ANCEL®

User's Manual

www.anceltech.com

Table of Contents

1 Statement 1
1.1 Agreement 1
1.2 Copyright information 1
1.3 Disclaimer 2
1.4 Safety Information 2
1.4.1 Inspection Precautions 3
2 Product description 6
2.1 Product Overview 6
2.2 Ancel X6 VCI box structure description 7
2.3 Ancel X7 VCI box structure description 9
Product menu introduction 11
3.1 Diagnosis 12
3.2 Special function 14
3.3 Update 14
3.4 Data Manager 16
3.5 Quick Support 17
3.6 DTC Query 18
3.7 Feedback 19
3.8 Data Playback 20
3.9 Dictionary 21
3.10 User Manual 22
3.11 Settings 23
3.12 User 25
4 Vehicle Diagnosis 26
4.1 First login activation 26

4.2 Data download and product connection 29
4.3 Vehicle diagnosis 33
5 Software upgrade 34
6 Cleaning and maintenance and warranty 36
6.1 Cleaning and maintenance 36
6.2 Warranty 37

1 Statement

You must carefully read the instruction manual, especially the safety instructions, before you can connect, commission and operate the products of OBDSPACE TECHNOLOGY CO., LTD., Ltd. (hereinafter referred to as “OBDSPACE”).

1.1 Agreement

Once the product is used, it is an endorsement of the following:

(1) Please refer to the packing list of the random distribution for the configuration equipment of this product, whichever is the actual product;

(2) The functions and pictures described in this manual are subject to the actual software. All information, specifications and illustrations in the manual are the latest information at the time of publication. The company reserves the right to change it without notice.

1.2 Copyright information

It cannot be copied or stored in any form(electronic, mechanical, photocopying, recording or otherwise) without prior written permission being secured from OBDSPACE. Software and data are owned by technology and protected by copyright laws, international

contract law, and other national laws. It is strictly forbidden to copy or transfer the data and software or some of the contents. If there is any violation, the technology will be held legally responsible according to law.

1.3 Disclaimer

(1) This manual only provides the operation and operation methods for Ancel X6/X7. The company does not assume any responsibility for the consequences caused by using the operation methods for other equipment operations.

(2) The company shall not accept any responsibility for accidents caused either by the user personally or anyone else, or costs and expenses due to equipment damages including equipment loss caused by the user's abuse or misuse, arbitrary changes or repairs or operation of the equipment in a manner not in accordance with the manual requirements.

1.4 Safety Information

For the safety of yourself and others, and to avoid damage to equipment and vehicles, all personnel handling the equipment must read the safety precautions mentioned in the manual.

1.4.1 Inspection Precautions

(1) Ancel X6/X7 can only be connected to a safety outlet that is grounded. Before connecting, check and confirm that the diagnostic circuit is in good condition. Otherwise, it is not necessary to test to avoid damage to the main unit. If necessary, use a multimeter to measure the diagnostic seat voltage.

(2) Use only the power cord supplied with the OBDSPACE diagnostics or detected power line.

(3) Pay special attention to the effects or damage caused by environmental factors such as acid and alkali, poison gas, and heavy pressure.

(4) Exhaust gases from the engine contain a variety of toxic compounds and should be avoided. Park the vehicle in a well ventilated area before operation.

(5) Do not place the device on the vehicle's power distribution unit. Strong electromagnetic interference can cause damage to the equipment.

(6) After the equipment is installed successfully, before starting the engine, make sure that the parking brake is pulled and the speed lever is placed in the neutral or parked position to avoid accidents when the vehicle is started.

(7) When the engine is running at a high temperature, avoid contact

with high temperature components such as the water tank and the exhaust pipe. At the same time, be careful of the voltage generated by the components such as the ignition coil, the distributor cover, the ignition circuit and the ignition plug during engine operation.

1.4.2 Notes on the use of the instrument

(1) This instrument is a precision electronic instrument. Do not drop it. Handle it as gently as possible, away from heat and electromagnetic fields.

(2) Ensure that the instrument and diagnostics are well connected so that signal interruptions do not affect the test.

(3) Use screws as much as possible when using the cables and connectors to avoid disconnecting and damaging the connectors when moving. Hold the front end of the connector when pulling the connector, and avoid pulling the rear cable to avoid damage to the diagnostic interface.

(4) When the electrical components are energized, the circuit cannot be disconnected to prevent self-inductance, mutual inductance and current sensors and the vehicle ECU.

(5) The operation of this instrument requires a certain basis for vehicle inspection and maintenance, and has a certain understanding of the electronic control system of the vehicle under test.

1.4.3 Operating car ECU considerations

When performing diagnostic operations on a vehicle equipped with

a computer control system, the following should be noted:

(1) Do not place magnetic objects such as radio speakers close to the computer, as the magnetic properties of the speakers can damage the circuits and components in the ECU.

(2) When the ignition switch is turned on, the internal electrical equipment of the car must not be disconnected. Due to the self-inductance of the coil when disconnected, a high instantaneous voltage will be generated, which will cause damage to the sensor and ECU;

(3) When performing repairs near a computer or sensor, special care should be taken to avoid damage to the ECU and sensor;

(4) When carrying out maintenance work on or near the ECU-controlled digital meter, be sure to wear a metal strap with one end clamped to the body and the other end wrapped around the wrist;

(5) When performing welding work on a car, the ECU system power should be turned off beforehand;

(6) Do not use test lights to test ECU-related electrical devices to prevent damage to the ECU or sensor unless specifically stated;

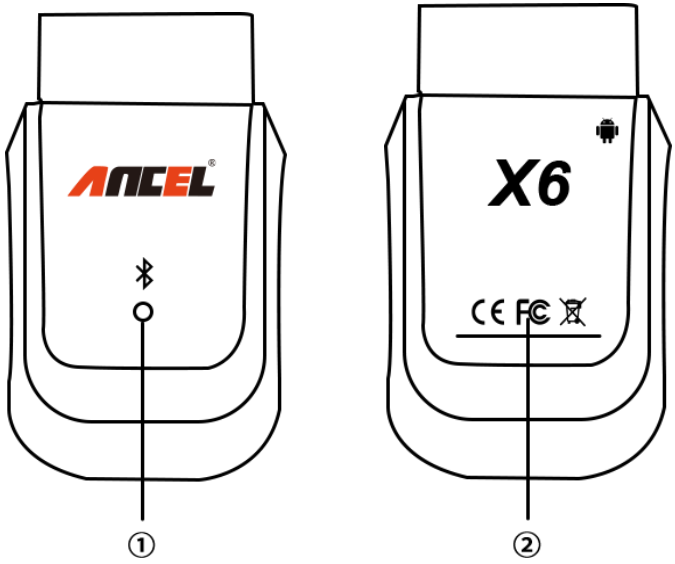
(7) Test ECU and sensors cannot be tested with a pointer-type ohmmeter, unless otherwise specified in the test procedure, but should be tested with a high-impedance digital meter.

2 Product description

2.1 Product Overview

Ancel X6/X7 Android-based multifunctional diagnostic tool with 8 inch Android tablet developed by OBDSPACE. It has an extensive vehicle coverage for over 70 car makers from America, Asia, Europe, Australia and China to meet your basic vehicle diagnostic needs.

2.2 Ancel X6 VCI box structure description

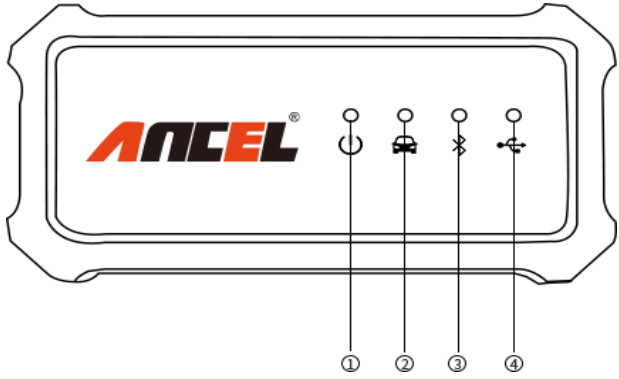


No.	Name	Description
①	Power and connection Indicator	Lights on red when powered(connected to the car) Lights on blue when the buletoot connected Lights flashing when the the communication in process
②	Certification	CE, FCC,RoHS certification

VCI Box Parameters

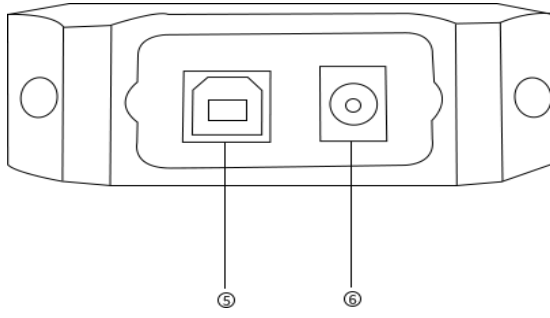
Processor	ARM 32-bit Cortex processor
Input Voltage	DC 8-16V
Operating Temperature	-10 to 70℃ （14-158℉），relative Humidity:<90%
Storage Temperature	-30 to 120℃（-22-248℉），relative Humidity:<90%
Communication model	Bluetooth
Protocols	ISO 9141, ISO14230, ISO15765, ISO11898, SAE-J1850 VPW, SAE-1850 PWM, UDS, K/L lines, High speed CAN, Middle speed CAN, Low speed CAN and Single wire CAN

2.3 Ancel X7 VCI box structure description



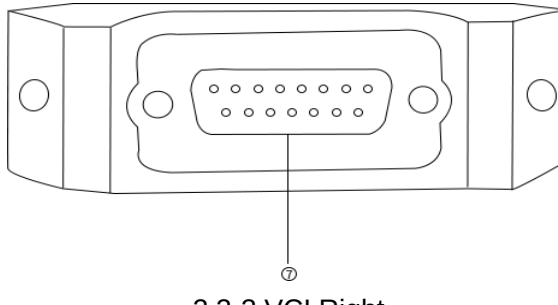
2.3-1 VCI Front

No	Name	Description
①	Power Indicator	Lights up when powered(connected to the car)
②	Vehicle communication indicator	Vehicle communication data
③	Bluetooth indicator	Lights up when connected to tablet
④	USB indicator	Lights up when connected to tablet



2.3-2 VCI Left

No	Name	Description
⑤	USB interface	Used for wired communication with tablets
⑥	DC interface	Power supply



2.3-3 VCI Right

No	Name	Description

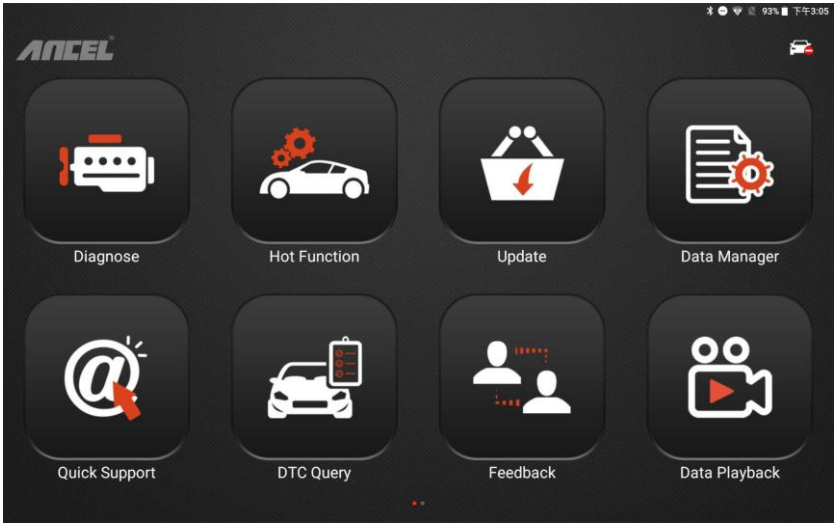
⑦	DB15 interface	Connect to the main testing line, connect to the vehicle through the diagnostic connector

VCI Box Parameters

Processor	ARM 32-bit Cortex processor
Input Voltage	DC 8-16V
Operating Temperature	-10 to 70℃ （14-158℉），relative Humidity:<90%
Storage Temperature	-30 to 120℃（-22-248℉），relative Humidity:<90%
Communication model	Bluetooth or USB
Protocols	J1708, J1939, ISO 9141, ISO14230, ISO15765, ISO11898, SAE-J1850 VPW, SAE-1850 PWM, UDS, K/L lines, High speed CAN, Middle speed CAN, Low speed CAN and Single wire CAN

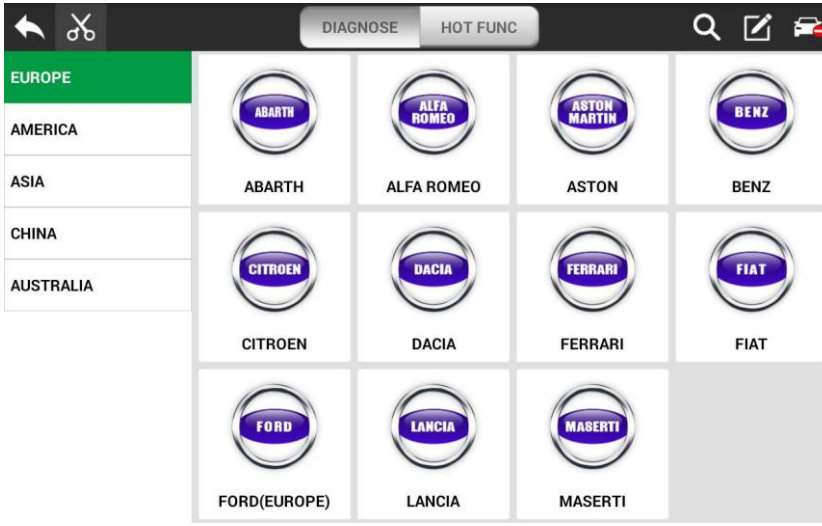
Product menu introduction

Turn on the power switch, turn the host on, and enter the following interface:



3.1 Diagnosis

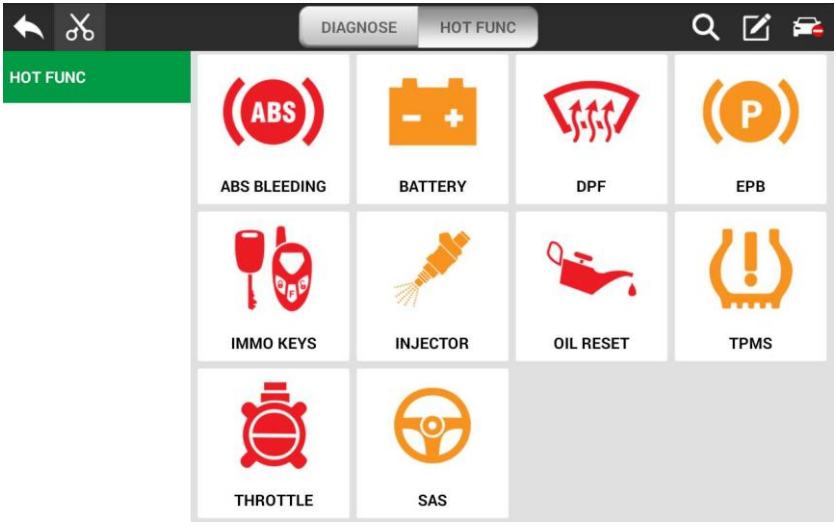
Vehicle diagnosis, different car systems, systems, etc., based on the actual display menu.


DIAGNOSE
HOT FUNC
EUROPE
AMERICA
ASIA
CHINA
AUSTRALIA
ABARTH
ALFA ROMEO
ASTON
BENZ
CITROEN
DACIA
FERRARI
FIAT
FORD(EUROPE)
LANCIA
MASERTI

DIAGNOSE
HOT FUNC
EUROPE
AMERICA
ASIA
CHINA
AUSTRALIA
BYD
CHANGAN
CHANGHE
CHERY
EMGRAND
ENGLON
FOTON
GEELY
GLEAGLE
GWM
HBSH
HUACHEN

3.2 Special function

Including ABS BLEEDING, BATTERY, DPF ,EPB, IMMOKEYS, INJECTOR, OILRESET, SAS, THROTTLE, TPMS, etc.



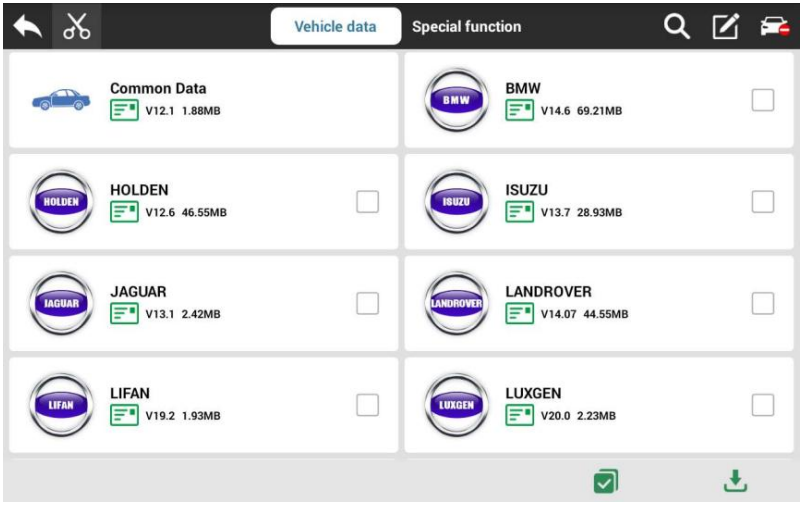
3.3 Update

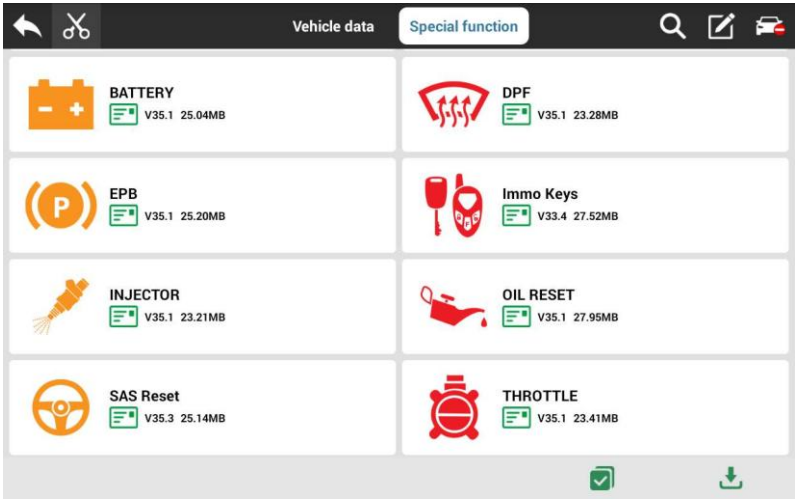
After logging in, you can view the model/system data.

• Support WIFI automatic upgrade and one-click upgrade, easy to

operate

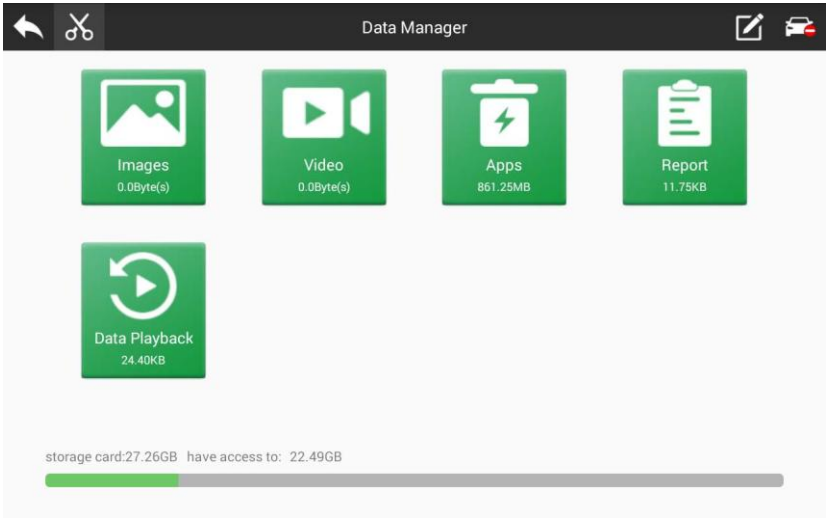
• Provides version information, software release time, and software upgrades, so users can quickly learn about updates.





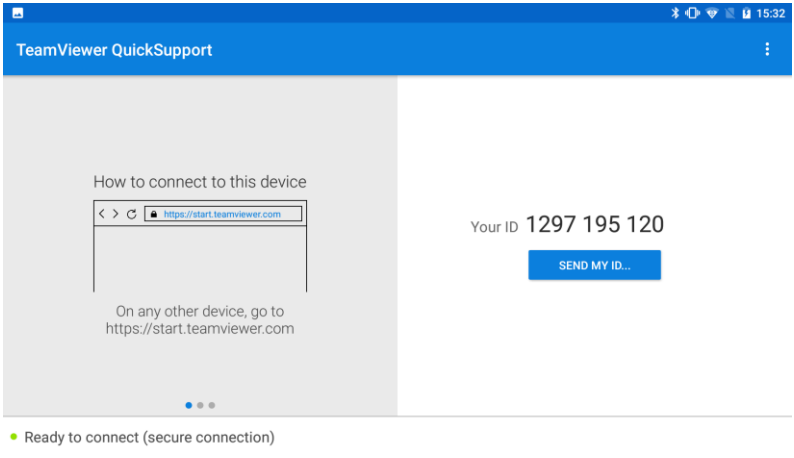
3.4 Data Manager

The storage location of vehicle applications, test pictures, videos, reports and for user reference.



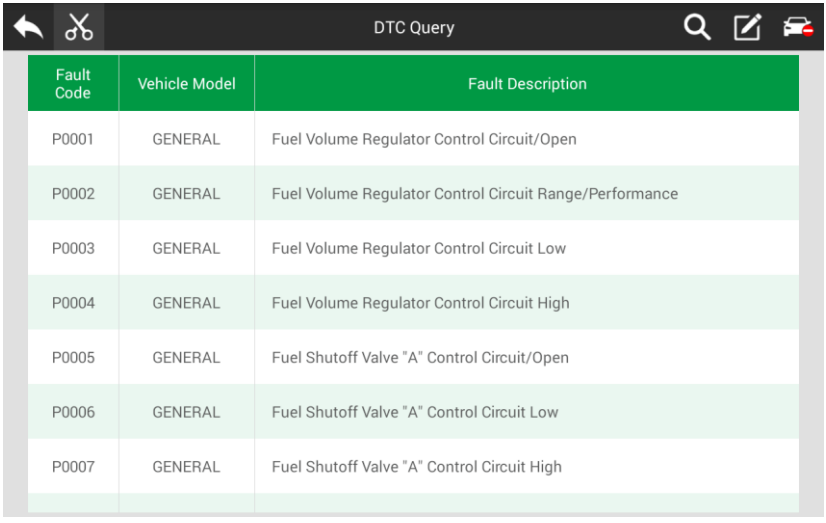
3.5 Quick Support

The function allows OBDSPACE technical staff to connect to your host through the network remotely to help you diagnose the vehicle.



3.6 DTC Query

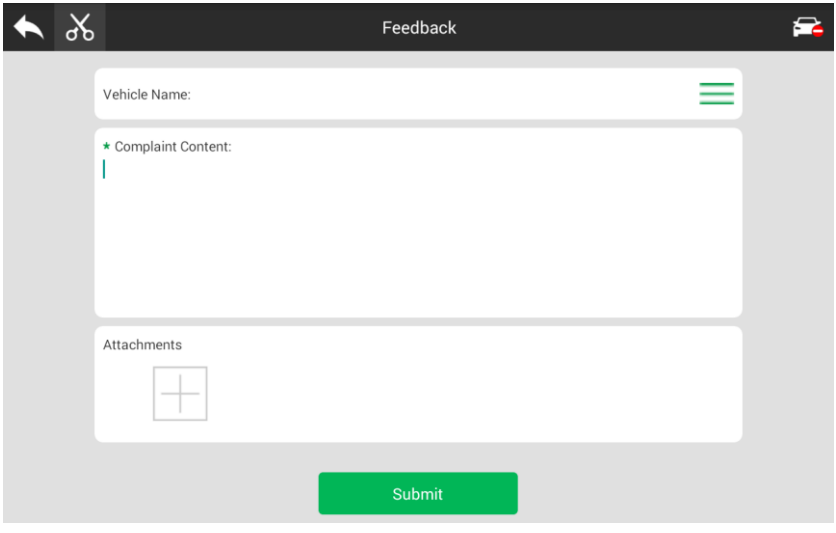
The fault information corresponding to the fault code can be quickly retrieved to help the repairer locate the component fault.



Fault Code	Vehicle Model	Fault Description
P0001	GENERAL	Fuel Volume Regulator Control Circuit/Open
P0002	GENERAL	Fuel Volume Regulator Control Circuit Range/Performance
P0003	GENERAL	Fuel Volume Regulator Control Circuit Low
P0004	GENERAL	Fuel Volume Regulator Control Circuit High
P0005	GENERAL	Fuel Shutoff Valve "A" Control Circuit/Open
P0006	GENERAL	Fuel Shutoff Valve "A" Control Circuit Low
P0007	GENERAL	Fuel Shutoff Valve "A" Control Circuit High

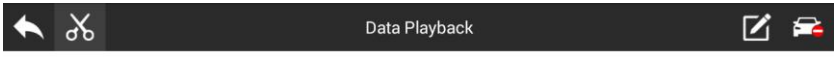
3.7 Feedback

This function allows you upload vehicle diagnostics problems encountered by users during the use of the software. It can help engineers repair software errors.



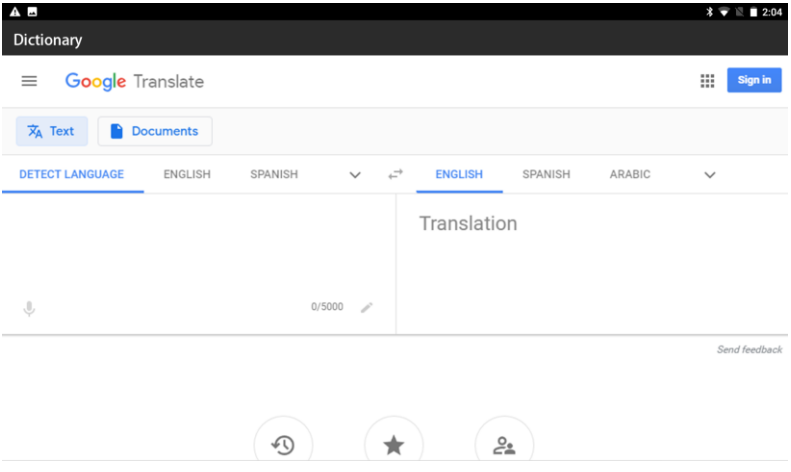
3.8 Data Playback

Users can play back data and quickly analyze the communication data between the vehicle and the diagnostic tool to find out the problem.



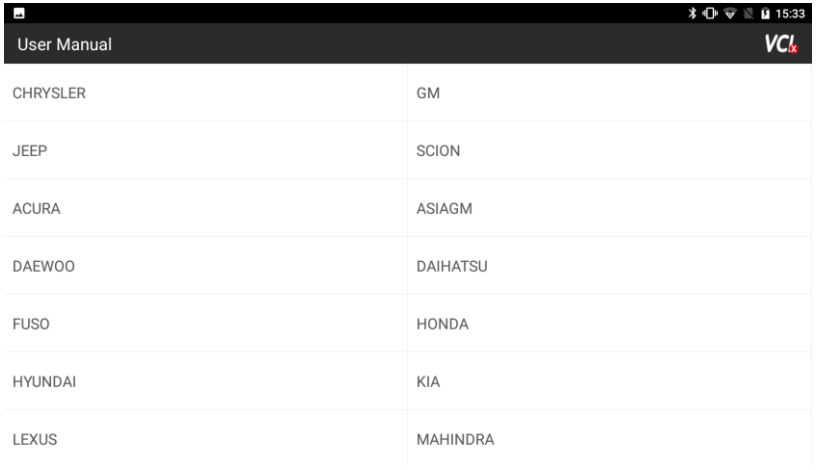
3.9 Dictionary

Support online search for words. Use a third-party tool to provide a dictionary query.



3.10 User Manual

Users can view the different systems and corresponding functions supported by the data packet.



3.11 Settings

View or set the operating mode, unit, search engine, VCI information, OS version, about us, etc.

• Language: The product supports multiple languages, please set it according to the language supported by the model you purchased.

• Run mode: Diagnostic mode or Demo mode. In demo mode, you can view the test flow and display page of the model without connecting the vehicle.

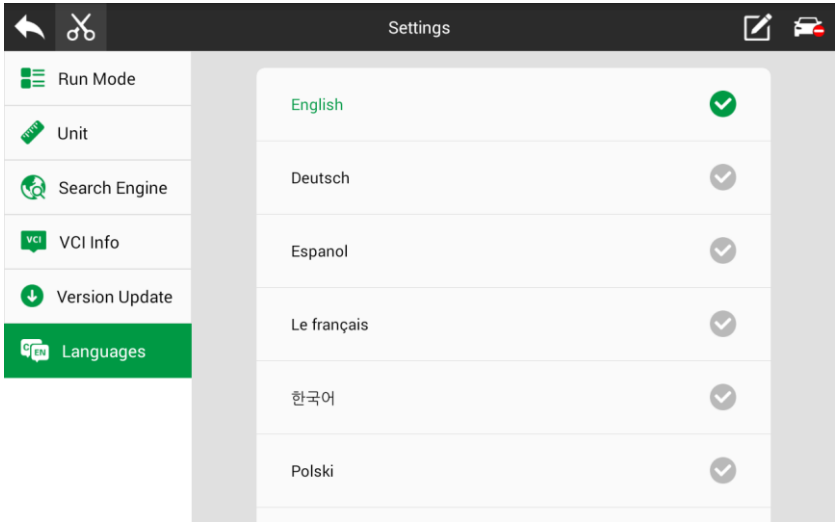
• Unit: Set the data flow unit in the diagnostic software. You can select metric or imperial system as needed.

• Search engine: Set the search engine, you can choose BAIDU or GOOGLE.

• VCI Info: You can view VCI related information.

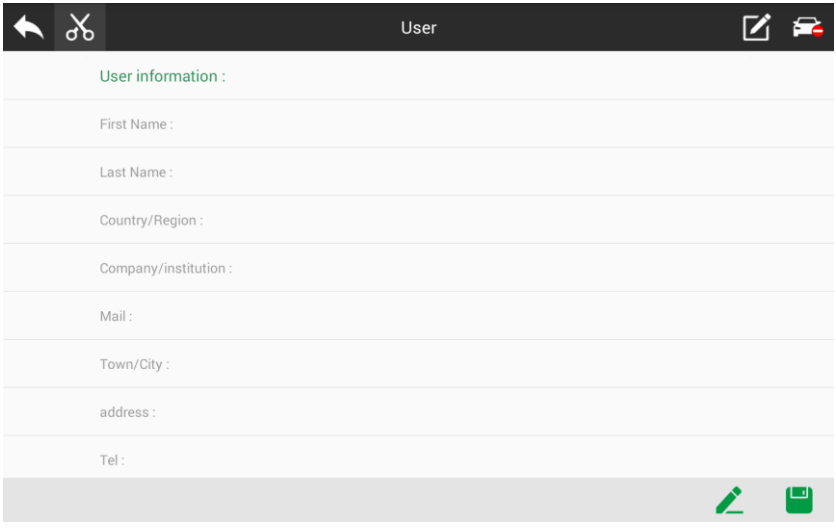
• OS version: You can check the current software version and manually check if there is a new version. The software itself can automatically prompt for updates.

• About: Including company profile, company culture and company contact information, etc.



3.12 User

You can edit and save company, address, mobile number, fuel tank, fax and other information.

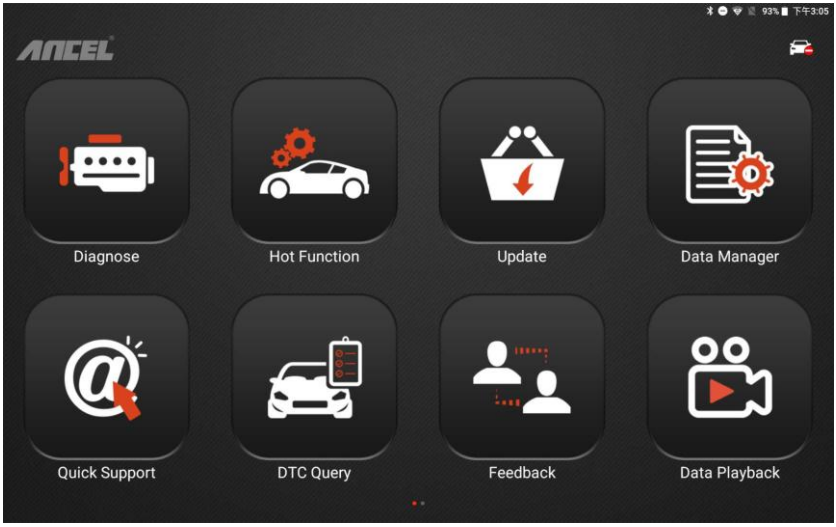


4 Vehicle Diagnosis

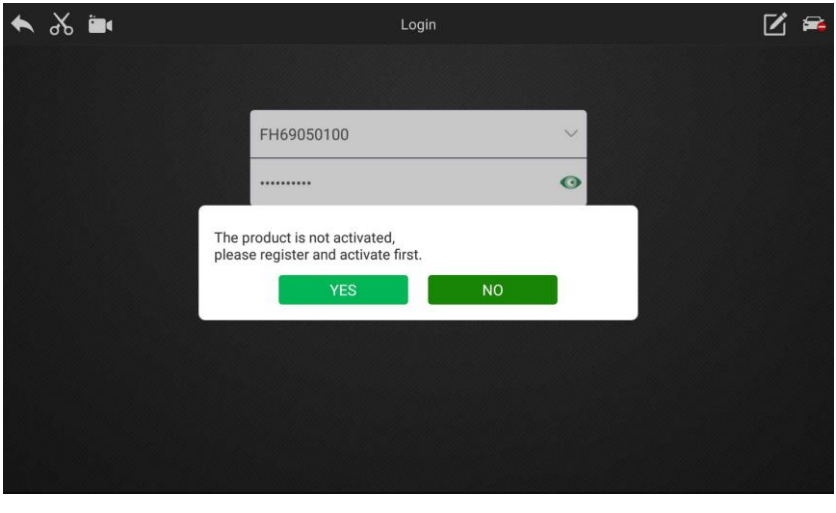
4.1 First login activation

(1) Press and hold the power switch to start the host. Click the software icon.

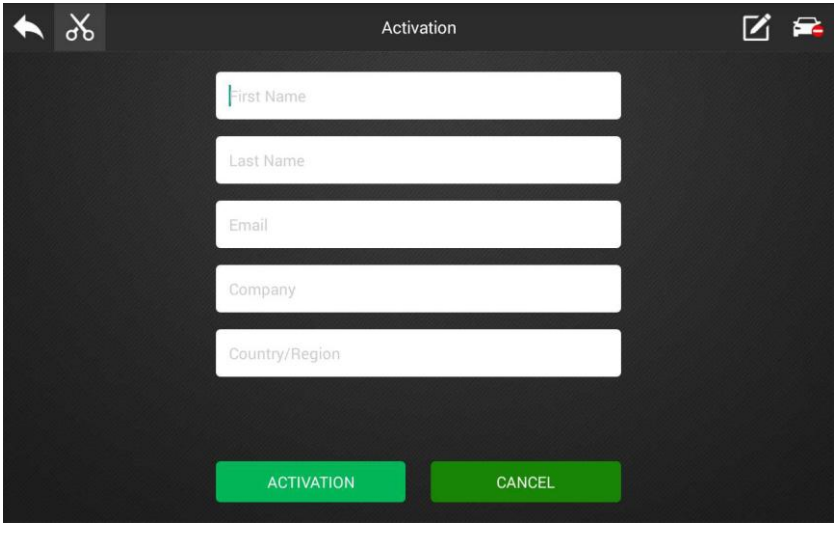
(2) Click the 【Update】button.



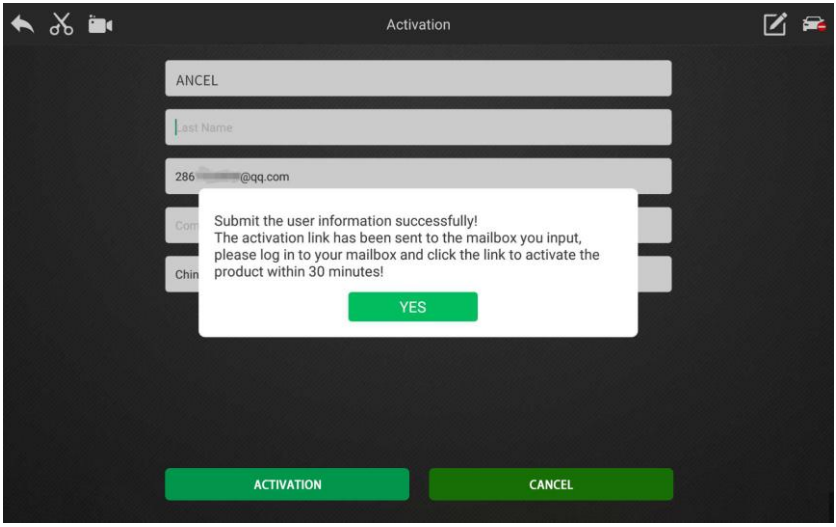
(3) Enter the account number and password on the password envelope, click 【Login】, and a prompt box will pop up.



(4) Click 【Yes】 to fill in the activation information.



(5) After the information is filled out, click 【ACTIVATION】.

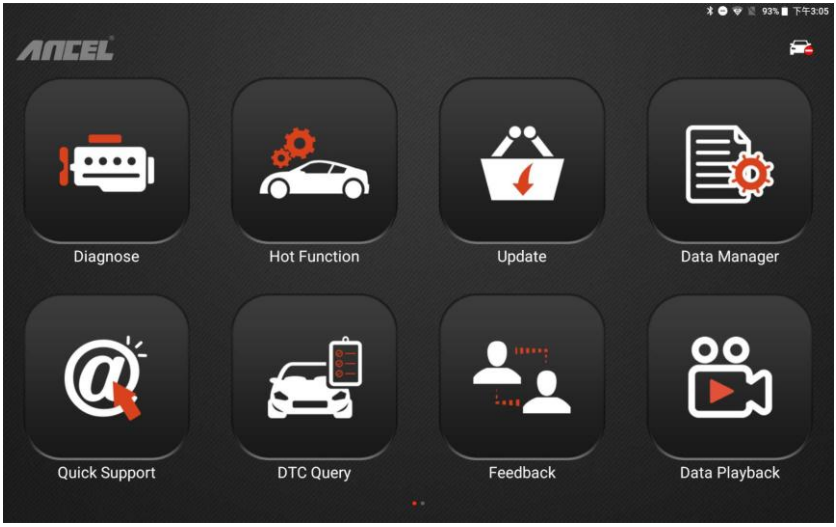


(6) Log in to the mailbox where you just filled in the activation information and click the activation link to complete the activation.

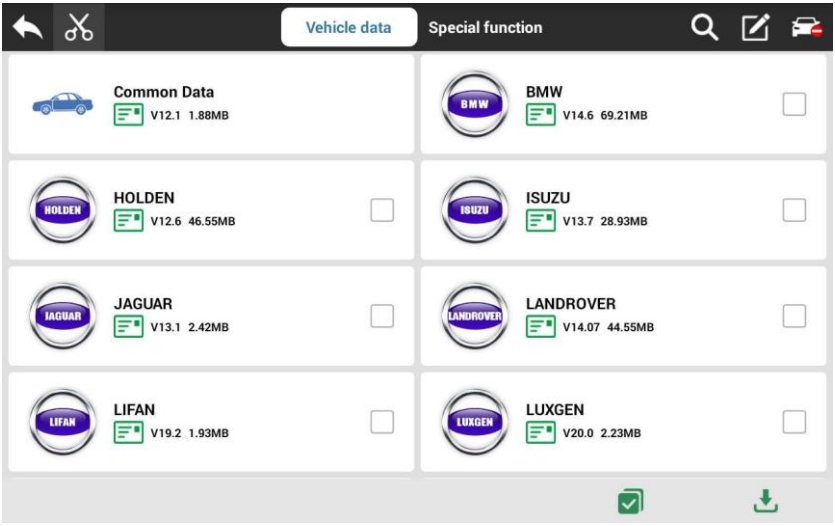
4.2 Data download and product connection

4.2.1 Download data

(1) Click 【App Store】 on the main screen of the software and log in.



(2) After checking the check box before the data, click the Download icon to download the vehicle type data for the vehicle to be diagnosed.



Note: • Diagnostic vehicles must download [Common Data] and other vehicle model data required;

• Click the 【 】 button after the data to view its data coverage and download instructions.

4.2.2 VCI and vehicle connection

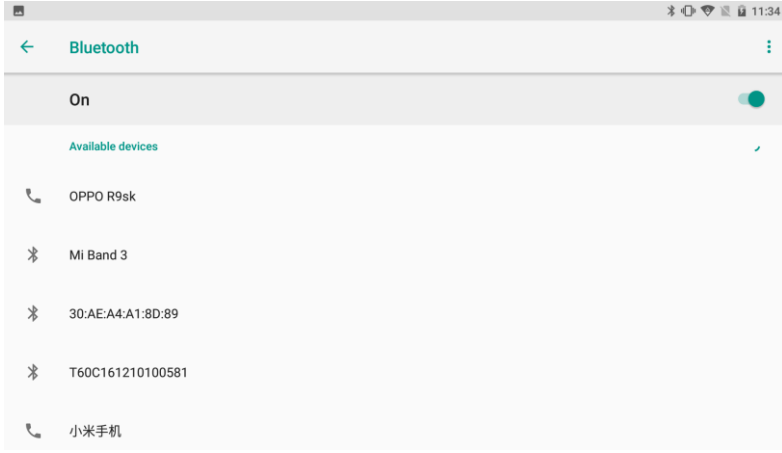
Connect the VCI box to the vehicle to be diagnosed through the main test leads and diagnostic connector. After the connection is successful, the power light is on and the Bluetooth indicator is

flashing.

4.2.3 Tablet and VCI Bluetooth connection

Software support Bluetooth automatic matching and connection. It will take you several seconds to wait for Bluetooth automatic matching. Or you can connect by following steps:

(1) Turn on the tablet Bluetooth.



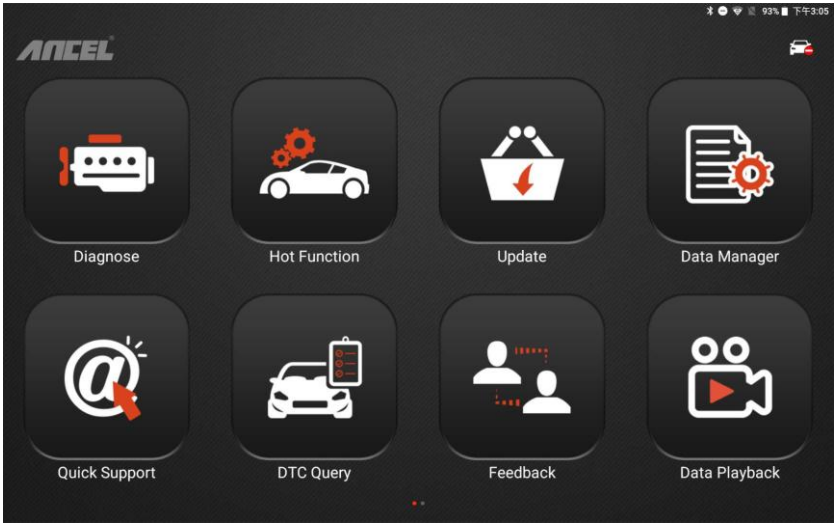
(2) Wait a moment, you can search for the ID of the VCI box connected to the vehicle. Click to pair.

(3) After the pairing is successful, the Bluetooth indicator of the VCI device is steadily displaying blue.The VCI icon at the top of the screen is switched on green.

4.3 Vehicle diagnosis

After the above steps are completed, click the【Diagnosis】button on the main Screen of the software to select the model data/system data corresponding to the connected vehicle. Click to communicate.The specific functions will vary according to different

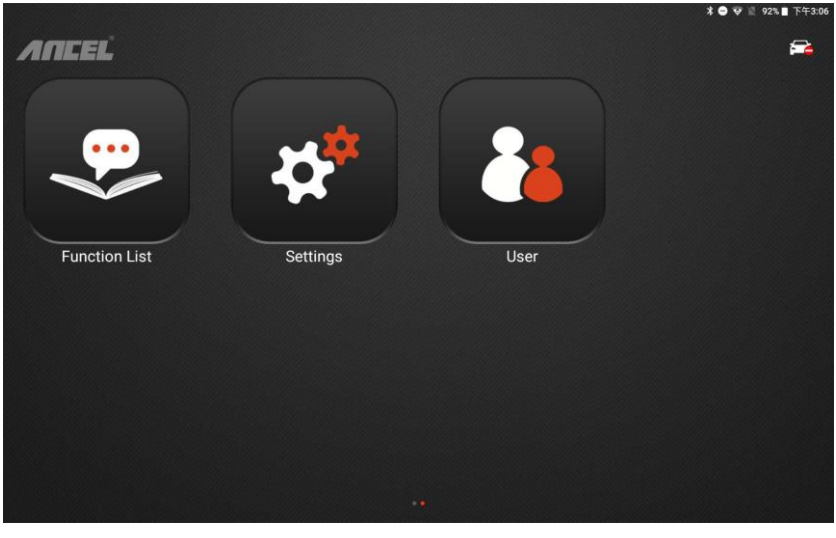
vehicle brands and systems.



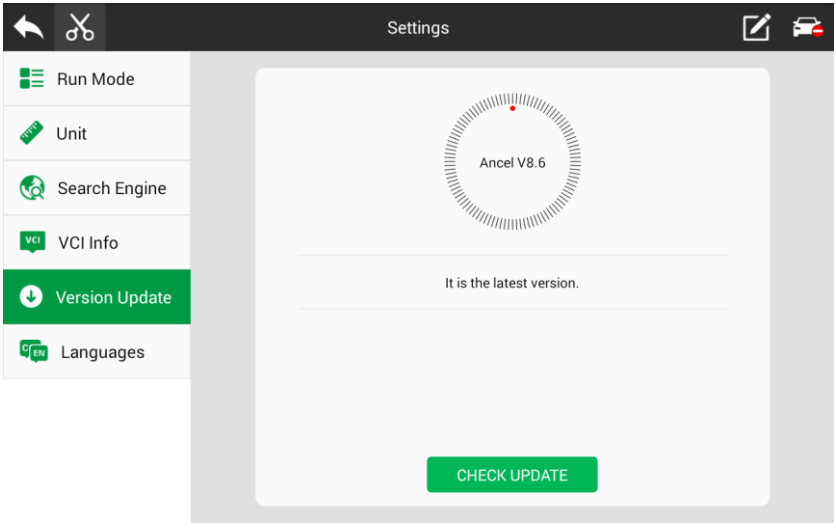
5 Software upgrade

The system will automatically prompt for updates, or you can manually detect updates by:

(1) Click the 【Settings】 button from the main screen of the software.



(2) Click【OS version】-【Check update】.



(3) If there is a new version, download and then install it.

6 Cleaning and maintenance and warranty

6.1 Cleaning and maintenance

(1) Do not disassemble it, try to handle it gently to avoid impact.

(2) Place the fault diagnosis device in a flat, dry, temperature-friendly and dust-free place and avoid high

temperature and humidity, excessive smoke, easy vibration, direct sunlight, and strong magnetic field storage environment.

(3) If the vehicle test operation is not performed for a long time, please run the main machine regularly to avoid moisture.

(4) Unplug the power plug when not in use to avoid aging of electrical components caused by long-term power.

(5) When the host is dirty, please disconnect the power before cleaning.

(6) Do not use a cleaning agent with a corrosive function or any rough cloth to clean the main unit. Only use a soft cloth and a neutral detergent.

(7) The surface of the screen can be cleaned with a special wiper for the LCD screen.

(8) Do not place anything on the screen to avoid cracking of the screen or damage to internal components.

6.2 Warranty

This applies only to products purchased from a product dealer that has been authorized by OBDSPACE. If products are purchased from anyone other than a OBDSPACE authorized product dealer, buyers will be solely responsible for the cost of product maintenance services and will not be eligible to obtain any warranty

from OBDSPACE .

(1) Product acceptance

When you receive the product, please be sure to open the package check.

Please carefully check the product category and quantity according to the attached list. If there are any shortages, errors, damages and other unpredictable abnormal conditions, please keep all the documents of the product and notify us immediately. Otherwise it is considered a waiver of the claim.

(2) Product warranty

Beginning on the date of purchase(subject to valid purchase proof and effective warranty card of the product), if the product suffers performance failure within one month which is not caused by deviation from the recommended operation or by uncontrollable environmental events, you can choose to have evaluation via our maintenance service or replacement of the product with the same model. After that, there is one year warranty service for the main unit, connectors and power adapter.

(3) Product Software Update

Two-year free software update since activation of product, and will be charged annually after free update session.

(4) Not in the scope of the free warranty

A. Failures, defects or flaws not directly related to the quality of the OBDSPACE products, including but not limited to failing to use the product according to the user manual's instructions, crash, fall, disassemble by anyone other than a OBDSPACE approved service person, connecting improper accessories, damage owing to impact because of improper transport or storage of the product, etc.
B. Natural wear and tear of the product: including but not limited to cover, keypad, touch screen, accessories, etc.
C. Main unit serial number and warranty card serial number discrepancy, product quality inspection tag or bar code removed, altered or damaged.
D. Maintenance and modification without the approval of OBDSPACE or its distributors.

(5) Product warranty program

When the product needs to be repaired, please send the product to the local distributor or OBDSPACE, and attach the purchase certificate and warranty card, fill in the following information: company name, contact name, phone number, problem description, purchase invoice.

Note: The valid purchase certificate is an important warranty service certificate. To protect your legal rights, you must obtain a formal invoice from the dealer when purchasing the machine. The

name, model number, serial number and purchase date of the product should be clearly stated on the invoice. It is covered with the official seal of the dealer.

---

(6) Over-warranty product maintenance regulations

If the product needs to be repaired by our company after the maintenance period, we will charge the maintenance fee appropriately, and the freight will be borne by the user.

For products that have passed the warranty period, our technical support personnel will fax the maintenance cost to the user, and will repair it after confirmation by the customer. After confirming, the customer will pay the repair fee to the designated account of our company. After the maintenance fee is received, our company will Can be repaired.

OBDSPACE TECHNOLOGY CO.,LTD

D03, Block A, No.973 Minzhi Ave, Longhua District.
Shenzhen, Guangdong, China
Email: support@anceltech.com
Web: www.anceltech.com