

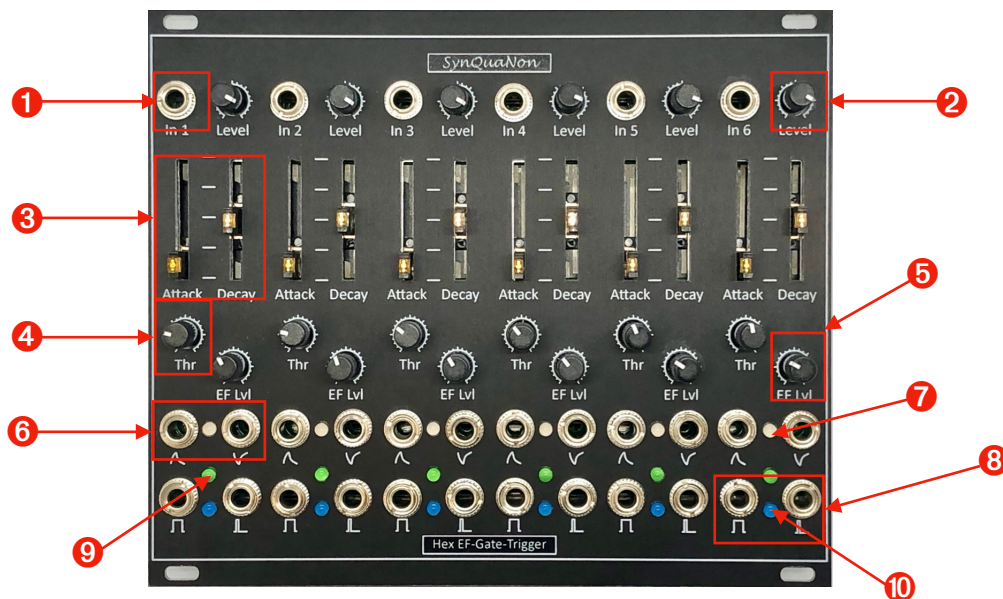
Hex EF-Gate-Trigger

Six Channel Envelope Follower with Gate and Trigger Outputs for

Introduction

Congratulations on your purchase of this SynQuaNon product! It is our belief that our products will enable you to find new and interesting ways to create custom sounds with your synthesizer and other SynQuaNon modules. Check out our full line at www.synquanon.com.

Module front panel overview



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| <ul style="list-style-type: none"> ❶ Inputs ❷ Input Levels ❸ Attack, Decay Sliders ❹ Threshold ❺ EF Level ❻ EF, EFINV Outputs ❼ EF Level/Clip LED ❽ Gate, Trigger Outputs ❾ Gate LED ❿ Trigger LED | <p>DC-coupled inputs; accept +/- 12V audio or CV signals.</p> <p>Adjusts the input level fed into the Envelope Follower.</p> <p>Adjust rise and fall times of the Envelope outputs.</p> <p>Sets the trigger point for the Gate and Trigger outputs.</p> <p>Sets the final amplitude of the Envelope outputs.</p> <p>EF (0-10V) and inverted EF (-10-0V) outputs.</p> <p>LED is green up to 5V, red from 5V to 10V.</p> <p>Gate (0-10V) and Trigger (0-10V) outputs.</p> <p>LED is on for the duration of the Gate output.</p> <p>LED lights during Trigger output.</p> |
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Overview

The Hex Envelope Follower module is capable of creating control voltages from six audio sources, trigger pulses, gate signals and also from other control voltages. It can generate trigger and gate pulses when the incoming signal goes above a certain threshold. You can adjust the attack and decay response times to generate swells or sustained envelopes. Extract the envelope of an audio signal or change the time characteristics of other control voltages with the SynQuaNon Hex Envelope Follower. Expandable to 7 channels.

Ideal for guitar or bass single-string processing.

Hand-built in the USA.

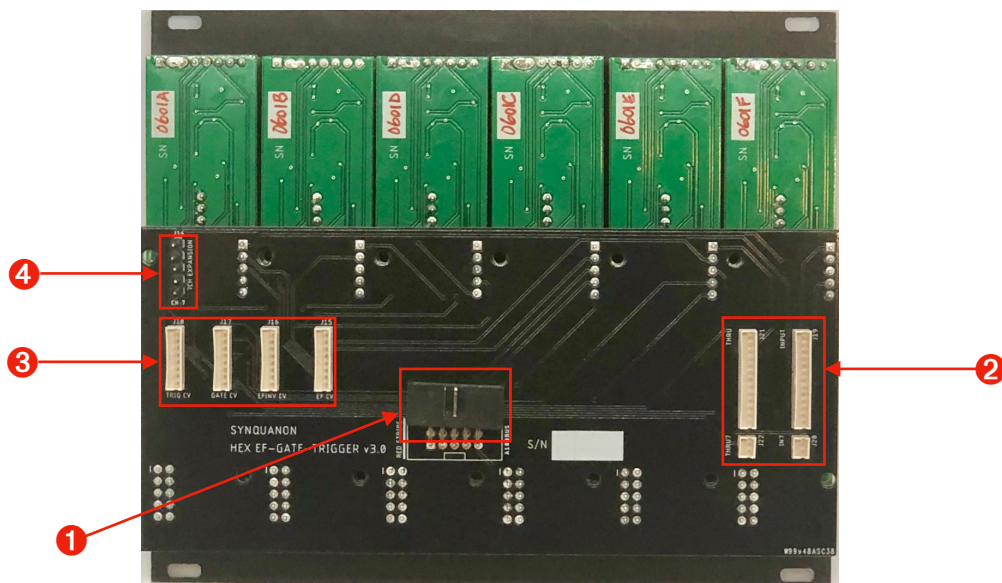
Features

- Expandable to 7 channels via expansion header on the back.
- DC coupled inputs accept audio or CV inputs up to +/-12V.
- Input level, gate/trigger threshold, and EF output level controls.
- Normal and inverted EF, Gate, and Trigger outputs for each channel.
- Output LEDs provide visual signal level feedback.
- SynQuaNon Bus audio/CV inputs, through, and output headers on the back of the module. Inputs normalised to front panel jacks.
- Pairs well with 13-Pin Input Breakout, Hex VU Meter, Hex VCF, Hex Fuzz

Suggested Guitar Input Setup

- Ensure that the hexaphonic guitar input signals are not clipping by using the Hex VU Meter or an oscilloscope to adjust the levels in the previous stage.
- Set the THR level at about 8 o'clock and the EF level at about 12 o'clock.
- Set the Attack and Decay sliders at their minimum (bottom) levels.
- For each string, play a note with medium pick strength and observe the EF level, Gate, and Trigger LEDs. You should see the blue Trigger LED flash briefly, while the Gate LED stays on for the duration of the note.

- The EF level LED should turn red at first, then transition to green as the envelope decays.
- Continue to play notes with the same pick strength and adjust the THR level to get consistent triggering (blue LED) as well as maximum gate duration (green LED). Too low a THR level can cause the gate to stay on; if that happens, raise the THR level until the green LED goes out. Note that the circuit will not generate a new trigger output if the gate is still high (green LED). Once a desired THR level is achieved, adjust the EF LVL for the desired envelope output level; A brief period of red at the start is OK. Repeat for remaining strings.
- Adjusting the Attack and Decay sliders will affect the gate threshold and envelope outputs, so repeat the above procedure to get optimum results.



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|----------|------------------|---|
| 1 | A100 Bus | Keyed power connection with reverse polarity protection. |
| 2 | Audio Input/Thru | 7 Channel Audio In and Thru normalled to front input jack. |
| 3 | CV Outputs | Individual connectors for 7 channels of EF, EFINV, Gate, Trigger CVs. |
| 4 | Expansion Header | Connect a single channel EF-Gate-Trigger here as the 7th channel. |

Technical Specifications + Downloads

Width	30 HP	EF Out	0-10V
Depth	43 mm	EFINV Out	-10-0V
Power	197 mA @ +12V	Gate Out	0-10V
	66 mA @ -12V	Trigger Out	0-10V
	0 mA @ +5V	ModularGrid	Hex EF-Gate-Trigger

Reverse power protection, resettable fuses, extensive power supply filtering.

Support

In case of difficulty:

1. Make sure power is available to the Eurorack and that it is turned ON.
2. Check the rear module power connection (turn OFF Eurorack power first).
3. Check patch cables for continuity or shorts.
4. Check level settings on front panel. Check gain select header on rear of module for proper gain range selection (turn OFF Eurorack power first).

For additional information please feel free to contact us at support@synquanon.com