

FLASHING-CUM-RUNNING LIGHT



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This circuit generates flashing lights in running pattern. In conventional running lights, the LEDs glow one

quencies, which are given to decade counter IC2. The decade counter is designed to count Q0, Q1 and Q2 outputs, while its fourth output (Q3) is used to reset it. The Q0, Q1 and Q2 outputs of IC2

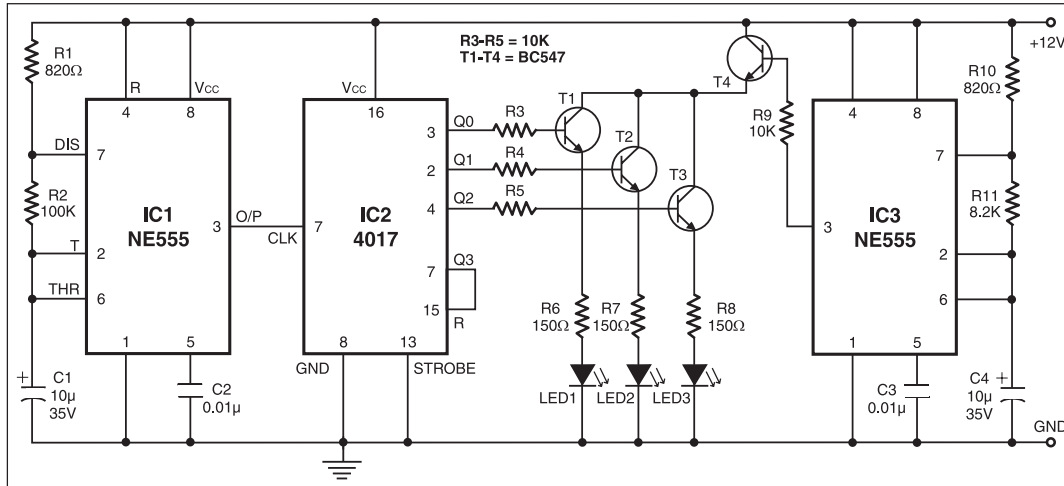
spectively. The LEDs are activated one by one by the decade counter outputs.

Astable multivibrator IC3 produces approximately 8.4Hz clock, which is given to transistor T4 via resistor R9 to switch on the supply to transistors T1 through T3 for each positive half cycle of IC3 output.

Now for each output period of IC2, a particular LED blinks at the rate of 8.4 Hz. The blinking then shifts to the next LED when the output of IC2 advances by one count (after about 1.3 seconds). Similarly, the blinking effect shifts to the next LED after another 1.3 seconds and the cycle repeats thereafter.

Flashing frequencies can be changed by

changing the values of R10 and R11 and capacitor C4. The circuit can be easily assembled on any general-purpose PCB. It works off a 12V regulated power supply. You can also add more LEDs in series with LED1, LED2 and LED3, respectively.



by one. In this circuit, the LEDs flash a number of times one by one.

The circuit comprises two astable multivibrators (IC1 and IC3) and a decade counter (IC2). Astable multivibrator IC1 produces approximately 0.72Hz clock fre-

are fed to npn transistors T1, T2 and T3, respectively. The collectors of transistors T1, T2 and T3 are connected to the emitter of transistor T4, while their emitters are connected to LED1, LED2 and LED3 via 150-ohm resistors R6, R7 and R8, re-