



CHANDLER LIMITED[®] **CURVE BENDER[®]** User's Guide

Softube User Manual

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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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Contents

1	<i>User Interface</i>	<i>5</i>
	Menu Row	5
	Key Commands	6
2	<i>Chandler Limited Curve Bender</i>	<i>7</i>
	User Interface.	8
	In Use	12
	Mid/Side Tips	12
	Mono/Stereo Operation	12
	Credits	12

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 Bass Amp Room plug-in as an example, but the same goes for all our plug-ins.

About Box

Opens the “About” Box with version info.

Value Display

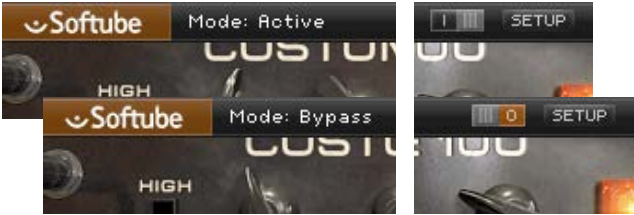
Displays the knob value when the mouse is hovering over a control.

Enable

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

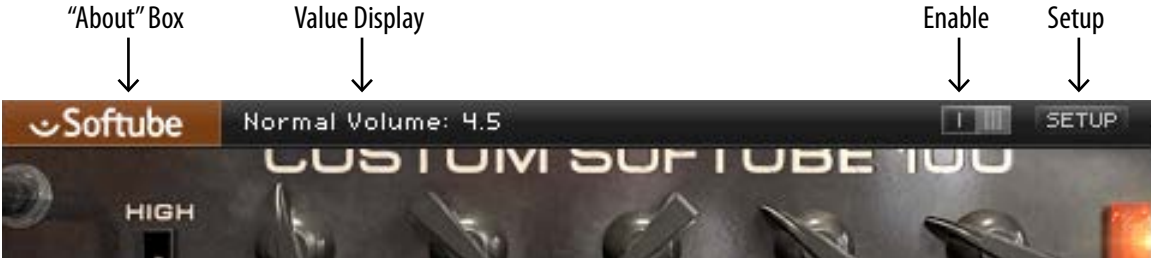
Setup

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 (O), it will be bypassed and not process any audio. It will take considerably less CPU when it is bypassed.



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 easily 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.

Solo Several Mics SHIFT, while clicking on a **Solo** button



2

Chandler Limited® Curve Bender®

CHANDLER LIMITED'S FOUNDER AND CHIEF designer **Wade Goeke** had many ideas for reimagining the historic console EQ to work in a modern context. After experimenting with a number of prototypes, Goeke incorporated several new features into the equalizer, creating what is now considered a modern classic — the **Chandler Limited Curve Bender EQ**.

Vintage Sound, Modern Features

That beast was called the **Chandler Limited EMI TG12345 Curve Bender**, and it was issued in celebration of the 75th birthday of Abbey Road Studios. Powerful functionality gives you serious sound shaping mojo. Wade Goeke turned the nine fixed frequency selections of the original Abbey Road desk into 51 EQ points. He also added



the **Multiply** switch which increases the boost/cut ability from 5 to 15 dB, as well as sharpening the **Q**. He furthermore added high and low pass filters, and bell/shelf selections on the high and low bands.

So the Chandler Limited EMI TG12345 Curve Bender® is a classic equalizer reimagined from the glorious history of EMI and Abbey Road Studios which has come full circle, morphing into a modern powerhouse EQ perfect for all your recording, mixing, and mastering needs.

The Curve Bender's additions to the original TG12345 feature set are marked with yellow text color on the panel. The original features have white text color, except the Mid/Side and Link features.

User Interface

Top row, left to right (duplicated for the **RIGHT** channel)

Bass Shelf/Bell switch Switches the **Bass** band between **SHELF** or **BELL** operation.

Bass Frequency Selects the operating frequency of the **Bass** band. The available frequencies are 35, 50, 70, 91, 150, 200 and 300 Hz. The band is bypassed in the **OUT** position.

Presence 2 Frequency Selects the operating frequency of the **Presence 2** band. The available frequencies are 0.3, 0.4, 0.5, 0.8, 1.2, 1.8, 2.8 and 3.6 kHz. The band is bypassed in the **OUT** position.

Presence 1 Frequency Selects the operating frequency of the **Presence 1** band. The available frequencies are 0.8, 1.2, 1.8, 2.8, 3.6, 4.2, 6.5 and 8.1 kHz. The band is bypassed in the OUT position.

Treble Frequency Selects the operating frequency of the **Presence 2** band. The available frequencies are 3.6, 4.2, 6.5, 8.1, 10, 12, 16, and 20 kHz. The band is bypassed in the Out position.

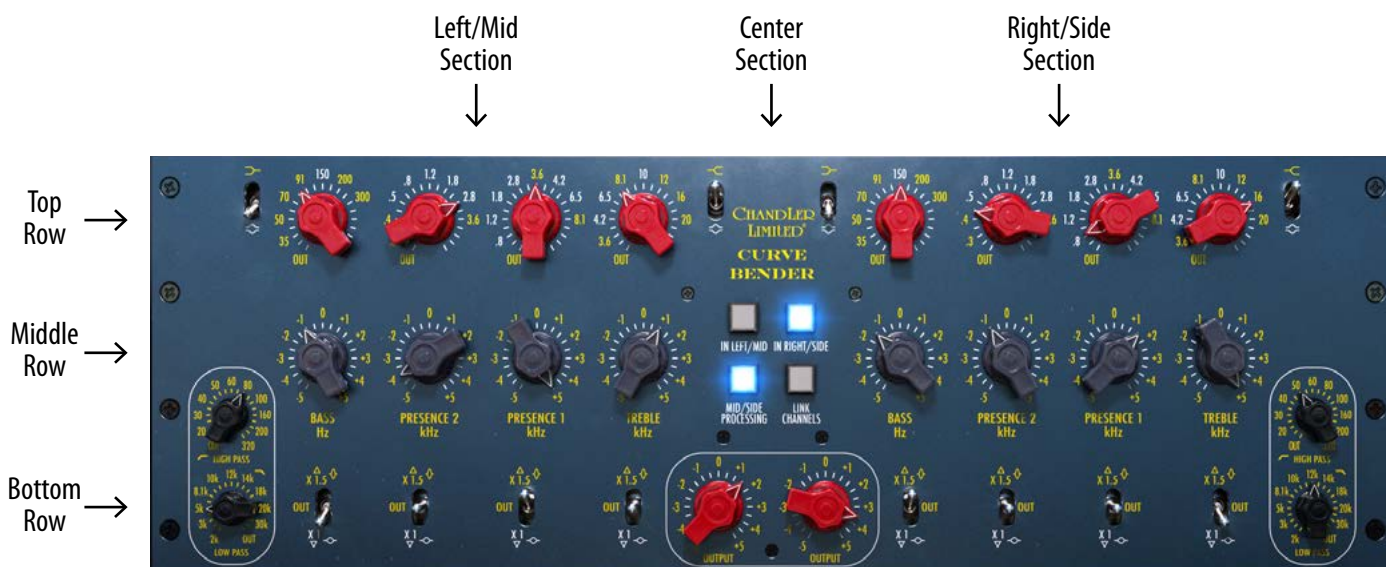
Treble Shelf/Bell

Switch Switches the Treble band between **SHELF** or **BELL** operation.

Middle row, left to right (duplicated for the **RIGHT** channel):

High Pass Selects the operating frequency of the **High Pass** filter, which has a fixed slope of 6 dB per octave. The available frequencies are 20, 30, 40, 50, 60, 80, 100, 160, 200 and 320 Hz. The filter is bypassed in the Out position.

Low Pass Selects the operating frequency of the **Low Pass** filter, which has a fixed slope of 6 dB per octave. The available frequencies are 30, 20, 18, 14, 12, 10, 8.1, 5, 3 and 2 kHz. The filter is bypassed in the Out position.





Cut/Boost Cuts or boosts the selected frequency with a range of either +/- 5 dB or +/- 15 dB, depending on the setting of the corresponding **Multiply** switch.

Bottom row, left to right (duplicated for the RIGHT channel):

Multiply switches When set in the bottom position, cutting and boosting will have a maximum range of 5 dB. In the top position, the boost/cut range is increased to 15 dB to enable more aggressive equalization. This also decreases the width (Q) of the EQ curve for tonal variety. With the **Multiply** switch in

its center position, the corresponding band is bypassed.

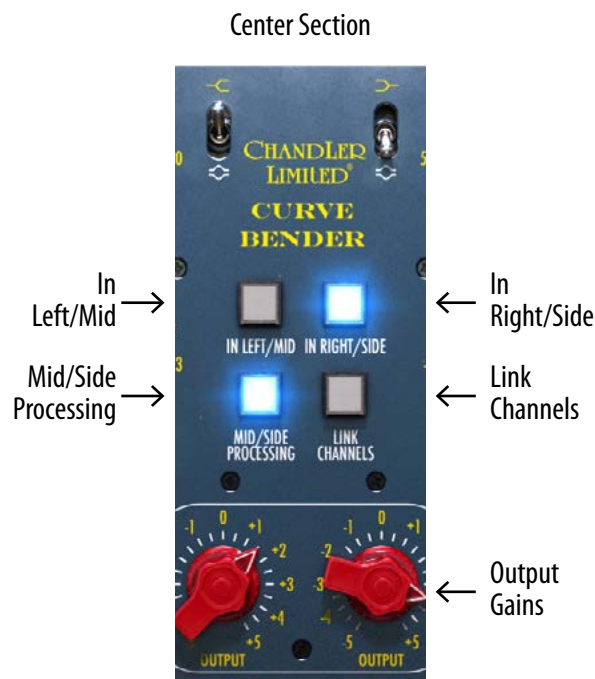
Center section

In Left/Mid Activates or bypasses Curve Bender's processing of the **LEFT** or **MID** channel (depending on the position of the **Mid/Side Processing** button) to facilitate direct comparison of the processed and unprocessed sound.

In Right/Side Activates or bypasses Curve Bender's processing of the **RIGHT** or **SIDE** channel (depending on the position of the **Mid/Side Processing** button) to facilitate direct comparison of the processed and unprocessed sound.

Mid/Side Processing Enables **MID/SIDE** processing. When in **MID/SIDE** mode, the **LEFT** channel of the equalizer controls the **MID** channel, and **RIGHT** channel controls the **SIDE** channel.

Link Channels Links the **LEFT** and **RIGHT** channels in **STEREO** mode, and **MID** and **SIDE** in **MID/SIDE** mode. When the channels are linked, any adjustments made to one channel will be automatically reflected in the other.



Output Gain Controls the output gain in 0.5 dB steps. Adjust this so the output level is reasonably matched to the unprocessed sound of the original sound source. This lets you accurately perform A/B comparisons of the Curve Bender bypassed and active.

In Use

The Curve Bender® alters the tonal content of the sound source in a musical, yet transparent, manner. It is equally useful during recording, mixing or mas-

tering. The most common use is probably on a stereo source, with the unit in stereo mode and its left and right channels linked. This means that exactly the same processing is applied to both the left and right side of the sound source. But it works equally well on mono sources, and the ability to unlink the left and right channels means you can apply different equalization to the different sides, if necessary. For example, a stereo recording might have been made with slightly unmatched microphones—this can be remedied by unlinking the Curve Bender's channels and apply equalization to match one side to the other.

Mid/Side Tips

The Curve Bender® plug-in offers a mode which is not available on the hardware—the **Mid/Side** mode (MS).

In **Mid/Side** mode, the Curve Bender® will not process the left and right channels separately. Instead, the sound is separated into a **MID** portion of the sound, which contains only the material which is common to both left and right channels (the mono portion of the sound). The other portion is the **SIDE** portion of the sound, which contains only the material which differs between left and right.

Mid/Side for Mastering

Mid/Side processing is typically useful in a mastering situation, where you are working on stereo program material without access to the individual channels. For example, the lead vocal is typically placed firmly in the center of the stereo panorama and thus entirely resides in the **MID** portion of the sound, and not at all in the **SIDE** portion. So if you find a need to apply equalization to the lead vocal, but wish to avoid affecting the other instruments in the same frequency range, you can set Curve Bender® to **MID/SIDE** mode, and only adjust the

MID portion to achieve the desired effect on the vocal. Doing it this way leaves the **SIDE** portion untouched—where you in many cases will find panned guitars or stereo keyboards. You can of course also do the opposite, only affect the **SIDE** portion of the sound.

Stereo Widening

Mid/Side processing can also be used to make a stereo sound appear wider. You do this by slightly turning down the **MID** portion of the sound—but don't go too far as you might end up with a center “hole” in the mix.

Mono/Stereo Operation

The Curve Bender® is a stereo unit, but can also be used in **MONO** or **MULTI-MONO**.

Please note, when using Curve Bender® in **MONO** or **MULTI-MONO**, make sure the channels are linked and **Mid/Side Processing** is disengaged.

Credits

Kim Larsson, Arvid Rosén - modelling. **Niklas Odelholm** - graphic design. **Paul Shyrinskykh** - product owner, manual. **Henrik Andersson Vogel** - marketing, manual. **Patrik Holmström** - framework programing. **Ulf Ekelöf** - 3D rendering.

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