

Intellijel – Micro VCF

- [Manual PDF](#)

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Creative Eurorack Patching Ideas with the Intellijel µVCF

The **Intellijel µVCF** is a compact, versatile state variable filter that excels not just as a filter, but also as a unique sound source and modulation processor. Here are some creative patching and integration ideas to explore fresh sonic ground in your modular setup.

1. Self-Oscillating Sine VCO

- **Setup:** Remove the input signal, turn Q to maximum. The µVCF will self-oscillate and generate a stable sine wave.
- **Expand:** Use FM1 as a 1V/Oct pitch CV input (fully clockwise on the attenuator). You can now sequence melodies using any sequencer, quantizer, or analog keyboard.
- **Recommended Modules:**
 - [Intellijel Metropolix](#) for sequenced melodies
 - **Generic:** Any sequencer or quantizer

2. Multi-Output Filtering for Parallel Processing

- **Setup:** Pass the same sound source (e.g., complex oscillator, chord, drum loop) to the μ VCF input. Send the LPF, HPF, and BPF outputs to different FX chains, VCAs, or mixes.
- **Creative Twist:** Crossfade or pan the different outputs for morphing filter textures, or use a switch module (like the WMD Sequential Switch) for rhythmically swapping filter flavors.
- **Recommended Modules:**
 - [Intellijel Planar2](#) for manual/CV crossfading
 - [WMD Sequential Switch Matrix](#) for rhythmically cycling outputs
 - **Generic:** Stereo/multichannel mixers

3. Filter FM: Additive or Complex Modulation

- **Setup:** Patch LFOs, envelopes, or even audio-rate oscillators into FM1 and FM2.
- **Bipolar Fun:** Use the bipolar attenuator (FM2 knob) to invert modulation polarity on the fly.
- **Audio-Rate FM:** Try running a second oscillator (tuned to harmonic or inharmonic intervals) into FM2 for classic filter FM “zing” or metallic sounds.
- **Recommended Modules:**
 - [Make Noise Maths](#) (complex envelopes/LFO)
 - **Generic:** Any VCO, LFO, or envelope generator

4. Dynamic Timbre Animation with Envelopes & LFOs

- **Setup:** Envelope to FM1; LFO to FM2. Set FM1 for tracking, use FM2 for slow movement or vibrato.

- **Hack:** Try patching gate signals or clocks into FM2, and experiment with the attenuator for rhythmic cutoff “stepping.”
- **Recommended Modules:**
 - [Intellijel Quadra](#) (multi-envelope)
 - [ALM Busy Circuits Pam's New Workout](#) for clocked modulation

5. Spectral “Split” via Parallel Filtering

- **Setup:** Use a signal splitter (or mult) to send audio both pre- and post-filter.
- **Mix:** Wet/dry mix or parallel compression/EQ can be achieved with a mixer—process the filtered and dry sounds separately for punchy, custom results.
- **Recommended Modules:**
 - [Intellijel Mixup](#) (compact audio mixer)
 - **Generic:** Buffered multiple

6. Noise Shaping for Percussion and Texture

- **Setup:** Patch white or pink noise into the μ VCF. Sweep FREQ and Q for sweeps and wind noises, resonant snare/hi-hat shaping, or unusual percussive textures.
- **Tip:** Gate or envelope the input attenuator for percussion and rhythmic gating.
- **Recommended Modules:**
 - [Mutable Instruments Peaks](#) (envelopes, LFOs)
 - [Doepfer A-118](#) (noise source)

7. Voltage-Controlled Stereo Animation

- **Setup:** Use two μ VCF modules in parallel on the same source, modulate their cutoffs with different LFOs/EGs, and pan their outputs hard left/right for dramatic stereo movement.

- **Recommended Modules:**
 - **Second µVCF module**
 - [Happy Nerding PanMix Jr](#) (stereo mixer)

8. Wavefolder/Distortion Pre- or Post-Filtering

- **Setup:** Patch a wavefolder, distortion, or waveshaper before or after the filter to carve out exciting harmonics and tame or enhance them with resonance and cutoff.
- **Recommended Modules:**
 - [Intellijel Bifold](#)
 - [Tiptop Audio Fold Processor](#)

9. Triggerable Sound Effects (Karplus-Strong Style Plucks)

- **Setup:** Patch noise or a short impulse to the input, set Q high but below full resonance, and ping (or envelope) the frequency for plucked string or percussive tones.
- **Recommended Modules:**
 - [Mutable Instruments Marbles](#) (random trigger source)
 - [Intellijel Quadrax](#) (fast envelopes)

10. CV-Controllable Feedback Loop

- **Setup:** Patch one of the filter outputs (e.g., LPF) back into the input via a VCA, and modulate the feedback amount for evolving resonant effects.
- **Warning:** Adjust feedback carefully to avoid runaway self-oscillation.
- **Recommended Modules:**
 - [Intellijel VCA 1U/2U](#)

- **Generic:** Any linear VCA

Bonus Tip: Use ModularGrid!

Use [ModularGrid](#) to virtually arrange your modules and plan power/hp usage for your system as you explore new patching possibilities.

[Generated With Eurorack Processor](#)