



OMEGA TYPE ES-346 Experimental Set Up has been designed specifically to determine Mutual Inductance of a pair of coils by direct deflection method using Ballistic Galvanometer. The set up is absolutely self contained and requires no other apparatus.

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

OBJECT

01 To determine the Mutual Inductance of a pair of coils by direct deflection method using Ballistic Galvanometer.

FEATURES

The Set up consists of the following :

- 01 **BALLISTIC GALVANOMETER** : 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 500Ω and gives sensitivity per microcoulomb at one meter distance of about 600 mm.
- 02 **LAMP AND SCALE** : 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 220V A.C. Translucent perspex scale graduated in 25-0-25 cm is used.
- 03 **DENIAL CELL (Substitute)** : 0-1V08/200mA OMEGA TYPE CE 1V08.
(Battery Eliminator)
- 04 **DIGITAL STOP CLOCK** : OMEGA TYPE DSC-602 with START/STOP operation by means of toggle switch & RESET by a push button switch. It has a range of 999.9 seconds with resolution of 0.1 seconds and accuracy of $\pm 0.01\%$ (Quartz controlled). Display is through 4 no's of 12.5mm bright Seven Segment Displays and working voltage of the unit is 230V \pm 10% 50Hz.
- 05 A fixed mutual inductor (50 mH) OMEGA TYPE M-505K.
- 06 Two Fixed Resistance 0.1ohms & 0.2 ohms 1 Watt OMEGA TYPE FR-105.
- 07 Reversing Key.
- 08 Tapping key.
- 09 Adequate no. of connecting wires, 100cm long.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report

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

OMEGA ELECTRONICS