

Solid State Logic

OXFORD • ENGLAND

X-Delay User Guide

Introduction

SSL X-Delay is an intuitive **digital delay** plug-in, controllable from a gorgeous and easy-to-use UI inspired by 80s hardware units. In addition to the endless sounds you can create from a combination of up to **four independently sync-able taps** – from saturated slapback vocal delays, to vast stereo soundscapes for your synths to sit in - **SSL X-Delay** is augmented by global FX such as **built-in modulation**, SSL's **signature analogue saturation** and a **reverb** offering multiple diffusion effects and rooms from a single control.



Key Features

- Four independently configurable taps.
- Easily sync taps to the beat using **SYNC** and set the note value using the seven-segment displays.
- **Add swing** and **build polyrhythms** by dropping sync'd taps into 'dotted' and 'triplet' modes.
- Sync to your host DAW, or free-wheel and tap the tempo.
- Combine static taps with **PING PONG** to create movement in the stereo field.
- Add **movement** and a touch of **classic SSL-style saturation** using the **MODULATION** and **SATURATION** controls.
- Use **FREEZE** and **KILL** to build **risers and drops** in recordings and live performances.
- Global **MULTIPLIER** control lets you halve or double all delay times simultaneously for creative effects.

- Bespoke one-knob **DIFFUSION** control featuring a **brand-new reverb design**.
- Built-in **DE-ESSER** for **soothing those harsh frequencies**.
- **HPF**, **LPF** and **WIDTH** controls for getting the perfect mix.
- Built on the **SSL Plug-in Engine**.
 - SSL's **cross-platform preset management**.
 - A/B-ing system.
 - UNDO/REDO support.
 - NEW: **built-in help!** Simply click the '?' symbol and mouseover the GUI for more information about each of the parameters.

Download and Installation

You can download installers for a plug-in from the website's Download page, or by visiting a plug-in product page via the Web Store.

All SSL plug-ins are supplied in VST, VST3, AU (macOS only) and AAX (Pro Tools) formats.

The installers provided (macOS Intel .dmg and Windows .exe) copy the plug-in binaries to the common VST, VST3, AU and AAX directories. After this, the host DAW should recognise the plug-in automatically in most cases.

Simply run the installer and you should be good to go. You can find more information about how to authorise your plug-ins below.

Licensing

Visit the online plug-ins FAQ for guidance in authorising your SSL plug-in.

Setting Values



All numerical controls can be dragged to change the value, including all of the pots and seven-segment displays.



Double-click any of the numerical controls to directly type in a value. In the case of the the seven-segment displays you can also use the arrow buttons to increment/decrement the value.

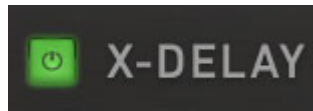
FINE Control (hold ⌘/ALT)

Hold ⌘ /ALT while dragging a control to enter 'FINE' control mode. This causes all interactions with numerical input to have finer control, including the increment/decrement buttons!

I/O

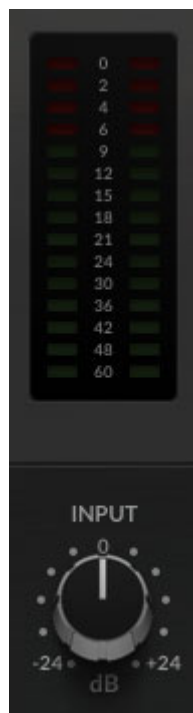


Bypass



Switch out to bypass all plug-in processing. In some supported DAWs this bypass is linked to the DAW bypass.

Input and Output Metering and Gain



The input and output meters either side of the main user interface show the level of the input signal, in dBFS. The pots underneath provide the means to apply a gain of up to ± 24 dB to the input signal (pre-processing) or the output signal (post-processing).

Setting the BPM



BPM



The top section of the user interface allows you to control the speed of delay and set the BPM.



When the 'HOST' button is switched in, the BPM will be locked to the BPM of your DAW and will turn green to indicate that it is 'syncned' to the DAW.



When 'HOST' is switched out, the BPM can be set freely, like on a hardware delay unit. The display will turn red, to indicate it is not 'syncned' to the DAW. You can tap a custom tempo using the 'TAP TEMPO' control.

Multiplier



The MULTIPLIER parameter lets you easily multiply the delay times of all of the taps, speeding them up (0.5x) or slowing them down (2x).

For example, if a tap is set to 300 ms, setting the multiplier to 0.5 will halve the delay time to 150 ms. If you have a tap set to $\frac{1}{4}$, then the resulting tap delay will be $\frac{1}{8}$.

You can quickly switch the MULTIPLIER in/out using the 'MULT' button.

Configuring a Tap

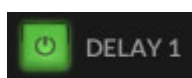


X-Delay comes with four independently configurable taps. For each tap, you can set the following parameters:

- TAP IN
- TAP FREE/SYNC
- TAP TIME / TAP DIVISION
- TAP RHYTHM
- TAP LEVEL
- TAP PAN
- TAP PING PONG



TAP IN



The power button toggles the delay tap in or out.

TAP FREE/SYNC



Switches the delay tap between free/sync mode. When free, the delay time is configured in ms. When synced, a tap's delay time is configured as a division of time. Synced taps will follow the BPM of the plug-in.

TAP TIME



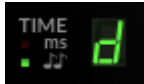
When in FREE mode, you set a tap's delay time in ms. The TAP TIME controls the delay time, in ms, between repeats.

TAP DIVISION



When in SYNC mode, you set a tap's delay time in a division, for example 1/4. You can go all the way from 1/64 (the shortest time division, a hemidemisemiquaver) up to 1/0.5 (the longest time division, a breve).

TAP RHYTHM



When in SYNC mode, you can set the rhythm of the note. Click the display to the left of the main time division to toggle the rhythm between default, dotted ('d') and triplet ('t').

TAP LEVEL



You can reduce the volume of individual taps, by setting the 'TAP LEVEL' in percent. A tap set to 50% will have half the volume (-6 dB gain applied).

TAP PAN



Pans the tap left/right. Use this to position the tap exact position of the tap in the stereo field.

TAP PING PONG

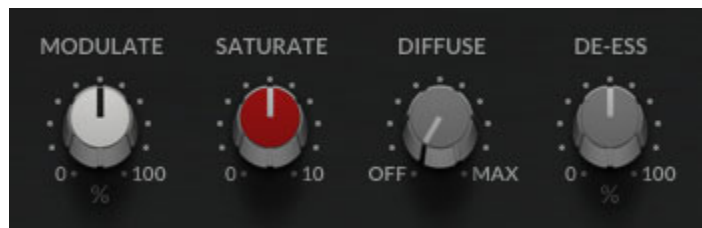


Switches the tap into 'Ping Pong' mode. Subsequent repeats will be reflected around the center, and based on the pan you apply to the tap. Stereo inputs are summed to mono.

Global Sound Controls



The lower section of the GUI contains global controls that effect the entire sound of the plug-in. The controls on the left-hand side are focused on the overall characteristic of the plug-in.



MODULATION



Modulates the sound by varying the amplitude of an LFO that shrinks and expands the delay time.

SATURATION



Introduces analogue saturation characteristics such as soft clipping that is cumulative on multiple repeats.

DIFFUSION



A brand-new reverb design, that blends through different room types and sizes. As you increase from OFF to MAX the room size increases and the effect becomes more prominent.

DE-ESSER



A single-knob de-esser that applies cumulatively to repeats. Use this to tame and soften sibilant and harsh frequencies.

Feedback Control



The middle-lower section of the GUI contains controls related to the feedback behaviour.

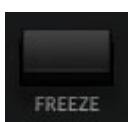


FEEDBACK



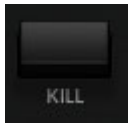
Increases the number of repeats, by feeding the delayed signal back into the output. Be careful - feedback values greater than 100% will cause self-oscillation and can get loud very quickly if your delay time is short!

FREEZE



Freezes the feedback of the delay and mutes the input. This causes the delay effect of the plug-in to 'freeze' in place. Use this for creative and live effects such as building risers and drops. You can still crank the feedback when 'FREEZE' is enabled.

KILL



Mutes the input to the delay and allows the tail to die off in a musical way.

Mixing Section



The left-hand lower section of the GUI contains controls related to mixing.



HPF and LPF



The high-pass (HPF) and low-pass (LPF) filters can be used to filter out low frequencies and high-frequencies respectively.

Use these to help your effect sit better in the mix. Try these in to blend the effect better within the context of the entire track.

WIDTH



Mid-side processor on the output. It goes from mono (fully counter-clockwise) to stereo (in the center) to super wide (fully clockwise).

MIX



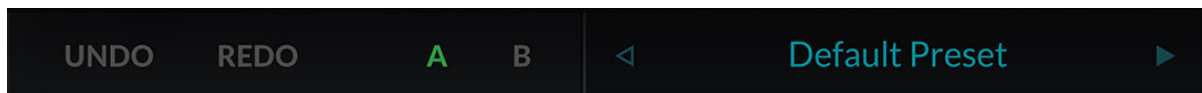
Blends between the processed and unprocessed signals. Use this control to dial back the effect of the plug-in. When using as an effect on a send/return this is typically left at 100%. However, it is useful to non-destructively dial back the effect of the plug-in, even when used on a send/return!

Presets

Factory presets are included in the plug-in installation, installed in the following locations:

macOS: /Library/Application Support/Solid State Logic/PlugIns/Presets/[Plug-in Name]

Windows: C:\ProgramData\Solid State Logic\PlugIns\Presets\[Plug-in Name]



Switching between presets can be achieved by clicking the left/right arrows in the preset management section of the plug-in GUI and by clicking on the preset name, which will open the preset management display.

The Preset Management menu reflects the folder structure of the preset folder.

Load, Save and Save As...

Load opens a file dialog to load a preset from anywhere.

Save overwrites changes to the current preset. Factory presets are read-only, and can't be overwritten.

Save As... opens the file dialog to save a new preset.

Save as Default

Sets the current preset to load by default when the plug-in is instantiated.

Revert Changes and Delete

Revert Changes discards any changes to the current preset.

Delete removes the current preset from the filesystem. Factory and Producer presets cannot be deleted from the plug-in GUI, although they can be manually deleted using the filesystem (Windows Explorer or Finder).

A/B and Copy

A/B allows you to toggle quickly between two presets. This is useful for comparing between two parameter settings.

COPY X TO Y is used to copy presets between A/B.

UNDO/REDO

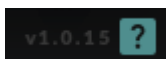
SSL plug-ins come with a built-in UNDO/REDO stack, in case your DAW doesn't handle this.

UNDO undoes the current action in the history stack. **REDO** re-does the next action in the history stack.

Built-in help



This plug-in features built-in contextual help. To turn this feature on, click the '?' in the bottom right-hand corner. Mouse over elements of the GUI to see some information about the feature.



Click the tooltip to cycle through the pages.