



TANGENT GALVANOMETER - pssc

EM3980-001 aluminium const.

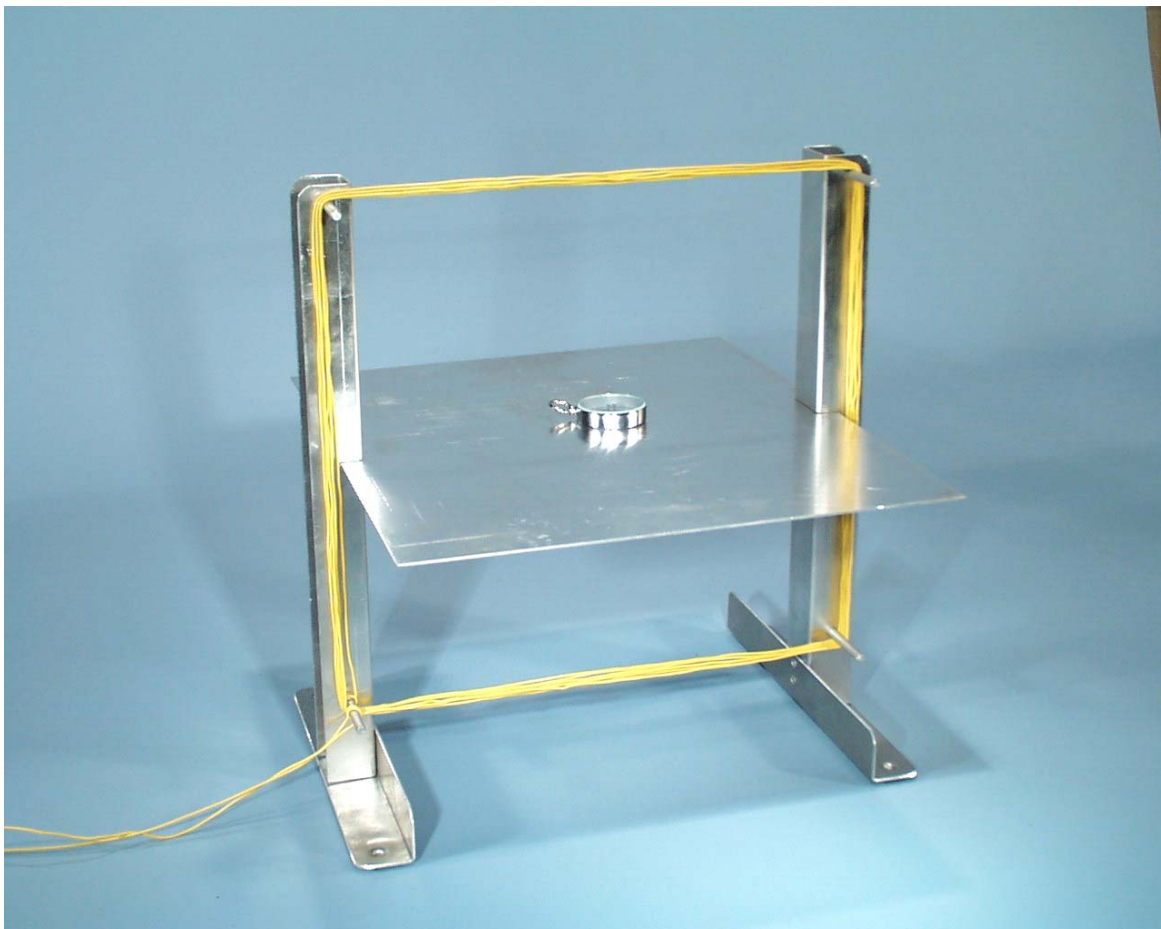
DESCRIPTION:

This kit is an original PSSC design and is manufactured from non-magnetic materials. When assembled it permits experiments relating to the phenomenon of electric currents in a coil producing magnetic fields. It is used to prove that magnetic fields add as vectors and are proportional to both the current that produces them and the number of turns in the coil.

KIT CONTENTS:

- 1 pce flat aluminium plate
- 2 pcs legs to support the flat plate.
- 6 pcs large aluminium pegs.
- 1 roll small insulated wire for winding a coil around the pegs.
- 1 pce small magnetic compass.

EM3980-001 tangent galvanometer



Physical size: 320x420x50mm LxWxTh

Weight: 1.4 kg.

**ASSEMBLY INSTRUCTIONS:**

1. Unpack components and slip the edges of the large flat plate into the slots in the legs so that the holes in the edge of the plate appear inside the channel shaped legs.
2. Take two aluminium pegs and insert and press firmly into the two holes in the plate so that the heads of the pegs cause plate to be tightly wedged into the slots.
3. Place the two aluminium feet on the workbench so that the plate is horizontal.
4. Fully insert the remaining 4x pegs into the 2x holes in the sides of each leg so that they all protrude from the sides of the legs in the same direction.
5. Take the wire and wrap it around the four protruding pegs to form a large coil in the vertical plane completely surrounding the large plate such that the centre of the plate is approximately at the centre of the coil.
6. Place the magnetic compass in the centre of the plate over a sheet of plotting paper to plot the angular deflection of the compass pointer as a DC current is passed through the coil and as the number of turns in the coil is altered.

EXPERIMENTS:

Perform the experiments as described in you textbooks or in the class experimental notes.

Designed and manufactured in Australia