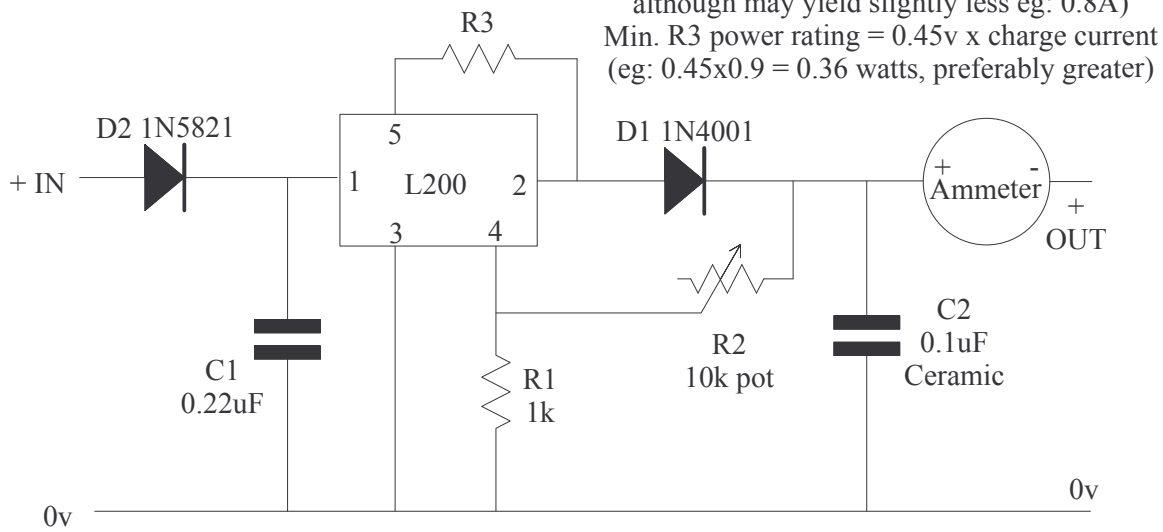


Lithium Charger
(1 to 8 cells, 2A max)
www.flyelectric.ukgateway.net



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

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

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

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.

