

OMEGA TYPE ETB-64 Experimental Training Board has been designed specifically for the study & verification of the laws and network theorems in D.C. circuits. 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 Verification of Ohm's Law.
- 02 To draw the V-I characteristics for studying the D.C. behavior of the following :
 - 2.1 Ideal resistance.
 - 2.2 Semiconductor diode.
 - 2.3 Zener diode.
 - 2.4 Thermistor (NTC Type).
- 03 To verify Kirchoff's current law and voltage law.
 - 3.1 Kirchoff's current law
 - 3.2 Kirchoff's voltage law
- 04 Verification of the series & parallel laws for resistance.
 - 4.1 Series resistance
 - 4.2 Parallel Resistance
- 05 Verification of Superposition Theorem.
- 06 Study of potential divider.
- 07 Verification of Maximum Power Transfer Theorem.
- 08 To verify Thevenin's Theorem and to find equivalent voltage source circuit.
- 09 To verify Norton's Theorem and to find equivalent current source circuit.
- 10 To verify the Reciprocity Theorem and to measure current in a branch containing voltage source after shifting it to some other branch.
- 11 To verify the Tellegen's Theorem.
- 12 To study the design of a multimeters.
 - 12.1 Designing a DC current meter
 - 12.2 Multi range DC current meter
 - 12.3 Designing a DC voltmeter
 - 12.4 Multi range DC voltmeter
 - 12.5 Designing OHM's meter



FEATURES

The board consists of following built-in parts:

- 01 0-30V D.C. at 100 mA, continuously variable IC Regulated Power Supply.
- 02 +9V D.C. at 100mA, IC Regulated Power Supply.
- 03 +5V D.C. at 100mA, IC Regulated Power Supply.
- 04 D.C. Voltmeter, 65mm rectangular dial with switch selectable ranges of 0.5, 1.5, 25 & 50V.
- 05 D.C. Ammeter, 65mm rectangular dial with switch selectable ranges of 0.05, 0.5, 5, 50 & 100mA.
- 06 Adequate no. of other electronic components.
- 07 The unit is operative on 230V $\pm 10\%$ at 50Hz A.C. Mains.
- 08 Adequate no. of patch cords stickable 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 : 4.200 Kg. (Approx.)
- 12 Dimension : W 415 x H 165 x D 315.

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

OMEGA ELECTRONICS