

FLAME SIDECHAINER

EURO RACK MODULE

Version 1.00

last version: 02.04.2026



- 2..... **TABLE OF CONTENTS**
- 2..... **SHORT DESCRIPTION**
- 3..... **MODULE OVERVIEW**
- 4..... **CONNECTIONS TO THE MODULAR SYSTEM**
 - Doepfer Power connector
 - Inputs/Outputs: Trigger/Gate, Audio/Signal, CV
- 5..... **HOW IT WORKS**
 - Overview
 - SHAPE
 - INTENSITY
- 6..... **APPENDIX & TECHNICAL INFORMATIONS**
 - Technical details
 - Warrenty
 - Terms of production
 - Disposal
 - Support
 - Acknowledgment

Thank you for purchasing the FLAME SIDECHAINER eurorack module!

The SIDECHAINER is a slim 3HP module for easily creating ducking effects (e.g., rhythmic pumping). It features an integrated stereo audio VCA, an envelope generator, and a trigger/gate input. The envelope, triggered by the trigger/gate pulse, attenuates the stereo audio signal, which passes through the VCA in a 1:1 manner.

The effect can be easily adjusted with a control for the intensity of the attenuation and a control for the envelope length. The envelope has a fixed shape but its length is adjustable. It is suitable for tempos between approximately 60 bpm and 180 bpm. The intensity control acts as an attenuator and can influence the effect of the envelope from zero (no effect) to maximum.

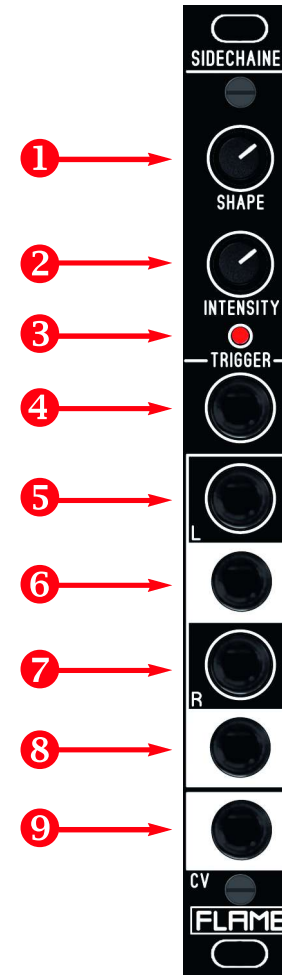
The control voltage generated by the envelope generator is available at a separate, additional CV output and can be used for other modules. The control voltage is independent of the intensity control.

The module has two normalized audio/signal input jacks, L (mono/left) and R (right), as well as two audio/signal output jacks, L (left) and R (right). The signal path is designed for +/-5V levels and is passed through 1:1. The signal path is DC-coupled and can therefore also be used for control voltages.

The front panel is printed differently on both sides for 180-degree mounting.

MODULE OVERVIEW

- 1 Envelope Length Control
- 2 Envelope Intensity Control (Attenuator)
- 3 LED Trigger/Gate
- 4 Trigger/Gate Input (0/+5V)
- 5 Left/Mono Audio/Signal Input (max. $\pm 5V$)
- 6 Left Audio/Signal Output (max. $\pm 5V$)
- 7 Right Audio/Signal Input (max. $\pm 5V$)
- 8 Right Audio/Signal Output (max. $\pm 5V$)
- 9 Envelope CV Output (approx. +8V to 0V)



CONNECTION TO THE MODULAR SYSTEM

DOEPFER POWER CONNECTOR

The module is delivered with a ribbon cable connected to the Doepfer bus. The color-coded wire (usually red) represents minus 12 volts.

It is important to ensure that the polarity is correct when connecting. If the module is accidentally connected incorrectly, protective diodes prevent the module from being destroyed immediately (but it cannot be ruled out that damage may still occur).

Therefore, be careful: Check the connection several times before switching on for the first time!

The module's maximum current consumption at 12V is approx. +30mA / - 10mA. The 5V supply is not used.

TRIGGER / GATE INPUT

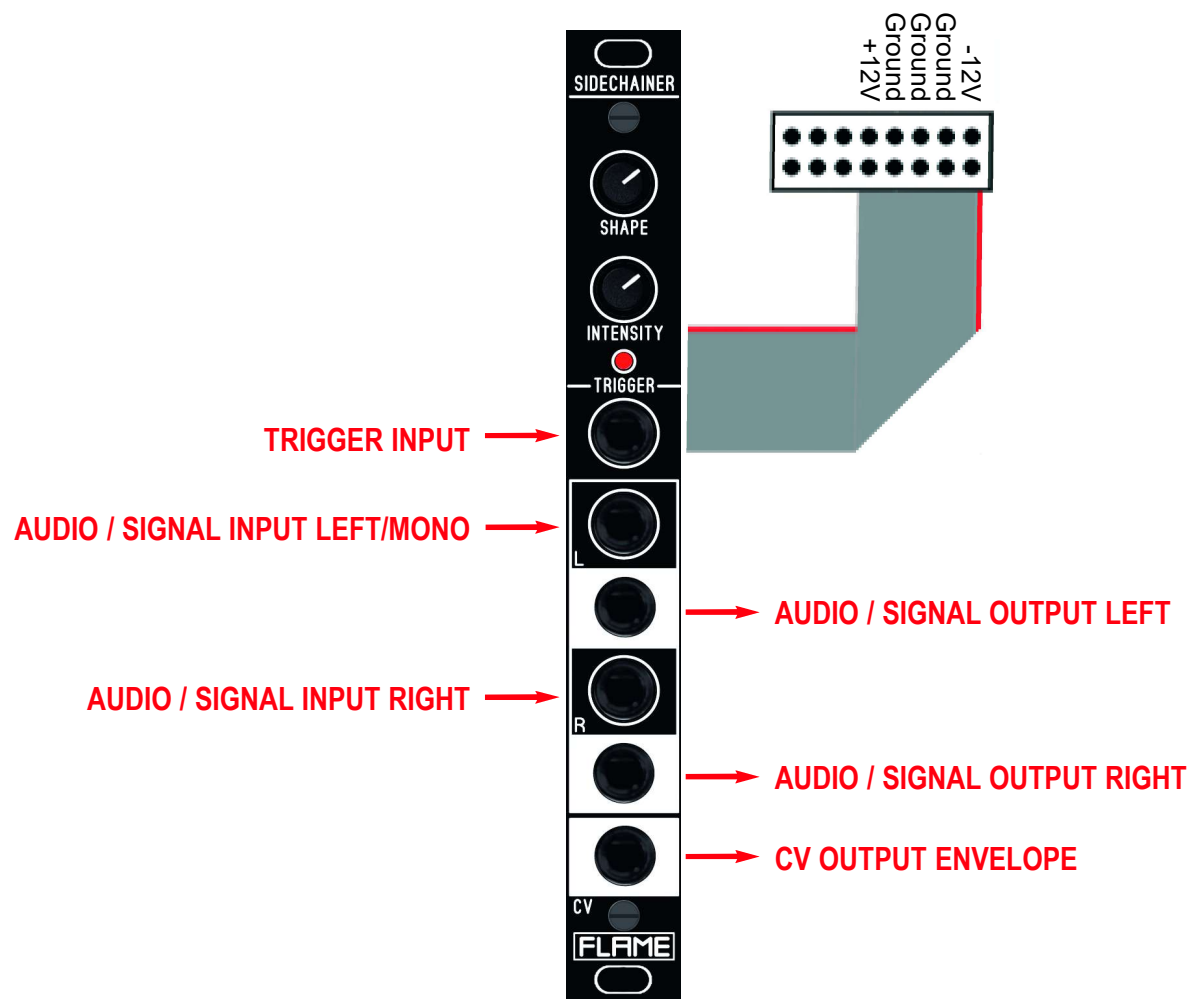
The trigger/gate input switches in the range of 0 and +5 volts.

AUDIO / SIGNAL INPUTS & OUTPUTS

The audio/signal path processes voltages from -5 volts to +5 volts.

CV OUTPUT ENVELOPE

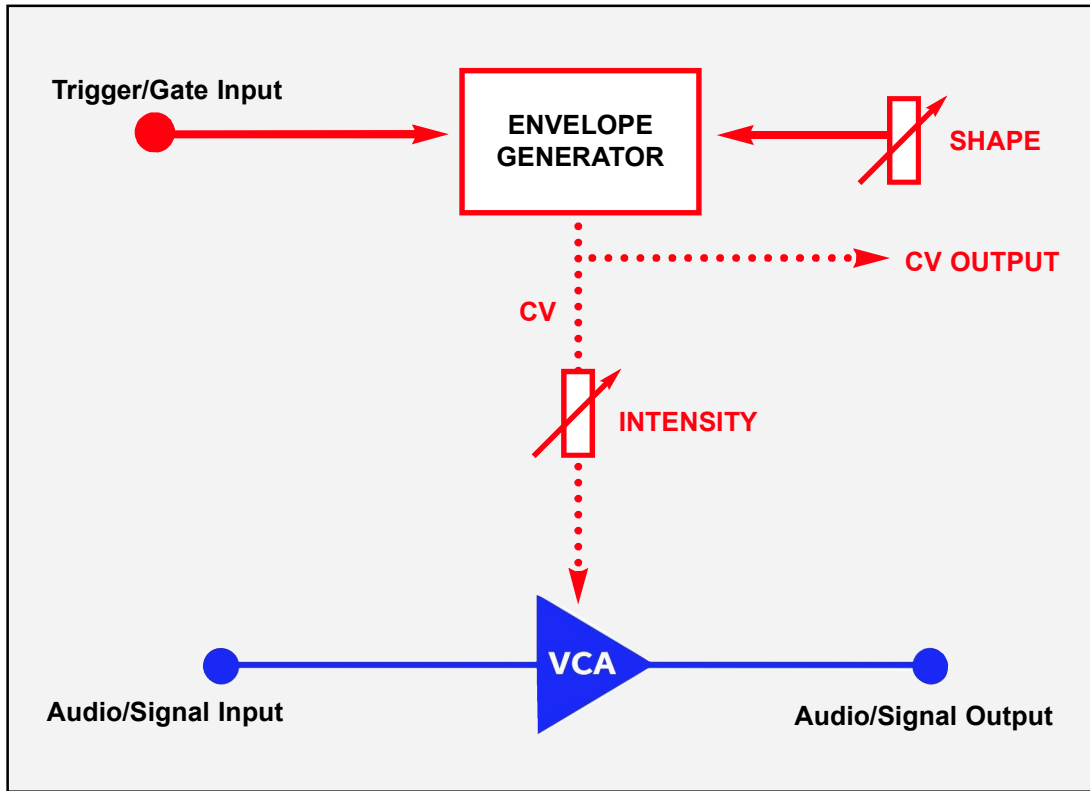
The CV output provides a voltage from +8 volts to 0 volts.



HOW IT WORKS

OVERVIEW

The module features an analog stereo VCA and an envelope generator. The envelope generator creates a tapered voltage curve, which is triggered by a trigger/gate pulse and thus reduces the VCA's output. The envelope cycles through once automatically.

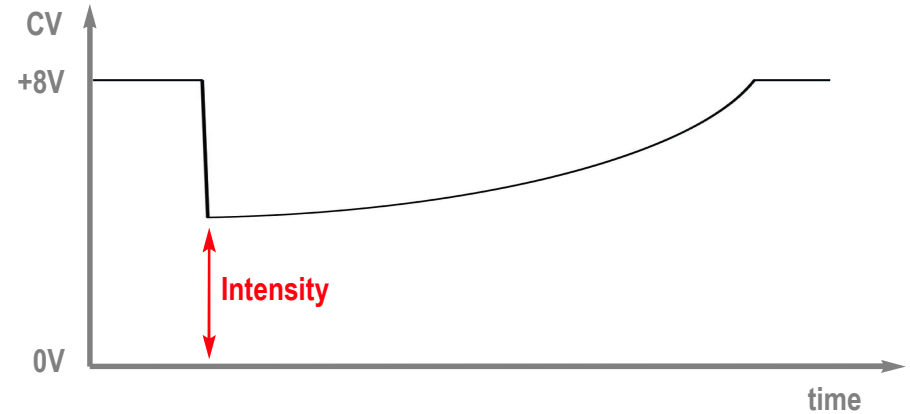


SHAPE (Length)

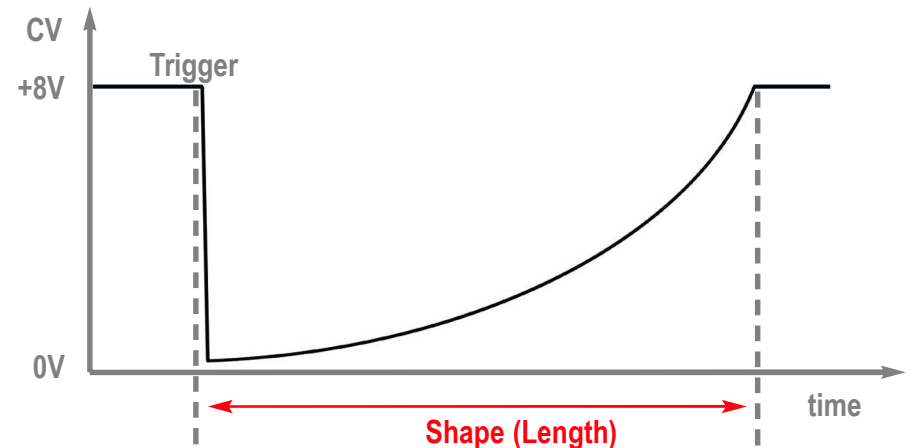
Use the **SHAPE** control to set the speed at which the envelope is played back. Note that the effect diminishes with increasing trigger speed. Tempos between 60 bpm and 180 bpm are possible. This parameter also affects the additional CV output.

INTENSITY

The **INTENSITY** control adjusts how strongly the envelope affects the VCA. Fully counter-clockwise means no effect, fully counter-clockwise means maximum effect.



Note: This parameter does not affect the additional CV output, allowing independent control of the CV with other modules. The curve has maximum intensity at the CV output. The voltage fluctuates approximately between +8V and zero volts.



APPENDIX & TECHNICAL DETAILS

Technical details

Connections:

Ribbon cable adapter for Doepfer bus +/-12Volt

Inputs: 1x Trigger/Gate, 2x Audio 3,5mm mono/stereo jacks

Outputs: 2x Audio, 1x CV 3,5mm mono/stereo jacks

Controls:

2 Potentiometer

Current consumption: +/-12v: +30mA / -10mA

Size: Eurorack format 3U / 3HP 110x128,5x15mm, Installation depth: 42mm

Warrenty

Beginning from the date of purchase a 2-year warranty is guaranteed for this device in case of any manufacturing errors or other functional deficiencies during runtime.

The warranty does not apply in case of:

- damage caused by misuse
- mechanical damage arising from careless treatment (dropping, vigorous shaking, mishandling, etc)
- damage caused by liquids penetrating the device
- heat damage caused by overexposure to sunlight or heating
- electric damage caused by improper connecting (wrong power supply/ jacks/ MIDI connections/ voltage problems).

If you have any complaints please contact your dealer or send an e-mail to:

service@flame-instruments.de

Terms of production

conformity: CE, RoHS, UL

Disposal

The device is produced with RoHS-conformity (subject to the regulations of the European Union) and is free of hazardous substances (like mercury, plumb, cadmium and hexavalent chrome). But electronical scrap is hazardous waste. Please don't add this to consumer waste. For an environment friendly disposal of waste please contact your distributor or specialist dealer.

Support

Updated and additional informations, updates, downloads and more see:

<http://www.flame-instruments.de>

Instagram: @flame_instruments

Acknowledgment

For help and assistance big thanks to: Sebastian Preller, Robert Junge (Digi Toys), Thomas Wagner (Flirren), Felix Bergleiter, Anne-Kathrin Metzler, Alex4 and Schneiders Büro Berlin.