Waves SSL 4000 Collection

SSL G-Master Bus Compressor

1. Introduction

The unique sound of Solid State Logic's 4000 Series analogue mixing consoles is sought after worldwide. Engineers of pop and rock music, broadcast transmissions and television post-production value the SSL 4000's flexible dynamics chain as much as the trademark SSL "punchy" sound. Waves and SSL engineers have worked together for over a year to recreate the sound characteristics of the classic SSL 4000 Series E and G Series consoles. Now, those who "mix in the box" can achieve the sound they thought they'd lost when they moved to the digital world.

The SL4000 console was the first mixing desk to incorporate dynamics processing into every channel, as well as a master bus compressor in the console's center section. The ability to 'patch' into the SL4000's master bus compressor and to control its sidechain from an internal sub-mix allowed sound engineers to discover unique, history-making

applications of this console technology. Whether used to record instruments such as piano and drums or for final mixing, these innovative console sections - master bus compressor, EQ and dynamics - opened up a new world of opportunities. For years, workstation users have sought this unusual flexibility and signature sound. But conventional dynamics and EQ plug-ins couldn't produce the unique SSL color.

The Waves SSL 4000 Collection is the result of a partnership between Waves Audio and Solid State Logic. These processors faithfully recreate the same EQ and dynamics characteristics which made legendary the SL4000 consoles. Plus, the interface accurately reflects the classic SSL console. Couple all of this with state-of-the art Waves software and you suddenly find yourself working with the same tools that have provided countless hit mixes for the world's best audio engineers.

The Waves SSL 4000 Collection consists of three separate sections:
- The SSL E-Channel
- The SSL 4000 G-Master Bus Compressor
- The SSL G-Equalizer

2. Description of the SSL G-Master Bus Compressor

The SSL G-Master Bus Compressor plug-in is modeled after the renowned SSL G Series stereo bus compressor. The compressor's gain reduction meters are fitted to the classic SSL console range and displayed in dBu rather than in dBFS. There is an external side chain source select.
Meters are calibrated to 18 dBu = 0 dBFS.

Key Features

- Classic SSL G Series stereo bus compressor.
- Gain reduction meter is fitted to the characteristic SSL console range.
- External sidechain source select (in host applications which support this feature.)
- Autofade with rate control for automatic linear fade-in/fade-out.

3. SSL 4000 Master Bus Compressor Controls and Indicators

1. *Threshold* sets the operating level for the knee of the compressor. *Threshold* is continuously adjustable from -15 dB to +15 dB.

2. *Make up* Gain compensates for a change in signal level due to compressor activity. *Make up* is continuously variable from -5 dB to +15 dB.

3. *Attack* controls the quickness of the compressor's response to changes. Six switchable attack rates: 0.1; 0.3; 1; 3; 10 and 30 ms.

4. The *Release* time of the master compressor is switchable between 0.1, 0.3, 0.6 and 1.2 seconds, or to automatic. If *Auto* is selected, the release time is dependent upon the duration of the program peak.

5. *Ratio* sets the ratio of signal level to signal gain, i.e., the compression ratio. *Ratio* can be switched between 2:1, 4:1 and 10:1.

6. *Rate-S* sets the Autofade duration. Variable from 1 to 60 seconds. When the *Fade Off* button is activated, the compressor will execute a fade-out over the selected duration. When the *Fade Off* button is toggled (will switch to fade out), the compressor executes a fade-out at the selected speed, toggling it again will switch to fade-in until unity gain is reached, at any point you can toggle it for the third time to skip all the fade status.

7. *Analogue.* Classic analogue processors necessarily create more noise and harmonic distortions than modern digital devices. This is, in part, what gives analogue processors their desired sound. By default, all components of the SSL 4000 Collection operate in a mode which enables emulation of the SSL console. However, there may be times when you prefer to use this plug-in without these special attributes. De-selecting *Analogue* will disable analogue emulation.

8. *In* serves as a bypass button. When *In* is selected, the compressor is active. When deselected, the compressor is in bypass.

Master Bus Compressor Indicators

The analogue-style **dB Compression indicator** indicates the amount of compression (gain reduction) imposed by the Master Bus Compressor, expressed in dB.

4. The Waves System Bar

All Waves plug-ins share a common feature, the Waves System Bar, which takes care of most administrative functions you will encounter while working with Waves plug-ins. Since the Waves System Bar is virtually identical on all Waves plug-ins, you will always know how to file, compare, load and copy the parameters of a Waves plug-in, even if you have never before worked with that particular processor.

Commands common to all Waves plug-ins:

Undo   undoes the last performed action

Redo   redoes the last undone action, there are 6 levels of undo redo.

Setup A/B   toggles between two sets of parameters within the same processor – useful when comparing different parameter settings in order to achieve optimal results

Copy A->B   copies the current settings to the second setup register

Save   used for saving presets in the Waves file format (.xps)

There are two options for saving:

Save to new file: creates a new .xps file wherein multiple presets can be saved.

Save into preset menu: saves the preset into the default list of the

plug-in.

Pressing the **?** button will open the manual for the plug-in you are using.