



Power Electronic Training Board has been designed specifically to study the SCR as D.C. circuit breaker when the D.C. circuit exceeds specified limit. The set up works on 30V D.C. and permits the circuit breaker to be adjusted from 100mA to 1.8 Amp. This Training Board also includes Electronic Crow Bar circuitry to demonstrate the over voltage and over current trip under D.C. Condition.

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

**Object:**

01. To study SCR turn OFF action under varying loads.
02. To study D.C. over voltage trip action.
03. To study over current trip action.

**FEATURES**

The board consists of the following built-in parts:

01. 20V D.C. Zener Stabilized Power Supply for UJTs.
  02. Two SCRs, one main and one auxiliary.
  03. Two push button switches, one to trigger the main SCR and other to trigger the auxiliary SCR which turns the main SCR OFF.
  04. Two UJTs connected in relaxation oscillator mode.
  05. Two potentiometers to adjust the over voltage and over current limit.
  06. Capacitor bank to study commutation under different load.
  07. Resistance bank for varying load.
  08. Adequate no. Of other Electronic Components.
  09. Fuse protection in D.C. supply.
- \* The unit is operative on 30V D.C. at 2 Amp.
  - \* Adequate no. of patch cords stackable 4 mm spring loaded plug length ½ metre.
  - \* Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/observation of wave forms.
  - \* Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

**Other Apparatus Required:**

- \* Digital Multimeter 3¾ digit - Order Code 16901
- \* 0-30V D.C.-2 Amp, IC Regulated Power Supply
- \* Dual Trace Cathode Ray Oscilloscope 20MHz (Unearthed)

Note: Specifications are subject to change.

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