



**OMEGA TYPE ETB-137** Experimental Training Board has been designed specifically for the study of Light Emitting Diodes (LED's). The application of an LED as a seven segment display is experimentally explained. 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 understand the operation of an LED :
  - (a) On D.C. Voltage
  - (b) On A.C. Voltage
- 02 To plot and study the forward voltage current characteristics of different colour discrete LEDs.
- 03 To practically understand the operation of a seven segment LED display.

#### FEATURES

The board consists of following built-in parts :

- 01 +9V D.C. at 100mA, IC regulated Power Supply.
- 02 12V A.C. at 100mA, Power Supply.
- 03 Digital Voltmeter DC 3½ Digit range 20V.

- 04 Digital Ammeter DC 3½ Digit dual range 0-20/200mA
- 05 Red, Green, Yellow and Bicolour discrete LEDs.
- 06 Seven segment common anode LED display.
- 07 Wire wound potentiometer and adequate no. of other electronic components.
- 08 Mains ON/OFF switch, Fuse and Jewel light.
- 09 The unit is operative on 230VAC ±10% at 50Hz.
- 10 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 11 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/observation of waveforms.
- 12 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 13 Weight : 2.500 Kg. (Approx.)
- 14 Dimension : W 340 x H 125 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