Noise Engineering

Quant Gemi

Quad octave switch and mult

Overview

Type	Quad octave switch/mult
Size	4HP Eurorack
Depth	.8 Inches
Power	2x5 Eurorack
+12 mA	40mA
-12 mA	40mA

Quant Gemi is a small transposition/split utility. Each channel can be used to transpose a sequence up 0, 1, or 2 octaves. The channels are also normalled together so the same sequence can be split up to 4 ways and transposed separately.

Etymology

Quant -- from Latin *quantus*: “how many”
Gemi -- from Latin *gemino*: “to pair or double”

“Multiple doubling”

Input & output voltages

QG is designed to work with the widest range of voltages possible, so anything within -8v to +8v should work fine, if you really need a 16-octave melody in your patch somewhere.

Power

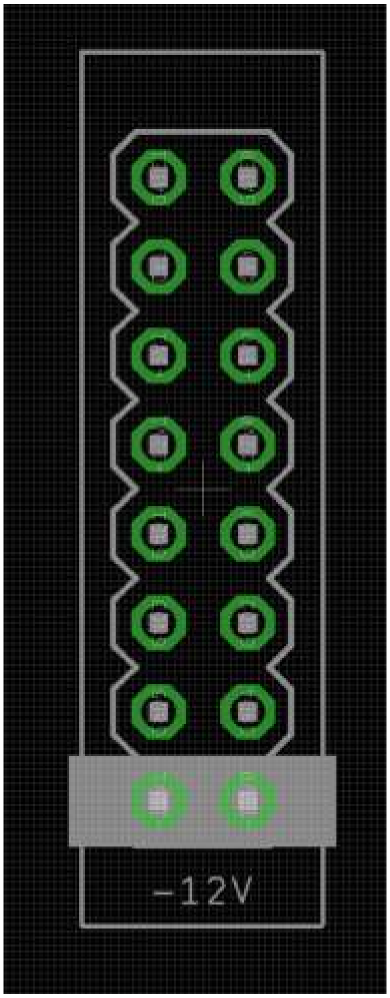
To power your Noise Engineering module, turn off your case. Plug one end of your ribbon cable into your power board so that the red stripe on the ribbon cable is aligned to the side that says -12v and each pin on the power header is plugged into the connector on the ribbon. Make sure no pins are overhanging the connector.

Line up the red stripe on the ribbon cable so that it matches the white stripe and/or -12v 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.



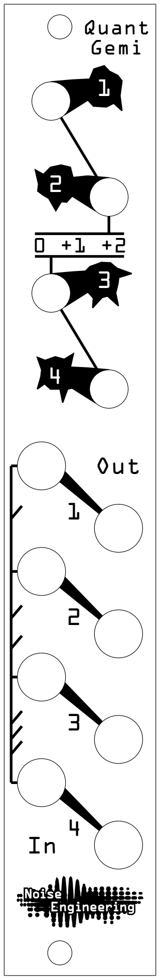
Warranty

Noise Engineering backs all our products with a product warranty: we guarantee our products to be free from manufacturing defects (materials or workmanship) for one year from the date of the original retail purchase (receipt or invoice required). The cost of shipping to Noise Engineering is paid by the user. Modules requiring warranty repair will either be repaired or replaced at Noise Engineering's discretion. If you believe you have a product that has a defect that is out of warranty, please contact us.

This warranty does not cover damage due to improper handling, storage, use, or abuse, modifications, or improper power or other voltage application.

Interface

Switches 1-4:
Adds 0, 1, or 2 volts (octaves) to the input CV.
Inputs 1-4:
CV inputs. These are normalled together so QG can be used as a mult. Patching to a second input breaks the normal.
Outputs 1-4:
CV outputs. Transposed sequence comes out here!



Patch Tutorial

Patch 1:
Patch a pitch sequencer (like Mimetic Digitalis) to QG's first input. Patch the output to an oscillator. Use the first switch to transpose the sequence.
Patch 2:
QG can be used as a mult. Patch the additional outputs to other pitch CV destinations and use the switches to transpose each channel separately. This is useful for a number of things; route the same sequence to both pitch inputs of a complex oscillator like Loquelic Iteritas and use QG's octave switches to change timbre. Similarly, patch one channel to an oscillator and one channel to a keytracking filter's 1v/8va input and use QG's transposition to change timbre in a subtractive patch.
Patch 3:
Using a precision adder like Quantus Pax, QG can be used to transpose multiple sequences. Take the outputs of QP and route them to channels 1-4 on QG to transpose them separately. Conversely, patch an output of QG to one of QP's xpose inputs to transpose multiple sequences at once.

Design Notes

The QG was a pretty simple design dreamed up when we decided to make the QP and several other modules that we have in the pipeline. The schematic was pretty simple and we had a mockup pretty quickly. The first version was pretty spot on except for two things: we didn't think to normal the jacks, and the switches were not ideally laid out. We revised the hardware, making both of these changes, and voila!