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Important Safety Precautions

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

- Never collide, throw, or puncture X-431 Torque, 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 Torque in exceptionally cold or hot, dusty, damp or dry environments.
- In places using X-431 Torque may cause interference or generate a potential risk, please turn it off.
- X-431 Torque 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 Torque into apparatus with strong electromagnetic field.
- Keep X-431 Torque far away from magnetic devices because its radiations can damage the screen and erase the data stored on X-431 Torque.
- DANGER: Do not attempt to replace the internal rechargeable lithium battery. Contact the dealer for factory replacement.
- CAUTION: Please use the included battery and charger. Risk of explosion if the battery is replaced with an incorrect type.
- Do not disconnect power abruptly when X-431 Torque 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 Torque software might fail to work.
- Be aware that accessing network resources can leave your X-431 Torque 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 Torque

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.

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1 Introduction

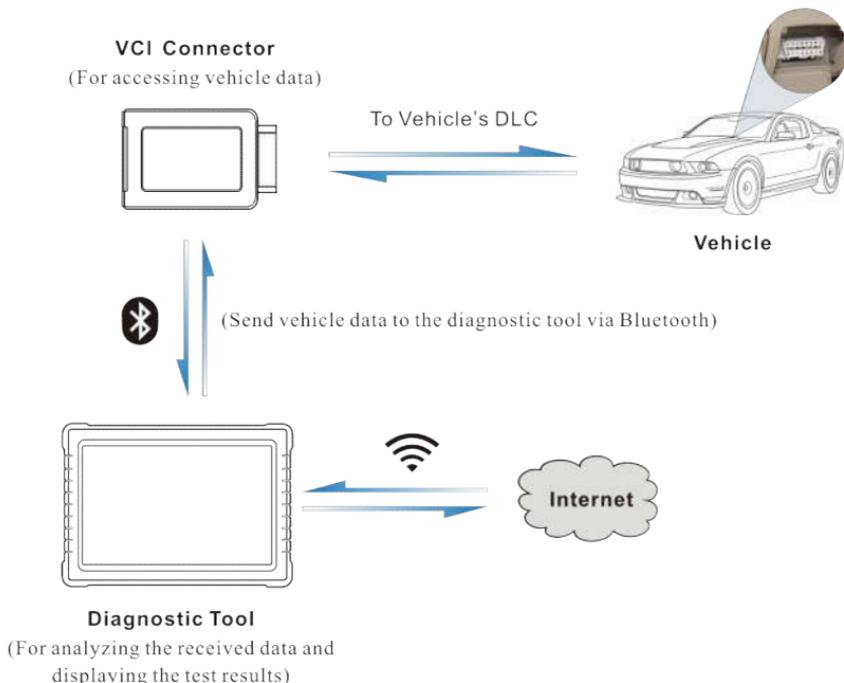
1.1 Product Profile

X-431 Torque 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 Torque 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 Torque adopts a higher performance-price ratio tablet computer, which is equipped with Android 7.1 operating system, 1.4GHz quad core CPU and 10.1" HD display.

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



1.2 Features

1. Diagnose:

- **Local Diagnosis:** VINscan quick test and manual diagnosis are available. Diagnosis functions include: Read DTCs, Clear DTCs, Read Data Stream, Special Functions etc.
 - **I/M Readiness:** I/M refers to Inspection and Maintenance that is legislated by the Government to meet federal clean-air standards. I/M Readiness indicates whether or not the various emissions-related systems on the vehicle are operating properly and are ready for Inspection and Maintenance testing.
 - **Tech-To-Tech:** This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the repair job getting fixed faster.
 - **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.
 - **Repair Info:** Multiple speed dial to professional repair website are available for helping repair professionals diagnose and repair vehicle efficiently, accurately and profitably.
 - **Vehicle Coverage:** Enables you to quickly check which vehicle models are supported.
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 Torque 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

- Wi-Fi (802.11b/g/n)
- Bluetooth 4.0

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 Torque

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

- X-431 Torque 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 Torque 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.

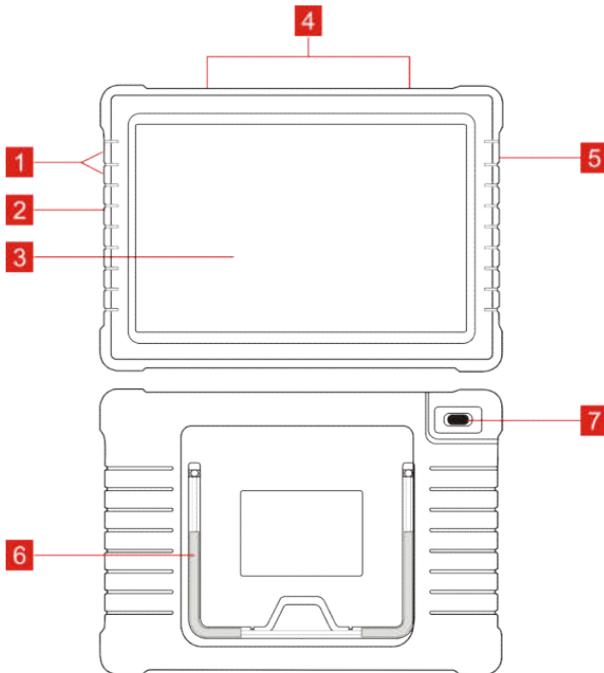


Fig. 2-1 X-431 Torque handset

1	VOLUME +/- Key	To adjust the volume.
<hr/>		
2	POWER Key	In Off mode, press it for 3 seconds to turn the handset on. In On mode: <ul style="list-style-type: none">• 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.
<hr/>		
3	LCD Screen	
<hr/>		
4	Speakers	
<hr/>		
5	USB/Charging Port	<ul style="list-style-type: none">• To connect to AC outlet for charging.• To connect to PC for data exchange.
<hr/>		
6	Adjustable Kickstand	Flip out it to any angle and work comfortable at your desk, or hang it on automotive part.
<hr/>		
7	Rear Camera	

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 Torque handset via Bluetooth.

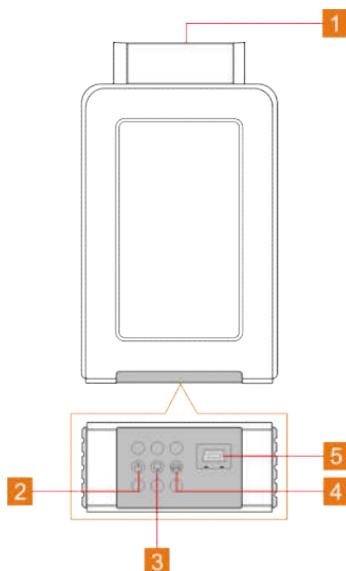


Fig. 1-2 VCI connector

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

No.	Item	Descriptions	Qt.
1	X-431 Torque handset	Indicates the test result.	1
2	VCI connector	Collects the vehicle data and sends it to the X-431 Torque 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 Torque tablet via AC outlet.	1
6	Cigarette lighter cable	To supply power to the non-16pin connector from the vehicle's cigarette lighter receptacle.	(Optional)
7	USB cable	For connecting the X-431 Torque tablet to PC for data transmission or charging.	1
8	OBD I adaptor box	For connecting the VCI connector and non-16pin adaptor cable.	(Optional)
9	Non-16pin adaptor cable kit	To connect to the vehicle equipped with non-OBD II management system.	(Optional)

3 Preparations

3.1 Charging X-431 Torque

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 Torque.
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 Torque.

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 Torque.

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

*Note: You are recommended to set screen lock as "None" since X-431 Torque 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 Torque 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 Torque.

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 Torque 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 Torque will consume more power. While WLAN keeps unused, please turn it off to conserve battery power.

X-431 Torque has a built-in Wi-Fi module that can be used to get online. Once you're online, you can register your X-431 Torque, 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 Torque 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 Torque.

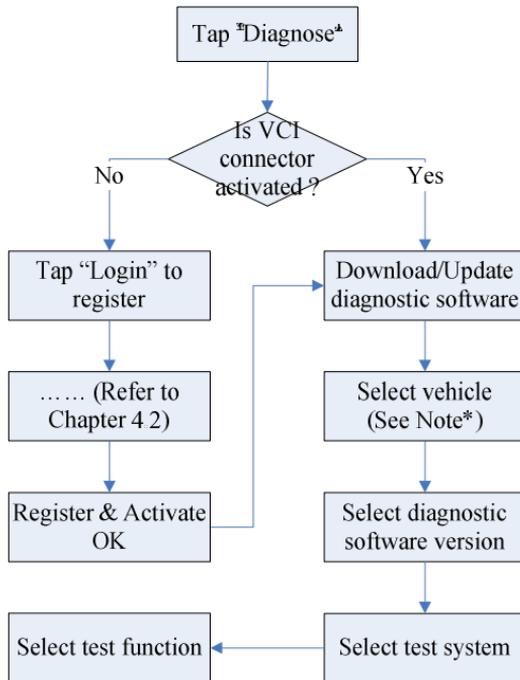


Fig. 4-1

Note*: If “VIN Scan” 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, a dialog box similar to the following will pop up on the screen:

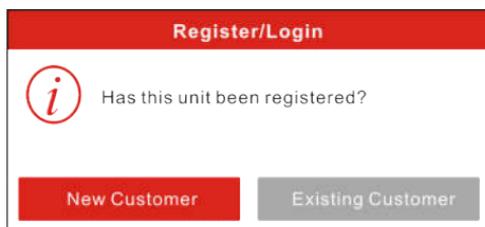


Fig. 4-2

- A. If you are a new user and want to register your tool directly, tap “New Customer” in Fig. 4-2 to start your sign-up.

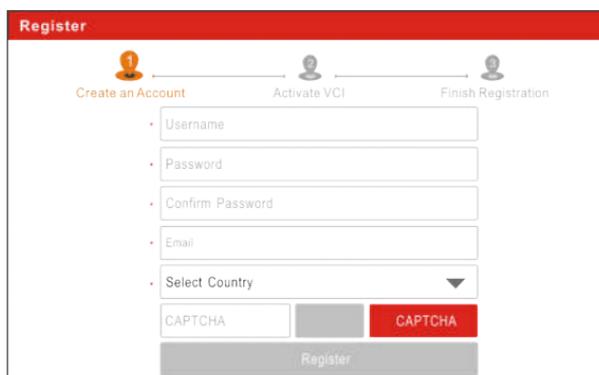


Fig. 4-3

- a) Create App Account: 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:

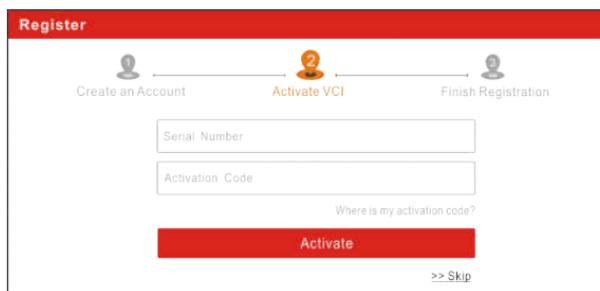


Fig. 4-4

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

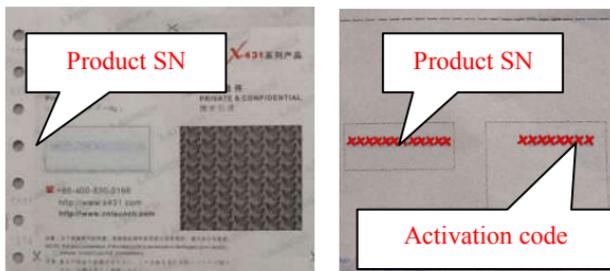


Fig. 4-5

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

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

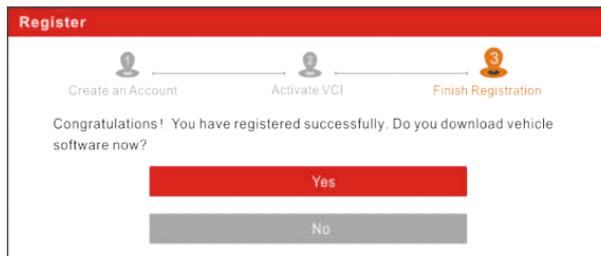


Fig. 4-6

c) Finish Registration: To download the diagnostic software, tap “Yes” to navigate to the download page. Tap “No” to download and install it later.

On the 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.

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

B. If you have registered to be a member, tap “Existing Customer” in Fig. 4-2, a screen similar to the following appears:

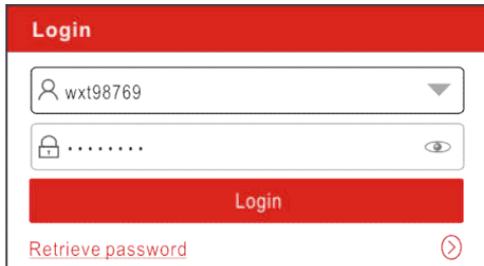


Fig. 4-7

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

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

- a) 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 Torque 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.

- b) 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:

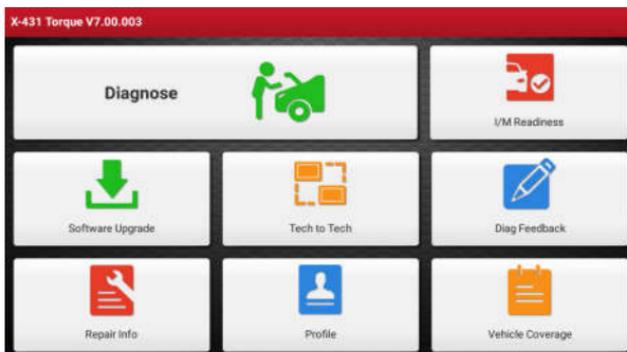


Fig. 4-7

Name	Description
Diagnose	To configures X-431 Torque to operate as a diagnostic tool.
I/M Readiness	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.
Software Upgrade	To update vehicle diagnostic software and APK.
Diagnostic History	Generally once a vehicle diagnosis is performed, X-431 Torque will automatically record every details of diagnostic session. 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.
Tech-To-Tech	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	Provides quick access to various authorized automotive repair database.
Profile	To manage my connector, my reports, change password, configure wireless Wi-Fi printer, configure system settings and logout etc.
Vehicle Coverage	To view all the vehicle models that the X-431 Torque covers.

4.2.3 Vehicle menu layout

After downloading the diagnostic software, you can go to “Diagnose” to check if all software are completely downloaded and installed.

Tap “Diagnose”, a screen similar to the following figure appears:

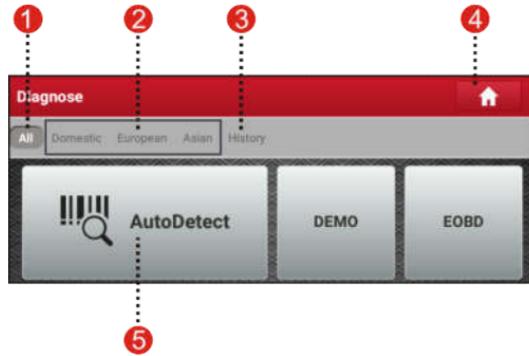


Fig. 4-8

1 **All** Tab: Displays all the vehicle makes in the vehicle menu.

2 Vehicle region buttons: Tap different buttons to switch to corresponding vehicles.

Generally once a vehicle diagnosis is performed, X-431 Torque will record the every details of diagnostic session. 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.

4  **Home** Button: Returns to the Job menu.

5 Auto Detect: Through simple Bluetooth communication between the X-431 Torque 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.

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.
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.

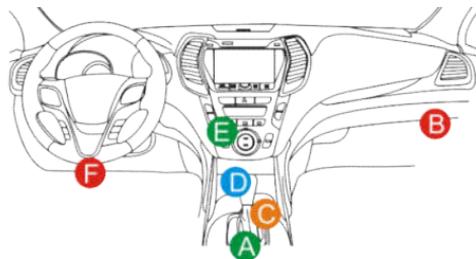


Fig. 4-10

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 Torque 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.

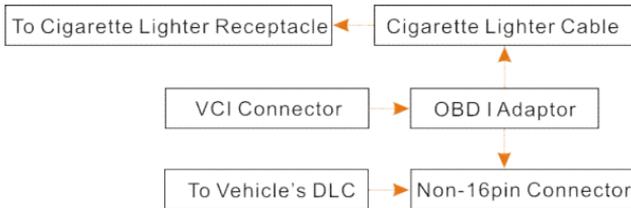


Fig. 4-11

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.

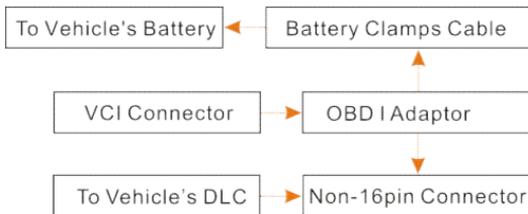


Fig. 4-12

4.4 Bluetooth Setting

There are two kinds of ways available for X-431 Torque 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 Torque starts searching for all available Bluetooth device.
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 Torque 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

X-431 Torque supports two kinds of diagnosis methods: Smart Diagnosis (AutoDetect) and Manual Diagnosis.

Tap “Diagnose” on the Job Menu to enter the Diagnose main menu.



Fig. 5-1

5.1 Smart Diagnosis (AutoDetect)

Through simple Bluetooth communication between the X-431 Torque 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 4.3.3 "Vehicle Connection".
- A stable network connection is required for this function.

Follow the steps below to proceed.

1. Tap "AutoDetect" on the Diagnose main menu screen to enter Fig. 5-2.

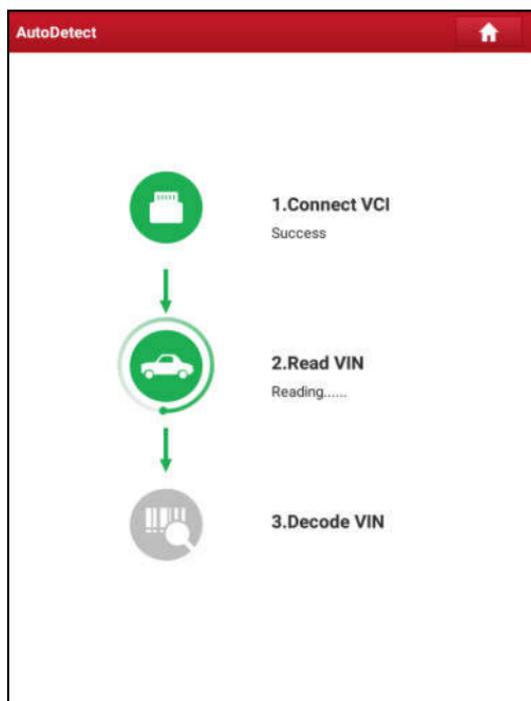


Fig. 5-2

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

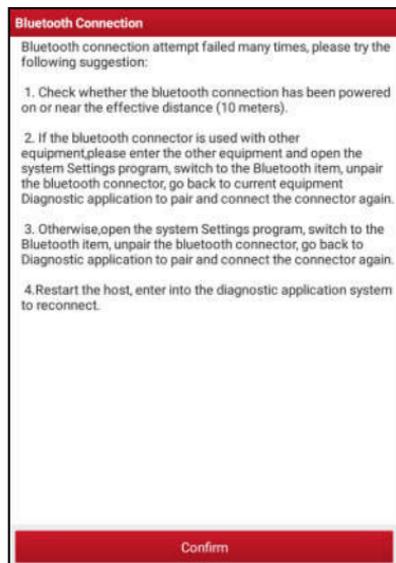


Fig. 5-3



Fig. 5-4

Check all the possible reasons of Bluetooth connection failure carefully, and then tap “Confirm” to enter Fig. 5-4.

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 “Profile” -> “VCI Management” -> Tap “Deactivate matching”.

In Fig. 5-4, tap “Scan” to start searching for the VCI connector and pairing up with it.

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:

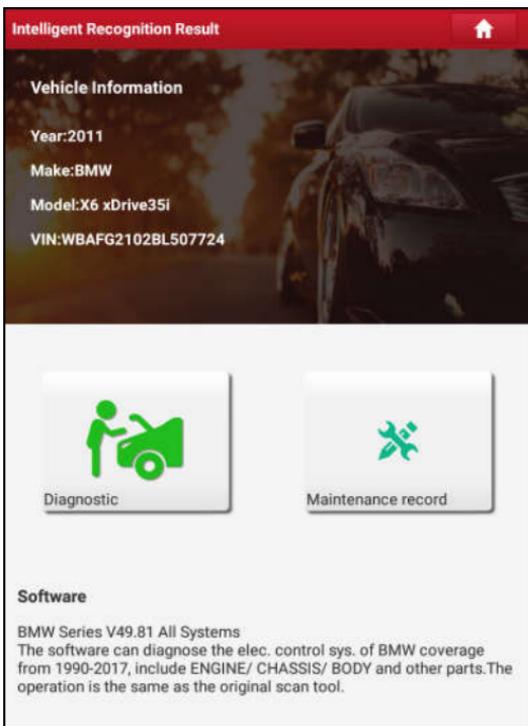


Fig. 5-5

- 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 WBAAF2102BL507724			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:

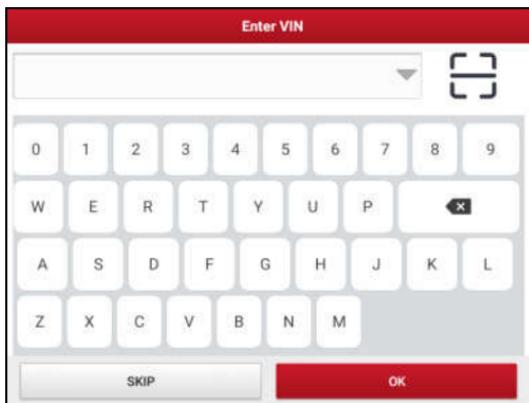


Fig. 5-7

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

- 1) Tap  to launch the VIN recognition module.

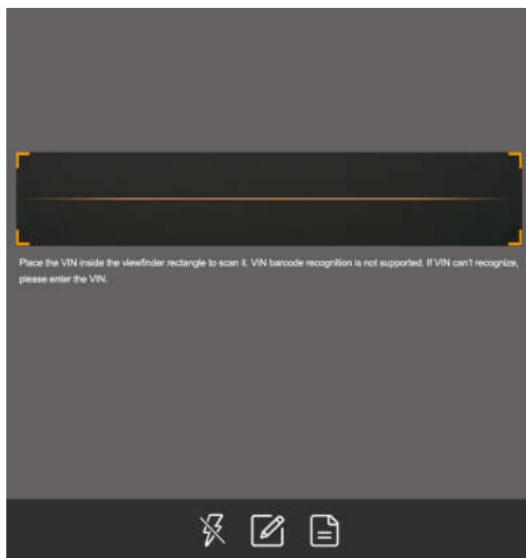


Fig. 5-8

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

After scanning, the screen automatically displays the result.

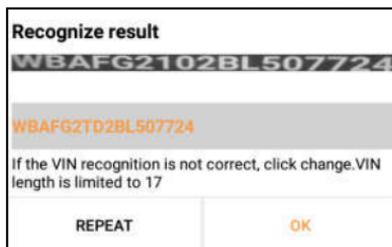


Fig. 5-9

- 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”.
- 2) Input the VIN, and tap “OK”, the system will automatically identify the vehicle model and directly navigate to the vehicle information page.
- In general, vehicle identification numbers are standardized - all contain 17 characters. VIN characters may be capital letters A through Z and numbers 1 through 0; however, the letters I, O and Q are never used in order to avoid mistakes of misreading. No signs or spaces are allowed in the VIN.
- Tap “SKIP” to go to Diagnose main menu screen.

5.2 Manual Diagnosis

In this mode, you need to execute the menu-driven command and then follow the on-screen instruction to proceed.

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. 5-10

On-screen Buttons:

Vehicle Coverage: 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. 5-11

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

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

OK: Tap it to go to next step.

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



Fig. 5-12

5.2.1 Health Report (Quick Test)

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

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

System Name	Result
ECM(Engine Control Module)	Fault4
TCM(Transmission Control Module)	Fault3
ABS(Anti-lock Braking System)	Fault2
SRS(Supplemental Inflatable Restraint System)	Fault3
BCM(Body Control Module)	Fault3
IMM(Immobilizer)	Fault3
BMS(Battery Manager System)	OK
TPMS(Tire Pressure Monitoring System)	Fault2
SAS(Steering Angle System)	Fault3

Clear DTC Fault Report

Fig. 5-13

In Fig. 5-13, 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 V14.95 » Demo » 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. 5-14

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.

Add information

Report Type

Pre-Repair Post-Repair

Vehicle Information

Demo Model:

Year: 35565 km

1E4GEAK12FT00001X license #:

Report Info

Demo_Model_1E4GEAK12FT00001X_DTC_20171018151006

Remark:

Skip OK

Fig. 5-15

Choose the report type and input the required information, and then tap “OK”.

More Information

Tester Customer

Tester Customer

Shop Card modify

Shop Name: 

Address:

Zipcode:

Email:

Telephone:

Fax:

Skip OK

Fig. 5-16

Enter the tester and customer name and then tap “OK” to save it.

For workshop information, tap “Modify” to revise it. Alternatively you can also set the workshop information in “Profile” -> “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 as tags on the diagnostic report, which allows you to easily retrieve the desired report while performing “Filter” function of Diagnostic Report.

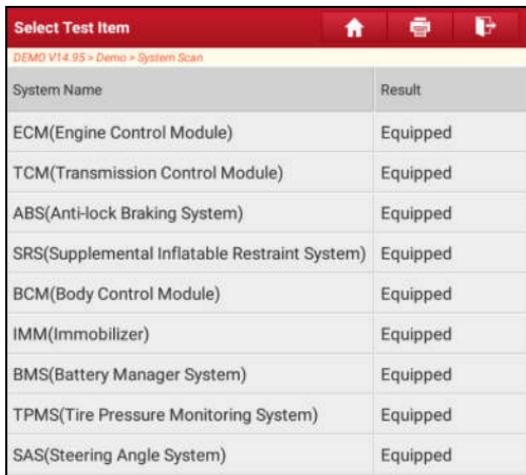
To skip the workshop information, tap “Skip” to go to the next step.

All reports are saved under the “Diagnostic Report” tab in “My Report” from “Profile” 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. 5-12, tap “System Scan”, the system start scanning the systems. Once the scanning is complete, the screen will display the result. See Fig. 5-17.



Select Test Item	
DEMO V14.95 > Demo > System Scan	
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. 5-17

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. 5-12, tap “System Selection”, the screen displays as follows:

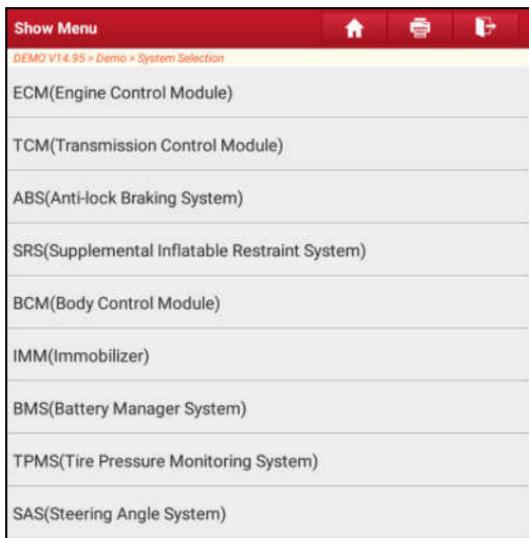


Fig. 5-18

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.

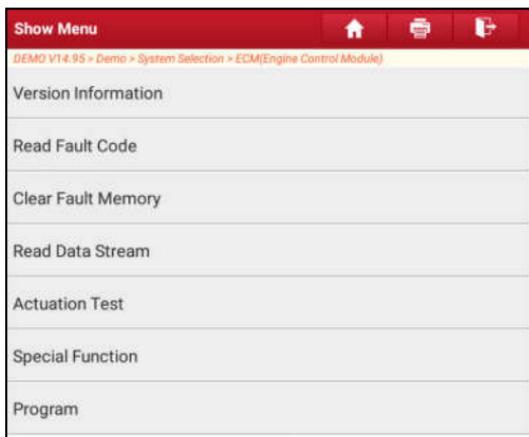


Fig. 5-19

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.

B. Read Fault Code

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

In Fig. 5-19, tap "Read DTC", the screen will display the diagnostic result.

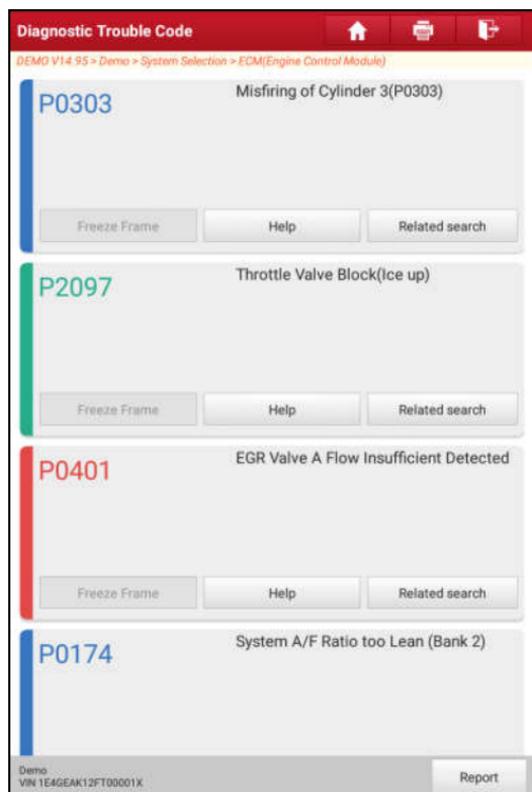


Fig. 5-20

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 “Profile” 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. 5-19, 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. 5-19, tap “Read Data Stream”, the system will display data stream items.

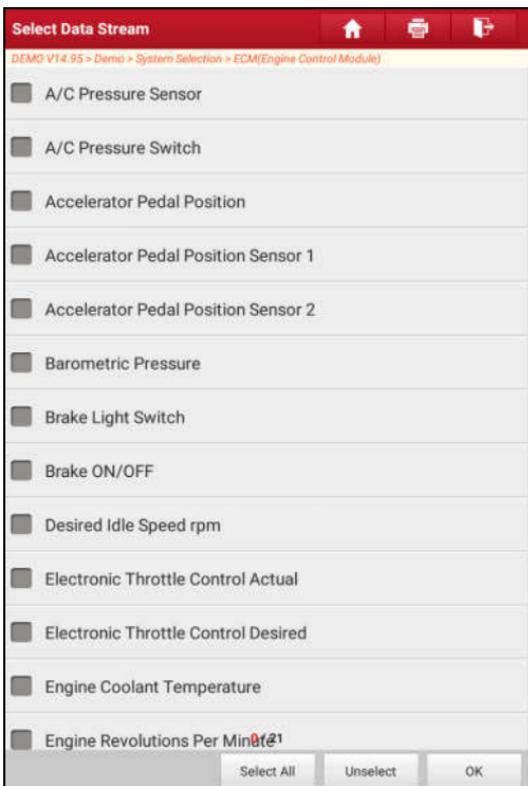


Fig. 5-21

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 “OK” to enter the data stream reading page.

Data Stream				
DEMO V14.95 » Demo » System Selection » ECM(Engine Control Module)				
Name	Value	Standard Range	Unit	
A/C Pressure Sensor	675.71	0-1000	Kpa	
A/C Pressure Switch	Closed (High)			
Accelerator Pedal Position	19.22	0-100	%	
Accelerator Pedal Position Sensor 1	12.68	0-5	V	
Accelerator Pedal Position Sensor 2	12.68	0-10	V	
Barometric Pressure	67.31	80-110	Kpa	
Brake Light Switch	Off			
Brake ON/OFF	Off			
Desired Idle Speed rpm	1284	600-1400	rpm	
Electronic Throttle Control Actual	24.50	1-100	Deg	
Engine Coolant Temperature	9	-40-100	degree C	
Exhaust Gas Recirculation Status	No Fault			
	Graph	Report	Record	

Fig. 5-22

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.

On-screen Buttons:

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

- ✓ Graph – displays the parameters in waveform graphs. Refer to Fig. 5-23.

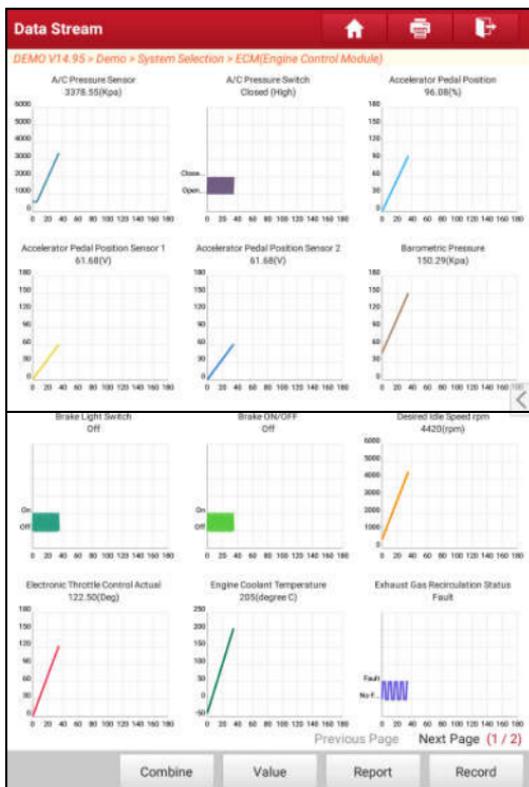


Fig. 5-23

- ✓ 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. See Fig. 5-24.

Tap “<” on the right side of the screen, a pull-down list of the data stream items appears on the screen. Deselect the unnecessary items and then screen will remove the waveforms corresponding to these items immediately.

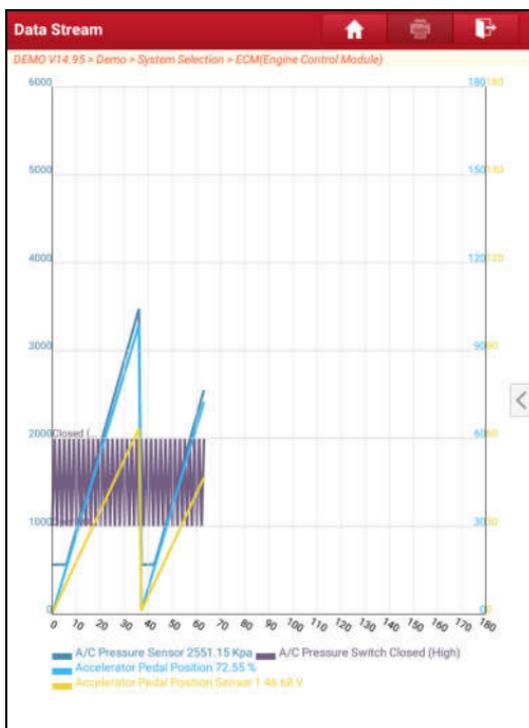


Fig. 5-24

Report: To save the current data in text format. All reports are saved under the “Diagnostic Report” tab in “My Report” from “Profile” menu. 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 in “My Report” from “Profile” menu. For details on playback operations, please refer to Chapter 9.1 “My Report”.

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

 **Graph:** Tap to view the waveform of the current item.

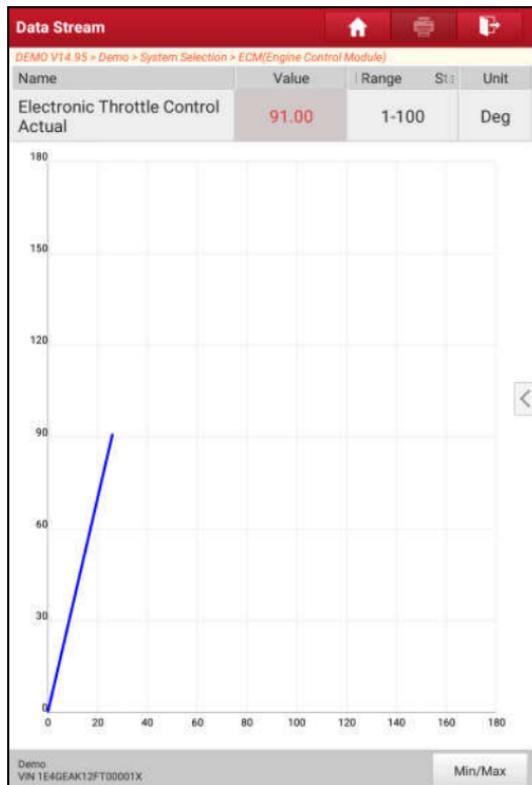


Fig. 5-25

Tap “Min/Max” to define the maximum/minimum value. Once the value goes beyond the specified value, the system will alarm.

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 Torque 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 an injector between two operating states.

In Fig. 5-19, tap “Actuation Test”, the system will display as follows:

Actuation Test

DEMO V14.95 > Demo > System Selection > ECM(Engine Control Module)

1# Injector

ON

2# Injector

ON

3# Injector

ON

4# Injector

ON

OK Cancel

Fig. 5-26

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 Tech To Tech

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

Tap “Tech to Tech” on the Job menu, a disclaimer page will pop up on the screen:

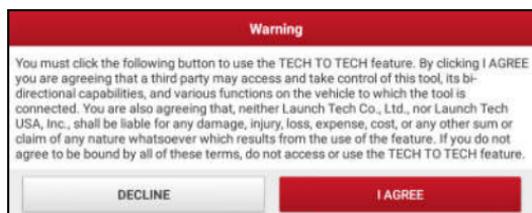


Fig. 5-27

Tap "I AGREE" to enter the Contact page. The screen appears blank by default.

5.3.1 Interface Layout

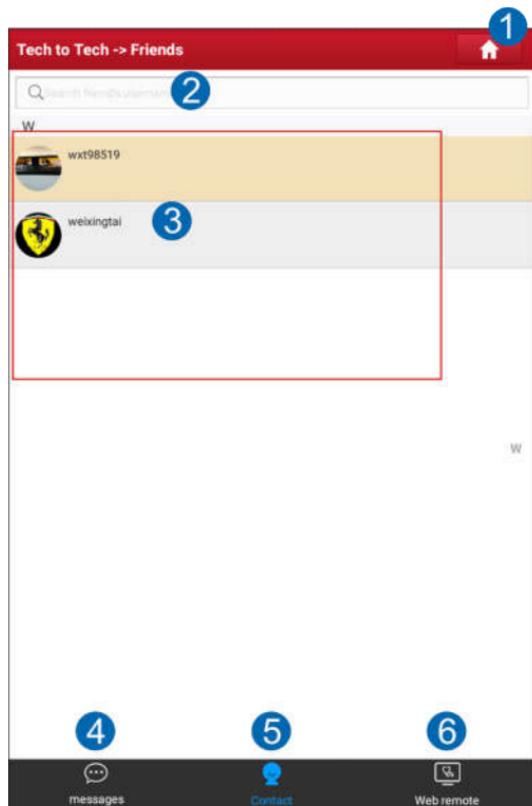


Fig. 5-28

1	Home button	Tap it to navigate to the Job menu screen.
2	Search bar	Directly input the username of the X-431 Torque 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 Torque 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 Torque 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:

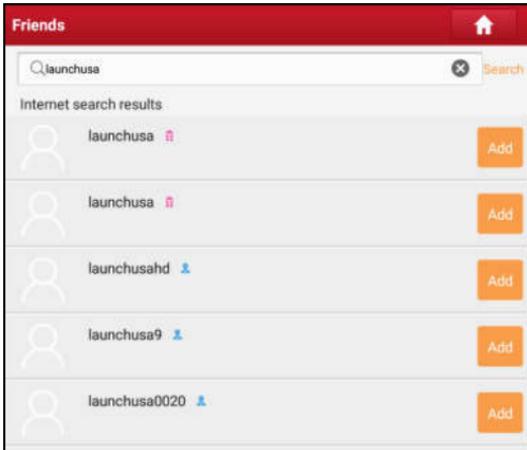


Fig. 5-29

Tap “Add”, a dialog box pops up:

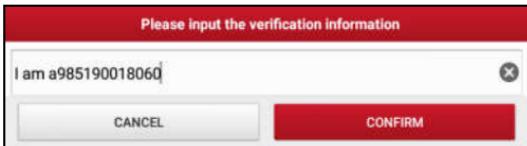


Fig. 5-30

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.

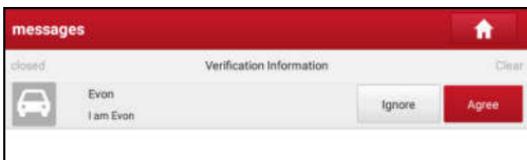


Fig. 5-31

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 partner's name to enter a screen similar to the following:

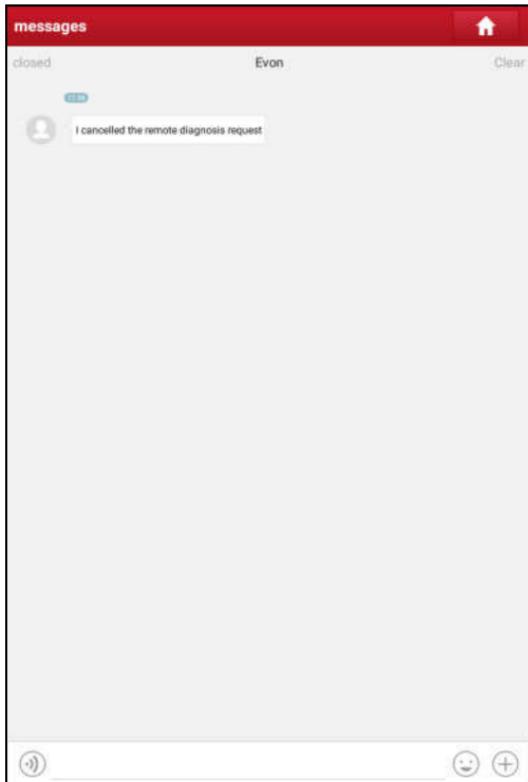


Fig. 5-32

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.

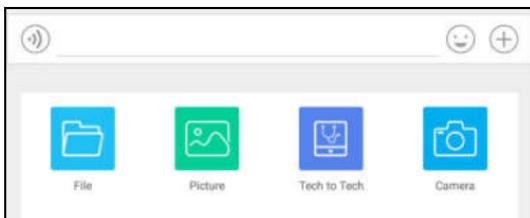


Fig. 5-33

File: Choose diagnostic reports or local files to send.

Picture: Choose screenshots or pictures to send.

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

In Fig. 5-34, tap “Tech to Tech”, a pull-down menu including the following options appears:

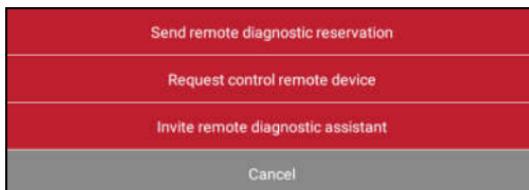
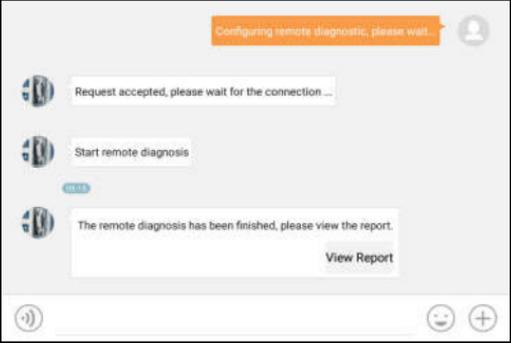


Fig. 5-34

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	Request to control the partner’s device remotely to help him diagnose the vehicle. *Notes: <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>
<p>Invite remote diagnostic assistant</p>	<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 “Profile”.

	 <p>Configuring remote diagnostic, please wait.</p> <p>Request accepted, please wait for the connection ...</p> <p>Start remote diagnosis</p> <p>The remote diagnosis has been finished, please view the report.</p> <p>View Report</p> <pre>graph TD; A[Tap "Invite remote diagnostic assistant*"] --> B[Choose the desired diagnostic software]; B --> C[Wait for partner's confirmation]; C --> D[Start connecting after request confirmed]; D --> E[Start Diagnosis]; E --> F[Generate diagnostic report];</pre>
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.

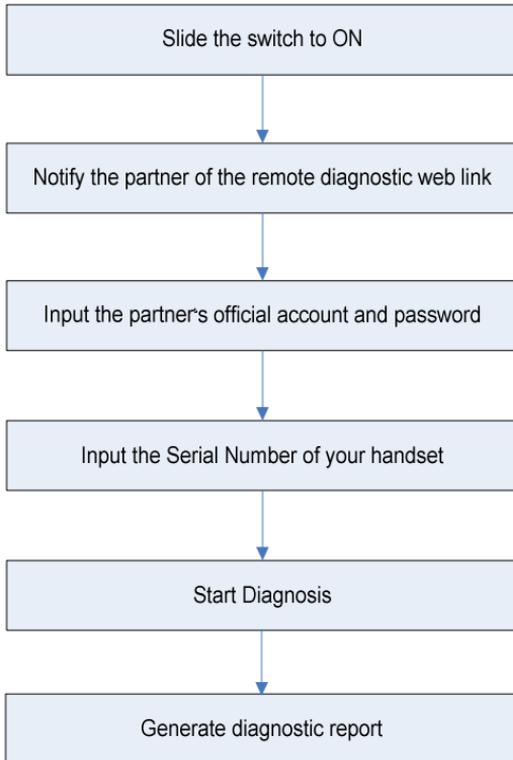


Fig. 5-35

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



Fig. 5-36

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 Torque handset is properly connected to the vehicle.

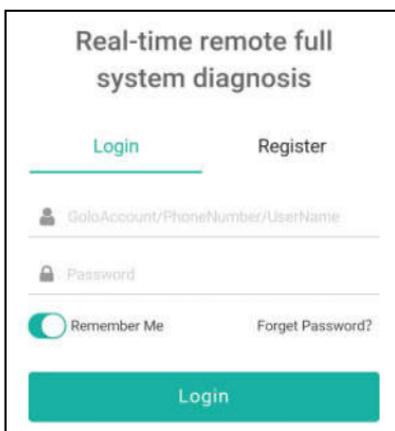


Fig. 5-37

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. 5-38

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 Torque 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 “History” on the Diagnose main menu screen, all diagnostic records will be listed on the screen in date sequence.

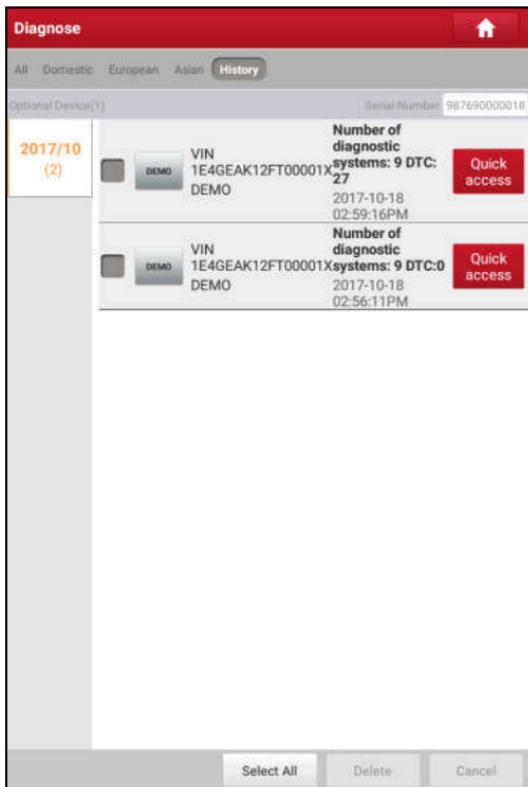


Fig. 5-39

- 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.

6 Diagnostic Feedback

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

Tap "Diag. Feedback", a pop-up message will appear:

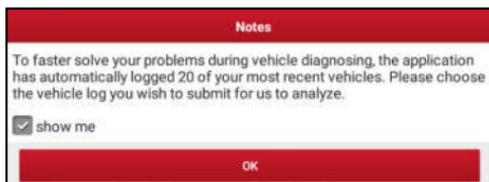


Fig. 6-1

Tap "OK" to choose the vehicle diagnostic record page.

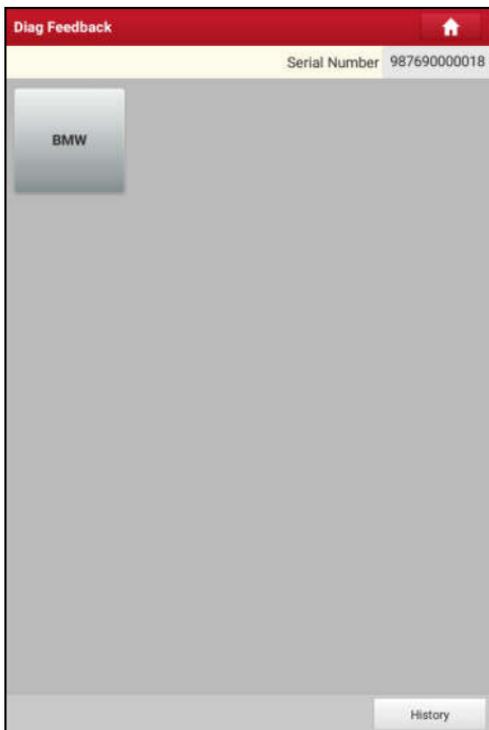


Fig. 6-2

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



Vehicle	File Name	Date
<input type="checkbox"/> BMW	987690000018_BMW_20171018 145349	2017-10-18 14:53:49
<input type="checkbox"/> BMW	987690000018_BMW_20171018 144106	2017-10-18 14:41:06

Fig. 6-3

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

The screenshot shows a 'Feedback' form with a red header. It contains several sections: 'Select failure type(Required)' with seven radio button options; 'Problem description (Required)' with a large text input field; and 'Phone/E-mail (we will contact with you)' with a dropdown menu for country (set to 'China') and a text input for 'Telephone'. At the bottom are 'Cancel' and 'Submit Result' buttons.

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. 6-4

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.

7 I/M Readiness

An important part of a vehicle's OBD II system is the Readiness Monitors, which are indicators used to find out if all of the emissions components have been evaluated by the OBD II system. They are running periodic tests on specific systems and components to ensure that they are performing within allowable limits.

Currently, there are eleven OBD II Readiness Monitors (or I/M Monitors) defined by the U.S. Environmental Protection Agency (EPA). Not all monitors are supported in every vehicles and the exact number of monitors in any vehicle depends on the motor vehicle manufacturer's emissions control strategy.

Continuous Monitors -- Some of the vehicle components or systems are continuously tested by the vehicle's OBD II system, while others are tested only under specific vehicle operating conditions. The continuously monitored components listed below are always ready:

- 1) Misfire
- 2) Fuel System
- 3) Comprehensive Components (CCM)

Once the vehicle is running, the OBD II system is continuously checking the above components, monitoring key engine sensors, watching for engine misfire, and monitoring fuel demands.

Non-Continuous Monitors -- Unlike the continuous monitors, many emissions and engine system components require the vehicle to be operated under specific conditions before the monitor is ready. These monitors are termed non-continuous monitors and are listed below:

- 1) EGR System
- 2) O2 Sensors
- 3) Catalyst
- 4) Evaporative System
- 5) O2 Sensor Heater
- 6) Secondary air Injection
- 7) Heated Catalyst
- 8) A/C system

I/M refers to Inspection and Maintenance that is legislated by the Government to

meet federal clean-air standards. I/M Readiness indicates whether or not the various emissions-related systems on the vehicle are operating properly and are ready for Inspection and Maintenance testing.

The purpose of the I/M Readiness Monitor Status is to indicate which of the vehicle's Monitors have run and completed their diagnosis and testing, and which ones have not yet run and completed testing and diagnosis of their designated sections of the vehicle's emissions system.

The I/M Readiness Monitor Status function also can be used (after repair of a fault has been performed) to confirm that the repair has been performed correctly, and/or to check for Monitor Run Status.

Tap [I/M Readiness] on the Job Menu, a screen similar to the following appears:

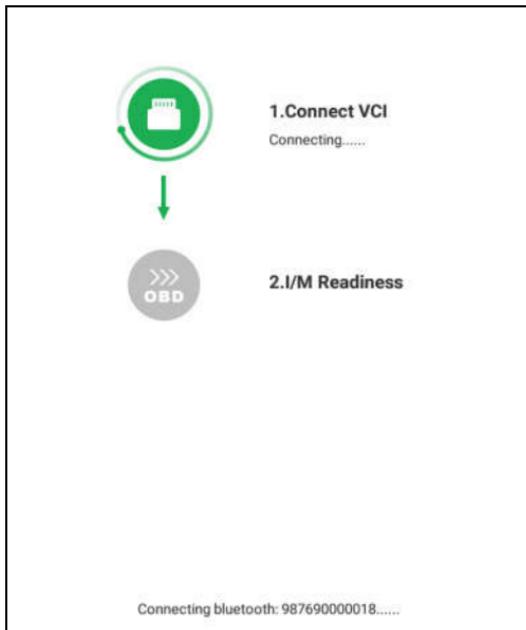


Figure 7-1

After checking all I/M readiness status, the screen will output the result:

I/M Readiness	
VIN : WP1AG2928DLA54391 	
Year : 2016	Make: Porsche
Model: Ip700	Date : 07/23/2017 12: 28: 05
3 DTCs	 MII
 Voltage	CAN-15765-4 Agreement
Monitor	Value
Misfire	
Fuel System	
Comprehensive Component	
Catalyst	
Heated Catalyst	
Evaporative System	
Secondary Air injection	
O2 sensor	
O2 sensor heater	
EGR	
 Completed  Uncompleted  Unsupported	

Figure 7-2

Note:  means not available on this vehicle,  means incomplete or not ready,  means Completed or Monitor Ok.

8 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.

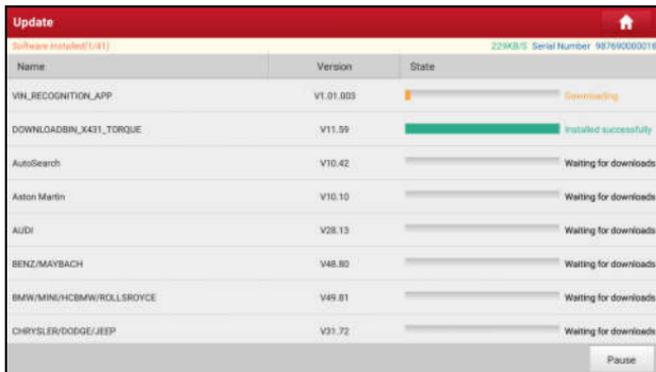


Fig. 8-1

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.

9 Profile

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”.
- Tap “Filter” to exactly locate the desired diagnostic report. Input the keyword and tap “OK” to start searching. Once it is found in the diagnostic reports, all the diagnostic reports matching this keyword will be listed on the screen.

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

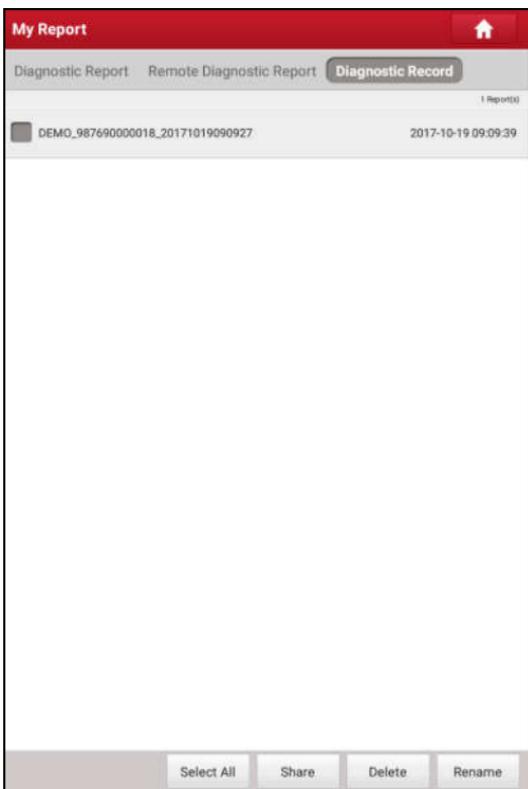


Fig. 9-2

Tap the desired one to enter:

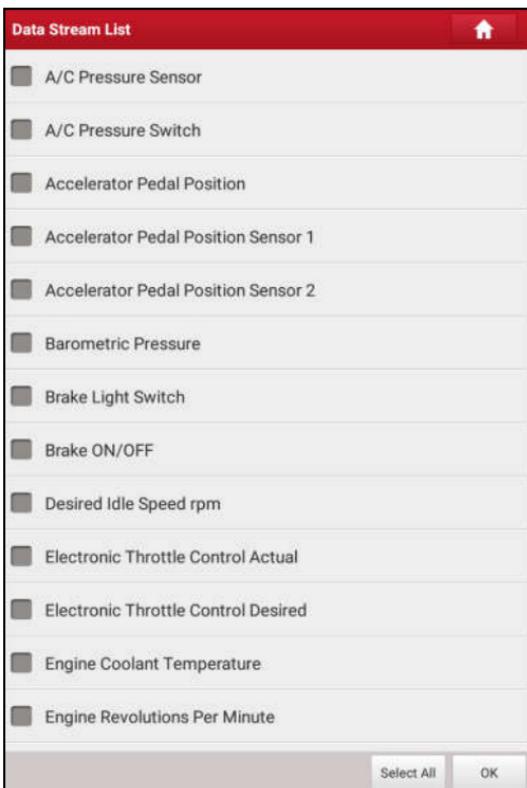


Fig. 9-3

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

Diagnostic Record			
Name	Value	Unit	
A/C Pressure Sensor	1930.60	Kpa	
A/C Pressure Switch	Open (OK)		
Accelerator Pedal Position	54.90	%	
Accelerator Pedal Position Sensor 1	35.43	V	
Accelerator Pedal Position Sensor 2	35.43	V	
Barometric Pressure	105.84	Kpa	
Brake Light Switch	Off		
Brake ON/OFF	Off		
Desired Idle Speed rpm	2740	rpm	
Electronic Throttle Control Actual	70.00	Deg	
Electronic Throttle Control Desired	70.00	Deg	
Engine Coolant Temperature	100	degree C	

Frame Playback (1 / 2)

Graph Combine Value

Auto Playback

Fig. 9-4

On-screen Buttons:

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.

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

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 VCI

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 VCI Management

This option is used for X-431 Torque 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 VCI

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.

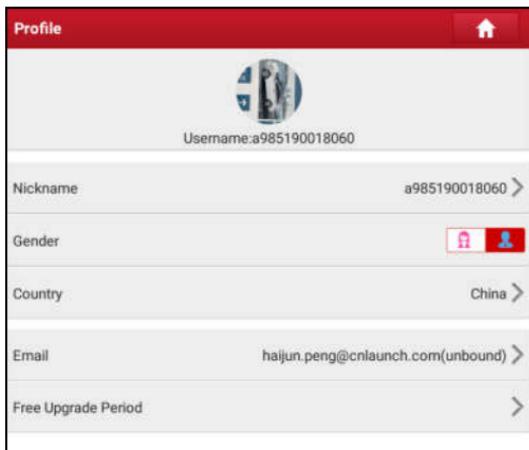


Fig. 9-7

- 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.

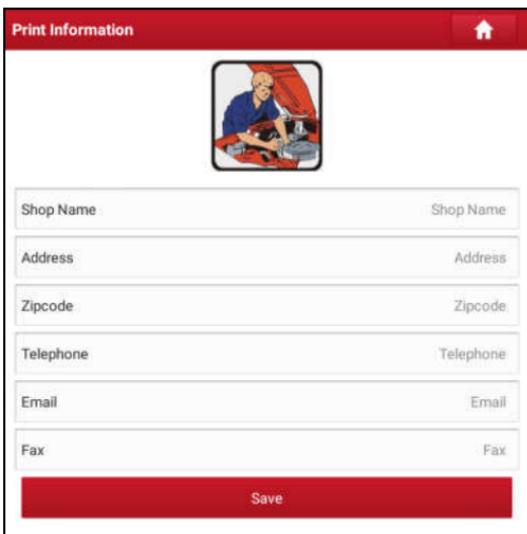
9.8.1 Units of Measurement

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.



Print Information	
	
Shop Name	Shop Name
Address	Address
Zipcode	Zipcode
Telephone	Telephone
Email	Email
Fax	Fax
Save	

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 Torque and the Wi-Fi printer (sold separately) while performing printing operations.

Follow the steps below to connect the printer.

1. Tap “Launch Printer Set”.

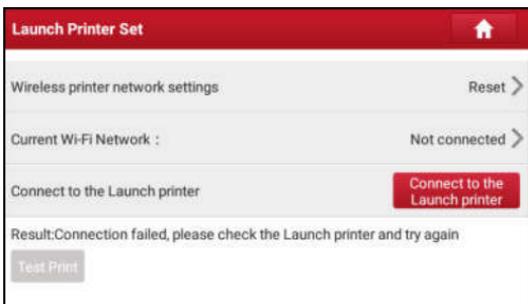


Fig. 9-9

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.

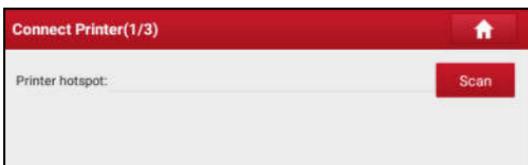


Fig. 9-10

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 Orientation

X-431 Torque supports 3 kinds of display mode: Auto, Horizontal and Vertical.



Fig. 9-10

When “Auto” is applied, the system will rotate the contents of the screen when the handset is rotated.

9.8.5 About

The software version information and disclaimer are included.

9.8.6 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.

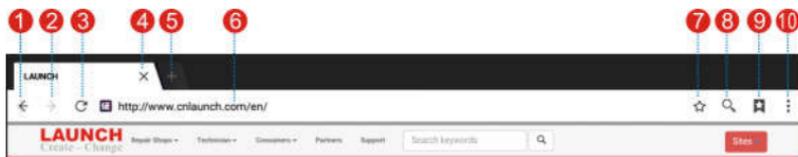


Fig. 10-1

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 Torque 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 Torque.

10.3.1 Connect to PC

1. Use the USB cable to connect the X-431 Torque 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 Torque 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 Torque 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 Torque.

4. How to reset X-431 Torque?

 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 Torque:

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 Torque 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 **Profile -> Activate VCI**.
 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 **Profile -> VCI** 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 Torque handset?

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

Note: Once WLAN is set as ON, X-431 Torque 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 Torque 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.

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 Torque can not be set.

It is because Automatic date & time is set on your X-431 Torque. 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

If you have any questions or comments please forward them to:

LAUNCH Tech USA

Product Support

Phone: 877-528-6249 xt: 4

E-mail: support@launchtechusa.com

Fax: 562-463-1590

Monday - Friday 5 am - 5 pm PST

Service & Repair

Phone: 877-528-6249 xt: 5

Monday - Friday 8 am - 5 pm PST

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: LAUNCH Tech USA

1820 South Milliken Ave.

Ontario, CA 91761