Softube

**User Manual
Summit Audio TLA-100A
Tube Leveling Amplifier**

Softube User Manual

Disclaimer

Every effort has been made to ensure that the information in this manual is accurate. However, there are a chance that we have made mistakes, and we hope that you understand that we are only humans. Please let us know about the mistake, and we'll fix it in the mix (or in the next version of this manual).

Support

On the Softube website (www.softube.com) you will find answers to common questions (FAQ) and other topics that might interest you.

Support questions can be posted at http://www.softube.com, where we will help you as fast as we can!

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1 User Interface

SOFTUBE PLUG-INS ARE "what you see is what you get" products. You should be able to intuitively learn the products within minutes, so that you can work fast and efficient with them. There are a couple of things that remain the same for all of our plug-ins, such as the menu row. These will be explained in this chapter. For detailed information of a particular plug-in, please see its chapter.

Menu Row

In the bottom of the plug-in interface, you will see a thin black row with some buttons. We'll use the Dyna-mite plug-in as example, but the same goes for all plug-ins.

About Box Opens the "About" Box with version info.

Value Display Displays the knob value when the mouse is hovering over a control.

Enable Enable/Activate the plug-in. Set to OFF for bypass.

Setup Changes global options for all instances of that plug-in.
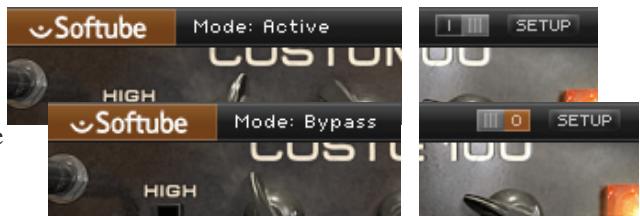
Enable

When the **Enable** switch is set to ON (I), the plug-in is active and will process audio. When set to OFF (0), it will be bypassed and not process any audio. It will take considerably less CPU when it is bypassed.

"About" Box   Value Display   Enable   Setup
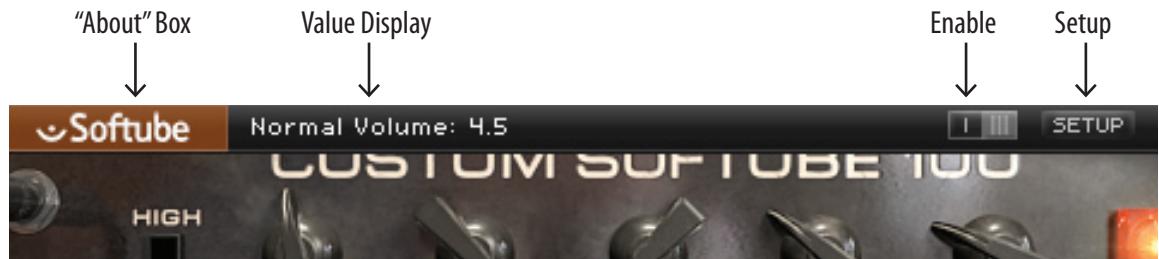
Setup

In the Setup window you can change settings that will affect all instances of that particular plug-in. If you for example de-select the "Show Value Display" option in the Bass Amp Room plug-in the value display will be off for all Bass Amp Rooms on your system until you select that option again.

The different options vary between Windows and Mac, and also different formats and plug-ins. The most common options are:

SHOW VALUE DISPLAY: Enables the parameter and value display in the bottom row of the plug-in.

REVERSE MOUSE WHEEL DIRECTION: (Mac OS Only) Changes if the a knob is turned up or down when the mouse wheel is turned up or down. *(Mac OS Only)*

> You need to restart your host software (DAW) before the changes to fully take effect!

If you messed something up and manually need to set these options, you'll find them in text format in the following locations:

MAC OS: `~/Library/Application Support/ Softube`

WINDOWS: `username\Application Data\`

Key Commands

All numbers and labels in the plug-in are clickable. This allows you to easy select a setting by clicking on the wanted value. Hovering above a label will turn the mouse pointer into a pointing hand.

Mouse

Up/Down or Mouse Wheel	Change a parameter, such as a knob or a switch.

Keyboard

Fine Adjust	⌘ (Mac) or CTRL (Win), while changing the parameter value.
Reset to Default	ALT, while clicking on the knob or fader.

Plug-In Specific Key Commands

In many plug-ins, you can SHIFT-click on a knob or a switch to get some extra functionality

Metal Amp Room

SHIFT-click and drag a mic will move both mics simultaneously.

All Amp Rooms

SHIFT-click in the cabinet background will change cabinet (or amp) without any animations

2 Summit Audio TLA-100A Compressor

More Than a TLA-100A

THIS SUMMIT COMPRESSOR IS A CLASSIC, but we felt that there are a couple of features that could really bring this unit into the 21st century. So we decided to add an extra panel below the unit. If you don't care about fancy features, just disregard that panel and the TLA-100A will work just as the original unit.

Low Cut

It is always handy to have the ability to filter out the lowest frequencies so that the compressor doesn't react on them. Here you also have the possibility to choose whether you want to put the low cut on the entire signal (just as if you would have had a Low Cut inserted before the TLA-100 plug-in) or put on just the detector part of the compressor (a.k.a. "sidechain filtering")

Parallel Inject = Parallel Compression

Parallel compression, ie. mixing a compressed signal together with the original signal, is a standard practice today. So instead of using several mix buses to achieve this we added a knob.

Saturation = Headroom = Mix Level Adjust

It's always difficult to choose what level the virtual 0 VU should correspond to in the digital world. Some people use drum loops that peak at 0 dBFS, while others use material recorded at -24 dBFS. That's why we added the Saturation control. With that control you can tune the headroom and the

amount of saturation from the tube output stage in the compressor. Without it, you would have to use the Gain control to set the desired amount of distortion and compensate for that loss or increase in volume with a separate volume control. The Saturation does all that. In one knob.

User Interface

The user interface consists of two panels, the upper panel, containing the original TLA-100A knobs and switches, and the lower panel that offers extra functionality.

Attack
Release
Meter Select

Gain (Output volume)

Reduction/Output Meter

Gain Reduction
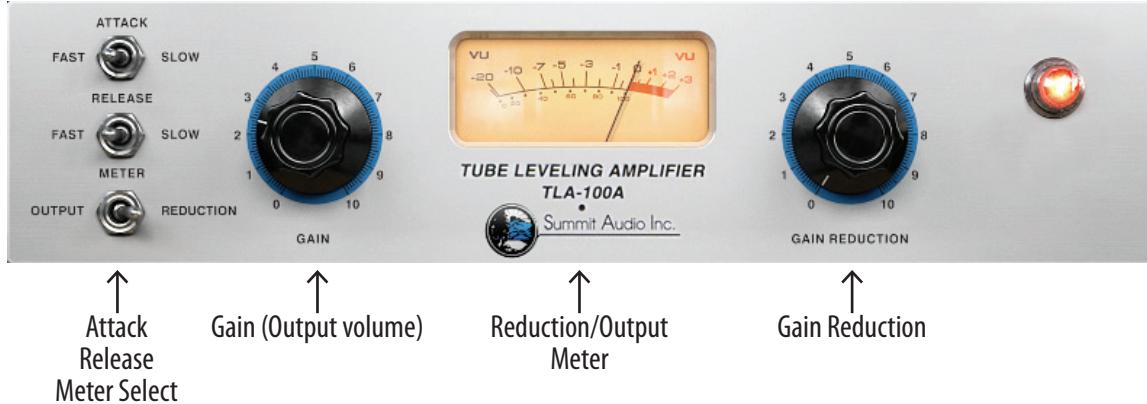
Upper Panel

Attack	A three position switch with FAST, MEDIUM and SLOW settings, which corresponds to the time it takes the compressor to respond to the input signal.
Release	Controls the time it takes the compressor to return to unity again. A three position switch with FAST, MEDIUM and SLOW settings. The release time is also effected by the program material. The slower the release time setting, the more the program material determines the release time.
Meter Select	Allows monitoring the output level (OUTPUT) or the amount of gain reduction taking place (REDUCTION).
Gain	Output volume. Unity gain is at "25". The value display in the lower menu bar will show 0.0 dB.
Gain Reduction	Sets the amount of gain reduction and the operating point where gain reduction begins. The higher the gain reduction, the higher the ratio becomes. Works almost like a threshold control.

Lower Panel

|	
Low Cut	Adds a low cut filter on either the detector or the input. From OFF to 600 Hz. OFF disables the low cut functionality.
Low Cut Selector	Select if the low cut filter should affect the input: like a normal low cut filter placed before the TLA-100A, or just the detector so that low frequencies doesn't trigger the compressor.
Saturation	Sets the amount of headroom in the unit. If you need more distortion, turn up this knob. Distortion can sometimes be very useful together with slower attack times when you get loud transients. Use the **Saturation** knob to limit the transients.
Saturation LED	Indicates distortion at the output. You will get the best result if the saturation is used sparingly on percussive sounds, like a drum bus. Let it take care of occasional peaks, and do not run it too hot.
Parallel Inject	Adds the un-affected dry signal to the compressed (WET) signal. If you are using the compressor to shape the sound instead of compressing the volume (a rather normal use case these days), it is often useful to blend some of the original signal with the compressed track. An overcompressed drum track has few transients, which will make it sound dull and without energy, but if you blend some of the original transients into that track you'll get the energy back while maintaining the overcompressed sound.

Low Cut (Frequency)   Low Cut Selector   Saturation / Saturation LED   Parallel Inject

Parallel Inject

Output

Input

GAIN RED.

Low Cut

Saturation

Gain

DETECTOR

Attack, Release, Gain Reduction
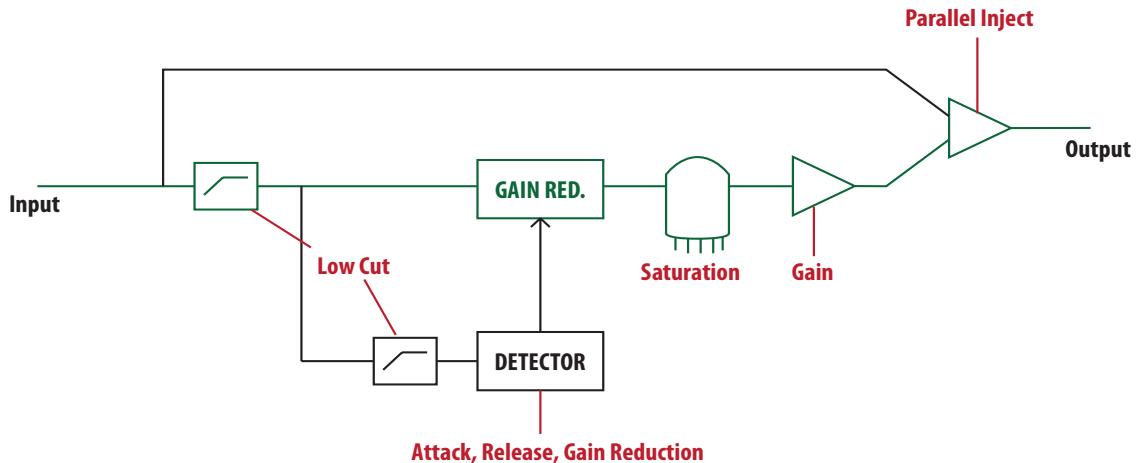
Block Diagram

The drawing above illustrates the functionality of the plug-in. Green lines illustrate the main signal path and red labels the parameters.

The **Low Cut** parameters switch between either the detector low cut filter or the input filter.

Only one of the low cut filters is active at a time or both bypassed (by setting the **Low Cut** frequency parameter to OFF).

Mono and Stereo Operation

The Summit Audio TLA-100A plug-in can operate in both stereo and mono modes. In stereo mode the plug-in will work as the real unit in "stereo link" mode. This means that both channels will get the same amount of gain reduction (which will preserve your stereo image). How the different modes (stereo, mono and mono-to-stereo) are selected depends on your host software.

Credits

Oscar Öberg – modeling, **Niklas Odelholm** – extra features and testing, **Torsten Gatu** – framework programming, and **Arvid Rosén** – framework programming, **Ulf Ekelöf** – 3D rendering.

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