Waves MaxxVolume

Software User Guide

WAVES

Superior Sound Tools

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Introduction

MaxxVolume is an all-in-one dynamics processor. Available in both mono and stereo configurations, it performs four different dynamics processing functions: gating, low level compression, leveling, and compression.

Combining several acclaimed Waves dynamics processing technologies, MaxxVolume packs a lot of audio processing power while consolidating several controls under a small set of simple faders. Each of the dynamics functions is controlled by one or two faders for simplicity and straightforward operation.

The left side of the plug-in interface (to the left of the Energy Meter) handles low gain or low signal level audio. The right side of the interface handles high signal level functions.

Low Level Compressor
The Low Level Compression function is controlled by a pair of faders: Threshold, which sets the threshold under which low level compression starts, and Gain, which sets the amount of gain applied to the compressed portion of the signal.

Low Level Compression can be explained in simple terms as the opposite of standard or high level compression. In a standard compression setting, any signal above the set threshold gets compressed and attenuated. With a low level compressor, any signal that goes below the set threshold gets compressed upward, resulting in increased gain. The dynamic range is thus compressed, pushing low levels up while leaving high levels as they were.

If you are familiar with compression curves, low level compression looks like this (curve marked in red):
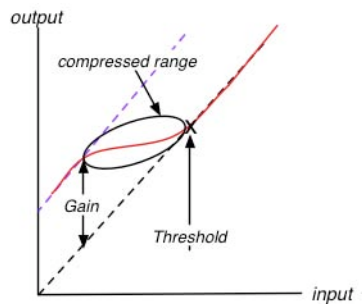
Gate
The Gate function is controlled by a single fader that sets the gating threshold. The gate applies gentle downward expansion, affecting any signal below the threshold.

Leveler
The Leveler function, also known as auto-gain control (AGC), is controlled by the Leveler fader which sets its threshold and target. A Leveler is used to maintain constant levels over long segments of audio. Essentially, a Leveler is a compressor set to very long attack and release times, making it react to the "forest" and not each individual "tree". A Leveler can also be viewed as an RMS compressor.

MaxxVolume's Leveler smoothly and transparently gain-rides any signal that exceeds its threshold, bringing it back down as close as possible to the desired target level (the threshold).

High Level Compressor
MaxxVolume's High Level Compression function is comprised of compression with automatic makeup gain and output level control.

The Compressor function is similar to that of Waves Renaissance Vox. The compressor is controlled by the Threshold fader, which sets the amount of desired dynamic range compression. An automatic gain makeup function compensates for gain reduction resulting from the applied compression. The Gain fader determines the maximum output signal level.

MaxxVolume Interface and Functions

The MaxxVolume interface is organized around the central Energy Meter. The controls are laid out so that Low Level signal functions are on the left side of the interface, while High Level signal functions are on the right side of the interface.

Low Level Compression, Gating, Leveling, and High Level Compression can each be turned on or off individually using the on/off buttons located on their respective faders, as shown below:

Energy Meter

Displays the audio signal's level after the Leveler's processing function, and before the other dynamics processing functions.
Range: 0 to -96dB

Low Level Compression – Threshold

Sets the threshold below which low level soft-knee compression starts. The fader's position is displayed by a hairline indicator on the Energy Meter. The fader supports an on/off button for low level compression.
Range: 0 to -96dB

Low Level Compression – Gain

Controls the maximum amount of gain makeup and compression applied to the signal below the Threshold. Note that applying gain values that are higher than the Threshold value will result in a signal exceeding 0dB or clipping.
Range: 0 to **+**48dB

Low Level Compression – Gain Meter

Displays the amount of low-level makeup gain.
Range: 0 to **+**48dB

Gate

Sets the level below which gating (downward expansion) is applied. The fader supports an on/off button for gating.
Range: 0 to -96dB

Loud/Soft

Changes the ARC ™ release times between:
Loud - shorter and more aggressive release resulting in louder output signal.
Soft – longer release times resulting in softer output signal.
Range: Soft/Loud

Leveler

Sets both the threshold above which leveling is applied, and the target to which the audio signal is leveled. To compensate for gain reduction caused by the Leveler, use the High Level Compressor function. The fader supports an on/off button for leveling.
Range: 0 to -48dB

High Level Compression – Gain Reduction Meter

Displays the amount of high-level gain reduction or attenuation.
Range: 0 to **-**48dB

High Level Compression – Threshold

Controls the compressor threshold, setting the amount of potential dynamic range compression. As you pull the fader down, automatic makeup gain corresponding to the resulting attenuation is applied to the signal. The fader's position is displayed by a hairline indicator on the Energy Meter. The fader supports an on/off button for high level compression.
Range: 0 to -48dB

High Level Compression – Gain

Controls the maximum output level.
Range: 0 to -48dB

Output Meter

Displays the plug-in's output level, including peak and clip (signal exceeding 0dB) indication.
Range: 0 to -96dB

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 essentially the same 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 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 32 levels of undo and redo.

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

A->B   Copies the current settings to the second setup register.

Load   Allows recalling presets from files. Once a file is selected, its first preset will load and become active. Other presets in the file will be listed under the preset's name in the **Load** menu. You can also load factory presets and user presets (saved using "**Save into preset menu**.")

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.