

MicroFX Filter

USER MANUAL

Welcome to the MicroFX Filter

MicroFX are small, but powerful plugins, each focusing on a different effect. The *MicroFX Filter* is a dual multi-mode filter that offers a lot of flexibility without an overwhelming number of parameters.

About the Effect

A filter is an audio effect which changes the timbre of a sound by removing and/or accentuating certain frequencies. A common filter type in audio is a lowpass filter, which removes high frequencies (allowing the *low* frequencies to *pass* through), but there are a number of filter types for audio each with its own character. As such filters are a flexible effect that can be used to help make an instrument sit in a mix, or radically transform a sound in creative ways.

The *MicroFX Filter* uses two filters which are controlled simultaneously via the XY Pad. You can set up various modes for each filter and route them in different ways to produce surprising results. The XY Pad modulation compliments the filters in such a way that this plugin becomes a powerful rhythmic and creative sound design tool.

The MicroFX Framework

The *MicroFX* line uses the same control framework for all of its plugins.

Please refer to the **MicroFX Quickstart Guide** for information about the general features of the line, including how to activate your plugin.

Parameter Reference

Below is a list of the controls specific to the *MicroFX Filter* with a description of what they do.



The XY Pad is linked to the two most important parameters for any filter:

- **X: Cutoff** – this is the central or key frequency for the filter.
- **Y: Resonance** – for most filters this controls a boost at the cutoff frequency, but in other cases it will control the “sharpness” of the filter.

The additional controls are as follows:

- **Drive:** Controls how much the filters will be overdriven, adding saturation and distortion to the signal.
- **Dirty:** Toggles dirty filter variations on or off. Dirt will add instability to the filters and a harsher drive character.
- **Offset:** Controls the cutoff offset between the two filters.
- **Env Follow:** Controls how much the input level will modulate the filter cutoffs. A common use for this feature would be for creating an auto-wah style effect.
- **Invert Filter 2** (up/down arrow icon button): When active, the cutoff control for filter 2 will be inverted, so increasing the cutoff for filter 1 will decrease the cutoff for filter 2 and vice versa.

Filter Modes and Routing

You can select the filter modes for each filter by clicking on the menus towards the bottom of the interface. The menu will display a selection of icons each representing a different filter type.

The filter modes available to you are (from top to bottom, left to right):

- **Lowpass** – frequencies above the cutoff will be attenuated.
- **Highpass** – frequencies below the cutoff will be attenuated.
- **Bandpass** – frequencies either side of the cutoff will be attenuated.
- **Notch** – removes frequencies around the cutoff.
- **Comb** – creates a series of cuts and boosts at regular intervals. This filter type is integral for Flanger style effects.
- **Bypass** – no filtering. However, the saturation and distortion from the drive control will still affect the signal.



All of the filters are -12dB/octave (2-pole) filters. If you want to create a -24dB/octave filter you can select the same mode for both filters and run them in series.

You can then select how the two filters are routed by using the dropdown menu between them. The routing options available are:

- **Series** – the filters are routed one into the other, with filter 1 being processed first.
- **Parallel** – the filters are processed individually, then mixed together.
- **Left/Right** – filter 1 will process the left channel only, and filter 2 will process the right channel only.
- **Mid/Side** – the stereo signal is converted to mid/side, then filter 1 processes the mid channel and filter 2 processes the side channel. The m/s signal is then reformatted to standard stereo before it reaches the output.

[this setting is best used on true stereo signals. Mono signals will send no signal to filter 2]