loading is stuck at 0%.

During closing, Loop Kong may show a closing overlay. This is not only cosmetic. It gives the interface time to show the closing state while the native host and embedded web interface shut down safely.

If you use MIDI learn, the Info bar becomes very important. When it says the system is waiting for a MIDI message, play or press the control you want to map. Press Escape to cancel. If nothing happens, check that your MIDI input device is selected and active.

A good habit is to look at the Info bar whenever something seems confusing. It often tells you whether the app is ready, waiting, loading, saving, or expecting input from you.

## Tracks and Track Types

Tracks are the main vertical lanes of a Loop Kong project. Each track has a type and a purpose.

| Track type | Main use |
|---|---|
| Audio track | Plays audio clips/layers and hosts audio effects. |
| MIDI track | Plays MIDI clips/layers and normally hosts a VST instrument before audio effects. |
| Record/Monitor track | Captures or monitors live input, often independent of scenes and tempo. |
| Return track | Receives sends or shared processing, useful for common effects. |
| Master track | Final mix output, master processing, metering, and output routing. |

Audio tracks are best for WAV, AIFF, FLAC, MP3, OGG, and other imported or recorded audio. MIDI tracks are best for note patterns, piano roll editing, and software instruments. Record/Monitor tracks are useful when you want a live input channel, for example guitar, vocal, synth, or external instrument monitoring.

Track controls normally include volume, pan, mute, solo, PFL, record arm, monitoring state, plugin slots, sends, and routing. Some controls are always visible, while others appear in the bottom panel or channel strip view.

On Audio tracks and Record/Monitor tracks, the “Input” selector can choose either hardware inputs or another track as an internal source. Internal sources can appear as Post FX or Post Mixer: Post FX captures the processed signal before the fader, while Post Mixer captures the channel output after fader/pan.

When a track does not make sound, check it in this order: it has material, it is not muted, its volume is up, its layer is not muted, it is routed to Master or a valid output, the master is not muted, the correct audio device is selected, and plugin slots are not blocking signal.

For MIDI tracks, also check that a VST instrument is loaded before audio effects. A MIDI clip alone does not create audio unless it drives an instrument or external MIDI output.

## Adding Tracks

Loop Kong can add tracks in several modes. The visible commands may include **Add Free Audio track**, **Add Clone Audio track**, **Add Multi Audio track**, **Add Random Audio track**, and equivalent MIDI or general track entries.

**Free** means a normal independent track. Use it when you want a new clean lane.

**Clone** means a track based on an existing track idea. It is useful when you want similar routing, plugin choices, or performance behavior. Always check the clone after creating it, especially plugin slots and routing.

**Multi** is useful when creating several tracks at once or when the project template expects grouped track creation.

**Random** can create variation-oriented tracks, often useful for performance experiments or layer workflows. If random panning is enabled for new layers, newly created material may be spread automatically.

When adding tracks, choose the correct type from the beginning. Do not put VST instruments on audio tracks just because the plugin appears in a list. A VST instrument belongs on a MIDI track or a track configured to generate sound from MIDI. Audio effects belong after audio exists.

If you add a track during playback, Loop Kong should handle it safely, but it is still wise to avoid unnecessary operations during a critical live performance moment. In the studio, adding tracks during playback is normal. On stage, prepare the structure before the show whenever possible.

After adding a track, name it immediately. Newly created normal Audio and MIDI Tracks use Preferences > Monitoring > Default monitor mode (IN, AUTO or OFF; AUTO is the factory default). Projects you reopen keep their persisted mode, and duplicated Tracks copy the source Track state. Names such as Drums, Bass, Lead MIDI, Guitar RM, Vocal Delay Return, or Click/PFL are much easier to manage than generic track numbers.

## Track Header Controls

The track header is the control area for a Track. In the compact Session header, the left status/progress area and the right function button are intentionally separate: the progress ring follows the maximum cycle of the Track's current Cell, while the function button shows the action that FIRE/STOP will actually perform.

Use the track name to keep the project readable. Right-click or use the rename action to change names. In live sets, readable names are not decoration; they reduce mistakes.

**Mute** silences the track output. **Solo** lets you focus on one or more tracks. **PFL** sends a track to the cue/listen output. Depending on Preferences, enabling PFL can also mute the track output to the Master. This is useful when you want to listen privately in headphones before sending sound to the audience.

**Record arm prepares the Track for recording. The compact function button follows the real engine action: an unarmed playing Track shows STOP; an unarmed stopped Track shows PLAY; an armed empty target can show REC; an active recording shows REC in its recording state; a pending PLAY/REC can be cancelled with the stop action.**

The track header may have a compact mode. Right-clicking an eligible normal Track header can also expose “Delete Stop buttons”, which removes STOP from empty Cells for that Track (or from eligible selected Tracks) so those Scene positions become CONTINUE/NO ACTION.

If the bottom panel is maximized for editing, track-header interactions may help restore or select the related view. Always watch which track is selected before editing layers, plugins, or MIDI notes.

## Scenes and Scene Pads

Scenes are the main live-performance sections of Loop Kong. You can think of them as song parts: intro, verse, chorus, bridge, build-up, drop, ending, or any arrangement section.

The Scene dock shows scene pads. Each pad can launch a scene. A scene pad can show status such as selected, active, pending, playing, or recording. The selected scene is the one you are looking at or editing. The active scene is the one the engine is actually playing. These can be different during pending launches or quantized changes.

Click a scene pad to launch it. If the system uses quantization, the launch may be pending until the next allowed musical point. This is normal. A pending scene is not broken; it is waiting for the correct timing.

You can add, rename, delete, move and copy Scenes. Scene-pad drag-and-drop follows the same move/copy idea as the Session Grid: normal drag moves, and Ctrl/Cmd while dragging requests a copy. Multi-selected Scenes can be handled together where the context action supports it. Scene Chain entries are references, so one Scene can appear in several steps.

Scene banks let you navigate many scenes without making pads too small. Use previous/next bank controls when you have more scenes than fit on screen.

When recording into scenes, remember that the active scene matters. If a scene launch is pending, recording should start in the correct scene after the pending launch according to the engine rules. This protects you from recording into the old scene by mistake.

## Scene Chain

Scene Chain is a performance sequence made from Scene references. Every occurrence has its own step identity, so a chain such as 1-1-1-1-2-2 contains six distinct steps even though only two Scene IDs are used.

Drag Scenes into the Scene Chain area to create the sequence. Repeated references are useful for song forms and for dividing one long performance window into several timed steps. The UI keeps the exact active occurrence separate from the prepared next cursor, so the highlighted step can remain truthful while the following step is already prepared.

The Scene Chain control block contains the timing selector, LOOP, REC 1×/REC ∞, PLAY/PAUSE, RWD, STEP ×2, CHAIN ×2, trash and CLR controls. STEP ×2 doubles the duration represented by every step by repeating each reference; CHAIN ×2 duplicates the whole pattern. The mouse wheel over a step changes only that step’s referenced Scene, and dragging a step to the trash removes only that Chain reference. Expansion is capped at 1024 steps.

Timing choices are ordered CYCLE BAR, CYCLE BEAT, BAR, BAR x2, BAR x4, BAR x8, BAR x16, BAR x32, BAR x64 and BAR x128. CYCLE BAR is the default for genuinely new projects. CYCLE modes use each Scene's stable per-Scene musical cycle; BAR xN gives every step a fixed global duration independent of Layer length.

LOOP returns to the first step after the final occurrence. RWD prepares the first step when stopped; while the Chain is running, the current step completes its remaining musical duration and the first step becomes the exact next occurrence. CYCLE references are saved with modern projects so reopening a project does not silently change its established step timing.

Automatic consecutive steps that point to the same Scene advance the step marker without relaunching that Scene or resetting its Layers. For example, an 8-bar Layer can play continuously across four 2-bar Scene-1 steps. A real change to another Scene still performs the normal Scene transition, and direct Scene-pad launches remain direct Scene launches.

For recording, Q1/Q2 intent can be prepared for the upcoming exact Chain step. Consecutive Q2 steps using the same Scene form one continuous recording window. With OVERDUB off, recording stops at the real Scene change or end of the pass; with OVERDUB on, a real Scene change can continue recording into the destination Scene. REC 1× ends at the current Chain pass; REC ∞ can continue across LOOP wraps while OVERDUB stays enabled.

## Cells: Where Tracks and Scenes Meet

A cell belongs to one track and one scene. It is the slot where musical material lives for that specific track in that specific scene.

For example, the Drum track in Scene 1 may contain a simple beat. The Drum track in Scene 2 may contain a fuller beat. The Bass track in Scene 1 may be empty, while the Bass track in Scene 2 contains a bass loop. This is how scenes build arrangements.

Click a Cell to select it. Session Cells separate status from action: the left side can show playing/recording/pending state, while the right-side symbol shows what the next click will do. This prevents a PLAY/REC/STOP action icon from being mistaken for the current transport state.

You can also select multiple cells. Ctrl+click toggles individual cells, and Shift+click creates a rectangular range across tracks and scenes. If you drag a cell that is part of a multi-cell selection, Loop Kong moves the whole group while preserving the relative layout.

The context menu adapts to the selection. In addition to grouped actions such as “Clear X cells” or MIDI “Add layer”, an eligible empty normal Cell can show “Delete Stop button” or “Add Stop Button(s)”. Removing STOP changes that Cell to CONTINUE/NO ACTION; restoring it makes the position actionable again. CONTINUE is non-actionable for recording too, so it does not stop an existing take or start a new one merely because the global Scene changes.

If you drag an audio or MIDI file onto a cell, Loop Kong can import it into that cell. Supported importable extensions shown by the interface include common audio formats such as WAV, AIFF/AIF, FLAC, MP3, OGG, M4A, and MIDI files such as MID/MIDI. Actual support can depend on your installation and available decoding libraries.

An empty normal Cell with its Stop button present tells a Scene launch to stop that Track. If the Stop button has been deleted, launching that Scene leaves the Track on its current Cell and current playback state. Armed empty Cells can instead expose REC according to recording state and preferences. Stop-button state is saved per Track/Scene.

Good cell organization makes the whole project easier. Keep related material in the same scene, name tracks clearly, and avoid filling cells with old takes that you no longer need.

## Layers

Layers are the actual takes or clips inside a cell. A layer can be audio or MIDI. Layer controls let you shape that material without changing the entire track.

Common layer controls include volume/gain, pan, mute, solo, start point, end point, reverse, normalize, fades, speed, and region selection. Audio Layers can also expose Warp editing and Spread actions. MIDI Layers have MIDI-specific settings such as note tails across loop, overlap behavior, quantize, humanize, note velocity, and editor zoom.

Layer gain changes the level of that layer before or inside the track processing path. Use it to balance takes before using the track fader. Track volume is for mixing the whole track. Layer gain is for correcting one piece of material.

Layer pan positions the layer left or right. If random panning for new layers is enabled, new layers may receive automatic pan variation. This can help create width when recording multiple takes, but it can also surprise you if you expect everything centered.

Layer mute and solo are useful for comparing takes. Mute a layer to silence it. Solo a layer to hear it without other layers in the same context. If a track is silent, check both track mute and layer mute.

Delete layer removes the take from the cell. Be careful with deletion. If the take is important, save the project first or duplicate it before editing.

## Audio Layers and Waveform Editing

Audio layers show a waveform when their audio data is available. During recording, live preview and final waveform are different states; when REC ends, the finalized waveform is requested automatically. The START→END loop-range bar uses the active accent while Loop is ON and a neutral grey treatment while Loop is OFF.

The waveform editor can show start and end region points. These define which part of the audio layer is used. Region commits are atomic. In Q1, Speed changes source traversal/repitch but does not resize the fixed one-bar selection; the musical boundary remains one bar.

Horizontal zoom lets you see more detail. When zoomed in, scrolling lets you move through the waveform. Q1 Speed geometry is anchored to the real transformed START position, so increasing Speed does not push the waveform display to the right.

Normalize raises the clip or layer level so its peak reaches a target level. Use normalize carefully. It can make quiet recordings easier to use, but it can also make noise louder.

Reverse plays the audio backward. This is useful for effects, transitions, risers, and creative sound design.

Warp editing is available on compatible Audio Layers. Turn WARP ON, double-click the upper ruler to insert a marker on the current Warp curve, drag the orange target diamond/vertical line to change its target beat, and press Delete/Backspace to remove the selected marker. The small orange point is the fixed source anchor. Creating a marker is timing-neutral until it is moved, and the waveform deforms immediately around edited markers.

Prepared Warp/TS/Tune playback has been extended beyond the earlier Q0/Q1 gate to Q2/Multi and Q3/Random, with mode-dependent tempo and timing rules. Reverse can preserve prepared Tune, while source and StartMode changes may require different rendering paths. See the Revision 1.6 update for the current behavior.

## Recording Audio

To record audio, first choose or create the track that will receive the recording. For live input, a Record/Monitor track is often the clearest choice. For clip-based recording into scenes, an audio track can also be used depending on the workflow.

Set the audio input channels. If your interface has many inputs, make sure the correct input pair or mono input is selected. For a microphone, choose the mic input. For guitar or synth, choose the instrument/line input. For stereo devices, select a stereo pair.

If you want to record or monitor the output of another track, use the same “Input” selector and choose the source track instead of a physical input. This lets you record, for example, the result of a MIDI track with an instrument or an already processed audio track. Avoid routing cycles; if a route is not valid, Loop Kong should safely fall back to an external/hardware input.

Arm the track for recording. Record arm tells Loop Kong that this track is allowed to record. If the track is not armed, pressing a scene record command may not record into it.

Choose monitoring behavior. Monitor Off disables live input through the Track, Monitor In keeps it audible, and Monitor Auto follows LoopKong's playback/recording rules. Newly created normal Audio/MIDI Tracks use Preferences > Monitoring > Default monitor mode (AUTO by factory default); loaded projects preserve each Track's saved monitoring value.

Launch the Scene or recording command. If “Start recording on scene launch” is enabled, an armed normal Track whose destination Cell is empty starts recording on the first Scene launch, exactly when that Scene launch becomes active. A Cell that already contains material launches normally instead of simultaneously creating a new recording on that first launch.

After recording, listen back. Check for latency, clipping, noise, and correct scene placement. If the recording is good, save the project. If it is wrong, delete the layer and record again.

For important takes, do a short test recording before the real take. This catches wrong inputs, silent monitoring, and bad levels before you lose a performance.

## Recording MIDI

MIDI recording is different from audio recording. MIDI records notes, timing, velocity, and possibly controller information. It does not record sound by itself.

To hear a MIDI track, load a VST instrument or route MIDI to an external device. A MIDI clip with no instrument may look correct but produce no audio. This is one of the most common beginner mistakes.

Select the MIDI input device in Preferences. If your keyboard or pad controller does not trigger notes, check the MIDI device list, the active input, the channel, and whether the device is actually sending data.

Create or select a MIDI track. Arm it for recording. Select the scene/cell where the MIDI should be recorded. Press the appropriate record or scene-launch command. Play your notes.

If several MIDI tracks are armed and share the same MIDI input, they can all receive input and play at the same time while you perform. To avoid duplicate recordings, when one armed track is already recording or pending, Loop Kong keeps recording input exclusive to that track.

After recording, open the MIDI editor. Check whether notes appear in the correct musical position. You can edit note position, length, pitch, and velocity. If you hear stuck notes, use MIDI Panic. In Loop Kong, stopping the transport should also send All Notes Off, but some external plugins or devices can behave differently.

MIDI timing can be affected by quantize settings, tempo changes, and scene launch timing. If you are recording tight rhythmic parts, check the quantize mode and project BPM before recording.

When recording with plugins, remember that plugin latency, heavy CPU load, or large audio buffers can make performance feel delayed. Use a lower buffer size for recording when your computer can handle it safely.

Global MIDI Swing is applied at playback time rather than destructively rewriting the note positions. Use the Top Bar selector to choose 1/8, 1/16 or 1/32 and the ratio control from 50% to 75%. 50% is straight; approximately 66.7% is a triplet feel; 75% is strong swing. New projects default to 50% at 1/16 unless Preferences specify another default.

## MIDI Editor: Basic Editing

The MIDI editor is the piano-roll style editor for MIDI layers. It shows notes on a grid. Time runs left to right. Pitch runs bottom to top. A note rectangle shows pitch, start time, duration, and sometimes velocity through color or a separate control.

Click a note to select it. Drag it left or right to move it in time. Drag it up or down to change pitch. Drag an edge to change its length. Use the velocity control to change how hard the note plays.

The grid is measured in musical time: bars, beats, and subdivisions. Zoom X changes horizontal zoom. Zoom Y changes vertical zoom. If notes are too small, zoom in. If you cannot find the full phrase, zoom out.

Use Preview if you want to hear changes while editing. Preview is useful, but if you are editing during playback, listen carefully. Some edits can retrigger notes or change note-off timing depending on the current playback position.

The editor can display original bars and current bars. Original bars describe the clip's original length. Current bars describe the current playback/editor length. If these do not match, the clip may loop or play a selected region differently from the original source.

Use the selected playback range when you want only part of the MIDI clip to play. Make sure the visual range and the audible range match. If they do not, save the project, stop playback, reopen the editor, and verify the start/end values.

For simple editing, use this order: select the note, move or resize it, adjust velocity, listen, then save.

## MIDI Editor: Range, Loop Length and Note Tails

MIDI clips can loop. A loop region has a start and end. If a note begins before the loop end but its note-off happens after the loop end, Loop Kong needs to decide what to do with the tail.

The **Allow note tails across MIDI loop** option controls whether notes can continue past the loop boundary. If it is off, notes are cut at the region end. This gives tight loops and prevents long notes from leaking into the next cycle. If it is on, note-offs can occur after the loop boundary. This is more musical for pads, chords, sustained instruments, and legato lines.

The overlap mode controls what happens if the same note appears again before its previous tail closes.

| Mode | Meaning |
|---|---|
| Stack | Allow overlapping instances of the same note. Useful for layered or natural decay behavior. |
| Retrig | Close the previous note before starting the next one. Useful for tight synths, drums, and monophonic-like parts. |

If notes hang, first press MIDI Panic. Then check note tails and overlap mode. A hanging note can also come from a plugin that did not receive or process a note-off correctly.

When changing the playback range during playback, Loop Kong must re-phase the MIDI head so the audible loop follows the new region. If you notice the visual range and sound range do not match, stop playback and re-check the editor.

For beginners, use tails off for drums and short patterns. Use tails on for sustained chords and atmospheric parts.

## Quantize and Humanize

Quantize moves MIDI notes closer to a rhythmic grid. Humanize adds small timing or velocity variations to make parts feel less mechanical.

The Quantize tab can include strength controls. A strength of 100% moves notes fully to the grid. Lower values move notes part of the way. This is often more musical because it corrects timing without destroying performance feel.

Choose the grid according to the part. For steady kick drums, 1/4 or 1/8 may be enough. For hi-hats, 1/16 is common. For triplet grooves, use triplet values such as 1/8T or 1/16T if available.

Humanize time changes note timing slightly. Humanize velocity changes note strength slightly. Use small amounts. Too much humanize can make a part sloppy or late.

Preview lets you hear the effect before committing. This is safer than applying blindly. If you like the result, apply it. If not, undo or reduce the amount.

A good workflow is:

1. Record the part naturally.
2. Listen before editing.
3. Apply gentle quantize, not necessarily 100%.
4. Use humanize only if the part feels too rigid.
5. Check important notes manually.

For electronic drums, stronger quantize may be correct. For piano, guitar-like MIDI, strings, and expressive synths, gentle quantize is usually better.

## Importing Audio and MIDI Files

Loop Kong can import common audio and MIDI files. The interface identifies importable audio extensions such as WAV, AIFF/AIF, FLAC, MP3, OGG, and M4A, and MIDI extensions such as MID and MIDI.

The simplest import method is drag and drop. Drag a file from the Browser or from the operating system into a compatible cell. Audio files should go to audio-capable tracks. MIDI files should go to MIDI tracks.

When you import a file into a cell, Loop Kong creates a layer for it. Select the layer to edit its region, gain, pan, waveform, MIDI notes, or other properties.

Audio formats can behave differently. WAV and AIFF are normally safest for production. FLAC is lossless and can be good for storage. MP3, OGG, and M4A are compressed formats and may have small timing offsets or quality changes depending on decoding. For precise loop work, prefer WAV or AIFF when possible.

MIDI files do not contain audio. After importing a MIDI file, load a VST instrument on the MIDI track or route it to external MIDI gear. If the MIDI editor shows notes but you hear nothing, this is the first thing to check.

If a file does not import, check the extension, file path, permissions, and whether the track type is compatible. Avoid unusual characters in file paths when troubleshooting.

After importing, listen to the file inside the project. Confirm that the tempo, start point, loop length, and level are correct before building more scenes around it.

## The Browser

The Browser helps you find material and send it into the project. It can show folders, content, clips, recordings, templates, favorites, or other categories depending on your installation and configuration.

Use the Browser to locate audio files, MIDI files, recordings, and reusable project material. You can open folders, reveal files in Explorer, open files with the default external player, and import files into cells.

When using the Browser, think in two steps: first find the file, then decide where it belongs. A drum loop belongs on an audio track. A MIDI bass pattern belongs on a MIDI track with a bass instrument. A vocal recording belongs on an audio track or Record/Monitor workflow. A template belongs in a project/template operation, not inside a normal clip cell.

The Browser can have adjustable width. If names are cut off, widen it. If the session grid is too small, narrow or hide it. The goal is not to keep every panel open; the goal is to make the current task easy.

Favorites are useful for folders or files you use often. Templates are useful for repeated setups. Recordings are useful for quickly finding new takes.

If you cannot find a file, check whether you are looking at the correct folder. Use the parent folder navigation if available. If the Browser says it cannot access a path, the drive may be disconnected, the folder may have moved, or the application may not have permission.

## Plugins: Basic Rules

Loop Kong can host VST2 and VST3 plugins. Plugins are loaded into slots on tracks or the master. Some plugins are instruments. Some are effects. Some can do both, but Loop Kong tries to classify them from their format and bus capabilities.

The most important rule is this:

- A **MIDI track** needs a VST instrument before audio effects if you want MIDI notes to become sound.
- An **audio track** should use audio effects, not instruments.
- The **Master** should use master effects such as EQ, compression, limiting, metering, or saturation.

A plugin slot can be opened, loaded, removed/ejected, or sometimes toggled. If a plugin has no path or cannot be found, the slot may show an error or fail to open.

Loaded plugin slots can be dragged and dropped within one Track or between compatible Tracks/Master slots. Normal drag moves into an empty destination or swaps with an occupied destination while preserving live plugin state. Ctrl/Cmd+drag requests a Copy: LoopKong creates a new destination instance and restores it from the source plugin state snapshot.

Plugin loading can be asynchronous and serialized. This means Loop Kong may load one plugin, restore its saved state, then move to the next plugin. This is safer than trying to load everything at once. During this time, wait for the project to finish loading before assuming that a plugin has failed.

Some old VST2 plugins can behave badly during loading, closing, or editor opening. Save before experimenting with old or unstable plugins. If a plugin crashes the host repeatedly, remove it from the project or test it in a separate project first.

Plugin Copy is real in the current build, but the destination instance is still external plugin software and may take time to load/restore. Save before copying old or fragile plugins, and verify both the source and copied destination after the operation.

If a plugin makes no sound, check whether it is the right type, whether it is in the correct slot order, whether it has a preset loaded, whether MIDI is reaching it, and whether audio is leaving it.

## Plugin Slots on MIDI Tracks

MIDI tracks have a special rule: they need an instrument before audio effects. The instrument turns MIDI notes into audio. After that, audio effects can process the sound.

For example, a normal MIDI track chain might be:

Slot 0: Synthesizer, sampler, drum instrument, piano instrument, or other VSTi.

Slot 1: Chorus, delay, distortion, compressor, EQ, or reverb.

Slot 2: More audio effects if needed.

If a MIDI track already has a VSTi in a slot, Loop Kong may restrict what you can load in other slots. This prevents invalid chains such as placing an audio effect before any instrument when there is no audio yet.

When moving plugins on MIDI tracks, keep the chain logic intact: first the instrument that creates audio, then the audio effects. If a track becomes silent after a move, check the slot order before looking for other causes.

If the plugin picker only shows certain plugins, that is often intentional. It may hide incompatible choices to prevent silent tracks. A message may explain that the MIDI track needs one VSTi before audio effects, or that it already has a VSTi in a given slot.

When troubleshooting a MIDI track:

- Confirm the MIDI clip has notes.
- Confirm the track is not muted.
- Confirm a VSTi is loaded.
- Confirm the VSTi is receiving MIDI on the expected channel.
- Confirm the VSTi produces audio.
- Confirm later effects are not muting the signal.
- Confirm output goes to Master or a valid route.

If you want to use an external hardware synth instead of a VSTi, use MIDI output routing and audio return/recording as appropriate.

## Plugin Slots on Audio, Return and Master Tracks

Audio tracks already contain audio, so they normally use effects. Typical audio track plugins include EQ, compressor, gate, saturation, chorus, flanger, delay, reverb, transient shaper, and utility tools.

Return tracks are useful for shared effects. Instead of putting the same reverb on many tracks, you can send several tracks to a return that holds one reverb. This saves CPU and gives a shared space. Return behavior can depend on routing and Preferences. Depending on your Preferences and routing setup, return tracks may be configured so they only pass audio when they have an effect loaded. This avoids unintended dry signal passing through a return.

The Master track is for final processing. Use it carefully. Common master plugins include gentle EQ, bus compression, limiting, metering, or tape/saturation. Avoid using extreme effects on the master unless you intentionally want the whole mix transformed.

When removing a plugin, use the eject/remove command. The slot should clear both the loaded plugin and its displayed name.

To reorganize effects, drag the loaded slot to another slot. This is useful for moving a reverb, delay, EQ, or compressor to a different position without searching for it again in the plugin picker. Save the project after a chain is stable.

Do not overload the master with too many heavy plugins during live playback. Heavy plugins can cause CPU spikes. If you hear clicks or dropouts, bypass plugins one by one to find the cause.

Always save a project after setting up a plugin chain you want to keep.

## Mixer Basics

The mixer lets you balance track levels, pan positions, sends, monitoring, and routing. Even if Loop Kong is scene-based, mixing still matters. A good scene can sound bad if the mix is unbalanced.

Start with levels. Bring all track faders down, then raise the most important track first. Add drums, bass, harmony, leads, vocals, and effects gradually. Avoid running every track at maximum level. Leave headroom for the master.

Use pan to create space. Keep kick, bass, main vocal, and important central elements near the center unless you have a reason to move them. Spread supporting parts, percussion, pads, and effects to the sides.

Use mute and solo while building the mix, but do not forget to turn solo off. A common mistake is thinking a track is broken when another track is soloed.

Use sends for shared effects. A send can be pre-fader or post-fader. A post-fader send follows the track volume. A pre-fader send can still feed the return even when the track fader is down. Use post-fader for normal reverb/delay sends. Use pre-fader for special monitoring or creative effects when needed.

Meters show signal. If a track meter moves but the master does not, the issue is routing, mute/solo, PFL behavior, or output. If no meters move, the issue is earlier: clip/layer, plugin, input, or recording state.

Mix quietly enough to avoid clipping. The master limiter can help, but it should not be a permanent excuse for an overloaded mix.

## Master Output and Soft Limiter

The Master output is the final sound that leaves Loop Kong for the main outputs. Treat it as the last safety and tone-shaping stage.

The master section can include volume, meters, output routing, PFL routing, and a soft limiter. A soft limiter is designed to reduce peaks and protect the output from clipping. It is useful, but it should not replace proper gain staging.

A limiter usually has controls such as threshold and output ceiling. The threshold decides when limiting begins. The output ceiling sets the absolute maximum output level. Keeping the ceiling slightly below 0 dBFS helps avoid unexpected digital clipping or true-peak problems.

If the master meter is always hitting the top, lower individual tracks or groups before relying on the limiter. A mix that is too hot before the master can sound distorted, flat, or tiring.

Master output routing must match your audio interface. If you use outputs 1-2 for speakers, set the master there. If you route to a mixer, choose the outputs connected to that mixer. If you use PFL on separate headphones, do not accidentally set PFL and Master to the same output unless that is intentional.

If you hear no sound but the master meter moves, the problem is likely after Loop Kong: wrong interface outputs, muted interface mixer, wrong speakers, monitor controller, or physical cable.

Before live use, test the master output with a simple project and confirm the correct hardware outputs.

## PFL and Monitoring

PFL means pre-fade listen. It is a cue/listen path. DJs and live performers use this idea to listen to something in headphones before sending it to the main output.

In Loop Kong, PFL can be used to hear a track privately. Depending on Preferences, enabling PFL can also mute that track's output to Master. This is useful when you want to prepare a clip, sound, or plugin without the audience hearing it.

Monitoring settings control how live input is heard. Common states include:

| Monitoring mode | Meaning |
|---|---|
| Off | The input is not monitored through the track. |
| In | The input is monitored all the time. |
| Auto | Input/playback monitoring follows LoopKong state. New normal Audio/MIDI Tracks use the Default monitor mode selected in Preferences; AUTO remains the factory default. |

Use PFL output routing carefully. It should normally go to headphones or a cue output, not the main speakers. If PFL and Master share the same output, PFL will not be private.

The metronome can be routed to PFL by default. This is useful for live players who need a click in headphones while the audience hears only the music.

If PFL is on and a track disappears from the main mix, check the preference **Mute track output when PFL is enabled**. This behavior may be exactly what you asked Loop Kong to do.

When recording vocals or microphones, avoid routing monitored input to speakers in the same room. Use headphones to prevent feedback.

## Metronome

The metronome gives a timing reference. It can help you record loops, MIDI parts, and scene changes accurately.

You can enable or disable the metronome from the top bar or Preferences. You can set its volume. You can also route it to Master or PFL depending on your workflow.

For studio recording, the metronome is often routed to headphones or PFL. For practice, you may route it to Master. For live performance, avoid sending the click to the audience unless it is part of the music.

Loop Kong has had work on several metronome sounds, such as original click, bright click, analog pulse, hi-hat, shaker, cabasa, sticks, and dry rim-like sounds. The exact available choices can depend on your installation and settings.

Set the metronome level low enough that it does not distract you but high enough that you can record accurately. If the click bleeds into microphones, lower it, use closed-back headphones, or change the sound.

If the metronome feels out of time, check the project BPM, buffer size, audio device, and whether your monitoring path has external latency. The metronome itself is only useful if the rest of the timing setup is correct.

A good habit is to test one bar of click before recording the first take. This confirms tempo, output routing, and level.

## Tempo and BPM

The project tempo is measured in BPM: beats per minute. It affects scene timing, MIDI grid positions, quantization, metronome, and loop behavior.

Loop Kong may provide controls for setting BPM directly, incrementing or decrementing BPM, tap tempo, half tempo, double tempo, and reset tempo. Use direct BPM entry when you know the exact tempo. Use tap tempo when matching a live idea or external source by feel.

Half tempo and double tempo are useful when the musical feel is correct but the grid is not. For example, a loop may feel like 90 BPM or 180 BPM depending on how you count it. Use the version that makes editing easiest.

BPM via MIDI notes can let MIDI notes control or follow tempo behavior. Modes may include Off, Follow, and Locked. In a locked mode, you may capture a base BPM. Treat BPM-from-MIDI as an advanced feature. Test it before using it in a serious project.

Changing BPM during playback can affect MIDI playback and loop positions. Loop Kong is designed to avoid stuck or cut MIDI notes during tempo changes, but it is still wise to listen carefully when automating or manually changing tempo.

For audio loops, changing BPM may or may not time-stretch audio depending on the current feature set and clip behavior. If the audio does not follow tempo as expected, render or prepare loops at the project tempo.

Save before major tempo restructuring.

### Global MIDI Swing

Global MIDI Swing is a project-level, engine-owned playback parameter. The resolution selects the binary subdivision pair to swing: 1/8, 1/16 or 1/32. The ratio selects where the delayed subdivision falls inside the pair: 50% is straight, about 66.7% gives a triplet feel, and 75% is a strong swing.

Changing Swing while playing remaps future MIDI events safely without editing the stored note data. The current project stores its Swing ratio/resolution, while Preferences define the defaults used only when creating a genuinely new project. The current factory default is 50% at 1/16.

## Preferences: Overview

Preferences are where you configure Loop Kong's default behavior. They affect new projects, audio/MIDI devices, monitoring, master safety, recording behavior, editing defaults, plugin lists, interface appearance, and advanced settings.

The visible Preferences tabs can include:

| Tab | Main purpose |
|---|---|
| Audio | Audio engine, device, sample rate, buffer size, internal audio format. |
| MIDI | MIDI inputs/outputs, Track/Remote roles, default empty MIDI Layer length, BPM-from-MIDI and default Global MIDI Swing ratio/resolution. |
| Monitoring | PFL, metronome routing, return-track behavior, and Default monitor mode (IN/AUTO/OFF) for newly created normal Audio/MIDI Tracks. |
| Master | Master limiter and output protection defaults. |
| Project | Default tracks, scenes, templates, and song structure. |
| Recording | Record arm behavior, first-launch Scene recording, Session Recorder location and global OVERDUB recording options. |
| Editing | Defaults for fades, layer behavior, and editing-related options. |
| Plugins | Scanned plugins, enable/disable state, GUI-on-load behavior. |
| UI | Language (English/Español), zoom, theme, colors, panel visibility and other presentation settings. |
| Advanced | Diagnostics and low-level or experimental settings. |

Preferences can be powerful. Change one thing at a time and test. If you change many settings and something stops working, it becomes harder to know which setting caused it.

For beginners, the most important tabs are Audio, MIDI, Monitoring, Project, Recording, and Plugins. UI settings can wait until the main workflow is working.

## Preferences: Audio

The Audio tab controls how Loop Kong talks to your audio hardware. This is one of the first places to check when sound is missing, distorted, delayed, or unstable.

Choose the audio host. On Windows, ASIO is usually best for professional audio interfaces. Other host types may work but can have higher latency.

Choose the input and output device. If you use an interface such as an RME, Focusrite, MOTU, Steinberg, Audient, or similar device, select its driver. Avoid selecting laptop speakers or generic drivers when you expect professional low-latency operation.

Choose sample rate. Common values include 44.1 kHz, 48 kHz, and 96 kHz. 44.1 kHz is common for music. 48 kHz is common for video and many modern sessions. 96 kHz uses more CPU.

Choose frames per buffer. Smaller numbers mean lower latency but higher CPU pressure. Larger numbers mean more latency but more stability.

| Buffer | Typical use |
|---|---|
| 16 or 32 | Very low latency, only for stable systems and light projects. |
| 64 | Good low-latency recording if your system is stable. |
| 128 | Safer recording and live use. |
| 256 or higher | Mixing, heavy plugins, or troubleshooting dropouts. |

Internal project audio format controls how Loop Kong saves internal audio. WAV PCM 16 is smaller. WAV float 32 keeps more headroom and is better for processing-heavy workflows.

After changing audio settings, test sound before continuing.

## Preferences: MIDI

The MIDI tab controls MIDI devices and MIDI-related defaults.

MIDI inputs are devices that send MIDI into Loop Kong: keyboards, pads, drum controllers, foot controllers, control surfaces, or virtual MIDI ports. MIDI outputs are devices or virtual ports that receive MIDI from Loop Kong.

A MIDI matrix may show Track, Sync, or Remote-style roles. Track means notes and performance data for playing instruments or recording MIDI clips. Remote means control messages for mapping buttons, knobs, or pedals to Loop Kong actions. In Loop Kong, the active MIDI port can still be unique per direction, so always confirm which device is actually active.

Default empty MIDI layer bars controls how long a new empty MIDI Layer is when you add one from a Cell context menu. The MIDI Preferences also store the default Global MIDI Swing ratio and resolution for new projects. Current factory defaults are 4 bars for a new empty MIDI Layer and 50% Swing at 1/16.

BPM from MIDI notes can be Off, Follow, or Locked depending on your installation and settings. Use Off unless you know you need tempo controlled by MIDI. Use Follow or Locked only after testing.

If MIDI learn does not receive anything, check this tab first. Confirm the controller is connected, selected, and enabled for the role you need. Also check the MIDI channel. Many controllers can transmit on any channel, while a map may expect a specific one.

For a first test, create a MIDI track with a simple instrument, arm it, play the keyboard, and confirm that the MIDI activity and instrument sound respond.

## Preferences: Monitoring and PFL

The Monitoring tab shapes cue behavior, metronome routing, return-track behavior, and the Default monitor mode used for newly created normal Audio/MIDI Tracks.

**Metronome routed to PFL by default** is useful when the click should go to headphones instead of the main output. This is usually the right choice for live performance and recording with other people listening to the master output.

**Mute track output when PFL is enabled** means that when you cue a track, it can be removed from the Master output. This is useful when you want to audition a sound privately. If you expect PFL to be only an extra listen path and not mute the main output, turn this preference off.

**Return tracks require FX to pass audio** can prevent dry audio from passing through return channels accidentally. In many DAWs, return/aux channels are normally used for effects, not dry pass-through. Keeping this enabled by default can avoid confusing doubled dry sound.

Default monitor mode can be IN, AUTO or OFF. IN always monitors input, AUTO follows the Track/arm state, and OFF does not monitor input. The preference affects only newly created normal Audio/MIDI Tracks; loaded Tracks restore their persisted mode, duplicated Tracks copy the source state, and Record/Monitor/Return Tracks keep their own semantics.

A safe setup for recording is:

6. Master goes to speakers or main mix.
7. PFL goes to headphones.
8. Metronome goes to PFL.
9. Microphone monitoring uses headphones, not speakers.
10. PFL mute behavior is set intentionally.

If something disappears from the main mix when you press PFL, this tab probably explains why.

## Preferences: Project Defaults

Project defaults decide what a new project looks like before you add anything manually.

You can set the number of scenes for an empty project. If you normally write short loop ideas, 4 or 8 scenes may be enough. If you build full live sets, you may want more.

You can set default counts for audio tracks, MIDI tracks, and Record/Monitor tracks. Do not create more tracks than you need. A clean project is easier to understand and uses fewer resources.

Track quantize modes can be set per track. Modes such as Free, Clone, Multi, and Random describe how tracks behave when launching or recording layers. Use simple modes until you understand the advanced ones.

Template options let you include or exclude audio clips depending on how you want templates to work. A template with clips is useful for a prepared live set. A template without clips is useful for starting many songs with the same routing and track structure.

Select Track preference can make track selection follow certain actions. Some users like the interface to automatically select the track they interact with. Others prefer selection to stay stable while they launch clips. Choose the behavior that feels safest.

After changing project defaults, create a test new project. Check whether the track and scene layout is what you expected. It is better to adjust defaults before starting a serious session than to restructure later.

## Preferences: Recording

Recording preferences control what happens when tracks are armed, scenes are launched, or the session recorder is used.

Record arm behavior decides whether arming one track affects other tracks. In some workflows, only one track should be armed at a time. In others, several tracks should record together. Choose based on your performance style.

**Start recording on scene launch makes a Scene launch start recording on eligible armed Tracks whose destination Cell is empty. In the current behavior it starts on the first launch at the Scene-launch boundary; it does not require firing the Scene a second time. A non-empty destination still launches its existing material normally.**

REC Scene can behave as a contextual toggle. If armed tracks are already recording or waiting to record, REC Scene stops only those armed recording/pending tracks and cancels queued recording. If none are recording or pending, it starts recording on all armed tracks.

Session Recorder settings decide where long or global recordings are stored. You may be able to save inside the project folder or to a fixed directory. A project-based location keeps takes with the project. A fixed location is useful for a central recordings folder.

The “Stop pauses first” option adds a two-step Stop behavior: first Stop = pause and keep position; second Stop = full stop and reset. Leave it off if you want Stop to always reset directly.

A link-record-start option can make certain Record/Monitor tracks start together. This is useful when recording multi-mic setups or several live inputs at once.

Before a serious recording, test the arm behavior. Arm the tracks, start recording, stop, and confirm that the recorded layers appear in the expected cells. This prevents scene/track mistakes during a real take.

## Preferences: Plugins

The Plugins tab shows the plugins Loop Kong has found and how they are enabled.

Plugins can be VST2 or VST3. VST2 plugins often use .dll files. VST3 plugins usually use .vst3 bundles. VST3 plugins often expose bus information more clearly, but older VST2 plugins are still common.

You can enable or disable plugins. Disabling a plugin can keep it out of the picker if it causes crashes, is not useful, or is the wrong type for your workflow.

Plugin scanning can find invalid plugins. An invalid plugin may be the wrong architecture, broken, blocked, missing dependencies, or incompatible with the host. Do not assume every plugin installed on your system will work perfectly.

Options such as open plugin GUI on load or open project plugin GUIs on load control whether plugin windows appear automatically. For live use, automatic GUI opening can be distracting and heavy. For studio sound design, it may be convenient.

If a plugin is missing when you load a project, check that it is installed in the same path, enabled, and scanned. If you moved the plugin, the saved project path may no longer be valid.

A good plugin practice is to create a small test project for new plugins. Load the plugin, play it, save, reload, remove it, and close Loop Kong. If all of that works, the plugin is more likely to be safe in important sessions.

When reorganizing plugins with drag and drop, confirm that the slot still opens its editor after the move and that the project saves/reloads the chain as expected. If a particular plugin behaves unstably when moved, avoid trying to duplicate it during an important session.

## Preferences: User Interface

The UI tab controls how Loop Kong looks, how much space the interface uses, and which language is used for user-facing text.

Language switches the application presentation between English and Español. The preview changes immediately; Apply/OK persists the selected language in application Preferences and Cancel restores the last host-confirmed language. Internal project keys, Engine commands, diagnostic logs and the .lkp format do not change with the UI language.

Themes can include names such as Classic Dark, Arctic Stone, Blue Steel, Crimson Carbon, Forest Night, Midnight Violet, Slate Teal, Warm Graphite, and others depending on your installation and settings. Choose a theme that is readable in your working environment. Dark themes are useful in studios and live stages. Higher contrast themes are useful on bright monitors.

Track type background colors can help you identify audio, MIDI, and Record/Monitor tracks quickly. This is useful in large projects. Do not use colors that make text hard to read.

Panel visibility and top bar options let you make the interface compact. If you perform live, create a clean layout before the show. Hide the panels you do not need. If you edit, show the browser, bottom panel, and master details.

UI preferences should help you work faster. They should not hide information you need. After changing the layout, rehearse common actions: launch scene, record, stop, use PFL, open editor, load plugin, and save.

## MIDI Learn and Controller Mapping

MIDI Learn lets you control Loop Kong from a MIDI device such as a keyboard, pad controller, footswitch, or control surface.

The basic idea is simple:

11. Choose the control, target scope and Gesture (Legacy, Single, Double, Long or Triple for compatible Note/CC buttons).
12. Select the Gesture before starting MIDI Learn. Then press Learn or Add; explicit gestures can share a pedal if compatible.
13. Press or move the hardware control.
14. Loop Kong stores the message as a mapping.

The Info bar may show **MIDI learn waiting**. While it is waiting, press the MIDI button, key, pedal, or knob you want to assign. Press Escape to cancel.

Mappings can have scope. A **selected** scope means the mapping controls whichever track is currently selected. A **track** scope means the mapping is tied to a specific track. Selected scope is flexible. Track scope is safer for fixed live rigs.

Common mappable actions can include FIRE, STOP, PLAY, PAUSE, SCENE_FIRE_CURRENT, SCENE_NEXT, SCENE_PREV, SCENE_RECORD_CURRENT, SCENE_STOP_CURRENT, SONG_BPM, INC_BPM, DEC_BPM, and other commands depending on your installation and settings.

You can view/edit MIDI mappings, delete mappings, clear all mappings, export mappings, and import mappings. Exporting is useful before reinstalling, moving to another computer, or testing new mappings.

If MIDI Learn fails, check MIDI input selection, channel, controller mode, and whether another program is using the device. Some controllers send note messages, some send CC messages, and some need configuration software.

## Using Loop Kong Live

For live use, preparation matters more than complexity. A reliable simple set is better than a complicated set that you do not fully understand.

Prepare scenes in performance order. Name them clearly. Use Scene Chain if you want a planned structure. Leave direct scene pads available for improvisation.

Prepare tracks with readable names and stable plugin chains. Avoid loading new unknown plugins during the show. If you need many instruments, load them before the performance and test them.

Set PFL correctly. Master should go to the audience or main mixer. PFL should go to headphones. Test that PFL is private. Test that the metronome does not go to the audience unless intended.

Use MIDI mapping for actions you need without touching the mouse. A foot controller can be useful for recording, scene launch, stop, or panic. A pad controller can be useful for scene firing.

Save a performance version of the project. Do not use your only studio-edit version on stage. Keep a backup copy.

Before the show, run a complete rehearsal:

15. Open Loop Kong.
16. Load the project.
17. Wait for ready status.
18. Check audio outputs.
19. Check MIDI controller.
20. Launch every scene.
21. Record a test if recording is part of the show.
22. Test Stop and Panic.
23. Save nothing unless you intentionally changed the project.

During performance, avoid unnecessary editing. Launch, mix, cue, record, and stop. Edit later.

## Studio Workflow

In the studio, you can use Loop Kong as a sketchpad, loop recorder, MIDI idea builder, and plugin host.

Start with a project template that matches your style. For example, create audio tracks for drums, bass audio, guitars, vocals, return tracks for reverb/delay, MIDI tracks for instruments, and a Record/Monitor track for live input.

Record ideas into scenes. Scene 1 can be a minimal idea. Scene 2 can add drums. Scene 3 can add bass. Scene 4 can be a chorus. This gives you a non-linear arrangement before you commit to a linear song structure.

Use layers for takes. Record several guitar takes, vocal phrases, synth lines, or percussion loops into the same area. Mute/solo layers to choose the best one. Delete weak takes when you are sure you do not need them.

Use plugins while composing, but do not let plugin browsing replace songwriting. Create a few reliable chains and reuse them. Save them in templates if the workflow supports it.

Use the MIDI editor for corrections. Quantize lightly. Humanize only when needed. Adjust velocity to make parts breathe.

Use the mixer as you build. A rough balance early helps you make better musical decisions. If everything is too loud, turn tracks down before adding a master limiter.

At the end of a session, save the project, export or back up important recordings, and write a short note about what works and what needs editing next.

## Troubleshooting: No Sound

No sound is the most common audio problem. Work through the signal path slowly.

First, check whether any meters move. If the layer or track meter moves but the master meter does not, the problem is between the track and master: mute, solo, routing, PFL behavior, sends, or output assignment. If the master meter moves but you hear nothing, the problem is after Loop Kong: audio interface output, speakers, monitor controller, headphones, or cable.

If no meters move, check the source. For an audio cell, confirm the layer exists, is not muted, and has a valid region. For a MIDI cell, confirm notes exist and a VST instrument is loaded. For live input, confirm the track is armed or monitoring and the correct input channels are selected.

Check mute and solo. A soloed track can make other tracks silent. A muted master or muted layer can stop sound even when the clip looks correct.

Check plugins. A plugin can be bypassed, unloaded, waiting for a preset, muted internally, or incompatible. Temporarily remove or bypass plugins to test the dry signal.

Check devices. Open Preferences > Audio and confirm the correct host, input, output, sample rate, and buffer. If you changed audio hardware, reload or reapply settings.

Check PFL. If PFL mutes the track output to Master, you may be hearing or not hearing exactly according to Preferences.

Use a known-good test: one audio track, one WAV file, no plugins, master output to speakers. If that works, add complexity one step at a time.

## Troubleshooting: MIDI Problems

MIDI problems usually come from one of four places: input device, MIDI clip, instrument/plugin, or routing.

If MIDI Learn does not respond, check the MIDI input device in Preferences. Confirm the controller is connected before opening Loop Kong if possible. Try another USB port if the device is missing.

If recorded MIDI does not appear, check record arm, selected scene/cell, and whether the track is a MIDI track. Also check whether the recording was pending due to quantization or scene launch timing.

If notes appear but you hear no sound, check the instrument. A MIDI track needs a VSTi or external MIDI output. Load a simple instrument and preset. Confirm the plugin receives MIDI on the right channel.

If several armed MIDI tracks should sound but only one responds, check that they really share the same MIDI input and that none of them is already recording exclusively. During active recording, Loop Kong avoids feeding sibling tracks to prevent duplicate takes.

If notes hang, use MIDI Panic. Then check whether you edited a note while it was sounding, changed tempo during playback, or used long note tails. Loop Kong is designed to send All Notes Off on stop, but third-party plugins may still behave badly.

If notes are late, check audio buffer size and plugin latency. A large buffer makes live playing feel delayed. Heavy instruments can also add latency or CPU spikes.

If MIDI playback range is wrong, open the MIDI editor and verify start/end region, current bars, original bars, and selected range. Stop playback, adjust the range, and play again.

For reliable MIDI work, use one simple instrument first. Once notes record and play correctly, add effects and advanced routing.

## Troubleshooting: Plugins

Plugins are external software. Even when Loop Kong is working correctly, a plugin can fail, crash, hang, produce silence, or behave differently in VST2 and VST3 versions.

If a plugin does not appear, check the plugin path, plugin scan, architecture, enabled state, and file type. A 32-bit plugin will not work in a 64-bit host unless bridging is supported, which should not be assumed.

If a plugin appears but does not load, it may be invalid, missing a dependency, blocked by the system, or incompatible. Test the plugin in a blank project.

If a plugin loads but makes no sound, check whether it is an instrument or effect. Instruments need MIDI. Effects need audio input. A reverb on an empty MIDI track before an instrument will not create sound.

If a moved plugin does not open its editor or does not sound after drag-and-drop, save the project under another name, try closing/reopening the slot editor, and check that the chain order is still valid. With problematic plugins, prefer Move/Swap rather than trying to duplicate live instances.

If a plugin crashes when closing, avoid using it in important projects until you confirm stable behavior. Old VST2 plugins can be more fragile. Save before loading or removing them.

If a project takes time to load, remember that Loop Kong may restore plugins one by one. Wait until the project is ready before pressing Play. Heavy plugins such as samplers can take longer.

If plugin windows clutter the screen, disable automatic GUI opening on project load. Open editors only when needed.

Keep plugin chains simple for live use. Complexity is fine in the studio, but live stability benefits from fewer moving parts.

## Troubleshooting: Audio Dropouts and CPU

Audio dropouts, clicks, and glitches can happen when the computer cannot process each audio buffer in time.

First, increase frames per buffer in Preferences > Audio. Moving from 32 to 64, or from 64 to 128, can greatly improve stability. The cost is higher latency.

Second, check heavy plugins. Some instruments and effects use much more CPU than others. Bypass plugins one by one to find the cause. Plugin editor windows can also increase CPU or graphics load.

Third, reduce live operations during playback. Adding, deleting, duplicating tracks, loading plugins, or changing major routing during playback is more demanding than normal mixing.

Fourth, close other applications. Web browsers, video software, cloud sync, antivirus scans, and background updates can interrupt real-time audio.

Fifth, use a proper audio driver. ASIO with a stable audio interface is usually better than generic drivers for low-latency work.

Sixth, watch meters and diagnostic indicators. If CPU or drop indicators show trouble, do not ignore them.

A good live setup uses a buffer size that leaves safety margin. Ultra-low latency is attractive, but a slightly larger buffer with no dropouts is better than a tiny buffer that clicks.

For recording, use the lowest stable buffer. For mixing or editing heavy projects, use a larger buffer.

## Keyboard and Mouse Habits

Loop Kong is easier when you develop consistent mouse and keyboard habits.

Left-click selects or activates the main control. Right-click opens context menus. Drag files into cells to import. Drag scene references into Scene Chain to build an arrangement. Drag region edges in editors to change start/end points. Drag notes in the MIDI editor to move or pitch them.

To select several cells, use Ctrl+click for individual toggles and Shift+click for a rectangular range. To move the group, start the drag from a cell that is already selected.

Use Escape to cancel waiting operations such as MIDI Learn when supported. Use undo/redo if available after editing or track actions. Use save before operations that may be destructive.

Double-click may open, maximize, restore, or edit depending on the object. For example, double-clicking an editor area may open more detail, while double-clicking certain track header areas can restore a maximized bottom panel when that behavior is enabled.

Use tooltips. Many controls have short explanations in their title text. If you do not understand a button, hover over it before clicking during an important session.

For live performance, reduce mouse use. Map important actions to MIDI controls. For editing, use the mouse and keyboard freely, but work slowly when changing start/end ranges, MIDI notes, or plugin chains during playback.

If a drag operation seems stuck, release the mouse, press Escape, click a neutral area, and check whether a context menu or selection state is still active.

## Recommended Beginner Exercise

This exercise teaches the core workflow without advanced features.

24. Open Loop Kong.
25. Create a new empty project.
26. Open Preferences > Audio and confirm the correct output device.
27. Add one audio track.
28. Add one MIDI track.
29. Add four scenes and name them Intro, Beat, Bass, End.
30. Import a simple WAV drum loop into the audio track on Scene 1.
31. Launch Scene 1 and confirm it plays.
32. Load a simple VST instrument on the MIDI track.
33. Add or record a short MIDI pattern in Scene 2.
34. Open the MIDI editor and move one note.
35. Add gentle quantize if needed.
36. Set the metronome to PFL or Master depending on your output setup.
37. Add a delay or reverb effect after the instrument or on a return track.
38. Save the project.
39. Close and reopen the project.
40. Confirm that scenes, plugins, and clips restore correctly.

This exercise covers the most important ideas: project creation, audio output, track creation, importing audio, MIDI instrument loading, scene launching, MIDI editing, plugin use, and saving.

If something fails, do not skip it. Fix that step before continuing. A small correct project teaches more than a large broken one.

## Recommended Live Exercise

This exercise teaches a simple live-performance setup.

Create a project with four scenes: Intro, Groove, Break, Finale. Add three tracks: Drums audio, Bass MIDI, and Lead audio or MIDI. Add a return track with reverb or delay if you want effects.

Set the Master output to speakers or your main interface outputs. Set PFL to headphones. Route the metronome to PFL. Test that the audience output does not receive the click.

Put one loop or clip in each important cell. Scene 1 can have only drums. Scene 2 can add bass. Scene 3 can mute or change drums. Scene 4 can bring everything back.

Map a MIDI controller or keyboard buttons to Scene Next, Scene Previous, Fire Current Scene, Stop Current Scene, and MIDI Panic if available. Use selected scope only if you understand how track selection affects mappings.

Build a Scene Chain: Intro, Groove, Break, Groove, Finale. Launch each Scene manually first. Then press Scene Chain PLAY and test CYCLE BAR or a fixed BAR xN timing mode.

Rehearse the full set twice. During the first run, look at the screen. During the second run, use mostly the controller. If you cannot perform it without searching visually, simplify the project.

Save a live copy. Do not edit the live copy right before performance unless necessary.

## File Organization and Backups

Good file organization prevents lost work.

Keep each serious project in its own folder. If Loop Kong stores internal audio inside the project folder, this keeps recordings together. If you use a fixed recording folder, periodically move or copy important takes into the project folder.

Use clear folder names. For example:

- Loop Kong Projects/2026-04-25 Live Set A/
- Loop Kong Projects/Song Ideas/Guitar Ambient 01/
- Loop Kong Recordings/Vocals/
- Loop Kong Templates/Minimal Live Rig/

Back up projects before major changes. A major change includes deleting tracks, reorganizing scenes, replacing plugins, changing tempo structure, or cleaning recordings.

If a project uses external audio files, do not move those files unless the project copies them internally. If a project opens with missing files, check the original paths.

Keep a small text note with important projects. Write the audio interface, sample rate, buffer size, plugin versions, and any unusual routing. This helps you recover the session later.

For live sets, keep two copies: one performance copy and one editing copy. The performance copy should be stable and tested. The editing copy can be experimental.

## Glossary

**Arm**: Prepare a track for recording.

**ASIO**: A Windows audio driver system commonly used for low latency.

**BPM**: Beats per minute. The project tempo.

**Cell**: A slot where one track and one scene meet.

**Clip**: Audio or MIDI material used in a layer/cell.

**FPB**: Frames per buffer. Smaller values mean lower latency and higher CPU demand.

**Layer**: A take or clip inside a cell.

**MIDI Panic**: A command that sends note-off/all-notes-off messages to stop hanging notes.

**PFL**: Pre-fade listen. A cue path for headphones or private monitoring.

**Plugin**: A VST2/VST3 instrument or effect.

**Return track**: A track used for shared effects or return processing.

**Scene**: A performance section containing cells across tracks.

**Scene Chain**: An ordered performance list made from scene references.

**Track**: A vertical lane for audio, MIDI, monitoring, return, or master processing.

**VSTi**: A VST instrument. It turns MIDI into audio.

**Waveform**: The visual shape of an audio recording or clip.

# Quick Reference Tables

## Common tasks

| Task | Where to start |
|---|---|
| Hear audio | Preferences > Audio, then Master output routing. |
| Use a MIDI keyboard | Preferences > MIDI, then create MIDI track and load VSTi. |
| Import audio | Drag audio file into an audio cell. |
| Import MIDI | Drag MID/MIDI file into a MIDI cell. |
| Record audio | Select input, arm track, choose monitoring, start recording. |
| Record MIDI | Select MIDI input, arm MIDI track, load VSTi, record. |
| Cue privately | Route PFL to headphones, enable PFL on track. |
| Add effects | Load plugins in track, return, or master slots. |
| Build song sections | Create scenes and fill cells. |
| Perform arrangement | Use Scene Pads or Scene Chain; choose CYCLE timing or a fixed BAR xN step length. |
| Fix timing | Use MIDI editor quantize or adjust audio region starts. |
| Stop hanging MIDI | Use MIDI Panic or stop transport. |

## Safe defaults

| Area | Safe beginner choice |
|---|---|
| Audio host | ASIO if available. |
| Sample rate | 44.1 kHz or 48 kHz. |
| Buffer | 64 or 128 for recording; 256 for heavy mixing. |
| Metronome route | PFL/headphones for recording. |
| MIDI layer length | 4 bars. |
| Master ceiling | Slightly below 0 dBFS. |
| Plugin auto-open | Off for live use. |
| Save habit | Save after every stable setup step. |
| Global MIDI Swing | 50% at 1/16 for a straight default; change resolution/ratio when the groove needs swing. |

### No-sound checklist

41. Does the layer exist?
42. Is the layer muted?
43. Is the track muted?
44. Is another track soloed?
45. Does the track meter move?
46. Does the master meter move?
47. Is the output routed correctly?
48. Is PFL changing master behavior?
49. Is the plugin chain valid?
50. Is the audio interface output unmuted?

## A Practical Complete Workflow

Here is a complete example workflow from empty project to saved performance idea.

Open Loop Kong and create a new default project. Open Preferences and confirm audio output, MIDI input, PFL routing, and project defaults. Save the empty project as a template-like starting point if it looks good.

Create scenes named Intro, Groove, Variation, Break, and Ending. Create tracks named Drums, Bass MIDI, Guitar RM, Pad MIDI, Vocal, Delay Return, Reverb Return, and Master if those are not already present.

Import a drum loop into Drums/Intro. Duplicate or create a variation in Drums/Groove. Add a bass MIDI clip to Bass MIDI/Groove and load a bass instrument. Add a pad instrument and record sustained chords. Use note tails across loop if the pad should continue naturally.

Set up sends from tracks to Delay Return and Reverb Return. Keep effects subtle. Use PFL to audition changes before sending them to Master if your routing allows it.

If you want to record the result of one track into another, create an Audio or RM destination track and select the source track as its “Input” in Post FX or Post Mixer mode. Post FX is usually the neutral choice for capturing processed sound without depending on the fader; Post Mixer captures the channel output.

Record guitar into the Guitar RM track. Keep monitoring safe. Trim the recorded audio region and add a fade if needed. Normalize only if the take is too quiet.

Build Scene Chain: Intro, Groove, Variation, Break, Groove, Ending. Launch the Scenes manually first. Then press Scene Chain PLAY and choose CYCLE BAR or a fixed BAR xN step length.

Balance the mixer. Lower tracks before pushing the master. Enable the soft limiter only as a safety net. Save the project as version 01. Make a copy before more experimental edits.

At the end, you have a musical session that can be performed, edited, or developed into a full arrangement.

## Final Checklist Before a Session

Use this checklist before recording or performing.

- The correct audio interface is selected.
- The sample rate and buffer size are intentional.
- Master output goes to the correct physical outputs.
- PFL output goes to headphones or cue output.
- Metronome route and volume are correct.
- MIDI controllers are connected and tested.
- If you use several armed MIDI tracks, they all respond to the correct controller and recording does not create unwanted duplicate takes.
- Important MIDI mappings work.
- Tracks have clear names.
- Scenes have clear names.
- Plugin chains are loaded and tested.
- No unwanted solo or mute is active.
- Record-arm behavior is understood.
- Scene-launch recording is tested if used.
- The project has been saved.
- A backup exists for important work.
- The live/performance copy is separate from the editing copy.
- The stop command and MIDI Panic behavior are tested.
- The first scene, last scene, and emergency stop workflow are known.

The best Loop Kong session is not the one with the most features. It is the one you understand well enough to use without fear.

# Historical Reference: Features Introduced in APP_3507

These historical notes document APP_3507 / 0.3.507. The main user-visible additions since APP_3466 are Scene Chain editing controls, restoration of deleted Stop Buttons, Audio Spread, Warp editing/prepared playback in Q0 and the controlled Q1 gate, configurable default monitoring, a clearer Loop OFF range cue, and persistent English/Spanish UI localization.

The general workflow is unchanged: LoopKong remains a scene-based live workstation with Audio, MIDI, Record/Monitor, Return and Master Tracks. The notes below summarize the current behavior that matters most when learning the interface or opening an older project.

## Global Undo, Multi-Selection and Scene Drag

Global Undo/Redo still covers broad session structure and parameter edits and remains separate from MIDI-editor and older local histories. Cells and Scenes support Ctrl/Cmd and Shift multi-selection for grouped operations; Scene drag-and-drop follows move/copy semantics, including multi-selected Scene copy where supported.

Scene deletion has no confirmation dialog, so global Undo is the immediate recovery path for an accidental delete. The global history remains bounded and no-op/failed commands should not unnecessarily dirty the project or destroy redo history.

## Session Cells, STOP/CONTINUE and Track Headers

Empty normal Cells carry a persistent Stop Button by default. STOP means a Scene launch stops that Track; “Delete Stop button” turns the position into CONTINUE/NO ACTION and “Add Stop Button(s)” restores STOP later. CONTINUE also means no recording action for that Track/Scene position.

Cell status and action are visually separated: the left side reports playing/recording/pending state, while the right side shows the action. The compact Track header carries the current Cell max-cycle ring and a function button whose PLAY/STOP/REC state follows the action the Engine will actually execute.

## MIDI Runtime and Global Swing

The MIDI editor keeps note pitch aligned during zoom and supports the current editing/navigation workflow. Global MIDI Swing is now project-owned with 1/8, 1/16 and 1/32 resolutions plus a 50-75% ratio. New-project defaults are 50% at 1/16 and can be changed in Preferences.

Several armed MIDI Tracks sharing the same input may all sound live. Recording ownership remains protected so one take is not accidentally duplicated across sibling Tracks. Global OVERDUB now applies to normal MIDI Tracks as well as normal Audio Tracks; Return and Record/Monitor Tracks remain outside that global action.

MIDI Scene transitions preserve release-before-new-note ordering, and normal stop/pause/panic paths remain distinct so note releases do not have to rely on a single global “panic every time” behavior.

## Waveform, Recording Feedback and Monitor Defaults

The waveform editor keeps atomic audio range updates, source/playback ruler modes and Q-Mode-specific timing behavior. Playback-phase feedback is tied to the exact Track/Scene/Layer identity, so the playhead can remain continuous when the same Scene occurs in several automatic Chain steps.

New normal Audio and MIDI Tracks use Preferences > Monitoring > Default monitor mode (IN/AUTO/OFF, AUTO by factory default). Existing projects retain their saved monitoring mode and

duplicated Tracks copy the source state. Finalized audio recordings automatically refresh their final waveform when REC stops.

Start recording on scene launch now records an armed empty destination Cell on the first Scene launch at the actual Scene boundary. Existing material still launches normally, and CONTINUE Cells do not get forced into recording just because the preference is enabled.

### Plugin Slots and Full Screen

Audio import remains pre-decoded outside the critical engine path, and FLAC handling remains hardened. For plugin slots, normal drag performs Move/Swap while Ctrl/Cmd+drag performs Copy by creating/restoring a new destination instance. Save before copying fragile third-party plugins.

F11 toggles true Full Screen for the main LoopKong window and restores the previous placement when pressed again. The shortcut is scoped to the Main Shell so plugin editor windows keep their own keyboard handling.

### Scene Chain: Timing and Playback

Scene Chain timing is selected directly: CYCLE BAR, CYCLE BEAT, BAR, BAR x2, BAR x4, BAR x8, BAR x16, BAR x32, BAR x64 or BAR x128. STEP ×2 doubles the duration represented by each step, CHAIN ×2 duplicates the complete pattern, the wheel edits one step's Scene reference, and the trash removes one reference. CYCLE BAR remains the default for new projects.

Repeated same-Scene steps are exact separate steps but do not automatically retrigger the Scene or restart long Layers. PLAY starts/resumes the Chain, PAUSE stops only future progression, LOOP wraps, and runtime RWD makes step 1 the next occurrence after the current step finishes.

### Scene Chain: Recording, OVERDUB and Save/Load

Q1/Q2 recording can be prepared for the upcoming exact Chain step. Consecutive Q2 steps that reference the same Scene form one continuous take. With OVERDUB ON, a real Scene change can continue recording into the destination without another FIRE; with OVERDUB OFF, the take ends at that real Scene change/end boundary.

REC 1× ends recording at the end of the current Chain pass. REC ∞ allows recording to continue through LOOP wraps while OVERDUB remains enabled, including a continuous same-Scene wrap when the last and first steps use the same Scene.

CYCLE BAR and CYCLE BEAT references are stable per Scene and are persisted in modern projects. Saving, closing and reopening must therefore preserve the established step timing even if a long recording Layer spans several short repeated steps. Legacy projects without saved references continue to derive timing automatically.

### Backward Compatibility and Defaults

Existing projects keep their saved Scene Chain timing mode. Truly new projects default to CYCLE BAR; legacy project files from before timing-mode persistence keep the older BAR fallback so opening an old project does not silently change its musical structure.

The Scene Chain timing selector is ordered CYCLE BAR, CYCLE BEAT, BAR and BAR x2 through BAR x128. Its dropdown uses the dark LoopKong theme for legibility. These UI defaults do not change the Engine authority over step timing, current Scene or recording state.

### Audio Spread and Warp

Audio Layer Spread is available in Q0/Free and Q2/Multi. It reuses the same AudioClip and creates independent Layers with consecutive START/END slices across Scenes. Spread across Scenes below divides the available musical material among the required Scenes; Spread by Bars uses fixed 1/2/4/custom bar slices. Existing destination material blocks the operation before mutation, and the whole action is one Session Undo step.

Warp uses the listening-validated WarpLab 0.2.86 BEATS renderer outside the real-time callback. The editor uses fixed source anchors and draggable target positions. Prepared playback has since been extended to Q2/Multi and Q3/Random with mode-specific timing conditions. Unsupported or not-ready combinations use an appropriate safe path; see the Revision 1.6 section for Tune and Reverse behavior.

### Monitoring and UI Language

Default monitor mode is an application preference for newly created normal Audio/MIDI Tracks. AUTO is still the default, which works naturally with Record Arm > Follow selection because AUTO monitoring follows the arm state. IN and OFF remain explicit alternatives.

UI Language is presentation-only. English is the deterministic fallback for old/missing settings. Main SPA text and principal native dialogs can display in English or Spanish without changing protocol names, project persistence keys, Engine state or audio behavior.

### Real-time Safety Changes Behind APP_3507

Large imported AudioClip sample buffers are adopted by move during the Engine commit instead of copied there, and normal Add Track preallocates the heavy Track/Scene/Layer pools outside CoreThread before the authoritative Song commit. These changes are internal, but they protect the same low-latency behavior documented throughout this manual.

## Revision 1.6 Update — APP_3640 / 0.3.640

This revision updates the practical user workflows introduced after APP_3507 and through the functionally tested APP_3640. The preceding chapters remain useful for projects, Scenes, Cells, Layers, the Mixer, PFL, plugins and recording. The sections below describe the newer controls and important differences.

### MIDI Mapping: choose Gesture before Add or Learn

Open MIDI Mapping from the Top Bar. In Add Mapping, choose the target scope (GLOBAL or a visible normal Track), action, control type and Gesture before pressing Learn or Add. Button-style Note/CC mappings may use Legacy, Single, Double, Long or Triple. When compatible, one physical pedal can control separate actions with distinct gestures.

Example: choose FIRE and Single, press Learn and operate your pedal. Next choose OVERDUB and Long, press Learn and operate the SAME pedal. Keep the MIDI message kind, channel and note/CC consistent. A short press and a long hold can then perform different actions. You do not need to learn a Legacy mapping first and edit it afterward.

Legacy is the older single-action behavior; it cannot coexist with explicit gestures for the same MIDI message. Duplicating the same message and gesture is rejected. For CC buttons with explicit gestures, use Learn CC in the mappings table to capture the press and release values. Continuous controls such as VOLUME, PAN, GAIN and SEND do not use gestures. Press & Hold is limited to compatible INC_BPM/DEC_BPM controls. If Learn does not complete, check the Remote MIDI input, message kind, existing mappings and Info Bar status.

### Track navigation: skip Returns, stop at the ends

Previous Track and Next Track move through normal user Tracks and skip Return FX buses. Navigation stops at the first and last normal Track instead of wrapping through returns. Return FX channels remain available by direct selection. PREVIOUS_TRACK and NEXT_TRACK appear as GLOBAL MIDI Mapping actions and are not assigned to a specific Track.

A newly created empty project with no normal Tracks shows MASTER in the Bottom Panel, rather than implicitly choosing Return FX1. Explicit Return selection and saved selections in loaded projects are preserved.

### Preferences: changing live Audio I/O

Enable the required hardware input and output pairs under Preferences > Audio, then press Apply. After the Engine applies the change, the input/output choices on Tracks refresh immediately. ASIO may need to restart its stream to accept the new routing. Verify Master/PFL outputs and monitoring after modifying device channels; if a driver refuses a configuration, return to a supported setup.

### Saving, switching projects and Project Recovery

Saving while audio is playing requests consent before the brief playback interruption. Cancel leaves playback running; continuing saves and resumes audio. New Project, Open Project and Close Project also warn when a change will interrupt playback or recording. For unsaved edits, the confirmation combines Save, Don't Save and Cancel. Cancellation keeps the current session.

Project Recovery creates safe checkpoints for unsaved changes while the Engine is stopped. After an unexpected termination, Recover or Discard may be offered when a valid copy exists. Recovery does NOT automatically overwrite the original project; save the recovered session explicitly. Some recent third-party plugin changes may not have an exact recoverable state: review the restored plugin settings.

### Undo History, plugin changes and MIDI Mapping Undo

The stacked Undo / Undo History / Redo controls in the Top Bar provide a history list you can navigate. The main Undo/Redo history covers many Session changes, including groups of fader and knob adjustments, completed takes, MIDI Mapping additions/edits/imports, and selected plugin actions such as bypass, loading and copying. When changing plugin presets, state restoration depends partly on plugin behavior; save before risky edits.

### Browser Favorites, Clips Pool and Record/Monitor takes

Favorites holds frequently used folders, audio/MIDI files, projects and templates. The Clips tab lists imported audio clips kept in the project pool even before a Track uses them. Drag a pool clip into a compatible Cell, or import a favorite audio file into Clips. Audio referenced by Undo/Redo and Record/Monitor takes is protected during automated cleanup. New RM takes appear at the top and their waveform is selected when recording finishes.

### Audio Layers: Warp, Time Stretch, Tune and Reverse

Prepared Warp/Time Stretch/Tune playback now also supports Q2/Multi and Q3/Random with mode-specific timing conditions. Tune covers -24 to +24 semitones while TS or WARP is enabled. When both are off, the Tune knob is dimmed and retains its stored value. Reverse playback keeps the prepared Tune setting. START and END may be freely adjusted after recording; the waveform Snap choices are BAR, BEAT and OFF. Fade-in and fade-out edits are visible in the waveform and remain inside the actual selected region.

A Warp, SPEED or Tune change can require a background audio render; an already valid prepared generation remains audible when permitted while the replacement is built. Source changes can invalidate the render. These audio edits do not change the Q-Mode-specific recording and launch rules.

### Multi-track operations and AutoOverdub

Deleting several selected Tracks now removes the intended Tracks while preserving their individual identities. Switching off AutoOverdub during Q1 recording no longer produces an unintended empty take. On Q0, STOP followed by FIRE restarts playback at the Layer's configured beginning.

### Short live checklist

Before a performance: check physical Master/PFL routing, verify Track Input menus after Audio Apply, test MIDI pedal gestures and GLOBAL Track navigation, and reopen a saved project to verify its Scenes, clips and plugin settings. Keep a separate live copy of important projects.