# **ELECTROSTATICS KIT - Nuffield type**

#### EM1771-001 electrostatics – 'Nuffield'

**DESCRIPTION:** This is a larger sized electrostatics kit patterned on the 'Nuffield' style. It is complete with an IEC metal vane electroscope for measurements.

### **KIT CONTENTS**

- 1 pce Electroscope, Metal Vane. With standard disc electrode. •
- 1 pce Proof Plane on insulated handle. 20mm diameter. •
- 1 pce Electrophorus with insulating plates. 50mm diam.
- 4 pcs Pith Balls (coated with a conductive film)
- 1 pce Nylon Filament for suspending pith balls x25m
- 2 pcs Aluminium Cans. 60x30mm diam.
- 2 pcs Polythene Tiles for insulation. 100x100x3mm thick
- 1 pce Polythene Strip. 200x25x3mm thick
- 1 pce Acrylic Strip. 200x25x3mm thick
- 1 pce Wire Stirrup for supporting insulating strips.
- 1 pce Rubbing Cloth, flannelette. 150x150mm



#### EM1771-001 electrostatics kit - 'Nuffield'

Physical size: 250x120x100mm box LxWxH

Weight: 1.8 kg.



**WILTRONICS** 5-7 Ring Road, Alfredton, VIC 3350 1 Freecall: 1800 067 674 www.wiltronics.com.au

## **USEFUL NOTES ON THE KIT:**

- The standard IEC electroscope has a fixed disc electrode. The wire hook type, used for radioactivity experiments, is not part of this standard electrostatics kit.
- Note: for identification, the polythene plastic is white and the thinner cellulose acetate strip is transparent.
- The pith balls are coated with a conductive film. Attach 20cm of nylon filament to a ball by threading it through and tying it. The balls can then be hung 3 or 4cm apart from a retort clamp or similar. They will attract or repel one another depending on the charges applied during experiments.
- The proof plane and the electrophorus are used for collecting and transferring charge from one place to another.
- The wire stirrup is normally suspended from a thread and it supports plastic strips in the horizontal plane. The strips can be seen to twist due to various electrostatic forces of attraction or repulsion being applied.
- The two metal cans are normally insulated from the table on the polythene tiles and are used for demonstrating electrostatic induction and similar phenomenon.
- To obtain good results, all materials must be perfectly dry.
- During handling, all plastic insulators become dirty and will gradually lose their effectiveness. They may be cleaned by washing with soap and water, rinsed and allowed to dry.
- Many simple electrostatics experiments can be performed with this small kit of parts. Refer to your Physics text books for all normal electrostatics experiments information.

Designed and manufactured in Australia

