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Integra Solum Manual

Dual multi-mode clock divider / trigger generator

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Overview

Integra Solum is a dual rotating clock divider with 16 trigger outs in two sets of eight. The two sides can be clocked or reset independently or a single input and/or reset normals to both sides. Integra Solum switches between three modes and an encoder adjusts the offset of each side. Bonus modes add randomization options.

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

90 mA

- **-12 V:**

35 mA

Interface

Clock

The **Clock** input responds to a rising edge at about 3.3 V . The inputs are normalled to each other, so connecting one clock will drive both divider sections; alternatively, each section can be clocked individually. The outputs are updated with a latency of about $70\text{ }\mu\text{s}$.

Reset

Optional inputs to the reset jack reset the state of the divider. While depressed, the **Reset** button pauses the processing of all clocks. Once released, it resets the input on the first clock following release of the switch.

Shift

This knob / cv will "rotate" the outputs: jack 2 becomes the first output in the cycle, followed by jack 3, etc.

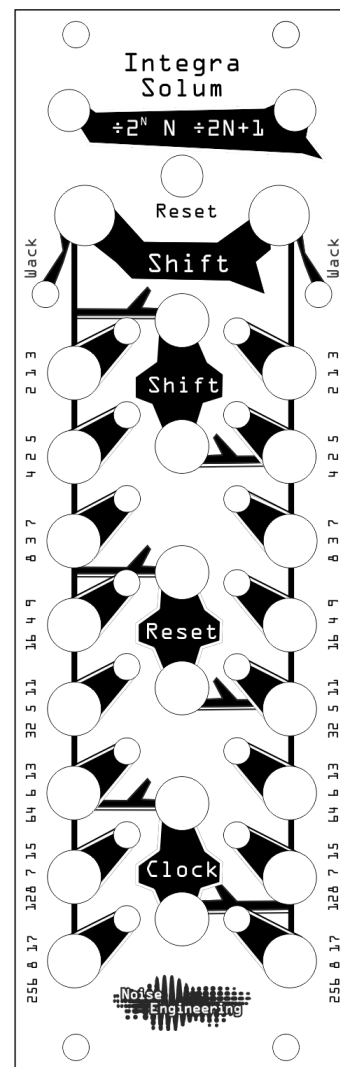
Mode ($/2N$, N , $/2N+1$)

The **Mode** switch sets the divider mode. There are 3 basic modes: divide by powers of two ($/2N$), sequence of eight (N), and divide by odd numbers ($/2N+1$).

Wack mode

To toggle between **Wack** mode and regular mode on one side, depress and hold **Offset** knob and then press **Reset**. To enter **Wack** mode on both sides simultaneously (if both sides are in regular mode), depress and hold both knobs, then press **Reset**.

In **Wack** mode, each of the modes behaves differently:



- `/2N`: This setting becomes probabilistic divide by two. In this mode, there is a 50% chance that a trigger will generate at each step. In this mode, clocks change, on average, the same as in `/2N`, but randomly so.
- `N`: In this setting, a single random trigger is generated at each step.
- `/2N+1`: The 8 triggers outputs are activated independently at each step: for every input rising clock edge, each output has a 50% chance of going high (triggering).

Patch tutorial

Patch a clock to either `Clock` input on Integra Solum. It will normal to both sides. Patch the outputs to trigger and/or CV inputs on other modules. Play with `Offset`s and switches to get variation in trigger order.

I/O voltages

Integra Solum triggers at approximately `3.4 V`. Outputs range from `0 V to 5 V`.

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