INDEPENDENT AUDIO SOFTWARE

LYNCH Delay

Let the repeats tell another story.



Choose tape drift, smooth digital timing or broken-bucket grain, then shape how repeats answer the part. Echo Bloom diffuses them, Orbit moves later heads and Auto Duck keeps the source present while the echoes develop.

Complete colour user guide · version 0.2.0 · Apple Silicon Mac AU · macOS 12+

Contents

Start with the part 3

Inside the sound 3

Lynch Delay · Echoes With A Memory 4

Engine Selector 4

Routing / Level 5

Sound And Approach 5

Presets / Your Sounds 5

Automation / Controllers 5

Editor 5

Install and choose the right host slot 6

Trial and permanent licensing 6

Save, recall and automate 6

Troubleshooting and support 7

About this guide 7

Start with the part

Choose tape drift, smooth digital timing or broken-bucket grain, then shape how repeats answer the part. Echo Bloom diffuses them, Orbit moves later heads and Auto Duck keeps the source present while the echoes develop.

01 / TAPE ECHO: continuous speed drift, pitch movement on time edits, asymmetric loop color, wear, Wow and Flutter.

02 / AUTO DUCK: incoming audio above Duck Threshold reduces wet output, up to approximately 36 dB at 100%.

03 / TAIL LOCK: stop feeding new input and set regeneration to 98%.

04 / Three separate engine buttons replace the type dropdown.

Inside the sound

Lynch Delay · Echoes With A Memory

TAPE ECHO: continuous speed drift, pitch movement on time edits, asymmetric loop color, wear, Wow and Flutter.

Engine Selector

Three separate engine buttons replace the type dropdown.

Routing / Level

Direct / Insert blends the original with the processed signal using Mix.

Presets / Your Sounds

24 original factory sounds including Init · Dry.

Automation / Controllers

Every sound value is a native host parameter.

Editor

Drag or scroll controls; Shift gives fine movement, double-click resets a dial.

Lynch Delay · Echoes With A Memory

Start with Tape · Golden Quarter. Tempo Sync ON sets spacing from Beat and the host tempo; Manual BPM is used if the host provides no tempo. Editing Time selects manual milliseconds and turns Sync OFF. Host automation does not automatically change Sync. Synced spacing caps at 8 seconds; manual Time spans 10–4000 ms. Echo heads can extend beyond the primary spacing.

TAPE ECHO: continuous speed drift, pitch movement on time edits, asymmetric loop color, wear, Wow and Flutter. SMOOTH DIGITAL: clean crossfaded time changes with no intentional tape pitch glide. BROKEN BUCKET: darkened, quantized regeneration with worn motion. These are original algorithms inspired by broad delay families, not replicas of specific hardware.

Feedback regenerates repeats. Tone and Low Cut prevent buildup. Age behaves differently for each engine. Ping Pong exchanges feedback between channels, with a left-led initial feed. Repeat Pattern selects Single, Dual, Dotted or Triplet answers. The editor calls it Tape Heads, Tap Pattern or Echo Pattern for the selected engine. Orbit moves the later heads across the stereo field. Echo Bloom diffuses repeated audio into a cloud. Tube and Grit add wet-loop color. Heavy nonlinear color creates harmonics; this is not a bandlimited hardware model.

AUTO DUCK: incoming audio above Duck Threshold reduces wet output, up to approximately 36 dB at 100%. Attack, Hold and Release control its return. The detector is internal, not an external kick sidechain. Dry audio and feedback decay remain independent of the output ducking. Lower the threshold for quiet tracks. Set Auto Duck to zero for an uninterrupted echo.

TAIL LOCK: stop feeding new input and set regeneration to 98%. Stored echoes still decay, sometimes over minutes; this is not infinite Freeze. It cannot capture sound that has not yet entered the delay. Clear Tail clears every retained sample and filter state safely at the next audio render. No noise is generated into an empty buffer.

Engine Selector

Three separate engine buttons replace the type dropdown. The selected engine remains lit; clicking it again does not deselect it. Buttons follow factory/User presets, project state and host automation of the same Engine parameter. Right-click a type button for reset/controller guidance. Tape Echo shows Tape Heads and head options. Smooth Digital shows Tap Pattern and digital tap options. Broken Bucket shows Echo Pattern and echo options. All use the same stored Repeat Pattern parameter ID: Single, Dual, Dotted and Triplet. A digital tap is a read from a delay buffer, so multitap timing also makes sense in digital delays. Wow/Flutter are dimmed and marked N/A in Smooth Digital because that engine does not use tape-time modulation; stored values return when choosing Tape or Bucket.

Routing / Level

Direct / Insert blends the original with the processed signal using Mix. Dry audio is not colored. At Mix 0% the original passes at unity, including trim bypass. Send / Bus outputs wet only and Mix becomes wet level; our Bypass mutes that return so dry audio never doubles from an aux. Output trims wet audio. Sample Protect limits the resulting processed output sample peak, not intersample true peak. Normal bypass smoothly returns original unity on Direct. Routing and Manual BPM survive factory/User sound loads; full project state restores everything.

Sound And Approach

Apple Silicon native AUv2 for macOS 12+. Mono, mono-to-stereo and stereo. Zero added audio buffer latency. Engineering validation is separate from musical approval: audition with your own material in Logic. No production, other plugin or Logic cache is modified by the plugin.

Presets / Your Sounds

24 original factory sounds including Init · Dry. Starting Points and arrows browse them. Save… writes a User sound; User… lists your files or opens one. Every parameter is validated before loading. No audio samples are saved or required.

Automation / Controllers

Every sound value is a native host parameter. Continuous values support ramps and future buffer offsets, with deliberate control smoothing. Right-click / Control-click a control to reset or open the guide. For a hardware knob or expression pedal in Logic, first move the plugin control. Choose Logic Pro > Control Surfaces > Learn Assignment for that parameter, move your hardware control, then turn Learn Mode off. This audio insert has no MIDI Learn input. Use Logic's Controller Assignments for mappings and pickup behavior.

Editor

Drag or scroll controls; Shift gives fine movement, double-click resets a dial. Optional Hover Control spans each large wheel's complete range inside its bounds and leaves its value unchanged on entry. Escape turns it off. Gestures end on focus loss, exit and window closure. UI Size scales the editor to fit the screen. ? enables English hover help. Guide opens this text. The graph shows live wet envelope for Delay/Reverb, or live pedal position for Wah, over approximately 480 ms; it is not an editable curve. Clear Tail resets retained audio/filter state in this instance.

Install and choose the right host slot

Apple Silicon Mac, macOS 12 or later. Audio Unit only; no Intel Mac, Windows, VST3 or standalone application is included. Use an AU-compatible host and insert on an audio track, instrument audio output or bus.

Save your session before installation. Use the verified current installer and follow its installation prompts, then restart the host if the newly installed AU is not listed. Select the product under Lynch Audio Lab in the appropriate slot.

Trial and permanent licensing

Download the trial installer shown on the product page; the same installer is used for trial and purchase. No card is needed for the trial.

Open the plug-in, click Trial & Activation at the bottom and press Start trial to begin its full 14 days. Installing, opening a preset or downloading a guide does not start a new trial. Each product has its own trial. There is no subscription, automatic charge or periodic noise burst.

For a permanent purchase, use the exact Buy link on the product page. Lemon Squeezy supplies a license key in the receipt. Connect this Mac to the internet, click Trial & Activation at the bottom, paste the receipt key for this exact product and choose Activate. A permanent license allows a maximum of three computers. After successful activation, work offline.

To free a Mac’s activation, connect it to the internet, open Trial & Activation and choose Deactivate this Mac. This releases that computer without renewing or resetting trial dates. Presets, project settings and updates do not renew the trial and retain settings.

The login Keychain stores trial and license-key records separately from presets. If it is locked, unlock it normally and press Refresh in Trial & Activation. Keep the system date correct.

At expiry, audio effects return latency-aligned dry audio with normal reported latency; instruments are silent; MIDI tools stop output and release held notes. Presets and project settings remain. Purchase activation restores licensed processing rather than a new trial.

Save, recall and automate

Save the host project to retain the AU instance. Use the product-specific preset operations described in the control chapters for reusable sounds. Preset files, complete project state and controller assignments can have different scopes; do not treat them as interchangeable.

When using host automation, choose an exposed sound parameter, record a short test pass and replay from before the first change. Check module enables, routing and output level. Only use product-local MIDI Learn when this manual explicitly documents it; otherwise use the host’s controller-assignment workflow.

Troubleshooting and support

If the AU is missing, save your session, install the current package and restart the AU-compatible host. Check the required macOS version and Apple Silicon architecture, then review the host's plug-in manager. Do not delete a working production project to troubleshoot an insert.

For no sound or no processing, first check the correct slot, track input/output, incoming audio or MIDI, bypass/mute, module enables, mix/return amounts and trial or activation status. Test a simple documented starting point before adding a complex chain.

If the sound is too loud or distorted, reduce drive or output and inspect later inserts and the host master. Sample-peak protection does not guarantee intersample peaks. Source clipping cannot be repaired simply by lowering a later trim.

For dropouts, reduce active polyphony, unison, long returns or dense processing where applicable, or use the host's freeze/bounce workflow. A larger buffer can help scheduling; it cannot cure sustained processing overload.

For activation trouble, check the internet connection and use the key for this exact product from the Lemon Squeezy receipt. For help, contact info@lynchaudiolab.com with product version, macOS version, AU host and a short description. Never send your private license key publicly.

About this guide

Lynch Audio Lab · Music records a brighter tomorrow. This guide describes the released Audio Unit package. The control chapters preserve the supplied public operating documentation, with current-operation addenda integrated and obsolete private-test release labels removed. Images show the real product interface; some original panel lettering may predate the current package version. Original TXT documentation remains available separately.

Original Lynch designs are not measured hardware replicas or equipment-maker endorsements. Listen in context, maintain headroom and check the final deliverable after downstream processing. Support: info@lynchaudiolab.com.