

ZIBOO 15B PRO

ZIBOO 15B PRO True RMS Digital Multimeter User Manual

Model: 15B PRO

1. SAFETY INFORMATION

Before using the ZIBOO 15B PRO Digital Multimeter, please read and understand all safety instructions. Failure to follow these instructions may result in electric shock, fire, or personal injury.

1.1 General Safety Guidelines

- Always ensure the multimeter is in the correct function and range before making measurements.
- Do not use the multimeter if it appears damaged or if the test leads are compromised.
- Observe all safety precautions for working with electricity, including wearing appropriate personal protective equipment (PPE).
- Never exceed the maximum input values for any function.
- The device is rated CAT III 600V and CAT II 1000V. Adhere to these ratings for safe operation.
- The multimeter features double fuse protection to prevent damage from overload.

2. PRODUCT OVERVIEW

The ZIBOO 15B PRO True RMS Digital Multimeter is a compact and reliable tool designed for a wide range of electrical testing applications. It offers accurate measurements for AC/DC voltage, AC/DC current, resistance, continuity, diode, capacitance, and duty cycle. Its True RMS capability ensures precise readings for non-sinusoidal waveforms.



Figure 1: Front view of the ZIBOO 15B PRO Digital Multimeter, showing the display, rotary dial, and function buttons.

2.1 Key Features

- **True RMS:** Provides accurate measurements for both sinusoidal and non-sinusoidal AC waveforms.
- **6000 Counts Display:** High-resolution display for precise readings.
- **AC/DC Voltage:** Measures up to 1000V.
- **AC/DC Current:** Measures up to 10A (optional current clamp for up to 600A).
- **Resistance, Continuity, Diode, Capacitance, Duty Cycle:** Essential functions for comprehensive electrical troubleshooting.
- **VFD AC 600V:** Variable Frequency Drive measurement capability.
- **NCV/LIVE:** Non-Contact Voltage and Live Wire Detection with Red LED Flash.

- **Data Hold:** Freezes the displayed reading for easier recording.
- **Backlight:** Bright white backlight for clear visibility in various lighting conditions.
- **Protective Casing:** Durable outer casing for enhanced protection.

DIGITAL MULTIMETER



Figure 2: Visual representation of the various measurement functions available on the multimeter.

2.2 What's in the Box

- ZIBOO 15B PRO Digital Multimeter
- Multimeter Test Leads (Red and Black)
- Protective Caps for Test Leads
- User Manual

Note: AC pliers are an optional accessory and are not included with the standard package.

3. SETUP

3.1 Battery Installation

1. Ensure the multimeter is powered off.
2. Locate the battery compartment on the back of the device.

3. Unscrew the single Phillips #1 screw to open the compartment.
4. Insert three AA 1.5V batteries, observing correct polarity.
5. Replace the battery compartment cover and secure it with the screw.

3.2 Connecting Test Leads

1. Insert the black test lead into the 'COM' (Common) jack.
2. For most measurements (voltage, resistance, continuity, diode, capacitance, frequency, duty cycle), insert the red test lead into the 'VΩHz' jack.
3. For current measurements up to 10A, insert the red test lead into the '10A' jack.
4. For milliampere (mA) or microampere (μA) measurements, insert the red test lead into the ' μAmA ' jack.



Figure 3: The ZIBOO 15B PRO Multimeter with its test leads, showing the connection points.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off and Display

Turn the rotary dial from 'OFF' to any desired function to power on the multimeter. To power off, turn the dial back to 'OFF'. The device features an automatic power-off function to conserve battery life. Press the

LED button to activate or deactivate the display backlight for improved visibility.

4.2 Measurement Functions

Rotate the dial to select the desired measurement function. Use the **MODE** button to toggle between different sub-functions within a dial position (e.g., AC/DC voltage, NCV/LIVE).

1. **Voltage Measurement (AC/DC):**

Set the dial to 'V~' for AC voltage or 'V=' for DC voltage. Connect the test leads in parallel to the circuit or component being measured. The display will show the voltage reading.

2. **Current Measurement (AC/DC):**

Set the dial to 'A~' for AC current or 'A=' for DC current. Ensure the red test lead is in the appropriate current jack (10A or μ AmA). Connect the multimeter in series with the circuit.

3. **Resistance Measurement (Ω):**

Set the dial to ' Ω '. Connect the test leads across the component. Ensure the circuit is de-energized before measuring resistance.

4. **Continuity Test ():**

Set the dial to ' Ω ' and press **MODE** until the continuity icon appears. A buzzer will sound and a green LED will flash if continuity is detected (low resistance).

5. **Diode Test ():**

Set the dial to ' Ω ' and press **MODE** until the diode icon appears. Connect the test leads across the diode.

6. **Capacitance Measurement (F):**

Set the dial to 'F'. Connect the test leads across the capacitor. Ensure the capacitor is discharged before measurement.

7. **NCV (Non-Contact Voltage) / LIVE (Live Wire Detection):**

Set the dial to 'NCV LIVE'. The multimeter will detect AC voltage without direct contact. 'L' indicates a live wire with voltage, accompanied by a red LED flash and buzzer. 'EF' indicates non-contact detection.

SENSITIVE NCV

Buzzer Alarm & On-screen Display



Figure 4: The multimeter's NCV function detecting voltage near an electrical outlet, indicated by 'EF' on the display.

Your browser does not support the video tag.

Video 1: This video demonstrates the difference between the NCV (Non-Contact Voltage) and LIVE (Live Wire Detection) functions on the ZIBOO 15B PRO/17B PRO multimeters. It shows how to toggle between these modes and their respective indications when detecting live electrical circuits.

4.3 Special Functions

- **HOLD:** Press the **HOLD** button to freeze the current reading on the display. Press again to release.
- **MIN/MAX:** Press the **MIN/MAX** button to record the minimum and maximum values during a measurement session. Press again to cycle through MIN, MAX, and current readings.
- **RANGE:** Press the **RANGE** button to switch between auto-ranging and manual ranging.

5. MAINTENANCE

5.1 Cleaning

Wipe the multimeter casing with a damp cloth and mild detergent. Do not use abrasive cleaners or solvents. Ensure the device is completely dry before use.

5.2 Battery Replacement

When the battery indicator appears on the display, replace the batteries as described in Section 3.1. Always use three new AA 1.5V batteries.

5.3 Fuse Replacement

The multimeter is equipped with internal fuses for protection. If a current measurement function stops working, the fuse may need replacement. To access the fuses, open the battery compartment (Section 3.1). The fuses are located inside. Replace with fuses of the correct type and rating (e.g., 10A/1000V and 500mA/1000V).

Intelligent anti-burning

Built-in double fuse, with overload protection, to prevent operation errors from burning the meter



Figure 5: Internal view highlighting the double fuse protection for safety and durability.

5.4 Test Lead Care

The test leads come with protective caps. Use these caps to protect the sharp tips when not in use or when measuring in situations where only a short tip is required. This helps prevent damage to the probes and ensures safety.

6. TROUBLESHOOTING

If you encounter issues with your ZIBOO 15B PRO Digital Multimeter, refer to the following common troubleshooting steps:

- **No Display/Faint Display:** Check battery levels and replace if necessary. Ensure the multimeter is powered on.
- **Incorrect Readings:** Verify the test leads are correctly inserted into the appropriate jacks for the selected function. Ensure the rotary dial is set to the correct measurement type and range. Check for damaged test leads.
- **Current Function Not Working:** The internal fuse for current measurement may have blown due to an overload. Replace the fuse as described in Section 5.3.
- **Continuity Buzzer Not Sounding:** Ensure the multimeter is in continuity mode. Check for open circuits or high resistance.

For persistent issues, consult the manufacturer's support resources.

7. SPECIFICATIONS

Feature	Specification
Display	6000 Counts, True RMS
DC Voltage (V)	6V/60V/600V/1000V ($\pm(0.5\%+3)$)
AC Voltage (V)	6V/60V/600V/1000V ($\pm(0.8\%+5)$)
VFD AC Voltage (V)	600V ($\pm(0.8\%+5)$)
DC Current (A)	600 μ A/6mA/60mA/600mA/6A/10A ($\pm(0.8\%+5)$ to $\pm(1.5\%+5)$)
AC Current (A)	600 μ A/6mA/60mA/600mA/6A/10A ($\pm(1.0\%+5)$ to $\pm(1.8\%+5)$)
Resistance (Ω)	600 Ω /6K Ω /60K Ω /600K Ω /6M Ω /60M Ω ($\pm(0.8\%+5)$ to $\pm(2.5\%+5)$)
Capacitance (F)	60nF-60mF ($\pm(3\%+5)$ to $\pm(5\%+5)$)
Frequency (Hz)	10Hz-20MHz ($\pm(0.1\%+5)$)
Duty Cycle	10%-90% ($\pm(2\%+5)$)
Safety Rating	CAT III 600V, CAT II 1000V
Power Source	3 x AA 1.5V Batteries
Product Dimensions	3.58 x 1.77 x 7.2 inches
Product Weight	1.19 Pounds (402g)

Note: Accuracy specifications are typical values and may vary slightly.



Figure 6: A detailed table outlining the technical specifications for the ZIBOO 15B PRO multimeter.

8. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the official ZIBOO website or contact the seller directly through the platform where the product was purchased. Standard return policies typically apply (e.g., 30-day return window).