MINIMAL AUDIO

CLUSTER DELAY

OWNER'S MANUAL

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SYSTEM REQUIREMENTS

Formats:

64 bit AU, VST, VST3, and AAX

Works on:

macOS 10.9 or higher
Windows 10 or higher

Activation:

Online Account Login

An internet connection is required for activation.

INSTALLATION & ACTIVATION

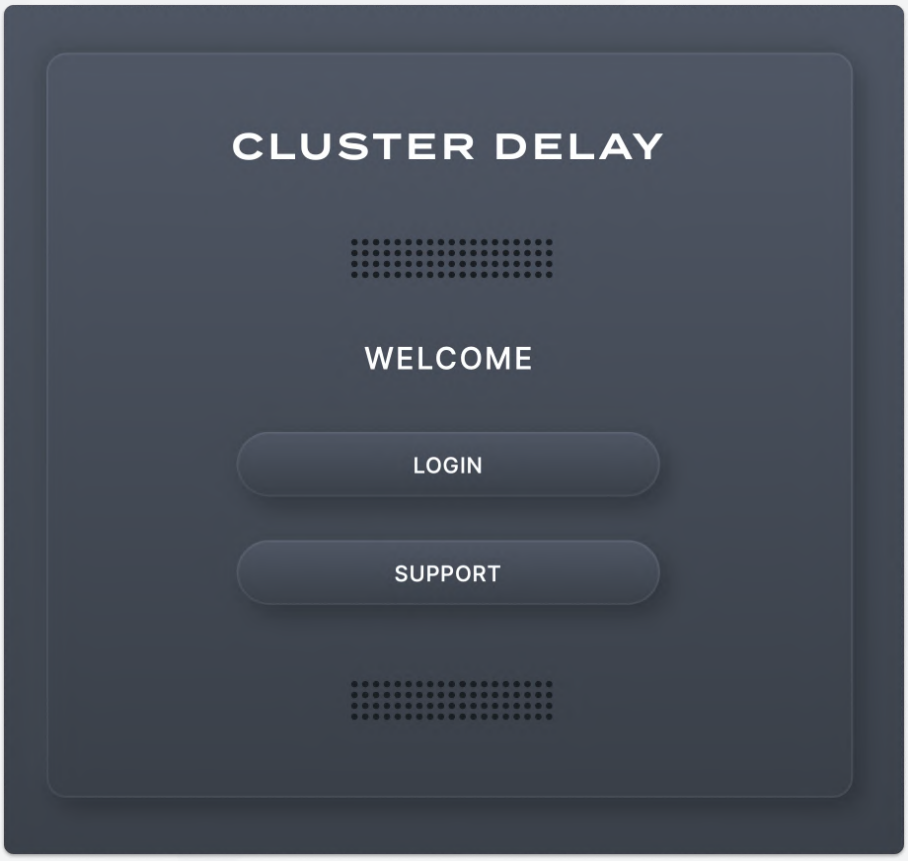
If you have not yet downloaded Cluster Delay's installer, please log in to your account at minimal.audio and navigate to "Products & Downloads."

From this page, you can access all of your products. Please select the desired installer and download it. Once the file has finished downloading, double-click on it and follow the installation instructions.

Now that Cluster Delay has been installed, start your DAW and open the plugin.

Note that in some cases, your computer may require a restart for your DAW to detect the new plugin.

When opening Cluster Delay for the first time, the plugin will ask you to log in to your minimal.audio account. Once that is done, you are ready to go!



WELCOME TO CLUSTER DELAY

Thanks for purchasing Cluster Delay, a creative delay sequencer plugin by Minimal Audio. Cluster Delay can produce many exciting effects, varying from retro tap delays to reverb-laden soundscapes.

Sculpt your delay sequences with various tap timing and shape controls. Cluster Delay also offers six built-in effects, filters, integrated ducking, and flexible routing to keep your mixes clean.

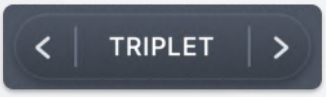
Dive in and get inspired by the endless possibilities of Cluster Delay.

DELAY CONTROLS

DELAY TIME

Set the delay time in seconds or as a BPM-synced value.

DELAY TIME RANGE



Choose how you would like to set the delay time. FREE mode is in seconds, while the other options sync the delay time to the current BPM.

DELAY FEEDBACK AMOUNT

Adjust how much of the delay line is fed back into itself. More feedback will result in longer delays, and at 100%, the delay will sustain nearly indefinitely.

ANALOG MODE

When active, the delay line will use analog-modeled feedback techniques inspired by vintage delays. Try using this with high feedback and lowpass filtering to get a rich tape-like delay.

DELAY TIME SPREAD

Offset the TIME for the two delay channels to create interesting stereo effects. This can be used to create subtle stereo-width or wide alternating patterns.

DELAY CONTROLS

DELAY SPREAD SYNC

When active, SPREAD will be synced to divisions of the current delay TIME.

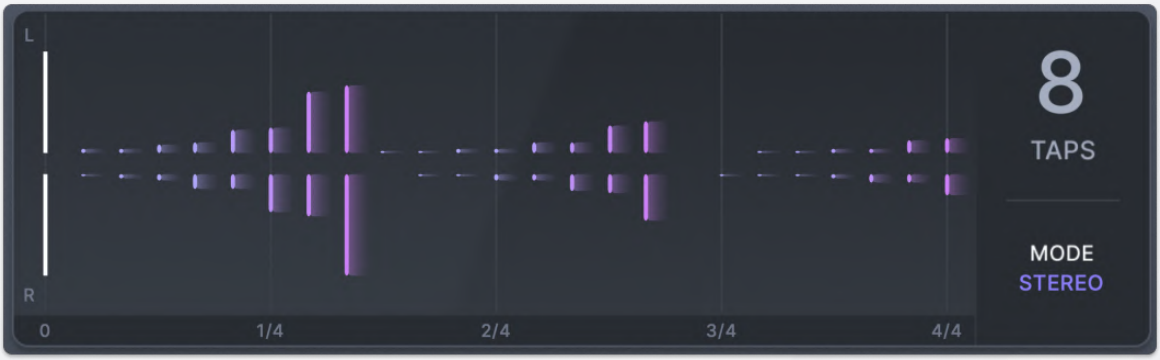
DELAY CROSSFEED AMOUNT

Adjust how much of the left channel's feedback is sent into the right channel's delay line and vice versa. This can be used to create ping-pong delay effects when combined with SPREAD.

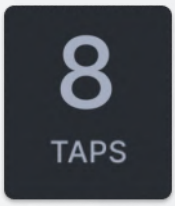
TAP CONTROLS

TAP SCOPE

View tap patterns in the TAP SCOPE. The verticle lines visualize a group of taps in the delay sequence.



TAP COUNT



Set the current number of delay taps.

TAP COUNT can be thought of as the number of beats in a rhythmic sequence where each beat's length is the current TIME setting. This means that more taps will result in a longer delay effect. For example, if the delay time is set to 1/4 note and you have four taps, then the sequence length will be four quarter notes (one bar) long.

DELAY ROUTING

Choose between stereo and mid-side modes.

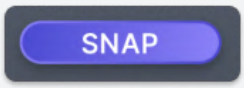
Mid-side mode can be useful for creating complex spaces that preserve the stereo image.

TAP SPACING

Create rhythmic delay patterns by shifting the tap times forward or backward in time. The overall sequence length is determined by TIME and TAP COUNT and will always be preserved.

TAP CONTROLS

TAP SPACING SNAP



When active, each tap time will snap to the nearest division of the delay TIME. This way you can create perfectly synced rhythmic delay sequences.

TAP RAMP

Create sweeping gain changes in the tap sequence. Positive RAMP settings will make each tap quieter than the last, while negative settings will start quiet and become louder.

TAP SCATTER

Pan each tap to create stereo movement within the delay sequence.

HIGHPASS CUTOFF

Adjust the frequency of the highpass filter in the delay line. This can be useful for removing low-end buildup, or more creative effects.

LOWPASS CUTOFF

Adjust the frequency of the lowpass filter in the delay line. This can be useful for creating warm, naturally-decaying effects.

EFFECT CONTROLS

EFFECT BYPASS

Bypass or activate the delay effect module.

EFFECT TYPE

Choose from a variety of delay effects to add character and tone to the delay.

• **WOBBLE:** Add time modulation similar to tape wow and flutter to the delay line. This is great for vintage-style delays.

• **DIFFUSION:** Add reverb-like diffusion that blurs the delay line in time. Try using this for ambient delay effects.

• **CHORUS:** Add rich detuning to the delay line for lush, unison-like effects.

• **PHASER:** Add sweeping phasing effects to the delay line.

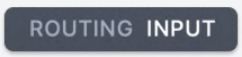
• **FLANGER:** Add subtle to extreme flanging to the delay line.

• **FREQUENCY SHIFT:** Shift the delay line up or down using inharmonic frequency shifting. This is great for sound effects and swirling barber-pole effects.

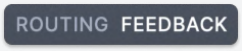
EFFECT CONTROLS

EFFECT ROUTING

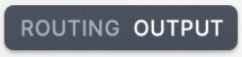
Choose where in the delay line the effect is placed. These options will change depending on what works best with the current effect.



• **INPUT:** The effect will be applied to the input signal. This results in a layered effect that matches how the delay layers your input material.



• **FEEDBACK:** The effect will be applied within the delay's feedback loop. This option makes the delay effect more intense each time the tap sequence repeats.



• **OUTPUT:** The effect will be applied to the delay's output. This results in the cleanest effect and will not interact with the other delay settings like the other routing options.

EFFECT DEPTH

Set the depth of the currently selected delay effect.

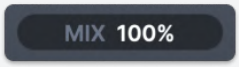
DIFFUSION SIZE

Adjust how large of a space the DIFFUSION effect creates.

DIFFUSION MODULATION

Adjust how much modulation is applied to the diffusion. This can create chorus-like detuning effects.

DIFFUSION MIX



Adjust the balance between the dry delay signal and the diffused signal.

EFFECT CONTROLS

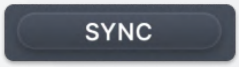
FREQUENCY SHIFT

Adjust how much the frequency shifter shifts up or down. Try combining this with FEEDBACK routing to get cascading pitch effects.

FREQUENCY SHIFT MIX

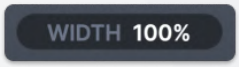
Adjust the balance between the dry effect signal and the frequency shifter's output.

RATE SYNC



Enable BPM sync for effect's rate RATE.

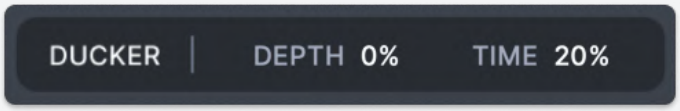
EFFECT WIDTH



Adjust the stereo width for the currently selected effect.

MIXING CONTROLS

AUTO DUCKER



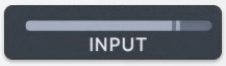
DUCKER AMOUNT

Adjust how much the dry input signal will duck the wet delay signal. This can be very useful for preventing long delays from mixing with the dry signal.

DUCKER TIME

Adjust the release time of the auto-ducker. Less time will result in abrupt gain changes while higher values will create intense pumping effects..

INPUT GAIN



Adjust the gain being sent into the effect.

INPUT SEND MODE

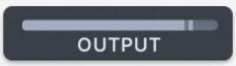
When active, the INPUT gain will only affect the signal that is being sent into the delay line, leaving the dry signal unaffected. Try combining this with automation or modulation to send only certain parts of your input through the delay.

MIXING CONTROLS

DRY WET

Adjust the balance between the processed wet signal and the unprocessed dry signal.

OUTPUT GAIN



Adjust the gain at the very end of the effect's processing chain. This can be useful for compensating for gain changes or creative effects.

SUPPORT

Thank you for your interest in Cluster Delay! We hope it provides endless creative inspiration and exploration for your productions.

If you have any issues while using the plugin or have questions that are not answered in this manual, please reach out to us at hello@minimal.audio.

www.minimal.audio