



Dual RECTIFIER (v1.1F) DIY BUILD GUIDE

This build guide assumes the user has basic knowledge of through hole components, soldering skills and various tools required to Do-It-Yourself. Assemble at your own risk and have fun.

STEP BY STEP

1. Populate all resistors and ferrite beads. Solder and clip leads.
2. Populate all diodes, taking care to align the black band on the diode with the stripe shown on the PCB. Solder and clip leads.
3. Populate all of the ceramic capacitors. Solder and clip leads.
4. Populate all of the ICs, taking care that the notch at the top of the IC lines up with the notch shown on the PCB. Solder leads.
5. Populate the IDC power connector, taking care to line up the notch on the part with the notch shown on the PCB. Hold the connector in place while soldering
6. Populate the electrolytic capacitors, taking care to line up the black stripe on the caps with the outlined via on the PCB. Solder and clip leads.
7. Place each the of the jacks into the board and install the faceplate. Finger tighten each nut in place to ensure the jacks are straight. Solder them once you are satisfied.
8. Carefully check the solder of each component for bridges and any solder joints that may have been missed. Clean excess flux with alcohol. You may now test it your work.

BILL OF MATERIALS

Resistors:

<input type="checkbox"/> R1	4.99K
<input type="checkbox"/> R2	1.5K
<input type="checkbox"/> R3 - R5, R10, R12 - R18, R20 - R25, R34, R36 - R42, R44 - R49	1K
<input type="checkbox"/> R6, R8, R30, R32	100K
<input type="checkbox"/> R7, R9, R11, R19, R26 - R29, R31, R33, R35, R43, R50 - R52	499R

Integrated Circuits:

<input type="checkbox"/> IC1	TL431
<input type="checkbox"/> IC2	TL072
<input type="checkbox"/> IC3 - IC6, IC8, IC87	LM6172

Ferrite Beads:

<input type="checkbox"/> FB1, FB2	68R
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Diodes:

<input type="checkbox"/> D1, D2	1N4001
<input type="checkbox"/> D3 - D10	1n5711

Ceramic Capacitors:

<input type="checkbox"/> C3 - C17	100n
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Electrolytic Capacitors:

<input type="checkbox"/> C1, C2	10u 25v
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Other Parts

<input type="checkbox"/> 8x	PJ302M Jacks
<input type="checkbox"/> 8x	3.5mm nuts
<input type="checkbox"/> 1x	2x5 Polarized IDC Power Header
<input type="checkbox"/> 1x	10-16 Ribbon Cable
<input type="checkbox"/> 1x	Rectifier PCB
<input type="checkbox"/> 1x	Rectifier Faceplate

