

MAGNETS & MAGNETISM EQUIPMENTS

PR-207 DIP CIRCLE

The case is made of aluminium, strongly magnetised cobalt steel needle fitted with imported hard axle rolls on knife edges agates and can be clamped when desired by a V clamp, a sensitive spirit level is provided. The tripod stand is provided with three levelling screws.



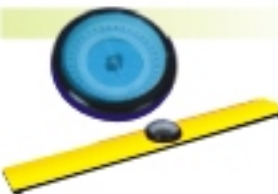
PR-208 TANGENT GALVANOMETER

The plastic ring or bobbin, 162.5 mm overall diameter wound with three coils of insulated copper wire with 2, 50 and 500 turns mounted on bakelite moulded platform fitted with 4 terminals, rotating on a tripod non-magnetic metal base, supported by levelling screws. Complete with compass box (Magnetometer) mounted at the centre of the ring.



PR-209 MAGNETOMETER

Comprising a stout metal box, 100mm. diameter, with aluminium dial graduated in degrees 0-90 four times, anti-parallel mirror slot.



PR-210 MAGNETIC NEEDLES

Carbon steel with brass cup bearing for pivoting.

	A	B	C
Length (mm)	50	75	100



PR-211 STAND, MAGNETIC NEEDLE

Non-magnetic metal pillar with carbon steel point, on stable base, overall height 110 mm.



PR-212 COMPASS

A small compass in a metal case, 45 mm. dia. marked in degree with N & S indications.



PR-213 RING MAGNETS, CERAMIC

Magnetised

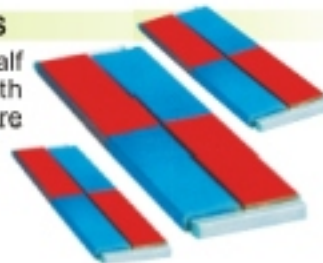
A	32x16x8mm.
B	36x18x6mm.
C	36x18x8mm.
D	45x22x8mm.
E	45x22x11mm.
F	53x24x10mm.
G	72x32x10mm.



PR-214 BAR MAGNETS

Chrome Steel, in Pairs, half Red/Blue painted with keepers. Dimensions are nominal.

Size:	37x12x5 mm.
	50x12x5 mm.
	75x12x5 mm.
	100x12x5 mm.
	150x12x5 mm.



PR-215 BAR MAGNETS

Dimensions are nominal, supplied in cardboard boxes.



PR-216 HORSESHOE MAGNETS

Chrome steel, with keepers, dimensions are nominal.

Size:	50x12x5 mm.
	75x12x5 mm.
	100x12x5 mm.
	150x12x5 mm.



PR-217 HORSE SHOE MAGNETS

ALINCO, with keepers. Dimensions are nominal. Supplied in cardboard boxes.

A.	50x12x15mm.
B.	75x12x15mm.
C.	100x12x15mm.



PR-218 CYLINDRICAL MAGNETS

Chrome Steel, 12mm. diameter, in Pairs.

A.	Length 50mm.
B.	Length 100mm.
C.	Length 150mm.



PR-219 U-SHAPE MAGNET

ALINCO, with keepers. Dimensions are nominal. Supplied in cardboard boxes.

	Size (mm)	Center Gap	Lifting Power
A.	37x13x10	18mm.	350 gms.
B.	50x13x10	18mm.	500 gms.
C.	75x13x10	18mm.	500 gms.



PR-220 ELECTROMAGNET

Lifting type. Built with a coil of 300 turns of insulated copper wire. Operates on 6-12 volts and will easily lift 15 kg. when energised by a current of 6-8 amperes. Complete with disc armature.



PR-221 ELECTROMAGNETISM COIL

Output variable from 100V to 5KV DC at 50 A, 6.3V AC at 2A, separate earthing terminal.



MAGNETS AND MAGNETISM EQUIPMENTS

PR-222 DEMONSTRATION INDUCTION COIL

With primary of heavy gauge enamelled copper wire, approximate resistance 0.5 ohms wound on former 110x30 mm. length x diameter. Secondary coil of fine enamelled copper wire, approximately resistance 100 ohms on former 120 x 82 mm. length x diameter. Both coils fitted with 4 mm. sockets. Iron core 160x15 mm. length x diameter.



PR-223 BARLOW'S WHEEL

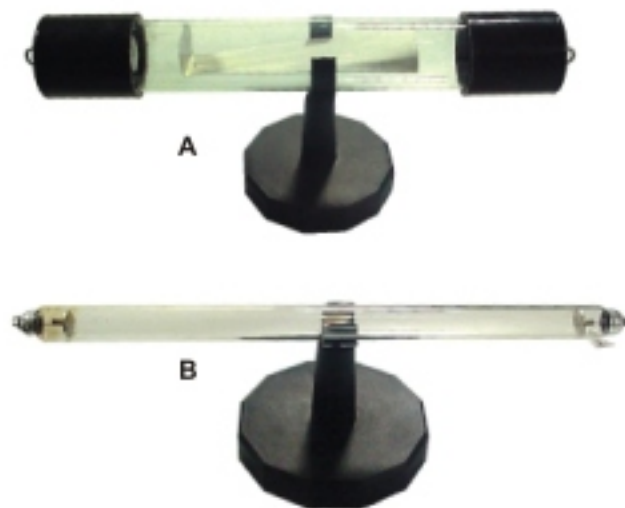
For demonstrating the conversion of electric energy into mechanical energy. Star-shaped copper disc rotatable vertically on pair of adjustable centers and dipping into mercury trough between the vertical limbs of a small horseshoe magnet on a wood base. Disc adjustable vertically on metal pillar which is connected to one of two terminals mounted on base. The other terminal is connected to the mercury trough. The apparatus will operate on 4 volts at which voltage it takes 1.8 amps, with out battery.



ELECTROMAGNETIC APPARATUS

PR-224 CATHODE RAY MECHANICAL EFFECT

Cathode Rays exert a pushing effect on objects it falls on, is shown by the rotating vanes by the force extended by cathode rays.



PR-225 SHADOW EFFECT

An object star obstructing the path of cathode rays casts its shadow the fluorescent painted wall facing cathode rays.



PR-226 RADIOMETER

Comprising partly evacuated glass bulb approx. 70mm diameter, containing at its center a fine pivot which supports four light weight metal arms. One side of each vane is blackened, the reverse side is bright. Mounted on round base.



ON PLASTIC BASE

PR-227 SPECTRUM TUBES

Straight form, with side electrodes and 50 mm. long fine capillary in the middle. Filled with Oxygen, Neon, Helium, Air, Nitrogen, Argon, Carbon Dioxide, Hydrogen, Iodine Vapour, Sulphur water vapours, Krypton, Xenon.

Size :
20 cm. long & 26 cm. long.



PR-228 SPECTRUM TUBES STAND

Specially designed box holds the tube firmly while preventing you from touching the electrodes. A black panel behind the tube eliminates distracting ambient light and protects the tube from breakage. Operates on 220 Volts A.C., 50 Hz and suitable for 20 / 26 cm. Long spectrum tubes.



PR-229 INDUCTION COIL

Adjustable vibrating arm, with tungsten contacts and coil with core mounted on rigid wooden base. Baised off switch to prevent continuous running. Input voltage 6V D.C. at 2A via 4 mm. socket terminals. Spark length obtainable in air 5 mm.



VAN DE GRAAF GENERATOR & WIMSHURT MACHINE

PR-230 VAN DE GRAAFF GENERATOR MOTOR DRIVEN

Specially designed for electrostatic experiments and where continuous source of high voltage is required. Fitted on base with smooth running A.C. Motor, operates on 220 volts A.C. 50 Hz.

SPECIFICATIONS

Charge collecting Belt : Silicon rubber having excellent insulation resistance.

Tracking : Belt-tracking easily adjusted.

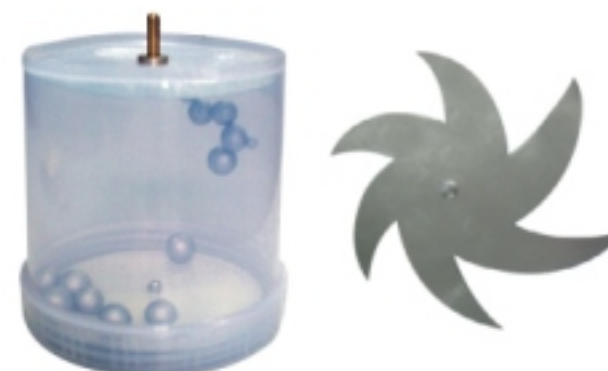
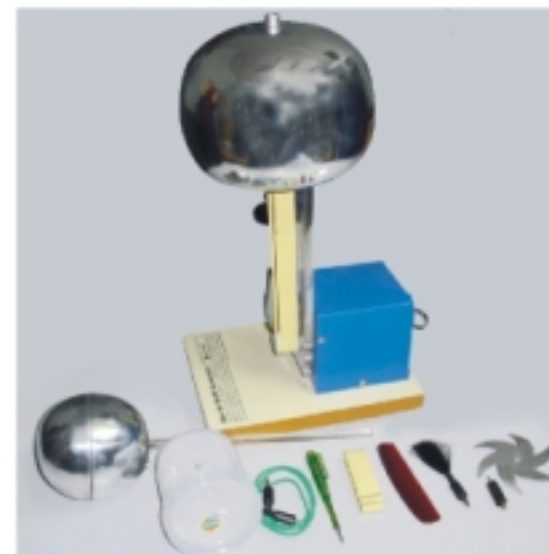
Charge collecting combs : Aluminium mesh, clearly visible.

Sphere : Aluminium 150 mm. dia.

Connections : 4 mm. sockets in dome and base.

Voltage developed : Upto 200 kV, depending on ambient conditions, with a spark length of 60 mm.

Discharger : Spherical 100 mm. dia., with insulated handle and 4 mm. sockets.



SET OF ACCESSORIES FOR
VAN DE GRAAFF

PR-231 VAN DE GRAAFF GENERATOR

Hand operated on base. The generator is self exciting and charge separation occurs. A metal sphere surrounds the upper pulley assembly and charge accumulates on the sphere, which is insulated by a plastic column supporting the pulley assembly. The charge builds up until electrical breakdown of air surrounding the sphere occurs. Supplied with a



PR-232 WIMSHURT MACHINE

The two plates are supported in two rigid uprights and driven by belt in opposite direction. They are heavy, high resistance plastic with sectors of aluminium sheet. Two leyden jars (condensers) made from corning glass and aluminium foil. The whole is mounted on a wooden base nicely polished.

Size :
A 200 mm. Dia.
B 250 mm. Dia.
C 300 mm. Dia



PICTURE - A



PICTURE - B

PICTURE - C

ELECTROSTATICS

PR-233A NYLON ROD

Length approx. 30 cm and 12mm dia.

PR-233B POLYTHENE ROD

For use as insulators. Length approx. 30 cm. and 13mm dia.

PR-233C FRICTION ROD, EBONITE

Length approx. 30 cm and 12mm dia.

PR-233D FRICTION ROD, COMPOUND

Half glass half-brass, length approx. 30 cm. and 13 mm dia.

PR-233E WOOL CLOTH PIECES

Square size 30 x 30 cm. approx.

PR-233F RUBBER SILK

Square size 30 x 30 cm. approx.

PR-233G SILK CLOTH PIECES

Square size 30x30 cm. approx.



PR-234 CARBON ELECTRODES, MOUNTED

Newly designed holder which can hold different type of electrodes. Complete assembly can be put on the top of the vessel/jar.



PR-235 BIOTS CONDUCTOR

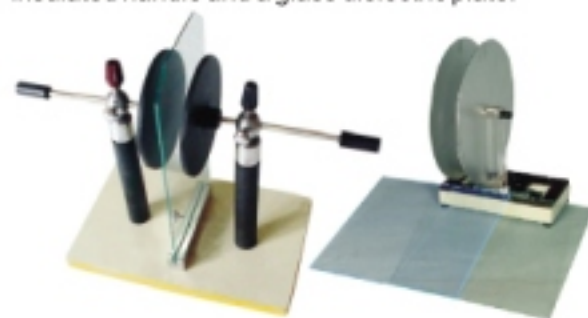
To demonstrate that charge resides only on outside surfaces of a conductor. Sphere of 5 cm. diameter on insulated stand, complete with hemispherical cups, having insulated handles.



SPHERICAL CONDUCTOR, CONICAL CONDUCTOR, CYLINDRICAL CONDUCTOR ARE ALSO AVAILABLE

PR-236 AEPINUS CONDENSER

It consists of two adjustable plates 100mm. dia. insulated handle and a glass dielectric plate.



PR-237 PROOF PLANE

Consisting of an ebonite rod with brass disc of 50 mm. diameter.



PR-238 DISCHARGER

Jointed, small plated brass sphered mounted on curved arms, with ebonite insulating handle. Overall length 30 cm. approx.



PR-239 GOLD LEAF ELECTROSCOPE

A plated brass pillar mounted on bakelite base supporting two pith balls in unspun silk.



PITH BALL & ELECTROSCOPES

PR-243 BRAUN ELECTROSCOPE

This rugged, sensitive electroscope can accept various accessories to change its capacitance. A sensitive aluminium vane is balanced in a vertical position on a metal support which is insulated from its base. The vane is easily observed and projected on a chalkboard (Light Source, not included) on which an arbitrary scale has been marked. Height without attachments is about 9". Four attachment, each equipped with a banana plug which fits the vane system top, are included : a 1" conducting sphere; a 3" conducting sphere; a proof plane with detachable insulating handle; and an aluminium cup (Faraday ice pail). Attachments can be charged using either our Electrophorus or our Power Supply (not included). With instructions.



PR-244 PRECISION PROJECTION ELECTROSCOPE

Project your measurements onto a screen for a large group to see with this well-made electroscope. Its cylindrical metal case has two parallel plane glass windows, both removable, through which you can shine a light for projection. Close fittings and quality materials insulate the leaf system so it stays charged for several days in dry weather. The case is mounted on a heavy metal base. The Precision Projection Electroscope comes complete. A metal cap is provided for shielding the projecting rod and knob, as well as a 3.5 cm. square piece of gold leaf. Includes instructions and experiments for use in projection or for direct viewing. Size : 23 cm. high case is 12 cm. diameter x 6 cm. thick.



PR-240 ELECTROSCOPE, PITH BALL

We have mounted an insulated stand on a solid round base. Over the hook at the stands end you dangle a silk thread with a light pith ball attached to each end. Pith balls react sensitively to static charges like those from a charged friction rod. Comes with 3 strings and six 8mm. pith balls.



PITH BALL

PR-241 ELECTROSTATIC KIT

Comprises of 1 electroscope, 4 metallised polystyrene spheres, 1 each reel nylon, cellulose acetate strip, polythene strip, wire stirrup, rubber cloth, wire hook, electrophorus on handle and proof plane, 2 each of polythene tiles and aluminium cans.



PR-242 OPEN CASE FORM ELECTROSCOPE

Inexpensive Charge Detector with Scale Charge is indicated by deflection of an aluminized plastic straw which rotates freely on the saddle of the conducting rod. The conducting rod is recessed in the metal housing to shield against air currents.

