BEFACO
Bandit
Eurorack Multi
Band Mixer
Filter Module

BEFACO Bandit Eurorack Multi Band Mixer Filter Module User Manual

Contents

BEFACO Bandit Eurorack Multi Band Mixer Filter Module

Product Information

- The Bandit is a versatile module that combines band-pass filters, VCAs, and routing options.
- It can function as an equalizer, crossover, multiband VCA, 4-band spectral mixer, and spectral external FX insert point.

Product Usage Instructions

- Disconnect your cabinet from the mains before plugging in the module.
- Check power cord polarity – the colored line on the cable is the -12V rail.
- Avoid plugging the module backwards to prevent damage not covered by warranty.
- Contact **support@befaco.org** for any product-related queries.

FAQ

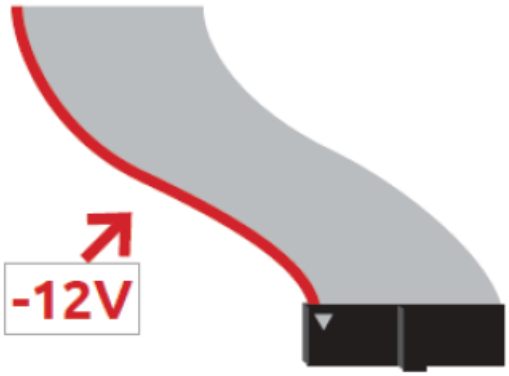
- **Q:** What is the purpose of Bandit?
- **A:** Bandit serves multiple functions including equalizer, crossover, multiband VCA, spectral mixer, and spectral external FX insert point.
- **Q:** How do I adjust band levels with Bandit?
- **A:** Use the Band Level Faders to control the gain of VCAs for each band after the filter. The fader is set to unity

gain at the center position.

POWERING THE MODULE

THANKS FOR PURCHASING A MODULE FROM BEFACO!
BEFORE YOU PLUG THIS MODULE IN…

1. Disconnect your cabinet from the mains.
2. Triple-check the power cord polarity. The colored line on the cable (PIN 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 feel free to contact us **support@befaco.org**



INTRODUCTION

WHAT IS BANDIT?

- Bandit is a fun combination of band-pass filters, VCAs, and routing options.
- It serves multiple functions including equalizer, crossover, multiband VCA, 4-band spectral mixer, and spectral external FX insert point.

It allows you to

- Cut or emphasize different frequency bands of a signal, acting as a voltage-controlled equalizer/isolator.
- Split a sound into four different frequency bands for external processing, and if needed, insert them back.
- Mix four different signals with predefined tone placement in the mix.
- Create four different sounds from one sound source by modulating the volume with four different envelopes.
- Create evolving timbres by modulating one or more frequency bands using LFOs or audio-rate modulation.

CONTROLS

1. **ALL AUDIO IN:** This input is a general audio input. It is normally to all the individual band audio inputs, so any signal applied here will be routed to all of them, while each band audio input remains unconnected.
2. **ALL CV IN:** This is the general Control Voltage input. The CV signal applied here will be summed with the channel's CV input.
3. **BAND AUDIO INPUTS:** These are separate audio inputs for each band. Signals applied to these inputs will pass through the channel filters, which consist of Low-Pass, Mid High Band-Pass, Mid Low Band-Pass, and

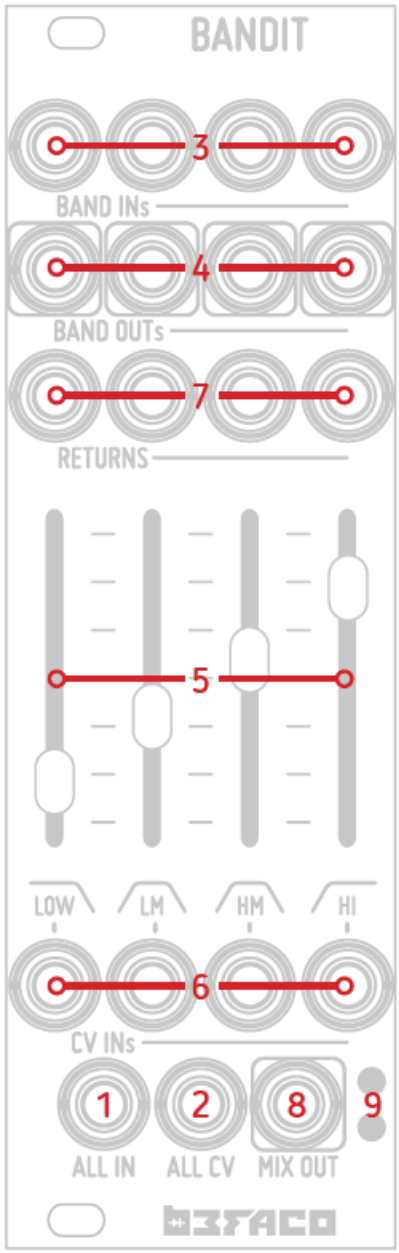
High-Pass filters.

The Low-Pass and High-Pass filters are shelf filters with cutoff frequencies set at 300 Hz and 5 kHz, respectively.

The Mid Low Band-Pass and Mid High Band-Pass filters are peak filters, with center frequencies around 700 Hz and 1500 Hz, respectively.

After the filter, each channel has a VCA (Voltage Controlled Amplifier) to manage the volume of the band.

4. **INDIVIDUAL BAND AUDIO OUTs:** This sends each band signal for external processing. Plugging a cable into these jacks will break the signal path at this point.
5. **BAND LEVEL FADERS:** These faders control the gain of the VCAs for each band after the filter. The fader is set to unity gain at the center position. When the fader is at the bottom, the channel remains silent. Moving the fader up from the center boosts the signal. Additionally, when a cable is plugged into these faders, they will function as attenuators for the Band Level CV input.
6. **BAND LEVEL CV IN:** This is the voltage control input for adjusting the level of the different bands. Expected CV 0 to 10. 5V is unity gain, 0V makes this band silence, and more than 5V boosts the band levels.
7. **RETURNS IN:** Signals applied to these inputs will be summed into the MIX OUT. This mixing occurs post-filters, meaning no EQ is applied to them, and the order of signals is irrelevant, as this is just a four-channel mixer summing to the total mix.
8. **MIX OUT:** The band signals and returns are mixed at this output. A clipping limiter is provided at this point to ensure soft clipping occurs when the sum of signals is too º high.
9. **MIX PEAK METER:** It blinks green when a signal is present and red when the main output is clipping. This meter is located after the MIX OUT (post-limiter).



Specifications

MISCELLANEA SPECS AND CREDITS

- Size: 8HP
- Depth: 30 mm
- +12v: 80 mA
- -12v: 70 mA

Designed with care and love by the Befaco Team in Barcelona 2024.

Documents / Resources

	**BEFACO Bandit Eurorack Multi Band Mixer Filter Module** [pdf] User Manual Bandit Eurorack Multi Band Mixer Filter Module, Bandit, Eurorack Multi Band Mixer Filter Module, Multi Band Mixer Filter Module, Band Mixer Filter Module, Filter Module

References

- **User Manual**