



**OMEGA TYPE TD-13** "Transistor Designer" has been designed specifically for designing different types of circuits based on transistors. Its primary objective is to present a clear, and consistent picture of the practical aspects and physical behavior of transistors. Different experiments have been included in this Transistor Designer in order that a wide range of topics on Transistor applications be covered, in a reasonable amount of time. Although the experiments can be performed without modifications, they can also be used creatively in accordance with the ideas of the individual teachers who may wish to alter the depth and objectives of selected experiments.

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

#### OBJECT

To design different types of circuits based on transistors  
Though the scope of Transistor Designer is unlimited, Some of the experiments which can readily be set up are as under :

- 01 Common Emitter Amplifier
- 02 Common Collector Amplifier
- 03 Combination Amplifier (C.E. & C.C.)
- 04 Common Emitter current feedback Amplifier
- 05 Phase Shift Audio Oscillator
- 06 Wien-Bridge Audio Oscillator
- 07 Free Running Multivibrator
- 08 Monostable Multivibrator
- 09 Flip-Flop Circuit
- 10 Schmitt's Circuit
- 11 Phase Splitter
- 12 Difference Amplifier

#### FEATURES

The board consists of the following built-in parts :

- 01 I.C. Regulated D.C. Power Supplies
- 02 Gang Condenser, Potentiometers and Transistors etc
- 03 Adequate no. of other Electronic Components
- 04 Mains ON/OFF switch, Fuse and Jewel light
- 05 The unit is operative on 230V  $\pm 10\%$  at 50Hz A.C. Mains
- 06 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm
- 07 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections & observation of waveforms
- 08 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References

#### OTHER APPARATUS REQUIRED:

- 01 Audio Frequency Generators Sine/Square OMEGA TYPE SS-305 (2 Nos)
- 02 Decade Resistance Box OMEGA TYPE DRBC-115L
- 03 A.C. Mill voltmeter OMEGA TYPE ACV-25
- 04 D.C. Voltmeter 0-15V OMEGA TYPE MO-65
- 05 Dual Trace CRO 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.

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