ADSR ENVELOPE

Manual

MOSAIC

CONTENTS

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THINGS TO KNOW

What is 1U?

1U is a measurement of height in the 19" rackmount standard. Eurorack modules adhere to 3 rack units, or 3U. Mosaic tiles adhere to 1 rack unit in height, and require appropriate rails to mount in a rack or modular case.

What 1U format are Mosaic modules?

We ship our modules with Intellijel 1U formatted front panels. If you use the Pulp Logic format, don't worry! You can purchase Pulp Logic replacement front panels on our Replacement Panels page.

Mosaic Color Guide

Each color indicates a function across the Mosaic lineup.

Green: Audio Signals

Purple: Gate Signals

Blue: Control Voltage

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OVERVIEW

Description

Shape sound sources and modulate parameters with the dedicated ADSR envelope. This four stage envelope gives individual control over each stage, allowing for complex, yet detailed modulation over filters, VCAs, effects, and more. Patch in punchy synth stabs, sweeping pads, and powerful sonic transformations with the ADSR.

- Four stage envelope

- 10V range for maximum control potential

- Ergonomic layout

Tech Specs

- Width: 14HP

- Depth: 38mm

- Front Panel: Ships in Intellijel format. Pulp Logic replacement panels available [here](#).

- Current Consumption: +12V = 24mA, -12V = 7mA

Installation

To install, locate space in your Eurorack case for your 1U module, 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.

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DETAILS

How It Works

An envelope generator, such as ADSR Envelope, is a form of triggerable modulation with control over the level over the triggered voltage cycle. In this case, ADSR gives you control over Attack, Decay, Sustain, and Release which are elaborated on below. The envelope begins when it receives a high gate or trigger signal, and ends when the gate goes low and the release stage is complete.

Depending on how you shape your envelope, you can create brief moments of modulation, or long sweeping changes. Envelopes are commonly used to modulate signal amplitude and filter frequency, but can be sent to anything that receives control voltage (CV). Send it out everywhere, and find where ADSR fits best for you!

Note: Common in modular synthesizers, the attack, decay, and sustain stages are only active when the gate is high. Once the gate is low, the envelope will advance to the release stage.

Diagram
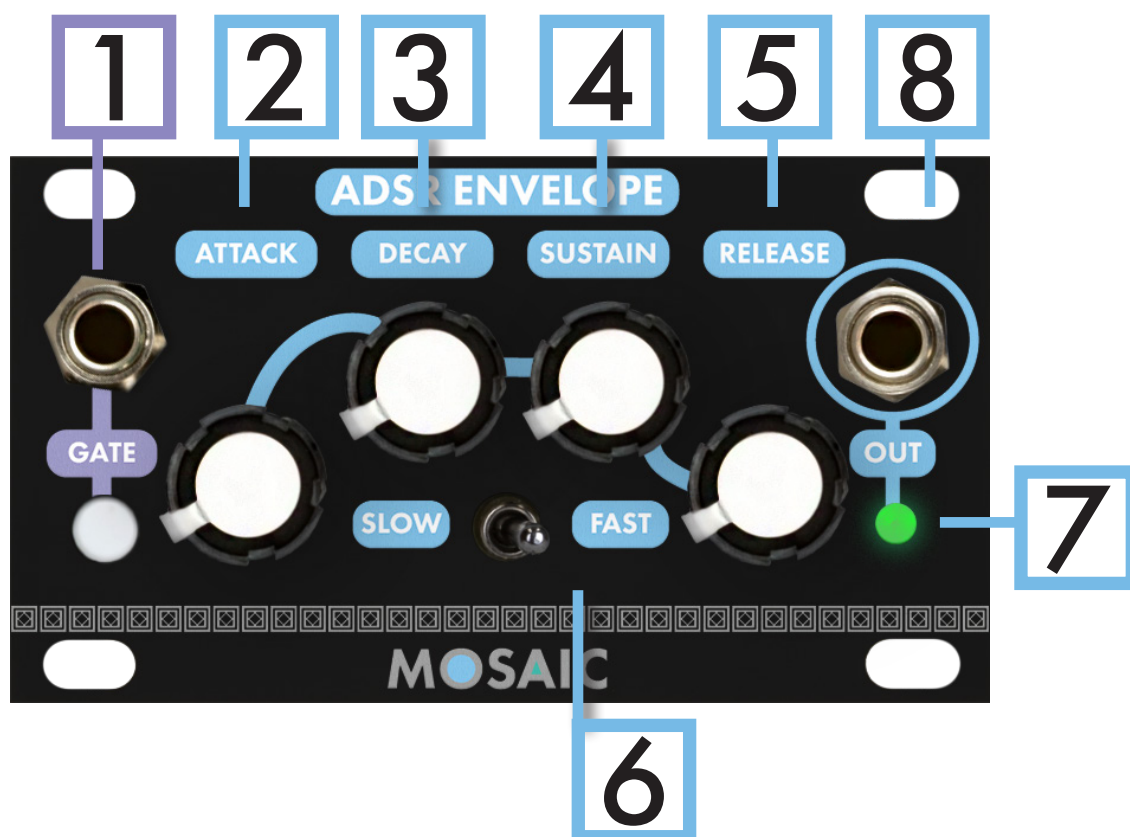
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DETAILS

1. Gate Trigger

Gate Input. An envelope will trigger when either; the Gate input receives a gate signal or; the Gate button is pressed.

Threshold: 2.5V

2. Attack

Controls the attack stage of the envelope. Attack will be as short as possible when the knob is fully left, and slowest when the knob is fully right.

3. Decay

Controls the decay time of the envelope. Decay will be as short as possible when the knob is fully left, and slowest when the knob is fully right.

4. Sustain

Controls the sustain level of the envelope. Sustain is at 0V when the knob is fully left, and 10V when the knob is fully right.

5. Release

Controls the release time of the envelope. There is immediate release when the knob is fully left, and longest when the knob is fully right.

6. Slow/Fast Envelope Mode

Toggles between the slow and fast envelope ranges.

Fast Range: 0.54ms - 5s per stage
Slow Range: 5ms - 30s per stage

7. Envelope LED

VIsual indicator for the envelope amplitude.

8. Output

Envelope Output. Range: 0V - 10V

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