

- Manuals.plus /
- › ANENG /
- › ANENG 683 Smart Multimeter User Manual

ANENG Multimeter 683

ANENG 683 Smart Multimeter User Manual

Model: Multimeter 683

1. PRODUCT OVERVIEW

The ANENG 683 Smart Multimeter is a versatile digital instrument designed for accurate electrical measurements. It features a touch screen, auto-ranging capabilities, and a rechargeable battery, making it suitable for both professional electricians and DIY enthusiasts. This multimeter can measure a wide range of electrical parameters, ensuring comprehensive circuit analysis and troubleshooting.

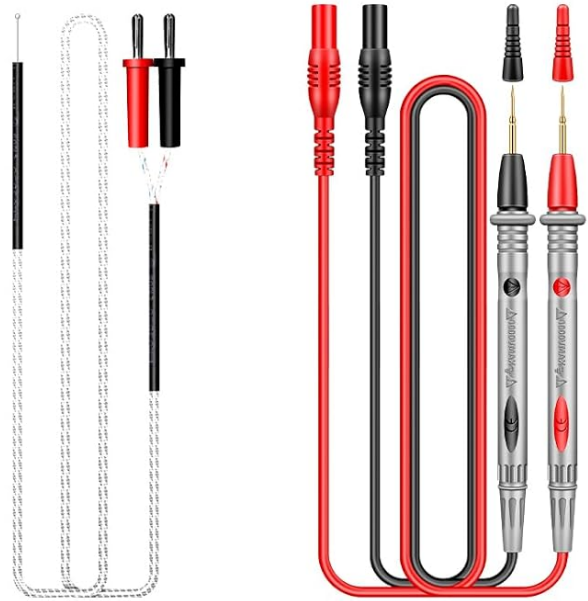


Figure 1: Front view of the ANENG 683 Smart Multimeter.

Key Features:

- **Multi-Function Measurement:** Measures AC/DC voltage, current, temperature, resistance, capacitance, frequency, continuity, NCV, and diodes. Includes live wire testing.
- **Smart Mode & Touchscreen:** Automatically identifies measurements and selects optimal ranges. Features a VA color reverse display with 6000 counts and data hold function.
- **Rechargeable & Portable:** Compact, phone-sized design with a rechargeable battery and Type-C charging. Auto-sleep/shutdown conserves power.
- **Safety Protection:** Double insulation and overload protection, continuity tester with buzzer, and high-quality test leads.
- **Built-in Flashlight:** Enhances readability in low-light conditions.

2. PACKAGE CONTENTS

Upon opening the package, please verify that all items are present and in good condition:

- 1 x ANENG 683 Digital Multimeter
- 1 x Test Lead Set
- 1 x Temperature Probe
- 1 x Type-C Charging Cable
- 1 x User Manual (this document)
- 1 x Storage Bag



Figure 2: Included accessories with the ANENG 683 Multimeter.

3. SETUP

3.1 Charging the Multimeter

The ANENG 683 Multimeter is equipped with a built-in rechargeable battery. Before first use, or when the low battery indicator appears, charge the device using the provided Type-C USB cable.

1. Connect the Type-C end of the charging cable to the multimeter's charging port (typically located on the side or top).
2. Connect the USB-A end of the charging cable to a standard USB power adapter (not included) or a computer's USB port.
3. The charging indicator on the multimeter will show the charging status. Disconnect the cable once fully charged.

SMART TOUCHSCREEN



Figure 3: Multimeter connected for USB charging.

3.2 Connecting Test Leads

Always ensure test leads are securely connected before taking measurements.

1. Insert the red test lead into the 'VΩmA' input jack.
2. Insert the black test lead into the 'COM' (common) input jack.
3. For high current measurements (e.g., 10A), insert the red test lead into the '10A' input jack.

4. OPERATING INSTRUCTIONS

The ANENG 683 features a 'Smart Mode' that automatically detects the measurement type. For specific functions, manual selection is also available via the touchscreen.

4.1 Power On/Off

Press and hold the power button located on the side of the multimeter to turn it on or off.

4.2 Smart Mode (Automatic Measurement)

In Smart Mode, the multimeter automatically identifies AC/DC voltage, resistance, and continuity. Simply connect the test leads to the circuit, and the device will display the appropriate measurement.



Figure 4: Automatic measurement in progress.

4.3 Specific Measurement Functions

Use the touchscreen interface to select specific measurement modes if not using Smart Mode or for functions not automatically detected.

- **Voltage Measurement (AC/DC):** Select ACV or DCV mode. Connect test leads in parallel to the circuit or component.
- **Current Measurement (AC/DC):** Select ACA or DCA mode. Connect test leads in series with the circuit. Ensure correct input jack (VΩmA or 10A) is used.
- **Resistance Measurement:** Select Ω mode. Ensure the circuit is de-energized. Connect test leads across the component.

- **Continuity Test:** Select continuity mode (often indicated by a buzzer icon). Connect test leads across the circuit. A beep indicates continuity.
- **Diode Test:** Select diode mode. Connect test leads across the diode. The display will show the forward voltage drop.
- **Capacitance Measurement:** Select Cap mode. Ensure the capacitor is discharged before testing.
- **Frequency (Hz) Measurement:** Select Hz mode.
- **Temperature Measurement:** Connect the temperature probe to the multimeter and place the probe tip on the object to be measured.
- **NCV (Non-Contact Voltage) Detection:** Activate NCV mode. Bring the top of the multimeter near a live wire. The device will indicate voltage presence without direct contact.
- **Live Wire Detection:** Select Live mode. Insert the red test lead into the live wire socket. The multimeter will indicate if it's a live line or zero line.



Figure 5: Examples of different measurement types.

ZERO/LIVE LINE DETECTION



Figure 6: Live and Zero Line Detection.

4.4 Flashlight Function

Press and hold the 'HOLD/Torch' button to activate or deactivate the built-in flashlight for illumination in dark work areas.

4.5 Data Hold

Press the 'HOLD' button to freeze the current reading on the display. Press again to release.

4.6 Instructional Video

Your browser does not support the video tag.

Video 1: Demonstrates various functions and usage of the ANENG 683 Smart Multimeter, including diode testing and other measurements.

5. MAINTENANCE

5.1 Cleaning

Wipe the multimeter casing with a damp cloth. Do not use abrasive cleaners or solvents. Ensure the device is off and disconnected from any power source before cleaning.

5.2 Battery Care

To prolong battery life, avoid fully discharging the battery frequently. Recharge the multimeter when the low battery indicator appears. If storing for an extended period, charge the battery to approximately 50% and recharge every few months.

5.3 Storage

Store the multimeter in its provided storage bag in a cool, dry place, away from direct sunlight and extreme temperatures. Keep out of reach of children.

5.4 Test Lead Inspection

Regularly inspect the test leads for any signs of damage, such as cracked insulation or exposed wires. Replace damaged leads immediately to ensure safety and accurate measurements.

6. TROUBLESHOOTING

- **Multimeter does not power on:** Ensure the battery is charged. Connect the Type-C charging cable and allow it to charge for a period before attempting to power on again.
- **Inaccurate readings:** Check that test leads are correctly and securely connected. Ensure the correct measurement mode is selected for the task. Verify the circuit is de-energized for resistance or continuity tests.
- **No display or partial display:** Recharge the battery. If the issue persists, contact customer support.
- **Continuity buzzer not working:** Ensure continuity mode is selected. Check test leads for damage.
- **Auto-ranging not functioning correctly:** Ensure the multimeter is in Smart Mode. If manually selecting a range, ensure it is appropriate for the expected value.

7. SPECIFICATIONS

PRODUCT DIMENSIONS



Figure 7: Product Dimensions.

ANENG 683 Multimeter

Functional Parameters

Function	Range	Resolution	Accuracy
AC voltage	0V-750V	0.001V-1.0V	$\pm(1.0\%+10d)$
DC voltage	0V-1000V	0.001V-1.0V	$\pm(0.8\%+10d)$
AC current	0mA-10A	1mA-0.01A	$\pm(2.5\%+10d)$
DC current	0mA-10A	1mA-0.01A	$\pm(2.5\%+10d)$
Resistance	0 Ω -60M Ω	0.1 Ω -0.01M Ω	$\pm(2.5\%+5d)$
Capacitance	0nF-100mF	0.01nF-0.1mF	$\pm(5.0\%+5d)$
Hz	0Hz-999.9kHz	0.001Hz-0.1kHz	$\pm(0.8\%+3d)$
Temperature	-40°C-1000°C	1°C	$\pm(1.9\%+5d)$
Temperature	-40°F-1832°F	1°F	$\pm(1.9\%+6d)$
NCV induction	✓	USB charging	✓
Zero Fire Line	✓	Touch screen	✓
Duty cycle%	✓	VA color display	✓
Buzzer	✓	Auto power off	✓
Diode	✓	Data retention	✓
Material	ABS/Silicone	Flashlight lighting	✓
Weight	About 217g	Silicone sheath	✓
Maximum count	6000 Counts	Low power	 symbol

The above parameters are for reference only, and the actual measurement of the specific equipment shall prevail!

Figure 8: Functional Parameters Table.

General Specifications

Parameter	Value
Brand	ANENG
Model	Multimeter 683
Power Source	Rechargeable (Corded Electric via USB-C)
Display	Touch Screen, VA Color Reverse Display, 6000 Counts
Maximum Operating Voltage	1000V DC
Item Weight	200 g

Parameter	Value
Material	ABS/Silicone
Included Components	Smart Multimeter, Test Lead, Temperature Probe, Charging Cable, Manual, Storage Bag

8. WARRANTY AND SUPPORT

ANENG provides dedicated technical support for its products. If you encounter any issues with your ANENG 683 Smart Multimeter that cannot be resolved using this manual or through standard troubleshooting, please contact the ANENG seller team directly. Your full satisfaction is our priority, and we are committed to assisting you with any concerns.

For support, please refer to the contact information provided with your purchase or visit the official ANENG brand store on Amazon.

© 2023 ANENG. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B0GSD77F7P>

More documents and user manuals: <https://manuals.plus/>