Solid State Logic

OXFORD · ENGLAND

Vocalstrip 2 User Guide

Introduction

About SSL Vocalstrip 2

Vocalstrip is a collection of refined tools for superior vocal processing. It features four configurable processing blocks: an SSL Compander, De-esser and De-ploser, and an application specific EQ. Simply add FX and your vocal tracks are good to go!

Key Features

- Intelligent De-esser.
- Intelligent De-ploser.
- Three-band EQ.
- Compander featuring compression, downwards expansion and output drive.
- Extensive visual feedback including a real-time FFT analyser showing the result of the EQ processing on the audio spectrum.
- Complete control over process order.
- Extensive control options including mouse wheel adjustment and numerical data entry.

- Proprietary preset management functions providing compatibility between all DAW platforms.
- A/B functionality for easy comparison of any two settings.
- Global latency-free bypass.
- Superb mastering-grade audio quality delivered by a 64-bit floating point engine.
- Preset library based on settings used by some of the world's top mixing engineers.

Supported Platforms and Hosts

When we release an SSL plug-in, we test it on all Windows and macOS operating systems that aren't End-of-Life (EOL) at the time of release.

The versions listed below are the latest on which we have officially tested the the product.

It is possible for our products to work on platforms outside of this list. However, if your host, host version or operating system is not listed here, we recommend you demo the product before purchase to confirm that it works correctly.

Operating Systems

macOS	Mojave, Catalina, Big Sur
Windows	10, 8.1

Hosts

- Logic Pro 10
- Pro Tools 2020
- Ableton Live 10
- Studio One 5
- Cubase 11

Demo

To demo this plug-in, you can get the 30-day free trial of the SSL Complete subscription bundle via Gobbler: https://www.gobbler.com/solid-state-logics-30-day-free-trial/

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 comes ship with 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, your 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-in below.

Licensing

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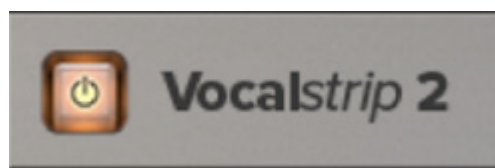
Overview

Vocalstrip is a collection of refined tools for superior vocal processing. The illustration below introduces the main Vocalstrip plug-in features which are described in full over the following sections.
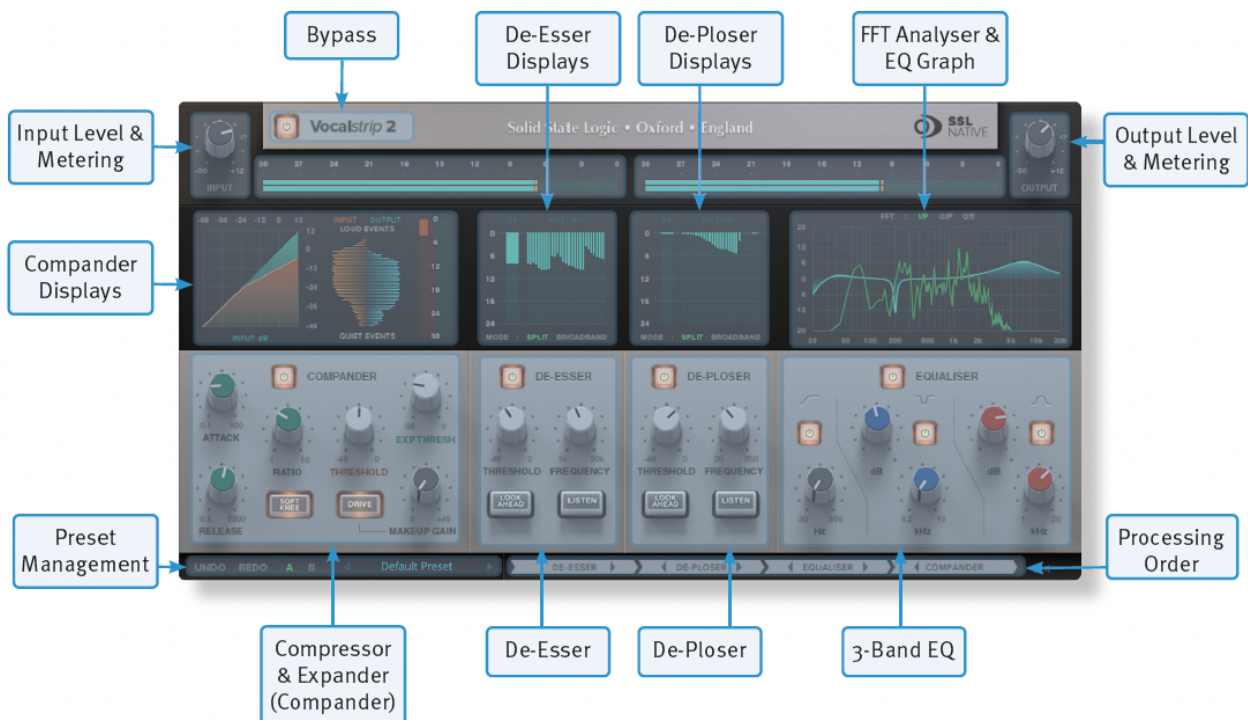
Interface Overview

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

Plug-in Bypass

The **power** 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.

Automation

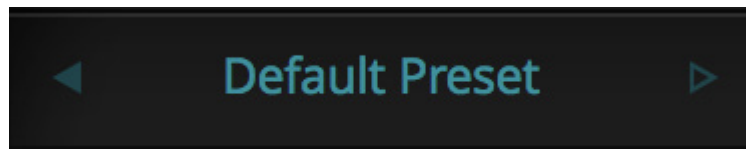Automation support for Vocalstrip is the same as for the Channel Strip.

Presets

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

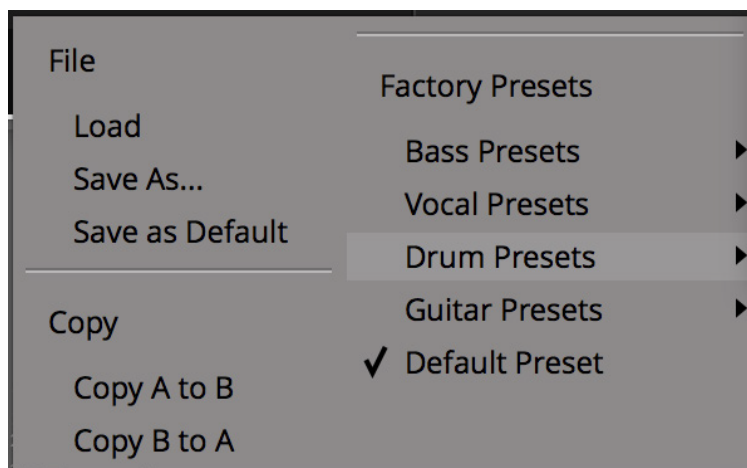**Mac:** Library/Application Support/Solid State Logic/SSLNative/Presets/Vocalstrip2

Windows 64-bit: C:\ProgramData\Solid State Logic\SSL Native\Presets\Vocalstrip2

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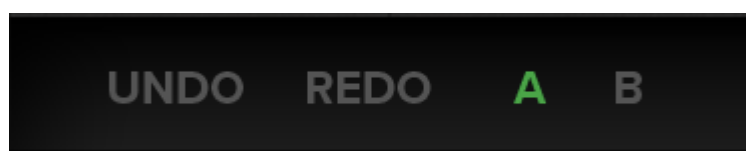
The **A B** buttons at the base of the screen allows you to load two independent settings and compare them quickly. When the plug-in is opened, setting **A** is selected by default. Clicking the **A** or **B** button will switch between setting **A** and setting **B**.

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

Input and Output Sections

The input and output sections at the top of the plug-in window provide input and output gain control and metering.
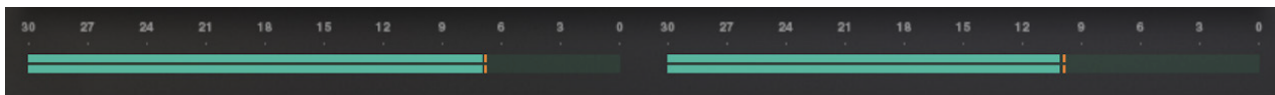

- When clipping occurs, the meter will turn red. It will remain red until the meter is reset by clicking on the meter.
- Turn the **GAIN** knob in the input section to control the level of the incoming audio signal. The post-gain signal level is shown on the input meter,
- Turn the **GAIN** knob in the output section to ensure that the signal retains a good signal level post-processing. The output signal level is shown on the output meter.

De-esser

Sibilance is often found in vocal recordings whereby the 'S' consonants are too pronounced. The Vocalstrip de-esser can detect and remove sibilance.
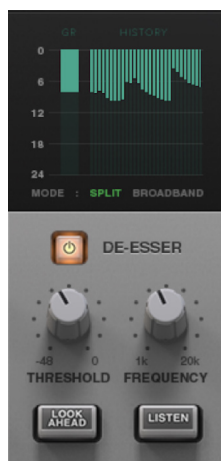
- Switch the de-esser on by clicking on the power button in its top left-hand corner.
- Adjust the **Threshold** control to set the detection level. You will see the gain reduction meter above the de-Esser controls change depending on where this is set.
- Adjust the **Frequency** knob to change the frequency range that triggers the de-esser.
- To listen to the sibilance that is being removed, press the **Listen** button. This can be particularly helpful in ensuring that the threshold is correctly set.

- Turn on the **Lookahead** to detect incoming sibilance before it reaches the de-esser block - this increases latency, but results in a smoother sound. Ensure **Lookahead** is turned off if monitoring live inputs through Vocalstrip.
- The de-esser runs in **SPLIT** band mode by default (gain reduction is applied to the frequency range that triggers it), but can be switched to **BROADBAND** mode (gain reduction is applied to the full frequency range when triggered).

De-ploser

Plosives are bursts of low frequency energy in a signal that can cause compressors to sound unpleasant. They are often caused when recording a singer too close to the microphone, or without a pop shield. The Vocalstrip de-ploser can detect and remove plosives.

- Switch the de-ploser on by clicking on the power button in its top left-hand corner.
- Adjust the **Threshold** control to set the detection level. You will see the gain reduction meter above the de-ploser controls change depending on where this is set.
- Adjust the **Frequency** knob to change the frequency range that triggers the de-ploser.
- To listen to the plosives being removed, press the **Listen** button. This can be particularly helpful in ensuring that the threshold is correctly set.
- Turn on the **Lookahead** to detect incoming plosives before they reach the de-ploser block - this increases latency, but results in a smoother sound. Ensure **Lookahead** is turned off if monitoring live inputs through Vocalstrip.
- The de-ploser runs in **SPLIT** band mode by default (gain reduction is applied to the frequency range that triggers it), but can be switched to **BROADBAND** mode (gain reduction is applied to the full frequency range when triggered).

Equaliser

Switch the EQ on by clicking on the power button. Three popular EQ types are provided to allow you to cut low frequencies, find and remove resonances, and shape the top end of the signal. Switch each band on by clicking on the corresponding power switch.

- The high pass filter operates in the range of 30Hz to 300Hz , with a slight boost around its cut-off frequency.
- The notch filter operates in the range 200Hz to 10kHz and offers 12dB of boost and 36dB of attenuation with a high Q value.
- The high band EQ offers 12dB of boost/attenuation over the range of 1kHz to 20kHz with a low Q value.

EQ Display

When any controls within the EQ section are moved, the display in the top right-hand quarter of the window becomes an EQ graph:

- The line across the graph shows the frequency response of the current EQ settings.
- The shaded area represents the impact of each of the three EQ bands.
- A display of the signal's frequency response is shown in green. The FFT signal displayed can be switched between the plug-in input and output and can be switched off, all using the **FFT** buttons above the graph.

EQ Tip: Finding and Attenuating a Resonance

Vocal resonances can be detected and reduced in the following way:

- Set the notch filter gain to +10dB.
- Sweep the frequency slowly across the frequency range, listening out for a significant build up of resonance.
- Once you have found the offending frequency, bring the gain of the notch band down.
- Another technique is to use the green frequency response line in the EQ graph and locate resonances visually.

Compander

The Vocalstrip Compander is a hybrid Compressor and Expander. Switch it on by clicking on the power button.

Expander

First the signal enters a fixed ratio downwards expander, designed to reduce room ambience, spill or breath noise that is often brought up by the subsequent compression.

To set the level at which the level reduction is introduced, turn the **Exp Thresh** (Expander Threshold). Turn the threshold to 0dB to stop the expander affecting the input signal. The amount of level reduction introduced is shown in the green bar above the **Exp Thresh** knob.

Compressor

The compressor offers fully variable Ratio, Thresh (threshold), Attack, Release and Makeup controls, along with a choice of Hard or Soft Knee.

The output stage, which is sourced after the make-up gain, features an optional Drive feature that introduces harmonic characteristics to the signal. Its intensity is increased with the Makeup gain. If you use a lot of make-up gain to drive the circuit, the level can be reduced again using the Output level control. The amount of level reduction introduced is shown in the red bar above the compressor controls.

Compander Display

When any controls within the Compander section are moved, the display in the top of the window shows two different graphs:
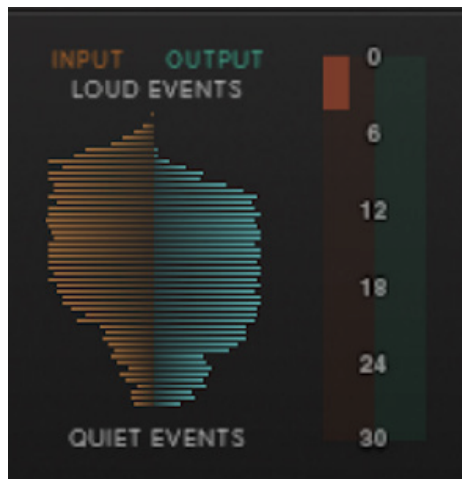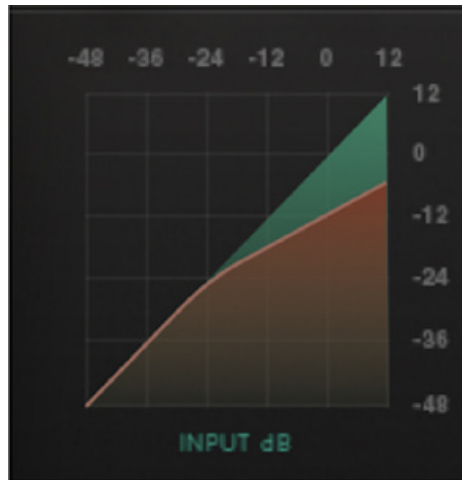
- The left-hand graph is a gain-law display, showing the relationship between input and output levels.
- The right-hand graph is an I/O difference display, showing how often each level occurs within the input and output signals. The input is shown on the left, and the output on the right.
- The vertical scale is amplitude, with 0dB at the top and −∞ at the bottom. The length of each line protruding from the centre represents the number of incidents of that amplitude over a period of seconds.
- To the right of the I/O difference display are the gain reduction meters; an orange meter for the compressor, a green meter for the expander.

Processing Order

The processing order is controlled at the base of the plug-in window.

Click on the left or right arrows to move a module earlier or later in the plug-in signal path.