GComp2 Manual

Welcome to GComp2

GComp2 is a simplified compressor that also includes lo- and hi-cut filters, a gate, and visual feedback on how the signal has been affected.

Interface

The user interface features a set of 8 knobs which control all of the plug-in's parameters. Each is clearly labelled above, with a user-editable readout below.

In addition to the knobs, a window to the right provides a visual cue as to how your source material has been affected. The darker "shadow" waveform represents the original source material, while the brighter Cyan shows the resulting post-processing audio.

The signal path is illustrated on the user interface itself. Incoming audio goes first to the Gain and filter stage, after which it is gated and compressed according to user settings, with the resulting waveform displayed to the right. Finally, the user may also apply manual gain to the effected signal.

Gain: Gain is the level or "volume" of the source material. At 0dB, the original signal passes through. By increasing or reducing gain, the rest GComp2's parameters are drastically affected.

Lo Cut: Any frequencies below this setting are removed from the source material.

Hi Cut: Frequencies above this setting are eliminated from the incoming audio signal.

Gate: Actually an expander, the incoming signal is turned down once it drops below the defined threshold.

Compress: One knob combines the "threshold" and "ratio" parameters found on most compressors. With a higher rate of compression, there is a lower threshold (level at which compression is triggered) and a higher ratio (amount of gain reduction).

Attack: How quickly the compressor reacts to audio peaks.

Release: The speed at which the source material returns to its original level after being compressed.

Output: Allows the user to manually adjust the post-compression signal with make-up gain.

Hints and ideas

- The visual feedback is only a tool, with your ears being the ultimate judge of having selected appropriate settings.

- Each of the components of GComp2 has more sophisticated counterparts in the GVST suite of plug-ins; however, GComp2 is excellent for combining these into one elegant interface.

- In addition to changing the "Compress" parameter, reducing or increasing gain to the incoming signal will affect the way it is compressed.

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.

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