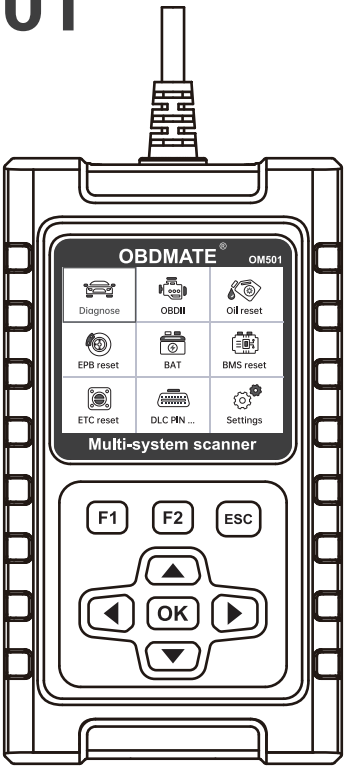
OBDMATE®

USER'S MANUAL

OM501



7/24 Service: obdmate@autophix.com

SAFETY PRECAUTIONS AND WARNINGS

To avoid injury or damage to the vehicle and/or scan tool, please read this manual at first and observe the following safety precautions when working on a vehicle:

- Always perform vehicle tests in a safe environment.
- Do not attempt to operate or observe the unit while driving a vehicle.
- Operating or observing the device while driving can cause distraction and may result in a fatal accident.
- Wear safety glasses that meet the standards of ANSI.
- Keep your hair, hands, clothing, tools, and test equipment away from all moving or hot engine parts.
- Operate the vehicle in a well-ventilated area: Exhaust fumes are toxic.
- Put the transmission in PARK(for automatic) or NEUTRAL(for manual) and make sure the parking brake is engaged.
- Never leave the vehicle unattended while performing tests.
- Use extreme caution when working near the ignition coil, distributor cap, ignition wires and spark plugs. These components generate dangerous voltages when the engine is running.
- Keep a fire extinguisher nearby that is suitable for gasoline, chemical, and electrical fires.
- Keep the scan tool dry, clean, and free of oil/water or grease. If necessary, use a mild detergent on a clean cloth to wipe the exterior of the scan tool.

ABOUT OBDMATE OM501

1. Coverage

OBDMATE OM501 is a professional diagnostic tool for Land Rover and Jaguar. It supports multiple vehicle systems, such as engine, brake, airbag, automatic transmission, instrumentation and other control systems.

1) This device works on most OBDII compatible American, European and Asian vehicles after 2000.

2) This device supports most Land Rover and Jaguar models as listed:

Land Rover: Range Rover, Range Rover Velar, Range Rover Sport, Evoque, Evoque II, Freelander, Discovery, Discovery Sport, Defender.

Jaguar: XJS, XF, XK, F-Type, S-Type, XE, F-Pace, I-Pace.

2. Product Specifications

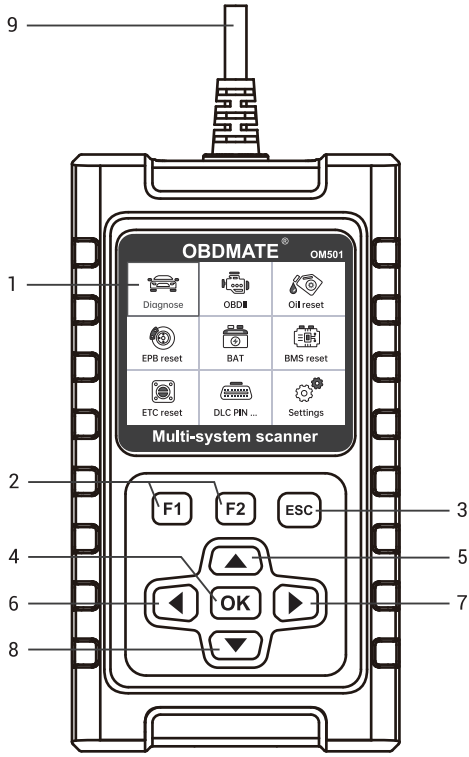
1) Display: 2.8" TFT 262K true color

2) Operating temperature: 0 to 50 ºC (32 to 140 ºF)

3) Storage temperature: -20 to 70 ºC (-4 to 158 ºF)

4) External power supply: 8.0 to 18.0 V (Vehicle battery-powered)

3. Product Appearance



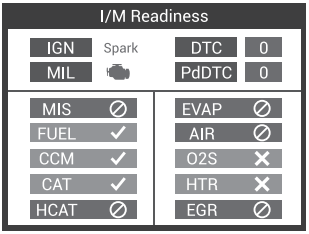
3.1 Buttons Description

1) LCD DISPLAY - Indicate test results. Backlit, 2.8" TFT color screen, 320*240 pixels.
2) **[F1]/[F2]** BUTTON - Shortcut keys for "I/M Readiness", "Diagnose" and "Service" functions.
3) **[ESC]** BUTTON - Cancels the current selection/action or returns to the previous menu.
4) **[OK]** BUTTON - Confirms the current selection/action.

5) [▲] BUTTON - Scrolls upward through menu items (one item per press).
6) [◄] BUTTON - Moves the cursor left or select the left menu item.
7) [►] BUTTON - Moves the cursor right or select the right menu item.
8) [▼] BUTTON - Scrolls downward through menu items (one item per press).
9) OBDII CONNECTOR - Connects the scan tool to the vehicle's DLC (Data Link Connector).

3.2 I/M Readiness Shortcut

Press F1/F2, then select "I/M Readiness". The display shows as following:



Remarks:
MIL Yellow- Dashboard MIL ON
MIL Gray-Dashboard MIL OFF
⊘ -not support
✓ -complete
✕ -not complete

Note: The F1/F2 keys can be customized in "Settings".

4. Accessories List

1) User manual - Instructions on how to operate the scanner.
2) USB cable - Connects the scanner to a computer for upgrade.
3) Storage case - To carry the tool and accessories.

OPERATION INSTRUCTIONS

1. OM501 Connection Procedure

1) Turn off the ignition.

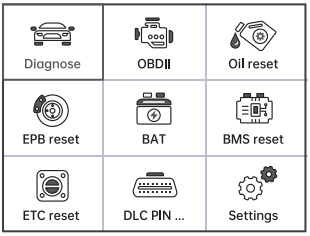
2) Plug the scan tool's 16-pin connector into the vehicle's DLC port.

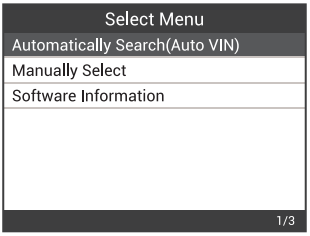
3) Turn the ignition to "ON" position (do not start engine).

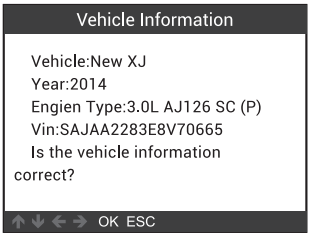
4) The scan tool will power up automatically.

2. For JLR System Scan

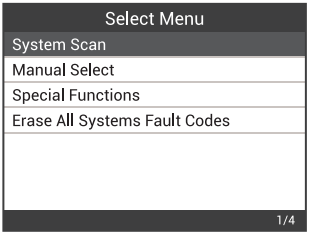
1) Select "Diagnose" from the main menu. Then select "Automatically Search(Auto VIN)" from "For JLR". The scan tool will display as follows:

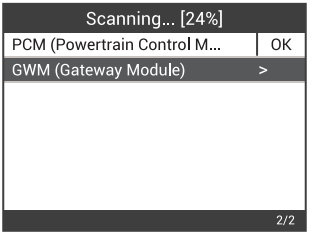






2) Select "System Scan", and the tool will automatically scan vehicle's systems. The faulty system will be displayed.

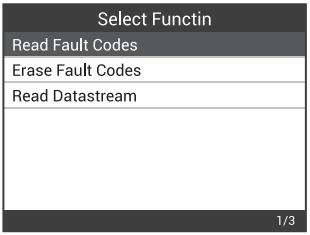


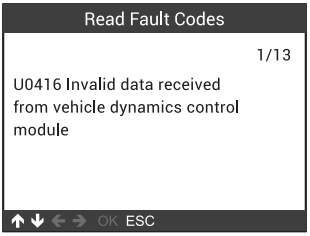


Note: Diagnostic menu options may vary depending on the vehicle model.

2.1 Read Fault Codes

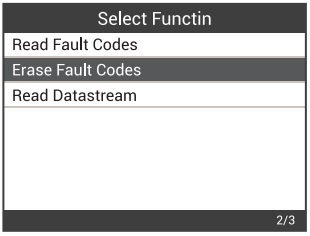
Select "Powertrain Control Module" then select "Read Fault Codes". It will display as follows:

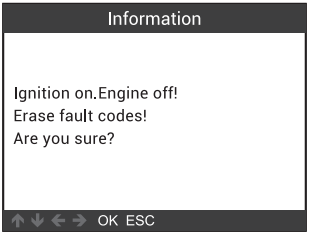


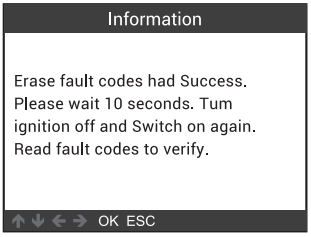


2.2 Erase Fault Codes

Select "Erase Fault Codes" and the tool will display as follows:

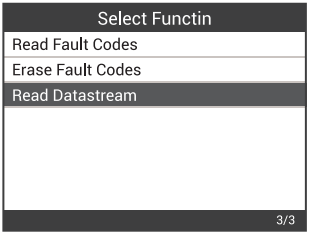


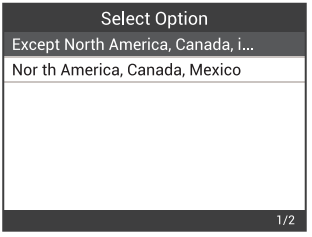


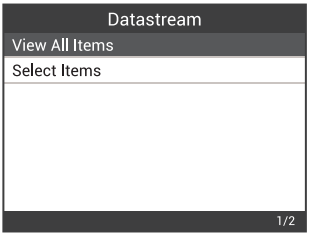


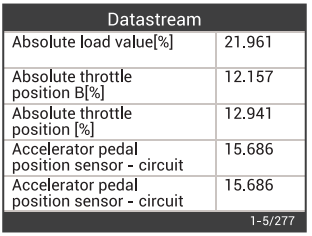
2.3 Read Data stream

1) Select "Read Datastream" and then select "View All Items", the tool will display as follows:

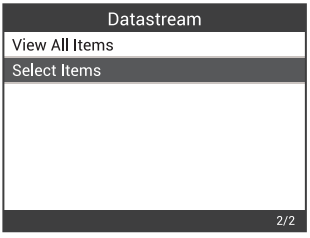


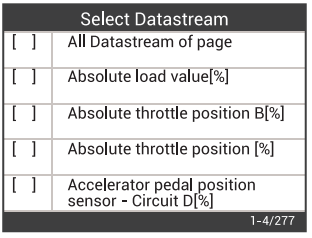


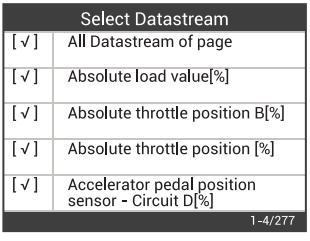


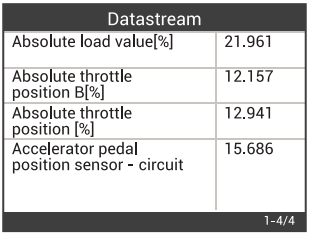


2) Select "Read Datastream" then select "Select Items". It will display as follows:







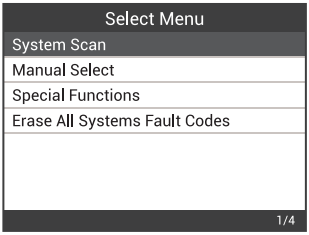


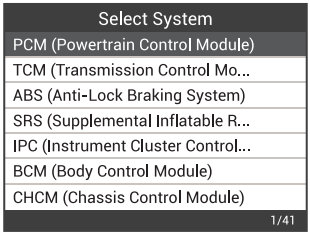
Press [◄] and [►] keys to scroll. Press [▲] and [▼] keys to select in sequence.
Press [OK] key to select the datastream and press [ESC] key to read the datastream.

3. For JLR Manual Selection

Manual selection is to display all systems.

Select "Manual Select" and then choose one of the systems to diagnose.





The further operating steps are the same as in the "System Scan" menu.

4. For JLR Special Functions

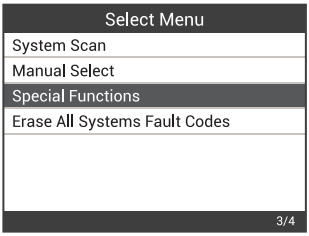
The procedure of each special function contains multiple steps. Screen captures in this manual demonstrate representative steps - actual workflow may differ. Always adhere to the interface prompts during actual operation.

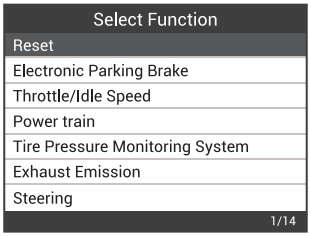
Here we select two of the special functions and explain them in detail.

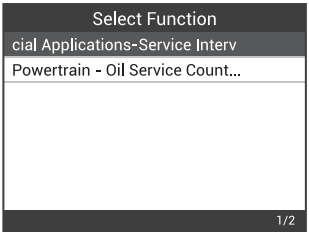
Note: Special functions availability depends on the vehicle's year, make, and model. Not all special functions are supported.

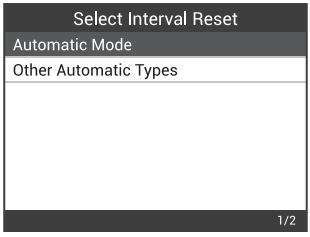
4.1 Oil Reset

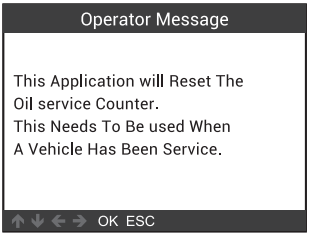
Select "Special Functions" first, then select "Reset". The tool will display the following.

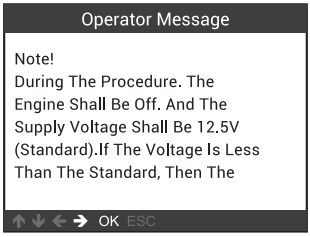


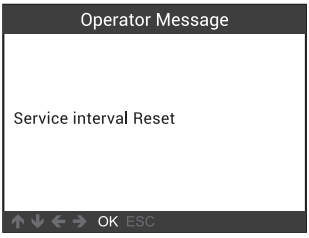


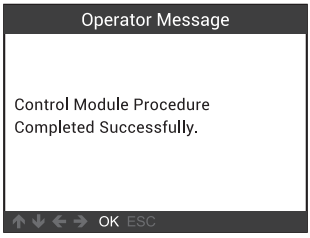






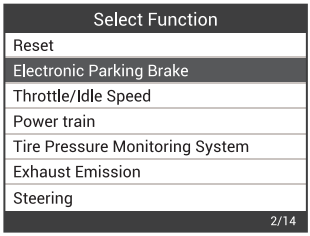


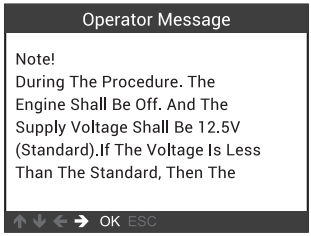


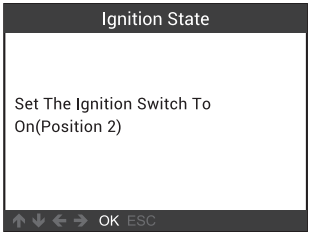


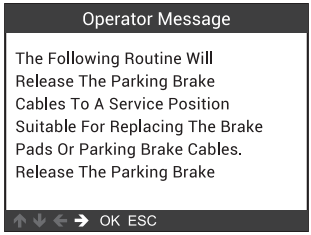
4.2 Electronic Parking Brake

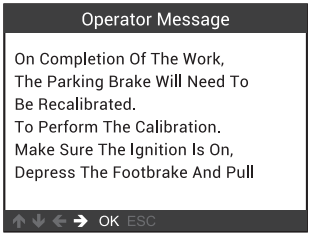
Select "Special Functions" first, then select "Electronic Parking Brake". The tool will display the following.

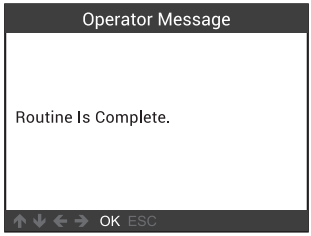


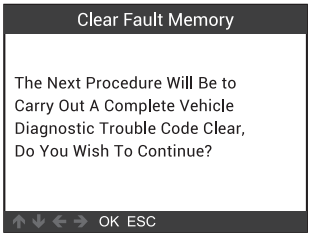


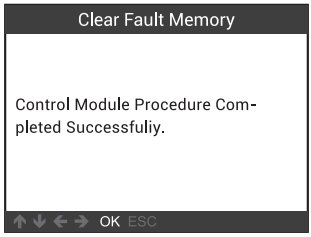






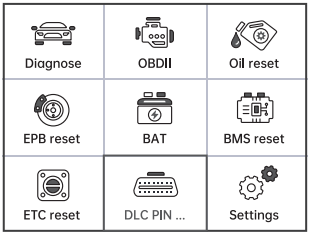


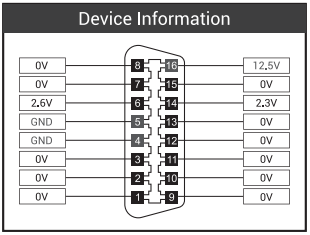




5. DLC PIN Test

The tool supports detecting the voltage measurements for each pin of the 16-pin diagnostic connector (DLC). Select "DLC PIN Test" in the main menu, then press OK to proceed. The screen will display as shown below.

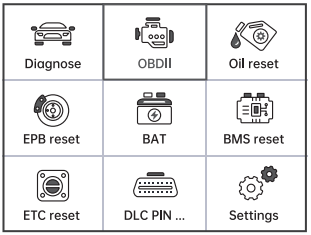


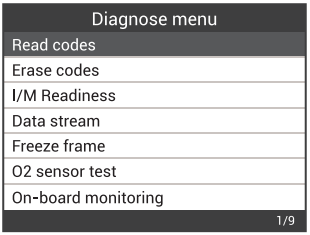


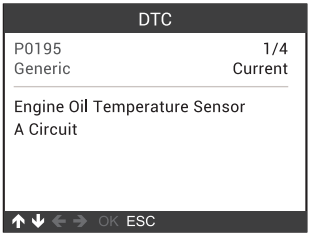
6. OBDII Functions

6.1 Read Codes

Access "OBDII", select "Read Codes" from "diagnostic menu" and press [OK]. If fault codes exist, they will list as below:

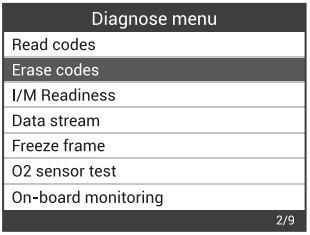


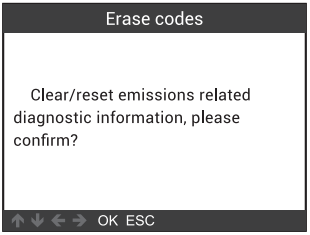




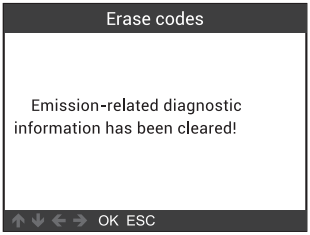
6.2 Erase Codes

1) Select "Erase Codes" in the diagnostic menu, the screen will display as follows:



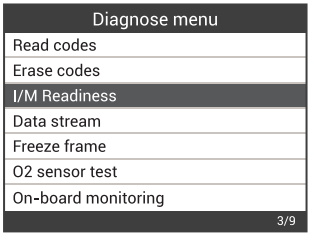


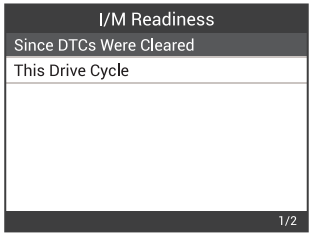
2) Press [OK] to erase fault codes.



6.3 I/M Readiness

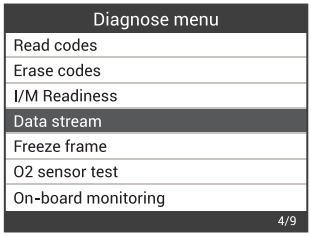
Select "I/M Readiness" in the diagnostic menu, the screen will display as follows:



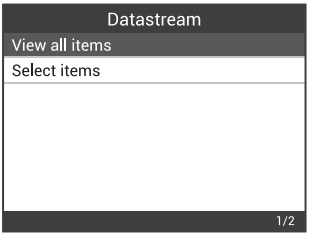


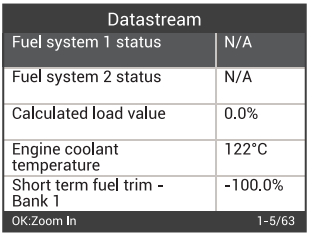
6.4 Read Data Stream

1) Select "Data stream" in the diagnostic menu.



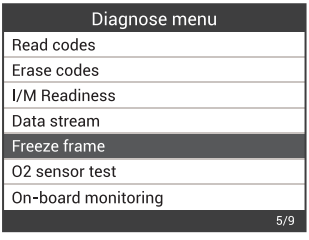
2) Select "View all items", the user can read real-time data including value(volts, rpm, temperature, speed etc.) and system status information (open loop, closed loop, fuel system status, etc.) generated by the various vehicle sensors, switches and actuators.

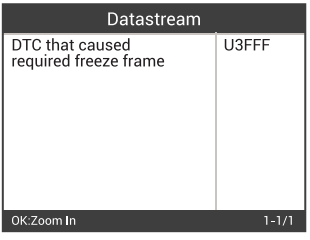




6.5 Freeze Frame

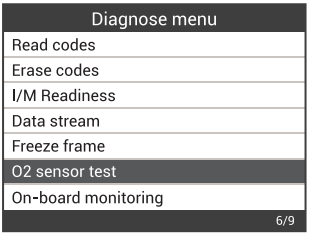
Select "Freeze Frame" in the diagnostic menu then press [OK]. The screen will display recorded emission-related fault information.

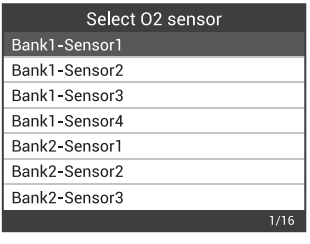




6.6 O2 Sensor Test

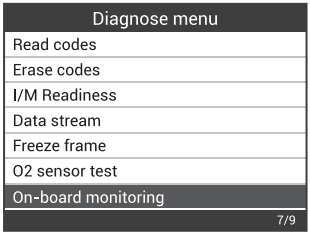
Select "O2 sensor test" in the diagnostic menu then press [OK]. It will retrieve and display the O2 Sensor monitor test results from the vehicle's ECU.

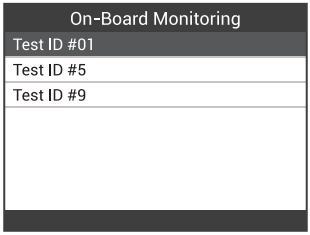




6.7 On-board Monitoring

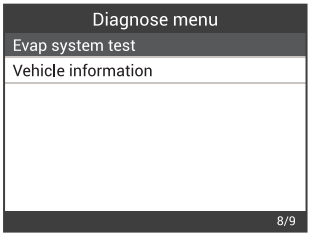
Select "On-board monitoring" in the diagnostic menu then press [OK]. It will display the results of the on-board diagnostic monitoring (the data is different each time).

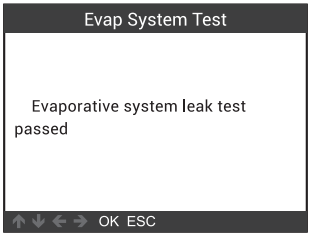




6.8 EVAP System Test

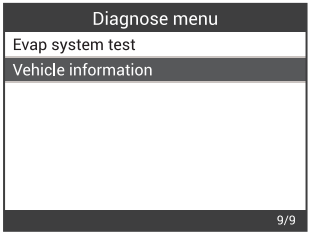
Select " EVAP system test" in the diagnostic menu then press [OK]. If the vehicle supports this function, it will display as follows:

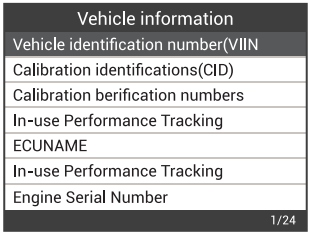




6.9 Vehicle Information

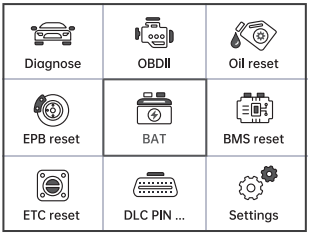
Select " EVAP system test" in the diagnostic menu then press [OK]. It will display the information such as VIN(Vehicle identification number), CID (Calibration identifications), CIN (Calibration verification numbers), etc.

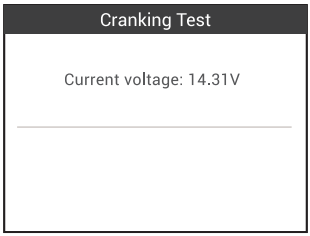




7. BAT Check

Select "BAT" to perform a battery test. This monitors the vehicle's battery voltage in real time.





8. Tool Setup

The scan tool allows you to make the following settings and adjustments.

1) Language: Select your preferred language, then press [OK] to confirm.

2) Beeper: Turns ON/OFF the beep tone then press [OK] to confirm.

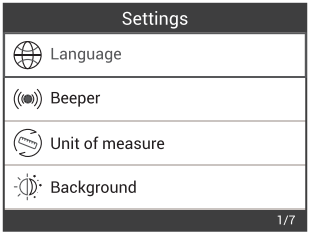
3) Unit of measurement: Choose between Imperial (e.g., mph, °F) or Metric (e.g., km/h, °C) then press [OK] to confirm.

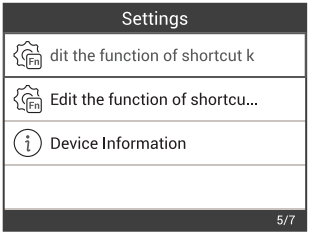
4) Background: Select Day mode or Night mode then press [OK] to confirm.

5) Edit the function of shortcut key F1: Set F1 as shortcut for "I/M Readiness" "Diagnose" or "Service". Press [OK] to confirm.

6) Edit the function of shortcut key F2: Set F2 as shortcut for "I/M Readiness" "Diagnose" or "Service". Press [OK] to confirm.

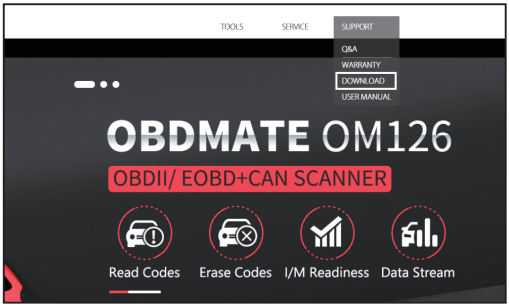
7) Device information: Access version information about this tool.



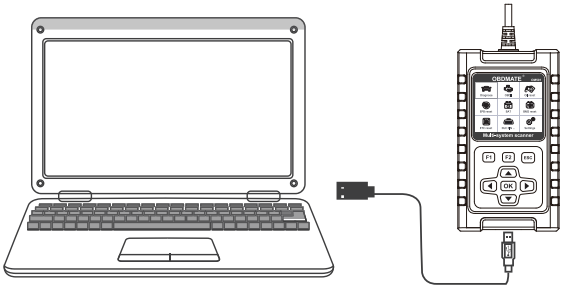


9. Update

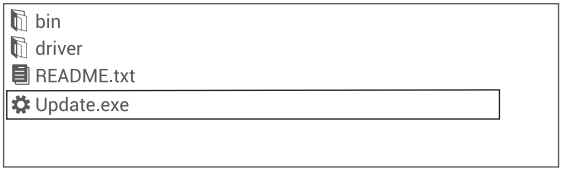
1) Visit our website www.obdmate.com/en and download the update software to your computer (locate “SUPPORT-DOWNLOAD” in the upper-right corner).



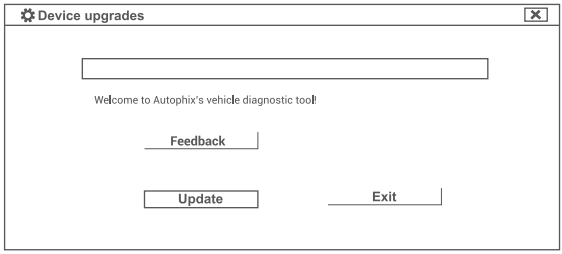
2) Connect the tool to the computer using the included USB cable.

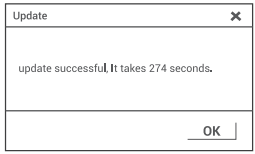


3) Unzip the upgrade file and execute the software.



4) Click “Update” to complete the upgrade.





Note: The update software only supports Windows 7/8/10/11; Windows XP and macOS are not supported.

10. Warranty

1. This warranty is valid solely for the original purchaser of OBDMATE products.
2.OBDMATE products are warranted against defects in materials and workmanship under normal use for one year (12 months) from the date of retail purchase.
3. If any issues, we commit to providing a resolution within 24 hours.

Contact Us:
obdmate@autophix.com
www.obdmate.com/en/

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AUTOPHIX TECH CO.,LTD

Address: Room 406, 403 and 402, Building 2, XiangRong Road No.8,
Bujiuwo, Longping Community, Dalang Street, Longhua District, Shenzhen,
Guangdong, China 518000
E-mail: obdmate@autophix.com
Website: www.obdmate.com/en/

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