BB3 MOD FILTERS
v 2026

The Mod Filters are a key feature of the **BlackBox II**, originally released circa 2003. While their design and functionality are now somewhat dated, they are still relevant within Scope.

The **Mod Filters 2026** package is an update which includes four filters, available as mono and stereo project devices as well as mono and stereo insert effects.

The stereo versions can operate in linked or unlinked mode to create panning effects.

The frequency selector is derived from the Rodin line and provides tempered frequencies. Although this has minimal impact due to continuous frequency modulation, modulating around tempered frequencies can produce musically interesting results.

The goal is to provide a lightweight solution with sufficient modulation capabilities to be usable in any project.

4 ModFilters

- **Mod Filter 12:** a classic 12 dB LP/HP/BP filter with an additional 24 dB mode. This is the lightest version in terms of CPU usage.
- **Mod Filter 24 :** Includes 24 dB LP/HP/BP filters in addition to the 12 dB modes, eliminating the need to load the 12 dB version just to try 12dB filters. This version likely uses the most resources but offers the greatest flexibility.
- **Mod Formant :** a classic Scope formant effect allowing you to blend two formants, producing tonal changes through phase cancellation.
- **Mod BB3 : a**Allows loading BB2/BB3 filters. “Haze 2” is a great choice for a sound distinct from the other mod filters.

5 Modulators

All Mod Filters share the same modulators.

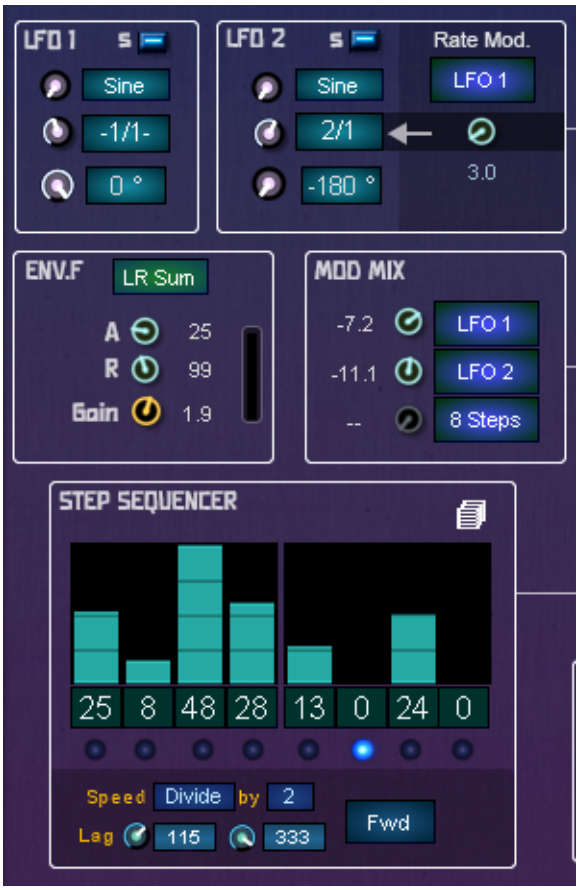
- 2 × multi-shape LFOs
- 1 × envelope follower
- 1 × 8-step sequencer
- 1 × modulation mixer (3 inputs)

LFO2 speed can be modulated by the other modulators using the **Rate Mod.** source and amount controls. Particular care has been taken in this section to make it easy to create musical, usable effects.

The **All LFO Amp** control at the top of the device adjusts the gain of all LFOs simultaneously, making it easier to balance them with the other modulation sources.

The envelope follower offers a selection of input sources (for example, **L/R/Sum** in the stereo version).

The step sequencer should feel familiar, as it is also found in other devices such as **Neodyne**. Here, we retain the **48-note** increments, even though this value is internally scaled to take full advantage of the available modulation range.



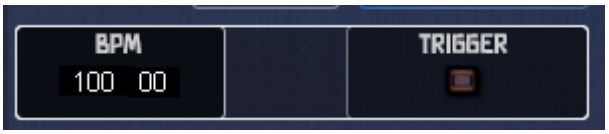
Sync and triggers

All Mod Filters can be synchronized to the internal BPM, an external clock, or a KS device from SpaceF (project BPM), as implemented in the **LG Sync** freeware device from SpaceF.

The LFOs can be triggered by **Note On** messages (MIDI version only) or by pressing the trigger button (available in both the MIDI and insert FX versions). The button can be assigned a MIDI CC number, allowing you to automate it within your DAW in both versions.

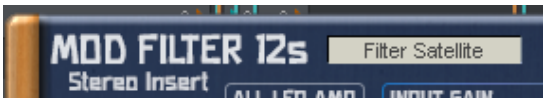
The **MIDI In** section displays incoming MIDI notes and includes a MIDI activity LED.

The insert FX version can synchronize only to the internal BPM and can be triggered via the button.



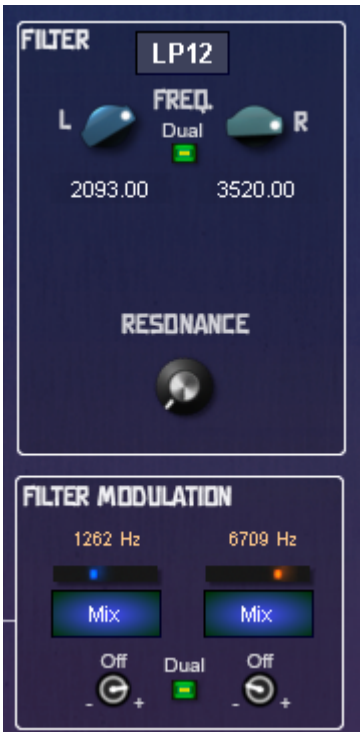
The insert version does not have a MIDI channel selector, and has a slot display instead (shows the slot the effect is loaded in, provided the slot is named by the dev of the host)

Insert version:



MIDI Version:

FIlter and Modulation section



The **Dual** buttons allow you to link or unlink the left and right channel controls.

You can dualize the frequency selectors and/or the modulation amounts independently.

Setting **Filter Modulation** to *Dual* enables the creation of mesmerizing auto-pan effects.

The Dual buttons are available only in the stereo versions of the filters.

Filter modulation amounts are bipolar, allowing you to invert a modulation source.

Each filter has its own specificities, but the main modulation part remains the same.

The Formant filter also includes filters after the formants. It is like a ModFIlter 12 with dual formants before the 12dB filters. Both formant and post-filter can be bypassed (Formant “Off” button, and filter selector set to “None”).

You can select 2 formants (A and B) and mix them with the “XF A+B” potentiometer.

You can dualize the left and right of A and B formants, but it might get complicated. In general, you keep one of them linked (for example, A is “Dual”, and B is not Dual).

The “Filter” follows the formants and is made to attenuate and enrich the sound.

The “F.Shift” allows to shift the Center Frequency by +/- 8 or 30 %, to let pass through more or less frequencies. When set to “None” the frequency of the filter is the same as the Center Frequency.

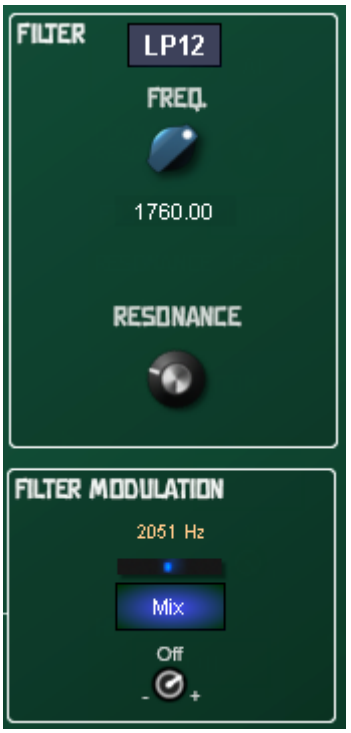
The “Mod” is a gain to the main modulation, between -6 and +9dB by increments of 3. When boosted, it modulates More, and when attenuated, it modulates less.

The BB3 filter includes 1 or 2 slots to load a satellite filter.

It also includes a post filter that works exactly the same as in the ModFormant filter.

You can bypass the BB3 filter with the “Off” button, and deactivate the post filter by setting it to “None”.

The mono versions do not have “dual” options and are much simpler.



Post HP

Before the output, a wet HP allows you to remove an excess of bass frequencies. the “HP + Notch” position is a filter combination that should bring your sound to another level.

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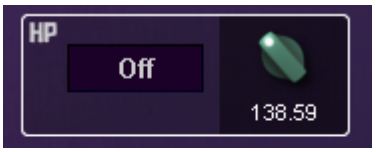
<td> 
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Note that some filters may offer other options, such as 6 and 12dB filters instead of 12 and 24 dB as shown in the screenshot.

Output

Classic Dry and Wet and Output gain controls.

You can boost the Wet and Output gain by up to +12dB by increments of 3dB.

Please note that this section is not stored in presets, only in projects. The reason is that the volume will be highly dependent on the input signal, and it is better not to have those parameters restored when you test presets.

The only exception is the Wet gain of the ModFormant, because different filter settings will change the gain drastically. Therefore, it is desirable to restore the Wet gain when you browse presets.

Enjoy !

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