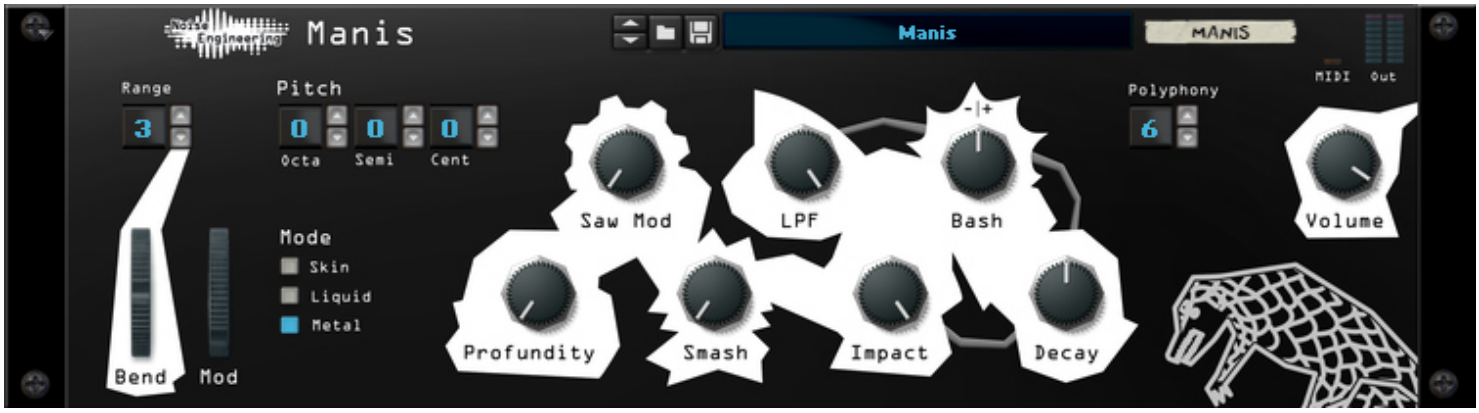
Manis

Tough, hard-hitting, or sparkly and beautiful: Manis is a one-of-a-kind synth that fits into any track.

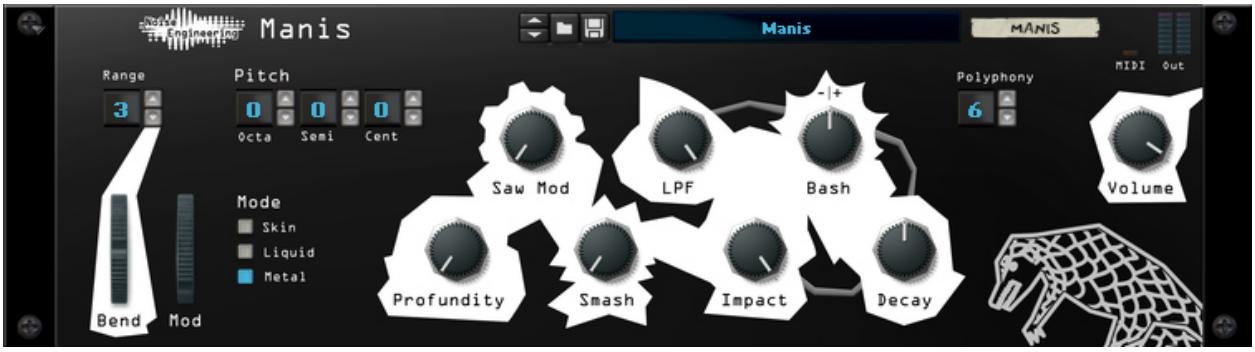


User Guide

Welcome to Manis.

Manis is a synthesizer based on the Basimilus Iteritas, but designed to use saw waves and a different architecture to give it a completely new and complementary sound. Inspired by a hardware Eurorack module by the same name, Manis can create distinct timbres that range from distorted and aggressive to shimmering and mesmerizing. Its structure also takes influence from Basimilus Iteritas's percussive nature, making abstract drum creation a breeze.

Coming from hardware, our instruments are designed to be played by hand and modulated by other modules.



Interface

Bend/Bend Range

Pitch bend control. Range setting changes the maximum amount of bend. Use this to smoothly warp the tonality of the sound.

Mod

Modulation wheel. Internally routed to LPF, Saw Mod, and Profundity.

Octa/Semi/Cent

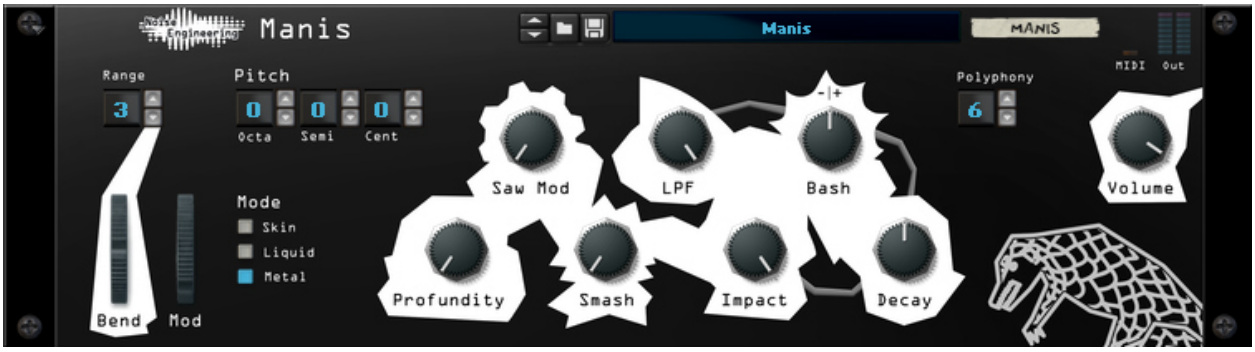
Changes the pitch of the oscillator by octaves, semitones, or cents.

Mode

Selects the algorithm:

- Skin: Six-oscillator additive
- Liquid: Six-oscillator additive with pitch envelope
- Metal: Two 3-operator phase-modulated oscillators

See Tone Generation for more information on how these algorithms differ.



Saw Mod

Creates an effect that sounds similar to PWM or hard sync.

LPF

Two pitch-tracking 2-pole non-resonant filters. To the left only very low frequencies pass; all the way to the right the filter is bypassed.

Bash

Determines how much the effect tracks the envelope (Impact and Decay, below). Bash routes the envelope to Smash, Profundity, and LPF and is a bipolar control: center is off, right of center applies positive modulation, and left of center applies negative modulation.

Profundity

As the Profundity knob is turned up, additional out-of-phase oscillators are added for a chorus effect, and the synth is detuned.

Smash

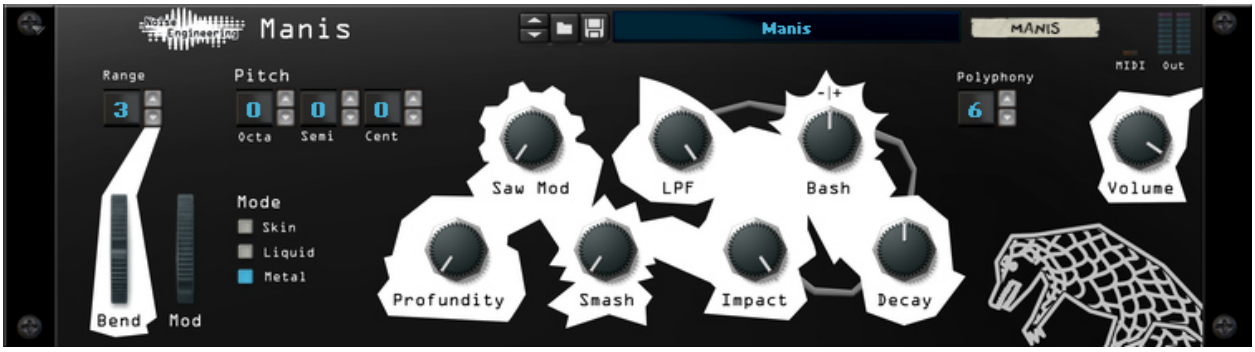
A gnarly wavefolder-inspired distortion effect. Wavefolding complexifies a sound and can make some sounds more metallic and bright..

Impact

Controls the impression of the attack of notes.

Decay

Controls how long it takes for the sound to fade out.

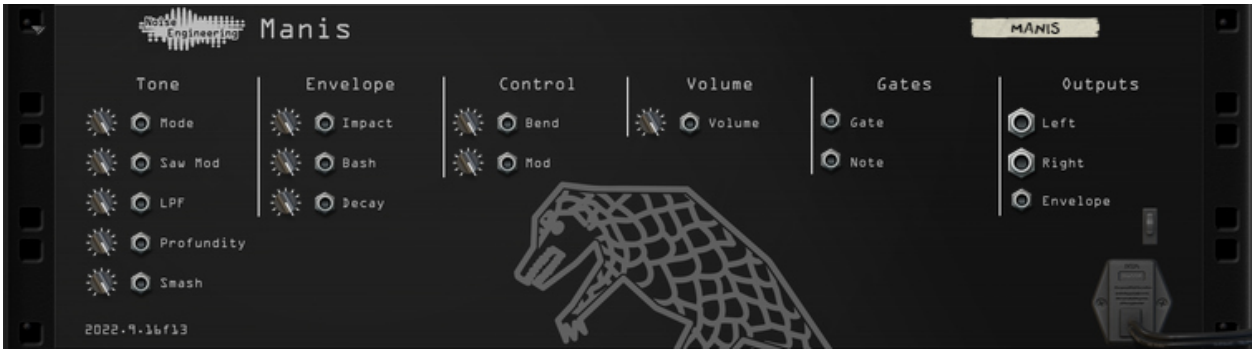


Polyphony

Sets the maximum number of simultaneous notes the synth can play.

Volume

Sets the output level of the synth.



Back Panel

Back-panel knobs act as attenuators for all inputs.

Gates

Gate: gate input to trigger the module

Note: CV input to specify note

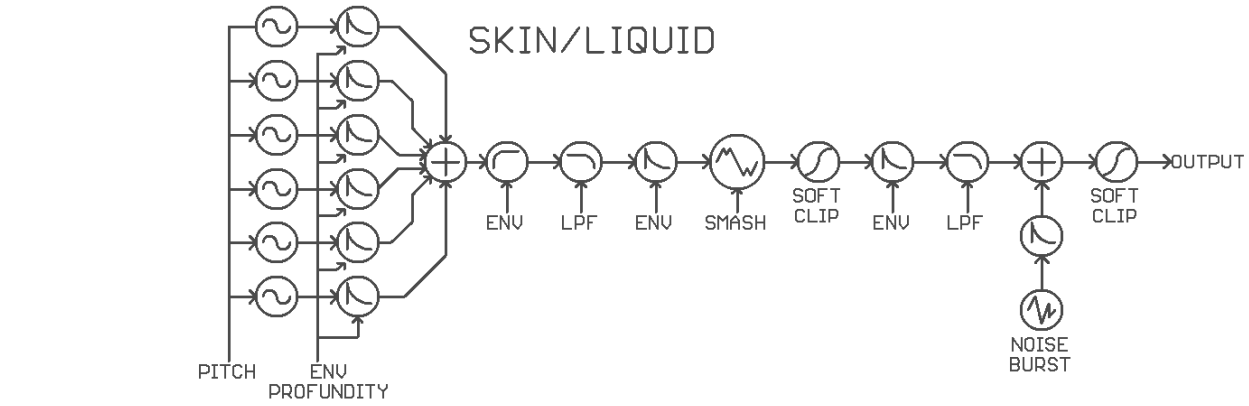
Output

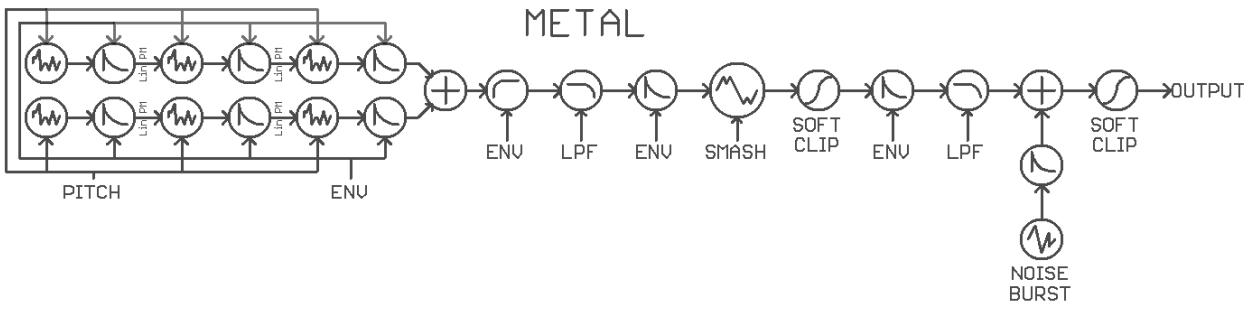
Envelope: CV output that tracks the current envelope level

Left/Right: Stereo output

Tone Generation

At first glance, the architecture of Manis is similar to the Basimilus Iteritas. In Skin and Liquid modes, there are six oscillator/envelope pairs that are added together. In Metal mode, there are phase-modulated oscillator/envelope chains. Metal mode differs in Manis by having two sets of three sequentially modulated oscillators rather than one set of six. Metal mode also waveshapes the output of the oscillators by summing two sawtooth waves of the same frequency to give a waveform somewhere between a sawtooth and a square.





Manis History

Manis started as a Eurorack module. Two friends of Noise Engineering, Matt Lange and Anthony Baldino loved our module Basimilus Iteritas, but wanted a version that was unapologetically aggressive. This sounded like a fun idea, and a couple days after our first chat we had enough ideas to give it a try. The first changes were simple. Move to sawtooth only, make the fold into something far more harsh, allow routing of the amplitude envelope to the tone parameters, and add sample-rate modulation for a detuned sound. Another early add-on was a second distortion-like thing that would eventually become sawmod. Matt's feedback on this version was that it met the goal of being aggressive but lacked a lot of subtlety. Anthony made the suggestion that a filter might be a good addition to help tame the sound. We weren't convinced, but once Stephen worked through the technical details, he was able to implement our first variable-sample-rate filter.

We knew we were closer, but we weren't there yet, and so we spent considerable time working on expanding the tone space to have more variety of sounds that were more easily controlled. As we finalized the module, we toyed with the timbres we were getting and were so happy to discover the range of harsh and aggressive, fulfilling Matt and Anthony's initial request, but also a complex range of lush, beautiful, and soft, almost piano-like timbres too.

Now, you get the sound of the Eurorack module with the power of Reason: presets, polyphony, automation, and a virtually unlimited number of instances.

About the Preset Names

Preset names are often weird. It's true. But you may find ours a little strange. Let us explain.

At Noise Eng, we are a small team of nerds. And faced with a daunting task like names for 500 presets for a single synth, we do what we do best: we automate. We briefly considered using a dictionary, but if you've ever read a dictionary (at least one of us has), you'll know there are some words in there that at least one of our users is bound to not want popping up in their session. So we did a workaround.

Stephen, our chief noisemaker and also head engineer, went to the nerdiest resource he could find: the IETF, or the Internet Engineering Task Force. They produce documents for voluntary Internet standards. They are technical and cover things like Network File Systems, MD5, ISCSI, Secure Shell-2, and others. Want a nerdy list? Check it out here.

The Requests for Comments series contain technical and organizational notes about the Internet. So we grabbed some of those and made our own dictionary. If some of the presets have very weird terms -- there is probably an esoteric technical meaning to it. If Joseph or some other name pops up, you can thank them for their contribution to trying to make the Internet a slightly more sane place.

Of course there was still the occasional questionable word here or there, so we went in and made a few adjustments. Now you may one day find a preset with the name Puppies_rainbows or with Unicorn in the name. You can thank Kris for that. Did we miss a questionable word you think we should take out? Get in touch and let us know!

And the categories? During early beta test (alpha beta?) of our first plugins, one of our great testers let us know that some of the category names seemed like they were meant to be descriptive, but then were somewhat misleading. He was completely right, so we took a look at this and decided to revise. One thing we think about a fair amount here at Noise Engineering is creativity. In particular, we don't like telling people how to use something. This is part of why we name our products as we do (but that's a story for another day), and we decided to apply the same logic to the preset categories. But we wanted to bring our normal sense of play to it so you'll find that each Rack Extension has the presets categorized as themes suggested by the team here.

About NE

Noise Engineering is located in Los Angeles, California. We started around 2014 when Chief Noisemaker Stephen McCaul wanted a hobby for his off time from his day job and started making Eurorack modules in a spare bedroom at home. One thing led to another and a couple of years later, he and wife Kris Kaiser quit their day jobs and took the company full time. Noise Engineering has since grown in size and has established itself as a well-regarded and innovative synthesizer brand, with products in Eurorack, 5U, and multiple software platforms.

Special Thanks

Loptimiste

NaviRetlav

nisse

joeyluck

laurensvansteenbergen

andrehorst

MattiasHG

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lincolnjet

EpiGenetik

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