



OMEGA TYPE ETB-93 Experimental Training Board has been designed specifically to study the behavior of the Reactive Elements and Time Dependent Network Analysis.

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

OBJECT

- 01 To study Charging & Discharging of a Capacitor.
- 02 To Calibrate D.C. meter for A.C. voltage measurements.
- 03 To construct the vector (phasor) diagram for series L-R circuit and to calculate the power factor and "Q" at 50 Hz.
- 04 To study series LCR resonance circuit and its "Q".
- 05 To study series L-C resonance circuit and from it to find out the true value of "L".
- 06 To study series C-R circuit.
- 07 To study different types of filters.
 - 7.1 Low Pass Filters
 - 7.2 Low Pass L-C Filter (LPF)
 - 7.3 High Pass Filters
 - 7.4 High Pass C-R Filter (HPF)
 - 7.5 High Pass T-Type Filter
 - 7.6 Band Pass Filter
 - 7.7 More Complex Filters
- 08 To study the parallel R-C resonance circuit.
- 09 To study the parallel L-C resonance circuit and to find its "Q".
- 10 To verify circuit laws.

- 11 To find out the impedance and reactance of LCR reactive elements and to plot their reactance curves.

- 12 To plot "LISSAGOUS" figures.

FEATURES

The board consists of the following built-in parts:

- 01 Mains Transformer having secondary tapings of 10V, 20V, 30V, 40V, 50V A.C. at 500mA.
- 02 Digital DC Voltmeter $3\frac{1}{2}$ Digit range 0-20V.
- 03 Four Rectifier diodes.
- 04 SPDT switch.
- 05 Potentiometer and adequate no. of other electronic components.
- 06 Mains ON/OFF switch, Fuse and Jewel light.
- 07 The unit is operative on 230VAC $\pm 10\%$ at 50Hz.
- 08 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 09 Good quality, reliable terminal/sockets are provided at appropriate places on panel for connections & observation of waveforms.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 11 Weight : 6.700 Kg. (Approx.)
- 12 Dimension : W 415 x H 165 x D 315

OTHER APPARATUS REQUIRED :

- 01 AF Generator OMEGA TYPE AO-300.
- 02 Digital Stop Clock OMEGA TYPE DSC-602
- 03 Dual trace CRO 20MHz OMEGA TYPE CRO-20

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

OMEGA ELECTRONICS