Noise Engineering (https://www.noiseengineering.us/)

Seca Ruina

Multiband distortion drive

Overview

Distortion is fun, but it's even better when you split it up across the frequency spectrum. Seca Ruina takes an input, splits it up into three frequency bands, and lets you drive them into annihilation. Seca Ruina includes a bypassable VCA on the output and CV over individual band and universal drive amount. With individual outputs for each band, you can process each band further externally. So much potential in only 6HP!

- **Type**: Multiband distortion/VCA
- **Size**: 6HP Eurorack

- **Depth**: 0.8 inch
- **Power**: 2x5 Eurorack
- **+12 V**: `85 mA`
- **-12 V**: `80 mA`

Etymology

Seca -- from Latin secare: *"to cut"*

Ruina -- from Latin: *"destruction"*

"Cut and destroy"

Power

To power your Noise Engineering module, turn off your case. Plug one end of your ribbon cable into your power board so that the red stripe on the ribbon cable is aligned to the side that says `-12 V` and each pin on the power header is plugged into the connector on the ribbon. Make sure no pins are overhanging the connector! If they are, unplug it and realign.
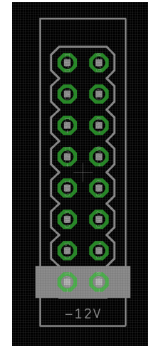
Line up the red stripe on the ribbon cable so that it matches the white stripe and/or `-12 V` indication on the board and plug in the connector.

Screw your module into your case **before** powering on the module. You risk bumping the module's PCB against something metallic and damaging it if it's not properly secured when powered on.

You should be good to go if you followed these instructions. Now go make some noise!

A final note. Some modules have other headers -- they may have a different number of pins or may say "not power". In general, unless a manual tells you

otherwise, **do not connect those to power**.

Interface

High/Mid/Low knobs

Drive amount for each band. Knob acts as an offset for CV.

High/Mid/Low inputs

CV input controlling drive amount for each band.

All

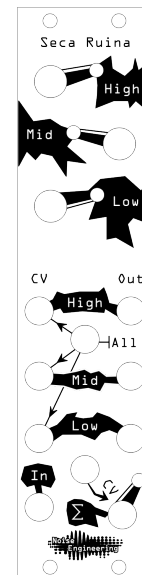CV over `High`, `Mid`, and `Low` drive amount simultaneously.

High/Mid/Low outs

Individual outputs of each band.

In

Audio input.

Sum (Σ) out

Sum of all three outputs.

Patch tutorial

Patch 1

Input a simple waveform to the audio `In`. Connect the `Sum` out to your mixer and tweak the knobs to hear how Seca Ruina can make even simple sounds exciting.

Patch 2

Input a more complex sound like a drum loop or melody line and tweak the drive amounts to completely badassify your input!

Patch 3

Patch a free-running oscillator like Loquelic Iteritas to the audio `In`. Set the drive amounts to taste, then patch an envelope to the `Sum` CV input. This makes Seca Ruina into a VCA and creates a complete voice.

Input voltages

All CV inputs on Seca Ruina use a range of `0 V to 5 V`.

Design notes

Seca Ruina was one of the early distortion module ideas we had in the distortion-of-the-month plan. It was initially a 4HP module and had no CV. We pretty rarely want to make a module larger unless we really think it increases the value and utility of the module a lot. But we got the first prototype in hand and realized that in this case, CV was key to the module. We revised and added the CV jacks, adding 2HP to the footprint.

The next version still didn't perform perfectly so there was a little more circuit tweaking -- it took a few clever workarounds but once we had it, we were happy. That turned into the module you hold today and became the basis for some future modules we have planned.

Warranty

We will repair or replace (at our discretion) any product that we manufactured as long as we are in business and are able to get the parts to do so. We aim to

support modules that have been discontinued for as long as possible. This warranty does not apply to normal wear and tear, including art/panel wear, or any products that have been modified, abused, or misused. Our warranty is limited to manufacturing defects.

Warranty repairs/replacements are free. Repairs due to user modification or other damage are charged at an affordable rate. Customers are responsible for the cost of shipping to Noise Engineering for repair.

All returns must be coordinated through Noise Engineering; returns without a Return Authorization will be refused and returned to sender.

Please contact us (https://noiseengineering.us/pages/contact) if you think one of your modules needs a repair.

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