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Integra Funkitus

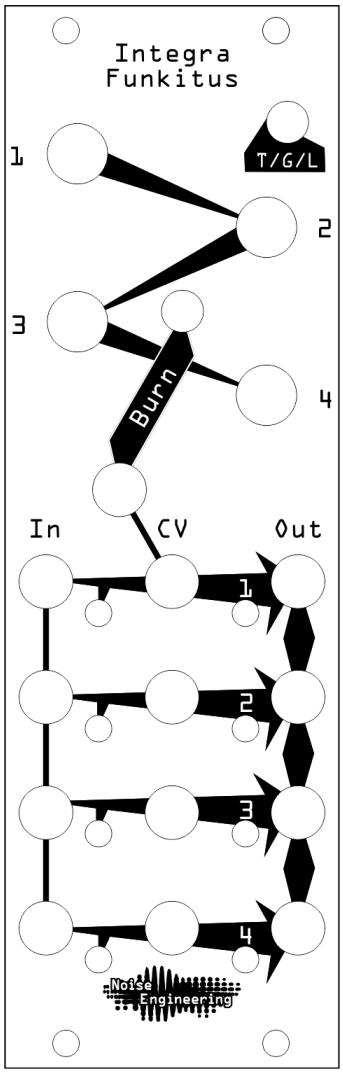
Four-part rhythm modifier

Overview

Integra Funkitus takes up to four input rhythms and combines and modifies them into rhythm outputs. There are three modes: two based on probability and one on generalized logic combinations.

- **Type**: Rhythm Modifier
- **Size**: 8HP Eurorack
- **Depth**: 0.8 inches
- **Power**: 2x5 Eurorack
- **+12 V**: `50 mA`
- **-12 V**: `11 mA`

Interface



Part input 1-4

These are the four gate input channels. Any gate over `2 V` will trigger the input.

Part output 1-4

These are the four gate output channels. They output `6 V` gates.

Mode switch

Selects the mode by which the inputs will be combined. Mode options include `Trigger`, `Gate`, or `Logic`. How each function affects output is described below.

Trigger Mode (T) Modification Knob 1-4

In `Trigger` Mode, the knobs determine the probability that an input gate will pass through to the output channel. Any time a rising edge is detected a random test with probability based on the position of the knob is performed possibly letting the rising edge through. The falling edge will always be emitted.

Gate Mode (G) Modification Knob 1-4

In `Gate` Mode, the knobs select the probability that an edge will pass through; the die is rolled for both rising and falling edges. This produces much longer-lasting gate pulses than Trigger Mode as falling edges can be "consumed," leaving the gate high until a subsequent falling edge passes the probability test.

Logic Mode (L) Modification Knob 1-4

In `Logic` Mode, the knobs choose which input channels are combined into the similarly numbered output channel. When the knob is fully counterclockwise, the output channel will match the input channel. As the knob is turned the other parts are combined into the output channel. When fully clockwise, the knob acts as a channel mute.

Rhythm Modification 1-4 Jack

These are CV inputs for the modification knobs. When patched, the knobs act to attenuate the signal.

Burn

`Burn` combines all inputs into all outputs, creating a sort of instant fill.

Patch tutorial

Feed up to four rhythms from a rhythm module (such as Numeric Repetitor) into the inputs.

Connect the gate outputs to percussion modules, then turn the knobs to control how the rhythms are combined and modified.

Design notes

Integra Funkitus was a simple answer to a simple but burning question:

How can I dynamically arrange rhythms produced by Zularic Repetitor and Numeric Repetitor? There are a lot of logic combiners that can do cool variations so why not combine all possible or gate combinations for four inputs and address them with a knob?

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