



Fusion Transformer User Guide

Introduction

About SSL Fusion Transformer

Emulating the 600-ohm, 1:1-wound under-damped transformer found in the Fusion hardware, SSL Transformer Plug-in adds low-end thickening and high-end sheen to your productions. From subtle presence and body on vocals and instruments, to tight lows and sizzling highs on mixes and masters, the combination of processing effects Transformer Plug-in offers could be the magic your mix or master is after.



Key Features

- Modelled on the SSL Fusion Transformer circuit
- Use across your all your tracks as well as mixes and masters
- Add analogue weight and authority to your signals
- SHINE to attenuate high-frequency phase shift
- AMOUNT to amplify harmonic distortion
- MIX for instant parallel processing
- Drive the circuit harder to introduce natural low-end roll off that increases with input level
- LF EXTEND switches out the low-frequency roll-off
- Built on the SSL Plug-in Engine.
- NEW: Built-in help! Simply click the '?' symbol and mouseover the GUI
- ECO mode: low-latency tracking through transformer circuit
- Exceptional DSP design with reference to the original analogue circuit designs

- Modelled using a combination of real-life measurements, analogue circuit designs, and close collaboration with the original analogue designers of the SSL Fusion hardware
- SSL's cross-platform preset management and A/B-ing system
- Built-in UNDO/REDO support
- Comes with presets from world-class producers and engineers Romesh Dodangoda, Sean Divine and Wez Clarke.

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.

Licencing

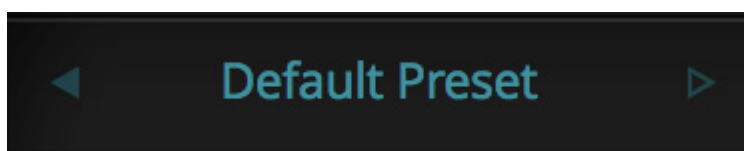
Visit the [online plug-ins FAQ](#) for guidance in authorising your SSL plug-in.

Using SSL Fusion Transformer

Interface Overview

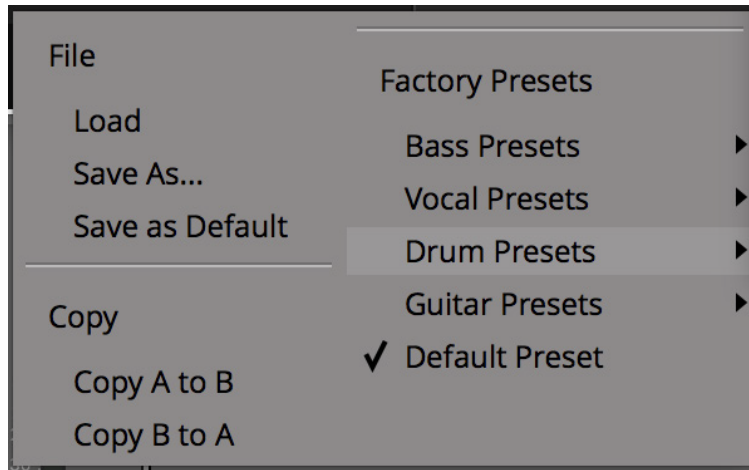
The basic interface techniques for the Fusion Transformer are largely identical to those for the Channel Strip.

Presets



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.

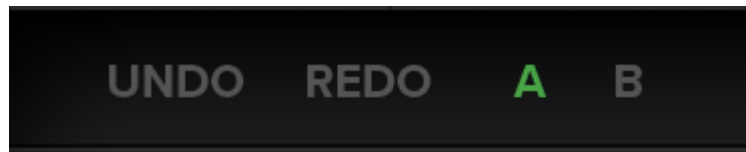
Preset Management Display



There are a number of options in the Preset Management Display:

- **Load** allows loading of presets not stored in the locations described above.
- **Save As...** allows for storage of user presets.
- **Save as Default** assigns the current plug-in settings to the Default Preset.
- **Copy A to B** and **Copy B to A** assigns the plug-in settings of one comparison setting to the other.

A-B Comparisons



The **A B** buttons at the base of the screen allows you to load two independent settings and compare them quickly. When the plug-in is opened, setting **A** is selected by default. Clicking the **A** or **B** button will switch between setting **A** and setting **B**.

UNDO and **REDO** functions allow undo and redo of changes made to the plug-in parameters.

Automation

Automation support for Fusion Transformer is the same as for the Channel Strip.

ECO Mode

If a plug-in has an 'ECO' button, this means that there's some clever DSP, such as oversampling, going on under the hood. This is why it sounds so good!

Putting the plug-in into ECO mode drops the plug-in into a reduced latency and CPU-use mode - ideal for recording and tracking!

Built-In Help

As a traditional user guide, it's not really in my best interests to mention this, but...

Click the '?' and mouse over ANY control in the plug-in GUI to see some contextual help about that control

Interface Controls



I/O Meters

Segmented I/O metering, with 3s peak hold for a clear indication of peaks.

Input/Output Trim

Applies a gain to the input/output signals.

Bypass

The red Transformer switch located in the Input section provides an internal plug-in bypass. This allows for smoother In/Out comparisons by avoiding the latency issues associated with the host application's Bypass function. The button must be 'lit' for the

plug-in to be in circuit.

LF Extend

Bypasses the dynamic LF roll-off – a natural low-end roll off that occurs as you drive the transformer circuit.

Distortion Meter



The distortion meter is an indication of the THD (Total Harmonic Distortion) of the signal.

The THD has been abstracted to a value from 0 to 100, scaling it to the levels of expected distortion produced by the transformer circuit.

Higher values indicate a greater level of harmonics being introduced to the signal.

Shine

Augments or reduces the high-end sheen and phase shift introduced by the transformer. Values above 100% accentuate the effect beyond the original circuit, and values below reduce them.

Amount

Augments or reduces the harmonic distortion. Values above 100% drive the circuit harder, and values below reduce their level.

Mix

Blends between the processed and unprocessed signals.

Tips & Tricks

The Fusion features a custom-designed SSL transformer circuit.

The 600 ohm, 1:1 winding transformer and surrounding circuitry adds low-end harmonics and a favourable top-end phase-shift to the sound.

The underdamping of the transformer also adds a subtle 'weight' to the sound, and the natural low-end roll of as level increases is quite often (but not always!) welcome in keeping the bottom-end in check.

Impossible to 'Overdo'

The SSL Transformer plug-in means that you can now add that 'transformer mojo' to EVERY track in your mix.

Although the difference can be quite subtle at default settings, the this quickly adds up across an entire session and can transform - pun intended! - your mix by introducing subtle and music vibe that knocks off that 'digital edge'.

You'll find it hard to overcook this one - but its cumulative effect will give you a polished sound with very little effort.

Shine and LF Extend

The SHINE and LF EXTEND parameters add versatility and excitement beyond the original hardware unit. Use SHINE to add high presence that is less harsh than a 'traditional' EQ, and LF EXTEND to retain a thick, warm low-end.

Example Use Cases

- Instantly create depth ing gritty rhythm guitar groups without making them brittle of bitey.
- Add subtle and smooth harmonics to vocals.
- Sounds great on drums - use the SHINE control to improve top-end and cymbals, or drum spot mics.
- Push the input gain and reduce the output on sparse mixes (such as Jazz) for a cool-vibe.