

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

> [Agatige](#) /

> [Agatige ANENG Q1 Digital Multimeter and Insulation Resistance Tester User Manual](#)

Agatige ANENG Q1

Agatige ANENG Q1 Digital Multimeter and Insulation Resistance Tester User Manual

Model: ANENG Q1

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective operation of your Agatige ANENG Q1 Digital Multimeter and Insulation Resistance Tester. Please read this manual thoroughly before use and retain it for future reference.

The ANENG Q1 is a true RMS digital multimeter designed for professional and home use, offering precise measurements for various electrical parameters including AC/DC voltage, AC/DC current, resistance, temperature, continuity, and diode testing. It also features insulation resistance testing capabilities.

2. SAFETY INFORMATION

WARNING: To avoid electric shock or personal injury, read and understand all safety information before using this product.

- Always ensure the multimeter is in the correct function and range before connecting to a circuit.
- Do not use the meter if it or the test leads appear damaged.
- Do not apply more than the rated voltage, as marked on the meter, between the terminals or between any terminal and earth ground.
- Use extreme caution when working with voltages above 30V AC RMS, 42V peak, or 60V DC. These voltages pose a shock hazard.
- Keep your fingers behind the finger guards on the test probes during use.
- Replace the battery as soon as the low battery indicator appears to avoid incorrect readings.
- Do not operate the meter in explosive gas, vapor, or dust environments.
- Always disconnect power to the circuit and discharge all high-voltage capacitors before testing resistance, continuity, diodes, or insulation.

3. PACKAGE CONTENTS

Verify that all items listed below are present and undamaged. If any items are missing or damaged, contact your retailer.



Image: Contents of the Agatige ANENG Q1 Digital Multimeter package. This image displays the multimeter unit, a black storage bag, red and black test leads, a temperature sensor probe, and various small test probes and accessories.

- 1 x Agatige ANENG Q1 Digital Multimeter
- 2 x Test Leads (Red and Black)
- 1 x Temperature Sensor Probe
- 1 x Storage Bag
- 1 x User Manual (this document)
- Additional Test Probes/Accessories (as pictured)

4. PRODUCT OVERVIEW



Digital Multimeter

Displays values on a digital screen to help you control real-time condition of testing object

Image: Front view of the Agatige ANENG Q1 Digital Multimeter. The large digital display shows "0000 mV" and an analog bar graph. Below the display are buttons for power, NCV, function selection, range, hold, and Hz/%. Input jacks are located at the bottom.

4.1 Display Features

- **9999 Counts Digital Display:** Provides high-resolution readings.
- **Analog Bar Graph:** Offers a quick visual indication of measurement trends.
- **Backlight:** Improves visibility in low-light conditions.
- **Function Indicators:** Icons for AC/DC, units (V, A, Ω , $^{\circ}\text{C}$, $^{\circ}\text{F}$, Hz, %), and special modes (HOLD, MAX, MIN, REL).

4.2 Controls and Input Jacks

- **Power Button:** Turns the multimeter on or off.
- **Function Buttons:** Selects measurement modes (e.g., Voltage, Current, Resistance, Temperature, NCV).
- **RANGE Button:** Manually selects measurement range (if not in auto-ranging mode).
- **HOLD Button:** Freezes the current display reading.
- **Input Jacks:**
 - **COM:** Common terminal for all measurements (black test lead).

- **VΩHz**: Input for voltage, resistance, frequency, and diode measurements (red test lead).
- **mA/μA**: Input for milliampere and microampere current measurements (red test lead).
- **A**: Input for ampere current measurements (red test lead).

5. SETUP

5.1 Battery Installation

The multimeter requires batteries for operation. Refer to the battery compartment on the back of the device. Open the compartment, insert the batteries according to the polarity markings, and secure the cover.

NOTE: Replace batteries immediately when the low battery indicator appears on the display to ensure accurate measurements.

5.2 Connecting Test Leads

Always connect the black test lead to the **COM** jack. Connect the red test lead to the appropriate input jack based on the desired measurement:

- For Voltage, Resistance, Frequency, Diode, and Continuity: Connect the red lead to the **VΩHz** jack.
- For milliampere/microampere Current: Connect the red lead to the **mA/μA** jack.
- For Ampere Current: Connect the red lead to the **A** jack.



Image: The Agatige ANENG Q1 Digital Multimeter shown with its red and black test leads connected, alongside various interchangeable probes and clips, illustrating the versatility of the included accessories.

6. OPERATING INSTRUCTIONS

6.1 Power On/Off

Press the **Power** button to turn the multimeter on. The display will illuminate. To turn off, press and hold the **Power** button until the display turns off. The device also features an auto-power-off function to conserve battery life after a period of inactivity.

6.2 AC/DC Voltage Measurement

1. Connect the red test lead to the **VΩHz** jack and the black test lead to the **COM** jack.
2. Select the voltage measurement mode (AC V or DC V) using the function buttons.
3. Connect the test probes in parallel to the circuit or component you wish to measure.
4. Read the voltage value on the display.



Image: A person using the Agatige ANENG Q1 Digital Multimeter to take a measurement inside an electrical panel, demonstrating its application in real-world electrical work.

6.3 AC/DC Current Measurement

CAUTION: Never connect the test leads in parallel to a voltage source when measuring current. This can blow the fuse or damage the meter.

1. **Determine the expected current:** If the current is expected to be less than 999.9mA, connect the red test lead to the **mA/μA** jack. If it's expected to be higher, connect to the **A** jack. Connect the black test lead to the **COM** jack.
2. Select the current measurement mode (AC A or DC A) using the function buttons.
3. **Break the circuit:** Open the circuit where you want to measure current.
4. Connect the test probes in series with the circuit.
5. Read the current value on the display.

6.4 Resistance Measurement

CAUTION: Ensure the circuit is de-energized and all capacitors are discharged before measuring resistance.

1. Connect the red test lead to the **VΩHz** jack and the black test lead to the **COM** jack.
2. Select the resistance measurement mode (Ω).

3. Connect the test probes across the component to be measured.
4. Read the resistance value on the display.

6.5 Temperature Measurement

1. Connect the temperature sensor probe to the appropriate input jacks (usually VΩHz and COM, or dedicated temperature jacks if present).
2. Select the temperature measurement mode (°C or °F).
3. Place the tip of the temperature sensor on or in the object whose temperature you wish to measure.
4. Read the temperature value on the display.

Temperature Measuring Function

Test temperature of solution, liquid or jelly with probe
Can change the temperature unit between °C
Temperature Range: -20~1000°C / -4~1832°F
Temperature Resolution: 1°C



Image: The Agatige ANENG Q1 Digital Multimeter displaying a temperature reading while a yellow temperature probe is immersed in a glass of liquid, demonstrating its temperature measurement capability.

6.6 Continuity Test

CAUTION: Ensure the circuit is de-energized before performing a continuity test.

1. Connect the red test lead to the VΩHz jack and the black test lead to the COM jack.
2. Select the continuity test mode (usually indicated by a speaker icon).
3. Touch the test probes to the two points of the circuit or component you want to test.
4. If continuity exists (low resistance), the meter will emit an audible beep. The display will show the

resistance value.

6.7 Diode Test

CAUTION: Ensure the circuit is de-energized before performing a diode test.

1. Connect the red test lead to the **VΩHz** jack and the black test lead to the **COM** jack.
2. Select the diode test mode (usually indicated by a diode symbol).
3. Connect the red probe to the anode and the black probe to the cathode of the diode.
4. Read the forward voltage drop on the display. Reverse the probes; the display should show "OL" (Open Loop) for a good diode.

6.8 Insulation Resistance Test

WARNING: Insulation resistance testing involves applying high voltage. Ensure the circuit under test is completely de-energized and isolated from other equipment. Follow all safety precautions.

The ANENG Q1 can perform insulation resistance tests. Specific steps for this function may vary slightly. Generally:

1. Ensure the circuit is de-energized and safely isolated.
2. Connect the test leads to the appropriate jacks for insulation resistance (refer to the meter's markings, often VΩHz and COM, or dedicated insulation test terminals).
3. Select the insulation resistance test mode (often indicated by a symbol like MΩ or a specific button).
4. Apply the test probes to the points between which insulation resistance is to be measured (e.g., between a conductor and ground).
5. Initiate the test (often by pressing and holding a dedicated test button). The meter will apply a test voltage and display the insulation resistance in MΩ.
6. Release the test button and allow the circuit to discharge before disconnecting the probes.

6.9 Special Functions

- **Data Hold (HOLD):** Press the HOLD button to freeze the current reading on the display. Press again to release.
- **Maximum/Minimum Hold (MAX/MIN):** Some models allow you to record the maximum or minimum reading over a period. Consult the specific button on your device.
- **Backlight:** The backlight button illuminates the display for better visibility.
- **Non-Contact Voltage (NCV):** The NCV function allows detection of AC voltage without direct contact. Select NCV mode and bring the top of the meter near a live conductor. The meter will indicate the presence of AC voltage with an audible beep and/or visual indicator.

7. MAINTENANCE

7.1 Cleaning

Wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents. Keep the terminals free from dirt and moisture.

7.2 Battery Replacement

When the low battery indicator appears, replace the batteries immediately. Turn off the meter, disconnect all test leads, open the battery compartment on the back, replace with new batteries of the specified type, and securely close the compartment.

7.3 Fuse Replacement

WARNING: To prevent damage to the meter or injury, use only fuses with the specified amperage and voltage ratings.

If the current measurement function stops working, the fuse may be blown. Turn off the meter, disconnect all test leads, open the case (refer to specific instructions for your model, usually involves screws on the back), locate the fuse, and replace it with an identical type and rating.

8. TROUBLESHOOTING

- **Meter does not power on:** Check battery installation and charge level. Replace batteries if necessary.
- **No reading or "OL" (Overload) displayed:**
 - Ensure test leads are correctly connected to the meter and the circuit.
 - Verify the correct function and range are selected.
 - For current measurements, check if the fuse is blown.
 - "OL" can also indicate a value exceeding the meter's range or an open circuit.
- **Inaccurate readings:**
 - Check battery level.
 - Ensure test leads are not damaged and connections are secure.
 - Verify the correct measurement function and range.
 - Ensure the circuit is de-energized for resistance, continuity, and diode tests.

9. SPECIFICATIONS

Parameter	Value
Display	9999 Counts with Analog Bar Graph
True RMS	Yes
DC Voltage Range	Up to 1000V
AC Voltage Range	Up to 750V
DC Current Range	Up to 10A
AC Current Range	Up to 10A
Resistance Range	Up to 100MΩ
Temperature Range	-20°C to 1000°C / -4°F to 1832°F
Continuity Test	Audible beep at low resistance
Diode Test	Yes
Insulation Resistance	Up to 100MΩ (specific test voltages apply)
Non-Contact Voltage (NCV)	Yes
Auto Power Off	Yes
Dimensions	5.71 x 2.87 x 1.18 inches

Parameter	Value
Weight	0.4 Kilograms (14.11 ounces)
Safety Rating	CAT III 1000V, CAT IV 600V

Note: Specific ranges and accuracies may vary slightly. Refer to the product label or included documentation for precise details.

10. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the contact details provided by your retailer or visit the official Agatige website. Keep your purchase receipt as proof of purchase.

© 2024 Agatige. All rights reserved.