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Important Safety Precautions

Important: To avoid personal injury, property damage, or accidental damage to the product, read all of the information in this section before using the product.

- Never collide, throw, or puncture the tool, and avoid falling, extruding and bending it.
- Do not insert foreign objects into or place heavy objects on your device. Sensitive components inside might cause damage.
- Do not use the tool in exceptionally cold or hot, dusty, damp or dry environments.
- In places using the tool may cause interference or generate a potential risk, please turn it off.
- The tool is a sealed unit. There are no end-user serviceable parts inside. All internal repairs must be done by an authorized repair facility or qualified technician. If there is any inquiry, please contact the dealer.
- Never place the tool into apparatus with strong electromagnetic field.
- Keep the tool far away from magnetic devices because its radiations can damage the screen and erase the data stored on the tool.
- DANGER: Do not attempt to replace the internal rechargeable lithium battery. Contact the dealer for factory replacement.
- CAUTION: Please use the included battery and charger. Risk of explosion if the battery is replaced with an incorrect type.
- Do not delete unknown files or change the name of files or directories that were not created by you, otherwise the tool software might fail to work.

Precautions on Using X-431 PROS MINI

Before using this test equipment, please read the following safety information carefully.

- Always perform automotive testing in a safe environment.
- If the VCI device remains unused for a long period of time, it is suggested to unplug the connector from vehicle's DLC to conserve battery power.
- Wear an ANSI-approved eye shield when testing or repairing vehicles.
- The vehicle shall be tested in a well-ventilated work area, as engines produce

various poisonous compounds (hydrocarbon, carbon monoxide, nitrogen oxides, etc.)

- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Keep the test equipment dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clear the outside of the equipment as necessary.
- Do not drive the vehicle and operate the test equipment at the same time. Any distraction may cause an accident.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Before starting the engine, put the gear lever in the Neutral position (for manual transmission) or in the Park (for automatic transmission) position to avoid injury.
- To avoid damaging the test equipment or generating false data, please make sure the vehicle battery is fully charged and the connection to the vehicle DLC (Data Link Connector) is clear and secure.
- Automotive batteries contain sulfuric acid that is harmful to skin. In operation, direct contact with the automotive batteries should be avoided. Keep the ignition sources away from the battery at all times.

Precautions on Operating Vehicle's ECU

- Do not disconnect battery or any wiring cables in the vehicle when the ignition switch is on, as this could avoid damage to the sensors or the ECU.
- Do not place any magnetic objects near the ECU. Disconnect the power supply to the ECU before performing any welding operations on the vehicle.
- Use extreme caution when performing any operations near the ECU or sensors. Ground yourself when you disassemble PROM, otherwise ECU and sensors can be damaged by static electricity.
- When reconnecting the ECU harness connector, be sure it is attached firmly, otherwise electronic elements, such as ICs inside the ECU, can be damaged.

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1 Introductions

1.1 Product Profile

X-431 PROS MINI is a stylish Android-based vehicle trouble diagnostic tool. It inherits from LAUNCH's advanced diagnosing technology and is characterized by covering a wide range of vehicles, featuring powerful functions, and providing precise test result.

Through the simple wireless (BT) communication between the VCI(Vehicle Communication Interface) and the tablet, it achieves full car model and full system vehicle trouble diagnosis, which includes Reading DTCs, Clearing DTCs, Reading Data Stream, Actuation Test and Special Functions.

Moreover, it supports WLAN connection, which enables you to surf the Internet, update the diagnostic software online and perform remote diagnosis etc, getting your job fixed faster and easier.

1.2 Features

1. Diagnostic Tool:

A. Diagnose

- ♦ Diagnose the electronic control system of prevailing vehicle models covering Asian, European, American and Chinese. Diagnosis functions include: Read DTCs, Clear DTCs, Read data stream, Special functions etc.
- ♦ Specially designed for Android platform with clear and user-friendly interface.

B. One-click Update: lets you update your diagnostic software and APK more efficiently.

C. Repair Data: provides abundant automotive handbook, repair case and wiring diagrams for reference and retrieval.

D. Remote Diagnosis: configures the tool as an I/M (Instant Messaging) tool, which enables technicians to exchange repair experience and perform remote assistance more conveniently.

2. Browser: built-in WLAN module makes surfing on the internet freely.

3. Email: allows you to send and receive emails.
4. Settings: to configure your personalized tablet through it.
5. Applications: other android based applications can be customized to install or uninstall.

1.3 Knowledge of X-431 PROS MINI

There are two main components to the X-431 PROS MINI system: Display tablet and VCI device.

1.3.1 Display tablet

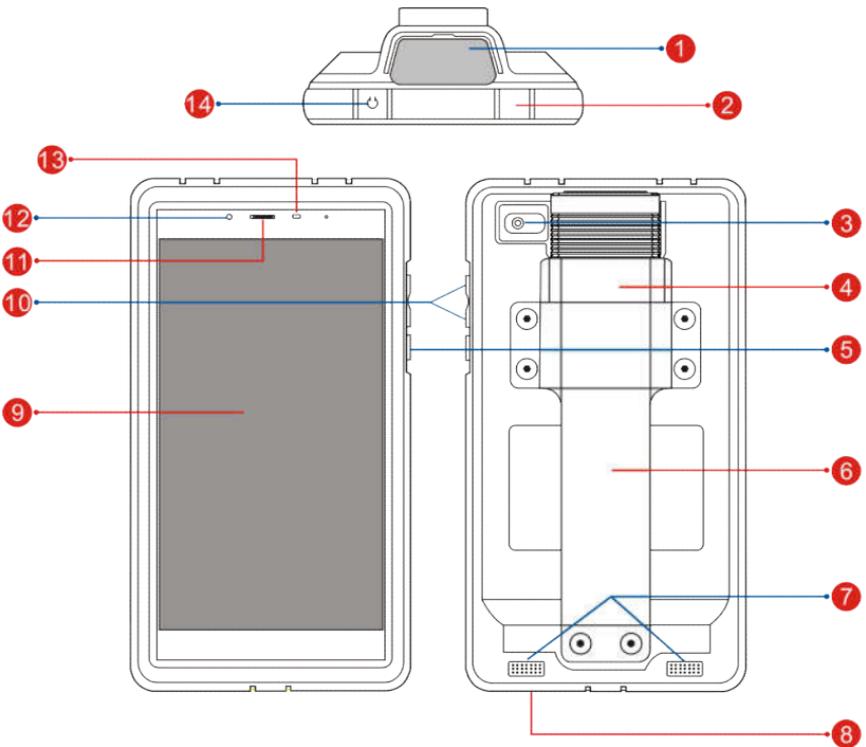


Fig. 1-1 X-431 PROS MINI tablet

1	VCI device	
---	-------------------	--

2	Charging/Data I/O port	To connect to the power adaptor/PC for charging/data exchange.
---	-------------------------------	--

3	Rear camera	
---	--------------------	--

4	Slot for VCI device	For housing the VCI device.
---	----------------------------	-----------------------------

5	POWER/Screen lock key	In Off mode, press it to turn the tablet on. In On mode, turn the tablet off with long press or lock screen with short press.
---	------------------------------	--

6	Carry strap	
---	--------------------	--

7	Speakers	
---	-----------------	--

8	Microphone	
---	-------------------	--

9	LCD screen	
---	-------------------	--

10	VOLUME +/- Key	To adjust the volume. To print the screen, hold and press the POWER and VOLUME – key until a snapshot pops up on the screen. The captured snapshot is saved in the “Screenshots” folder.
----	-----------------------	--

11	Receiver	
----	-----------------	--

12	Front camera	
----	---------------------	--

13	Ambient light sensor	
----	-----------------------------	--

14	Earphone Jack	
----	----------------------	--

1.3.2 VCI device (Only applies to 12V cars)

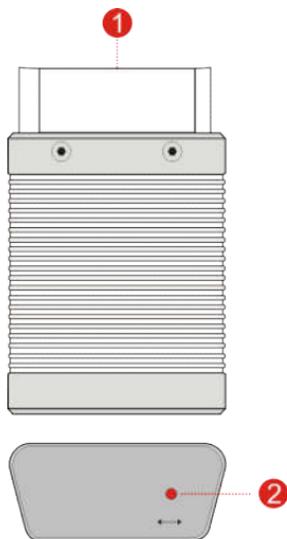


Fig. 1-2 VCI device

1	OBD-16 diagnostic connector	To connect on vehicle's OBD II DLC.
2	Mode indicator	<ul style="list-style-type: none"> • It illuminates red when the VCI device is connected to the vehicle's DLC. • Blue indicates the VCI device is working in wireless (BT) communication mode.

1.4 Technical Parameters

Display tablet:

Operating system	Android 7.0
Processor	Quad core 1.3 GHz
Memory	2GB

Storage	16GB
LCD screen	7 inch with a resolution of 1280 x 720 pixels
Camera	Front-facing 2MP camera + rear-facing 5MP camera
Battery	3500mAh rechargeable polymer lithium battery
Connectivity	<ul style="list-style-type: none">• WLAN 802.11b/g/n• BT 4.0
Working temperature	0°C ~ 45°C
Storage temperature	-10°C ~ 50°C

VCI device:

Working voltage	9 ~18V
Working temperature	-10°C ~ 55°C
Storage temperature	-20°C ~ 70°C
Relative humidity	20% ~ 90%

1.5 Package List

While opening X-431 PROS MINI package for the first time, please carefully check the following components. Common accessories are same, but for different destinations, the accessories may vary. Please consult from the local agency or check the package list supplied with X-431 PROS MINI together.

- X-431 PROS MINI display tablet
- Password envelope
- VCI device (For connecting OBD II vehicles)
- OBD II extension cable
- OBD I adaptor (For connecting the non-16pin diagnostic connector and the VCI device)
- Battery clamps cable

- Power adaptors
- Non-16pin connectors (For connecting non-OBD II vehicle)

2 Preparations

2.1 Charging X-431 PROS MINI

1. Plug one end of the included power adaptor into the charging port of the tablet.
2. Connect the other end to the AC outlet.

If  appears on the screen, it indicates it is being charged. If the logo changes into , it indicates that the battery is fully charged. Unplug the power adaptor from the tablet.

2.2 Using your battery

- If the battery remains unused for a long period of time or the battery is completely discharged, it is normal that the tool will not power on while being charged. Please charge it for a period of 5 minutes and then turn it on. For initial use, you are strongly recommended to charge the tablet for at least 8 hours.
- Please use the included power adaptor to charge your tool. No responsibility can be assumed for any damage or loss caused as a result of using power adaptors other than the one supplied.
- While the tablet has low battery, a beep will sound. If it is very low, the tablet will be switched off automatically.

2.3 Power on/off

2.3.1 Power on

Press [POWER] to turn the tool on.

 Note: If it is the first time you have used this tool or the tool remains idle for a long period of time, the tool could fail to turn on. Please charge the tool for a minimum of 5 minutes and attempt to turn on again.

2.3.2 Power off

Press [POWER] for 3 seconds, an option menu will pop up on the screen. Tap "Power off" to turn the tool off.

2.4 Tips on finger operations



Single-tap: To select an item or launch a program.



Double-tap: To zoom in so that the text on a webpage appears in a column that fits your device's screen.



Long press: Tap and hold on the current interface or area until a contextual menu pops up on the screen, and then release it.



Slide: To jump to different pages.



Drag: Tap the application icon and drop it to other location.



Spread apart/pinch together: To zoom in manually, place two fingers on the screen and then spread them apart. To zoom out, place two fingers apart on the screen and then pinch them together.

2.5 Screen layout

There are four on-screen buttons available on the bottom of the screen.

BACK

Tap  to return to the previous screen.

HOME

Tap  to navigate to the Android's home screen.

Recent Apps

Tap  to view the recently launched applications.

2.6 Adjust brightness

 **Tips:** Reducing the brightness of the screen is helpful to conserve the battery power.

1. On the home screen, tap Settings -> Display -> Brightness level.
2. Drag the slider to adjust it.

2.7 Set standby time

If no activities are made within the defined standby period, the screen will be locked automatically and the system enters sleep mode to save power.

1. On the home screen, tap Settings -> Display -> Sleep.
2. Choose the desired sleep time.

3 Network Setup

The tablet has built-in wireless module that can be used to get online. Once you're online, you can register the diagnostic App, activate the VCI device, surf the Internet, get apps, send email, launch the remote diagnosis, and check for software updates etc.

3.1 Connect to a WLAN network

1. On the home screen, tap Settings > WLAN.
2. Slide the switch to ON, the tablet starts searching for available wireless networks.
3. Select a wireless network,
 - If the chosen network is open, the tablet will connect automatically;
 - If the selected network is encrypted, a network password will need to be entered.
4. When "Connected" appears, it indicates the WLAN connection is complete.

 Note: When WLAN is not required, this should be disabled to conserve battery power.

Once it is connected successfully, tap the network from the list to view its name, link speed, security type, IP address etc.

When this tool is in range, it will connect to the previously linked network automatically.

3.2 Disconnect from a WLAN network

1. On the home screen, tap Settings > WLAN.
2. Tap the network with a **Connected** status, then tap "Disconnect".

4 How To Diagnose

4.1 Diagnosis Flowchart

For new users, please follow the operation chart shown in Fig. 4-1 to get familiar with and start using the tool.

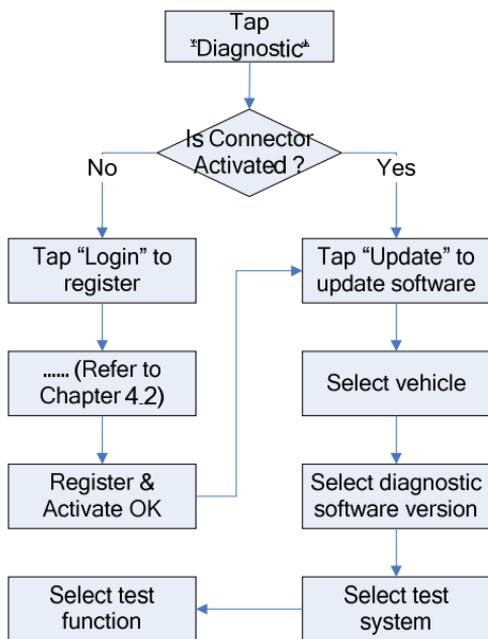


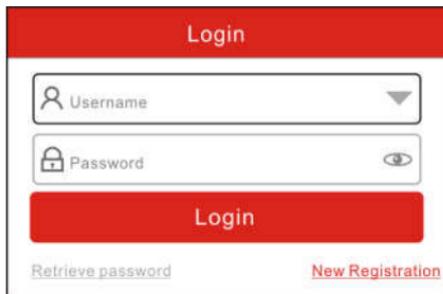
Fig. 4-1

4.2 Initial Use

During initial use, tap the application icon on the home screen to launch it and enter the main menu screen.

4.2.1 User registration

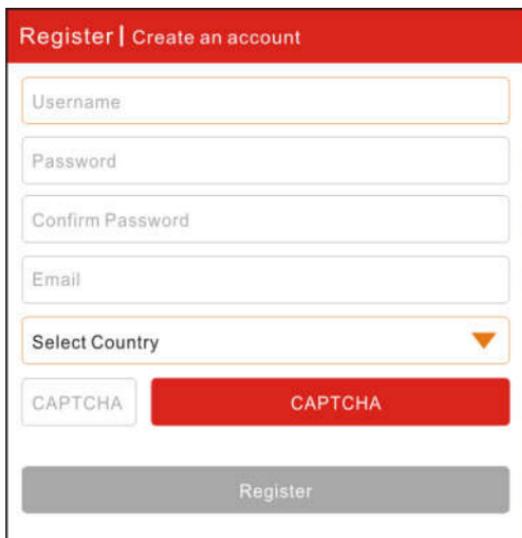
Tap "Login" on the upper right corner of the main menu screen:



The image shows a login screen with a red header containing the word "Login". Below the header are two input fields: "Username" with a person icon and a dropdown arrow, and "Password" with a lock icon and an eye icon. A red "Login" button is positioned below these fields. At the bottom, there are two links: "Retrieve password" on the left and "New Registration" on the right.

Fig. 4-2

1. If you are a new user, tap "New Registration". See Fig. 4-3.



The image shows a registration screen with a red header containing "Register | Create an account". Below the header are five input fields: "Username", "Password", "Confirm Password", "Email", and "Select Country" with a dropdown arrow. Below these fields are two "CAPTCHA" buttons, one in a white box and one in a red box. At the bottom is a large grey "Register" button.

Fig. 4-3

 Note: To obtain better service, you need to provide real information.

- A. Create App account: In Fig. 4-3, fill in the information in each field and then tap "Register", a screen similar to the following will appear:



Fig. 4-4

- B. Activate the VCI device: In Fig. 4-4, input the Serial Number and Activation Code, which can be found in the password envelope.

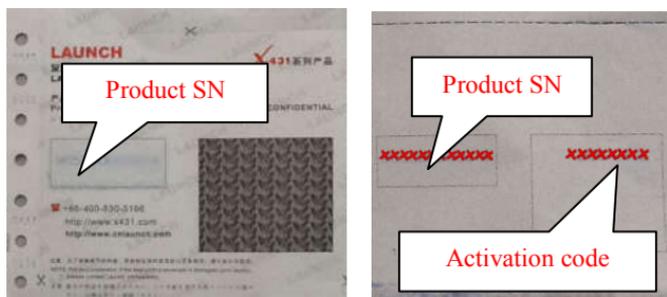


Fig. 4-5

 Note: To exit and activate it later, tap “Skip”. In this case, you can activate your connector by tapping “Activate Connector” in “Personal Center”. For details, please refer to Chapter 4.9.3 Activate Connector.

- C. Download diagnostic software: Tap “Activate”, a dialog box similar to Fig. 4-6 will appear:

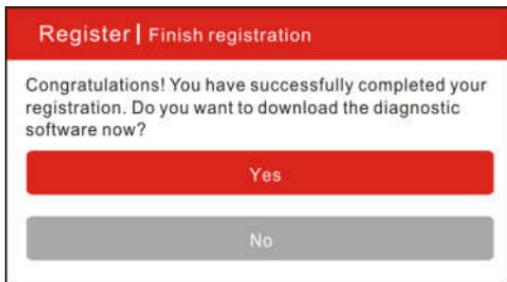


Fig. 4-6

To download the diagnostic software, tap “Yes” to enter the software download page. Tap “No” to download it later.

112 Upgradable Software		Serial Number	985691001600
Vehicle	Current Version	Update Version	Installation package size
<input checked="" type="checkbox"/> AutoSearch		V10.14	220.1 KB
<input checked="" type="checkbox"/> BatteryTest App		V1.04.000	381.8 KB
<input checked="" type="checkbox"/> Scope App		V1.03.003	1.1 MB
<input checked="" type="checkbox"/> Sensor App		V1.03.002	352.0 KB
<input checked="" type="checkbox"/> AUDI		V27.81	37.1 MB
<input checked="" type="checkbox"/> BAIC		V10.40	1.7 MB
<input checked="" type="checkbox"/> BeJing Hyundai		V21.36	1.3 MB
<input checked="" type="checkbox"/> BENZ/ MAYBACH		V48.30	36.3 MB
<input checked="" type="checkbox"/> BMW/MINI/ HCBMW/ ROLLSROYCE		V49.40	77.6 MB
<input checked="" type="checkbox"/> CHANGAN		V15.83	2.4 MB
<input checked="" type="checkbox"/> CHANGCHENG		V35.50	2.8 MB
<input checked="" type="checkbox"/> CHANGFEN		V20.04	797.1 KB

Unselect
 Update
 Delete

Fig. 4-7

On the download page, tap “Update” to start downloading. It may take several

minutes to finish it, please be patient to wait. To pause downloading, tap “Pause”. To resume it, tap “Continue”.

Once download is complete, the system will install the software package automatically.

2. If you have registered to be a member, input your name and password, and then tap the “Login” button to enter the main menu screen directly.
3. If you forgot the password, tap “Retrieve Password”, and then follow the on-screen instructions to retrieve it.

4.2.2 Diagnostic software layout

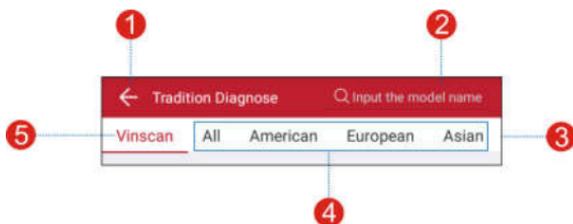


Fig. 4-8

- 1 Tap to navigate to the main function menu. Refer to “**Chapter 4.2.3 Function menu**” for details.
- 2 Search bar: input the desired vehicle model name to locate it quickly.
- 3 History tab: Generally once a vehicle diagnosis is performed, the system will record the every details of diagnostic process. This function provides a quick access to the tested vehicles and users can resume from the last operation, without the necessity of starting from scratch.
- 4 Vehicle region buttons: Tap different buttons to switch to corresponding vehicles.
- 5 VINscan button: Tap it to scan the Vehicle Identification Number (VIN) code of your vehicle. OBD VIN and INPUT VIN are included.
Note: Before using this function, the corresponding diagnostic software and Auto search file need to be downloaded on your tool first while downloading the diagnostic software.

4.2.3 Function menu

It mainly includes the following items:

Name	Description
Tradition Diagnose	Configures the tablet to operate as a diagnostic tool.
Remote Diagnosis	This option aims to help repair shops or technicians to get the repair job fixed faster.
Software Upgrade	To update vehicle diagnostic software.
Maintenance Help	Includes How-to Videos, operation skills and user manual etc.
Personal Center	Allows you to configure system settings and manage your personal information.

4.3 Connections

4.3.1 Preparation

Normal testing conditions

- Turn on the vehicle power supply.
- Vehicle battery voltage range should be 9-14 Volts.
- Throttle should be in a closed position.

Select the VCI connector

If the tool is testing vehicles equipped with universal OBD II 16 PIN diagnostic socket, please use the included VCI connector. (For vehicles with non-OBD II 16 PIN diagnostic socket, a non-16 PIN connector is required.)

4.3.2 DLC location

The DLC (Data Link Connector) is typically a standard 16-pin connector where diagnostic tools interface with a vehicle's on-board control modules. The DLC is usually located 12 inches from the center of the instrument panel, under or around the driver's side for most vehicles. If DLC is not located under dashboard, a label should be there telling location. For some Asian and European vehicles, the DLC is located behind the ashtray and the ashtray must be removed to

access the connector. If the DLC cannot be found, refer to the vehicle's service manual.

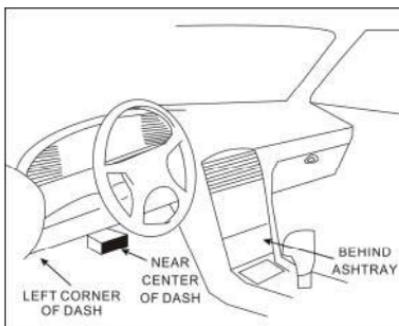


Fig. 4-9

4.3.3 Vehicle connection

The method used to connect the VCI device to a vehicle's DLC depends on the vehicle's configuration as follows:

- A vehicle equipped with an OBD II management system supplies both communication and 12V power through a standardized DLC.
- A vehicle not equipped with an OBD II management system supplies communication through a DLC connection, and in some cases supplies 12V power through the cigarette lighter receptacle or a connection to the vehicle battery.

Follow the steps mentioned below to connect OBD II vehicle:

1. Locate vehicle's DLC socket.
2. Plug the VCI device into the vehicle's DLC socket (It is suggested to use the OBD II extension cable to connect the VCI device and DLC socket.).



Fig. 4-10

3. Choose one of the two ways to obtain power from:
 - A. Power adaptor: Connect one end of the included power adaptor to charging port of the tablet, and the other end to AC outlet.
 - B. Internal battery pack

For non-OBDII vehicle, proceed as follows:

1. Locate vehicle's DLC socket.
2. Select the corresponding non-16pin connector.
3. Plug the non-16pin end of the connector into the DLC socket, then connect the other end to the OBD I adaptor, and then tighten the captive screws.
4. Connect the other end of the adaptor to the included VCI device.
5. To supply power to OBD I adaptor from:

A. Cigarette Lighter cable (optional): Connect one end of the cigarette lighter cable to vehicle's cigarette lighter receptacle, and the other end to the power jack of OBD I adaptor.

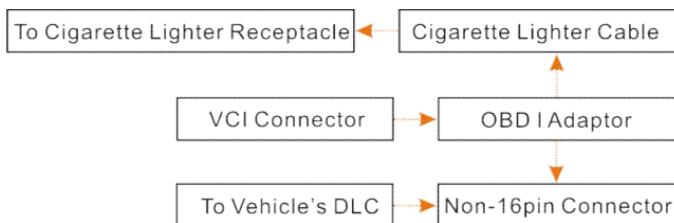


Fig. 4-11

B. Battery Clamps Cable: Connect one end of the battery clamps cable to vehicle's battery, and the other end to the power jack of OBD I adaptor.

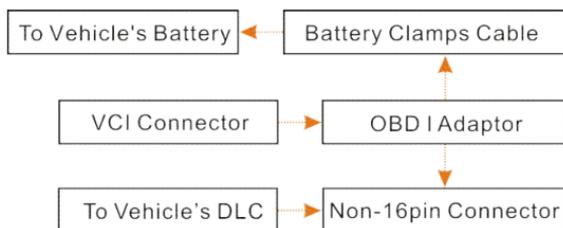


Fig. 4-12

4.4 Communication Setup

On the home screen, go to "Settings" -> "BLUETOOTH (BT)", slide the switch to ON and the tablet will start searching for available wireless BT devices. Tap the VCI ID to pair. By default, the VCI ID is 98*****00 (where ***** stands for 5

digits.).

 Note: In case no communication setup is done before diagnostic software is launched, you can also configure it while using the software. For details on BT connection, please refer to Chapter 4.5 “Start diagnosing”.

4.5 Start Diagnosing

Tap “Tradition Diagnose” to enter the vehicle selection page.

2 approaches are provided for you to access the vehicle diagnostic software. Choose any one of the following ways:

1. VINSKAN enables you to access it more quickly.

In this case, automatic scan (OBD VIN) and manual input (INPUT VIN) are available.

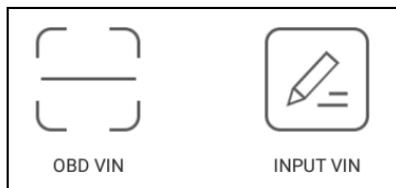


Fig. 4-13

OBD VIN: In this mode, the VCI device should be plugged into the vehicle's DLC first, and then a wireless BT communication should be established between the tablet and the vehicle.

Tap “OBD VIN” to scan the vehicle identification number of the vehicle. Once scanning is complete and successful, the tablet will enter the diagnostic software of the vehicle.

 Note: Before using this function, the corresponding diagnostic software and Auto search file need to be downloaded on your tool first while downloading the diagnostic software.

INPUT VIN: In this mode, you need to input the VIN manually. In general, vehicle identification numbers are standardized - all contain 17 characters. VIN characters may be capital letters A through Z and numbers 1 through 0; however, the letters I, O and Q are never used in order to avoid mistakes of misreading. No signs or spaces are allowed in the VIN.

The most recognizable location for this number is in the top left corner on the vehicle's dashboard. Other locations include the driver's door or post, and the firewall under the hood.

Tap "INPUT VIN" and a screen similar to Fig. 4-14 will appear:

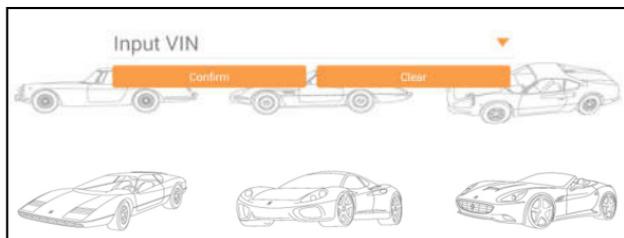


Fig. 4-14

Input the VIN, and tap "Confirm" to enter the diagnostic software of the vehicle.

2. Tap a corresponding diagnostic software logo, and then follow the on-screen instruction to access the diagnostic software.

Take Demo as an example to demonstrate how to diagnose a vehicle.

- 1). Tap the "DEMO" to enter the software selection page.
- 2). Tap "DEMO" to navigate to the DEMO system selection screen. (Note: No BT connection is required for DEMO program.)

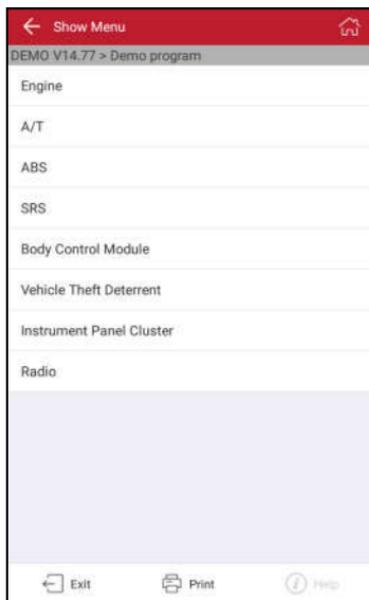


Fig. 4-15

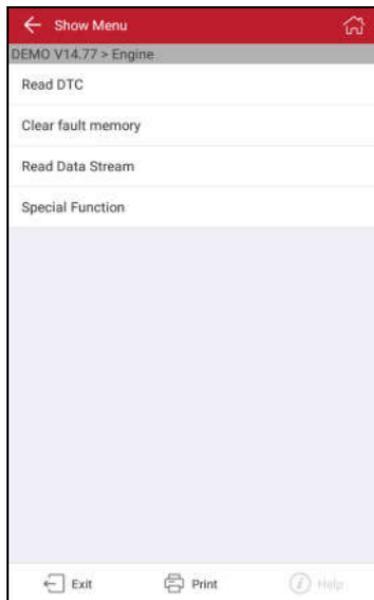


Fig. 4-16

- 3). Tap “Engine”, the system will navigate to the test function menu. See Fig. 4-16.

4.5.1 Read DTC

This function displays the detailed information of DTC records retrieved from the vehicle’s control system.

 Note: Retrieving and using DTCs for troubleshooting vehicle operation is only one part of an overall diagnostic strategy. Never replace a part based only on the DTC definition. Each DTC has a set of testing procedures, instructions and flow charts that must be followed to confirm the location of the problem. This information can be found in the vehicle’s service manual.

Tap “Read DTC” in function menu, the screen will display the diagnostic result.



Fig. 4-17

Highlight a certain DTC item, and then tap  to search the definition of the selected DTC online.

On-screen Buttons:

Exit: Tap it to return to the home screen.

Report: To save the current diagnostic data. All reports are saved under the tab “Diagnostic Report” in “My Report” from “Profile” menu. For details on report operations, please refer to Chapter 4.9.1 “My Report”.

Freeze Frame: When an emission-related fault occurs, certain vehicle conditions are recorded by the on-board computer. This information is referred to as freeze frame data. Freeze frame data includes a snapshot of critical parameter values at the time the DTC is set.

Help: Tap it to view the help information.

4.5.2 Clear fault memory

After reading the retrieved codes from the vehicle and certain repairs have been carried out, you can use this function to erase the codes from the vehicle. Before performing this function, please be sure the vehicle's ignition key is in the ON position with the engine off.

Clearing DTCs does not fix the problem(s) that caused the code(s) to be set. If proper repairs to correct the problem that caused the code(s) to be set are not made, the code(s) will appear again and the check engine light will illuminate as soon as the problem that cause the DTC to set manifests itself.

Tap "Clear fault memory" in function menu, the system will automatically delete the currently existing trouble code.

 Note: After clearing, you should retrieve trouble codes once more or turn ignition on and retrieve codes again. If there are still some trouble codes in the system, please troubleshoot the code using a factory diagnosis guide, then clear the code and recheck.

4.5.3 Read data stream

This option lets you view and capture (record) real-time Live Data. This data including current operating status for parameters and/or sensor information can provide insight on overall vehicle performance. It can also be used to guide vehicle repair.

 Note: If you must drive the vehicle in order to perform a troubleshooting procedure, always have a second person help you. Trying to drive and operate the diagnostic tool at the same time is dangerous, and could cause a serious traffic accident.

Tap "Read Data Stream" in function menu, the system will display data stream items.



Fig. 4-18

On-screen Buttons:

Select Page: Tap it to select all items of the current page.

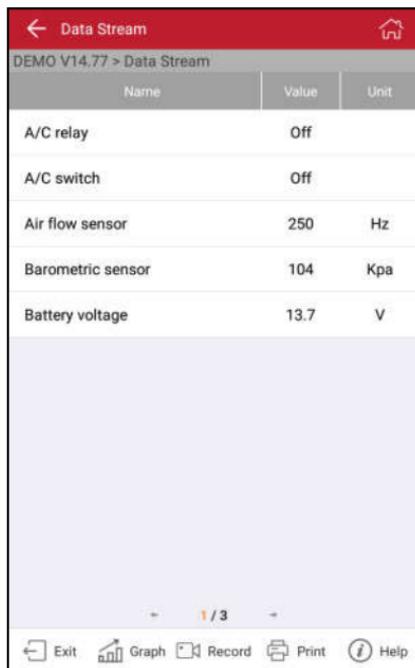
Unselect: Tap it to deselect all data stream items.

Exit: Tap it to return to the home screen.

Print: Tap it to print the current screen. To perform printing, you need to purchase a MINI printer manufactured by LAUNCH separately. For details on printer setting, see Chapter 4.10.3 “Launch wireless printer connection”.

Submit: Tap it to confirm and jump to the next step.

After selecting the desired items, tap “Confirm” to enter the data stream reading page.



Name	Value	Unit
A/C relay	Off	
A/C switch	Off	
Air flow sensor	250	Hz
Barometric sensor	104	Kpa
Battery voltage	13.7	V

Fig. 4-19

On-screen Buttons:

Exit: Tap to return to the home screen.

Graph: After selecting, tap it to view the waveform. There are 3 types of display modes available for data viewing, allowing you to view various types of parameters in the most suitable way.

- ✓ **Graph** – displays the parameters in waveform graphs.
- ✓ **Value** – this is the default mode which displays the parameters in texts and shows in list format.
- ✓ **Combine** – this option is mostly used in graph merge status for data comparison. In this case, different items are marked in different colors.

Record: Tap to start recording diagnostic data for future playback and

analysis. The saved file follows the naming rule: It begins with vehicle type, and ends with the record starting time (To differentiate between files, please configure the accurate system time). The file is stored in “My Report” under “Personal Center” menu. For details on playback operations, please refer to Chapter 4.9.1 “My Report”.

To stop reading the data stream, tap before the recording progress bar.

Print: Tap it to print the current screen. To perform printing, you need to purchase a MINI printer manufactured by LAUNCH separately. For details on printer setting, see Chapter 4.10.3 “Launch wireless printer connection”.

Help: Tap to view the help information.

If more than one page of data stream items is displayed, an icon similar to 1/X appears. Swipe the screen from right to left to switch to the next page.

4.5.4 Special function

This option allows you to detect whether the system parameters are normal or not. It mainly includes: Injector test, fuel pump test, purge control solenoid and so on.

Take “1# injector” as an example.

To detect whether 1# injector works normally or not, tap “1# injector”, the system will automatically carry out the function. After complete, a prompt dialog box will pop up on the screen.

4.5.5 How to view History?

Generally once a vehicle diagnosis is performed, the tablet will record the every details of diagnostic process. The History function provides a quick access to the tested vehicles and users can resume from the last operation, without the necessity of starting from scratch.

1. Tap “History”, all diagnostic records will be listed on the screen in date sequence.

Where the box with light blue background indicates that no DTCs are found on this vehicle and the light yellow box indicates that the vehicle has DTCs.

2. Tap a certain box to enter the history records.
3. Tap “Restore” to directly jump to the system selection screen.

4. Tap the desired system to enter and follow the instructions on the screen to proceed.

4.6 Remote Diagnosis

This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the repair job getting fixed faster.

Tap “Remote Diagnosis” to enter, the screen appears blank by default.

4.6.1 Interface layout

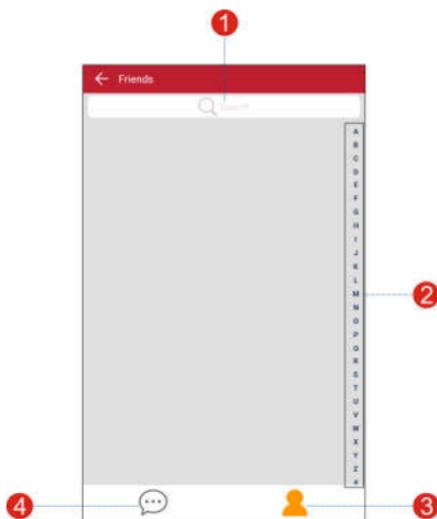


Fig. 4-20

1	Search bar	Directly input the username of the partner to start searching, and then tap the desired one to add it into your friend list.
2	Alphabetic order list	The name of friends is sorted by alphabetic order. Tap the desired letter to quickly locate it.
3	Contact tab	Tap to enter the friend list.
4	Message tab	Once an incoming message reaches, a red dot will appear

		on the upper right corner of the tab.
--	--	---------------------------------------

4.6.2 How to launch a remote diagnosis?

After adding your friend, you can tap it from the friend list to enter the instant messaging interface.

Tap the input field and use the on-screen keyboard to enter the text message, and then tap “Send” to send it; tap  to send the voice message; tap  and choose the desired file type to send.

To perform the remote diagnosis, tap “Remote Diagnostic”, an option menu including the following will appear:

Actions	Results
Send remote diagnostic reservation	Tap it and input the reservation title of the remote diagnosis, and then tap “Confirm” to send.
Request control remote device	Request to control the partner’s device remotely to help him diagnose the vehicle.
Invite remote diagnostic assistant	<p>If you need assistance, just use this option to invite a technician to perform a remote control on your tool.</p> <p>Notes: In this case,</p> <ul style="list-style-type: none"> • To perform this function, you need to download and install the corresponding vehicle diagnostic software. • Make sure the VCI device is properly connected to the vehicle’s DLC and the wireless BT communication between the tablet and the VCI device works smoothly.
Cancel	To cancel this operation.

4.7 Software Update

Before diagnosing a vehicle, you have to download the corresponding vehicle diagnosis software.

Tap “Software Upgrade” to enter the update center.

Tap “Update” to start downloading. Once downloading is finished, the software packages will be installed automatically.

4.8 Maintenance Help

This option provides abundant repair case and automotive technology handbook for your reference.

4.9 Personal Center

This function allows users to manage personal information, configure system settings and feedback your vehicle issues or diagnostic reports to us for analysis.

4.9.1 My report

This option is used to view the diagnostic report generated in process of vehicle diagnosis. Additionally, delete, share operations are also supported.

Tap “**My Report**”, there are total 3 options available.

If user records the running parameters while reading data stream, it will be saved as .x431 file and appear under **Diagnostic Record** tab.

Remote Diagnostic Report lists all records generated in process of remote diagnosis.

In case the DTC result is saved on Read Trouble Code page, the files will be listed under **Diagnostic Report** tab.

4.9.2 My connector

This option is used to manage all your activated connectors.

If several VCI devices are activated on this tool, a list of connectors will be displayed on the screen. Once you choose the connector that belongs to other account, you have to log out, and then input the right account to continue.

4.9.3 Activate connector

It is used to activate your VCI device.

Input the Serial Number and Activation Code, and then tap “Activate” to activate it.

For details on how to obtain Serial Number and Activation Code, tap the link below to get help.

4.9.4 Firmware fix

Use this item to upgrade and fix diagnostic firmware. During fixing, please do not

cut power or switch to other interfaces.

4.9.5 Diagnostic feedback

This item allows you to feedback your diagnostic problems to us for analysis and troubleshooting.

4.9.6 Profile

Use this item to view and configure personal information.

4.9.7 Change password

This item allows you to modify your login password.

4.10 Settings

It enables you to make some application settings and view software version information etc.

4.10.1 Units of measurement

It is designed to set the measurement unit. Metric System and English System are available.

4.10.2 Print information

This option lets you define your print information. It mainly includes Workshop, Address, Telephone, Fax and License Plate.

After inputting, tap on "Save" to save it.

4.10.3 Launch wireless printer connection

This option is designed to establish a wireless connection between the tablet and the MINI printer (sold separately) while performing printing operations.

Follow the steps below to connect the printer.

1. Tap "Launch Wireless Printer Connection".

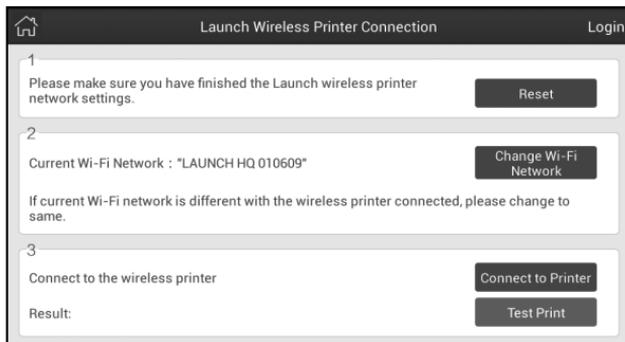


Fig. 4-21

A. If it is the first time you have operated this printer, please proceed the following:

2. For initial use, you are suggested to reset the printer: Press and hold [MODE] & [FEED] for 8 seconds, the following resetting command will be printed out:

at + default = 1

ok

at + reboot = 1

rebooting...

3. Tap "Reset" to configure the printer.

Step 1: Connect the printer:

Tap "Scan" to select the desired printer hotspot ID with X-431PRINTER-XXXX (XXXX stands for 4 characters), and then tap "Connect" to enter Step

2.



Fig. 4-22

Step 2: Join the printer into LAN:

Tap “Scan” to select the desired local network from the list, and type in the security password (If it is an open network, password is not required), and then tap “Confirm”.

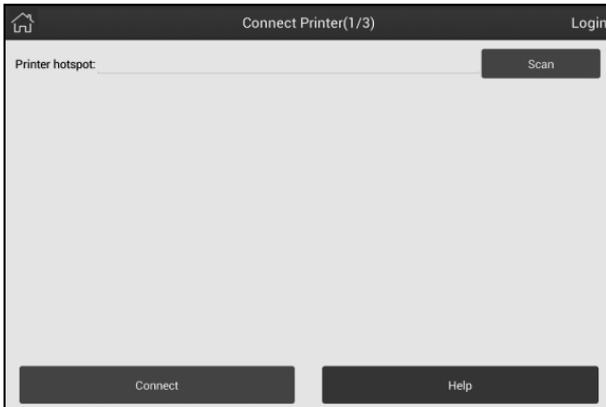


Fig. 4-23

1. Once the network of the printer is connected and the printer is found, tap “Printing test” to test the printing.

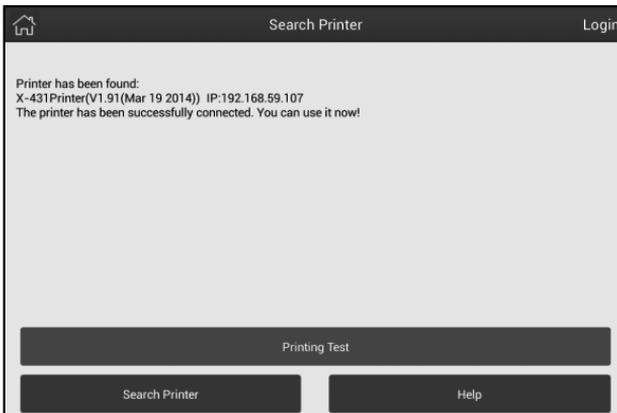


Fig. 4-24

Now you can use the printer to print.

If the printer is not found, please reset the printer to default factory settings (refer to Step 2 for details) and check whether the current device and the printer are on the same LAN.

B. If you have configured the printer to the LAN:

2. Tap “Connect to Printer”:

- a). If the local network remains as it is, tap “Test Print” directly to test the printing.
- b). If the local network changes, you have to reset the printer.

4.10.4 Network test

It enables you to test whether the current network environment is good or not. It is normal that you may encounter a logout while testing.

4.10.5 About

The software version information and disclaimer are included.

4.10.6 Exit

This option allows you to logout the system.

To logout the current user ID, tap “Exit from current account”.

5 Others

5.1 Email

The function allows you to send and receive emails.

5.1.1 Configure an email account

 Note: Before sending or receiving email, you have to set up an email account. In addition, this function requires a stable network connection.

1. On the home screen, tap **Email**.
2. Choose the desired email account type.
3. Input email address and password, tap “Next”.

 Note: If “Manual setup” is selected, please consult your email service provider for detailed parameter setting.

4. Follow the on-screen instructions to proceed until the system prompts you that the account setup has been finished.

5.1.2 Add an email account

1. Tap **Settings** -> **Accounts**.
2. Tap **Add account**.
3. Choose the desired account type.

5.2 Browser

5.2.1 Open browser

On the home screen, tap **Browser** to launch the browser. You can choose the desired homepage or input the website address to browse.



Fig. 5-1

1	Return to the previous page.
2	Advance to the recently visited page.
3	Refresh the current page.
4	Close the current page.
5	Create a new tab.
6	Input a web address.
7	Add the current page as bookmark.
8	Open search bar.
9	Open bookmark list.
10	View more options.

5.2.2 Download files

Files, pictures, and applications can be downloaded from the website in browser.

For example:

Tap and hold a picture, then choose “Save image” from pop-up menu to download it.

To download a link, tap and hold it, and then choose “Save link”.

To protect your tool and personal data, please download applications from trusted sources. To configure it, tap **Settings** -> **Security**, and then slide the Unknown sources switch to off.

5.3 Synchronization

You can transfer media files and APK between the PC and the tablet.

5.3.1 Connect to PC

1. Use the data cable to connect the tablet to your PC.
2. Swipe from the top, a message “Connected as a media device” appears.

5.3.2 Run on PC

Perform the following steps:

- Locate the new disc.
- Copy the files.

5.3.3 Install an application

Do the following steps:

1. Tap **Settings** -> **Security**, and set the “Unknown sources” to ON, which allows you to install apps from unknown sources.
2. A dialog box appears on the screen, tap “OK” to confirm.
3. Set the tool as “Connected as a media device”, and copy the APK file from the PC to the tool.

5.4 Clear Cache

Doing so clears all browsing records and accounts and enables the tablet to run smoothly and quickly.

1. Tap **Settings > Apps**.
2. Tap  and select “Sort by size” to arrange all applications in size order.
3. Tap certain application, then tap “Clear Cache” to release the space these cache files are occupied.

6 FAQ

1. Communication error with vehicle ECU?

Please confirm:

- 1) Whether the VCI is properly connected.
- 2) Whether the vehicle ignition switch is ON.
- 3) If all checks are normal, send vehicle year, make, model and VIN number to us using Dia. Feedback feature.

2. Failed to enter into vehicle ECU system?

Please confirm:

- 1) Whether the vehicle is equipped with the system.
- 2) Whether the VCI is correctly connected.
- 3) Whether the vehicle ignition switch is ON.
- 4) If all checks are normal, send vehicle year, make, model and VIN number to us using Diagnostic Feedback feature.

3. How to save power?

- Please turn off the screen while the tablet keeps idle.
- Set a shorter standby time.
- Decrease the brightness of the screen.
- If WLAN connection is not required, please turn it off.
- Disable GPS function if GPS service is not in use.

4. How to reset the tablet?

 Resetting may cause data loss. Before doing so, please make sure important data and information has been backed up.

Do the following to reset the tablet:

1. Tap "Settings" --> "Back & Reset".
2. Tap "Factory data reset".
3. Tap "Reset tablet".

4. Tap “Clear all data” to start resetting until the tool automatically reboots.

5. The diagnostic application is failing.

1. Press the Home key on the tool.
2. Select “Settings”-> “Apps”.
3. Select the application name from the Apps list.
4. Select “Force Stop”, and then press “OK” to confirm.
5. Select “Clear Data”, and then press “OK” to confirm.

Warranty

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

LAUNCH electronic product is warranted against defects in materials and workmanship for one year from 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 LAUNCH shall not be liable for any consequential or incidental damages.

Final determination of defects shall be made by LAUNCH in accordance with procedures established by LAUNCH. No agent, employee, or representative of LAUNCH has any authority to bind LAUNCH to any affirmation, representation, or warranty concerning LAUNCH automotive meters, except as stated herein.

Disclaimer

The above warranty is in lieu of any other warranty, expressed or implied, including any warranty of merchantability or fitness for a particular purpose.

Purchase Order

Replaceable and optional parts can be ordered directly from your LAUNCH authorized tool supplier. Your order should include the following information:

Order quantity

Part number

Part name

Customer Service

Any question during the operation, please call 86-8455-7891.

If your unit requires repair service, return it to the manufacturer with a copy of the sales receipt and a note describing the problem. If the unit is determined to be in warranty, it will be repaired or replaced at no charge. If the unit is determined to be out of warranty, it will be repaired for a nominal service charge

plus return freight. Send the unit pre-paid to:

Attn: Customer Service Department

LAUNCH TECH. CO., LTD.

Launch Industrial Park,

North of Wuhe Avenue,

Banxuegang, Bantian,

Longgang, Shenzhen, Guangdong

P.R.China, 518129

Launch website: <http://www.cnlaunch.com>

<http://www.x431.com>

<http://www.dbscar.com>

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