

nonlinearcircuits

ISOLATE build & BOM

Back in the late 90s, I played a few gigs in Japan using a couple of SP-808s, Korg Er-1 and Pinky. Generally I'd just get something going and tweak the Isolators on the SP-808s, usual DJ type shenanigans.

Anyway, played a gig earlier this year, I only use a modular these days but wished I had an Isolator, so here are two.

They are simple EQ filters, all manually controlled.

The core circuit is based on a section of the PGM Isolator, don't know where that came from, probably a 70s electronic hobby magazine.

The input stage boosts the signal by approx. 1.5x, feel free to adjust this (15k on the input op amp).

Feed them some drums and tweak.



BOM – The Tayda & Mouser part numbers are given as examples

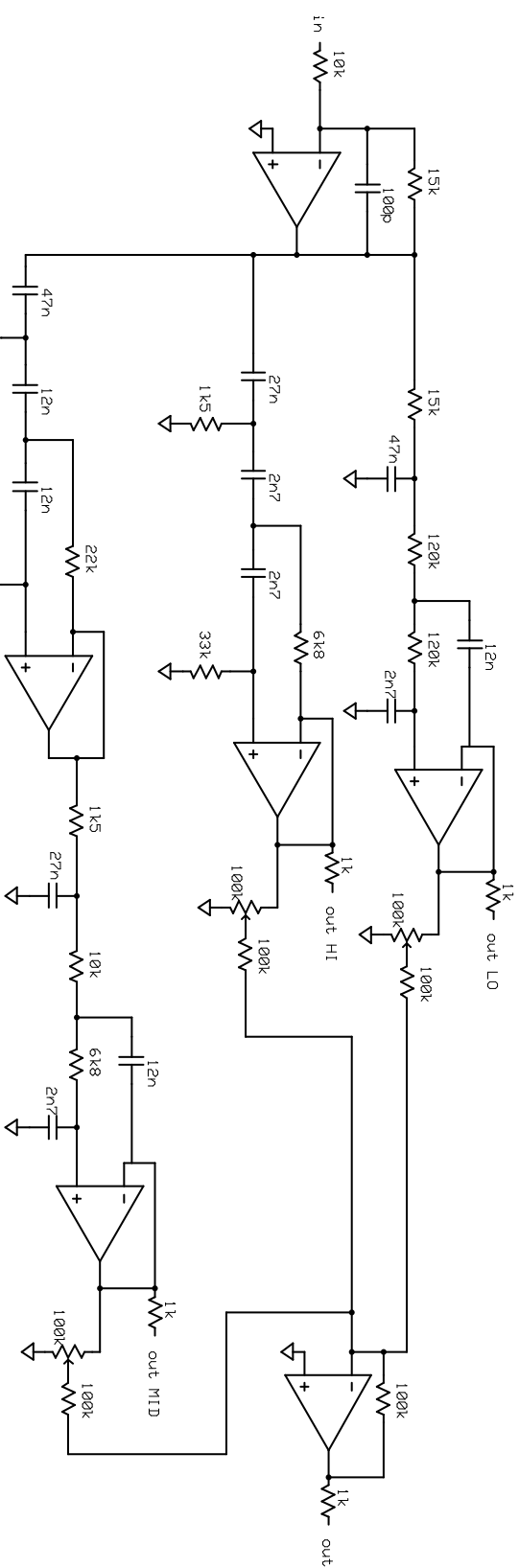
VALUE	QUANTITY	DETAILS
100pF	2	0805
2n7	8	0805
12n	8	0805
27n	4	0805
47n	4	0805
10uF	2	0805 25V or higher voltage rating Mouser: 963-TMK212BBJ106MG-T or similar
1k	8	0805
1k5	4	0805
6k8	4	0805
10k	4	0805
15k	6	0805
22k	2	0805
33k	2	0805
100k	10	0805
120k	4	0805
TL072 or TL082	6	Soic Tayda: A-1139
Eurorack 10 pin power connector	1	Tayda: A-198 cut to size
S1JL, Schottky, power rectifier or 10R	2	SMD SEE NOTES #1. dot on PCB indicates CATHODE (stripe on component).
3.5MM SOCKET Kobiconn style	10	Tayda: A-2563 or Thonkiconn Jacks (PJ301M-12) from Thonk, Synthcube or Modular Addict
100k pot	6	A-5623 or A-4729 or similar

Additional notes:

1. , Schottky (best option) or standard power rectifier diode 50-600V 1A or more, or use a resettable fuse or just a 10R. Examples: BAT54GWX, PMEG2005EGWX, AEC-Q101, 20V, SOD-123, PMEG2005EH DIODE, SCHOTTKY, 0.5A, 20V, 1N400x or S1JL or similar.

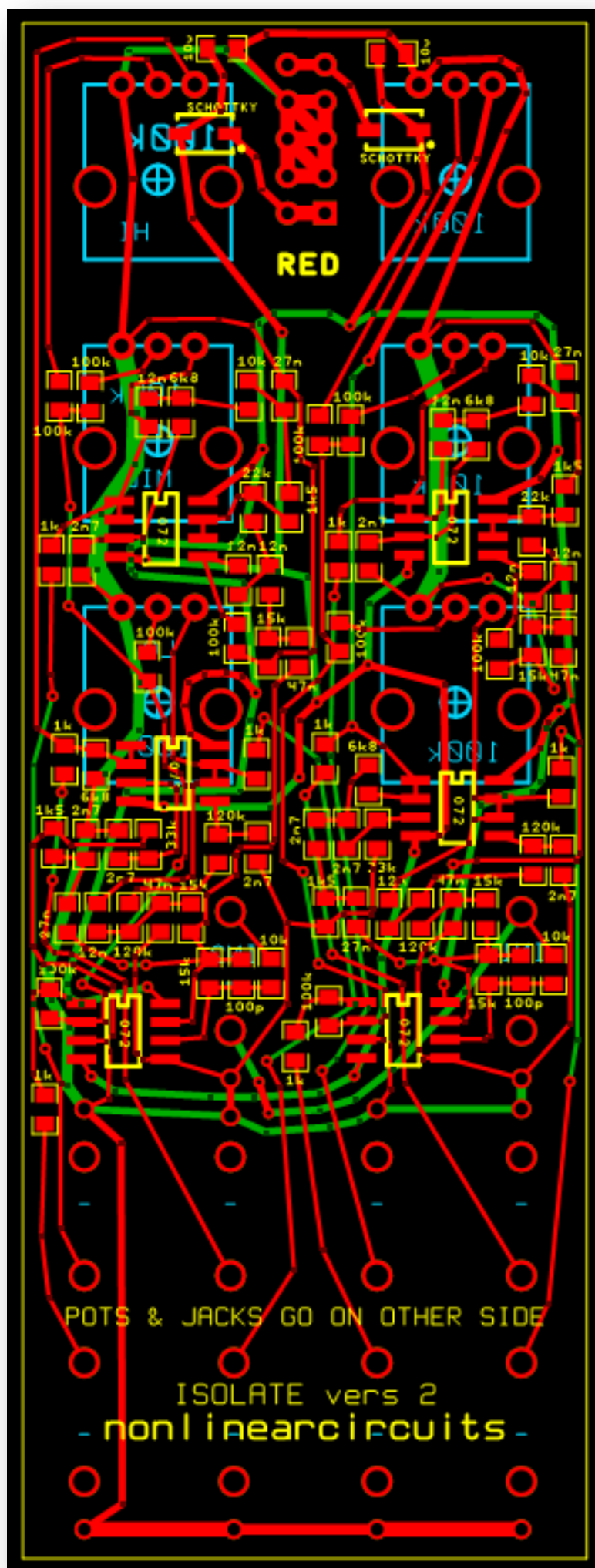
2. The chips, resistors, caps are cheapest from Tayda. Schottky diodes, CMOS & 1uF, 10uF 25V 0805 caps from Mouser/E14/Farnell/etc.

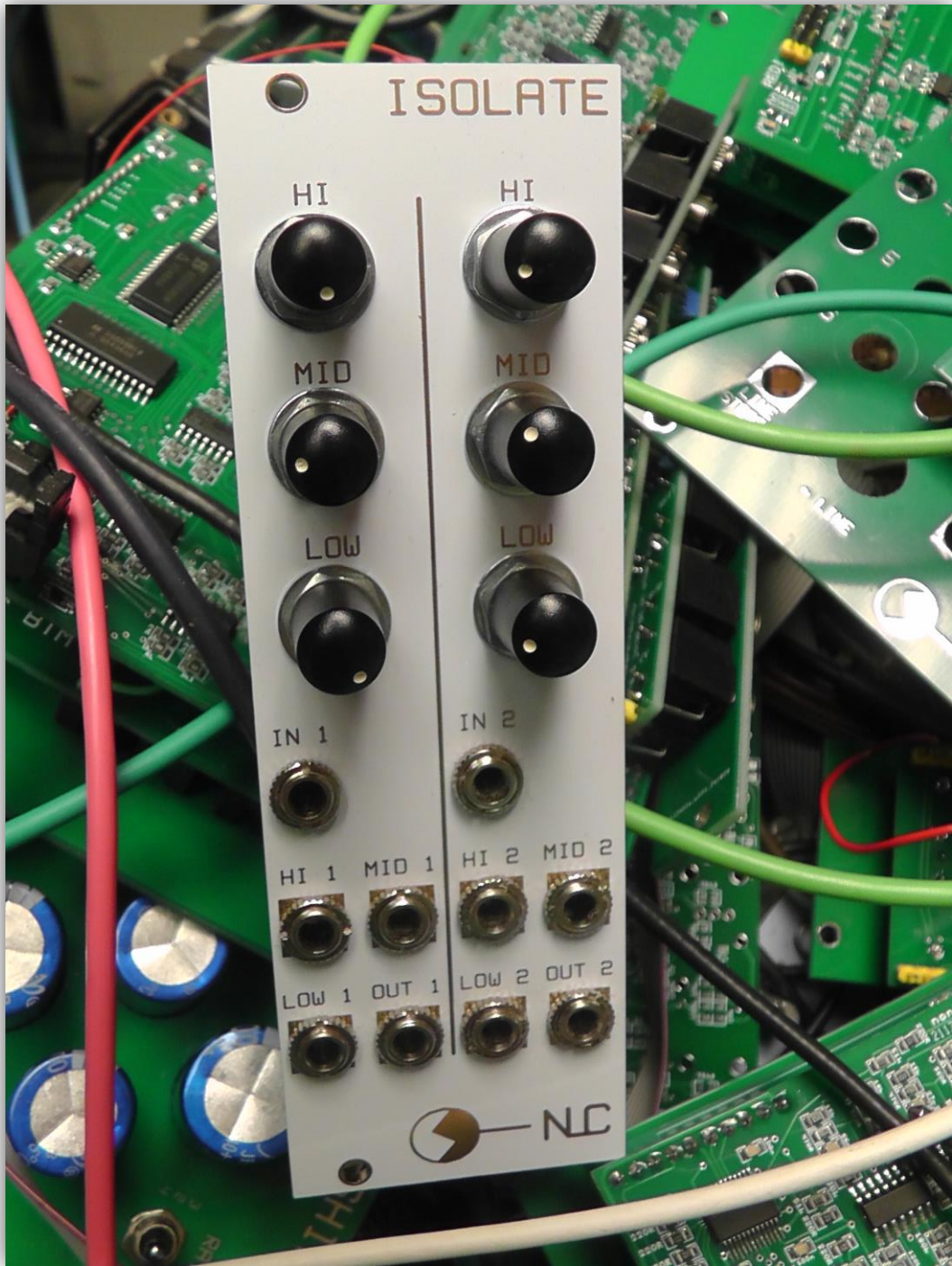
3. Join the Nonlinearcircuits Builders Guild on FB: <https://www.facebook.com/groups/174583056349286/> and ask questions there if you have any. If you prefer not to FB then email is fine.

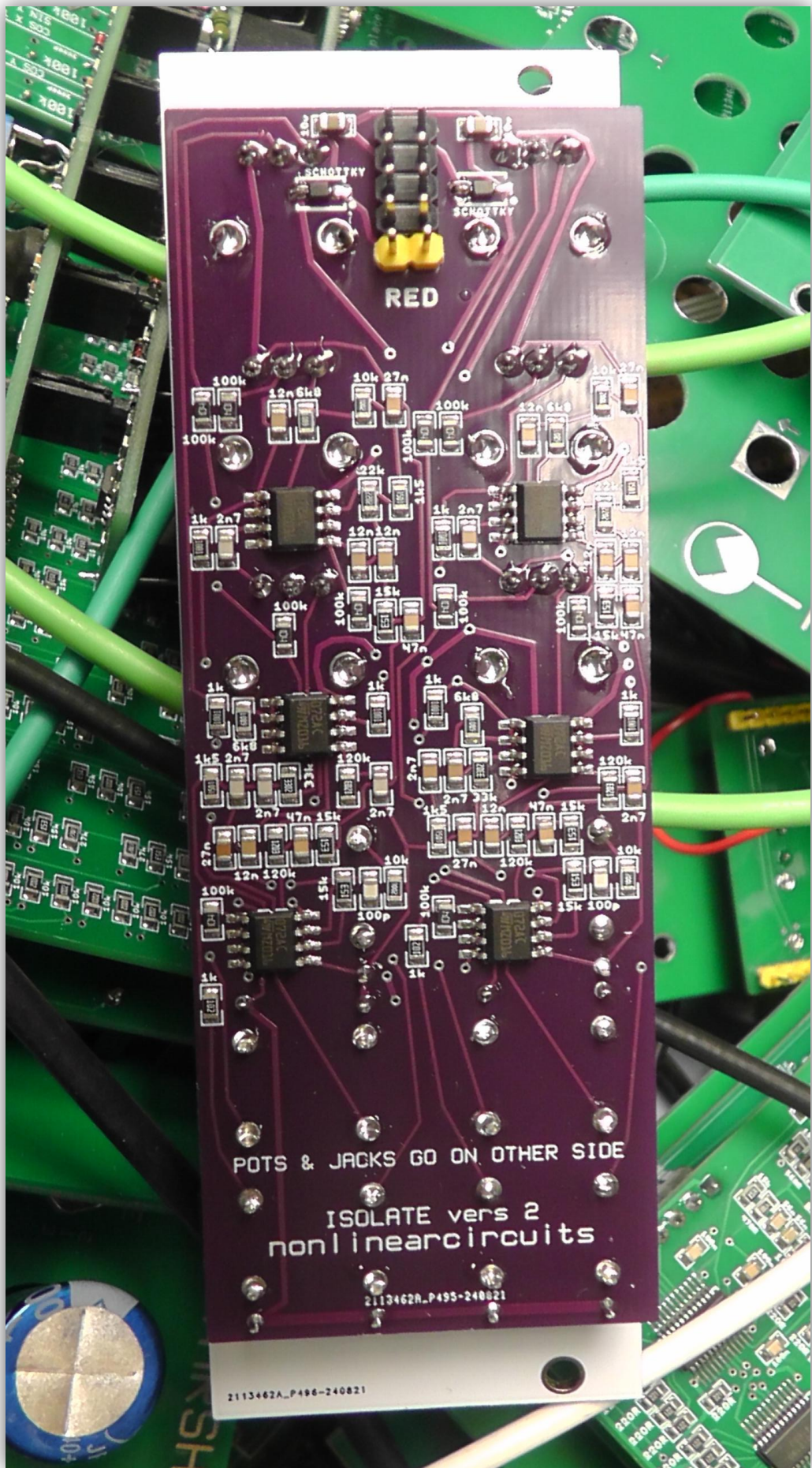


SAME CIRCUIT TWICE ON PCB

nonlinear circuits		
ISOLATE		
Rev 1.0		Page # or name
11/14/2024		
andrewf		







RED

POTS & JACKS GO ON OTHER SIDE

ISOLATE vers 2
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