Version: V1.00.001

Revised date: 03-18-2019

Statement: LAUNCH owns the complete intellectual property rights for the software used by this product. For any reverse engineering or cracking actions against the software, LAUNCH will block the use of this product and reserve the right to pursue their legal liabilities.

## **Copyright Information**

Copyright © 2019 by LAUNCH TECH. CO., LTD. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of LAUNCH. The information contained herein is designed only for the use of this unit. LAUNCH is not responsible for any use of this information as applied to other units.

Neither LAUNCH nor its affiliates shall be liable to the purchaser of this unit or third parties for damages, losses, costs, or expenses incurred by purchaser or third parties as a result of: Accident, misuse, or abuse of this unit, or unauthorized modifications, repairs, or alterations to this unit, or failure to strictly comply with LAUNCH operating and maintenance instructions. LAUNCH shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original LAUNCH Products or LAUNCH Approved Products by LAUNCH.

#### **Trademark Information**

LAUNCH is a registered trademark of LAUNCH TECH CO., LTD. (LAUNCH) in China and other countries. All other LAUNCH trademarks, service marks, domain names, logos, and company names referred to in this manual are either trademarks, registered trademarks, service marks, domain names, logos, company names of or are otherwise the property of LAUNCH or its affiliates. In countries where any of the LAUNCH trademarks, service marks, domain names, logos and company names are not registered, LAUNCH claims other rights associated with unregistered trademarks, service marks, domain names, logos, and company names. Other products or company names referred to in this manual may be trademarks of their respective owners. You may not use any trademark, service mark, domain name, logo, or company name of LAUNCH or any third party without permission from the owner of the applicable trademark, service mark, domain name, logo, or company name. You may contact LAUNCH by visiting the website at www.cnlaunch.com, or writing to LAUNCH TECH. CO., LTD., Launch Industrial Park, North of Wuhe Avenue, Banxuegang, Bantian, Longgang, Shenzhen, Guangdong, P.R.China, to request written permission to use Materials on this manual for purposes or for all other questions relating to this manual.

## **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 V+, 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 V+ in exceptionally cold or hot, dusty, damp or dry environments.
- In places using X-431 V+ may cause interference or generate a potential risk, please turn it off.
- X-431 V+ 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 V+ into apparatus with strong electromagnetic field.
- Keep X-431 V+ far away from magnetic devices because its radiations can damage the screen and erase the data stored on X-431 V+.
- 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 disconnect power abruptly when X-431 V+ is being formatted or in process of uploading or downloading. Or else it may result in program error.
- Do not delete unknown files or change the name of files or directories that were not created by you, otherwise your X-431 V+ software might fail to work.

## Precautions on Using X-431 V+

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.

## **TABLE OF CONTENTS**

1 INTRODUCTION	1
1.1 Product Profile	1
1.2 FEATURES	3
1.3 KNOWLEDGE OF X-431 V+	4
1.3.1 X-431 V+ tablet	4
1.3.2 VCI connector (Only for Passenger Vehicle Version)	6
1.3.2 VCI module (Only for Commercial Vehicle Version)	7
1.4 TECHNICAL PARAMETERS	9
1.4.1 X-431 V+ tablet	9
1.4.2 VCI connector (Only for Passenger Vehicle Version)	10
1.4.2 VCI module (Only for Commercial Vehicle Version)	10
1.5 PACKAGE LIST (FOR PASSENGER VEHICLE VERSION)	11
1.5 PACKAGE LIST (FOR COMMERCIAL VEHICLE VERSION)	12
2 PREPARATIONS	15
2.1 CHARGING X-431 V+	15
2.2 USING YOUR BATTERY	15
2.3 POWER ON/OFF	15
2.3.1 Power on	15
2.3.2 Power off	16
2.4 TIPS ON FINGER OPERATIONS	16
2.5 SCREEN LAYOUT	16
2.6 ADJUST BRIGHTNESS	17
2.7 SET STANDBY TIME	17
2.8 CHANGING LANGUAGE	17
3 NETWORK SETUP	18
3.1 CONNECT TO WLAN	18
3.2 DISCONNECT FROM A WLAN NETWORK	18
4 HOW TO DIAGNOSE	19

4.1 DIAGNOSIS FLOWCHART	. 19
4.2 USER REGISTRATION, CONNECTOR ACTIVATION & DIAGNOSTIC SOFTWAR	E
DOWNLOAD	. 19
4.2.1 User registration	. 19
4.2.2 Diagnostic software layout	. 22
4.2.3 Function menu	. 23
4.3 CONNECTIONS	. 23
4.3.1 Preparation	. 23
4.3.2 DLC location	. 23
4.3.3 Vehicle connection (For Passenger Vehicle Version)	. 24
4.3.3 Vehicle connection (For Commercial Vehicle Version)	. 26
4.4 COMMUNICATION SETUP (FOR PASSENGER VEHICLE VERSION)	. 27
4.4 COMMUNICATION SETUP (FOR COMMERCIAL VEHICLE VERSION)	. 28
4.4.1 Pairing up via wireless BT	. 28
4.4.2 WLAN communication	. 28
4.5 START DIAGNOSTICS	. 32
4.5.1 Read DTC	. 34
4.5.2 Clear fault memory	. 35
4.5.3 Read data stream	. 35
4.5.4 Special function	. 38
4.5.5 How to view History?	. 39
4.5.6 Reset Service	. 39
4.6 REPAIR DATA	. 42
4.7 UPDATE	. 42
4.8 PROFILE	. 43
4.8.1 My connector	. 43
4.8.2 Diagnostic connector connection management	. 43
4.8.3 Activate connector	. 44
4.8.4 Firmware fix	. 44
4.8.5 My report	. 44

4.8.6 Profile	44
4.8.7 Change password	44
4.8.8 Help	44
4.8.9 Log out	44
4.9 SETTINGS	45
4.9.1 Units of measurement	45
4.9.2 Orientation	45
4.9.3 Print information	45
4.9.4 Launch wireless printer connection	45
4.9.5 Diagnostic feedback	48
4.9.6 Network test	48
4.9.7 About	48
5 OTHERS	49
5.1 EMAIL	49
5.1.1 Configure an email account	49
5.1.2 Add an email account	49
5.2 Browser	49
5.2.1 Open browser	49
5.2.2 Download files	50
5.3 SYNCHRONIZATION	50
5.3.1 Connect to PC	50
5.3.2 Run on PC	51
5.3.3 Install an application	51
5.4 CLEAR CACHE	51
6 FAQ	52

## 1 Introduction

#### 1.1 Product Profile

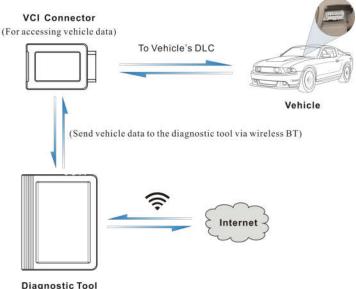
X-431 V+ is a new Android-based vehicle trouble diagnostic tool. It is characterized by featuring powerful functions, and providing precise test result.

Through simple wireless communication between VCI and X-431 V+ tablet, 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 V+ adopts a higher performance-price ratio tablet computer, which is equipped with Android 7.1 operating system, 1.4GHz quad core CPU and 10.1" HD display.

There are two product configurations available for X-431 V+.

#### 1. Passenger Vehicle Version



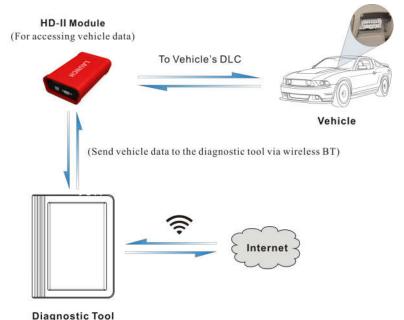
(For analyzing the received data and displaying the test results)

#### 2. Commercial Vehicle version

X-431 V+ is compatible with the following two Heavy-duty VCI modules. For different VCI modules, the communication methods vary.

Below shows how the X-431 V+ system works.

#### A. HD-II module:

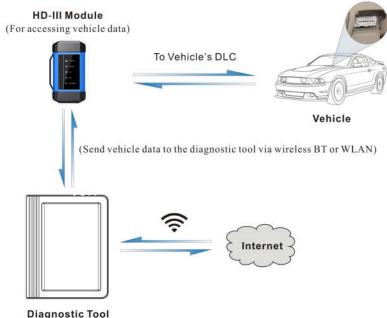


(For analyzing the received data and displaying the test results)

### B. HD-III module:

Besides the BT communication, the HD-III VCI module comes loaded with a built-in WLAN module, which can work as a wireless hotspot or a network adaptor.

Below shows how the X-431 V+ system works.



(For analyzing the received data and displaying the test results)

### 1.2 Features

### 1. 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 user-friendly interface.
- It is simple for the VCI (Vehicle Communication Interface) to communicate with X-431 V+
- Equipped with an exclusive X-431 V+ protective sleeve to prevent it from being damaged.
- Multiple maintenance and repair functions are supported to boost shop

revenue: Electronic throttle position reset/learn and gear learning etc.

- Repair Data: Provides a mass of service information for various vehicle models, which enables users to retrieve service data of some vehicle online.
- 3. Update: Lets you update your diagnostic software more efficiently.
- 4. Browser: Built-in Wi-Fi module makes surfing on the internet freely.
- 5. Email: Allows you to send and receive emails.
- **6. Settings**: To configure your personalized X-431 V+ through it.

## 1.3 Knowledge of X-431 V+

There are two main components to the X-431 V+ system:

- X-431 V+ Tablet the central processor and monitor for the system (See Chapter "1.3.1").
- VCI Device the device for accessing vehicle data (See Chapter "1.3.2").

#### 1.3.1 X-431 V+ tablet

The tablet acts as the central processing system, which is used to receive and analyze the live vehicle data from the VCI device and then output the test result.

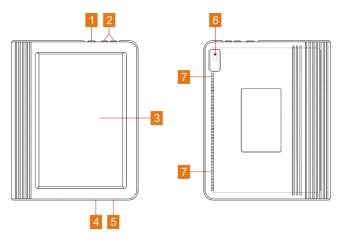


Fig. 1-1 X-431 V+ tablet

1	POWER Key	<ul> <li>In Off mode, press it for 3 seconds to turn the tablet on.</li> <li>In On mode:</li> <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 it for 3 seconds to turn it off.</li> <li>Press it for 8 seconds to perform forced shutdown.</li> </ul>
2	VOLUME +/- Key	To adjust the volume.
3	LCD Screen	
4	Microphone	
5	Data transmission/Charging Port	<ul><li>To connect to AC outlet for charging.</li><li>To connect to PC for data exchange.</li></ul>
6	Rear Camera	
7	Speakers	

## 1.3.2 VCI connector (Only for Passenger Vehicle Version)

The VCI connector works as a vehicle communication interface device, which is used to connect to the vehicle's DLC (Data Link Connector) socket directly or via OBD II extension cable to read the vehicle data and then send it to the X-431 V+ tablet via wireless BT communication.

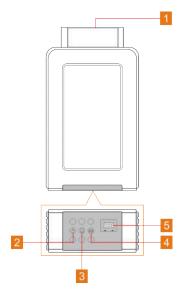


Fig. 1-2 VCI connector

1	OBD-16 diagnostic connector	To connect on vehicle's OBD II DLC.
2	Power LED	It lights up while the connector is plugged into the vehicle's DLC.
3	BT LED	It indicates wireless BT mode if the connector is energized and illuminates blue (default mode).
4	ECU LED	It flashes when the connector is communicating with the vehicle.

## 5 Data I/O port

This port is temporarily disabled and reserved for subsequent function extension.

#### 1.3.2 VCI module (Only for Commercial Vehicle Version)

#### A. HD-II Module

1

As the 2<sup>nd</sup> generation of heavy-duty module, it mainly functions as a VCI device for accessing vehicle data.



Fig. 1-2 HD-II VCI module

LED indicators: It is defined as follows(from left to right):

- Power Indicator: It lights up when it is powered on.
- <u>Communication LED of Tablet</u>: It illuminates when the module is communicating with the tablet.
- Communication LED of Vehicle: It lights up once the module is connected to a vehicle's DLC.

- Communication LED of PC
- Data I/O LED
- 2 Data I/O port
- 3 Communication Port of PC
- 4 **Diagnostic Socket**: To connect the included diagnostic cable.
- 5 **DC-IN power jack**: To connect the power adaptor.

#### **B. HD-III Module**

As the 3<sup>rd</sup> generation of heavy-duty module, it works as a vehicle communication interface device, which is used to read the vehicle data and then send it to the X-431 V+ via wireless BT/WLAN communication. The LED indicators enable you to easily identify the working status of the module.

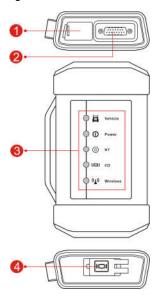


Fig. 1-4 HD-III VCI module

3

- 1 **DC-IN power jack**: For connecting the power adaptor.
- 2 Diagnostic socket: For connecting the diagnostic cable.

LED indicators: It is defined as follows:

- <u>Vehicle</u>: While communicating with the vehicle, the indicator lights up and flashes. Otherwise, it will not illuminate.
- Power: It illuminates solid red when the module is powered on.
- BT: Blue indicates the module is working in wireless BT mode.
- <u>I/O</u>: It lights up when the module is connected to the diagnostic tool via data cable (Currently disabled and only reserved for subsequent function extension).
- Wireless: It lights up when the module works as a wireless hotspot or network adaptor.
- Data I/O port: Currently disabled and only reserved for subsequent function extension.

#### 1.4 Technical Parameters

#### 1.4.1 X-431 V+ tablet

Operating system	Android 7.1	
Processor	Quad-core 1.4GHz processor	
Battery	7000mAh rechargeable polymer lithium battery	
Memory	2GB	
Storage	16GB	
Screen	10.1 inch capacitive touch screen with a resolution of 1280 x 800 pixels	
Camera	Front-facing 2.0MP camera + rear-facing 5.0MP camera	

Connectivity	<ul><li>WLAN (802.11b/g/n)</li><li>BT 4.0</li></ul>
Working temperature	0°C ~45°C
Storage temperature	-20℃ ~ 70℃

## 1.4.2 VCI connector (Only for Passenger Vehicle Version)

Working voltage	DC 9 ~18V
Average working current	About 128mA
Standby current	About 50mA
Working temperature	-20 to 55℃
Storage temperature	-30 to 70℃
Storage humidity	<80%
Working humidity	<60%

## 1.4.2 VCI module (Only for Commercial Vehicle Version)

## A. HD-II VCI module

Working voltage	DC 9 ~36V
Working temperature	-20 to 70°C
Storage temperature	-30 to 80°C
Storage humidity	10% to 80%

## **B. HD-III VCI module**

Working voltage	DC 9 ~36V
Power consumption	≤ 2W

Communication	Via wireless BT/WLAN or data cable
Working temperature	-10 to 55℃
WIFI module	HLK-RM08K • Frequency range: 2412-2472MHz • Transmit power: 19.29dBm
Wireless BT module	YG-218M-A2 • Frequency range: 2402-2480MHz • Transmit power: 16.62dBm

## 1.5 Package List (For Passenger Vehicle Version)

Common accessories for each X-431 V+ are same, but for different destinations, the accessories (such as diagnostic software, adaptor cables) may vary. Please consult from the local agency or check the package list supplied with the tool together.

No.	Item	Descriptions	Qt.
1	X-431 V+ tablet	Indicates the test result.	1
2	VCI connector	Collects the vehicle data and sends it to the tablet for analysis.	1
3	OBD II extension cable	To connect the VCI connector to the OBD II vehicle's DLC.	1
4	Password envelope	A piece of paper bearing the product Serial Number and Activation Code for product registration.	1
5	Power adaptor	For charging the tablet via AC outlet.	1
6	Cigarette lighter cable	To supply power to the non-16pin connector from the vehicle's cigarette lighter receptacle.	1

7	Battery clamps cable	To supply power to the non-16pin connector from the vehicle's battery.	1
8	OBD I adaptor box	For connecting the VCI connector and non-16pin adaptor cable.	(Optional)
9	Non-16pin adaptor cable kit	To connect to the vehicle equipped with non-OBD II management system.	(Optional)

## 1.5 Package List (For Commercial Vehicle Version)

Common accessories for each X-431 V+ are same, but for different destinations, the accessories (such as diagnostic software, adaptor cables) may vary. Please consult from the local agency or check the package list supplied with the tool together.

#### 1. For HD-II

1	X-431 V+ tablet	Indicates the test result.	1
2	HD-II module	Only available for X-431 V+ of Commercial Vehicle Version.	1
3	Diagnostic cable	To connect the VCI module to the vehicle's DLC.	1
4	Adaptor cable	To connect the diagnostic cable and the non-16pin adaptor cable.	1
5	Data cable	To connect the VCI module to the tablet to perform diagnosis.	(Optional)
6	Power adaptor (For VCI module)	To provide power to the VCI module through connection to the AC outlet.	1
7	Password envelope	A piece of paper bearing the product Serial Number and Activation Code for product registration.	1

8	Power adaptor	For charging the tablet via AC outlet.	1
9	Cigarette lighter cable	To supply power to the non-16pin connector from the vehicle's cigarette lighter receptacle.	1
10	Battery clamps cable	To supply power to the non-16pin connector from the vehicle's battery.	1
11	Non-16pin adaptor cable kit	To connect to the vehicle equipped with non-OBD II management system.	(Optional)

## 2. For HD-III

1	X-431 V+ tablet	Indicates the test result.	1
2	HD-III module	Only available for X-431 V+ of Commercial Vehicle Version.	1
3	Diagnostic cable	To connect the VCI module to the vehicle's DLC.	1
4	Data cable	To connect the VCI module to the tablet to perform diagnosis.	(Optional)
5	Power adaptor (For VCI module)	To provide power to the VCI module through connection to the AC outlet.	1
6	Password envelope	A piece of paper bearing the product Serial Number and Activation Code for product registration.	
7	Power adaptor	For charging the tablet via AC outlet.	1
8	Cigarette lighter cable	To supply power to the non-16pin connector from the vehicle's cigarette lighter receptacle.	1

9	Battery clamps cable	To supply power to the non-16pin connector from the vehicle's battery.	1
10	Non-16pin adaptor cable kit	To connect to the vehicle equipped with non-OBD II management system.	(Optional)

# 2 Preparations

## 2.1 Charging X-431 V+

There are two charging methods available:

#### Via Power adaptor:

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

#### Via Personal computer:

- Insert one end of the data cable (optional) into the Universal Serial Bus port of PC.
- 2. Connect the other end to the charging port of the tablet.
- 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 charging cable on the charger 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.
- 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 V+ has low battery, a beep will sound. If it is very low, X-431 V+ 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 more than 8 seconds until the screen goes dark.

## 2.4 Tips on finger operations

5	Single-tap: To select a item or launch a program.
S	<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.
5	Slide: To jump to different pages.
5	<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, lock screen wallpapers, widgets, settings and apps.

## 2. On-screen buttons

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

- Back: Tap 

   □ to return to the previous screen.
- **Home:** Tap O to jump to the Android's home screen.
- Screenshot: Tap 🖪 to capture the current screen.

## 2.6 Adjust brightness

Tips: Reducing the brightness of the screen is helpful to save the power of X-431 V+

- 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.

## 2.8 Changing language

X-431 V+ supports multiple languages.

To change the language of the tablet, please do the following:

- 1. On the home screen, tap Settings -> Language & Input -> Languages.
- 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 and then release it, the system will change into the target language.

# 3 Network Setup

Note: Once WLAN is set as ON, the tablet will consume more power. While WLAN keeps unused, please turn it off to conserve battery power.

The tablet has a built-in WLAN module that can be used to get online. Once you're online, you can register your diagnostic App, activate VCI device, update the diagnostic software & APK, surf the Internet, get apps and send email on your network.

#### 3.1 Connect to WLAN

- On home screen, tap Settings > WLAN.
- Tap or slide the WLAN switch to ON, the tablet starts searching for all available wireless LANs.
- 3. Choose the desired wireless 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).

Note: On the WLAN setting page, tap and choose "Add network" to add a new network.

Once it is connected successfully, tap the desired 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 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 this tool.

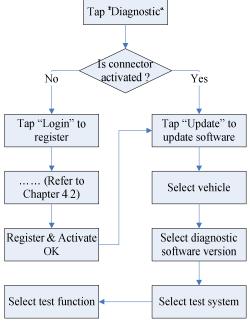


Fig. 4-1

# 4.2 User Registration, Connector Activation & Diagnostic Software Download

## 4.2.1 User registration

Tap the X-431 V+ icon on the home screen to launch the application, and then tap "Login" to enter the login interface of diagnosis software.



Fig. 4-2

1. <u>If you are a new user</u>, tap "New Registration" to enter registration page. See Fig. 4-3.



Fig. 4-3

In Fig. 4-3, fill in the information in each field (Items with \* must be filled). After inputting, tap "Register", a screen similar to the following will appear:



Fig. 4-4

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

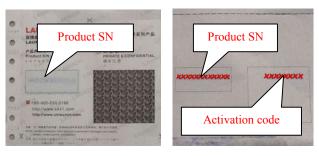


Fig. 4-5

Note: To exit and activate it later, tap "Skip". In this case, you can activate your connector by tapping "Activate Connector" in "Profile". For details, please refer to Chapter 4.8.3 Activate Connector.

Tap "Activate" to finish your registration. See Fig. 4-6.



Fig. 4-6

To download the diagnostic software, tap "Go to Update Center". See Fig. 4-7. Tap "Download Later" to download and install it later.



#### Fig. 4-7

In Fig. 4-7, 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.

- Note: In process of download, please make sure it is properly connected to the WLAN network. It may take several minutes to finish it, please be patient to wait.
- 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.

#### 4.2.2 Diagnostic software layout



Fig. 4-8

- 1 Tap to unfold the function menu. Refer to "Chapter 4.2.3 Function menu" for details.
- 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 needs to be downloaded on your tool first.
- 3 Vehicle diagnosis software logo: To start diagnosing a vehicle, you have to download the corresponding diagnostic software.
- 4 Vehicle region buttons: Tap different buttons to switch to corresponding vehicles.
- 5 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 starting from scratch.

6 Login button/User image: Tap it to login or register the diagnostic system. Once users have logged in successfully, it will change to your username or photo.

#### 4.2.3 Function menu

Tap **[a]** to unfold function menu, it mainly includes the following items:

Name	Description
Diagnostic	Configures the tablet to operate as a diagnostic tool.
Data	Provides abundant automotive technology handbook and repair case for your reference.
Update	To update vehicle diagnostic software.
Profile	To manage My Connector, My Report, Change Password and Logout etc.
Settings	Allows you to configure system settings and feedback the diagnostic reports.

#### 4.3 Connections

## 4.3.1 Preparation

## Normal testing conditions

- Turn on the vehicle power supply.
- Throttle should be closed at its close position.

## Select the adaptor cable

If X-431 V+ is testing vehicles equipped with universal OBD II 16 PIN diagnostic socket, please use the included diagnostic connector (For vehicles with non-OBD II 16 PIN diagnostic socket, a non-16 PIN connector is required).

#### 4.3.2 DLC location

#### For passenger vehicles:

The DLC (Data Link Connector or Diagnostic Link Connector) is typically a standard 16 pin connector where diagnostic code readers interface with the

vehicle's on-board computer. The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side for most vehicles. 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.

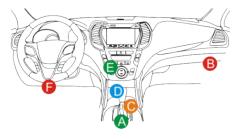


Fig. 4-9

#### For commercial vehicles:

The DLC is located in the driver's cab.

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

## 4.3.3 Vehicle connection (For Passenger Vehicle Version)

The method used to connect the diagnostic connector 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.
- Plug the VCI connector into the vehicle's DLC socket (It is suggested to use the OBD II extension cable to connect the VCI connector and DLC socket.).
- 3. Choose one of the two ways to obtain power from:

- A. Power adaptor: Connect one end of the included power adaptor to DC IN port of X-431 V+ 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.
- Plug the non-16pin end of the connector into the DLC socket, and 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 connector.
- 5. To supply power to OBD I adaptor from:

<u>A. Cigarette Lighter Cable</u>: 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. 4-10

<u>B. Battery Clamps Cable:</u> 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. 4-11

#### 4.3.3 Vehicle connection (For Commercial Vehicle Version)

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

 OBD II Vehicle Connection: Plug one end of the diagnostic cable into the vehicle's DLC, and the other end into the diagnostic socket of the VCI module, and then tighten the captive screws.



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

#### A. Using HD-II module

For trucks equipped with non-OBD II 16 PIN diagnostic sockets, choose any one of the following to proceed:

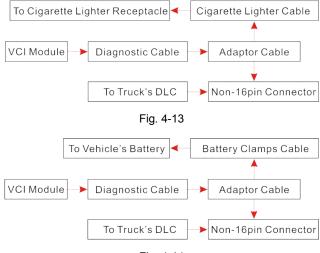


Fig. 4-14

## B. Using HD-III module

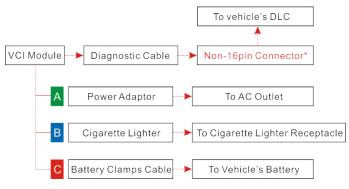


Fig. 4-15

#### \*Notes:

- a). For commercial vehicles, refer to the above connection method to proceed.
- b). For <u>passenger vehicles</u>, replace the "Non-16pin connector" with "OBD I adaptor" + "non-16pin connector (for passenger vehicles)". Other connections shall also apply.

## 4.4 Communication Setup (For Passenger Vehicle Version)

There are two kinds of ways available for the tablet to pair with the VCI connector.

- Connect one end of the data cable (optional) to the data I/O port of the VCI connector.
- 2. On the home screen, tap "Settings" -> "BLUETOOTH", slide the switch to ON and the tablet starts searching for all available BT devices.
- 3. Tap the desired VCI connector to pair and match. By default, the connector ID is 98\*\*\*\*\*\*\*00 (where \*\*\*\*\*\*\*\* stands for 8 digits.).
- If the pair request pops up on the screen, enter the request pin code (default code: 0000 or 1234).
- Once the connector is paired with the tablet, it will be shown under the paired device tab

Note: In case no BT setting is done before diagnostic software is launched, you can also configure it in process of vehicle diagnosis.

## 4.4 Communication Setup (For Commercial Vehicle Version)

For Commercial Vehicle version equipped with HD-II, refer to Chapter 4.4.1 for wireless BT pairing.

For Commercial Vehicle version equipped with HD-III, there are 2 ways available for the tablet to communicate with the VCI module: wireless BT and WLAN. Choose any one of the following ways to establish communication.

#### 4.4.1 Pairing up via wireless BT

Refer to Chapter 4.3.3 Vehicle Connection to connect the tablet and VCI module

- On the home screen, tap "Settings" -> "BLUETOOTH", slide the switch to ON and the tablet starts searching for all available BT devices.
- Tap the desired VCI module to pair and match. By default, the VCI module ID is 98\*\*\*\*\*\*00 (where \*\*\*\*\*\*\*\* stands for 8 digits).
- If the pair request pops up on the screen, input the request pin code (default code: 0000 or 1234).
- When pairing is successfully done, the VCI module will be shown on the top of the "Paired devices" list.

\*Note: If you logged in the account on another diagnostic tool and the VCI module has ever been paired up with that tool, you need to cancel pairing first before using a different tool to proceed new diagnostic session. Tap "Setting" -> "BLUETOOTH" -> the icon next to the device name, and then tap "FORGET" on the pop-up dialog box to unpair it.

In case no wireless BT setting is done before diagnostic software is launched, you can also configure it in process of vehicle diagnosis.

#### 4.4.2 WLAN communication

Refer to Chapter 4.3.4 Vehicle Connection to connect the tablet and VCI module.

Tap X-431 V+ icon on the home screen to launch it and login the system.
 After logging successfully, tap -> "Profile" -> "Diagnostic connector connection management".



Fig. 4-18

Check the box "Use WIFI communication mode", the system will search for VCI module automatically. See Fig. 4-19 & Fig. 4-20.





Fig. 4-19

Fig. 4-20

Tap the desired VCI module and a pairing request similar to Fig. 4-21 will appear:



Fig. 4-21

4. Tap "PAIR" to start pairing. Once the pairing is successfully done, the screen displays:



Fig. 4-22

- 5. There are two communication modes available for the VCI module.
  - Work as WIFI hotspot: Once enabled, the VCI module and the tablet automatically connect and form a LAN network to make communication. In this case, the tablet cannot surf the Internet.
  - Work as network card: Once enabled, a WLAN connection dialog box appears:



Fig. 4-23

Input the network name and access password (if the network is encrypted) until it is properly connected. In this case, the tablet can surf the Internet and communicate with the VCI module.

# 4.5 Start Diagnostics

Tap = -> "Diagnostic" 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. VINSCAN enables you to access it more quickly.

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



Fig. 4-24

<u>OBD VIN:</u> In this mode, the diagnostic connector 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, X-431 V+ 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.

<u>INPUT VIN:</u> 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. 4-25 will appear:

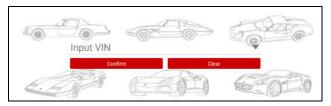


Fig. 4-25

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

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", the following dialog box appears:



Fig. 4-26

2). Tap "DEMO" to ignore BT connection and jump to the DEMO system selection screen. (Note: No wireless BT connection is required for DEMO.)



Fig. 4-27

3). Tap "Engine", the system will jump to the function menu.



Fig. 4-28

#### 4.5.1 Read DTC

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

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



Fig. 4-29

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.

## **On-screen Buttons:**

**New Session:** Tap it to return to the home screen.

<u>Search:</u> Highlight a certain DTC item, and then tap it to search the definition of 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 4.8.5 "My Report".

<u>Freeze Frame:</u> 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 Trouble Code" 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.

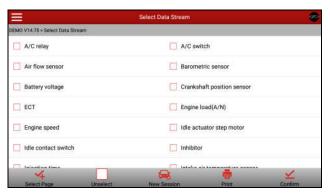


Fig. 4-30

## On-screen Buttons:

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

**<u>Unselect:</u>** Tap it to deselect all data stream items.

New Session: Tap it to return to the home screen.

<u>Print:</u> Tap it to print the current screen. To perform printing, you need to purchase a Wi-Fi printer manufactured by LAUNCH separately.

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

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



Fig. 4-31

## On-screen Buttons:

New Session: Tap to return to the home screen.

<u>Graph:</u> 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.

✓ <u>Graph</u> – displays the parameters in waveform graphs. Refer to Fig. 4-32.

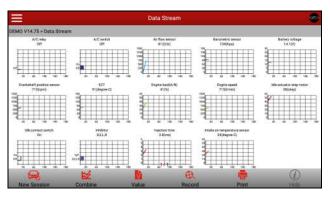


Fig. 4-32

 Value – this is the default mode which displays the parameters in texts and shows in list format. ✓ <u>Combine</u> – this option is mostly used in graph merge status for data comparison. In this case, different items are marked in different colors. See Fig. 4-33.

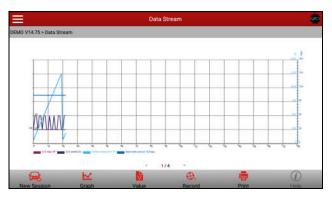


Fig. 4-33

**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 record starting time and ends with .x431 (To differentiate between files, please configure the accurate system time). The file is stored in "My Report" under "Profile" menu. For details on playback operations, please refer to Chapter 4.8.5 "My Report".

To stop reading the data stream, tap \( \square\) before the recording progress bar.

<u>Print:</u> Tap to print the content of current screen. An additional Wi-Fi printer is required.

Help: Tap to view the help information.

If more than one page of data stream items is displayed, an icon similar to 1/4 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.

## 4.5.5 How to view History?

Generally once a vehicle diagnosis is performed, X-431 V+ 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 starting from scratch.

- 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.
- Tap a certain box to enter the history records.
- 3. Tap "Restore" to directly jump to the system selection screen.
- Tap the desired system to enter and follow the instructions on the screen to proceed.

#### 4.5.6 Reset Service

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

- Oil Reset Service
- Steering Angle Calibration
- Electronic Parking Brake Reset
- Battery Register / Battery Maintenance
- ABS Bleeding
- Electronic Throttle Position Reset / Learn
- Diesel Particulate Filter (DPF) Regeneration
- Tire Pressure Monitor System Reset

# Oil Reset Service

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.

## 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.

## **Electronic Parking Brake Reset**

- 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.

# Electronic Throttle Position Reset/Learn

This function enables you to initialize the throttle actuators so that the "learned" values stored on ECU are returned to the default state. Doing so can accurately regulate throttle (or idle engine) operations to control the amount of air intake.

Throttle matching must be performed in the following cases:

- a) The ECU is replaced and the ECU does not yet store throttle working features.
- b) The ECU is disconnected from power and the ECU memory is lost.
- c) The throttle assembly is replaced.
- d) The intake pipe is replaced or removed, which affects idle speed control by ECU and throttle body.
- e) The throttle is cleaned. Although the idle throttle potentiometer features remains unchanged, with the same throttle opening, the air inflow has changed and idle speed control features have changed.

#### **Battery Register/Battery Maintenance**

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.

## **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.
- 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.

# **Tire Pressure Monitor System Reset**

- 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.

# 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.

# 4.6 Repair Data

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

Tap "Data" and follow the on-screen instructions to proceed.

# 4.7 Update

Note: To make sure the X-431 V+ is running the latest available software, it is advisable to check for updates on a frequent basis. When checking for updates it is important to make sure X-431 V+ has a strong Wi-Fi connection.

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

Tap = --> "Update" to enter.

Tap the serial number and a list of diagnostic software will pop up on the screen.

Note: If no several connectors are activated, please ignore this step.



Fig. 4-34

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

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

#### 4.8 Profile

This function allows users to manage your personal information.

# 4.8.1 My connector

This option is used to manage all your activated connectors.

If several diagnostic connectors 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.

# 4.8.2 Diagnostic connector connection management

This option is used for X-431 V+ to deactivate pairing up with the VCI connector via wireless BT.



## Fig. 4-35

\* Note: please be sure to keep the VCI connector powered on while performing the operation.

#### 4.8.3 Activate connector

It is used to activate your diagnostic connector.

Input the Serial Number and Activation Code, and then tap "Activate" to activate the connector

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

#### 4.8.4 Firmware fix

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

## 4.8.5 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.

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

In case the DTC result is saved <u>on Read Trouble Code page</u>, .pdf or .jpg files will be listed under **Diagnostic Report** tab.

#### 4.8.6 Profile

Use this item to view and configure personal information.

# 4.8.7 Change password

This item allows you to modify your login password.

# 4.8.8 Help

FAQ, Quick Start Guide and User Manual are included.

# 4.8.9 Log out

This option allows you to logout the system. To logout the current user ID, tap "Log Out".

# 4.9 Settings

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

#### 4.9.1 Units of measurement

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

#### 4.9.2 Orientation

This option is used to set the display mode of the application.

#### 4.9.3 Print information

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

#### 4.9.4 Launch wireless printer connection

This option is designed to establish a wireless connection between X-431 V+ and the Wi-Fi printer (sold separately) while performing printing operations.

Follow the steps below to connect the printer.

1. Tap "Launch Wireless Printer Connection".

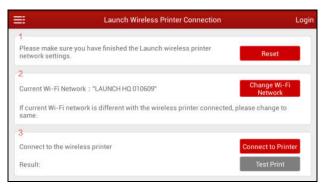


Fig. 4-36

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 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. 4-37

## 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".



Fig. 4-38

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



Fig. 4-39

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.

## 4.9.5 Diagnostic feedback

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

#### 4.9.6 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.

### 4.9.7 About

The software version information and disclaimer are included.

# 5 Others

### 5.1 Email

The function allows you to send and receive email.

## 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 required 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.
- 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 X-431 V+ 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 X-431 V+.

#### 5.3.1 Connect to PC

- 1. Use the data cable to connect the X-431 V+ 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:

- 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.
- 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 X-431 V+ 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.
- 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.
- 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 X-431 V+ 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 handle when you encounter "Insufficient storage space"?

If this happens while downloading the diagnostic software, please proceed as follows:

- 1. Get your X-431 V+ username and password ready. If you forgot the password, please dial our after-sales support center hotline to retrieve it with the product Serial Number.
- 2. Reset the X-431 V+ to the default factory settings (For details, please refer to

Item 5 in this Chapter).

- Tap "Settings" -> "WLAN", slide the switch to ON and then choose the desired WLAN network to connect.
- Open the browser and visit <u>www.dbscar.com</u> to download and install the latest App.
- After the installation is complete, launch the application and login with your username and password.
- 6. Tap = -> "Update" to download the diagnostic software.
- Note: For new App, the software structure and storage space occupied by the vehicle software have been optimized so as to avoid the occurrence of insufficient storage.

## 5. How to reset X-431 V+?

A 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 V+:

- 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.

# 7. 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 86-755-84528722.

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

#### Statement:

LAUNCH reserves the rights to make any change to product designs and specifications without notice. The actual object may differ a little from the descriptions in the manual in physical appearance, color and configuration. We have tried our best to make the descriptions and illustrations in the manual as accurate as possible, and defects are inevitable, if you have any question, please contact local dealer or after-sale service center of LAUNCH, LAUNCH does not bear any responsibility arising from misunderstandings.