

[BF22]SALLEN-KEY FILTER

BF-22

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



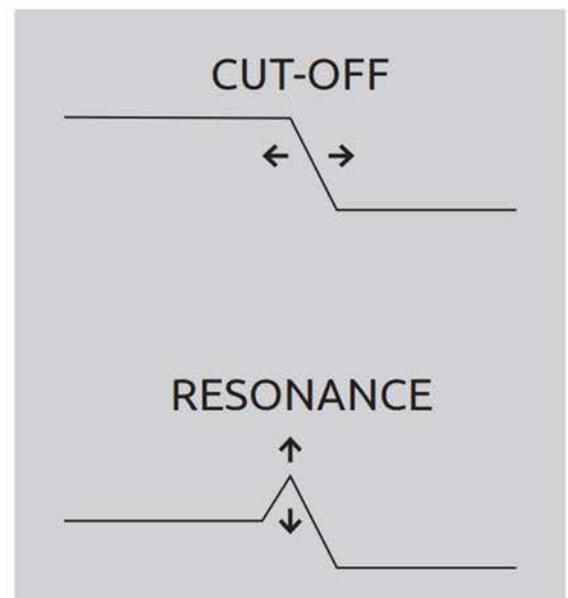
INTRODUCTION | THE BF-22 VCF IS A DUAL HI/LOW-PASS FILTER

Inspired by the Sallen-Key filter from the early MS-20, BF-22 includes attenuverters (inverter-attenuators) in addition to the normal CV control for Cut-off and Resonance. The module offers a little more presence in the Resonance than the original. The CV control for Cut-off keeps tracking through 3 octaves.

The 'Link' switch connects the input of the second unit into the output of the first.

TECHNICAL SPECIFICATION:

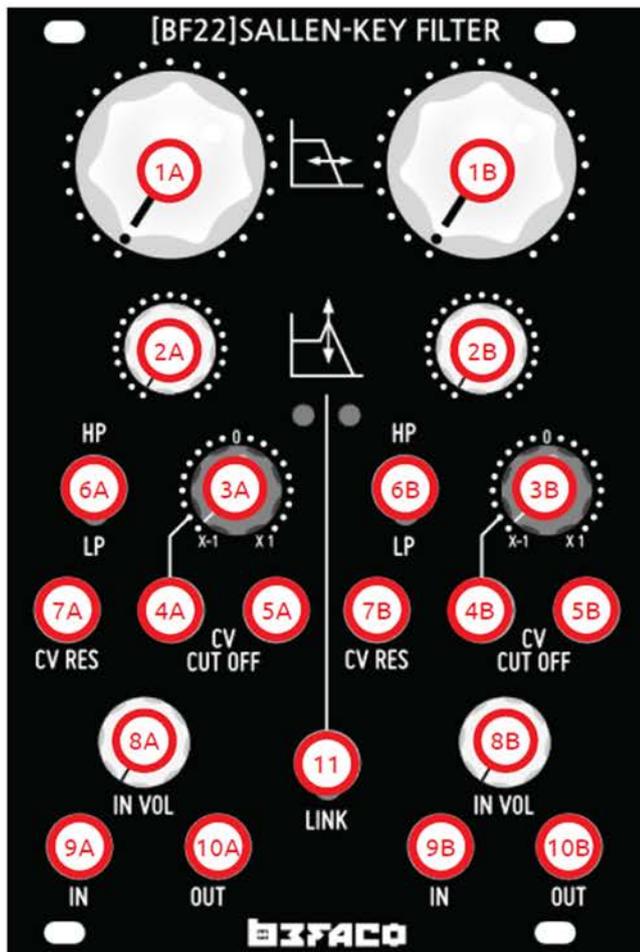
- Eurorack Compatible
- Can be powered with either +/-12V or +/-15V without need for modification.
- Current requirement: +12V: 40mA -12V: 35mA
- Banana or mini-jack connectors available
- Selectable HP/LP mode at 6/12 dB
- Cut-off and Resonance are CV controlled
- 17 HP / 47 mm depth



DISCLAIMER!!!

THIS FILTER BRINGS TO YOUR MODULAR SYSTEM THE CHARACTER AND CHARACTERISTICS OF EARLY MS-20 SOUND: KICK-ASS-ROCKING-DIRTY SCREAMS! IT INHERITED NOT ONLY ITS AMAZING SOUND BUT ALSO THE MS-20'S NOISE FLOOR. IF NOISE FLOOR IS A MAJOR CONCERN, THEN THIS MIGHT NOT BE THE FILTER FOR YOU.

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



6 A/B. FILTER RESPONSE SELECTOR

Select between high-pass and low-pass. For the classic MS20 sound, set the first filter to HP and the second to LP, then flip the LINK switch (11) to connect the two filters.

7 A/B. RESONANCE CV INPUT

CV input for resonant frequency control.

8 A/B. AUDIO INPUT VOLUME CONTROL KNOB

Increase to just before the LEDs flash for max resonance with min noise.

Experiment with different settings to get different tones.

9 A/B. AUDIO INPUT

Audio input

10 A/B. AUDIO OUTPUT

Audio output

11 LINK SWITCH (10 A TO 9 B)

Flip up to connect the output from filter A (10A) to the input of filter B (9B). It also disconnects filter B input (9B).

1 A/B. CUT-OFF

Manual cut-off frequency control.

2 A/B. RESONANCE

Manual resonant frequency control.

3 A/B. CUT-OFF CV INPUT ATTENUVERTER

MANUAL ADJUST

- At mid-point: CV = 0

- Fully clockwise: CV at Max level

- Fully anti-clockwise: CV at Max level & inverted

4 A/B. ATTENUATED CUT-OFF CV INPUT

CV control for filter cut-off (affected by manual attenuverter adjust (3)).

5 A/B. CUT-OFF CV INPUT

CV control for Cut-off. Has Volt/Oct tracking for 4 octaves.