

μ VCF

3320-LP4-A

Description

μ VCF_{3320-LP4-A} is a four stage voltage controlled low pass filter micromodule. Its 24dB per octave slope delivers classic sound response found in many synthesizers. The micromodule is based on the AS3320 integrated circuit.

Features

- integrated 4-channel input signal mixer
- integrated 4-channel cut-off frequency CV mixer
- integrated 2-channel resonance CV mixer
- control voltage range normalized to 0 ÷ 5 V
- exponential control of cut-off frequency
- linear control of resonance
- buffered signal output
- low noise
- +12V, -12V power supply
- reverse voltage protection

Input/Output

pin	label	description	range [V]
1-4	▷ INPUT	audio signal inputs; summed	-7 ÷ +7
5-8	▷ FREQ	cut-off frequency control inputs; summed	0 ÷ +5
9,10	▷ RES	resonance control inputs; summed	0 ÷ +5
11	◁ OUTPUT	audio signal output	-7 ÷ +7
14	+12V	positive power supply	
15	GND	ground	
16	-12V	negative power supply	

Typical connections

from	↔	attenuated	↔	to	comment
μ VCO \triangleleft wave ¹	↔	maybe ²	↔	\triangleright INPUT	audio signal to be filtered
+5V	↔	yes	↔	\triangleright FREQ	manual cut-off frequency control
+5V	↔	yes	↔	\triangleright RES	manual resonance control
μ ADSR \triangleleft OUTPUT	↔	yes	↔	\triangleright FREQ	filter envelope
μ ADSR \triangleleft INV OUTPUT	↔	yes	↔	\triangleright FREQ	filter envelope/subtractive
μ LFO \triangleleft wave ³	↔	yes	↔	\triangleright FREQ	filter modulation by LFO
\triangleleft OUTPUT	↔	maybe	↔	μ VCA \triangleright INPUT	routing audio signal to amplification stage

¹wave = TRIANGLE | PULSE | SAW

²attenuator at this point makes sense when multiple input signals are mixed, e.g. signals from 2 oscillators

³wave = TRIANGLE | PULSE | SAW | INV SAW