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ALLmeter ALLWT325A

ALLmeter FS899L Digital Smart Multimeter User Manual

Model: ALLWT325A

1. INTRODUCTION

The ALLmeter FS899L is a USB rechargeable digital smart multimeter designed for accurate measurement and testing of various electrical parameters. It features auto-ranging capabilities and a large, backlit color display for clear readings in diverse environments. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your device.

2. KEY FEATURES

- **Multifunctional Measurement:** Supports AC/DC voltage and current, resistance, capacitance, diode, continuity, NCV (Non-Contact Voltage) detection, and Live Check.
- **Large Display:** 4.8-inch, 6000-count high-definition color display with backlight for visibility in low-light conditions.
- **Integrated Flashlight:** Built-in flashlight for illuminating work areas.
- **User-Friendly Design:** Automatic shutdown feature to conserve battery life and an analog bar display for quick readings.
- **Portable and Rechargeable:** Compact size with a built-in USB rechargeable lithium battery.
- **Environmental Temperature Display:** Shows real-time environmental temperature in Celsius.

TRMS 6000 Counts Voltmeter



Figure 2.1: Multimeter display with icons indicating various measurement capabilities.

3. PRODUCT COMPONENTS

The ALLmeter FS899L package includes:

- ALLmeter FS899L Digital Smart Multimeter
- Test Leads (1 pair)
- Charge Cable (USB)
- Protective Bag
- User Manual
- Small Alligator Clips (for convenient test lead connections)

4. SETUP

4.1 Initial Charging

Before first use, fully charge the multimeter using the provided USB cable. Connect the micro USB end to the multimeter's charging port (located at the top) and the standard USB end to a compatible USB power adapter or computer port.

Built in USB Rechargeable

Avoid frequently battery replacement



Others: Need to install /
replace batteries
frequently

Figure 4.1: Charging the multimeter via USB. The device features a built-in rechargeable battery, eliminating the need for frequent battery replacements.

4.2 Connecting Test Leads

Insert the red test lead into the 'VΩHz' jack and the black test lead into the 'COM' jack for most measurements. For current measurements (Amperage), refer to the troubleshooting section regarding manual inaccuracies.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off and Auto-Ranging

Press and hold the power button (located on the right side) to turn the device on or off. The multimeter defaults to 'Auto' mode, which automatically selects the appropriate measurement range for voltage, resistance, and capacitance.

5.2 Measurement Modes

The power button also functions as a mode selector. Short press the power button to cycle through different measurement functions such as capacitance, resistance, and diode testing. The display will indicate the active mode.



Figure 5.1: Measuring AC and DC Voltage. The multimeter automatically detects and displays the voltage type and frequency (for AC) or temperature (for DC).

5.3 NCV (Non-Contact Voltage) Detection

To activate NCV mode, press the NCV/Flashlight button (top right side). The device will indicate the presence of AC voltage without direct contact, providing an audible and visual alarm. This feature is useful for quickly checking if an outlet or wire is live.

Non-contact Voltage Detection

Light and Sound Alarm If Detect AC Voltage



Lightweight Portable



Handy Size

Figure 5.2: Using the NCV function to detect live voltage without physical contact.

5.4 Flashlight and Backlight

Press and hold the NCV/Flashlight button to turn the built-in flashlight on or off. The display backlight is automatically activated when the device is on, ensuring readability in various lighting conditions.

4.7 Inch Large Screen

Easy to read



Figure 5.3: The large display and integrated flashlight for enhanced usability.

5.5 Data Hold

Short press the 'Hold' button (middle button on the right side) to freeze the current reading on the display. Press it again to release the hold function.

5.6 Video Demonstration of Features

Video 5.1: This video demonstrates the ALLmeter FS899L multimeter's compact form factor, button functions including NCV and Hold, and its auto-switching/ranging capabilities for various measurements like resistance and capacitance. It also highlights the use of standard test leads and alligator clips, and discusses the temperature display in Celsius and the continuity beeper.

6. MAINTENANCE

6.1 Charging

The multimeter is equipped with a built-in USB rechargeable lithium battery. Recharge the device when the battery indicator shows low power. Use the provided USB cable for charging.

6.2 Cleaning and Storage

Clean the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Store the multimeter in its

protective bag in a cool, dry place away from direct sunlight and extreme temperatures when not in use.

7. TROUBLESHOOTING

- **Display Readability in Sunlight:** The display may be difficult to read in direct sunlight. Adjust the angle of the device for better visibility.
- **Temperature Unit:** The device displays temperature in Celsius only. There is no option to change this to Fahrenheit.
- **Current Measurement Ports:** The included manual may contain inaccuracies regarding the correct ports for current measurement. Always use the dedicated Amperage (A) port for current measurements, not the VΩHz port, to avoid damage to the device or inaccurate readings.
- **Continuity Beeper:** The continuity test features an audible beeper. There is no function to disable this beeper.
- **Accuracy:** Readings may show slight variations compared to higher-end or calibrated testers. For critical applications, verify readings with a known accurate device.
- **Screen Off Mode:** The 'screen off' function only turns off the display backlight to save battery, the device remains operational.

8. SPECIFICATIONS

Specification	Value
Brand	ALLmeter
Model	ALLWT325A
Power Source	Battery Powered (USB Rechargeable)
Style	6000 Counts Smart Multimeter
Color	RED/BLACK
Item Weight	1 Pounds
Measurement Type	Multimeter, Voltmeter
Specification Met	MSDS Certified (Battery)
Manufacturer	ALLmeter

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the contact information provided with your purchase documentation or visit the official ALLmeter website. Keep your purchase receipt as proof of purchase.