

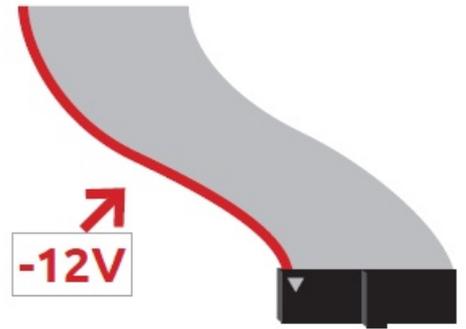


PERCALL USER MANUAL

Rev. Jul 2020

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

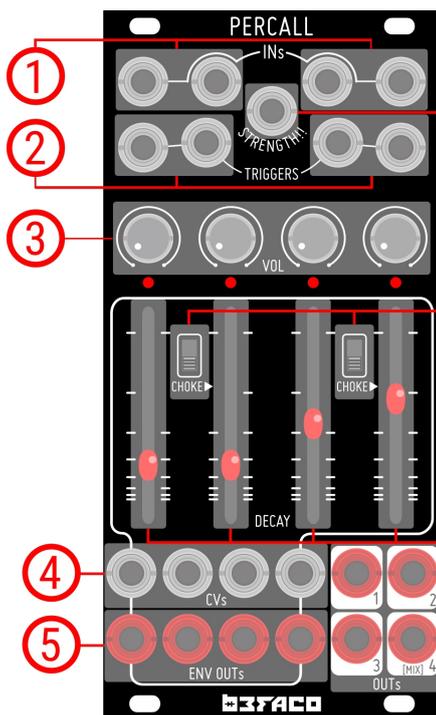
1. **Disconnect your cabinet from the mains.**
2. **Triple check the power cord polarity.** The coloured line on the cable (pin number one) is the -12V rail.
3. If you plug the module backwards you might burn it out and unfortunately this is not covered by the warranty.
4. If you have any questions about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



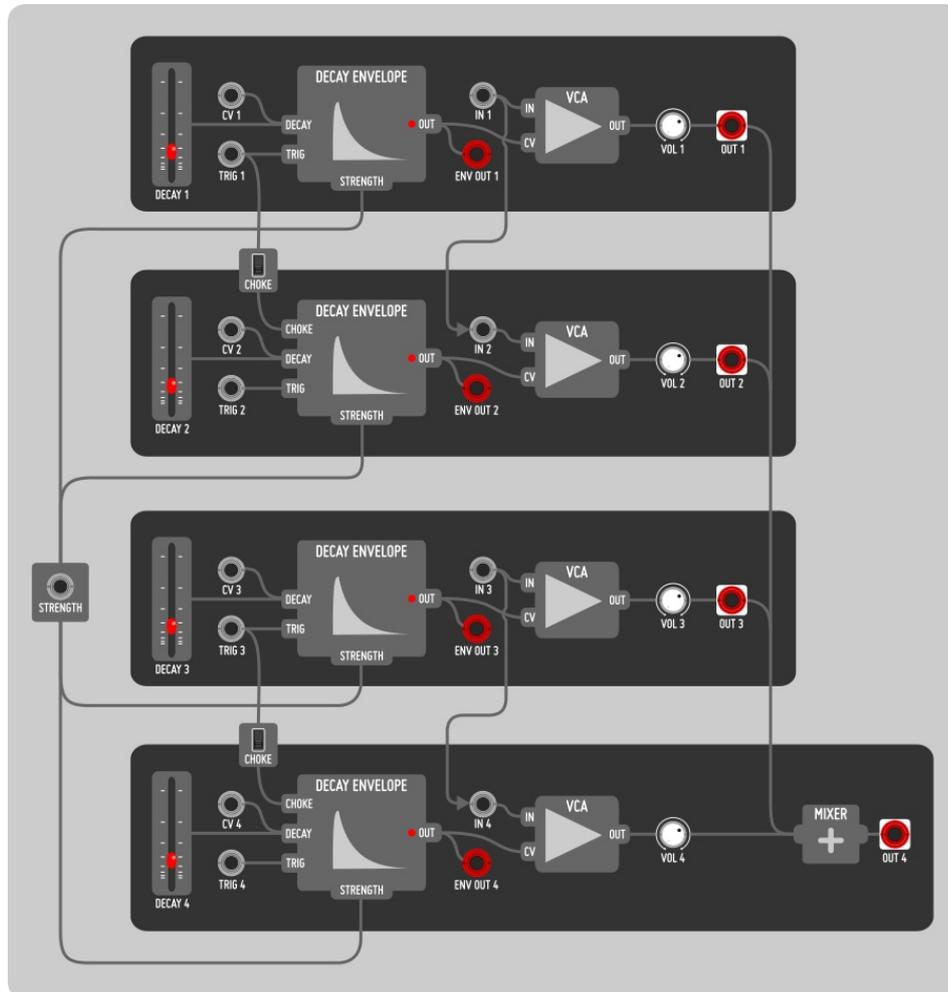
INTRODUCTION | PERCALL

Percall is a percussive oriented module that will shape four different sound sources into percussive sounds. Percall has four VCAs with dedicated decay envelopes and a mixer, so you can prepare a percussion submix. The strength input will provide extra dynamics to the sounds! To round up the module, audio inputs are normaled from one to two and from three to four, spicing them up with choke control. This allow to create open and closed Hats or kind of side-chained baselines with your kick!

MODULE REFERENCE | PANEL OVERVIEW



1. **Audio Inputs**
They are normalized in pairs. That means what you plug on IN 1 also goes to IN 2 until you plug a cable on IN 2. Same for IN 3 to IN 4.
2. **Trigger Inputs**
3. **Volume Controls**
- 4 & 8. **Decay Controls**
They control the tail of the envelopes. Both are added together.
5. **Envelope Outputs**
Envelope range: 0-10v.
6. **Strenght Input**
This is an amplitude+decay CV control, shared by all four envelopes. It is normalized to 10v so when it is not used, envelopes have maximum strength.
7. **Choke Controls**
When active (up position), channel 1 kills 2 and channel 3 kills channel 4. It is often used to simulate mutually exclusive drum sounds like open/closed Hi-hats.
9. **Audio Outputs**
Channels 1 to 3 are summed at channel 4, so 4 acts as a master mix out. Channels 1 to 3, get removed from the mix, as soon as a jack is plugged at their INs.

FUNCTIONAL
BLOCKS | INTERNAL STRUCTURE

As you can check on the diagram above, PercAll is based on four identical channels. Each channel has a **VCA** circuit, which is internally controlled by a **Decay Envelope** circuit. This envelope is fired via its TRIG Input and the time of the decay can be either controlled manually or CV via its dedicated CV Input.

The module counts with two Choke circuits for channels 1-2 and 3-4. When Choke switch is activated (Switch on top position), the TRIG signal of the first channel mutes second channel's envelope. The obvious application to this is to make open-close hi-hat patterns but we encourage you to get creative on this a try more stuff.

The **Strength** input is a macro CV Input that affects to all envelopes amplitudes at the same time. As the ratio of the envelope is constant, the falling time will be affected depending on the signal plugged in, as well as the amplitude of the sound. This emulates the behaviour of a real percussive instrument, where the release time depends on the energy applied to the membrane.

The audio **Output** of every channel is summed on a final mixing stage at Out 4. Inputs 1 to 3 are normalized, so they will be taken out of the mix if you use that individual output.

MISCELANEA | SPECS & CREDITS

* **Size:** 12HP

* **Depth:** 32mm

* **+12v:** 75mA

* **-12v:** 56mA



Designed with care and love by the Befaco Team.
Thanks a lot to all beta testers and friends that tried the module and provided loads of valuable information!