



**OMEGA TYPE ETB-69** Experimental Training Board has been designed specifically to understand the operation of function generator chip. In digital circuits the operation of various gates, flip-flops etc. are dependent on the control signals. Various methods are employed in generating these train of pulses. With the advancement in the semiconductor technology various types of ICs have come in the market which provide Sine, Triangle, Ramp, Square etc. wave outputs. Here we will discuss the use of function generator IC to generate square and triangle wave outputs.

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

### OBJECT

- 01 To study the operation of a function generator.
  - 01.1 To study the operation of a function generator using 1m 566 (with single 12V supply)
  - 01.2 Study-variation of frequency with  $R_1$ .
  - 01.3 Study variation of frequency with  $C_1$ .
  - 01.4 Study-variation of frequency with control voltage  $V_c$ .
  - 01.5 TTL compatible signal using single supply (12 Volts).
  - 01.6 To study the operation of a function generator using dual supply ( $\pm 6V$ )

### FEATURES

The board consists of the following built-in parts :

- 01 +12V D.C. at 100mA, IC Regulated Power Supply.

- 02  $\pm 6V$  D.C. at 100mA, IC Regulated Power Supply.
- 03 Function Generator chip (566) mounted on a I.C. base.
- 04 Control voltage is set with the help of band switches and potentiometer.
- 05 LED for visual indication of output waveform (TTL output).
- 06 Adequate no. of other electronic components.
- 07 Mains ON/OFF switch, Fuse and Jewel light.
- 08 The unit is operative on 230V  $\pm 10\%$  at 50Hz A.C. Mains.
- 09 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 10 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
- 11 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 12 Weight : 3.00 Kg. (Approx.)
- 13 Dimension : W 340 x H 125 x D 210

### OTHER APPARATUS REQUIRED :

- 01 Digital Multimeter OMEGA TYPE DMM-201.
- 02 Dual trace CRO 20MHz OMEGA TYPE CRO-20
- 03 Digital Frequency Counter OMEGA TYPE DFC-20M.

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

**OMEGA ELECTRONICS**