

OP - AMP TIMER

Jaswinder

A simple timer can be constructed using an easily available OP-AMP IC 741. This circuit can operate at any voltage e.g. 6v, 9v, 12v etc.

The timing is controlled by the combination of R_3C and is equal to $0.7 R_3C$, where R is in Ohms and C in farads.

The time period is independent of the supply voltage.

A wide range of time periods are possible.

Switch S_1 which should be normally kept closed, is opened to start the operation. Capacitor C starts to charge via R_3 . As the voltage at Pin 3 exceeds that at pin 2 the output changes from 0 volt to almost $+V$. The output can be used to operate a relay instead of the LED.

