

Vident

12V Battery Analyzer iBT100

USER MANUAL

General Notice

For your own safety and the safety of others, and to prevent damage to the equipment and vehicles, read this manual thoroughly before operating your code reader. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this device. Always refer to and follow safety messages and test procedures provided by vehicle manufacturer. Read, understand and follow all safety messages and instructions in this manual.

Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the scan tool, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:
 Always perform automotive testing in a safe environment. Wear safety eye protection that meets ANSI standards. Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
 Operate the vehicle in a well-ventilated work area: Exhaust gases are poisonous. Put blocks in front of the drive wheels and never leave the vehicle unattended while running tests.
 Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
 Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.

Keep a fire extinguisher suitable for gasoline/chemical/ electrical fires nearby. Ignition is on or the engine is running.
 Keep the scan tool dry, clean, free from oil/water or grease. Use a mild detergent on a clean cloth to clean the outside of the scan tool, when necessary.

Warranty and Service Limited One Year Warranty

We warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

- The sole responsibility of our company under the Warranty is limited to either the repair or, at the option of our company, replacement of the scan tool at no charge with Proof of Purchase. The sales receipt may be used for this purpose.
- This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired Center.
- We shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the scan tool. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

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1.Using This Manual

We provide tool usage instructions in this manual. Below is the conventions we used in the manual.

- 1.1 Bold Text**
 Bold text is used to highlight selectable items such as buttons and menu options.
 Example:
 Press the ENTER button to select.

- 1.2.1 Solid Spot**
 Operation tips and lists that apply to specific tool are introduced by a solid spot .
 Example:
 When System Setup is selected, a menu that lists all available options displays. Menu options include:

- Languages
- Unit
- Beep
- Keypad Test
- LCD Test
- About
- Shortcuts

- 1.2.2 Arrow Icon**
 An arrow icon indicates a procedure.Example:
 To change menu language:
 1.Scroll with the arrow keys to highlight Language on the menu.
 2.Press the ENTER button to select.

- 1.2.3 Note and Important Message**
 Note
 A NOTE provides helpful information such as additional explanations, tips, and comments.
 Example:
NOTE
 Test results do not necessarily indicate a faulty component or system.

Important
 IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

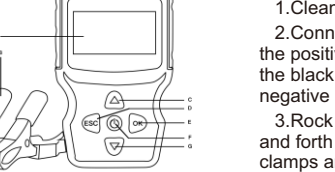
2.Introductions

The latest BT100 12 Volt Automotive Battery Analyzer from Vident is dedicatedly developed to test 6V & 12V regular flooded, AGM flat plate, AGM spiral and gel batteries. It provides a quick, easy and affordable solution for technicians to view battery charging status, check battery health and detect faults.

2.1 Tester Descriptions
 This section illustrates external features, ports and connectors of the tester.

- A. LCD Display** - shows menus, test results and operation tips.
B. Test Cable - Connects the tester to battery for testing.
C. G UP and Down Buttons - scroll to select an option or change the values. UP Button is also used to call up the language setup menu when starting the tester.
D. ESC Button - exits a screen and generally returns to previous screen.
E. ENTER Button - executes a selected option and generally goes to the next screen.
F. RESTART BUTTON - Restart the test of battery

2.2 Accessory Descriptions
 This section lists the accessories that go with the tester. If you find any of the following items missing from your package, contact your local dealer for assistance.



IMPORTANT
 Do not use solvents such as alcohol to clean keypad or display. Use a mild nonabrasive detergent and a soft cotton cloth.

2.2 Accessory Descriptions
 This section lists the accessories that go with the tester. If you find any of the following items missing from your package, contact your local dealer for assistance.

- BT100 12 Volt Automotive Battery Analyzer main unit
- User's Guide - provides operation instructions for the usage of the tester.

2.3 Specifications
Display: 128 * 64 pixels, backlit display screen
Working Temperature: 0 to 60°C (32 to 140°F)
Storage Temperature: -20 to 70°C (-4 to 158°F)
Dimensions (L*W*H): 125*76*24mm
Gross Weight: 0.2 KG
Gross Weight: 0.35KG

3.Operations

This section describes how to use the tester to perform tests on car batteries and charging systems. The menu-driven display will guide you step by step through the test process.

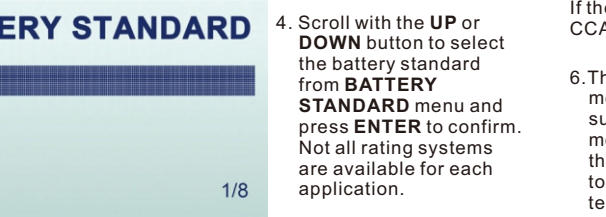
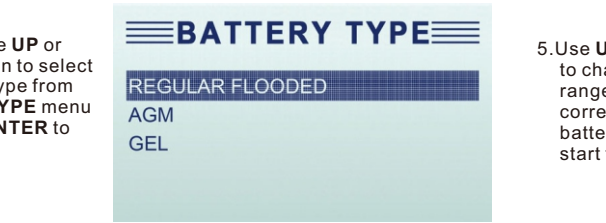
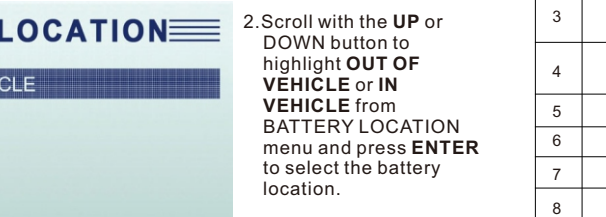
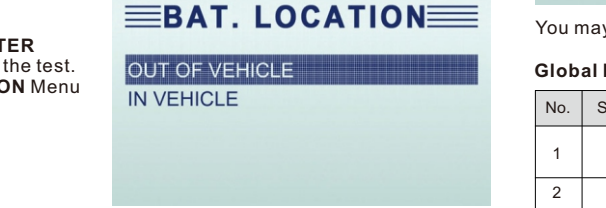
3.1 Connecting The Tester
 The tester powers on automatically when it is correctly connected to the battery. The preferred test position is at the battery terminals. If the battery is not accessible, you may test at the jumper post; however, the power measurement may be lower than the actual value.

- To connect the tester:
- Clean the battery posts or side terminals.
 - Connect the red clamp to the positive (+) terminal and the black clamp to the negative (-) terminal.
 - Rock the clamps back and forth to make sure the clamps are firmly connected.
 - When the tester is correctly connected, it boots up automatically and show the voltage of the battery.

NOTE
 Do not connect the tester to a voltage source greater than 30VDC; otherwise you may damage the tester.

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3.2 Battery Test
 BT100 12 Volt Automotive Battery Analyzer allows you to analyze the battery healthy status and view battery charging status.
 To start a battery test:



You may find the battery type and battery rating label on every battery.

Global Rating Systems

| No. | Standard | Description | iBT100 Testing Range |
|-----|----------|---|----------------------|
| 1 | CCA | Cold Cranking Amps, as specified by SAE. The most common rating for cranking batteries at 0°F (-18°C) | 100-1100 |
| 2 | CA | Cranking Amps standard. The effective starting current value at 0°C (32°F). | 100-1100 |
| 3 | MCA | Marine Cranking Amps standard. The effective starting current value at 0°C (32°F). | 100-1100 |
| 4 | JIS | Japanese Industry Standard, shown on a battery as a combination of numbers and letters | 26A17-245H52 |
| 5 | DIN | Deutsche Industrie-Norm | 100-1100 |
| 6 | IEC | International Electrotechnical Commission | 100-1100 |
| 7 | EN | Europa-Norm | 100-1100 |
| 8 | SAE | Society of Automotive Engineers | 100-1100 |

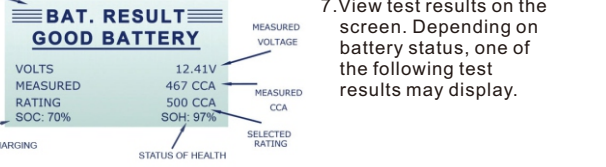


5. Use UP or DOWN button to change measure range till you enter the correct range of your battery. Press ENTER to start the test.

If the battery belongs to CCA standard, just select the corresponding CCA standard value and press ENTER to start the testing.



6. The BAT. TEMPERATURE menu will display to make sure the battery result be more accurate. Scroll with the UP and DOWN button to select the right battery temperature to confirm.



7. View test results on the screen. Depending on battery status, one of the following test results may display.

| No. | Test Results | Interpretation |
|-----|------------------|--|
| 1 | GOOD BATTERY | The battery is in good condition. |
| 2 | GOOD-RECHARGE | The battery is in good condition but low current. Fully charge the battery and return it to service. |
| 3 | CHARGE & RETEST | Fully charge the battery and retest. Failure to fully charge the battery before testing may result in inaccurate results. If you still get CHARGE & RETEST message after you fully charge the battery, replace it. |
| 4 | REPLACE BATTERY | The battery is almost dead or the connection between the battery and battery cable is poor. Replace the battery and retest; or disconnect the battery cables and retest the battery using the out-of-vehicle test before replacing it. |
| 5 | BAD CELL-REPLACE | The battery may be damaged such as broken cell or short circuit. Replace the battery and retest. |

8. Press the ESC button to exit the test.
NOTE:
 The tester keeps the results of last test only. When you start a new test, the last results are overwritten.

4.Language

Language menu lets you choose system language. The device is set to English menu by default.
 To change the language setting:



1. Scroll with the UP button when the tester starts to go to the LANGUAGE menu.

2. Use the UP or DOWN button to select the language you need and press the ENTER key to confirm and return. Or press ESC button to return.

