ПОЛИВОКС

MULTI-MODE STEREO FILTER



PF-3
MANUAL

CONTROLS



FILTER 1 - MAIN **FILTER 2**

CV - you can control/automate filter cutoff via CV using CV in. Led indicator mirrors the amount of voltage in the input jack.

CV potentiometer attenuates CV applied to the filter cutoff frequency.

CUTOFF - manual filter cutoff frequency

RESONANCE - Filter resonance (boost the frequency near cutoff point)

MODE- Filter mode switch

- **LP** - low pass
- **BP** - band pass
- **HP** - high pass
- **N** - notch filter

LEVEL - controls the output level of filtered signal to balance the volume.

DRY/WET - blends dry and filtered signals

FREQ CONTROL

CV in - connect control voltage standart mono minijack from eurorack system

LINK CV - when switched on links CV on filter 1 to control both filters 1 and 2

LINK FREQ - when switched on links FREQ CONTROL on filter 1 to control both filters 1 and 2

NOISE

There is a noise generator built in the filter. It can blend noise to the audio signal

PINK/WHITE - switch two types of noise

LEVEL - controls the level of noise generator.

BALANCE - adjusts amount of noise signal going to filter 1 and 2

IN1 and **IN2 -** this is an audio input of the filter. To operate in stereo or dual mono mode plug in stereo of 2 mono signals here. If you plug just the **IN1** and **OUT 2** two filters are conneccted in series. If you plug input 1 and 2 and outputs 1 and 2 two filters work in stereo (parallel mode). **POWER ON** - switches on/off the unit. **POWER SUPPLY**- use 12VDC adapter 0,5 - 1 A (center positive)

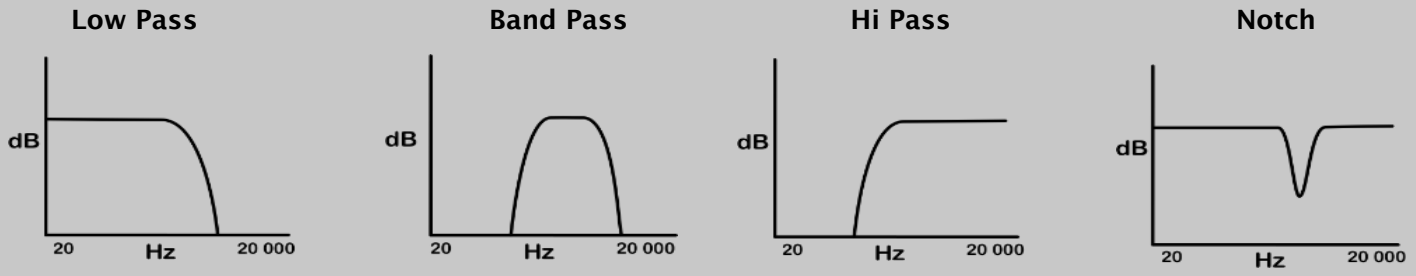
ELTA MUSIC

DESCRIPTION

POLYVOX PF3 double-stereo filter utilizes the classic Soviet filter chip for a unique and iconic filter tone. This filter will make your sound dirty and angry. With the resonance turned up, you won't lose bass frequencies. Two independent 12dB multi-mode filters that can be controlled by a single cutoff knob. Turning the filter into a 24dB filter, when connected in series. When connected in stereo, you can achieve interesting effects by using different modes to each channel. A noise generator is on board pre-filter and can be used separately as a source of white and pink noise. There are two types of noise - white and pink. You can choose the type of noise via **WHITE/PINK** switch. Adjust the volume and balance of the noise using the **LEVEL** and **BALANCE** pots in the noise section. Volume as well as clean and processed signal balance per channel. Can be used as two independent filters or stereo mode. **FILTER modes** - Lowpass, Bandpass, Hi-pass, Notch. **HARD/SOFT** switch lets you choosse the character of the filter. The more resonance, more difference you can hear between hard and soft mode. **HARD** mode is a classic **POLYVOX** filter mode, **SOFT** mode takes the dirt and impertinence out of the sound. This mode used in MAESTRO synthesizer. **Note:** The **SOFT** mode shifts the filter slope slightly, it sort of opens up. This is normal. You can use filter in three modes. When audio signal passes through the filter, it is partially cuts some frequency content. There are four modes in this filter.

Low pass - removes frequency content above the cutoff frequency
High pass - removes frequency content below the cutoff frequency
Band pass - removes frequency content above and below the cutoff frequency
Notch - removes frequency content at the cutoff frequency

FILTER MODES



To adjust cutoff frequency, use the **FREQ** control. To boost the volume near the cutoff frequensy turn the **RESONANCE** control clockwise. **LEVEL** control adjust the level of the filtered signal. **WET/DRY** control blends direct and filtered signals in any proportion. For remote control of the cutof frequency, use the **CV** input jack and the **CV** potentiometer to control amount of **CV** to cutoff. Led indicator near the **CV** jack mirrors the control voltage applied to **CV** input. Polivoks PF-3 has two separate filters onboard. To control cutoff of both filters with the filter 1 cutoff pot and CV, switch on the link switch in the middle of the control panel.

WARNING

Before using the device, turn it on for 5-7 minutes and let it stand. The control transistor should warm up. So that in SOFT mode there is no feedback when the FREQ knobs are in zero position. If you overdo it.

The UD1208 chips used in the filter are very sensitive and are never the same. Therefore you will not mathematically get two identical filters. Which is an advantage when using the unit in stereo.

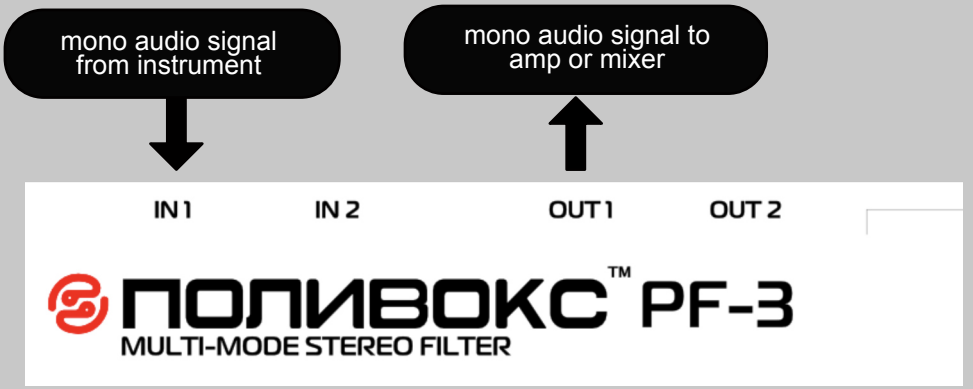
DELTA MUSIC

EXAMPLES OF USE

1

Mono single filter mode.

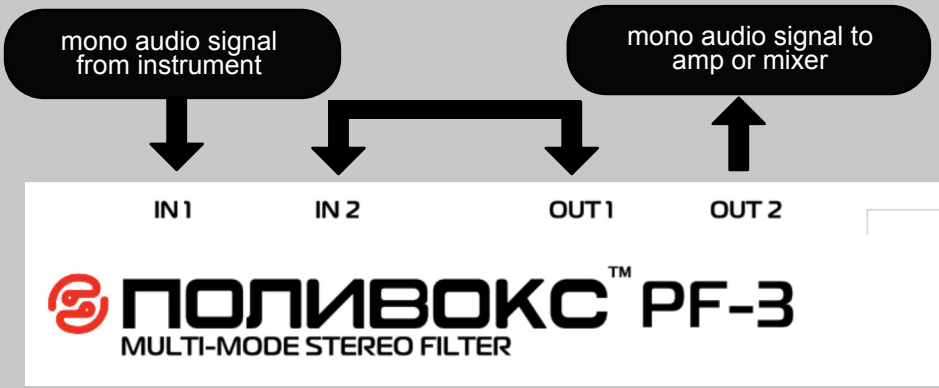
In this mode one filter work in a standart 12db mode. Connect mono audio signal to input 1, and output from output 1. You can use second filter separatly in this mode, using input and output 2.



2

Mono dual filter mode.

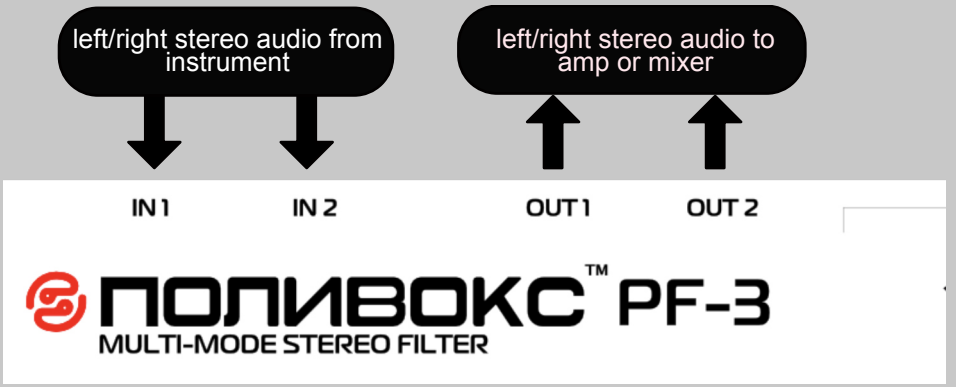
In this mode two filters work in series filter 1 into filter 2. Connect mono audio signal to **input 1**, then connect a cable from output 1 to input 2, and output from **output 2** to mixer. If you use 2 filters and turn on Cutoff link, and get the 24db Polivoks filter.



3

Stereo mode.

In this mode two filters work in stereo. filter 1 is effecting left stereo channel and filter 2 effects right stereo channel. Connect audio signals to input 1 (left) and input 2 (right), and output from output 1 and 2.



WARRANTY

Dear customer!

Thank you very much for purchasing our products and thereby supporting ELTA music. With this fact we feel our necessity in the market of electronic instruments.

ARSENIY TOKAREV, ELTA MUSIC SIA



12 month warranty. The manufacturer is not responsible for the consequences resulting from the use of Stereo Folter PF3 Polivox, the documentation, and any parts related to the device. Everything the user does with thedevice, he does at his own risk and for his own pleasure. The manufacturer is not responsible for the use of a third-party power adapter not included in the kit. In case of failure of the device, such situations are not warranty. Please follow the instructions for use of the ELTA music POLYVOX PF3 below, cause only this will guarantee proper operation of the module and ensure warranty from ELTA music.

You will find ELTA music terms of warranty at www.eltamusic.com or via e-mail sales@eltamusic.com
Items for return, exchange and/or warranty repair have to be sent to:

ELTA MUSIC SIA, Ropazu Str. 140, Riga, Latvia, LV-1006

Input audio signal level	max 2 V
Modulation CV Inpput	- 5 to +5 V or 0 to + 10V
Power supply: universal mains adapter	110-220V / 12V 1A out
Filter weigth	0,7 kg
Packed weigth	1 kg
Dimensions	175x135x50mm

POLYVOX PF3 team

Idea, production: Arseniy Tokarev, Vladimir Kuzmin
Design: Arseniy Tokarev
Enclosure construction: Grigoriy Ryazanov
PCB development, engineering: Alexander Grygoriev
User manual: Arseniy Tokarev

The manufacturer reserves the right to change the appearance, equipment and design of the product.

SAFETY INSTRUCTION



Water is lethal for most of the electric devices, unless they are made waterproof. ELTA music POLYVOX PF3 is NOT intended for use in a humid or wet environment. No liquids or other conducting substances must get into the module. Should this happen, the POLYVOX PF3 should be disconnected from mains power immediately, dried, examined and cleaned by a qualified technician.



Do not expose the midi through box to temperatures above +50° C or below -20° C.



Although the module has rigid steel case, so you technically can stand on it, it's not recommended to place objects heavier than 10 kg on the top of the instrument.



Transport the instrument carefully, never let it drop or fall over. Warranty does not apply to POLYVOX PF3 with visual damages.



Due to solid build and mass of 0,5kg, you can use POLYVOX PF3 for self-defense, but two year warrantee applies only to the instruments that are used for the purpose described in this user manual.



The POLYVOX PF3 has to be shipped in the original packaging only. Any module shipped to us for return, exchange and/or warranty repair has to be in its original packaging. All other deliveries will be rejected and returned to you. Make sure you keep the original packaging and technical documentation. In case of a destroyed warranty seal, any warranty claim will be rejected.



This device complies with EU directives and is manufactured in accordance with RoHS without the use of lead, mercury, cadmium and chromium. Nevertheless, this device is a special waste and it is not recommended to dispose of it in household waste.

ELTA MUSIC



DELTA MUSIC
RIGA, LATVIA