Noise Complaint! Quad Normalized Attenuator - User's Manual for Eurorack

Hello and thank you for using the Noise Complaint! Quad Normalized Attenuator for Eurorack modular. We hope you will find it to be good for attenuating stuff!

Technical Specifications (Intellijel 1U)
Width: 22 hp
Depth: 25 mm
Peak Current Draw: 0 mA (Passive)

1. Installing the Noise Complaint!

The Noise Complaint! consumes no power and as such does not need to be plugged into your case's power busboard. The module will fit in any **Intellijel-format** 1U case. Simply place it in the case and mount it using either two diagonal rack screws or screws in each of the four corner holes.

2. Theory of Operation

The Noise Complaint! is a very simple module containing four passive attenuator channels. Because this is a passive module, it is only capable of turning signals down, never of amplifying. It's also worth noting that this module **can't be used as a mixer**, though it can be used as the opposite (in other words, an attenuating Multiple - see "Patch Ideas" section).

Most Eurorack output signals are relatively hot, or high-amplitude, making it a common problem that they need "reining in" in order to most effectively modulate or control parameters which benefit from nuance, such as filter cutoff, FM amount, envelope time, and similar. As such, the Noise Complaint! is designed simply to provide some solid, performance-friendly knobs and switches for precisely dialing in signals.

Please note: The Noise Complaint! is an <u>entirely passive module</u> and will accept and output any voltage and current up to the breaking point of its hardware, without limiting or conditioning it in any way apart from acting as a voltage divider depending on the position of the corresponding knob. As such, it should not be used to process signals outside the power rail voltages of any synthesizer to which it is patched as this could potentially damage an active circuit.

3. Summary of Functions

Level A-D (knobs)**:** Controls the level of the corresponding input channel.
Mute A-C: Interrupts the Input of the corresponding channel and pulls the Output to 0 volts. Does not affect the Normalization of one input channel to the next.
In A-D: Input to each Attenuator channel. If IN D is left unpatched, its jack will be normalized to IN C. IN C is normalized to IN B, and IN B is normalized to IN A. Therefore, if only IN A is patched, this input signal will be routed to IN B, C, and D as well.
Out A-D: Channel Outputs post-Attenuation and Mute, if applicable.

4. Patch Ideas

"Attenuating Multiple"
Patch a signal to IN A. If IN B-D are left unpatched, LEVEL B-D and MUTE B-C can be used to provide a different level output of the signal present at IN A. The Normalization to any channel can be broken by

patching a signal to the corresponding IN, allowing for the creation of two separate two-channel Attenuating Multiples for example.

"Meta Controller"
Patch a signal to IN A, then patch OUT A to IN B. Patch OUTs B-D to sensitive parameters in your patch and adjust LEVELs B-D to control the "window size" of each parameter to be modulated. When LEVEL A is adjusted, it will provide overall level control for each of the other Channel OUTs, and MUTE A can be used to mute all other Channels.