

PM Presets – PM Sequencer 3

Edit 2022-02-28

Overview

In "Sequencer 3" a rather unusual way is gone to build up a stepper. Saw signal from *Voltage LFO* controls a *P.Moon Switch 1 to 8*. That's it!



Functional Sections

Clock Generator

The LFO frequency determines sequencer speed.

Step Generator

Pure LFO saw signal would not match anticipated stepping. That's why a *P.moon Transform* module is added. It helps to adjust switch timing. Transform converts triangle voltage (-5 to +5 V) to "cv in" (+0.50 to +4.49 V). This voltage results in



selecting "out 1" to "out 8" of Switch 1 to 8. Eighth step is only to get a pause of one step length.

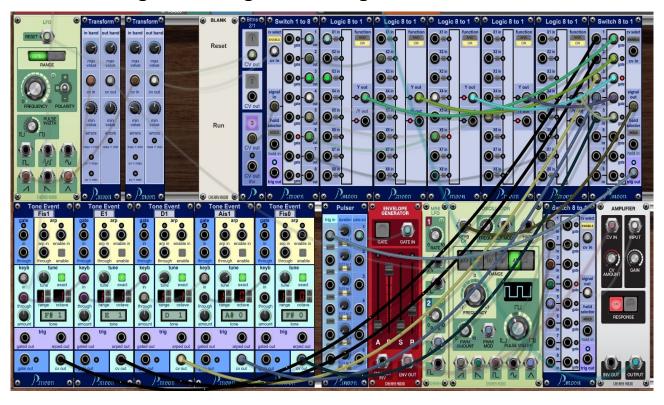
"Transport Control"

Because Switch 1 to 8 here only switches a boolean signal (5 volts = ON), it's "signal input" can be used as "PLAY" signal. P.moon Buttons 2/1 module lets you reset LFO with one click on button 2. Toggle button 3 works as PLAY switch.

KEYB signal

All *Tone Event*'s KEYB sections are chained. First "keyb in" gets signal from host, so that keyboard tracking is possible.

Only *Tone Event*'s "cv outs" are used in this setup. A *P.moon Switch 8 to 1* collects these signals to a single KEYB voltage for the tone oscillator.



GATE signal

To get the common GATE signal for the stepping melody, a special function of *Switch 8 to 1* (most right in upper shelf) is used. It creates a "trig out" pulse of 5 milliseconds everytime, when port selection by "gate in" or "cv in" changes between "1" and "8". So we get 7 pulses at every sequencer cycle.



This short pulse will be enlarged by *Pulser*. Please note, that enlarged pulse must be shorter than a *Stepper's* step. Otherwise it's output will stay ON continuously and ADSR will remain at "S" level.

Shape Switch

A little sound variation is done by another *Switch 8 to 1*. It changes between several tone shapes. Selection is done by a triangle shaped control voltage. This comes from the *LFO* and is adapted with help of most left *Transform* module.



Example preset: <u>PM Sequencer 3.voltagepreset</u>