



**OMEGA TYPE ETB-82** Experimental Training Board has been specifically designed to study Charging and Discharging of a Condenser.

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

#### OBJECT

- 01 To study the charging of a condenser, to plot a graph of voltage (V) across it against time (t) and to determine the time constant from this graph.
- 02 To plot a graph of charging current (i) against time (t) and to determine the time constant from this graph.
- 03 To study the discharging of a condenser, to plot a graph of voltage (V) across the condenser against time (t) and to determine the time constant from this graph.
- 04 To plot a graph of discharge current: (i) against time (t) and to determine the time constant from this graph.
- 05 To study the variation of charge and current in RC circuits for different time constants (using DC source.)
- 06 Electric Board Study of Rc Circuit With Ac Sinusoidal Wave.
- 07 Electric Board Study of Rc Circuit With Non Sinusoidal Wave.

#### FEATURES

The board consists of the following built-in parts :

- 01 0-20V D.C. at 25mA, continuously variable regulated Power Supply.
  - 02 Digital Voltmeter DC 3½ Digit having Dual range of 2V / 20V.
  - 03 Digital Current meter DC 3½ Digit having range of 20mA.
  - 04 Three SPDT switches.
  - 05 Four electrolytic condensers.
  - 06 Adequate no. of other electronic components.
  - 07 Mains ON/OFF switch, Fuse and Jewel light.
  - 08 The unit is operative on 230VAC  $\pm 10\%$  at 50Hz.
  - 09 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
  - 10 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
  - 11 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
  - 12 Weight : 2.500 Kg. (Approx.)
  - 13 Dimension : W340 x H125 x D210
- OTHER APPARATUS REQUIRED:**
- 14 Digital stop Clock OMEGA TYPE DSC-602 or metronome OMEGA TYPE MN-276
  - 15 Audio Frequency Sine Wave Generator Omega Type AO-300
  - 16 Oscilloscope 10 MHz Omega Type CRO-10

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

## OMEGA ELECTRONICS