



The 8x2 cv programmer is a classic fully analog cv programmer utility module. Yes, it has sequential functions but it's uses as a sequencer are rather limited to the point that certainly by today's standards I feel you can hardly even call it a sequencer. And viewing it as such in my opinion will most likely limit its usefulness.

Each of the 8 touch sensors corresponds to 2 out of the 8 cv slots. Additionally each touch sensor will activate an individual gate out on the row of patch points directly above the knobs. There is also a gate output to the left of the knobs which is turned on when any of the touch sensors is activated. This gate signal is useful if you want to use the cv rows to play an oscillator as a sort of keyboard and have a vca, lo pass gate, or filter being triggered whenever a key press is in the On position. Sensors to the right have priority over sensors to the left. The gate outputs above the 8 cv slots are however able to play concurrently with one another. These gate outputs are also not triggered by the Logic functions, they are triggered only by the touch sensors of the running the clock.

Clock can be input at the clock patch point and when the clock switch is in the up position, the voltages will be cycled sequentially at the speed of the clock.

The default voltage that is fed through the 8x2 matrix is 10v. But if you want to change that voltage source you can, via the COM input with COM switch in the up position. For example, if you feed a pulse oscillator into the clock input and into the COM input, you will find pulses of varying intensity output on the Row Output Patch points in sync with the sequential cycling. You can feed any positive voltage into the COM input. For example you could send a pulse oscillator that is not synced with the clock for interesting rhythmic timbres or you could even send white noise etc... in there.

Reset resets the sequence. So for example if you patch step 6's gate output to the reset patch point, the sequencer will only cycle through the first 5 voltages. Or sending a division of the clock symbol into the reset will add repeating variations to the sequential order of the cycle.

INH is a pause input and will pause the cycle whenever a positive pulse is received.

The Logic Inputs allow you to rearrange the sequence. Clock run switch does not need to be enabled and clock signal does not need to be present for the logic to run. The only thing necessary is that gate signals or pulse oscillators are present at - at least one of the logic inputs and the Logic switch must be in the up position. Typically I find nice results by feeding a pulse oscillator into the clock divider on either 23 or antirave, and then feeding various outputs of the clock divider to some combination of the 3 logic inputs, but you can experiment. The Logic inputs are by default held in a low position so using the Logic On patch point will invert whatever logic pins it is connected to - allowing for all possible logic combinations to be accessed even if there is not a pulse oscillator patched to a particular logic pin.

The slur knob will apply a smoothing effect similar to portamento to the top row CV.

Gate to trigger turns pulses or gates into short triggers useful for pinging any of the filters at varying intensities.

Some of the uses for this module are:

- sending gate outputs to various points to play antirave and/or 23 like a percussion synthesizer
- pitching oscillators or filters and playing keyboard style or creating short linear or evolving sequences
- clock divider with odd number of steps
- dynamically triggering filters with varying intensity triggers
- as a pseudo randomized or complex voltage source
- as a sort of primitive wavetable oscillator