Gravel

Manual

Taiga dsp

Introduction

Gravel is a Lo-fi distortion Vst plug-in for PC. A Vst can be run inside compatible hosts, most often a DAW, like Reaper, Cubase, Mulab and FL Studio. Being an effect, it doesn't create sounds of it's own, but rather is used to process whatever sound you feed it.

Gravel is most succesfully used for making your sounds grittier, reminescent of old technology, or as a creative mangling effect. Apart from the usual algorithms you'd find in an effect such as this, Gravel also have some tricks up it's sleeve.

Installation

Just extract all the content of the folder that came with your download to your Vst folder. You're host should now find Gravel and load it into your project. If you don't know where your Vst folder is, please consult the documentation of your host.

License

Gravel is provided free of charge and may be used in any of your projects, commercial or not. Programming a Vst is a long, difficult process, so if you want to do something nice for the developer, you could:

1. Tell us how you used Gravel. We're always happy to hear what people are doing with our software.
2. Send us a donation.

You may not, under any circumstances, redistribute Gravel without Taiga dsp's written consent.

Layout

Gravel is divided into three panels. In the top panel you can set the amount of Wet and Dry signal to be outputed. In the left panel you will find the knobs controlling the three main algorithms: **Bit depth**, **Drive** and **Decimation**. Lastly, the right panel lets you control the **Envelope Follower** and use it as a control signal to modulate the **Bit depth**, **Drive** and **Decimation.** The **Envelope Follower** can also modulate the **audio input**, which shapes the waveform before going into the main signal chain.

Top panel

Wet: the amount in percent of processed audio outputed from Gravel.

Dry: the amount in percent of unprocessed audio outputed from Gravel.

Left panel

Bit depth: the amount in bits to which Gravel reduces the **Bit depth** of the audio. It's range is 1.00 bit to 24.00 bit.

Drive: the amount of **Drive ,** between 1.00 (no **Drive**) to 25.00 (probably too much **Drive**).

Decimation: The sample rate reduction ratio. 1.00 means no reduction, and as the ratio approaches 0.00, the reduction is stronger.

Right panel

Attack: the attack in milliseconds of the **Envelope follower**, between 1 milliseconds and 5 seconds.

Release: the release in milliseconds of the **Envelope follower**, between 1 milliseconds and 5 seconds.

Bit depth: the amount of modulation applied to the **Bit depth** parameter, where the modulation source is the control signal created by the **Envelope follower**. The modulation can be either positive or negative.

Drive: the amount of modulation applied to the **Drive** parameter, where the modulation source is the control signal created by the **Envelope follower**. The modulation can be either positive or negative.

Decimation: the amount of modulation applied to the **Decimation** parameter, where the modulation source is the control signal created by the **Envelope follower**. The modulation can be either positive or negative.

AudioIn: the amount of modulation applied to the **audio input** amplitude, where the modulation source is the control signal created by the **Envelope follower**. The modulation can be either

positive or negative.

Known issues

1 – On some extreme settings audio drop-outs may be experienced

Something about Vst hosts

Gravel is to be used inside a Vst host. A host can be a lot of different things:

-**DAW**: A digital audio workstation. These are gigantic audio production environments, real jack of all trades and the most common host for Vst's.
Paid examples: Cockos Reaper, Propellerhead Reason, Image Line FL Studio, MOTU Mulab, Ableton Live. **Free examples**: Ardour, Rosegarden, Zynewave Podium Free.

-**Tracker**: Also powerful audio production environments, having roots in old-school digital music production. Hip for chiptunes!
Paid examples: Renoise. **Free examples**: OpenMPT.

-**Modular environments**: These rebels give you a blank canvas onto which you can load units (a Vst for instance) for ultimate signal path control. Sometimes they work as a complete programming language too!
Paid examples: Cycling '74 Max/Msp, Audiomulch. **Free examples**: Pure data.

-**Simple hosts**: Some programs simply focus on hosting Vst plug-ins, and therefore enable you to use them as quasi-standalone applications. SAVIHost is a popular choice.