

Version: V1.00.000
Revised date: Oct-19-2017

Copyright Information

Copyright © 2017 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 PRO, 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 PRO in exceptionally cold or hot, dusty, damp or dry environments.
- In places using X-431 PRO may cause interference or generate a potential risk, please turn it off.
- X-431 PRO 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 PRO into apparatus with strong electromagnetic field.
- Keep X-431 PRO far away from magnetic devices because its radiations can damage the screen and erase the data stored on X-431 PRO.
- 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.
- Use the approved charging methods only. You can use any of the following charging methods to safely recharge the internal battery of X-431 PRO:

Charging method	Display on	Display off
AC adaptor	Supported, but the battery will charge slowly	Supported
USB connection between the Micro-USB interface on the X-431 PRO and a USB port on a PC or other device that comply with the USB2.0 standards. Users have to use the connection to USB interfaces with USB2.0 version or higher.	Supported, but will compensate power consumption and the battery will charge more slowly than usual.	Supported, but the battery will charge slowly.

- Do not disconnect power abruptly when X-431 PRO 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 PRO software might fail to work.
- Be aware that accessing network resources can leave your X-431 PRO vulnerable to computer viruses, hackers, spyware, and other malicious activities that might damage your device, software or data. It is your responsibility to ensure that you have adequate protection in the forms of firewalls, antivirus software, and anti-spyware software and keep such software up to date.

Precautions on Using X-431 PRO

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

- Always perform automotive testing in a safe environment.
- If the diagnostic connector remains unused for a long period of time, it is suggested to unplug the connector from vehicle's DLC to conserve battery power.
- Wear an ANSI-approved eye shield when testing or repairing vehicles.
- The vehicle shall be tested in a well-ventilated work area, as engines produce various poisonous compounds (hydrocarbon, carbon monoxide, nitrogen oxides, etc.)
- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Keep the test equipment dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clear the outside of the equipment as necessary.
- Do not drive the vehicle and operate the test equipment at the same time. Any distraction may cause an accident.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Before starting the engine, put the gear lever in the Neutral position (for manual transmission) or in the Park (for automatic transmission) position to avoid injury.
- To avoid damaging the test equipment or generating false data, please make sure the vehicle battery is fully charged and the connection to the vehicle

DLC (Data Link Connector) is clear and secure.

- Automotive batteries contain sulfuric acid that is harmful to skin. In operation, direct contact with the automotive batteries should be avoided. Keep the ignition sources away from the battery at all times.

Precautions on Operating Vehicle's ECU

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

TABLE OF CONTENTS

1 INTRODUCTION	1
1.1 PRODUCT PROFILE	1
1.2 FEATURES	2
1.3 TECHNICAL SPECIFICATIONS	2
2 KNOWLEDGE OF X-431 PRO	4
2.1 X-431 PRO TABLET	4
2.3 VCI CONNECTOR (ONLY APPLIES TO 12V CARS)	5
2.4 PACKAGE LIST	6
3 PREPARATIONS	8
3.1 CHARGING X-431 PRO	8
3.2 USING YOUR BATTERY	8
3.3 POWER ON/OFF	8
3.3.1 Power on	8
3.3.2 Power off	9
3.4 TIPS ON FINGER OPERATIONS	9
3.5 LOCK & UNLOCK THE SCREEN	9
3.5.1 Lock the screen	9
3.5.2 Unlock the screen	9
3.6 SCREEN LAYOUT	10
3.7 CUSTOMIZE YOUR DESKTOP	10
3.7.1 Create a widget on the desktop	10
3.7.2 Move items on the desktop	10
3.7.3 Delete items from the desktop	10
3.7.4 Adjust brightness	11
3.7.5 Set standby time	11
3.8 CHANGING LANGUAGE	11
3.9 NETWORK SETTING	11
3.9.1 Connect to a Wi-Fi network	11
3.9.2 Disconnect from a Wi-Fi network	12
4 INITIAL USE	13

4.1 GETTING STARTED	13
4.2 REGISTER & DOWNLOAD DIAGNOSTIC SOFTWARE	13
4.2.1 User registration	13
4.2.2 Job menu	16
4.2.3 Vehicle menu layout	18
4.2.4 Diagnostics toolbar	19
4.3 CONNECTIONS	20
4.3.1 Preparation	20
4.3.2 DLC location	20
4.3.3 Vehicle connection	21
4.4 BLUETOOTH SETTING	22
5 DIAGNOSIS.....	24
5.1 INTELLIGENT DIAGNOSIS	24
5.2 LOCAL DIAGNOSIS	29
5.2.1 Health Report (Quick Test)	35
5.2.2 System Scan	38
5.2.3 System Selection	39
5.3 REMOTE DIAGNOSIS	47
5.3.1 Interface Layout	48
5.3.2 Add Friends	49
5.3.3 Start Instant Messaging	50
5.3.4 Launch Remote Diagnosis (Device-To-Device)	52
5.3.5 Launch Remote Diagnosis (Device-To-PC)	55
5.4 HOW TO VIEW DIAGNOSTIC HISTORY?	59
5.5 HOW TO FEEDBACK DIAGNOSTIC LOGS?	60
6 SPECIAL (RESET) FUNCTION.....	63
6.1 OIL RESET SERVICE	64
6.2 ELECTRONIC PARKING BRAKE RESET	64
6.3 STEERING ANGLE CALIBRATION	65
6.4 ABS BLEEDING	65
6.5 TIRE PRESSURE MONITOR SYSTEM RESET	65
6.7 GEAR LEARNING	65

6.7 IMMO SERVICE.....	66
6.8 INJECTOR CODING.....	66
6.9 BATTERY MAINTENANCE SYSTEM RESET.....	67
6.10 DIESEL PARTICULATE FILTER (DPF) REGENERATION.....	67
6.11 ELECTRONIC THROTTLE POSITION RESET.....	67
7 SOFTWARE UPDATE.....	68
8 GOLO BUSINESS MANAGER.....	70
9 PERSONAL CENTER.....	72
9.1 MY REPORT.....	72
9.2 MY CONNECTOR.....	76
9.3 DIAGNOSTIC CONNECTOR CONNECTION MANAGEMENT.....	76
9.4 ACTIVATE CONNECTOR.....	76
9.5 FIRMWARE FIX.....	77
9.6 PROFILE.....	77
9.7 CHANGE PASSWORD.....	77
9.8 SETTINGS.....	77
9.8.1 Units of Measurement.....	77
9.8.2 Print Information.....	78
9.8.3 Launch Printer Set.....	78
9.8.4 About.....	80
9.8.5 Login/Exit from current account.....	80
10 OTHERS.....	81
10.1 EMAIL.....	81
10.1.1 Configure an email account.....	81
10.1.2 Add an email account.....	81
10.2 BROWSER.....	81
10.2.1 Open browser.....	81
10.2.2 Download files.....	82
10.3 SYNCHRONIZATION.....	82
10.3.1 Connect to PC.....	82
10.3.2 Run on PC.....	82

10.3.3 Install an application.....	83
10.4 CLEAR CACHE.....	83
11 FAQ	84

1 Introduction

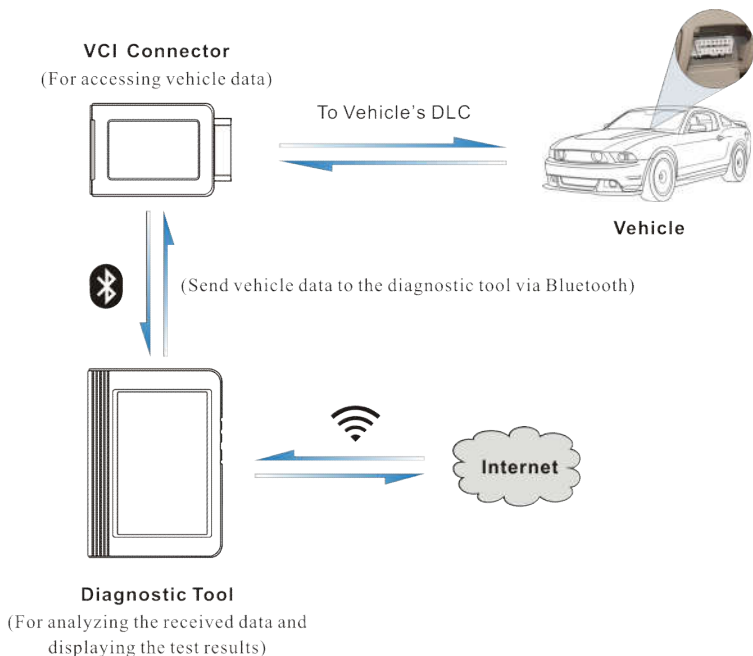
1.1 Product Profile

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

Through simple Bluetooth communication between VCI connector and X-431 PRO handset, 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 PRO adopts a higher performance-price ratio tablet computer, which is equipped with Android 7.1 operating system, 1.3GHz quad core CPU and 10.1" HD display.

The following illustration shows how the X-431 PRO system works.



1.2 Features

1. Diagnose:

- **Smart Diagnosis:** This module allows you to use the VIN information of the currently identified vehicle to access its data (including vehicle information, historical diagnostic records) from the cloud server to perform quick test.
 - **Local Diagnosis:** 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.
 - **Reset:** All kinds of common maintenance and reset items including Oil lamp reset, DPF regeneration, ABS bleeding 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.
 - **golo Business Manager:** On this platform, you can provide nearby car owners with attentive service to develop new business opportunities, manage technicians and golo customers more efficiently, monitor customer's vehicle running status in real-time manner and perform remote assistance anywhere etc. It is very helpful to increase productivity and boost shop revenue.
2. Wi-Fi connection and Ethernet connection are supported.
3. Web browser: Users can make online search and visit any website.

1.3 Technical Specifications

X-431 PRO handset:

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 style="list-style-type: none">• Wi-Fi (802.11a/b/g/h)• Bluetooth 2.0
Working temperature	0°C ~ 45°C
Storage temperature	-20°C ~ 70°C

VCI connector:

Working voltage	DC 9 ~18V
Average working current	About 35mA
Standby current	About 25mA
Working temperature	-20 to 55°C
Storage temperature	-30 to 70°C
Storage humidity	<80%
Working humidity	<60%

2 Knowledge of X-431 PRO

X-431 PRO is mainly composed of one X-431 PRO tablet and one VCI connector.

- X-431 PRO tablet – the central processor and monitor for the system (See Chapter “2.1”).
- VCI connector – the device for accessing vehicle data (See Chapter “2.2”).

2.1 X-431 PRO tablet

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

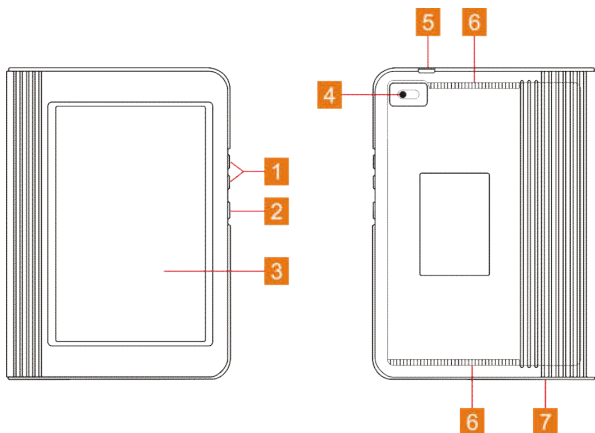


Fig. 2-1 X-431 PRO handset

1	VOLUME +/- Key	To adjust the volume.
2	POWER Key	In Off mode, press it for 3 seconds to turn the handset on. In On mode: • Press it to activate the LCD if the LCD is off.

- Press it to turn off the LCD if the LCD lights up.
- Press it for 3 seconds to turn it off.
- Press it for 8 seconds to perform forced shutdown.

3	LCD Screen	
4	Rear Camera	
5	USB/Charging Port	<ul style="list-style-type: none">• To connect to AC outlet for charging.• To connect to PC for data exchange.
6	Speakers	
7	Microphone	

2.3 VCI Connector (Only applies to 12V cars)

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 PRO handset via Bluetooth.

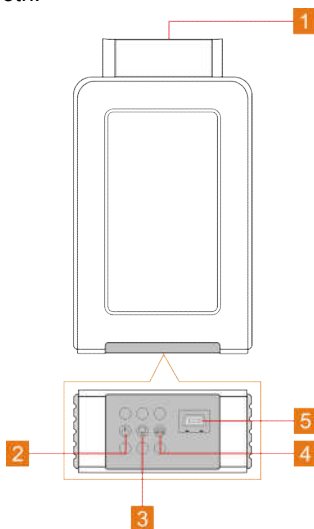


Fig. 1-2 VCI connector

1	OBD-16 diagnostic connector	To connect on vehicle's OBD II DLC.
2	Power indicator	It lights up while the connector is plugged into the vehicle's DLC.
3	Bluetooth/USB communication indicator	<ul style="list-style-type: none"> It indicates Bluetooth mode if the connector is energized and illuminates blue (default mode). It illuminates red when the connector is connected to the diagnostic tool via USB cable (The USB port is temporarily disabled).
4	ECU communication indicator	It flashes when the connector is communicating with the vehicle.
5	USB port	This port is temporarily disabled and reserved for subsequent function extension.

2.4 Package List

Common accessories for each X-431 PRO are same, but for different destinations, the accessories of X-431 PRO (such as diagnostic software, testing connectors) may vary. Please consult from the local agency or check the package list supplied with X-431 PRO together.

No.	Item	Descriptions	Qt.
1	X-431 PRO handset	Indicates the test result.	1
2	VCI connector	Collects the vehicle data and sends it to the X-431 PRO 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 X-431 PRO 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.	1
9	Non-16pin adaptor cable kit	To connect to the vehicle equipped with non-OBD II management system.	(Optional)

3 Preparations

3.1 Charging X-431 PRO



There are two charging methods available:

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 PRO.
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 PRO.

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 USB cable on the charger from X-431 PRO.

3.2 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 PRO has low battery, a beep will sound. If it is very low, X-431 PRO will be switched off automatically.

3.3 Power on/off

3.3.1 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.

3.3.2 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.

3.4 Tips on finger operations

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

3.5 Lock & unlock the screen

Many screen lock modes are available on X-431 PRO.

*Note: You are recommended to set screen lock as "None" since X-431 PRO is a frequently used diagnostic tool.

3.5.1 Lock the screen

- When it is ON, press [POWER] once to lock the screen;
- The system will lock the screen automatically after X-431 PRO remains idle over the preset standby time.

3.5.2 Unlock the screen

Press [POWER] to activate the screen and drag the lock to "Unlock" position.

*Note: If you define as unlock using the pattern, you have to draw the right target pattern to unlock it.





3.6 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  to jump to the Android's home screen.
- **Recent App:** Tap  to view the recently launched applications and running applications.
- **Screenshot:** Tap  to capture the current screen.

3.7 Customize your desktop

3.7.1 Create a widget on the desktop

1. Tap and hold a blank area on the home screen, tap "WIDGETS" below the preview screen.
2. Tap and hold the desired application or widget, and then drag it to the target position.

3.7.2 Move items on the desktop

Tap and hold the item to be moved, and drag and drop it to the target location.

3.7.3 Delete items from the desktop

*Warning: Deleting an icon will uninstall the corresponding application. Please be careful to do so.

1. Tap and hold the item to be moved until it is shaken.
2. Drag it on the trash icon and release it.

*Note: If no trash icon appears on the top of the screen, it indicates that the application cannot be uninstalled.

3.7.4 Adjust brightness

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

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

3.7.5 Set standby time

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

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


3.8 Changing language

X-431 PRO supports multiple languages.

To change the language of the handset, 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.


3.9 Network Setting

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

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

3.9.1 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 PRO 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).

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

network.

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.

3.9.2 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 Getting Started

For new users, please follow the operation chart shown in Fig. 4-1 to start using X-431 PRO.

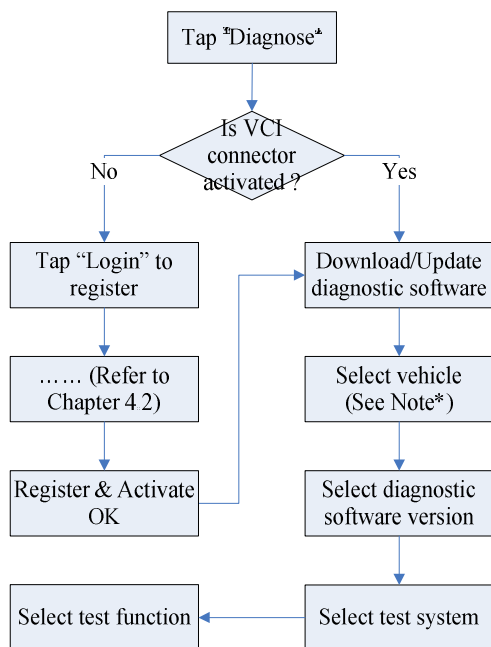


Fig. 4-1

Note*: If “VIN Scan” or “Intelligent Diagnosis” function is performed, this step shall not apply.

4.2 Register & Download Diagnostic Software

4.2.1 User registration

On the home screen, tap the application icon to launch it, and then tap “Login” to

enter the login interface of diagnosis software.

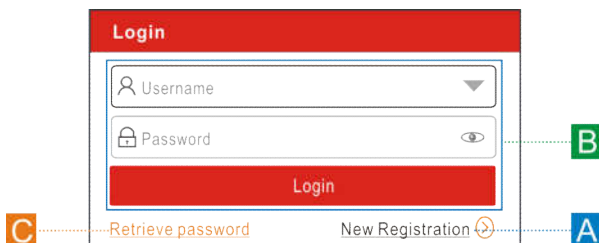


Fig. 4-2

(If you are a new user, follow **A** to proceed.)

(If you have registered to be a member, go to **B** to login the system directly.)

(In case you forgot password, refer to **C** to reset a new password.)

A. If you are a new user, tap “New Registration” to enter registration page. See Fig. 4-3.

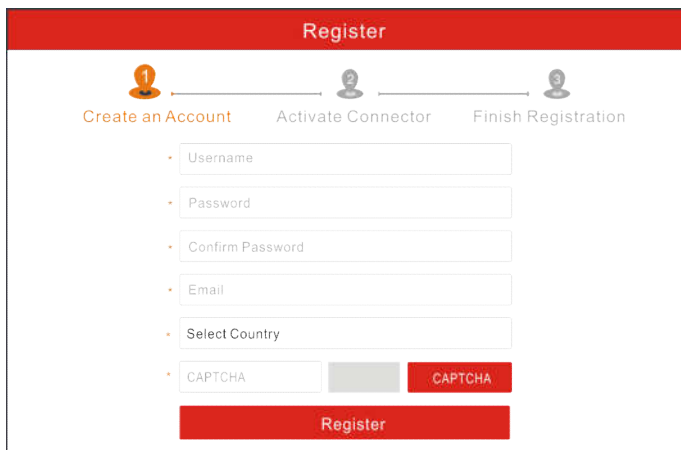


Fig. 4-3

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:

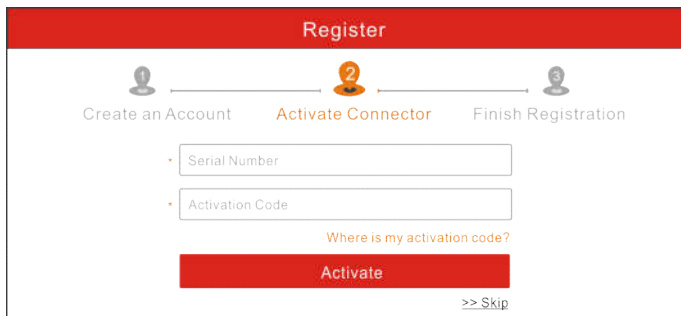


Fig. 4-4

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

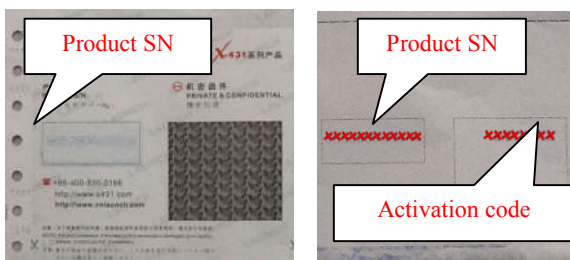


Fig. 4-5

Note: To exit and activate it later, tap “Skip”. In this case, you can activate your connector by tapping “Activate Connector” in “Personal Center”. For details, please refer to Chapter 9.4.

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

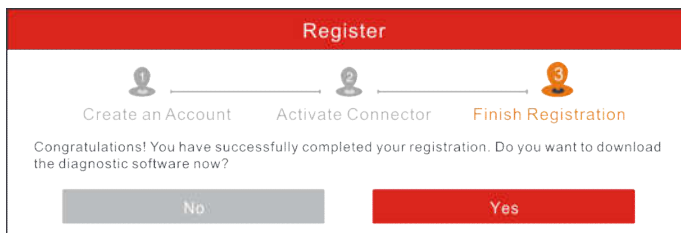


Fig. 4-6

To download the diagnostic software, tap “Yes” to enter the download page.

Tap “No” to download and install it later.

On download 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.

Notes:

- 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.
- To use the VINScan function, you have to download the corresponding diagnostic software and AutoSearch file.

B. 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.

Note: The X-431 PRO 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 instructions to set a new password.

4.2.2 Job menu

It mainly includes the following items:

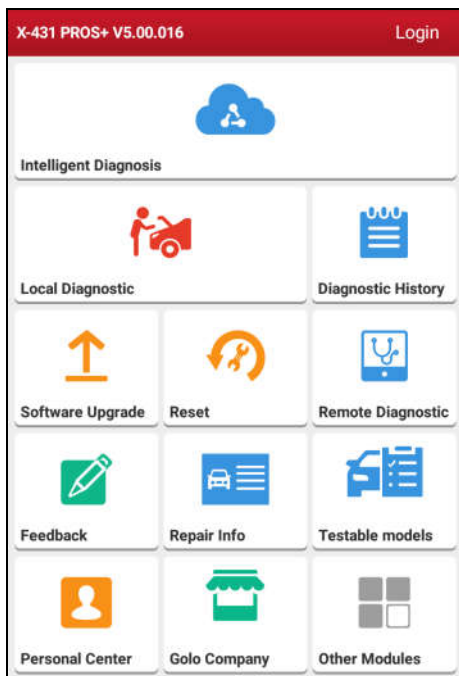


Fig. 4-7

Name	Description
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.
Local Diagnosis	To diagnose a vehicle manually.
Diagnostic History	Generally once a vehicle diagnosis is performed, X-431 PRO will automatically save every details of diagnostic process. This function provides a quick access to the tested vehicles and users can resume from the last

	operation, without the necessity of starting from scratch.
Software Upgrade	To update vehicle diagnostic software and APK.
Reset	To perform all kinds of common repair & maintenance items, including electronic throttle position reset, ABS bleeding, oil lamp reset 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.
Diagnostic Feedback	To feed back the recent 20 diagnostic logs to us for issue analysis.
Repair Info	Abundant maintenance data are available, which helps repair professionals diagnose and repair vehicles efficiently, accurately and profitably.
Testable Models	To view all the vehicle models that the X-431 PAD III covers.
Personal Center	To manage my connector, my reports, change password, configure wireless Wi-Fi printer, configure system settings and logout etc.
golo Business Manager	A business expansion and customer management platform developed exclusively for repair shops, on which you can develop new business, manage golo customers, monitor customer's vehicle real-time status, consult vehicle issues and provide remote assistance etc. It is unquestionably beneficial to increase customer's retention and boost shop revenue.
Other Modules	Includes How-To videos, product manual and FAQ.

4.2.3 Vehicle menu layout

After downloading the diagnostic software, you can go to "Local Diagnosis" to check if all software are completely downloaded and installed.

Tap "Local Diagnosis", a screen similar to the following figure appears:

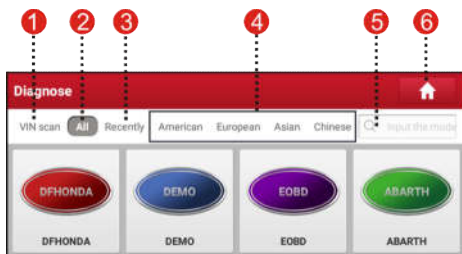


Fig. 4-8

- 1 **VINScan** button: Tap it to scan the Vehicle Identification Number (VIN) code of your vehicle. OBD VIN and INPUT VIN are included. This function does not apply to the commercial vehicles.

*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.






-
- 2 **All** Tab: Displays all the vehicle makes in the vehicle menu.
-
- 3 **Recently** Tab: Displays all the recently tested vehicle makes.
-
- 4 Vehicle region buttons: Tap different buttons to switch to corresponding vehicles.
-
- 5 Search bar: Enables you to use the virtual keyboard to quickly locate the vehicle model. Input the desired vehicle model to start searching.
-
- 6 Home Button: Returns to the Job menu.
-

4.2.4 Diagnostics toolbar

The diagnostics toolbar contains a number of buttons that allow you to print the displayed data or make other controls. It is displayed on the upper right corner of the screen and goes through the whole diagnostic session. The table below provides a brief description for the operations of the diagnostics toolbar buttons:



Fig. 4-9

Name	Button	Description
Home		Returns to Job menu screen.
Print		Tap to print the current screen. To perform printing, you need to purchase an extra Wi-Fi printer manufactured by LAUNCH separately and then properly configure the wireless printer following the steps described in Chapter 9.8.3.
Testable Model		Inquires the vehicle models that the X-431 PRO supports.
Personal Center		Quick access to personal center.
Exit		To exit the diagnostic application.

4.3 Connections

4.3.1 Preparation

Normal testing conditions

- Turn on the vehicle power supply.
- Throttle should be in a closed position.

4.3.2 DLC location

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

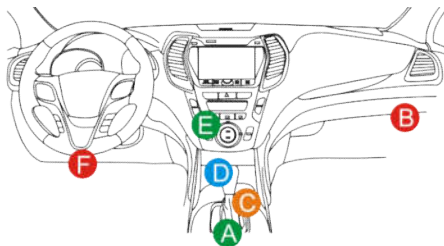


Fig. 4-10

4.3.3 Vehicle connection

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.
2. 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 PRO tablet, and the other end to AC outlet.
 - B. Internal battery pack

For non-OBDII vehicle, proceed as follows:

1. Locate vehicle's DLC socket.
2. Select the corresponding non-16pin connector.
3. Plug the non-16pin end of the connector into the DLC socket, 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:

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.

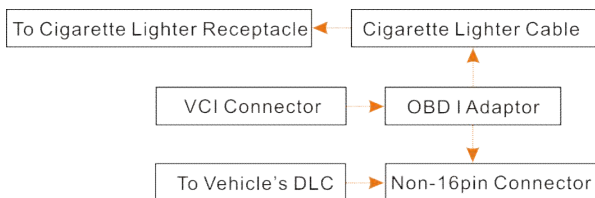


Fig. 4-11

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

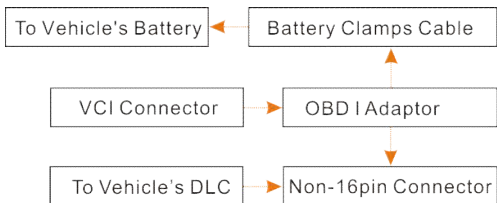


Fig. 4-12

4.4 Bluetooth Setting

There are two kinds of ways available for X-431 PRO to pair with the VCI connector.

1. Connect one end of the USB cable (optional) to the Mini USB port of the VCI connector.
2. Connect the other end to the USB port of the PC. The power indicator of the VCI connector lights up.
3. Enter Bluetooth setting screen by tapping "Settings" --> "Bluetooth", slide the Bluetooth switch to ON and X-431 PRO starts searching for all available Bluetooth device.

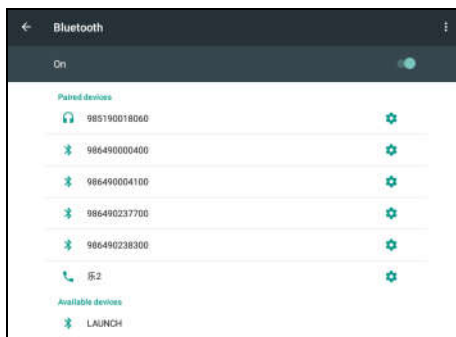


Fig. 4-13

4. Tap the desired VCI connector to pair and match. By default, the Bluetooth name of the connector is 98*****00 (where ***** stands for 8 digits).
5. If the Bluetooth pair request pops up on the screen, enter the request pin code (default code: 0000 or 1234).
6. Once the connector is paired with the X-431 PRO handset, it will be shown under the paired device tab.

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

5 Diagnosis

5.1 Intelligent Diagnosis

Through simple Bluetooth communication between the X-431 PRO handset and VCI connector, 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 VCI connector is properly connected to the vehicle's DLC. For detailed connection, see Chapter 4.4.3 "Vehicle Connection".
- 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.

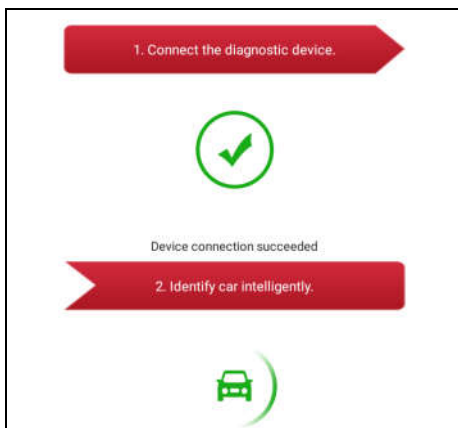


Fig. 5-1

Note: If the VCI connector is not paired up with the X-431 PRO handset before doing this step, a prompt message box will appear:

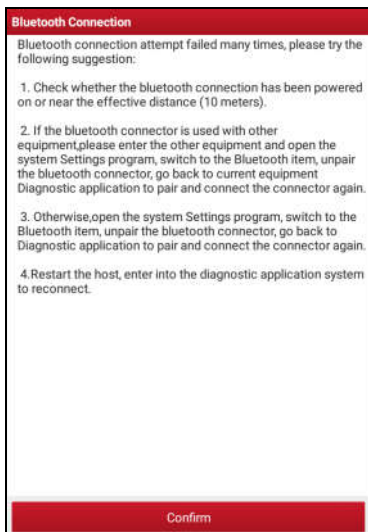


Fig. 5-2



Fig. 5-3

Check all the possible reasons of Bluetooth connection failure carefully, and then tap "Confirm" to enter Fig. 5-3.

If the VCI connector was once used with other devices, you need to cancel the pairing of the connector first via either one of the following ways:

- On the Android's home screen, tap "Settings" -> "Bluetooth" -> Choose the desired VCI connector from the Paired list. Tap "⚙️", and then tap "FORGET" to unpair it.
- Tap "Personal Center" -> "Diagnostic Connector Connection Management" -> Tap "Deactivate matching".

In Fig. 5-3, tap "Scan" to start searching for the VCI connector and pairing up with it.

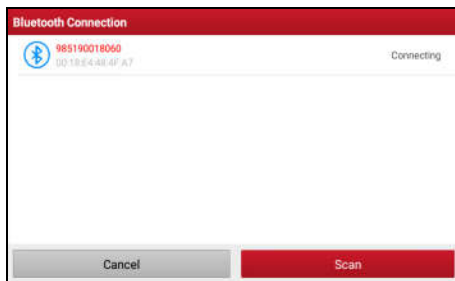


Fig. 5-4

2. Once pairing is complete, the handset starts reading the vehicle VIN.
- A. If the VIN can be found from the remote server database, a screen similar to Fig. 5-5 displays:

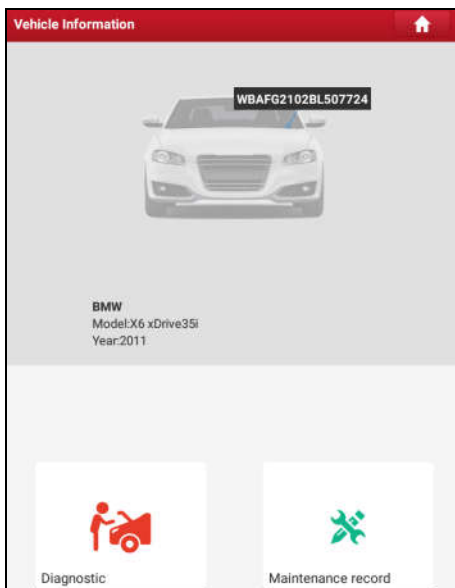


Fig. 5-5

- 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”.

Maintenance record			
2017 10/16	Number of diagnostic systems:34 Number of DTCs:0	17:48:39	View record
	Number of diagnostic systems:34 Number of DTCs:2	14:15:46	View record
	Number of diagnostic systems:4 Number of DTCs:0	11:49:48	View record
	Number of diagnostic systems:6 Number of DTCs:0	11:47:31	View record
2017 10/14	Number of diagnostic systems:34 Number of DTCs:2	09:35:25	View record
2017 10/11	Number of diagnostic systems:1 Number of DTCs:0	11:43:13	View record
	Number of diagnostic systems:34 Number of DTCs:2	09:12:23	View record
2017 09/30	Number of diagnostic systems:34 Number of DTCs:2	14:51:40	View record
BMW X6 xDrive35i 2011 VIN WBAF02102BL507724			Quick access

Fig. 5-6

- Tap “View record” to view the details of the current diagnostic report.
- 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.

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

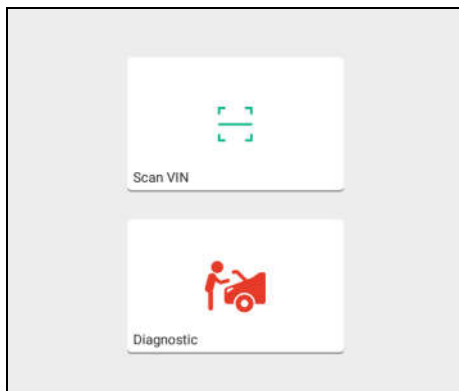


Fig. 5-7

- Tap “Diagnostic” to launch the Local Diagnosis module and start a new diagnostic session. Refer to Chapter 5.2 for detailed diagnostic operations.
- Tap “Scan VIN”, a screen similar to the following appears:

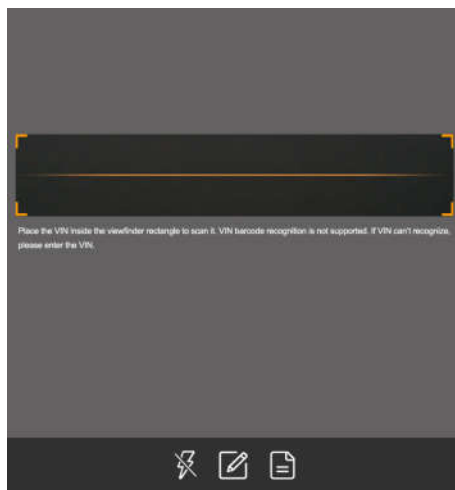





Fig. 5-8

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 identify it, tap  to enter it manually.

Note: 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.

- To turn the flash on, tap .

After scanning, the screen automatically displays the result.

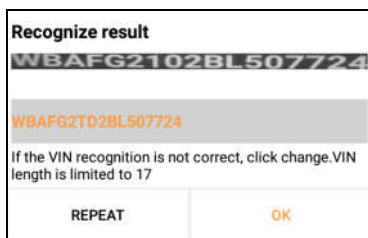


Fig. 5-9

- 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. 5-5.
- To scan it again, tap "REPEAT".

5.2 Local Diagnosis

Tap "Local Diagnosis" to enter the vehicle selection page.

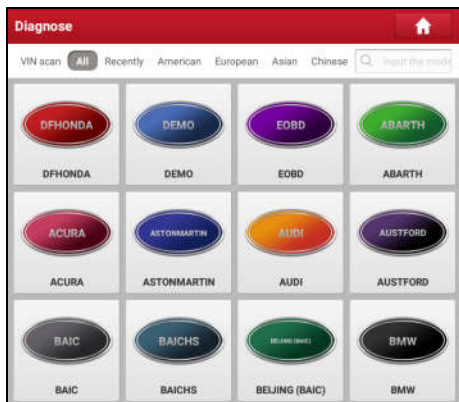


Fig. 5-10

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.

In Fig. 5-10, tap "VINScan", the screen displays as follows:

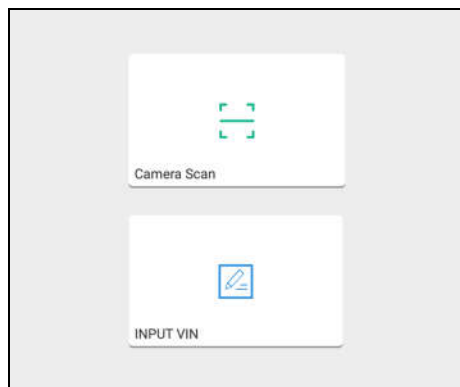


Fig. 5-11

A. Camera Scan: In this mode, the VCI connector should be plugged into the vehicle's DLC first, and then a Bluetooth communication should be

established between X-431 PRO and the vehicle.

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

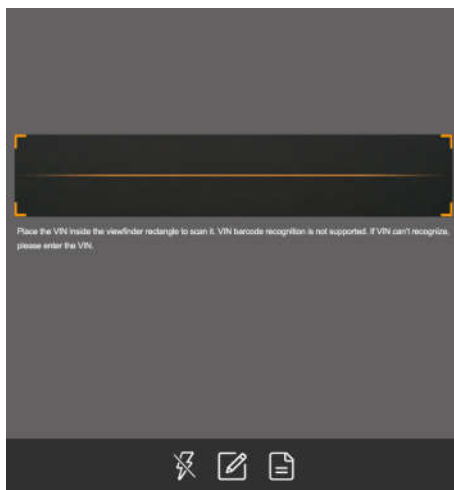





Fig. 5-12

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 recognize it, tap  to enter it manually.
- To turn the flash on, tap .

Once the test vehicle is successfully identified, X-431 PRO will jump to the function selection page directly.

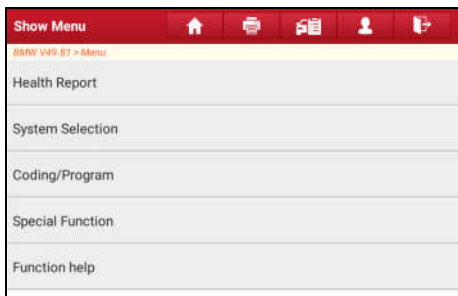



Fig. 5-13

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 a screen similar to Fig. 5-14 will appear:

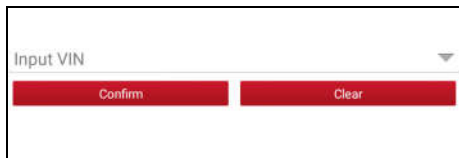


Fig. 5-14

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). **Select diagnostic software version:** Tap the "DEMO" to go to Step 2. (Note: If more than one version is available on this handset, it will be listed on the screen.)

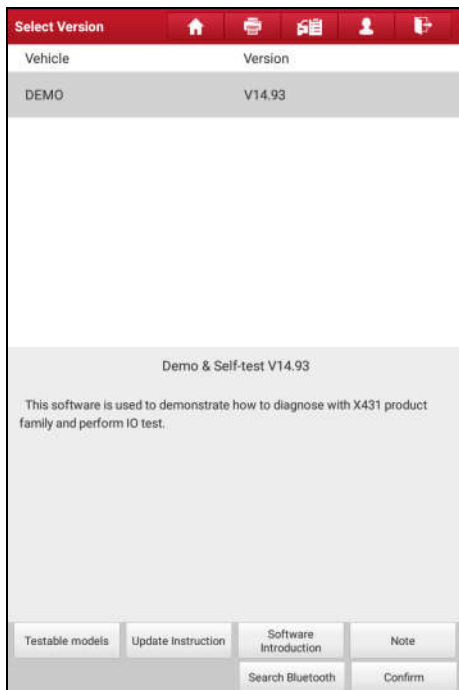


Fig. 5-15

On-screen Buttons:

Testable models: Tap to view the vehicle models that the current diagnostic software covers.

Update instruction: Tap to view the optimized items and enhancements.

Software introduction: Tap to check the software function list.

Note: Tap to read some precautions on using the current diagnostic software.

Search Bluetooth: Tap to search for the available VCI Bluetooth connector.

Notes:

- No Bluetooth connection is required for DEMO program.
- If a vehicle is tested and no Bluetooth connection is made before diagnosis, tap “Search Bluetooth”, a dialog box similar to the following appears:

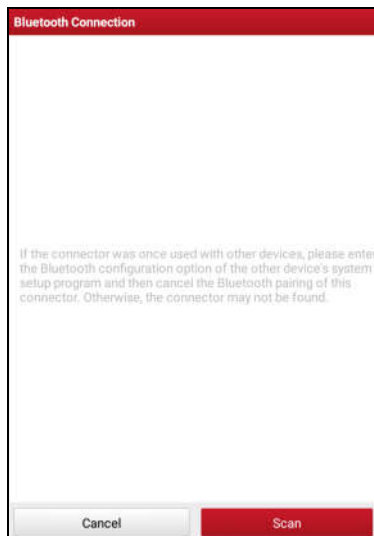


Fig. 5-16

Tap "Scan" to start searching for the VCI connector. Once it is found, tap it to start pairing.

If the X-431 PRO handset has paired with the VCI connector, it will enter Step 2 directly.

Confirm: Tap it to go to next step.

2). Select test item: Select the desired test item to proceed.

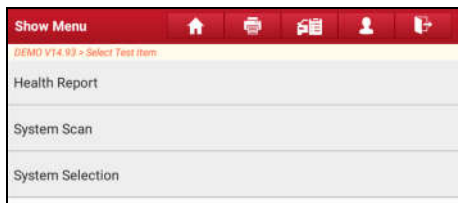
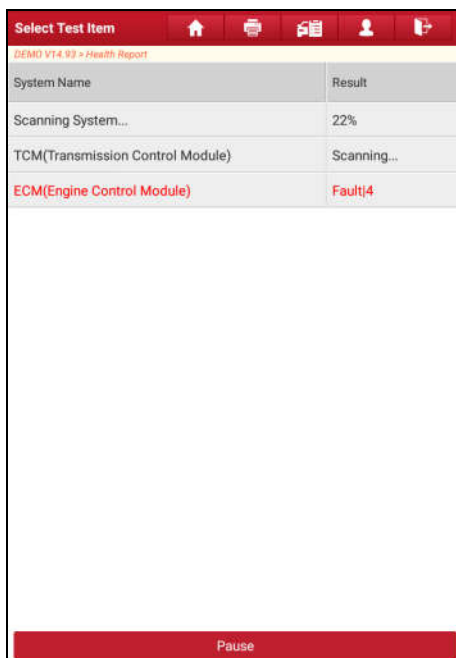


Fig. 5-17

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 and the screen displays as follows:

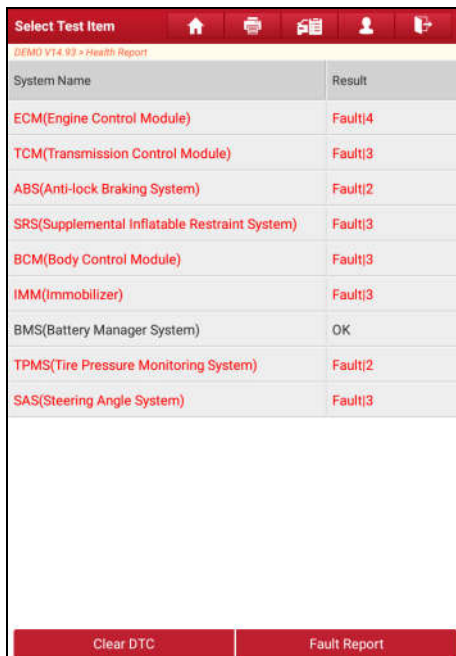


System Name	Result
Scanning System...	22%
TCM(Transmission Control Module)	Scanning...
ECM(Engine Control Module)	Fault 4

Fig. 5-18

(To stop the system scanning, tap “Pause”).

Once the scanning is complete, a screen similar to the following appears:



The screenshot shows a mobile application interface with a red header bar containing the text 'Select Test Item' and several navigation icons. Below the header, the text 'DEMO V14.93 > Health Report' is displayed. The main content is a table with two columns: 'System Name' and 'Result'. The table lists various vehicle systems and their diagnostic status. At the bottom of the screen, there are two red buttons: 'Clear DTC' and 'Fault Report'.

System Name	Result
ECM(Engine Control Module)	Fault 4
TCM(Transmission Control Module)	Fault 3
ABS(Anti-lock Braking System)	Fault 2
SRS(Supplemental Inflatable Restraint System)	Fault 3
BCM(Body Control Module)	Fault 3
IMM(Immobilizer)	Fault 3
BMS(Battery Manager System)	OK
TPMS(Tire Pressure Monitoring System)	Fault 2
SAS(Steering Angle System)	Fault 3

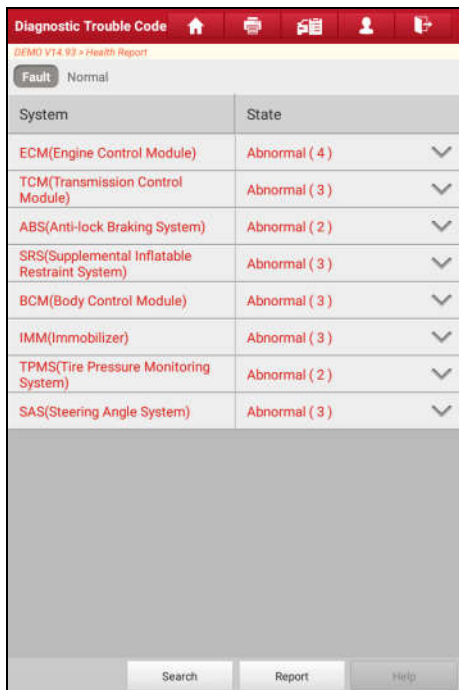
Fig. 5-19

In Fig. 5-19, the tested system with fault code appears in red and the system with OK displays in black (normally).

On-screen Buttons:

Clear DTC: Tap to clear the existing diagnostic trouble codes.

Fault Report: Tap to view the health report in details.



Diagnostic Trouble Code

DEMO V14.93 > Health Report

Fault: Normal

System	State
ECM(Engine Control Module)	Abnormal (4)
TCM(Transmission Control Module)	Abnormal (3)
ABS(Anti-lock Braking System)	Abnormal (2)
SRS(Supplemental Inflatable Restraint System)	Abnormal (3)
BCM(Body Control Module)	Abnormal (3)
IMM(Immobilizer)	Abnormal (3)
TPMS(Tire Pressure Monitoring System)	Abnormal (2)
SAS(Steering Angle System)	Abnormal (3)

Search Report Help

Fig. 5-20

On-screen Buttons:

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

Report: To save the current data in text format.

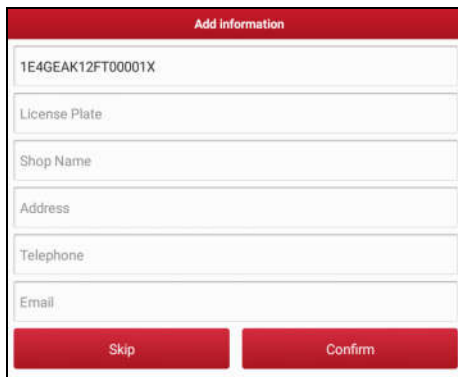


Fig. 5-21

Input the required information, and then tap “Confirm” to save it.

Alternatively you can also set the workshop information in “Personal Center” -> “Settings” -> “Print Information”.

Once you configured the information, it will be automatically generated every time you saved the diagnostic report. All vehicle and workshop information will be appended to the diagnostic report.

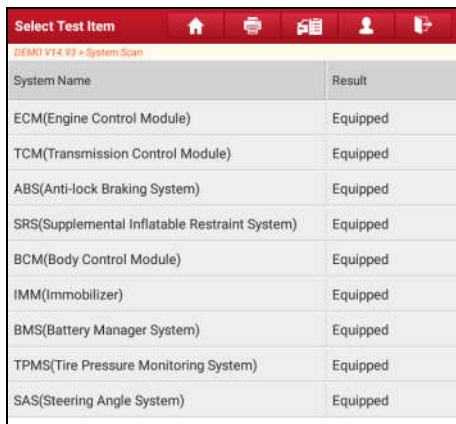
To skip the workshop information, tap “Skip” to go to the next step.

All reports are saved under the tab “Diagnostic Report” in “My Report” from “Personal Center” menu. For details on report operations, please refer to Chapter 9.1 “My Report”.

5.2.2 System Scan

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

In Fig. 5-17, tap “System Scan”, the system start scanning the systems. Once the scanning is complete, the screen will display the result. See Fig. 5-22.



The screenshot shows a mobile application interface with a red header bar containing the text "Select Test Item" and several navigation icons. Below the header, the text "DEMO V14.93 > System Scan" is displayed. The main content is a table with two columns: "System Name" and "Result".

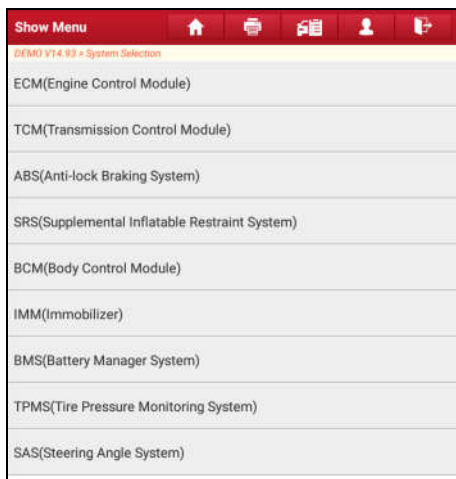
System Name	Result
ECM(Engine Control Module)	Equipped
TCM(Transmission Control Module)	Equipped
ABS(Anti-lock Braking System)	Equipped
SRS(Supplemental Inflatable Restraint System)	Equipped
BCM(Body Control Module)	Equipped
IMM(Immobilizer)	Equipped
BMS(Battery Manager System)	Equipped
TPMS(Tire Pressure Monitoring System)	Equipped
SAS(Steering Angle System)	Equipped

Fig. 5-22

Tap the desired system to advance to the test function selection page. For detailed operations on test function, please refer to Chapter 5.2.3.

5.2.3 System Selection

This option allows you manually select the test system and function step by step. In Fig. 5-17, tap "System Selection", the screen displays as follows:



The screenshot shows a mobile application interface with a red header bar containing the text "Show Menu" and several navigation icons. Below the header, the text "DEMO V14.93 > System Selection" is displayed. The main content is a list of system names, each on a separate line.

ECM(Engine Control Module)
TCM(Transmission Control Module)
ABS(Anti-lock Braking System)
SRS(Supplemental Inflatable Restraint System)
BCM(Body Control Module)
IMM(Immobilizer)
BMS(Battery Manager System)
TPMS(Tire Pressure Monitoring System)
SAS(Steering Angle System)

Fig. 5-23

Swipe the screen from the bottom to view the vehicle system on the next page. Tap the desired system (take “ECM” for example) to jump to the test function page.

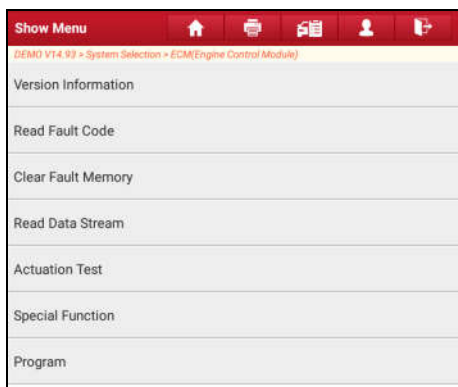


Fig. 5-24

Note: Different vehicle has different diagnostic menus.

A. Version Information

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

In Fig. 5-24, tap “Version Information”, the screen displays as Fig. 5-25.



Fig. 5-25

Tap “OK” to confirm and exit.

B. Read Fault Code

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

In Fig. 5-24, tap “Read DTC”, the screen will display the diagnostic result.

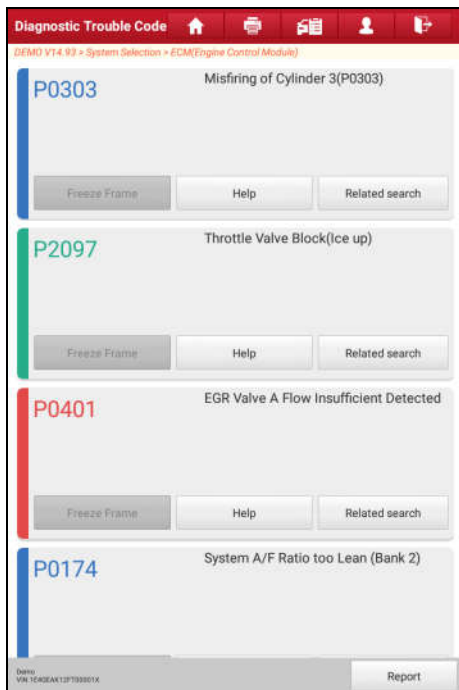


Fig. 5-26

On-screen Buttons:

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

Help: Tap to view the help information.

Related Search: Tap it to search for more information about the current DTC online.

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. For details on report operations, please refer to Chapter 9.1 “My Report”.

C. 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. 5-24, 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.

D. Read Data Stream

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

In Fig. 5-24, tap "Read Data Stream", the system will display data stream items.

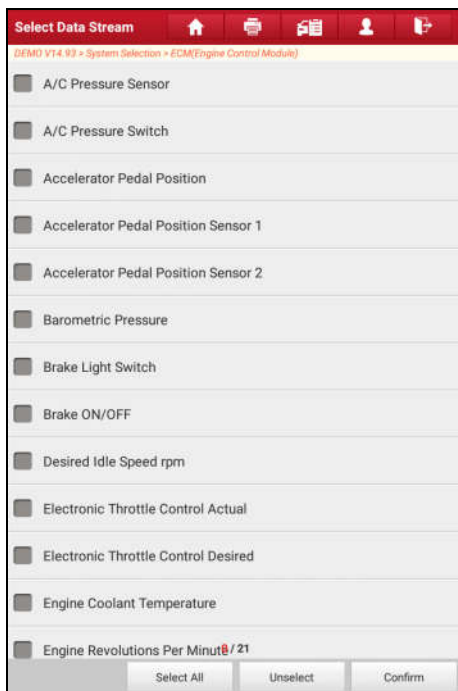


Fig. 5-28

On-screen Buttons:

Select All: 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.

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.

Data Stream				
DEMO V14.93 • System Selection • ECM(Engine Control Module)				
Name	Value	Standard value	Unit	
A/C Pressure Sensor	675.71	0-1000	Kpa	
A/C Pressure Switch	Closed (High)			
Accelerator Pedal Position	1922	0-100	%	
Accelerator Pedal Position Sensor 1	1268	0-5	V	
Accelerator Pedal Position Sensor 2	1268	0-10	V	
Barometric Pressure	6731	80-110	Kpa	
Brake Light Switch	Off			
Brake ON/OFF	Off			
Desired Idle Speed rpm	1264	600-1400	rpm	
Electronic Throttle Control Actual	24.58	1-100	Deg	
Electronic Throttle Control Desired	24.58	0-100	Deg	
Engine Coolant Temperature	9	-40-100	degree C	
Combine		Report	Record	Help

Fig. 5-29

Notes:

1. If the value of the data stream item is out of the range of the standard (reference) value, the whole line will display in red. If it complies with the reference value, it displays in blue (normal mode).

2. The indicator 1/X shown on the bottom of the screen stands for the current page/total page number. Swipe the screen from the right/left to advance/return to the next/previous page.

There are 3 types of display modes available for data viewing, allowing you to view various types of parameters in the most suitable way.

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

On-screen Buttons:

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

Name	Value	Standard value	Unit	
<input type="checkbox"/> A/C Pressure Sensor	5378.55	0-1000	Kpa	
<input type="checkbox"/> A/C Pressure Switch	Closed (High)			
<input type="checkbox"/> Accelerator Pedal Position	96.88	0-100	%	
<input type="checkbox"/> Accelerator Pedal Position Sensor 1	61.68	0-5	V	
<input type="checkbox"/> Accelerator Pedal Position Sensor 2	61.68	0-10	V	
<input type="checkbox"/> Barometric Pressure	158.29	80-110	Kpa	
<input type="checkbox"/> Brake Light Switch	Off			
<input type="checkbox"/> Brake ON/OFF	Off			
<input type="checkbox"/> Desired Idle Speed rpm	4428	600-1400	rpm	
<input type="checkbox"/> Electronic Throttle Control Actual	122.58	1-100	Deg	
<input type="checkbox"/> Electronic Throttle Control Desired	122.58	0-100	Deg	
<input type="checkbox"/> Engine Coolant Temperature	285	-40-100	degree C	

Demio V14 R3 • System Selection • ECM(Engine Control Module)
Demio V14 R3 • 1/1788000000

Confirm Back

Fig. 5-30

Tap it to select the desired items (maximum 4 items can be selected), and then tap “Confirm” to view the merged items in graph.

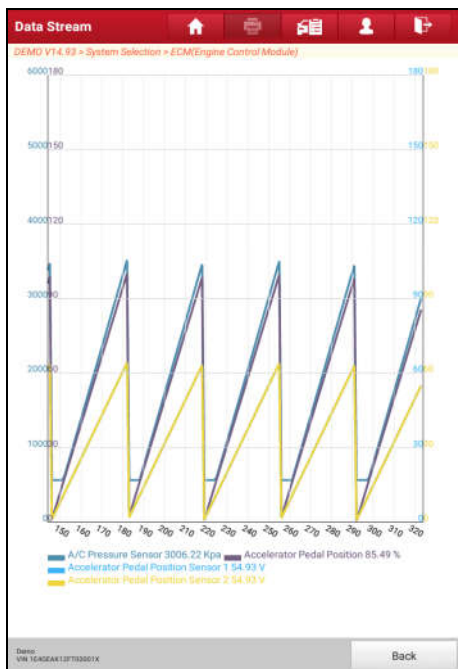



Fig. 5-31

Report: To save the current data in text format. All reports are saved under the “Diagnostic Report” tab of “My Report” in “Personal Center”. For details on report operations, please refer to Chapter 9.1 “My 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 record starting time and ends with .x431 (To differentiate between files, please configure the accurate system time). The file is stored under the “Diagnostic Record” tab of “My Report” in “Personal Center”.

Help: Tap to view the help information.

 **Graph:** Tap it to view the waveform.

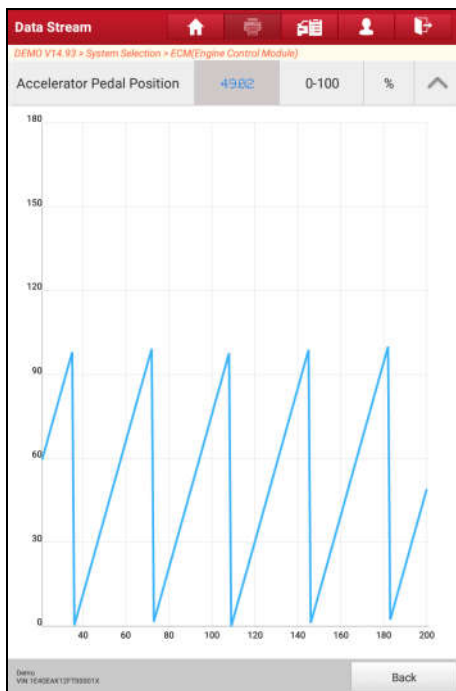


Fig. 5-32

E. 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 PRO 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.

In Fig. 5-24, tap "Actuation Test", the system will display as follows:

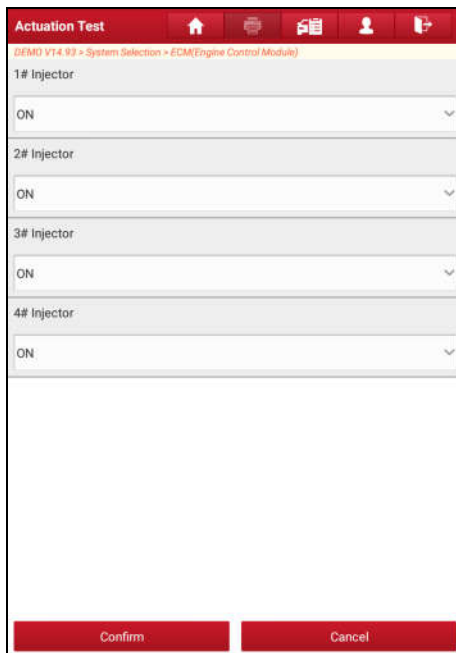


Fig. 5-33

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

5.3 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 Job menu, the screen appears blank by default.

5.3.1 Interface Layout

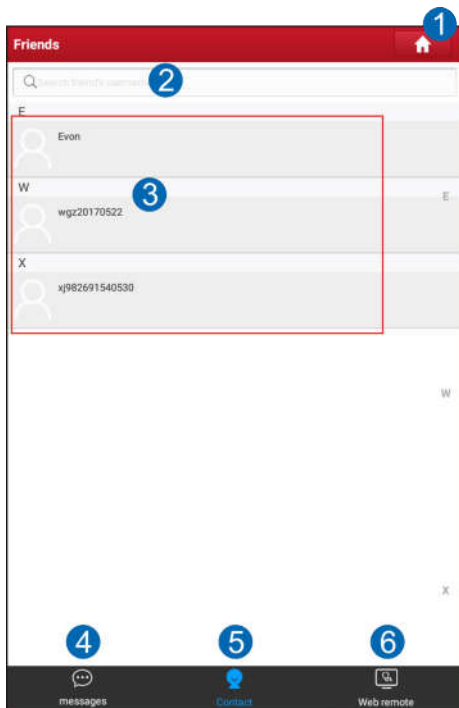


Fig. 5-34

1	Home button	Tap it to navigate to the Job menu screen.
2	Search bar	Directly input the username of the X-431 PRO to start searching, and then tap the desired one to add it into your friend list.
3	Friend list display area	By default it appears blank.
3	Message tab	Once an incoming message reaches, a red dot will appear on the upper right corner of the tab.
4	Contact tab	Tap to enter the friend list.

5	WEB Remote switch	Tap to slide the switch to ON, the X-431 PRO 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 PRO remotely.
---	-------------------	--

5.3.2 Add Friends

Tap “Contact” 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 starts 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:

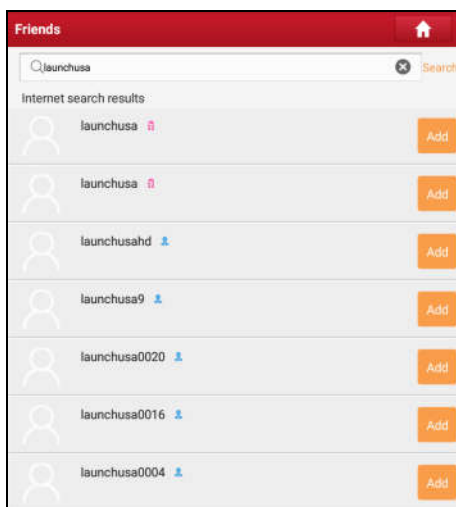


Fig. 5-35

Tap “Add”, a dialog box pops up:



Fig. 5-36

Tap “CONFIRM” to send your request.

Once the partner receives the request, a beep will sound. Tap the “Message” tab:

- 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.

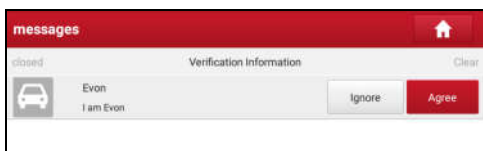


Fig. 5-36

5.3.3 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.

After adding your friends, tap the desired one’s photo to enter a screen similar to the following:

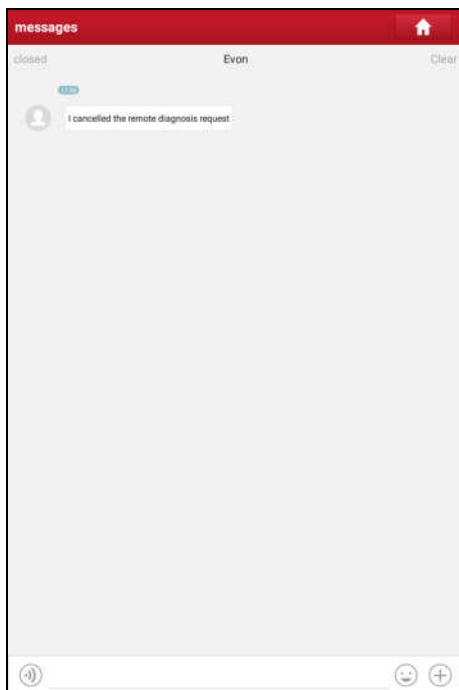


Fig. 5-37

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 send the emoji.

Tap + to call out more function options.

Tap “Clear” to delete all the partner’s dialog logs.

Tap “Close” to close the current dialog.

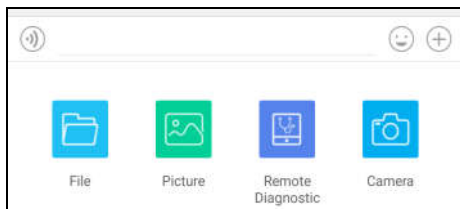


Fig. 5-38

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 5.3.4.

Camera: Open camera to take pictures.

5.3.4 Launch Remote Diagnosis (Device-To-Device)

The X-431 PRO handset is allowed to launch remote diagnosis with other diagnostic tools (including but not limited to the X-431 PRO) 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 PRO should be properly connected to the vehicle's DLC and a successful communication is required.

In Fig. 5-38, tap "Remote Diagnostic", a pull-down menu including the following options appears:

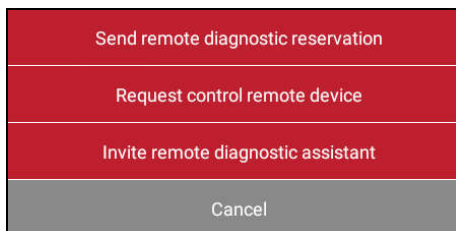

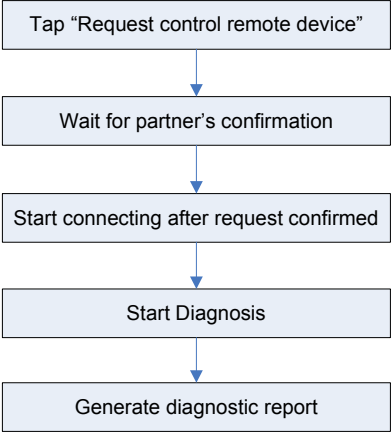

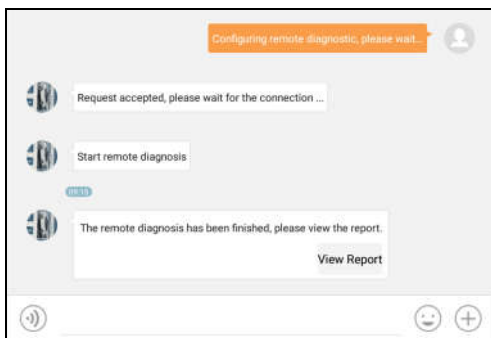


Fig. 5-39

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"> • Remote diagnosis has the same diagnostic steps as manual diagnosis. • In process of remote diagnosis, tap the  button to send a voice message. • 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.  <pre> graph TD A[Tap "Request control remote device"] --> B[Wait for partner's confirmation] B --> C[Start connecting after request confirmed] C --> D[Start Diagnosis] D --> E[Generate diagnostic report] </pre>
Invite remote diagnostic assistant	<p>If you need support, just use this option to invite a technician to perform a remote control on your tool.</p> <p>*Notes:</p> <ul style="list-style-type: none"> • 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”.



Tap "Invite remote diagnostic assistant"

Choose the desired diagnostic software

Wait for partner's confirmation

Start connecting after request confirmed

Start Diagnosis

Generate diagnostic report

Cancel

To cancel this operation.

5.3.5 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.

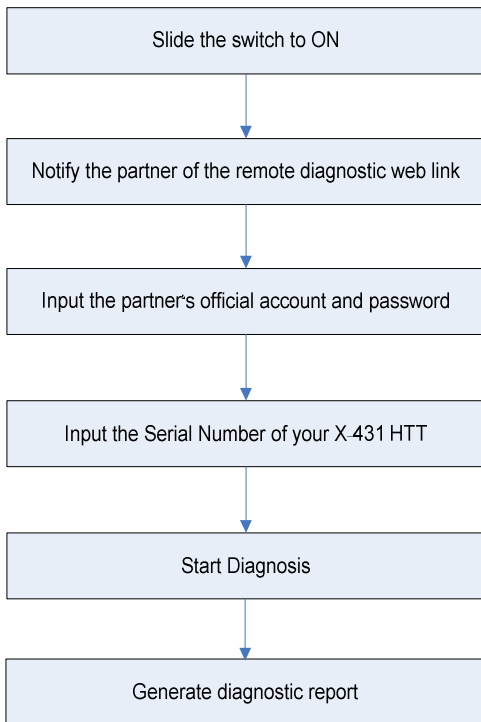


Fig. 5-40

Tap the “Web Remote” tab, the screen displays as follows:



Fig. 5-41

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 PRO 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. 5-42

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. 5-43

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.

5.4 How to view diagnostic history?

Generally once a vehicle diagnosis is performed, X-431 PRO will record the every details of diagnostic process. The History function provides direct access to the previously tested vehicles and users can resume from the last operation, without the necessity of starting from scratch.

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

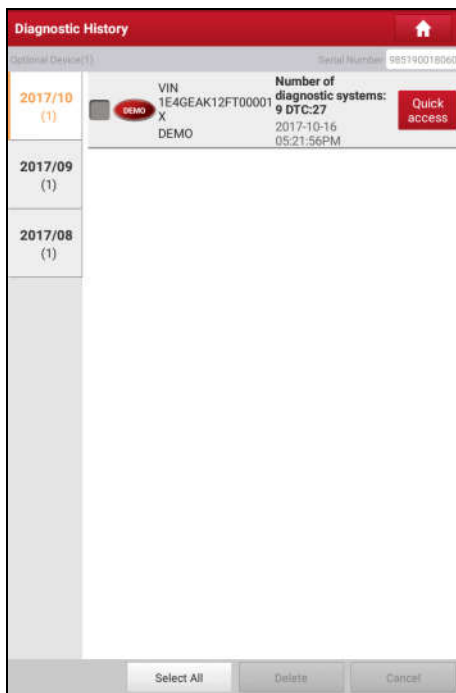


Fig. 5-44

- 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.

5.5 How to feedback diagnostic logs?

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

Tap “Feedback”, a pop-up message will appear:

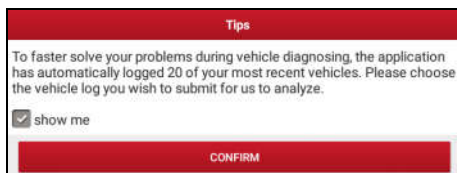


Fig. 5-45

Tap “CONFIRM” to choose the vehicle diagnostic record page.

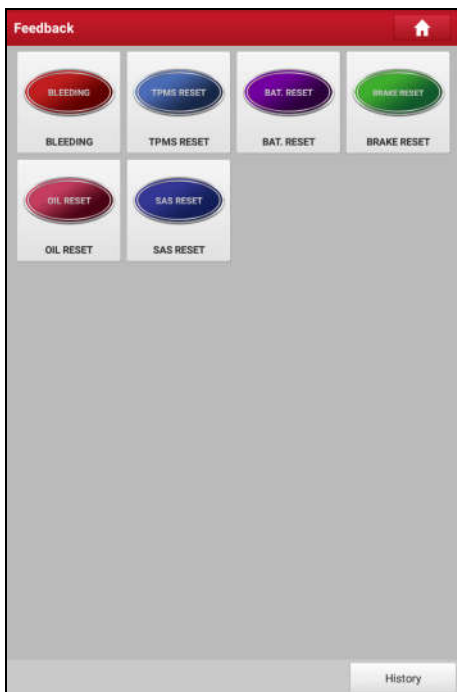


Fig. 5-46

A). Tap the desired vehicle to enter the diagnostic log selection page.

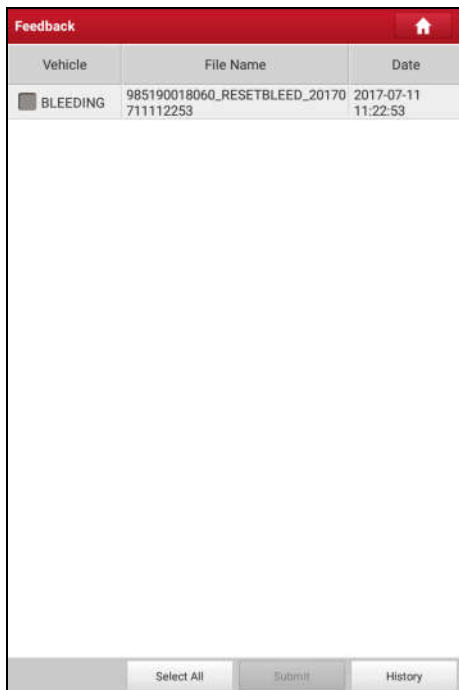
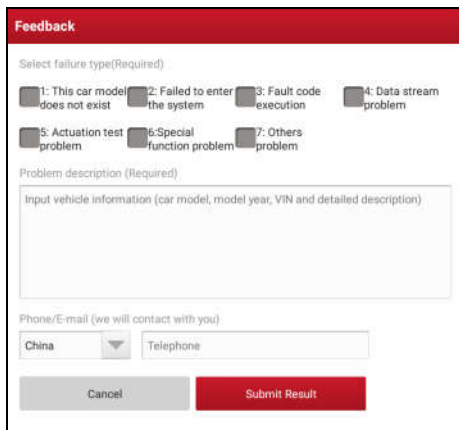


Fig. 5-47

Select the check box and tap “Submit”. A screen similar to the following will appear:



Feedback

Select failure type(Required)

1: This car model does not exist 2: Failed to enter the system 3: Fault code execution 4: Data stream problem

5: Actuation test problem 6: Special function problem 7: Others problem

Problem description (Required)

Input vehicle information (car model, model year, VIN and detailed description)

Phone/E-mail (we will contact with you)

China Telephone

Cancel Submit Result

Fig. 5-48

Choose the failure type and fill in the detailed failure description in the blank text box and telephone or email address. After inputting, tap “Submit Result” to send it to us.

B). Tap “History”, the diagnostic logs marked with different color indicate the process status of the diagnostic feedback. Green/Red/Blue means the diagnostic feedback is fixed/pending/in process respectively.

6 Special (Reset) Function

In addition to amazing & powerful diagnostic function, X-431 PRO 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

There are two methods to reset service lamp: Manual reset or Auto reset. Auto reset follows the principle of sending command from the tool to vehicle's ECU to do resetting. While using manual reset, users just follow the on-screen instructions to select appropriate execution options, enter correct data or values, and perform necessary actions, the system will guide you through the complete performance for various service operations.

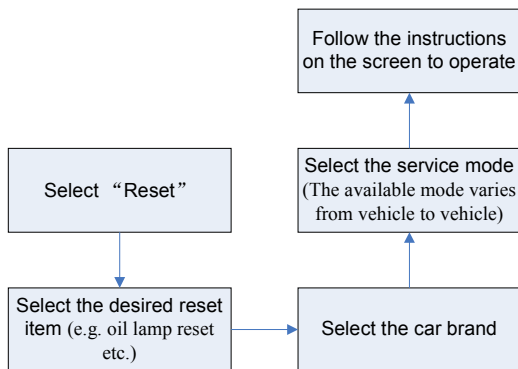


Figure 6-1

6.1 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.

6.2 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.

6.3 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.

6.4 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.

6.5 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.

6.7 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.

6.7 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.

6.8 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.

6.9 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.

6.10 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.

6.11 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 Software Update

If you did not download the software in process of product registration or a pop-up message prompting you that some new software can be updated, you may use this option to download it or keep it synchronized with the latest version.

Tap “Software Upgrade” on the Job menu to enter the update center.

Update			
125 Upgradable Software		Serial Number 985190018060	
Vehicle	Current Version	Update Version	Installation package size
<input checked="" type="checkbox"/> AFS RESET		V10.51	10.9 MB
<input checked="" type="checkbox"/> Aston Martin		V10.10	1.1 MB
<input checked="" type="checkbox"/> AUDI		V28.13	188.8 MB
<input checked="" type="checkbox"/> BAIC		V10.51	3.1 MB
<input checked="" type="checkbox"/> BAICHS		V10.07	6.8 MB
<input checked="" type="checkbox"/> BAW		V10.10	1.6 MB
<input checked="" type="checkbox"/> BeiJing Hyundai		V21.38	1.3 MB
<input checked="" type="checkbox"/> BENZ/MAYBACH	V48.71	V48.80	43.1 MB
<input checked="" type="checkbox"/> CH SUZUKI		V17.04	472.4 KB
<input checked="" type="checkbox"/> CHANGAN		V15.95	3.5 MB
<input checked="" type="checkbox"/> CHANGCHENG		V35.61	10.9 MB
<input checked="" type="checkbox"/> CHANGFENG		V20.05	806.3 KB
<input checked="" type="checkbox"/> CHANGHE		V20.11	2.2 MB
<input checked="" type="checkbox"/> CHDAIHATSU		V10.16	3.0 MB
<input checked="" type="checkbox"/> CHRYSLER/DODGE/JEEP		V31.72	13.8 MB
<input checked="" type="checkbox"/> CHRIJIANI		V10.07	1.3 MB

Unselect Update Delete

Fig. 7-1

By default, all diagnostic software is selected. To deselect certain software, tap “Unselect”, and then check the box next to vehicle model. Tap “Update” to start downloading. It may take several minutes to finish it, please be patient to wait. To pause downloading, tap “Stop”. To resume it, tap “Continue”. If network

connection failure occurs, tap “Retry” to try again.

Once download is finished, the software packages will be installed automatically.

8 golo Business Manager

This module is an individual business management application specially developed for repair shops. Before using it, you need to download the application and register a golo business account.

On this platform, you can provide nearby car owners with attentive service to develop new business opportunities, manage technicians and golo customers more efficiently, monitor customer's vehicle running status in real-time manner and perform remote assistance anywhere etc. It is very helpful to increase productivity and boost shop revenue.

Tap “golo” on the Job menu to enter golo business manager account. See Fig. 7-1.

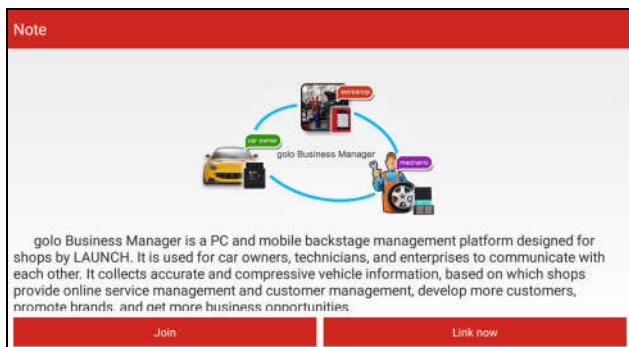
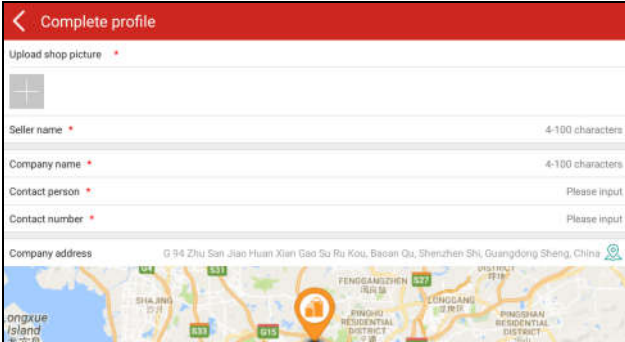


Fig. 8-1

A. If you had no golo business manager account, tap “Join” to enter a screen similar to Fig. 7-2:



Complete profile

Upload shop picture *

Seller name * 4-100 characters

Company name * 4-100 characters

Contact person * Please input

Contact number * Please input

Company address G 94 Zhu San Jiao Huan Xian Gao Su Ru Kou, Baoan Qu, Shenzhen Shi, Guangdong Sheng, China


Fig. 8-2

Fill in the required items:

- To upload the shop picture, tap the + logo to choose the desired photo.
- To locate company address, tap the GPS location icon to obtain it automatically.
- To define the item “Model specialized”, tap the > icon to select the vehicle models.

After entering, tap “Submit” to confirm. “Sign up successfully” will pop up and the system will jump to golo main menu screen.

B. If you have a golo business manager account, tap “Link now” to bind this tool to it.



Link workshop

Account

Login password

Cancel OK

Fig. 8-3

For more detailed operations on this module, please refer to the user manual included within this application.

9 Personal Center

This function allows users to manage personal information and VCI connector.

9.1 My Report

This option is used to view, delete or share the saved reports.

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

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



Fig. 9-1

- To select certain report, check the box before the report. To select all reports, tap “Select All”. To deselect all, tap “Unselect”.
- To share the report with others, select the desired one and then tap “Share”.
- Select the desired report and then tap “Delete” to delete it.
- To change the filename of report, tap “Rename”.

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



Fig. 9-2

Tap the desired one to enter:

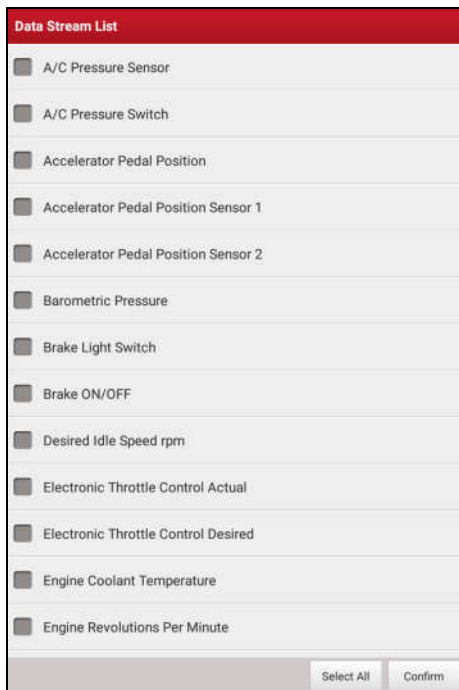












Fig. 9-3

Select the desired data stream items and tap "Confirm" to jump to the playback page:


Diagnostic Record			
Name	Value	Unit	
A/C Pressure Sensor	241325	Kpa	
A/C Pressure Switch	Closed (High)		
Accelerator Pedal Position	6663	%	
Accelerator Pedal Position Sensor 1	441B	V	
Accelerator Pedal Position Sensor 2	441B	V	
Barometric Pressure	12066	Kpa	
Brake Light Switch	On		
Brake ON/OFF	On		
Desired Idle Speed rpm	3300	rpm	
Electronic Throttle Control Actual	8750	Deg	
Electronic Throttle Control Desired	8750	Deg	
Auto Playback(1) temperature	135	degree C	0/30

 Combine
 Value

Frame Playback

Fig. 9-4

On-screen Buttons:

 **Graph** – displays the parameters in waveform graphs.

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

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

Frame Playback – plays back the recorded data stream items frame by frame. Once it is in frame playback mode, this button changes into “Auto Playback”.

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

9.2 My Connector

This option allows you to manage all your activated VCI connectors.

If several VCI 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.

9.3 Diagnostic Connector Connection Management

This option is used for X-431 PRO to deactivate pairing up with the VCI connector via Bluetooth.

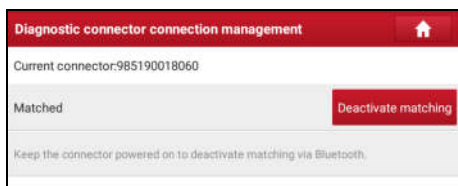


Fig. 9-5

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

9.4 Activate Connector

This item lets you to activate a new VCI connector.

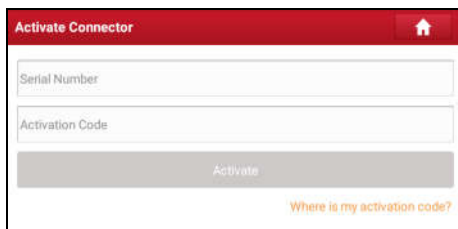


Fig. 9-6

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

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

9.5 Firmware Fix

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

9.6 Profile

Use this item to view and configure personal information.

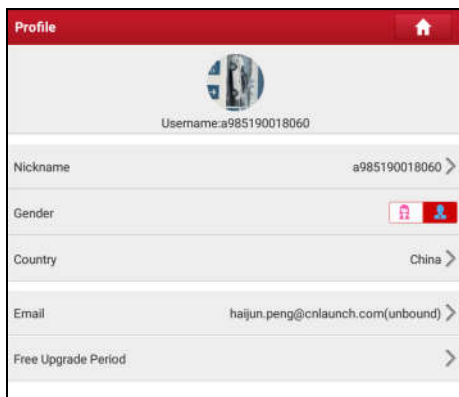


Fig. 9-7

- Tap the user image to change it.
- Tap > next to “Free Upgrade Period” to check the due date of all diagnostic software.

9.7 Change password

This item allows you to modify your login password.

9.8 Settings

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

9.8.1 Units of Measurement

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

9.8.2 Print Information

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

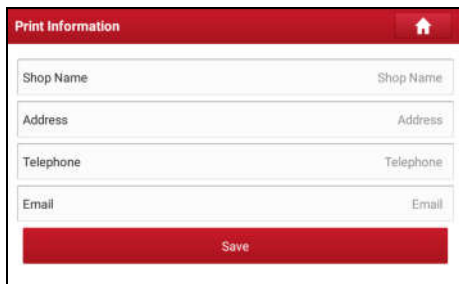


Fig. 9-8

After inputting, tap “Save”.

Once you saved the print information, it will be entered automatically in the “Add Information” box every time you save the diagnostic report.

9.8.3 Launch Printer Set

This option is designed to establish a wireless connection between X-431 PRO 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”.

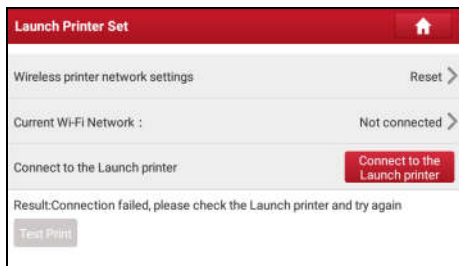


Fig. 9-9

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...

1. Tap “Reset” to configure Wi-Fi printer.

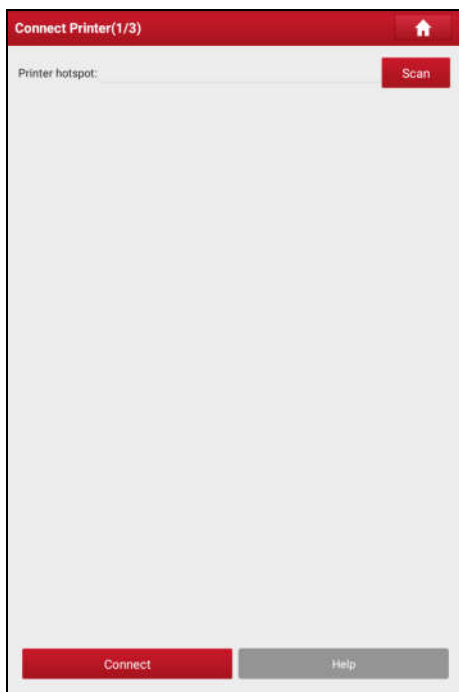


Fig. 9-10

Step 1: Connect the printer:

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

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”.

4. 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.

9.8.4 About

The software version information and disclaimer are included.

9.8.5 Login/Exit from current account

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


To login the system again, tap “Login”.

10 Others


10.1 Email

The function allows you to send and receive email.

10.1.1 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.

10.1.2 Add an email account

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

10.2 Browser

10.2.1 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.

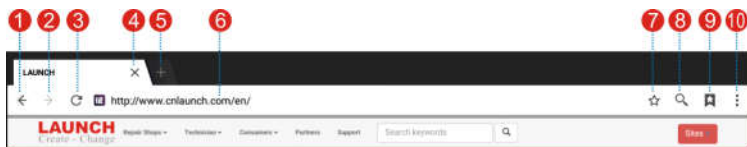


Fig. 10-1

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.

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

10.3 Synchronization

You can transfer media files and APK between the PC and X-431 PRO.

10.3.1 Connect to PC

1. Use the USB cable to connect the X-431 PRO to your PC.
2. Swipe from the top, a message “Connected as a media device” appears.

10.3.2 Run on PC

Perform the following steps:

- Locate the new disc.

- Copy the files.


10.3.3 Install an application

Do the following steps:

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

10.4 Clear Cache

Doing so clears all browsing records and accounts and enables X-431 PRO 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.


11 FAQ

1. How to save power?

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

4. How to reset X-431 PRO?

 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 PRO:

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. How to register your X-431 PRO or new VCI connector?

Note: Before registration, please make sure the network is properly connected.

- A. If this is the first time using the handset, please refer to "Chapter 4.2.1" in the user manual for product registration.
- B. If you have activated a VCI connector before, but bought a new VCI connector due to the loss or other reasons, please follow the below steps to activate:
 1. Tap the application icon on the home screen to launch it.
 2. Tap "Personal Center" -> "Activate Connector".
 3. Input product S/N and activation code, which can be found from the included password envelope, then tap "Activate".
 4. After activation is complete, tap "Personal Center " -> "My Connector" to check if the activated VCI connector is displayed in the connector list or not. Multiple VCI connectors can be bound to one tool. If you intend to use one of the VCI connectors to diagnose or test a vehicle, just switch to the corresponding VCI connector.

6. How to update the APK and diagnostic software?

1. Tap the application icon on the home screen to launch it.
2. Tap "Software Upgrade".
3. Tap "Select all" if all the software needs to be downloaded. To cancel the selection of certain software, just click the check box before it. Tap "Update" on the bottom of the screen to start the download. During the upgrade, please make sure the handset has a stable network connection.

7. How to pair the VCI connector with the X-431 PRO handset?

Users can pair the VCI connector with the X-431 PRO handset via Bluetooth when testing the vehicle or in system settings.

1. Turn the ignition on.
2. Plug the VCI connector (or use the OBD-II extension cable to connect the VCI connector and the VCI) into the vehicle's DLC.
3. On the home screen, tap **Setting -> Bluetooth**.
4. Set Bluetooth "ON". X-431 PRO will search for all the available Bluetooth

devices automatically.

5. Tap the name of the connector (98*****00, where ***** stands for 8 digits) to start pairing. Input the Bluetooth request code (default value: 0000 or 1234) if necessary. Once the pairing is properly done, the system will display it as a paired device.

8. How to set up a network connection?

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

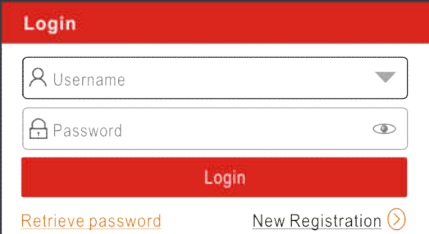
Note: Once WLAN is set as ON, X-431 PRO will consume more power. While WLAN keeps unused, please turn it off to conserve battery power.

1. On the home screen, tap **Settings** -> **Wi-Fi**.
2. Tap or slide the Wi-Fi switch to ON, X-431 PRO starts searching 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).

9. How to retrieve the login password?

Please follow below steps to proceed in case you forgot the login password:

1. Tap the application icon on the home screen to launch it.
2. Tap [Login] button on the upper right corner of the screen.



The screenshot shows a login interface with a red header labeled "Login". Below the header are two input fields: "Username" with a person icon and a dropdown arrow, and "Password" with a lock icon and an eye icon. A red "Login" button is positioned below the password field. At the bottom, there are two links: "Retrieve password" in orange text and "New Registration" in blue text with a right-pointing arrow icon.

3. Tap "Retrieve password".
4. Input product S/N and follow the on-screen prompts to retrieve the password.

10. The data and time of X-431 PRO can not be set.

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

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.