

Physics Lab Equipments & Experimental Setups

ME 844 - To Calibrate a given Voltmeter of 1Volt range by means of a Potentiometer.



Setup comprises of:

- Potentiometer : 10 wire Potentiometer
- Battery Eliminator : 2-12V DC/2 Amps (ME 202)
- Fixed DC Power Supply : 2V/1A +6V/1A+1.018V (ME 143)
- Rheostats : 100 ohm/1A (2Nos.)
- Galvanometer : 1 μ A/div
- Voltmeter : 0-1V DC
- Two way key
- DC connecting wire : 3 Meter

ME 847 - To determine the Frequency of A.C. Mains using an Electric Vibrator.



Setup comprises of :

- Electric vibrator apparatus
- Light Pan : 10-30 gm
- Flexible, inextensible thread of uniform thickness 4 Meters
- Weight box : up to 100 gm
- A J-type frictionless pulley with table clipper (height of pulley 15 cm)

ME 847B - To determine the Frequency of Electrically maintained Tuning Fork by means of Melde's Apparatus in Longitudinal and Transverse mode of Vibration.



Setup consist of:

- Electrically maintained tuning fork
- Step Down Transformer : 0 - 6 - 8 Volts (ME 222) for tuning fork
- Hanger/pan with non-extendable thread
- Weights : 5, 10, 20 gm (upto 100gm.)
- Measuring tape : 3 Meters
- Friction less pulley : 30 cm Length (with table clipper stand)

ME 846 - To find out the resistance per unit length of wire and to determine the value of given low resistance using Carry Foster Bridge.

Setup comprises of:

- Carry foster bridge : Four gap
- Digital Galvanometer: 100 μ A DC
- : or
- Weston galvanometer : 1 μ A/div or 20 μ A/div
- Decimal ohm box : 0.1 to 2.0 ohm
- Battery Eliminator : 2 - 06V DC/2 Amps
- or
- Electronic standard cell : 1.018V DC
- Rheostat : 6 ohm/1A
- Small unknown Resistance : 1-2 Ohm Approx.
- DC connecting wire : 3 Meters



ME 848 - Measurement the Magnetic Field Strength B & its variation in Solenoid

Objective :

- Measurement of magnetic field strength (B) and its variation (db/dx) and frequency of free using solenoid.
- **Setup comprises of :**
- Solenoid having different tapping
- Search coil having some turns
- Vernier calliper : LC=0.01cm Range : 15cm
- Scale : 30 cm
- AC Ammeter :
- AC Voltmeter :
- AC Voltage source

ME 848A - To determine the Horizontal Component (BH) of the Earth's Field.



Setup Consist of:

- Graduated Compass
- Current carrying coil (Tangent galvanometer)
- Rheostat : 100 ohm/1Amp
- Power Supply : 0-12V DC/1 Amps
- DC milliammeter : 500 mA
- Switch for changing direction of current (commutator)
- DC connecting wires : 2 Meters