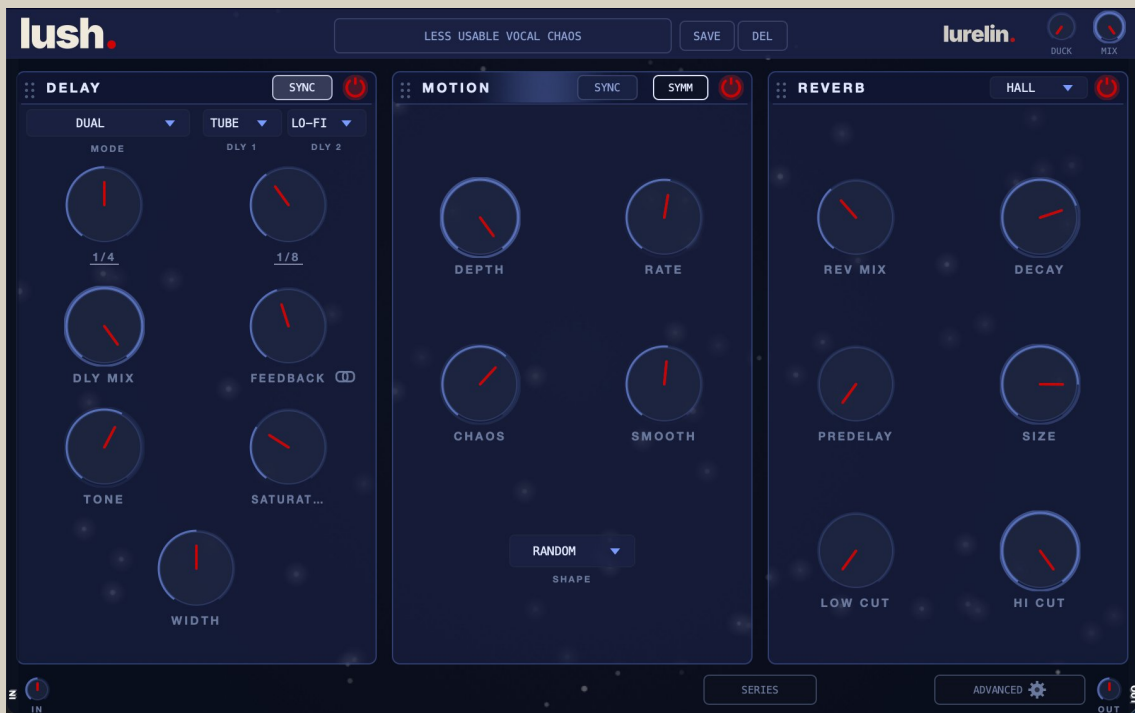


LURELIN AUDIO

# lush.

DELAYS · MOTION · REVERBS



USER MANUAL  
VERSION 1.0  
FOR MACOS · VST3 / AU

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## 01

# getting started.

Lush is a creative vocal-throw delay and reverb plugin. It is built for vocals first — the name refers to "throwing" a vocal into delayed, moving, reverberant space while the dry signal stays anchored — but it works on any source: guitars, drums, synths, full buses.

### SYSTEM REQUIREMENTS

macOS 11 (Big Sur) or later. Universal binary supporting both Apple Silicon and Intel Macs. VST3 and Audio Unit (AU) formats. Pro Tools is supported today via a VST3/AU wrapper; native AAX is planned post-launch. Operates correctly at standard sample rates including 44.1, 48, and higher.

### INSTALLATION

Run the signed and notarized .pkg installer. During installation you can choose which formats to install — VST3 and AU are both selected by default. The VST3 installs to the standard system VST3 folder; the AU installs to the standard Components folder. Restart your DAW so it picks up the new plugin.

### FIRST LAUNCH

If a license file was bundled with your installer (as it is in the downloads sent after starting a trial or purchasing), the plugin is already activated on first launch. If no license was bundled, the plugin shows an activation window the first time you open it — see Section 08.

## the plugin window.

Lush's window is divided into four areas: the title bar across the top, three module panels in the main body (Delay, Motion, Reverb), and a bottom strip of global controls.

### TITLE BAR

The "lush." wordmark sits top-left and toggles master bypass when clicked (see Section 07). The preset menu sits in the center. The "LURELIN AUDIO" wordmark sits top-right and links to the Lurelin website when clicked.

### INPUT AND OUTPUT METERS

Vertical meters along the left and right edges, running from the bottom of the title bar down to the bottom strip. Both drop to zero when the plugin is bypassed.

### THE THREE MODULE PANELS

Delay, Motion, and Reverb. Each clearly labeled, each independently bypassable, each freely reorderable by click-and-drag.

### BOTTOM STRIP

Holds the input gain (left, inside the input meter), the output gain (right, inside the output meter), the master wet/dry mix, the Series/Parallel routing toggle, and the Advanced button.

## signal flow and routing.

The overall path: Input → (input gain applied to the wet-feeding path only) → Delay+Motion and/or Reverb (arranged per routing) → output gain (wet only) → master wet/dry mix → Output.

### SERIES VS PARALLEL

The Series/Parallel toggle at the bottom of the plugin controls how the delay and reverb relate to each other. In Series, they feed each other in order. In Parallel, the input is split and sent to delay and reverb simultaneously, and their outputs are summed.

### REORDERING MODULES IN SERIES

In Series mode, click and drag any module to a new position to change the chain. The two common configurations are Delay → Reverb (delay first, reverb catches the result) and Reverb → Delay (reverb first, delay picks up the bloomed tail).

### WHERE MOTION FITS

Motion is bound to the delay stage's output — it pans whatever comes out of that stage, before being summed back with the dry. With the delay on, motion pans the delayed signal while the dry stays centered. With the delay off, the delay stage becomes a pass-through and motion pans whatever it received (the dry, or the reverb output in Reverb → Delay order).

### PARALLEL BEHAVIOR

In Parallel, the delay branch goes silent only when both delay AND motion are off; with delay off but motion on, the branch passes the dry signal into motion (the plugin acts as a pure auto-panner). The reverb branch contributes only when the reverb is on. At full-wet settings, parallel gives clean simultaneous delay and reverb with no doubled dry signal.

### INPUT/OUTPUT GAIN SCOPE

Input gain only affects the wet processing path. The dry signal is captured before it, so input gain changes how hard the effects are driven without altering the dry. Output gain only affects the wet signal, before the master mix.

# the delay module.

A dual-tap delay (two delay voices, tap 1 and tap 2) with multiple character styles, tempo sync, and rhythmic options.

## **DELAY MODE**

Single (one voice), Dual (two independent taps), or Ping-Pong (taps bouncing across the stereo field). In single mode the full character style name is shown; in dual and ping-pong the style name is shown as an abbreviation to save space.

## **TEMPO SYNC AND TIMING**

Each tap can be synced to the host tempo or run free in milliseconds. When synced, the tap snaps to a musical division: 1/64, 1/32, 1/16, 1/8, 1/4, 1/2, 1/1, 2/1, or 4/1.

## **RHYTHMIC MODIFIER (NOTE / DOTTED / TRIPLET)**

When a tap is synced, click the division label beneath the knob to cycle through straight note, dotted, and triplet. The label updates to show "1/4," "1/4 d," or "1/4 t." When a non-default modifier is active, the label is highlighted. The same modifier system applies to the synced motion rate.

## **CHARACTER STYLES**

Five tonal characters: Digital (DIG) — clean transparent repeats. Studio Tape (STUDIO) — warm tape coloration. Old Tape (OLD TAPE) — more aged, degraded tape character. Tube (TUBE) — saturated valve warmth. Lo-Fi (LO-FI) — degraded, filtered, lo-fi character.

## **FEEDBACK AND THE FEEDBACK LINK**

Each tap has a feedback amount controlling how many repeats it produces. A chain-link control ties the two taps' feedback together. Linked: both share one feedback value. Unlinked: each tap gets independent feedback, and a second control appears.

## **SATURATION**

Adds harmonic drive to the delayed signal. Defaults to 0 (off).

## **TONE, WIDTH, DELAY MIX**

Tone shapes the brightness of the repeats (wet signal only). Width controls stereo width of the delay output. Delay Mix is the module's own wet/dry balance, independent of the global master mix.

## the motion module.

Motion moves the delayed signal through the stereo field using LFO-driven panning. It is the engine behind the plugin's sense of movement and space.

### **SYMMETRIC VS ASYMMETRIC**

The defining toggle. Symmetric: the two taps move as a perfect mirror of each other — when tap 1 swings right, tap 2 swings left at the same speed. Tap 2 has no independent motion in this mode; it's purely the mirror of tap 1.

Asymmetric: the two taps each run their own independent motion with their own rate, depth, and character. Note: in symmetric mode, if both taps carry nearly identical audio, the mirrored panning can perceptually sum back toward the center — this is inherent and expected.

### **RATE**

The speed of the panning movement. Motion rate can be synced to the host tempo (using the same division and dotted/triplet system as the delay) or run free in Hz.

### **DEPTH**

How far the signal swings across the stereo field.

### **CHAOS**

Introduces randomness and irregularity into the motion, making the movement less predictable and more organic, as opposed to a clean repeating cycle.

### **SECONDARY RATE / SECONDARY DEPTH (ADVANCED PANEL)**

A second, slower LFO layered on top of the main motion for more complex, evolving movement. Secondary depth defaults to 0 (off) — secondary motion is only present when dialed in. Where chaos adds disorder, the secondary LFO adds structure.

## the reverb module.

Five distinct algorithms selectable from a style menu within the reverb panel. All reverb controls are shared across the styles; only the underlying algorithm changes.

### **REVERB STYLES**

Plate — dense, smooth, bright (the reference algorithm). Plate 2 — a second plate with a slightly more classic-plate character. Hall — a large, spacious concert-hall character with a long blooming tail. Chamber — tighter and more controlled, denser early reflections, brighter character. Gated — a plate-style reverb with a hard gate that cuts the tail off sharply.

### **SIZE**

Controls the balance between early and late reflections. Turned down: mostly early reflections (tighter, more immediate). Turned up: mostly the late reflection tail (the lush, sustained part). The middle is a balanced blend. Volume stays consistent across the full sweep on all algorithms.

### **DECAY**

The length of the reverb tail. On the Gated style, decay governs the gate length; the shortest setting produces a very short, punchy gate.

### **DAMPING**

High-frequency damping in the tail. At 0, no damping (full, bright reverb). At maximum, high frequencies are fully rolled off (dark reverb). This direction is consistent across all styles.

### **LOW CUT, HIGH CUT, PRE-DELAY, REVERB MIX**

Low/High cut filter the reverb signal. Pre-delay is a short gap before the reverb begins (useful for keeping the dry transient clear). Reverb Mix is the module's own wet/dry, independent of the global master mix.

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## global controls & behaviors.

### MASTER BYPASS (CLICK THE LUSH. TITLE)

Click the "lush." wordmark in the title bar to bypass the entire plugin. When bypassed, the whole interface dims, the wordmark goes notably dark, meters drop to zero, the visuals stop, and the dry signal passes straight through. Click again to restore. The bypass state persists across window close/reopen.

### INPUT GAIN / OUTPUT GAIN / MASTER MIX

Input gain (left, inside the input meter) drives the wet processing path only. Output gain (right, inside the output meter) trims the wet signal before the master mix. Master Mix is the final dry/wet blend, applied after output gain.

### DUCKER

Lush includes a built-in ducker that automatically pulls the wet signal down when the dry input is present, then lets it bloom back as the input dies away. This keeps delays and reverb out of the way of the dry signal during phrases. See the "Basic Ducked Delay Insert" factory preset for an example.

### ADVANCED PANEL

The Advanced button at the bottom right slides open a panel of deeper controls (such as the secondary motion LFO). Closed by default.

### VISUALS TOGGLE (IN ADVANCED)

Turns the animated starfield on or off. Disabling it stops the animation and reduces CPU use.

### MANUAL LINK (IN ADVANCED)

Opens this manual in your default browser.

### KNOB AND LABEL INTERACTIONS

Double-click a knob: reset to default. Option-click a knob: also reset to default. Double-click a label: open a text-entry box to type an exact value (percentage parameters accept 0–100; synced divisions accept "1/8," "1/4 t," etc.). Click and hold a knob: the label beneath it shows the current value while dragging, returning to the parameter name on release.

### THE STARFIELD VISUALIZER

Each star has a baseline brightness, and the overall star brightness rises and falls with the plugin's output level — effectively a soft ambient meter. Drift speed follows the motion rate: synced motion drifts in time with the sync, free motion follows the Hz rate. When motion is off, stars drift at a slow idle speed.

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## licensing & activation.

Lush uses a license-file system. The plugin verifies a signed license file on load and behaves accordingly. There is no constant online check — verification happens locally, so the plugin works offline once activated.

### FULL (PURCHASED)

The plugin runs normally with no restrictions.

### TRIAL ACTIVE

Full functionality, every feature unlocked. A small "X DAYS" banner with a "BUY NOW" link appears in the title bar. The first time the plugin is opened in a session, a one-time confirmation shows how many trial days remain (the trial is 10 days).

### **TRIAL EXPIRED / UNLICENSED**

The plugin's audio is gated — the output briefly mutes periodically (a short dropout roughly every 30 seconds) so it's clear the plugin needs to be activated. An activation window is shown.

### **THE ACTIVATION WINDOW**

A centered panel with the dimmed plugin behind it. It uses the Lurelin parent-brand look (warm cream, red accent stripe, lurelin wordmark) — distinct from the plugin's deep-space interface. Three options: start a free trial (enter an email and the plugin contacts the Lurelin server, activates automatically, and shows a confirmation); enter a license code (paste or drag the license file onto the window); or buy Lush (opens the store in your browser). The expired-trial window offers enter-code and buy (no second trial).

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## **troubleshooting & support.**

### **LUSH ISN'T SHOWING UP IN MY DAW**

Restart your DAW so it rescans for new plugins. If it still doesn't appear, check that you ran the installer (not just unzipped the .pkg without opening it).

### **I OPENED LUSH AND IT SAYS "ACTIVATE"**

Either enter your email to start a 10-day trial, or paste the license file contents from your purchase email — you can also drag the license file directly onto the window.

### **MY TRIAL EXPIRED — WHAT NOW?**

Buy a license at [lurelin.com/lush](http://lurelin.com/lush). Once you receive the email, paste your license into the activation window. Your settings and presets are preserved.

### **I LOST MY LICENSE EMAIL**

Email [support@lurelin.com](mailto:support@lurelin.com) with your order ID. We'll resend it.

### **I NEED TO INSTALL ON A SECOND MACHINE**

Your license is good for two machines. Download the installer from [lurelin.com/downloads](http://lurelin.com/downloads), then paste your license into the activation window on the second machine.

### **SUPPORT**

## **we'll help.**

For anything not covered here, email [support@lurelin.com](mailto:support@lurelin.com). We read everything and respond personally. For updates and new plugins, follow [@lurelinaudio](https://www.instagram.com/lurelinaudio) on Instagram or subscribe at [lurelin.com](http://lurelin.com).