



**52093** provides displacement Measurement Trainer using LDR, Photo transistor and Photo diode set up & study of their characteristics. The characteristics include Displacement vs Resistance at constant voltage and voltage vs resistance at constant displacement.

Different test points are also provided on the panel to facilitate the student to understand without any operation instruction by third person.

#### **Object:**

1. To study LDR characteristics as displacement vs resistance at constant voltage.
2. To study LDR characteristics as voltage vs resistance at constant displacement.
3. To study Photodiode characteristics as voltage vs displacement.
4. To study Phototransistor characteristics as voltage vs displacement..

#### **Features**

The board consists of following built in parts

1. 5 - 12V variable D.C. supply at 500mA.
2. A hollow pipe with 12V bulb inside it at one end. The pipe is fixed on the board for sliding another pipe inside it.
3. Three movable slide pipe capable of displacing 10 cm inside the fixed pipe, consisting LDR, Photo transistor & Photo diode.
4. A Potentiometer for varying voltage between 5-12V that is applied to bulb for brightness variation
6. DPM of 3½ digit Dual range 2V / 20V display for displaying Bulb voltage and Photo diode / Photo transistor voltage .
7. Adequate no. of other electronic components.
8. Mains ON/OFF switch, fuse and indicator.
9. The unit is operative on 230V  $\pm$ 10% at 50Hz.
10. Good Quality, reliable terminal / sockets are provided at appropriate places on panel for connections.
11. Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions.
12. Weight : 2 Kg. (Approx)
13. Dimension : W 340 x H 125 x D 210

#### **List of Accessories:**

1. Multi meter

Note: Specifications are subject to change.