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MADE IN CHINA



TOPDON



ArtiDiag800 BT

Professional Diagnostic Tool
USER MANUAL

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Welcome

Thank you for purchasing TOPDON automotive diagnostic tool ArtiDiag800 BT. Please patiently read and understand this User Manual before operating this product.

About

TOPDON ArtiDiag800 BT is designed with technicians in mind. This 5.99" Android tablet-style scanner boasts high-quality features with easy workflow to tackle the common and complex vehicle diagnostic issues for most modern vehicles worldwide. The Bluetooth VCI dongle has been included allowing wireless diagnostics for optimal efficiency.

Package List

- ArtiDiag800 BT
- Bluetooth VCI Dongle (Pre-installed in the Unit)
- Charging Cable
- Charging Adapter
- Password Envelope
- User Manual

Compatibility

TOPDON ArtiDiag800 BT is compatible with the following protocols:

- KWP2000
- ISO9141
- J1850 VPW
- J1850 PWM
- CAN (Controller Area Network)
- And more

Notice

ArtiDiag800 BT may automatically reset while being disturbed by strong static electricity. THIS IS A NORMAL REACTION.

This Product Manual is subject to change without written notice.

Read the instruction carefully and use the unit properly before operating. Fail to do so may cause damage and/or personal injury, which will void the product warranty.

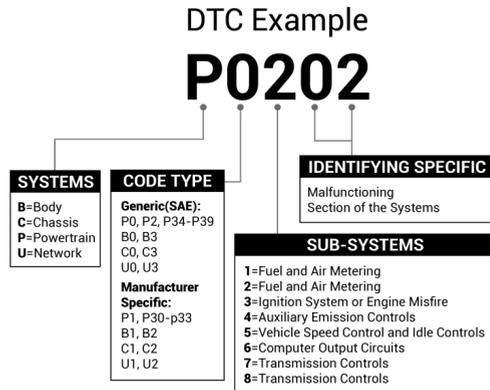
*Visit www.topdon.com/products/artidiag800BT to download the multilingual user manual.

General Information of OBDII (On-Board Diagnostics II)

The OBDII system is designed to monitor emission control systems and key engine components by performing either continuous or periodic tests of specific components and vehicle conditions, which will offer three pieces of such valuable information:

- Whether the Malfunction Indicator Light (MIL) is commanded "on" or "off";
- Which, if any, Diagnostic Trouble Codes (DTCs) are stored;
- Readiness Monitor status.

Diagnostic Trouble Codes (DTCs)



Product Descriptions

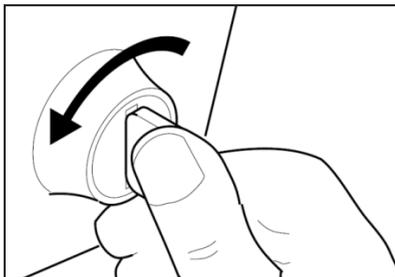


| NO. | Name | Descriptions |
|-----|--------------------|--|
| 1 | Power Inlet | For charging and data transmission. |
| 2 | USB Expansion Slot | Can be used to charge 5V electronic devices. |
| 3 | Power/Lock Button | <ul style="list-style-type: none"> • Hold the button for 3 seconds to turn the tablet on, or off. • Hold the button for 8 seconds for a forced shutdown. • Press the button to wake up the screen or turn off the screen. |

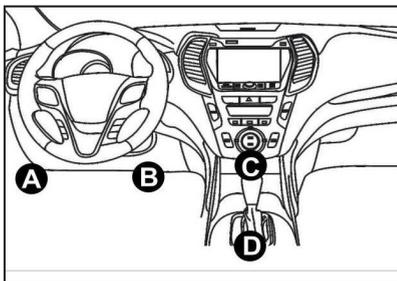
| NO. | Name | Descriptions |
|-----|-----------------------|--|
| 4 | Loudspeaker | Converts an audio signal into a corresponding sound. |
| 5 | Screen | Displays the test results. |
| 6 | Diagnostic VCI Dongle | The pre-installed diagnostic VCI dongle will be ejected from the docking slot once you press it. Please reinsert the VCI dongle into the slot to avoid loss when it is idle. |

Preparation & Connection

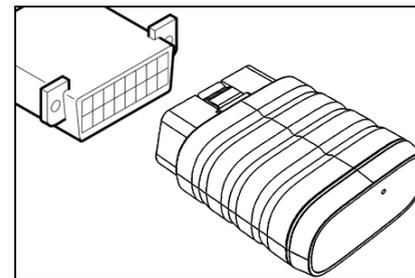
1. Turn the ignition off.



2. Locate the vehicle's DLC socket.



3. Plug the TOPDON ArtiDiag800 BT Diagnostic VCI dongle into the vehicle's DLC socket.



4. Turn the ignition on. The engine can be off or running.
5. Hold the Power Button for 3 seconds to turn the TOPDON ArtiDiag800 BT on. The tablet will start initializing and enter the following interface.



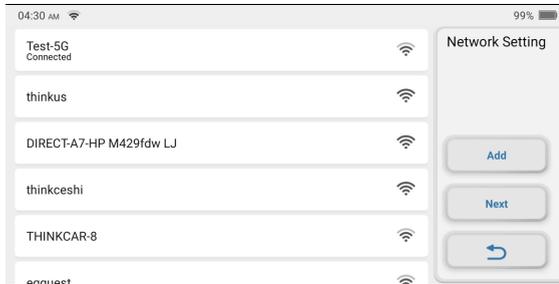
*Note: Don't connect or disconnect any test equipment with the ignition on or engine running.

6. Language Setting
Select the tool language in the following interface:



7. Connect Wi-Fi

The system will automatically search all available Wi-Fi networks. You can choose the Wi-Fi needed.



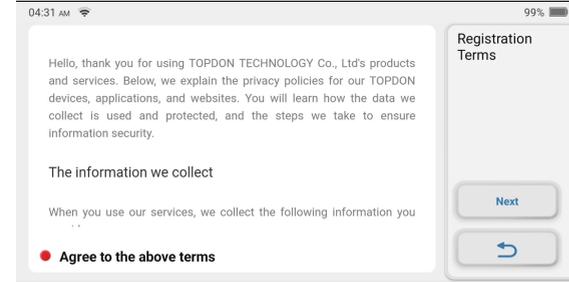
8. Choose Time Zone

Choose the time zone where you are in. The system will automatically configure the time according to the time zone you selected.



9. User Agreement

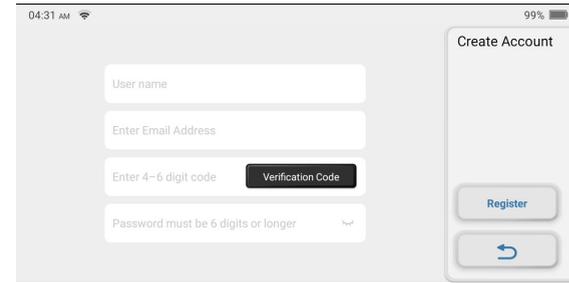
Please read all the terms and conditions of the user agreement carefully. Choose "Agree to the above terms".



Tap "Next" to register an account.

10. Create an Account

You need to register an account with a valid e-mail address. Or you can directly log in by using the account available if you already have one.



After you input the information required, tap "Register". The tablet will enter the Activation procedure.

11. Activation

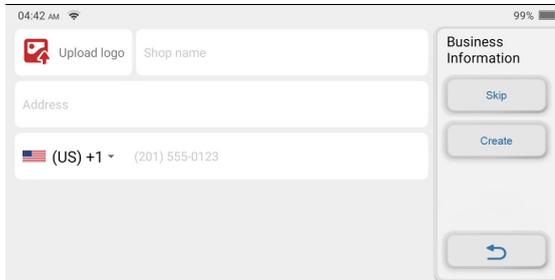
Input the serial number and activation code to activate and bind the diagnostic VCI dongle. Both the serial number and the activation code are available in the "Password Envelop".



You need to activate the tablet first before performing any diagnostic functions, or a window will pop up saying "Diagnostic function is not available yet. Activate the device with your account now". And the Activation procedure is necessary for being able to upgrade the software. Tap "Activate" to finish the procedure.

12. Type in Business Information

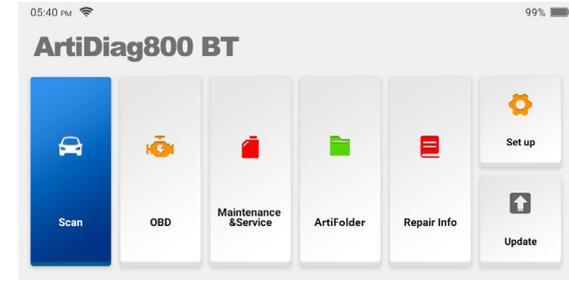
Input the repair shop information which will be shown in the diagnostic report.



Tap "Create" to finish the procedure. The system will automatically jump to the Home Menu.

Operation Introduction

TOPDON ArtiDiag800 BT has 7 major modules, including OBD, Scan, Maintenance & Service, ArtiFolder, Repair Info, Setup, and Upgrade.



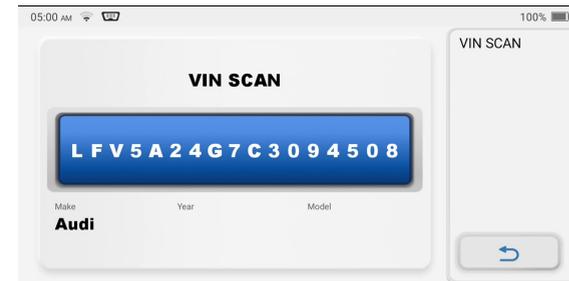
1. Diagnosis

TOPDON ArtiDiag800 BT supports Smart Diagnosis and Manual Diagnosis covering OBDII diagnosis, full system diagnosis for most modern vehicles worldwide. A diagnostic report will be automatically generated after the diagnostics.

1.1 Smart Diagnosis

Plug the dongle into the vehicle's DLC port, and tap "Scan" in the main interface. Tap "AUTOSEARCH" to start communicating with the dongle via Bluetooth.

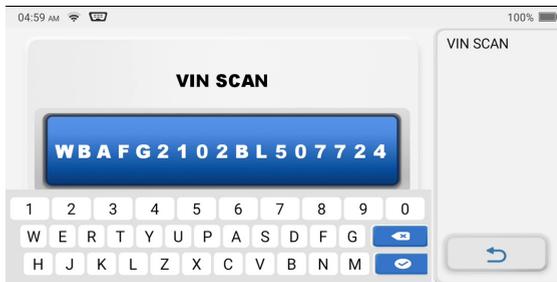
The system will automatically start scanning the vehicle's VIN after establishing stable communication.



*Note: Follow the prompts to proceed if the communication failure occurs.

1.2 Manual Diagnosis

You need to enter the vehicle's VIN data manually if ArtiDiag800 BT fails to get access to the vehicle VIN data automatically.

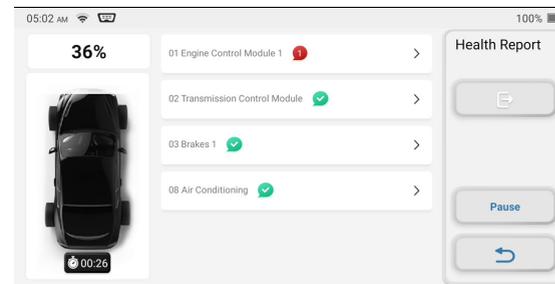


After reading VIN, the following screen may appear:

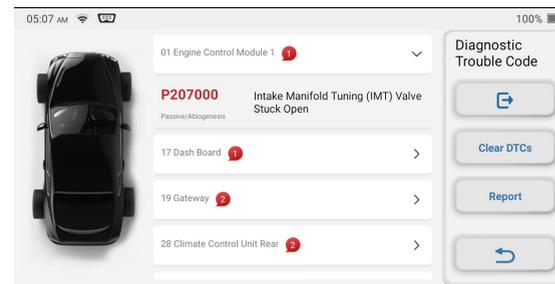


1.3 Health Report

This function can quickly reveal the vehicle's health status. Tap "Health Report". The system will start scanning DTCs and show the test results.



The DTC will be displayed on the screen in red font, with a specific definition.



*Note: This function will be available only when the diagnostic software supports it.

1.4 System Scan

This function will automatically scan all systems of the vehicle.

1.5 System Selection

This function allows you to manually choose the automotive electronic control system.

Tap "ECM" (e.g.). The screen will show the selection interface.



Choose the system to be tested. The following screen may vary by vehicle's make, model, and year.



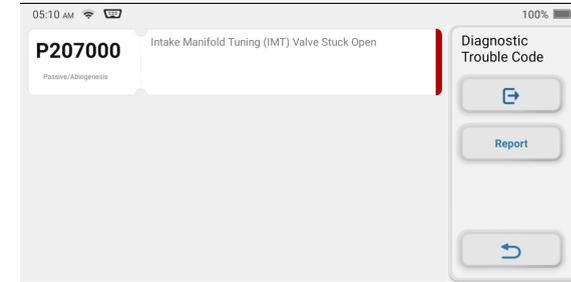
1.5.1 Version Information

This function reads the current version information of ECU.

1.5.2 Read Fault Code

This function can read the Diagnostic Trouble Codes (DTCs) in the ECU memory, helping quickly identify the cause of the vehicle breakdown.

Tap "Read Fault Code". The screen will display diagnostic results.



*Explanation of terms:

- Freeze Frame: Records specific data streams for verification when the car breaks down.
- Report: Saves the current diagnosis result as a diagnosis report, which can be sent to a specific E-Mail address.

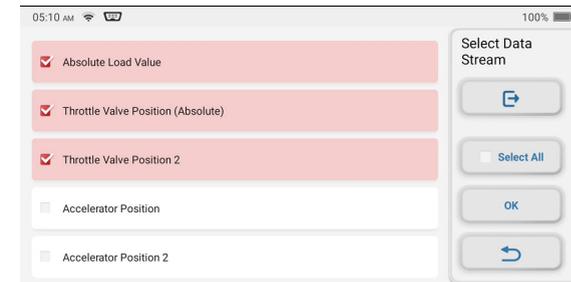
1.5.3 Clear Fault Code

This function can clear the DTC of the ECU memory of the tested system.

1.5.4 Read Data Stream

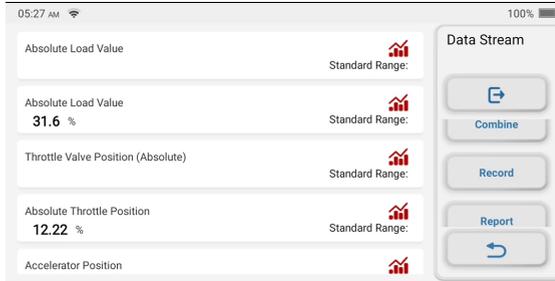
This function can read and display the real-time data and parameters of ECU.

To view the specific data stream, check the box next to its name, and then tap "OK".



The system will display a maximum of four dynamic data streams in three modes:

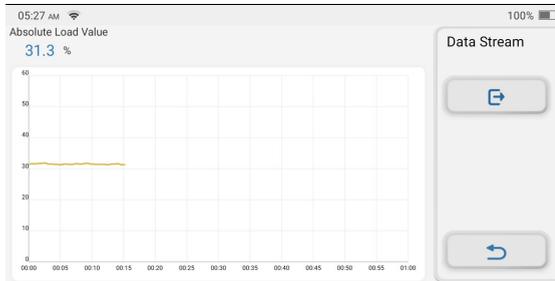
- 1) Value (default): Shows parameters with numbers and lists.
- 2) Figure: Displays parameters with wave patterns.
- 3) Combine: The graphs can be merged for easier comparisons.



*Explanation of terms:

- : To have the data streams displayed in wave patterns.
- Report: To save the number of current data streams.
- Record: To record the diagnostic data for further analysis.
- Help: To check the help information.

Tap to have the data streams displayed in wave patterns.



Tap "Combine". The system will display the merged parameters of the selected data streams with wave patterns.



1.6 Diagnostic History

The tablet will record the details of every diagnostic session.

The History function provides direct access to the previously tested vehicles. Users can resume from the last operation, without the necessity of starting from scratch.

Tap "HISTORY" in the "Scan" module. All diagnostic records will be listed on the screen in a date sequence.



2. Maintenance & Reset

TOPDON ArtiDiag800 BT features 16 most commonly used maintenance and reset functions.

2.1 Maintenance Light Reset

This function enables you to reset the oil service lamp for the engine oil life system, which calculates an optimal oil life change interval depending on the vehicle driving conditions and weather events.

It needs to be performed in the following cases:

- If the service lamp is on, run car diagnostics first for troubleshooting. After that, reset the driving mileage or driving time, so as to turn off the service lamp, and enable a new driving cycle.
- If the service lamp is not on, but you have changed the engine oil or electric appliances that monitor oil life, you need to reset the service lamp.

2.2 Steering Angle Reset

This function can reset the steering angle to zero to keep the car running straight.

It needs to be performed generally after replacing the steering angle position sensor, or after replacing the mechanical parts of the steering system (such as steering gear, steering column, tie rod ball head, steering knuckle), or after completing the four-wheel positioning, body repair, etc.

2.3 Injector Coding

This function can write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder, so as to have more accurately control or correct cylinder injection quantity.

It needs to be performed in the following cases:

- After the ECU or injector is replaced.

2.4 Battery Matching

This function can reset the monitoring unit of the car battery, by clearing the original breakdown information about the lack of battery power to rematch the battery.

It needs to be performed in the following cases:

- Replacement of the main battery needs to utilize battery matching to clear the former information about the lack of power, thus avoiding false information detected by the relevant control module which may cause the failure of some electronic auxiliary functions. For example, the vehicle automatically stops; the sunroof can't work by one key; electric windows

can't open and close automatically.

- The battery monitoring sensor uses the battery matching function to re-match the control module with the monitoring sensor, so as to detect the use of the battery power more accurately, and avoid receiving wrong information from instrument prompts which will cause false alarms.

2.5 ABS Bleeding

This function enables you to perform tests to check the operating conditions of the Anti-lock Braking System (ABS).

It needs to be performed in the following cases:

- When the ABS contains air.
- When the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced.

2.6 Throttle Matching

This function can utilize the car decoder to initialize the throttle actuator so that the learning value of the ECU returns to the initial state. By doing so, the movement of the throttle (or idle motor) can be more accurately controlled, thus adjusting the intake volume.

It needs to be performed in the following cases:

- After replacing the electronic control unit, the relevant characteristics of the throttle operation have not been stored in the electronic control unit.
- After the electric control unit is powered off, the memory of the electric control unit's memory is lost.
- After replacing the throttle assembly, you need to match the throttle.
- After replacing or disassembling the intake port, the controlling of the idle speed by the coordination between the electronic control unit and the throttle body is affected.
- The intake volume and the idle control behavior has changed while staying at the same throttle opening position, although the idle throttle potentiometer behavior hasn't changed.

2.7 Electronic Parking Brake Reset

This function helps you to replace and reset the brake pad.

It needs to be performed in the following cases:

- The brake pad and brake pad wear sensor are replaced.
- The brake pad indicator lamp is on.
- The brake pad sensor circuit is short, which is recovered.
- The servo motor is replaced.

2.8 DPF Regeneration

This function can help remove particulate matter from the trap by using combustion oxidation methods to keep the performance of the trap stable.

It needs to be performed in the following cases:

- Replace the exhaust back pressure sensor.
- Disassembly or replacement of the particle trap.
- Removal or replacement of fuel additive nozzles.
- Removal or replacement of catalytic oxidizer.
- The DPF regeneration fault lamp is lit and matched after maintenance.
- Repair and replace the DPF regeneration control module.

2.9 Anti-theft Matching

This function can match the anti-theft key after replacing the ignition key, ignition switch, instrument cluster, engine control unit (ECU), body control module (BCM), and remote control battery.

2.10 Tire Pressure Reset

This function can reset the tire pressure and turn off the tire pressure fault indicator when the car tire pressure fault indicator light is on.

2.11 Suspension Level Calibration

This function can adjust the vehicle body height sensor for level calibration after replacing the vehicle height sensor or control module in the air suspension system, or when the vehicle level is not correct.

2.12 Headlight Matching

This function can initialize the adaptive headlight system. The headlight system can decide when to turn on the headlights based on the ambient light intensity. It can also monitor the vehicle's driving speed, body posture, etc., and adjust the headlight lighting angle timely.

2.13 Gearbox Matching

This function can complete the self-learning of the gearbox and improve the shift quality when the gearbox is disassembled or repaired which may cause shifting delay or car impact.

2.14 Sunroof Initialization

This function can set the sunroof lock off, close in rain, memory function of sliding/tilting sunroof, outside temperature threshold, etc.

2.15 EGR Adaption

This function can learn the EGR (Exhaust Gas Recirculation) valve after it is cleaned or replaced.

2.16 Tooth Learning

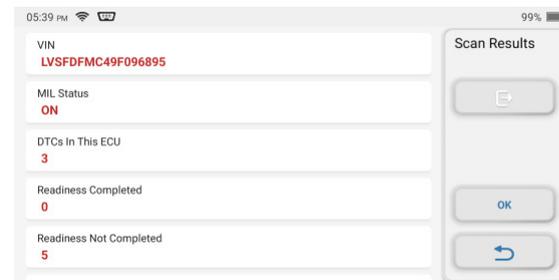
This function can perform tooth learning for the car, to turn off the MIL. It needs to be performed in the following cases:

- After the engine ECU, crankshaft position sensor, or crankshaft flywheel is replaced.
- The DTC "tooth not learned" is present.

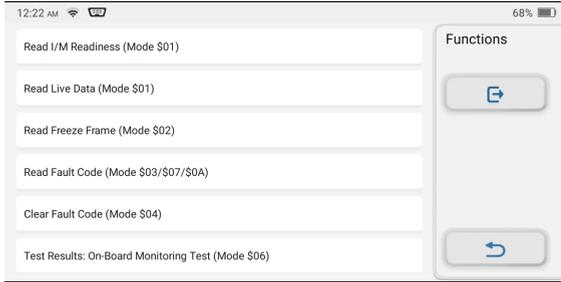
3. OBDII/EODB Diagnostics

This function presents a quick way to check for DTCs, isolate the cause of the illuminated Malfunction Indicator Lamp (MIL), check monitor status prior to emissions certification testing, verify repairs, and perform other services that are emission-related.

Tap "OBD" in the Home Menu after the tablet is properly connected to the vehicle's DLC port. The tablet will start an automatic check of the vehicle's computer to determine which type of communication protocol it is using, then display the Monitor Status as follows:



Tap "OK", the following OBDII function list appears.



3.1 Read Codes

This function can identify which section of the emission control system has malfunctioned.

3.2 Erase Codes

This function erases the codes from the vehicle, after retrieving codes from the vehicle and certain repairs have been carried out.

Make sure the vehicle's ignition key is in the ON position with the engine being off before the operation.

3.3 I/M Readiness

This function checks whether or not the various emissions-related systems on the vehicle are operating properly, and are ready for Inspection and Maintenance testing.

It can also be used to check the Monitor Run Status and to confirm if the repair of a car fault has been performed correctly.

3.4 Data Stream

This function retrieves and displays live data and parameters from the vehicle's ECU.

3.5 View Freeze Frame

This function takes a snapshot of the operating conditions when an emission-related fault occurs.

3.6 O2 Sensor Test

This function retrieves O2 sensor monitor test results of the most recently completed tests from the vehicle's on-board computer.

3.7 On-Board Monitor Test

This function retrieves test results for emission-related powertrain components and systems that are not continuously monitored. The test's availability is determined by the vehicle manufacturer.

3.8 EVAP System Test

This function initiates a leak test for the vehicle's EVAP system.

Refer to the vehicle's service repair manual to determine the procedures necessary to stop the test.

3.9 Vehicle Info

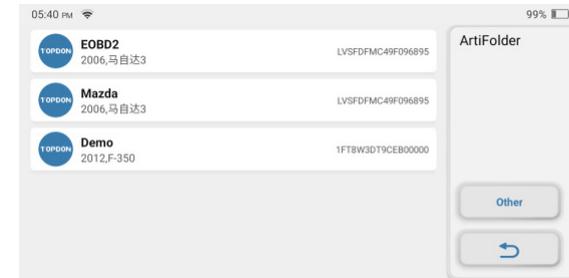
This function retrieves a list of information (provided by the vehicle manufacturer) from the vehicle's on-board computer.

This information may include:

- VIN (Vehicle Identification Number).
- CID (Calibration ID).
- CVN (Calibration Verification Number).

4. ArtiFolder

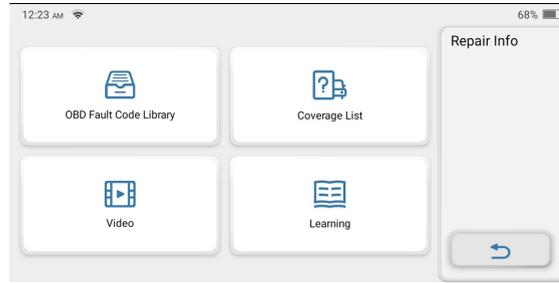
This module can record and establish the file of the diagnosed vehicles, including all diagnostic-related data such as diagnostic reports, data stream records, and screenshots.



5. Repair Info

This module includes four sections:

- 1) OBD Fault Code Library: The detailed explanation of the fault codes.
- 2) Coverage List: The supported vehicles' information.
- 3) Videos: Contains table usage tips, maintenance, and diagnostic guides.
- 4) Learning Course: Demonstrates how to operate the tool.



6. Update

This module allows you to update the diagnostic software & App to the latest version. You can also set frequently used software here.

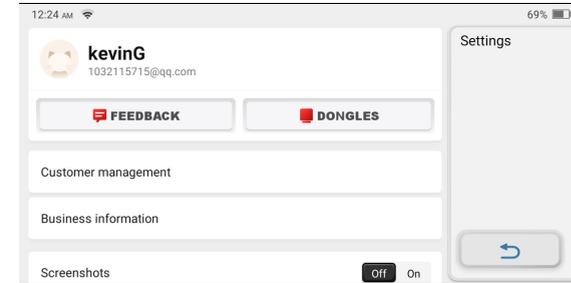
A pop-up message will indicate newer software is available if you don't update the software in the process of registration.



7. Settings

You can modify or add related information in this module, or make settings after the initial setting is completed.

7.1 Account Information



*Explanation of terms:

- Feedback: Allow you to feedback the diagnostic software/app bugs to us for analysis and improvements.
- Dongles: Activate and bind the diagnostic VCI dongle.

7.2 Customer Management

This module will display all vehicle information of your clients in turn for future reference.

7.3 Business Information

This module allows you to add the repair shop information, including photos, shop name, address, and telephone number, etc., which will be displayed in the diagnostic report.

7.4 Screenshots

This option can set the Screen Capture icon to be shown or not on the screen.

7.5 Photo Album

This module saves the screenshots.

7.6 Screen Floating Window

This option can set the Screen Recording icon to be shown or not on the screen.

*Note: The Screen Capture icon and the Screen Recording icon cannot be

shown in the meantime on the screen. (It is not available to run the screenshots and screen recording function simultaneously.)

7.7 Screen Recorder

This module saves the screen recordings.

7.8 Network

This module allows you to set the connectable Wi-Fi network.

7.9 Brightness

This option allows you to set the screen brightness.

7.10 Volume

This option lets you adjust the volume.

7.11 Unit of Measure

This option sets the measurement unit. The Metric System and Imperial System are available.

7.12 Region

This option sets the region to be America or Europe.

7.13 Language

The tablet supports multiple languages. You can use this option to set the preferred language.

7.14 Time Zone

This option sets the time zone you are in.

7.15 Sleep Time

This option sets when the tablet will enter the sleep mode.

7.16 Firmware Fix

This module allows you to update or fix the firmware.

7.17 Clear the Cache

This option allows the user to clear some cache files and free up the storage space.

7.18 Reset

This option will clean your data and restart the tablet.

7.19 Help

This option includes Frequently Asked Questions, and official answers.

7.20 App Update

This option allows you to upgrade the ArtiDiag800 BT software.

7.21 About

This option displays the hardware configuration information of the tool and license agreement.

Technical Specification

TOPDON ArtiDiag800 BT Tablet

- Battery Capacity: 3100mAh/7.6V
- Screen Size: 5.99 inches
- Resolution: 720*1440 Pixels
- Working Voltage: 5V
- Working Current: ≤2.5A
- Working Environment: 32 °F ~122 °F (0°C ~50°C)
- Storage Environment: -4 °F ~140 °F (-20°C ~60°C)

TOPDON ArtiDiag800 BT Diagnostic VCI Dongle

- Working Voltage: 12V
- Working Current: ≤60mA
- Working Environment: 14 °F ~122 °F (-10°C ~50°C)

Warnings

- ✔ Always perform automotive testing in a safe environment.
- ✔ DO NOT smoke near the vehicle during testing.
- ✔ DO NOT place the code reader near the engine or exhaust pipe to avoid damage from high temperatures.
- ✔ DO NOT wear loose clothing or jewelry when working on an engine.
- ✔ DO NOT connect or disconnect any test equipment while the ignition is on or the engine is running.
- ✔ DO NOT disassemble the code reader.
- ✔ Engine parts will become hot when the engine is running. To prevent severe burns, avoid contact with hot engine parts.
- ✔ When an engine is running, it produces carbon monoxide, a toxic and poisonous gas. Operate the vehicle ONLY in a well-ventilated area.
- ✔ Wear safety eye protection that meets ANSI standards.

Cautions

- ✔ Please ensure that the vehicle battery is fully charged and the scanner is firmly connected to the vehicle DLC to avoid erroneous data generated by the scanner and diagnostic systems.
- ✔ Please do not use the code reader during driving.
- ✔ Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- ✔ Keep the scanner dry, clean, free from oil/water, or grease. Use a mild detergent on a clean cloth to clean the outside of the scan tool, when necessary.
- ✔ Keep the scanner out of the reach of children.

FAQ

Q:Why does TOPDON ArtiDiag800 BT have no responses when it is connected to a car?

A:Check if the connection with the vehicle diagnostic socket is solid, or check if the ignition switch is on, or if the tool supports the car.

Q:Why does the system stop when reading the data stream?

A:This may be caused by the loose diagnostic VCI dongle.

Please unplug the VCI dongle, and make sure the reconnection is stable and solid.

Q:Communication error with vehicle ECU?

A>Please confirm the following cases:

- Whether diagnostic VCI dongle is correctly connected.
- Whether ignition switch is ON.

Or, send your vehicle's year, make, model and VIN number to us using Feedback feature for timely technical assistance.

Q:Why does the screen flash when the engine ignition starts?

A:It is normal and caused by electromagnetic interference.

Q:How to upgrade the system software?

A:

- 1.Power on the tool and ensure a stable Internet connection.
- 2.Go to "Set up" -> "App Update", tap "OTA" and then tap "check version" to enter the system upgrade interface.
- 3.Complete the process by following the instructions on the screen step by step. It may take a few minutes depending on the status of your network. After the upgrade is finished, the tool will automatically restart and display the main interface.

Q:How to capture the screenshot?

A:Tap the "Screenshot" icon on the screen to capture the current screen, which will be saved in the ArtiFolder module.

FCC Statement:

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.