## Overview

| Type | Attenuator |
| :---: | :---: |
| Size | 4HP Eurorack |
| Depth | . 8 Inches |
| Power | 2x5 Eurorack |
| +12 mA | 70 mA |
| -12 mA | 30 mA |

Yep, it's an attenuator. With a fancy name! And LEDs!

## Etymology

Sinc -- from Old English sinc: treasure and greek clastic: easily removable
Defero -- from Latin: to slope down
"Portable treasure reduction"

## Input \& output voltages

Sinc Defero is rated to work with voltages from -10 v to +10 v .

## Patch Tutorial

Patch a single CV signal into input \#1. Patch the corresponding output to an input on an oscillator, for example, the Basimilus Iteritas Alter. Turn the attenuator to turn the CV level up and down.

Add patch cables to other outputs and send them to other inputs on BIA. The single input is sent to all outputs.

Add a second signal to input 3 . The signal on input 3 is now sent out of outputs 3 and 4.

## Interface

In 1-4: CV Inputs. Inputs are circularly normaled so a single input can be sent to all outputs or as few as you like.

Out 1-4: Buffered outputs.
Attenuators 1-4: Attenuators for each channel. Fully CCW mutes a signal. Indicator LEDs show the incoming and outgoing signals, with green for positive voltage and red for negative.

## Design Notes

SD was one of a suite of really simple utility modules we came up with during a day of planning. While we were really trying to work on some bigger things that we wanted in our line---like filters and effects---we just kept having ideas that we thought would be just so helpful if we had them with the things we were talking about. By the end of the day, we had designs for three simple products that we'd never discussed before and had prototypes ordered by the end of the week.

This module was meant to fill the hole we saw in the market for a buffered attenuator. While passive attenuators abound (and we use the heck out them), the drop in voltage they sometimes cause can be problematic, and we wanted something that would be active and give some visual feedback. Plus, it wouldn't be NE if it didn't have blinkenlights!

