

APPLICATION USING OP-AMP. IC-741
(APPLICATION LIGHT BASED PWM & V-F CONVERTER,
SHADOW SENSING AND TEMPERATURE TO VOLTAGE)
OMEGA TYPE ETB-273

OMEGA TYPE ETB-273 Experimental Training Board has been designed specifically for the study of Application Op-Amp. IC-741 like Voltage to Frequency Converter, PWM Modulation, Shadow Sensing Alarm & Temperature to Voltage Converter. The capabilities of this trainer extend far beyond the experiments described. Although only a finite number of experiments have been described yet other circuits as per individuals requirements can also be designed using the available components and power supplies.

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

OBJECT :-

STUDY OF APPLICATIONS OF OPERATIONAL AMPLIFIER (IC-741)

- 01 To Study Voltage to Frequency Converter using 741.
- 02 To Study Light Based PWM using 741 & Voltage to Frequency Converter.
- 03 To Study Shadow Sensing using 741 & LDR.
- 04 To Study Temperature to Voltage Converter using 741 & Thermistor

FEATURES :-

THE BOARD CONSISTS OF THE FOLLOWING BUILT IN PARTS:

- 01 Voltage to Frequency Converter Circuit.
- 02 1 KHz Variable Sine Wave Generator.
- 03 Shadow Sensing Circuit
- 04 Temperature to Voltage Converter Circuit.
- 05 Light Activated Switch
- 06 $\pm 12V$ & $+6V$ D.C. at 100mA power supply
- 07 Mains ON / OFF Switch, fuse and Neon Indicator



- 08 The unit is operative on 230V AC $\pm 10\%$ at 50Hz .
- 09 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections & observation of waveforms.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 11 Weight : 1.900 Kg. Approx.
- 12 Dimension : W 340 x H 125 x D 210

LIST OF ACCESSORIES :

- 01 Patch cord 2mm-multipin 50 cm. Red.... 02
- 02 Patch cord 2mm-multipin 50 cm. Black...02

OTHER APPARATUS REQUIRED

- 01 Cathode Ray Oscilloscope 20MHz OMEGA TYPE CRO-20.
- 02 Multimeter OMEGA TYPE DMM-101
- 03 Solder Iron for Heating.
- 04 Frequency Counter- OMEGA TYPE DFC-020M

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

OMEGA ELECTRONICS