GMulti Manual

Welcome to GMulti

GMulti is a three-band compressor with stereo enhancement and advanced visual feedback.

The input signal is split at user-defined frequencies into three bands. Each of these bands can be compressed independently and have its stereo width altered before being mixed back together.

Interface

Each knob is laid out the same way for consistent and easy reference. Above each one, its function is labelled. Below each is a numerical readout of its value. There is also a waveform display and a gain reduction meter for each band.

Gain: This knob adjusts the gain applied to the signal before it enters the compression stage.

Low Cut: Configure the high-pass filter. Anything below this frequency is cut. Turning the dial down to the minimum will disable the high-pass filter.

Freq 1 and Freq 2: The cross-over frequencies. The first band is defined as

anything up to *Freq 1*. The second band is defined as anything between *Freq 1* and *Freq 2*. And the third band is defined as anything above *Freq 2*.

Thresh: The compressor threshold. If the level for a band rises above its threshold, compression will be applied.

Ratio: The amount of compression to apply. The level of a band will be reduced according to this ratio whenever it exceeds the relevant threshold.

Attack: The speed at which compression will take effect after the signal level rises above the threshold.

Release: The speed at which compression will relax when the signal level drops.

Width: The amount that the stereo image is accentuated.

Level: Post-compression level adjustment for each band.

Mute: These are mute switches. When engaged, the associated band will be silenced.

Mix: This controls the mix between the original and processed audio. At 0% the output is entirely unprocessed and at 100% the output is entirely processed.

Waveform Display and Gain-Reduction Meters: The amount of compression is displayed visually in two ways. The waveform display shows a before and after trace of the waveform. This display can show any band and can be zoomed in or out. There is also a gain-reduction meter for each band that shows how much the signal level is being reduced. The meters have a resolution of 1dB per bar.

Hints and ideas

- Bass frequencies are not directional, so it is usually preferable to share these powerful frequencies between speakers. (Some speaker systems take advantage of this fact by taking the bass load from the signal and sending it through a single, purpose-built 'sub' speaker). You can use the width control to 'collapse' the stereo image of the bass band so that it is centred.
- You can use the mute switches listen to bands individually or in any combination. This can be a great help when configuring the compression for each band.

Installation

I've always aimed to ensure that the GVST plug-ins are each a single file and as compact as I could make them.

For simple plug-ins like these, installation usually boils down to copying a file, so I've never created any automated installers. I know some people would prefer an installer, so apologies for the extra hassle, but hopefully it won't be too difficult.

The installation process will vary for different hosts and different operating systems, but I'll try to cover the basics below.

32-bit or 64-bit (Windows and Linux)

The Windows and Linux plug-ins come in 32- and 64-bit versions. Generally speaking you will need the one that matches the host software you're running.

If you're not sure, you can usually tell if you look at the "About" screen, which can usually be found in one of the application menus.

Taking Audacity as an example: at the time of writing you can find the necessary detail in the "Build Information" tab of its "About" screen.

If all else fails, you could try both and see which works. These days 32-bit applications are becoming increasingly rare, so try the 64-bit version first.

General installation

1. All GVST plug-ins come compressed in a `.ZIP` file, so the first step is to extract the files from the `.ZIP` file.
2. Once extracted, you should have a plug-in file - on Windows it will be a `.DLL` file, on Mac a `.VST` file, and on Linux a `.SO` file.
3. You will need to copy the plug-in file to the appropriate folder for your host program and possibly configure the host software to find it.
4. Many hosts will allow you to specify a folder on your computer where it should look for plug-ins. For example, in the Preferences in Audacity for Windows or Mac, you can add extra locations for VST plugins.
5. In most cases, you will need either to restart the host program or re-scan

the plug-in folder in order for newly-installed plug-ins to appear.

6. The exact process will depend on the software you're using. You should be able to find specific instructions by searching the Internet, e.g. "How to install a VST plugin in Cubase".

Special/default plug-in locations

On a Linux machine, the convention is to locate VST plug-ins under the `~/.vst` directory. I have all the GVST plug-ins copied into `~/.vst/GVST`.

Similarly, there is a common location for audio plug-ins on a Mac: `~/Library/Audio/Plug-Ins`. I copy all the GVST plug-ins into `~/Library/Audio/Plug-Ins/VST`.

It's usually more convenient to place the plug-ins in a location of your choosing and point your host software to it, if that's supported by the application.

License

1. GVST plug-ins are provided to the user at no cost. While every GVST plug-in is tested to the best of the developer's ability, no warranty or guarantee is offered to the end user.

2. No suggestions made by the developer or his representatives (i.e., freely offered support) are to be taken as an implied warranty or guarantee.

3. These plug-ins may only be distributed by the official GVST website, or by parties explicitly given permission by the developer.

4. GVST plug-ins are to be distributed only in their original form as intended by the developer (i.e., the unaltered archive).

5. GVST plug-ins are freeware, meaning you are never under any obligation to pay for them! However, should you wish to help support continued development of GVST software, please consider donating through the official website.

6. GVST plug-ins can be used freely to create and process audio for private or commercial works.

In a nutshell, the code's all mine, but any music or sounds you create using GVST plug-ins is all yours. Of course, if you hit the big time then do feel free to pop back and donate a little something.

Credits

- Plug-in development, website and graphics by Graham Yeadon.
- A special mention to Rick "grymmjack" Christy and Greg Pettit who helped me with the UI design and documentation early on.
- VST technology copyright Steinberg GmbH.
- The "VST" name and logo are registered trademarks of Steinberg GmbH.
- "Windows" is a registered trademark of Microsoft Corporation.
- "Mac" and "OSX" are trademarks of Apple Inc.