

SCR application trainer has been designed specifically for the study of SCR & Triac application. This training board gives better understanding of SCR, triac, UJT & Diac as used in various applications. Practical experience on this board carries great educative value for Science and Engineering Students.

OBJECT:- To study the following D.C. Circuit Breaker

- DC Circuit Breaker
- 1.1 To Study SCR Turn Off Action Under Varying Loads
- 1.2 To Study DC Over Voltage Current Trip Action
- Lamp Flasher
- 2.1 Symmetrical SCR Type DC Flasher
- 2.2 High Power AC Flasher
- AČ Phase Control 3
- 3.1 Half Wave Phase Control
- 3.2 Full Wave Phase Control
- 4 UJT Relaxation Oscillator
- Thyristor Alarms
- 5.1 Study of Make-to-operate Alarms
- 5.2 Study of Break-To-operate Alarms
- 5.3 Demonstration of Temper-proof Burgler Alarm
- 6 Time Delay Relay
- 6.1 Study of Delayed Turn-'ON' of DC Load
- 6.2 Study of Auto Turn-'OFF' of DC Load
- Light Activated Solid State Switch
- Light Operated Switch/relay 8
- To Demonstrate Lift Activated Relay
- 10 Temperature Controller
- 10.1 To Turn ON or OFF an External Load At A Particular Temperat
- 10.2 To Control And Maintain The Temperature of The Internal ove
- 11 Illumination Control Using Scr
- 12 Application of a Triac For Illumination Control
- 13 Study of An Electronic Timer Using IC NE 555
- 14 Scr Controlled Emergency Light

FEATURES

The board consists of the following built in parts:

- 01. Three I.C. regulated D.C. power supplies internally connected.
- 02. A.C. supply.
- 03. Isolation Transformer.
- 04. Timer I.C.
- 05. Operational amplifier I.C.
- 06. Quad dual Input NAND gate I.C.
- 08. Pulse Transformer.09. Battery.
- 10. D.C. Relay.
- 11. OVEN with Power Supply.
- 12 Thermometer 0-110 °C.
- 13. Adequate no. of electronic components to be used in various experiments i.e. Pot 5 Nos., Push to on switch 2 Nos., Push to off switch, Buzzer, Bulb 230V40watt, Bulb 12V 5watt, LED 2Nos., Diode 4 Nos., Diac, Zener 2Nos., LDR, Thermistor, SCR 4 Nos., Triac, UJT 2 Nos, Transistors 3 Nos. Resistance & Capacitor 44No. etc. Main ON/OFF switch, fuse and jewel light.
- The Unit is operative on 230V, $\pm 10\%$ at 50Hz A.C. mains.
- Good quality, reliable terminals/Sockets are provided at appropriate places on panel for connections/observations.
- Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- Patch cords are provided to make required connections.

OTHER APPARATUS REQUIRED

- Digital Multimeter
- General Purpose Unearthed Oscilloscope.

Note: Specifications are subject to change.

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