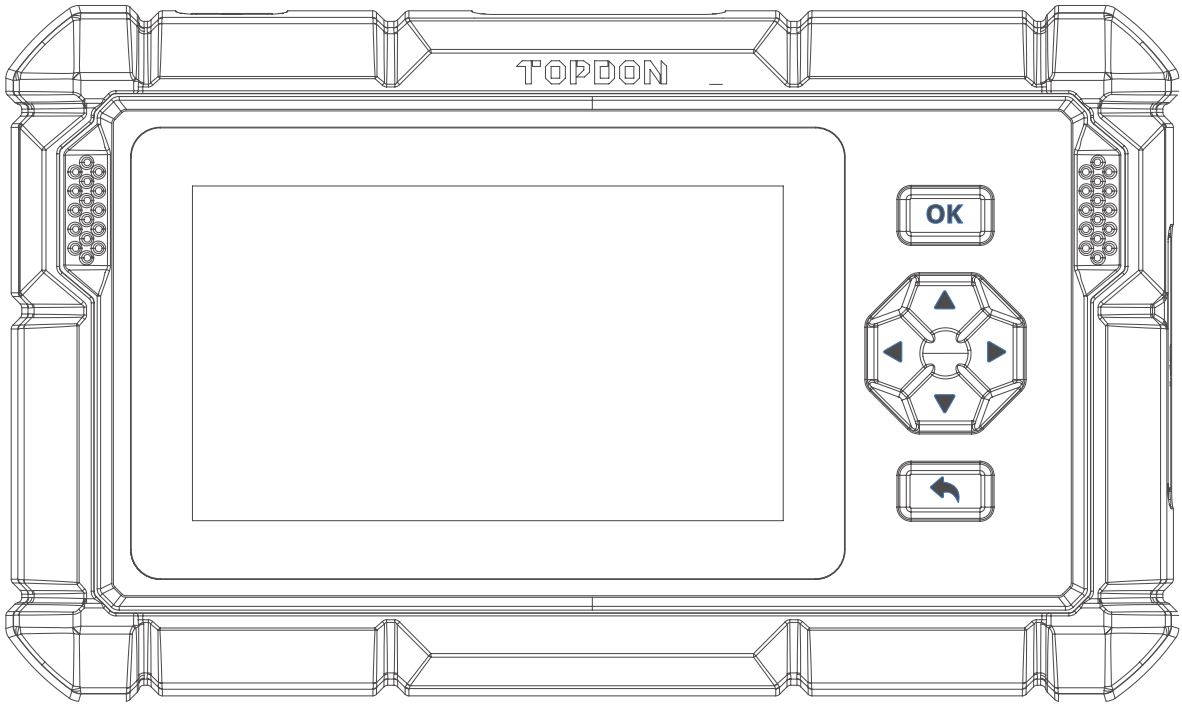
ArtiDiag600 S

Professional Diagnostic Tool

USER MANUAL



TOPDON®

CONTENTS

ENGLISH

SAFETY IS ALWAYS THE FIRST PRIORITY!

READ ALL INSTRUCTIONS BEFORE USE

For your safety, the safety of others, and to avoid any damage to the product and your vehicle, CAREFULLY READ AND MAKE SURE YOU FULLY UNDERSTAND ALL THE SAFETY INSTRUCTIONS AND MESSAGES IN THIS MANUAL BEFORE OPERATING. You must also read the vehicle's service manual, and observe the stated precautions or instructions before and during any test or service procedure.

Keep yourself, your clothing and other objects away from moving or hot engine parts and avoid contact with electrical connections.

ONLY OPERATE THE VEHICLE IN A WELL-VENTILATED AREA, as the vehicle produces carbon monoxide, a toxic and poisonous gas, and particulate matter when the engine is running.

ALWAYS WEAR approved SAFETY GOGGLES to prevent damage from sharp objects and caustic liquids.

DO NOT SMOKE OR HAVE ANY FLAMES NEAR THE VEHICLE when testing. The fuel and battery vapors are highly flammable.

DO NOT ATTEMPT TO INTERACT WITH THE PROUDUCT WHILE DRIVING. Any distraction may cause an accident.

TURN THE IGNITION OFF BEFORE CONNECTING OR DISCONNECTING THE PRODUCT FROM THE VEHICLE's DATA LINK CONNECTOR (DLC) to prevent causing damage to the product or vehicle's electronic components.

SECTION 1 WHAT'S IN THE BOX?

- **ArtiDiag600 S**
- **OBD-II Diagnostic Cable**
- **USB Cable (Type-A to Type-C)**
- **Quick User Guide**
- **Carrying Case**

SECTION 2 PRODUCT OVERVIEW

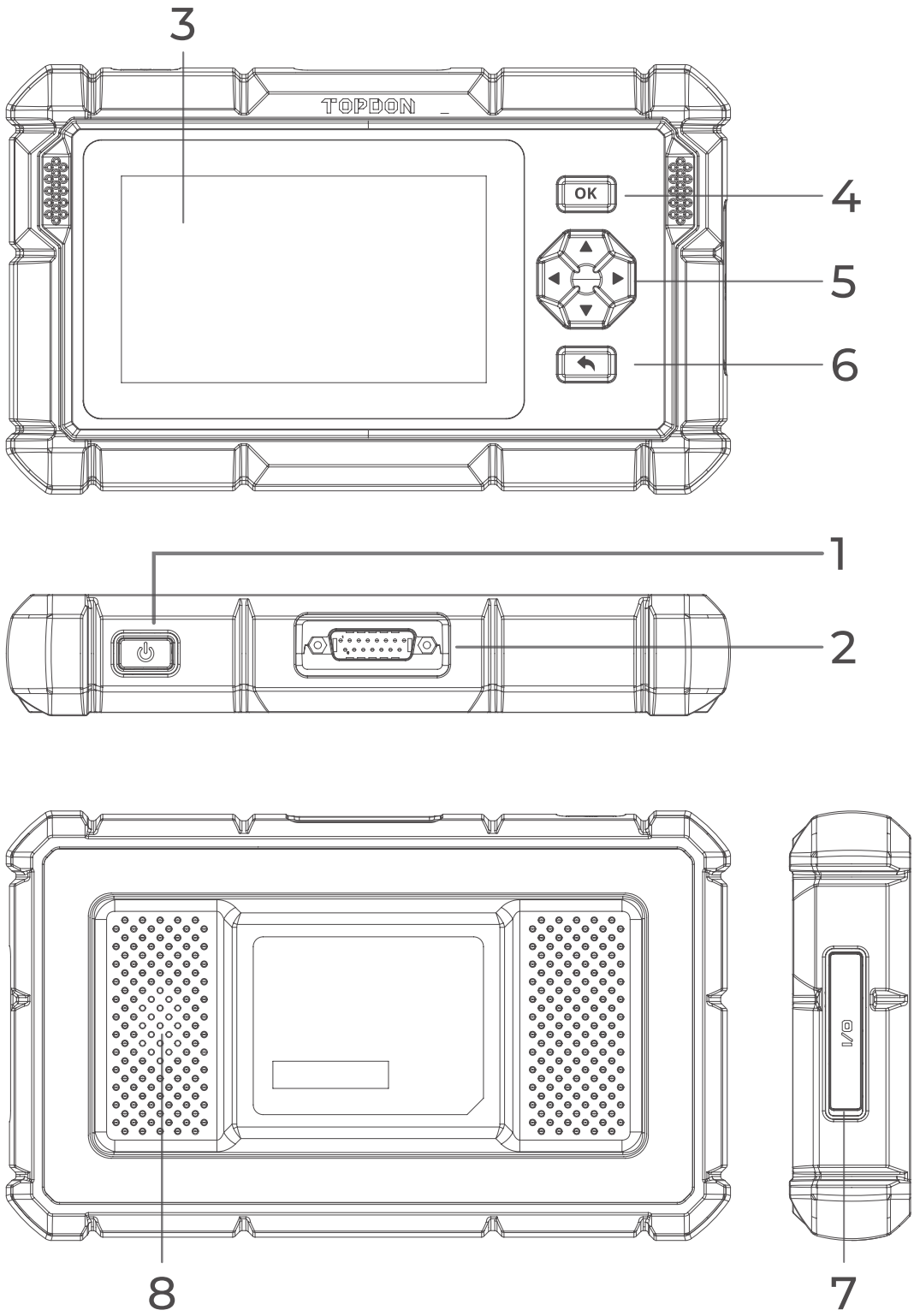


Figure 2-1

1. **Power / Screen Off Button**
   Long press the button to turn on the ArtiDiag600 S. Long press again to display the Power off / Restart / Cancel toolbar, then tap the desired option.
   Short press the button to wake up / lock the screen.

2. **DB15 Diagnostic Cable Connector**
   Data cable connection used to connect the ArtiDiag600 S to a vehicle data link connector (DLC).

3. **Five-inch Touch Screen**

4. **OK Button**
   Used to confirm the current selection or operation.

5. **Directional Buttons**
   Used to move the cursor or highlight in their respective direction:
   - ▲ Up
   - ▼ Down
   - ◀ Left
   - ▶ Right

6. **Return Button**
   Used to return to the previously viewed page.

7. **USB Type-C Charging Port**
   For data transfer and charging (5 V, 2 A)

8. **Audio Speaker**

SECTION 3 GETTING STARTED

3.1 Basic Setup

Press and hold the power button for 3 seconds to turn on the ArtiDiag600 S. Follow the steps below to set up the ArtiDiag600 S.

1. Select the desired system language.

Figure 3-1

2. Choose the appropriate region and time zone.

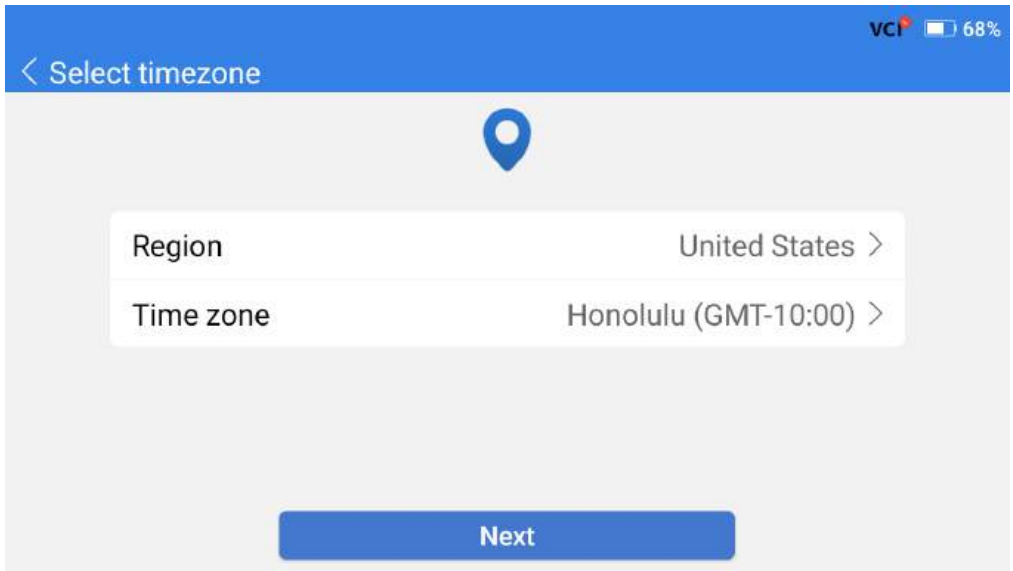


Figure 3-2

3. Configure the Wi-Fi connection. Select a Wi-Fi from the scanned list and enter the password.

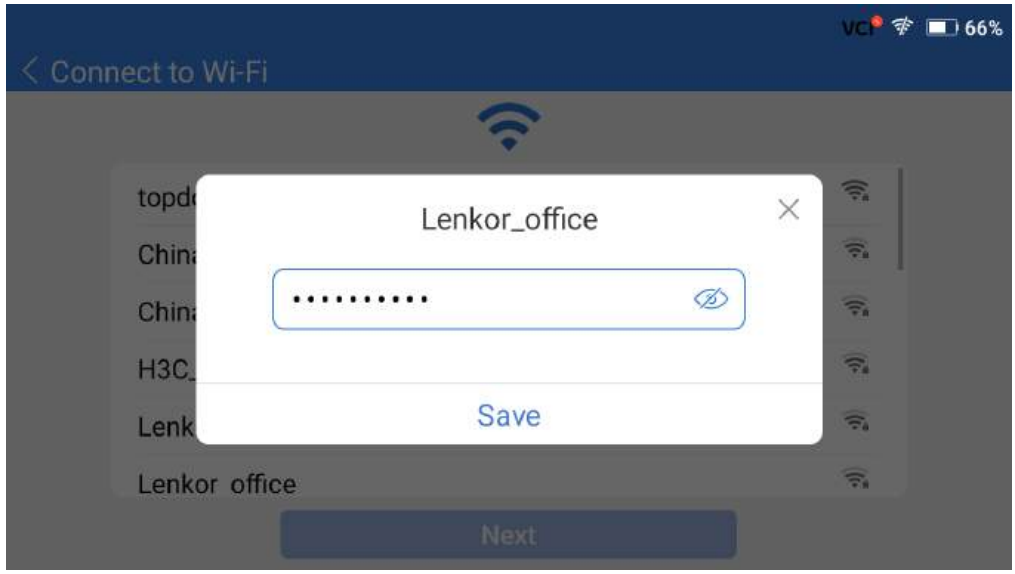


Figure 3-3

4. Log in to your TOPDON account. (If you do not have an account, please register with your email).

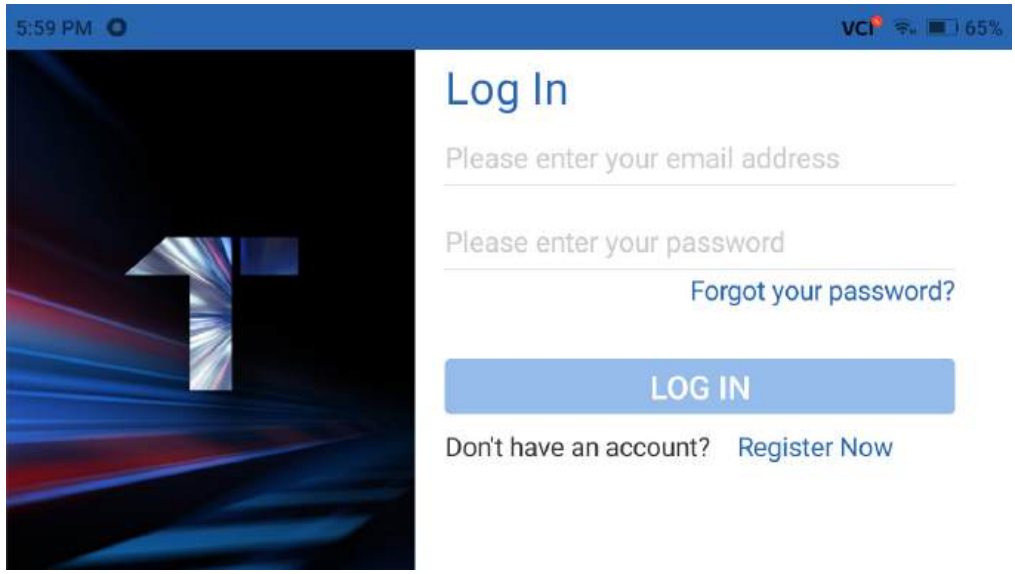


Figure 3-4

5. After logging in to your TOPDON account, the home screen will display.

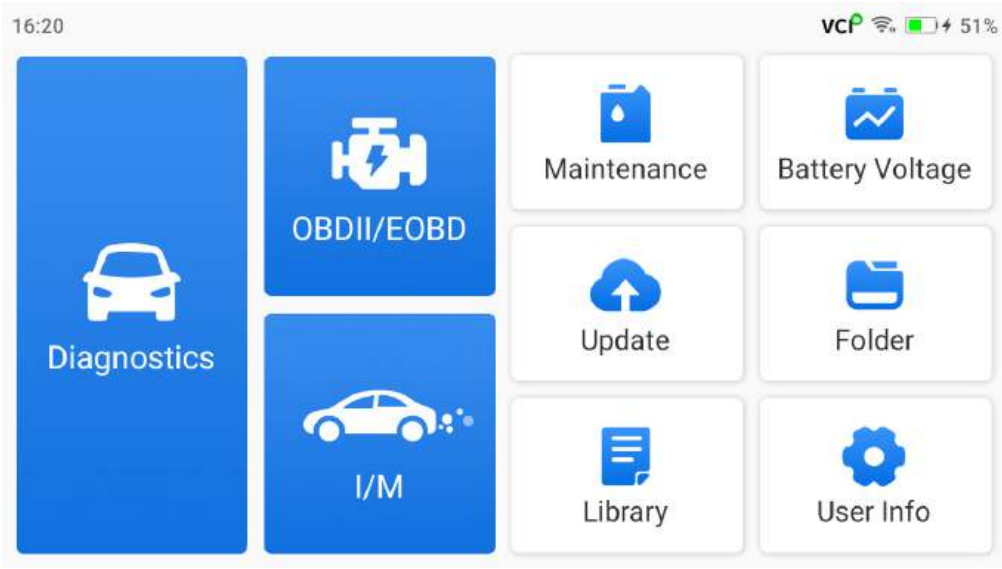


Figure 3-5

Note: It is recommended to update the software for better service if a new version is available on the ***System Update*** module.

3.2 Connect the ArtiDiag600 S to the Vehicle's DLC

Use the supplied OBD-II diagnostic cable to connect the ArtiDiag600 S to the vehicle's DLC (see Figure 3-6). The vehicle's DLC port is usually located under the dashboard. After the vehicle's DLC is properly connected to the ArtiDiag600 S, the icon VCI changes to VCI .

If you encounter a problem in locating the DLC, please go to ***Library*** > ***DLC Location*** for more details, or refer to the vehicle's service manual.

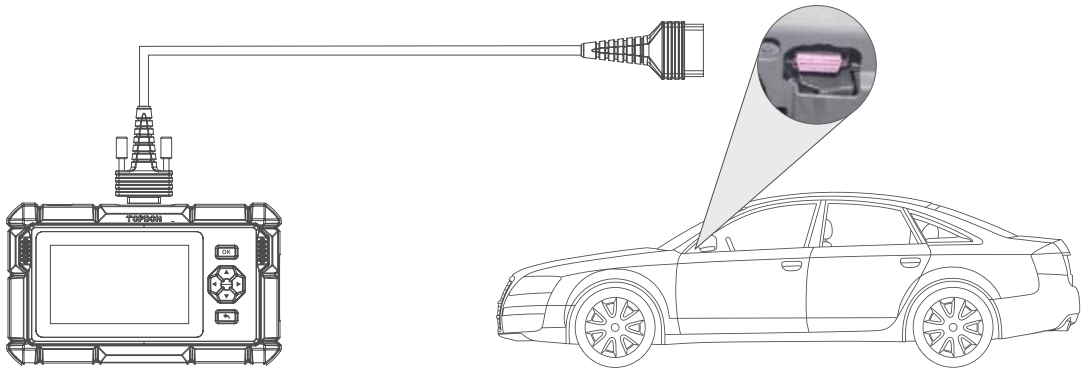


Figure 3-6

Note: Make sure the ignition is always OFF before plugging in the unit.

3.3 Turn the Ignition to the "ON" Position (see Figure 3-7)

If your vehicle is equipped with a keyless start system and the ignition switch is an "Engine Start Stop" button (see Figure 3-8), press the "Engine Start Stop" button until the car is in "ON" mode. Do not apply the brake while pressing the "Engine Start Stop" button, or you will start the car instead of putting it in the "ON" position.

The method of ignition varies by vehicle model. Refer to the vehicle's service manual for details.

Figure 3-7

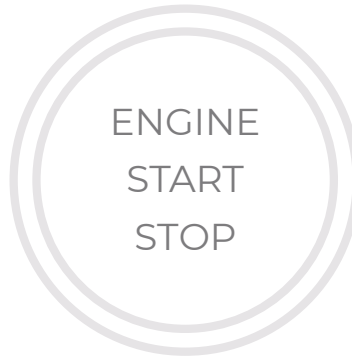


Figure 3-8

Your are now ready to start diagnosing the vehicle.

SECTION 4 USING YOUR ARTIDIAG

4.1 Home Screen

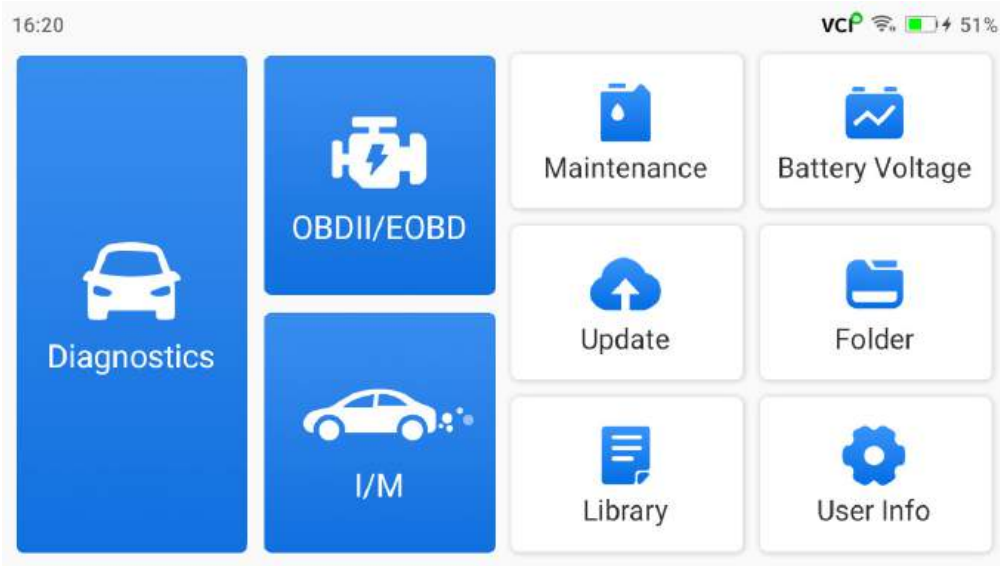


Figure 4-1

Function Icons

Diagnostics	Allows you to perform diagnostics functions including reading Diagnostic Trouble Codes (DTCs), clearing DTCs, viewing data stream and reading Electronic Control Unit (ECU) version information.
OBDII/EOBD	Allows you to perform emission-related diagnostics for your vehicle.

 I/M (Inspection and Maintenance) Readiness	Provides quick access to check the status of the emission-related systems.
 Maintenance	Provides 9 maintenance services including Oil Reset, Throttle Adaptation, EPB Reset, Steering Angle Reset, DPF Regeneration, ABS Bleeding, BMS Reset, Injector Coding and TPMS Reset,
 Battery Voltage	Displays the real-time voltage of your vehicle battery.
 Update	Allows you to update the vehicle-specific diagnostic software if a new version is available.
 Folder	Allows you to access Reports (System Report, Fault Code Report, and Data Stream Report), Live Data Rec, Screenshots and Screen Rec.

Library	Includes OBD-II Generic DTC Repair Guide, Technical Service Bulletins, DLC Location, Warning Light Library, which provides reference information on vehicle inspection, diagnostics, and repair.
User Info	Provides access to My Profile, Firmware Update, Customer Feedback, Shop Info, System Update and Settings.

4.2 Diagnostics

The Diagnostics module allows you to scan supported vehicle systems (Auto Scan) for Diagnostic Trouble Codes (DTCs) or select an individual system to perform Read Version Information, ***Read Trouble Code, Clear Trouble Code and Read Data Stream***.

Auto Scan and Individual System Diagnostics

Identifying the Vehicle

To perform Auto Scan or Individual System Diagnostics, you need to identify your vehicle first. Tap ***Diagnostics*** from the home screen. You will see ***VIN*** and ***Make*** at the top of the Diagnostics screen.

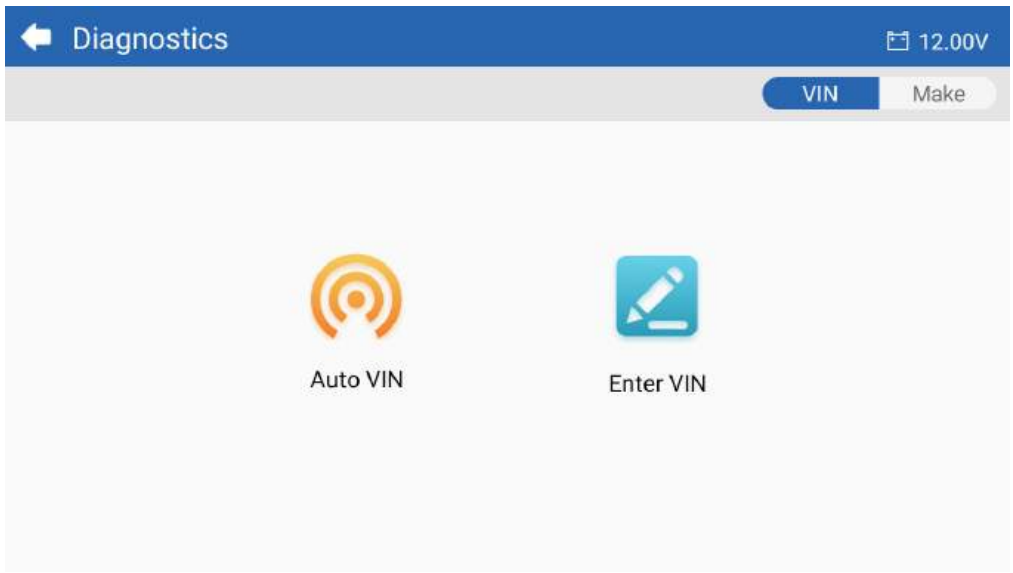


Figure 4-2

Identifying via VIN

VIN allows you to identify the vehicle via Auto VIN or Enter VIN.

• Auto VIN - the ArtiDiag600 S automatically reads and decodes the Vehicle Identification Number (VIN).

> ***Note:*** Not all vehicles support automatically reading and decoding the VIN via Auto VIN.

• Enter VIN - manually enter the vehicle VIN to identify the vehicle.

Identifying via Make

1. Tap ***Make***, and a list of vehicle makes will display.

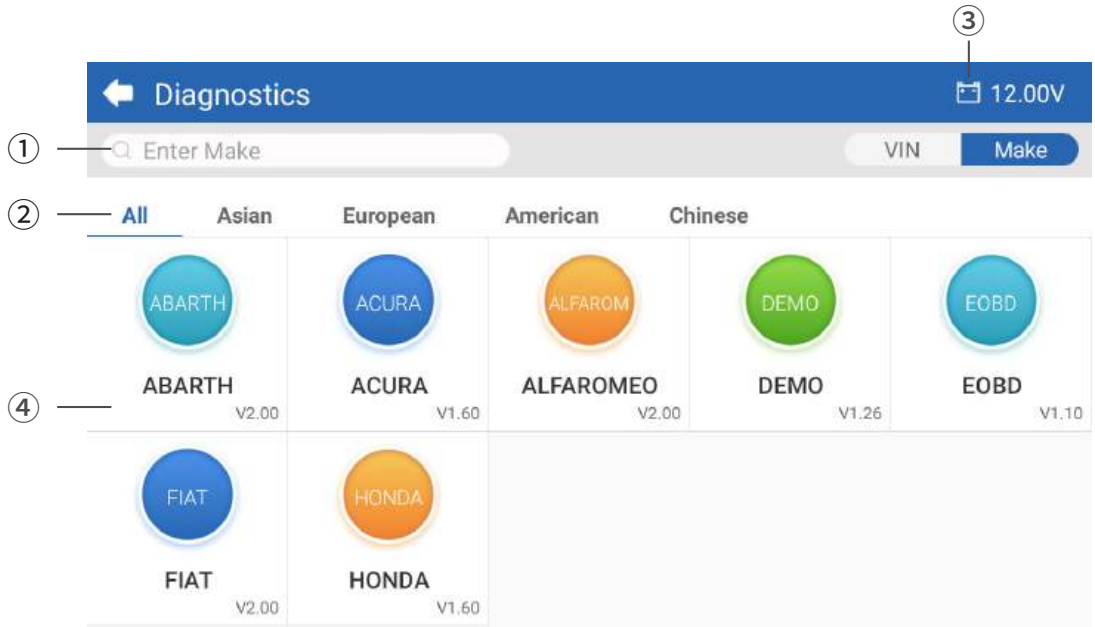


Figure 4-3

① Search Icon
Tap the search icon to display the search bar, and enter the vehicle's make to search for it.

② All / Asian / European / American / Chinese
Select from this menu to filter the vehicle makes made in certain countries. All Models / Asian Models / European Models / American Models / Chinese Models.

③ Vehicle Battery Voltage Icon
Displays the real-time voltage of your vehicle battery.

④ Manufacturer (Vehicle Make) Options

2. Select or enter the make of your vehicle.

> ***Note:*** A demonstration mode (DEMO option on the Make list) is provided to help you become familiar with the Diagnostics functions.

3. Select ***Automatic / Manual*** to identify the vehicle.

Automatic

Manually enter the VIN or tap Read to acquire the VIN, then tap ***Confirm***. ArtiDiag will automatically decode the VIN to identify the vehicle.

Manual

Manually select the vehicle information to identify the vehicle.

A system menu will display after the vehicle is identified.

> ***Note:*** Systems may vary by vehicle make, model and year.

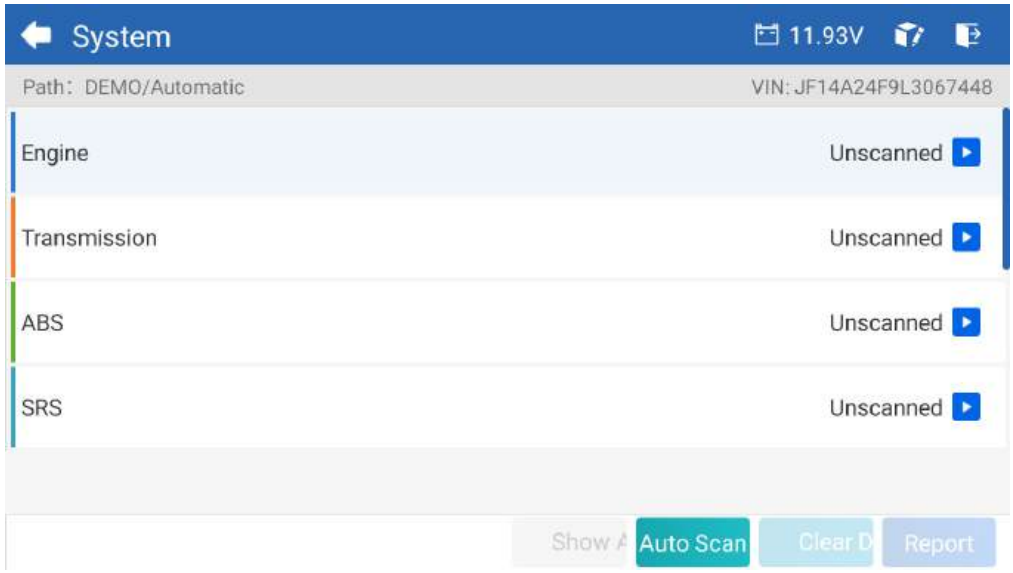


Figure 4-4

Auto Scan

Auto Scan detects the systems supported by the vehicle and retrieves DTCs for these systems, providing a complete health check of your vehicle. Performing Auto Scan before and after a repair could help in troubleshooting and validating repairs. Pre and post scan reports allow you to record the condition of the vehicle before and after repair for comparison.

To perform an Auto Scan, tap the Auto Scan button at the bottom

corner, the ArtiDiag600 S will start scanning the systems supported by the vehicle, and DTC retrieval will begin automatically.
Results are displayed progressively as the systems are scanned.

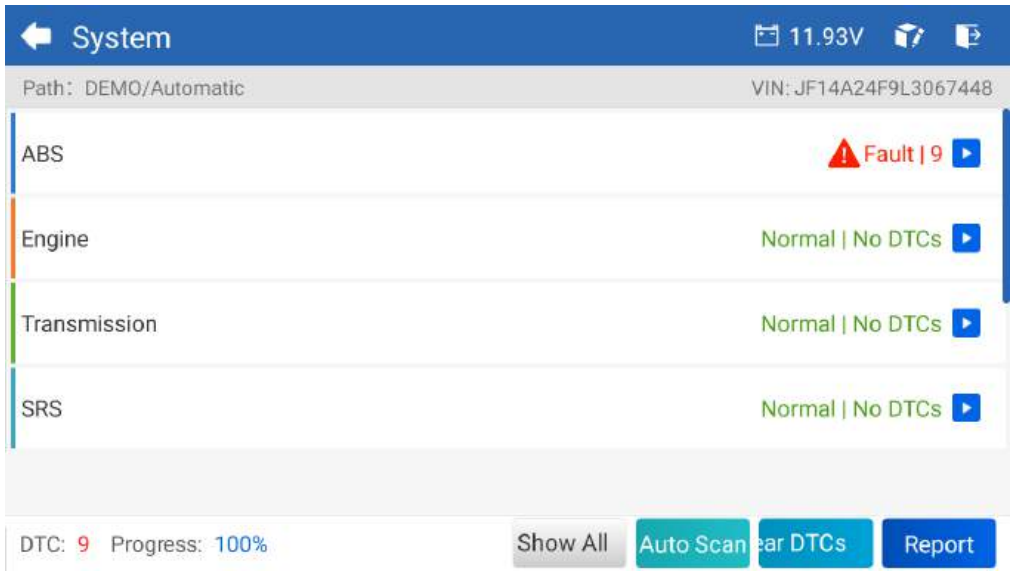


Figure 4-5

Button Description

Clear DTCs - tap to clear all the DTCs retrieved.
Report - tap to save the current scan results in report format. (To view the saved reports, go to ***Folder*** > ***Reports*** > ***System Report***.)

Performing Individual System Diagnostics

In addition to Auto Scan, you can also select an individual system to perform Read Version Information, Read Trouble Code, Clear Trouble Code and Read Data Stream.

> ***Note:*** Depending on the vehicle make, some functions may not be available.

Read Trouble Code

1. After the vehicle is identified, select the system for which you wish to retrieve DTCs from the system menu.

2. Tap Read Trouble Code in the function menu.
ArtiDiag will communicate with the ECU and retrieve and display DTCs for the currently selected system.

3. Tap the ▼ icon at the right side to open the option menu of a particular DTC.

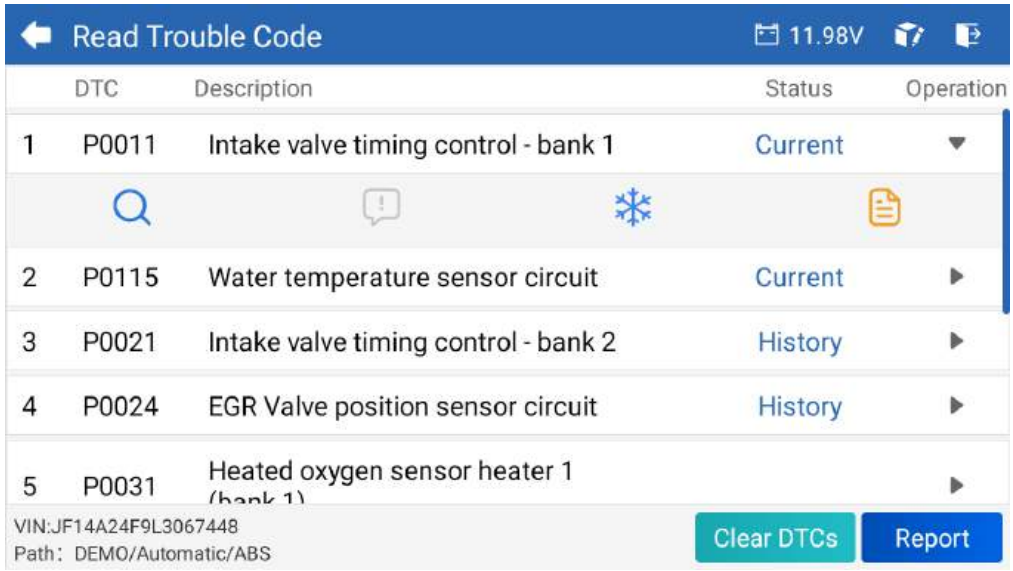


Figure 4-6

Icon Description

	When this icon lights up, tap to open a window that allows you to search on Google for more information about the DTC.
	When this icon lights up, tap to view the detailed description of the DTC.
	When this icon lights up, tap to view the freeze frame captured at the time when the DTC occurs.
	When this icon lights up, tap to view the instructive repair measures.

Button Description

Report - tap to save the DTCs in report format. (To view the saved reports, go to ***Folder*** > ***Reports*** > ***Fault Code Report***.)
Clear DTCs - tap to clear all the DTCs retrieved.

Clear Trouble Code

1. After the vehicle is identified, select the system for which you wish to clear DTCs from the system menu.

2. Tap ***Clear Trouble Code*** in the function menu.

3. Tap ***OK*** when the DTCs are cleared.

> ***Note:***
> 1. The procedure of clearing DTCs should be performed after the required repair has been completed. Once confirmed, DTCs and freeze data stored in the ECU will be cleared.
> 2. DO NOT START UP THE ENGINE WHILE CLEARING DTCS.

Live Data

1. After the vehicle is identified, select the system for which you wish to read the data stream from the system menu.

2. Tap ***Live Data*** in the function menu. A data stream list displays.

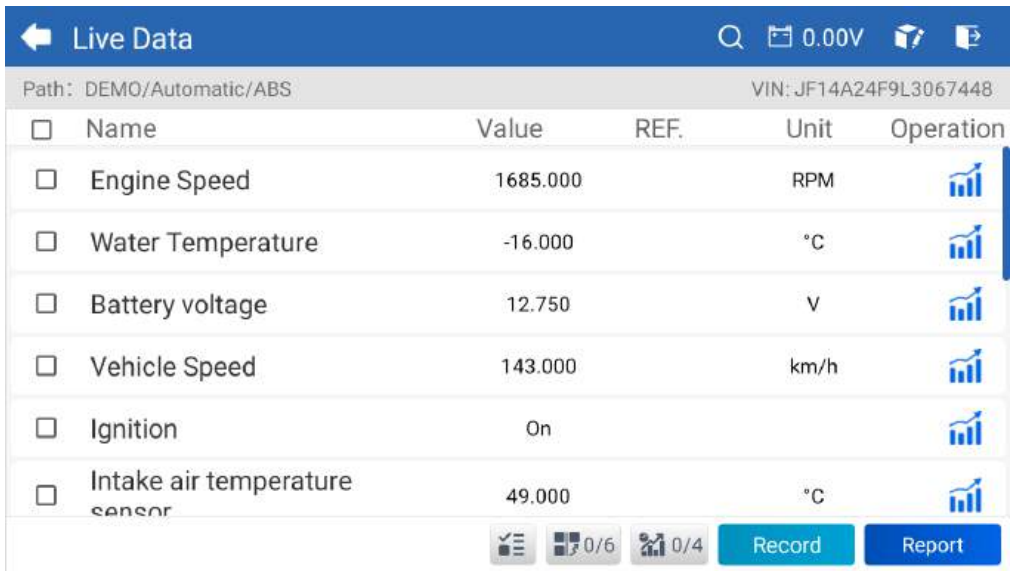


Figure 4-7

Icon Description

	Tap to have the real-time data stream displayed in a wave-pattern graph.

Button Description

	- tap to select the data streams that you want to be displayed.
	- tap to display up to 6 data streams in graph.
	- tap to combine up to 4 data streams in one graph for easier comparison and observation.
	- tap to record and save real-time data stream information for comparison and analysis. To view the recorded data streams, go to ***Folder*** > ***Live Data Rec.***
	- tap to save the current data stream values in report format. To view the saved reports, go to ***Folder*** > ***Reports*** > ***Data Stream Report***.

Note:
IF THE VEHICLE MUST BE DRIVEN TO VIEW THE LIVE DATA STREAM, ALWAYS HAVE A SECOND PERSON HELPING YOU. DO NOT WATCH THE DATA STREAM WHILE DRIVING.

Read Version Information

1. After the vehicle is identified, select the system for which you wish to view the ECU version information from the system menu.

2. Tap ***Information*** in the function menu. Then you can view the ECU version information of the selected system.

4.3 OBDII / EOBD

The OBDII / EOBD function allows you to perform emission-related diagnostics for your vehicle.

4.3.1 Perform OBDII Diagnostics

1. Tap OBDII/EOBD from the home screen.

2. Select your communication method: Auto Scan or Protocol.

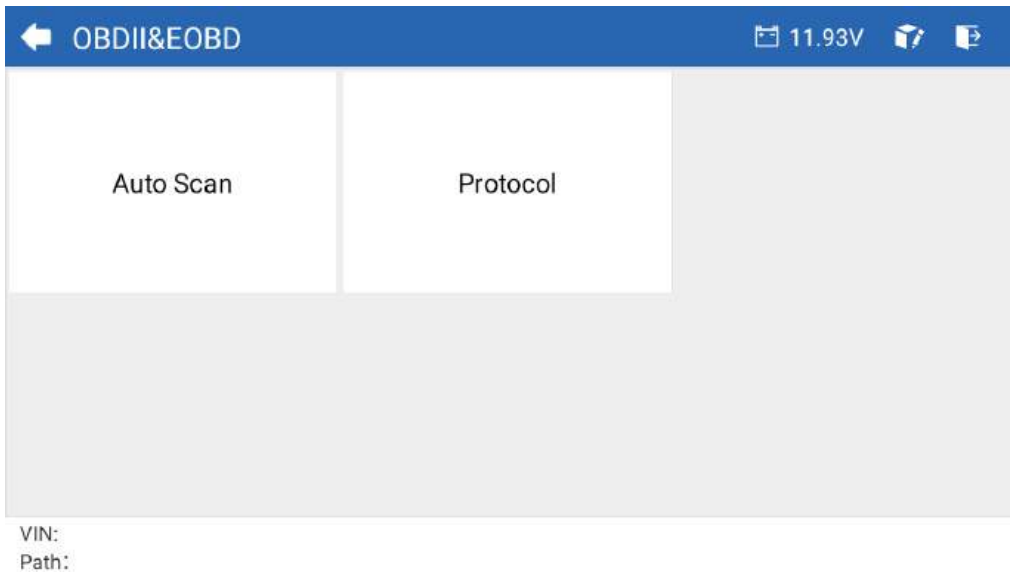


Figure 4-8

Auto Scan - the ArtiDiag600 S will automatically communicate with the vehicle and identify which protocol the vehicle is using.

Protocol - allows you to manually select the communication protocol.

3. Select a function to continue.

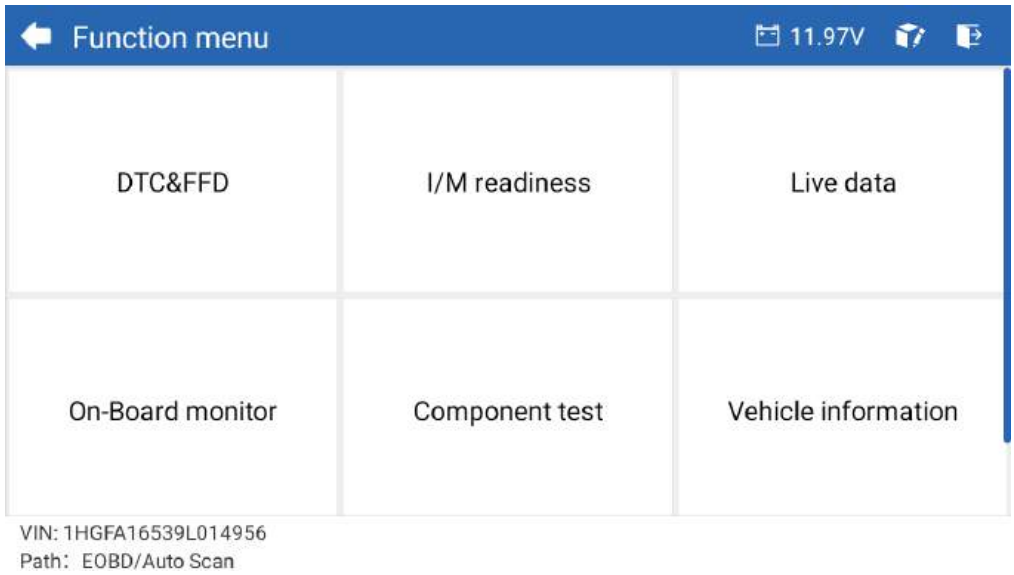


Figure 4-9

Note:
Depending on the vehicle make, some functions may not be available.

Typical function options may include: DTC & FFD, I/M Readiness, Live Data, On-Board Monitor, Component Test, Vehicle Information and Vehicle Status.

1. Read DTCs
This function displays the DTCs retrieved from the emission-related systems.

2. Clear DTCs
This function allows you to clear the DTCs retrieved from the emission-related systems.

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

Note:
1. The procedure of clearing DTCs should be performed after the required repair has been carried out. Once confirmed, DTCs and FFD stored in the ECU will be cleared.
2. DO NOT START UP THE ENGINE WHILE CLEARING DTCS.

I/M Readiness
This function checks whether or not the various emission-related systems on the vehicle are operating properly, and are ready for I/M testing.

It can also check the monitor running status and to confirm if the repair of a car fault has been performed correctly.

Live Data
This function displays the real-time live data and parameters from the vehicle's ECU.

On-Board Monitor
This function displays the test results for emission-related powertrain components and systems that are not continuously monitored.

Component Test
This function helps send control commands to the vehicle's ECU as a way to test and operate the system parts and components.

Vehicle Information
This function displays a list of information (provided by the vehicle manufacturer) from the vehicle's ECU.

The information may include:
- VIN.
- Calibration ID (CID).
- Calibration Verification Number (CVN).
- In-use Performance Tracking for Spark Ignition Engine (IUPR)
- ECU Name

Vehicle Status
This function displays the status of the vehicle, including Engine, Transmission, Codes Found, MIL Status, Monitors and Protocol.

4.3.2 Diagnostic Feedback

The ArtiDiag600 S allows you to instantly send diagnostic feedback (with logs of diagnostic data automatically attached) while you are encountering a software problem with the diagnostics operations.

To send diagnostic feedback:

1. Tap the  icon located at the top right corner of any screen with this icon.
2. Select the type of problem.

3. Write a description of the problem.

4. Tap Submit to send the feedback.

> ***Note:***
> The Diagnostic Feedback function is only available with the Diagnostics module.

4.4 I/M Readiness

This function checks whether or not the various emission-related systems on the vehicle are operating properly, and are ready for I/M testing.
It can also check the monitor running status and to confirm if the repair of a car fault has been performed correctly.

> ***Note:***
> The vehicle should only be considered ready for inspection and allowed to pass emissions if all required tests have been passed.

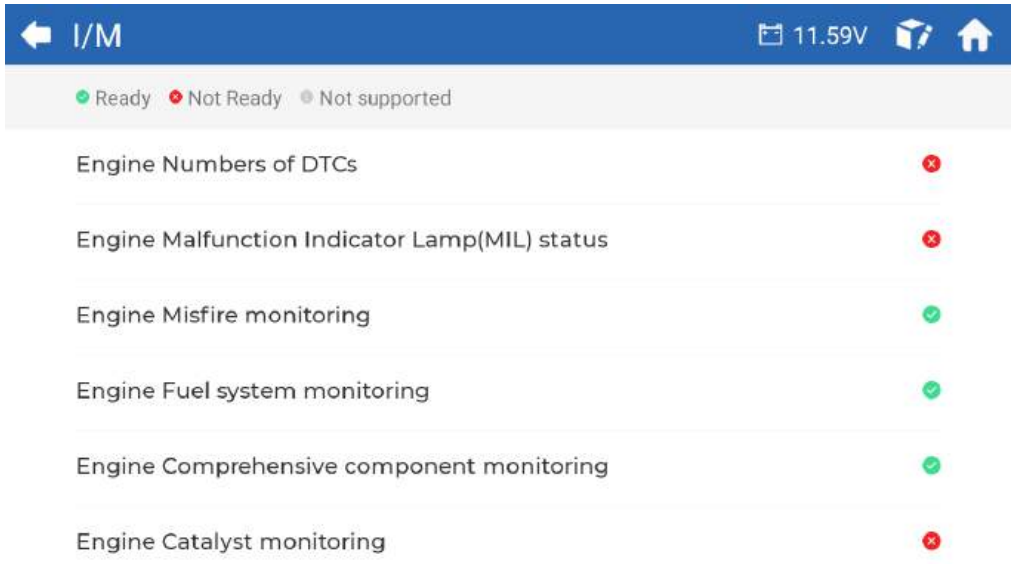


Figure 4-10

4.5 Maintenance

This function provides you with 9 maintenance services including Oil Reset, Throttle Adaptation, EPB Reset, Steering Angle Reset, DPF Regeneration, ABS Bleeding, BMS Reset, Injector Coding and TPMS Reset.

4.5.1 Services Overview

Oil Reset
This function allows you to reset the oil service lamp for the engine oil life system. The engine oil light system calculates an optimal oil change interval depending on the vehicle's driving conditions and weather events. Oil resets are required every time the engine oil is changed.

Throttle Adaptation
If the ECU is disconnected accidentally, or if the throttle is replaced or cleaned, then the throttle actuators need to be initialized via the Throttle Adaptation function. This resets the ECU's data to its initial state so that the throttle can accurately regulate the air intake.

EPB Reset
This function helps you replace and reset the brake pads.
It needs to be performed in the following cases:
• After the brake pads and brake pad wear sensors are replaced.
• When the brake pad warning light is on.
• After a short circuit in the brake pad sensor is fixed.
• After the servo motor is replaced.

Steering Angle Reset
If the steering angle sensor is replaced, or the steering angle is inaccurate or not centered, the steering angle reset function needs to be performed to find the relative zero position. With this position as a reference, the ECU can then calculate the exact angle for left and right steering.

BMS Reset
After the car battery is replaced, the car battery control unit needs to be reset. This will clear fault information (such as low battery level) so that the control unit can match the relevant information of the newly replaced battery.

TPMS Reset
After the tire has been reinflated or replaced, the tire pressure information needs to be reset via the tire pressure reset function to resolve the tire pressure fault code.

DPF Regeneration
This function is mainly used for the regeneration of diesel particulate filters. To keep the filters performing well, it removes particles by means of combustion and oxidation.

Injector Coding
After replacing injectors, various codes need to be written to correspond to the code of each cylinder injector. This controls the quantity of oil injection into each cylinder.

ABS Bleeding
This function enables you to perform tests to check the operating conditions of the Anti-lock Braking System (ABS).
Use cases:
· When the ABS lines contain air.
· When the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced.

4.5.2 Steps

To perform a service reset:

1. Tap ***Maintenance*** from the home screen and a function menu will display.

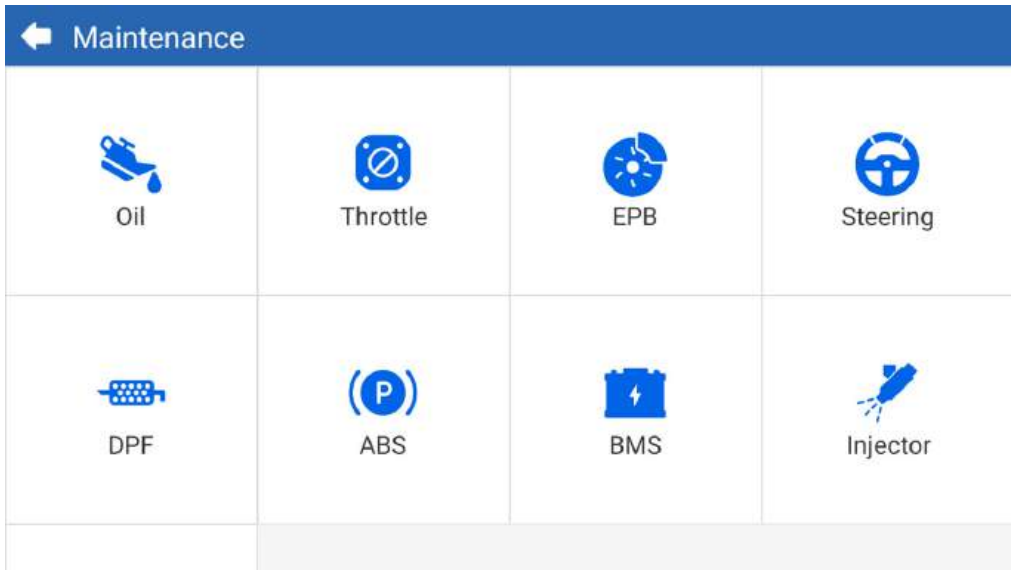


Figure 4-11

2. Select the function you want to perform.

3. Identify the vehicle via VIN or Make (for more on identification operations, refer to ***Identifying the Vehicle in Auto Scan and Individual System Diagnostic***). Then go to the screen for the selected function displays.

4. Follow the on-screen instructions to perform the service reset.

4.6 Battery Voltage

This function displays the real-time voltage of your vehicle battery.

Figure 4-12

4.7 Update

This function allows you to update the vehicle-specific Diagnostics software if there is any new software available.

To perform the Update function:

1. Tap ***Update*** from the home screen and the Update screen will display.

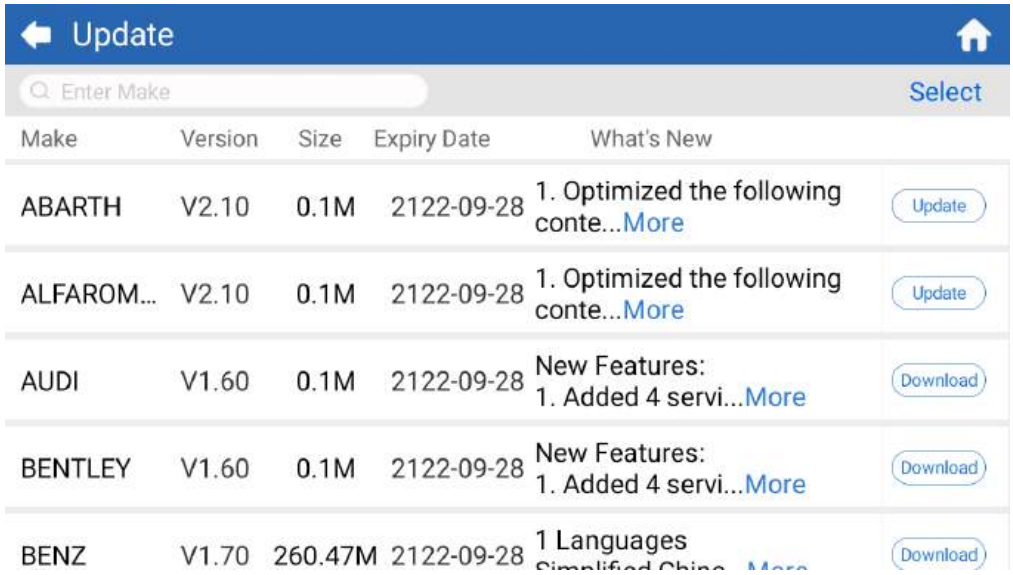


Figure 4-13

2. Tap ***Download*** to update or download the software.

> ***Note:***
> You can also tap Select at the top right corner to batch select and update software.

4.8 Folder

This function gives access to ***Reports (All, System Reports, Fault Code Report, and Data Stream Reports), Live Data Rec., Screenshots and Screen Rec.***

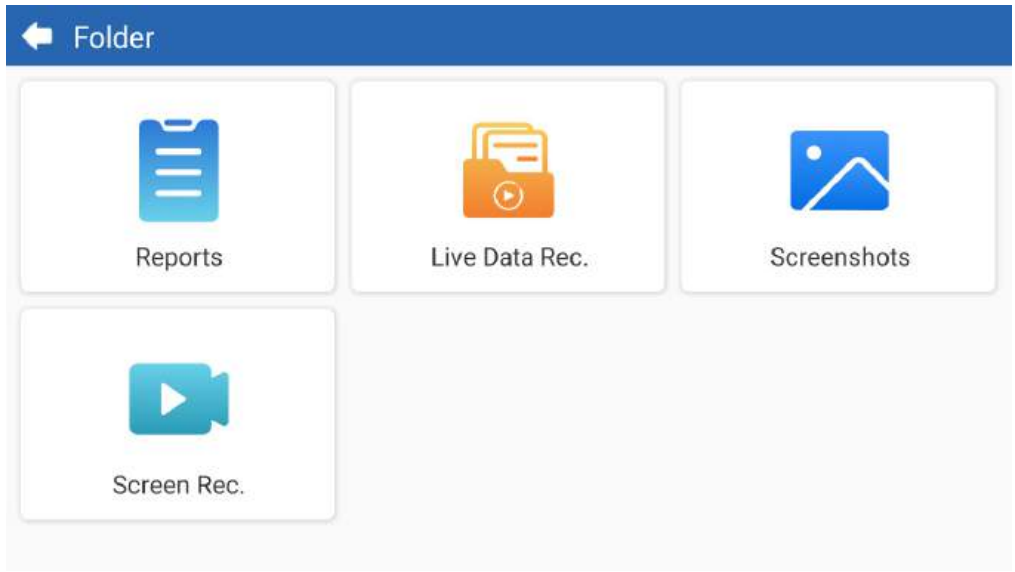


Figure 4-14

Button Description

	Tap to search for a particular report
	Tap to batch select and delete reports

4.8.1 Reports

1. Tap ***Folder*** > ***Reports***.
2. Select a particular report to view details of that report.

4.8.2 Live Data Rec.

1. Tap ***Folder*** > ***Live Data Rec***. to view the recorded data stream list.
2. Tap a particular data stream to play the recorded video of that data stream.

4.8.3 Screenshots

Tap ***Folder*** > ***Screenshots***. to view the screenshots saved during the operation of the ArtiDiag600 S.

4.8.4 Screen Rec.

Tap ***Folder*** > ***Screen Rec***. to view the screen recordings saved during the operation of the ArtiDiag600 S.

4.9 Library

4.9.1 DTC Repair Guide

DTC Repair Guide is an experience-based database that provides code-specific information, including popular fixes and repair steps for identifying faults.

To use DTC Repair Guide:
Tap ***Library*** > ***DTC Repair Guide***. Enter a DTC in the search bar.

4.9.2 Technical Service Bulletins

To view technical service bulletins:

Tap ***Library*** > ***Technical Service Bulletins***. Select vehicle make, model, year, system and subsystem, and tap ***Next***. A list of OEM technical service bulletins issued for the selected vehicle will display. Tap the desired bulletin to view the full content.

4.9.3 DLC Location

To view DLC location:

Tap ***Library*** > ***DLC Location***. Select vehicle make, model and year, and tap ***Next***. A picture of the DLC location for the selected vehicle will display.

4.9.4 Warning Light Library

The Warning Light Library provides information on dashboard warning lights, including light descriptions, impacts on driving, typical causes, responsive measures and relevant FAQs.

To view Warning Light Library:
Tap ***Library*** > ***Warning Light Library***. A list of warning lights will display. Tap the desired warning light to view the details.

4.10 User Info

The User Info function provides access to My Profile, Firmware Update, Customer Feedback, Shop Info, System Update and Settings.

4.10.1 My Profile

You can tap the profile photo in the User Info screen to enter the My Profile page. With this function, you can change your profile photo/ alias, view your TOPDON ID, change the password, and delete your TOPDON account.

4.10.2 Firmware Update

Allows you to update the firmware if a new version is available.

4.10.3 Customer Feedback

This function allows you to write a feedback on the product to the TOPDON after-sales team.

4.10.4 Shop Info

Allows you to save repair shop information.

4.10.5 System Update

Allows you to update the software if a new version is available.

4.10.6 Settings

The Settings function allows you to set WLAN, time and date, languages / unit, AutoVIN, check storage and set the ArtiDiag600 S to factory settings, view the version information of the ArtiDiag600 S, update the ArtiDiag600 S, view the Terms of Service and Privacy Policy, set the Auto-Lock time, view the tablet information and log out of your TOPDON account.

AutoVIN: With this function enabled, the ArtiDiag600 S will automatically perform AutoVIN for vehicle diagnostics once the device's VCI is detected to be connected to the vehicle's DLC. This feature is disabled by default.

SECTION 5 SPECIFICATIONS

Display Screen	1280 * 720 Touchable Screen
RAM	2G
ROM	32G
Battery	3350 mAh/3.7 V
Input Voltage Range	9-18 V
Working Temperature	-10 °C to 50 °C (14 °F to 122°F)
Storage Temperature	-20 °C to 70 °C (-4°F to 158°F)
Dimension (L x W x H)	8.9*5.3*1.56 in. (225.15*135.15*39.7 mm)
Weight	578 g (20.39 oz)

SECTION 6 FAQ

Q: What should I do if a communication error occurs?
A: Follow the steps below to identify the problem:
1) Check if the ignition is ON.
2) Check if the ArtiDiag OBD-II diagnostic cable is securely plugged into the vehicle's DLC port.
3) Turn the ignition off. Turn it on again after 10 seconds and continue the operation.
4) Check if the vehicle's control module is defective.

Q: What special functions does the ArtiDiag600 S support?
A: ***ArtiDiag600 S*** supports 9 maintenance services including Oil Reset, Throttle Adaptation, EPB Reset, Steering Angle Reset, DPF Regeneration, ABS Bleeding, BMS Reset, Injector Coding and TPMS Reset,

Q: Do I need to update the firmware before using the ArtiDiag600 S for the first time?
A: Yes. Firmware will automatically update to the latest version. You can also tap ***User Info*** > ***Firmware Update*** to update the firmware manually.

Q: Why is the ArtiDiag600 S screen flashing when the engine is working?
A: That is a normal occurrence caused by electromagnetic interference.

Q: How do I capture a screenshot?
A: Swipe down and tap ***Screenshot***, then tap the  on the screen to capture a screenshot. To view the saved pictures, tap ***Folder*** > ***Screenshots***.

SECTION 7 WARRANTY

TOPDON One Year Limited Warranty

TOPDON warrants to its original purchaser that the company's products will be free from defects in material and workmanship for 12 months from the date of purchase (Warranty Period).
For the defects reported during the Warranty Period, TOPDON will either repair or replace the defective part or product according to its technical support analysis and confirmation.
TOPDON shall not be liable for any incidental or consequential damages arising from the device's use, misuse, or mounting.
If there is any conflict between the TOPDON warranty policy and local laws, the local laws shall prevail.
This limited warranty is void under the following conditions:
• Misused, disassembled, altered or repaired by unauthorized stores or technicians.
• Careless handling and/or improper operation.

Notice:
All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. TOPDON reserves the right to make changes at any time without notice.

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