

ALLmeter ALL012-DEFBA

ALLmeter Digital Multimeter Tester User Manual

Model: ALL012-DEFBA

Brand: ALLmeter

1. INTRODUCTION

This user manual provides detailed instructions for the safe and effective operation of your ALLmeter Digital Multimeter Tester. This device is designed for precise and accurate electrical measurements, suitable for electronics hobbyists, DIY enthusiasts, professional electricians, automotive technicians, engineers, and students.

1.1 Product Overview

The ALLmeter Digital Multimeter Tester is a versatile and intelligent tool featuring a 6000-count display, auto-ranging capabilities, and True RMS measurement. It is designed for ease of use with a smart mode that automatically identifies common measurements, and a clear, backlit color screen for optimal readability.

Portable Design High Precision

No need to select a test mode to measure voltage or current, just plug in the test leads in automatic mode.

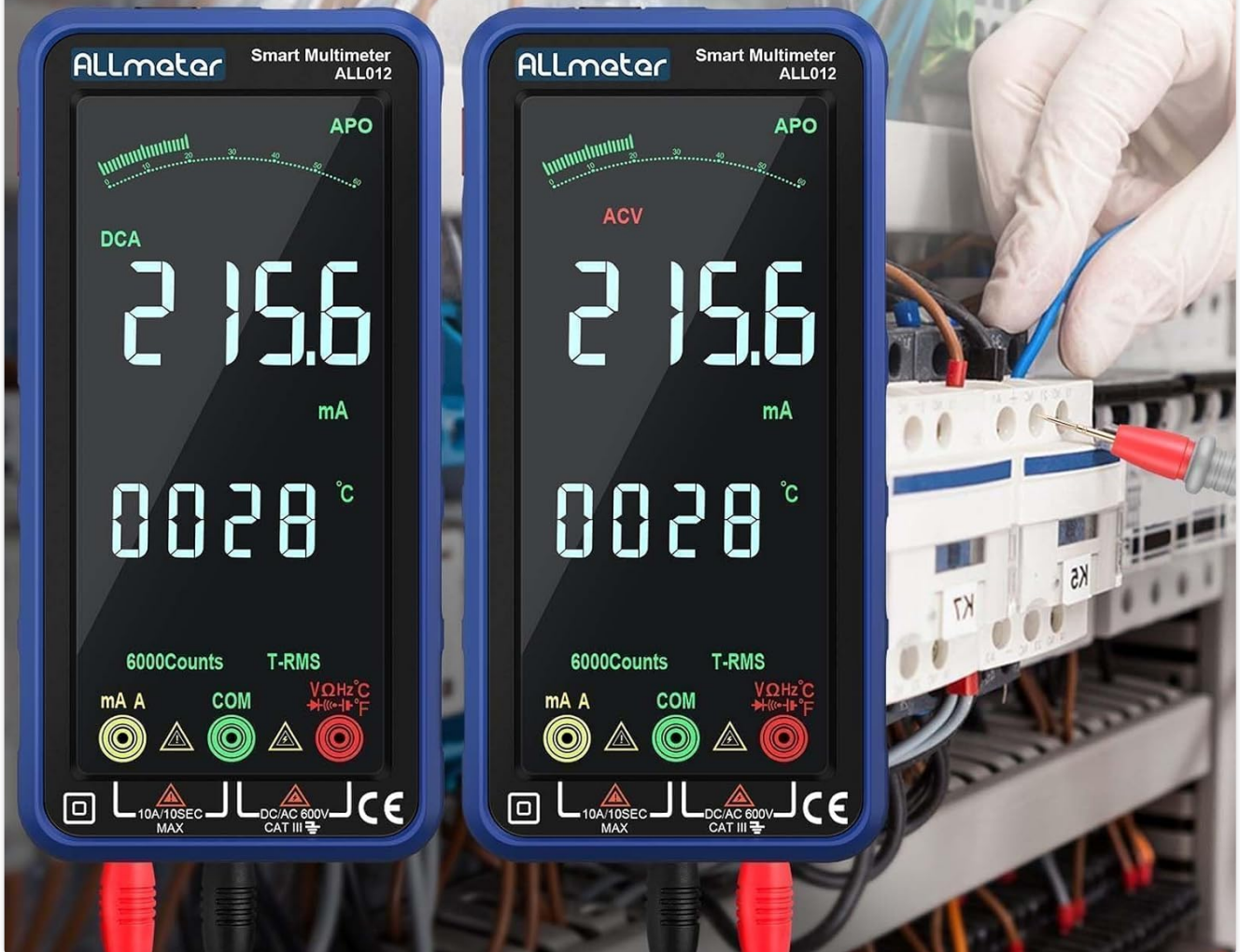


Figure 1: ALLmeter Digital Multimeter Tester showcasing its portable design and high precision.

1.2 Key Features

- **Smart Detection for Easy Measurements:** Automatic smart mode identifies AC/DC voltage, current, and resistance without manual switching. Auto-ranging simplifies testing for quick and precise measurements.
- **Clear and Convenient High-Definition Display:** 5.0-inch backlit color screen with dual-line displays for easy reading of volt, amp, and other measurements. Features an intuitive interface and data hold function.
- **Enhanced Safety Features:** Meets CAT II 1000 V and CAT III 600 V standards. Includes built-in fuse protection and non-contact voltage (NCV) detection for reliable and safe operation.
- **Versatile Measurement Capabilities:** Measures AC/DC voltage up to 1000 V, current up to 10 A, resistance, capacitance, and temperature. Provides True RMS and high accuracy for detailed analysis.
- **Portable and User-Friendly Design:** Compact and easy to carry, with a built-in flashlight and backlit screen for convenience.

2. WHAT'S IN THE BOX

Upon opening the package, please verify that all the following items are included:

- ALLmeter Digital Multimeter Tester
- Test Leads (Red and Black)
- Thermocouple (for temperature measurement)
- USB Type-C Charging Cable
- User Manual
- Carrying Case



Figure 2: Package contents of the ALLmeter Digital Multimeter Tester.

3. SETUP

3.1 Charging the Multimeter

The ALLmeter Digital Multimeter Tester is equipped with a rechargeable Lithium-Ion battery. Before first use, or

when the low battery indicator appears, charge the device using the provided USB Type-C cable.

1. Connect the USB Type-C cable to the charging port on the side of the multimeter.
2. Connect the other end of the USB cable to a standard USB power adapter (not included) or a computer USB port.
3. The charging indicator light will be **red** during charging. Once fully charged, the light will turn **green**.



Figure 3: USB charging port and indicator light.

3.2 Initial Power On

To power on the multimeter, long press the red power button located on the side of the device. The display will illuminate, and the device will typically start in automatic mode.

Smart Multimeter

Modes Automatiques



On/Off Switch

Long press to switch on/off



DCV / ACV



DCA / ACA



Buzzer



Indoor temperature



Figure 4: Power button and automatic mode display after startup.

4. OPERATING INSTRUCTIONS

The ALLmeter Digital Multimeter Tester offers both automatic and manual measurement modes for various electrical parameters.

4.1 Automatic Mode

In automatic mode, the multimeter intelligently identifies and measures AC/DC voltage, AC/DC current, and resistance. Simply connect the test leads to the circuit, and the device will automatically select the appropriate measurement function.

6000 counts 5 inch

Easy to read

Extra large, Colour, Backlit display



Figure 5: Automatic mode display.

4.2 Manual Measurement Functions

For specific measurements not covered by automatic mode, or to manually select a function, press the **SEL** button. Repeatedly pressing the **SEL** button cycles through available manual functions.

Professional Multimeter

T-RMS 6000 counts



Figure 6: Manual function selection buttons.

Manual functions include:

- Diode Test
- Resistance Measurement (Ω)
- Non-Contact Voltage (NCV) Detection
- Live Wire Testing
- Capacitance Measurement (μF , mF)
- Frequency Measurement (Hz, kHz, MHz)
- Temperature Measurement ($^{\circ}\text{C}$, $^{\circ}\text{F}$)

4.3 Data Hold Function

To freeze the current reading on the display, short press the **H/Y** button. Press it again to release the hold function.

4.4 Flashlight Function

The multimeter includes a built-in flashlight for working in dimly lit areas. Long press the **H/Y** button to turn the flashlight on or off.

Multi Functions



Temperature Measurement



NCV Measurement



LED Flashlight



Data hold

Figure 7: Multimeter demonstrating temperature measurement, NCV, flashlight, and data hold functions.

4.5 Operational Demonstration Video

Watch this video for a visual guide on the multimeter's features, including unboxing, charging, automatic mode, manual mode, data hold, and flashlight operation.

Your browser does not support the video tag.

Video 1: USB Rechargeable TRMS smart multimeter voltage Capacitance. This video demonstrates the unboxing, charging, automatic mode, manual mode selection, data hold, and flashlight functions of the ALLmeter Digital Multimeter.

5. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your multimeter.

- **Cleaning:** Use a soft, damp cloth to clean the exterior of the multimeter. Do not use abrasive cleaners or solvents. Ensure the device is powered off and disconnected from any power source before cleaning.
- **Storage:** Store the multimeter in a cool, dry place, away from direct sunlight and extreme temperatures. Use the provided carrying case for protection when not in use.
- **Battery Care:** Recharge the battery regularly, even if not frequently used, to maintain battery health. Avoid fully discharging the battery for extended periods.
- **Test Leads:** Inspect test leads for any signs of damage (cracks, frayed wires) before each use. Replace damaged leads immediately to ensure safety and accurate readings.

6. TROUBLESHOOTING

If you encounter issues with your multimeter, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Multimeter does not power on.	Low or depleted battery.	Charge the multimeter using the USB Type-C cable.
Inaccurate readings.	Damaged test leads; Incorrect measurement mode; Environmental interference.	Inspect and replace test leads if damaged. Ensure correct mode is selected. Move away from strong electromagnetic fields.
Display shows "OL" (Overload).	Measurement exceeds the range of the selected function.	Switch to a higher range if available, or ensure the measurement is within the device's specifications.
No NCV detection.	Not close enough to live wire; Wire is shielded.	Ensure the NCV sensor is close to the live wire. Note that shielded wires may not be detected.
Screen discoloration/damage.	Physical pressure or impact.	Handle with care. Consider a screen protector if available.

7. SPECIFICATIONS

Detailed technical specifications for the ALLmeter Digital Multimeter Tester:

Feature	Specification
Product Dimensions	5.71 x 2.76 x 0.87 inches
Item Weight	1.1 Pounds (0.5 Kilograms)
Item Model Number	ALL012-DEFBA
Batteries	1 Lithium Ion battery (included)
Display Counts	6000 Counts
Display Type	5.0 inch Backlit Color Screen
True RMS	Yes

Feature	Specification
Safety Rating	CAT II 1000 V, CAT III 600 V
Non-Contact Voltage (NCV)	Yes
Auto-Ranging	Yes
Power Source	Battery Powered
Color	BLUE
Country of Origin	China

8. WARRANTY AND SUPPORT

ALLmeter products are manufactured to high-quality standards. For information regarding warranty coverage, technical support, or service, please refer to the contact details provided in the product packaging or visit the official ALLmeter website. Keep your purchase receipt as proof of purchase for any warranty claims.

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Related Documents

<div><div>Overview</div><div>6000counts is a pocket 3 1/2 true effective value, pen type intelligent multimeter. It does not need to turn the dial to select the function. According to the difference of input voltage/resistance, the instrument will automatically identify and measure. The machine has stable performance, high accuracy, high reliability, clear reading and overload protection function. Driven by a AAA 1.5V battery, the instrument uses a large screen LCD display with boost power supply. Even at the edge of a 0.8V low battery, the backlight and the ultra-high brightness of the flashlight can be guaranteed. The meter is portable and is extremely popular with users. This series of instruments can automatically identify DC voltage and AC voltage, resistance, without any switching, and can also manually switch to measure diodes. Non-contact voltage measurement and zero-fire line measurement are excellent tools and meters, and are ideal tools for laboratories, factories, radio lovers and families.</div><div>EN-01</div></div>	<div>ALLmeter 6000 Counts Pen Type Intelligent Multimeter User Manual</div> <div>User manual for the ALLmeter 6000 Counts pen-type intelligent multimeter. Covers overview, safety precautions, general and technical characteristics, operation panel description, technical indicators for DCV/ACV, resistance, and diode measurements, troubleshooting, and warranty information.</div>
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