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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 X-431 HTT, 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 X-431 HTT in exceptionally cold or hot, dusty, damp or dry environments.
- In places using X-431 HTT may cause interference or generate a potential risk, please turn it off.
- X-431 HTT 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 X-431 HTT into apparatus with strong electromagnetic field.
- Keep X-431 HTT far away from magnetic devices because its radiations can damage the screen and erase the data stored on X-431 HTT.
- 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.

## Precautions on Using X-431 HTT

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

- Always perform automotive testing in a safe environment.
- 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 Introduction

## 1.1 Product Profile

X-431 HTT is a new smart hand-held vehicle diagnostic tool. It has several different product configurations: Passenger Vehicles, Commercial Vehicle and Gasoline & Diesel Vehicles. 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 a simple connection between X-431 HTT and vehicle's DLC via the diagnostic cable, it achieves full car model and full system vehicle trouble diagnosis, which include Reading DTCs, Clearing DTCs, Reading Data Stream, Actuation Test and Special Functions.

X-431 HTT adopts a higher performance-price ratio tablet computer, which is equipped with Android 7.0 operating system, 8-core CPU, rear-facing 13MP camera and 5" display screen with a resolution of 1280\*720 pixels.

## 1.2 Features

1. Diagnose:

- VINscan quick test and manual diagnosis are available. Diagnosis functions include: Read DTCs, Clear DTCs, Read Data Stream, Special Functions etc.
- Remote diagnosis: This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the repair job getting fixed faster.
- Special function: All kinds of maintenance and reset functions can be done.
- One-click Update: Lets you update your diagnostic software online.
- Diagnostic feedback: Enables you to submit the vehicle issue to us for analysis and troubleshooting.

2. WLAN connection and Ethernet connection are supported.

3. Walkie-Talkie: Comes loaded as an optional module and varies with product configuration. Multiple channels can be created for group chat and user-to-user private chat.

4. NFC(Near Field Communication): This add-on module is currently disabled and reserved for subsequent function extension.

5. Laser Scanner: This add-on module is currently disabled and reserved for

subsequent function extension.

6. Web browser: Built-in Wi-Fi module enables you to make online search and visit any website.
7. ES file explorer: Lets you manage files or downloaded files stored in memory card efficiently.
8. Other Android-based applications can be customized to install or uninstall.

### 1.3 Knowledge of X-431 HTT

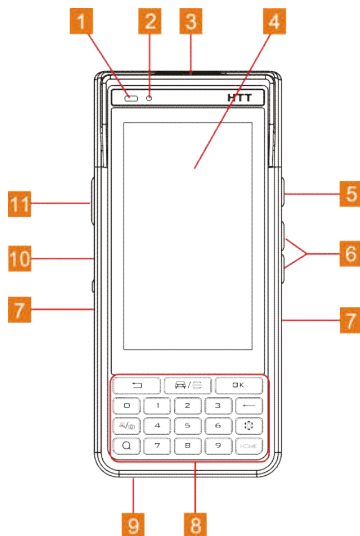










Fig. 1-1 Front & side views

No.	Name	Descriptions
1	Ambient light sensor	
2	Power indicator	Red means Charging and Green mean Full Charged.
3	DB15 connector	For connecting the main cable.

4	Screen	For indicating the test result.
5	Power/Screen lock key	<p>In Off mode, press and hold it for 3 seconds to turn the X-431 HTT handset on.</p> <p>In On mode:</p> <ul style="list-style-type: none"> <li>• Press it to activate the LCD if the LCD is off.</li> <li>• Press it to turn off the LCD if the LCD lights up.</li> <li>• Press and hold it for 3 seconds to turn it off.</li> <li>• Press and hold it for 10 seconds to perform a forced shutdown.</li> </ul>
6	Volume keys	To adjust the volume. Press and hold the [POWER] and [VOLUME -] to capture the screen.
7	Hand strap	
8	Keypress	To execute the command and input the characters.
		To return to the previous screen.
		Press to start the diagnostic APK.
		To confirm an action/operation.
		<ul style="list-style-type: none"> <li>• Delete one character before the cursor with short press.</li> <li>• Delete all characters in one line with long press.</li> </ul>
		Quick access to the system setting.
	<ul style="list-style-type: none"> <li>• To navigate to Android's Home screen with short press.</li> <li>• To open the application list manager with long press.</li> </ul>	

		<ul style="list-style-type: none"> <li>To capture the current screen with short press.</li> <li>To launch camera with long press.</li> </ul>
		To retrieve it in search engine.
9	Microphone	
10	USB port	To connect the included power adaptor for charging the handset or connect to the PC for data transmission.
11	PTT(Push-To-Talk) Key	It is only available on the X-431 HTT which is equipped with this module. It is currently disabled and reserved for future use.

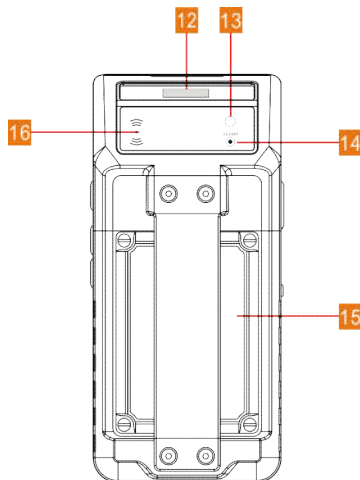


Fig. 1-2 Rear view

No.	Name	Descriptions
12	Laser scanner	It is used to quickly scan the VIN (Vehicle Identification Number) of the tested vehicle.

		It is currently disabled and reserved for future use.
13	Flashlight	
14	Camera	To photograph the vehicle plate number to identify the vehicle information or take pictures.
15	Battery	
16	NFC(Near Field Communication) module	As an optional module, it is currently disabled and reserved for future use.

## 1.4 Technical Parameters

<b>Operating System</b>	Android 7.0
<b>CPU</b>	8-core processor
<b>ROM</b>	16GB
<b>RAM</b>	2GB
<b>Screen</b>	5 inch capacitive touch screen with a resolution of 1280*720 pixels
<b>Battery</b>	4680mAh fast recharging supported
<b>Camera</b>	Rear-facing 13 MP camera
<b>Laser</b>	Supported (It is currently disabled and reserved for future use.)
<b>NFC Communication</b>	Supported (It is currently disabled and reserved for future use.)
<b>Wi-Fi</b>	802.11a/b/g/n/
<b>Rated Voltage</b>	3.8V
<b>Working Temp.</b>	-10℃ ~ 50℃
<b>Storage Temp.</b>	-10℃ ~ 45℃

### 1.5 Packing List (Only for Passenger Vehicle Configuration)

For detailed accessory items, please consult from the local agency or check the packing list supplied with X-431 HTT together.

No.	Item	Description	Qt.
1	X-431 HTT handset	For analyzing the vehicle data and indicating the test results.	1
2	Diagnostic cable	To connect the X-431 HTT handset and the vehicle's DLC.	1
3	OBD I adaptor	To connect the main cable to non-16pin adaptor cable.	1
4	Cigarette lighter cable	Optional. To supply power to non-16pin adaptor cable via vehicle's cigarette lighter receptacle.	1
5	Battery clamps cable	Optional. To supply power to non-16pin adaptor cable via vehicle's battery.	1
6	Power adaptor	To charge the handset.	1
7	Password envelope	A piece of paper bearing Product S/N and Activation Code, which is needed for product registration	1
8	Non-16pin adaptor cable kit for Passenger Vehicles	Optional. For connecting to Non-OBD II vehicle DLC.	1

### 1.5 Packing List (Only for Commercial Vehicle Configuration)

For detailed accessory items, please consult from the local agency or check the packing list supplied with X-431 HTT together.

No.	Item	Description	Qt.
1	X-431 HTT handset	For analyzing the vehicle data and indicating the test results.	1

2	Diagnostic cable	To connect the X-431 HTT handset and the vehicle's DLC.	1
3	Power adaptor	To charge the handset.	1
4	Password envelope	A piece of paper bearing Product S/N and Activation Code, which is needed for product registration	1
5	Non-16pin adaptor cable kit for Commercial Vehicles	Optional. For connecting to Non-OBD II vehicle DLC.	1

### 1.5 Packing List (Only for Gasoline & Diesel Configuration)

For detailed accessory items, please consult from the local agency or check the packing list supplied with X-431 HTT together.

No.	Item	Description	Qt.
1	X-431 HTT handset	For analyzing the vehicle data and indicating the test results.	1
2	1.5m diagnostic cable	To connect the X-431 HTT handset and the passenger vehicle's DLC.	1
3	3m diagnostic cable	To connect the X-431 HTT handset and the commercial vehicle's DLC.	1
4	OBD I adaptor	To connect the main cable to non-16pin adaptor cable.	1
5	Cigarette lighter cable	Optional. To supply power to non-16pin adaptor cable via vehicle's cigarette lighter receptacle.	1
6	Battery clamps cable	Optional. To supply power to non-16pin adaptor cable via vehicle's battery.	1
7	Power adaptor	To charge the handset.	1

8	Password envelope	A piece of paper bearing Product S/N and Activation Code, which is needed for product registration	1
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9	Non-16pin adaptor cable kit for Passenger & Commercial Vehicles	Optional. For connecting to Non-OBD II vehicle DLC.	1
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## 2 Preparations

### 2.1 Charging X-431 HTT



There are two charging methods available for X-431 HTT:

#### **Via Power adaptor:**

1. Insert one end of the included USB cable into the power adaptor.
2. Connect the other end into the charging port of X-431 HTT.
3. Plug the adaptor into AC outlet.

#### **Via Personal computer:**

1. Insert one end of the included USB cable into the USB port of PC.
2. Connect the other end into the charging port of X-431 HTT.

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 X-431 HTT.

### 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.
- 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 X-431 HTT has low battery, a beep will sound. If it is very low, X-431 HTT 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.

To perform a forced shutdown, press [POWER] for about 10 seconds until the screen goes dark.

## 2.4 Tips on finger operations

	<b>Single-tap:</b> To select a item or launch a program.
	<b>Double-tap:</b> To zoom in so that the text on a webpage appears in a column that fits your device's screen.
	<b>Long press:</b> Tap and hold on the current interface or area until a contextual menu pops up on the screen, and then release it.
	<b>Slide:</b> To jump to different pages.
	<b>Drag:</b> Tap the desktop icon and drop it to other location.
	<b>Spread apart/pinch together:</b> 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

### 1. Preview the screen

Tap and hold any blank area on the home screen, a function menu will pop up at the bottom of the screen. It mainly includes wallpapers, widgets and settings.

### 2. On-screen buttons

There are three on-screen buttons available on the bottom of the screen. If it is hidden, swipe the screen from the bottom to call it out.

- **Back:** Tap  to return to the previous screen.
- **Home:** Tap  to jump to the Android's home screen.
- **Recent App:** Tap  to view the recently launched applications and running applications. The following operations can be done:
  - Tap the desired app to open it.

- Swipe the desired app to the left or to the right to close it.

## 2.6 Notification panel

The notification bar is used to display some activities, such as new message, to do list and running tasks. You can also open the notification bar to view the reminder or activity notification.

## 2.7 Adjust brightness

Tips: Reducing the brightness of the screen is helpful to save the power of X-431 HTT.

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

## 2.8 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.

## 2.9 Change language

X-431 HTT supports multiple languages. To change the language, please do the following:

1. On the home screen, tap **Settings -> Languages & input -> Languages**.



Fig. 2-1

2. Tap "Add a language", and then choose the desired language from the list.
3. Tap and hold the desired language and drag it to the top of the screen, the system will change into the target language.

## 3 Wi-Fi Setting

\*Note: Once WLAN is set as ON, X-431 HTT will consume more power. While WLAN keeps unused, please turn it off to conserve battery power.

X-431 HTT has built-in Wi-Fi that can be used to get online. Once you're online, you can register your X-431 HTT, update the diagnostic APK, browse the Internet, get apps and send email on your network.

### 3.1 Connect to a Wi-Fi network

1. On the home screen, tap **Settings** -> **WLAN**.
2. Tap or slide the Wi-Fi switch to ON, X-431 HTT starts searching for all available wireless LANs.
3. Choose the desired Wi-Fi access point / network,
  - If the network you chose is open, you can connect directly.
  - If the selected network is encrypted, you have to enter the right security key (network password).

Once it is connected successfully, tap the Wi-Fi 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 Wi-Fi network

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

## 4 Initial Use

### 4.1 Register & Activate X-431 HTT

For initial use, you are strongly recommended to register and activate your X-431 HTT to enjoy more functions and service in future.

\*Note: Before proceeding these operations, please make sure X-431 HTT has a strong W-Fi connection.

Press [POWER] button to turn the X-431 HTT on and enters the home screen. Tap the X-431 HTT application icon to start initializing.

After initialization, tap the “Login” on the upper right corner of the screen, a screen similar to the following figure will appear:

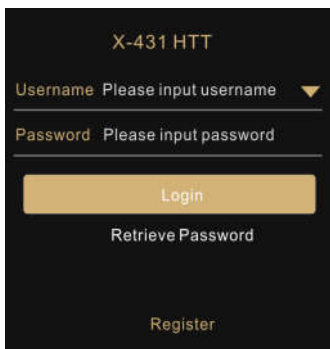


Fig. 4-1

- A. If you are a new user, proceed following step 1-5.
- B. If you have an app account, input the username and password, and tap on “Login” to go into the main menu screen.

Note: X-431 HTT has an auto-save function. Once the username and password are correctly entered, the system will automatically store it. Next time you login the system, you will not be asked to input the account manually.

- C. If you forgot the password, tap “Retrieve password”, and then follow on-screen prompt to reset a new password.

1. Create a App Account: Tap “Register” to enter the app sign-up page. See Fig. 4-2.

\*Note: To obtain better service and more functions, please enter the real information.

Register | Create an Account

Username Please input username

Password Please input password

Confirm Password Please input username

Email Please enter your email

Country Select Country

CAPTCHA  CAPTCHA

Submit

Fig. 4-2

2. Fill in Workshop Information: Enter the workshop information and then tap “Submit” to advance to the next step.

Register | Workshop Information

Maintenance shop Please enter the name

Maintenance Plant address Please enter the main

Maintenance Plant phone Please enter the main

Submit

Fig. 4-3

3. Activate Device: Input the Product Serial Number and Activation Code, and then tap “Activate” to go to Step 4.

Fill in the information in each field.

\*Notes:

- The items with must be filled.
- Tap “Select Country” to select the desired area from the list or directly input the country name to locate it.
- Tap “CAPTCHA” to obtain the verification code.

After filling, tap “Submit” to go to Step 2.

\*Notes:

- The workshop information that you set here will be synchronized with the same option of “Personal Center” -> “Settings” -> “Print Information”.
- All the information about your workshop will be appended to the diagnostic report once a diagnostic session is generated.



Fig. 4-4

\*Notes:

- The Serial Number and Activation Code can be found in the password envelope.
- If user does not activate the X-431 HTT in this step, you can alternatively activate it by tapping “Personal Center” -> “Activate Device”.

4. **Finish Registration:** To download the diagnostic software, tap “Yes” to enter download center.

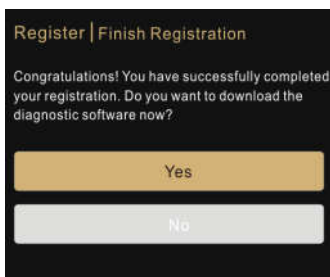


Fig. 4-5

Tap “No” to ignore this operation. To download the diagnostic software later, you can also tap “Upgrade Center” on the main menu screen to download it.

5. **Download Diagnostic Software:** On the update page, tap “Update” to start downloading. To pause downloading, tap “Stop”. To resume it, tap “Continue”. Once download is complete, the system will install the software package automatically.

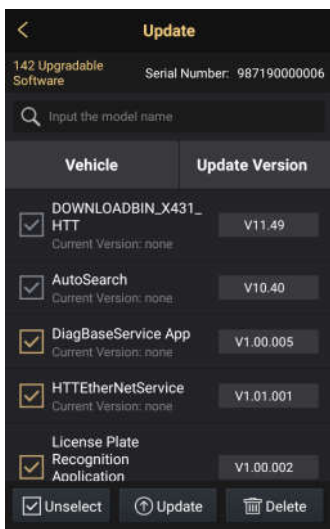


Fig. 4-6

If you have logged in the system, a number of software available for update will appear on the “Upgrade Center” icon. Tap it to enter to keep the handset synchronized with the latest version.

\*Note: In process of download, please make sure the tablet has a strong Wi-Fi signal. It may take several minutes to finish it, please be patient to wait.

## 4.2 Job Menu

It mainly includes the following items:

By default, all diagnostic software is selected. To select certain software, tap “Unselect”, and then uncheck the box next to vehicle make.

To download certain software, swipe the screen from the bottom to select it from the software list manually or directly input the vehicle model name in the search field to retrieve it. After selecting it, tap “Update” to download.

If several versions of software are downloaded on the handset, select the desired software, tap the version next to it to select the older version, and then tap “Delete” to remove it to free up more storage.



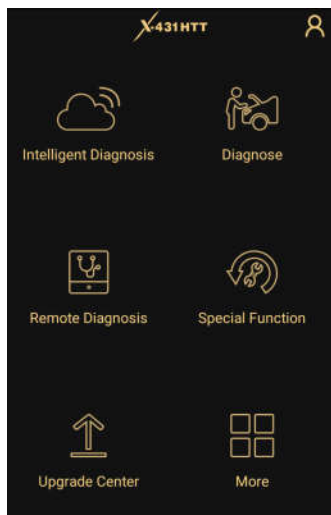



Fig. 4-7

Login/ 	Tap it to login or register the diagnostic system. Once users have logged in successfully, it will change into the username or photo.
Intelligent Diagnosis	This module allows you to obtain vehicle data from the cloud server to perform quick test via reading VIN, which provides a perfect solution to various defects resulting from step-by-step menu selection. In addition, user can also check the historical repair records online through this module.  *Note: This function requires a stable network connection.
Local Diagnosis	To diagnose a vehicle manually.
Remote Diag.	This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the repair job getting fixed faster.  *Note: This function requires a stable network connection.

Special Function	To perform all kinds of common repair & maintenance items, including electronic throttle position reset, ABS bleeding, oil lamp reset etc.	
Upgrade Center	To update vehicle diagnostic software and APK. *Note: This function requires a stable network connection.	
More	Maintenance Help	Provides abundant automotive technology handbook, repair case and How-To videos for your reference.
	Personal Center	To manage personal information and make system settings of the application.

### 4.3 Preparation

1. Turn the ignition key on.
  2. Locate the vehicle's DLC socket: The DLC (Data Link Connector) is typically a standard 16-pin connector where diagnostic code readers interface with the vehicle's on-board computer.
- A. For Passenger Vehicles,

The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side (See Fig. 4-8 for DLC location). If Data Link Connector 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.

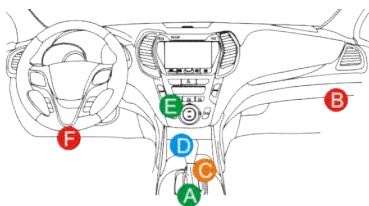


Fig. 4-8

- B. For Commercial Vehicles,

The DLC is usually located in driver's cab.

If the DLC cannot be found, refer to the vehicle's service manual for the location.

## 4.4 Connections

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

A. OBD II Vehicle Connection: Plug one end of the main cable into the vehicle's DLC, and the other end into the DB15 diagnostic socket of the X-431 HTT, and then tighten the captive screws.

B. Non-OBD II Vehicle Connection: For vehicles with non-OBD II diagnostic socket, a non-16pin adaptor cable is required.

a). For non-OBDII Passenger Vehicles, proceed as follows:

1. Select the non-16pin adaptor cable corresponding to the tested vehicle.
2. Plug one end of the main cable into the DB15 diagnostic socket of the X-431 HTT, and the other end to into the OBD I adaptor.
3. Plug the non-16pin end of the adaptor cable into the DLC socket, and the other end to the OBD I adaptor, and then tighten the captive screws.
4. To supply power to OBD I adaptor from:

A. Cigarette Lighter Cable: 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.

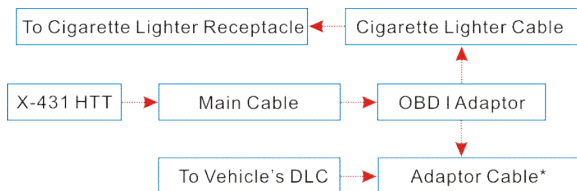


Fig. 4-9

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.

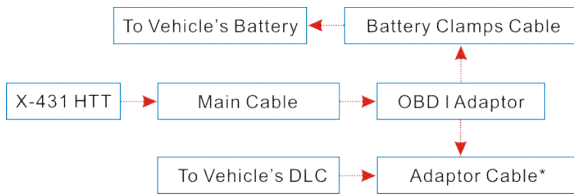


Fig. 4-10

b). For non-OBDII Commercial Vehicles, proceed as follows:

1. Select the non-16pin adaptor cable corresponding to the tested vehicle.
2. Plug the non-16pin end of the adaptor cable into the DLC socket, and the other end to the main cable.
3. Connect the other end of the main cable to the DB15 diagnostic socket of the X-431 HTT, and then tighten the captive screws.

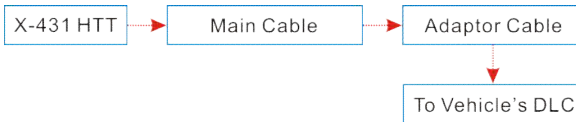


Fig. 4-11

## 5 Diagnosis

### 5.1 Intelligent Diagnosis

Through simple connection between the X-431 HTT handset and vehicle's DLC, you can easily get the VIN (Vehicle Identification Number) information of the currently identified vehicle. Once the VIN is successfully identified, the system will retrieve it from the remote server and then guide you to vehicle information page without the necessity of step-by-step manual menu selection.

The vehicle information page lists all historical diagnostic records of the vehicle, which lets the technician have a total command of the vehicle faults. In addition, a quick dial to local diagnosis and diagnostic function are also available on this page for reducing the roundabout time and increasing productivity.

Notes:

- Before using this function, please make sure the X-431 HTT handset is properly connected to the vehicle's DLC. For detailed connection, see Chapter 4.4 "Connections".
- A stable network connection is required for this function.

Follow the steps below to proceed.

1. Tap "Intelligent Diagnosis" on the Job menu screen to enter Fig. 5-1.

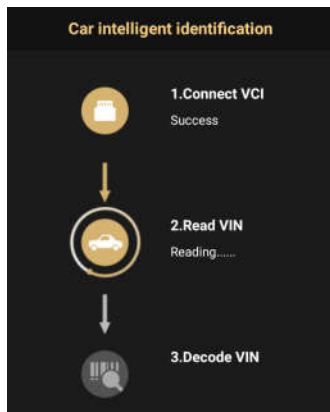


Fig. 5-1

2. After reading the vehicle VIN,

- A. If the VIN can be found from the remote server database, a screen similar to Fig. 5-2 displays:

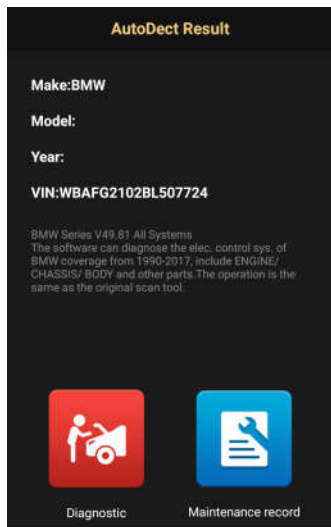


Fig. 5-2

- Tap "Diagnostic" to start a new diagnostic session.
- Tap "Maintenance record" to view its historical repair record. If there are records available, it will be listed on the screen in sequence of date. If no records exist, the screen will show "No Record".

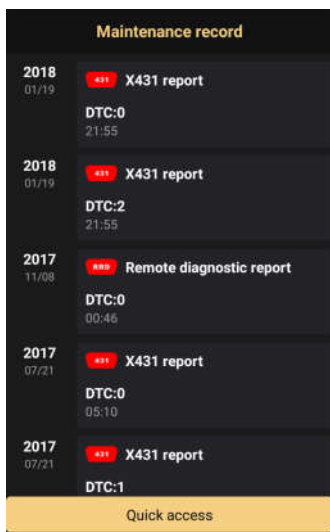


Fig. 5-3

If the currently identified vehicle has ever been tested by various diagnostic tools or scanners of Launch family, the screen will display all historical repair records in sequence of date.

#### On-screen Buttons:

Quick access: To perform other functions, tap "Quick access" to directly go to the function selection screen. Choose the desired one to start a new diagnostic session.

Tap certain record to view its details.

- B. If the handset failed to access the VIN information, the screen will display as below:

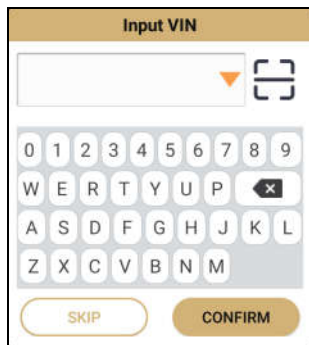


Fig. 5-4

In this mode, you need to input the VIN manually or tap  to scan it.

- 1) Tap  to launch the VIN recognition module.

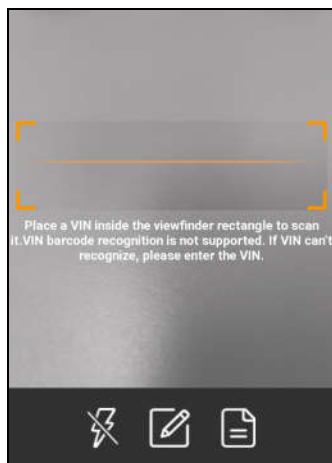





Fig. 5-5

Place the VIN inside the viewfinder rectangle to scan it. 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.

- If you have scanned the VIN of the vehicle, tap  to choose it from the record list.
- In case the handset failed to detect it, tap  to enter it manually.
- To turn the flash on, tap .

After scanning, the screen automatically displays the result.

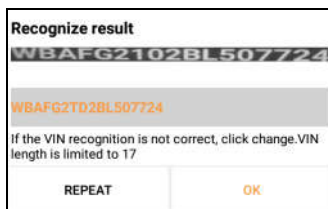


Fig. 5-6

- If the VIN scanned is incorrect, tap the result field to modify it and then tap "OK". If the VIN exists on the remote server, the system will enter



the vehicle information screen. See Fig. 5-2.

- To scan it again, tap “REPEAT”.

- 2) Input the VIN, and tap “OK”, the system will automatically identify the vehicle model and directly navigate to the vehicle information page.

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.

Tap “SKIP” to go to Local Diagnosis main menu screen.

## 5.2 Local Diagnosis

Tap “Diagnose” to enter the vehicle selection page.

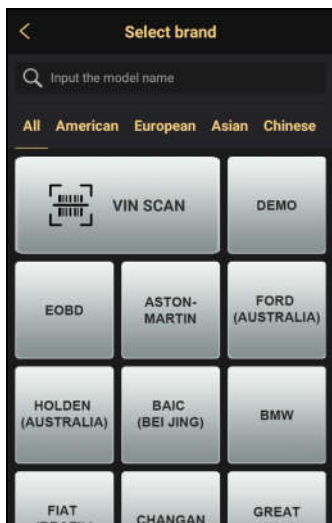


Fig. 5-7

\*Notes:

1. Input the vehicle model name in the search bar directly to retrieve it or swipe the screen from the bottom to select the desired vehicle brand from the vehicle list.
2. **All** incorporates the vehicle models from all regions. Tap American, European, Asian or Chinese to switch to the corresponding vehicles.
3. If you had a Gasoline & Diesel version of X-431 HTT, a “Commercial vehicle” tab will appear between Passenger vehicle and History.

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

1. VINSCAN enables you to access it more quickly.

In this case, automatic scan (Camera Scan) and manual input (Enter VIN) are

available.

In Fig. 5-7, tap “VIN SCAN”, the screen displays as follows:

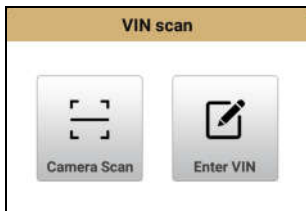


Fig. 5-8

**A. Camera Scan:** In this mode, the X-431 HTT and the vehicle should be properly connected.

Tap “Camera Scan”, a screen similar to the following appears:

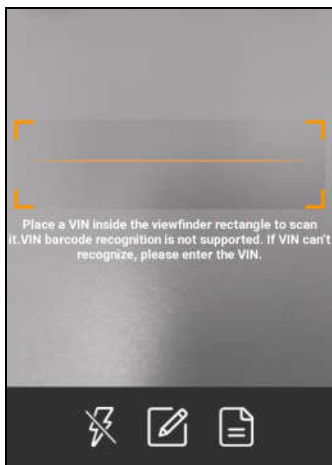





Fig. 5-9

**On-screen Buttons:**

- If you have scanned the VIN of the vehicle, tap  to choose it from the record list.
- In case the handset failed to recognize it, tap  to enter it manually.
- To turn the flash on, tap .

Place the VIN inside the viewfinder rectangle to scan it. 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.

Once the test vehicle is successfully identified, X-431 HTT will navigate to the

function selection page directly.

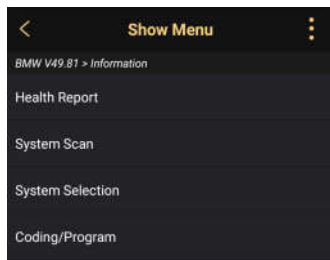


Fig. 5-10

Tap the desired option to perform the corresponding function.

\*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.

**B. 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.

Tap "INPUT VIN" and the following screen will appear:

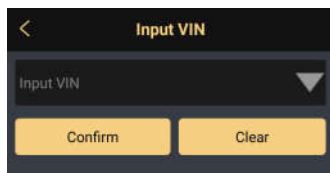


Fig. 5-11

Input the VIN, and tap "Confirm", the system will automatically identify the vehicle model and directly navigate to the function selection page.

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", a screen similar to the following appears:

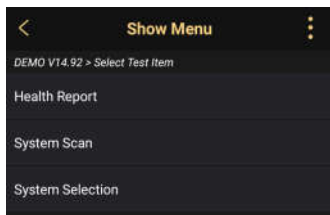






Fig. 5-12

Tap  to call out the option menu:

 **Homepage:** tap to return to the main menu screen.

 **Exit:** Tap to exit the current diagnostic session.

 **Print:** Tap to print the current screen via Wi-Fi printer (sold separately).

### 5.2.1 Health Report (Quick Test)

This function varies from vehicle to vehicle. It enables you to quickly access all the electronic control units of the vehicle and generate a detailed report about vehicle health.

Tap "Health Report", the system start scanning the ECUs. Once the scanning is complete, a screen similar to the following appears:

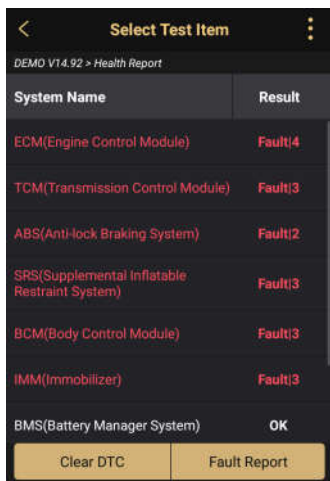


Fig. 5-13

#### On-screen Buttons:

**Clear DTC:** Tap to clear the existing diagnostic trouble codes. See Chapter 5.2.1.2.

**Fault Report:** Tap to view the health report in details. See Chapter 5.2.1.1.

In Fig. 5-13, the tested system with fault code appears in red and the system with OK displays in black (normally).

Tap the desired system to enter the test function selection page. For detailed operations on test function, please refer to Chapter 5.3.

### 5.2.1.1 View fault report

This function allows you to view the health report in details.

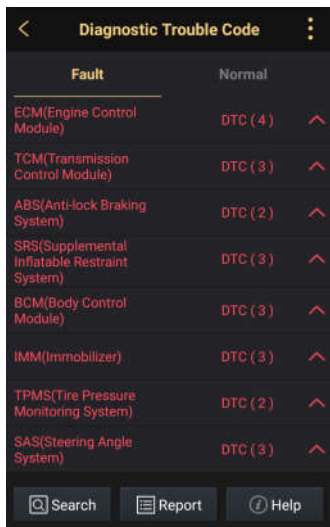
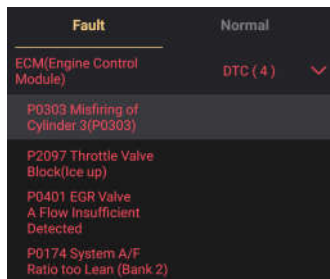


Fig. 5-14

#### On-screen Buttons:

**Report:** To save the current data in text format. All reports are saved under the tab “Diagnostic Report” in “My Report” from “Personal Center” menu.

Tap ^ to call out all DTCs.



Highlight a certain DTC item, and then tap “Search” to launch the browser to search for more information about the selected DTC online.

### 5.2.1.2 Clear DTC

This function lets you clear the existing diagnostic trouble codes in health report. Tap “Clear DTC”, a confirmation dialog box appears. Tap “Yes” to clear all the diagnostic trouble codes. Tap “No” to abort it.

### 5.2.2 System Scan

This option allows you to quickly scan which systems are installed on the vehicle.

In Fig. 5-12, tap “System Scan”, the system start scanning the systems. Once the scanning is complete, the screen will display the result.

### 5.2.3 System Selection

This option allows you manually select the test system and function step by step. In Fig. 5-12, tap “System Selection”, the screen displays as follows:

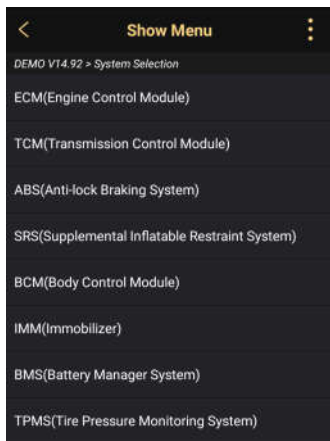


Fig. 5-15

\*Note: Different vehicle has different diagnostic menus.

### 5.2.3.1 Version Information

This function is used to read the version information of system mode, vehicle VIN, software and ECU.

### 5.2.3.2 Read Fault Code

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

In Fig. 5-16, tap "Read Fault Code", the screen will display the diagnostic result.

In Fig. 5-15, tap the desired system to advance to the test function selection page.

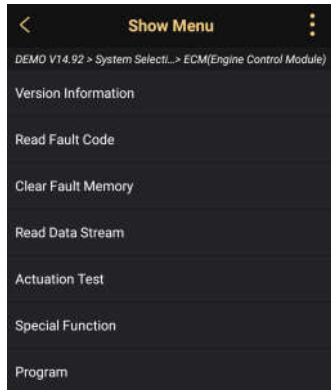


Fig. 5-16

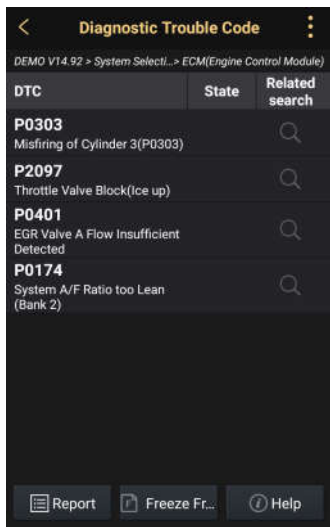


Fig. 5-17

#### On-screen Buttons:

**Search:** Highlight certain DTC item, and tap it to search for more information about the selected DTC online.

**Report:** To save the current data in text format. All reports are saved under the tab “Diagnostic Report” in “My Report” from “Profile” menu. For details on report operations, please refer to Chapter 8.1 “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:** Highlight certain DTC item and tap it to view the help information of the selected DTC.

### 5.2.3.3 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.

In Fig. 5-16, tap “Clear Fault Memory”, a confirmation dialog box pops up on the screen. Tap “Yes”, the system will automatically delete the currently existing trouble code.

\*Note: The trouble code will not disappear until the trouble was completely cleared.

### 5.2.3.4 Read Data Stream

This option retrieves and displays live data and parameters from the vehicle’s ECU.

In Fig. 5-16, tap “Read Data Stream”, the system will display data stream items.

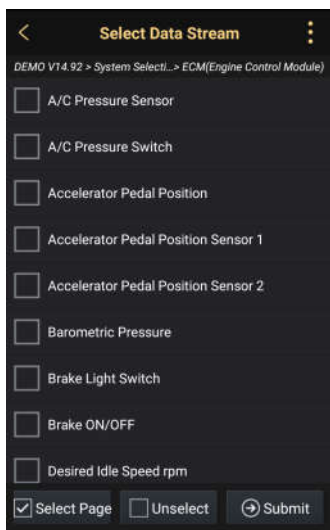


Fig. 5-18

On-screen Buttons:

**Select Page:** Tap it to select all items of the current page. To select certain data stream item, just check the box before the item name.

**Unselect:** Tap it to deselect all data stream items.

**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. See Fig. 5-19.

By default, there are 2 types of display modes available for data viewing:

- ✓ **Value** – this is the default mode which displays the parameters in texts and shows in list format.

In Fig. 5-19,

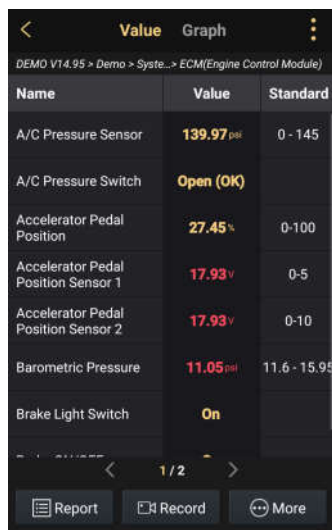


Fig. 5-19

\*Notes:

- If the value of the data stream item is out of the range of the standard (reference) value, it will display in red. If it complies with the reference value, it displays in gold (normal mode).
- If more than one page of data stream items is displayed, an icon similar to 1/X appears on the bottom of the screen. The indicator 1/X stands for the current page/total page number. Swipe the screen from right to left to switch to the next page.



**Report:** Tap to save the current running parameters as a diagnostic report.

**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 then the test function and ends with the record generation time (To differentiate between files, please configure the accurate system time). The file is stored in “My Report” under “Personal Center” menu.

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

**More:**

- **Saved data:** Tap it to access to “My reports”.
  - **Help:** Highlight certain item and tap it to view the help information.
- ✓ **Graph** – displays the parameters in waveform graphs.

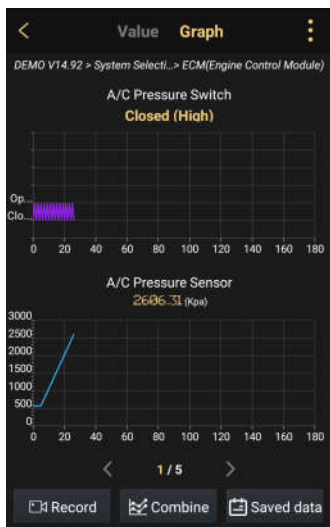


Fig. 5-20

\*Notes:

- Tap the “Value” tab to switch to the text view mode.
- Swipe the screen from right to left to switch to the next page.

**On-screen Buttons:**

**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 then the test function and ends with the record saving time. The file is stored in “More” -> “Personal Center” -> “My Report”.

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

**Combine** – this option is mostly used in graph merge status for data comparison. In this case, different items are marked in different colors.

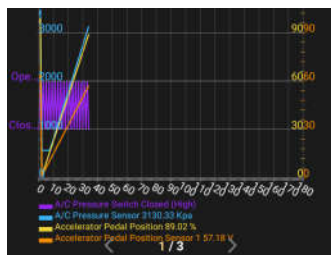


Fig. 5-21

**Saved data:** Tap to access to “My reports”.

### 5.2.3.5 Actuation Test

This option is used to access vehicle-specific subsystem and component tests. Available test vary by vehicle manufacturer, year, and model.

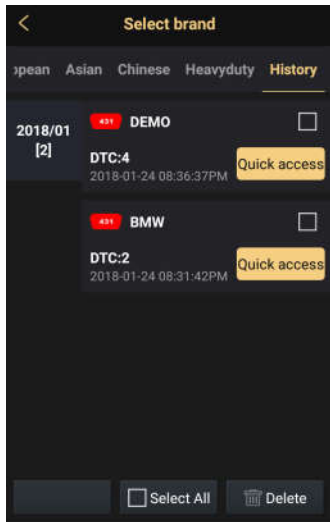
During the actuation test, the X-431 HTT handset outputs commands to the ECU in order to drive the actuators, and then determines the integrity of the system or parts by reading the ECU data, or by monitoring the operation of the actuators, such as switching a injector between two operating states.

Simply follow on-screen instructions and make appropriate selections to complete the test. Each time when an operation is successfully executed, "Completed" displays.

## 5.3 How to view diagnostic history?

Generally once a vehicle diagnosis is performed, X-431 HTT 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.

Tap "History" on the Local Diag. main menu screen to enter the following screen.



- Tap certain vehicle model to view the details of the last diagnostic report.
- To delete certain diagnostic history, select it and then tap "Delete". To delete all historical records, tap "Select All" and then tap "Delete".
- Tap "Quick access" to directly navigate to the function selection page of last diagnostic operation. Choose the desired option to proceed.

Fig. 5-22

## 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” on the function menu, the screen appears blank by default.

### 6.1 Interface Layout

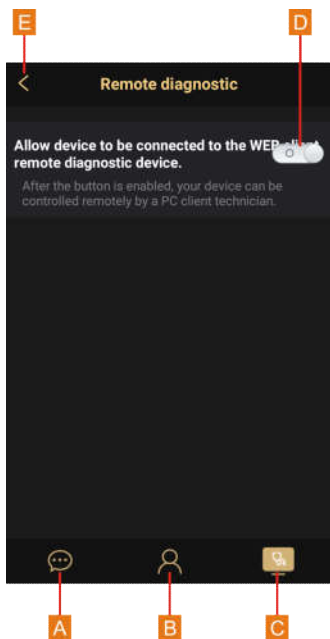


Fig. 6-1

**A. Message tab:** Once an incoming message reaches, a red dot will appear on the upper right corner of the tab.

**B. Contact tab:** Tap to add friends or enter the friend list.

**C. Remote diagnosis with Web client diagnostic device:** Tap to enter and choose whether to enable the switch or not.

**D. Remote diagnosis switch:** Tap to slide the switch to ON, the X-431 HTT keeps online and becomes visible on the web client. In this case, inform the technician of your product S/N, and he/she will control your X-431 HTT remotely.

**E. Exit button:** Tap it to navigate to the previous screen.

### 6.2 Add Friends

Tap  to enter the contact page. By default it appears blank.

In the search bar, input the partner's username and tap "Search" button next to the search bar to start searching from Launch's golo business database.

The partner must be the users who have registered their Launch's diagnostic tools. They may be the following:

- Workshop
- Technician
- golo users

Once the result matches the keyword, a screen similar to the following will appear:

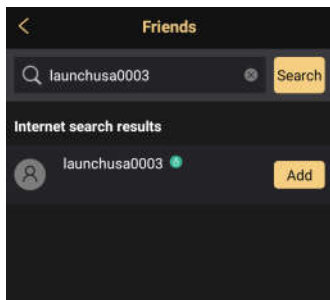


Fig. 6-2

Tap "Add", a dialog box pops up:

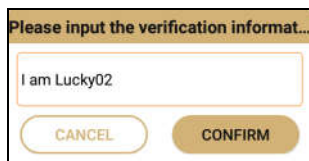


Fig. 6-3

Tap "CONFIRM" to send your request.

Once the partner receives the request, a beep will sound. Tap the "Message" tab, the screen displays:

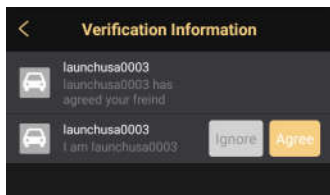


Fig. 6-4

- Once the partner agreed your request, he/she will automatically be listed in the Contact tab.
- If a technician sent you a friend request, you can tap "Agree" to confirm and his/her name will appear in the friend list (Contact). Or tap "Ignore" to ignore this request.

## 6.3 Start Instant Messaging

Note: The I/M (Instant Messaging) function is open to all users who had Launch's diagnostic tool equipped with this module. But for remote diagnosis, it only can be launched between two diagnostic tools that have the same product configurations.

After adding your friend, tap  to enter the friend list page.

Tap the logo before the friend name to view details. See Fig. 6-5.

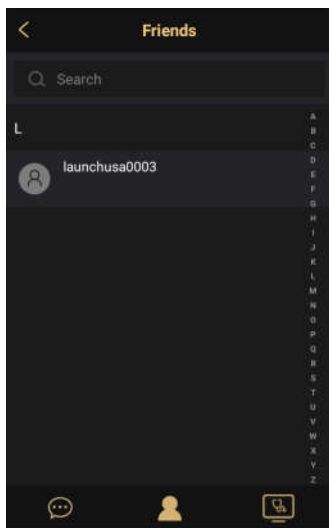


Fig. 6-5

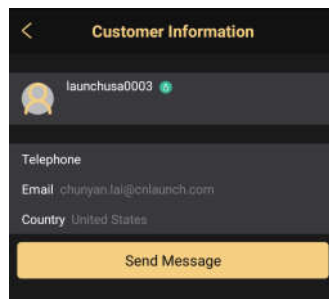


Fig. 6-6

In Fig. 6-6, tap “Send Message” to go into the instant messaging interface.

Alternatively user can also directly tap the desired partner's name from the friend list (Fig. 6-5) to enter the instant messaging interface.

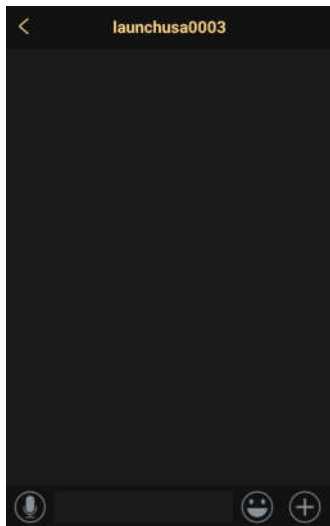


Fig. 6-7

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  to call out more function options.

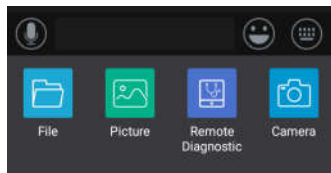


Fig. 6-8

File: Choose diagnostic reports or local files to send.

Picture: Choose screenshots or pictures to send.

Remote Diagnostic: To start a remote diagnostic session. For details, refer to Chapter 6.4.

Camera: Open camera to take pictures.

## 6.4 Launch Remote Diagnosis (Device-To-Device)

The X-431 HTT handset is allowed to launch remote diagnosis with other diagnostic tools (including but not limited to the X-431 HTT) of Launch family, which are equipped with this module.

\* Note: Before performing this operation, please make sure the following no matter which side sends the remote request:


- Turn on the vehicle power supply.
- Throttle should be in a closed position.
- The X-431 HTT should be properly connected to the vehicle’s DLC and a successful communication is required.

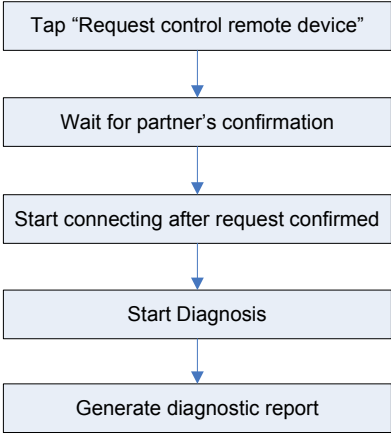
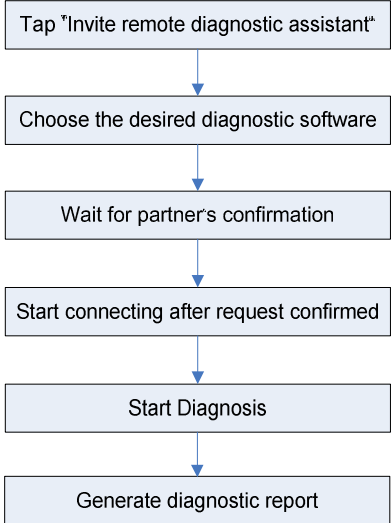
In Fig. 6-8, tap “Remote Diagnostic”, a pull-down menu including the following options appears:

Send remote diagnostic reservation
Request control remote device
Invite remote diagnostic assistant
Cancel


Fig. 6-9

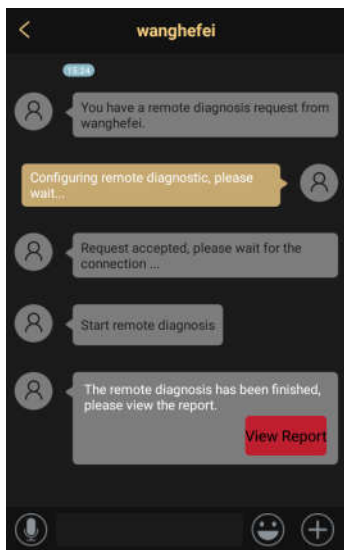
These options are defined as follows:

Actions	Results
Send remote diagnostic reservation	Tap it and input the reservation title or scheduled date of the remote diagnosis, and then tap “Confirm” to send.
Request control remote device	<p>Request to control the partner’s device remotely to help him diagnose the vehicle.</p> <p>*Notes:</p> <ul style="list-style-type: none"> <li>• Remote diagnosis has the same diagnostic steps as manual diagnosis.</li> <li>• In process of remote diagnosis, tap the  button to send voice message.</li> <li>• Once vehicle diagnosis is complete, a report will be created. Input your comments on this report, and then tap “Send Report” to send it to the partner.</li> </ul> <div data-bbox="472 1006 838 1110" style="background-color: #333; color: #ccc; padding: 5px; margin-top: 10px;"> <p>Please input your comments from diagnosis <span style="float: right; background-color: #ffcc00; padding: 2px 5px; border-radius: 3px;">Send Report</span></p> </div>

	 <pre>graph TD; A[Tap "Request control remote device"] --&gt; B[Wait for partner's confirmation]; B --&gt; C[Start connecting after request confirmed]; C --&gt; D[Start Diagnosis]; D --&gt; E[Generate diagnostic report];</pre>
Invite remote diagnostic assistant	<p data-bbox="366 656 917 711">If you need support, just use this option to invite a technician to perform a remote control on your tool.</p>  <pre>graph TD; A[Tap "Invite remote diagnostic assistant"] --&gt; B[Choose the desired diagnostic software]; B --&gt; C[Wait for partner's confirmation]; C --&gt; D[Start connecting after request confirmed]; D --&gt; E[Start Diagnosis]; E --&gt; F[Generate diagnostic report];</pre> <p data-bbox="366 1307 443 1332">*Notes:</p>



- Remote diagnosis has the same diagnostic steps as manual diagnosis.
- In process of remote diagnosis, tap the  button to send voice message.
- Once you received the report from the partner, tap “View Report” to view details. All diagnostic reports are saved under the “Remote Diagnostic Reports” tab of “My Reports” in “Personal Center”.

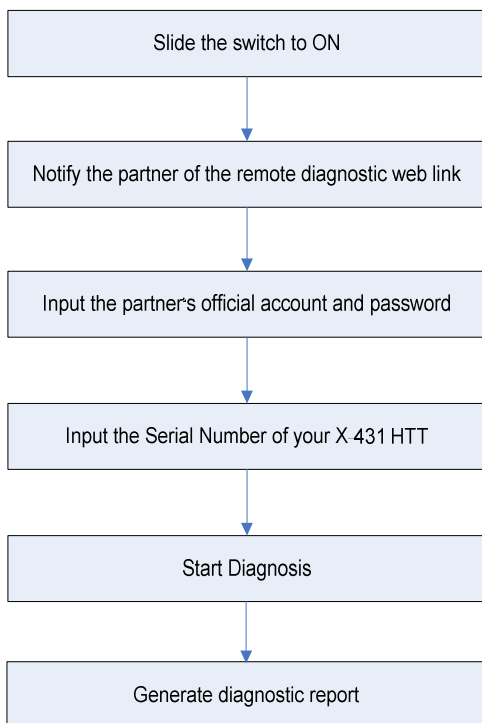



Cancel

To cancel this operation.

## 6.5 Launch Remote Diagnosis (Device-To-PC)

Except that the remote diagnosis can be done between different Launch's diagnostic tools that come loaded with the module, user also can ask for remote control from PC client technician.



Tap the  (Web Diagnostic) tab, the screen displays as follows:

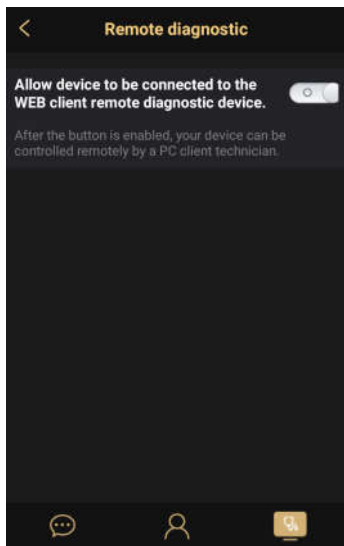


Fig. 6-10

1. Slide the switch “Allow device to be connected to the WEB client remote diagnostic device” to ON so that the partner can find and connect to this device while using the PC.
2. Notify the partner of the PC client website <http://remote.x431.com/cn/>. When the partner accesses the link, the PC displays as below:

\*Note: Before processing remote diagnosis, please make sure the X-431 HTT handset is properly connected to the vehicle.

Real-time remote full system diagnosis

Login Register

GoloAccount/PhoneNumber/UserName

Password

Remember Me [Forgot Password?](#)

Login

Fig. 6-11

3. Tell the partner to input his own official technician account and password, and then tap "Login" to navigate to the following figure.

Remote diagnosis

Serial Number  
Locate the car to be diagnosed according to golo/AIT serial number

License Plate Number  
Locate the car to be diagnosed according to the car owner's license plate number

Phone Number  
Locate the car to be diagnosed according to the car owner's phone number

972290000223

Start remote diagnosis

Tips: Before starting remote diagnosis, confirm the car owner's car information and condition

Fig. 6-12

4. Tell the partner to check the box "Series number" and enter the Serial

Number provided by you, and then tap “Start remote diagnosis” to control your device remotely.

In process of remote diagnosis, please note the following things:

- 1) You are not suggested to execute any actions.
- 2) The partner is not allowed to save any diagnostic reports or records on your handset.

The operations in remote diagnosis are same as those in local diagnosis. Once the session is complete, a remote diagnostic report will be automatically generated.

## **7 Special Function (Only for Passenger Vehicles/Gasoline & Diesel Configuration)**

In addition to amazing & powerful diagnostic function, X-431 HTT also features various service functions. The most commonly performed service functions contain:

- Oil Reset Service
- Electronic Parking Brake Reset
- Steering Angle Calibration
- ABS Bleeding
- TPMS (Tire Pressure Monitor System) Reset
- Gear Learning
- IMMO Service
- Injector Coding
- Battery Maintenance System
- Diesel Particulate Filter (DPF) Regeneration
- Electronic Throttle Position Reset
- Gearbox Matching
- AFS (Adaptive Front-lighting System) Reset
- Sunroof Initialization
- Suspension Calibration

### **7.1 Oil Reset Service**

This function allows you to perform reset for the engine oil life system, which calculates an optimal oil life change interval depending on the vehicle driving conditions and climate.

This function can be performed in the following cases:

1. If the service lamp is on, you must provide service for the car. After service, you need to reset the driving mileage or driving time so that the service lamp turns off and the system enables the new service cycle.
2. After changing engine oil or electric appliances that monitor oil life, you need to reset the service lamp.

## 7.2 Electronic Parking Brake Reset

1. If the brake pad wears the brake pad sense line, the brake pad sense line sends a signal sense line to the on-board computer to replace the brake pad. After replacing the brake pad, you must reset the brake pad. Otherwise, the car alarms.
2. Reset must be performed in the following cases:
  - a) The brake pad and brake pad wear sensor are replaced.
  - b) The brake pad indicator lamp is on.
  - c) The brake pad sensor circuit is short, which is recovered.
  - d) The servo motor is replaced.

## 7.3 Steering Angle Calibration

To reset the steering angle, first find the relative zero point position for the car to drive in straight line. Taking this position as reference, the ECU can calculate the accurate angle for left and right steering.

After replacing the steering angle position sensor, replacing steering mechanical parts (such as steering gearbox, steering column, end tie rod, steering knuckle), performing four-wheel alignment, or recovering car body, you must reset the steering angle.

## 7.4 ABS Bleeding

This function allows you to perform various bi-directional tests to check the operating conditions of Anti-lock Braking System (ABS).

1. When the ABS contains air, the ABS bleeding function must be performed to bleed the brake system to restore ABS brake sensitivity.
2. If the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced, the ABS bleeding function must be performed to bleed the ABS.

## 7.5 Tire Pressure Monitor System Reset

This function allows you to quickly look up the tire sensor IDs from the vehicle's ECU, as well as to perform TPMS replacement and sensor test.

1. After the tire pressure MIL turns on and maintenance is performed, the tire pressure resetting function must be performed to reset tire pressure and turn off the tire pressure MIL.

2. Tire pressure resetting must be performed after maintenance is performed in the following cases: tire pressure is too low, tire leaks, tire pressure monitoring device is replaced or installed, tire is replaced, tire pressure sensor is damaged, and tire is replaced for the car with tire pressure monitoring function.

## **7.6 Gear Learning**

The crankshaft position sensor learns crankshaft tooth machining tolerance and saves to the computer to more accurately diagnose engine misfires. If tooth learning is not performed for a car equipped with Delphi engine, the MIL turns on after the engine is started. The diagnostic device detects the DTC P1336 'tooth not learned'. In this case, you must use the diagnostic device to perform tooth learning for the car. After tooth learning is successful, the MIL turns off.

After the engine ECU, crankshaft position sensor, or crankshaft flywheel is replaced, or the DTC 'tooth not learned' is present, tooth learning must be performed.

## **7.7 IMMO Service**

An immobilizer is an anti-theft mechanism that prevents a vehicle's engine from starting unless the correct ignition key or other device is present. Most new vehicles have an immobilizer as standard equipment. An important advantage of this system is that it doesn't require the car owner to activate it since it operates automatically. An immobilizer is considered as providing much more effective anti-theft protection than an audible alarm alone.

As an anti-theft device, an immobilizer disables one of the systems needed to start a car's engine, usually the ignition or the fuel supply. This is accomplished by radio frequency identification between a transponder in the ignition key and a device called a radio frequency reader in the steering column. When the key is placed in the ignition, the transponder sends a signal with a unique identification code to the reader, which relays it to a receiver in the vehicle's computer control module. If the code is correct, the computer allows the fuel supply and ignition systems to operate and start the car. If the code is incorrect or absent, the computer disables the system, and the car will be unable to start until the correct key is placed in the ignition.

To prevent the car being used by unauthorized keys, the anti-theft key matching function must be performed so that the immobilizer control system on the car identifies and authorizes remote control keys to normally use the car.



When the ignition switch key, ignition switch, combined instrument panel, ECU, BCM, or remote control battery is replaced, anti-theft key matching must be performed.

## **7.8 Injector Coding**

Write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder so as to more accurately control or correct cylinder injection quantity.

After the ECU or injector is replaced, injector code of each cylinder must be confirmed or re-coded so that the cylinder can better identify injectors to accurately control fuel injection.

## **7.9 Battery Maintenance System Reset**

This function enables you to perform a resetting operation on the monitoring unit of vehicle battery, in which the original low battery fault information will be cleared and battery matching will be done.

Battery matching must be performed in the following cases:

- a) Main battery is replaced. Battery matching must be performed to clear original low battery information and prevent the related control module from detecting false information. If the related control module detects false information, it will invalidate some electric auxiliary functions, such as automatic start & stop function, sunroof without one-key trigger function, power window without automatic function.
- b) Battery monitoring sensor. Battery matching is performed to re-match the control module and motoring sensor to detect battery power usage more accurately, which can avoid an error message displaying on the instrument panel.

## **7.10 Diesel Particulate Filter (DPF) Regeneration**

DPF regeneration is used to clear PM (Particulate Matter) from the DPF filter through continuous combustion oxidation mode (such as high temperature heating combustion, fuel additive or catalyst reduce PM ignition combustion) to stabilize the filter performance.

DPF regeneration may be performed in the following cases:

- a) The exhaust back pressure sensor is replaced.
- b) The PM trap is removed or replaced.

- c) The fuel additive nozzle is removed or replaced.
- d) The catalytic oxidizer is removed or replaced.
- e) The DPF regeneration MIL is on and maintenance is performed.
- f) The DPF regeneration control module is replaced.

### **7.11 Electronic Throttle Position Reset**

This function enables you to make initial settings to throttle actuators and returns the “learned” values stored on ECU to the default state. Doing so can accurately control the actions of regulating throttle (or idle engine) to adjust the amount of air intake.

### **7.12 Gearbox Matching**

1. This function can complete the gearbox self-learning to improve gear shifting quality.
2. When the gearbox is disassembled or repaired (after some of the car battery is powered off), it will lead to shift delay or impact problem. In this case, this function needs to be done so that the gearbox can automatically compensate according to the driving conditions so as to achieve more comfortable and better shift quality.

### **7.13 AFS (Adaptive Front-lighting System) Reset**

This feature is used to initialize the adaptive headlamp system. According to the ambient light intensity, the adaptive headlamp system may decide whether to automatically turn on the headlamps, and timely adjust the headlamp lighting angle while monitoring the vehicle speed and body posture.

### **7.14 Sunroof Initialization**

This function can set the sunroof lock off, closed when it rains, sliding / tilting sunroof memory function, temperature threshold outside the car etc.

### **7.15 Suspension Calibration**

1. This function can adjust the height of the body.
2. When replacing the body height sensor in the air suspension system, or control module or when the vehicle level is incorrect, you need to perform this function to adjust the body height sensor for level calibration.

## 8 Personal Center

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

### 8.1 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 2 options available.

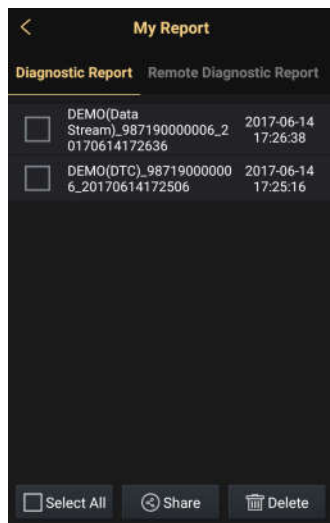


Fig. 8-1

If user records the running parameters while reading data stream or saves the DTC result on Read Trouble Code page, the diagnostic records and diagnostic reports will be listed under the **Diagnostic Report** tab.

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

## 8.2 My device

This option is used to manage all your activated X-431 HTT handsets.

If several X-431 HTT handsets are activated on this tool, a list of X-431 HTT will be displayed on the screen. Once you choose the X-431 HTT that belongs to other account, you have to log out, and then input the right account to continue.

## 8.3 Activate connector

It is used to activate your X-431 HTT.

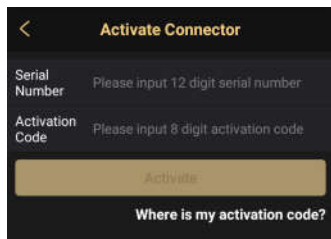


Fig. 8-2

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.

## 8.4 Firmware fix

Use this item to upgrade and fix diagnostic firmware. During fixing, please do not cut power or switch to other interfaces.

## 8.5 Diagnostic feedback

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

## 8.6 Profile

Use this item to view and configure personal information.

## 8.7 Change password

This item allows you to modify your login password.

## 8.8 Settings

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

### 8.8.1 Units of measurement

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

### 8.8.2 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.

### 8.8.3 Launch printer connection

This option is designed to establish a wireless connection between X-431 PRO MINI and the Wi-Fi printer (sold separately) while performing printing operations. Follow the steps below to connect the printer.

1. Tap "Launch Printer Connection".

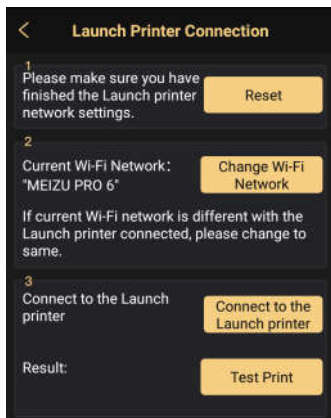


Fig. 8-3

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

following:

- 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...
- Tap "Reset" to configure Wi-Fi printer.

Step 1: Connect the printer:

Tap "Scan" to select the desired printer hotspot named with X-431PRINTER-XXXX (XXXX stands for 4 characters), and then tap "Connect" to enter Step 2.

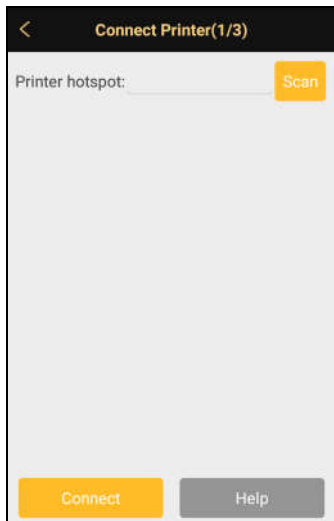


Fig. 8-4

Step 2: Join the Wi-Fi printer into LAN:

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

- Once the Wi-Fi network of the printer is connected and the printer is found, tap "Printing test" to test the printing.

Now you can use the Wi-Fi 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 Wi-Fi 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 Wi-Fi printer.

### **8.8.4 About**

The software version information and disclaimer are included.

### **8.9 Exit**

This option allows you to logout the system.

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


## 9 FAQ

### **1. How to save power?**

- Please turn off the screen while X-431 HTT 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.

### **2. What should I do in case I forgot the screen lock?**

You can set screen lock as pattern or password. If you forgot the password, please consult your device provider or reset your device.

 Warning: Resetting may cause data loss. Before use, please make sure important data has been backed up.

### **3. How to do if the system runs slow?**


In this case, please do the followings:

> Check all running applications and stop the unnecessary applications (Steps: Settings --> Apps --> Running --> Tap the desired application and then tap "Stop").

> Check all installed applications, remove the unnecessary applications (Steps: Settings --> Apps --> Downloaded --> Tap the desired application and then tap "Uninstall").

If all steps mentioned above are finished and the system still works slowly. Please try to close the system and reboot your X-431 HTT.

### **4. How to reset X-431 HTT?**

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

Do the following to reset X-431 HTT:

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 date and time of X-431 HTT cannot be set.**

It is because Automatic date & time is set on your X-431 HTT. Tap "Settings" --> "Date & time", deselect "Automatic date & time" and then set the date and time



manually. Since the diagnostic reports are saved and sorted by date, please make sure the system date and time is properly configured on this tool.

## **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 86-755-84528722.

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>