Euclid



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Description

Euclid is a rhythmic pattern generator based on ideas originally presented by Euclid, the Greek mathematician. The Euclidean algorithm can be adapted to create rhythms by taking the total number of active steps in a sequence, and then distributing them across the entirety of the pattern. This creates cyclical rhythms that are immediately musical and can be used for everything from EDM to IDM. Bring your patches full circle with Euclid.

- Euclidean pattern generator
- Up to 16 steps
- CV over pattern generation
- Instantly musical

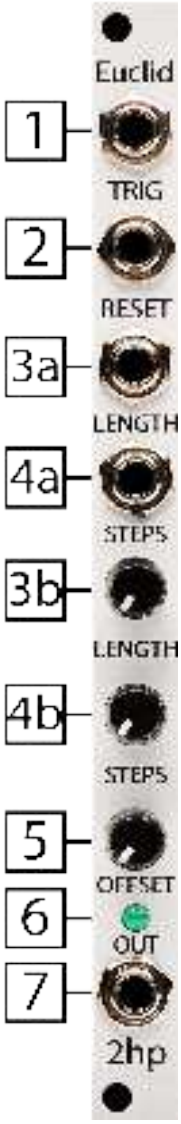
Installation

To install, locate 2 HP of space in your Eurorack case and confirm the positive 12 volts and negative 12 volts sides of the power distribution lines. Plug the connector into the power distribution board of your case, keeping in mind that the red band corresponds to negative 12 volts. In most systems, the negative 12 volt supply line is at the bottom. The power cable should be connected to the module with the red band facing the front of the module.

Specifications

- Size: 2 HP
- Depth 42mm
- Current Consumption:
  - +12V: 21mA
  - -12V: 2mA

Diagram


Euclid
1
TRIG
2
RESET
3a
LENGTH
4a
STEPS
3b
LENGTH
4b
STEPS
5
OFFSET
6
OUT
7
2hp

Functional Overview

1. Trig Input

A trigger or gate signal present at this input will advance the Euclidean pattern by one step

2. Reset Input

A trigger or gate signal present at this input will reset the Euclidean pattern to its first step

3. Length

Sets the length of the Euclidean pattern between 1 and 16 steps

3a. Length CV

CV input for Length control

Range: 0V to +5V

Control voltage is added to the knob position

3b. Length Knob

When fully left, the pattern will be 1 step long

When fully right, the pattern will be 16 steps long

4. Steps

Sets the number of active steps to be distributed across the Euclidean pattern

The control is scaled between 1 and the current length setting

4a. Steps CV

CV input for Steps control

Range: 0V to +5V

Control voltage is added to the knob position

4b. Steps Pot

When fully left, there will be 1 active step

When set to center, there will be half as many active steps as there are steps in the sequence

When fully right, the entire Euclidean pattern will be filled

5. Offset Pot

Controls the offset of initial step of the Euclidean pattern

When fully left, the sequence will not be offset

When fully right, the sequence will be offset by 1 less step than the current length.

6. Output LED

Indicates the presence of signal at the OUT jack

7. Trigger Output

+5V trigger output when the Euclidean pattern advances to an active step

Pulse Width: 6ms