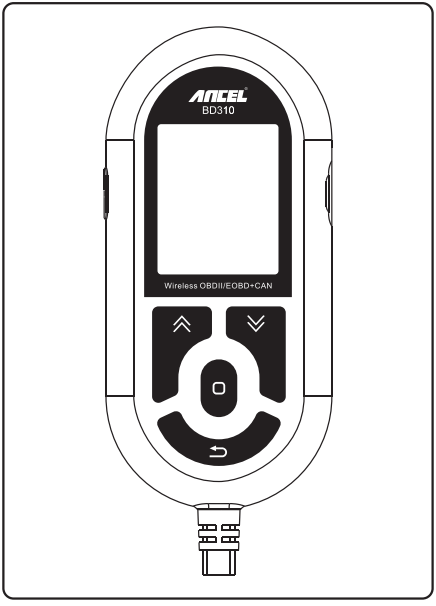
ANCEL®



BD310
USER'S MANUAL

OBDII/EOBD+CAN

BD310 Display function inside the device

1. Safety Precautions and Warnings

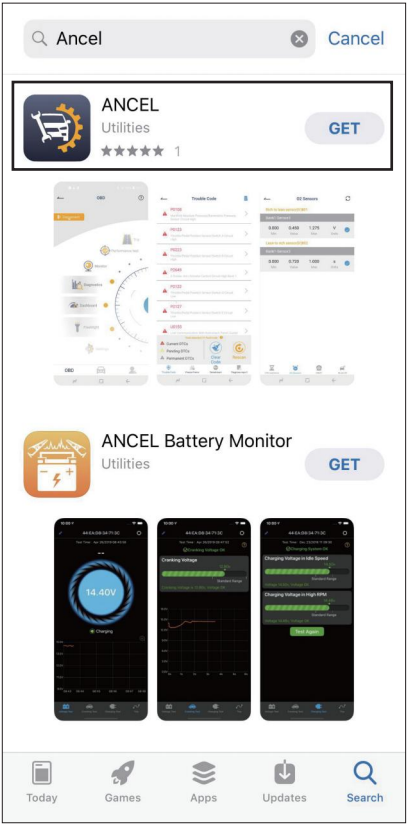
To prevent personal injury or damage to the vehicle and/or the scan tool, read this instruction manual first and observe the following safety precautions whenever working on a vehicle:

- Turn the ignition off first. Connect 16-pin to plug, then turn the ignition on.
- 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.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well ventilated place: Exhaust gases are Poisonous.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while running tests.
- Use extreme caution when working around the ignition coil, distributor cap, ignition wires, and spark plugs. These components create hazardous voltages when the engine is running.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.
- Keep the scan tool dry, clean, and free from oil/water or grease. Use a mild detergent on a clean cloth to clean the outside of the scan tool when needed.

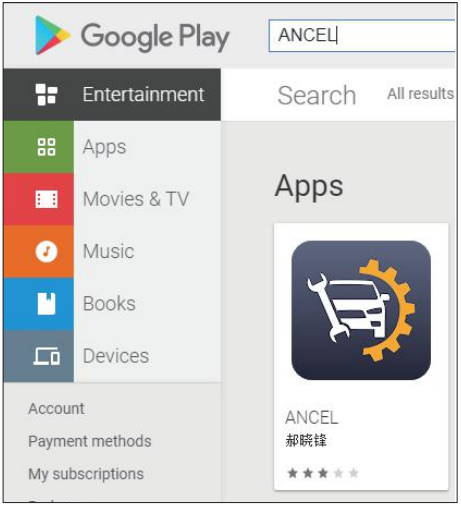
1. How to connect

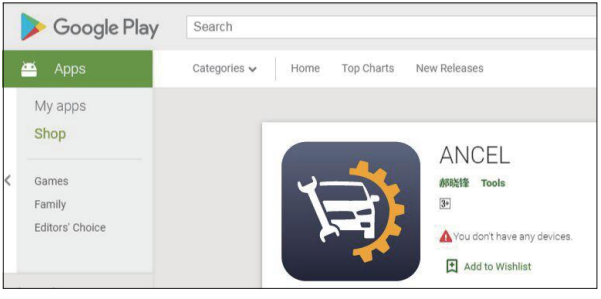
Download & install app "ANCEL"

1：For iOS users, search "ANCEL" in the App Store and install it.



For Android users, search "ANCEL" in the Google Play and install it.





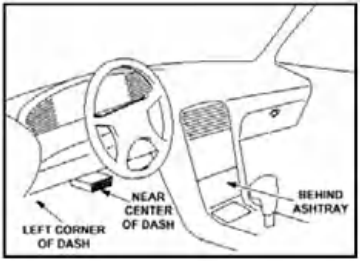
2. Scan the QC code below to download the App "ANCEL".

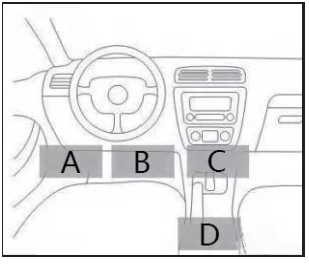
for IOS

for Android

3.Turn ignition on but engine off.

4.Plug ANCEL BD310 into the diagnostic link connector(DLC)
The DLC is usually found on the driver's side under dash.





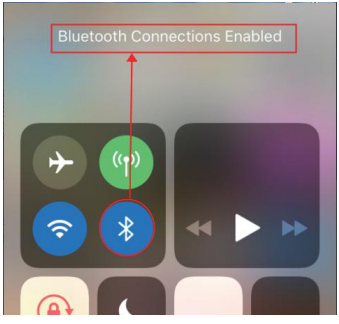
5.Bluetooth Connection for iOS devices

Please note:

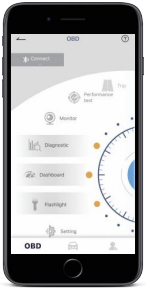
For iOS users, do not connect bluetooth device in the phone system settings, otherwise it will fail to connect with the App, please refer to below step (2) and (3).

1)Turn your phone bluetooth on.

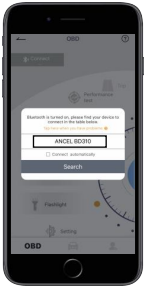
Method: On the screen, draw up from the bottom or draw down from the top right side to open the shortcut menu. Tap "Bluetooth" icon to turn it on.



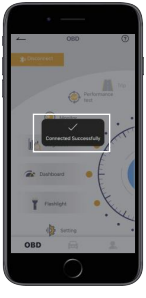
2)Open App "ANCEL" , and make sure the handheld device is in Bluetooth mode when it connects the App.



3) Tap “Connect” and select “ANCEL BD310” to connect in the device list (please make sure BD310 device does not connect with other Phone).



4) Bluetooth connected successfully when "Connect successfully" popped up.

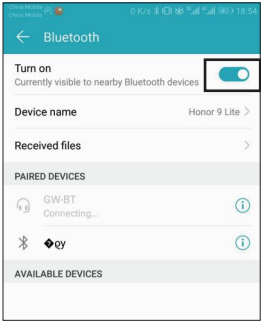


6.Bluetooth Connection for Android devices

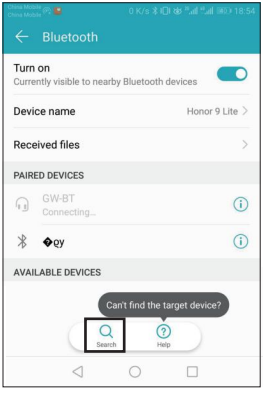
Step1: Pair Phone with device

1)Turn your phone bluetooth on.

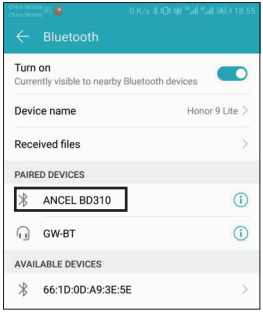
Steps: Tap the right button to turn bluetooth on from “Setting”



2）**Search device if “ANCEL BD310”is not in available devices**

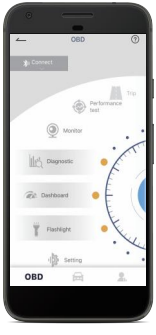


3))Select “ANCEL BD310” to pair from available devices; please enter 0000 or 1234 if pairing password is needed. You can skip this step if Bluetooth is paired with phone.

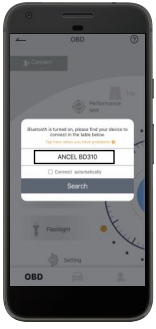


Step2: Connect device

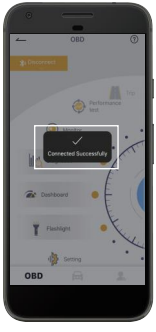
1)Open App "ANCEL" , and make sure the handheld device is in Bluetooth mode when it connects the APP.



2) Tap“Connect” and select device “ANCEL BD310”to connect.



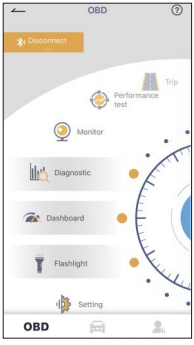
3) You can enjoy the device when "Connect successfully" popped up.



2 . “ANCEL “ APP FUNCTION FOR OBD

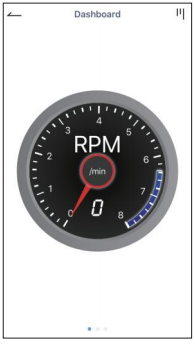
1 .Main Menu for OBD

Support real-time monitor, trip analysis, performance test, alarm settings, battery check and more functions.

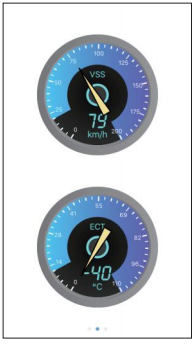


2 Dashboard

Intuitive graphical display with three different styles.



Style 1



Style 2

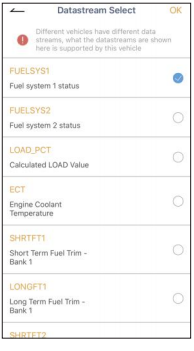
Style 3

Touch screen to wake up the dashboard setting.

How to customize your data stream:

“Add page” – “Choose the styles of the graphic you like” – “PID” – “Select the data-stream you need ”

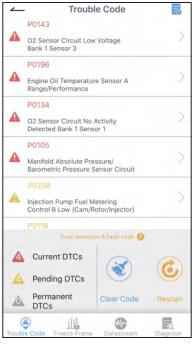
Long press the graph to drag it to the position you want, or delete it.

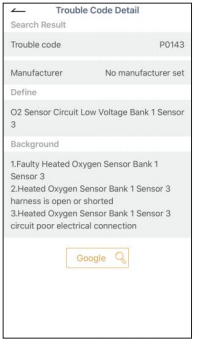


3.Diagnostic

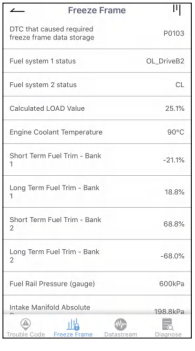
1) Trouble Code

Excellent DTC explanations give you accurate and detailed fault code definitions. One click to Google to get more details!



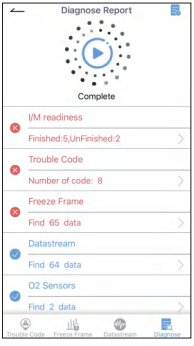


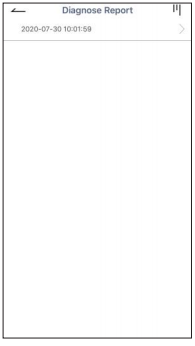
2) Freeze Frame and Data Stream

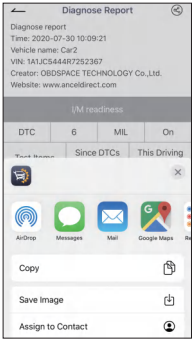


3) Report

You can export and share diagnostic reports to social media.

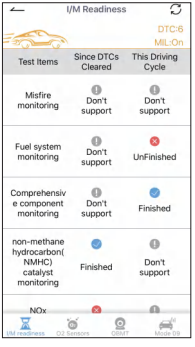


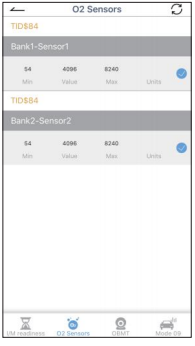


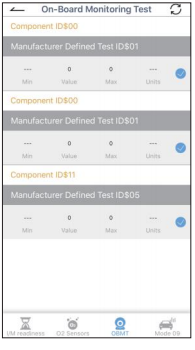


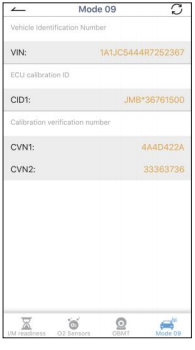
4) Monitor

Support Real-time monitoring of vehicle conditions, includes I/M readiness, O2 Sensors, Mode 06 and Mode 09.



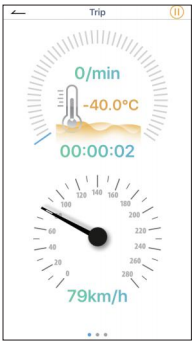


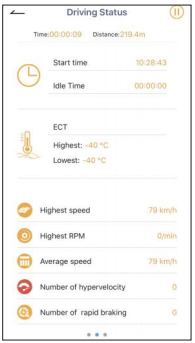


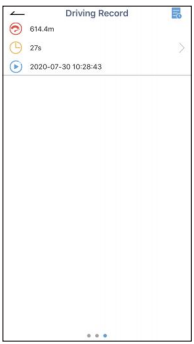


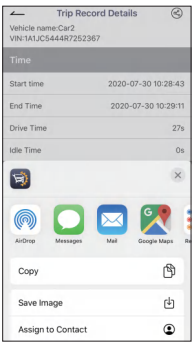
5)Trip Analysis

Exclusive trip analysis including time, distance, start time, driving Time, highest speed, highest RPM, average speed, highest and lowest coolant temperature, number of hyper-velocity, and number of rapid braking. Moreover, trip details can be recorded, saved, printed and shared for your own analyses or for your mechanic.



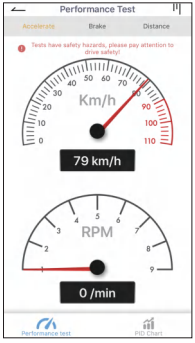


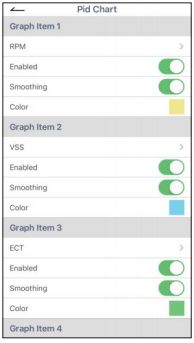




6) Performance Test

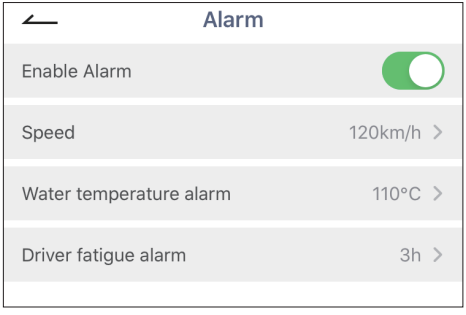
To check health condition for acceleration, brake, and distance of your vehicle. Intuitive PID chart format makes it easy to see at a glance. You can also set your own chart.





7)Setting

Distinctive voice Alarm can set up in speed, water temperature, driving time. Once exceed, a voice alarm will be sent promptly for speeding and fatigue of driver.

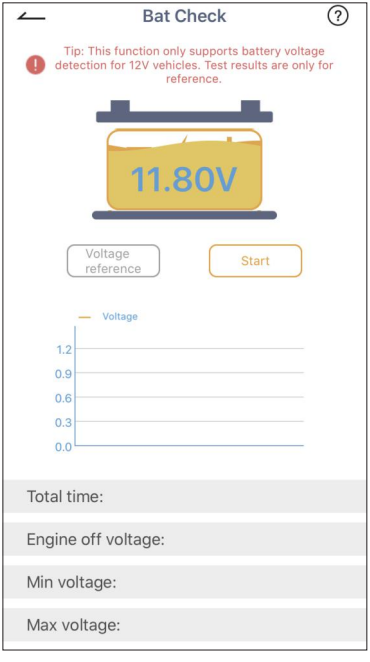


8) DTC look, Flashlight and EVAP system

Support DTC quickly look so that you can look up the error code directly.

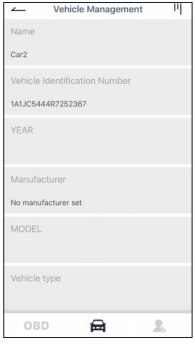
9) Battery Check

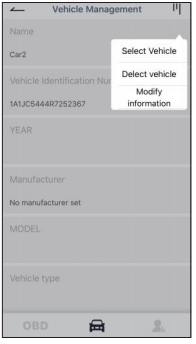
Display real-time graphing battery voltage, so as to access and analyze more accurate trend of your battery life and monitor the health status.



10)Vehicle Setting

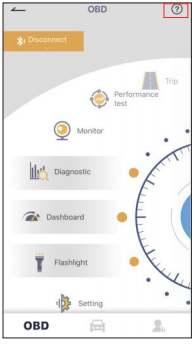
Tap Car Icon – See your vehicle information
Tap the screen to wake up the setting icon. You can select or delete the your vehicle information.
It can record vehicle information of up to 3 cars at the same time.

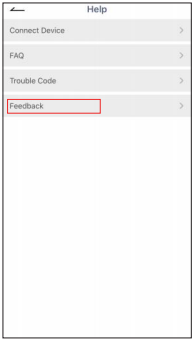




4. Using Help

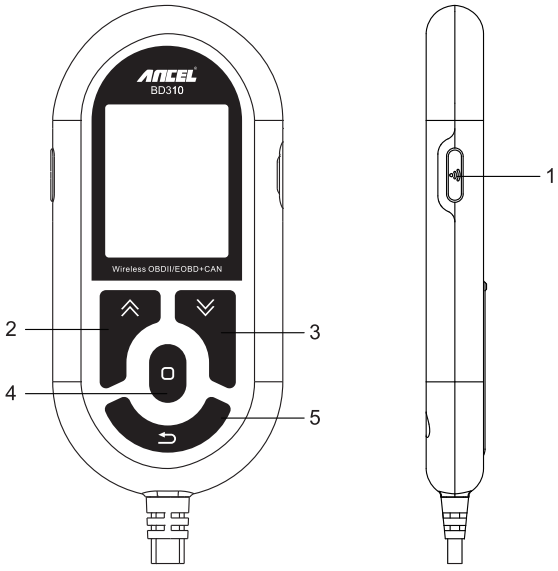
If you have problems during using, please click the Help Button to get help or contact us.





Handheld scanner description- ANCEL BD310

1.1 Tool Desctiption- ANCEL BD310



1. Wireless Bluetooth terminal and handheld device switching button, Bluetooth wake button.

2. - UP BUTTON - Up scroll item by item in a menu.

3. - DOWN BUTTON - Down scroll item by item in a menu .

4. - ENTER BUTTON - Confirm a selection (or action) from a menu.

5. - EXIT BUTTON - Cancel a selection (or action) from a menu or return to the previous menu.

1.2 Specifications

1) Display: full 65k color 2.0 inch TFT

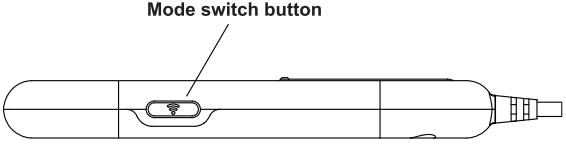
2) Operating Temperature: 0 to 50℃ (32 to 140 F°)

3) Storage Temperature: -20 to 70℃ (-4 to 158 F°)

4) External Power: 8.0 to 18.0 V power provided via vehicle battery

5) Dimensions: 130*61.5*15.6mm

6) Weight: 0.35kg



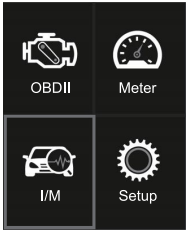
Click to switch to handheld mode.
As shown below

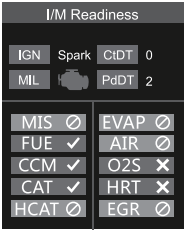
How to use Handheld scanner (BD310)?

1.3 I/M

A snapshot of the emission systems operations for all OBD II vehicles - i.e., misfire monitor, evap systems monitor, and more.

Choose [I/M] and it displays as follows:

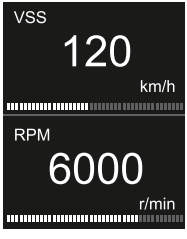




1.4 Meter TEST

The function is used to read real data stream. You can quickly check the main data such as VSS, RPM, coolant temperature, oil temperature, intake air temperature, and voltage .

From the Main Menu, use the UP / DOWN scroll button to select the meter menu and press the ENTER button. The screen will display the interface as shown below:



1.5 Tool / Setup

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

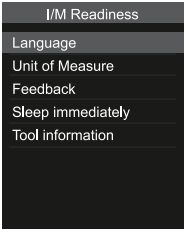
1) Select Language: Selects the desired language.

2) Unit of Measure: Sets measurement to English or Metric.

3) Feedback.

4) Sleep immediately.

5) Tool information.



2. OBDII Diagnostics

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

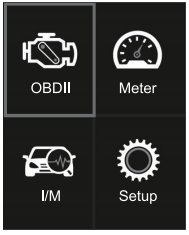
1) Turn the ignition off.

2) Locate the vehicle's 16-pin Data Link Connector (DLC).

3) Plug the scan tool cable connector into the vehicle's DLC.

4) Turn the ignition on. The engine can be off or running.

5) Press ENTER to enter the Main Menu. Press the UP / DOWN button to select Diagnostics from the menu.



6) Press ENTER to confirm.

If "LINKING ERROR!" message shows on the display.

- Verify that the ignition is ON;

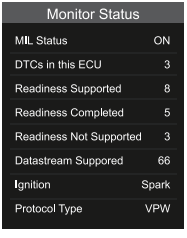
- Check if the scan tool's OBD II connector is securely connected to the vehicle's DLC;

- Turn the ignition 'off' and wait for about 10 seconds. Turn the ignition back to 'on' and repeat the procedure from step 5.

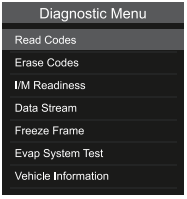
2.1 Diagnostic Menu

- Stored emission-related codes are hard codes which illuminate the malfunction indicator lamp(MIL).
- Pending codes are current codes or historical codes which will not illuminate the malfunction indicator(MIL).

1) Select OBDII in Main Menu and press ENTER, shown as follows:

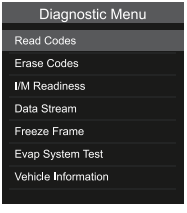


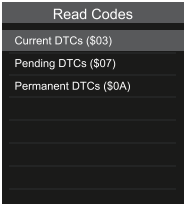
2) Press ENTER to go to the Diagnostic Menu, screen will display as follows:



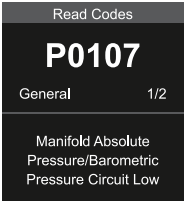
2.2 Read Codes

1) Press UP / DOWN button to select Read Codes and press ENTER in the Diagnostic Menu. If there are some codes, the screen will display the codes as shown below:





2) According to the above figure, select a different item by pressing UP or DOWN and press ENTER to confirm.

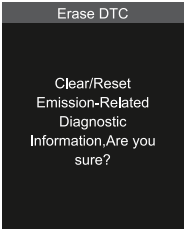


3) After viewing all the codes, you can press EXIT to return to the previous menu.

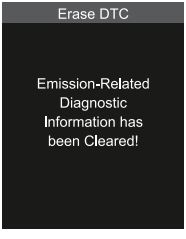
2.3 Erase Codes

1) Press UP /DOWN button to select Erase Codes. The screen will display the interface as shown below.

Press ENTER to erase DTC's, and the screen will display the interface as shown below:



2) According to the above figure, press ENTER and the screen will display the interface as shown on the next page:

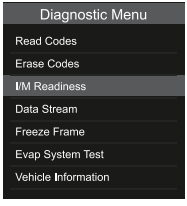


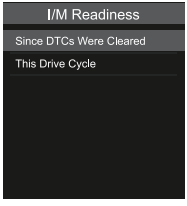
Notes:

- 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 the codes again. If there are still some trouble codes in the system, please troubleshoot the codes using a factory diagnosis guide. Then clear the codes and re-check.

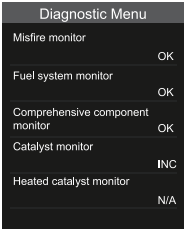
2.4 I/M Readiness

Press the UP / DOWN button to select I/M Readiness and press ENTER. The screen will display the interface as shown below:





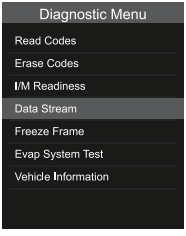
I/M readiness is to test Misfire / Fuel system / Comprehensive component. You can use the UP or DOWN button to select and press ENTER, shown as follows:

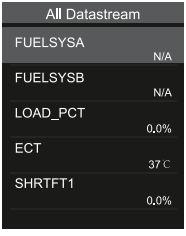


N/A means not available on this vehicle, INC means incomplete or not ready, and OK means Completed or Monitor OK.

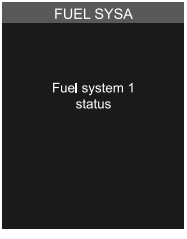
2.5 Data Stream

Press the UP or DOWN button to select Data Stream in the Main Menu interface and then press ENTER button to confirm. The screen will display the interface as shown below:





If you want to know the meaning of the abbreviation data, you can press the ENTER button. The screen will display the interface as shown below:

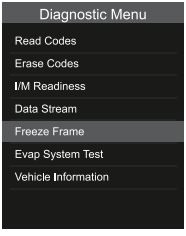


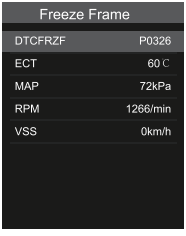
2.6 View Freeze Frame

When an emission-related fault occurs, a snapshot of current vehicle parameters is recorded by the ECU.

Note: If DTCs were erased, Freeze Data may not be stored in vehicle.

Select Freeze Frame in main menu interface. The screen will display the interface as shown below:



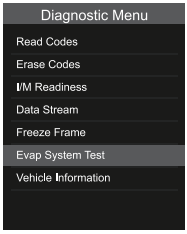


You can use the UP / DOWN button to view the data. Press EXIT to return to the Diagnostic Menu.

2.7 EVAP System Test

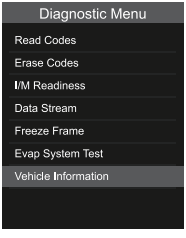
The EVAP test function lets you initiate a leak test for the vehicle's EVAP system. The device does not perform the leak test, but signals to the vehicle's on-board computer to initiate the test. Before using the system test function, refer to the vehicle's service repair manual to determine the procedures necessary to stop the test.

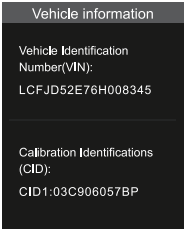
Select the EVAP System Test and press ENTER. The screen will display the relative information about the EVAP system. Some vehicle manufacturers do not allow external devices to control vehicle system. If the car supports this function, it will display as below:



2.8 Vehicle Info

Press the UP / DOWN button to select [Vehicle Info] and press ENTER. The screen will display the information such as VIN (Vehicle identification Number), CID (Calibration ID) and CVN (Calibration verification number) as shown below (different cars will show different data):



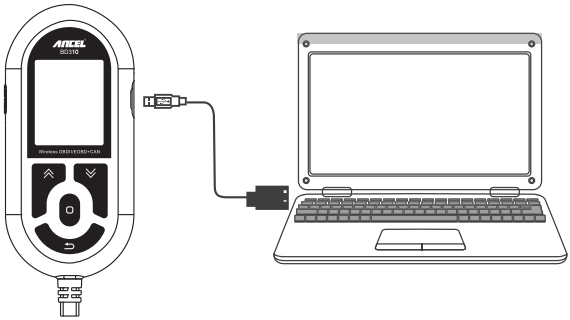


Press EXIT to return to the Diagnostic Menu.

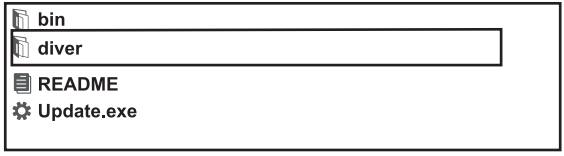
3. Update

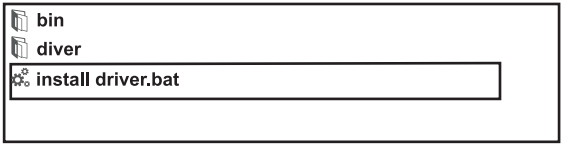
1) Download update software

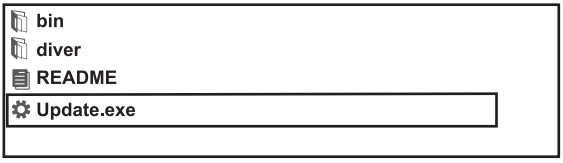
2) Connect the devise with computer through USB cable.



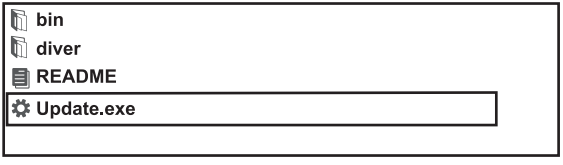
3) The update software is only supported by 7/8/10.
Click "install driver.bat" in the driver files to install the driver, if computer system is Windows 7







Windows 8/10 can run update software directly.



FAQ

1. Why is there a Vehicle Linking Error?

A communication error occurs if the scan tool fails to communicate with vehicle's ECU (Electronic Control Unit).

Answer:

Verify that the ignition is ON.

Check if the scan tool's connector is securely connected to the vehicle's DLC.

Turn the ignition off and wait for about 10 seconds and turn the ignition back to on. Then continue the testing.

Verify the control module is not defective.

2. Why Doesn't The Scan Tool Power Up?

If the scan tool doesn't power up or operates incorrectly in any other way.

Answer:

Check if the scan tool's connector is securely connected to the vehicle's DLC.

Check if the DLC pins are bent or broken. Clean the DLC pins if necessary.

Check the vehicle's battery to make sure it is still good with at least 8.0 volts.

3. Why is there an Operating Error?

In rare cases, the scanner might suddenly freeze. If the scan tool freezes, then an exception occurs or the vehicle's ECU is too slow to respond to requests.

Answer:

Reset the scan tool first, then turn the ignition off and wait for 10 seconds. Turn the ignition back to on and continue the test.

4. Why can I not connect the BD310 code reader?

a. Most android users need to pair with the BD310; not for iOS users

b. Android users need to pair with the BD310 for the first time using the product and you need to enter the password (0000 or 1234).

c.Click the device and enter the pairing request interface, enter the password, and click OK to pair. If Bluetooth is turned on, you can skip this step.

5. What do I need to pay attention to?

a. BD310 code reader works on 12volt vehicles and some light trucks. It cannot do the 24v truck.

b. The update software only supports Windows 7/8/10.

c. Other systems can run update software directly, only windows 7 needs to install the driver. Select the driver folder.

4. Warranty and Service

4.1 Limited One Year Warranty

THIS WARRANTY IS EXPRESSLY LIMITED TO PERSONS WHO PURCHASE ANCEL BD310 PRODUCTS FOR PURPOSES OF RESALE OR USE IN THE ORDINARY COURSE OF THE BUYER'S BUSINESS.

ANCEL BD310 code reader is warranted against defects in materials and workmanship for one year (12 months) from the date of delivery to the user.

This warranty does not cover any part that has been abused, altered, used for a purpose other than for which it was intended, or used in a manner inconsistent with instructions regarding use. The exclusive remedy for any automotive meter found to be defective is repair or replacement, and ANCEL BD310 shall not be liable for any consequential or incidental damages.

4.2 Service Procedures

If you have any questions, please contact your local store distributor.

If it becomes necessary to return the scan tool for repair, contact your local distributor for more information.

OBDSPACE TECHNOLOGY CO., LTD

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