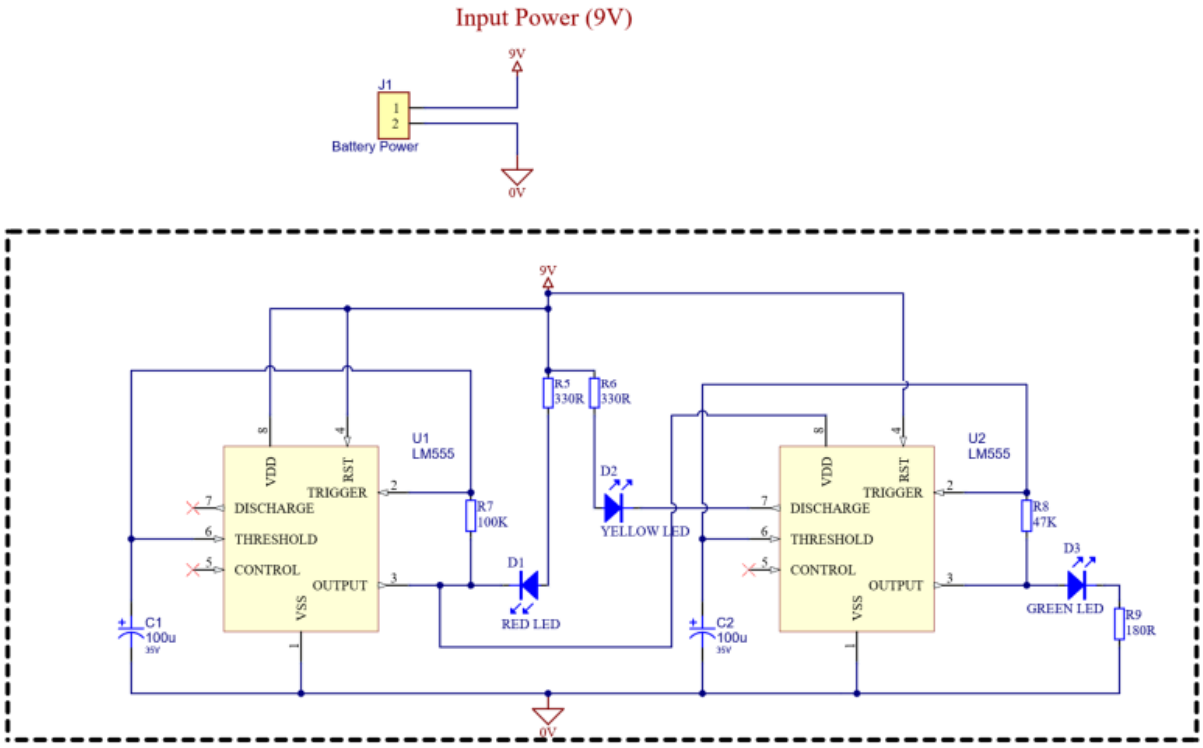
Traffic Light Kit

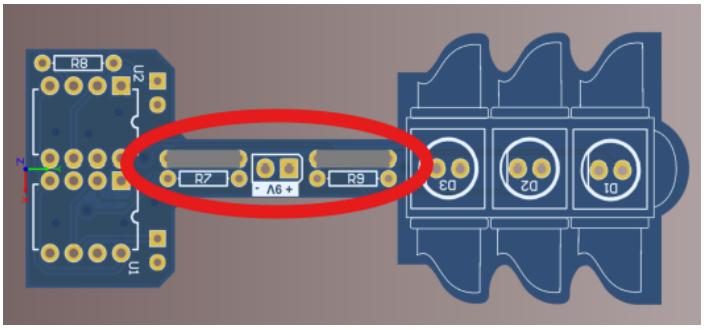
This kit contains the electronics to create a traffic light, the same as you would see in the real world.

Circuit Diagram :

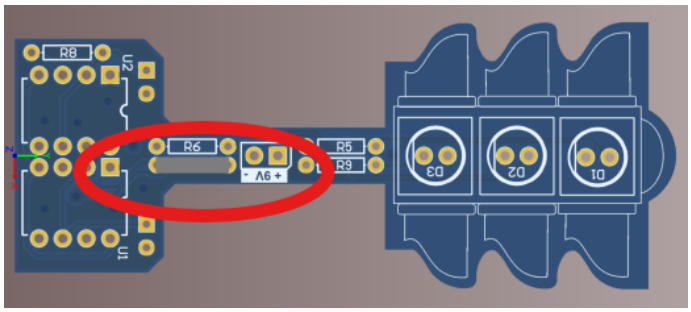


Build Instructions :

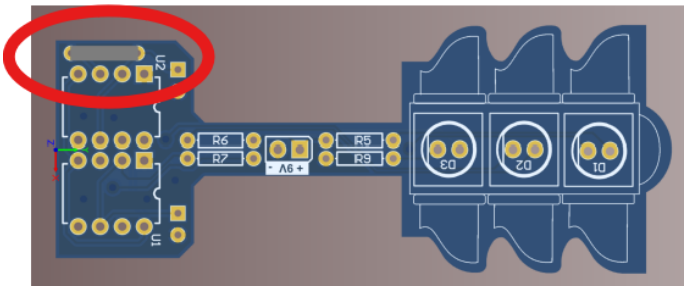
1. Solder the 330R resistors Orange, (Orange and Brown band) into locations
   R5 R6



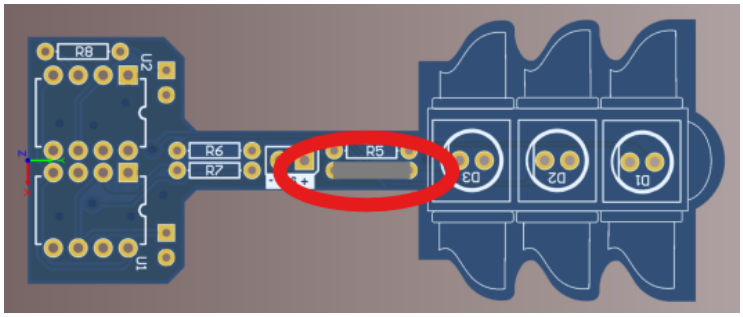
2. Solder the 100K resistor (Brown, Black and Yellow bands) into location
   R7



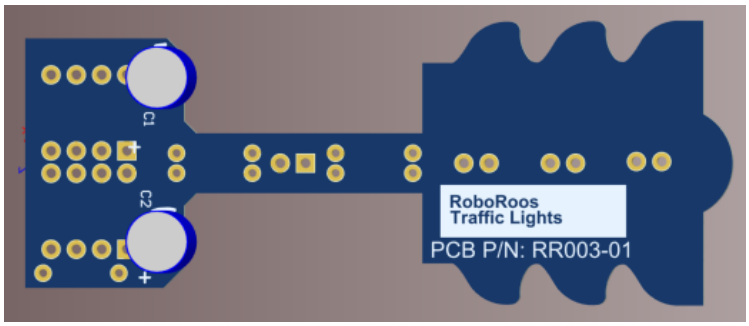
3. Solder the 47K resistor (Yellow Violet, and Orange bands) into location
   R8



4. Solder the 180R resistor (Brown, Grey and Black bands) into location R9

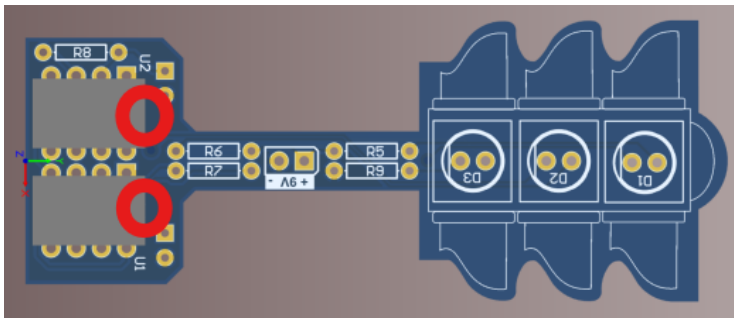


5. Solder the Red LED into location D1 (note the orientation flat at the bottom of the part)
6. Solder the Yellow LED into locations D2 (note the orientation flat at the bottom of the part)
7. Solder the Green LED into locations D3 (note the orientation flat at the bottom of the part)
8. Solder the capacitors into locations C1 and C2 to the rear of the PCB
   Note that capacitors have a (-) printed on the side. The pin to this side should not be next to the (+) printed on the circuit board.

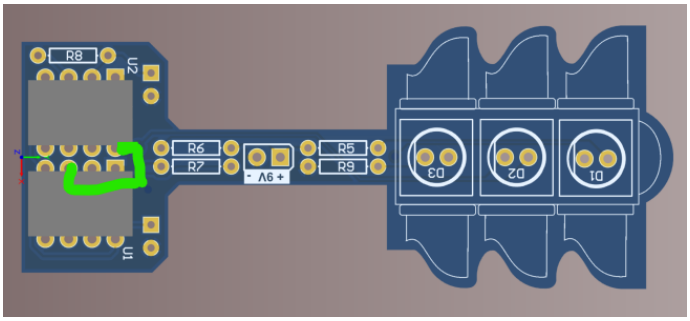


9. Solder the battery leads into J1 (9V)
   a. Note Red is pin1 (+) and Black is pin2 (-)

10. Solder the NE555 chips into U1 and U2
    a. Note that the indent on the chip needs to face the indents shown on the board



11. *The PCB marked RR003-01 (rear) contains an error.3*
    a. *Bend U2-Pin8 of 180 degrees into the air.*
    b. *Using a small piece of wire connect U2-Pin8 to U1-Pin3*



12. Connect the battery to the battery clip

The traffic lights will now function as you see out in the real world changing from Red through yellow to green and back again.