bong0

nonlinearcircuits

The bong0 is a twin-T based drum module with a LED acting as a nonlinear resistor to give it some interesting characteristics.

The trigger input acts as a normal input to get your drum sound. The input marked 'in' can also be used, or you can jam a CV in there, or a gate or audio. You can just use the 'in' input without anything into the trigger.

The way the trimpot is set greatly affects how the module will behave, at some settings it will oscillate easily and you can use bong0 as a crude VCO, the other way it is more strictly a drum module. Leave it around the mid-point if not sure.

100k pot	2	Tayda: A-1848
kobiconn style jack	3	Tayda: A-865
100k trimpot	1	Tayda: A-2506
TL072	1	thru-hole
8 pin DIP socket	1	optional
LED	1	high V_{on} best (blue)
1N4148 diode	2	
10 pin eurorack power connector	1	Tayda: A-198
10R	2	0805
1k	1	0805
10k	1	0805
100k(c)	7	0805
470k	1	0805
10nF (103)	1	0805
100nF(104)	6	0805

Building:

Install the 0805 components 1st. Easiest way is to put a blob of solder on one pad of each pair. Pick up the component with tweezers, put it in position across the pads and then reheat the solder so the component drops onto the pad. Let it cool down the put some solder on the other pad.

Once the 0805 parts are installed and then start on the thru-hole components. Make sure the chip, LED and diodes are installed in the correct direction.

Wamod: In the parts kit, the six 100nF (104) capacitors are unmarked, the 470k resistor is marked '47' and the 1k resistor is marked '1'

bong-0 *
V3
* not a smoking implement
env

freq

100k
104
100k
100k
470k
100k
100k
072
1k
100k
100k
100k
103
104
100k
104
10k
104
10R
10R
000

red

out
trig
cv

in
100k
10k
GND
100n
10n
D
GND
D
100k
GND

freq
100k
GND
V+
100k
100n
100k
trim
100k
envelope
100k
100k
GND
100n
100k
100k
D
GND
100n

cv or something
100k
100k
GND

470k
1k
out