

ANENG A3009, AC28

ANENG A3009 Pen Type Digital Multimeter and AC28 Socket Tester User Manual

Comprehensive instructions for safe and effective use of your ANENG electrical testing devices.

1. INTRODUCTION AND SAFETY INFORMATION

This manual provides detailed instructions for the operation, maintenance, and troubleshooting of your ANENG A3009 Pen Type Digital Multimeter and ANENG AC28 Socket Tester. Please read this manual thoroughly before using the devices to ensure safe and correct operation.

1.1 Safety Precautions

- Always read and understand this manual completely before operating the devices.
- Do not use the devices if they appear damaged or are not functioning correctly.
- Ensure proper battery installation and replacement as described in this manual.
- Do not exceed the maximum input values specified for each measurement function.
- Exercise extreme caution when working with live electrical circuits. Always assume circuits are live until verified otherwise.
- The AC28 Socket Tester is designed for standard household outlets. Do not use it on industrial or non-standard outlets.
- If the AC28 Socket Tester indicates a wiring fault, consult a qualified electrician immediately.
- Keep the devices away from water, moisture, and extreme temperatures.

2. PRODUCT OVERVIEW

The ANENG A3009 Pen Type Digital Multimeter and AC28 Socket Tester are designed for various electrical testing applications, from basic household checks to more professional troubleshooting. The A3009 offers multiple measurement functions in a compact pen-style design, while the AC28 provides quick and clear indications of socket wiring status and leakage detection.



Figure 2.1: The ANENG A3009 Pen Type Digital Multimeter and AC28 Socket Tester, shown with included accessories such as test leads, batteries, and various probe tips.

2.1 Key Features of ANENG A3009 Pen Multimeter

- AC/DC Voltage Measurement
- Resistance Measurement
- Continuity Test
- Frequency Measurement
- Diode Test
- Live Wire Detection
- Non-Contact Voltage (NCV) Detection
- Voice Broadcast Function
- Phase Sequence Detection
- Data Retention (HOLD)
- Flashlight and VA Reverse Display Screen

- Automatic Shut-down (after 5 minutes of inactivity)



Figure 2.2: Detailed illustration of the ANENG A3009 Pen Multimeter's various functions and features, including voice broadcast, phase sequence detection, and NCV.

2.2 Key Features of ANENG AC28 Socket Tester

- One-click Leakage Detection (RCD Test)
- Wiring Status Indication (Correct, Open Ground, Open Neutral, Live/Neutral Reverse, Live/Ground Reverse, Open Live & Live Neutral Reverse)
- Digital Voltage Display



Digital display voltage

Figure 2.3: The ANENG AC28 Socket Detector, highlighting its LED indicators for wiring status and the digital voltage display.

3. SETUP

3.1 Battery Installation (A3009 Pen Multimeter)

1. Locate the battery compartment cover on the back of the A3009 multimeter.
2. Use a small screwdriver or coin to open the battery compartment.
3. Insert two (2) 1.5V AAA batteries, ensuring correct polarity (+/-).
4. Replace the battery compartment cover and secure it.

The AC28 Socket Tester does not require separate battery installation as it draws power directly from the outlet.

3.2 Attaching Test Leads/Probes (A3009 Pen Multimeter)

1. The A3009 comes with a detachable metal nib. To attach, screw the desired probe tip (e.g., pointed needle, U-

shaped insert) onto the end of the multimeter.

2. For certain measurements, connect the included test lead to the appropriate input jack on the multimeter.

Detachable Metal Nib



VA Reverse Display



Figure 3.1: The detachable metal nib of the ANENG A3009 Pen Multimeter, illustrating how different probe tips can be attached for various testing needs.

4. OPERATING INSTRUCTIONS: ANENG A3009 PEN MULTIMETER

4.1 Power On/Off

Press and hold the power button to turn the multimeter on or off. The device will automatically shut down after approximately 5 minutes of inactivity to conserve battery life.

4.2 Function Selection

Use the 'SELECT' button to cycle through different measurement functions such as AC/DC voltage, resistance, continuity, frequency, diode, live wire detection, and NCV. The selected function will be indicated on the VA reverse display screen.

4.3 Measurement Procedures

- **Voltage Measurement (AC/DC):** Select the appropriate voltage mode. Connect the probe to the circuit points to measure voltage.
- **Resistance/Continuity:** Select resistance mode. Touch the probes to the component. For continuity, a beep indicates a continuous circuit.
- **Live Wire Detection:** Select 'LIVE' mode. Touch the probe to the live wire. The device will indicate the presence of live voltage.
- **NCV (Non-Contact Voltage) Detection:** Select 'NCV' mode. Bring the tip of the multimeter close to a wire or outlet. The device will detect AC voltage without direct contact.
- **Phase Sequence Detection:** Select the phase sequence detection mode. Follow the on-screen prompts or voice broadcast instructions to test the phase sequence of a three-phase power supply.



Figure 4.1: The ANENG A3009 Pen Multimeter in action, demonstrating its capabilities for phase sequence measurement, live wire detection, and AC voltage measurement, accompanied by its voice broadcast feature.

4.4 Data Retention (HOLD)

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

4.5 Flashlight and Backlit Display

The A3009 features a built-in flashlight and a backlit VA reverse display screen for improved visibility in dimly lit environments. These features activate automatically or can be toggled via specific button presses (refer to on-device markings).

5. OPERATING INSTRUCTIONS: ANENG AC28 SOCKET TESTER

5.1 Basic Wiring Test

1. Plug the AC28 Socket Tester into a standard 3-prong electrical outlet.
2. Observe the LED indicators on the front panel. The combination of lit LEDs will indicate the wiring status of the outlet. Refer to the legend on the device for interpretation (e.g., Correct, Open Ground, Open Neutral, Live/Neutral Reverse).
3. The digital display will show the current voltage of the outlet.

Capable of Detecting the Most Common Wiring Faults



Figure 5.1: The ANENG AC28 Socket Detector illustrating its capability to detect common wiring faults such as lack of ground wire, phase-to-ground inversion, missing neutral line, and phase-to-ground error with lack of ground.

5.2 One-Click Leakage Detection (RCD Test)

The AC28 Socket Tester includes a leakage detection function to test Residual Current Devices (RCDs) or Ground Fault Circuit Interrupters (GFCIs) in the circuit.

1. With the AC28 plugged into the outlet and showing a 'Correct' wiring indication, press the 'LEAKAGE TEST' button.
2. If the receptacle trips (power cuts off), it indicates that the RCD/GFCI protection is functioning correctly.
3. If the receptacle does not trip, the RCD/GFCI may be faulty or absent. Consult a qualified electrician.



Figure 5.2: The ANENG AC28 Socket Detector demonstrating its one-click leakage detection feature, which tests the integrity of the circuit's protective measures.

5.3 Digital Voltage Display

The AC28 Socket Tester provides a clear digital display of the measured voltage, allowing for quick verification of power supply levels.



Figure 5.3: The ANENG AC28 Socket Detector displaying the measured voltage digitally, providing an immediate and clear reading of the outlet's power.

6. MAINTENANCE

- **Cleaning:** Wipe the devices with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the devices in a cool, dry place, away from direct sunlight and extreme temperatures. If storing for extended periods, remove the batteries from the A3009 multimeter.
- **Battery Replacement:** Replace the AAA batteries in the A3009 multimeter when the low battery indicator appears on the display to ensure accurate readings.
- **Automatic Shutdown:** The A3009 multimeter features an automatic shutdown function after 5 minutes of no operation to conserve battery power.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
A3009 does not power on	Dead or incorrectly installed batteries	Replace batteries, ensuring correct polarity.
Inaccurate readings on A3009	Incorrect function selected; low battery	Ensure the correct measurement function is selected. Replace batteries if low.
AC28 shows a wiring fault	Actual wiring issue in the outlet	Do not use the outlet. Consult a qualified electrician for inspection and repair.
AC28 leakage test does not trip	Faulty RCD/GFCI or no RCD/GFCI protection	Consult a qualified electrician to check the RCD/GFCI or install one if necessary.
A3009 display is dim or flickering	Low battery	Replace batteries.

8. SPECIFICATIONS

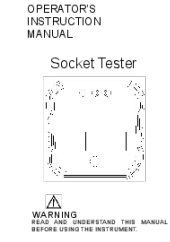

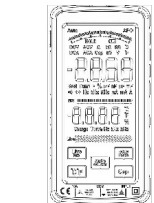

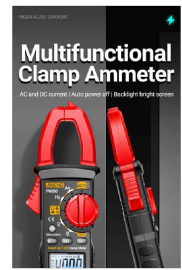
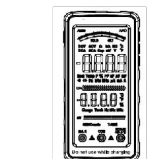
Feature	Detail
Brand	ANENG
Model (Multimeter)	A3009
Model (Socket Tester)	AC28
Power Source (A3009)	2 x 1.5V AAA Batteries
Measurement Type	Multimeter (A3009), Socket Tester (AC28)
Auto Shutdown (A3009)	Yes (after 5 minutes of inactivity)
Display (A3009)	VA Reverse Display, Backlit
Socket Tester Voltage (AC28)	250V 50Hz/60Hz
Socket Tester Leakage Current (AC28)	IΔn 6mA

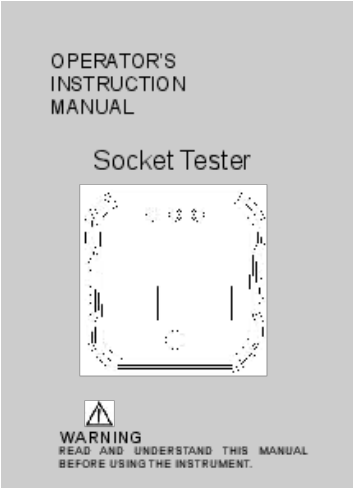
9. WARRANTY AND SUPPORT

ANENG provides lifetime service and technical support for this electrical tester. For any inquiries, technical assistance, or warranty claims, please contact ANENG customer support through the official channels provided at the point of purchase or on the ANENG brand website.

Please retain your purchase receipt as proof of purchase for warranty purposes.

Related Documents - A3009, AC28

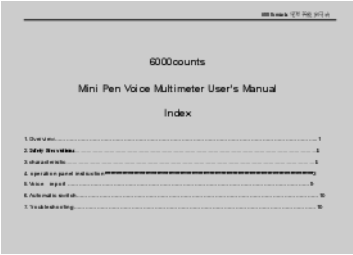
 <p>OPERATOR'S INSTRUCTION MANUAL</p> <p>Socket Tester</p> <p>WARNING READ AND UNDERSTAND THIS MANUAL BEFORE USING THE INSTRUMENT</p>	<p>ANENG Socket Tester Operator's Instruction Manual</p> <p>This manual provides instructions for the ANENG Socket Tester, detailing its functions for polarity detection, leakage switch testing, and voltage measurement. It includes technical specifications, safety warnings, operating procedures, and cleaning guidelines.</p>
 <p>High Precision Pen Multimeter</p> <p>Small portable digital pen multimeter, multifunctional non-contact induction detection</p>	<p>ANENG A3002 High Precision Pen Multimeter - Features and Specifications</p> <p>Explore the ANENG A3002, a portable digital pen multimeter offering high precision, non-contact voltage detection, and a bright HD screen. Learn about its features, measurement capabilities, and after-sales support.</p>
 <p>Touch Meter User Manual</p>	<p>ANENG 683 Touch Meter User Manual: Features, Specs & Operation Guide</p> <p>Comprehensive user manual for the ANENG 683 digital multimeter. Covers safety, specifications, measurement functions (voltage, current, resistance, etc.), and operational guidance for electrical testing.</p>
 <p>MULTIMETER MINI multimeter</p>	<p>ANENG M107 Mini Multimeter: Features, Specifications, and Usage Guide</p> <p>Discover the ANENG M107, a compact and intelligent smart digital multimeter. This guide covers its automatic measurement capabilities, AC/DC voltage and current testing, resistance measurement, NCV detection, flashlight, innovative storage, and detailed functional parameters.</p>
 <p>Multifunctional Clamp Ammeter</p> <p>AC and DC current (Auto power off) Backlight large screen</p>	<p>ANENG PN200 Multifunctional Clamp Ammeter: Features, Specifications, and Usage</p> <p>Explore the ANENG PN200, a versatile AC/DC clamp ammeter for electrical testing. Learn about its functions including current, voltage, resistance, capacitance, frequency, NCV detection, and its key specifications and accessories.</p>
 <p>Smart Meter User Manual</p>	<p>ANENG 681 Digital Multimeter User Manual - Features, Specifications, and Operation Guide</p> <p>Comprehensive user manual for the ANENG 681 Digital Multimeter. Learn about safety, specifications, test ranges, operation instructions, maintenance, and troubleshooting for this versatile measuring tool.</p>



[ANENG AC28 Socket Tester: Operator's Instruction Manual](#)

Operator's instruction manual for the ANENG AC28 Socket Tester, detailing its use for polarity detection, leakage switch testing, and voltage measurement. Includes technical specifications, safety warnings, and operating procedures.

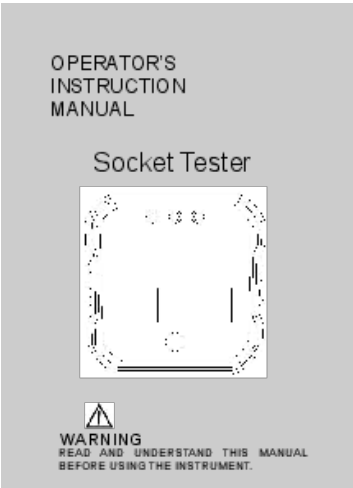
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[6000counts A3009 Mini Pen Voice Multimeter User Manual - Features, Specifications, and Operation](#)

Comprehensive user manual for the 6000counts A3009 Mini Pen Voice Multimeter. Learn about its features, safety precautions, technical specifications, operation, voice reporting, and troubleshooting.

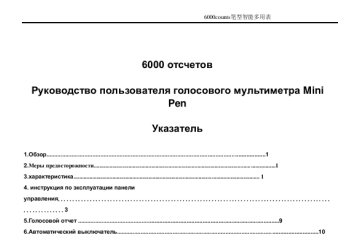
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[\[pdf\] User Manual Specifications](#)

1 Jinshui User manual ANENG AC28 Digital Socket TesterANENG LCD Tester 250V 50 60Hz Multi function Polarity Voltage Phase Detector EU US Universal Plug TesterSfacff7c5813046728b1d72c06f09c780Bae01 alicdn kf Sfacff7c5813046728b1d72c06f09c780B ||| OPERATOR S INSTRUCTION MANUAL Socket Tester WARNING READ AND UNDERSTAND THIS MANUAL BEFORE USING THE Operating instructions 1. Operation Panel Description Wiring indicator light LCD display screen **AC28** only Leakage test button 2. Voltage value display **AC28** only Note: The voltage value is onl...

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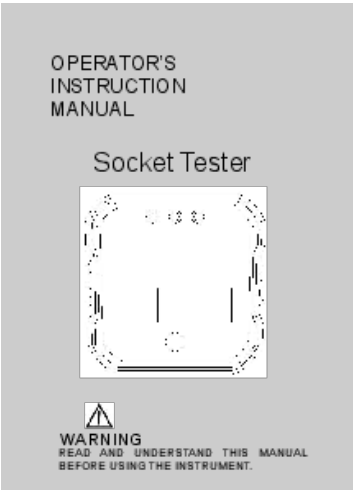


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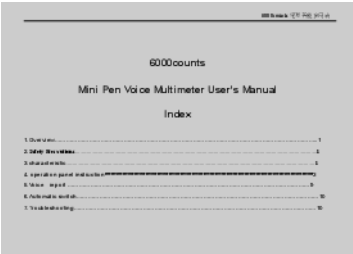
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[ANENG Socket Tester Operator's Instruction Manual](#)

This manual provides instructions for the ANENG Socket Tester, detailing its functions for polarity detection, leakage switch testing, and voltage measurement. It includes technical specifications, safety warnings, operating procedures, and cleaning guidelines.

lang:en score:23 filesize: 175.35 K page_count: 4 document date: 2024-11-28



[\[pdf\] User Manual Troubleshooting Guide](#)

Administrator User manual ANENG ANENGANENG A3009 Mini Digital Multimeter Smart Voice Broadcast Tester Pen Multimetro DC AC Voltage Meter Professional Test Tools

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5. Voice Report 9 6. Automatic Switch 10 7. Troubleshooting 10 6000counts I. Overview ||| 6000counts

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temperature 8/10 6000counts V. Voice Report **A3009** is a fully intelligent function prompt and digital voice reporting value table developed by ou...

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