Doepfer — A-121

- Manual PDF

Doepfer A-121 VCF2 System A-100 Manual PDF

Doepfer A-121 VCF2 (System A-100) Cheat Sheet

Type: Analog Voltage Controlled Multimode Filter
Slope: -12 dB/octave
Modes: Simultaneous LP, BP, HP, NOTCH outputs

PANEL OVERVIEW

CONTROLS / KNOBS

Label	Function
Audio Level	Attenuator for input audio signal. Reduce if output distorts.
Freq.	Manual cut-off frequency control.
FCV 2	Attenuates CV input to cut-off frequency at FCV 2 jack.
Res.	Manual resonance (Q/emphasis) control (self-oscillation when near max).
QCV 2	Attenuates CV input to resonance at QCV 2 jack.

INPUTS & OUTPUTS

Jack Label	Type	Function	CV Range
Audio In (!)	Audio In	Main audio input. Patch VCO/ Noise/Mixer here.	Audio (-5V/ +5V typical)
FCV 1 (")	CV In	Cut-off frequency CV input. 1V/oct scaling. Patch keyboard CV, LFO, ADSR, etc.	0-10V
FCV 2 (§)	CV In	Second cut-off frequency CV input via attenuator 3.	0-10V
QCV 1 ($)	CV In	Resonance (Q) CV input. 1V/oct scaling. Patch LFO/Envelope etc.	0-10V
QCV 2 (%)	CV In	Second resonance CV input via attenuator 5.	0-10V
Low (&)	Audio Out	Low-pass output (frequencies below cutoff pass).	Audio
Band (/)	Audio Out	Band-pass output (only a narrow band around cutoff passes).	Audio
High (()	Audio Out	High-pass output (frequencies above cutoff pass).	Audio
Notch ())	Audio Out	Notch (band-reject) output (all but a narrow band passes).	Audio

QUICK REFERENCE

- **Cut-off Frequency (Freq.)** shifts filter point for all modes.

- CV inputs (FCV 1, FCV 2) can be summed; FCV 2 is attenuated with knob 3.
- FCV 1 is calibrated 1V/oct for filter tracking or as a sine oscillator.
- **Resonance (Res.)** accentuates frequencies at the cutoff point; high resonance leads to self-oscillation (sine wave output).
- Resonance CV via QCV 1 (full-scale) and QCV 2 (attenuated by knob 5).
- **Output Jacks**: All filter 'modes' (LP, BP, HP, Notch) are available simultaneously.

PATCH IDEAS

- **LFO to FCV 1:** Auto-wah/flanging effects.
- **Envelope to FCV inputs:** Classic subtractive synth sweeps.
- **Use as Sine Oscillator:** Max-out resonance; 1V/oct CV to FCV 1.
- **Quadraphonic/Spatial Processing:** Route each mode output to different speakers for spatial spectrum manipulation.

VOLTAGE CONTROL SUMMARY

Parameter	Manual Control	CV Control (input jacks)	Range
Cutoff Frequency	Freq.	FCV 1 (1V/oct), FCV 2 (w/ attenuator 3)	0–10V (typ), audio-rate possible
Resonance	Res.	QCV 1 (1V/oct), QCV 2 (w/ attenuator 5)	0–10V (typ), up to self-osc.

TIPS

- If output is distorted, reduce Audio Level.
- Max resonance + high cutoff = sine oscillator mode (frequency may drop slightly at extreme settings; a characteristic of CEM3320 chip).
- All outputs are active at all times: patch for creative mixes.
- Patch **slew limiter** to VCO pitch CV for portamento (vocal patches).
