BSIDE O1 Green

BSIDE Handheld Oscilloscope Multimeter O1 Green User Manual

Model: O1 Green | Brand: BSIDE

Introduction

The BSIDE O1 Green Handheld Oscilloscope Multimeter is a versatile 2-in-1 device designed for comprehensive electrical testing. It combines the functionalities of a true RMS digital multimeter with a graph scope, making it suitable for various applications including HVAC, electronics, and automotive maintenance. Featuring a clear 2.8-inch TFT LCD color display, it provides accurate measurements and waveform visualization.

Image: The BSIDE O1 Green device, highlighting its dual functionality as both a multimeter and an oscilloscope.

What's in the Box

Your BSIDE O1 Green package includes the following components:

- 1 x Handheld Oscilloscope Multimeter
- 1 x Test Leads
- 1 x Carrying Case
- 1 x Charging Cable
- 1 x User Manual

Image: All items included in the product package: the oscilloscope multimeter, test leads, carrying case, and charging cable.

Setup

Charging the Device

The BSIDE O1 Green is equipped with a rechargeable battery. Before first use, or when the low battery indicator appears, connect the device to a power source using the provided charging cable. The charging port is located under a protective cover on the device.

Image: The device connected to a charging cable, illustrating the charging process.

Connecting Test Leads

Insert the red test lead into the "INPUT" or "VΩ" jack and the black test lead into the "COM" jack for most measurements. For current measurements, use the "10A FUSED" or "6A" jack for the red lead, depending on the expected current range.

Operating Instructions

General Operation

The device features a 2.8-inch color TFT screen for clear display of measurements and waveforms. Use the navigation buttons (up, down, left, right) and the 'AUTO' and 'FUNC' buttons to navigate menus and select modes.

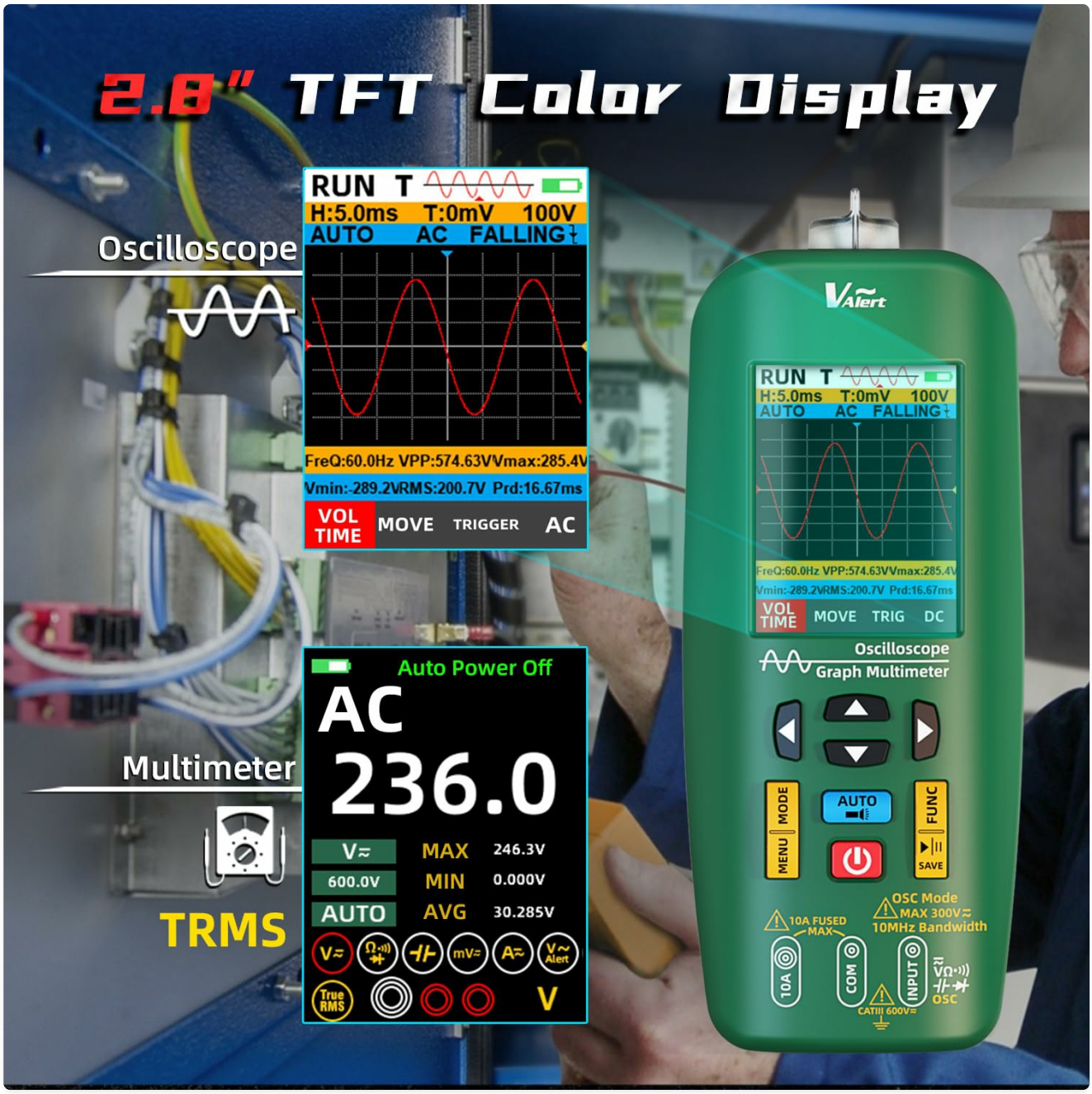

Image: A close-up view of the device's 2.8-inch TFT color display, showing both oscilloscope and multimeter readings.

Multimeter Mode

In Multimeter Mode, the device functions as a true RMS digital multimeter. It can measure a variety of electrical parameters:

- **Voltage:** AC and DC voltage measurement.
- **Current:** AC and DC current measurement (up to 10A).
- **Resistance:** Measures electrical resistance.
- **Capacitance:** Measures capacitance values.
- **Diode:** Tests diodes within 3V.
- **Continuity:** Checks for circuit continuity with an audible alert.
- **V-Alert (Non-Contact Voltage Detection):** Detects AC voltage without direct contact.
- **Live Wire Check:** Identifies live wires.
- **MAX/MIN/AVG:** Displays maximum, minimum, and average values during measurements.

To switch between measurement functions within Multimeter Mode, press the**FUNC** button. The **AUTO** button

enables auto-ranging for most measurements.

Oscilloscope Mode

The Oscilloscope Mode allows for waveform visualization and analysis. Key features include:

- **Bandwidth:** 10MHz.
- **Real-time Sample Rate:** 48MSa/s.
- **Auto-Calibration:** Ensures accurate readings.
- **Memory Function:** Stores waveform data.
- **Horizontal SEC Range:** 100ns/div - 20s/div.
- **Vertical Sensitivity:** 20mV/div - 100V/div.

Use the navigation buttons to adjust the time base, voltage division, and trigger settings. The**AUTO** button can automatically set optimal display parameters for the input signal.

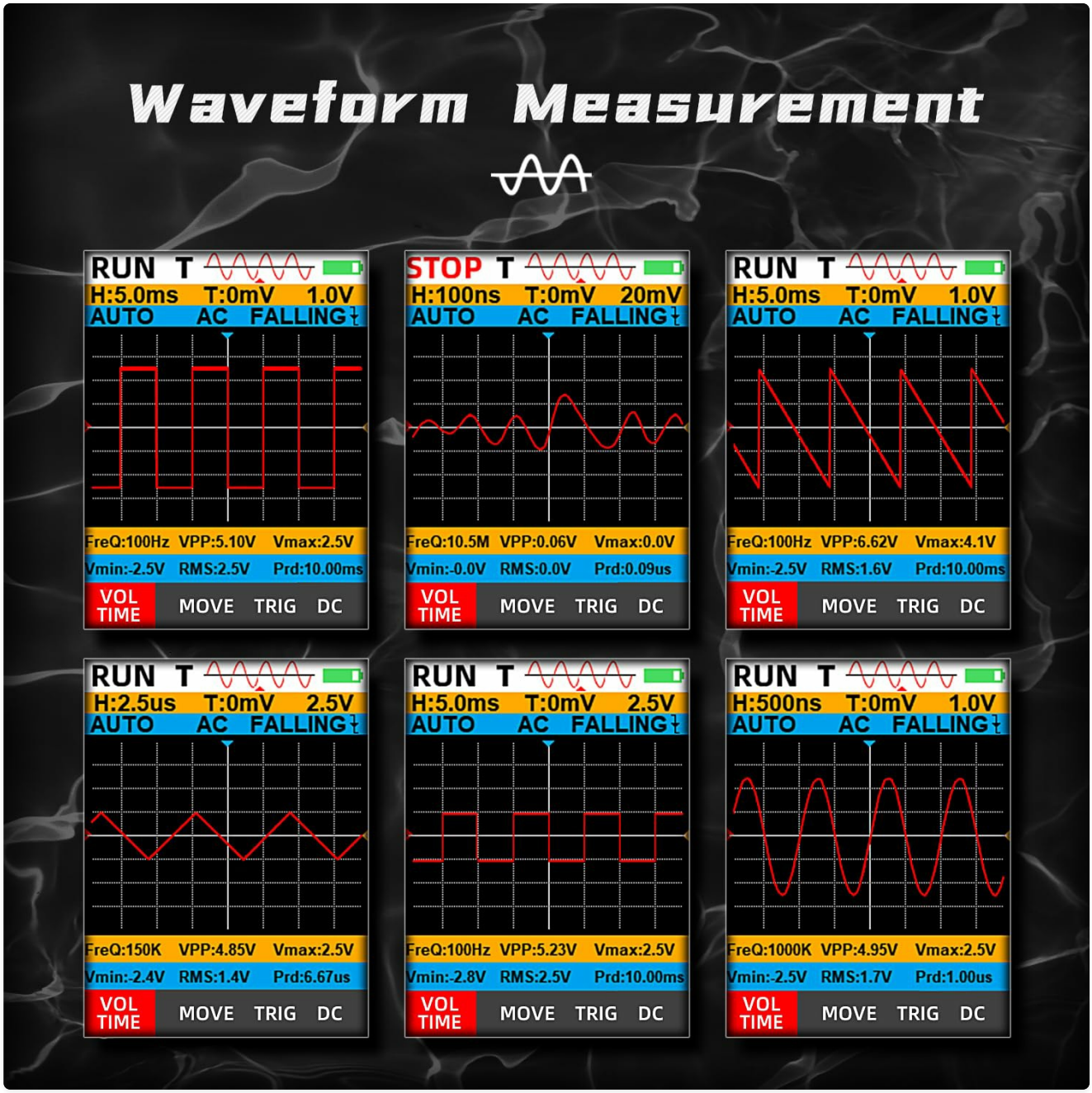

Image: Examples of various waveforms displayed on the oscilloscope screen, demonstrating its measurement capabilities.

Data Storage and Export

The device supports data storage, allowing you to save measured data and waveforms. This data can then be exported to your computer for further analysis or record-keeping.

Image: The device displaying saved data, with icons indicating its data storage and export capabilities to a computer.

Integrated Flashlight

For convenience in low-light conditions, the device includes a bright LED flashlight. This can be activated via a dedicated button or menu option.

Image: The device with its integrated LED flashlight illuminated, demonstrating its utility in dark environments.

Product Demonstration Video

Watch this official product video for a demonstration of the BSIDE O1 Scope Multimeter's features and operation.

Your browser does not support the video tag.

Video: A demonstration of the BSIDE O1 Scope Multimeter, showcasing its various measurement capabilities including voltage, resistance, continuity, and waveform display.

Maintenance

Battery Care

The device uses a rechargeable Lithium Ion battery. To ensure optimal battery life, charge the device regularly and avoid fully discharging it for extended periods. Always use the provided charging cable.

Cleaning and Storage

Clean the device with a soft, dry cloth. Avoid using abrasive cleaners or solvents. Store the multimeter in its provided carrying case to protect it from dust, moisture, and physical damage when not in use.

Serviceability

The device is designed for serviceability. The case uses screws, and components such as the fuse and LiPo battery can be replaced without desoldering, if necessary. For complex repairs, it is recommended to contact qualified service personnel.

Troubleshooting

If you encounter issues with your BSIDE O1 Green, consider the following common troubleshooting steps:

- **Device not powering on:** Ensure the battery is charged. Connect the charging cable and allow it to charge for at least 30 minutes before attempting to power on again.
- **Inaccurate readings:** Check that the test leads are properly connected to the correct jacks for the measurement type. Ensure the probes are making good contact with the circuit. Perform an auto-calibration if available in the device settings.
- **Display issues:** If the screen is dim or unreadable, adjust the brightness settings. If the display is frozen, try restarting the device.
- **No waveform displayed in Oscilloscope Mode:** Verify that the input signal is within the device's bandwidth and voltage range. Adjust the time base and vertical sensitivity settings. Ensure the trigger is set appropriately.

For persistent issues, refer to the detailed user manual included in the package or contact BSIDE customer support.

Specifications

Feature	Specification
MAX Display	6000 counts
Screen Size	2.8 inch
Bandwidth	10MHz
Real-time Sample Rate	48MSa/s
Input Impedance	1MΩ, @16pf
Maximum Input Voltage	300V (DC+AC peak)
Horizontal SEC Range	100ns/div - 20s/div

Feature	Specification
Vertical Sensitivity	20mV/div - 100V/div
DC Voltage	60mV (0.01mV ±(1%+5)); 600mV/6V/60V (0.1mV/0.001V/0.01V/ ±(0.8%+3)); 600V (0.1V ±(1%+5))
AC Voltage	60mV (0.01mV ±(1.2%+5)); 600mV/6V/60V (0.1mV/0.001V/0.01V/ ±(1%+3)); 600V (0.1V ±(1.2%+5))
DC Current	6A/10A (0.001A/0.01A ±(1.2%+3))
AC Current	6A/10A (0.001A/0.01A ±(1.2%+3))
Resistance	600Ω (0.1Ω ±(1.2%+5)); 6kΩ/60KΩ/600KΩ (0.001KΩ/0.01KΩ/0.1KΩ ±(1.0%+3)); 6MΩ (0.001MΩ ±(1.2%+5)); 60MΩ (0.01MΩ ±(1.5%+5))
Capacitance	99.99nF (0.01nF ±(5.0%+20)); 999.9nF/9.999μF/99.99μF/999.9μF (0.1nF/0.001μF/0.01μF/0.1μF ±(4.5%+5)); 9.999mF/99.99mF (0.001mF/0.01mF ±(5.0%+10))
Diode	Measures diodes within 3V
Continuity	Yes
V-Alert (non-contact voltage detection)	Yes
Power	2000mA battery (rechargeable)
Size	187 x 74 x 40.5 mm
Weight	269g

Warranty and Support

For warranty information and technical support, please refer to the documentation included with your product or contact BSIDE customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims. You can typically find support contact information on the manufacturer's official website or through the retailer where the product was purchased.