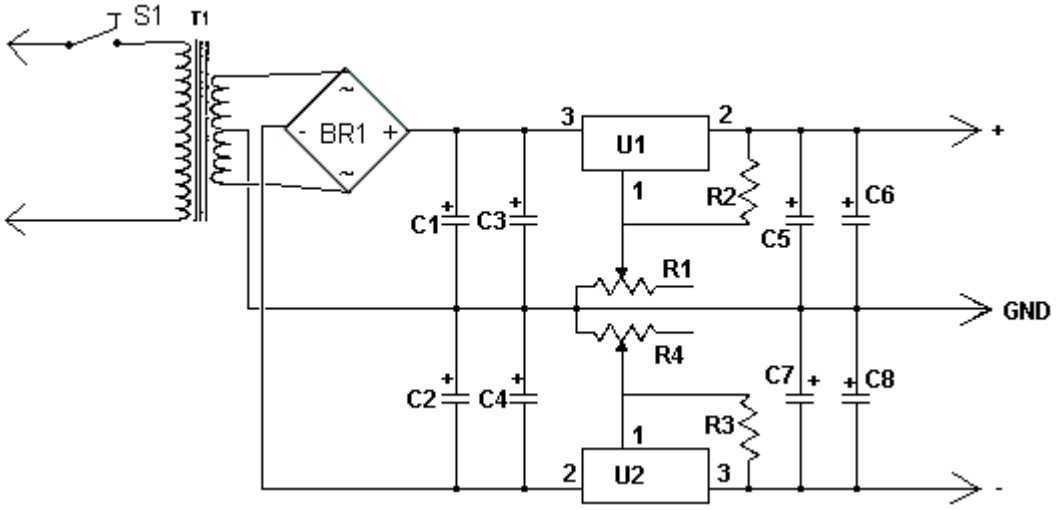
Dual Polarity Power Supply



This dual polarity power supply is easy to build, requires few parts, and is adjustable from 0-15 volts. It is great for powering op amp circuits, as well as other circuits that require a dual supply voltage.

Part	Description	Quantity
C1, C2	2200uF 35V Electrolytic Capacitor	2
C3, C4, C5, C7	1uF 35V Electrolytic Capacitor	4
C6, C8	100uF 35V Electrolytic Capacitor	2
R1, R4	5K Pot	2
R2, R3	240 Ohm 1/4 W Resistor	2
BR1	2A 30V Bridge Rectifier	1
U1	LM317 Adjustable Positive Regulator	1
U2	LM337 Adjustable Negative Regulator	1
T1	30V Center Tapped 2 Amp Transformer	1
S1	SPST 2 Amp Switch	1
MISC	Heatsinks For U1 And U2, Line Cord, Case, Knobs For Pots, Wire	1

Notes:
1. Since this project operates from 120 (or 220, or 240, etc.) volts AC, it **MUST** be built inside a case.
2. U1 and U2 get quite hot and will require heatsinks. A fan is usually not needed.
3. You can, of course, add a volt and amp meter.
4. U1 and U2 can only go down to a minimum of +-1.2V. If you need to go lower, you can add two 1N4003 diodes in series with the output of the regulator. The diodes drop about 0.6V each, which will allow the supply to go to 0. Note that this will also decrease your maximum output voltage by 1.2V. (Thanks to Steve Horvath for the suggestion