

**OMEGA TYPE PET-407** Power Electronic Training Board has been designed specifically to study various switching techniques of TRIAC - a bidirectional silicon controlled switch. The phase control applications of TRIAC are included in another board OMEGATYPE PET-404.

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

#### OBJECT

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| 01 Study of TRIAC as line triggered A.C. power switch.   | 12 Adequate no. of patch cords stackable 4 mm spring loaded plug length 50cm.  |
| 02 Study of TRIAC as D.C. triggered A.C. power switch.   | 13 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.                      |
| 03 Study of TRIAC as self latching line switch.  | 14 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References. |
| 04 Study of TRIAC as UJT triggered A.C. power switch.  | 15 Weight : 5 Kg. (Approx.)  |
| 05 Study of TRIAC as UJT triggered A.C. power switch with external transistor control from transducer. | 16 Dimension : W 415 x H 165 x D 315.  |

#### FEATURES

The board consists of the following built in parts:

- 01 An isolation transformer 230V A.C. 200mA. This protects external instruments from damage if they are not isolated.
- 02 12V D.C. at 200 mA, IC Regulated Power Supply for D.C. Triggering.
- 03 The TRIAC under experiment.
- 04 Two push button switches for triggering.

- 05 UJT 2N 2646 connected in relaxation oscillator mode to provide triggering pulses.
- 06 Pulse transformer 1:1.
- 07 NPN Transistor for UJT control with external transducer.
- 08 Lamp holder with 40 Watt lamp for load in power control indicator.
- 09 Adequate no. of other Electronic Components.
- 10 Mains ON/OFF switch, Fuse and Jewel light.
- 11 The unit is operative on 230V  $\pm 10\%$  at 50Hz A.C. Mains.

#### OTHER APPARATUS REQUIRED:

- 01 Digital Multimeter  $3\frac{3}{4}$  digit OMEGATYPE DMM-201
- 02 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