Fusion HF Compressor User Guide

Introduction

About SSL Fusion HF Compressor

The SSL FUSION HF Compressor plug-in tames undesirable harshness in your tracks and mixes with analogue high-frequency rounding.

SSL FUSION is a hardware mix bus processor, delivering five powerful analogue colouration tools — Vintage Drive, Violet EQ, HF Compressor, Stereo Image enhancer, and SSL Transformer — from SSL, the Masters of Analogue.

Key Features

- Delivers analogue-style HF rounding for taming brittle high-frequencies
- Modelled using a combination of real-life measurements, analogue circuit designs, and close collaboration with the original designers Fusion hardware
- Ratio, attack and release optimised for maximum transparency
- MIX for instant parallel processing
- AUTO GAIN introduces an automatic makeup gain to only the compressed frequencies, retaining HF rounding but not loosing level
- The Gain Reduction History graph and Gain Reduction meter make it easy to visualise the effect of the circuit.
- Use LISTEN to solo the frequencies that are being compressed and removed from the signal.
- ECO mode: Reduce latency and CPU-use, for tracking and recording purposes

- Built on the SSL Plug-in Engine
- Built-in help Simply click the '?' symbol and mouseover the GUI for more information
- Comes with presets from world-class producers and engineers Adrian Hall, Caesar Edmunds and Sean Divine

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.
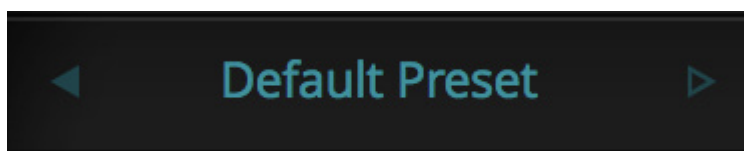
Using SSL Fusion HF Compressor

Interface Overview

The basic interface techniques for the Fusion HF Compressor are largely identical to those for the Channel Strip.
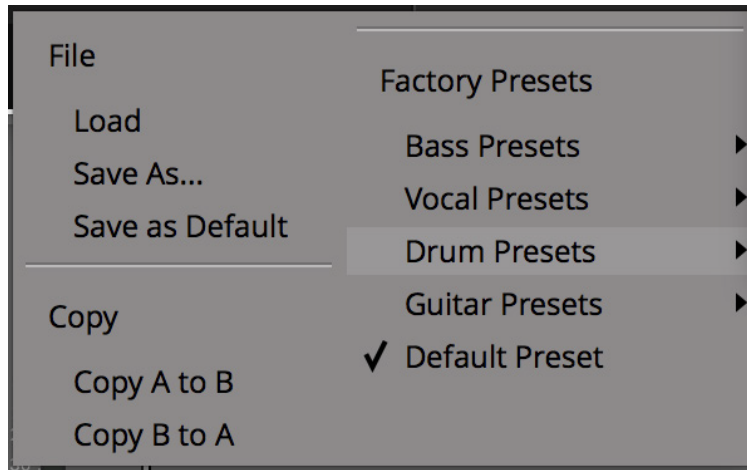
Presets

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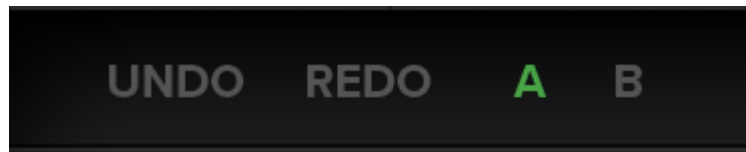
The **A B** buttons at the base of the screen allows you to load two independent settings and compare them quickly. When the plug-in is opened, setting **A** is selected by default. Clicking the **A** or **B** button will switch between setting **A** and setting **B**.

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

Automation

Automation support for Fusion HF Compressor 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 IN switch located above 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.

Auto Gain

Applies an automatic makeup gain to the compressed frequencies. Use this to restore high frequencies after rounding.

LED and Graph

The tri-colour LED provides an 'at-a-glance- indication of how much compression is happening.

The main graph shows the input signal (filled), and compression (the top line) over time.

The meter to the right indicates the instantaneous compression being applied.

Listen

Auditions the frequencies being compressed and removed.

Threshold

Determines at what point compression starts to occur.

X-Over

Determines the frequencies that are affected by compression.

Mix

Adjusts the blend between the processed and unprocessed signal.

Tips & Tricks

This is a circuit that only compresses high-frequencies, introducing a 'tape-like' top-end roll-off, taming unwanted brittleness or harshness that can sometimes build up in a mix or individual stem sound.

Other compressor parameters such as 'attack', 'release' and 'ratio' have all been fixed in the design, and are optimised for the best transparency.

Less fiddling, and more results!

Full Mix Content

A good starting point for full mix material is THRESHOLD at +2 dB and X-OVER around 15 kHz.

Our recommended approach is similar to the hardware - move the controls until the accompanying HF Compressor tri-colour LED just starts to flicker green occasionally.

However, in the plug-in version, feel free to go more extreme - you can always dial it back using the MIX control!

Auto Gain

What is there to gain from AUTO GAIN? Well, that's a very good question, and we're glad you asked...

AUTO GAIN introduces an automatic makeup gain to only the compressed frequencies - you'll find this feature fairly common in digital multi-band compressors.

This introduces more of the compressed signal, and you'll hear more of the compressor's envelope - taming harshness while maintaining high-end transients, due to the attack and release. Try it on more extreme settings, with highly transient signals such as drums!