

# Nervous Squirrel – Zeno's Paradox

---

- [Manual PDF](#)
- 

[Zeno's Paradox Manual \(PDF\)](#)

---

## Zeno's Paradox Eurorack Module – Cheat Sheet

---

A unique, ultra-high division clock divider and audio mangler.

---

### Quick Start

---

1. **Patch a clock or audio source** into **CLOCK IN** (>1V pulses work, max input  $\approx$  18kHz).
  2. **Patch from any OUTPUT** to send a divided clock (or audio) elsewhere in your system.
  3. **Use RESET** to sync/zero all divisions.
  4. **Manual Reset Button:** Click to reset/hold all outputs.
- 

### Inputs, Outputs, and Controls Reference

---

#### Inputs

- **CLOCK IN**
- Type: CV or Audio
- Voltage: Any signal with >1V threshold

- Range: Up to  $\approx$ 18kHz
- Accepts: Audio, pulse wave, white noise, gates, clocks

#### • **RESET IN**

- Type: Gate/trigger
- Action: Resets divider chain on rising edge

## Manual Controls

- **MANUAL RESET BUTTON**
- Action: Push to (re)start/halt counters (hold to hold outputs low)

## Outputs

- **30 Output Jacks**
  - Arrangement: Each output is half the frequency of the previous (binary ripple counter)
  - Output Level: 7V square pulse
  - Divisions: /2, /4, /8, ... down to /1,073,741,824 (a billion)
  - Each output LED indicates activity
- 

## Usage Tips

- **Basic Clock Divider:** Great for events at rare intervals (last LED flashes every 34 years at 1Hz!)
  - **Sub-Oscillator:** Feed in any repeating audio (produces 1V/octave descending square subharmonics)
  - **Audio Mangler:** White noise gives a "filtered noise" cascade; drums sound crunchy/lo-fi divided.
  - **Extreme Timing:** Chain multiple modules for astronomical divisions (reset inputs let you sync up).
-

# Technical Specs

---

- **Width:** 14HP
  - **Depth:** 35mm
  - **Current:** +12V 225mA (all LEDs on); -12V 16mA
  - **Output Voltage:** 7V
  - **Panel:** 2mm aluminum
- 

Full manual and purchase info: [https://nervoussquirrel.com/zenos\\_paradox.html](https://nervoussquirrel.com/zenos_paradox.html)

---

Generated With Eurorack Processor