



Power Electronic Training Board has been designed specifically to study the use of SCR and TRIAC in D.C. and A.C. lamp flasher respectively. The flasher is useful for students of understand the application of SCRs in D.C. flasher, triggered by UJT relaxation oscillator. The repetition rate of the flasher can be varied by varying the frequency of the relaxation oscillator. This Training Board also makes use of the same SCR D.C. flasher for making the TRIAC ON and OFF in the A.C. power circuit which operates a normal 230V incandescent lamp used as load.

Practical experience on this board carries great educative value for Science and Engineering Students.

**Object:**

To perform the following experiments :

01. Symmetrical D.C. flasher.
02. High power A.C. flasher.

**Features:**

The board consists of the following built-in parts:

01. 12V D.C. at 100mA, IC Regulated Power Supply.
  02. Two SCRs.
  03. TRIAC 4 Amp./400PIV
  04. 230V/40 Watt lamp for load.
  05. UJT 2N 2646 in relaxation oscillator mode.
  06. Two LEDs to demonstrate Twin-lamp D.C. flasher.
  07. Potentiometer for frequency variation.
  08. Two numbers of toggle switches, one for D.C. flasher, and one for A.C. flasher.
  09. Adequate no. of other Electronic Components.
  10. Mains ON/OFF switch, Fuse and Jewel light.
- \* The unit is operative on 230V  $\pm$ 10% at 50Hz A.C. Mains.
  - \* Adequate no. of patch cords stackable 4 mm spring loaded plug length 1/2 metre.
  - \* Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
  - \* Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

**Other Apparatus Required:**

- \* Digital Multimeter 3 3/4 digit - Order Code 16901
- \* Dual Trace Cathode Ray Oscilloscope 20MHz (Unearthed)

Note: Specifications are subject to change.

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