## Autel Autel BT508 Battery Tester - US New

# Autel MaxiBAS BT508 Car Battery Tester User Manual

Model: Autel BT508 Battery Tester - US New | Brand: Autel

## Introduction

The Autel MaxiBAS BT508 is an advanced car battery tester designed to provide comprehensive analysis of 6V and 12V automotive batteries, as well as 12V and 24V cranking and charging systems. This device utilizes adaptive conductance technology for highly accurate results, identifying battery issues within seconds. It offers a range of functions including battery testing, battery change guidance, and all-systems diagnostics for a selected vehicle brand.
Key features include:

- Adaptive Conductance Technology for accurate battery health assessment.
- Cranking Test and Generator Test for comprehensive system analysis.
- Support for various battery types: FLOODED, AGM, AGM SPIRAL, EFB, and GEL.
- All System Diagnostics (for one selected vehicle brand) to read/erase DTCs and view live data.
- Auto Battery Registration and Electrical System Reset functions.
- In-vehicle and Out-vehicle testing capabilities.

## Setup

Before using your Autel MaxiBAS BT508, ensure it is properly set up and connected.

### 1. Device Binding

To activate and use the full features of your BT508, you need to bind the device to your account using the MaxiBAS app.




*Figure 1: Device Binding via QR Code Scan*

**Steps:**

1. Download the MaxiBAS app from Google Play Store (for Android) or Apple App Store (for iOS).
2. Open the app and follow the on-screen instructions to create an account or log in.
3. Locate the QR code on the back of your BT508 device.
4. Use the app's scan function to scan the QR code and bind the device to your account.
5. Ensure the device is connected via Bluetooth to your smartphone for operation.

## 2. Initial Connection

Connect the BT508 to the vehicle's battery using the provided battery clamp cables. Ensure proper polarity (red clamp to positive terminal, black clamp to negative terminal).




*Figure 2: Autel MaxiBAS BT508 with VCI and Clamps*

The BT508 unit itself has a power button and status indicators. The VCI (Vehicle Communication Interface) unit connects to the vehicle's OBDII port for in-vehicle diagnostics.

## Operating Instructions

The Autel MaxiBAS BT508 offers various testing modes accessible through the MaxiBAS app on your smartphone.

## 1. Battery Test (In-vehicle & Out-vehicle)

This test determines the real health status of the battery. It can be performed with the battery installed in the vehicle or removed.




*Figure 3: In-vehicle and Out-vehicle Testing*

**In-vehicle Test:** Connect the BT508 to the vehicle's battery terminals. The device will assess the battery's health, starter, and generator performance while connected to the vehicle's electrical system.

**Out-vehicle Test:** Connect the BT508 directly to a standalone battery. This checks the health status of the separate battery.

The test results will indicate the battery's condition, such as "Good Battery", "Good & Recharge", "Charge & Retest", "Replace Battery", or "Bad Cell".

## 2. Cranking Test

This test evaluates the 12V and 24V cranking/charging systems by measuring cranking amps, starting voltage, starting time, and engine cranking speed.




*Figure 4: Cranking, Generator, and Starter Motor Tests*

**Steps:**

1. Connect the BT508 to the vehicle battery.
2. Select "Cranking Test" in the MaxiBAS app.
3. Follow the on-screen prompts to start the engine.
4. The app will display the test results, including starting voltage and time, to assess the battery's capacity to crank the engine.

## 3. Generator Test

This test assesses the generator system's performance, displaying no-load voltage, load voltage, ripple, and output condition.

**Steps:**

1. Ensure the BT508 is connected to the vehicle battery.
2. Select "Generator Test" in the MaxiBAS app.
3. Follow the on-screen instructions, which may involve running the engine at specific RPMs.
4. The app will provide a detailed report on the generator's health.

## 4. Starter Motor Test

This test checks the starter motor's condition, including normal operation, load current, and voltage capacity.

**Steps:**

1. Connect the BT508 to the vehicle battery.
2. Select "Starter Motor Test" in the MaxiBAS app.
3. Follow the on-screen instructions to perform the test.

4. The app will display the results indicating the starter motor's health.

## 5. All System Diagnostics

The BT508 provides advanced all-systems diagnostics for one selected vehicle brand. This allows you to read/erase DTCs (Diagnostic Trouble Codes), view live data, freeze frame data, and retrieve ECU information.




*Figure 5: Smart All System Diagnostics Overview*

**Note:** This function is only available for one vehicle brand, which you select during initial setup or purchase. The Auto VIN feature helps quickly identify vehicle and battery specifications, though it may not work on all vehicles.
**Steps:**

1. Connect the BT508 VCI to the vehicle's OBDII port.
2. Select "Diagnostics" in the MaxiBAS app.
3. Choose your vehicle brand (if prompted) or use Auto VIN.
4. Select the desired diagnostic function (e.g., Read Codes, Live Data).
5. Follow the on-screen instructions to perform the diagnostic scan.

# Battery Change & Reset

The BT508 provides distinct guidance for battery registration and one-touch registration of new batteries for over 53 vehicle brands. It also assists with electrical system resets after battery replacement.




*Figure 6: Battery Change and Reset Process*

**Steps for Battery Replacement and Registration:**

1. **Check Battery Condition:** Perform an initial battery test to confirm the need for replacement.
2. **Replace the Battery:** Physically remove the old battery and install the new one, following vehicle-specific procedures.
3. **New Battery Test:** Perform a test on the newly installed battery to ensure it is functioning correctly.
4. **Auto Registration:** Use the MaxiBAS app to automatically proceed to the Auto Registration section. The BT508 provides guided steps for registering the new battery with the vehicle's ECU.
5. **Battery Reset:** After battery replacement, certain vehicle electrical components (like sunroof, windows, doors, windscreen wipers) may lose their position settings. The BT508 can help reset these systems.

The device also offers graphic instructions for battery position and testing, and procedures for electrical system resets.




*Figure 7: Locate Battery Position Feature*

## Compatibility

The Autel MaxiBAS BT508 supports a wide range of battery types and standards.

### Supported Battery Types:

- FLOODED
- AGM
- AGM SPIRAL
- EFB
- GEL




*Figure 8: Compatible Battery Types and Standards*

### Supported Battery Standards (Rating):

- CCA (Cold Cranking Amps)
- SAE (Society of Automotive Engineers)
- CA (Cranking Amps)
- EN (European Norm)
- EN2
- IEC (International Electrotechnical Commission)
- DIN (Deutsches Institut für Normung)
- JIS (Japanese Industrial Standards)
- MCA (Marine Cranking Amps)
- BCI (Battery Council International)

- GB (Chinese National Standard)

The BT508 is designed to work with both 6V and 12V batteries, covering a CCA range of 100-2000 CCA.

## Maintenance

To ensure the longevity and optimal performance of your Autel MaxiBAS BT508, follow these maintenance guidelines:

- **Cleaning:** Wipe the device and cables with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a dry, cool place away from direct sunlight and extreme temperatures.
- **Cable Care:** Inspect the battery clamp cables regularly for any signs of wear, fraying, or damage. Replace if necessary.
- **Software Updates:** Regularly check for and install software updates via the MaxiBAS app to ensure the device has the latest features and compatibility.

## Troubleshooting

If you encounter issues with your Autel MaxiBAS BT508, consider the following common troubleshooting steps:

- **Device Not Powering On:** Ensure the battery clamps are securely connected to the vehicle battery terminals with correct polarity. Check if the internal battery of the BT508 is charged (if applicable).
- **No Bluetooth Connection:** Ensure Bluetooth is enabled on your smartphone and the BT508. Try restarting both the device and the app. Ensure the device is properly bound to your account.
- **Inaccurate Readings:** Verify that the battery clamps have a clean and secure connection to the battery terminals. Ensure the battery type and standard selected in the app match the battery being tested.
- **App Freezing/Crashing:** Close and restart the MaxiBAS app. Ensure your smartphone's operating system is up to date. Clear the app's cache if necessary.
- **Diagnostic Function Not Working:** Confirm the VCI is properly connected to the vehicle's OBDII port. Ensure the selected vehicle brand in the app is correct for the vehicle being diagnosed.

For persistent issues, refer to the official Autel support resources or contact customer service.

## Specifications

| Feature | Detail |
|---|---|
| Model | Autel BT508 Battery Tester - US New |
| Item Weight | 0.705 ounces |
| Product Dimensions | 5.91 x 2.32 x 1.97 inches |
| Manufacturer Part Number | MaxiBAS BT508-US |
| Batteries Required | 1 Lithium Polymer battery (included) |
| Special Features | Complete battery detect functions, 1000+ vehicle coverage, whole system diagnosis (for one specific vehicle brand). |

| Feature | Detail |
| --- | --- |
| CCA Range | 100-2000 CCA |
| Work Battery Voltage | 6V & 12V |

## Warranty & Support

Autel provides comprehensive support for the MaxiBAS BT508.

### Lifetime Free Updates

The Autel BT508 comes with lifetime free software updates provided by Autel H-Q. This ensures your device always has the latest features, vehicle compatibility, and performance enhancements.

### Data Logging & Repair Reports

You can upload data logs to the Autel Support platform for assistance and save a history of scan reports directly within the Battery Test App. This allows for easy tracking of battery health over time and sharing reports with technicians.




*Figure 9: MaxiBAS App for Updates and Management*




*Figure 10: Repair Reports Feature*

### Technical Support

For any technical concerns or support needs, you can contact Autel Direct via email at autel direct@outlook.com.
A PDF user manual is also available for download: User Manual (PDF).

## Package Contents

The Autel MaxiBAS BT508 package includes the following items:

*Figure 11: Package List*

- Autel MaxiBAS BT508 Unit
- Battery Clamp Cable (Black)
- Battery Clamp Cable (Red)
- VP200 Unit (VCI)
- User Quick Guide
- Packing Box

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