# AD310 BT

## User's Manual

## (2 in 1 diagnostic tool)

## Safety precautions

To prevent personal injury or damage to vehicles and/or the scan tool,read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:

- Always perform automotive testing in a safe environment.
- Do not attempt to operate or observe the tool while driving a vehicle. Operating or observing the tool will cause driver distraction and could cause a fatal accident.
- Operate the vehicle in a well ventilated work area: Exhaust gases are Poisonous.
- Keep the scan tool 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.

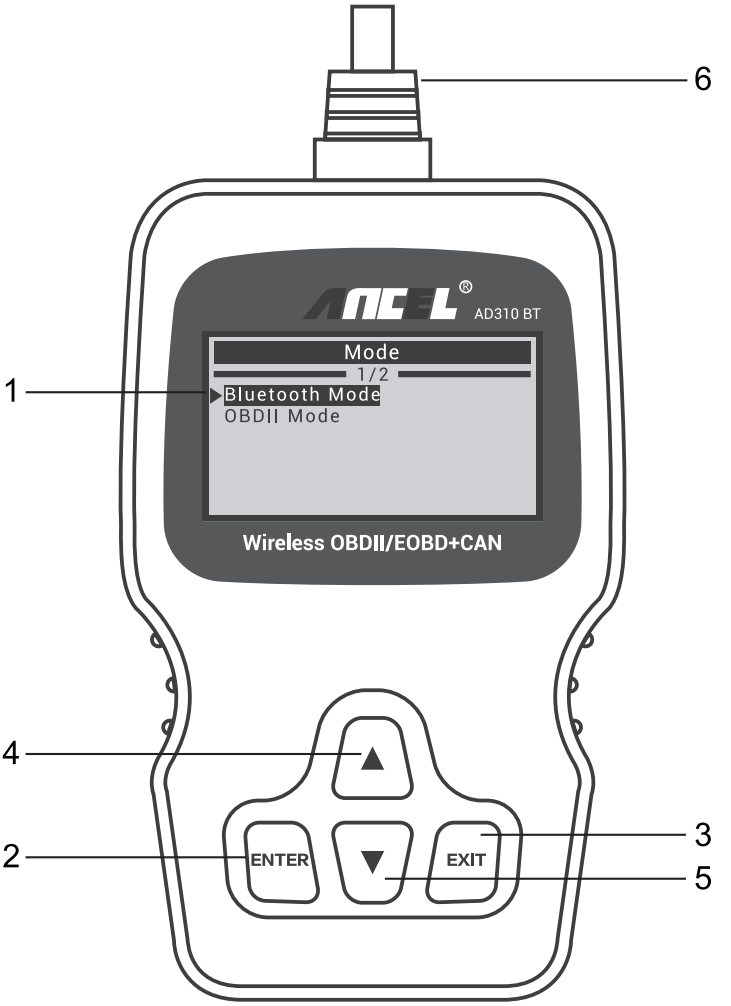
## Product Profile

AD310 BT is a new generation 2-in-1 diagnostic tool that can display data directly on the scanner screen or via Bluetooth on the screen of an Android or IOS device.

## Product specification

1) Display: Backlit, 128 × 64 pixel display with contrast adjustment
2) Operating Temperature: 0 to 60°C (32 to 140°F).
3) Storage Temperature: -20 to 70°C (-4 to 158°F).
4) External Power: 8.0 to 18.0V power provided via vehicle battery.

# Tool Description - ANCEL AD310 BT




1) LCD DISPLAY – Indicates test results. Backlit, 128 x 64 pixel display with contrast adjustment.
2) ENTER BUTTON – Confirms a selection (or action) from a menu.
3) EXIT BUTTON – Cancels a selection (or action) from a menu or returns to the menu. It is also used to exit DTC Lookup screen.
4) UP SCROLL BUTTON – Moves up through menu and submenu items in menu mode. When more than one screen of data is retrieved, moves up through the current screen to the previous screens for additional data.

5) DOWN SCROLL BUTTON – Moves down through menu and submenu items in menu mode. When more than one screen of data is retrieved, moves down through the current screen to next screens for additional data.
6) OBD II CONNECTOR – Connects the scan tool to the vehicle's Data Link Connector (DLC).

## DOWNLOAD APP

1. Scan the QR code below to download the software for Android and iOS.

ANCEL
Official Website

for Android

for iOS

2. iOS can be downloaded from the Appstore by searching for the keyword "ANCEL".
3. Android can be downloaded from Google Play by searching for the keyword "ANCEL".

Note: This product only supports the ANCEL APP connection and is not compatible with any other apps.

## Operation instructions

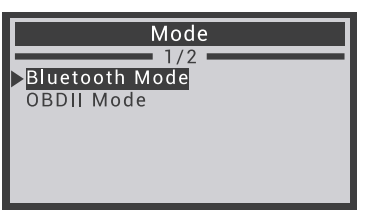
1) Find the vehicle's 16-pin Data link Connector(DLC)

2) Start the vehicle.



3) Plug the product into the vehicle's OBDII interface.

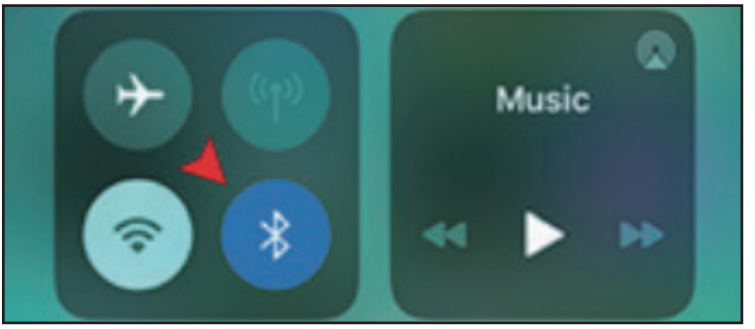
4) Press ENTER to enter mode menu.Use the UP/DOWN scroll button to select Mode from the menu.

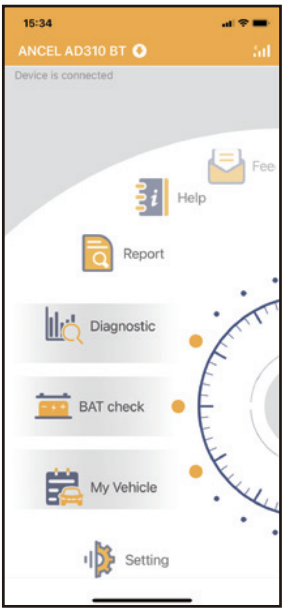
# Bluetooth mode
# (Connect to mobile APP for diagnosis)

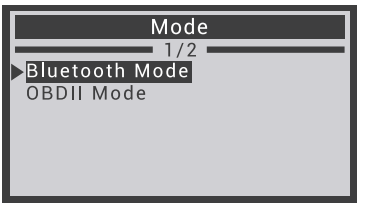
## Bluetooth connection for iOS devices

1) Turn on Bluetooth on your phone.
Drag from the bottom to the top or from the top right to the bottom of the screen to open the context menu. Tap the Bluetooth icon to turn it on. For cell phones with iOS version 13 and higher, you must also turn on Bluetooth in the system's privacy settings.

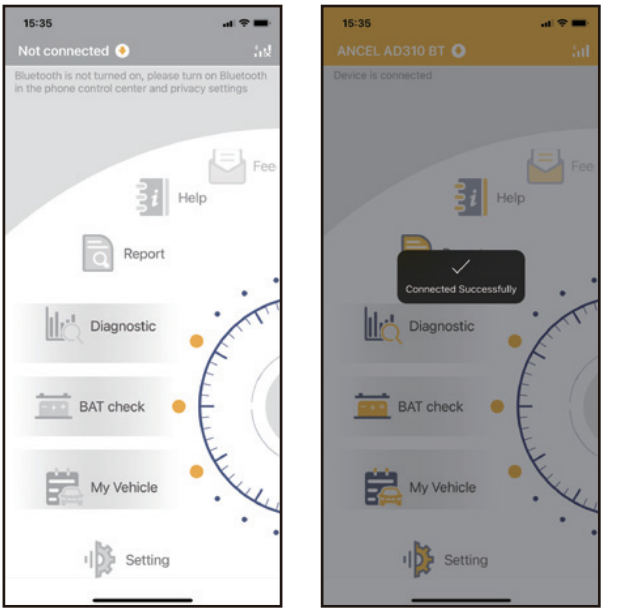



2) Open the "ANCEL" app , and make sure that the handheld device is in the Bluetooth mode when it connects to the app.



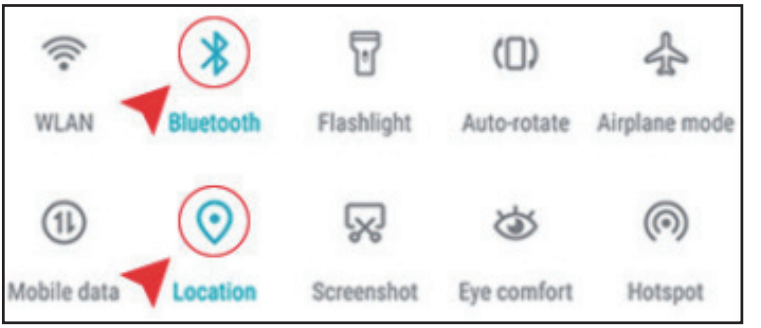




3) The APP will automatically connect to the device. During the connection process, make sure that no other phones have connected to the device. When the " Connected Successfully" message is displayed, the product can be used normally.

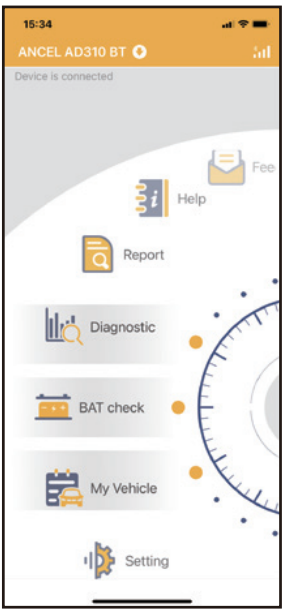


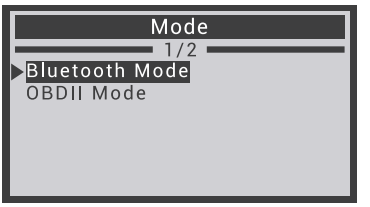

## Bluetooth Connection for Android devices

1) Turn on Bluetooth and the Location switch on the phone.



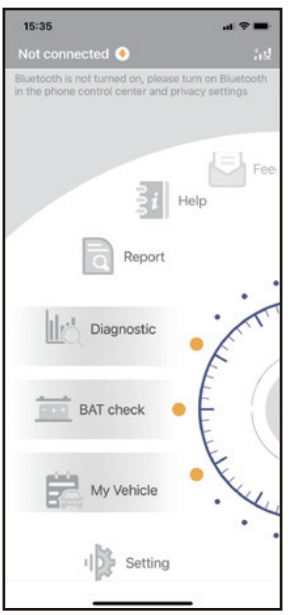
2) Open the "ANCEL" app , and make sure that the handheld device is in the Bluetooth mode when it connects to the app.

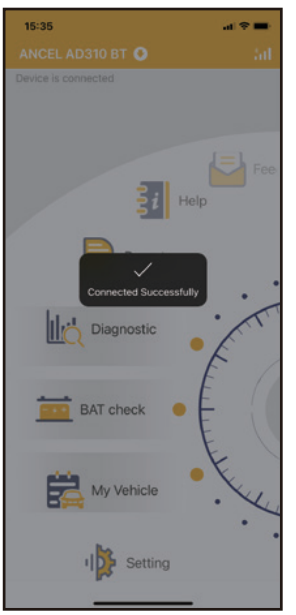




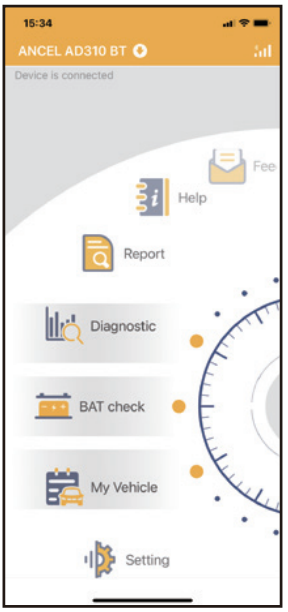
3) The APP will automatically connect to the device. During the connection process, make sure that no other phones have connected to the device. When the "Connected Successfully " message is displayed, the product can be used normally.

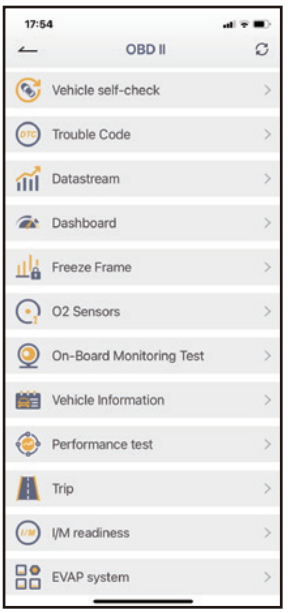


## START USING YOUR DEVICE

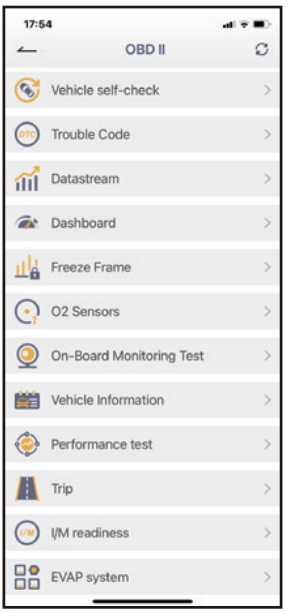
After Bluetooth connection, the diagnostic software will be launched if your vehicle supports it. You can use all functions of the device, e.g. the standard OBDII function and other functions.

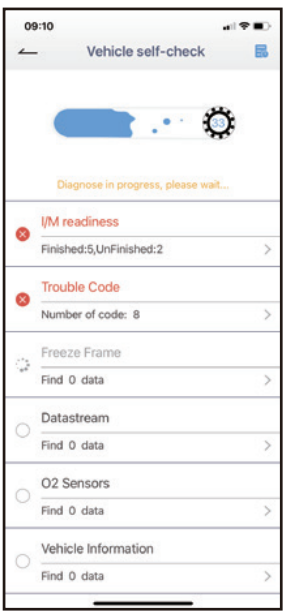



## Vehicle self-check

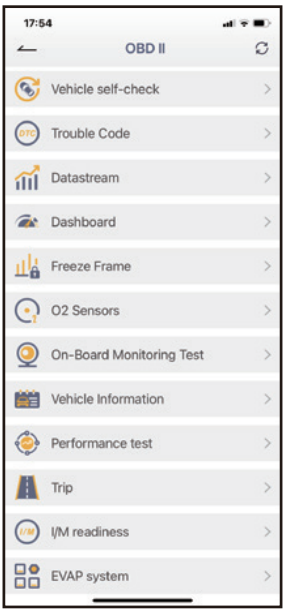
Read vehicle I/M readiness, trouble Codes, datastreams and other information with oneclick.

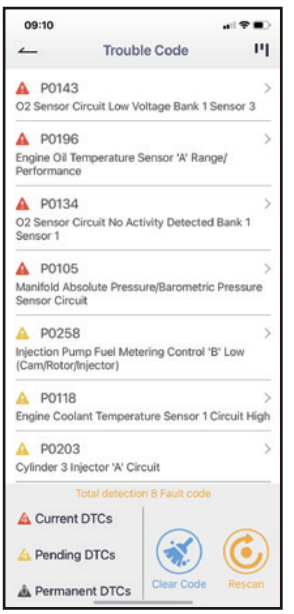


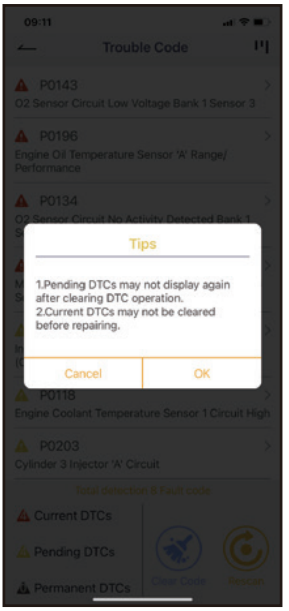
## Trouble Code & Clear Code

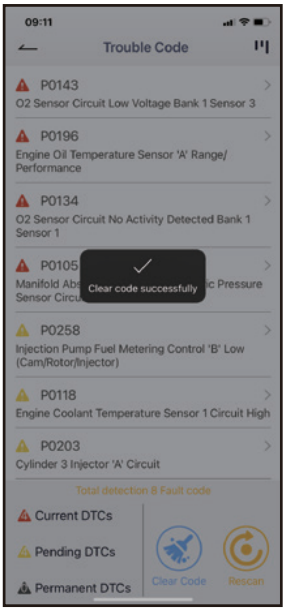
Excellent DTC explanations provide you with accurate and detailed trouble code definitions.



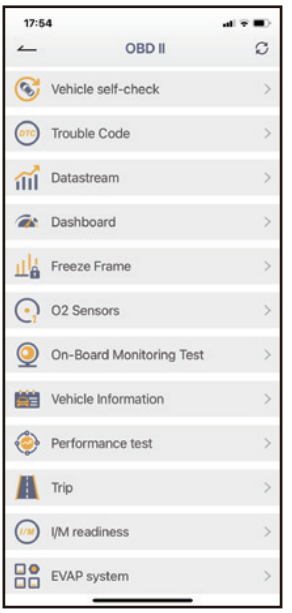

Use the Delete Code button to delete all current and saved DTCs from the control module.

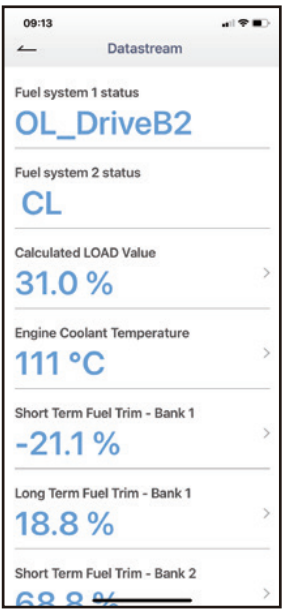


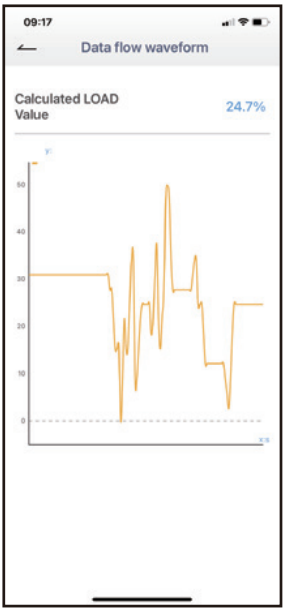



## Datastream

The View Datastream function allows you to view the PID data of the vehicle's electronic control unit in real time.
When there is an arrow mark in the data flow, the data flow is displayed in the form of a diagram, if as shown:

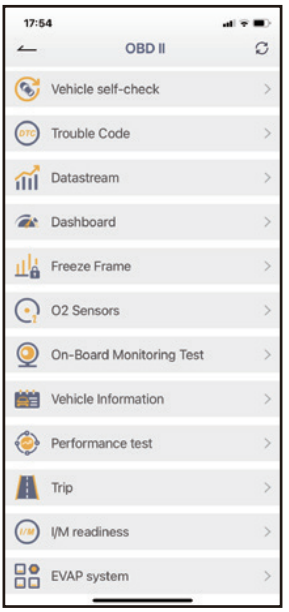


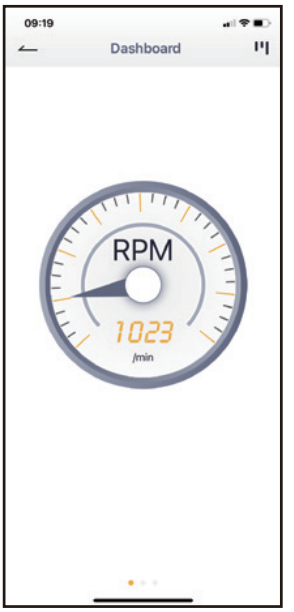



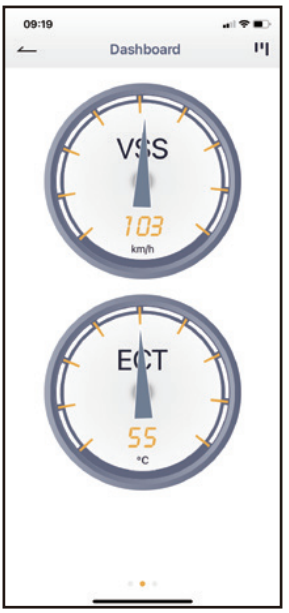



## Dashboard

Intuitive graphical display with three different styles.

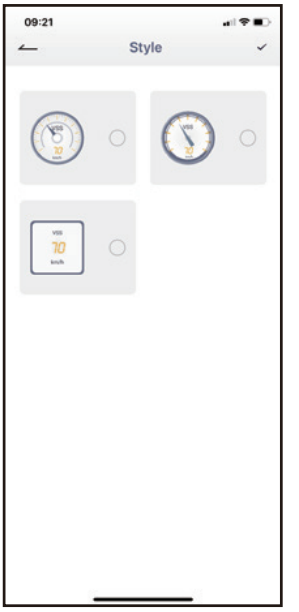


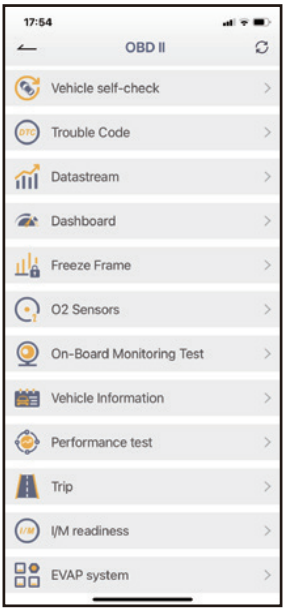


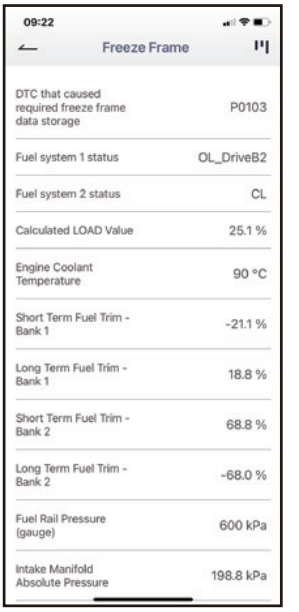
To customize your data stream:
"Add page" - "Select the graphic styles you like" - "PID" "Select the data stream you need".
Long press on the graphic to drag it to the desired position or delete it.


## Freeze Frame

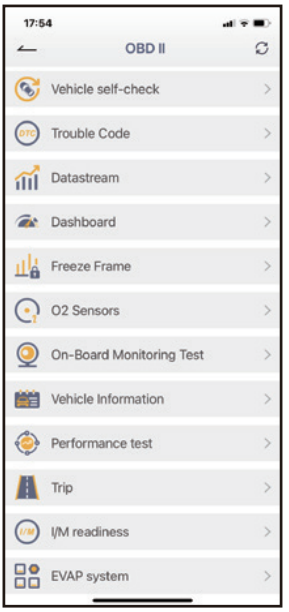
The Freeze Frame menu displays freeze frame data, a snapshot of critical vehicle operating conditions automatically recorded by the on-board computer at the time of the DTC record. This is a good function to determine the cause of the fault.

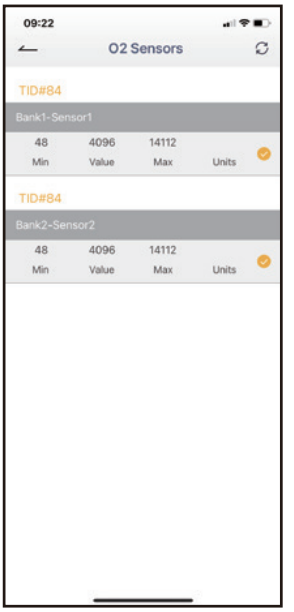


## O2 Sensors

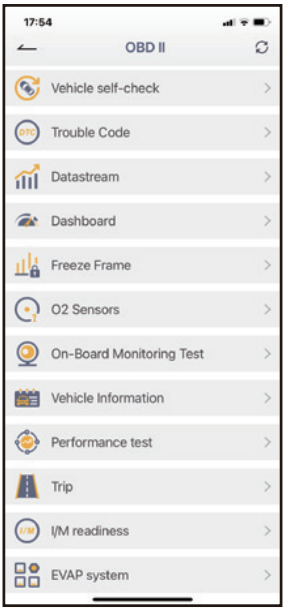
Regulations from OBD II require certain vehicles to monitor and test oxygen (O2) sensors to isolate fuel and emissions related faults. The O2 Monitor Test function allows you to view the results of the O2 sensor monitoring tests.

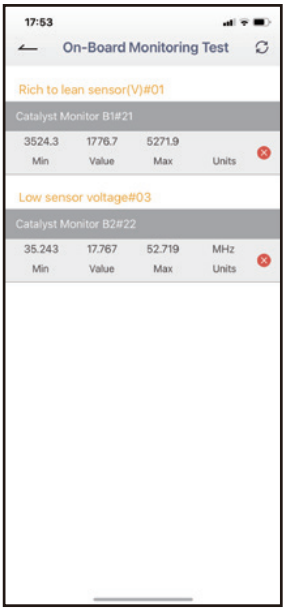



## On-Board Monitoring Test

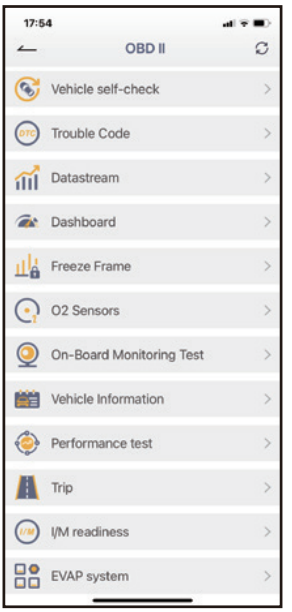
This function allows you to read the results of the on-board diagnostic monitoring. Tests for specific components/systems.

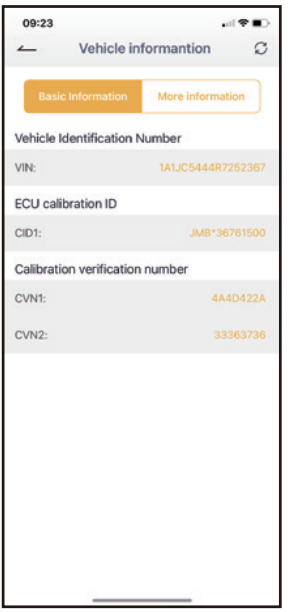


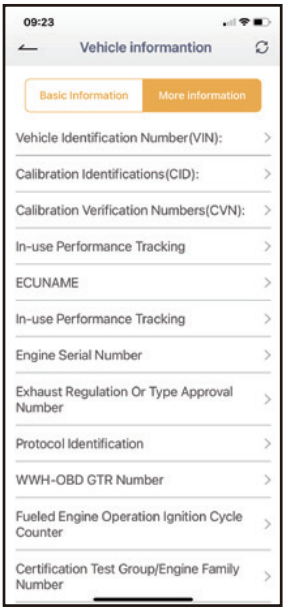



## Vehicle information

Vehicle information allows retrieval of the vehicle number VIN, calibration number ID (s) which identifies the software version of the vehicle control module(s), calibration check numbers (CVN(s)), and in-service performance tracking for OBD  compliant vehicles model year 2000 and later. CVNs are calculated values mandated by OBD II. They are reported to verify that emissions-related calibrations have been changed. Multiple CVNs can be reported for a control module. It can take several minutes to calculate the CVN. Performance tracking in operation tracks the performance of the key standby monitors.

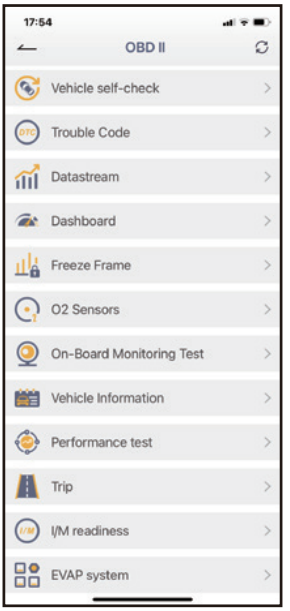


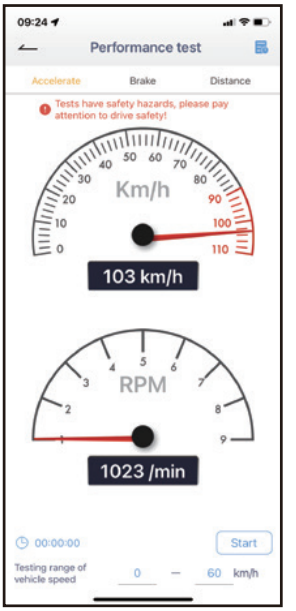






## Performance Test

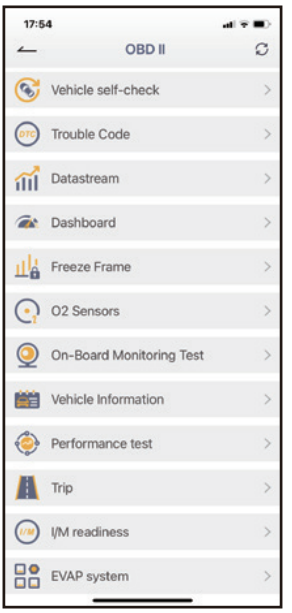
To check health condition for acceleration, brake, and distance of your vehicle.

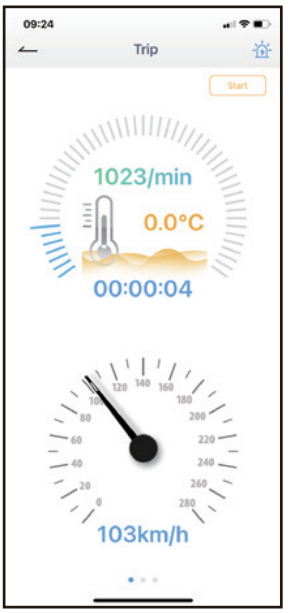


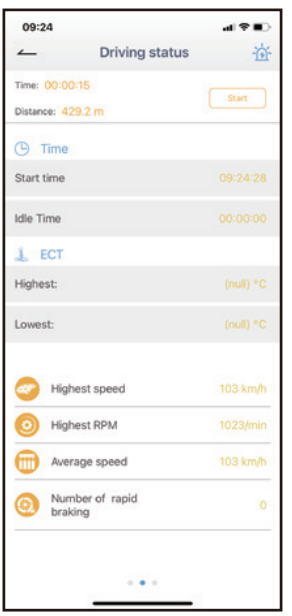



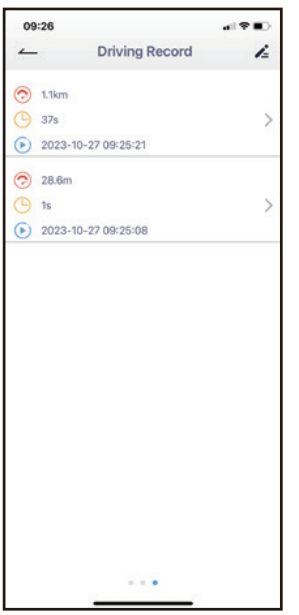
## Trip

To check the health of acceleration, braking and distance of your vehicle. Exclusive trip analysis with time, distance, start time, travel time, maximum speed, maximum speed RPM, average speed, highest and lowest coolant temperature, number of overspeeds and number of quick braking. You can also record, save, print and share the trips for your own analysis or with your mechanic.



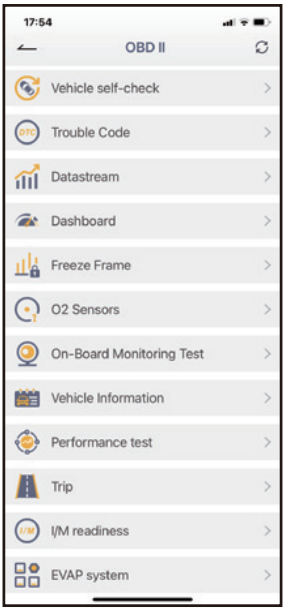



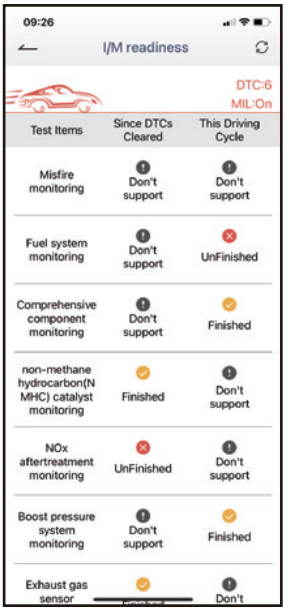



## I/M Readiness

The I/M Readiness option allows you to view a snapshot of the operations for the exhaust system on OBDII/EOBD vehicles.



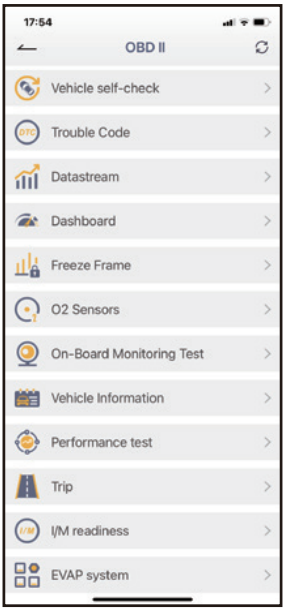

## Component Test (EVAP Test)

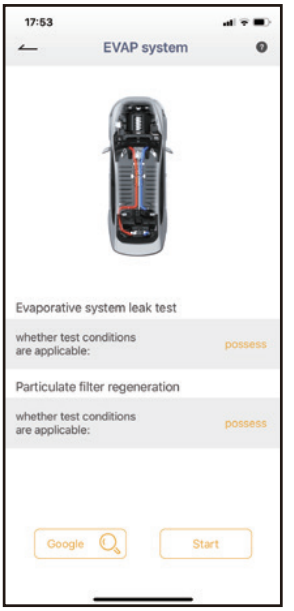
The OBD2 system monitors the fuel system for fuel vapor leakage to ensure that no hydrocarbons (HC)leak into the atmosphere. EVAP monitor does two things:

1. Ensure that the gasoline vapor is sent to the intake pipe at the right time, and mixed with the air to enter the engine for combustion.
2. Prevent fuel vapor in the fuel pipe from leaking into the atmosphere and polluting the environment.

EVAP test function: The external diagnostic device can't control the fuel evaporation control (EVAP) of the OBD system, and the diagnostic device only displays its status and test results.

If the car supports this function, it will display as below:



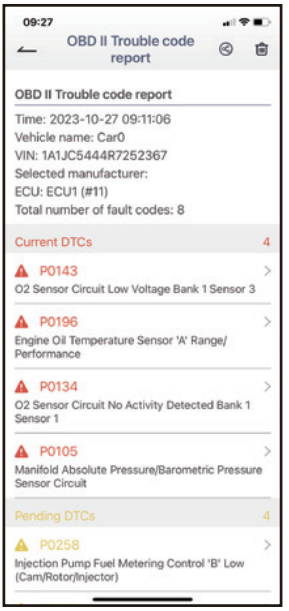

Note: Regarding the On-Board Monitor Test and Component Test (EVAP Test) functions these two functions are subject to the current test. Some vehicles support these two functions and the product software displays these two functions, while other vehicles do not support them and the product software does not display them.

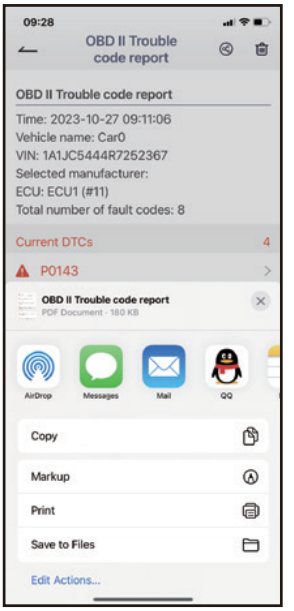
## Battery Check

Graphically display battery voltage in real time to retrieve and analyze a more accurate battery life trend and monitor health status.


## Report

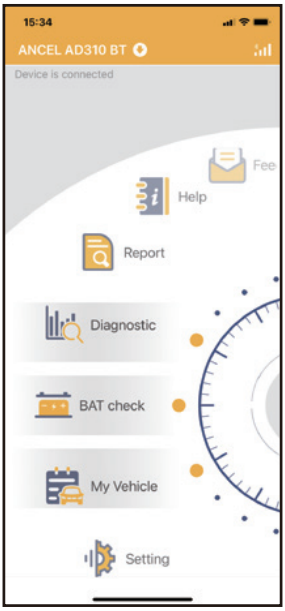
You can export diagnostic reports and share them on social media.

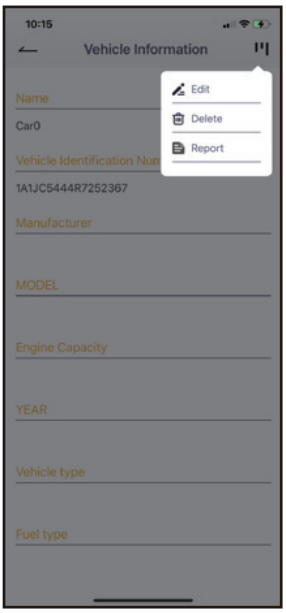




## My Vehicle

You can select or delete the information about your vehicle. Conditions for newly added vehicles:
1. If the VIN code of the newly added vehicle can be read, the vehicle can be added.
2. If the VIN code of the newly added vehicle cannot be read, an input box will appear when the device communicates with the vehicle, and you need to add the newly added vehicle information manually.
3. If the user has only one vehicle and wants to add multiple vehicles: app is not allowed.

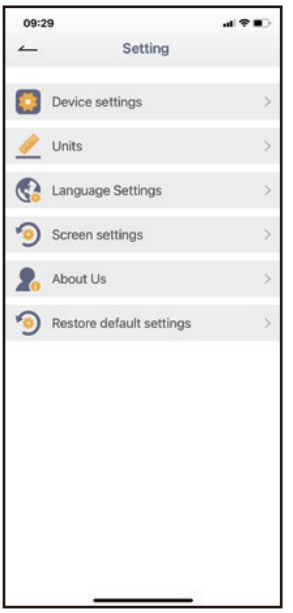

15:34
ANCEL AD310 BT
Device is connected
Fee
Help
Report
Diagnostic
BAT check
My Vehicle
Setting


09:28
Vehicle Information
Name
Car0
Vehicle Identification Number
1A1JC5444R7252367
Manufacturer
MODEL
Engine Capacity
YEAR
Vehicle type
Fuel type


10:15
Vehicle Information
Edit
Delete
Report
Name
Car0
Vehicle Identification Num
1A1JC5444R7252367
Manufacturer
MODEL
Engine Capacity
YEAR
Vehicle type
Fuel type

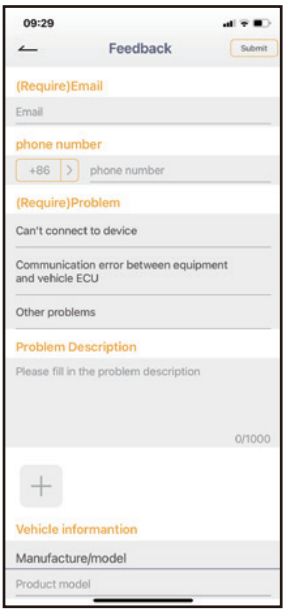
## Setting

Device settings / Units / Language Settings / Screen settings / About Us / Restore default settings.

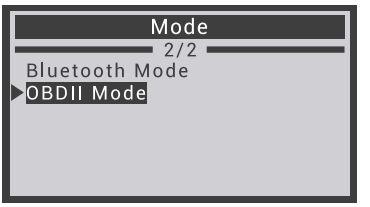



## FEEDBACK

You can send us feedback if you have problems using it. To do so, fill out and submit the feedback form.



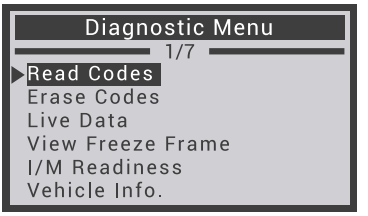
# Function display in handheld mode (OBDII Mode)

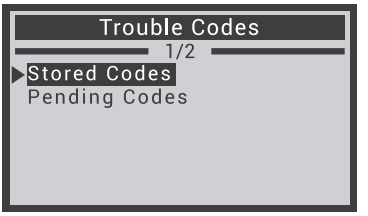

## 1. Read Codes

- Stored codes are also known as “hard codes” or “permanent codes”. These codes cause the control module to illuminate the malfunction indicator lamp(MIL) when an emission-related fault occurs.
- Pending Czodes are also referred to as “maturing codes” or “continuous monitor codes”. They indicate problems that the control module has detected during the current or last driving cycle, but are not considered serious, yet. Pending Codes will not turn on the malfunction indicator up cycles, the code clears from memory.

1) Use the UP/DOWN scroll button to select Read Codes from the Diagnostic menu and press ENTER.

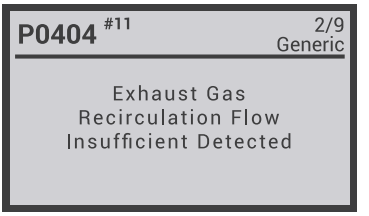



2) Use the UP/DOWN scroll button to select Stored Codes or Pending Codes from the Trouble Codes menu and press ENTER.



If there are no Diagnostic Trouble Codes present, the display indicates "No (pending) codes are stored in the module!" Wait a few seconds or press any key to return to the Diagnostic Menu.

3) View DTCs and their definitions on screen.




The control module number, sequence of the DTCs, total number of codes detected and type of codes (Generic of Manufacturer specific) will be observed on the upper right hand corner of the display.

4) If more than one DTC is found, use the UP/DOWN scroll button, as necessary, until all the codes have been viewed.
If retrieved DTCs contain any manufacturer specific or enhanced codes, a "Manufacturer specific codes are found! Press any key to select vehicle make!" message comes up prompting you to select vehicle manufacturer to view DTC definitions. Use the UP/DOWN scroll button to select manufacturer and then press ENTER to confirm.


If the manufacturer for your vehicle is not listed, use the UP/DOWN scroll button to select "For Other" and press ENTER.

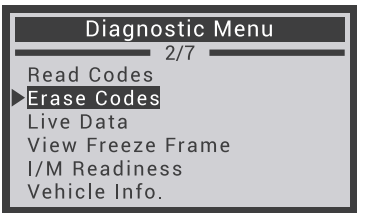
NOTICE:
The car brand logo and vehicle brand name on the display or as stated above are not a product source indicator. It is to describe the compatibility of the product with one or more specific vehicles. This scanner is not affiliated with the brands mentioned. This scanner only works for the above brands. All rights reserved to their respective owners.

## 2. Erase Codes

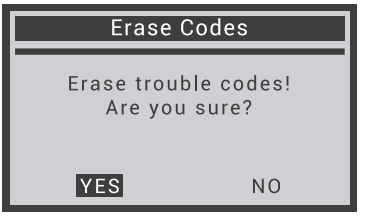
Notes:

- This function is performed with key on engine off. Do not start the engine.
- Before performing this function, make sure to retrieve and record the trouble codes.
- After clearing, you should retrieve trouble codes once more or turn ignition on and retrieve codes again. If there is still some trouble codes for hard troubles, please find the reason caused the trouble code firstly, and then solve the problem. Now, the trouble codes can be erased.

1) Use the UP/DOWN scroll buttons to select Erase Codes from the Diagnostic Menu and press ENTER.

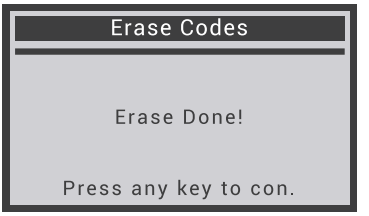



2) A warning message comes up asking for your confirmation.

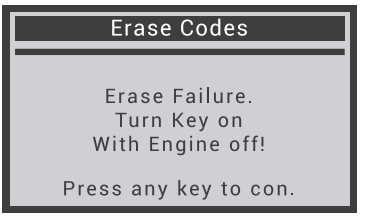


3) Press ENTER to confirm.

- If the codes are cleared successfully, an "Erase Done!" confirmation message is displayed.

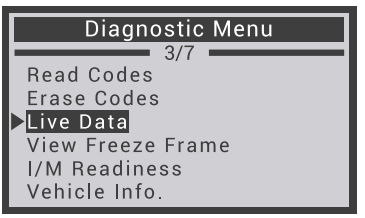


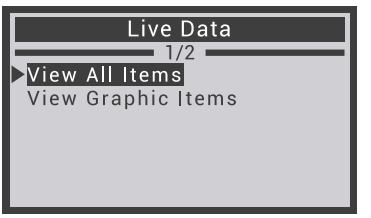

- If the codes are not cleared, then an Erase Failure. Turn Key on with Engine off!" message is displayed.



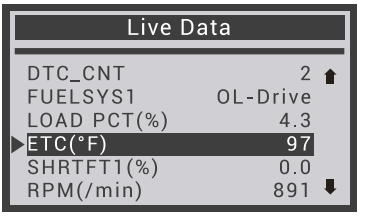

### 3. Live Data

The OBDII Scan Tool is a special diagnostic tool that communicates with the vehicle's computer. The Scan Tool lets you view "real-time" Live Data. This information includes 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.
Select [View All Items ]and press the ENTER key. The screen displays the interface shown below:

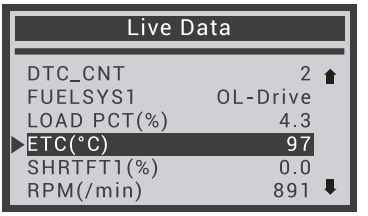


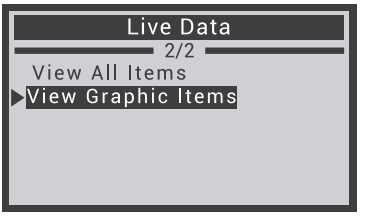
1) To view live PIDs on the screen. Use the UP/DOWN scroll button for more PIDs if an ⬆ or ⬇ arrow appears on the screen.

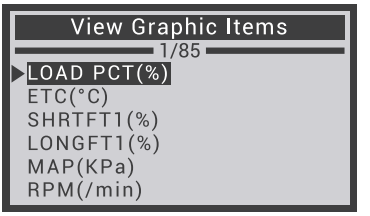


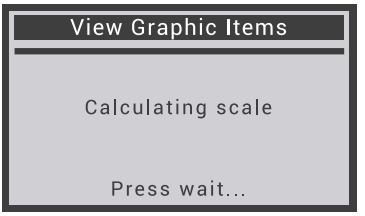

- If you want change unit of measure Press ENTER to change.

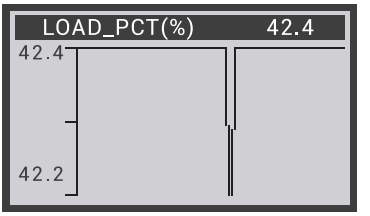



2) Press EXIT to return to Diagnostic Menu. Select [View Graphic Items] from the Live Data menu and press ENTER. The screen displays the interface shown below:



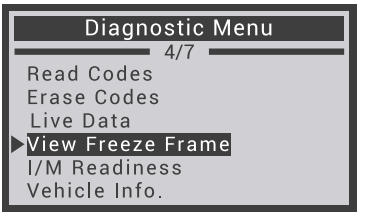



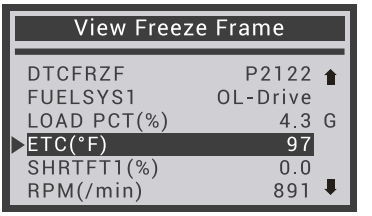
## 4. View Freeze Frame

When an emisssion-related fault occurs, certain vehicle conditions are recorded by the on-board computer.This information is referred to as freeze frame data. View Freeze Data is a snapshot of the operating conditions at the time of an emission-related fault.

- If DTCs were erased,View Freeze Data may not be stored in vehicle memory depending on vehicle.

Select [View Freeze Frame], the screen will display the interface as shown below:



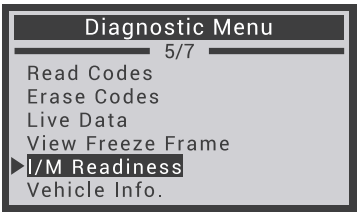



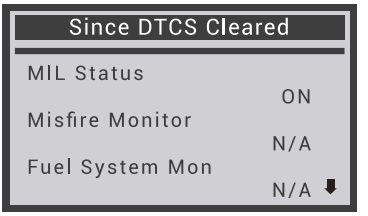

Use the UP/DOWN scroll button for more PIDs if an ⬆ or ⬇ arrow appears on the screen. Press EXIT to return to Diagnostic Menu.

## 5. I/M Readiness

I/M refers to Inspection and Maintenance,that is legislated by the Government to meet federal clean-air standards. I/M Readiness indicates whether or not the varous emissions-related systems on the vehicle are operating properly and are ready for Inspection and Maintenance testing. The purpose of the I/M Readiness Monitor Status is to indicate which of the vehicle's Monitors have run and completed their diagnosis and testing (as described in 2.5), and which ones have not yet run and completed testing and diagnosis of their designated sections of the vehicle's emissions system.

The I/M readiness Monitor Status function also can be used (after repair of a fault has been performed) to confirm that the repair has been performed correctly, and/or to check for Monitor Run Status. Select [I/M Readiness Test] and Press [ENTER], the screen will display the interface as shown below:



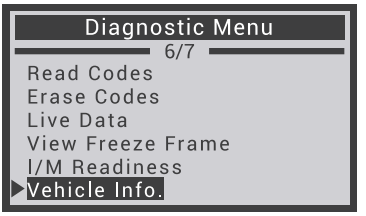




Press EXIT return to the Diagnostic Menu.

**6. Vehicle Info.**

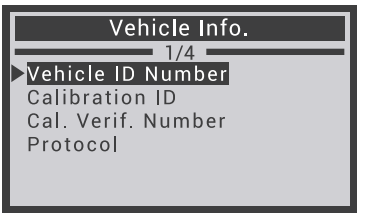
Select [Vehicle Info.] and press [ENTER], the screen will display the formation such as VIN (Vehicle indentification Number），CID（Calibration ID）and CVN (Calibration verify number).

1) Use UP/DOWN scroll button to select Vehicle Info. from the Diagnostic Menu and press ENTER.




2) An advisory message comes up to remind you. Wait a few seconds or press any key to continue.

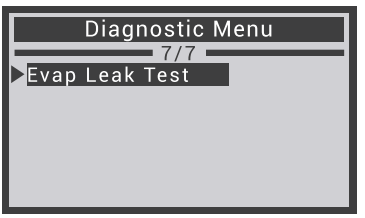
3) Wait a few seconds while the scan tool reads vehicle information.

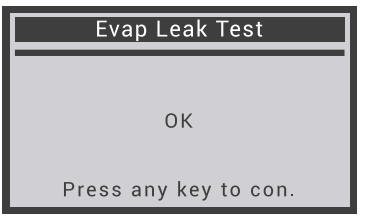



4) Press EXIT button to return Diagnostic Menu.

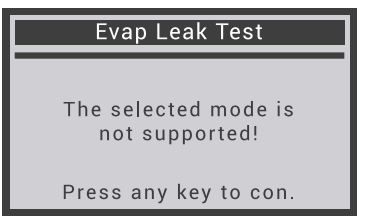
## 7. Evap Leak Test

The OBD2 system monitors the fuel system for fuel vapor leakage to ensure that no hydrocarbons (HC) leak into the atmosphere. EVAP monitor does two things:
1) Ensure that the gasoline vapor is sent to the intake pipe at the right time, and mixed with the air to enter the engine for combustion.
2) Prevent fuel vapor in the fuel pipe from leaking into the atmosphere and polluting the environment.
If the car supports this function , it will display as below:



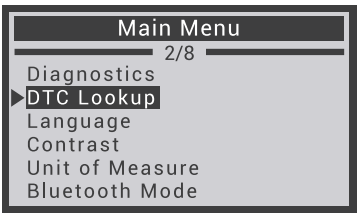

If the car not supported the function ,it will display as below:

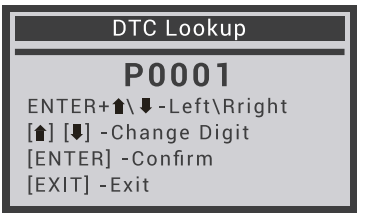


## 8. DTC Lookup

The DTC Lookup function allows you to search for definitions of codes stored in the built-in code library.

1) From the main menu, use the UP /DOWN keys to select Code Lookup and press ENTER.



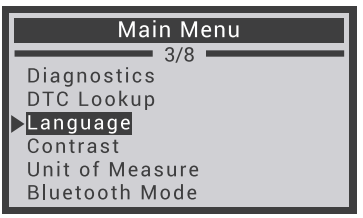

To query the error code, press enter + up, cursor to the left; press enter + down, the cursor to the right. For manufacturer specific codes, you must select a vehicle make in an additional screen to search for DTC definitions.

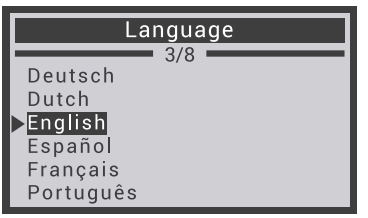
If no definition is found (SAE or manufacturer specific), the scan tool will display "DTC definition not found!". Please refer to the vehicle's service manual.

2) Press the EXIT key and return to the main menu.

## 9. Language

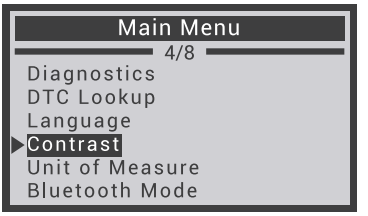
1) From the Main Menu, use the UP/DOWN scroll button to select the Language and press the ENTER button.



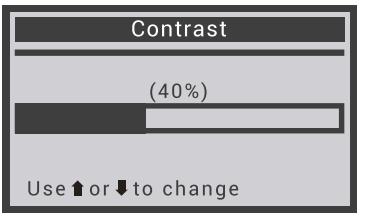



## 10. Contrast

1) From the Main Menu, use the UP/DOWN scroll button to select Contrast, and press ENTER.



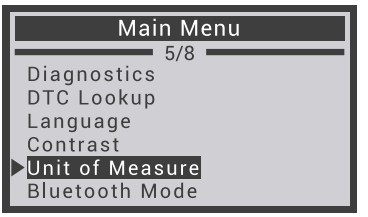

2) From the Contrast menu,use the UP/DOWN scroll button to increase or decrease contrast.



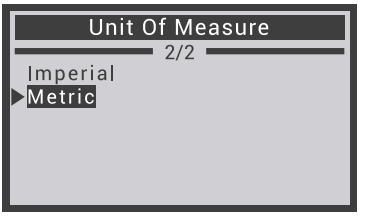

3) Press ENTER to save your settings and return to the previous menu.

## 11. Unit of measure

1) From the Main Menu, use the UP/DOWN scroll button to select Unit of Measure, and press ENTER.



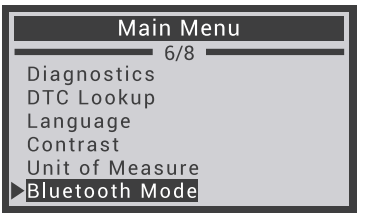

2) From the Unit of Measure menu, use the UP/DOWN scroll button to select the desired Unit of Measure.




3) Press the ENTER button to save your selection and return to the previous menu.

## 12. Bluetooth Mode

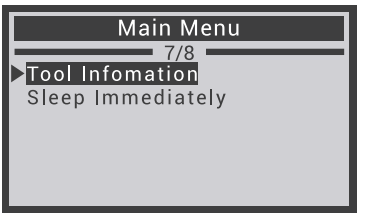
The Bluetooth mode feature switches the device from handheld functionality to Bluetooth mode.

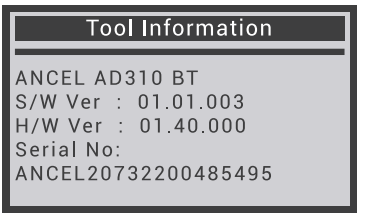




## 13. Tool Information

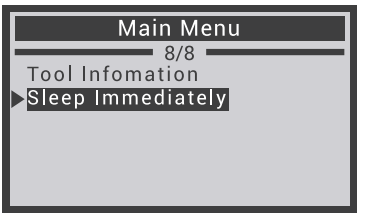
Select [Tool Information] and the following is displayed:




## 14. Sleep Immediately

Select [Sleep Immediately] and the device will enter sleep state directly.



**Federal Communications Commission (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.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide Reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

•Reorient or relocate the receiving antenna.

•Increase the separation between the equipment and receiver.

•Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

•Consult the dealer or an experienced radio/TV technician for help.

**Warning:** Changes or modifications made to this device not expressly approved by **OBDSPACE TECHNOLOGY Co., LTD** may void the FCC authorization to operate this device.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

**RF exposure statement:**

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The device is installed and operated without restriction.