

ANENG A3005

ANENG Pen-Type Digital Multimeter User Manual

Model: A3005 | Brand: ANENG

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1. INTRODUCTION

Thank you for choosing the ANENG A3005 Pen-Type Digital Multimeter. This device is a versatile and professional mini multimeter designed for a wide range of electrical applications. It combines the functions of a traditional multimeter with the convenience of a voltage test pen, making it an essential tool for electricians, technicians, and DIY enthusiasts. This manual provides detailed instructions for safe and effective use of your new multimeter.

2. SAFETY INFORMATION

Please read all safety warnings and operating instructions carefully before using this instrument. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always ensure the multimeter is in good working condition before use.
- Do not attempt to measure voltages or currents exceeding the specified maximum limits.
- Use caution when working with live circuits. Always assume circuits are live until proven otherwise.
- Wear appropriate personal protective equipment (PPE), such as safety glasses and insulated gloves.
- Do not use the multimeter if it appears damaged or if the test leads are frayed.
- Keep the device dry and clean. Do not operate in wet or damp conditions.
- Replace batteries promptly when the low battery indicator appears to ensure accurate readings.
- This device is for professional and DIY use. If you are unsure about any measurement, consult a qualified electrician.

3. PRODUCT OVERVIEW

The ANENG A3005 is a compact and versatile pen-type digital multimeter. It features a clear VA inverted display, a built-in flashlight, and various measurement capabilities.



Figure 3.1: ANENG A3005 Pen-Type Digital Multimeter, showing the main unit, detachable test lead, and two AAA batteries.

Key Features:

- **2-in-1 Design:** Functions as both a multimeter and a voltage test pen.
- **Comprehensive Measurements:** AC/DC Voltage, Resistance, Continuity, Diode, Capacitance (implied by feature bullets, though not explicitly listed in specs table).
- **Non-Contact Voltage (NCV) Detection:** Safely detects voltage without direct contact.
- **Live Wire Detection:** Identifies live wires for enhanced safety.
- **Built-in Flashlight:** Illuminates work areas in low light conditions.
- **VA Inverted Display with Backlight:** Clear and easy-to-read display, even in the dark.
- **Data Hold Function:** Freezes the displayed reading for convenient recording.
- **Automatic Power Off:** Conserves battery life by shutting down after 5 minutes of inactivity.
- **Portable Design:** Compact pen shape with an ergonomic clip for easy carrying.

Pen-type multimeter



Figure 3.2: Overview of the ANENG A3005's multi-functional capabilities.

2 in 1

Multimeter Test pencil



Figure 3.3: The 2-in-1 concept of the ANENG A3005, combining a multimeter and a test pencil.

4. SETUP

4.1 Battery Installation

The ANENG A3005 requires two 1.5V AAA batteries for operation. Follow these steps to install them:

1. Locate the battery compartment cover on the back of the multimeter.
2. Slide the cover open or remove it according to the design.
3. Insert two AAA batteries, ensuring correct polarity (+ and -) as indicated inside the compartment.
4. Replace the battery compartment cover securely.

Portable and Compact Two AAA batteries



Figure 4.1: Battery installation for the ANENG A3005.

4.2 Connecting the Test Lead

The multimeter comes with a detachable test lead. Connect it to the appropriate port on the multimeter for measurements requiring two probes.

1. Identify the COM (common) input jack on the multimeter.
2. Insert the black test lead plug into the COM jack.
3. The red test probe is integrated into the pen tip.

5. OPERATING INSTRUCTIONS

To turn on the multimeter, press the power button. The device will typically start in auto-ranging mode for common measurements.

5.1 AC/DC Voltage Measurement

The multimeter can automatically detect and measure both AC and DC voltage.

1. Ensure the multimeter is powered on.
2. Touch the red probe to the positive point of the circuit and the black test lead to the negative or common point.
3. The voltage reading will appear on the display.



Figure 5.1: Measuring voltage with the ANENG A3005.

5.2 Resistance and Continuity Test

To measure resistance or check for continuity:

1. Ensure the circuit or component is de-energized before testing resistance or continuity.
2. Touch the red probe and the black test lead to the two points of the component or circuit you wish to test.
3. For continuity, a beep will sound and the display will show a low resistance value if there is a continuous path.

4. For resistance, the value in Ohms (Ω) will be displayed.

5.3 Non-Contact Voltage (NCV) Detection

The NCV function allows you to detect AC voltage without physical contact, enhancing safety.

1. Press the NCV button (if available, or select NCV mode).
2. Bring the tip of the multimeter close to the wire or outlet you want to test.
3. The device will emit an audible alarm and/or visual indication (e.g., flashing light) if AC voltage is detected.



Figure 5.2: Non-Contact Voltage (NCV) detection.

5.4 Live Wire Detection

This function helps identify the live (hot) wire in an AC circuit.

1. Select the Live mode (if available).
2. Touch the red probe to the wire you suspect is live.

3. The multimeter will indicate if the wire is live, often with a specific icon or sound.

5.5 Flashlight Function

The built-in flashlight is useful for working in dimly lit environments.

- Press the flashlight button (or designated key) to turn the flashlight on/off.



Figure 5.3: Using the built-in flashlight.

5.6 Data Hold

To freeze the current reading on the display:

- Press the "HOLD" button. The reading will remain on the screen until the button is pressed again.

5.7 Automatic Power Off

To conserve battery life, the multimeter will automatically power off after approximately 5 minutes of inactivity.

- To reactivate the device, press any button or cycle the power.

6. MAINTENANCE

6.1 Cleaning

To ensure the longevity and accuracy of your multimeter:

- Wipe the casing with a damp cloth and mild detergent. Do not use abrasive cleaners or solvents.
- Ensure no moisture enters the device.

6.2 Battery Replacement

When the low battery indicator appears on the display, replace the batteries as described in the "Battery Installation" section (4.1). Always use fresh 1.5V AAA batteries.

6.3 Storage

If the multimeter is not used for an extended period, remove the batteries to prevent leakage and damage to the device. Store it in a cool, dry place away from direct sunlight and extreme temperatures.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not turn on.	Dead or incorrectly installed batteries.	Check battery polarity or replace with new AAA batteries.
Inaccurate readings.	Low battery; dirty probes; incorrect mode selection.	Replace batteries; clean probes; ensure correct measurement mode is selected.
No NCV detection.	NCV function not activated; no AC voltage present.	Ensure NCV mode is active; verify AC voltage is present in the area being tested.
Auto power off too quickly.	Normal operation (5 minutes inactivity).	This is a battery-saving feature. Press any button to reactivate.

8. SPECIFICATIONS

Feature	Detail
Brand	ANENG
Model Number	A3005
Measurement Type	Multimeter
Color	Black
Power Source	Battery Powered (2 x AAA, included)

Feature	Detail
AC Voltage Range	0.8V-600V
DC Voltage Range	0.8V-600V
Resistance Range	0.1Ω-40MΩ
Display Counts	4000 Counts
NCV Induction	Yes
Live-Null Line Judgment	Yes
Buzzer (Continuity)	Yes
Auto Power Off	Yes (after 5 minutes inactivity)
Package Dimensions	19.7 x 6 x 3.2 cm
Item Weight	130 grams

9. WARRANTY AND SUPPORT

ANENG Electrical Tester offers service and technical support for this product. For specific warranty details, please refer to the documentation included with your purchase or contact ANENG customer service directly. Keep your proof of purchase for warranty claims.

For technical assistance or inquiries, please visit the official ANENG website or contact their support channels. Always provide your product model number (A3005) when seeking support.

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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