nonlinearcircuits Primal Hyperchaos

build and BOM

Primal Hyperchaos is based on the description in <u>a paper by C Li, et al</u>. It can be built to run at different speeds simply by installing different capacitors. Very easy build, no special components needed. There are 5 different CV outputs and 1 gate output. The CV IN is associated with the CLIMAX pot which determines how high the peaks go. The module can be greatly influenced by the CV in signal and can exhibit some fairly nutty responses at times.

component	quantity	notes
1M pot	2	Tayda A-1882
100k pot	1	Tayda A-1848
3.5mm jack	7	Kobiconn style, get from Modular Addict or Thonk or Tayda A-865
3mm LED	4	note – 3mm
LL4148 diodes	6	Mouser 512-LL4148
TL074	3	SOIC Tayda A-1137
S1JL or similar	2	Mouser 821-S1JL, dot=cathode
Eurorack power connector	1	Tayda A-198
10uF	3	0805, 25V or higher voltage rating
CAP	4	0805 - see notes
470R	2	0805
1k	6	0805
2k2	1	0805
10k	6	0805
100k	12	0805
220k	1	0805
470k	1	0805
1M	1	0805
		0805

BOM

notes

CAPS - choose these to suit the speed you want Primal to run at, anything from 100nF to 10uF will work. All caps should be the same value and must be voltage rated for 25V or more. Check the demo vid on youtube to see 1uF and 10uF versions in action.

If using 10uF, you may want to increase the value of the 470k resistor to prevent the output signals hitting the rails, not a big deal if you don't, just turn the Climax pot low to reduce the peaks.

Probably all the LEDs should be the same, feel free to experiment tho.







