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DARK SEEKER LOGO



Instruction Manual for Soldering Kit

Step 1: Place Resistors R1-R4 and Transistors Q1-2

Resistor Values:

$$R1 = 470\Omega$$



$$R2 = 4.7K\Omega$$



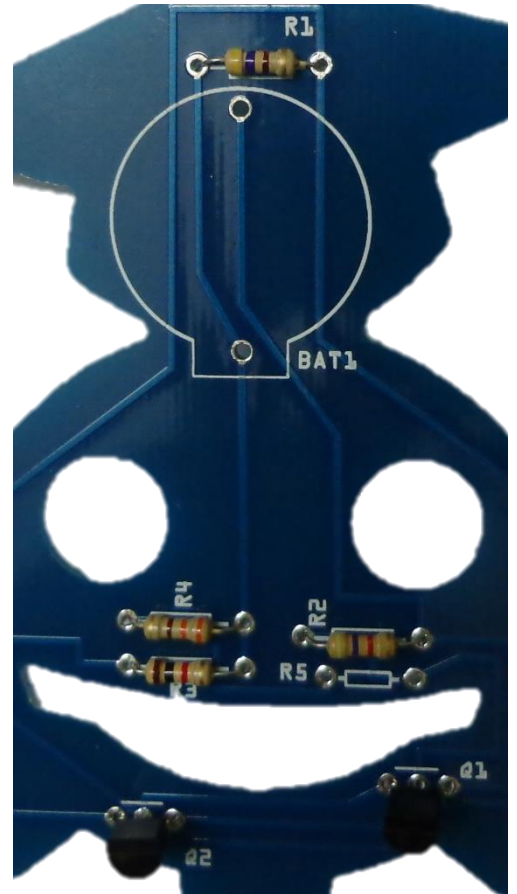
$$R3 = 1K\Omega$$



$$R4 = 330\Omega$$

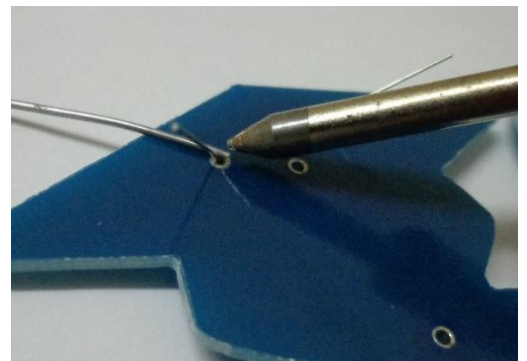


Place the resistors as shown in the image on the right. Also place the transistors Q1 and Q2 as shown in the image. Please note that the flat part of the IC should align with the flat line and the curved part should align with the curved line on the board.



Step 2: Solder the Components

Turn the PCB around and solder the ends of the placed components. Touch the tip of the iron on the silver hole and touch the solder wire on the hot tip to make a permanent connection as shown in the image. You may clip off the extra ends of the components using a wire or nail cutter.

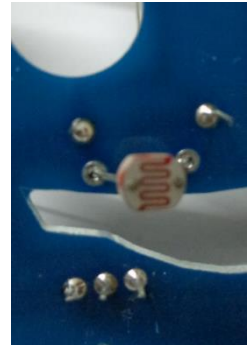
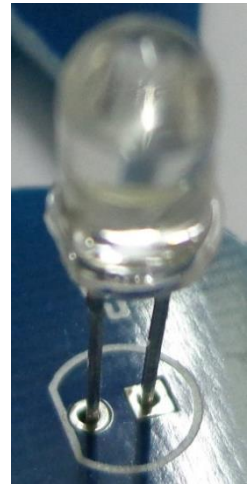


Step 3: Add the LEDs and Light Sensor

The two LEDs may now be placed in slots labelled LED1 and LED2. The longer leg of the LED should be inserted into the square pad and the shorter leg should be inserted into the circular pad. This should result in the cut on one side of the LED aligning with the cut on the outline as shown in the image:

The light sensor can also now be added on the front face of the board in place of R5 as shown in the image.

You may now turn the board around and solder both of these components to make the connection permanent.



Step 4: Add the Coin Cell Holder

You may now add the coin cell holder along with the two-coin cells as shown in the image. The outline of the board should line up with the outline of the coin cell holder. The positive (+) sign of both the batteries should be facing upwards.

You may now turn around the board and solder the coin cell holder.



Step 5: Test out your Dark Seeker Logo!

Your Dark Seeker Logo is now complete. Now turn off the lights and see the LEDs light up!

