



**OMEGA TYPE ETB-148** Experimental Training Board has been designed specifically to study the principle of Temperature Control with the use of a Thermistor. This is one of the important industrial applications of the thermistor. The board is absolutely self contained and requires no other apparatus.

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

#### OBJECT

- 01 To turn ON or OFF an external load at a particular temperature.
- 02 To control and maintain the temperature of the internal oven.

#### FEATURES

The board consists of the following built-in parts :

- 01  $\pm 12V$  DC at 100 mA, IC Regulated Power Supply Internally connected.
- 02 20VAC at 1A for the internal oven.
- 03 12V D.C. relay having contact rating of 2A.
- 04 Electrically heated Oven.
- 05 Op-Amp IC741.
- 06 NPN transistor.

- 07 Mercury thermometer 110 degree.
- 08 NTC thermistor.
- 09 Potentiometer.
- 10 Rotary Switch and adequate no. of other electronic components.
- 11 Mains ON/OFF switch, Fuse and Jewel light.
- 12 The unit is operative on 230VAC  $\pm 10\%$  at 50Hz.
- 13 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 14 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections / observation of waveforms.
- 15 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 16 Weight : 4.800 Kg. (Approx.)
- 17 Dimension : W 340 x H125 x D 210.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

**OMEGA ELECTRONICS**