

1 Product Introduction

- Test battery health status.
- Test battery CCA.
- Test battery internal resistance.
- Test battery voltage and charging status.
- Test vehicle cranking system.
- Test vehicle charging system.



GET IT ON
Google play

Available on the
App Store

*Support Android 4.3 or higher / iOS 8.0 or higher systems.

2 Product Parameters

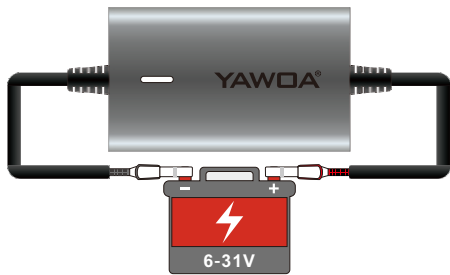
Name: Bluetooth Battery Tester
Model: BM500
Size: 73mm*45mm*20mm(2.87inch*1.77inch*0.78inch)
Input voltage: DC 6V-30V
Applicable battery: 6V/12V/24V

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Working temperature: -40~80°C(-40~170°F)
Housing: fireproof, IP65
Function: Built-in short circuit and reverse connection protection.
Bluetooth: 4.2

3 Installation Instructions

Clamp the clips on the two poles of the battery (regardless of positive and negative) then the LED will light up.



- *Tip:
- Blue LED: means the connection is successful.
 - White LED: means device is not connected.
 - Blue LED flashing: means clips connection problem.

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4 Application Operation

4.1. Connect Bluetooth

Firstly, turn on the mobile phone's Bluetooth and allow the BM500 application to access the following rights.

Location Permission Required	OK	"BM500" wants to use Bluetooth	Don't Allow	OK
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(Android)

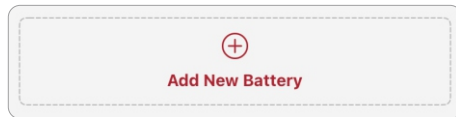
(iOS)

4.1.2. The green icon on the top right corner of the app is on, indicating that the device is connected; if the red icon is on, it indicates that it is not connected, please check the hardware device at this time. When the connection status changes, the phone will prompts sound and vibration.



4.2. Add New Battery

Add new battery information to the list in the top left corner of the menu bar.



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Add New Battery

name

Customized name

Voltage

12V

▼

Type

Ordinary battery

Standard

CCA

Rated Value

Please enter the rated value

OK

Ordinary battery / AGM flat battery / AGM wound battery / GEL / EFB CCA / DIN / JIS / EN / IEC GB / SAE / MCA / BCI / CA

*Tip:The battery model, type, standard and rating are usually marked on the battery label.

Model: H9-105-L-T2-A

Type: AGM

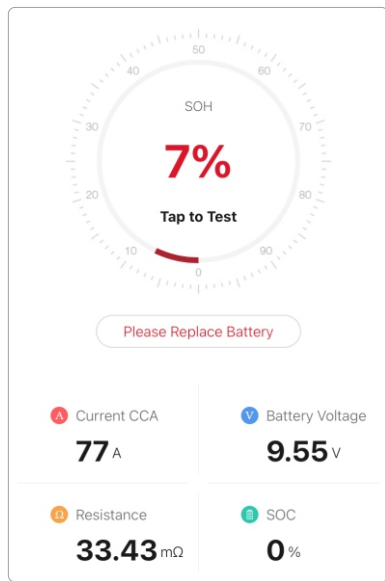
Rated value: 950A

Standard: EN

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4.3. Standard Test

After adding a new battery, return to homepage to perform standard test and obtain the test result.



*Tip: Before performing standard test, make sure that the engine is turned off.

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4.4. Quick Test

No need to add a new battery, you can test directly by entering the battery parameters, and get the test results.

Voltage

6V

12V

24V

Type

Ordinary battery

AGM tablet battery

AGM winding battery

Gel colloidal battery

EFB battery

Standard

CCA

DIN

JIS

EN

IEC

GB

SAE

MCA

BCI

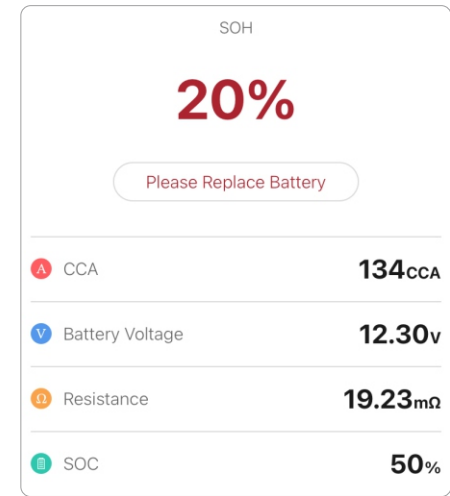
CA

Rated Value

Please enter the rated value

Go!

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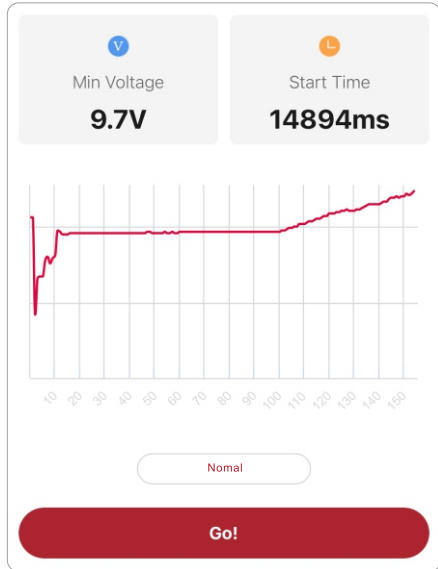


*Tip: If the test result shows "Please Replace Battery", it is possible that the connection between the car's cable and the battery is loose. After disconnecting the cable, use this method to test the battery again, or not then decide whether to replace the battery.

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4.5. Start Test

Click the "Go" button and perform the test according to the on-screen instructions to obtain the test result.



*Tip: Start test the car engine must be started before testing.

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4.6. Charging Test

Step by step tests through the three states: Ripple Test, Loading Test and Unload Test, and finally get the test results.

Ripple Test

Loading Test

Unload Test

Step 1: Diode Ripple Test

1. Please start the engine
2. Turn OFF all electronic equipments
3. Keep the engine in idle, then start testing.

Step 2: Loading Test

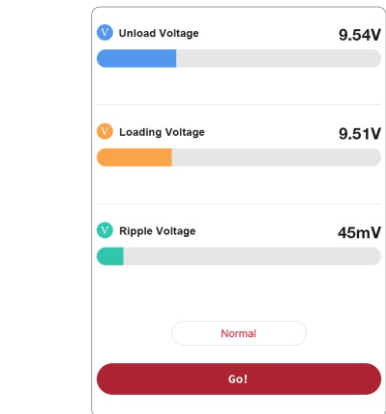
1. Keep the engine in idle
2. Turn ON all electronic equipments (headlights, A/C)
3. Click "Go!" button

Step 3: Unload Test

1. Turn OFF all electronic equipments (headlights, A/C)
2. Keep the engine 2500-3000 RPM
3. Click "Go!" button

*Tip: Please do not turn off the engine during the charging test. You must strictly follow the prompts to get accurate test results.

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Output too high state:
6V : Unload voltage is higher than 750 mV;
12V: Unload voltage is higher than 14.5 V;
24V: Unload voltage is higher than 29 V;

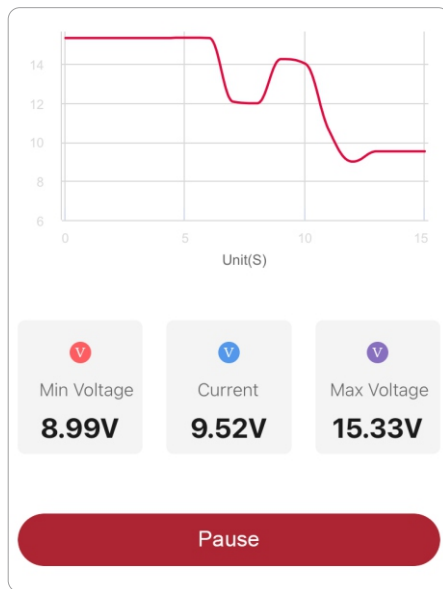
Normal status:
The battery is charging normally.

No output state:
6V : 1. Unload voltage is less than 630 mV;
2. The unload voltage is higher than the unload voltage;
12V: 1. Unload voltage is less than 13.6 V;
2. The unload voltage is higher than the unload voltage;
24V: 1. Unload voltage is less than 25.8 V;
2. The unload voltage is higher than the unload voltage;

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4.7. Waveform Test

Detect the real-time voltage of the car battery and show through the waveform.



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4.8. Generate Report

In the settings, the test results can be exported and shared by generating report.

Battery Test	Test Results : Please Replace Battery
Type	Ordinary battery
Rated Value	300cca
Test value	77cca
Battery Voltage	9.55V
Resistance	33.43mΩ
SOC	0%
SOH	7%
Start Test	Test Results : Normal
Min Voltage	10.94V
Start Time	7239
Charging Test	Test Results : No Output Value
Loading Voltage	12.30V
Unload Voltage	12.30V
Ripple Voltage	0mV

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FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement.