

# Solid State Logic

O X F O R D • E N G L A N D

## Drumstrip User Guide

### Introduction

### About SSL Drumstrip

The Drumstrip plug-in brings a unique blend of tools to the SSL Native platform, which provides an unprecedented amount of control over the transient and spectral elements of drum and percussion tracks. Manipulation that previously may have been time-consuming or impossible with traditional EQ and dynamics processing becomes elegant and rewarding with the SSL Drumstrip.



### Key Features

- Transient shaper capable of drastically changing the attack characteristics of rhythmic tracks. An audition mode makes for easy setup.
- Highly controllable gate featuring both open and close thresholds, attack, hold, release and range control.
- SSL Listen Mic Compressor with extra functionality.
- Separate high and low frequency enhancers provide spectral control not achievable with traditional EQ.
- Peak and RMS metering on both input and output.

- Wet/dry controls on both the main output and the LMC allow parallel processing to be easily dialled in.
- Process order control over all five sections gives complete flexibility over the serial signal chain.
- Latency-free bypass of all processing.

## Installation

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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

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

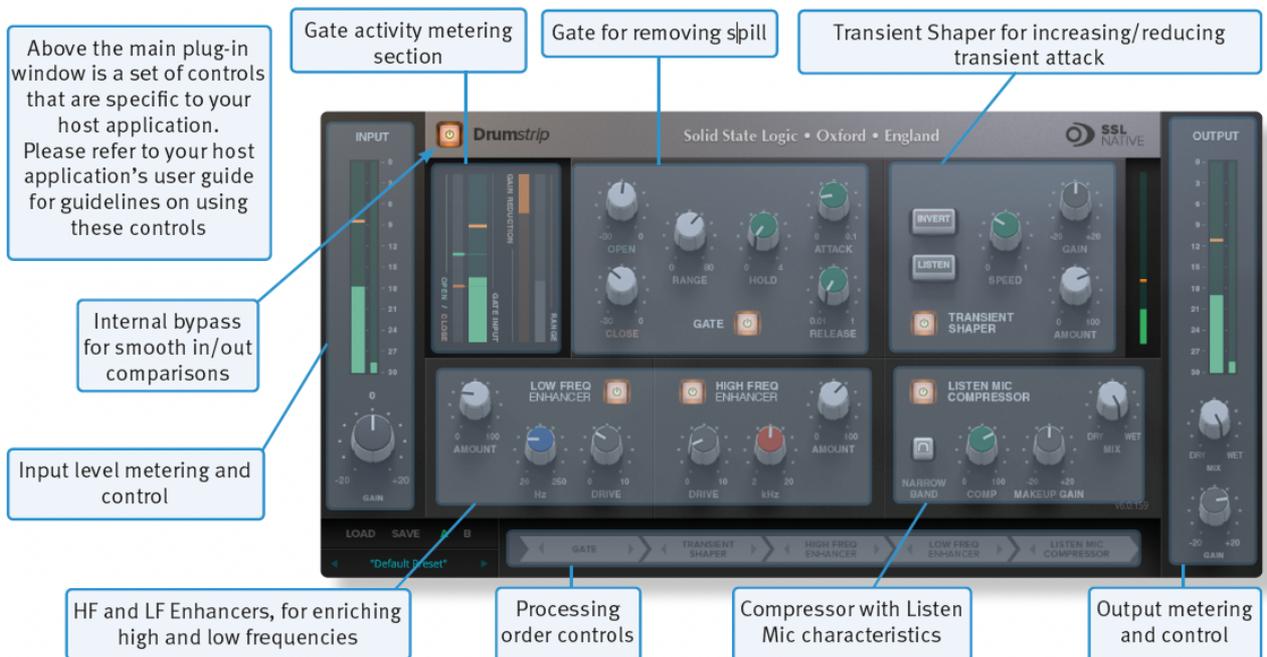
## Using SSL Native Drumstrip

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### Overview

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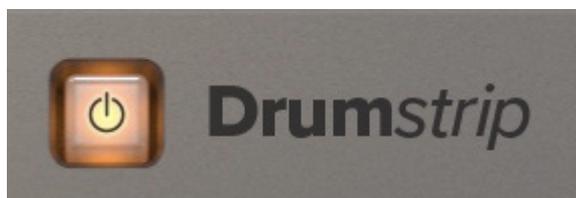
Drumstrip is a one-stop solution for superior drum processing, providing tailor-made tools for fixing and polishing your drum sounds. The diagram below introduces its features which are described in full in the following sections.



## Interface Overview

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

### Plug-in Bypass



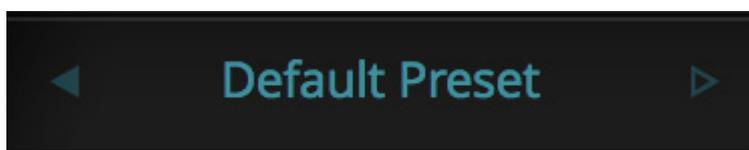
The **power** switch located above the **Input** section provides an internal plug-in bypass. This allows for smoother In/Out comparisons by avoiding the latency issues associated with the host application's Bypass function. The button must be 'lit' for the plug-in to be in circuit.

### Presets

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

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

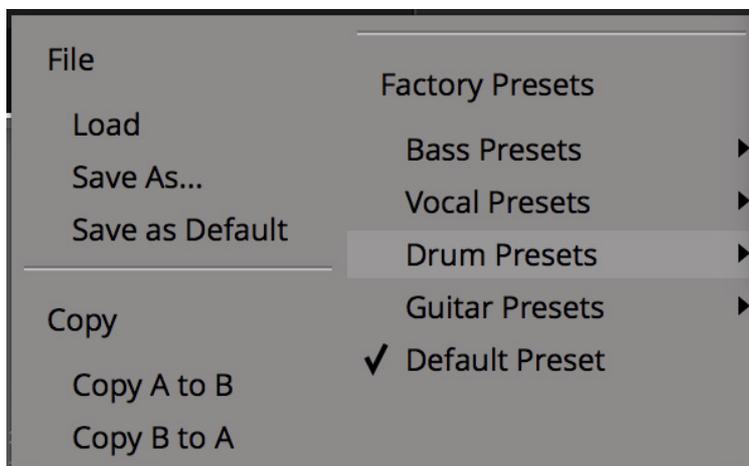
**Windows 64-bit:** C:\ProgramData\Solid State Logic\SSL Native\Presets\Drumstrip



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

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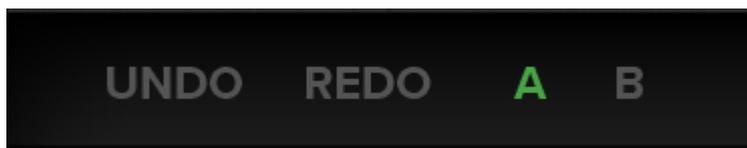


There are a number of options in the Preset Management Display:

- **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

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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

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

## Input and Output Sections

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The input and output sections at either side of the plug-in window provide input and output gain control, along with displays of the following information:

**Peak Meter**  
Allows you to observe the exact level at any point in time. Stereo instances display the highest level of the left and right signals.



**RMS Meter**  
The thinner bar to the right shows the RMS (average) level over time.

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 above.

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 above the knob.

## Drumstrip Modules

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### Gate

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The gate is suitable for many applications, including:

- Shortening drum hits to obtain a 'tighter' sound
- Controlling ambience on live drums tracks
- Manipulating attack and decay characteristics

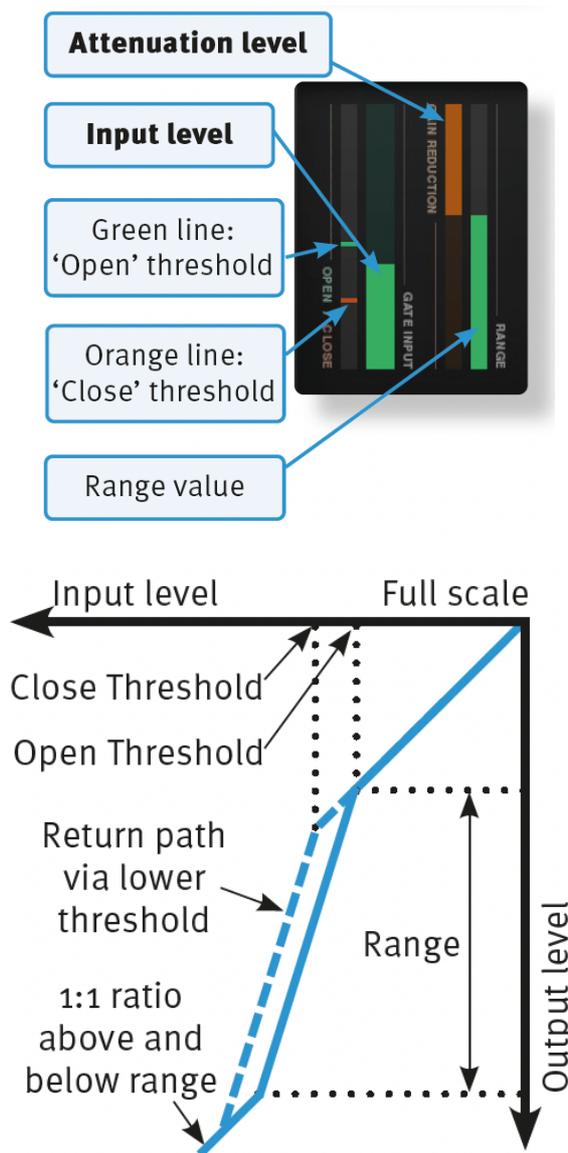


Switch the Gate on by clicking on the power button.

The Gate provides controls for the **Attack**, **Release** and **Hold** times, as well as **Open** and **Close** thresholds and **Range** levels, as illustrated in the diagrams below left. If you are unclear about these parameters.

## Open and Close Thresholds

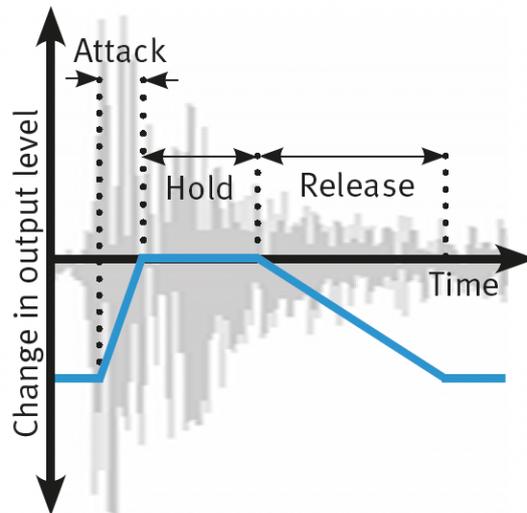
The levels for 'opening' the gate to audio and 'closing' it again are set separately. Generally, the 'open' level is set higher than the 'close' level. This is known as hysteresis and is very useful as it allows instruments to decay more naturally. If the close threshold is higher than the open threshold, the close threshold is ignored.



## Range

The range is the depth of attenuation applied to the signal when the gate is closed, as indicated by the white line in the right hand column. For a true gating action the range should be set to  $-80\text{dB}$ , which is effectively silence. By reducing the range, the gate takes on some of the characteristics of a downward expander where the signal is lowered in

level set by the range amount, rather than being completely silenced. This can be useful in cleaning up a drum track containing reverb, where silencing the reverb would sound too artificial but attenuating it by a few dB would push it down to an acceptable level.

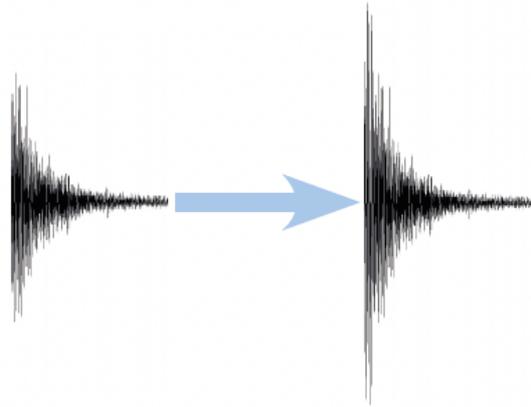


Parameter	Min	Max
Open Thr	0dB	-30dB
Close Thr	0dB	-30dB
Range	0dB	-80dB
Attack	0ms	0.1ms
Hold	0s	4s
Release	0s	1s

## Transient Shaper

The Transient Shaper allows you to add attack to the start of a drum hit by increasing the amplitude of the attack portion of the signal whilst leaving the decay unchanged. The right hand waveform is a processed version of the one on the left. It has been passed through the transient shaper where the amplitude of the attack portion has been increased.



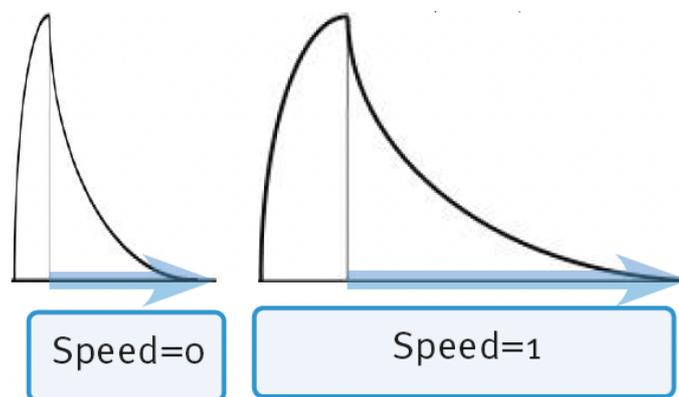


Switch the Shaper on by clicking on the 'power' button. The meter gives visual feedback on how much attack is being added using the **Gain** and **Amount** controls. **Gain** controls the detection level of the controller signal, and should be set so that only the transients you want to shape are detected. If this is set too low then the Shaper will do nothing; if it is set too high then the Shaper will detect too many transients, resulting in an exaggerated process, and the attack appearing too long. The default setting of 0dB should be a good starting point.

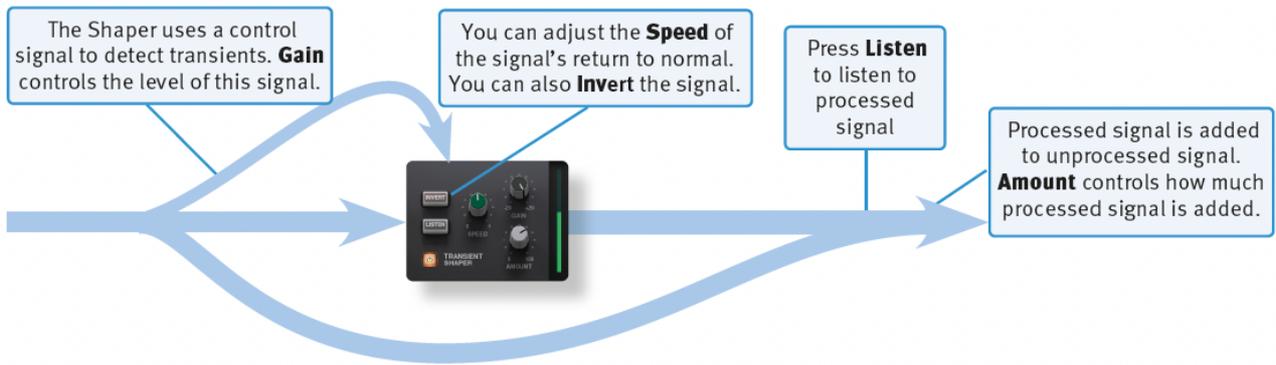
**Gain** doesn't directly affect the output signal's gain.

**Amount** controls the amount of the processed signal added to the unprocessed signal. This process can increase the peak level of a signal significantly, so watch the output meter carefully.

**Speed** controls the length of time the added attack takes to fall back down to the normal signal level once it has reached the top of the attack phase. Turn the knob clockwise for a slower speed, and longer transient.



The **Invert** switch inverts the processed signal so that it is subtracted from the unprocessed signal. This has the effect of softening the attack, resulting in more body in the drum sound.



The **Listen** switch allows you to listen to the processed signal, to assist in the set up process.

*When the **Invert** and **Listen** buttons are both pressed, the signal will not be inverted.*

## HF and LF Enhancers



The HF and LF enhancers respectively enrich the high and low frequencies of the input signal. Whereas a standard EQ simply raises the level of certain frequencies, the Enhancer adds a combination of 2nd and 3rd harmonics to those frequencies, producing a more pleasing effect.

Switch each Enhancer on by clicking on the power button in its top left-hand corner. No effect is heard until an Enhancer's **Drive** and **Amount** are turned up.

HF **Cutoff** sets the frequency above which the HF Enhancer generates harmonics. It ranges from 2kHz up to 20kHz – To add air or sparkle to a signal, push this frequency towards the higher end of the range. To give more presence to a signal, use the lower end of the range. Note that the effect is barely audible in the 15kHz to 20kHz range.

LF **Turnover** sets the frequency below which the LF Enhancer generates harmonics. It ranges from 20Hz up to 250Hz. The LF Enhancer is great for adding depth and weight to kick drums, snare or toms.

Each Enhancer has its own **Drive** and **Amount** controls:

- **Drive** (or overdrive) controls the density and amount of harmonic content, from 0 to 100%.
- **Amount** is the amount of Enhanced signal that is mixed into the unprocessed signal, from 0 to 100%.

## Listen Mic Compressor

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The Listen Mic Compressor was first found in the classic SSL 4000 E Series console. The Drumstrip edition includes a narrowband EQ bypass and a wet/dry Mix control.

**Comp** controls the amount of compression, from 0 to 100%.

**Makeup** controls the level compensation for the gain reduction and **Mix** controls the balance of the compressed ('**Wet**') to uncompressed ('**Dry**') signal. Note that **Makeup** only acts on the 'wet' part of the signal.

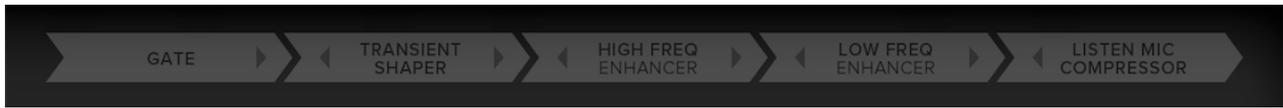
To simulate the original narrow-band listen mic characteristic, activate the **EQ In** button – to use the compressor on the full frequency range, leave **EQ In** deactivated.

*The Listen Mic Compressor features very quick fixed time constants. This means it is easily capable of producing distortion on low frequency material.*

## Processing Order

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The five processing blocks in Drumstrip can be configured in any order, as defined by the Process Order blocks at the base of the plug-in window.



To move a module within the order press either the left arrow or the right arrow.

By default the gate is first in the chain so that it is able to act on the full dynamic range of the signal