Noise Engineering Kith Ruina

All-analog tonestack: one-knob saturation/drive circuit into a simple and clean two-band EQ.



Overview

Type	Tonestack
Size	4HP Eurorack
Depth	.8 Inches
Power	2x5 Eurorack
+12 mA	20 mA
-75 w A	20 mA

Kith Ruina's inspiration comes from the world of guitar amps. A drive into an EQ is an extremely common configuration for shaping guitar tone, and we find that it works extremely well for synths as well. Think that amp head you always wanted, but 4 HP. A grungy drive into a pristine EQ gives excellent tone control, and with separate ins and outs for the two sections KR can be configured to fit into any patch you throw at it.

Etymology

Kith -- from Greek kithara: "Guitar" Ruina -- from Latin: "Destruction"

"Destroyer of guitars"

Design Notes

We initially envisioned this module as a slightly different version, Kithara Kharakt, a simple tone stack. We got it on paper, fell in love with the idea, and prototyped it, only to have the whole thing fall completely flat. Literally no one was impressed. We weren't ready to give up on the module, but time marched on and we got busy with other projects. When the Distortion of the Month idea came into focus, we dusted off the Kithara, knowing there was something there that we could salvage. We got back to work.

This was around the time of NAMM 2019, and we ran into friend of NE Joey Blush (Blush Response) and talked about the distortions he liked. He mentioned a load of pedals that inspired him and we were really excited to look more into those. In the end, we made the drive circuit a bit softer than a lot of the distortions we looked at -- it'll still saturate, of course, but the clipping is softer. The EQ stage is pretty. KR was a labor of love -- we believed in this one and we knew with some coaxing, we could get it right where we wanted it. We hope you love it.

Interface

Drive: Amount of overdrive applied to the input signal. At minimum slight saturation occurs, and at max you're driving your input into oblivion.

Tonestack: KR has controls for each EQ section. Detailed frequency response information can be found on the next page.

High: High shelf control. 12 o'clock is neutral, with boost to the right, and cut to the left.

Mid: Changes the frequencies of the Low/High shelf parameters.

Low: Low shelf control. 12 o'clock is neutral, with boost to the right, and cut to the left.

Drive In: Input for KR's drive section.

Drive Out: Output for KR's drive section. This jack is normalled to the Tone In. Normalization can be broken by patching to this jack or the Tone In.

Tone In: Input for KR's EQ section. This jack is normalled to the Drive Out. Normalization can be broken by patching to this jack or the Drive Out.

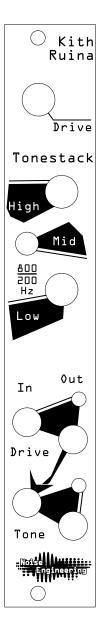
Tone Out: Output for KR's EQ section.

Patch Tutorial

Patch 1: Take a signal (like a kick drum from your Basimilus Iteritas Alter) and patch it to the Drive In. Patch the Tone Out to your mixer. This runs the input signal through both Drive and EQ sections of KR. Play with the different parameters to shape your input signal.

Patch 2: KR has two sets of ins and outs, meaning you can use the sections separately, or change their order. Patch a sound to Tone In, and Drive Out to your mixer. Patch Tone Out to Drive In. The EQ is now pre-distortion, which gives different tonal results. Neat!

Patch 3: A simple EQ can be very useful in a patch, especially when there are multiple layers. Patch a sound to Tone In, and Tone Out to your mixer. This bypasses the Drive section (which can be used elsewhere in the patch) and gives you a very clean EQ to shape your sound and better fit it into your mix.



Special Thanks

Joey Blush

EQ Frequency Response

