Owner's Manual

For JMP Skan Monitor II Standard

JMP Batterie-Monitor II Standard

APP

This product is used to monitor the vehicle battery, cranking system and charging system. After connecting it to the battery, a mobile can connect via Bluetooth. If a fault occurs with the battery, cranking or charging system, a notification alert will be sent to the user. The user also can test and review the trip record via the mobile app.

1.0 Product Parameters

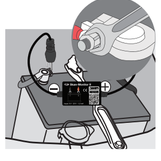
Average Current	1.5mA	Short-circuit Protection	Built in
Input Voltage	8~20V	Reverse Connection Protection	Built in
Operating Temperature	-40℃~90℃	Bluetooth	4.0
Physical Dimensions	55*35*16mm	Bluetooth Name	Battery Monitor
Voltage Accuracy (9-16V)	±0.03V	App Keyword	JMP BattMon II

2.0 Product Safety Performance

Product casing and wires are fire retardant and are suitable for use in high temperature environments.

A built-in short circuit prevention safety switch will automatically cut off power if the current is too high. Reverse connection protection built-in ensures it will not damage the vehicle or product in case of reverse polarity.

3.0 How to Install the Product



(Fig 1)

Install battery monitor to the battery of the vehicle

1. Install red connector to positive pole and black to negative pole, then secure in place.

2. Fix the product body with adhesive tape. Find a suitable position where the Bluetooth signal will not be blocked. Clean the surface before securing the product in place.

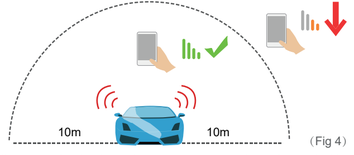
4.0 App Installation

(Fig 2)

(Fig 3)

1.Scan the QR code on the product.（Fig 2）
2.Search JMP BattMon II on App Store
or Google Play to download app.（Fig 3）

4.1 Using the app



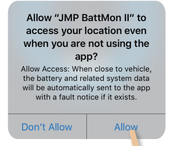
(Fig 4)

In direct line of sight, the mobile can receive the signal if placed within 10 metres. Signal strength will be affected if there are obstructions between the mobile and the device.

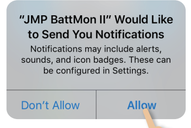
5.0 App Operation

1. Click app icon.To run the app it is necessary to turn on the Bluetooth of the mobile.

2. Please allow the app to access location even when not using the app. Without this, the product will not automatically create application notifications.



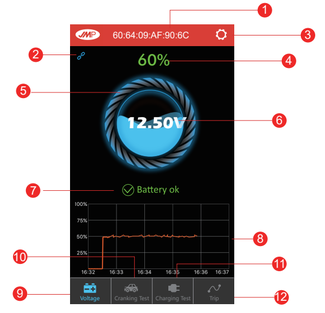
(Fig 5)



(Fig 6)

3. Please allow notifications. Notifications include the vehicle battery, cranking system and charging system alerts. Without notifications, you will not recieve any alerts to potential problems. When allowed, if the mobile enters the range of Bluetooth, it will receive the information notification no matter if the app is running or not.

6.0 App Interface Instruction—First Interface



(Fig 7)

1. It shows the device name. As default, it will be the device ID No..The user can set the nickname in the Device Management of System Setup.

2. Connected status is blue, unconnected status is red. It is default that it will connect to the latest device automatically, also can connect or disconnect manually.

3. System Setup icon, click to enter System Setup.

4. Show battery state of charge.

5. During charging, the battery ring will be dynamically rotating.

6. Show battery real-time voltage, and graphical display the state of charge.

7. Battery status: 1. Battery OK (Green), 2. Charging (Green), 3. Low Power (Red).

8. Show battery real voltage graph, click the table of graph, it can review the voltage graph every day.

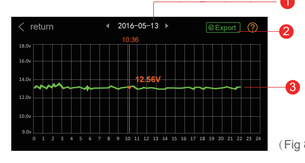
9. Battery voltage test icon, it is default first interface. Selected status is blue, the others are grey.

10. Cranking system test icon, when the engine start each time, it will test cranking system automatically. Selected status is blue, the others are grey.

11. Charging system test icon, it can test charging system manually. Selected status is blue, the others are grey.

12. Trip record icon, records each starting time, stopping time and driving time of the vehicle. Selected status is blue, the others are grey.

6.1 App Interface Introduction—Voltage History Graph



(Fig 8)

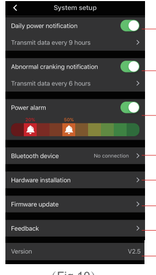
(Fig 9)

1. Date select: Click to open calendar, orange icon shows that it can review the voltage graph at selected date. If there is red digits in calendar, there happened a voltage abnormity.

2. Export data in Excel: If there is historical voltage data, the user can choose the date and export to e-mail or share it by WhatsApp, Skype, Facebook etc.

3. Historical voltage graph. Click the graph and a slider will appear. The top of the slider indicates the test time, the orange figure below the graph indicates the voltage value during this time period.

6.2 App Interface Introduction—System Setup



1. Daily Notification Alert Setup: green is on. System default is no more than one notification in 6 hours, the notification frequency can be set manually.

2. Abnormal cranking Notification: green is on. System default is no more than one notification in 6 hours, the notification frequency can be set manually.

3. Power alarm:
Two parameters can be set.
When battery power falls or reaches either value, the user will receive an app notification about the charge level.

（Fig 10）

4. Bluetooth Device Setup: click to enter Bluetooth device system setup. User can search nearby device, also can review the history of devices connected before. Bluetooth device name can be edited.

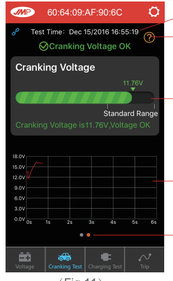
5. Hardware Installation: user can review the installation introduction.

6. Firmware Upgrade: user can review the hardware version, also can upgrade new firmware once new version available.

7. Feedback : user can input any question during use, and submit.

8. Version: display the current app version number.

6.3 App Interface Introduction—Cranking Test



1. Engine start time.

2. Cranking test: when engine starts, the device will test the cranking system automatically and store the test result. Usually, if the cranking voltage is higher than 9.6V, it means normal. But if the cranking voltage is less than 9.6V, it means abnormal. If the cranking voltage is too low, maybe aging of battery, low power, or starter fault etc.

3. Display the cranking voltage values, green color means healthy, red color means unhealthy.

4. The cranking voltage graph.

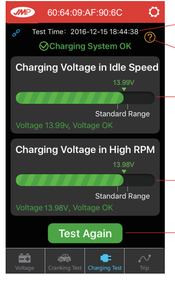
5. Can display the recent test results, the orange dot shows the selected page.

（Fig 11）

6.4 App Interface Introduction—Charging Test

（Fig 12）

（Fig 13）



1. Click to start the automatic test. The idle voltage will be shown, then move to step two.

2. For high RPM voltage test, it is necessary to increase RPM to 2500r/min and hold for 3-5 seconds, then test is finished.

3. Description of charging voltage Test:

Charging Voltage: normal
Charging system shows the alternator output normal, no problem detected.

（Fig 14）

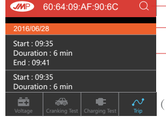
Charging Voltage: low
Charging voltage is low. Check that the alternator belt is not slipping or loose. Check that the cables between the alternator and battery are not damaged. If the alternator belt and cables are good, please follow the vehicle manufacturer's recommendations.

Charging Voltage: high
The alternator output voltage is too high. Since most automotive engines use a built-in regulator, you may need to replace the alternator assembly (Old vehicles use external regulator, you may replace only the regulator in this case). Common voltagelimits for automotive regulator is 14.7±0.5V. High voltage charging will overcharge the battery and shorten its life.

No Voltage Output: no engine voltage output is detected
Check whether the alternator cable and the alternator belt are working properly.

4. Charging test finishing time.
5. Voltage under idle test, green is ok, red is abnormal.
6. High RPM voltage test, green is ok, red is abnormal.
7. Click button to re-test.

6.5 App Interface Introduction—Trip Record



1. Click search button to review driving records by selecting the date.

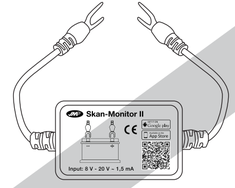
2. Date separator bar, specific to a certain day.

3. Starting time, running time and misfire time of each driving.

（Fig 15）

7.0 ⚠ Tips

1. Product should not be used overpass the specified voltage range (8-20V), excessive input voltage may damage the device.
2. App requires smartphones with: Android 4.3 and higher, iPhone 4S and higher.
3. When mobile enters Bluetooth range, it will receive a notification.
4. If during setup you select “not allowed to access location”, you will not receive notifications. If want to use this function in future, you can open the location in phone settings by selecting “always allow location access”.
5. If the daily test notifications are disabled, when the mobile is close to device, it also can’t get notification of the daily test result. You can set to allow notification both in app and phone's settings.
6. If the exception test notifications are disabled, when the mobile is close to device, it also can’t get notification of battery faults.
You can set to allow notification both in app and phone's settings.
7. Firmware update will clear all saved data in the device. Please open app and wait for sync to finish before a firmware update.
8. All historical data will be stored in the phone, an app upgrade will not lose any historical data. If the app is uninstalled, then saved data will be lost.
9. The device will automatically monitor vehicle battery, cranking and charging systems. The device can store data for up to 31 days. Please use the app or enter device Bluetooth range at least once within each 31 days. Historical data will then be synchronized to the phone.
10. If app can not locate your Battery Monitor, please ensure the Bluetooth is on and close to the device without obstructions.



JMP Batterie-Monitor II Standard

This product complies with the provisions of EU Directive 2014/53/EU. The complete EU declaration of conformity can be found on our homepage at https://uniparts.matthies.de and by naming the article.