

DRAPER

EN

Original Instructions
Version 3 - June 2026

POCKET **ANALOGUE MULTIMETER**

37317



**UK
CA** **CE**

Product Reference

User Manual for: Pocket Analogue Multimeter
Stock No: 37317
Part No: AMM1

Revisions

Version 1: March 2017
First release
Version 2: June 2023
Version 3: June 2026

1. Product Introduction

1.1 Intended Use

This device is designed to measure voltage, current and resistance across AC and DC circuits. It may also be used to test the voltage of 1.5V and 9V batteries. Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Part of our core range, this product is suitable for regular use by enthusiasts and tradespersons alike.

Read this manual in full before attempting to assemble, operate or maintain the product and retain it for later use.

1.2 Specification

Stock No.	37317
Part No.	AMM1
Multimeter rating	CAT II
Dimensions	W 62 x H 102 x D 35mm
Battery	1 x 1.5V AA (Not supplied)
Weight	125g
Circuit protection	500mA/250V fuse
DC voltage	
Input impedance	10KΩ/V
Measurement range	2.5, 10, 50, 250, 500V
Accuracy	±0.5%
AC voltage	
Input impedance	4.5KΩ/V
Measurement range	10, 50, 250, 500V
Accuracy	±0.5%
DC current	
Measurement range	500µA, 10mA, 250mA
Accuracy	±0.5%
Resistance	
Measurement range	2kΩ, 200kΩ (centre scale 3.6)
Battery test range	1.5V, 9V
Pollution degree	II
Operating conditions	
Ambient operating temperature	0–50°C
Ambient operating humidity	<80%

Important: Read all the Health and Safety instructions before attempting to use this product. Failure to follow these instructions may result in serious injury or death.



WARNING! Contact with live circuits can result in severe electrical shock. When measuring voltage above 30A, current above 10mA or AC power with an inductive load, take care not to touch the exposed contacts as they may give a serious electric shock.

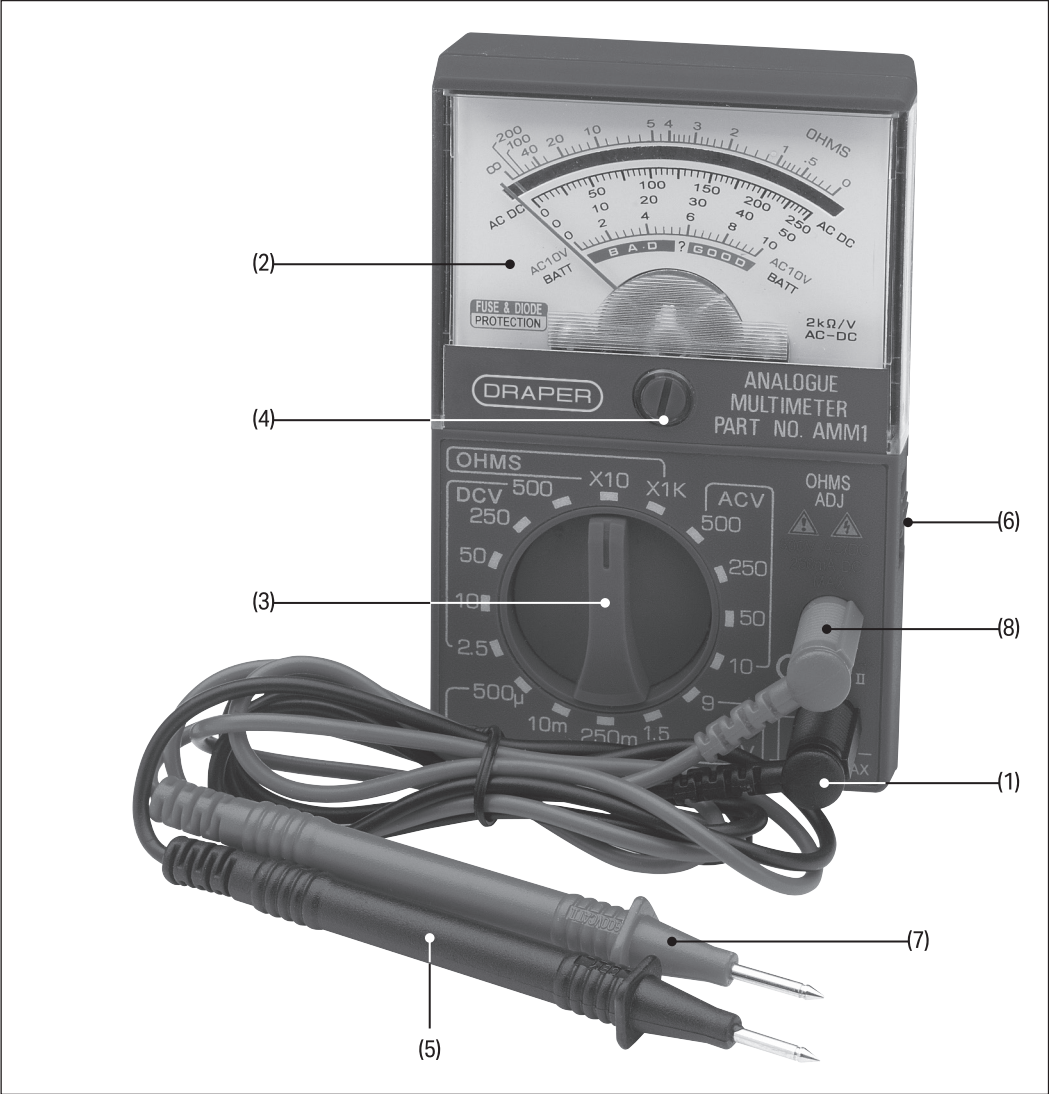
- **ONLY** trained and competent personnel may operate this device.
- Use this product **ONLY** as instructed in this manual.
- This product is rated for use on single-phase appliances, portable tools and other household loads **ONLY**.
- Use **ONLY** accessories and spare parts supplied by Draper Tools.
 - **DO NOT** use any other leads with this product than those supplied. Contact Draper Tools for replacement options if the leads become damaged.
 - If the battery or fuse must be replaced, use an item with the same rating.
- Observe all standard precautions and good practices when working with live electrical currents.
- Inspect the product for damage before every use, particularly the contact tips.
 - **DO NOT** use this product if the device or probe cables are damaged in any way or if there is evidence of battery leakage.
- Ensure that the device is clean, dry and free from grease before use.
- Ensure that the function dial is in the correct position before contacting a load with the probes.
- Ensure that the gauge needle is positioned at zero while the product is not in use.
- **DO NOT** use this product if it exhibits abnormal behaviour and have it checked by a qualified and authorised technician before next use.
- **DO NOT** exceed the maximum rated capacity per function for this device as it may expose you to a shock hazard.
- Ensure that the probe contacts are disconnected from the load or test circuit before moving the function dial.
- Assess any specific additional risks to the operator before each use.
- **DO NOT** expose this product to excessive ambient temperatures, high humidity, flammable substances or environments that produce a strong magnetic field.
- **DO NOT** use this this product around explosive gases, vapours or dust.
- **DO NOT** immerse this device in water or expose it to wet conditions.
- **ALWAYS** wear protective insulated gloves while using this product.
- Keep your fingers behind the guards at all times during use.
- **ALWAYS** remove the contact cables from the device before opening the back panel.
- **DO NOT** operate this device with the rear housing open or missing and **DO NOT** use it if the rear housing cannot be closed properly.
- **NEVER** insert the probe contacts into the device terminals.
- **DO NOT** abuse, mutilate or burn the battery.
- Remove the battery when the product is stored for extended periods.
- **DO NOT** attempt to repair this device; it contains no user-serviceable parts.
- Keep this product out of reach of children.



WARNING! ALWAYS ensure that the operator is not in contact with the ground while taking measurements, using insulating materials to prevent the current from earthing.

3. Identification and Unpacking

3.1 Product Overview



- | | |
|----------------------------------|---|
| (1) Common earth probe terminal | (5) Negative (black) probe |
| (2) Display gauge | (6) Resistance (Ohms) adjustment dial |
| (3) Function dial | (7) Positive (red) probe |
| (4) Manual zero adjustment screw | (8) Voltage, amperage and resistance probe terminal |

Important: Before operating this product, read and understand all the safety instructions listed in this manual.

Important: Inspect the device for signs of damage, particularly the probes and insulated cables. Replace faulty leads immediately.

For each measurement type, connect the positive probe (7) to the voltage, resistance and amperage probe terminal (8), and connect the negative probe (5) to the common earth probe terminal (1).

If the display gauge needle does not move during operation, check the polarity of the probes at the component contacts and the device terminals.

4.1 Installing the Battery

This product requires 1 x 1.5V AA battery (not supplied) to operate.



WARNING! To prevent an electric shock, the test cables MUST be disconnected from the device before accessing the battery.

1. Remove the screw on the back of the device to loosen the battery compartment cover.
2. Separate the front of the device from the rear casing at the divide around the tapered edge of the housing.
3. Install the battery between the two contacts above the circuit board, observing the polarity indicated.
4. Reassemble the device housing and tighten the rear screw securely.

4.2 The Function Dial

Use the function dial (3) to select the value that most accurately represents the anticipated measurement range from the appropriate measurement type. If the value to be measured is not known, set the function dial to the highest available range and reduce it until a suitable reading is displayed.

The dial can be rotated 360° through the following zones:

- DC voltage (DCV)
- AC voltage (ACV)
- DC current (DCA)
- Resistance (OHMS)
- Battery voltage (BATT V)

Important: Disconnect the probes from any load before adjusting the function dial.

4.3 Voltage Measurement

1. Use the function dial (3) to select the appropriate range from the DC voltage ranges or AC voltage ranges zone as appropriate.
2. Position the probe contacts across the source of the circuit to be measured, observing the correct polarity.
3. Enable power to the circuit to be measured and read the value from the appropriate scale on the gauge.
Important: If the reading is not appropriate for the circuit, disconnect the probes from the circuit and adjust the function dial to a more appropriate range.

4.4 DC Current Measurement

1. Use the function dial (3) to select the appropriate range from the DC current ranges zone.
2. Open the circuit to be measured and connect the probes in series, using the correct polarity, to bridge the gap.
3. Enable the power to the circuit to be measured and read the value from the appropriate scale on the gauge.
Important: If the reading is not appropriate for the circuit, disconnect the probes from the circuit and adjust the function dial to a more appropriate range.

4.5 Resistance Measurement

1. If the resistance to be tested is part of a circuit, switch the circuit off, disconnect the power and allow all capacitors to discharge before measurement.



WARNING! NEVER measure resistance across a voltage source or on a powered circuit.

2. Use the function dial (3) to select the appropriate range from the resistance ranges zone.
3. Touch the two probes together to short-circuit the leads and use the ohms adjustment dial (6) to set the gauge needle to a zero reading (top-right of the gauge).
4. Touch the probe contacts at either side of the resistance to be measured and read the value from the appropriate scale on the gauge.
Important: If the reading is not appropriate for the circuit, disconnect the probes from the circuit and adjust the function dial to a more appropriate range.

4. Operating Instructions

4.6 Battery Test Function

Important: This product can be used to test batteries of up to 9V.

1. Use the function dial (3) to select the battery test function.
2. Touch the probe contacts against the contacts of the battery, observing the correct polarity.
3. Read the value from the appropriate scale on the gauge.

Important: If the reading is not appropriate for the circuit, disconnect the probes from the circuit and adjust the function dial to a more appropriate range.

4.7 Manual Zero Adjustment

The needle of the display gauge (2) should rest at the far left of the scale when the device is not in use. If the needle does not return to this position, it can be manually adjusted by using a plain slot screwdriver to rotate the manual zero adjustment screw (4).

Important: After adjusting the zero screw, test the device to ensure that it delivers accurate readings and returns to the zero position as appropriate.

5. Product Care and Disposal

Important: Disconnect the probes from the terminals and any other source of voltage before performing any maintenance on this product.

5.1 Maintenance and Storage

- Keep the product clean and free from dust, debris and grease.
- Use a dry cloth **ONLY** to clean the housing of this device.



CAUTION! DO NOT use abrasives, solvents or other aggressive chemicals as these may damage plastic or insulated parts.

- Replace the probes **IMMEDIATELY** if they are damaged in any way or the conductors are exposed; contact Draper Tools for replacement options.

Important: Replacement probes must be rated CAT II.

- If the fuse must be replaced, access the device circuit board (see 4.1), remove the fuse from its holder and install an equivalent fuse in its place.

Important: This product requires a F200mA/250V fuse.

- Remove the battery when storing the device for extended periods.
- Store the device in a cool, clean and dry environment, out of direct sunlight and out of reach of children.

5.2 Disposal

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.
- **DO NOT** burn or mutilate batteries; this may release toxic or corrosive substances.
- Dispose of batteries separately and in accordance with local regulations.



6. Warranty

12 months from date of purchase -
visit drapertools.com/warranty for more information.

7. Explanation of Symbols



Read the instruction manual



Warning!



Warning! -
risk of shock



Do not incinerate or throw onto fire



Measures DC voltage



Measures AC voltage



Measures resistance



Measures the voltage of 1.5V and 9V batteries



Internal fuse rating



Requires 1 x 1.5V AA battery



WEEE -
Waste Electrical & Electronic Equipment
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish



European conformity



UK Conformity Assessed

Contact Details

Draper Tools Limited

Hursley Road
Chandler's Ford
Eastleigh
Hampshire
SO53 1YF
UK

Website: drapertools.com

Email: sales@drapertools.com

Product Helpline: +44 (0) 23 8049 4344

Telephone Sales Desk: +44 (0) 23 8049 4333

General Enquiries: +44 (0) 23 8026 6355

Draper Tools Europe B.V.

Oude Graaf 8
6002 NL
Weert
Netherlands

Please contact the Draper Tools Product Helpline for repair and servicing enquiries.