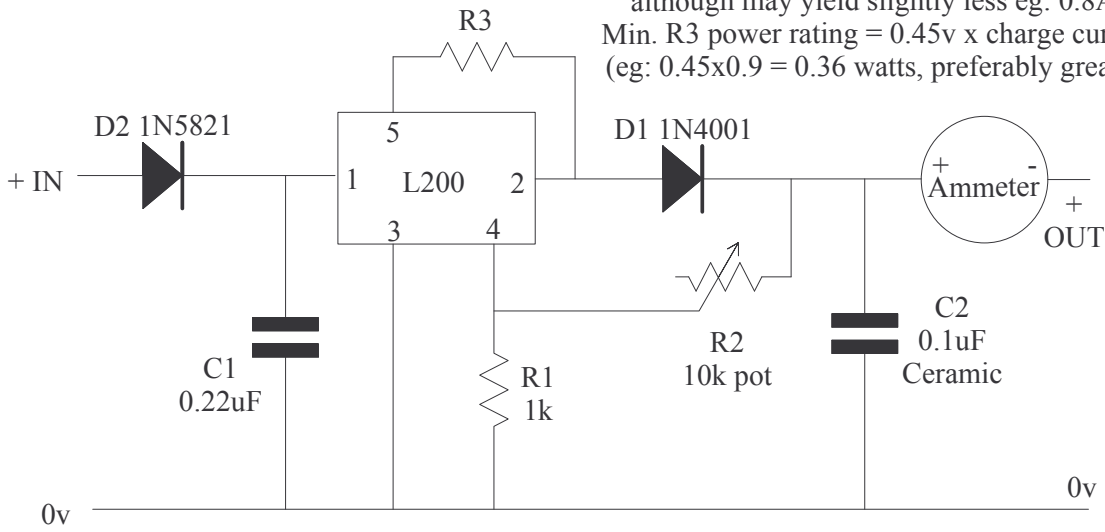


**Lithium Charger**  
 (1 to 8 cells, 2A max)  
[www.flyelectric.ukgateway.net](http://www.flyelectric.ukgateway.net)

R3 value =  $0.45\text{v}/\text{desired current}$   
 (eg:  $0.45/0.9\text{A} = 0.5\text{ohm}$  for 0.9A  
 although may yield slightly less eg: 0.8A)  
 Min. R3 power rating =  $0.45\text{v} \times \text{charge current}$   
 (eg:  $0.45 \times 0.9 = 0.36$  watts, preferably greater)



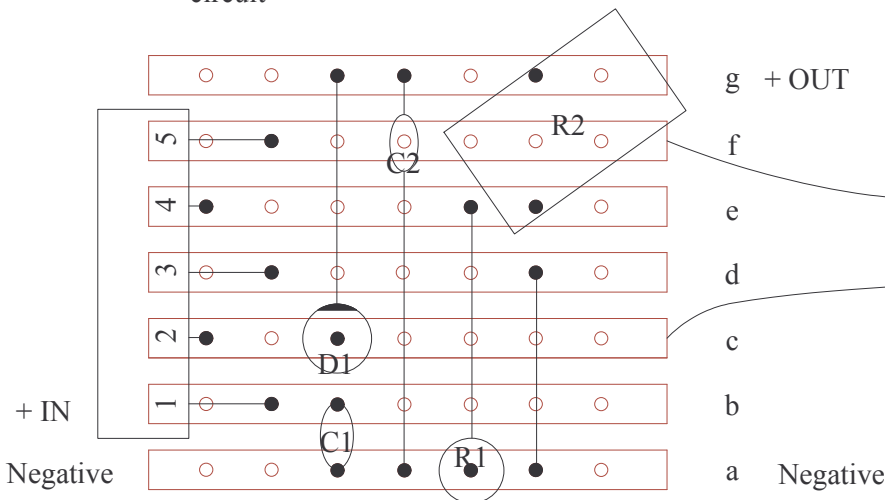
+IN has to be greater than +OUT, preferably about 3v more (eg: 15.6v for 3 cells). +IN must not exceed 40v.

Parts list (Maplin UK part numbers):

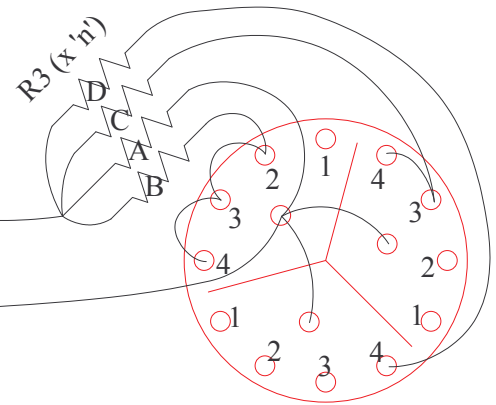
- C1 0.22uF (RA50)
- C2 0.1uF
- R1 1k (M1K)
- R2 10k vert.preset (UH16)
- R3 1ohm x 4 (M1R)
- D1 1N4001 (QL73)
- D2 1N5821 (JA49) optional
- L200 regulator (YY74)
- Rotary switch (FF75)
- Knob (RX99)
- Ammeter
- Veroboard

Adjust R2 so that +OUT is 4.2v per cell (assuming Lithium Polymer/Ion cells)  
 ie: 4.2v for 1 cell,  
 8.4v for 2 cells,  
 12.6v for 3 cell, etc.

D2 is optional for reverse polarity protection (any Schottky diode will do with current and voltage ratings higher than you are using). Don't use D2 if feeding circuit from a 'voltage booster' circuit



Top view  
 (D2 not shown)



Bottom view  
 of 4W3P rotary switch  
 If R3=1ohm:

- Position 1 (resistor 'A') = 1ohm = ~0.4A
- Position 2 (A+B) = 0.5ohm = ~0.8A
- Position 3 (A+B+C) = 0.33ohm = ~1.2A
- Position 4 (A+B+C+D) = 0.25ohm = ~1.6A