

OMEGA TYPE ETB-65 Experimental Training Board has been designed specifically to study the characteristics of TRIAC-a Bidirectional Triode Thyristor.

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



OBJECT

01 To study the gate characteristics of a triac in the following modes.

1.1 **Mode I+** : i.e. T_2 positive with respect to T_1 and gate positive with respect to T_1 .

1.2 **Mode I-** : i.e. T_2 positive with respect to T_1 and gate positive with respect to T_1 .

1.3 **Mode III+** : i.e. T_2 negative with respect to T_1 and gate positive with respect to T_1 .

1.4 **Mode III-** : i.e. T_2 negative with respect to T_1 and gate negative with respect to T_1 .

02 To study the terminal Characteristics of a triac in the following modes :

2.1 **Mode I+** : i.e. T_2 positive with respect to T_1 and gate positive with respect to T_1 .

2.2 **Mode III+** : i.e. T_2 negative with respect to T_1 and gate positive with respect to T_1 .

03 To measure the holding current I_H of a triac

04 To study the following applications of a triac

4.1 Triac as a static switch (D.C. control)

4.2 Control of A.C. with A.C. signal.

FEATURES

The board consists of following built-in parts:

01 0-70V DC at 100mA, regulated Power Supply.

02 0-3V DC at 30 mA, regulated Power Supply.

03 60 Volt at 100mA, fixed AC Supply.

04 7 Volt at 30mA, fixed AC Supply.

05 Digital Voltmeter DC $3\frac{1}{2}$ Digit Having Dual range of 2V / 200V.

06 Digital Current meter DC $3\frac{1}{2}$ Digit Having Dual range of 20mA/200mA

07 Digital Current meter DC $3\frac{1}{2}$ Digit Having range of 0-200mA

08 TRIAC.

09 Three Potentiometers.

10 Reset switch.

11 Adequate no. of other electronic components.

12 Mains ON/OFF switch, Fuse and Jewel light.

13 The unit is operative on 230VAC $\pm 10\%$ at 50Hz.

14 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.

15 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections / observation of waveforms.

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

17 Weight : 4.500 Kg. (Approx.)

18 Dimension : W 340 x H 125 x D 210

OTHER APPARATUS REQUIRED:

01 Dual trace CRO 20MHz 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.