Pluck

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Description

Pluck is a Karplus-Strong Algorithm based string synthesizer with an expressive range of sounds. Dial in the decay time and dampening controls to transform a harp into a grungy half-strung bass. Four voice polyphony allows for long resounding melodies and harmonies to be created with only a single module.

- Four Voice Polyphony
- Karplus-Strong Algorithm based implementation
- 1V/Octave tracking

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: 83.45mA
  - -12V: 4.5mA

Diagram

Functional Overview

1. Trig

Trigger input will cause a new note to be created with the current state of the knobs and CVs.

Four voices can be synthesized at once, and the oldest will be replaced when a new trigger is detected.

2. Damp

Changes the size of the string independent of pitch, dampening harmonics, and changing the tone of the output.

This only affects the generation of new notes.

2a. Damp Knob

When fully left the string will be as small as possible, dampening the most harmonics.

When fully right the string will be as large as possible increasing the harmonic content of the string.

2b. Damp CV

Bipolar CV is added to the knob position.

Input range: -5V to 5V

3. Decay

Sets the duration of the pluck sound for new notes that are generated.

The duration of the note will also have an effect on the harmonics produced, and for how long they will sound.

This only affects the generation of new notes.

3a. Decay Knob

When fully left the new note will be the shortest possible.

when fully right the new note will be the longest possible.

3b. Decay CV

Bipolar CV is added to the knob position.

Input range: -5V to 5V

4. V/Oct CV

1V/Octave input added to the pitch knob position.

5. Pitch Knob

Sets the fundamental frequency of the string sound.

The pitch control remains active for the most recently generated note providing the opportunity for vibrato, slew, and easier tuning while a note is ringing out.

6. Output

6a. Output LED

Visualization of the amplitude of the output.

6b. Output

10Vpp audio output signal