DualRegulated 15VA supply – mounting instructions

Thanks for buying this power supply pcb or kit! Now the fun of mounting starts. Make sure you read the complete instructions before you start mounting. Assembling can be done by an experienced hobbyist in about one hour.

List of components

Please check if all is complete. The kit should have the following components, if you bought the pcb, these components are suggested (or choose your own):

Value	Device	Parts
100uF	C-Elec-2.5-7	C5, C6
1000uF	C-Elec-3.5-10	C2, C3
100nF	C-multi	C10, C11, C12, C13
10nF	C-multi	C1, C4, C7, C8
3-pin	Con-pcb-5.08	OUT
2-pin	Con-pcb-7.62	X2
1N5158	Diode	D1, D2, D3, D4
200mA	Fuse+holder	F1
15/25VA	Transformer	TR1 (not included)
79xx	Vreg-neg	IC2 (default 15V)
78xx	Vreg-pos	IC1 (default 15V)
	Wire bridge	J1, J2, J3 (use wire from diodes)

Tools

Required:

- ✔ Soldering iron and solder
- ✔ Multi-meter (voltage and resistance)
- ✔ Side-cutting pliers

Recommended:

- ✔ Adjustable dual power supply

Mounting

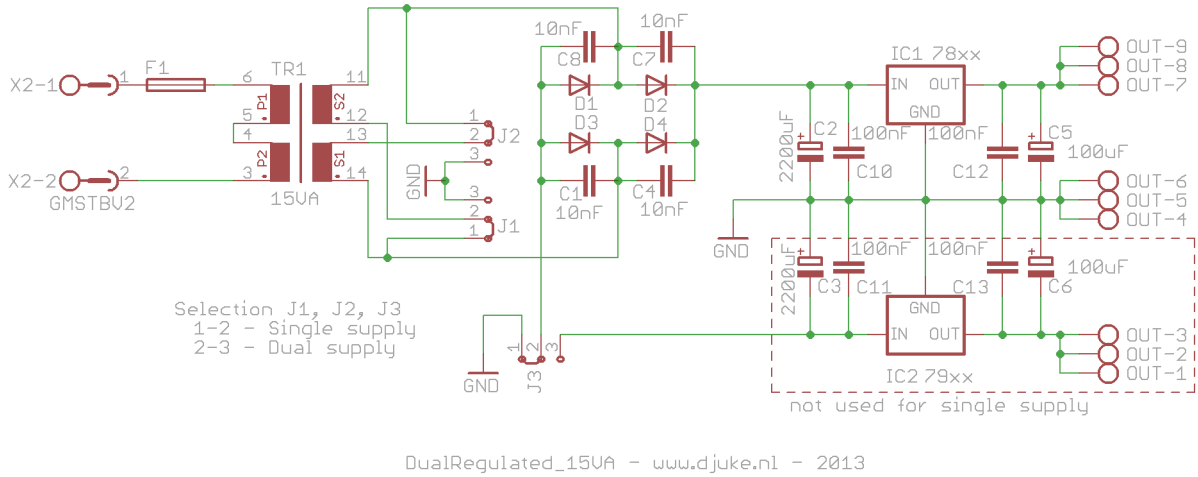
The easiest way of mounting is by starting with the components with the lowest height and build up the PCB in steps, where components of the same height are fitted and soldered in each step. So, solder in this order: resistors, diodes, multilayer capacitors, connectors, regulators, fuse, electrolytic capacitors, transformer.

Always double check all components before you solder them (especially the ones that are polarity dependent, diodes, electrolytic capacitors, etc), as it is difficult to remove them after soldering, much more time consuming and may break components or PCB.

Hints

- Using wire bridges J1, J2 and J3 single or dual voltage output may be selected
- Different output voltages can be selected using different voltage regulators
- Use a transfomer that fits the output voltage, suggested values are: at least 7VAC for 5VDC output, at least 9VAC for 9VDC output, at least 12VAC for 12VDC output, at least 14VAC for 15VDC output
- Depending on the input voltage and current consumption, IC1 and IC2 might need to be connected to a heatsink!

Schematic



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