

ASR DUAL ENVELOPE GENERATOR / LFO

User Manual, 2024



About

The ASR is a highly versatile module designed to provide two channels of precise modulation control for modular synthesis.

At its core, the module functions as a dual attack-sustain-release (ASR) envelope generator, offering precise control over the shape and timing of modulation signals. Both envelopes can be triggered by a single gate input, with the second channel's gate input normalized to the first, ensuring synchronized modulation on multiple parameters.

In addition to envelope generation, each channel includes a mode switch that transforms it into a Low-Frequency Oscillator. In LFO mode, the attack and release controls are repurposed to define the rise and fall times of the cyclic waveform. This allows users to generate evolving modulations with variable symmetry and timing, perfect for adding motion to patches.

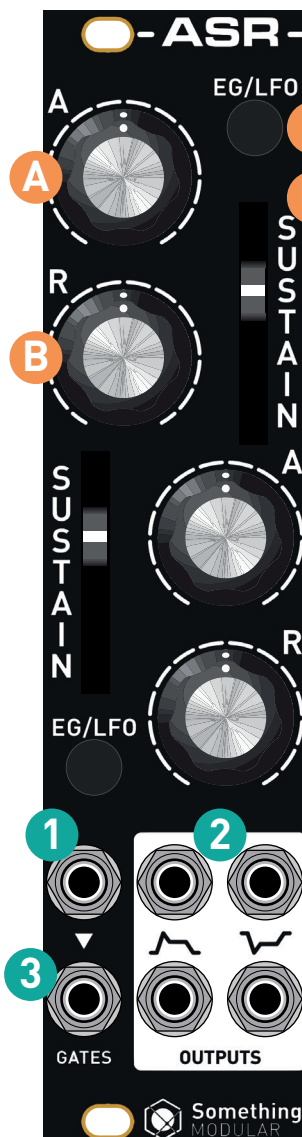
Whether used for traditional envelope shaping, synchronized dual modulation, or creative LFO experimentation, ASR is a powerful module. Its combination of simplicity and flexibility makes it an essential addition to any Eurorack system.

Features

- Maximum Attack or Decay time : Up to 20 s.
- Second channel's gate normalized to the first.
- Mode Switch between ASR/LFO for both channel.
- LFO range from 58 ms (17 Hz) to 39 s (25,6 mHz).

Specifications

- Module width : 6 HP
- Module depth : 33mm
- Power Consumption : 13mA at +12V / 13mA at -12V
- Reversed polarity protection



Controls

A. ATTACK knob

Sets the rise time of the envelope from 0V to peak voltage.

B. RELEASE knob

Determines the time it takes for the envelope to decay back to 0V after the gate signal ends.

C. MODE Push Button

Switch between modes:

- ASR: The channel behaves as a standard envelope generator, with attack, sustain, and release phases.
- LFO: The attack and release knobs now control the rise and fall times of a looping waveform. The sustain slider is inactive in this mode.

D. SUSTAIN Slider

Adjusts the level at which the envelope holds after the attack phase, sustaining as long as the gate signal remains high..

Inputs & Outputs

1. Channel 1 GATE Input

Gate input controls the triggering of the envelope. A trigger will trigger the Rise phase then the Fall phase.

2. Channel 1 Outputs

On the left, Positive Output of the envelope (or LFO).
On the right, inverted copy of the envelope Output.

3. Channel 2 GATE input

Gate input of the second channel. When nothing is plugged in, this input is normalled to the channel 1 GATE input.