



FabFilter Twin 3

User Manual



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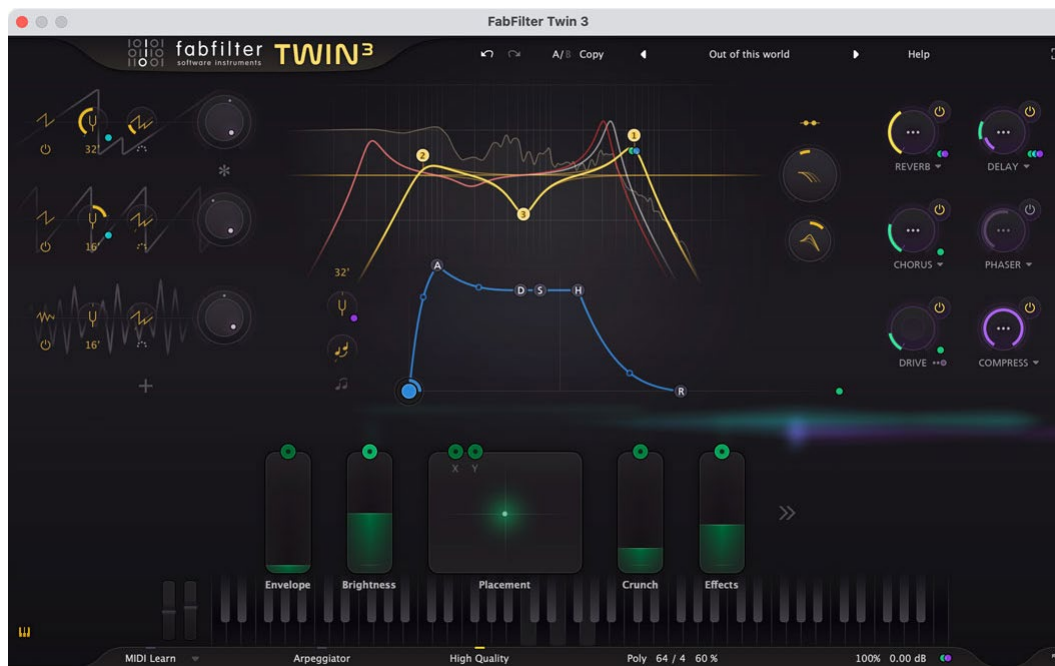
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About FabFilter Twin 3

We launched FabFilter as a company in 2004 with a small blue synthesizer: FabFilter One. It soon became famous for its filter quality, which proved to be a firm base for many plug-ins to follow. Since that time, a lot has happened, and although FabFilter established itself with professional mixing tools like Pro-Q and Pro-L, our love for synthesizers never faded.

With FabFilter Twin 3, we've reinvented Twin and its workflow, while still staying true to what it has always been: an awesome sounding virtual analog, subtractive synthesizer. With a fully redesigned interface and new full-featured preset browser, Twin has become much easier to use and program. And the new FX section, filter options, arpeggiator and sound improvements open up a whole new world of possibilities. Let's dive in!



New in Twin 3

The first thing you will notice when you open Twin 3 is the brand-new look. The completely redesigned interface makes Twin 3 more pleasant and much more intuitive to work with. All the goodness 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 and FX panels.
- Improved the oscillator and filter [sound quality](#), with built-in, [analog-modelled drift](#).
- Added an extra [fourth oscillator](#).
- Increased the maximum [number of voices](#) from 32 to 64.
- Added a [Per Oscillator polyphony](#) mode, where every note triggers a different oscillator.
- Added [two extra filters](#), so four available in total.
- Added [new, vintage-sounding EQ-type filter shapes](#) (bell, shelf, notch) 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. Filters can be created and deleted in the display, just like in Pro-Q or Volcano 3.
- Added [6 dB/oct filter slope](#) option.
- Introduced [large Cutoff/Peak offset knobs](#), which adjust all filters at once. Of course, these can be modulated as well.
- Introduced an [FX section](#) with 6 different effects:
 - [Reverb](#): a lush, vintage reverb with time, brightness and pre-delay settings
 - [Delay](#): Extensive delay effect, with tempo sync, filter section and more
 - [Chorus](#): Smooth chorus with basic rate, depth and delay settings
 - [Phaser](#): Classic phaser/flanger with rate, depth, feedback and shift options
 - [Drive](#): Ranges from subtle saturation to over the top amp-like distortion
 - [Compressor](#): Customizable compression, from smooth to aggressive
- Introducing a [full-featured preset browser](#), with support for tags, favorites and easy searching and filtering.
- Added an [Arpeggiator](#), with host tempo sync, groove/legato controls and transpose, note order and latch options.
- Added optional [High Quality mode](#), which turns on 4x oversampling.

- Introduced [Source Level \(-200% .. 200%\)](#) control for XLFOs, EGs, EFs and MIDI Sources, which scales the output of the source. Of course, this can also be modulated.
- Lowered minimum [Envelope generator](#) attack/decay and release times. Also, EGs now have a [curve slope setting](#) for the different stages, opening up a much wider range of possible shapes, from very snappy and aggressive to gentle and smooth.
- 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.
- 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.
- Increased the maximum number of [modulation slots](#) to 100.
- The XLFO Balance and Frequency Offset parameters are now modulation targets.
- XLFO MIDI triggering now offers a [new Legato mode](#).
- MIDI Sources now offer a [Range option](#) (available for Velocity and KB Track input), which lets you choose between Negative (-1..0), Centered (-1..1) or Positive (0..1).
- 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.
- Native sustain pedal support.
- The interface now supports [resizing and Full Screen mode](#).
- The resize button in the bottom right corner of the interface now offers a [Scaling submenu](#), with options to increase or decrease the scale of the entire interface, e.g. 125%, 150%, etc.
- New [factory presets](#), smartly organized and carefully designed.
- Support for loading Twin 2 and Twin 1 presets.
- Introduced support for Pro Tools hardware control surfaces.

FabFilter Twin 3 is available in VST, VST3, CLAP, AU (Audio Units) and AAX Native 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 Twin 3](#)
- [Upgrading to Twin 3](#)

Quick start

The installer will copy the FabFilter Twin 3 plug-in into the common VST, VST 3, 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**

Create a new stereo instrument track and add FabFilter Twin 3 as the first insert.

- **Studio One**

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

- **Logic Pro**

Create an Audio Instrument track in the arrange window and select FabFilter Twin 3 as the input and choose a preferred output. You will find FabFilter Twin 3 in the Audio Units -> FabFilter section.

- **Ableton Live**

In Session view, select the MIDI track you would like to place FabFilter Twin 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 Twin 3, or drag it onto the track.

- **Cubase**

Open the VST Instruments panel, click on an empty slot and select FabFilter Twin from the menu that appears. Right-click in the list of tracks and choose Add MIDI Track to create a new MIDI track and assign it to the new FabFilter Twin 3 instrument.

Next: [FabFilter Twin 3 overview](#)

See Also

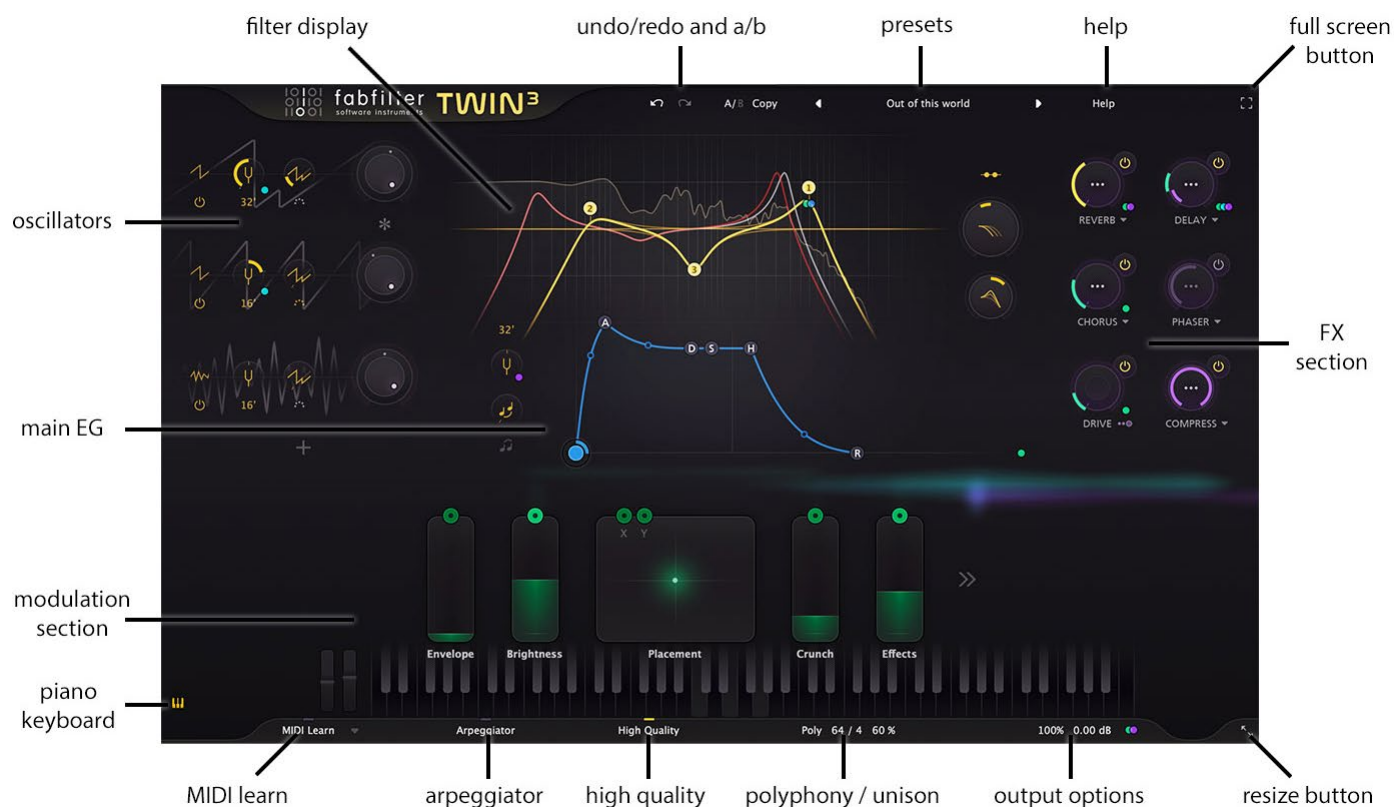
[Upgrading to Twin 3](#)

[Overview](#)

[Loading presets](#)

Overview

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



• Oscillators

Twin 3 lets you add up to four [oscillators](#) on the fly. The oscillator settings can be easily customized directly and the produced wave form is visualized in the background.

• 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 or notch. See [Filters](#).

• Main EG

Centered in the interface, the large ADSR [envelope generator](#) lets you easily customize the main envelope of the produced sound.

• FX section

Twin 3 offers six out-of-the-box effects, which can be easily enabled and controlled via the FX section at the right of the interface. Clicking on the Amount knob will open up a panel of options for each effect except Drive. See [FX section](#).

• 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 Twin 3 offers [XLFO](#), [envelope generator \(EG\)](#), [envelope follower \(EF\)](#), [MIDI](#) and [XY controller or slider](#) sources. See [Modulation](#) to get started.

• Piano keyboard

The Piano Keyboard button shows or hides the piano keyboard underneath the modulation section. It visualizes incoming MIDI notes and you can click keys to play notes manually.

• Arpeggiator

The arpeggiator button opens a panel with option to enable and customize the internal [arpeggiator](#).

• High Quality

The High Quality button controls the oversampling of the internal algorithms. See [Output controls](#).

• Polyphony / unison

The Polyphony button gives access to polyphony, unison settings and microtuning. See [Polyphony, unison and microtuning](#).

• Output options

On the far right of the bottom bar, the output button gives access to stereo width, output level and panning controls. See [Output controls](#).

• 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 Twin 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 re-use 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](#)

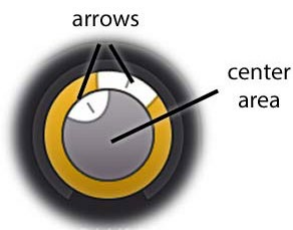
See Also

[About FabFilter Twin 3](#)

[Support](#)

Knobs

It is easy to control FabFilter Twin 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.



Most 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. Some knobs show their position using a colored arc instead of an arrow: these do not support rotate mode.

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, Twin 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, Twin 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: [Oscillators](#)

See Also

[Using on iOS](#)
[Support](#)

Oscillators



In Twin 3, you can use up to four full-featured oscillators. Combined with our award-winning filters and the new FX section, this gives you an exceptional broad palette of sounds. The oscillators are vintage-sounding, and have built-in *analog drift*: there is a very subtle randomness in various parts of the synthesizer, like the oscillator tuning and phase.

To **add** an oscillator, click the **+** button at the bottom of the oscillators. To **delete** one, hover over the oscillator and click the small **x** button in the top-right corner.

Every oscillator can be easily customized and shows the produced waveform in the background. The following parameters are available:

- **Waveform**

The Waveform button selects the waveform that the oscillator produces:

- Sawtooth: a sharp bright tone that is ideal for filtering
- Square: a more metallic but still vintage and 'round' sound, adjustable with the pulse width setting
- Square Pure: a more pure, digital square wave, also adjustable with pulse width setting
- Triangle: a soft, warm tone
- Triangle Pure: a pure triangle wave with more harmonics
- Sine: a simple, pure sine wave, the most basic waveform without harmonics
- White noise: has a flat frequency response, meaning all frequencies at equal power
- Pink noise: like white noise but with less power in the higher frequencies

- **Enable**

This will turn an oscillator on or off, so you can easily check the contribution of an oscillator to the overall sound.

- **Pulse Width**

The Pulse Width knob adjusts the pulse width of the square waveform, from an even square to an infinitely thin pulse (which is actually inaudible). Pulse width is a modulation target and is only available when the Square or Square Pure wave form is selected.

- **Detune**

The Detune knob sets the detune for each oscillator. It has a range of +/- one octave, and is extra sensitive around the 0 position. It is a modulation target as well. Like any other knob, you can double-click it to enter a value directly using the keyboard. For example, try '0.5 octaves' or '1 semitone' or '50 cents'. See [Knobs](#) for more information.

- **Scale**

Each oscillator can be transposed up to 3 octaves above and one octave below the master tune.

- **Sync**

The Sync knob adjusts the level of hard sync for its oscillator. When set to 1, the oscillator works normally without hard sync. When set to a higher value, the oscillator will 'squeeze' more phases into one actual audible phase, which drastically changes the harmonics in the sound with a metallic-sounding effect. Sync is a modulation target.

- **Phase Sync**

Below the Sync knob, the Phase Sync button (with a MIDI icon) toggles oscillator phase sync on and off. When oscillator phase sync is on, the oscillator resets its phase to halfway the waveform on each note-on event. With short, percussive sounds, this works really well to create a sharp and aggressive attack with every note. However, normally you should turn it off because it sometimes introduces unwanted clicks.

- **Level/Pan**

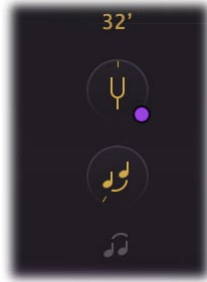
The volume and pan of each oscillator can be adjusted using the combined Level/Pan knobs. The inner knob set the

overall level and outer ring sets the panning. Both are modulation targets.

Ring modulation

You can enable ring modulation between two oscillators with the small * button between the sections for oscillator 1 and 2 or oscillator 3 and 4. Ring modulation multiplies two waveforms, and outputs the sum and difference of the frequencies present in each waveform. This produces a signal rich in overtones, suitable for producing bell-like or otherwise metallic sounds.

Master Tune/Scale and Portamento



The **Master Tune** knob determines the global frequency offset of all oscillators. The **Scale** menu above the knob transposes the frequency by full octaves. The Master Tune knob is a modulation target so you can modulate the frequency of all oscillators at once.

The **Portamento** knob adjusts the amount of portamento or glide, which makes the oscillators slide from one note to another. A little portamento is great for smooth keyboard solos, or when playing large bass intervals. Good portamento is one of those things that give your play just that little bit extra: it's magic. So we have fine-tuned it until it was just perfect! The best thing is: we have created a unique portamento because it also works in polyphonic mode, so you can play sliding chords. Normally, portamento is always applied, but when the **Portamento Legato** button below the knob is active, gliding will not be applied for the first key pressed, only for the keys after that. Portamento is also a modulation target.

Tips

- Modulate the Pulse Width knob with an [XLFO](#) for the classic pulse width modulation sound.
- Using less oscillators reduces CPU usage. Also, the oscillators operate more efficiently when the Sync knob is set to 1 and is not modulated (disabling hard sync).
- When you want to change any oscillator parameter for all oscillators at the same time, just hold down the *Alt* key (*Shift* key in Pro Tools) while turning a knob.

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Filters

The interactive filter display at the center 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. All 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.

The **shape** of newly created curves is determined automatically depending on where you click or drag, 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 high- or a low-pass filter? Just drag the curve in the left or right part of the display. Of course, you can also set the shape via the parameter value display. The available shapes are: Low/High Pass, Band Pass, Bell, Low/High Shelf and Notch. The **slope** can be set to 6dB, 12 dB, 24dB or 48 dB/oct.

Selecting filters

- Click the filter's dot or the colored area near 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.

Frequency Offset and Peak Offset knobs

At the right of the filter display, two large knobs let you offset the frequency and peak of all filters at once, which quickly

adjusts the sound for any preset you load. And of course, these can be modulated as well.

Filter parameter display

Next to each filter's dot in the display, the parameter display shows the exact parameter values for the filter. By default, it only shows the frequency (to save space and make it easier to select multiple filters) but when you hover above it, it extends and lets you control all the filter parameters. You can easily **bypass** or **delete** filters or change the **shape**, **slope** or **style**. You can double-click the values in the display directly to edit them.

Most of the filter parameters (frequency, peak, panning), can be [modulated](#). Just drag a source to a line in the parameter value display or to the filter dot directly (to modulate the frequency). If multiple filters are selected, a slot will be added for each filter, so you can easily setup modulation for multiple filters at once.

Filter Styles

FabFilter Twin 3 lets you choose between 11 different filter styles:

- FabFilter One, the original filter characteristic taken from our award-winning FabFilter One synthesizer
- Smooth, like the cream in your coffee
- Raw, a filter with lots of overdrive and exhibits a character of its own
- Hard, moderately distorting filter, with a nice clean whistle
- Hollow, juicy moderate distortion with fairly much low-end self-oscillation
- Extreme, for more wild sonic ideas
- Gentle, a more smooth and clean general purpose characteristic
- Tube, with a warmer sound and nice overdrive, great for synth sounds
- Metal, with a rough, sharper sound and distortion
- Easy Going, a softer version of the Tube filter
- Clean, linear behavior with no clipping or distortion at all

Filter Routing

Use the Filter Routing button at the right, above the frequency/peak offset knobs, to change the routing of the filters. There are three different setups:

- **Serial**: the sound passes through both filters serially. So the sound of all oscillators are led through filter 1 and then through filter 2
- **Parallel**: the sound is led through both filters in parallel and the result is then mixed together after the filters
- **Per Oscillator**: the output of oscillator 1 goes through filter 1, the output of oscillator 2 goes through filter 2, etc

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, additional result curves will show the overall filtering curve for each channel (white for left, red for right).

Next: [FX Section](#)

See Also

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

FX section

At the top right of the interface, Twin 3 features six high-quality, ready-to-use effect units, from lush, vintage reverb to heavy amp distortion. All effects have a distinct set of controls, and of course, everything can be modulated.



For each effect, you'll see a large **Amount knob**, and an **Enable/Disable button**. The menu button ▾ to the right of an effect label gives access to **presets per effect**. Clicking in the center of the knobs will open a panel with options per effect. While dragging to create modulation connections, you can hover above the knobs to open the panels.

Reverb

The vintage-sounding reverb unit has just a few controls, yet produces a wide palette of sounds. Using the **Time knob** you can set the decay time of the reverb between 200 milliseconds (very small room) and 20 seconds (cathedral). The **Brightness** knob changes the character from very dark, to shimmering bright. The **Predelay** slider sets the initial delay of the reverb, which can enhance the sense of space. Modulating Predelay will introduce analog-style tape pitch modulation, which can be used to make the reverb more chorus-like.



Delay

The delay unit offers a **stereo delay line** with delay **time panning** and **feedback**, combined with up to **four multimode filters**. These have the same specs as the synth's main filter, and can be added on the fly via the delay's filter display. See [Filters](#) for more information on the filter display. Of course, the delay time can be **sync'd to host tempo**, and **ping pong modes** are also available.



Chorus

The Chorus unit can be used to add subtle stereo widening, implemented using slowly modulated delay lines. When **Chorus** Mode is set to Single, only one tap per channel is used, while Double uses two taps per channel, for a slightly richer sound. The modulation **rate**, **depth** and total **delay** range can of course be customized.



Phaser / Flanger

The classic phaser unit adds swirling phase modulation using a series of allpass filters with customizable modulation **rate**, **depth** and **feedback**. Higher rate or depth will make the effect more obvious while adding feedback will make it more pronounced.

When set to **flanger** mode, modulation is applied to a short delay line instead of allpass filtering, similar to a chorus but using much shorter delays and including feedback, which makes the effect more like a phaser: both create notch effects in your audio, but achieve this in a different way.

Using the **shift** slider, you can offset the phase of applied modulation in the left and right channels, which makes the effect sound wider.



Drive

The one-knob Drive effect applies subtle to modest **saturation** in the lower half of the knob range, to obvious drive and screaming **amp distortion** in the upper half. Using the **routing** button at the right bottom of the knob, you can choose to route the drive before all other effects, or after all effects (and just before the final compression effect).



Compressor

The compressor is the final effect unit in the chain. With customizable **threshold** and **attack** and **release** ranging from very fast to subtly slow, it can be either used to keep the output level under control, or to apply creative compression effects like pumping, etc.

When **auto gain** is enabled, automatic make-up gain is applied to the processed signal, depending on current settings for Threshold and Attack. Auto Gain helps you to keep the audible audio level the same while adjusting the controls.

The output and gain change **level meters**, as well as the input meter around the threshold knob, will help you to dial in the right values.



Tips

- Most of the FX controls can be modulated. Try it!

Next: [Modulation](#)

See Also

[Filters](#)

[Overview](#)

Modulation

When you open the plug-in with its default settings, the interface looks simple and clean. But the real fun with FabFilter Twin 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.

A **source level control**, around the source drag buttons, is available for XLFOs, EGs, EFs and MIDI Sources. This scales the output level of the source. By default, this is set to 1, but it can be anything between -2 and 2. And of course, the source level can also be modulated.

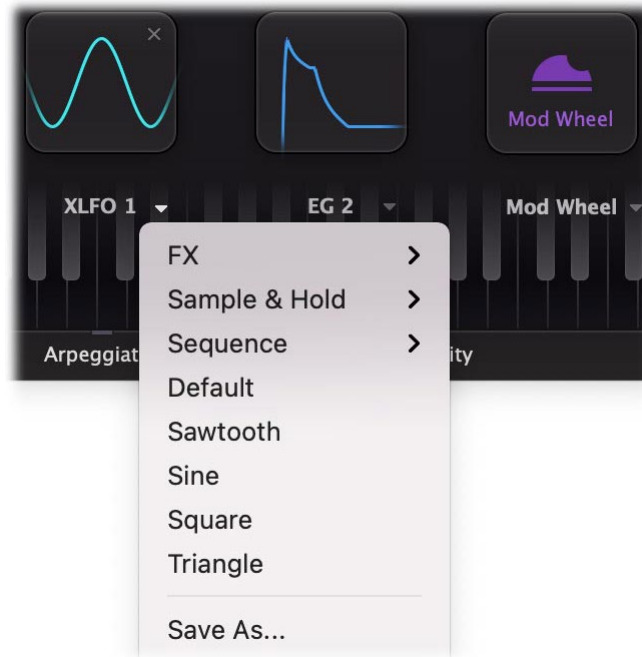
Every source has its own associated **color scheme**, which is also used for [modulation visualization](#) and modulation indicators in the interface, making it easy to see which types of sources are modulating a target.



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

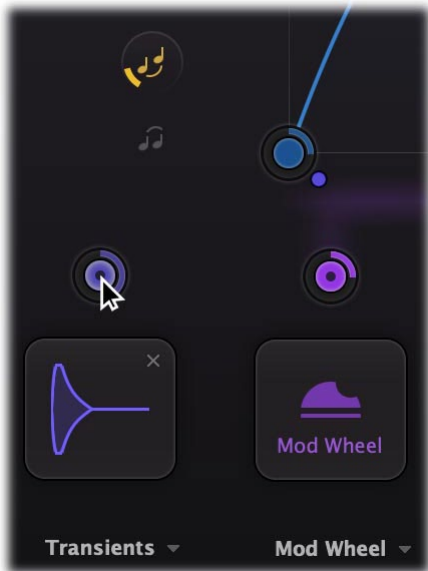
[Overview](#)

[Modulation visualization](#)

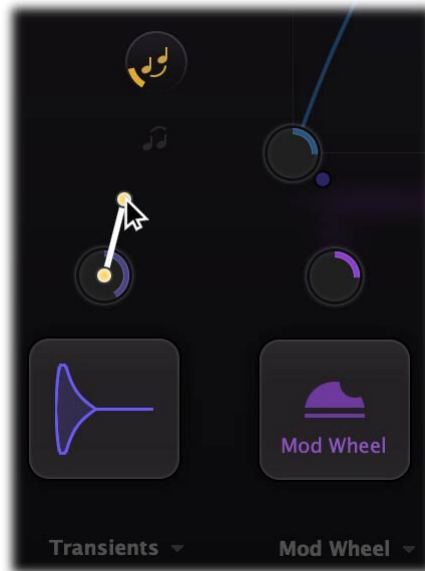
Drag-and-drop modulation slots

One of the best features in FabFilter Twin 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?

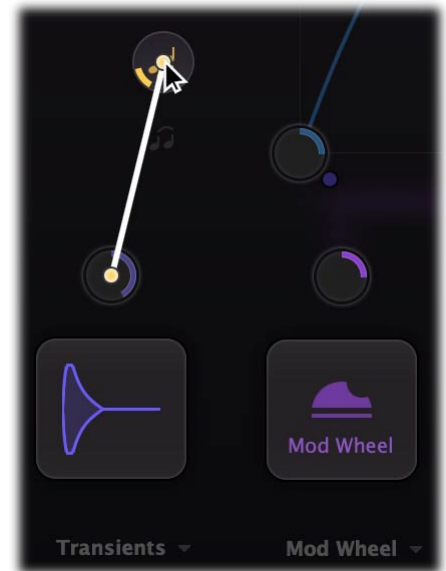
Grab a source...



... drag it to a target...



... and drop it.

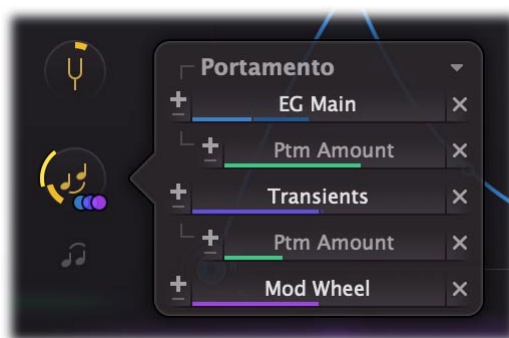


First, **grab the source drag button** that you would like to use as a modulation signal, for example XLFO 1. The moment you click on the source drag button, the interface dims and all modulation targets are highlighted.

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.

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 Twin 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

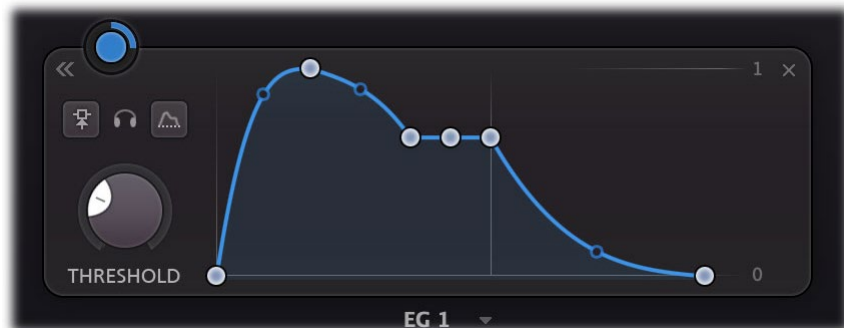
The envelope generator (EG) generates a traditional ADSR envelope. The envelope defines how the level changes with time and is controlled by the *Attack*, *Decay*, *Sustain* and *Release* parameters. Its function is to modulate a parameter over time, based on MIDI input or the amplitude of an audio signal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

Click and hold the **audition** button to temporarily listen to the external side chain signal the 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 Twin 3 using a MIDI keyboard or MIDI controller. Note that you first need to [route data from a MIDI track](#) to Twin 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.
- **Range**
... and when you select Velocity or KB Track, you can set the range of the produced modulation signal. You can choose between Negative (-1 ... 0), Centered (-1 ... 1) or Positive (0 ... 1). Other input types use a predefined range: Pitch Bend always goes from -1 to 1, while Aftertouch, Controller and Mod Wheel produce a signal from 0 to 1.
- **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

- The sustain pedal (CC 64) is applied automatically, so you don't have to route it manually via a MIDI source.
- The VST3 version of FabFilter Twin 3 doesn't support per-note aftertouch modulation.

Next: [XY controller](#)

See Also

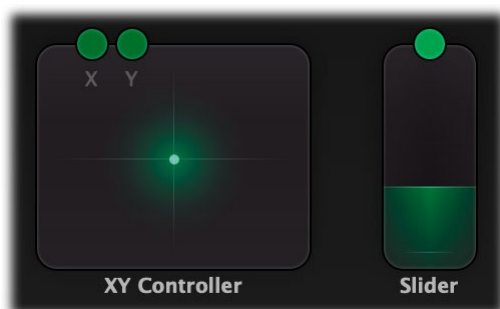
[Modulation](#)
[Drag-and-drop modulation slots](#)
[MIDI learn](#)

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

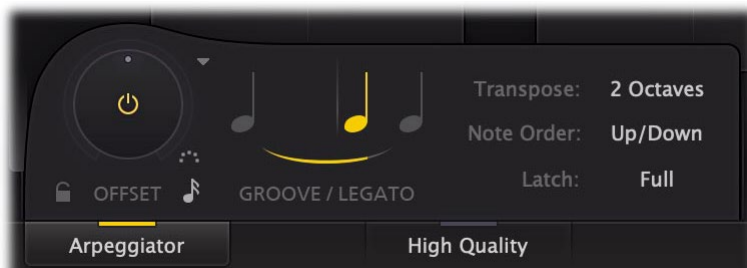
- To reset the XY Controller to its default position, hold down the *Ctrl* key (Windows) or *Command* key (macOS) and click once.
- When you want to adjust only one parameter on one axis, holding *Shift* will make it easier to do so while keeping the other parameter constant.
- With [MIDI learn](#), 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 Twin 3 with it.

Next: [Arpeggiator](#)

See Also
[Support](#)

Arpeggiator

Twin 3 is equipped with a full-featured arpeggiator. The arpeggiator automatically triggers notes on a synchronized tempo, according to the keys you are holding down.



The following controls are available:

- **Enable:** The enable button, centered in the Rate knob, turns the arpeggiator on or off. When enabled, it will start playing notes once it has been triggered by pressing down keys.
- **Lock:** With the Lock button on, the arpeggiator settings won't change when loading presets.
- **Rate:** The Rate knob sets the arpeggiator speed, ranging from 0.25 to 20 Hz.
- **Sync:** You can also choose to sync the arpeggiator to host tempo at various different rates. When synced, the rate knob will turn into an offset knob, to multiply the synced tempo with a factor from 0.5 to 2.
- **Retrigger:** The Retrigger button (with the MIDI icon) sets how the arpeggiator phase is synced/started. When off, the arpeggiator's pattern phase is based on the position on the DAW's timeline, but when active, the arpeggiator will restart the cycle on the first note that is pressed.
- **Groove:** Using the groove slider, you can offset every second note in the produced rhythm. Using this, you can easily create dotted/triplet like patterns. Simply drag the highlighted large middle note symbol to the left or right.
- **Legato:** The legato slider (underneath the large note symbols) sets the note length, from very short to fully legato.
- **Transpose:** By default, the arpeggiator will just play the notes for the keys you are holding down. But with transpose settings of 1 or 2 octaves, the arpeggiator additionally plays the notes one or two octaves higher.
- **Note Order:** The order of how the held notes are sequenced by the arpeggiator. With the **Up** and **Down** options, notes will be played from lowest to highest or reversed. To have the notes played from lowest to highest and then back again, use the **Up/Down** option. Otherwise, the arpeggiator can play the notes in the order **As Played** or in **Random** order.
- **Latch:** By default (the **Off** option), the arpeggiator will only play notes that are currently held down. By choosing the **Held** latch option, the arpeggiator remembers all notes that have been pressed while any note was held down, e.g. you can just hold down one note, and then add others to the pattern one by one. When set to **Full** latch, the arpeggiator will remember any note that you play and will keep playing them even after you stop holding any notes.

At the top right of the Rate knob, the Presets drop down button ▾ provides access to the arpeggiator [section presets](#).

Next: [Polyphony, unison and microtuning](#)

See Also

[Modulation](#)
[Oscillators](#)

Polyphony, unison and microtuning

FabFilter Twin 3's polyphony, unison and microtuning settings are located in a panel, available via a button in the bottom bar:



Polyphony

As you would expect, you can use FabFilter Twin in both **Mono** or **Poly** mode. In Poly mode, the **Voices** setting determines the number of voices that can be played simultaneously. Depending on the complexity of the current patch, you should set this to a value that your computer can comfortably handle to avoid glitches while playing.

Twin 3 introduces a new, third polyphony mode: **Per Oscillator**. In this mode, every new key you press will use the next available oscillator. This can lead to unexpected yet inspiring and creative effects, especially when using multiple wave forms and scales for the oscillators: every chord will sound different! Of course this works best if you use all four [oscillators](#).


Unison

In all modes you can specify the number of **unison voices**. When using unison, multiple voices will be activated for each key that you play. Those voices will be panned from left to right, and can be slightly detuned relative to each other using the **Spread** knob. Using unison will make your patches sound much more stereo and fat. Try it!

- The mono mode uses *last-note priority*, so the last key pressed determines the frequency that you hear. When you release a key, the frequency slides back to the second-last key pressed, and so on.
- The Voices setting always sets the maximum number of simultaneous voices. If Unison is higher than 1, more than one voice will be used at a time from the maximum number. For example, if you have Voices set to 16, and Unison to 4, you can play four different keys at a time. Of course, using a high number of voices, unison or not, will cause high CPU usage.
- The Unison Spread parameter is a [modulation target](#). You could, for example, increase the spreading gradually while a note is played by modulating it with an [envelope generator](#).

Microtuning

Twin 3 has extensive support for microtuning, which enables you to use custom midi-note-to-frequency mappings. By default, it uses the standard '12-tone equal temperament' tuning, but this can be customized in three ways:

- **MTS**: First of all, Twin 3 will automatically react to MTS (MIDI Tuning Standard) information if this is supplied by the DAW. For example, in Logic Pro's project settings, you can choose a specific tuning or design your own; Twin 3 will follow these settings automatically.
- **MTS-ESP**: For DAWs that do not offer custom microtuning, Twin 3 supports the [MTS-ESP](#)  standard from Oddsound, which is a system for applying microtuning automatically for all plug-ins in your DAW that support this framework. As soon as a *master* MTS-ESP tuning is active, Twin 3 will prefer this over a possible normal MTS tuning.
- **AnaMark tuning files (.tun)**: Of course, you can also load .tun tuning files to apply a specific tuning. Click the tuning button to choose from a list of included tunings, or click **Open Other Tuning** to load a custom .tun file. You can find free tuning file collections for download all over the internet. To clear the loaded tuning and revert back to MTS or MTS-ESP, click **Reset Tuning** (only available if a non-standard tuning is loaded).

When a non-standard (i.e. not 12-Tone Equal temperament) tuning is currently active, the button in the bottom bar will indicate this with a tuning fork icon.

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

See Also
[Overview](#)

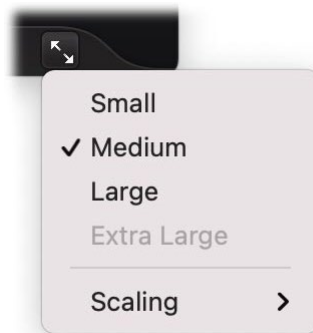
Full Screen mode, resizing and scaling

With just the click of a button, the Twin 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

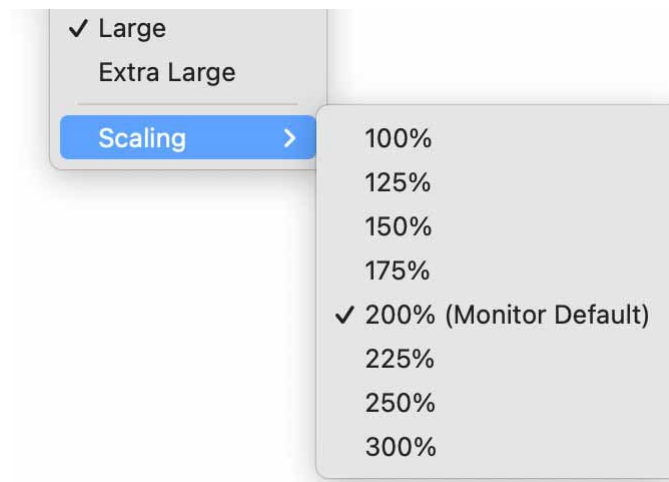
In addition to Full Screen mode, you can also customize the normal interface size using the Resize button at the right of the bottom bar. You can choose between Small, Medium (the default size), Large or Extra Large. Once you have selected a size, it will automatically become the default size for new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

See Also
[Overview](#)

Output controls

The bottom bar contains various output options and settings.



The **High Quality** button enables oversampling of the internal processing. Non-linearities, oscillator sync or audio rate modulation 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.



As soon as you hover the mouse over the output button, at the right end of the bottom bar, a panel with stereo width and output/pan controls will pop up:

- The **Width** setting sets the stereo spreading of the output signal. By default, it is at 100% or 'normal stereo', which means that it does not alter the signal. By reducing the setting towards 0%, the signal will become more mono. By increasing it towards 200%, the differences between the left and right channel are enlarged, which makes the sound more stereo.
- **Output level/pan**
The reading in the output button shows the current output gain and lets you adjust it from -INF dB to about +10 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 knob. The gain and pan knobs are also [modulation targets](#).

Notes

- Beware that making the signal more stereo can cause some undesirable phase cancellation.
- Both the output level/pan and stereo settings are modulation targets. Volume is commonly modulated by the [velocity modulation source](#). The Stereo knob is a global modulation target, meaning that it affects all voices simultaneously. When modulating a global target like Stereo with a per-voice modulation signal such as an [envelope generator](#), a combined envelope signal is used instead.

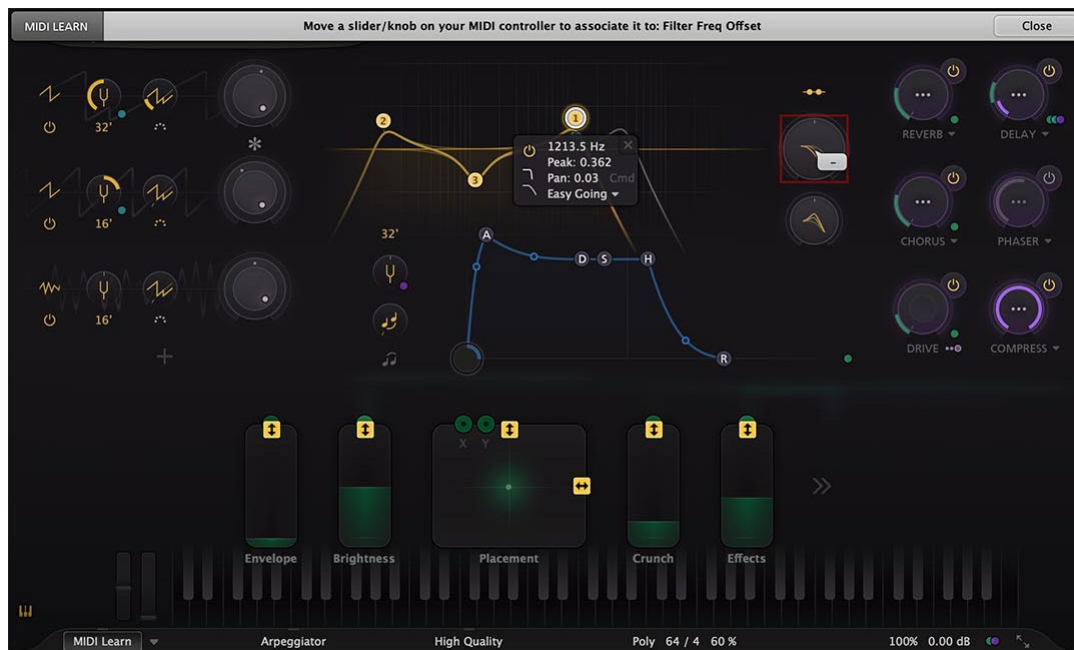
Next: [MIDI Learn](#)

See Also

[Polyphony, unison and microtuning Overview](#)

MIDI Learn

Controlling FabFilter Twin 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**:

- **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.
- **Load Factory Settings**
Loads a default MIDI mapping that may be useful.

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

See Also

[MIDI source Overview](#)

Undo, redo, A/B switch

The Undo and Redo buttons at the top of the FabFilter Twin 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 Twin 3 is available as an AUv3 plug-in for iPad in the App Store. Using Twin 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.



Unlike the regular plug-in, the AUv3 plug-in offers no resizing or full screen mode from the plug-in interface itself: this must be provided by the host app.

To organize presets on iOS, open the [preset browser](#) 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 Twin 3 app that contains the AUv3 plug-in serves as a stand-alone host that lets you play the synth with the on-screen keyboard via the speakers or headphone output. We do recommend to use an AUv3 host app like Auria, Cubasis, AUM or GarageBand to take full advantage of Twin 3's features.

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

Next: [Loading presets](#)

See Also
[Overview](#)

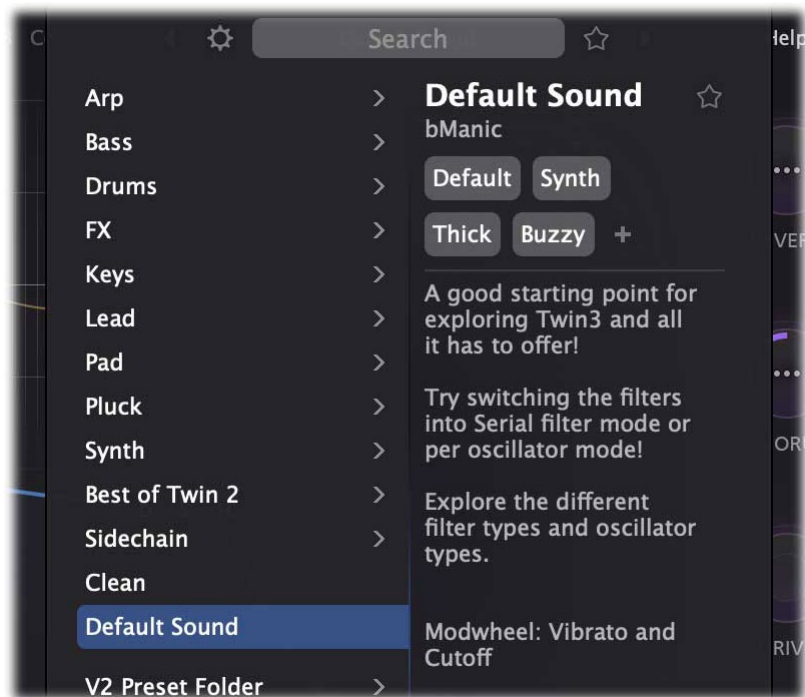
Loading presets

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



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.

Click the preset button to open the **preset browser**:



The preset browser shows all presets grouped in folders, with the current preset highlighted in blue.

Preset details

A preset can contain extra information: **author**, **tags** and a **description**, which is shown in the panel on the right. These fields are present in all factory presets and can of course be edited as well: just double click the author or description. To add a tag, click the **+** button. Double-click a tag to rename it, or hover over the tag and click the **x** button to remove it.

Browsing presets

You can browse and select presets in various ways:

- Of course, you can simply browse **using the mouse**. Hover over folders to open them, and click on a preset to load it. If you move the mouse outside the browser after selecting a preset, the browser will close. Otherwise, it will stay open so you can look around and try multiple presets, or edit their information.
- Within the preset browser, you can **use the arrow keys** to navigate, and the Enter key to load a preset and close the browser. Use the right arrow key to load a preset without closing the browser. Press the Esc key to close the browser without selecting anything.
- You can also click the previous/next arrow buttons around the preset button to explore presets one by one without opening the preset browser.
- ... and while the browser is open, **use the [and] keys** to load the next or previous preset directly.

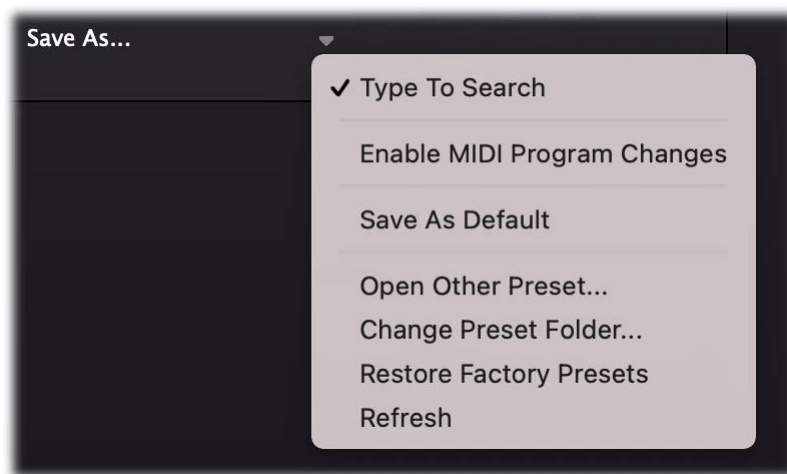
Searching, filtering and favorites

In the preset browser, you can **start typing to search** through the presets, filtering on folder name, preset name or tag. While typing, the preset browser automatically filter the current selection and update itself to show the resulting sub set. If you've first started browsing by mouse, just **click the Search field** and type to start filtering again.

You can also **mark presets as favorite**, by clicking the star icon next to the preset name in the preset details panel. Click the star icon next to the Search field to show only your favorites.

Preset browser options

Click the Options button  at the left of the search field at the top to open a menu with extra options:



- When **Type To Search** is enabled, you can start typing to search, right after you've clicked the preset button. Disabling this will always require a click in the Search field to start searching. This might be handy, for example if you're working without a MIDI keyboard and use letters on your computer keyboard to play notes.
- When **Enable MIDI Program Changes** is active, you can load presets via MIDI program change and bank select messages. The corresponding bank/program numbers are then 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.

- The **Default Sound** preset is loaded automatically when FabFilter Twin 3 is started. To change the default settings, simply overwrite this preset by clicking **Save As Default**.
- To open a preset outside the [presets folder](#), click **Open Other Preset**. This might be useful if someone sends you a preset by email, for example.
- To change the location where the presets for Twin 3 are stored, choose **Change Preset Folder** and select the desired folder.
- If somehow the factory presets are lost or not installed properly, click **Restore Factory Presets** to restore them.
- If needed, for example after you've manually removed or added files in the folder while Twin 3 is open, click **Refresh** to rescan the preset folder.

Compatibility with Twin 1 and 2

All presets created with Twin 1 and 2 can be loaded in Twin 3. If Twin 1/2 is also installed on your computer, your Twin 1/2 presets will be accessible via the **V1 Preset Folder** submenu in the preset menu. The factory presets for Twin 1 are also included in the Twin 3 factory presets, so you only need to use the V1 Preset Folder submenu to access presets you might have created yourself.

You can read more about compatibility between Twin 1, 2 and Twin 3 in [Upgrading to Twin 3](#). Please take some time to read it if you are planning to replace Twin 1 or 2 instances with Twin 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 Twin 3 that you can reuse in various projects. This is also a good way to copy settings across multiple instances of FabFilter Twin 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:

- **Favorite:** Mark the current preset as favorite.
- **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](#)

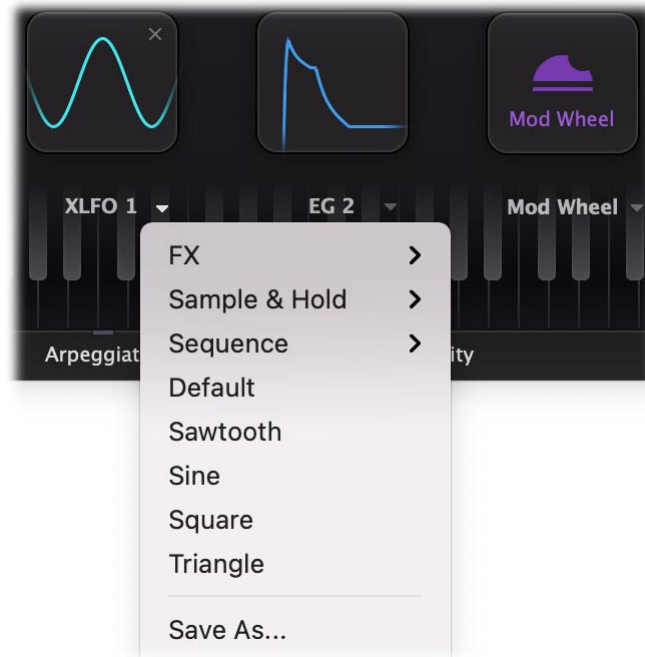
See Also

[Loading presets](#)

[Using FabFilter Twin 3](#)

Section presets

To make designing sounds for FabFilter Twin 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, effect name or in the arpeggiator interface. This will display a presets menu for that section. FabFilter Twin 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:

- [Effects](#) (Reverb, Delay, Chorus, Phaser and Compressor)
- [XLFO](#)
- [Envelope generator](#)
- [Envelope follower](#)
- [MIDI source](#)
- [Arpeggiator](#)

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\Twin 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 Twin 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/Twin 3* on both Windows and macOS. To change this location, first copy all presets to the desired new location. Click Options ⚙️ and **Change Preset Folder** in the preset browser and select the new folder.

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

Restoring factory presets

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

Next: [Purchasing FabFilter Twin 3](#)

See Also

[Saving presets Overview](#)

Purchasing FabFilter Twin 3


Once you have downloaded and installed the evaluation copy of FabFilter Twin 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 Twin 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 Twin 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](#)

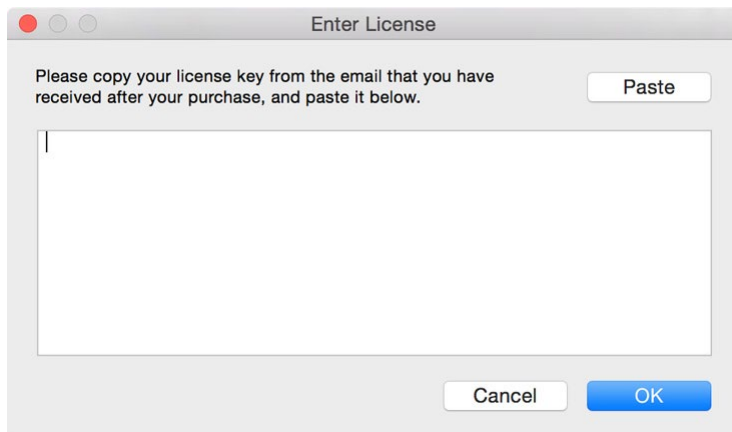
See Also

[Support](#)
[License agreement](#)

Entering your license key

After you have purchased FabFilter Twin 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 Twin 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 Twin 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 Twin 3](#)

[Support](#)

[License agreement](#)

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 Twin 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 Twin 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 Twin 3](#)

See Also

[Overview](#)

[About FabFilter](#)

Upgrading to Twin 3

Upgrading from Twin 1 or 2 to Twin 3 is safe and easy: installing Twin 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 Twin 1 or 2 without problems.

Twin 1/2 presets

All presets created with Twin 1 or 2 can be loaded in Twin 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 browser. See also [Loading presets](#).

Replacing a Twin 1 or 2 instance by Twin 3

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

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

Automation

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

Next: [Manual installation](#)

See Also

[Overview](#)

[Support](#)

Manual installation

When installing FabFilter Twin 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 Twin 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 Twin 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 Twin 3.dll* from *C:\Program Files\FabFilter\Twin 3* (or *C:\Program Files (x86)\FabFilter\Twin 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/Twin 3*
- */Users/<username>/Library/Audio/Presets/FabFilter/FabFilter Twin 3*
- */Users/<username>/Library/Application Support/FabFilter/Twin 3*
- */Users/<username>/Library/Preferences/com.fabfilter.Twin.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 Twin 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, free interface resizing, 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.

Next: [Using the side chain](#)

See Also

[Quick start](#)

[Manual installation](#)

Using the side chain

FabFilter Twin 3 offers the possibility of feeding an external signal to its side chain, which can be used to trigger Envelope Generators and is needed to trigger Envelope Followers. 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 Twin 3, which we'll call the *main track* from now. The second track contains the audio that we want to route to Twin 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 and instrument track and an audio track. Add and audio file to the audio track (the side chain 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 Instrument > FabFilter Twin 3.
- Open Twin 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 Twin 3's external side chain input via Bus 1.

Studio One

- Open Studio One and choose 'Create a new song'.
- Create and instrument track and an audio track (via Track > Add Tracks...). Add and audio file to the audio track (the side chain track).
- Access the mix window via "Mix" in Studio One's bottom right corner.
- Insert FabFilter Twin 3 on your main track via the '+' button next to the Insert tab.
- Open Twin 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 Twin 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 (a MIDI track) as the main track.
- From the folder menu's on at the left top of Ableton Live's interface, drag an audio clip to the first empty slots of Track 1.
- From the VST (or Audio Units) plug-in menu, also at the left top of Ableton Live's interface, drag FabFilter Twin 3 onto Track 2, the main track.
- In the small device interface for Twin 3 in the bottom Effects section, choose 'Track 1' from the 'Sidechain' drop down menu.
- Open Twin 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...
- Create and instrument track and an audio track. Add and audio file to the audio track (the side chain track).
- Select the main track and add Twin 3 in the instrument slot.
- Open Twin 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 Twin 3's external side-chain input.

Cubase

- Open Cubase and create a new empty project.
 - Create an instrument track and an audio track. Add an audio file to the audio track (the side chain track).
 - Open the Mixer. In the main track, click on an empty insert slot and select the VST 3 version of FabFilter Twin 3 in the Instrument menu (note the VST 3 icon which looks like ///).
 - Open Twin 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 Twin 3.
-

Next: [MIDI CC table](#)

See Also

[Quick start](#)

[Support](#)

MIDI controller messages

All of FabFilter Twin 3's parameters can easily be controlled using MIDI. Here is a list of the default MIDI controller numbers that correspond to the parameters. You can use these controller numbers to control each parameter with the sliders on your MIDI keyboard or MIDI controller.

Not all parameters are linked to a CC number by default. Using the [MIDI Learn](#) feature, you can change and add CC number associations any way you like.

General

7 - volume
5 - portamento
103 - polyphony

Oscillators

22 - detune 1
20 - scale 1
21 - waveform 1
23 - pulse width 1

28 - detune 2
78 - scale 2
87 - waveform 2
29 - pulse width 2

Filters

74 - frequency 1
71 - peak 1
26 - frequency 2
27 - peak 2

Main EG

73 - attack
75 - decay
79 - sustain
72 - release

XLFO 1

76 - frequency
25 - balance
89 - glide

Notes

- You can also consider using a [MIDI source](#), which provides a different way to use controller change messages.
- In Twin 3, CC 64 (sustain pedal) is handled automatically, so you don't have to use a MIDI source to connect this to the EG Main Hold parameter like in Twin 2.

Next: [License agreement](#)

See Also
[Support](#)

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See Also

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Acknowledgements

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FabFilter Twin 3 comes with a library of carefully designed presets. These were created by the following sound designers:

- bManic
- Allert Aalders / Sonar Traffic
- Dan Worrall
- Roelof van Krimpen
- Maarten de Boer

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

Next: [About FabFilter](#)

See Also

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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:

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

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[Support](#)

[FabFilter web site](#) 