

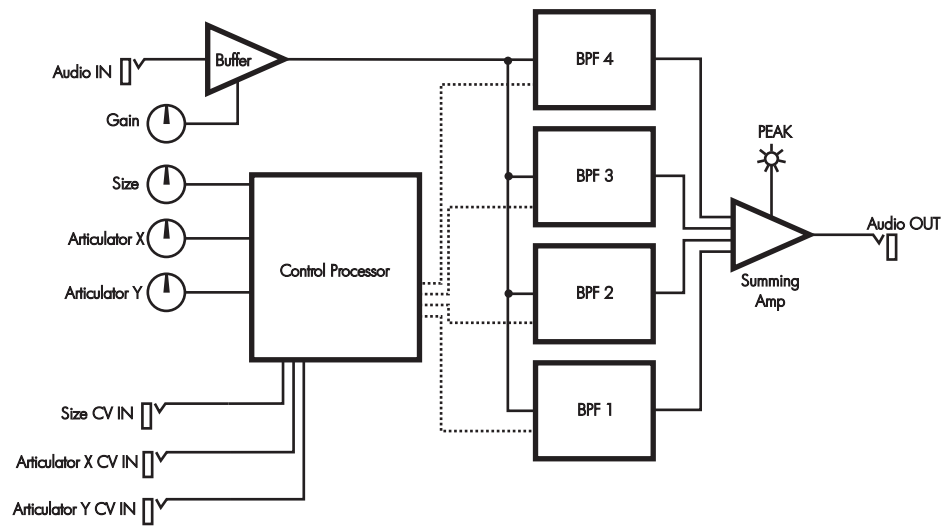


grendel

FORMANT FILTER

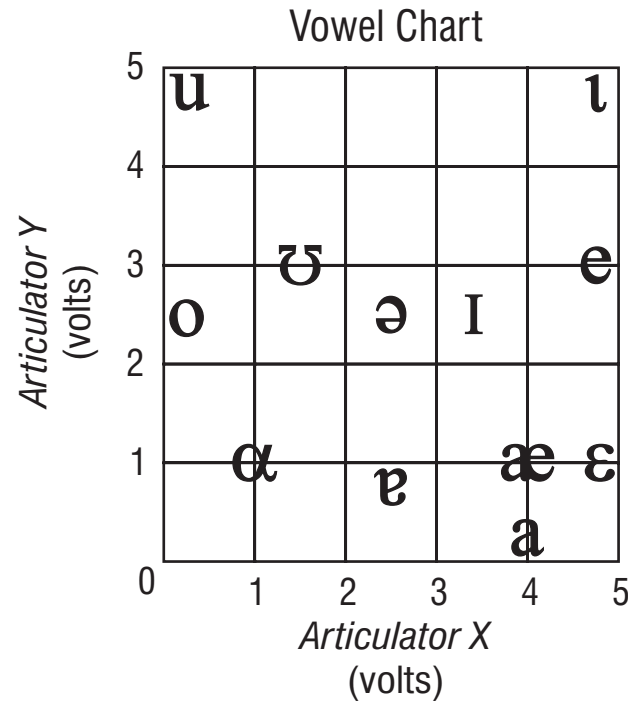
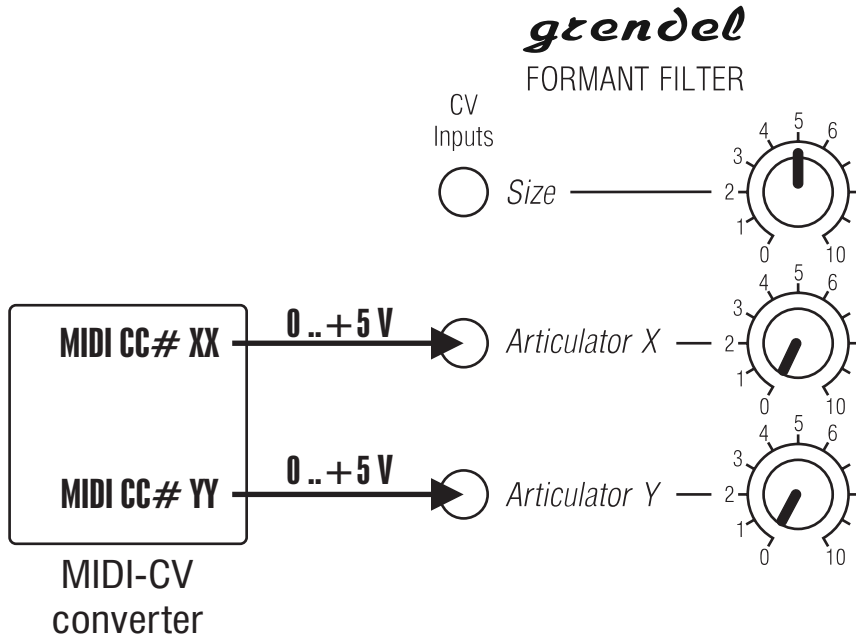
Patching Guide

2.0.1



Patch 1

Two Axis Vowel Synthesis with MIDI-CV Converter



Pronunciation Guide *

u	BOOT
ɪ	FREE
ʊ	HOOK
ɛ	PLAY
ɪ	BIT
ɔ	GO
ə	TINA
ɛ	BED
ɑ	STACK
ɑ	HOT
æ	CAT
ɹ	NUT

* N. American English

If the MIDI-CV converter's output range is 0.. +5 volts, set the Articulator X and Articulator Y knobs to the zero mark. This provides correct offset bias for full range of control.

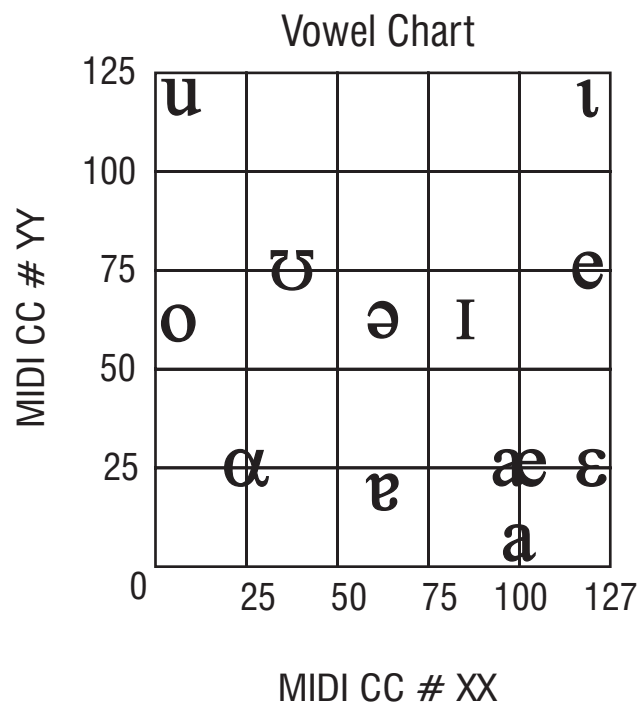
If using a 1V / octave CV output, set the Articulator's knob to the zero mark. Use the bottom 5 octaves of MIDI notes to control the formant filter.

If the MIDI-CV converter has bipolar output, such as Pitch Bend, set the Articulator knob to the 5 mark.

If unsure about your MIDI-CV converter's specifications, consult the manufacturer's literature.

Chart 1

Translating MIDI Continuous Controller Values To Vowel Positions



Pronunciation Guide *

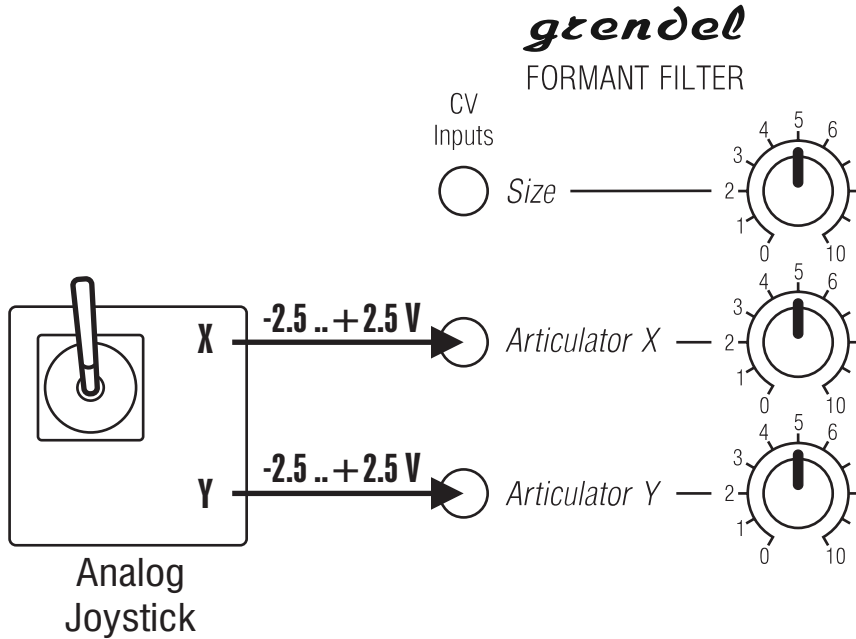
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This chart is valid for MIDI-CV converters with 5 volt output range.
 This is typical of the Aux Output on many converters.
 Set the Formant Filter's knobs as recommended in Patch 1.

* N. American English

Patch 2

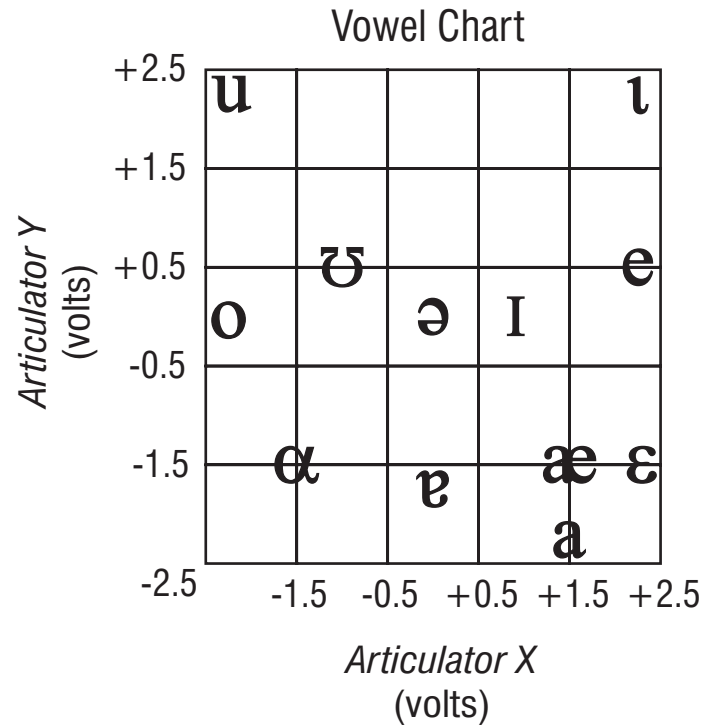
Two Axis Vowel Synthesis with Analog Joystick



If the joystick has bipolar output, such as -2.5 .. +2.5 volts, set both Articulator knobs to the 5 mark.

If the joystick's output range is 0.. +5 volts, set the Articulator X and Articulator Y knobs to the zero mark. This provides correct offset bias for full range of control.

It is OK to use a joystick with wider output range than 5 volts, but it will mean a narrower useful region of joystick travel. Patch a voltage attenuator in between the joystick and filter to correct this.



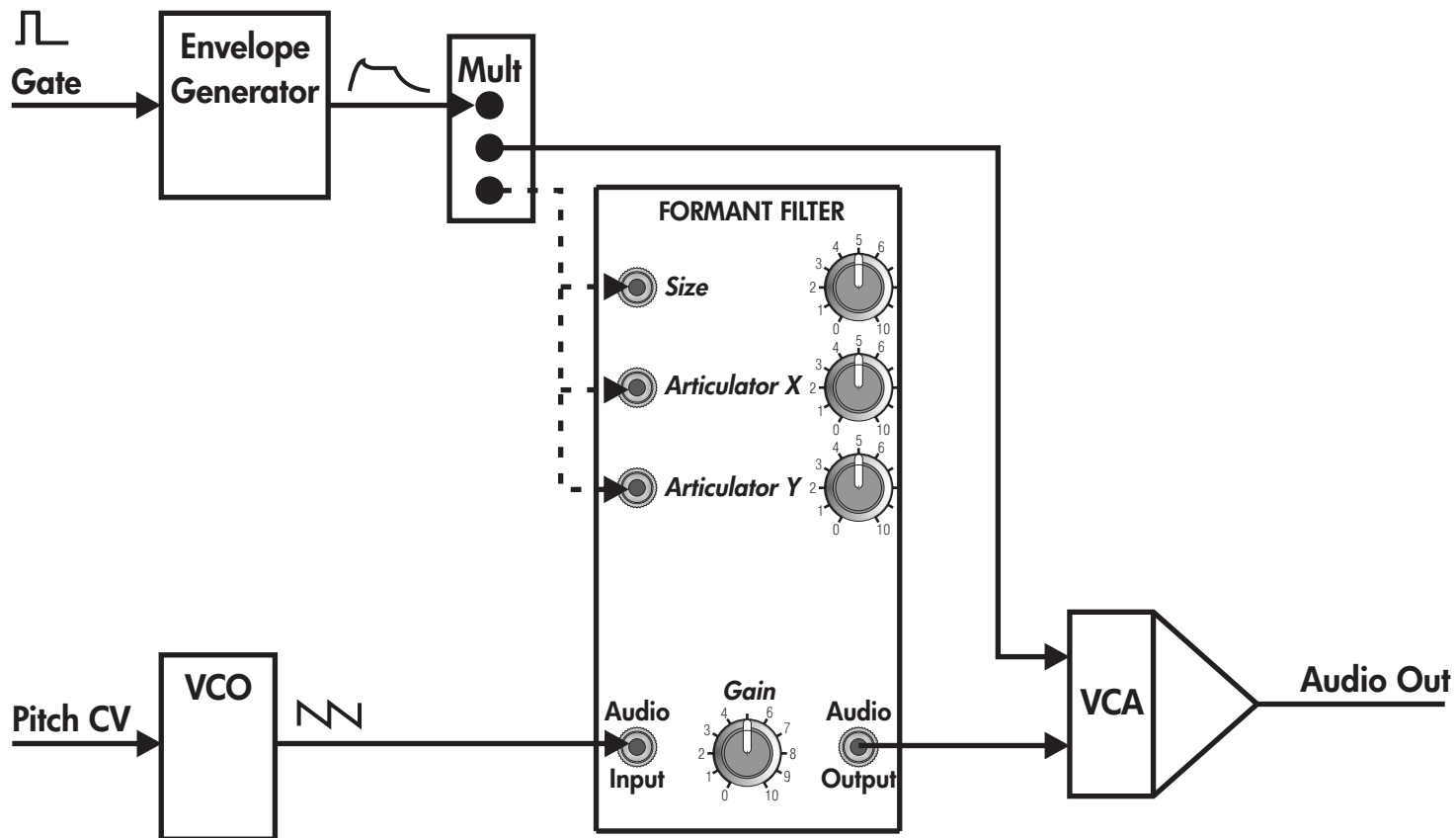
Pronunciation Guide *

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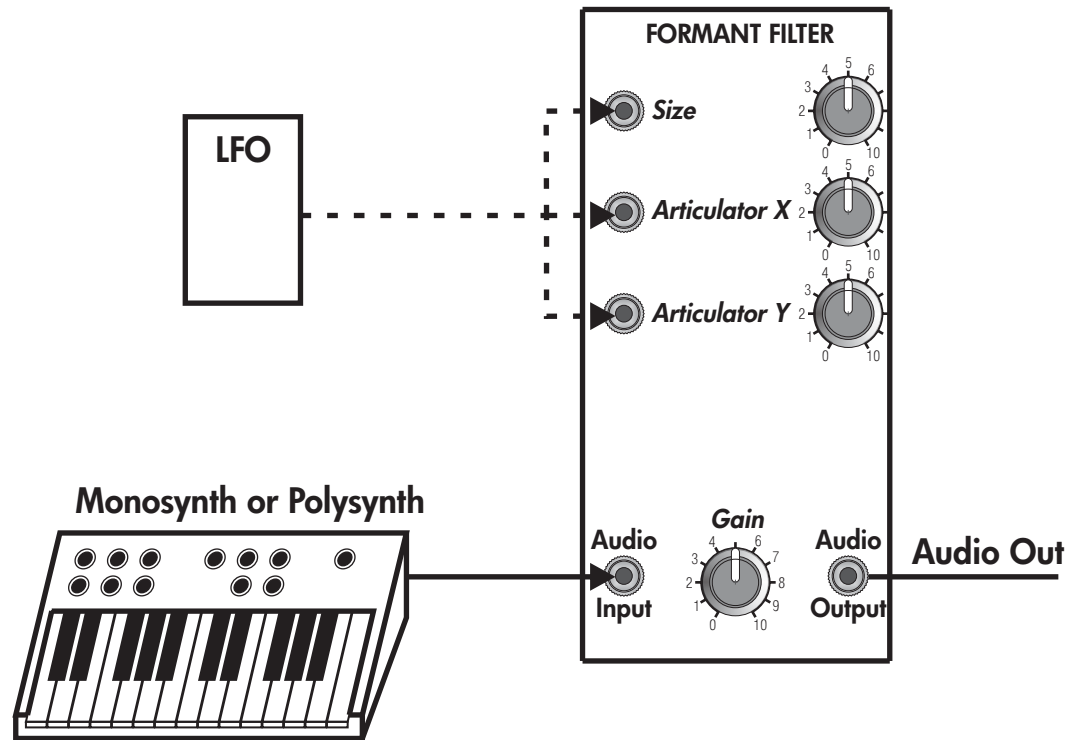
Patch 3

Classic CV-Gate Monosynth With Formant Effect



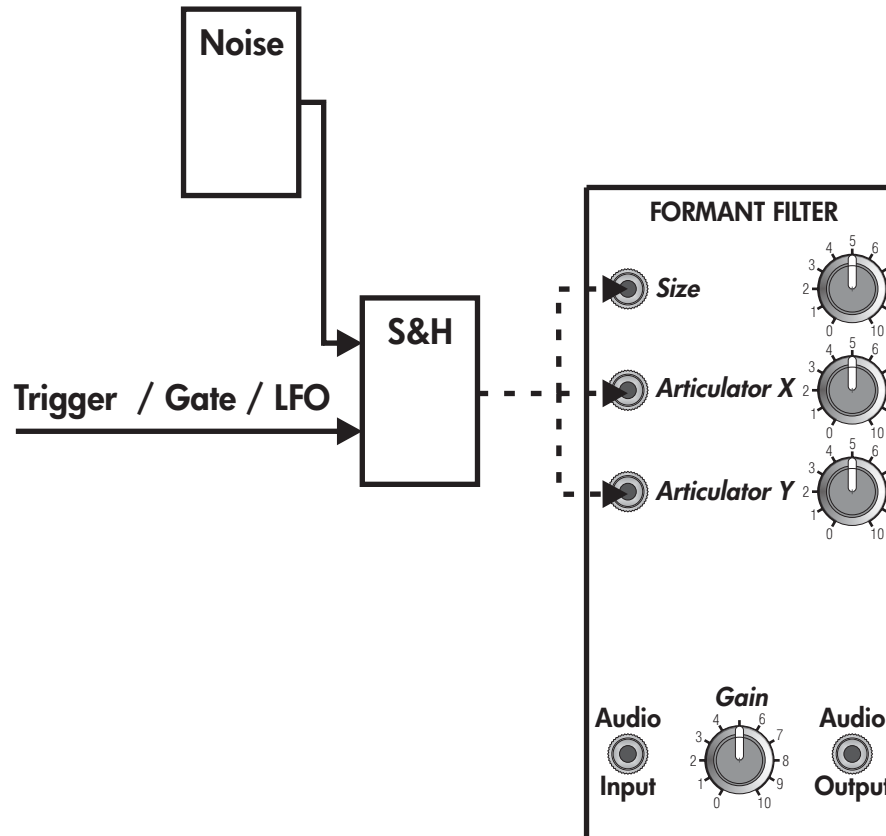
Patch 4

Adding LFO Filter Effects To A Keyboard



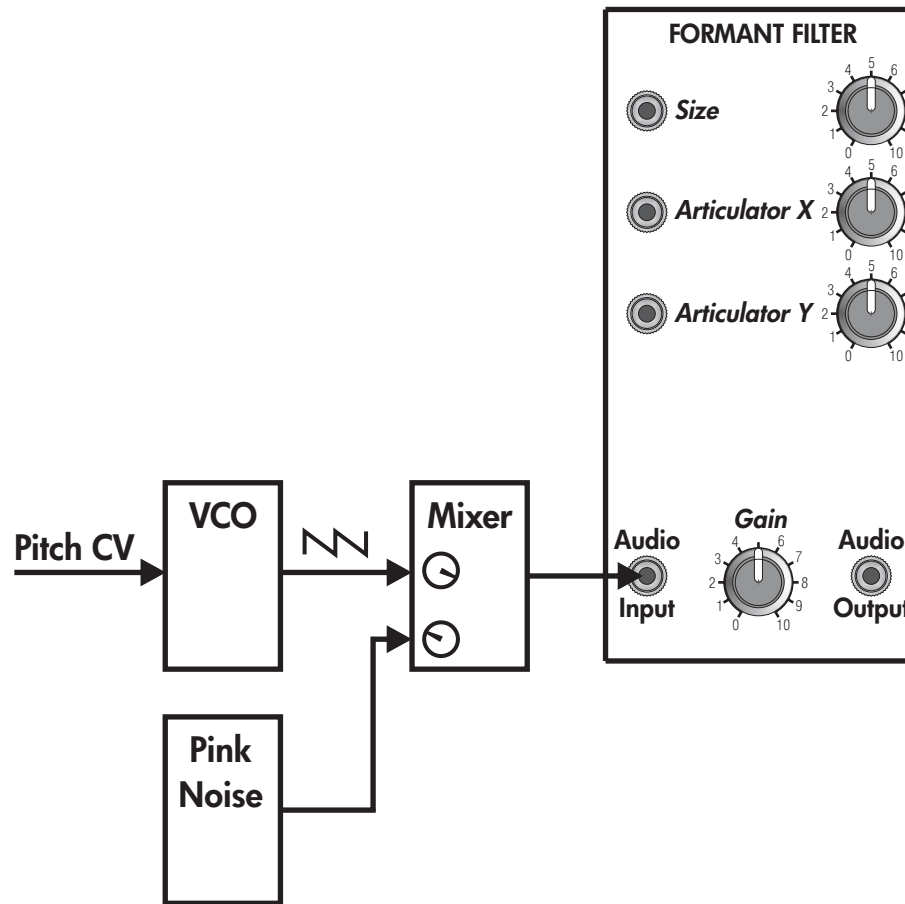
Patch 5

Stepped Random Formant Effect



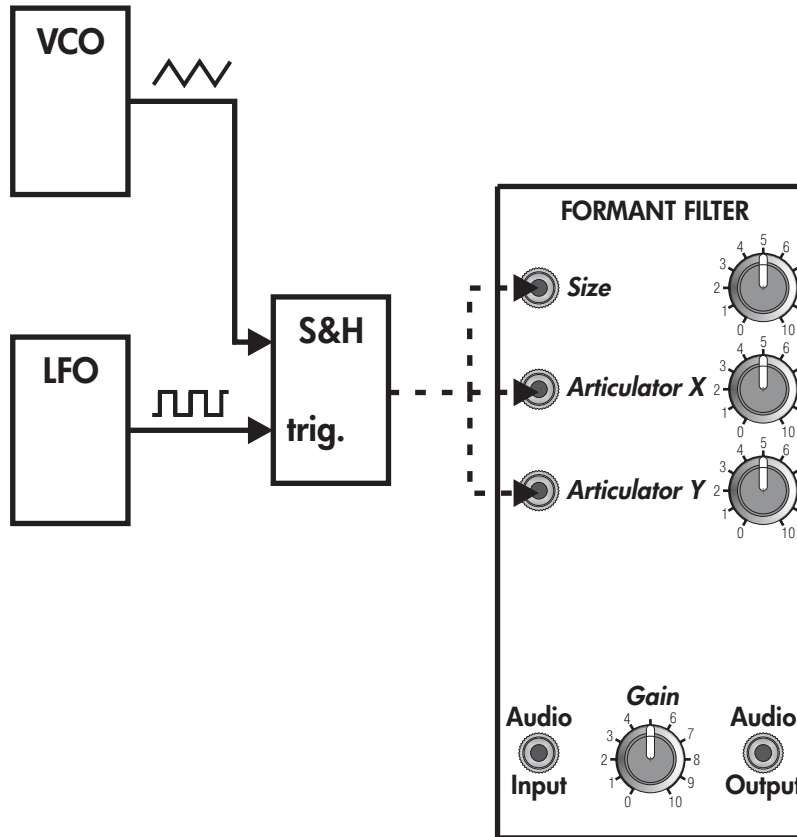
Patch 6

Breathy Voice Simulation



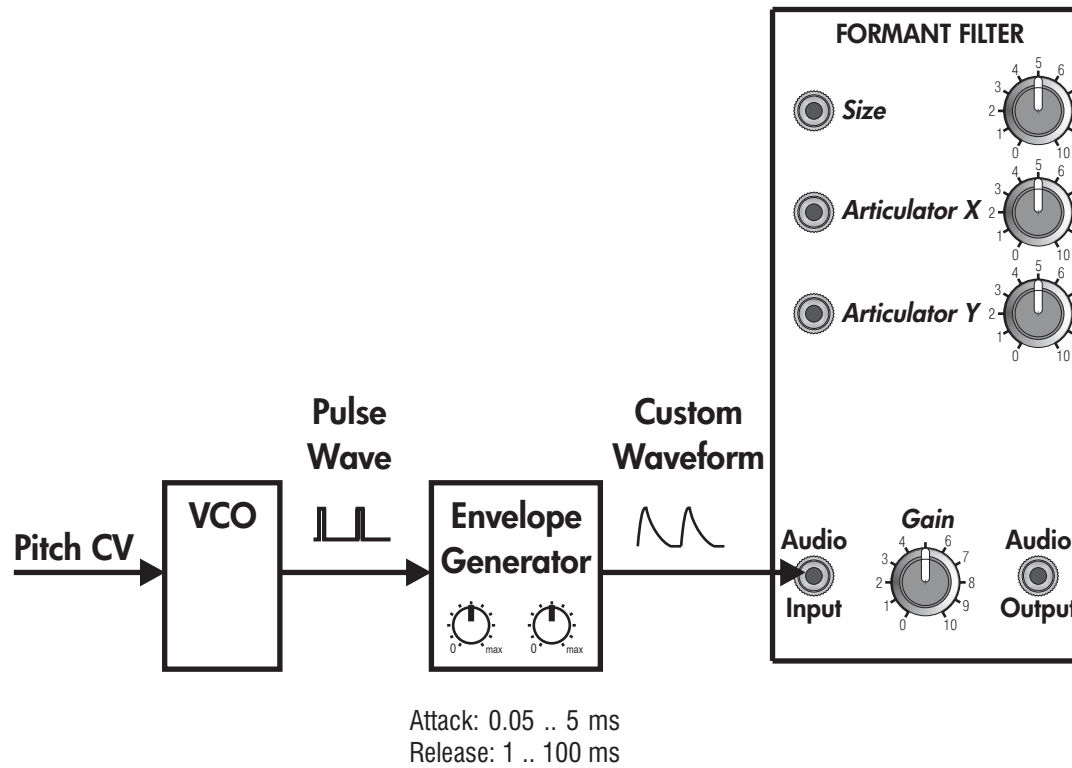
Patch 7

Stepped Pattern Formant Effect



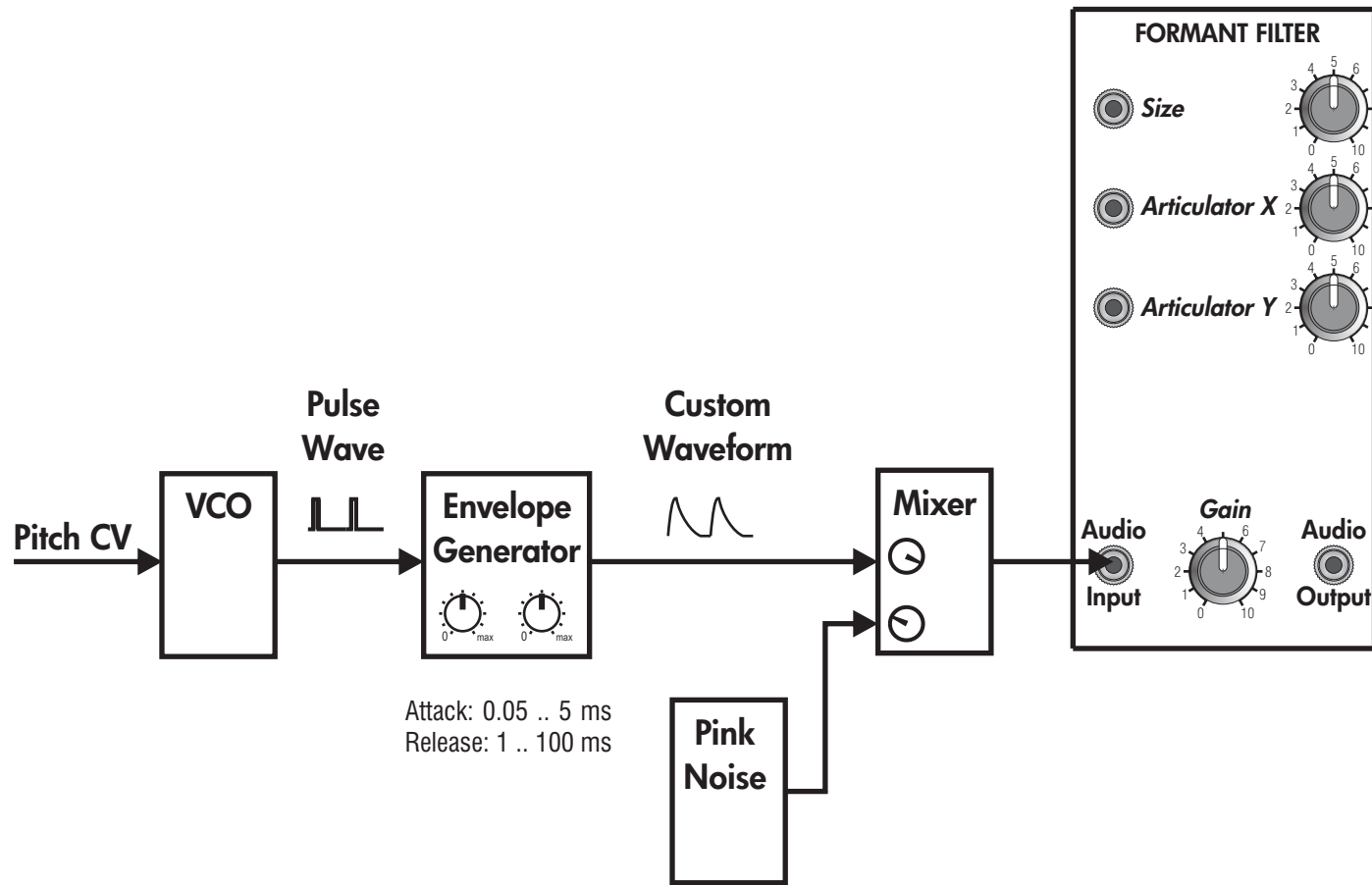
Patch 8

Vocal Waveform Simulation I



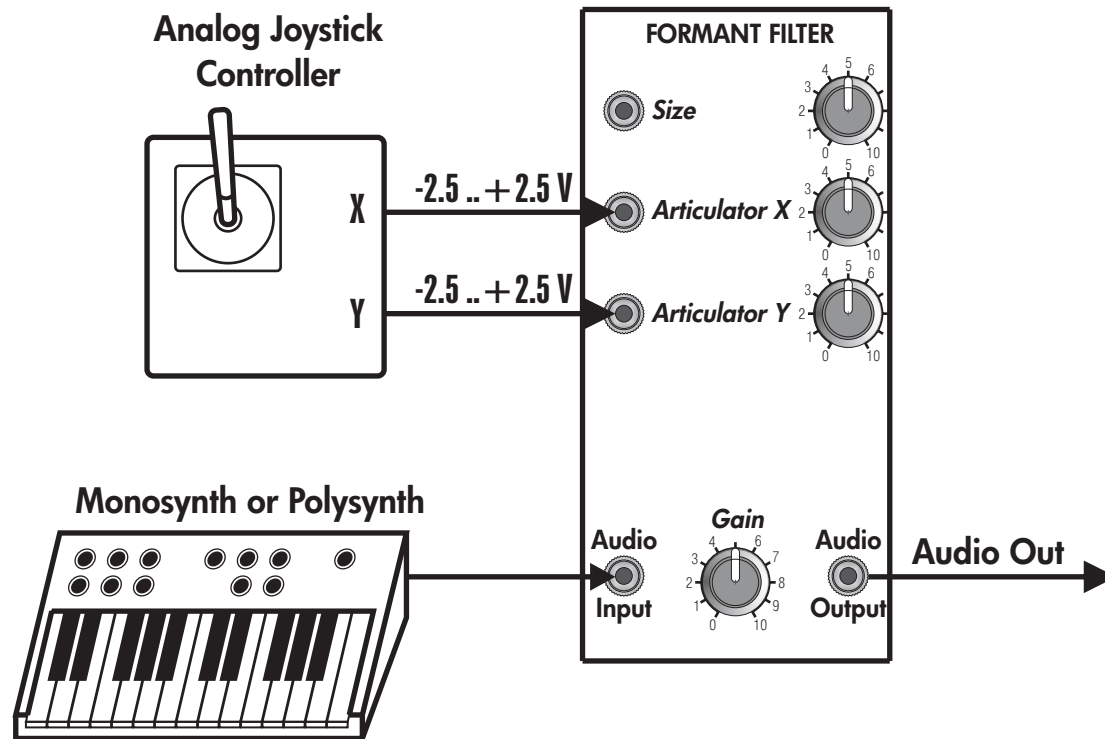
Patch 9

Vocal Waveform Simulation II



Patch 10

Keyboard Performance with Formant Expression Control



Patch 11

Sequenced Monosynth With Vocal Effect

