

nonlinearcircuits

4HP MIX build & BOM

The simplest module in the NLC range - a 4 input mixer. It has just 14 SMD components to solder onto the PCB, so a very gentle intro to surface mount soldering.

The pots are 0 at centre, -1x gain to the left (inverts) and 1x gain to the right. It can be called an attenuverting mixer, if you really want to.

Pot 4 will act as a voltage offset if nothing is patched into input 4. It can supply -5V to +5V of offset. If you do not want any offset, leave pot 4 at midpoint, or patch your signal into input 4.

The module will work with audio and CV signals. It is useful for creating sequences from logic modules such as the Divide & Conquer, BOOLS or 1/n.



BOM – The Tayda part numbers are given as examples, feel free to buy from your favorite retailer if you prefer.

VALUE	QUANTITY	DETAILS
10 μ F	2	0805, 25V rating or higher
1K	1	0805
100k	8	0805
TL072 or TL082	1	Soic Tayda: A-1139
Eurorack 10 pin power connector	1	Tayda: A-198 cut to size
Schottky, power rectifier or 10R	2	SMD pads suit sod-123-2 or similar. Schottky diode. Dot on PCB indicates CATHODE (stripe on component) Or use a resettable fuse or just a 10R 0805. SEE NOTES #1
3.5MM SOCKET Kobiconn style	5	Tayda: A-865 or preferably get Thonkiconn Jacks (PJ301M-12) from Thonk, Synthcube or Modular Addict
100k (B) pot	4	Tayda: A-1848 tho better to find ones with knurled shafts that can fit small knobs. The pots are very close together.

Additional notes:

1. Some schottky diodes at Mouser: PMEG2005EGWX SCHOTTKY RECT, AEC-Q101, 20V, SOD-123-2, PMEG2005EH DIODE, SCHOTTKY, 0.5A, 20V
2. The resistors, caps, diodes and transistors are cheapest from Tayda.
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.

