

## > reviews / arturia 3 filters you'll actually use

**CUTOFF AND RESONANCE**  
Common to all three filters, of course

**DUAL MULTIMODE FILTERS**  
Serial or parallel routing and 15 modes

**ENVELOPES**  
M12's envelopes are a high point

**LFO**  
Apply cyclical modulation

**NOISE**  
SEM-Filter includes a noise oscillator

**GATE SEQUENCER**  
Triggers SEM-Filter's LFO and envelope



**STEP SEQUENCER**  
Modulates Mini-Filter's filter and LFO

**ENVELOPE FOLLOWER**  
Mini-Filter's other trick is modulation by input amplitude



**MODULATION MATRIX**  
Each synth has its own mod assignment setup

# Arturia 3 Filters €199 PC MAC

Pulled from three classic synth emulations, these analogue-style filter plugins offer a rich diversity of frequency-shaping possibilities

> Simultaneously launched alongside 3 Preamps You'll Actually Use (see p92), 3 Filters You'll Actually Use (to give it its awkward full name - where on earth do they get the idea that we've not been happily using other filters up until now?) is a bundle of three analogue-modelled filter plugins (VST/AU/AAX), extracted from three of Arturia's classic synth emulations. As you'd hope, extra functionality has been added to each one, primarily a variety of modulation options for rhythmic and dynamic filtering. As well as the full bundle, each filter is available to buy individually for €99.

The 3 Filters in question comprise Mini-Filter, from the Mini V Minimoog emulation; SEM-Filter, from the SEM V Oberheim SEM emulation; and M12-Filter, from the Matrix-12 V Oberheim Matrix 12 emulation. The three interfaces are heterogeneous, each with its own styling and layout inspired by the synth from which it was pulled, and different implementations of

modulation matrices, step sequencers, envelopes, etc. However, they all feature wet/dry mix controls for parallel processing, as well as Arturia's excellent preset browser, MIDI learn system and resizable GUIs. The last of these proves essential on Retina/HiDPI screens, as the plugins are comically tiny at 100%. Two hundred percent is clearly the default for such displays,

"As we already know from Mini V, Arturia's model exudes all the warmth and fatness of the real thing"

and unless it's only intended to scale up to high-res normality, rather than actually make everything 'bigger', Arturia need to recalibrate this setting.

### Mini-Filter

Recreating the Minimoog's legendary 24dB low-pass ladder filter, Mini-Filter incorporates an input Drive stage, and self-oscillates at high Emphasis (or resonance, as the kids are calling it these days) unless the Limit Resonance button is activated. As we already know from Mini V, Arturia's model exudes all the warmth and fatness of the real thing, but with its onboard LFO, step sequencer and envelope follower, there's far more to the story than just that.

The LFO is simultaneously assignable to filter cutoff, resonance and sequencer modulation amount, and runs anywhere between 0.1 and 2000Hz, free or synced to host tempo. Five waveforms are provided, including Sample and

“SEM-Filter’s strengths are its filter mode morphing, integrated noise source and sequenced envelope”

Hold for random movement, and the wave can be offset with the Phase knob.

The step sequencer and envelope follower also modulate cutoff and resonance, as well as the LFO rate. The sequencer cycles through up to eight steps, synced to host or not, again at speeds up to 2kHz, with the modulation amount set per step using a row of bipolar knobs. The envelope follower, meanwhile, offers Attack, Decay and Sensitivity parameters for shaping its tracking response to the incoming audio signal. Mini-Filter’s three modulation sources are assigned to targets via dedicated amount knobs in each section, making it perfectly immediate and intuitive.

## SEM-Filter

Stepping up the complexity somewhat, the state-variable 12dB/octave SEM-Filter morphs from low-pass through notch to high-pass with its modulatable Mode knob. Alternatively, turning Mode fully anticlockwise switches to band-pass. Interestingly, a noise oscillator is also plumbed into the filter, for adding bite and edge to the sound. You can set it to trigger with audio input higher than -37dBFS, or to sound constantly when the host DAW is playing.

SEM-Filter’s modulation circuits consist of a syncable LFO with six waveforms and a smoothing control, an AHD envelope (up to 10s per stage) and the 16-step Gate Sequencer, which is not only programmed to trigger the envelope, but can also restart the LFO. Modulation assignments are made in a simple matrix, housing separate rows for the LFO and envelope, with targets comprising Cutoff, Resonance, Mode, Noise level, LFO Rate and Env Amp and Filter Out. Modulation of Filter Out allows creative volume gating to be brought into play, blendable with the dry signal using the Mix knob.

SEM-Filter’s main strengths are its filter mode morphing, integrated noise source and sequenced envelope. Its two-pole topology makes it smoother and less pronounced than Mini-Filter, particularly at high resonance, but it can still scream when you need it to – and it’s obviously the more versatile of the two. On that



The Minimog-mimicking Mini-Filter is the most accessible of the three, with no mod matrix



If we could only have one of the 3 Filters, it would, without doubt, be this one

## The jewel in the crown: M12-Filter

By far the most flexible and feature-rich of the set, M12-Filter is a dual filter modulated by three powerful multi-breakpoint graphical envelopes.

The two filters can be routed in series or parallel, and each offers 15 modes, including several combinations (HP+LP, LP+Notch, etc) and taking in one-, two-, three- and four-pole configurations. They both have their own Pan and Out level controls, and the Master Cutoff knob offsets the frequencies of both together.

Each of the three envelopes is shaped by positioning up to 16 breakpoints in the editor window, playback through which syncs to host,

cycling over one bar by default, with the Rate Multiplier altering the speed by a factor of 0.75-8. Breakpoints snap to grid, the curves and angles of connecting lines are adjustable, and playback can be retrigged or looped continuously, enabling elaborate LFOs and step sequences to be designed.

Further modulation is supplied by a syncable random-value generator, and a mod oscillator that runs at audible rate (0.01Hz-10kHz) for FM- and AM-style effects. All five modulation sources are independently assigned to up to eight freely-selected targets from a comprehensive list in the straightforward mod matrix.

last score, though, M12-Filter has them both beat – see *The jewel in the crown*.

## Filter freaks

All three of Arturia’s vintage filter plugins sound superb – that was never in doubt, given their software provenance – and the various modulation and cross-modulation systems that have been put in place turn them into wildly creative effects. While we appreciate the reasoning behind Arturia’s decision to meaningfully differentiate the feature set, though, it’s a shame only M12-Filter gets those nifty graphical envelopes and that Mini-Filter keeps that envelope follower all to itself. There’s also a bit of a question mark over the €99 individual plugin price, given its parity with the rather more feature-rich competition (see *Alternatively*). The bundle represents good value, assuming you really want all three, but we’d imagine many buyers won’t. The option to pick up two for, say, €149 would perhaps make a good compromise.

Beyond all that, this is a vibrant, beautifully realised trio of impressively analogue-sounding virtual filters that makes generating animated sweeps and rhythmic frequency-shaping treatments easy and fun. **cm**

Web [www.arturia.com](http://www.arturia.com)

## Alternatively

**Cytomic The Drop cm214 » 10/10 » \$99**

Cytomic’s feature-packed dual filter modulates the hell out of seven classic models

**Sugar Bytes Wow 2 cm198 » 10/10 » €99**

Twenty-one filter types (including formants), seven distortion flavours and copious modulation options

## Verdict

**For** Three superb-sounding filters  
Easy but capable modulation  
M12-Filter’s envelopes and Mod Oscillator are awesome

**Against** Fairly expensive individually and you probably don’t need all three  
Modulation isn’t visualised

The pricing might be slightly off, but Arturia’s trio of filters stands out in terms of hardware-inspired creativity and sonics

**8/10**