

NEOLD



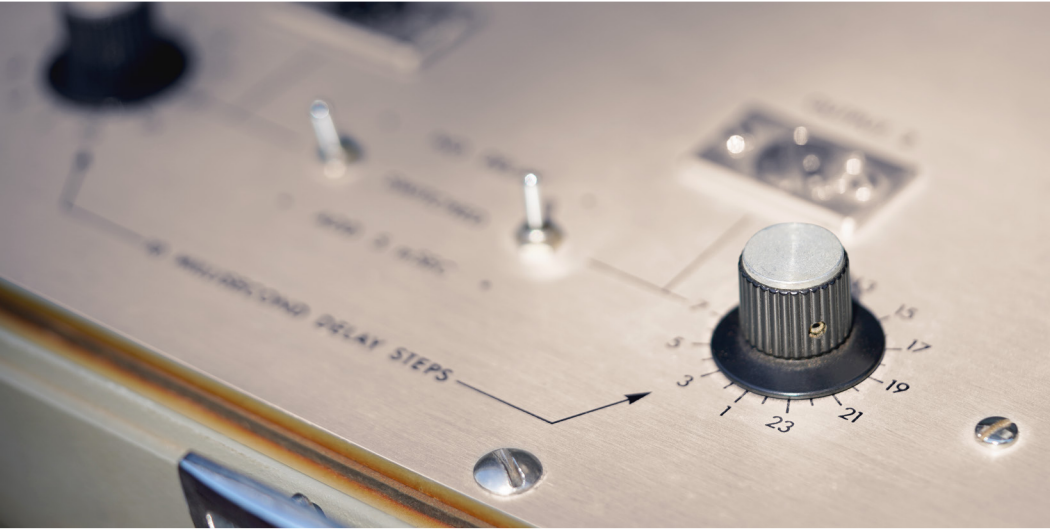
OLDTIMER

Manual



ANALOG KISSES DIGITAL

Oldtimer is a dual-topology delay that combines the special characteristics of analog bucket brigade designs and early digital systems from the 70s. Its two engines blend seamlessly – not against each other but within each other. This enchanting power creates an incredible range of characterful vintage echoes.



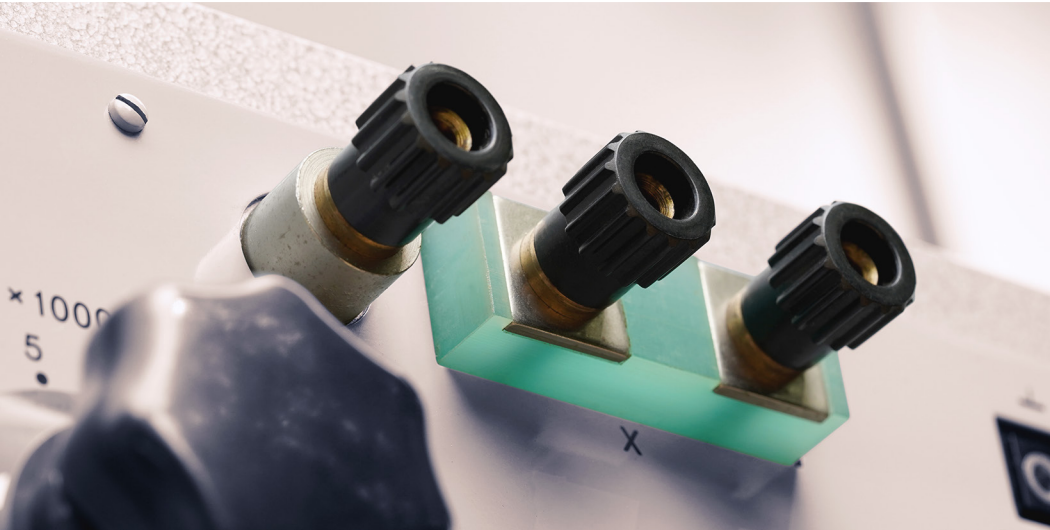
MASTER BLENDER

The Spread knob controls the spatial location of repetitions in the stereo field. Shifting toward the sides results in complex, reverb-esque patterns, while concentrating on the middle provides great focus and separation. Style configures a crossfaded routing for the delay feedback path, ranging from stereo to fully overlapping ping pong variations.



ORGANIC SPICES

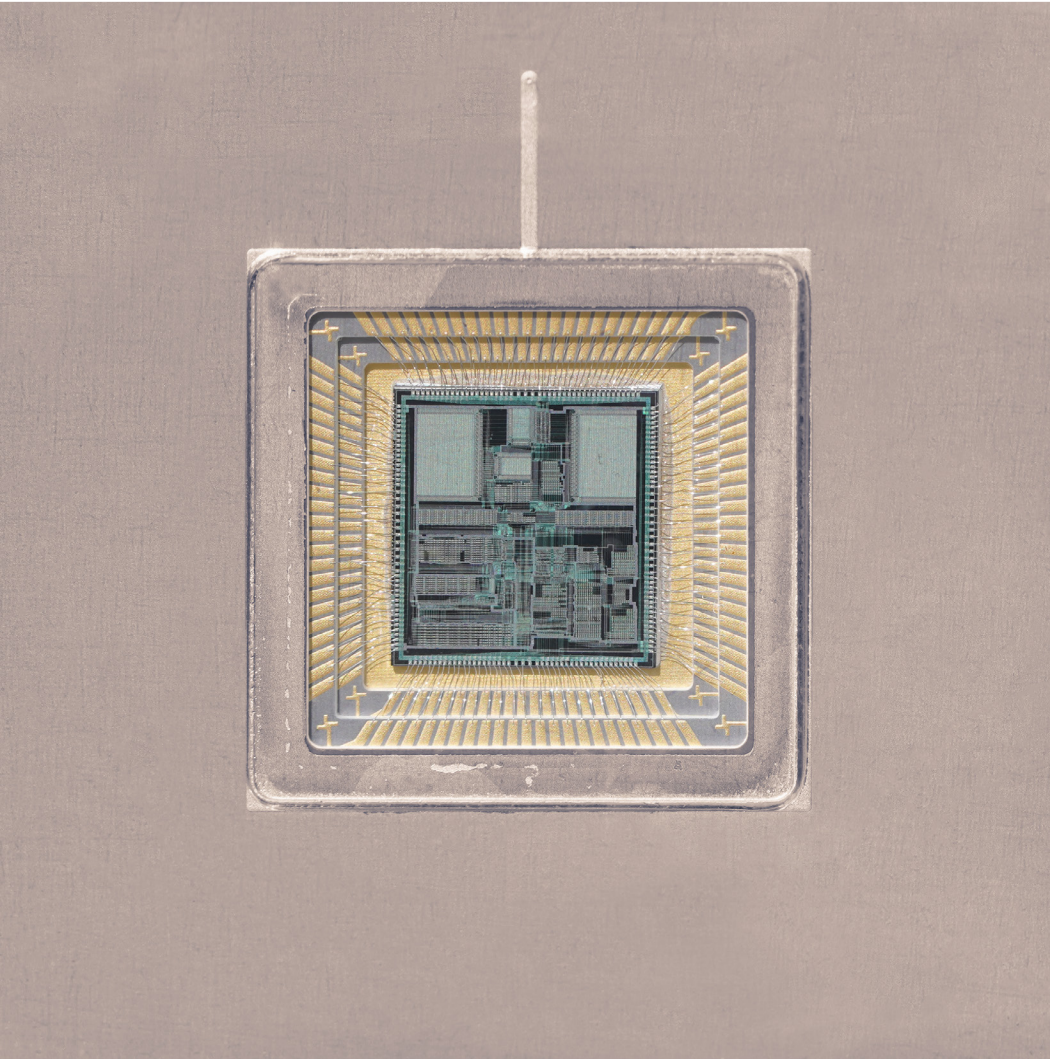
The switchable filter module offers any characteristic between low and high pass. Its additional resonance control creates beautiful accents that evolve with each repetition. The modulation section can blend sine into random waveforms, which are adjustable in depth and speed. Add some dub to your tracks? Just hit Glitch. You'll love it... ovit... vt.





ANALOG

Oldtimer's analog engine emulates a Bucket Brigade Delay (BBD). Introduced in the late 60s, CMOS based ICs were one of the first available technologies to implement signal delays up to the 100s of milliseconds in a reliable, affordable, and compact manner. While the signal level is stored in a truly analog manner, BBDs are actually time discrete devices that sample the signal at a fixed or variable frequency. Thus, additional antialiasing and reconstruction filters are required to interface with the analog domain. Due to the poor SNR of a BBD, a compander system is typically employed to enhance its dynamic range.



DIGITAL

Oldtimer's digital engine mimics an early digital delay implementation, including an AD/DA converter chain used to feed an array of random access memory ICs (RAM). This type of delay system was introduced in the 70s and allowed for much higher fidelity than its BBD counterpart. However, this implementation came at a much higher cost both in terms of space and the number of required components. Converters were in their early stages back then, and memory was expensive, thus the resolution was limited to 8/12 bits per sample, and the sampling rate was rather low, resulting in a delay sound of its own.

QUICK START



- 1 Activates (plug inserted) or bypasses (plug out) the entire Filter section below.
- 2 Introduces a softer (left) or stronger (right) resonance peak to the cut filter.
- 3 Blends filter type from low pass (left) via flat (middle) to high pass (right).
- 4 Erases the complete feedback loop and silences echoes immediately.
- 5 Controls how much of the signal is fed back into the delay and so the number of echoes.
- 6 Cross-fades from a Stereo (left) to a Ping Pong (right) style delay.
- 7 Focuses echoes towards the mid (left) via neutral (middle) to the sides (right) with each repetition.
- 8 Links (plug inserted) or unlinks (plug out) the Time knobs for left and right channel.
- 9 Sets the delay time for left and right channel from 10 ms to 2.5 s.
- 10 Engages or bypasses the entire signal processing chain.

QUICK START



- ⑪ Quantizes the delay time to the nearest note subdivision according to the current tempo.
- ⑫ Warps topology from vintage bucket brigade analog (left) to early digital delay (right) style.
- ⑬ Mixes the dry and processed signals for a perfect blend of the source and its echoes.
- ⑭ Adjusts the output level, implemented as linear gain without additional coloration.
- ⑮ Introduces random glitch artifacts for adding some groovy vibes to your tracks.
- ⑯ Switches the entire modulation section below on (plug inserted) or off (plug out).
- ⑰ Increases the speed of the modulation engine from slow (left) to fast (right).
- ⑱ Changes the modulation style and depth from sine wave (left) to random (right).

PARAMETERS



Time

Sets the delay time of the left and right channels between 10 ms and 2.5 seconds. In mono instances, you can use either of the two knobs to set the mono signal's delay time.

Link

Engaging the link function keeps the left and right time knobs in sync. This parameter is only available in stereo instances of the plugin.

Sync

Engage this mode to sync the delay times with the tempo setting of your DAW. Delay times will be quantized to the next subdivision (e.g. eighth notes). The respective subdivisions are displayed in the delay knobs' callouts.

Power

Use the power plug to engage or bypass the plugin's entire processing chain.

PARAMETERS



Feedback

The feedback knob sets the amount of signal tapped from the delay system's output and fed back to its input node. Setting higher feedback factors yield a slower decay of the echos reproduced by the delay line. 0% corresponds to a single echo, while turning the knob clockwise towards the 100% setting allows for endless feedback or even overdriving Oldtimer's delay system.

Style

The style knob is a continuous cross-fade between Stereo and Ping Pong operation. In the first mode, the left delay input will see the feedback signal of the left delay output channel, and the right channel stays with

itself, too. In the second mode, the channels will be cross-fed, allowing for e.g. Ping Pong effects, where echos will be reflected back and forth between the left and right channels. This function is only available in stereo instances of the plugin.

Spread

Spread sets the stereo width of the effect signal. 0 corresponds to mono, while 200% corresponds to maximum stereo widening. *Note:* This knob is only effective if you move the Style knob away from its 50% setting, which produces a mono effect signal by construction. This feature is only available in stereo instances of the plugin.

PARAMETERS



Topology

Oldtimer's two engines blend seamlessly – not against each other but within each other. This means that instead of running two separate delays in parallel and just blending their outputs, an advanced single engine dynamically changes all relevant parameters into the one or the other direction. This helps to control the fidelity and coloration of your delayed signal. Use the topology knob to continuously cross-fade between the analog (0%) and digital (100%) models.

Mix

The mix knob is a loudness compensated cross-fade between the dry (0%) and the wet (100%) effect signal tapped from the delay.

Level

Use the level knob for manual loudness compensation. This is implemented as a purely linear gain, with no additional sound coloration from -20 to +10 dB.

PARAMETERS



Filter

This plug engages or bypasses the filter section that is implemented as a semi-parametric second order filter located at the delay system's output.

Resonance

Sets the resonance of the filter. This is only effective when the Type knob is not in its 0 position.

Type

Use this knob to set the filter type. The 0 position corresponds to a flat frequency response, while turning it all the way to the extreme positions

yields a low pass (lp) or high pass response (hp). Intermediate settings result in all kinds of interesting and musical shelf filter curves. The transition frequency is fixed at 500 Hz.

Erase

Triggering the Erase function will reset the current delay line contents. This is useful as a loop reset when the delay is driven with a lot of feedback and/or longer delay times which will produce a long tail of echos.

PARAMETERS



Modulation

This plug engages or bypasses the modulation section.

Rate

The rate knob sets the modulation LFO frequency in Hz.

Depth

Depth sets the type and depth of the delay time modulation. Turning the knob counterclockwise generates a pure sine LFO signal with increasing modulation depth, while turning it clockwise pro-

duces a random waveform with a maximum frequency that corresponds to the selected rate. The 0 position corresponds to no modulation = off.

Glitch

Clicking the glitch plug will cause a short disruption in the clock signal of the virtual delay system, audible as a jittery glitch that is randomized every time you trigger the function.

TOOLBARS



- ① This icon provides a master bypass function for the entire plugin.
- ② Undo/Redo offers up to 32 steps of your recent settings. Just go back and forth.
- ③ Four individual preset banks which can also be automated in your DAW.
- ④ Copy and paste current settings to/from clipboard, or reset current settings to default.
- ⑤ Opens GUI preferences (set interface size/quality and mouse sensitivity).
- ⑥ Clicking the Plugin Alliance logo will send you to the PA website via your web browser.
- ⑦ This icon will guide you to the Plugin Alliance Store via your web browser.
- ⑧ Brings up the activation dialog for authorizing plugin licenses for your devices.
- ⑨ Here you will find the manual (requires PDF reader installed) and other useful info.
- ⑩ [System Requirements & Supported Platforms](#)
[Installation, Activation, Authorization, FAQs](#)



Version 1.0