

## **BALLISTIC GALVANOMETER SETUP**

(for Measurement of Ballistic Constant, Charge Sensitivity, **Comparing Capacitance & Logarithmic Decrement)** 

**OMEGA TYPE ES-245** 







**OMEGATYPE ES-245** Ballistic Galvanometer Setup illustrate fundamental information about electromagnetic induction. It concerns "how electric field affects magnetic field and also reveals the mechanism of current sensing devices" Ballistic Galvanometer setup enables not only to detect weak electric field but as well as to measures it very precisely. Ballistic power supply is included with setup, in which we can generate very weak ambient electric field and can reveal this effect to the Ballistic Galvanometer as a detected deflection of coil. Lamp and scale arrangement is included for measurement of deflection.

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

### **OBJECT:-**

- 01 To determine the Ballistic constant of a Ballistic Galvanometer.
- 02 To Determination of Charge sensitivity of Ballistic Galvanometer using capacitors
- 03 Comparing Capacitance of two condenser using ballistic Galvanometer
- 04 Study the logarithmic decrement for a ballistic Galvanometer

#### **FEATURES:**

### The Board Consists of:-

- 01 Aboard with following built-in parts:
  - 1.1 DC Power Supply, 0-2V at 100mA continuously variable with switch
  - 1.2 Two Fixed capacitor with Selector Switch

- 1.3 Charge Discharge Switch.
- 1.4 Tapping Switch For Ballistic Galvanometer
- 1.5 Reversing Switch
- 1.6 10 Step Each three Band Switch Having 1E, 100E.1K.
- 1.7 Mains ON/OFF switch, Fuse and Jewel light.
- 1.8 The unit is operative on 230V ±10% at 50 Hz. AC Mains.
- 02 Ballistic Galvanometer OMEGA TYPE BG-186. It consists of moving coil having a fairly large periodic time and large moment of inertia. The phosphor bronze suspension strip prevents shifting of zero. Its deflection is closely proportional to current. The resistance of coil is about 500W and gives sensitivity per microcoulomb at one meter distance of about 600 mm.
- 03 Lamp and Scale OMEGATYPE LS-187. Lamp is of cast aluminum with heavy iron adjustable stand. It is fitted with 8 volt electric bulb through built in transformer and works on 230V AC Translucent perspex scale graduated in 25-0-25 cm is used.
- 04 Adequate no. of Patch Cords
- 05 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

06 Weight :9 Kg. (Approx.)

07 Dimension : W 340 x H 125 x D 210

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

# OMEGA ELECTRONICS