



EN

Original Instructions
Version 4 - March 2026

200 SERIES MULTIMETER

41817/41818



Stock No: 41817



Stock No: 41818



1. Preface

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

All photographs and drawings within this manual are supplied by Draper Tools to help illustrate correct operation of the product.

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

1.1 Product Reference

User Manual for: 200 series Multimeters.

Stock No: 41817/41818

Part No: DMM200/DMM201

1.2 Revisions

Version 1: March 2017
First release

Version 2: June 2017

Version 3: February 2023

Version 4: March 2026

As our manuals are continually updated, always ensure that the latest version is used.

Please visit drapertools.com/manuals for the latest version of this manual and the associated parts list, if applicable.

1.3 Understanding the Safety Content of This Manual



WARNING! – Situations or actions that may result in personal injury or death.



CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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In all cases, this copyright notice must remain intact.

1. Preface	2
1.1 Product Reference	2
1.2 Revisions	2
1.3 Understanding the Safety Content of This Manual	2
1.4 Copyright © Notice	2
2. Contents	3
3. Product Introduction	4-5
3.1 Intended Use	4
3.2 Specification	4
4. Health and Safety Information	6
5. Identification and Unpacking	7
5.1 Product Overview	7
5.2 Packaging	7
6. Preparation Instructions	8
6.1 Installing/Replacing the Battery	8
7. Operating Instructions	9-10
7.1 Function Buttons	9
7.2 Measurements	9
8. Maintenance	11
8.1 General Maintenance and Storage	11
9. Disposal	11
10. Warranty	11
11. Explanation of Symbols	11

3.1 Intended Use

This multimeter is designed to measure AC and DC voltage, DC current, resistance, diode, continuity and for transistor HFE testing.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.



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

3.2 Specification

Stock No.	41817	41818
Part No.	DMM200	DMM201
Multimeter Rating:	CAT III, 600V	CAT III, 600V
Battery Type (not supplied):	1 x 9V /Type PP3/6F22	1 x 9V /Type PP3/6F22
Fuse Protection:	F1 600mA/600V F2 10A/600V	F1 600mA/600V F2 10A/600V
Operating Conditions:		
Ambient temperature:	0 to 40°C	0 to 40°C
Storage temperature:	-10 to 60°C	-10 to 60°C
Humidity:	<85% RH	<85% RH
Dimensions:	150 X 74 X 43mm	150 X 74 X 43mm
Net weight:	233g	233g

3. Product Introduction

3.2 Specification

Measurement	Range	Accuracy	Resolution
DC Voltage	200mV	±0.8% reading, +4 digits	0.1mV
	2V		1mV
	20V	±0.8% reading, +5 digits	10mV
	200V		100mV
	600V		1V
AC Voltage Frequency range 40 - 400Hz	200V	±1.2% reading, +20 digits	100mV
	600V		1V
DC Current	2mA	±1% reading, 10 digits	1µA
	20mA		10µA
	200mA	±1.5% reading, +20 digits	100µA
	10A	±3% reading, +20 digits	10mA
Resistance (Ω)	200Ω	±1.5% reading, +25 digits	0.1Ω
	2kΩ	±0.8% reading, +20 digits	1Ω
	20kΩ		10Ω
	200kΩ		100Ω
	2MΩ	±2% reading, +25 digits	1kΩ
Temperature °C (Stock No. 41818)	-20°C to 400°C	±1.2% reading, +5 digits	1°C
	400°C to 1000°C	±2% reading, +15 digits	
Diode		Instant DC current approx. 1mA Reversed DC V approx.3V	1mV
Continuity		Buzzer beeps when resistance is <70Ω. Open circuit voltage: approx.3V.	
Transistor hFE Test NPN & PNP	0 - 1000	Test Current/Voltage I _b = 10 µA / V _{ce} = 3V	

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 30V, 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.

- **DO NOT** measure voltages above 600V.
 - **DO NOT** apply voltages to the probes whilst measuring current or diodes.
 - **DO NOT** measure maximum current 10A for more than 30seconds in a 15 minute period.
- **ONLY** trained and competent personnel may operate this device.
- Use this product **ONLY** as instructed in this manual.
- 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 fuses must be replaced, use an identical item with the same specification.
 - Replace the battery with one with the same specification.
- Observe all standard precautions and good practice 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 leads are damaged in any way or if there is evidence of battery leakage.
 - If battery acid comes into contact with your skin, wash it off immediately with plenty of clean water.
 - If battery acid comes into contact with your eyes, flush them with plenty of clean water and seek immediate medical attention.
- Ensure that the device is clean, dry and free from grease before 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.
- **DO NOT** measure resistors, capacitors or diodes whilst they are charged. Discharge fully before carrying out a measurement.
- 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 temperature, 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.
- **ALWAYS** keep your fingers behind the guards on the test probes during use.
- Ensure the selector dial is in the correct function mode before taking any measurements.
- **ALWAYS** turn the function dial to the '**OFF**' position and remove the probe leads from the device before opening the battery compartment cover.
- **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.



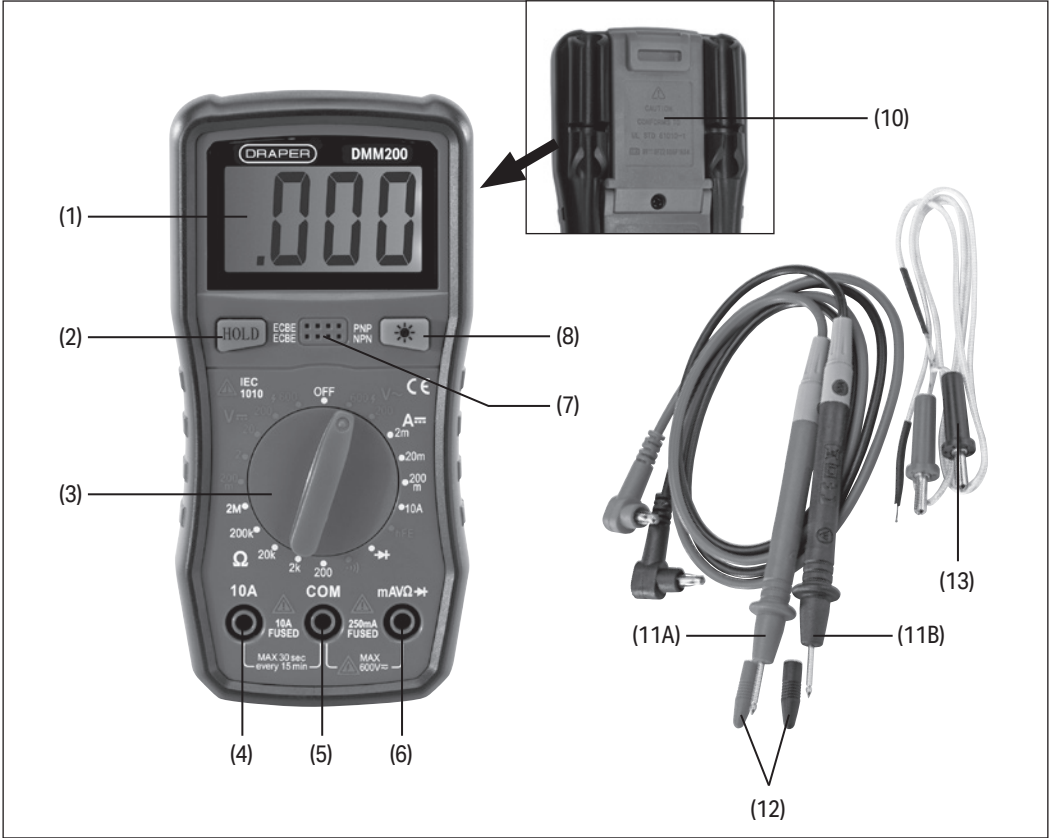
WARNING! ALWAYS ensure that the operator is not in contact with the ground while taking measurements, using insulating materials to prevent the current from earthing.

5. Identification and Unpacking

5.1 Product Overview

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment.


If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



- (1) LCD display
- (2) 'HOLD' button.
- (3) Measurement selector dial
- (4) 10A current terminal
- (5) (COM) Common earth probe (-) terminal
- (6) Voltage/Resistance/Temperature/Continuity/Diode (+) terminal
- (7) HFE transistor test/input socket
- (8) Backlight **ON/OFF** button
- (9) Battery compartment
- (10) Battery compartment cover/stand
- (11) 1 X Test leads
 - 11A (+) positive red lead
 - 11B (-) negative black lead
- (12) Test probe protective caps
- (13) Temperature probe (**41818 only**)

6.1 Installing/Replacing the Battery (Fig.1- Fig.2)

Important: Use **ONLY** a 9V (Type PP3/6F22) battery.

Replace the battery when the **'low battery icon'**  appears on the display screen.

1. Disconnect the test probes and ensure the selector dial (3) is in the **'OFF'** position before installing or removing the battery.

2. Undo the screw in the battery compartment cover (10) and lift off.

Fit the battery in the compartment (9), check that it is in the correct +/- orientation when installed.

3. Refit and screw the compartment cover back on.



Fig.1

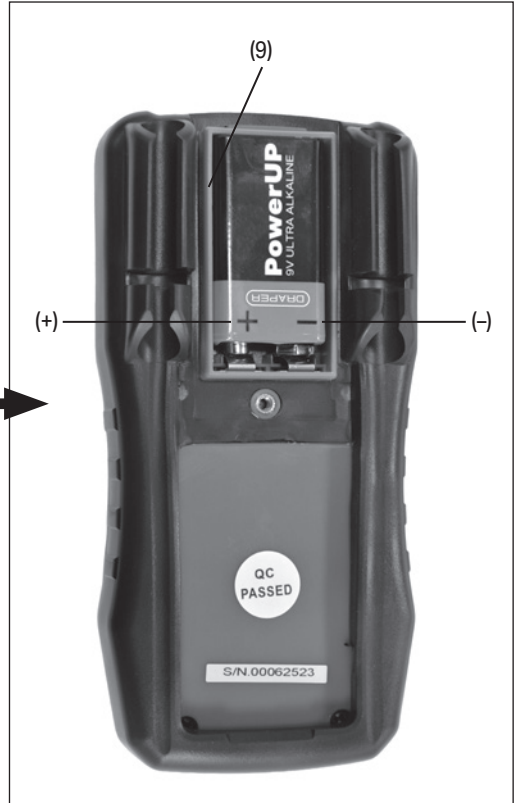



Fig.2

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 before each use. Replace faulty leads immediately.

7.1 Function Buttons








Button	Function
'HOLD'	<ul style="list-style-type: none"> Press to hold the value shown on the screen. To cancel press the button again or turn the selector dial.
Backlight 	Backlight <ul style="list-style-type: none"> To switch on the backlight – press and hold the backlight button (8) for more than 2 seconds. The light will switch off automatically after 15seconds.

7.2 Measurements

- Remove the protective caps (12) from the end of the test leads (11).
- For each measurement type, connect the positive (+) red probe (11A) to the voltage, resistance and temperature probe terminal (6) or 10A terminal (4), and connect the negative probe (-) black (11B) to the common earth probe terminal (5).
- If a negative value is shown on the display, check the polarity of the probes at the component contacts and the device terminals.
- Turn the measuring selector dial (3) to select the required measurement mode. **ALWAYS** return the dial to the '**OFF**' position once measuring is complete.

Measurement	Measuring Selector Dial Position	Action
DC Voltage		<ol style="list-style-type: none"> Move the dial to the 'DC voltage' range position. Contact the probes with the testing point. The voltage value and polarity will be displayed on the LCD screen (1). <p> CAUTION!</p> <ul style="list-style-type: none"> If the measurement is unknown, always set to the highest position. DO NOT measure voltage higher than 600V.
AC Voltage		<ol style="list-style-type: none"> Move the dial to the 'AC voltage' range position. Contact the probes with the testing point. The voltage value will be displayed on the LCD screen (1). <p> CAUTION!</p> <ul style="list-style-type: none"> If the measurement is unknown, always set to the highest position. DO NOT measure voltage higher than 600V.

7. Operating Instructions

Measurement	Measuring Selector Dial Position	Action
DC Current		<ol style="list-style-type: none">1. Connect the red positive probe with either the 10A (4) or mAVΩ (6) terminal.2. Connect the two probes to the testing points in series. The current value and polarity will be shown on the display. <p> CAUTION!</p> <ul style="list-style-type: none">• If unsure of the measured current range, start from 10A.• Maximum input current is 200mA for the VΩmA (6) terminal or 10A for terminal (4). Over current will damage the device.• DO NOT measure maximum current 10A for longer than 30 seconds in a 15minute period.• DO NOT apply any voltage to the probe during the current measurement.
Resistance		<ol style="list-style-type: none">1. Move the dial to the 'Ω' range position.2. Contact the probes to the resistor. <p> CAUTION!</p> <ul style="list-style-type: none">• When measuring resistance above 1MΩ, the reading may take a few seconds to stabilise.• If unsure of measured resistance, start from the highest range.• If there is an open circuit, '1' will be displayed.• Ensure all voltage sources are powered off and all capacitors have discharged before taking the measurement.
Diode		<ol style="list-style-type: none">1. Move the dial to the 'diode' position. (41818 combined diode/continuity position).2. Contact the probes with the testing points. <ul style="list-style-type: none">• The meter will show the approximate forward voltage drop of the diode.
Continuity		<ul style="list-style-type: none">• Move the dial to the  'continuity' position. (41818 combined diode/continuity position).• Connect the probes with two sides of the circuit, if the resistance is <70Ω the buzzer will sound. <p>Note: If there is an open circuit, '1' will be displayed</p>
Transistor Testing	hFE	<ul style="list-style-type: none">• Move the selector dial to the 'hFE' position.• Check whether 'NPN' or 'PNP' transistor is to be tested.• Insert the leads into the correct test holes (7).
Temperature (41818 only)	°C'	<ol style="list-style-type: none">1. Connect the temperature probe (13) to the COM and mAVΩ°C terminal (6).2. Move the dial to the '°C' position.

8. Maintenance

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

8.1 General 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 III 600V.

- If the low battery indicator () is shown on the display, replace the battery as soon as possible; **see 6.1 Installing/Replacing the Battery.**
- 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.

9. Disposal

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Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

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.

10. Warranty

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Warranty is 12 months from date of purchase.

Visit [drapertools.com/warranty/](https://www.drapertools.com/warranty/) for more information.

11. Explanation of Symbols



Read the instruction manual



Warning!



Warning! risk of shock



Do not incinerate or throw onto fire



Fuse protective device



Earthed



WEEE –

Waste Electrical & Electronic Equipment

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



UK Conformity Assessed



European conformity

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