INDEPENDENT AUDIO SOFTWARE

LYNCH Broke Amp

A small amp. A rough edge.



Take guitar, bass or another recorded part from gentle colour to worn drive. Five characters, independent Overdrive, Dirt and a short room/slap path keep the sound immediate; final cuts and the optional Tube Limiter help place it in the record.

Complete colour user guide · version 0.7.0 · Apple Silicon Mac AU · macOS 12+

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Start with the part

Take guitar, bass or another recorded part from gentle colour to worn drive. Five characters, independent Overdrive, Dirt and a short room/slap path keep the sound immediate; final cuts and the optional Tube Limiter help place it in the record.

01 / Use as an audio insert on guitar, bass or any audio channel. Guitar adds small-amp drive and speaker roll-off; Bass retains low-frequency weight; Direct removes speaker coloration; Broken adds stronger drive and sag. Gain / Overdrive adds clean-to-heavy drive independently of Dirt. Dirt controls compensated saturation; Body controls cabinet/low-mid weight. This is an original character amp without third-party IRs.

02 / Start with the first factory sound and a moderate input or MIDI velocity. Turn Tone for brightness, Dirt for worn warmth and Space for a short colored room plus slapback. Space is a master for both effects, with gentle wet ducking under new attacks. The default output leaves headroom; use Output to match the surrounding mix. This series is meant for intimate, imperfect, musical lo-fi character.

03 / Init resets to a clean starting sound.

04 / An independent ON/OFF peak stage at the end of the active chain, after the amplifier, Dirt/cabinet, Space and Output.

Inside the sound

Init And Preset Readability

Init resets to a clean starting sound.

Tube Limiter

An independent ON/OFF peak stage at the end of the active chain, after the amplifier, Dirt/cabinet, Space and Output.

High Pass / Low Pass

Two independent 12 dB/oct filters after the amp/cabinet and Space, before Output and Tube Limiter.

Five Characters

Guitar / Bass / Direct / Broken / Tube Tube adds stronger biased soft saturation and a darker cabinet voicing.

Quick Start

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Controls

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Five Characters

Guitar / Bass / Direct / Broken / Tube Tube adds stronger biased soft saturation and a darker cabinet voicing. Gain / Overdrive still controls the drive amount and Output matches the level.

Controls

Tone: dark to bright low-pass color. Gain / Overdrive: 0 to +36 dB. Zero preserves the original sound. Raise for soft breakup, crunchy chords or heavy distortion, including when Dirt is zero. Saturation runs at 4x sample rate with partial level compensation, then flows through Dirt, speaker color and Space. Use Output to match volume. All five source modes support overdrive. Old presets open at Gain 0. Dirt: tape-style, biased transistor saturation; four-times oversampled through windowed-sinc conversion filters. This is an original algorithm, not a hardware emulation. Space: a 91/117 ms colored slapback (slight Motion modulation), short diffused room and gentle auto-duck. Fully down removes wet output. Stored tails remain internal until Reset/preset loading; turning Space up can reveal them. Motion / Spin: gentle pitch or stereo movement, depending on the instrument. Zero is steady. Ring / Body: note ringing/damping or amplifier low-mid weight. Output: manual dB trim before the optional Tube Limiter.

The peak display measures recent rendered output, not input; lower Output if your mix clips. Mute / Bypass: clearly marked status. Amp bypass is a latency-aligned unity path; instrument mute fades the entire output.

Technical / Scope

Native Apple Silicon Audio Unit, macOS 12 or later. Broke Drums/Synth/Piano/Electric Piano/Organ are instruments; Broke Amp is an audio effect. Mono/stereo, 8–192 kHz float processing. Reported latency: 16 samples. Fixed-capacity MIDI/automation queue; no sample-file reads or voice allocation in the render path. Original sounds and processing, with no Goldbaby, commercial sample libraries or borrowed impulse responses. Isolated host validation cannot replace your own musical listening and a Logic session test. Avoid replacing components while recording; reopen Logic yourself when convenient. No Logic projects or host caches were changed by this build.

Host Compatibility

Thirteen stable host parameters: original IDs0–8 preserved; Tube Limiter appended ID9 (Boolean), Limiter Amount ID10 (0–100%), High Pass ID11 (20–2000 Hz) and Low Pass ID12 (200–20000 Hz). Older eight-parameter states also retain Gain0, limiter Off, Amount35 and both filters Off.

Guide Window

Guide opens a scrollable reading panel inside the plugin, in front of the controls and at the current UI scale. Close or Escape returns to your sound without changing any settings. Select and copy guide text if needed. Hover Control pauses while the guide covers the knobs and resumes after closing; its ON/OFF preference stays.

Tube Limiter

An independent ON/OFF peak stage at the end of the active chain, after the amplifier, Dirt/cabinet, Space and Output. Available in every Character. Amount 0–100% adds up to 12 dB of drive and progressively stronger modeled tube color. Start around 20–35%, then increase until the peaks and texture suit the music. It does not match RMS, LUFS or average loudness; Output remains your manual trim before the limiter.

The original tube-inspired asymmetric saturation uses antiderivative antialiasing, DC removal and a linked stereo peak detector. A soft knee, instant peak attack, short hold and program-dependent release round peaks. The fixed ceiling is -1 dBFS for sample peaks after the ON fade has settled. It is not a true-peak or loudness-target limiter. There is no added lookahead or latency; the plugin remains at 16 samples. ON/OFF and Amount changes glide to avoid hard switching. Global Bypass returns the original latency-aligned input, regardless of the limiter.

GAIN REDUCTION shows actual limiter attenuation, excluding its input drive and saturation. The graph records the largest attenuation in each 50 ms interval for four seconds; downward dips show attenuation and the scale expands above 6 dB. The number shows current limiter reduction. OFF or global Bypass stops new limiter reduction; the graph retains and scrolls the recent history. Both controls support host

automation, saved projects, Save/User presets, and Amount supports drag, scroll, Shift-fine and Hover.

Init and factory Starting Points turn the limiter OFF, with Amount at 35%. Older states also load limiter OFF rather than accidentally enabling it. Gain / Overdrive remains an independent amp drive control; the limiter does not replace it.

High Pass / Low Pass

Two independent 12 dB/oct filters after the amp/cabinet and Space, before Output and Tube Limiter. High Pass removes lows: far left is OFF (20 Hz endpoint); drag right for 20–2000 Hz. Low Pass removes highs: far right is OFF (20 kHz endpoint); drag left for 200–20000 Hz. Both start OFF in Init, factory sounds and older saved states. Their small sliders use logarithmic frequency with smooth changes; drag, scroll, Shift-fine, double-click Reset and host automation work. These final cuts shape both the amp and its effect tails. Global Bypass remains the unfiltered latency-aligned input.

Tuner, Return Ducking And Warm Limiting

Open the TUNER metal lid. The tuner reads the clean input before effects and the amplifier. Chromatic, Guitar, Drop D, DADGAD, Open G, Bass and Bass5 tunings; A reference430–450Hz. Tune/Mute silences the final output, including all effect tails. Closing the lid restores sound. Tuner/mute is a temporary editor action, never recalled in a sound preset.

Warm analog IN / OUT meters show measured levels, not separate L/R channels.

Broke Amp retains its existing optional final Tube Limiter; its amount, fixed sample ceiling and reduction history are described in the Tube Limiter chapter.

Init And Preset Readability

Init resets to a clean starting sound. Factory IDs and saved presets are unchanged. The preset control uses the light Broke appearance, including in a dark host. Use Save/User or your host project to save the initialized sound.

Presets

16 curated Starting Points, grouped by character. Arrows move through them. Editing parameters displays Custom / User Sound. Save writes a standard .aupreset file to a location you choose. User loads a preset from this same plugin and rejects other AU identities. Logic also saves all parameters in sessions and its normal plugin preset system. Drum factory changes preserve Play, Host Sync and manual BPM. Loading a complete User/host state restores them.

Playing / Automation

All sound and drum pattern parameters are exposed to host automation. The native controls send begin/end gestures. Instruments support MIDI notes, velocity, sustain CC64, pitch bend (+/-2 semitones), volume CC7, expression CC11, Reset Controllers CC121, All Notes Off CC123 and All Sound Off CC120. Use the host's Controller Assignments for mapping a MIDI knob; this version has no internal MIDI Learn. Right-click a dial for Reset or mapping guidance. No separate host transport callback is used.

Editor

Hover is optional and initially off. With it on, move upward over a large knob to reach maximum before its upper edge; move down to reach zero before its lower edge. Shift gives fine control, and Escape switches Hover off. Focus loss, presets and menus close gestures. Limiter Amount supports the same optional Hover, drag and scroll. Normal drag and scroll also work; double-click restores the parameter default. ? enables the help reminder; standard tooltips describe controls. Guide opens this document. UI Size offers 75–150% with a screen fit limit; the host owns the surrounding window.

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.