INDEPENDENT AUDIO SOFTWARE

LYNCH Techno 303

Acid soul. Broken circuits.



Build a monophonic line with persistent accent charge and slides that connect the notes. A thousand sound designs and two thousand forty-eight patterns keep sound and sequence independent, with colour and space ready when the phrase needs them.

Complete colour user guide · version 0.6.0 · Apple Silicon Mac AU · macOS 12+

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Start with the part

Build a monophonic line with persistent accent charge and slides that connect the notes. A thousand sound designs and two thousand forty-eight patterns keep sound and sequence independent, with colour and space ready when the phrase needs them.

01 / A dedicated monophonic acid instrument with a continuous-phase VCO, original coupled four-state diode-ladder approximation, persistent accent charge and logarithmic RC slide.

02 / Twenty-four sound folders, 41 or 42 patches each: Classic Saw, Classic Pulse, Liquid, Dark, Warehouse, Hard, Hypnotic, Psychedelic, Rubber, Metal, Sub, Peak Time, Minimal, Trance, Dub, Industrial, Distorted, Broke Bass, Stabs, Screams, Drones, Digital, Shimmer and Total Chaos.

03 / Load AU Instruments > Lynch Audio Lab > Lynch Techno 303.

04 / CUTOFF, RESONANCE, ENV MOD, DECAY, ACCENT, ACID DRIVE, DELAY and REVERB give immediate sound and effects control.

Inside the sound

Acid Soul. Broken Circuits.

A dedicated monophonic acid instrument with a continuous-phase VCO, original coupled four-state diode-ladder approximation, persistent accent charge and logarithmic RC slide.

1,000 Patches / 2,048 Patterns

Twenty-four sound folders, 41 or 42 patches each: Classic Saw, Classic Pulse, Liquid, Dark, Warehouse, Hard, Hypnotic, Psychedelic, Rubber, Metal, Sub, Peak Time, Minimal, Trance, Dub, Industrial, Distorted, Broke Bass, Stabs, Screams, Drones, Digital, Shimmer and Total Chaos.

Play Without Starting Logic

Load AU Instruments > Lynch Audio Lab > Lynch Techno 303.

Eight Front Controls

CUTOFF, RESONANCE, ENV MOD, DECAY, ACCENT, ACID DRIVE, DELAY and REVERB give immediate sound and effects control.

Pattern Lab

Click Pattern for all sixteen steps in one window.

Drag Midi To Logic

Drag the MIDI button into Logic's arrangement.

Acid Soul. Broken Circuits.

A dedicated monophonic acid instrument with a continuous-phase VCO, original coupled four-state diode-ladder approximation, persistent accent charge and logarithmic RC slide. Its voice path uses adaptive high-resolution oversampling internally. Built from published circuit analysis and hardware observations; exact original-unit equivalence has not been measured. No third-party samples or copied 303 DSP are included.

1,000 Patches / 2,048 Patterns

Twenty-four sound folders, 41 or 42 patches each: Classic Saw, Classic Pulse, Liquid, Dark, Warehouse, Hard, Hypnotic, Psychedelic, Rubber, Metal, Sub, Peak Time, Minimal, Trance, Dub, Industrial, Distorted, Broke Bass, Stabs, Screams, Drones, Digital, Shimmer and Total Chaos. Sixteen separate pattern folders each contain 128 rhythms and runs. A patch stores its starting pattern; selecting a pattern changes only sequencing fields, preserving your sound edits. The browser checkmarks and folder path follow the selected patch. Previous/Next arrows include Init and your User patches. Save stores the full patch and pattern in the separate Lynch Techno 303 User folder.

Play Without Starting Logic

Load AU Instruments > Lynch Audio Lab > Lynch Techno 303. Run holds a C2 root and starts the pattern while the host audio engine is processing, even when transport is stopped. Stop releases it. Host tempo is used when available, otherwise 120 BPM. The keyboard also plays and transposes a pattern while held. MIDI Play in Pattern switches to direct note performance; Run enables pattern playback again. Panic clears notes, sustain and all effect memory.

Eight Front Controls

CUTOFF, RESONANCE, ENV MOD, DECAY, ACCENT, ACID DRIVE, DELAY and REVERB give immediate sound and effects control. Normal filter Decay spans 200–2000 ms RC time; accented notes use the independent 200 ms decay. Env Mod retains a nonzero minimum like the stock-inspired design. Accent is independent of velocity: consecutive accents charge a shared filter/VCA path, and resonance changes its lag. Moving ACID DRIVE above zero enables its damage module. Drag or scroll; Shift is fine adjustment. Right-click a parameter for MIDI Learn, then move a controller. Pickup/Jump and two relative modes are available.

Pattern Lab

Click Pattern for all sixteen steps in one window. Each column has NOTE, VELOCITY, GATE, ACCENT (A), SLIDE (S) and TIE (T). Notes are offsets from the held root; displayed note names use C2 as the reference. Gate zero is a rest. Velocity changes volume when Voice > Velocity to amp is raised; Pure 303 keeps fixed normal-note level and uses explicit Accent instead. Slide belongs to the outgoing step: it holds the gate, then glides when the next note arrives, without envelope retrigger. Tie holds a following same-pitch note. A rest releases the voice. Choose 1–16 Steps in the header. Arp/Seq sets division, swing and transpose. Variation changes the current phrase; Undo swaps the last edit/variation. Close or Esc returns to the sound controls. Pattern changes take effect live; they are not queued to the next bar.

Drag Midi To Logic

Drag the MIDI button into Logic's arrangement. It creates a real Standard MIDI File at the current tempo, MIDI note 36 (C2) reference root plus Sequence Transpose, with notes, rests, velocities, swing, gates, accents, ties and slide overlaps. Successful drag completion automatically stops local audition and selects MIDI Play / Legato, so the imported phrase is played once rather than being re-sequenced. Accent notes export at velocity 127; normal notes are at most 109. Changing-pitch slides export a short overlap; same-note ties merge. An external synth must support mono-legato overlap to interpret slides. Odd-length swung patterns export two forward cycles so swing parity is correct when the region loops; other patterns export one cycle. MIDI cannot universally encode the analog accent-charge circuit. Actual arrangement dragging should be checked in your Logic session; the file writer and note timing are verified separately.

Stock Path And Creative Extensions

Factory patches are creative acid sounds, with one raw representative per earlier foundation and additional oscillator/filter/articulation/phrase recipes. For a clean stock-inspired comparison, start with Init and bypass the extension effects, Tape, Tube and Sample Protect. Init is direct mono MIDI with a clean saw and limiter off. Mono retriggers normal notes; Legato glides overlapping notes with Slide Time (Voice > page two, normally 60 ms). The oscillator phase and filter memory persist through notes. Pure 303 uses 3 ms attack, slow 3.5 s amplitude RC decay and a short 12 ms gate-off release; the original hardware onset delay is not modeled. Advanced controls add pulse width, oscillator two, unison, sub, noise, FM/ring, ADSR amplitude shaping, motion and key tracking. Circuit Bias changes resonance feedback coupling; it is not a filter-model morph. Three inherited state slots (Filter Sustain, Filter Release, Self Osc) are reserved and hidden because the 303 filter envelope is decay-only.

Color And Space

Color supplies Tube, Transistor and Tape warmth. Damage supplies starvation, sputter, crackle, crush, vinyl and loose circuitry. Warp adds resonant bodies, grains, pitch shift and freeze. Echo has two independent delay lines with sync, feedback, filters, width and ducking; Plate and Room have independent decay, filters and ducking. Delay and Reverb are always-visible master knobs. The FX Master slider beneath the knobs scales all four returns together from 0–200% (100% is neutral). If effects are faint, raise their master and send, or reduce Ducking. Plate/Room module presets set shared Reverb Master to 65%, so they work from Init. Echo > Presets > Tape Ping-Pong loads a tempo-synced tape echo with alternating left/right repeats, saturation and wow. Echo page 2 has Tape Ping Pong, time/sync, feedback and colour; page 4 has width, filters and ducking. Double-click an effect tab to bypass it; its status light makes this visible. Only the extension modules should be enabled when their sound is wanted.

Eq And Tempo Pump

EQ replaces the former duplicate Limit tab. Bass is a 110 Hz shelf, Mid is a broad 1 kHz bell and Treble is a 6.5 kHz shelf, each +/-12 dB. High Pass and Low Pass are separate 12 dB/octave cuts. Their endpoint settings are Off. Double-click the EQ tab to enable/bypass the entire EQ. It follows all sound and space processing, so it also shapes delay and reverb tails. Flat EQ with cuts Off is neutral. Existing patches start with EQ bypassed.

PUMP is the slim slider in the output stage. At 0% it leaves audio unchanged. Raise it for a tempo-locked dip at each selected 1/4, 1/8 or 1/16 beat division, followed by a smooth recovery. It acts on the whole stereo signal, including effect tails, before Tube and Tape. It follows the DAW beat during playback and uses a local tempo clock while stopped (120 BPM if no host tempo exists). Both Pump amount and rate can be automated or MIDI learned. EQ and Pump are independent of the two final limiter switches. OFF bypasses Tube/Tape and resets Pump to 0%; the EQ module retains its own bypass switch.

Song / Daw Bar Patterns

Open Song and enable SONG ON. Each DAW bar plays sixteen timing slots; unassigned bars inherit the Base pattern. The first edit creates a Custom bar. Silent is an explicit rest. Use Base removes the override. Copy/Paste, Copy To and Duplicate Next arrange pattern data; sound and effects stay global. Run previews the selected bar while the host is stopped. Song playback works with the editor closed. Init clears Song; factory sound loading retains it. The project and saved User patch include the arrangement. Automation of AU step parameters changes Base; Custom steps have their own saved data.

Bars range from 1 to 2147483647, with up to 65536 explicit overrides stored sparsely. The host supplies current meter/downbeat, not its historical meter map. At a meter change, choose the current DAW bar and press Align to DAW; repeat when revisiting another meter section. Negative preroll produces no automatic Song notes. Song MIDI exports an inclusive range of 1–4096 bars.

Follow And Loop Midi

The main-view FOLLOW button moves the visible editable pattern to the playing DAW bar while Song is enabled. Turn Follow off to inspect a fixed bar. Editing a step pins that bar so it cannot change under your hand. Follow moves the view without writing automation or changing any stored Custom pattern.

Enable Cycle in Logic and play briefly to expose the left/right locator beats. Open Song, then drag LOOP MIDI to the Logic instrument track at the left locator. The plugin prepares the complete Song within that exact loop range as you start the drag, including Base, Custom and Silent bars. A loop may start or end partway through a bar; exported events are relative to its left edge and note tails stop at its right edge. MIDI timing is quantized to 960 PPQN. The clip uses the current host tempo and time signature; export separate sections across meter changes. Maximum span is 4096 bars per file.

Audio Units can read the Cycle locators but have no documented API for creating Logic arrangement regions. The final drag is required. If the host does not supply valid loop locators, the plugin explains how to enable Cycle; Song MIDI remains available for an explicit bar range. Completed Song MIDI drag stops internal Song playback to avoid doubling; the arrangement remains.

Final Eq Filter Range

High Pass:20Hz Off to20kHz. Low Pass:0Hz Closed to20kHz Open. Fixed musicalQ trapezoidal state-variable filtering, shared with the new Lynch Filter foundation. This is a clean analog-inspired topology; the full Filter plugin has separate nonlinear voices. Cutoffs smooth, including Closed/Open. EQOff remains exactly neutral, and every factory sound is unchanged.

Final Output Stage

The lower OUTPUT STAGE has independent TUBE and TAPE switches. OFF bypasses both and resets Pump to 0%. When both are active the order is Tube > Tape, after all effects and before Sample Protect. Tube Amount adds warmth and peak control; Tape Drive adds dense saturation, with separate Ceiling and Release. Start gently with Tube when stacking stages to preserve attacks. Factory sounds start with Tape only; Init bypasses both. The graph displays their combined gain reduction from GUI meter readings. These processors control sample peaks; they are not certified true-peak limiters. The keyboard stays below the output stage.

Help, Size And State

? shows control explanations. Guide is an overlay above all controls and Pattern. UI Size ranges 75–150% within screen limits. All live sound/sequence controls support AU automation and MIDI learning; controller assignments are saved in instance state, separately from patches. Interface text is English.

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 software-instrument host and send MIDI to the instrument track.

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.