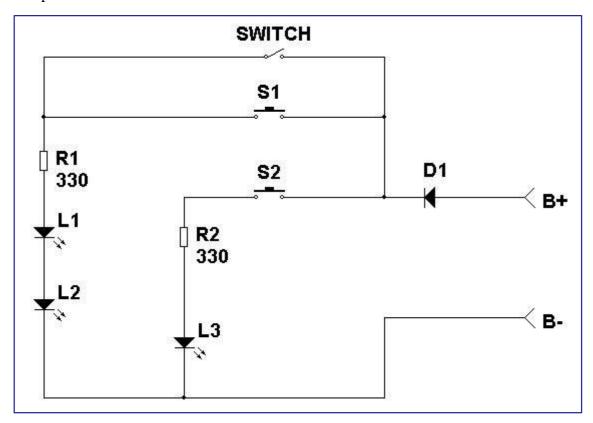
Making an Electronic Torch – Schematic, PCB Version and Breadboard Version

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Electronic Torch is an unique electronic circuit to learn about how electric flow through each components. Below is the electronic circuit:



Part Lists Based on Above Schematic

- − 2 resistor 330 ohm or 320 ohm. (breadboard version can uses up to 3 resistors)
- -3 led
- -3 switch
- 1 Dioda in4001

How this works on PCB Version?

Below is the electronic circuit logic flow:

– If switch is on, the current will flow through:

D1 (since it's a dioda it will prevent reverse current) -> switch -> R1 -> led1 -> led2 -> ground

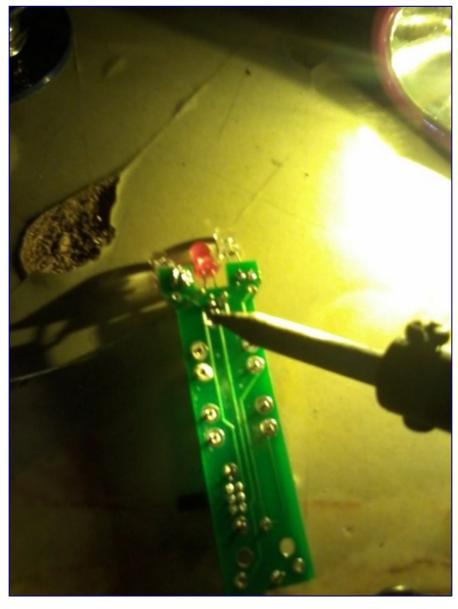
– If s1 is on, the current will flow through:

D1 -> S1 -> R1 -> led1 -> led2 -> ground.

− if s2 is on, the current will flow through:

D1 -> S2 -> R2 -> led 3 -> ground

Solder each component based on above schematic

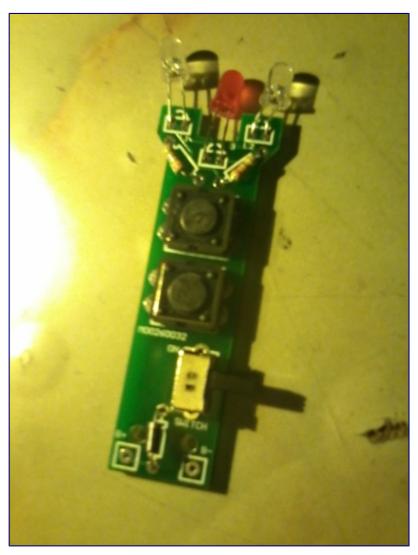


Note:

- Clean your solder with sponge before soldering

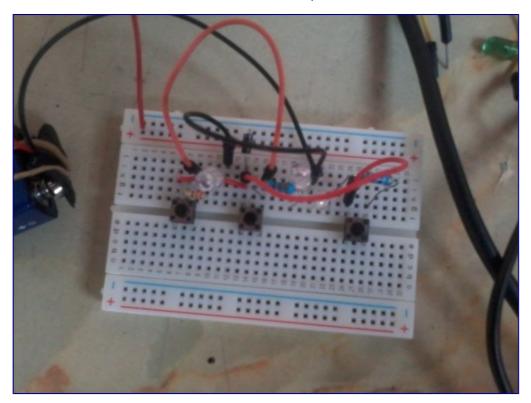
- Before soldering drop some soldering tin on top of your solder
- Don't use to much soldering tin

And here comes the pcb version of the torch :



Breadboard Version

We can also making breadboard version, vero board version, and so on. Here's the breadboard version of this electronic torch with 3 resistor (1 resistor 330 ohm and 2 resistor 320 ohm).



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