

COMPARATIVE STUDY OF CE, CB AND CC AMPLIFIERS OMEGA TYPE ETB-115



**OMEGA TYPE ETB-115** Experimental Training Board has been designed specifically for the Comparative study of Common Emitter (CE), Common Base (CB) and Common Collector (CC) Transistor Amplifiers. These practical transistor amplifier configurations are evaluated in respect of their main parameters and results are compared with theoretical calculations.

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

## **OBJECT**

- 01 Study of Common Emitter (CE) transistor amplifier circuit and evaluation of its input & output resistance, voltage gain, current gain and power gain.
- 02 Study of Common Base (CB) transistor amplifier circuit and evaluation of its input and output resistance, voltage gain, current gain and power gain.
- 03 Study of Common Collector (CC) transistor amplifier circuit and evaluation of its input and output resistance, voltage gain, current again and power gain.
- 04 To design/study a CE amplifier of given gain (mid gain) using voltage divider basis.

## **FEATURES**

The board consists of following built-in parts:

- 01 ±9V D.C. at 100mA, IC Regulated Power Supply internally connected.
- 02 All the three circuits i.e. CE, CB and CC are built separately.
- 03 Adequate no. of other electronic components.
- 04 Sine Wave Signal Generator of 1KHz, with variable level, low distortion, based on IC.
- 05 Mains ON/OFF switch, Fuse and Jewel light.
- 06 The unit is operative on 230V ±10% at 50Hz A.C. Mains.
- 07 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 08 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/observation of waveforms.

Y PRODUCT

09 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

10 Weight : 2.100 Kg. (Approx.)11 Dimension : W 340 x H 125x D 210

## OTHER APPARATUS REQUIRED:

- 01 Cathode Ray Oscilloscope (Single trace) 10 MHz OMEGATYPE CRO-10
- 02 A.C. Millivolt meter OMEGATYPE ACV-25
- 03 Audio Frequency Generator 15 Hz to 150 KHz, output 0 to 1V RMS OMEGATYPE AF-302

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

## **OMEGA ELECTRONICS**