

Compact Digital Multimeter CAT II 300V

Features

- Compact pocket digital Multimeter
- Suitable for carrying out basic AC/DC electrical measurements
- 3.5 digits (1999 count) LCD screen
- Sampling speed of 2 measurements per second
- Low battery indication
- Integral test leads clips on to the side of meter housing
- Overload protection
- Powered by 12V battery (included)



Safety Instructions

- These instructions should be read carefully and retained for future reference.
- Do not use the Meter if it is damaged or the case (or part of the case) is removed. Look for any cracks or missing plastic. Pay attention 2. to the insulation around the connectors.
- 3. Inspect the test leads for damaged insulation and exposed conductors.
- 4. Check the test leads for continuity.
- 5. Do not measure voltages exceeding the ratings marked on the Meter and between the terminals.
- To prevent damage to the meter, do not change the rotary switch settings/range during measurements. 6.
- When using the test leads, keep fingers behind the finger guard. 7.
- Take extra precaution when measuring voltages above 60V DC or 30V rms AC. 8.
- Do not store the Meter in an environment with high humidity and temperature, and in areas with strong magnetic fields. 9.
- 10. This product is suitable for indoor use only. Do not use in damp or wet conditions.
- 11. When not in use, store in a dry and secure place. Battery powered tools must not be stored in locations where the ambient temperature may increase above 40°C.
- 12. Replace the battery as soon as the battery indicator appears. With a low battery, the Meter may produce false readings that can lead to electric shock and personal injury.
- 13. Turn the meter off when not in use. If the meter is to be left unused for a long time, remove the battery.

Test Leads

Environmental Instructions

Product Panel Layout

This product may contain substances that can be hazardous to the environment if not disposed of properly. Electrical and electronic equipment and batteries should never be disposed of with general household waste but must be separated for its correct treatment and recovery. Where possible recycle your packaging.

LCD Display **Function Switch Rotary Switch** 20 V 500V 2000kΩ OFF CATI600V CATII300V AC-DC 500V MAX

Battery Replacement

Appearance of the battery symbol " on the LCD display indicates low battery. Replace the battery as soon as the low battery indicator appears.

Before replacing the battery, make sure lest leads are disconnected from any circuit under test.

Follow the steps below to replace the battery.

- Turn the rotary switch to OFF position 1.
- To remove the battery cover, unscrew the two screws at the rear of the device.
- 3. Remove the old battery and replace with a new one.
- Screw in place the battery compartment cover.

Technical Information

DC	V	olt	age
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De voltage			
Range	Resolution	Accuracy	
2V	1mV		
20V	10mV	±(0.8% of reading + 5D)	
200V	100mV		
500V	1V	±(1% of reading + 5D)	

Overload Protection: 220V rms AC for 200mV range and 500V DC or 500V rms for all ranges

Resistance

Range	Resolution	Accuracy
2ΚΩ	1Ω	
20ΚΩ	10Ω	1/10/ of reading (4D)
200ΚΩ	100Ω	±(1% of reading + 4D)
2000ΚΩ	1ΚΩ	

DC Current

Range	Resolution	Accuracy
200mA	100μΑ	±(2% of reading + 2D)

Overload Protection: PPTC Fuse 200mA/250V.

Measuring Voltage Drop: 200mV

Audible	Contin	uitv
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Range	Description
•)))	Built-in buzzer sounds if resistance is less than $30\pm20\Omega$

Overload Protection: 15 second maximum 220V rms

AC Voltage

Range	Resolution	Accuracy
200V	100mV	±(2% of reading + 5D)
500V	1V	

Shows RMS value when input impedance is $10 M\Omega$

Frequency Response: 45Hz ~ 450Hz

Overload Protection: 500V DC or 500V rms for all ranges

Note:

 Product calibration is guaranteed for 1 year, 23 °C, less than 80% RH

Operating Instructions

DC & AC Voltage Measurement

- 1. Set Function switch to \overline{V} (DCV) or \widetilde{V} (ACV), and the rotary switch to desired VOLTAGE range, if the voltage to be measured is not known beforehand, set switch to the highest range and reduce it until satisfactory reading is obtained.
- 2. Connect test leads to device or circuit being measured.
- 3. Turn on power of the device or circuit being measured voltage value will appear on Digital Display along with the voltage polarity.

DC Current Measurement

- 1. Set Function switch to \overline{A} , and the rotary switch to 200mA.
- 2. Connect the test leads in series with the test load whose current is to be measured.
- 3. Read the current value on Digital Display.

Resistance Measurement

- 1. Set Function switch to Ω , and the rotary switch to desired OHM range.
- 2. If the resistance being measured is connected to a circuit, turn off power and discharge all capacitors before measurement.
- 3. Connect test leads to circuit being measured.
- 4. Read the resistance value on Digital Display.

Diode Measurement

- 1. Set Function switch to Ω , and the rotary switch to \blacksquare \circledast .
- 2. Connect the red test lead to the anode of the diode to be measured and black test lead to cathode.
- 3. The forward voltage drop in mV will be displayed. If the diode in reverse polarity, the screen will display "1".

Audible Continuity Test

- 1. Set Function switch to Ω , and the rotary switch to -1.
- 2. Connect test leads to two points of the circuit to be tested. If the resistance is lower than $30\Omega\pm20\Omega$, the buzzer will sound.

General Spe	ecification
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Display	3.5 digits (1999 count)	Operating Conditions	0°C - 40°C @ <80%RH
Power (Battery)	12V 23A (included)	Storage Conditions	-10°C - 50°C @ <80%RH
Low Battery Indication	Yes	Dimensions:	120x70x20mm

