

# SOVIET

## WAVESHAPER / CROSSFADER

User Manual, 2021



### About

SOVIET is an analog 8HP Eurorack **waveshaper** inspired by the outstanding soviet synthesizer: **ALISA-1377**. Waveshapers generate **richer harmonic overtones** from simple waveforms such as sine, saw or triangle.

SOVIET is based around a **high gain VCA** that feed into the waveshaping stage making this module capable of **subtle to extreme** tone shaping. The circuitry of this module allows you to have voltage control over **any parameters** such as gain, symmetry and feedback.

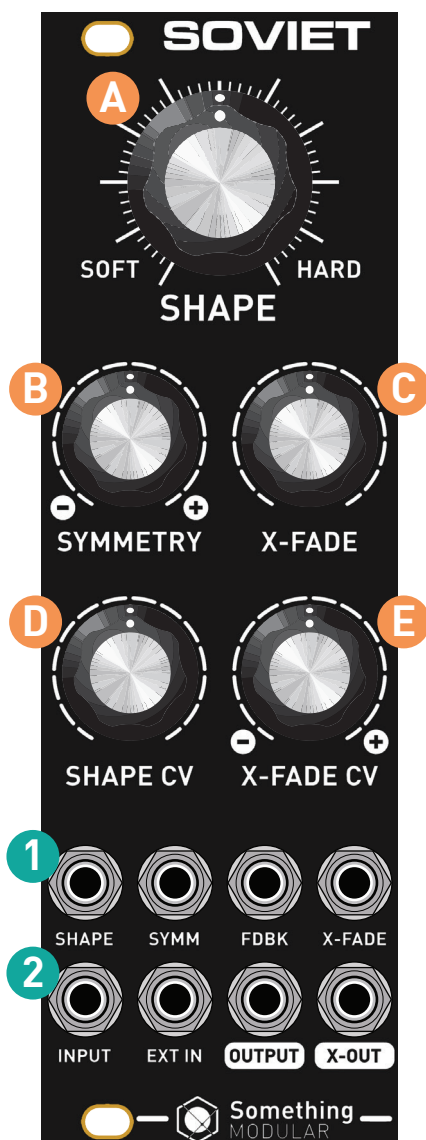
Besides the waveshaping section, **SOVIET** integrates a **voltage controlled crossfader** that can act either as a dry/wet crossfader or as a totally independent crossfader by using the external input.

### Features

- Fully Analog Waveshaper.
- CV control over anything : gain, symmetry, feedback.
- Voltage Controlled Crossfader for Dry/Wet mixing.
- Waveshaper and Crossfader can be used independently.

### Specifications

- Module width : 8 HP
- Module depth : 33mm
- Power Consumption : 35mA at +12V / 35mA at -12V
- Reversed polarity protection



### Controls

#### A. SHAPE knob

Sets the amplification of the input signal before entering the folding stage. SHAPE goes from subtle (SOFT) to extreme tone shaping (HARD).

#### B. SYMMETRY knob

Controls the offset voltage added to the audio input.

With a jack plugged in the SYMM CV, this knob acts as a bipolar attenuator for the incoming CV input.

#### C. CROSSFADE knob

Fades between INPUT (CCW position) and EXT IN (CW position). With nothing plugged in EXT IN, it fades between INPUT and the waveshaper output.

#### D. SHAPE CV knob

This knob is a classic attenuating potentiometer associated with SHAPE CV input.

#### E. CROSSFADE CV knob

This knob is an attenuating potentiometer associated with X-FADE CV input.

### Inputs & Outputs

#### 1. First row : from left to right

- SHAPE CV : Amplification of the input signal.
- SYMM CV : Offset voltage added to the input.
- FEEDBACK CV : Amount of output voltage back to the input.
- X-FADE CV input : Fades between INPUT and EXT IN.

#### 2. Second row : from left to right

- INPUT : Audio input
- EXT IN : External audio input, the jack is normalled to the waveshaper output.
- OUTPUT : Output of the waveshaper.
- X-OUT : Output of the crossfader.