Lqito CNBJ-823

Lqito Multifunctional Car Circuit Tester (Model CNBJ-823)

Instruction Manual

1. Introduction

The Lqito Multifunctional Car Circuit Tester (Model CNBJ-823) is designed for automotive electrical system maintenance and testing. This tool can be used to test battery voltage, voltage polarity, conductivity, and to identify faults such as short circuits and poor ground connections. It features a digital display for clear readings and an extended cable for convenience.

Figure 1: Lqito Multifunctional Car Circuit Tester

Figure 2: Key components of the Lqito Car Circuit Tester, including the probe, LED lights, battery clamp, LED polarity detection, LCD display, output power switch, buzzer, and grounding clips.

2. Setup

2.1 Connecting the Tester

To prepare the circuit tester for use, follow these steps:

1. Connect the red battery clip to the positive terminal of the vehicle's battery.
2. Connect the black battery clip to the negative terminal of the vehicle's battery.
3. Once connected, the blue digital display on the tester will show the current battery voltage. The front light will also illuminate.
4. If connected inversely (red to negative, black to positive), the voltage value will not be displayed, but the lamp may still illuminate. Ensure correct polarity for accurate readings.

Figure 3: Large crocodile clips ensure a secure connection to battery terminals.

3. Operating Instructions

3.1 Voltage and Polarity Testing

The tester can measure DC voltage within a range of 3.5V to 36V and indicate polarity.

- **Voltage Measurement:** Touch the probe tip to the circuit point you wish to test. The LCD display will show the voltage reading.
- **Polarity Indication:**
  - If the probe detects a positive voltage, the front red LED will light up, and the blue LCD will display the voltage.
  - If the probe detects a negative voltage (ground), the front green LED will light up, and the blue LCD will display the voltage.

Figure 4: The tester's display clearly indicates voltage and polarity with red (positive) and green (negative) LEDs.

Figure 5: Performing a voltage test on a vehicle component. The tester displays the measured voltage.

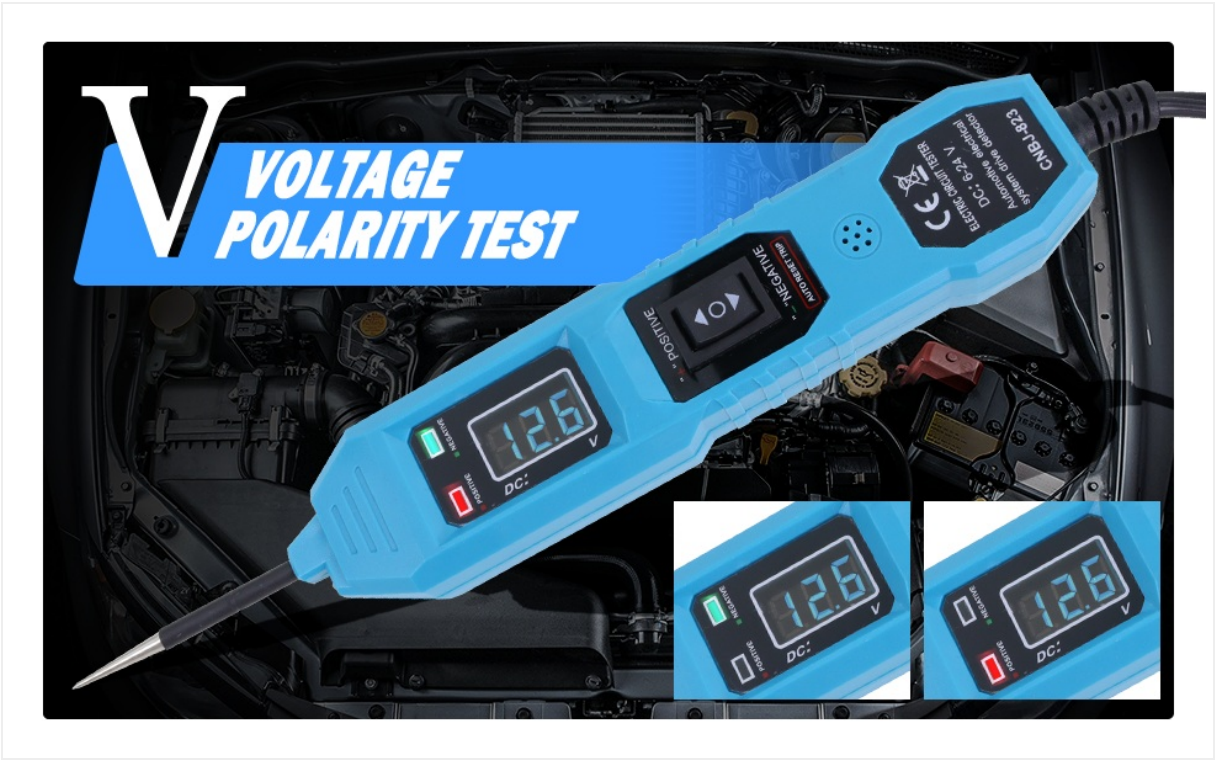

Figure 6: The tester indicates voltage polarity, showing positive or negative status along with the voltage reading.

3.2 Component Activation

The tester can supply power to activate components for testing. Use the output power switch to apply positive or negative voltage.

- **Positive Activation:** Slide the output power switch to the 'POSITIVE' position to supply positive voltage to the probe tip.
- **Negative Activation:** Slide the output power switch to the 'NEGATIVE' position to supply negative voltage (ground) to the probe tip.
- **Caution:** Always ensure the component can handle the applied voltage and current to prevent damage. The tester has overload protection, which will trigger a beep alarm and automatically disconnect power if an overload occurs.

3.3 Continuity Testing

To test for continuity, connect the grounding clip to a known good ground point. Then, touch the probe tip to the circuit or component you want to test. If continuity exists, the tester will indicate it, often with an audible beep or a specific light indicator (refer to Figure 2 for buzzer location).

3.4 Short Circuit Detection

The extended detection line (4.5 meters) allows for tracing and locating short circuits across the vehicle's electrical system. By systematically probing different points in a circuit, you can identify where a short to ground or power exists. The tester's polarity detection and voltage display assist in pinpointing the fault.

Figure 7: The circuit tester aids in quickly identifying fault points within the vehicle's electrical system.

Figure 8: The tester features a beep warning for overload conditions, with automatic disconnection to protect the device and the circuit.

4. Maintenance

Proper maintenance ensures the longevity and accuracy of your Lqito Car Circuit Tester.

- **Cleaning:** Wipe the tester with a clean, dry cloth after each use. Do not use abrasive cleaners or solvents.
- **Storage:** Store the tester in a dry, cool place, away from direct sunlight and extreme temperatures. Ensure the probe tip is protected to prevent damage.
- **Cable Care:** Avoid kinking or sharply bending the power cable. Store it neatly coiled.
- **Probe Tip:** Ensure the stainless steel probe tip remains sharp and clean for optimal contact.

5. Troubleshooting

If you encounter issues with your Lqito Car Circuit Tester, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
No display/No power	Incorrect battery connection; Blown fuse in vehicle; Faulty cable.	Ensure red clip is on positive and black on negative. Check vehicle's fuse. Inspect cable for damage.
Inaccurate voltage reading	Poor contact with test point; Battery voltage too low/high for range; Internal calibration issue.	Ensure firm contact. Verify voltage is within 3.5V-36V DC. If persistent, contact support.
LEDs not indicating polarity	No voltage detected; Weak connection; Faulty LED.	Confirm voltage presence. Ensure good contact.
Buzzer sounds continuously	Overload protection triggered; Short circuit detected.	Disconnect power immediately. Check for short circuits in the component/circuit being tested.

6. Specifications

Feature	Detail
Brand	Lqito
Model	CNBJ-823
Power Source	AC/DC (Powered by vehicle battery)
Operating Voltage Range	3.5V - 36V DC
Measurement Type	Voltmeter
Display	LCD Digital Display

Feature	Detail
Cable Length	4.5 meters (approximately 14.7 feet)
Included Components	Multifunctional Car Circuit Tester, Accessories, Instruction Manual
Safety Features	Overload power-off protection, Beep alarm

7. Warranty and Support

This Lqito product comes with a Manufacturer Warranty for 3 years limited from the date of purchase. For any questions regarding the product during purchase or after-sale use, please consult our online services. For support, please refer to the contact information provided with your purchase or visit the official Lqito website.