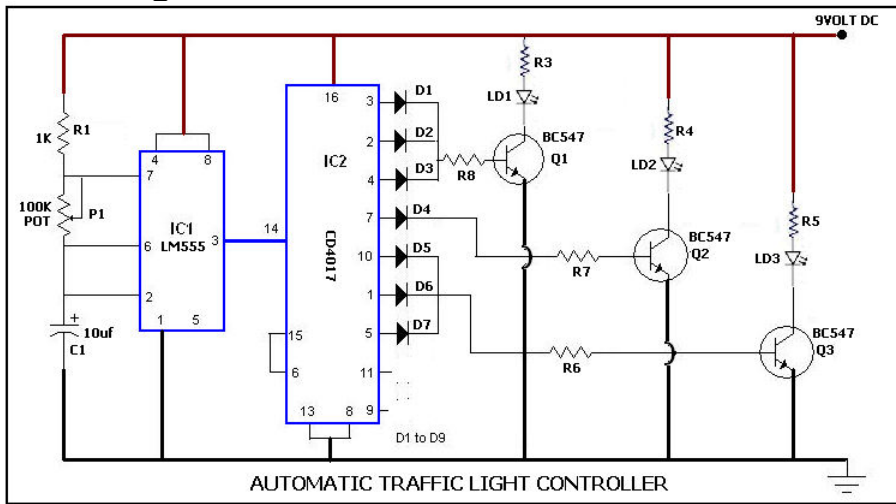


Traffic Light:



This Circuit is basically a shift timer using a 555 IC in Astable-multivibrator mode generating a periodic clock pulse, whose time period depends up on R1, P1 and C2. This clock pulse output is connected to a decade counter, whose output is shifted with every clock. The decade counter switches ON a red light, then the yellow light and a green light, and this routine is restarted on the 4th clock pulse.

In-fact the above shifting method is followed up for every 3 clock pulses for red and green light and 1 clock pulse for yellow light using diodes at each output to continue for multiple clock periods. The time duration of the clock pulse can be increased by increasing the P1 and C1. Therefore the signal light delay can also be increased. In real time similar shifted delay circuits are used using programmable controllers with suitable relay switches. This circuit is operated with a 9volt battery.

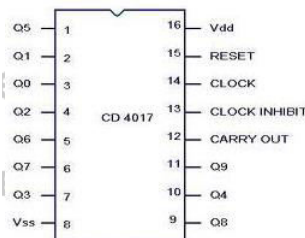
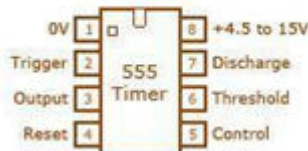
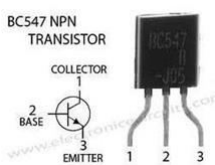
Components: R1=1k resistor, R2= resistor, R3= resistor, R4= resistor, R5= E resistor, R6= resistor, R7= resistor, R8= resistor, Q1=BC 547 NPN Transistor, Q2=BC 547 NPN Transistor, Q3=BC 547 NPN Transistor, C1=10uf capacitor, IC1=LM 555, IC CD 4017, LD1= L.E.D, LD2=L.E.D, LD3=L.E.D, P1=100k Pot, Battery= 9volt, Battery snapper,



Brown Black Red



Yellow Violet Brown



Battery snapper

