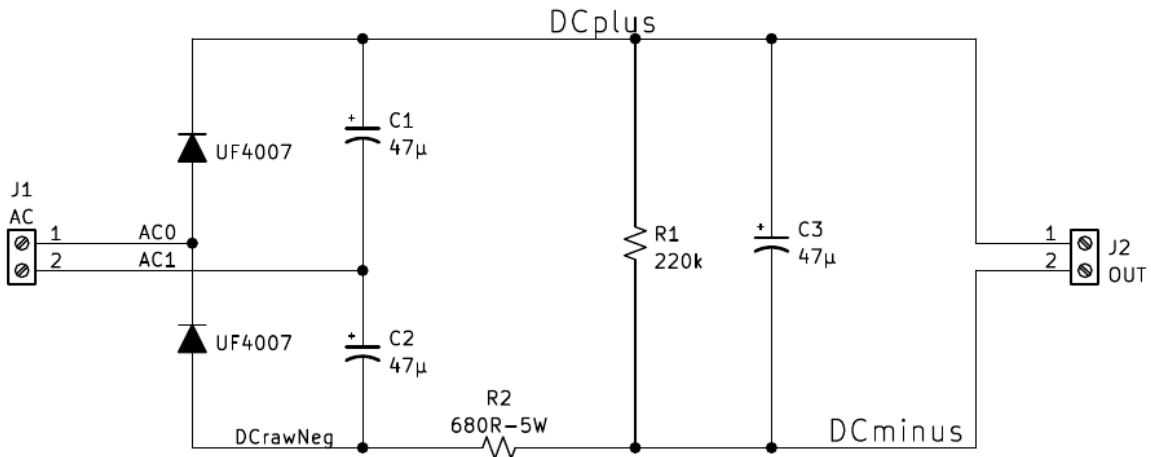


# Coleman Bias Regulator: Doubler PCB for Raw DC

A voltage-doubler circuit to make a neat job of providing the Raw or Unregulated DC supply for the Bias Regulator offered.

## Schematic:



Uses a typical voltage Doubler circuit. Parts List included in the Kit.

### 1. Capacitors and resistors:

C1 and C2 are standard capacitors. R2 adds some filtering action and (IMPORTANT) current limiting. Please don't use a lower value, to keep the protection of the regulator in place.

R1 drains the supply when switched OFF.

### 2. Transformer.

The output current of the bias Regulator is only around 5-10mA, so the raw DC voltage can be higher than the bias voltage at the grid. Transformer Secondary Voltage, Vrms

#### 2.1 Recommended transformer voltages:

Transformer Secondary Voltage, Vrms	Raw DC voltage (Input to Regulator)
55V rms	160V dc
48V rms	140V dc
40V rms	100Vdc
30V rms	72V dc

### 3. Assembly and Connexions:

