

# INSTRUCTION MANUAL

## Battery Sense BVM02

# XPARKLE

### INTRODUCTION

With Xparkle Battery Sense, which has built-in Bluetooth, you will know well about your vehicle battery's health.

This meter is to monitor the health of your vehicle battery: check the vehicle's cranking voltage automatically whenever the engine is started. It can also test the charging performance of the alternator. Also, you can keep a driving log of driving time and duration.

Using Bluetooth, your batteries will talk to you via your smartphone. The Battery Sense will send you a notification when you approach your vehicle. It'll help you prevent vehicle breakdowns due to power outage. The battery's performance gets maximized since you have valuable information about the state of your battery.

### FEATURES

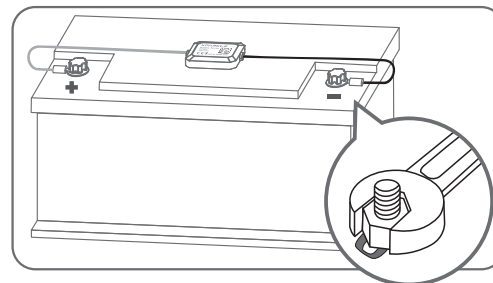
- Supporting all SLI (Starting Lighting and Ignition) type 12V/24V auto batteries for most cars, trucks, RVs, etc.
- Up to 4 devices simultaneous connection
- Bluetooth 5.0: higher speed at lower energy
- Notification of battery conditions when approaching vehicle
- Abnormal battery data alert
- Monitor the data on Apple watch
- Test cranking automatically once the engine starts
- Sync stats automatically and push to your smartphone via Bluetooth
- Historical voltage curve by date

### SPECIFICATIONS

- Voltage: 6-30V
- Power Consumption: Working: 12-Volt 4mA, 24-Volt 5mA  
Standby: 12-Volt 1mA, 24-Volt 2mA
- Communication: BLE5.0
- Range: 10-30M (The actual communication range of each vehicle will be affected by the location of the battery)
- Battery Type: 12-Volt and 24-Volt vehicle batteries
- Data Storage: Device: 30 Days  
Smartphone: no limitation
- Cable Length: 230mm x 2
- Size: 56x36x10mm
- Weight: 24g

### INSTALLATION

#### 1. Connect the Battery Sense to the Battery



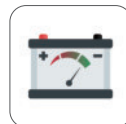
Connect the RED terminal to the positive pole, the BLACK terminal to the negative pole, or a suitable vehicle earth point. Clean the surface before pasting and fix the product body with double-sided adhesive tape.

#### Notice:

**Please ensure that the positive and negative terminals of the battery are free of oil and dust.**

**24v batteries have to connect extension cables to use this device.**

#### 2. Download the App



Battery Sense



Scan the QR code on the right to download the Battery Sense App which is available on App Store or Google Play.

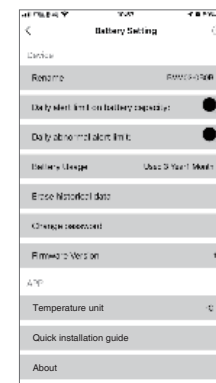
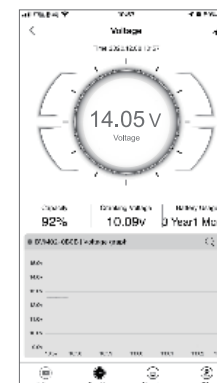
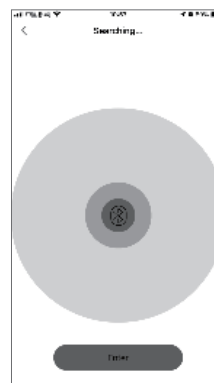


#### 3. Connected with Privacy Protected

When connecting Battery Sense to your smartphone, the device will prompt a password input for the first time. Compared to the predecessor, the passcode is introduced to bring more privacy. For security reasons, the most current Battery Sense requires you to input a passcode to get paired.

### APP OPERATION

#### 1. Turn on the Bluetooth. Open Battery Sense App - Click the Setting > Click the "+" icon>The App will search the devices within the Bluetooth range and connect automatically.

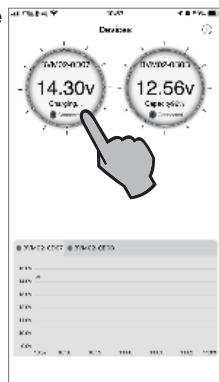


#### Tips

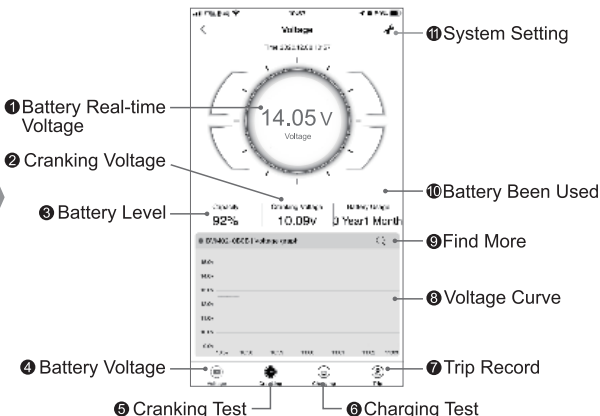
- The default password is 0000, and it can be changed in the setting. If you forget the password, don't worry: disconnect the Battery Sense and reconnect, the password will reset to 0000.
- The App supports up to 4 devices.
- One device can connect with one smartphone at a time. If you want to monitor with another smartphone, please delete the device from the existing smartphone or simply disable Bluetooth on the current phone.
- Please allow the app to access Location service even you don't use the App. Otherwise, Smart Sense will not automatically notify detecting any problem.
- Please allow the app to access Notifications. Or the app will not receive alert notifications.  
(For Android system users, make sure that the app is running in the background. Otherwise, you will not receive the notifications.)

## 2. Operation

### 1) Voltage



Click once to enter detail interface



#### 1 Battery Real-time Voltage

Show Battery Real-time Voltage

#### 2 Cranking Voltage

The voltage to which the battery drops when starting or cranking the engine. For a 12 Volts system, it often drops to 7.5 to 11 Volts. For a 24 Volts system, it often drops to 15 to 22 Volts.

#### 3 Battery Level

Show battery status of capacity

#### 4 Battery Voltage

Display current battery voltage

#### 5 Cranking Test

When the engine starts each time, it will test the cranking voltage automatically.

#### 6 Charging Test

It can test the charging system manually.

#### 7 Trip Record

Records each start time, stop time and driving duration of the vehicle.

Notice: For a start-stop system vehicle, braking and restarting the vehicle will cause false driving records! Trip record is an additional function of this meter, for reference only!

#### 8 Voltage Curve

It shows the voltage curve of the battery.

#### 9 Find More

More detailed view of voltage curve.

#### 10 Battery Usage Time

How many days of the battery have been used.

#### 11 System Setting

Click to enter the Setting. You could rename the device, change the password, choose the temperature unit, delete the device from app, etc.

### 2) Cranking Test

Every time you start the engine, the device will record the voltage data for 3 seconds and draw a voltage curve.

For a 12 Volts system, the cranking voltage below 7.5V is abnormal; for a 24 Volts system, voltage under 15V will be abnormal. It might be time for a replacement. Go to your trusted service center to check or replace!

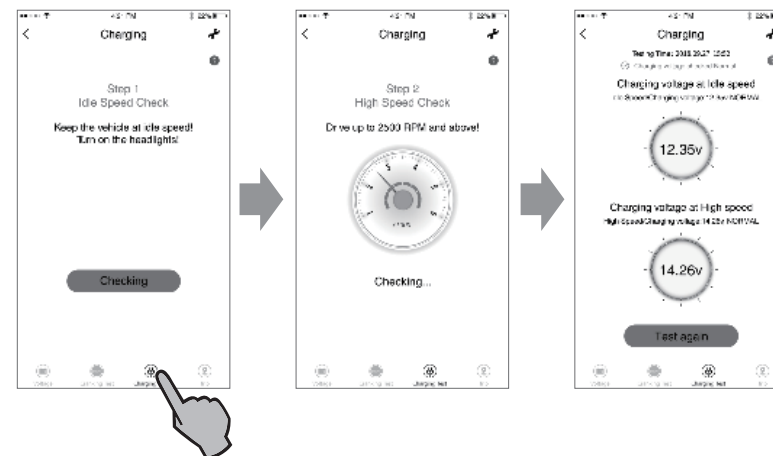
Vehicle owners of 24v batteries will have extension cables to connect the meter!



## 3) Charging Test (Test Alternator)

An alternator is used to recharge your car battery to run the car's electrical components. The vehicle's lighting system and all other electrical components work thanks to the alternator in conjunction with the battery. You should test your alternator to know whether it is in perfect condition or not to avoid unpleasant circumstances. The easiest way to test the alternator is by using this device, just following the instruction on the app, and do the test.

Notice: Due to the different charging systems of the different alternators, this test method is for reference only!



### 4) Trip Record

The Smart Sense app automatically detects and records trip duration, start, and stop times. (Many factors will affect the accuracy of the trip recorder. The trip log is for your reference only.)

#### Note:

**Trip is a complementary function to give drivers outlook of driving record. Due to the complexity of the actual driving condition, which may interfere with the built-in sensor, we can not guarantee Trip's accuracy!**



**XPARKLE**

All specifications and figures are subject to change without notice.  
Printed in China 2022.01 7504-1443-02



**FCC ID: 2ANDL-BT3L**