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# USER MANUAL



POWERING THE MODULE | THANKS FOR PURCHASING A MODULE FROM BEFACO!  
MODULE | BEFORE YOU PLUG THIS MODULE IN...

1. **Disconnect your cabinet from the mains.**
2. **Triple check the power cord polarity.** The coloured line on the cable (pin number one) is the -12V rail.
3. If you plug the module backwards you might burn it out and unfortunately this is not covered by our warranty.
4. If you have any questions about this product please send them to: [befacosynth@gmail.com](mailto:befacosynth@gmail.com)



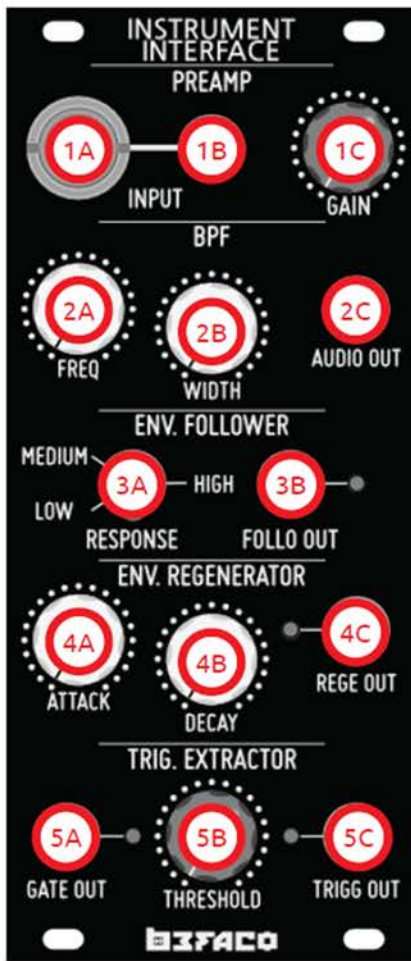
INTRODUCTION | THERE MAY COME A TIME WHEN YOU WANT TO INTERACT YOUR EXTERNAL RIG OR INSTRUMENT WITH YOUR MODULAR SET-UP.

The Instrument Interface (I<sup>2</sup>) is designed to facilitate just that. It can take a wide range of voltage sources and transform them into a set of useful Eurorack compatible signals.

The module uses an envelope follower circuit to achieve direct control over the amplitude of any incoming signal producing a control voltage proportional to its amplitude. This allows a real and direct communication between external sound sources and your Eurorack system.



MODULE REFERENCE | AN EXAMINATION AND DESCRIPTION OF THE VARIOUS FUNCTIONS OF THE MODULE



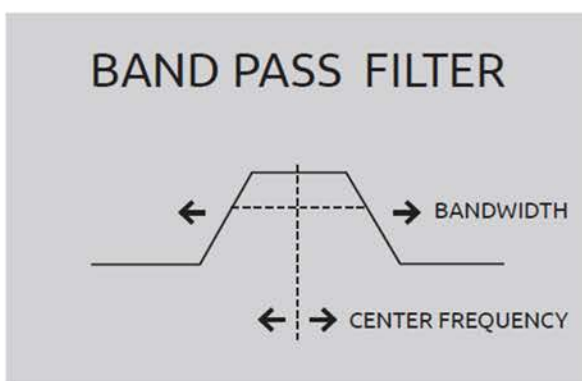
**1 A/B/C. P R E A M P**

With two audio inputs (6.5mm jack (1A) and mini-jack/banana (1B)) amplification of the input signal is controlled by the GAIN (1C).

**2 A/B/C. B A N D P A S S F I L T E R ( B P F )**

The input signal is routed through a band pass filter (BPF) with cut-off frequency and bandwidth controlled via FREQ (2A) and WIDTH (2B). This will set the frequency range of our control signal.

After this stage the signal can be accessed at synth level via AUDIO OUT. (2C).



**3 A/B. E N V E L O P E F O L L O W E R**

After filtering the signal it will feed into the RESPONSE (3A) stage which determines the envelope follower's response rate. It features a HIGH, MEDIUM and LOW selector switch to achieve the optimal envelope for different kind of signals. FOLLO OUT (3B) will output the extracted envelope and has a level indicator LED.

- Green: Medium level
- Orange: High level
- Red: Max. Level.

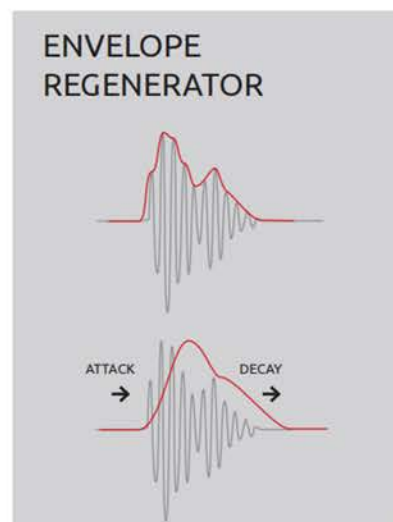


**4. E N V E L O P E R E G E N E R A T O R**

REGE OUT (4C) is a regenerated envelope that allows independent control of the rise part of the envelope with the ATTACK knob (4A), and the fall part with the DECAY (4B) knob.

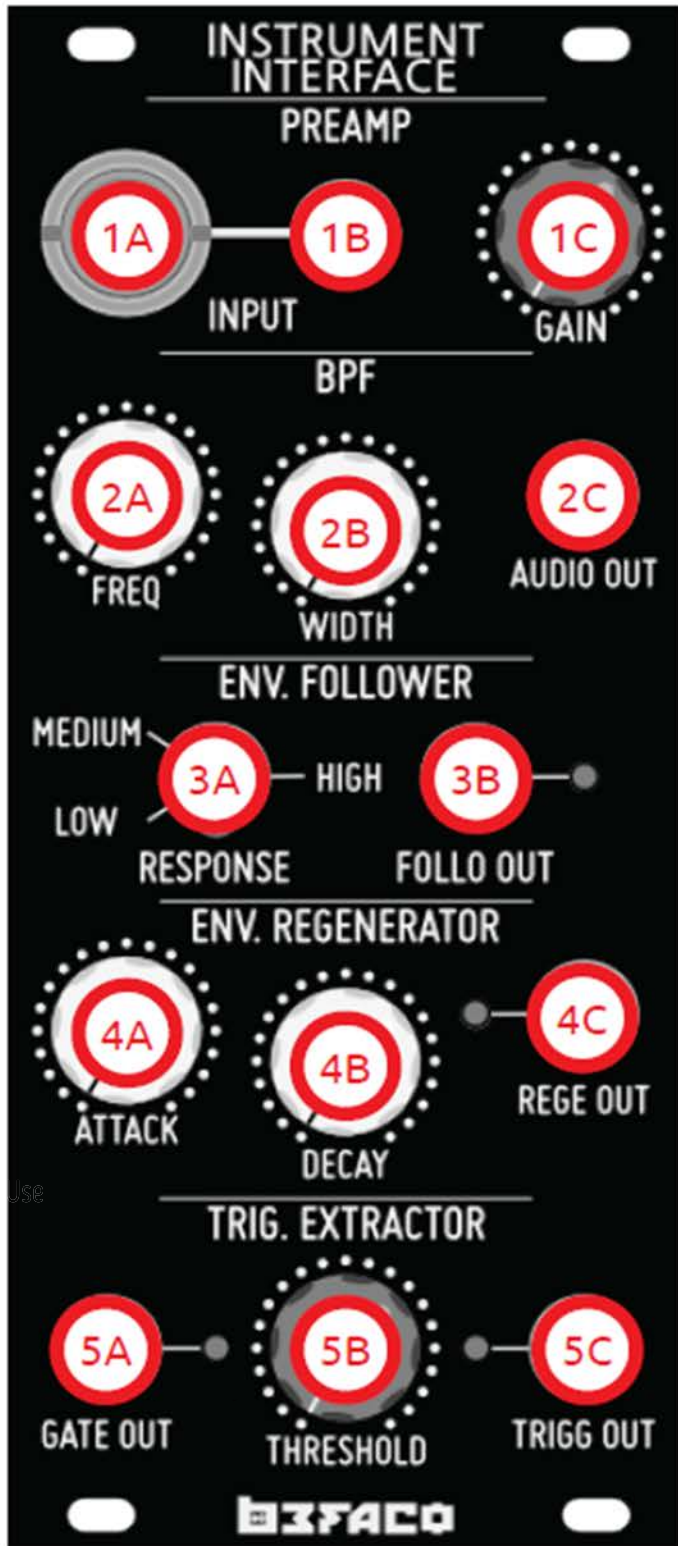
The Envelope Regenerator also features a LED indicator for the regenerated envelope level.

- Green: Medium level
- Orange: High level
- Red: Max. Level





MODULE REFERENCE | A DESCRIPTION AND EXAMINATION OF THE VARIOUS FUNCTIONS OF THE MODULE

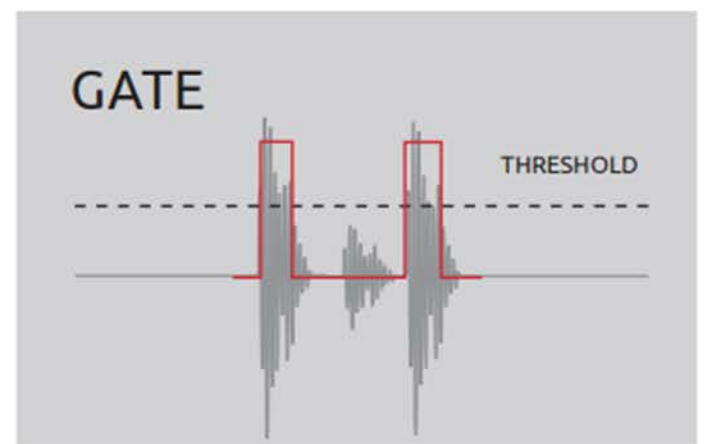
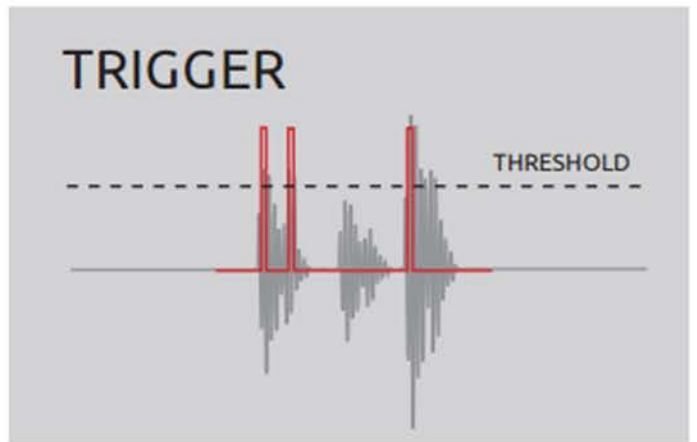


5. TRIGGER EXTRACTOR

With the THRESHOLD (5B) pot we can control the level of a comparator that determines when GATE OUT (5A) and TRIGG OUT (5C) outputs will be activated.

GATE OUT is active while the envelope is over the set threshold, while TRIGG OUT is activated each time the threshold is crossed.

Indicator LEDs show when outputs are active.



BLOCK DIAGRAM | IMAGE SHOWING HOW THE VARIOUS PARTS OF THE MODULE INTERACT

