

H30981

Basic Student Meter

NFU110



Purpose

This meter was originally designed to meet the Nuffield A-Level Physics specification 1002.

Apparatus details

The meter has two scales (2-0-10 and 1-0-5) and adding a shunt or multiplier converts it into a dual or triple range ammeter or voltmeter. A centre-zero version of this meter which takes the same range of accessories, is also available.

In some experiments, the meter may be used without a shunt or multiplier, in which case the full scale deflection is 100mV or 100 μ A.

Specification

Mass: 0.37kg

Dimensions: 150 x 100 x 70mm

1000 Ω movement, moving coil, scale length 74mm

Full scale deflection 20-1-100mV, 20-0-100 μ A (accuracy \pm 2% of f.s.d.)

A large range of A.C. and D.C. currents and voltages may be measured using the range of shunts and multipliers detailed below.

Diode Protection of the movement is incorporated and overload of at least 12 V D.C. can be tolerated.

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Shunts and Multipliers

A set of shunts and multipliers developed to withstand overload resulting from common student errors. When fitting a shunt or multiplier make sure the 4mm pins align with the sockets on the meter.

DC Ammeter Attachments

These units consist of suitable resistor networks mounted in a grey component channel fitted with three 4mm terminals as a common positive with two or more ranges.

H30932	1mA/ 10mA D.C. Shunt
H31201	50mA/ 100mA D.C. Shunt
H30427	1A/ 5A D.C. Shunt
H30385	2A/ 10A D.C. Shunt
H31043	5V/10V D.C. Multiplier
H31006	1V/5V D.C. Multiplier

AC Voltmeter and Ammeter Attachments

Similar to their D.C. equivalents except that appropriate rectifying or transformer circuits are included designed for 50/60Hz circuits.

H31080	10mA/ 50mA/ 100 mA A.C. Shunt
H30683	1A/ 5A/ 10A A.C. Shunt

Safety advice

For your safety, this product should be used in accordance with these instructions; otherwise, the protection provided may be impaired.

This unit is intended for use in DRY conditions. Avoid spillage of water and other liquids on to the unit. If spillage occurs, disconnect from the mains supply.

Disclaimer

If the equipment is used in a way not specified by Philip Harris, then the protection provided may be impaired.

Warranty, repairs and spare parts

The Basic Student Meter is guaranteed for a period of one year from the date of delivery to the customer. This warranty does not apply to defects resulting from the action of a user such as misuse, improper wiring, any operations outside of its specification, improper maintenance or repair, or unauthorized modification.

Our liability is limited to repair or replacement of the product. Any failure during the warranty period should be referred to Customer Services.

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In the event of a fault, the device should be referred to the Philip Harris recommended repair agent.

Disposal of Waste Electrical and Electronic Equipment (WEEE)



Do not dispose of this product with household waste

- For the proper treatment, recovery and recycling please take this product to an appropriate collection point.
- If you are unsure where this is, contact your Local Authority.
- By disposing of this product correctly you will be providing positive help to the environment.

Supplier details

Philip Harris Education, 2 Gregory Street, Hyde, Cheshire, SK14 4RH

Orders and Information Tel: 0845 120 4521

Fax: 0800 138 8881

Repairs

Tel: 0845 120 3211

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