



**OMEGA TYPE ETB-98** Experimental Training Board has been designed specifically for the study of Frequency Modulation and Demodulation. Practical experience on this board carries great educative value for Science and Engineering Students.

#### OBJECT

- 01 To observe the effect of D.C. voltage on frequency of carrier waveform.
- 02 To frequency modulate the carrier with Audio signal, observe F.M. waveform on C.R.O., and measure its modulation index.
- 03 To demodulate the F.M. signal and observe the output on C.R.O.
- 04 To plot the characteristics curve of the slope detector demodulating circuit.

#### FEATURES

The board consists of the following built in parts:

- 01  $\pm 12V$  D.C. at 100 mA, IC Regulated Power Supply.
- 02 Carrier generator circuit which generates the carrier signal.
- 03 Audio frequency modulating signal.
- 04 Variable D.C. is provided to see the frequency deviation in carrier frequency.
- 05 Frequency Modulation circuit with buffer stage at the output.
- 06 Demodulating circuit.

- 07 Adequate no. of other electronic components.
- 08 Mains ON/OFF switch, Fuse and Jewel light.
- 09 The unit is operative on 230VAC  $\pm 10\%$  at 50Hz.
- 10 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 11 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections & observation of waveforms.
- 12 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 13 Weight : 2.200 Kg. (Approx.)
- 14 Dimension : W 340 x H 125 x D 210

#### OTHER APPARATUS REQUIRED :

- 01 Audio Frequency Sine Wave Generator OMEGATYPEAO-300.
- 02 Digital Frequency Counter, 6 digit OMEGATYPE DFC-20M
- 03 Dual trace CRO 20MHz OMEGATYPE 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