36320 Experimental Training Board has been designed specifically for the study of Op-Amp, Timer and their Application with many sensor as photo diode. photo transistor, LDR, thermistor, NTC and PTC. 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. .

Objects:

STUDY OF TIMER IC-555 USING SENSOR CIRCUIT (OPTO ELECTRONICS)

1. To Study Burglar Alarm Using Timer IC-555 & Breaking of wire and LDR.
2. To Study Burglar Alarm Using Timer IC-555 Breaking of Wire & Photo Transistor
3. Burglar Alarm Using Timer IC-555 Breaking of wire and Photo Diode.

STUDY OF OPERATIONAL AMPLIFIER USING SENSOR CIRCUIT (OPTO ELECTRONICS)

4. LED Driver using 741 OP Amp.
5. Lamp Drivers using 741 OP Amp.
6. Temperature ON- OFF Controller with Thermistor NTC.
7. Temperature ON-OFF Controller with Thermistor Using PTC.
8. Burglar Alarm using OP Amp 741 and LDR.
9. Burglar Alarm using OP Amp 741 and Photo Diode.
10. Burglar Alarm using OP Amp 741 and Photo Transistor.

Features :

THE BOARD CONSISTS OF THE FOLLOWING BUILT IN PARTS :

1. ±12V D.C. at 200mA power supply
2. Thermistor NTC & PTC on Board.
3. Photo Diode
4. Photo Transistor
5. LDR.
6. Bulb 6V ONE Nos.
7. LED With Suitable Resistor For Visual Indication
8. IC OP Amp (LM-741) Two Nos.
9. ONE Timer IC (NE-555)
10. Three Transistor NPN (SL-100& BC-107,) and PNP (SK-100).
11. Four Potentiometers.(470E, 10K, 47K, 470K).
12. Buzzer
13. 16 Resistor of Different Values.
14. Four Capacitor of Different Values
15. Mains ON/OFF Switch, fuse and Neon Indicators are Provided.
16. The unit is operative on 230V ±10% at 50Hz A.C. Mains.
17. Adequate no. of patch cords stack able from rear both ends 2mm spring loaded plug length 50cm.
18. Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections & observation of waveforms.
19. Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
20. Weight : 3.00Kg. (Approx.)
21. Dimension : W 415 x H165 x D315

Other Apparatus Required:

1. Dual trace CRO 20MHz.
2. Multimeter
3. Solder Iron for Heating.

Note: Specifications are subject to change.

07.02.2023
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