



FabFilter Volcano 3

User Manual



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About FabFilter Volcano 3

Nothing beats a vintage sounding, gritty and creamy cut-off filter. And that's exactly what FabFilter Volcano has been known for since its first release in 2005. With Volcano 3, we are further expanding the sound palette with the introduction of characterful, non-linear bell, shelf, notch and all-pass filters, improved modulation options, high quality mode and much more.



New in Volcano 3

The first thing you will notice when you open Volcano 3 is the brand-new look. The completely redesigned interface makes Volcano 3 more pleasant and efficient to work with. All the goodness of the previous Volcanoes is still here of course, together with many new features:

- Fully redesigned, highly simplified [interface](#), with an easier workflow, including a new design of modulation sources and floating slot panel.
- Added [new, vintage-sounding EQ-type filter shapes](#) for every included filter style. With the internal drive and non-linearities, this results in truly unique filtering behavior, with lots of character, incomparable to usual, clean EQ filters:
 - Bell
 - Low- and high shelf
 - Notch
 - All-pass
- Added [6 dB filter slope](#) option.
- Improved the sound quality of the filter algorithms.
- Improved modulation quality and of the filter frequency and peak parameters.
- Introduced [High Quality](#) option, enabling maximum internal oversampling for the best results.
- Vastly improved the [filter display](#), including a spectrum analyzer, and optional piano display. The display now works much more intuitively, letting you select and adjust multiple filter curves at once.
- Introduced [Drive](#) setting per filter, adjusting the internal filter saturation, which allows for much more variety in sound and smoothness.
- Introduced Level/Pan per filter, which is especially useful when using parallel filter routings.
- Live [modulation visualization](#) for targets and sources.
- Envelope generators now have a [curve slope](#) setting for their attack, decay and release curves, opening up a much wider range of possible shapes, from very snappy and aggressive to gentle and smooth.
- Added [Transient mode for envelope followers](#), which turns them into transient detectors.
- Introducing Slider mode and a range setting for [XY controllers](#). In Slider mode, the XY controller only works in vertical direction, taking up much less space. The range setting toggles between bipolar (-1 to 1) and unipolar (0 to 1) behavior.
- Increased the number of XY controllers/sliders to 6.

- Modulation sources can now be renamed to make their use easier to understand.
- The [XLFO](#) Balance and Frequency Offset parameters are now modulation targets.
- XLFO MIDI triggering now offers a new [Legato mode](#).
- The [EG Threshold](#) parameters are now modulation targets. In addition, the incoming signal level is displayed in a meter around the Threshold knob, and it's now possible to audition the external side chain input.
- The EGs now have an [Range setting](#), toggling between Normal (a range between 0 and 1) and Neutral Sustain (a range around the Sustain level, where EG outputs 0 when it's in the sustain stage).
- Added the ability to [hide modulation sources](#) except for XY controllers and Sliders. This is often useful, since most presets use XLFOs, EFs, EGs and MIDI sources to create certain effects, which in turn can be controlled by XY controllers and sliders.
- The interface now supports resizing and [Full Screen](#) mode.
- [New factory presets](#), smartly organized and carefully designed.
- Introduced support for Pro Tools hardware control surfaces

FabFilter Volcano 3 can load presets from version 1 and 2. Due to changes in version 3, they might sometimes sound a bit different. See [Upgrading to Volcano 3](#) for more information.

FabFilter Volcano 3 is available in VST, VST3, CLAP, AU (Audio Units), AAX Native and AudioSuite formats.

Windows requirements	macOS requirements
Windows 11, 10, 8, 7 or Vista	macOS 10.13 or higher (64-bit only)
64-bit or 32-bit	VST 2/3, AU or CLAP host, or Pro Tools
VST 2/3 or CLAP host, or Pro Tools	Intel or Apple Silicon processor

Next: [Quick start](#)

See Also

[Using FabFilter Volcano 3](#)

[Upgrading to Volcano 3](#)

[VST plug-in versions](#)

Quick start

The installer will copy the FabFilter Volcano 3 plug-in into the common VST, VST 3, CLAP, AU (macOS only) and Pro Tools plug-in folders on your computer. On macOS, the global plug-in folders in `/Library/Audio/Plug-Ins` are used.

In most cases, your host will then recognize the plugin automatically. However, if the instructions below do not work, see [Manual installation](#) instead.

- **Pro Tools**

Choose an empty insert slot on one of your audio tracks, instrument tracks or buses and select FabFilter Volcano 3 from the pop-up menu in the Effect section.

- **Studio One**

Click the '+' button next to the Inserts tab of an audio track, instrument track or bus and select 'FabFilter Volcano 3' from the drop-down menu.

- **Logic Pro**

Choose an empty insert slot on one of your audio tracks, instrument tracks or buses and select FabFilter Volcano 3 from the pop-up menu. You will find FabFilter Volcano 3 in the *Audio Units > FabFilter* section (named Volcano 3).

- **Ableton Live**

In Session view, select the track you would like to place FabFilter Volcano 3 on, for example by clicking the track name. At the left top of Ableton Live's interface, click on the Plug-in Device Browser icon (third icon from the top). From the plug-ins list, double-click FabFilter/FabFilter Volcano 3, or drag it onto the track.

- **Cubase**

Choose an empty insert slot, for example in the Mixer, and select FabFilter Volcano 3 from the menu that appears. To use the MIDI features in Volcano 3, create a new MIDI track and set its output to the Volcano 3 instance you have just created. (The VST 3 version of Volcano 3 can be found in the Filter section.)

Use the Presets button to try different settings from the many factory presets that are bundled with FabFilter Volcano 3. Have fun!

Next: [FabFilter Volcano 3 overview](#)

See Also

[VST plug-in versions](#)

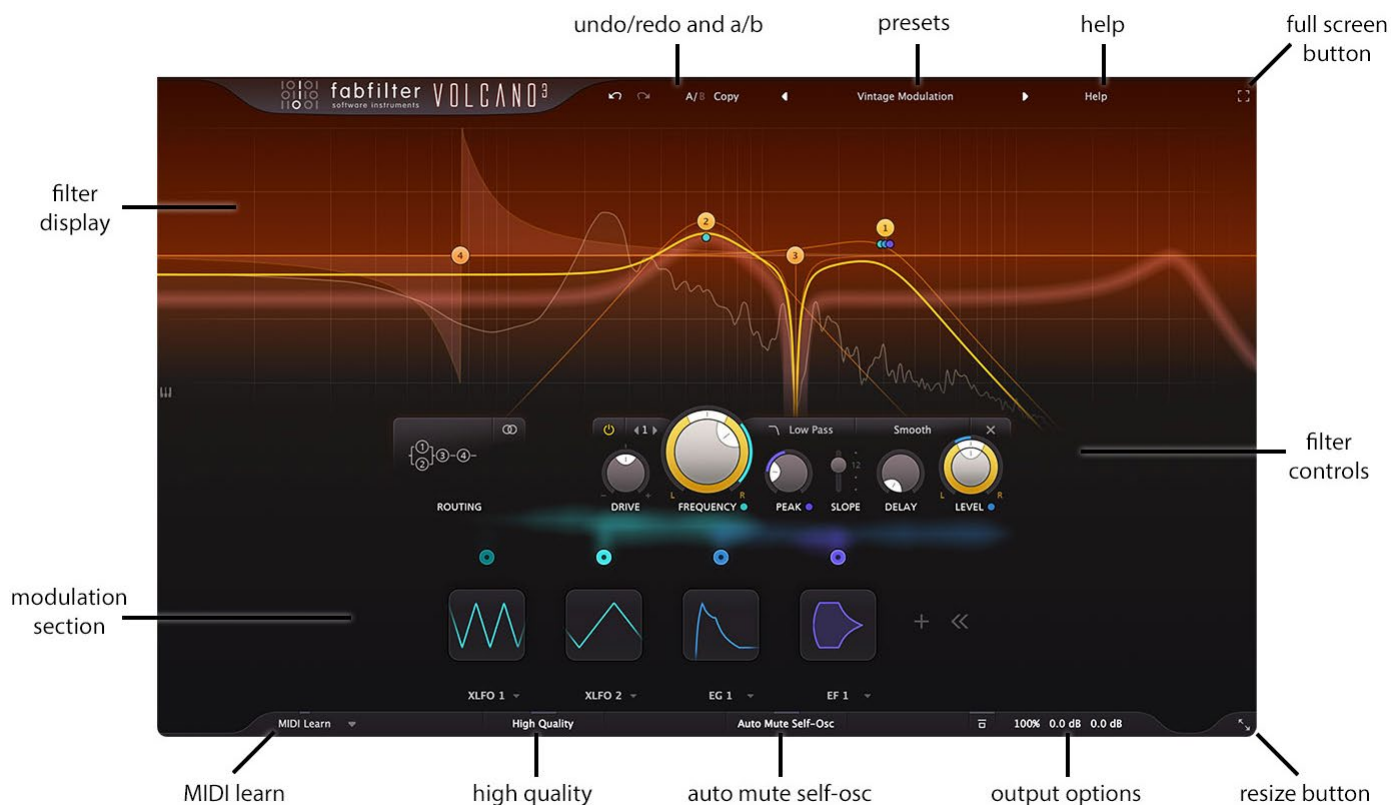
[Upgrading to Volcano 3](#)

[Overview](#)

[Loading presets](#)

Overview

FabFilter Volcano 3's interface is divided into multiple sections:



- **Filter display**

The filter display lets you create up to four different classic, non-linear, self-oscillating filters, which can be either low/high pass, band pass, bell, low/high shelf, notch or all pass. See [Filter display](#).

- **Filter controls**

At the bottom of the display, the [filter controls](#) provide full control over all parameters for the currently selected filters. At the left of the filter controls, the [routing button](#) selects the routing of the filters.

- **Modulation section**

The modulation section at the bottom shows all modulation sources, visualizing the signal flow and making it easy to set up modulation and create new sources. FabFilter Volcano 3 offers [XLFO](#), [envelope generator \(EG\)](#), [envelope follower \(EF\)](#), [MIDI](#) and [XY controller or slider](#) sources. See [Modulation](#) to get started.

- **High Quality**

The High Quality button controls the oversampling of the internal filter algorithms. See [Input/output options](#).

- **Auto Mute Self-Osc**

When Auto Mute Self-Oscillation is enabled, the possible self-oscillation introduced by the non-linear filters will be muted automatically when the plug-in input becomes silent. See [Input/output options](#).

- **Output options**

On the far right of the bottom bar, you can bypass the entire plug-in and the output button gives access to input/output level and panning controls. See [Input/output options](#).

- **Full Screen mode, resizing and scaling**

The Resize button at the far right of the bottom bar lets you change the interface size and scaling. In addition, click the Full Screen button in the top-right corner of the interface to let Volcano 3 fill the entire screen. See [Full Screen mode, resizing and scaling](#).

- **MIDI learn**

MIDI Learn lets you easily associate any MIDI controller with any plug-in parameter. See [MIDI Learn](#).

- **Presets, undo, A/B, help**

With the preset buttons, you can easily browse through the factory presets or save your own settings so you can reuse them in other songs. The Undo, Redo, A/B and Copy buttons at the top of the plug-in interface enable you to undo your changes and switch between different states of the plug-in. Finally, the Help menu provides access to help and version information. See [Loading presets](#) and [Undo, redo, A/B switch](#).

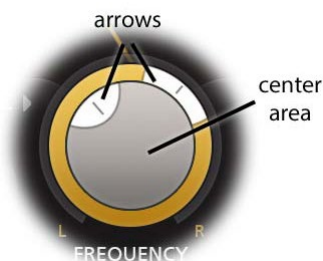
Next: [Knobs](#)

See Also

[About FabFilter Volcano 3 Support](#)

Knobs

It is easy to control FabFilter Volcano 3's parameters with the large round knobs. They will light up when you move the mouse cursor around to indicate that you can adjust them. The moment you move the mouse cursor over a knob, a parameter value display will pop up, which shows the name and the current value of the parameter.



All knobs support four ways of control:

1. **Vertical mode**

Click on the center area of a knob and drag up or down to rotate it. The knob reacts to the speed with which you are dragging, so if you move the mouse slowly, you make precise adjustments.

2. **Rotate mode**

Grab the arrow of the knob and drag it around. By moving the mouse cursor further away from the knob while dragging it, you can make precise adjustments.

3. **Mouse wheel mode**

Perhaps the easiest way to make adjustments is by using the mouse wheel when you hover over a knob. This mode works for all the knobs and possible panning rings. (On Windows, you might need to click in the plug-in interface first to make sure it is the active window.)

4. **Text entry mode**

Double-click a knob to enter an exact value using the keyboard.

Tips

- To **reset** a knob to its default position, hold down the *Ctrl* key (Windows) or *Command* key (macOS) and click the knob once. Note: In Pro Tools, Volcano 3 uses the default Pro Tools keyboard shortcut for reset: *Alt*+click.
- To **fine-tune** a value when using vertical drag mode or the mouse wheel, hold down the *Shift* key while dragging or moving the mouse wheel. Note: In Pro Tools, Volcano 3 uses the default Pro Tools keyboard shortcut for fine tune: *Ctrl*+drag on Windows or *Command*+drag on macOS.
- There are several **handy shortcuts in text entry mode**. With frequency values, you can type e.g. '1k' to set the value to 1000 Hz, and also 'A4' for 440 Hz, or even strings like 'C#3+13'. With dB values, you can type e.g. '2x' to get +6 dB (the value that corresponds to two times louder). With all values, you can also type a percentage (e.g. '50%' will put a knob exactly in the middle position).
- Sometimes, knobs in our plug-in interfaces are **linked**: these can be adjusted simultaneously by holding down the *Alt* key (*Shift* key in Pro Tools) while dragging on one of them. For example, an output level and input level setting of a plug-in could be adjusted simultaneously (in the opposite direction) this way.

Next: [Filter display](#)

See Also

[Support](#)

Filter display

The interactive filter display at the top right of the interface lets you add up to four high-quality, analog-like, self-oscillating filters, full of character and with internal saturation. The thick yellow curve shows the overall frequency response of the filters. Most of the filter parameters can be easily controlled via the display, either by clicking and dragging, or via the parameter value display. Here's how it works.



Creating filters

- To add a new filter, simply click on the yellow overall curve and drag it up or down.
- Alternatively, double-click or *Ctrl*-click (*Command*-click on macOS) on the display background.

Note: when using one of the per-channel routings (L/R or M/S), filters will always be created or deleted in pairs.

The shape of newly created curves is determined automatically depending on where you click, and once you get used to this, it's a real time-saver! Do you need a notch? Just double-click in the far low area of the display. Want a low-pass or high-pass filter? Double-click or drag in the left or right areas.

Selecting filters

- Click the filter's dot or the colored area around it to select it.
- Click and drag on the display background to **select adjacent filters** by dragging a rectangle around them.
- Hold down *Ctrl* (*Command* on macOS) and click another dot to **select multiple filters**. Hold down *Shift* and click a dot to **select a consecutive range** of filters.

Adjusting and editing filters

Once you have selected one or more filters, the display highlights the shapes of the selected curves. You can easily make adjustments by simply dragging them around:

- Click and drag a selected dot to adjust the **frequency** and **peak** of all selected filters. If you have multiple bell or shelf filters selected, the peak of all selected filters will be scaled relative to each other.
- Move the mouse wheel to adjust the **slope** of filters, making the selected filters narrower or wider. This works while dragging or when the mouse pointer is above a curve. Alternatively, adjust the slope of all selected filters by holding down *Ctrl* (*Cmd* on macOS) while dragging vertically.
- Move the mouse wheel while holding down *Ctrl* (*Cmd* on macOS) to adjust the **peak**.
- Hold down *Ctrl* (*Cmd* on macOS) and drag horizontally to adjust **frequency panning** of the selected filters. Filter panning lets you filter the left and right channels differently. It works as a stereo balance setting for the center frequency of the filter. For example, when you set panning to a negative value, the left channel will be filtered with a lower center frequency, and the right channel will be filtered with a higher center frequency. You can use this to create various stereo filtering effects, especially in combination with modulation.
- Hold down *Shift* while dragging (or while using the mouse wheel) to **fine-tune** the settings of the selected filters.
- Hold down *Alt* while dragging to **constrain** to horizontal adjustments (frequency) or vertical adjustments (gain).
- Hold down *Alt* and click the dot on a filter once to toggle its **bypass** state (enabling or disabling the filter).
- Hold down *Ctrl+Alt* (*Cmd+Alt* on macOS) and click the dot on a filter once to change its **shape**.
- Hold down *Alt+Shift* and click the dot on a filter once to change its **slope**.
- Double-click a dot to **enter values in the parameter display** (using the *Tab* key to step through Frequency, Peak and Pan) or double-click the values in the parameter value display directly. Note that you can enter frequencies in various ways, like "100", "2k", "A4" or "C#2+13".

If you right-click on the dot for a filter, a **pop-up menu** appears with various filter settings. This is a quick way to modify the filter while you're working in the display.

Filter parameter display

Next to each filter's dot in the display, the parameter display shows the exact parameter values for the filter, along with quick controls to **bypass** or **delete**, and change its **shape** or **style**. You can double-click a value in the display directly to edit it.

Most of the filter parameters (drive, frequency, gain, peak, filter panning, delay, level/pan), can be [modulated](#). Just drag a source to a line in the parameter value display, one of the filter controls or to the filter dot directly (to modulate the frequency).

Tips

- When filter modulation is taking place, the display will show the modulated result curve as a thin yellow curve that gets fuzzy for quick modulation.
- If filter panning is in effect, or if the [routing mode](#) is set to L/R or M/S, additional result curves will show the overall filtering curve for each channel: white/red in stereo or L/R mode, or light salmon/blue in M/S mode.

Next: [Filter controls](#)

See Also

[Overview](#)

[Modulation](#)

Filter controls

The filter controls below the [filter display](#) provide precise control over the currently selected filters. Most of the filter parameters (drive, frequency, peak, filter panning, delay, level/pan), can be [modulated](#), which allows for a wide range of creative possibilities.



From left to right, the following settings are available:

- The large **routing** button at the left determines how the filters are connected to each other, either in serial or parallel. The number of routing options depends on the current number of filters and the current routing mode.
- The **routing mode** button, next to the routing button, determines whether filters are used in stereo, per-channel or mid/side mode. In normal stereo mode, every filter is applied to both plug-in channels (in the stereo version of the plug-in of course). In L/R or M/S modes, half of the filters are applied to the left or mid channel, and the other half to the right or side channel. Note: in L/R or M/S modes, filter panning is disabled.
- The **enabled** button at the left top of the filter controls enables or bypasses the currently selected filters. The small **previous** and **next** buttons let you step through the filters in the display, from left to right. In between, the current filter number is shown to help you to identify it in the host when automating parameters.
- The **drive** knob controls the overall input drive of the filters, changing how clean or gritty the filters will sound.
- The **frequency** knob sets the frequency of the selected band. If multiple bands are selected, they are adjusted in parallel.
- The **pan** ring around the frequency knob lets you filter the left and right channels differently. It works as a stereo balance setting for the center frequency of the filter. For example, when you turn the pan knob to the left, the left channel will be filtered with a lower center frequency, and the right channel will be filtered with a higher center frequency. You can use this to create various stereo filtering effects, especially in combination with modulation. Note: panning is only available in the stereo version of the plug-ins, using the default stereo routing mode
- The **peak** knob adjusts the resonance of the active filter. A little resonance will cause the filter to create warmer and more characteristic tones. For most filter styles, the filter will start to self-oscillate at the highest peak settings. (The Auto Mute Self-Osc option in the bottom bar will help to keep this manageable. See [Input/output options](#).) For bell and shelf filters, the peak controls both the gain and the resonance of the filter, so it can be negative as well as positive.
- The **shape** of each filter can be set to low/high pass, band pass, bell, low/high shelf, notch or all pass. Unlike normal EQ shapes, the filters in Volcano 3 (even the bell and shelf filters) are highly non-linear and follow the unique character of the selected filter style.
- The **slope** switch sets the steepness of the filter, which controls how aggressively the frequencies around the center frequency are filtered. You can choose between 6 dB/oct, 12 dB/oct, 24 dB/oct or 48 dB/oct settings. For bell and shelf filters, this makes the filter wider or narrower. The 6 dB/oct option is not supported for band pass and notch filters.
- The **style** button lets you choose between eleven different filter styles, all with a unique character:
 1. *Classic*, the original filter style taken from our award-winning FabFilter One synthesizer
 2. *Smooth*, like the cream in your coffee
 3. *Raw*, a filter with lots of overdrive and exhibits a character of its own. Great for distortion guitar sounds
 4. *Hard*, moderately distorting filter, with a nice clean whistle
 5. *Hollow*, juicy moderate distortion with fairly much low-end self-oscillation
 6. *Extreme*, for more wild sonic ideas
 7. *Gentle*, a more smooth and clean general purpose style
 8. *Tube*, with a warmer sound and nice overdrive, great for synth sounds
 9. *Metal*, with a rough, sharper sound and distortion
 10. *Easy Going*, a softer version of the *Tube* filter
 11. *Clean*, linear behavior with no drive or clipping at all
- The **delay** knob set a small delay on the filter output of up to 50 ms. Combine this with parallel filtering, the [mix slider](#) and [modulation](#) to create comb-filtering, Haas, chorus and flanging effects.

- The **output level/pan** knobs controls the output level of each filter separately. This is mainly useful when filters are routed in parallel or per-channel (L/R or M/S). Of course, filter level and pan controls are modulation targets as well. Note: panning is only available in the stereo version of the plug-ins, using the default stereo routing mode.
 - The **delete** button at the right top of the filter controls removes the selected filters. If you have accidentally deleted some filters, you can easily restore them using the [Undo](#) button at the top of the plug-in interface.
-

Next: [Modulation](#)

See Also

[Filter display](#)

[Modulation visualization](#)

Modulation

When you open the plug-in with its default settings, the interface looks simple and clean. But the real fun with FabFilter Volcano 3 starts with the incredible modulation options. Almost any parameter can be modulated. These are called **modulation targets**. They can be modulated by any of the following available **modulation sources**:

- The [XLFO](#) can generate almost any waveform you can imagine and can be synchronized to the host tempo.
- The [Envelope generator](#) is of the usual ADSR kind and triggered by audio or MIDI.
- The [Envelope follower](#) will follow the loudness or transients of the audio signal it triggers on.
- The [MIDI source](#) transforms any incoming MIDI data into a modulation signal.
- Finally, the [XY controller or slider](#) lets you modulate targets using horizontal and/or vertical mouse movements.

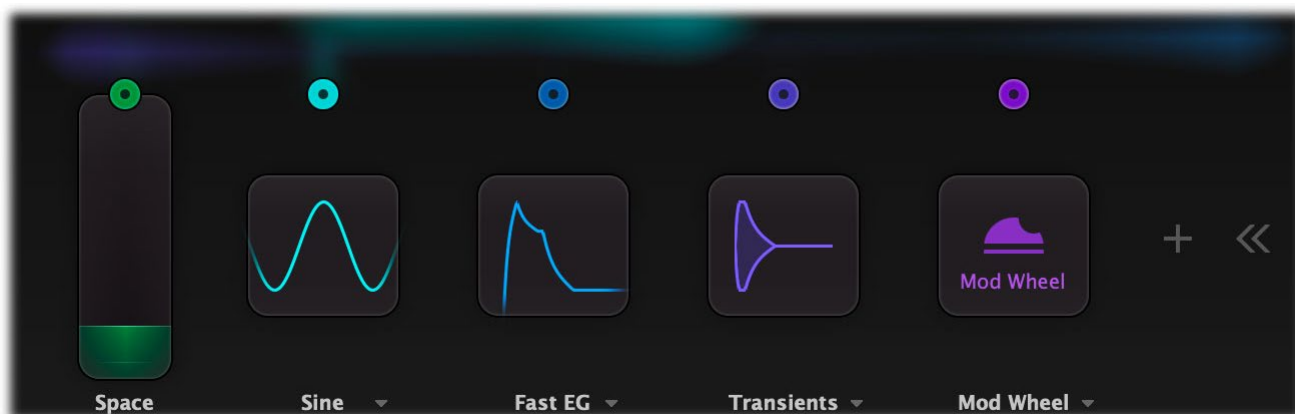
To **add a modulation source**, just click the '+' button in the modulation section at the bottom of the interface and choose one of the available options. Now, a source **component button** becomes visible, showing a graphical representation of the source's current settings.

To **delete** a source, move the mouse over the source component button and click the remove icon ✕ in the right-top corner.

Using the **show/hide modulation** button at the right of the + button, you can show or hide all modulation sources except for sliders and XY controllers. This makes it easier to interpret and work with the various factory presets, which often use quite a few XLFOs, EGs and EFs to achieve certain effects, and offer sliders or XY controllers to control the amount of these effects.

A modulation **source drag button** is located at the top of the source (two for XY controllers). [Drag-and-drop](#) this button to any modulation target in the interface to make a new modulation connection. The modulation signal always flows via a [modulation slot](#) that allows you to vary the extent of modulation. Click the source drag button once to pop up the modulation [slot panel](#), containing all slots that are affected (either directly or indirectly) by this source.

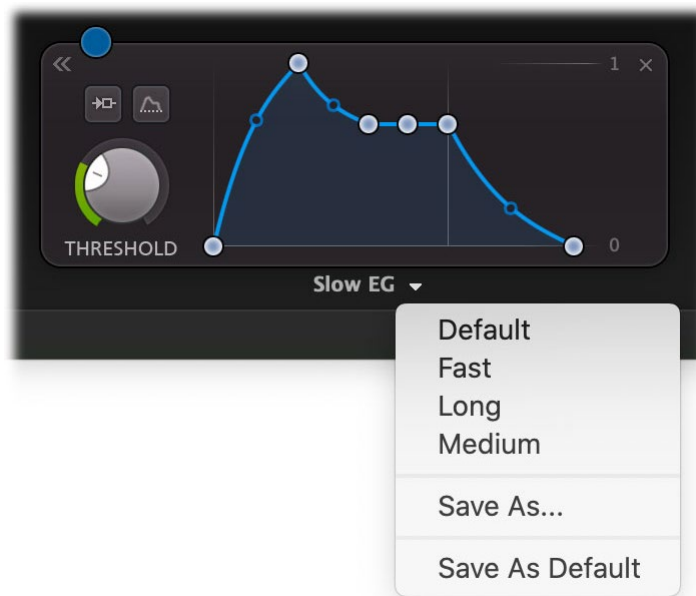
Every source has its own associated **color scheme**, which is also used for [modulation visualization](#) and modulation indicators in the interface, making it easy to see which types of sources are modulating a target.



Click a source component button once to expand the full source interface. **Click and drag** a button to directly adjust the main parameters for the source, as shown in the value displays when you hover above the button. For example, with an XLFO you can directly change the frequency.

You can **customize any source's name** by double-clicking the label below the source. Source names are stored in presets, A/B and undo states and will be saved with your session.

Right next to the source name label, the **preset button** ▾ provides access to the source's [section presets](#). You can customize the default settings for a newly added source by overwriting the predefined **Default** section preset using the *Save As Default* item in the preset menu.



Tip

- When the plug-in first starts up, the modulation sources are hidden, except for the [XY controller or slider sources](#), to keep the interface as uncluttered as possible. Simply click on the >> button in the modulation section to show all sources, and click on the << button to hide them again.
- If a modulation source drag button shows a filled dot inside, this means the source is actually in use at the moment.
- By default, if you expand a source to see its full interface, all other sources are collapsed to save space. If you would like to keep them expanded, click the large + button in the modulation section, and uncheck the **Auto-Collapse Sources** option at the end. You can always collapse a source by clicking its << button, or click on the background between the sources to collapse all sources.

Next: [Drag-and-drop modulation slots](#)

See Also

[Overview](#)
[Modulation visualization](#)

Drag-and-drop modulation slots

One of the best features in FabFilter Volcano 3 is the way you set up modulation connections with drag-and-drop. There is no need to search through long drop-down menus containing dozens of sources and targets or to find your way in cluttered and obscure matrix views. This simple method of making modulation connections makes sound design fun, easy and, above all: fast. So how does it work?

Grab a source...



First, **grab the source drag button** that you would like to use as a modulation signal, for example XLFO 1. The moment you click on the source drag button, the interface dims and all modulation targets are highlighted.

... drag it to a target...



The moment you **start dragging**, you will see a line from the source drag button to the icon that you are dragging. If you hover the mouse over the bands in the display or source selection buttons they will automatically be activated. The line will snap to any available modulation target.

... and drop it.



Now **drop the icon on the highlighted target** of the parameter that you would like to modulate, for example the *Filter Frequency* knob. That's all there is to it!

After you have connected a modulation source to a target, the **modulation slot panel** will popup near the target control. It contains all slots that affect the modulation target. Slots that modulate other slot levels, are shown indented and connected to the slot they are modulating.



When a control is modulated, a small **modulation indicator** dot appears near the control. The color matches the source that modulates the control. If multiple types of sources modulate a control, the modulation indicator consists of multiple colored dots.

You can **view the slots for a specific source or target**, simply by clicking any of the modulation source drag buttons or clicking any target control or modulation indicator in the interface. In the modulation slot panel that pops up, slots can be adjusted in the following way:

- Use the **level slider** to adjust the amount of modulation. Like with [knobs](#), hold down *Shift* for fine-tuning; hold down *Alt* to adjust all slot levels for the same source; *Ctrl*-click (Windows) or *Command*-click (macOS) to reset the level to the default value. (In Pro Tools, the default Pro Tools shortcuts are used instead.)
- To the left of the Level slider, you can **invert** the modulation signal with the +/- button.
- When you hover over the slider on the left an **on/off** button appears. Use this to temporarily disable the slot.

- On the right, a **drop-down menu** is accessible that lets you change the slot's source or target.
- To **delete the slot**, click the Remove button **X** to the right of the Level slider.
- To **delete/bypass/invert all slots**, use the drop down menu at the right top of the slot panel.

Tips

- When a modulation indicator appears next to the [filter display](#) or e.g. in an [envelope generator](#), this means one or more parameters of that filter or EG are modulated. When you click the indicator, the modulation slot panel that pops up shows all slots that modulate the filter or envelope generator.
 - To hide the modulation slot panel, simply click on a background area in the display or interface.
-

Next: [Modulation visualization](#)

See Also

[Modulation](#)

Modulation visualization

FabFilter Volcano 3 contains advanced modulation visualization features which greatly help you to understand the effect of the modulation that is going on. In the plug-in interface, modulation is visualized in three different ways: the effect of applied modulation to controls is shown by real-time **target level indicators**, the global amount and direction of modulation generated by sources is visualized in the **source flow area**, and finally, current connections by different types of sources are made clear by the **modulation indicators** next to target controls.

Target level indicators

All modulation that is applied to a control in the interface is shown in real-time via target level indicators around knobs, sliders and other controls. The level indicator originates from the current knob/slider position, and shows the range of modulation: it visualizes how the knob is dynamically changing due to the current modulation signal.

The color of the target level visualization matches the type of source that modulates it. Note that if a target is modulated by multiple types of sources, a generic yellow color is used instead.



The source flow area

In the area right above the modulation sources, the signal being produced by the sources is visualized in real-time by a diffuse flow, directed towards the targets it is currently modulating. This visualization gives you a global idea of the current activity and effect of sources. It is not intended to show all connections exactly, as this would highly clutter the interface and would probably be more confusing than helpful.



Modulation indicators

When a control is modulated, a small modulation indicator dot appears near the control. The color matches the source that modulates the control. If multiple types of sources modulate a control, the modulation indicator consists of multiple colored dots.

When a modulation indicator appears in the [filter display](#) or in an [envelope generator](#), this means one or more parameters are modulated. When you click the indicator, the modulation slot panel that pops up shows all slots that modulate one of these targets.



Tips

- Click on a modulation indicator next to a target control or on a control itself, to pop up the [modulation slot panel](#), showing all associated modulation slots. Click the control again, or click on the interface background, to hide the modulation slot panel.
- Are you seeing yellow colored target level visualization? This means that the target is modulated by multiple types of sources at the same time.
- In case you find the source flow visualization distracting, click the large + button in the modulation section, and uncheck the **Show Source Flow** option at the end to turn it off.

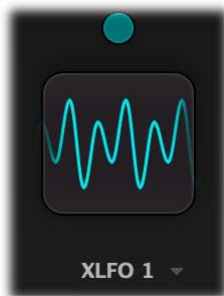
Next: [XLFO](#)

See Also
[Overview](#)

XLFO

The XLFO is like a classic LFO (Low Frequency Oscillator) on steroids: it can do so much more! It can be a regular LFO, but it can also turn into a 16-step sequencer with an individual glide setting for every step. The display shows the waveform that is used by the XLFO. Steps can be freely added or deleted to shape the funkiest of waveforms.

To add an XLFO as a modulation source, click the + button in the [modulation section](#) and click **New XLFO**.



Initially the XLFO is shown as a **source component button** in the interface, showing a graphical representation of the current settings. For more information on working with source component buttons, see [Modulation](#).

Click the source component button once to expand the full XLFO interface:



At the left, you will find the global parameters that affect the entire waveform:

- **Frequency**

The frequency knob sets the time it takes for one cycle of the waveform to complete. This knob is a modulation target, so you could let one XLFO modulate the frequency of another XLFO. The XLFO can be synchronized to the tempo of the plug-in host or set to run free. With the options at the top-right corner of the frequency button you can choose the different settings:

- Free running mode will allow values from 0.02 to 500 Hz, so the minimum cycle length is 0.002 seconds.
- When using any of the synchronized cycle lengths (16 to 1/64, measured in bars) the frequency knob changes into the **Offset** knob. It now acts like a cycle length multiplier and therefore is capable of changing the cycle length relative to the host tempo, from half to two times the host tempo. Click the dots around the knob to jump to certain predefined offsets for dotted and triplet synchronization. Note that the Offset knob is also a modulation target.

- **Balance**

The outer ring of the frequency knob adjusts the time balance of the first and last halves of the step sequence. For example, when turned to the left, the first half of the wave form is generated more quickly than the last half. The balance ring is also a modulation target so you can modulate the balance for creative effects.

- **MIDI sync**

The XLFO can be restarted at any point using MIDI if one of the MIDI sync options is enabled at the top-right corner of the frequency knob. In the *Retrigger* mode, any note-on MIDI message (e.g. pressing a key) will restart the cycle of the waveform (to the point set by the Phase offset slider). If set to *Legato* mode, the XLFO will only be triggered by the *first* note-on MIDI message, and won't retrigger on successive notes while notes are still being held down.

- **Snap**

This function makes it possible to use the XLFO as an arpeggiator. When you enable Snap, a small piano keyboard appears, the range of the XLFO turns into 2 octaves, and steps "snap" to notes on the piano keyboard. Now when you modulate a frequency parameter, turn the slot level to maximum, and the total amount of modulation will exactly correspond to 2 octaves.

- **Glide**

The global Glide knob acts like an overall glide offset. The amount of glide determines the point within a step at which the XLFO starts to interpolate to the value of the next step. The global Glide value is added to the glide value for individual steps to arrive at the final glide value for each step. The final glide value is limited between 0 (no interpolation) and 1 (full interpolation). Because the global Glide value can range from -1 to 1 it can completely overrule the individual step glide values at the extreme settings. It is also a modulation target which allows for very cool effects.

- **Phase offset**

In the step editor you can see a triangular shape. The vertical line of the shape indicates the beginning of each cycle. You can move this triangular shape, and thus change the beginning of a XLFO cycle. This phase offset is a modulation target, so when the XLFO frequency is set to 0, you can use another modulator to cycle through the different steps. **Tip:** Like with [knobs](#), you can *Ctrl/Command*-click on the phase offset slider to reset it.

To delete an XLFO, move the mouse over it and click the remove button **X** in the top right corner. Below the source, next to the source name, the Presets button **v** provides access to the XLFO [section presets](#). By default, the XLFO starts with two steps that make a sine wave. You can customize this by overwriting the predefined *Default* section preset using the Save As Default command from the preset menu.

Editing Steps

You can shape the waveform of the XLFO in almost any way you want by editing the individual steps.

- Drag a step up or down to **change the value** for the step.
- Click a step to **select** it.
- Hold down *Ctrl* (*Command* on Mac) and click a step to **select multiple steps**. Hold down *Shift* and click a step to **select a consecutive range** of steps.
- Click next to a step to **deselect** all steps.
- Click the **+** button at the end of all steps to **add** a new step. The new step is added to the right of the selected step, or at the end of all steps.
- Click the **-** button at the end of all steps to **remove** the selected steps. If no steps are selected, the last step is removed.

If one or more steps are selected, the XLFO expands to show the **step interface** where the parameters for the selected steps can be edited:

- **Random**
The Random button enables random values for this step. If enabled, the XLFO will use a new random value for the step each time it encounters it. The display also changes to show that the value is chosen at random (see step 3 in the screen shot above).
- **Value**
The Value knob adjusts the value of step. This is the same as dragging the step up and down, except that with multiple selected steps, the value of all steps is set to the same value. In contrast, when you drag multiple selected steps, the relative distance is kept the same.
- **Curve**
The Curve button selects the curve that is used to interpolate to the next step when the final glide value is higher than 0: Linear, Sqr, Sqrt and Sine.
- **Glide**
The Glide knob sets the per-step glide value. This is combined with the global glide value to determine at which point the XLFO starts to interpolate towards the next step.

To start exploring the many sound-shaping possibilities, start with an XLFO that [modulates](#) the Filter Frequency knob to make the sound change over time. You'll be amazed by the many possibilities. Have a look at the presets to see the XLFO in many different setups to get an idea of what it can do for you and start creating your own sequences!

Next: [Envelope generator](#)

See Also

[Modulation](#)

[Drag-and-drop modulation slots](#)

Envelope generator

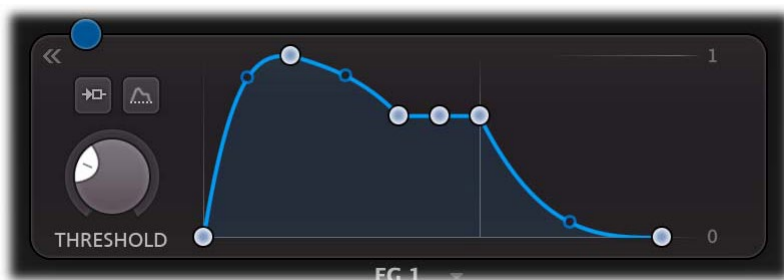
The envelope generator (EG) generates a traditional ADSR envelope. The envelope defines how the level changes with time and is controlled by the *Attack*, *Decay*, *Sustain* and *Release* parameters. Its function is to modulate a parameter over time, based on MIDI input or the amplitude of an audio signal that triggers it.

To add an envelope generator as a modulation source, click the + button in the [modulation section](#) and click **New Envelope Generator**.



Initially the EG is shown as a **source component button** in the interface, showing a graphical representation of the current settings. For more information on working with source component buttons, see [Modulation](#).

Click the source component button once to expand the full EG interface:



The expanded interface contains a large graphical envelope controller with triggering controls on the left.

- The **trigger input** button opens a menu to select which signal is used for triggering the EG: the main input signal, the signal from the external side-chain input, or MIDI note on events. See also [External side chaining](#).
- An **audition** button becomes visible when triggering on the external side-chain. Click and hold it to temporarily listen to the signal this EG is triggering on.
- The **threshold knob** sets the level of the incoming signal that the EG will trigger on. You should adjust the threshold depending on the type and amplitude of the incoming signal. The circular level meter around the threshold knob gives a good indication of what threshold level to use. Note: the threshold knob is hidden when MIDI input triggering is used.
- The **range button** selects whether the EG produces a signal in the default range between 0 and 1, or with a range such that the EG outputs 0 while in its sustain phase. In the latter case, the EG will attack from a negative value to a positive value, and finally release to a negative value. This "centers" the output value around 0, which can be useful for modulation.

In the **envelope controller** you can click and drag the dots to customize the envelope shape. The following parameters are available:

- **Delay**
The time it takes for the attack to start after the key is pressed (or triggered when the input signal exceeds the threshold).
- **Attack**
The Attack portion of the envelope is the time taken for the amplitude to reach maximum value. Slow attack is commonly part of sounds called pads. But for percussive sounds the attack time should be as short as possible.
- **Decay**
After the sound has reached its maximum level, it starts to decay until it reaches a level known as the Sustain level at a rate set by the Decay time setting.
- **Sustain**
This is the level reached after the decay time. The EG will hold this level as long as a key is pressed (or as long as the trigger input level is above the threshold). Note that this parameter specifies a volume level rather than a time period.
- **Hold**
Once the key is released (or the input level drops below the threshold), the value will remain at the sustain level for a time set by the hold parameter.
- **Release**
After the hold time the sound resumes its decay, this time at a new rate determined by the Release setting.

Attack, Decay and Release Slope

The attack, decay, and release curves each have a **slope dot** in the middle that you can drag up and down to vary the curve shape between linear, logarithmic and exponential behavior. This lets you customize each of these curves to change its feel and snappiness and makes the EG much more versatile.

Tips

- When adjusting the EG control points, you can hold down the *Shift* key to fine-tune a setting, just like with regular [knobs](#).
 - To let a sustain pedal control the EG, you can hook it up to the Hold setting. The recommended way to do this is via a [MIDI source](#).
-

Next: [Envelope follower](#)

See Also

[Modulation](#)

[Drag-and-drop modulation slots](#)

Envelope follower

The envelope follower modulation source outputs an envelope or transient signal based on the side-chain input audio level. Unlike the [envelope generator](#), which produces its own envelope, the EF tracks the envelope of the trigger signal and smoothes it out to produce a modulation signal.

To add an envelope follower as a modulation source, click the **+** button in the [modulation section](#) and click **New Envelope Follower**.



Initially the EF is shown as a **source component button** in the interface, showing a graphical representation of the current settings. For more information on working with source component buttons, see [Modulation](#).

Click the source component button once to expand the full EF interface:



In the graphical **envelope controller** you can click and drag the dots to customize the attack and release times of the EF, which controls how the signal is smoothed.

The **trigger input** button opens a menu to select which signal is used for triggering the EF: the main input signal, or the signal from the external side-chain input. See also [External side chaining](#).

An **audition** button becomes visible when triggering on the external side-chain. Click and hold it to temporarily listen to the signal this EF is triggering on.

The **mode** button toggles between the default Envelope setting and a Transient mode, where the envelope follower will work as a transient detector, only producing output for short-term bursts of energy in the signal (e.g. drum hits).

Next: [MIDI source](#)

See Also

[Modulation](#)

[Drag-and-drop modulation slots](#)

MIDI source

The MIDI source is a powerful modulation source if you want more control over FabFilter Volcano 3 using a MIDI keyboard or MIDI controller. Note that you first need to [route data from a MIDI track](#) to Volcano 3 in your host.

To add a MIDI source as a modulation source, click the + button in the [modulation section](#) and click **New MIDI Source**.



Initially the MIDI source is shown as a **source component button** in the interface, showing a graphical representation of the current settings. For more information on working with source component buttons, see [Modulation](#).

Click the source component button once to expand the full interface:



The expanded MIDI source interface contains the following controls:

- **MIDI Input**

Normally the MIDI source lets you use MIDI input such as velocity, pitch bend and modulation wheel to influence any parameter that can be modulated.

- **Controller number**

... but when you set the input selection to Controller, it lets you use any MIDI controller as a modulation source.

- **Response curve**

The response curve can be adjusted to get the desired control over the MIDI source output. For example, when used with velocity as MIDI source the linear, exponential, logarithmic, square, square root or sine curves make great dynamic differences.

Using a MIDI source is different from [MIDI Learn](#) because there is no direct control of a knob via MIDI but it uses a modulation slot instead. This way you can add modulation to an already modulated destination. Or you can use the full rotation of a knob while actually modulating a smaller range. This can be a good way to control say, an EG attack for which you sometimes want to make small changes with great precision.

Tips

- To let a sustain pedal control an [envelope generator](#), use a MIDI source. Set the input to Controller, and the controller number to 64. Now, [drag](#) the source drag button for the MIDI source to the hold control point of the envelope generator, and set the slot level to maximum. Of course, you can also set up more sophisticated behavior of the sustain pedal, for example by modulation the release setting instead of hold: the possibilities are endless.
- The VST3 version of FabFilter Volcano 3 doesn't support per-note aftertouch modulation.

Next: [XY controller](#)

See Also

[Modulation](#)

[Drag-and-drop modulation slots](#)

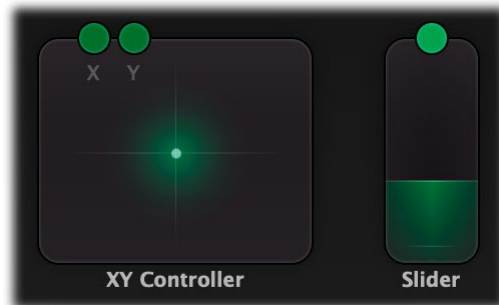
[MIDI learn](#)

XY controller

The XY controller makes for more tweaking fun. It's a classic, and we didn't dare to leave it out! It can control two parameters with one mouse movement. When browsing presets don't forget to listen to the sound mangling possibilities provided by these controllers. The XY controller can also be set to a one-dimensional Slider mode.

To add an XY controller or slider as a modulation source, click the **+** button in the [modulation section](#) and click **New XY Controller** or **New Slider**.

The new XY controller or slider is now added to the modulation sources in the interface. Note that every source has its own associated color scheme, which is also used for [modulation visualization and indicators](#) in the interface.



You can **customize any source's name** by double-clicking the label below its interface. Source names are stored in presets, A/B and Undo states and will be saved with your session. This is particularly useful for XY controllers and sliders, to indicate their purpose in a preset.

In bi-directional mode, the XY controller has two "outputs", so it also has two source drag buttons labeled X and Y. When using it as a slider, only the Y source drag button is available.

The **remove button** **X** at the right top deletes the source, including its associated modulation slots.

At the bottom right of the XY Controller, a drop-down menu gives access to the following options:

- The **mode** switches between the traditional *XY* mode (two dimensions) or simpler *Slider* mode (offering only one dimension).
- The **range** of the XY controller can be set to *bipolar* (-1 to 1) domain, or to *unipolar* (0 to 1) behavior.

In slider mode, the current position value of the slider is displayed when you move the mouse over the slider. Double-click the slider to type a new value directly.

Tips

- To reset the XY Controller to its default position, hold down the *Ctrl* key (Windows) or *Command* key (macOS) and click once.
- When you want to adjust only one parameter on one axis, holding *Shift* will make it easier to do so while keeping the other parameter constant.
- With [MIDI learn](#), you can set up a hardware MIDI controller to control the XY controller. So if your MIDI controller has XY-functionality you can directly control FabFilter Volcano 3 with it.

Next: [Full Screen mode, resizing and scaling](#)

See Also
[Support](#)

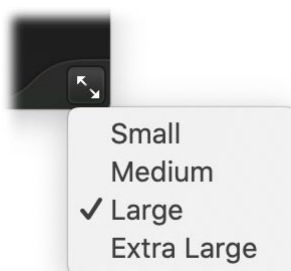
Full Screen mode, resizing and scaling

With just the click of a button, the Volcano 3 interface will fill up the whole computer screen so you can make ultra-precise adjustments and get the best view on the spectrum analyzer and filter display. To exit Full Screen mode, just press Escape or click the Full Screen button again.



Resizing

In addition to Full Screen mode, you can also customize the normal interface size using the Resize button at the right of the bottom bar. You can choose between Small, Medium (the default size), Large or Extra Large. Once you have selected a size, it will automatically become the default size for new plug-in instances.



Scaling

At the bottom of the resize menu, the Scaling submenu lets you increase or decrease the interface scaling relative to the system default, e.g. 150% (smaller) or 300% (larger) on Retina monitors (that have a 200% scaling by default).

When you enable Full Screen mode, the plug-in will automatically choose an appropriate scaling so that all controls become a bit larger. The plug-in automatically remembers the chosen scalings for normal and Full screen mode, and also per monitor type (Retina / High DPI or regular), so once you've customized the settings to your preference, you don't have to worry about it anymore.

**Tips**

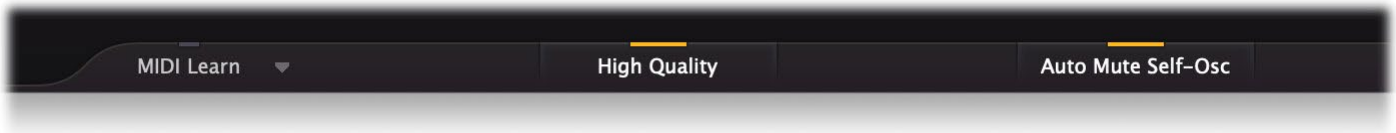
- When using the VST3 plug-in, you can resize the plug-in interface by just dragging the window edges to any size you like. Of course you can always go back to one of the predefined sizes with the resize button.
- The large interface options will be greyed out in the Resize button menu if the current display is too small to support them, and the same applies to the scaling options.

Next: [Input/output options](#)

See Also
[Overview](#)

Input/output options

Next to the [MIDI learn](#) button, the bottom bar contains various input/output options and settings.



The **High Quality** button enables oversampling of the internal filter algorithms. Non-linearities in digital audio can cause aliasing effects. Enabling High Quality mode can reduce these aliasing artifacts if needed, at the cost of using more CPU power.

When **Auto Mute Self-Osc** is enabled, the possible self-oscillation introduced by the [non-linear filters](#) will be muted automatically when the filter stage's input becomes silent. Otherwise, with extreme peak settings, filters could keep on self-oscillating long after the plug-in has stopped processing audio.

The **Global Bypass** button lets you bypass the entire plug-in. While most hosts already provide the ability to bypass plug-ins, our internal global bypass applies soft bypassing to avoid clicks. While the plug-in is bypassed, the frequency analyzer stops and a red line at the top of the bypass button appears.



As soon as you hover the mouse over the output button, right next to the bypass button, a panel with large input/output/pan and mix controls will pop up:

- **Input level/pan**

The input reading in the output button shows the current (wet) input gain and lets you adjust it from -36 dB to +36 dB. To change the gain, you simply drag the input reading in the output button in the bottom bar up and down. For precise adjustments, or to change the panning, hover over the output button or click it once to access the input gain/pan knobs. The input gain and pan knobs are also [modulation targets](#).

- **Output level/pan**

The output reading shows the current (wet) output gain, also adjustable from -36 dB to +36 dB. It works the same as the input reading and knobs and is also a modulation target. Note that you can overdrive the filters by increasing the input gain and reducing the output gain at the same time.

- **Mix**

You can use the mix slider to set a mix between the original (dry, unprocessed) input signal and the filtered/wet signal. This is also a modulation target. Note that due to phase changes in the filtered signal, mixing it with the dry signal may result in some degree of phase cancellation.

Next: [MIDI learn](#)

See Also

[Overview](#)
[Modulation](#)

MIDI Learn

Controlling FabFilter Volcano 3's parameters directly with MIDI is very easy using the MIDI Learn feature. With MIDI Learn, you can associate any MIDI controller with any parameter.



Click the **MIDI Learn** button in the bottom bar to enter MIDI Learn mode. The interface dims and the parameters that can be controlled are highlighted. Each parameter has a small text balloon that displays the associated controller number. Now do the following to associate a controller number with a parameter:

1. Touch the control of the desired parameter in the interface that you wish to control. A red square will mark the chosen parameter.
2. Adjust the slider or knob on your MIDI keyboard or MIDI controller that you want to associate with that parameter.

That's it! The parameter will now be controlled with the MIDI controller. You can now go back to step 1 to associate a different parameter. Note that there is no warning when you associate a different knob with a controller number that is already used. It will just be replaced.

To exit MIDI Learn mode, click the MIDI Learn button again, or click Close at the top of the interface.

Click the small menu drop-down button next to the MIDI Learn button to access the **MIDI Learn menu**:

- **Enable MIDI**
This globally turns MIDI control of parameters on or off: useful in hosts that automatically send all MIDI events on a track to all effect plug-ins associated with that track as well.
- **Clear**
This submenu shows all parameter associations and lets you delete individual associations or clear all associations in one step.
- **Revert**
Reverts to the last saved MIDI mapping (or the state when the plug-in was started).
- **Save**
Saves the current MIDI mapping so Revert will go back to this state. The current mapping is automatically saved when closing the plug-in.

Routing MIDI to effect plug-ins

For MIDI Learn to work properly, the plug-in need to actually receive MIDI of course. Depending on your host, it can be quite difficult to route MIDI data to effect plug-ins. Here's how to do it in the most important hosts:

- **Pro Tools**
Create a new **MIDI track**. From the MIDI input drop down menu, choose your MIDI device (if not already selected) and from the MIDI output drop down menu, choose FabFilter Volcano 3 -> channel 1 for the instance you would like to control.

- **Logic Pro**

Instead of adding FabFilter Volcano 3 to one of the insert slots, create a new **Instrument Track**, and click on the Instrument slot. Then choose **AU MIDI-controlled Effects** > FabFilter > Volcano 3. Now, the plug-in receives MIDI. To get audio into the plug-in, click the '**Side Chain**' drop down menu in Logic's plug-in header and choose the actual input track. Next, you can mute that original track, so you only hear the audio through the plug-in. The only downside is that plug-ins with an external side-chain cannot use it anymore.

- **Ableton Live**

First of all, create a new **MIDI track**. From the 'MIDI from' drop down menu, choose your MIDI device (if not already selected). Then, in the 'MIDI to' drop down menu, choose the Audio track that has FabFilter Volcano 3 on it. Note: only the first plug-in on any track can receive MIDI.

- **Cubase**

Simply create a new **MIDI track** and set its output to the Volcano 3 instance you would like to control via MIDI.

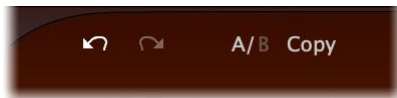
Next: [Undo, redo, A/B switch](#)

See Also

[Overview](#)

Undo, redo, A/B switch

The Undo and Redo buttons at the top of the FabFilter Volcano 3 interface enable you to easily undo changes you made to the plug-in. With the A/B feature, you can quickly switch between two different states of the plug-in.



- The **Undo** button at the left will undo the last change. Every change to the plug-in (such as dragging a knob or selecting a new preset) creates a new state in the undo history. The Undo button steps back through the history to restore the previous states of the plug-in.
- The **Redo** button cancels the last undo command. It steps forward through the history until you are back at the most recent plug-in state.
- The **A/B** button switches from A to B and back. Before switching, the current state of the plug-in is saved, so if you click this button twice, you are back at the first state. The button highlights the currently selected state (A or B). In the example above, the A state is active.
- The **Copy** button copies the active state to the inactive state. This marks the current state of the plug-in and allows you to go back to it easily with the A/B button. After clicking Copy, the button disables itself to show that both states are equal, so there is nothing to copy anymore.

Notes

- If the plug-in parameters are changed without using the plug-in interface, for example with MIDI or automation, no new undo states are recorded.
- The Undo and Redo buttons will disable themselves if there is nothing to undo or redo.

Next: [Using on iOS](#)

See Also
[Overview](#)

Using on iOS

FabFilter Volcano 3 is available as an AUv3 plug-in for iPad in the App Store. Using Volcano 3 on a touch screen is slightly different from using it with a mouse:

- To **adjust** a knob, just touch it and drag up or down. There is no [rotational drag mode](#) like with the mouse.
- For **fine adjustment**, hold down a second finger while you're dragging a knob.
- To **reset** a knob to its default position, simply double-tap it.
- To **type** a new value directly, press and hold on a knob until the on-screen keyboard appears. Note that the keyboard might obscure the parameter value display — unfortunately we can't do anything about that because an AUv3 plug-in cannot control its own position on the screen.



To organize presets on iOS, open the [preset menu](#) and swipe to the left on any preset or subfolder to see options to delete or edit it. When editing a preset or folder, you can rename it and move it to another folder.

The Volcano 3 app that contains the AUv3 plug-in serves as a stand-alone host that simply routes audio from the microphone to the plug-in and plays it back in real-time via the speakers or headphone output. You need to manually start the audio engine using the Audio On/Off switch at the bottom, but first make sure that the speaker volume is not too high to avoid excessive feedback! We do recommend to use an AUv3 host app like Auria, Cubasis, AUM or GarageBand to take full advantage of Volcano 3's features.

- [View FabFilter iOS plug-ins in the App Store](#) 

Next: [Loading presets](#)

See Also

[Overview](#)

Loading presets

The included presets give a great overview of what you can do with FabFilter Volcano 3. You can either use the presets as they are, or tweak them further to create your own unique effects.

- To load a preset, click the preset button. The presets menu will appear with all available presets. Click a menu item to load that preset. The currently selected preset is highlighted with check marks.
- To explore the presets one by one, click on the little arrow buttons to the left and right of the main preset button. This will load the previous or next preset in the menu.

The preset button shows the name of the current preset. If you have changed the preset by adjusting one or more parameters, the name is dimmed to indicate that this is not the original preset anymore.

Tips

- The **Default Setting** preset is loaded automatically when FabFilter Volcano 3 is started. To change the default settings, simply overwrite this preset by clicking **Options > Save As Default** in the presets menu.
- To open a preset outside the [presets folder](#), click **Options > Open Other Preset**. This might be useful if someone sends you a preset by email, for example.
- If somehow the factory presets are lost or not installed properly, click **Options > Restore Factory Presets** in the preset menu to restore them.

MIDI Program Change and Bank Select

Loading a presets can also be done via MIDI, using Bank Select and Program Change messages. Click **Options > Enable MIDI Program Changes** in the preset menu to enable or disable this feature. When enabled, the corresponding bank/program numbers are shown in front of the preset name (for example: *(0/65) My Preset*). This means that you can load that preset by first sending a Bank Select message to select bank 0 and then sending a Program Change message to select program 65.

Important: All the presets in your preset folder are numbered automatically, starting with bank 0 and program 0. This way, you are able to access any of the presets via MIDI. However, this also means that when you add new presets to the menu, bank/program numbers of other presets might change. Be aware of this when recording program changes in a session! We recommend to create a dedicated folder in your presets folder for your program changes, and name it with two leading underscores (e.g. *__Programs*) to ensure it's the first folder in your preset collection and the presets in this folder start with bank 0 and program 0.

Compatibility with Volcano 1 and 2

All presets created with Volcano 1 and 2 can be loaded in Volcano 3. If an earlier version of Volcano is installed on your computer, the presets from this version will be accessible via the **V1 Preset Folder** and **V2 Preset Folder** submenus in the preset menu.

You can read more about compatibility with earlier versions of FabFilter Volcano in [Upgrading to Volcano 3](#). Please take some time to read it if you are planning to replace Volcano 1 or 2 instances with Volcano 3 instances in your songs.

Next: [Saving presets](#)

See Also

[Overview](#)

[Quick Start](#)

Saving presets

You can easily extend the included presets with new settings to build your own library of presets for FabFilter Volcano 3 that you can reuse in various projects. This is also a good way to copy settings across multiple instances of FabFilter Volcano 3 in a session.

To save the current setting as a preset, click the preset button, and then click *Save As*. A standard Save dialog will appear. Type a name for the new preset and click *Save* to finish.

In the Save dialog, you can also rename and delete existing presets and create a new folder to store presets in. New folders will show up as new categories in the preset menu. (On macOS, this should be done with the Finder.)

Right-click shortcut menu

You can also right-click on the preset button to open a small menu with shortcuts:

- **Save:** Overwrite the currently loaded preset. You will be asked for confirmation before saving.
- **Save As:** Just like choosing the 'Save As...' item from the main menu.

See [How presets are stored](#) to determine the preset folder location and learn more about factory presets.

Next: [Section presets](#)

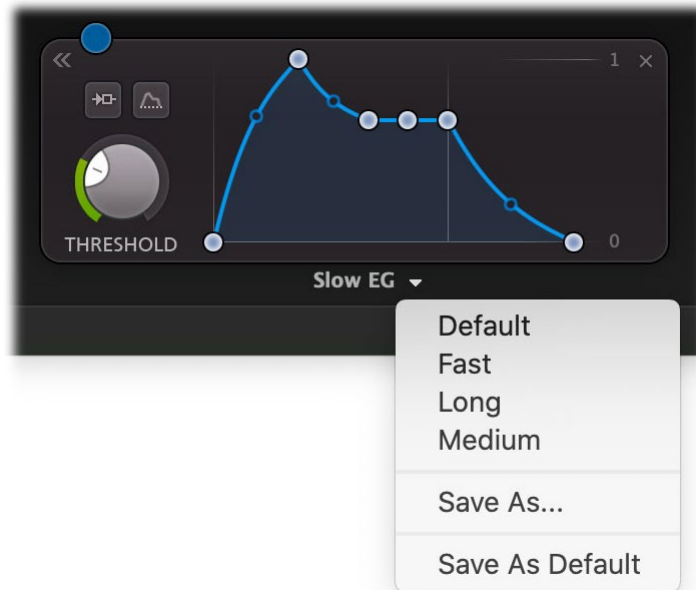
See Also

[Loading presets](#)

[Using FabFilter Volcano 3](#)

Section presets

To make designing sounds for FabFilter Volcano 3 easier, you can save section presets for different sections of the plug-in. In this way you can, for example, easily re-use certain settings.



To load and save section presets, click the arrow button right next to the modulation source name, centered at the bottom of the source interface. This will display a presets menu for that section. FabFilter Volcano 3 comes with a selection of ready-made section presets, but we encourage you to save your own presets to build a custom library of sound building blocks.

Supported sections are:

- [XLFO](#)
- [Envelope generator](#)
- [Envelope follower](#)
- [MIDI source](#)

When you add a new modulation source, it loads its **Default** section preset. You can customize the initial settings just by overwriting that preset using the Save dialog.

Section presets are stored in the *Application Data* folder (Windows) or *Application Support* folder (macOS) for the current user. For example, the full path to the section presets on Windows 10 is `C:\Users\<User>\AppData\Roaming\FabFilter\Volcano 3\Component Presets` (note that this folder is hidden by default). You cannot change the section preset paths.

Next: [How presets are stored](#)

See Also

[Loading presets](#)
[Overview](#)

How presets are stored

Presets for FabFilter Volcano 3 are stored in separate files with the .ffp extension (for FabFilter Preset). All presets reside in subfolders in the main preset folder. The subfolders will show up as separate categories in the preset menu. You can also further divide the subfolders into categories.

You can manage the preset files just like other files on your computer. The easiest way to do this is in the Save dialog that appears if you are saving a preset. The preset menu will automatically reload itself with the changes when the dialog is closed.

Furthermore it is very easy to share your newly created presets with other users since FabFilter presets use the same file format on both Windows and macOS.

The default location of the main preset folder is *Documents/FabFilter/Presets/Volcano 3* on both Windows and macOS. To change this location, first copy all presets to the desired new location. Click **Options > Change Preset Folder** in the preset menu and select the new folder.

Note: previously on macOS, presets were stored in *~/Library/Audio/Presets/FabFilter/FabFilter Volcano 3*. To determine the current location of the presets folder, click **Options > Change Preset Folder** in the preset menu.

Restoring factory presets

If you have accidentally lost the factory presets, you can easily restore them by clicking **Options > Restore Factory Presets** in the preset menu. This will install all factory presets again.

Next: [Purchasing FabFilter Volcano 3](#)

See Also

[Saving presets Overview](#)

Purchasing FabFilter Volcano 3


Once you have downloaded and installed the evaluation copy of FabFilter Volcano 3, you may evaluate it during 30 days. Every time you start the plug-in, you will see the following dialog:




While there are still days left, you can click **Evaluate** to start working with the plugin. If you want to keep using FabFilter Volcano 3 after the evaluation period, you must buy a copy in the online FabFilter Shop by clicking the **Buy Now** button in the evaluation dialog.

- [Go to the FabFilter Shop and purchase FabFilter Volcano 3 now](#) 

We accept a wide range of payment methods, like credit cards, PayPal, wire transfer and iDeal. The FabFilter Shop uses secure connections and encryption: therefore your personal information is completely safe.

Within a few minutes after you have purchased your copy, you will receive an email containing your personal license key. You use this license key to turn the evaluation copy into a fully registered version without the evaluation dialog and the 30-day trial restriction. In addition, we will automatically create a [FabFilter account](#)  for you (if you don't have one already). Here, you can access all your license keys at any time.

Note: If the evaluation period has expired but you didn't have the chance to properly evaluate the plug-in, you can request a new evaluation period by contacting us at info@fabfilter.com .

Next: [Entering your license key](#)

See Also

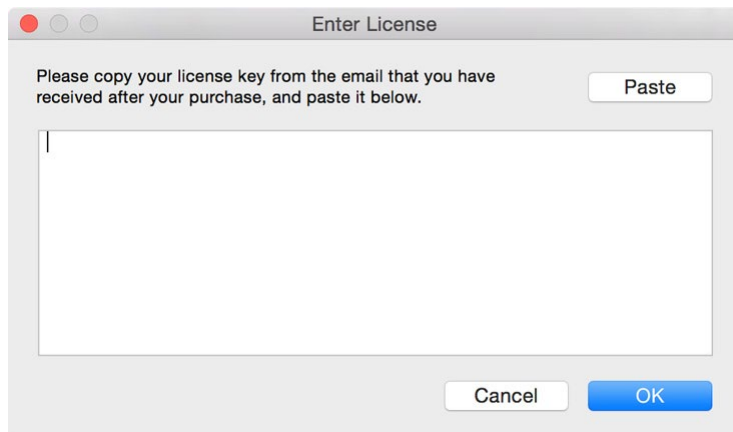
[Support](#)

[License agreement](#)

Entering your license key

After you have purchased FabFilter Volcano 3 in the online [FabFilter Shop](#), you will immediately receive an email containing your personal license key. This license key will turn the evaluation version into a fully registered plug-in.

- Start FabFilter Volcano 3 and click **Enter License** in the evaluation dialog, or click Enter License on the Help menu if the plug-in is already running.
- Copy the license information from the email you have received and paste it into the text field. Make sure that you are copying the entire license key including the *Product* and *Licensee* lines! If you are not sure what text to copy, just copy and paste the whole email.



After you have entered your license information, you will need to restart the plug-in host, so make sure you save your settings if needed. From now on, you will be able to use FabFilter Volcano 3 for an unlimited period of time with full support via email.

Tips

- After your purchase, you can always retrieve your license key again by logging into your [personal FabFilter account](#). Here you can also keep track of all your orders and take advantage of great discounts when buying other FabFilter plug-ins.
- To deauthorize your license key and remove it from the computer, click **Deauthorize** on the Help menu. If you temporarily need to install your license on another computer, or if you have transferred your license to someone else, this is the way to deinstall your personal license key safely.

Next: [Support](#)

See Also

[Purchasing FabFilter Volcano 3](#)

[Support](#)

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Support


If you need help with problems or questions, and the help file does not provide an answer, please visit the support pages on our web site.

- [Go to FabFilter Support](#) 

From here, you have direct access to the customer support forum, very useful tutorial videos for all FabFilter plug-ins, online and PDF versions of all our help files, and a section with extra downloads (such as presets, controller templates, older plug-in versions).

For sales-related questions and technical support, you can also contact FabFilter directly at info@fabfilter.com.

Reporting a bug

If you have encountered a bug in FabFilter Volcano 3, first of all make sure that you are using the latest version of the plug-in, which you can find at www.fabfilter.com/download . You can easily check the version of FabFilter Volcano 3 that you are using by clicking Help > About in the plug-in interface. If the bug is still present in the latest version, please send us an e-mail at info@fabfilter.com and include as much technical information as possible: operation system and version, host software and version, steps to reproduce the bug, etc. Thanks in advance!

Next: [Upgrading to Volcano 3](#)

See Also

[Overview](#)

[About FabFilter](#)

Upgrading to Volcano 3

Upgrading from Volcano 1 or 2 to Volcano 3 is safe and easy: installing Volcano 3 will not replace or delete the previous versions of the plug-in. All versions will co-exist and can be used at the same time. This ensures that you can open old songs that use Volcano 1 or 2 without problems.

Volcano 1/2 presets

All presets created with Volcano 1 or 2 can be loaded in Volcano 3, although they may sound slightly different due to changes in the new plug-in version. If you upgraded from version 1 or 2 to the new version, your original presets will be accessible via the **V1/V2 Preset Folders** item in the preset menu. See also [Loading presets](#).

Replacing a Volcano 1 or 2 instance by Volcano 3

If you are working on a song and want to replace a Volcano version 1 or 2 instance with the new Volcano 3, we advise you to do the following:

- First, save the current setting of the original Volcano instance as a FabFilter preset in the Volcano 1 or 2 preset folder.
- Then, remove the original Volcano instance and add Volcano 3 in its place.
- Finally, load the V1/V2 preset that you just created into Volcano 3 via the Preset Folder submenu in the preset menu.

Automation

Because the feature set of Volcano 3 has changed fundamentally, any automation data that has been written by a Volcano 1 or 2 instance **cannot be read correctly** by Volcano 3.

Next: [Manual installation](#)

See Also

[Overview](#)

[Support](#)

Manual installation

When installing FabFilter Volcano 3, the installation program will try to copy the plug-in into the appropriate plug-ins folders, and in most cases your host will recognize FabFilter Volcano 3 automatically. Otherwise, please follow these instructions:

Windows

On Windows, most hosts have their own VST plug-ins folder. So if you are using Windows and your host does not recognize FabFilter Volcano 3, you need to locate the proper plug-ins folder for your host first (it is usually shown in the Preferences or similar dialog). Then, copy the file *FabFilter Volcano 3.dll* from *C:\Program Files\FabFilter\Volcano 3* (or *C:\Program Files (x86)\FabFilter\Volcano 3* if you are using a 32-bit host on 64-bit Windows) to the plug-ins folder that you have found and restart the host so it can reload all its plug-ins. The VST3, CLAP, and AAX plug-ins are installed in the standard plug-in folders on your computer.

You can simply uninstall plug-ins or bundles via the Control Panel.

macOS

On macOS, plug-ins are installed in the standard plug-in folders in the system Library folder. These are the *only* possible correct locations:

- Audio Units: */Library/Audio/Plug-Ins/Components*
- VST/VST3: */Library/Audio/Plug-Ins/VST* and */Library/Audio/Plug-Ins/VST3*
- CLAP: */Library/Audio/Plug-Ins/CLAP*
- AAX: */Library/Application Support/Avid/Audio/Plug-Ins*


Note: AU and VST/VST3 plug-ins may also be placed in the user's Library folders under */Users/<username>/Library/Audio/Plug-Ins*.

To uninstall the plug-ins from your Mac, you can just delete the specific FabFilter plug-in files at the above locations. Finally, if you really want to delete all data written by our plug-ins, you can remove the following folders/files as well:

- */Users/<username>/Documents/FabFilter/Presets/Volcano 3*
- */Users/<username>/Library/Audio/Presets/FabFilter/FabFilter Volcano 3*
- */Users/<username>/Library/Application Support/FabFilter/Volcano 3*
- */Users/<username>/Library/Preferences/com.fabfilter.Volcano.3.plist*

Note: Since OS X 10.7 (Lion), the system and user Library folders are marked as hidden by default. To make them visible again in Finder, open Terminal (found in */Applications/Utilities*) and enter the following commands:

```
chflags nohidden /Library
chflags nohidden ~/Library
```

If you still have problems, contact [FabFilter Support](#) .

Next: [VST plug-in versions](#)

See Also

[Quick start](#)

[Support](#)

VST plug-in versions

FabFilter Volcano 3 is available in both VST 2 and VST 3 formats. They can be installed and used both at the same time. The VST 3 format offers easy side-chaining and is more CPU-friendly in some cases, but it can only be used by hosts that support it, for example recent versions of Cubase, Studio One or FL Studio. The VST 2 format is compatible with a larger variety of hosts.

Both the VST 2 and VST 3 versions of the plug-in automatically adapt themselves to the channel layout of the track they are inserted on (mono/stereo).

Next: [External side chaining](#)

See Also

[Quick start](#)

[Manual installation](#)

External side chaining

FabFilter Volcano 3 offers the possibility of feeding an external signal to its side chain, so that you can make it trigger on a different signal than the audio it is actually processing. Feeding a signal to a plug-in's side-chain inputs works slightly different in various hosts. This topic describes the procedure for some of the most popular hosts around: [Pro Tools](#), [Studio One](#), [Ableton Live](#), [Logic Pro](#) and [Cubase](#).

To explain how it works, we use a scenario with two tracks. The first one contains the audio that we want to process with Volcano 3, which we'll call the *main track* from now. The second track contains the audio that we want to route to Volcano 3's external side-chain input and use as trigger signal. We'll call this track the *side chain track*.

After setting up everything according to the instructions below for your host, any [envelope generators](#) or [envelope followers](#) that are set to trigger on the external side chain, will now respond to the side chain signal. You can check whether everything is routed correctly: play the audio, open an EG or EF interface and confirm it's set to trigger to the external side-chain. Then use the Audition button to listen to the side-chain signal.

Pro Tools

- Open Pro Tools and start a new empty session.
- Create two audio tracks that we'll use as main track and side chain track. Add audio files to both track.
- Open the Mix window to display the tracks with their Insert slots and Sends slots.
- In the first 'Sends' slot of the side chain track, choose 'Bus 1'. The track view for Bus 1 will open: set its level slider to 0.0 dB so the bus actually produces audio!
- In the first 'Inserts' slot of the main track, choose Effect > FabFilter Volcano 3.
- Open Volcano 3's interface and set up an [envelope generator](#) or [envelope follower](#), triggered by the external side chain signal.
- Now, in the 'Key Input' menu of the plug-in interface (just above the FabFilter logo), choose bus > Bus 1 instead of the default 'no key input'. Now, the audio from the side chain track is routed to Volcano 3's external side chain input via Bus 1.

Studio One

- Open Studio One and choose 'Create a new song'.
- Add two audio tracks (via Track > Add Tracks...) that we'll use as main track and side chain track.
- Add audio files on both the main track and the side chain track. You can simply drag audio files from a Finder/Explorer window onto a track.
- Access the mix window via "Mix" in Studio One's bottom right corner.
- Insert FabFilter Volcano 3 on your main track via the '+' button next to the Insert tab.
- Open Volcano 3's interface and set up an [envelope generator](#) or [envelope follower](#), triggered by the external side chain signal.
- On the side chain track, select Sends > Sidechains > FabFilter Volcano 3.

Ableton Live

- Open Ableton Live and start with an empty arrangement. We'll use Track 1 as the side chain track and Track 2 as the main track.
- From the folder menu's on at the left top of Ableton Live's interface, drag different audio clips to the first empty slots of Track 1 and Track 2.
- From the VST (or Audio Units) plug-in menu, also at the left top of Ableton Live's interface, drag FabFilter Volcano 3 onto Track 2, the main track.
- In the small device interface for Volcano 3 in the bottom Effects section, choose 'Track 1' from the 'Sidechain' drop down menu.
- Open Volcano 3's interface and set up an [envelope generator](#) or [envelope follower](#), triggered by the external side chain signal.
- **Note:** In earlier versions of Ableton Live (< 10.1), setting up sidechaining worked differently, which is described [here](#) [↗](#).

Logic Pro

- Open Logic Pro and create a new empty project via File > New...
- Add two audio tracks (via Track > New...) that we'll use as main track and side chain track.
- Add audio files on both the main track and the side chain track. You can simply drag audio files from a Finder/Explorer window onto a track.
- Select the main track and add Volcano 3 in the first Insert effect slot.
- Open Volcano 3's interface and set up an [envelope generator](#) or [envelope follower](#), triggered by the external side chain signal.

- In the right top corner of the plug-in interface header, in the 'Side Chain' menu, choose the side chain track. Now, the signal from the side chain track is sent to FabFilter Volcano 3's external side-chain input.

Cubase

- Open Cubase and create a new empty project.
 - Add two audio tracks that we'll use as main track and side chain track.
 - Add audio files on both the main track and the side chain track. You can simply drag audio files from a Finder/Explorer window onto a track.
 - Open the Mixer. In the main track, click on an empty insert slot and select the VST 3 version of FabFilter Volcano 3 in the Filter menu (note the VST 3 icon which looks like ///).
 - Open Volcano 3's interface and set up an [envelope generator](#) or [envelope follower](#), triggered by the external side chain signal.
 - In the plug-in header, click on the Activate Side-Chain button (right of the R/W buttons) to enable the external side chain in Cubase.
 - At the top of the Mixer, set the output for the side chain track to the side-chain input of FabFilter Volcano 3.
-

Next: [License agreement](#)

See Also

[Input/output controls](#)

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Next: [Acknowledgements](#)

See Also

[Purchase FabFilter Volcano 3 Support](#)

Acknowledgements

We would like to thank all beta testers for their relentless testing, helping us to make this plug-in as awesome (and bug-free) as possible.

FabFilter Volcano 3 comes with a large library of presets. These were created by the following sound designers:

- bManic (BM)
- Ralph Verdult (RV)
- Stephan Müsch (SM)

Visit the [FabFilter sound designers page](#)  to read more about each sound designer.

Next: [About FabFilter](#)

See Also

[Purchase FabFilter Volcano 3](#)

[Support](#)

About FabFilter

Beautiful sound. Fantastic workflow. These are the foundations of FabFilter. We create powerful audio plug-ins with superb sound quality and innovative interfaces.

A unique perspective

At FabFilter, we make the best possible tools for music production and audio processing. To achieve this, we continually rethink and challenge industry standards: we've never been afraid of reinventing the wheel. Considering every little detail, we tune our algorithms and interfaces until they sound perfect, look amazing and feel great to work with.

It's the sound that counts

Above everything else, you need superb sound quality. That's why we put a lot of effort into developing unique audio processing algorithms, ranging from our famous resonating filters to transparent high-end EQ and dynamics processing.

Innovative interfaces, great design

Every FabFilter plug-in has an easy-to-use, well-designed interface aimed at providing unsurpassed workflow. Our plug-ins focus on the task you're performing at that specific moment: they expose the features you need, when you need them. And because of our special attention to design, you'll be delighted every time you open a FabFilter plug-in.

Don't take our word for it

We always set the highest standard for sound quality, usability and design to make truly great products that raise the bar on what audio software can do. That's why we're very happy with the praise we've received from users and press alike:

"In the decade since the release of its first plug-in, One, FabFilter has made an indelible mark on the music production landscape." — Computer Music magazine

"While many other software developers are busy trying to model hardware, FabFilter is leaving them in the dust by being visionaries and reaching into the future. FabFilter stuff is just on another level." — Jeff Sanders

"FabFilter has an enviable reputation for making easy-to-use, powerful tools." — Music Tech magazine

FabFilter was founded in 2002 by Frederik Slijkerman and Floris Klinkert, and is based in Amsterdam, The Netherlands.

See Also

[Support](#)

[FabFilter web site](#) 