

DUAL STEREO FILTER BANK

FILTERFOLVK

USER MANUAL

Two stereo filters with fifty-eight shapes between them, a modulation section to move them, and a saturation and effects stage to finish the sound. An effect on any channel, or a synth of its own.

WHY IT EXISTS

Most filter plug-ins give you one filter and a handful of slopes. The interesting sounds live in between: a ladder pushed into overload, a vowel that moves, a comb tuned to a note, two band-passes pulling against each other.

TWO FILTERS, ONE PICTURE

Both filters run in stereo and can be chained either way round, run side by side, or split across left and right. The display draws both of them over the live spectrum, each in its own colour, so you can see what one is doing to the other.

MOVEMENT BUILT IN

Two LFOs, a sixteen-step sequencer, an envelope follower and an oscillator all feed one modulation matrix. Anything that moves can move almost anything else, and the tempo-synced sources lock to your session.

FOUR THINGS WORTH KNOWING

Fifty-eight filter types, from plain slopes to analogue ladders, formants, phasers, combs, EQs and lo-fi. **Effect or synth**: the same engine processes your audio or plays its own oscillator from MIDI. **A and B**: two complete settings to switch between while you listen. **A finishing stage** of twelve saturation types and twenty delays, modulation effects and reverbs.

WHERE TO START

Forty-two factory presets behind the arrows in the top bar, in five groups: basics, movement, character, space and synth. **Init** is a single warm ladder filter and nothing else.

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INSTALL AND ACTIVATE

INSTALLING

- 01 Open the installer.** It places both plug-ins — FilterFOLVK, the effect, and FilterFOLVK Synth, the instrument — as VST3 and Audio Unit, plus the standalone app.
- 02 Rescan in your DAW** if it does not pick them up straight away.
- 03 Use the effect on a channel,** or load the synth on an instrument track and play it from a keyboard.

UNIDENTIFIED DEVELOPER

The installer is not yet signed with an Apple Developer ID, so macOS calls it an unidentified developer the first time. Right-click the installer and choose Open rather than double-clicking it, then confirm. Once is enough.

If you copy the plug-ins in by hand instead, clear the quarantine flag macOS puts on downloads with `xattr -cr` on the copied bundles.

ACTIVATING

- 01 Buy a licence.** You get an email to choose a password.
- 02 Open FilterFOLVK and press Log in** in the bar along the top, then sign in with that email address and password.
- 03 Done.** The plug-in stores a signed licence and never contacts the server again.

WITHOUT A LICENCE

Every filter, every parameter and every preset is unlocked. The only difference is that the audio mutes for five seconds once every twenty, with a short fade so it does not read as a crash. There is no time limit.

ONE LICENCE, BOTH PLUG-INS

The effect and the synth are one product. Activating either one unlocks both, on one computer at a time. To move, release the computer under the gear in the top bar or from your account, then sign in on the next one.

A SEPARATE PRODUCT

A licence for another Folvk plug-in does not cover FilterFOLVK, and a FilterFOLVK licence leaves the others exactly as they are.

THE WINDOW



THE PRESET DUAL PEAKS: TWO BAND-PASSES IN PARALLEL, EACH MOVED BY ITS OWN LFO

TOP ROW

Filter 1 on the left, filter 2 on the right, and the display between them: the output spectrum with both filter curves drawn over it, blue for filter 1, yellow for filter 2.

MIDDLE ROW

What moves things: the oscillator, two LFOs and the envelope follower, with the master section on the end.

BOTTOM ROW

The step sequencer, the modulation matrix that connects every source to its destination, and the saturation and effects that finish the sound.

EVERY KNOB, FOUR WAYS

Drag up and down to turn it, with shift held for fine steps. **Scroll** over it to turn it in steps. **Double-click** to return it to its default. **Click the number** under it to type a value: 250, 2.5k, -6 and 1.2s all work.

A control that does nothing in the current setting dims rather than disappears, and a knob whose job changes says so: on an EQ filter Resonance is called Gain, and on a reverb the delay time becomes Pre-Delay.

TOP BAR, PRESETS AND A/B



CONTROL

WHAT IT DOES

Preset	Click the name for the list, or step through with the arrows. Save stores everything as a preset of your own; the × beside one of your presets deletes it.
Compare A / B	Two complete settings. Switching stores the one you leave and recalls the other. The first switch to B copies what you have, so you start comparing straight away. In B the whole interface turns a cooler blue, so you can tell which you are hearing without looking at the buttons. Both travel with your session.
Routing	Serial 1 > 2 and Serial 2 > 1 run one filter into the other. Parallel feeds both from the input and adds them. Split L / R gives filter 1 the left channel and filter 2 the right.
Mode	Effect filters the incoming audio. Synth replaces it with the oscillator, played from MIDI. FilterFOLVK Synth opens in Synth mode.
In / Out	Meters for the level going in and coming out.
Gear	Window size, whether to be told about updates, and releasing this computer from your licence.

WHERE PRESETS LIVE

Documents / Prime Entity / FilterFOLVK / Presets. A preset is one plain file, shared by the effect and the synth — back it up, or send it to somebody.

FACTORY PRESETS

Forty-two, in five groups: **basics**, **movement**, **character**, **space** and **synth**. Loading one sets every control, including the ones it does not use.

THE FILTERS



Filter 1 and filter 2 are identical. Each runs in stereo, and the line beside its name is the colour of its curve in the display.

Choose a type from the list at the top — it is grouped, so the fifty-eight types read as twelve families. **Bypass** switches the filter out and dims its controls.

Knob	Range	Default	What it does
Cutoff	20 Hz – 20 kHz	1.2 kHz	Where the filter works. On Resample it sets the sample rate, on Ring Mod the carrier.
Resonance	0 – 100%	30%	The peak at the cutoff; the ladders and most slopes ring on their own near the top. On the EQ types this is the gain, ±24 dB with 0 dB in the middle; on Resample the bit depth.
Drive	0 – 36 dB	0 dB	Pushes the input into soft saturation before the filter, and harder into the ladders' overload stage.
Osc FM	±100%	0%	Moves the cutoff at audio rate with the oscillator, up to four octaves either way.
Mix	0 – 100%	100%	Blends the filtered signal with what went in. Allpass and phaser types only become audible below 100%.
Level	–36 – +12 dB	0 dB	The filter's output.
Pan	±100%	0%	Stereo balance of the filter's output. Dims in Split L / R, where each filter already owns one side.

THE DISPLAY



The filled shape is the output spectrum. The two lines are the filters' responses at their current settings, before modulation — they show where a filter sits, the spectrum shows where it is right now.

FILTER TYPES

FAMILY	TYPES
Lowpass	6, 12, 18, 24, 36 and 48 dB per octave
Highpass	6, 12, 18, 24, 36 and 48 dB per octave
Bandpass	6, 12 and 24 dB, and Peak, which lifts a band on top of the full signal
Notch / Allpass	Notch 12 and 24 dB; Allpass 12 and 24 dB, which shift phase only — use Mix below 100%
Analog	Moog LP 24, LP 12, BP and HP: a transistor ladder that self-oscillates and overloads. Diode LP 18, rougher and brighter. Drive LP 12, a saturating 12 dB filter
Resonator / Vocal	Resonator and Resonator Duo, which ring at the cutoff and a fifth above. Formant A, E, I, O and U, shifted by Cutoff. Vocal Morph glides through all five vowels as Cutoff rises

FAMILY	TYPES
Multi-Peak	M-Shape, two peaks either side of the cutoff; W-Shape, two notches; Octave Peaks and Octave Notches, stacked an octave apart
Phaser / Comb	Phaser 4, 8 and 12 stages, Resonance as feedback. Comb + and Comb –, tuned to the cutoff. Comb Damped, a plucked-string resonance
EQ	Peak, Low Shelf, High Shelf and Tilt, with Resonance as gain
FM / AM / Lo-Fi	FM Lowpass and FM Bandpass, whose cutoff follows the signal itself. Ring Mod and AM Lowpass, with a carrier at the cutoff. Resample, which drops the sample rate and the bit depth, and Resample LP
Special	Elliptic LP and HP: a steep edge with a notch just past it. Saturated BP: a band-pass that clips inside its own loop
Off	Bypass

ON SELF-OSCILLATION

The ladders and the steep slopes ring at the cutoff when Resonance is near the top, even with nothing going in. That is the sound, not a fault. A safety limit stops the output at +12 dBFS, so it can never run away — but turn the Level down before you push Resonance all the way.

TWO IN A ROW

A highpass into a lowpass is a band you can shape from both sides. A ladder into a formant is a voice with a body. Serial routing makes the order matter, so try both.

TWO SIDE BY SIDE

In Parallel, two band-passes become two voices, and an LFO on each with opposite amounts makes them trade places. That is the Dual Peaks preset.

OSCILLATOR AND ENVELOPE FOLLOWER



The oscillator has two jobs: it is the sound in Synth mode, and a modulation source in both modes.

Its pitch follows the last MIDI note you played, or sits on C3 when none has been. In Effect mode its Level adds it to your audio — at zero, the default, it only modulates.

CONTROL	RANGE	WHAT IT DOES
Wave	15 shapes	Sine, Triangle, Saw, Ramp, Square, Pulse 25% and 10%, Super Saw, Sine + Octave, Half Sine, Parabola, Sync Saw, White and Pink Noise, Random Steps.
Tune	±48 semitones	Relative to the note played. Turned well down it becomes a slow audio-rate wobble for Osc FM.
Level	0 – 100%	How loud the oscillator is as sound.
Attack, Release	1 ms – 5 s, 5 ms – 10 s	How a note fades in and out in Synth mode. As an effect there are no notes, so these dim.

PLAYING IT AS A SYNTH

Load FilterFOLVK Synth on an instrument track, or set Mode to Synth. The last note held wins: an overlapping note changes the pitch without starting the fade-in again, so legato lines stay smooth. Velocity sets how hard a note sounds, and is also a modulation source.

ENVELOPE FOLLOWER



Turns the loudness of the incoming audio into a modulation signal — play harder, and whatever it is routed to moves further. Route it to a cutoff for an auto-wah.

Attack 0.1–200 ms and **Release** 5–2000 ms set how quickly it follows.

Sensitivity, up to 36 dB, sets how loud the input has to be to drive it all the way.

LFOS AND STEP SEQUENCER



Two identical LFOs, each with eight shapes: Sine, Triangle, Saw Up, Saw Down, Square, Sample & Hold, Smooth Random and Exp Decay.

Rate runs from 0.01 to 40 Hz. Press **Sync** and the LFO locks to the host's tempo and song position instead, with a **Division** from eight bars to a thirty-second, dotted and triplet values included. The one you are not using dims.

Stereo offsets the right channel's phase by up to 180°. At 90° a cutoff sweep circles around your head; at 180° the two sides move in opposite directions. The two random shapes stay the same on both sides.

STEP SEQUENCER



THE STEP PLAYING NOW IS LIT

Sixteen steps, each pulling its destination up or down from the centre line. **Draw** across the bars in one stroke to set them; double-click a bar to put it back on zero.

Step How long each step lasts, from eight bars to a thirty-second, in time with the host.

Length How many steps play before it repeats, 1 to 16. The rest dim.

Glide Slides from one step to the next instead of jumping.

While the host plays, the sequencer follows its position, so a pattern always starts on the bar. The sequencer does nothing by itself: route **Step Seq** to something in the modulation matrix.

MODULATION



Eight slots. Each connects one source to one destination with an amount.

Drag an **Amount** bar left or right; it is bipolar, so a negative amount moves the destination the other way. Double-click resets it. A slot with no source or no destination dims. Several slots may share a destination: their amounts add up.

SOURCES

LFO 1, LFO 2	-1 to +1
Step Seq	The current step, -1 to +1
Env Follower	Input loudness, 0 to 1
Oscillator	The waveform itself, at audio rate
Mod Wheel	MIDI controller 1, 0 to 1
Velocity	Of the last note, 0 to 1
Note (Key)	The last note, centred on C4

DESTINATIONS, AT FULL AMOUNT

Cutoff	±5 octaves, per filter or both at once
Resonance, Mix, Pan	Across their whole range
Drive	±24 dB
Level, Output	From silence to double
FM	Adds to the filter's Osc FM
Dist Drive, Dist Mix	±24 dB, whole range
FX Mix, FX Time	Whole range, ±1 octave
LFO Rate	±3 octaves, free-running only
Osc Pitch	±24 semitones

STEREO MODULATION

An LFO with Stereo turned up moves the left and right filters by different amounts, so a cutoff sweep becomes a stereo movement. Everything else modulates both sides alike.

SATURATION AND EFFECTS



Type picks one of twelve: Soft Clip, Hard Clip, Tube, Presence, Wave Wrap, Wave Shape, Bit Crush, Square Shape, Cubic, Compressor and Warble, or Bypass.

Position puts it **Pre** the filters, so they shape the distortion, or **Post**, so it colours what the filters left. **Drive** goes to 36 dB; **Mix** blends it with the clean signal. On Bit Crush, Drive sets how coarse the steps become; on Compressor, how far it pulls down.

DELAY / REVERB



Twenty effects in three families, sharing four knobs. Each knob's name changes with the family, so it always says what it does.

Sync sets the delay time from the host's tempo instead of in milliseconds.

FAMILY	TYPES	TIME	FEEDBACK	TONE
Delays	Stereo, Ping-Pong, Cross, Tape, Dub, Multi-Tap, Slapback, Lo-Fi	Delay time, up to 2 s	Repeats	Darkens the repeats
Modulation	Chorus, Flanger, Ensemble, Doubler	Speed	Regeneration	Depth
Reverbs	Ambience, Small Room, Room, Plate, Hall, Large Hall, Cathedral	Pre-delay	Decay	Brightness of the tail

MIX

Mix is the balance between the dry signal and the effect. Half way is a classic chorus; for a delay or reverb on a whole channel, a quarter is usually plenty.

MASTER AND SPECIFICATIONS



Input	±24 dB	Into everything, so it also sets how hard Drive and saturation are hit.
Dry / Wet	0 – 100%	The whole plug-in against the untouched input. In Synth mode there is no input, so it acts as a volume.
Output	±24 dB	After everything.

SIGNAL FLOW

Input → saturation (Pre) → filter 1 and filter 2 in the chosen routing → saturation (Post) → delay / reverb → Dry / Wet → Output. Each filter has its own Mix, Level and Pan on its way through.

SPECIFICATIONS

FORMATS	VST3, Audio Unit, standalone application
PLUG-INS	FilterFOLVK (effect) and FilterFOLVK Synth (instrument), one licence
SYSTEM	macOS 11 or later, Apple Silicon and Intel
CHANNELS	Stereo or mono
LATENCY	None
MIDI	Notes, velocity and mod wheel, in both plug-ins
FILTERS	Two, stereo, 58 types, four routings
MODULATION	Oscillator (15 shapes), two LFOs (8 shapes, tempo sync), 16-step sequencer, envelope follower, 8-slot matrix
EFFECTS	12 saturation types, 20 delays, modulation effects and reverbs
PRESETS	42 factory presets in five groups, unlimited of your own
COMPARE	A and B, saved with the session
SAFETY	Output limited at +12 dBFS

IF SOMETHING IS WRONG

WHAT YOU SEE

WHAT IT USUALLY IS

The audio stops for a few seconds, over and over	Demo mode: five seconds of silence in every twenty. Log in and it stops.
The synth makes no sound	Mode is set to Effect, or the oscillator's Level is at zero. Check the track is receiving MIDI.
The effect is silent in Synth mode	Synth mode replaces the input with the oscillator. Set Mode back to Effect.
A filter whistles on its own	Resonance near the top makes the ladders and steep slopes self-oscillate. Bring it down, or the filter's Level.
An allpass or phaser type does nothing	They only shift phase. Set the filter's Mix below 100% to hear them.
The step sequencer does not move anything	It is a source. Route Step Seq to a destination in the modulation matrix.
A synced LFO or the sequencer stands still	They follow the host's transport. Press play, or switch Sync off.
Rate or Time is greyed out	Sync is on, so Division is in charge. Switch Sync off to use the knob.
Pan is greyed out	Routing is Split L / R, where each filter already owns one side.
I lost a setting switching A and B	The one you left is stored in the other slot. Switch back to find it.
Log in says the licence is on another computer	It is active elsewhere. Release that machine in your account, then log in again.
I forgot my password	Use the forgot-password link on the sign-in page. The link works once and expires after a day.

TWO FILTERS. EVERY SHAPE BETWEEN.

Prime Entity is an audio production studio. Ghost production, mastering, sound design and recording, and tools built in-house for the same sessions.

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