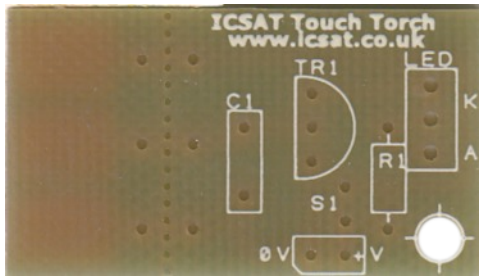


Touch Torch

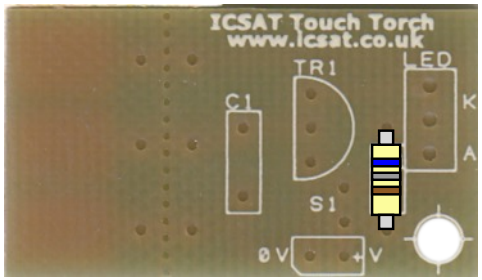
Introduction

The Touch Torch Kit can be used to make a 6V - 9V torch project, with the unique feature of a touch switch - that is a switch with NO moving parts. It has a small component count, which ensures success every time. The kit uses a 10mm Ultra bright white LED of the type that is used in modern cars as daylight running lights. The PCB is designed to be use as is or it can have the touch contact detached and used remotely if desired. A great starter project for Y6 and Y7 Design & Technology.

- 6V - 9V powered
- Ultra bright 10mm white LED
- Has provision for an on/off switch if required
- Has a simple touch switch for on/off
- 20mm x 37mm

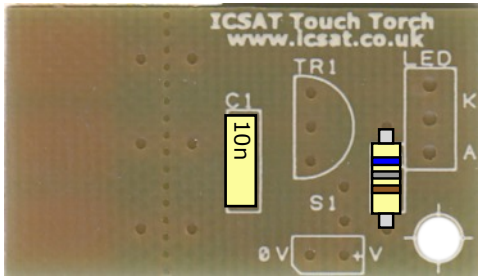
Assembling your Touch Torch

Solder the 68R resistor into the R1 position.



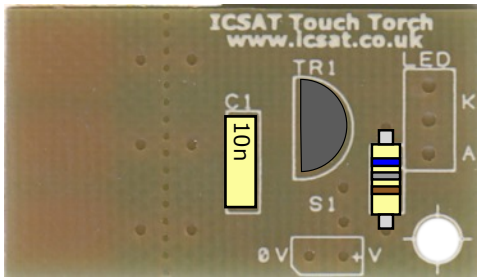
1

Now solder in place the 10nF capacitor in the position marked C1



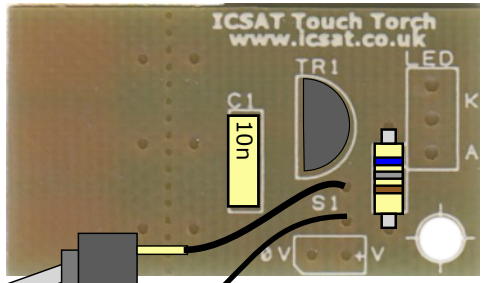
2

Now solder in place the BS170 FET Transistor, ensure it's orientation matches the component footprint on the PCB.



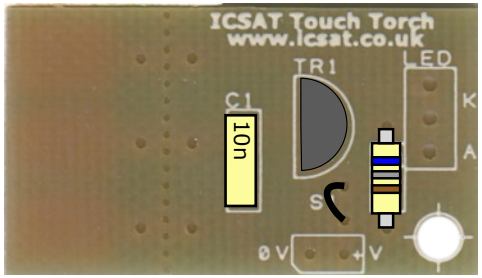
3

Add a switch to the position marked **SW1,** if **not** use a small wire link to make the connection **permanently on**.



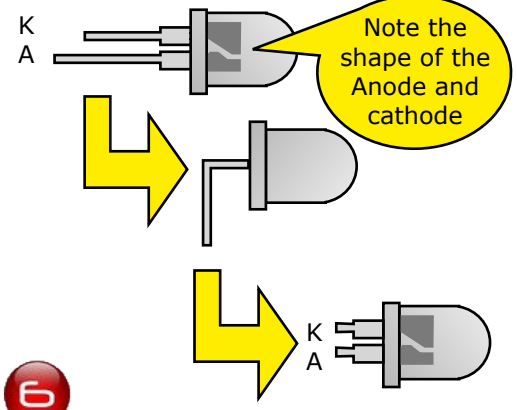
4

View with **NO** switch version, using a wire link



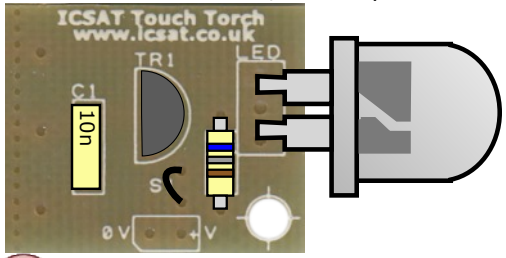
5

You now need to prepare the LED before fitting. It needs to be bent as shown:



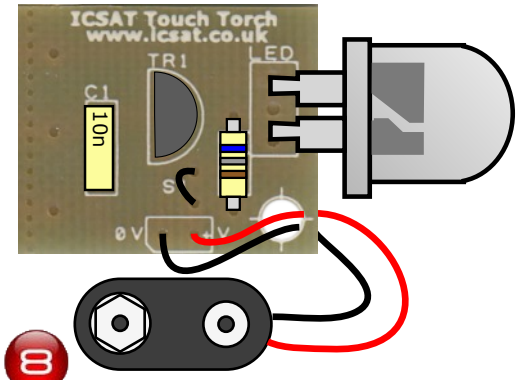
6

Now solder in place the prepared LED, ensure it is the correct way around. This can be verified by looking at the internal construction of the LED, see step 6.



7

Lastly, solder in place your PP3 battery clip, using the hole as a cable restraint.



8

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SKU EK0015

Touch Torch Manual

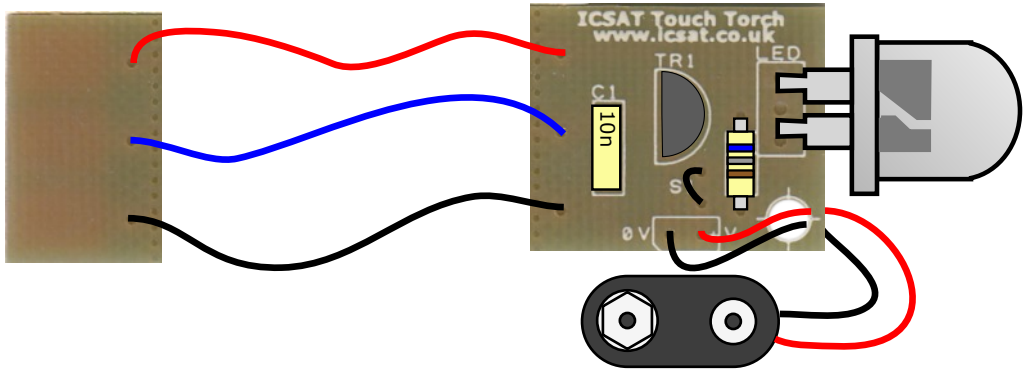
Ver. 1.00

Remember to check all connections before powering up the Touch Torch. To turn on the torch, touch the top and middle contact with your finger. It now should light up. To turn the torch off, touch the middle and bottom contacts - it should now go off.

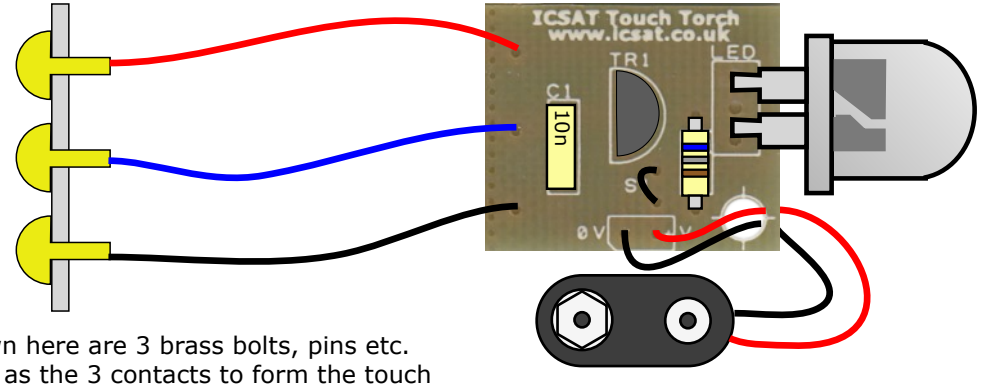
Making the contacts remote

The three contacts can be made remote. By either cutting the PCB in half, using the perforations as a guide or by making new contacts with any conductive material that you can connect back to the pcb using the 3 holes provided as shown below:

Separated pcb method:



Separate contacts method:



Shown here are 3 brass bolts, pins etc. Used as the 3 contacts to form the touch switch

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