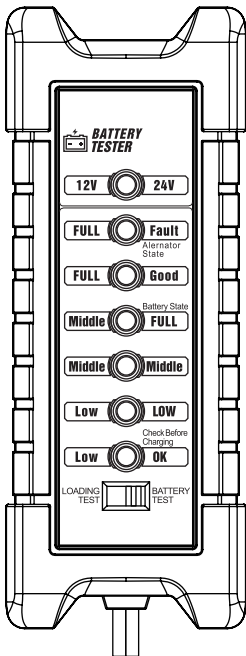


Car Battery Analyser



BM410/420/430

1. Product Details

BM410/420/430 is a portable car battery analyser tool for daily use, perform fast and effective.

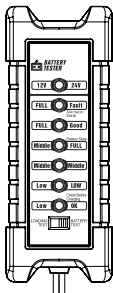
1) Battery Load Test

12V: Green LED - Current test battery is 12V

Full: Indicates that the battery is in good condition and has a good load capacity

Middle: Indicating that the battery is in very moderate condition, the carrying capacity is average

Low: Indicates poor battery condition and low load capacity



2) Charging Test

24V: Red light - current test battery is 24V

Fault: Red Light - Abnormal battery condition, high voltage

Good: Green Light - Normal working voltage

Full: Green Light - Good battery condition

Middle: Yellow Light - Medium battery

Low: Red Light - Low power, need to be charged

Ok: Check before charging

SWITCH: Mode Select

2. 12V/24V Battery Tester

For checking and testing the battery capacity, battery load capacity and the dynamo.

1) Connection:

Attach the cable clip of the red cable to the positive (+) of the battery and the black cable to the negative (-).

2) Checking The Dynamo:

Connect the testing device. Start the engine and switch off the headlights, radio etc. Start the engine again and switch on the headlights, radio etc. In both cases, then green signal LED "GOOD" should shine. The red signal LED "DEFECTIVE" will start to shine if the dynamo is in bad condition. If this situation happens, please go to local car workshop in your earliest time.

3) Checking The Charging Level:

Switch on the headlights for 1-2 minutes, then switch off. Remove the cable clips from the battery, wait approx. 10 mins then switch the testing device on again. A signal LED will shine according to the charging status of the battery indicating "FULL" "HALF-FULL" or "VERY LOW CHARGE".

4) Battery Start Capability:

The battery needs to be charged up to the maximum. Remove the connection of the ignition coil then connect the testing device. Try to start the vehicle using the key in the ignition switch. The engine cannot start (interrupted ignition). When the green signal LED "BATTERY OK" starts to shine, the charging status of the battery is ok.

5) Start The Battery Capability Load:

Switch to the loading test mode, then start the engine.

FULL: six-five LED will be shine,

MID: four-three LED will be shine,

Low: two-one LED will be shine, if no LED shine it means the battery capacity is very low, please charging the battery or change the battery.

COMMENT:

If the battery is not in good condition, the signal lamp "BATTERY OK" will start to go off and charging status of the battery LED will not light up.

WARNING:

Please use battery mate in safe area, and follow the instruction.

Parking the car in safe area before performing the testing.

3. Voltage Thresholds Details

Please check the below table for reference.

LED/V	OK	Low	Middle	Full	Good	Fault
<9.9 V	OFF	OFF	OFF	OFF	OFF	OFF
9.9 -11.9 V	ON	OFF	OFF	OFF	OFF	OFF
11.9 -12.2 V	ON	ON	OFF	OFF	OFF	OFF
12.2 -12.4 V	ON	OFF	ON	OFF	OFF	OFF
12.4 -13.5 V	ON	OFF	OFF	ON	OFF	OFF
13.5 -14.5 V	ON	OFF	OFF	ON	ON	OFF
>14.5 V	ON	OFF	OFF	ON	OFF	ON

* The threshold might be a little different due to the different battery type, please go to professional car battery workshop for further testing if in emergency.

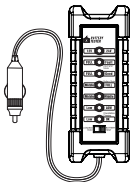
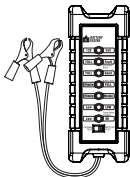
4. Multiple Modes Available

There are total 3 types battery testers as below:

1) BM410

Battery detector with clips.

Perform outside vehicle, have to open hood to test the battery condition, but in very fast response and accurate data.



2) BM420

Battery detector with cigarette lighter.

specially designed for in-car testing which is convenient to operate.

3) BM430

Battery detector and cigarette lighter with clips, triple use, including BM-310 and BM-320 functions.

