The Circuit Slices ADSR module is a re-triggerable envelope generator for modular Eurorack-compatible synthesizers. This popular module has been revised (part number CS017n) with a standard 6 HP front panel.

Specifications for the CS ADSR, part number CS017n
Attack time: 1mS to over 5s
Decay time: 1mS to over 12s
Sustain level: 0 to 10V
Release time: 1mS to over 12s
Output level: 10V
Gate threshold: 2.5V
Power: +12VDC @ 3mA, -12DC @ 2mA
Depth: 35mm (with power cable plugged in)
Panel width: 6 HP

Features for CS ADSR, part number CS017n*
"TRIG" input for re-triggered attacks
Logarithmic potentiometers for A, D, R
High-quality anodized aluminum panel
User selectable power-bus 'gate' using PCB shorting jumper (J4)
Low power consumption
Includes power cable and case screws
*Revised "n" version now with a standard narrow 6 HP width

Installation

The ADSR module is ready to install in your Eurorack. Simply mount the panel using the supplied screws and route the ribbon-cable power connector to your power bus.
**Be careful making the connection to your power bus** and double check your connection before applying power. The red stripe on the ribbon cable must be toward the -12V pin on the power bus.

**WARNING:** Reversed power *may* damage the module and your power supply.

The ADSR module includes a printed circuit board jumper option that enables the use of the power bus GATE signal. See "The Bus Gate" paragraph below.

The Trigger Input

A Gate input alone will produce the typical ADSR response at the Output:
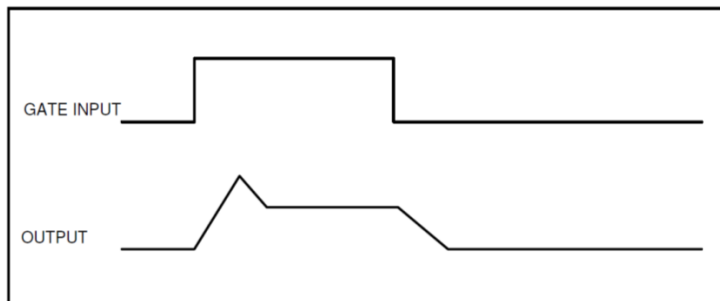
A Gate input accompanied with multiple triggers will produce the following response:
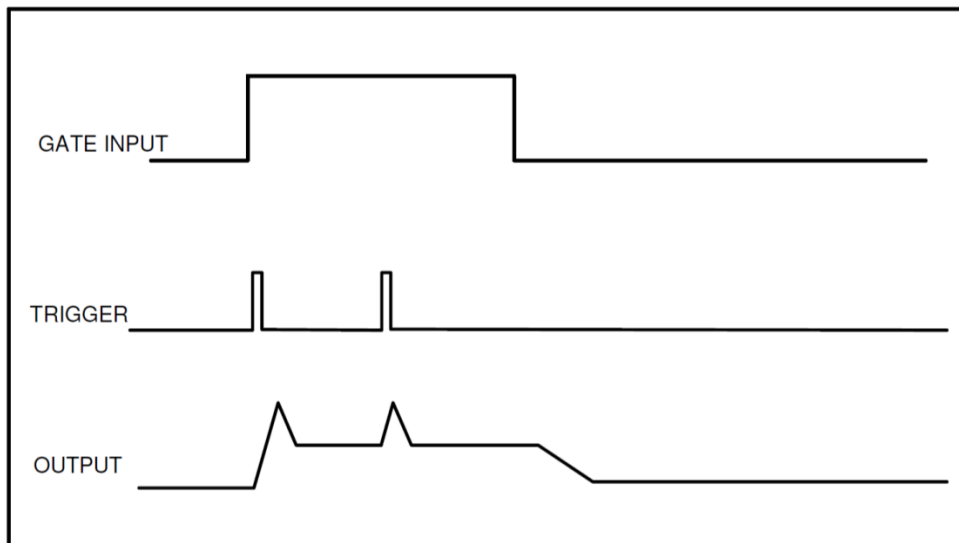
Some MIDI-CV interfaces will produce a trigger output with every Note-On event, even as the gate signal stays high throughout. This would normally happen when playing "legato" on a keyboard -- when playing a series of notes and only releasing the last note *after* the next is played. This gate and trigger system was typical of some older analog synthesizers.

If you don't have a keyboard or MIDI-CV interface that produces a trigger output, you will still find the re-trigger input useful. As an example, imagine using a master or MIDI clock signal in your patch to synchronize a sequence. The clock signal could be patched into the ADSR's TRIG input. This would produce an ADSR output with an initial attack, when the gate is high, and more attacks for every clock pulse, until the gate goes back low. Interesting modulation-like effects -- or multiple attacks -- would be produced and the effect would be synchronized to the over-all clock.

The Bus Gate

The Circuit Slices ADSR module can be triggered from the GATE signal on the Eurorack power connection. The standard power bus includes, along with power, CV and GATE. If you would like to have your ADSR module controlled from the system bus, simply install a shorting jumper across the two pins of header J4. This header is found on the circuit board, below the power connector.

This module is warranted for one year with parts, under normal use – not including the application of reverse or over-voltage power by customer. Return shipping to Circuit Slices from customer not included. Return to Circuit Slices, LLC for repairs. Circuit Slices, LLC reserves the right to replace the module if necessary. Please keep your receipt / packing slip for warranty information.

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