DECIMATOR

Manual

MOSAIC

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MOSAIC

THINGS TO KNOW

What is 1U?

1U is a measurement of height in the 19" rackmount standard. Eurorack modules adhere to 3 rack units, or 3U. Mosaic tiles adhere to 1 rack unit in height, and require appropriate rails to mount in a rack or modular case.

What 1U format are Mosaic modules?

We ship our modules with Intellijel 1U formatted front panels. If you use the Pulp Logic format, don't worry! You can purchase Pulp Logic replacement front panels on our Replacement Panels page.

Mosaic Color Guide

Each color indicates a function across the Mosaic lineup.

Green: Audio Signals

Purple: Gate Signals

Blue: Control Voltage

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OVERVIEW

Description

Bit reduce and downsample audio into oblivion with Decimator. Lo-Fi sweet spots are just a knob turn away with independent control over each decimation aspect, and a dedicated dry/wet mix knob to bring the heat when you want it. Effortlessly turn your karplus-strong plucks into heavy metal power chords, or harmonically complex samples into 8-bit chiptune goodness within a single module. Sonic destruction is a patch away with Decimator!

- High Fidelity 96kHz, 24-bit audio engine

- Multifaceted decimation DSP effect

- Downsampling

- Bitcrushing

- Mix between dry and wet signals

Tech Specs

- Width: 14HP

- Depth: 28mm

- Front Panel: Ships in Intellijel format. Pulp Logic replacement panels available here.

- Current Consumption: +12V = 80mA, -12V = 8mA

Installation

To install, locate space in your Eurorack case for your 1U module, and confirm the positive 12 volts and negative 12 volts sides of the power distribution lines. Plug the connector into the power distribution board of your case, keeping in mind that the red band corresponds to negative 12 volts. In most systems, the negative 12 volt supply line is at the bottom. The power cable should be connected to the module with the red band facing the front of the module.

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DETAILS

How It Works

Decimator has two unqiue audio reduction tools in its arsenal, which can be both used to create a host of unique lo-fi timbres. These two tools are: downsampling and bit depth reduction.
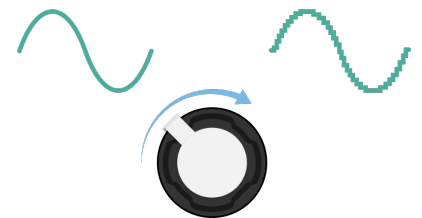
Bit depth reduction takes the incoming audio's bit depth, and reduces the amount it to create unique lo-fi timbres. On Decimator, this can range from 24-bit all the way to 1-bit.

Downsampling reduces the sample rate, providing bandwidth reduction to the audio signal. For example, if an incoming audio signal has a sample-rate of 44.1kHz and is downsampled by a factor of 5/4, the resulting sample rate is 35.28kHz.
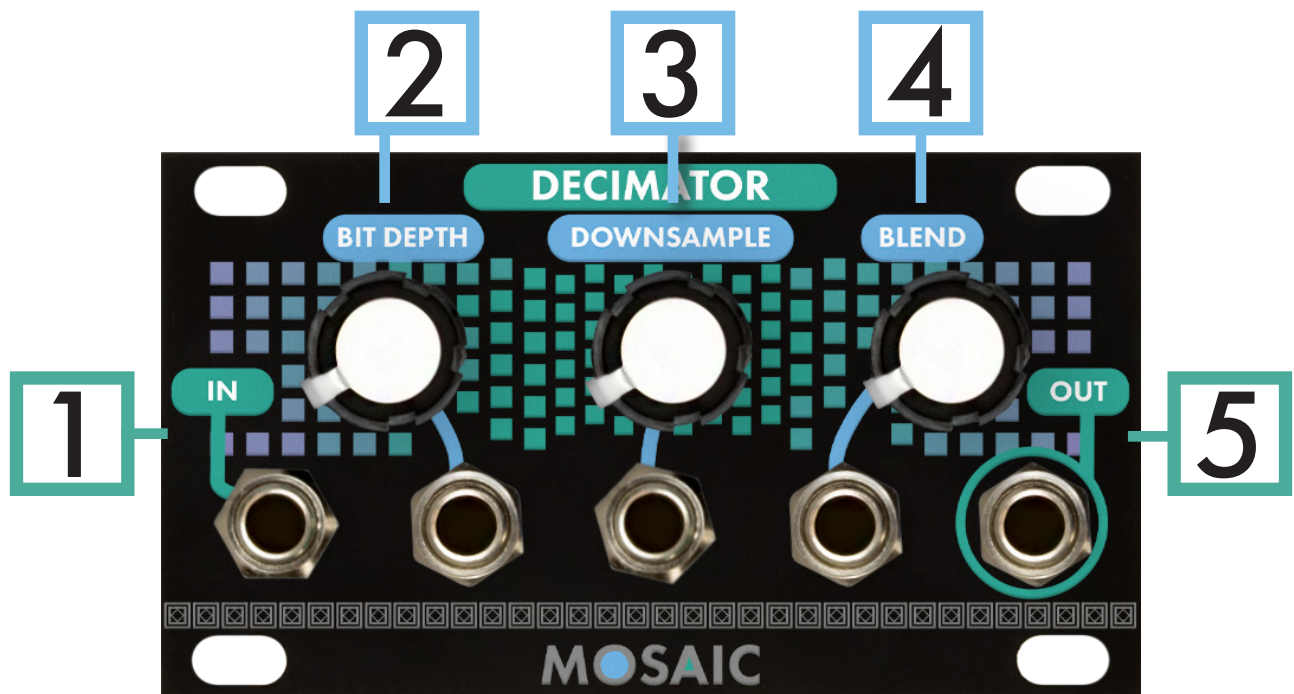
Diagram

Bit Depth Reduction

Downsample

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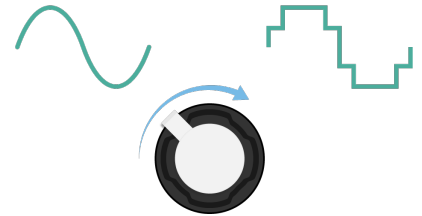
DETAILS

1. Input

Audio input to be affected by Decimator.

Range: 10Vpp

2. Bit Depth

Reduces the bit depth of the incoming audio. When the knob is fully left, audio is streamed at full resolution, up to 32-bits. When the knob is fully right, audio is streamed at 1 bit (square wave).

CV Range: ±5V

3. Downsample

Reduces the bandwidth resolution of the incoming audio. When the knob is fully left, no reduction takes place. When the knob is fully right, a maximum bandwith reduction is applied to the incoming audio.

CV Range: ±5V

4. Blend

Mixes between the dry and wet signal. When the knob is fully left, only the dry signal is present. When the knob is fully right, only the wet signal is present.

Range: ±5V

5. Output

Audio Output.

Range: 10Vpp

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