

Copyright Information

Copyright © 2021 by SHENZHEN SMARTSAFE 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 SMARTSAFE.

Neither SMARTSAFE 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 SMARTSAFE operating and maintenance instructions. SMARTSAFE 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 SMARTSAFE Products or SMARTSAFE Approved Products by SMARTSAFE.

All information, specifications and illustrations in this manual are based on the latest information available at the time of printing. SMARTSAFE reserves the right to make changes at any time without prior written or oral notice.

Trademark Information

SmartSafe is a registered trademark of SHENZHEN SMARTSAFE TECH CO., LTD. in China and other countries. All other SMARTSAFE 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 SMARTSAFE or are otherwise the property of SMARTSAFE or its affiliates. In countries where any of the SMARTSAFE trademarks, service marks, domain names, logos and company names are not registered, SMARTSAFE 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 SMARTSAFE or any third party without permission from the owner of the applicable trademark, service mark, domain name, logo, or company name. You may contact SMARTSAFE by visiting the website at

www.newsmartsafe.com, or writing to SHENZHEN SMARTSAFE TECH CO., LTD., 3310, Building 11, Tianan Cloud Park, Bantian Street, Longgang District, Shenzhen, Guangdong, China, to request written permission to use Materials on this manual for purposes or for all other questions relating to this manual.

To avoid personal injury, property damage, or accidental damage to the product, please read all the information in this chapter before using the product.

NOTES

1. Maintain a safe environment for vehicle testing at all times.
2. Do not operate the detection equipment while driving the vehicle to avoid distraction and causing an accident.
3. Before starting the engine, you should pull the handbrake, especially the front wheel, and put the shift lever in neutral (manual transmission) or [P] gear (automatic transmission) so as not to start the engine and make the vehicle injure people.
4. The exhaust gas from the engine contains a variety of toxic compounds (such as hydrocarbons, carbon monoxide, nitrogen oxides, etc.), which will lead to slow response and even serious personal injury or death. The vehicle under test should be parked in a well-ventilated place during operation.
5. Take extreme care when working around ignition coils, distributor caps, ignition lines and plugs. These components generate dangerous voltages when the engine is running.
6. To avoid damaging the testing equipment or generating incorrect data, please ensure that the vehicle battery is fully charged and that the connection of the vehicle diagnostic seat is clean and safe.
7. The vehicle battery liquid contains sulfuric acid, sulfuric acid is corrosive to the skin, so you should avoid direct contact between the battery liquid and the skin during the operation, especially do not splash it into the eyes, and do not put it close to the fire.
8. Keep clothing, hair, hands, tools, testers, etc. away from running or hot engine parts.
9. Please use the charger that comes with it. The Company will not be responsible for any damage or loss caused by the use of other chargers not

designated by the Company.

10. Keep the testing equipment dry and clean, away from gasoline, water and grease. When necessary, clean the surface of the equipment with a clean cloth coated with a mild detergent.

11. All internal repairs to test equipment must be performed by authorized maintenance organizations or authorized technicians. Attempting to disassemble or modify the device will void the warranty.

This manual uses the following conventions.

PROMPT

Prompt information provides helpful information such as additional operation instructions, tips, and suggestions. Example:

 *Prompt: The VIN code is usually located on the driver's side, in the lower right corner of the front windshield. The exact location varies from car to car. A VIN code is generally composed of 17 standard characters. The VIN code characters can contain the uppercase letters A to Z and the numbers 1 to 0, but the letters I, O, and Q are not usually used to avoid mispronunciation.*

WARNING

It indicates an imminent hazard that, if unavoidable, will result in death or serious injury to the operator or bystander. Example:

 *Warning: Reading a fault code during troubleshooting a vehicle is only a small step in the diagnostic process. The vehicle fault code is only used as a reference, and parts cannot be replaced directly on the basis of the given fault code definition. Each fault code has a set of test procedures, and the service technician must strictly follow the operating instructions and procedures described in the vehicle service manual to confirm the root of the fault.*

DANGER

It indicates an imminent hazard that, if unavoidable, will result in death or serious injury to the operator or bystander. Example:

 *Danger: You must drive the vehicle in order to perform troubleshooting. Please find someone else to help you. It is dangerous to drive and operate diagnostic equipment at the same time, which can cause severe traffic accidents.*

Contents

1. Packing List	1
2. Product Introduction	3
2.1 Overview	3
2.2 iSmartLink D01	3
2.3 iSmartBOX	5
2.4 Technical Parameters	6
3. Initial Use	7
3.1 Charge the Tablet	7
3.2 Turn On/Off	8
3.3 Network Connection	8
3.4 Registration and Update	8
4. Getting Started	12
4.1 Main Interface and Bottom Navigation Bar	12
4.2 Preparation and Vehicle Connection	13
4.3 Communication Settings	14
5. ADAS Calibration	15
5.1 Activate ADAS Calibration Function	15
5.2 ADAS Calibration Conditions	16
5.3 Calibration Operation	17
6. IMMO Matching	25
6.1 Anti-theft Matching	25
6.2 IMMO PROG	30
7. Diagnose	42
7.1 AutoDetect	42
7.2 Manual Selection	43
8. Special Functions	53
8.1 A/F Reset	53
8.2 Electronic Parking Brake Reset	53
8.3 Oil Reset Service	53

8.4 Steering Angle Calibration	53
8.5 Battery Maintenance System Reset	54
8.6 ABS Bleeding	54
8.7 Throttle Learning	54
8.8 Tire Pressure Monitor System Reset	55
8.9 Diesel Particulate Filter (DPF) Regeneration	55
8.10 Gearbox Matching	55
8.11 Gear Learning	55
8.12 Motor Angle Calibration	56
8.13 Coolant Bleed	56
8.14 Engine Power Balance Monitoring	56
8.15 IMMO Prog	56
8.16 IMMO Service	56
8.17 High Voltage Battery Diagnosis	56
8.18 Gas Particulate Filter Regeneration	56
8.19 Transport Mode	57
8.20 Tire Reset	57
8.21 Windows Calibration	57
8.22 AdBlue Reset	57
8.23 NOx Sensor Reset	57
8.24 Injector Coding	57
8.25 Stop/Start Reset	57
8.26 Sunroof Initialization	58
8.27 Suspension Calibration	58
8.28 Language Change	58
8.29 Intelligent Cruise Control System Diagnosis	58
8.30 AC System Relearn/Initialization	58
8.31 Seats Calibration	58
8.32 AFS (Adaptive Front-lighting System) Reset	58
8.33 EGR Learning	59

9. Reports	59
10. Update	61
10.1 Update	61
10.2 Renew Subscription	62
11. Remote Diagnose	63
11.1 Messages	63
11.2 Contacts	63
11.3 Remote	64
12. Feedback	65
13. Toolbox	66
13.1 Tyre Tread Depth Measuring	66
13.2 Oscilloscope	66
13.3 Multimeter	66
13.4 Current Clamp	66
13.5 Videoscope	66
14. Setting	67
14.1 Network and Internet	67
14.2 Bluetooth	67
14.3 Apps & Notifications	67
14.4 Battery	68
14.5 Display	68
14.6 Sound	68
14.7 Storage	68
14.8 Privacy	68
14.9 Location	69
14.10 Security	69
14.11 System	69
14.12 USB management	69
15. Personal center	70
15.1 VCI	70

15.2 Activate VCI 70

15.3 Firmware Fix 71

15.4 Data Sample 71

15.5 Comprehensive Inspection Reports 71

15.6 Profile 72

15.7 Subscription Renewal Card 73

15.8 Units 73

15.9 Diagnostic Software Clear 74

15.10 About 74

15.11 Login/Logout 74

16. Other..... 75

16.1 E-mail 75

16.2 Gallery 75

16.3 Recording Master 75

16.4 Camera 75

16.5 File Management 75

16.6 TeamViewer 75

16.7 Browser 76

16.8 System OTA Upgrade 76

16.9 Video Player 76

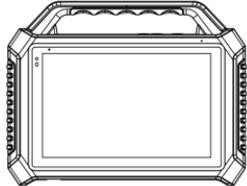
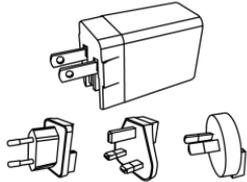
17. Frequently Asked Questions 76

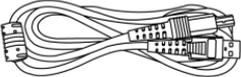
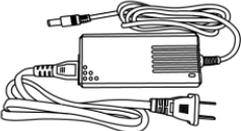
FCC Warning 79

Warranty..... 80

1. Packing List

The following accessories are for reference only. Please consult from the local agency or check the package list supplied with this tool together.

Main Unit and Accessories			
No.	Name	Q'TY	Reference Picture
1	iSmartLink D01	1	
2	iSmartBOX	1	
3	OBD Extension Cable	1	
4	Power Adaptor (5V 3A)	1	

5	USB Cable (Type-C)	1	
6	USB Cable (Type-B)	1	
7	Switching Power Supply (12V 5A)	1	
12	Password Envelop	1	-
13	Quick Reference Guide	1	-
14	User Manual	1	-
15	Packing List	1	-

2. Product Introduction

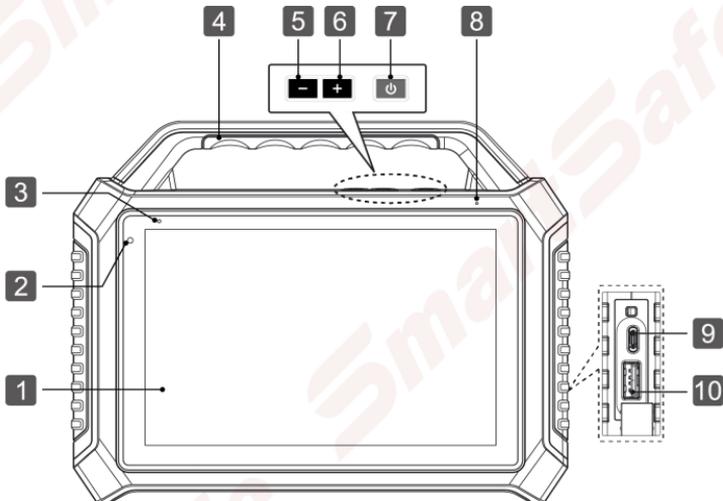
2.1 Overview

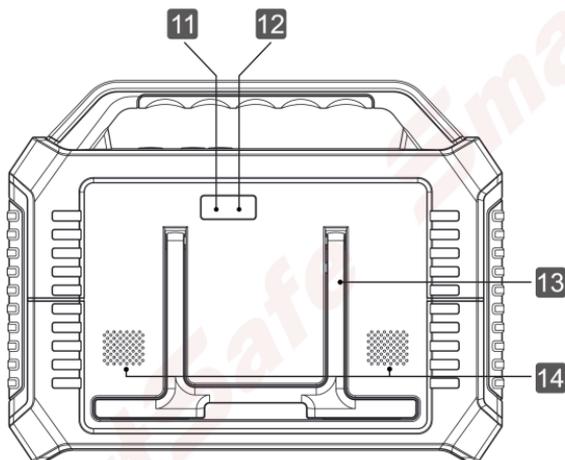
iSmartLink D01, developed by SMARTSAFE, is a professional tool that integrates ADAS (Advanced Driver Assistance Systems) calibration, anti-theft matching and vehicle diagnose. The device can perform fault diagnosis of the entire product model and system (including reading/clearing fault codes and reading data streams, etc.), and can be used with the specified ADAS calibration tool (optional) for ADAS calibration.

Note: By default, the ADAS calibration function is disabled. To ensure normal use of the calibration function, users need to activate the pin card (included with the Calibration Tool) to unlock it on the LINK first.

iSmartLink D01 is mainly composed of the main unit and iSmartBOX.

2.2 iSmartLink D01



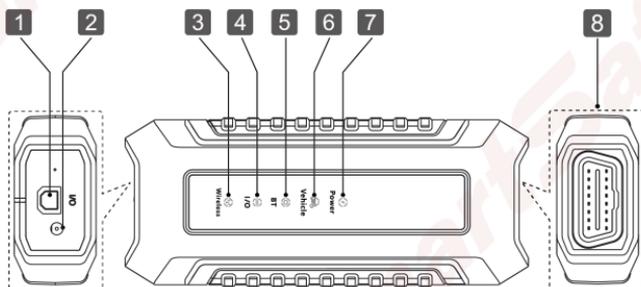


No.	Name and Description
1	10.1-inch Touch Screen
2	Front Facing Camera
3	Power Indicator Light <i>Red during charging and green after fully charged.</i>
4	Handle
5	Volume -
6	Volume+
7	Power Button/Screen Lock Button <ul style="list-style-type: none"> • Press the button for about 3 seconds to start the machine when the power is off. • Press this key to wake up/close the screen when the power is on. • Press the button for more than 3 seconds to select shutdown or restart when the power is on; • Press the button for about 8 seconds to force the shutdown.
8	Microphone
9	USB Type-C

	<ul style="list-style-type: none"> Used for connecting to power adapter for charging or connecting to computer for data transmission.
10	USB Type-A <ul style="list-style-type: none"> Used for connecting to USB devices or function expansion modules.
11	Flash Light
12	Rear Camera
13	Holder
14	Loudspeaker

2.3 iSmartBOX

The device is a Vehicle Communication Interface (VCI) device, which is used to connect the vehicle diagnosis seat or battery pack low-voltage signal communication interface for data collection, and then send the data to the host for analysis.



No.	Name and Description
1	USB Type-B
2	DC 12V Power Supply Jack
3	Wi-Fi Indicator
4	USB Indicator
5	Bluetooth Indicator

6	Vehicle Communication Indicator
7	Power Supply Indicator
8	OBD-II Port

2.4 Technical Parameters

2.4.1 iSmartLink D01

Item	Specification Parameters
Operation System	Android
CPU	8-core Processor, 2.0GHz
Internal Storage	4GB
Storage	128GB
Display Screen	10.1 inch Touch Screen, 1920x1200 Resolution
Front Facing Camera	8 Million Pixels
Rear Camera	13 Million Pixels
Wi-Fi	2.4GHz/5GHz Dual Wi-Fi
Communication	Wi-Fi, Bluetooth, USB
Battery	3.8V/9360mAH
Working Temperature	0°C ~45°C
Storage Temperature	-20°C ~70°C

2.4.2 iSmartBOX

Item	Specification Parameters
CPU	Cortex A7 + Cortex-M7
System	Linux
Internal Storage	256M

Storage	8GB
Port	Type B, ODBII-16, DC-IN
Communication	Wi-Fi, Bluetooth, USB
Working Voltage	DC 9~36V
Working temperature	0°C ~50°C
Storage temperature	-20°C ~70°C

3. Initial Use

3.1 Charge the Tablet

⚠ Warning: Please use the charger that comes with the product for charging. We are not responsible for any damage or economic loss caused by charging with a charger other than the one designated by us.

Please follow the following steps to charge the iSmartLink D01 tablet:

1. Connect one end of the charging cable to the USB port on the charger and the other end to the Type-C port on the host, and connect the charger to the power socket.
2. If the power indicator of the host is red and the battery identifier on the screen is displayed , then the battery is being charged.
3. When the power indicator of the host is green, the charging is complete. In this case, the battery identifier is displayed .

📖 Note:

If the device has not been used for a long time or the battery power of the device is exhausted, you may not be able to turn it on normally when charging. This is a normal phenomenon. Please charge the device for a period of time and then try to start the device. The battery can be recharged. But because the battery is a wear and tear product, after a long time of use, the standby time of the device will be shortened. So please avoid frequent and repeated charging to prolong the battery life.

3.2 Turn On/Off

3.2.1 Turn On

Press and hold the power button on the device until the screen lights up.

3.2.2 Turn Off

Press and hold the power button on the device until the shutdown prompt dialog box pops up on the screen, tap **Power off** to shut down the device or tap **Restart** to restart the device.

3.3 Network Connection

When using the device for the first time, you need to register a personal account, activate the VCI connector, and upgrade the diagnostic software or APK. In this case, the device must be connected to the internet.

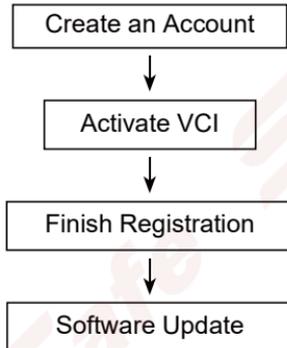
To set the wireless network connection, please perform the following steps:

 *Note: The power consumption of the device increases after the WLAN is enabled. You are advised to turn off the WLAN when it is not in use to save power.*

1. On the home screen, tap **Settings** -> **Network and internet** -> **Wi-Fi**.
2. Tap or slide the WLAN switch on. The device automatically scans for available wireless networks.
3. Select the network you want to connect to:
 - If you choose an open network, you can connect directly to that network.
 - If you choose an encrypted network, you will need to enter an access password before you can connect.
4. When "Connected" is displayed, it means the connection is successful.

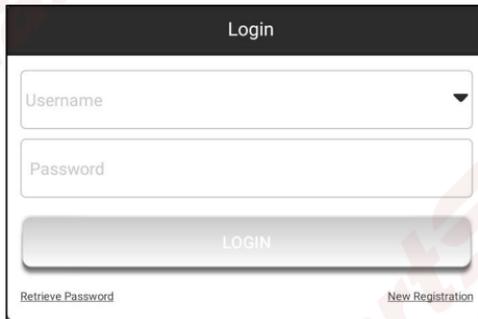
3.4 Registration and Update

During the first use, the user needs to follow the following operations:



 *Note: Before registration, ensure that the network connection to the host is normal and stable.*

On the main interface, tap **Personal Center** -> **Login**, and the following dialog box will pop up:



(If you are a new user, follow Section A.)

(If you are registered, please refer to Section B for login.)

(If you forget your password, please refer to Section C to reset it.)

A. If you are a new user, please tap **New Registration** to enter the registration page.



In the figure above, fill in the registration information in turn (the item with * is required). After the account information is filled in, tap **Register**, and the system will enter the interface of connector activation.

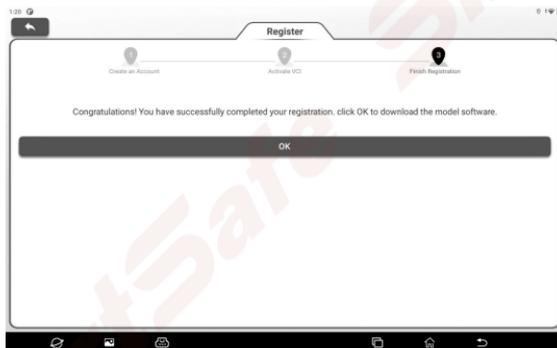


Enter the product serial number and activation code. The product serial number and activation code can be obtained from the password envelope in the package box.

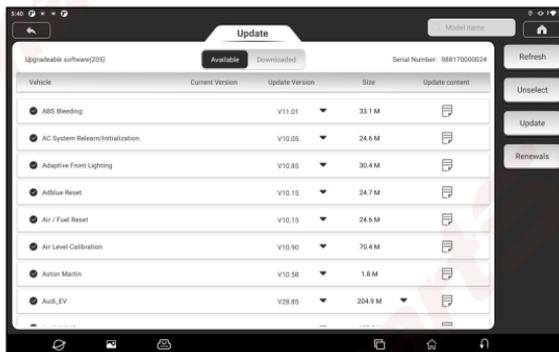


 **Note:** If you skip the activation step here, you can also go to **Personal Center** -> **Activate VCI** to activate after entering.

Tap **Activate** to complete the registration.



Tap **OK** to enter the software update interface.



On the software update page, tap **Update** to start downloading. After the download is complete, the system will automatically install the software.

 **Note:** During the update, ensure that the network connection is normal. In addition, due to the large number of software, it may take a long time (depending on the network speed). Please wait patiently.

B. If you have already registered, input the user name and password and tap **Login** to enter the account.

 **Prompt:** The device has the user information memory function. If multiple accounts have logged in to the device, click the triangle drop-down button behind the user name input box to select the corresponding account to log in.

C. If you forget the password, please tap **Retrieve Password** and then set the new password according to the prompts on the screen.

4. Getting Started

4.1 Main Interface and Bottom Navigation Bar

4.1.1 Main interface

The main interface of iSmartLink D01 mainly includes the following functions modules:



Items	Description
ADAS Calibration	This module works with the specified ADAS calibration tool (purchased separately, e.g., ADAS Mobile) for ADAS (Advanced Driver Assistance System) calibration operations.
IMMO Matching	This module is used to to perform the anti-theft key matching function and read&write the chip data of the car key, engine, gearbox, etc.
Diagnose	Use this function to test the electric control system of the whole vehicle.
Special Function	Use this function for special functions such as vehicle maintenance and adjustment etc.
Reports	This module is used to view and manage the diagnostic reports and diagnostic records.

Update	Use this function to update vehicle diagnostic software and APK.
Remote Diagnose	The function module is used to remotely assist the user to diagnose the vehicle.
Feedback	The function is used to report the problems (the last 20 test records) back to us.
Toolbox	The toolbox includes extended functional modules such as tyre tread depth measuring, oscilloscope, multimeter, current clamp and videoscope.
Setting	The function is used to configure the system settings of the tool.
Personal Center	The module is used to check and manage VCI connectors, firmware fix and personal information etc.
Other	Including functional modules such as file management, remote control, browser, system OTA upgrade, photo album, screen recording, player, email and camera etc.

4.1.2 Bottom Navigation Bar

The bottom navigation bar contains the following buttons:

Icon	Name and Function Description
	Browser-click this button to start the browser.
	Screenshot-click this button to capture and save the current screen image. The screenshot is saved in the Screenshots folder.
	VCI connection indicator-after the host is successfully connected to the VCI connector, this button lights up in green.
	Process Management - Click this button to display a list of recently used App thumbnails. Click on any of the thumbnails to open the corresponding program, hold the thumbnail to slide upward to close the corresponding program.
	Main interface-click to return to the main interface.
	Return-click to return to previous page.

4.2 Preparation and Vehicle Connection

4.2.1 Preparation

Normal Test Conditions

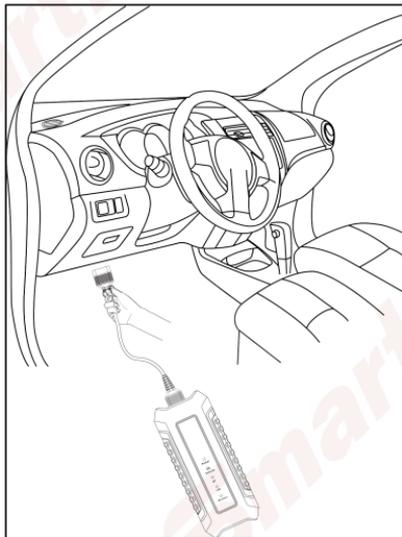
- The vehicle ignition is turned on.
- The vehicle battery voltage range is 11~14 volts or 23~26 volts.
- The throttle is in the closed position.

Find DLC position: The DLC (Data Link Connector) is usually located 12 inches from the center of the instrument panel, under or around the driver's side for most vehicles. For some vehicles with special designs, the DLC location may vary.

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

4.2.2 Vehicle Connection

Connect one end of the included OBD extension cable to the OBD-II port of iSmartBOX, and the other end to the vehicle's DLC port.



4.3 Communication Settings

The main connection modes of the tablet and VCI connectors are Wi-Fi communication and USB cable communication.

4.3.1 Wi-Fi Communication

The tablet will prompt the user to register and activate the VCI connector during the first use. Once the activation is complete, the tablet will

automatically match with the VCI connector and establishes a Wi-Fi connection. At this time the VCI connector icon  at the bottom of the screen lights up and the Wi-Fi indicator of the VCI connector is also on.

4.3.2 USB Communication

When the tablet and VCI connectors are connected through USB cables, the system automatically switches to USB communication mode. At this time the VCI connector icon  at the bottom of the screen will light up, and the USB indicator of the VCI connector will also light up.

5. ADAS Calibration

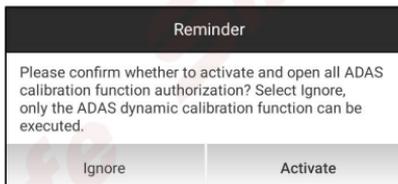
The ADAS calibration function is used to calibrate driver assistance systems with various cameras and radars, such as front-facing cameras for lane departure warning systems, and radar sensors for ACC (Adaptive Cruise Control), etc.

5.1 Activate ADAS Calibration Function

The ADAS calibration function on the device is disabled by default. Users need to use the activation card to activate the function before using it. This function is available with the specified ADAS calibration tool (purchased separately).

Perform the following steps to activate the device:

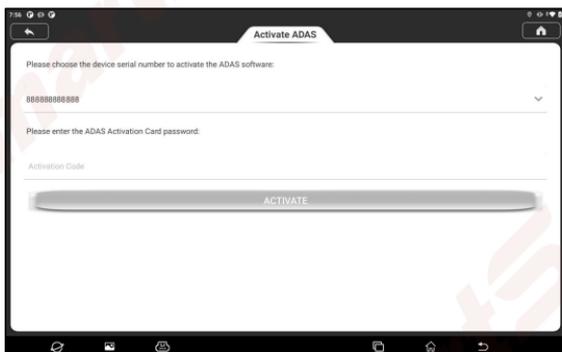
(1) Tap **ADAS Calibration** on the main interface, and the following prompt box will pop up. Tap **Activate** to enter the ADAS activation page.



(2) Tap **Activate** on the ADAS activation page.



(3) Scrape the coating area of the ADAS activation card to display the activation code. Enter the 24-digit activation code, and then tap **Activate** to activate the ADAS function.



(4) After successful activation, the calibration function of ADAS can be used normally.

5.2 ADAS Calibration Conditions

5.2.1 Precondition for the Use of the ADAS Calibration Tool

- Vehicle system is working properly.
- No trouble codes (not including the ADAS-related trouble codes) stored in ECU memories.
- Prepare ADAS Mobile / ADAS PRO+ calibration tool and vehicle-specific calibration reference pattern (sold separately).
- Front & rear axle track is properly adjusted.

5.2.2 Workstation Requirements

To make you work smoothly and calibrate accurately, please make sure the following workstation requirements are met.

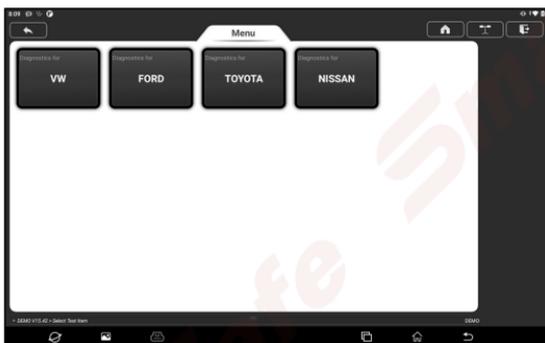
- Make sure the vehicle is parked with all wheels on an even floor surface.
- The lighting system around the calibration workstation should be a non-frequency flash source, including but not limited to: LED light source, industrial lighting complying with international standards, dual light source in opposite phase.
- In the field of view of the camera, there should be no direct light source into the camera, otherwise the camera will reduce the exposure so that the captured calibration pattern becomes darker, adversely affecting the calibration.
- The light source should ensure that there is no reflected spot on the calibration panel.
- The light source should ensure uniform illumination distribution in the calibration workstation.
- The brightness of the light should not be changed, and ensure that there will be no other changing light source around the workstation, such as a driving vehicle with lights ON, etc.

5.3 Calibration Operation

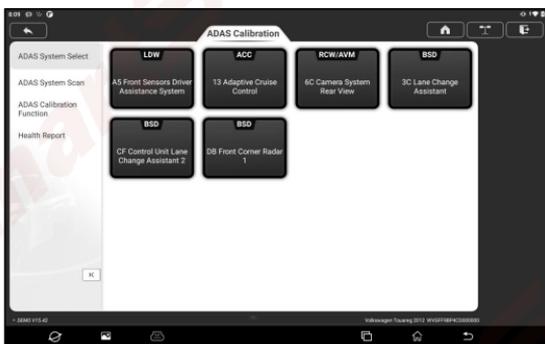
The calibration operation should be performed strictly following the on-screen instructions on the diagnostic tool. For some vehicle models, calibration pattern and calibration tool are not mandatory. But for some camera-based ADAS, the calibration cannot be done without the help of calibration tool and calibration pattern. In this case, for the positioning of the calibration tool and vehicle, it is necessary for the user to manually finish it. The ADAS calibration function is introduced below through the ADAS Demo program.

 *Note: Before doing ADAS calibrations, plug the VCI dongle into the vehicle's DLC port, then establish Bluetooth communication between the tablet and vehicle.*

Tap **DEMO** on the ADAS Calibration Page, the following screen will appear:



Tap **VW** (take VW as an example), the following screen will appear:



 Note: Different vehicle has different diagnostic menus.

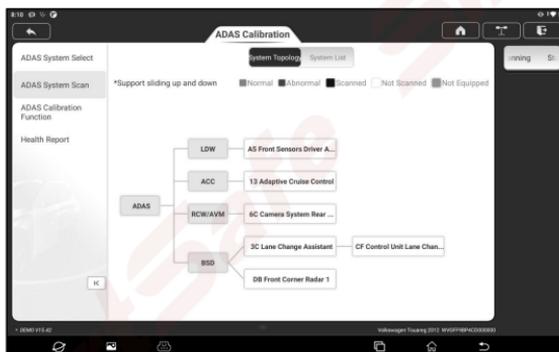
5.3.1 ADAS System Select

This function allows you to select the desired ADAS system to perform diagnosis operation.

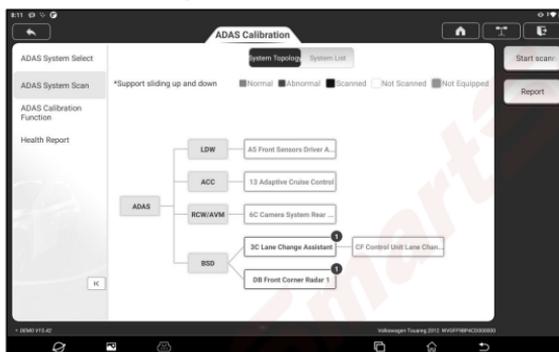


5.3.2 ADAS System Scan

Use this function to scan which ADAS systems are installed on the test vehicle.



The ADAS systems can be displayed in form of topology or list. Tap **Start Scanning** to start reading DTCs. After scanning is complete, tap the system displayed in red to view the existing DTCs, or tap the system functioning normally to perform other diagnostic functions.



5.3.3 ADAS Calibration Function

This option allows you to perform the ADAS calibration operation. In this case, ADAS Mobile / ADAS PRO+ calibration tool is required. The ADAS Mobile / ADAS PRO+ calibration tool is used to position the calibration targets with the vehicle. The tablet is mainly used to guide you through positioning the ADAS Mobile / ADAS PRO+ and providing the detailed calibration procedures.

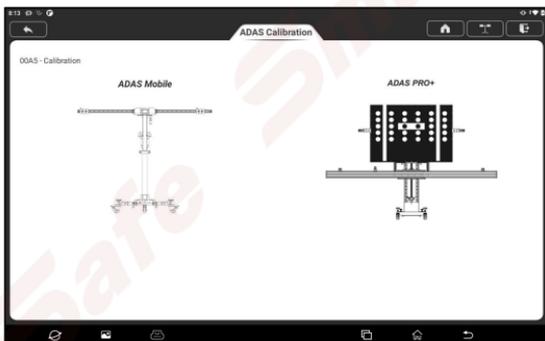
Tap **ADAS Calibration Function** tab, the following screen will appear:



Tap the desired calibration item (Take **Front Camera Calibration** for example), the following screen will appear:



Tap **A5 Front Sensors Driver Assistance System**, the following screen will appear:

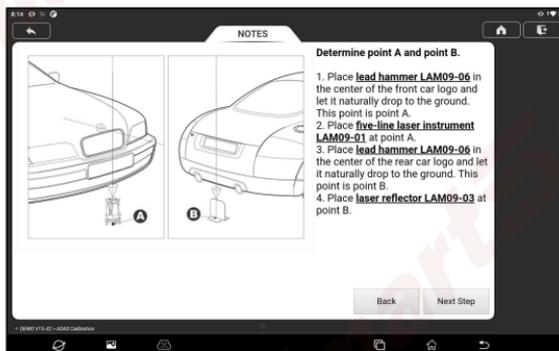


Tap the desired ADAS calibration tool (Take **ADAS Mobile** for example) to go to the next step.

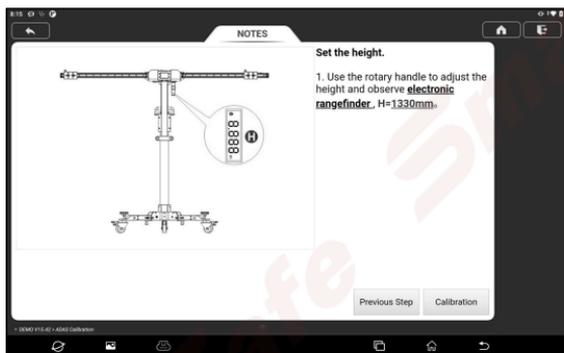
Carefully check the calibration notes and pre-calibration preparation. Swipe the screen from the bottom to view the hidden text if necessary.



Tap **Continue/Complete** to go to the next step.



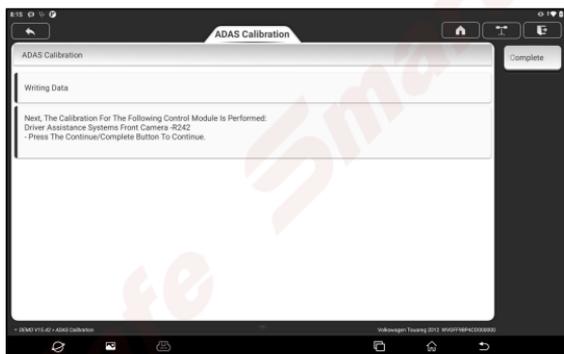
Follow the on-screen prompts to position the ADAS Mobile until the following screen appears.



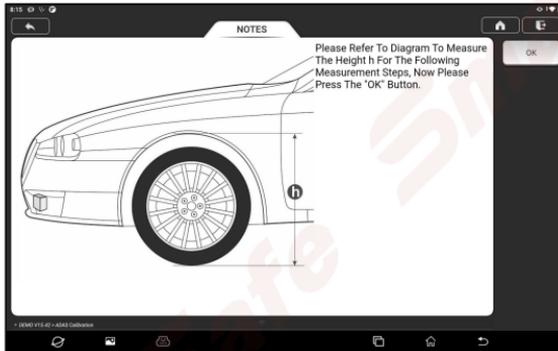
Tap **Calibration** to start calibrating.



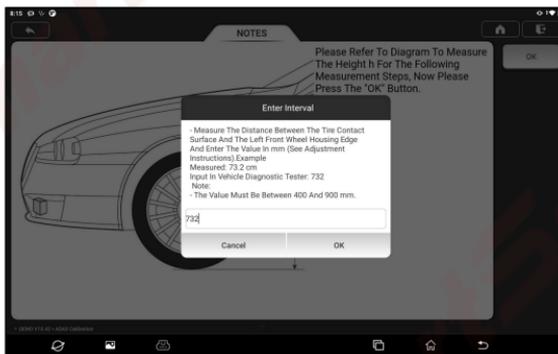
Tap **Continue/Complete** to continue.



Tap **Continue/Complete** to start writing data.



Follow the on-screen instructions to measure the height H (from the tire contact surface to the wheel housing edge) of each wheel respectively, and input the actual measured values.



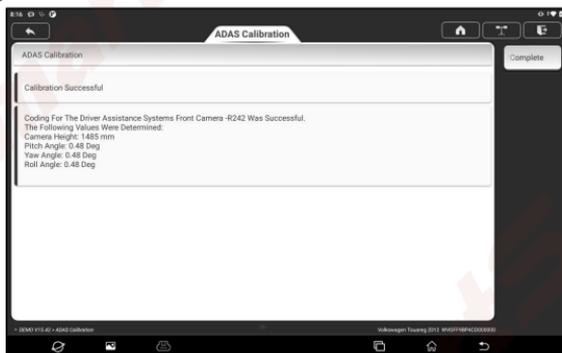
After inputting all measured values, tap **OK** to continue.



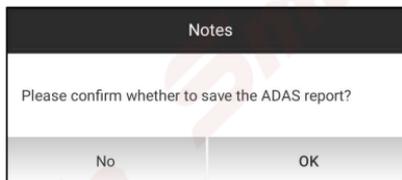
Switch the ignition off, tap **Continue/Complete** to continue.



Switch the ignition on again, tap **Continue/Complete** to code the driver assistance systems front camera data into the vehicle's ECU.



After successfully coding the front camera, tap **Continue/Complete** to continue.



Tap **OK** to save the ADAS report. The ADAS reports are saved under the **ADAS Report** tab in **ADAS Report** on the Job Menu.

5.3.4 Health Report

After performing ADAS calibration, use this option to re-scan all control

modules of the vehicle and check whether the DTCs related to the ADAS systems has been cleared or not.

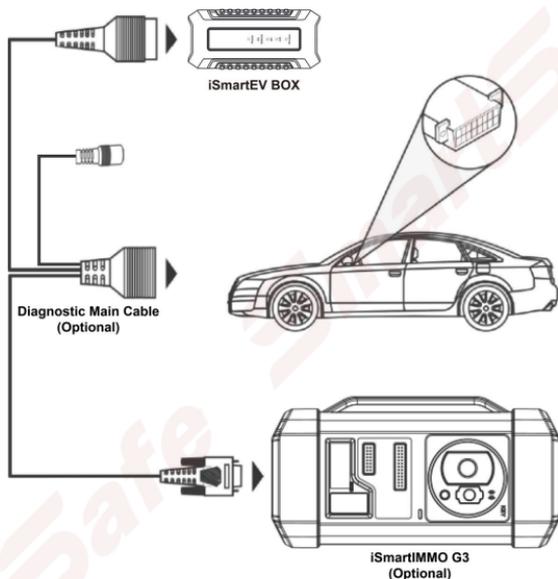
6. IMMO Matching

This function enables you to perform the anti-theft key matching function, so that the immobilizer control system on the car identifies and authorizes remote control keys to normally use the car.

6.1 Anti-theft Matching

6.1.1 Vehicle Connection

1. For most vehicles, just use the included OBD II extension cable to connect the VCI to the vehicle's DLC port.
2. For other vehicles (including but not limited to the Mercedes Benz, VW, BMW and Porsche), the iSmartIMMO G3 and diagnostic main cable (optional) are required.



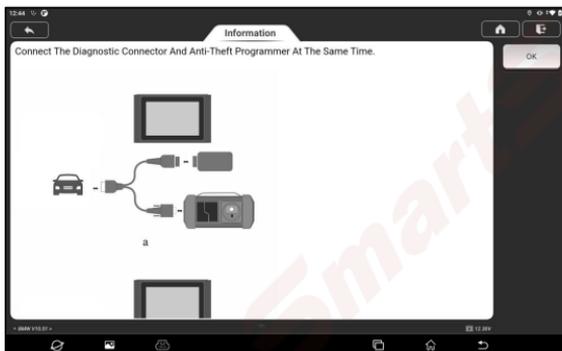
6.1.2 Operations

Here we take the BMW for example to demonstrate how to perform the functions of key adding and all lost for BMW CAS4/CAS4 + anti-theft system module.

1. Tap **IMMO Matching** on the main interface and select BMW as the vehicle brand.



2. Check that the VCI, vehicle and iSmartIMMO G3 are correctly connected according to the prompts in the software picture, and then tap **OK**.



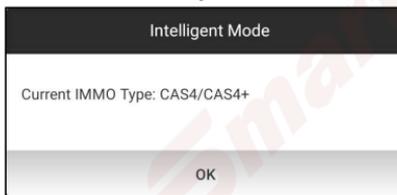
3. Tap **Anti-Theft Key Matching**.



4. If not sure about the type of anti-theft system, tap **Automatic Detection**.



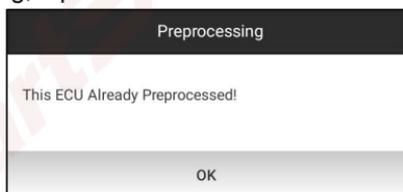
5. The IMMO type will be automatically identified , then tap **OK**.



6. Tap **Preprocessing** to perform Read anti-theft data, Key matching and more. If it has already been preprocessed, here you can perform the relevant functions. The ECU will be upgraded in this process, and files need to be downloaded online.



7. After preprocessing, tap **OK**.



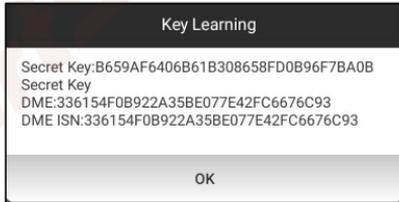
8. Return to the function menu page and tap **Key Learning**.



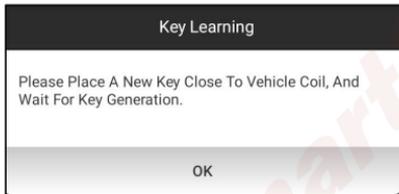
9. After the key information successfully read, select the unused key position and tap **Key Generated By Ignition Switch**.



10. Read and display the secret key, and tap **OK**.



11. Place a new key close to vehicle coil, tap **OK**, and wait for key generation.



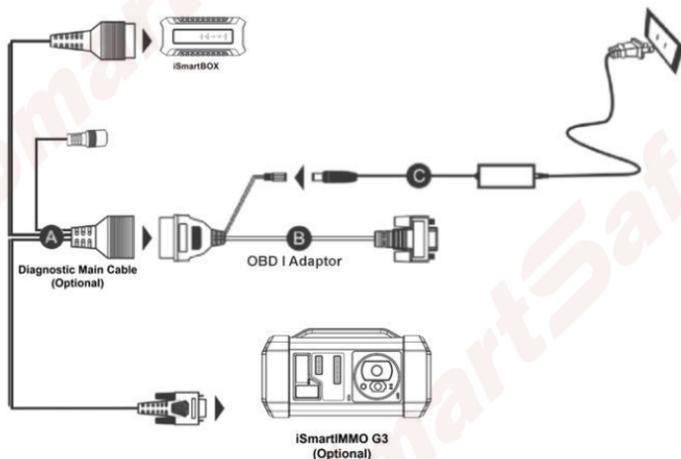
12. After the dealer key is successfully generated, please try to start the vehicle. Now the key matching is finished and the new key is ready for use.

6.2 IMMO PROG

The iSmartIMMO G3 is required when performing this operation. It has the following functions:

- Read transponder data (including Mercedes Benz infrared smart key), and generate exclusive keys.
- Read/write on-board EEPROM chip data, and read/write MCU/ECU chip data.
- Read/write remote control transponder data and detect key frequency.

1. Before performing this function, please make sure the following connections are properly made.



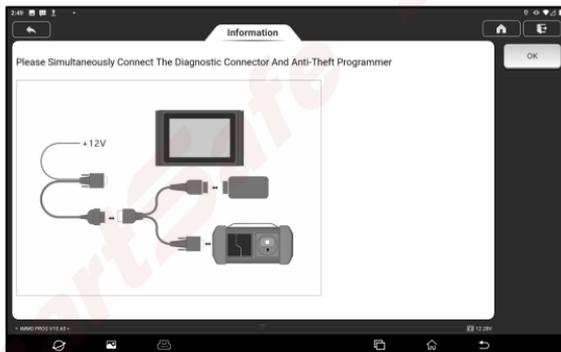
- Diagnostic main cable
- OBD I adaptor
- Switching power supply of the iSmartIMMO G3

Notes:

- You are suggested to connect the BOX shown in above diagram to the tablet via the USB cable. Using a USB cable could effectively enhance your data transmission speed.
- IMMO Programming does not require a connection to the vehicle. To ensure that the iSmartIMMO G3 works properly, ONLY use the switching power supply and OBD I adaptor

to supply power to the iSmartIMMO G3. Obtaining power through a connection to the DC power jack of the iSmartIMMO G3 via the switching power supply alone is failed.

2. Tap **IMMO PROG**. Check that the VCI, vehicle and iSmartIMMO G3 are correctly connected according to the prompts in the software picture, and then tap **OK**.



3. Select the desired item to proceed.



6.2.1 EEPROM Programming

This function allows you to read/write on-board EEPROM chip data.

6.2.2 Engine Programming

This function allows you to read the engine data and write in the backup data after a new engine is replaced.

Below procedures show you how to perform engine programming.

1. Tap **Engine**.

2. Select Engine Brand (e.g. Bosch).



3. Select Engine series (e.g. MED17).



4. Tap **Search For ECU Model**.

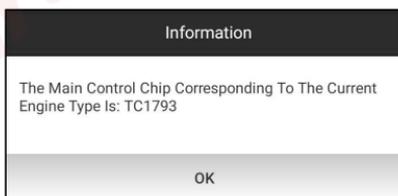


5. Check ECU model (printed on the sticker on the back of your Engine),

enter the engine type in the dialogue box (for example , the engine type should be MED17.7.7) and tap **OK**.



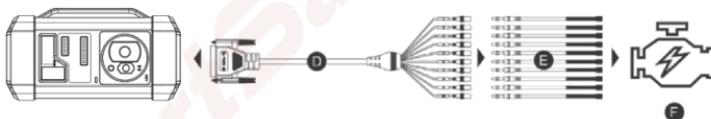
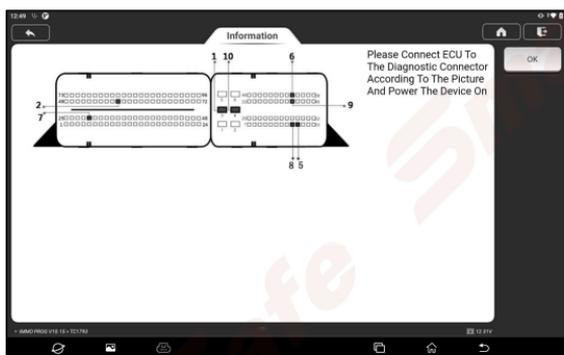
6. Tap **OK** to confirm the engine type and enter the function selection screen.



Note: The function selection screen varies by different vehicle manufacturers.

a. Tap **View Wiring Diagram** to check how to connect the engine with the iSmartIMMO G3.

Note: Vehicle engine connection could vary depending on engine types, for information how to connect the car engine, refer to the onscreen connection diagram.



D. BENCH mode cable (optional)

E. Adaptor cable (optional) associated with the BENCH mode cable

F. Engine

- b. Tap **Backup EEPROM data** to create a file name and save it on the tablet.
- c. Tap **Restore EEPROM data** to write the backup EEPROM data into the new engine.

! Stop: The EEPROM restoration applies only when you have encountered irrevocable faults or after a new engine is replaced.

- d. Tap **Backup FLASH data** to save the FLASH data on the tablet to avoid accidents.
- e. Tap **Read chip ID** to read the chip information.

6.2.3 Gearbox Programming

This function allows you to restore the old gearbox data or write in new data after a new gearbox is replaced.

Below procedures show you how to perform gearbox programming for AUDI. There are two kinds of gearbox ECU replacements, and the user can choose the corresponding solution according to the actual situation.

Situation 1 - The data of the original vehicle gearbox ECU is readable. Data is not damaged, and the gearbox can be cloned. In this case, we just need to back up the original gearbox EEPROM and FLASH, and then restore

them into the gearbox ECU for replacement.

Situation 2 - The data of the original vehicle gearbox ECU is unreadable or the data is damaged. In this case, we need to back up the EEPROM of the ECU for replacement, and then manually input the original CS code or get the original CS code from the original key.

Situation 1:

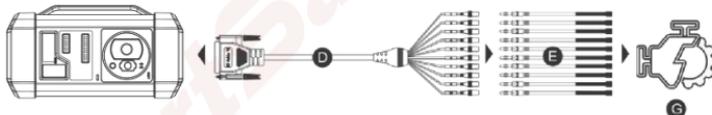
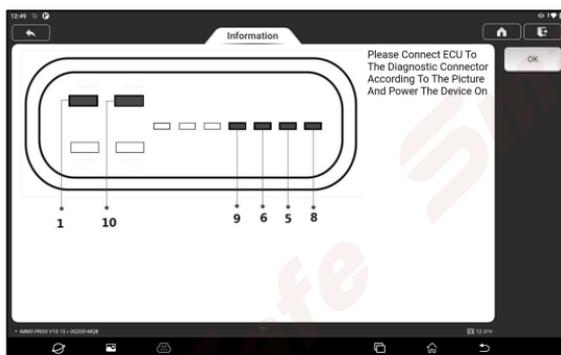
1. Tap **Gearbox**.
2. Select Gearbox type according to the specific model, here we choose **DQ200-MQB** (take this as an example) to enter the function selection screen.



Note: The function selection screen varies by different vehicle manufacturers.

3. Tap **View Writing Diagram** to check how to view the original car gearbox ECU with iSmartIMMO G3 using the BENCH mode cable and its associated adaptor cable.

Note: Vehicle gearbox connection could vary depending on gearbox types, for information how to connect the car gearbox, refer to the onscreen connection diagram.



D. BENCH mode cable (optional)

E. Adaptor cable (optional) for the BENCH mode cable

G. Gearbox ECU

4. Tap **Connect** to read the chip ID of the original car gearbox.
5. Tap **Backup EEPROM Data** to read the EEPROM data of the original car gearbox and then enter the new file name to save it on the tablet.
6. Tap **Backup FLASH Data** to back up the FLASH data of the original vehicle gearbox and then enter the new file name to save it on the tablet.
7. Tap **Disconnect** to disconnect the original vehicle gearbox, and then disconnect the original vehicle gearbox from the BENCH mode cable.
8. Connect the new gearbox ECU to the iSmartIMMO G3 according to the steps 3 and 4.
9. Tap **Restore EEPROM Data**, select the EEPROM data backed up in step 5, and tap **OK** to write the EEPROM data of the original vehicle gearbox in the new gearbox ECU.

10. Tap **Restore FLASH Data** to write the FLASH data of the original vehicle gearbox backed up in step 6 into the new gearbox ECU.

Situation 2:

1. Tap **Gearbox**.

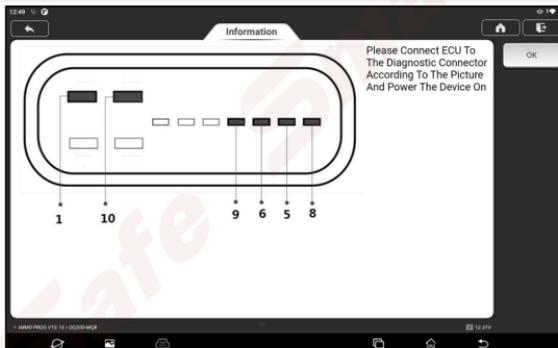
2. Select Gearbox type according to the specific model, here we choose **DQ200-MQB** (take this as an example) to enter the function selection screen.

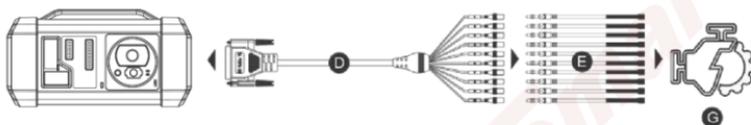


Note: The function selection screen varies by different vehicle manufacturers.

3. Tap **View Writing Diagram** to view how to connect the original car gearbox ECU with iSmartIMMO G3 using the BENCH mode cable and its associated adaptor cable.

Note: Vehicle gearbox connection could vary depending on gearbox types, for information how to connect the car gearbox, refer to the onscreen connection diagram.



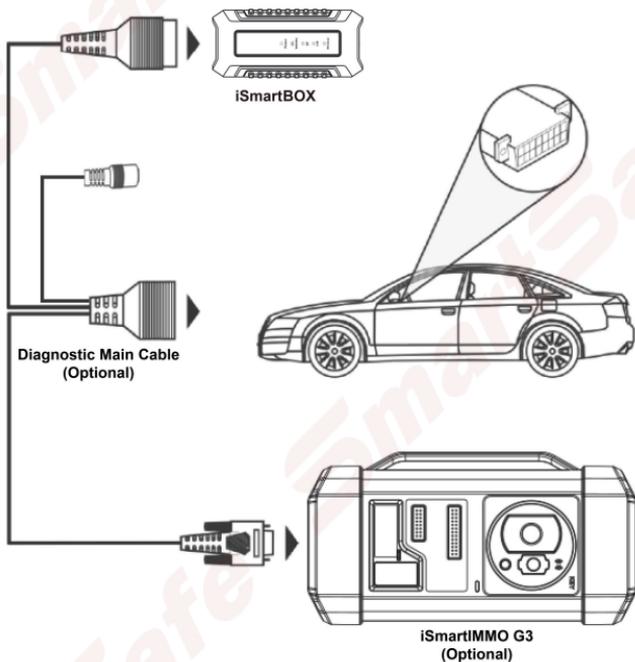


D. BENCH mode cable (optional)

E. Adaptor cable (optional) for the BENCH mode cable

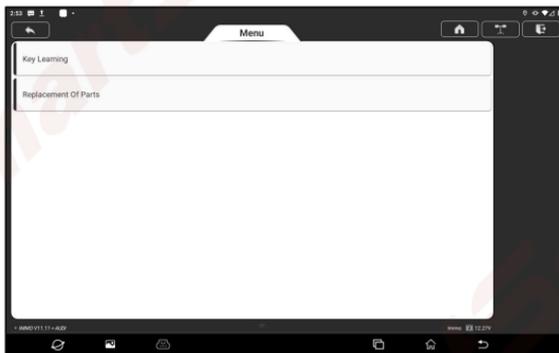
G. Gearbox ECU

4. Tap **Connect** to read the chip ID of the original car gearbox.
5. Tap **Backup EEPROM Data** to read the EEPROM data of the original car gearbox and then enter the new file name to save it on the tablet.
6. Exit **IMMO PROG**. Install the new gearbox on the vehicle and connect the iSmartIMMO G3 to the vehicle's DLC port.

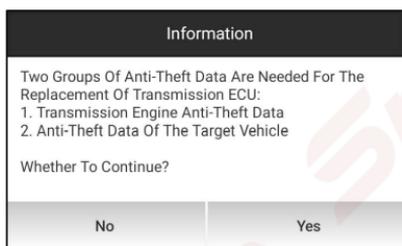


7. Tap **Special Function** on the main interface and then choose **VW** to enter the anti-theft system, select **MQB Instrument ->**

Replacement Of Parts -> Transmission, tap OK.



8. Tap **YES** to enter the gearbox replacement screen.

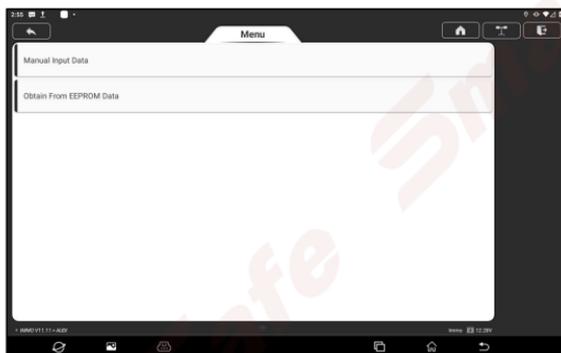


9. When replacing the transmission ECU, two groups of anti-theft data are required:

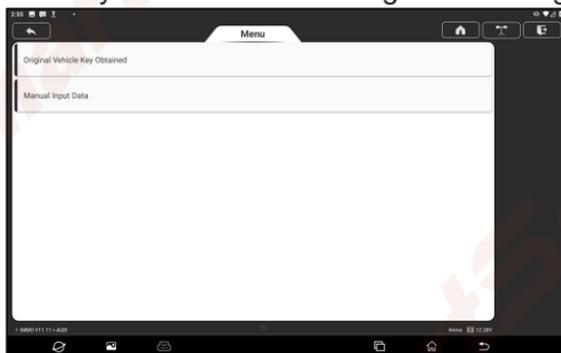
- Anti-theft data of transmission engine (backed up in step 5)
- Anti-theft data of the target vehicle

1) Select **Edit1**, tap **NO**, tap **Obtain From EEPROM Data**, select the new gearbox EEPROM data backed up in step 5, and tap **OK**.





2) Tap **Edit2**, if you have obtained the relevant data of the original vehicle gearbox from other equipment, select **Manual Input Data** and enter the 16-byte CS code of the original vehicle gearbox.



Note: If there is no anti-theft data of the target vehicle, select **Original Vehicle Key Obtained**, put the original vehicle key in the iSmartIMMO G3, and just follow the prompts to obtain it, no need to enter any data to complete the replacement.

10. Tap **Start Replacement**, and input the original car's VIN code, power level and CS code of the original car instrument according to the information prompts to complete the gearbox replacement.

Note: If **Original Vehicle Key Obtained** is selected in step 9, the vehicle's VIN code, power level and CS code in this step will be automatically obtained. The user is not required to enter any data to complete the replacement.

6.2.4 Key Programming

This function allows you to backup old key data, write in data for new keys and detect remote control frequency.

6.2.5 SCM(Single Chip Microcomputer) Programming

This function allows you to read chip (also called MCU) ID, lock/unlock chip, backup/restore EEPROM data and FLASH data.

Notes:

- The data flow is large when performing reading/writing operations. To improve the communication stability, you are recommended to use a USB cable.
- MCU connection could vary depending on MCU types, for information how to connect the MCU, refer to the onscreen wiring diagram.

7. Diagnose

This function is mainly used for vehicle diagnose. Users can use **AutoDetect** to quickly identify vehicle information and enter the system for vehicle diagnose, or manually select models and systems for detection.

7.1 AutoDetect

Use **AutoDetect** to quickly identify vehicle information and vehicle diagnose, without manual selection of vehicle type.

Tap **Diagnose -> AutoDetect** on the main interface to enable the intelligent detection function of vehicles.



Some models may not be able to identify the vehicle information through the intelligent detection function. In this case, the following dialog box will pop up for the user to scan or manually input the vehicle VIN code.

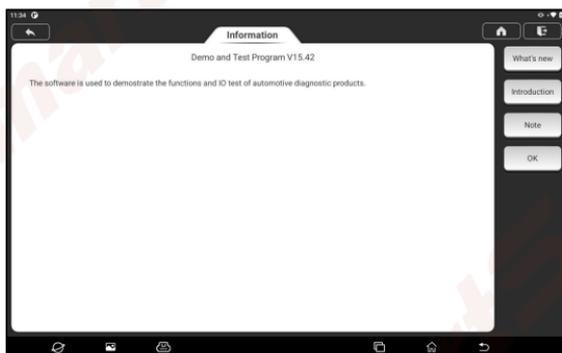


7.2 Manual Selection

1. Tap **Diagnose** on the main interface to enter the vehicle brand selection interface.



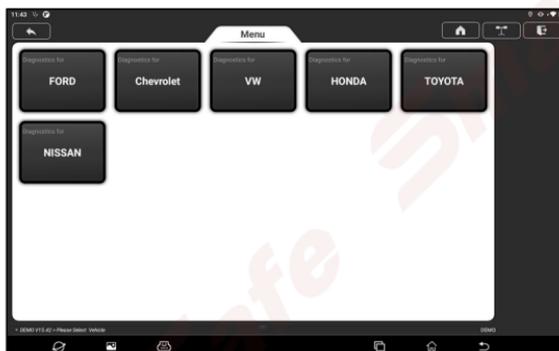
2. Click the vehicle brand to be tested to enter the model version information interface. Here we take Demo (Version 15.42) as an example to demonstrate how to diagnose a vehicle.



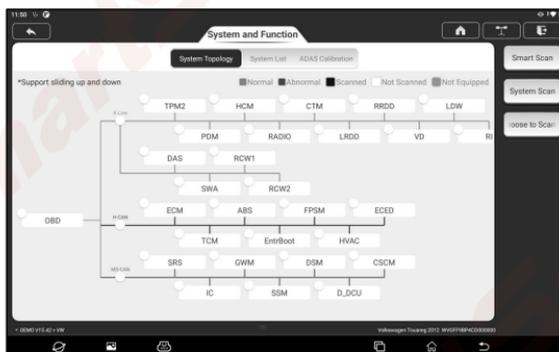
Screen Button Description:

What's new	Click to view the updated points of the current diagnostic software.
Introduction	Click to view the specific use of the current diagnostic software.
Note	Click to view precautions when using the current diagnostic software.
OK	Click to go to the next step.

3. Select vehicle brand and model. Here we take **VW** as an example.



4. Select the scan option that need to perform.



The system supports two display modes: topological diagram and list. User can also tap **ADAS Calibration** to perform ADAS related test options of vehicles .

Note: The specific system and special functions provided depend on the vehicle type.

7.2.1 Smart Scan

This function is used to quickly detect the vehicle and output the vehicle health report directly (this will only be displayed for the vehicle testing software supports this function.)

Tap **Smart Scan** on the test option selection interface, and the system starts to scan each system for faults code.



The system with fault codes will be displayed with red background, and the specific number of fault codes will be displayed. Click on a single system to view specific fault information. No fault system will be displayed with green background.

Screen Button Description:

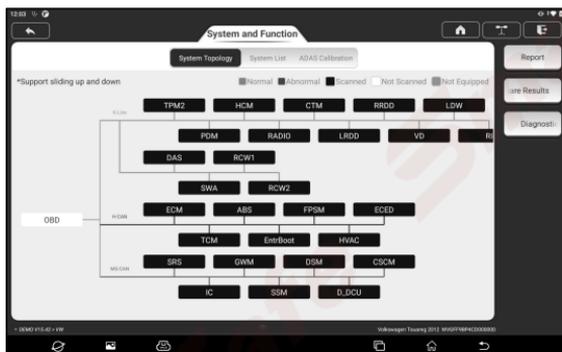
Report	<p>Click to save the current fault report as the detection report.</p>
	<div data-bbox="339 681 864 1093" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">Report Information</p> <p>Report Info Volkswagen_WVGFF9BP4CD00000_AllSystemDTC_20221018 Report Type Pre-Repair 235228</p> <p>Maintenance order: <input type="text" value="maintenance order"/> Technician Name: <input type="text" value="Technician Name"/> Customer Name: <input type="text" value="Customer Name"/></p> <p>Vehicle Information Volkswagen Touareg 2012 WVGFF9BP4CD00000 45565 km License # <input type="text"/></p> <p>Remark <input style="width: 100%;" type="text"/></p> <p>workshop information <input style="width: 100%;" type="text"/></p> <p style="text-align: center;">Cancel OK</p> </div> <p>Click ▼ to select the report type from the drop-down list, then enter the details and tap OK.</p> <p>Note: Diagnostic reports can be classified into Pre-Repair Report, Post-Repair Report and Diagnostic Scan (if no comparison is required, you can select Diagnostic Scan). The device has the report comparison function, so you need to select a correct report type when</p>

	<p>saving reports. By comparison, maintenance technicians can clearly understand whether the fault codes found before diagnosis have been completely cleared after maintenance.</p> <p>Enter the shop name and then tap OK to enter the report details view page.</p> <p>On the report details page, tap Save to save the report. All diagnose reports are stored in the Reports -> Diagnostic tab.</p>
Compare Results	<p>Click to select the report before maintenance. By comparing the reports before and after maintenance, the maintenance technician can clearly understand whether the fault codes found before maintenance have been completely cleared after maintenance.</p> <p> <i>Note: Before performing this function, please ensure that:</i></p> <ul style="list-style-type: none"> • The Pre-Repair inspection report of the current test vehicle has been saved; and • Repairs have been carried out on the basis of the inspection report before maintenance, and the code has been cleared. Otherwise there will be no difference between the reports before and after the maintenance
Diagnostic Plan	Click to view the reason analysis of the fault code.
Clear DTCs	<p>Click to clear all the fault codes.</p> <p> <i>Note: For general models, please strictly follow the conventional sequence: read the fault code first, then clear the fault code, test run, read the fault code again for verification, repair the vehicle, clear the fault code, test run again to confirm that the fault code does not appear.</i></p>

7.2.2 System Scan

This function is used to scan which systems the vehicle is equipped with.

Tap **System Scan** on the test option selection interface, and the system starts to scan the vehicle system. After the scan is completed, the screen will display the scan results.



The user can manually select the vehicle electronic control system to perform the test function operation. Click a single electronic control system (such as "ECM") in the test option selection interface, and then tap **Enter** to go to the test function selection page.



Note: Different models may have different test menus.

A. Module Information

This function is used to read the ECU version information of the current vehicle.

B. Read DTC

This function is used to read the diagnostic trouble code existing in the current car ECU, and help maintenance personnel quickly understand the cause of vehicle failure.

Tap **Read DTC** on the test function selection page, and the screen will display the following detection results.



⚠ Warning: Reading a diagnostic trouble code while troubleshooting a vehicle is only a small step in the diagnostic process. The vehicle DTC is only used as a reference, and parts cannot be replaced directly on the basis of the given DTC definition. Each DTC has a set of test procedures, and the maintenance technician must strictly follow the operating instructions and procedures described in the vehicle maintenance manual to confirm the root of the fault.

Screen Button Description:

Freeze Frame	If the button is highlighted, the frame is frozen. The freezing frame function is to record the values of some specific data streams at the moment when the car breaks down for verification.
Data Stream	Click to read and display the car ECU real-time operation data and parameters.
Help	Click to view the possible cause of the DTC.
Code Search	Click to search for a specific explanation of the DTC online.
Report	Save the current test result as a test report. All test reports are stored in the Reports tab.

C. Clear Fault Code

This function is used to clear fault codes stored in the ECU of the system under test.

In the test function selection page, Tap **Clear Fault Code**, the system will pop up a dialog box of confirming clearing, Tap **Yes** to confirm the clearing of the fault code.

📖 Note: For general models, please operate in strict accordance with the conventional

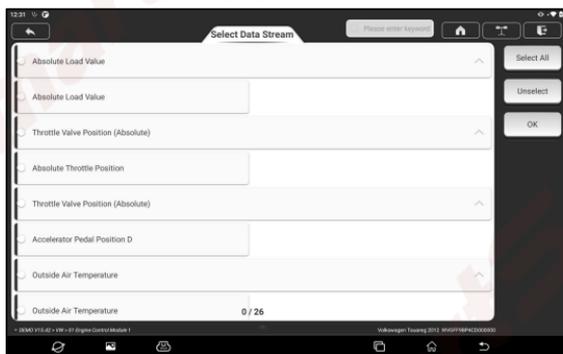
sequence: read the fault code first, then clear the fault code in the test run, read the fault code again for verification, repair the vehicle, clear the fault code, and confirm the fault code does not appear in the test run again.

D. Read Data Stream

This function is mainly used to read and display the real-time operation data and parameters of automobile ECU. By observing these real-time data streams, maintenance technicians can gain insight into the overall performance of the vehicle and provide guidance for vehicle maintenance.

⚠ Danger: If you must drive the vehicle while performing troubleshooting, please ask someone else to help you. Driving and operating diagnostic equipment at the same time is dangerous and can cause serious traffic accidents.

Tap **Read Data Stream** on the test function selection page, and the system enters the data stream selection page.



Screen Button Description:

Select All	Select all data stream options.
Unselect	Click to cancel all the selected data stream options.
OK	Confirm the current operation.

Tap **OK**, the system will display the dynamic data of the selection.



Note:

Style set		
Absolute Load Value	B	A
Throttle Valve Position (Absolute)	B	A
Accelerator Position	B	A
Outside Air Temperature	B	A
Current Of Oxygen Sensor Bank 1 Sensor 1 (Broadband Sensor)	B	A
Oxygen Sensor Bank 1 Sensor 2 (Jump Sensor)	B	A
Current Of Oxygen Sensor Bank 3 Sensor 1 (Broadband Sensor)	B	A
Oxygen Sensor Bank 3 Sensor 2 (Jump Sensor)	B	A
Ambient Air Pressure	B	A
Cancel	OK	

1. Click **T**, the left popup will appear on the screen:

Users can set different display styles for each data stream option according to personal preferences.

B Indicates that the current data stream will be displayed in bold.

A Indicates that the current data stream will be displayed in red.

2. Tap **English / Metric** to switch units.

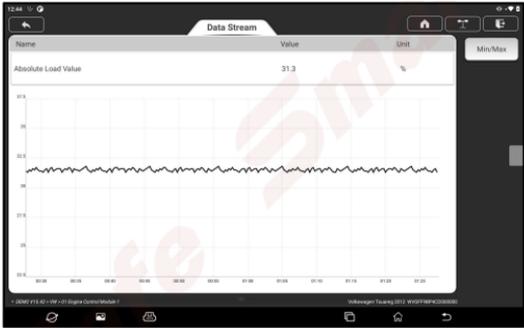
3. If the read data stream value is out of the standard value range, the data stream is displayed in red.

Screen Button Description:



(Single Graphic)

Click to display the current (single) data stream as a waveform diagram.

	 <p>Note: The waveform can be zoomed in or out. Tap the screen with two fingers (thumb and index finger, for example), then slide the fingers to adjust the distance between the fingers to zoom in and out of the screen.</p> <ul style="list-style-type: none"> • Min/Max Limit: Click to set the maximum/minimum value. Once the running value exceeds the set value, the system will issue a warning.
<p>Report</p>	<p>Click to save the current data stream value as a report. The saved test report is stored in Reports -> Diagnostic.</p>
<p>Record</p>	<p>Click to start recording test data. The recorded test data can provide an important reference for technicians to troubleshoot vehicle problems. To stop reading, click the button  in front of the progress bar.</p> <p>Note: The saved file is named after vehicle type + VCI device serial number + system time when recording starts. To distinguish file names, please set the correct system time.</p>

E. Actuation Test

This function is mainly used to test whether the executive component in the electronic control system can work normally.

7.2.3 Choose to Scan

This function is used to select the vehicle electronic control system required by the user for scanning. In the test option selection interface, check the check box in front of the system to be scanned, and then tap **Choose to Scan** to start scanning the selected system.

8. Special Functions

This module provides the quick entry for commonly used special function operation, including A/F Reset, Brake Reset, maintenance lamp returns to zero, steering angle learning, battery replacement, ABS exhaust, throttle learning, tire pressure reset, DPF regeneration, wave case learning, gear learning, headlamp matching, electronic water pump start, engine power balance, anti-theft matching, high pressure accumulator health detection, GPF regeneration and release of transport mode etc. If you need to operate more special functions, you can enter the diagnostic model software to operate.



Note: The specific special functions provided depend on the vehicle type.

8.1 A/F Reset

This function is applied to set or learn Air/Fuel ratio parameters.

8.2 Electronic Parking Brake Reset

This function enables you to reset the brake pad after replacing the brake pad.

It needs to be performed in the following cases:

- 1) The brake pad and brake pad wear sensor are replaced.
- 2) The brake pad indicator lamp is on.
- 3) The brake pad sensor circuit is short, which is recovered.
- 4) The servo motor is replaced.

8.3 Oil Reset Service

If the service lamp is on, run car diagnostics first for troubleshooting. After that, reset the driving mileage or driving time, so as to turn off the service lamp and enable a new driving cycle.

8.4 Steering Angle Calibration

This function enables you to reset the steering angle, 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.

8.5 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.

It needs to be performed in the following cases:

- 1) The main battery is replaced.
- 2) The battery monitoring sensor is replaced.

8.6 ABS Bleeding

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

It needs to be performed in the following cases:

- 1) When the ABS contains air.
- 2) When the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced.

8.7 Throttle Learning

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.

Cases when throttle learning is required:

- 1) After the replacement of the ECU, the ECU does not store the characteristics related to the working of the throttle, so the throttle matching is required.
- 2) After the power-off of the ECU, the memory of the ECU memory is lost, and throttle matching is required.
- 3) After replacing the throttle assembly, the throttle matching is required.
- 4) After the replacement or disassembly of the inlet, the coordination of the ECU and throttle body on the idle speed control will be affected, and the throttle matching is required.
- 5) After cleaning the throttle, the characteristics of the idle throttle

potentiometer have not changed, but under the same throttle opening, the air intake has changed, and the idle control characteristics have changed. At this time, it is necessary to match the throttle.

8.8 Tire Pressure Monitor System Reset

This function enables you to quickly look up the tire sensor IDs from the vehicle's ECU, reset tire pressure and turn off the tire pressure MIL.

It needs to be 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.

8.9 Diesel Particulate Filter (DPF) Regeneration

This function enables you 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.

It needs to be performed in the following cases:

- 1) The exhaust back pressure sensor is replaced.
- 2) The PM trap is removed or replaced.
- 3) The fuel additive nozzle is removed or replaced.
- 4) The catalytic oxidizer is removed or replaced.
- 5) The DPF regeneration MIL is on and maintenance is performed.
- 6) The DPF regeneration control module is replaced.

8.10 Gearbox Matching

This function enables you to complete the gearbox self-learning to improve gear shifting quality.

It needs to be performed in the following cases:

When the gearbox is disassembled or repaired.

8.11 Gear Learning

This function enables you to perform tooth learning for the car, to turn off the MIL.

It needs to be performed in the following cases:

- 1) After the engine ECU, crankshaft position sensor, or crankshaft flywheel is replaced.
- 2) The DTC 'tooth not learned' is present.

8.12 Motor Angle Calibration

When the rotor position detected by the motor angle position sensor is different from the actual rotor field position, motor angle calibration must be performed.

8.13 Coolant Bleed

Use this function to activate the electronic water pump before venting the cooling system.

8.14 Engine Power Balance Monitoring

It is used to monitor crankshaft acceleration in the power stroke of each cylinder, to determine the relative power provided by each cylinder.

8.15 IMMO Prog

This function supports the reading and writing of car key chip, EEPROM chip, MCU chip, EEPROM and flash of engine ECU and transmission ECU.

8.16 IMMO Service

This function enables you to perform the anti-theft key matching function, so that the immobilizer control system on the car identifies and authorizes remote control keys to normally use the car.

It needs to be performed in the following cases:

When the ignition switch key, ignition switch, combined instrument panel, ECU, BCM, or remote control battery are replaced.

8.17 High Voltage Battery Diagnosis

It is used for high voltage battery diagnosis and status information detection.

8.18 Gas Particulate Filter Regeneration

After the GPF is used for a long time, fuel consumption is increased and

engine output power is reduced. In this case, the GPF replacement or regeneration must be performed.

8.19 Transport Mode

In order to reduce power consumption, the following functions may be disabled, including limiting the vehicle speed, not waking up the door opening network, and disabling the remote control key, etc. At this time, the transport mode needs to be deactivated to restore the vehicle to normal.

8.20 Tire Reset

This function is used to set the size parameters of the modified or replaced tire.

8.21 Windows Calibration

This feature is designed to perform door window matching to recover ECU initial memory, and recover the automatic ascending and descending function of power window.

8.22 AdBlue Reset

After the diesel exhaust treatment fluid (car urea) is replaced or filled up, urea reset operation is required.

8.23 NOx Sensor Reset

NOx sensor is a sensor used to detect the content of nitrogen oxides (NOx) in engine exhaust. If the NOx fault is re-initialized and the NOx catalytic converter is replaced, it is necessary to reset the catalytic converter learned value stored in the engine ECU.

8.24 Injector Coding

This function enables you to 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.

It needs to be performed in the following cases:

After the ECU or injector is replaced.

8.25 Stop/Start Reset

This function is used to open or close the automatic start-stop function via setting the hidden function in ECU (provided that the vehicle has a hidden function and supported by hardware).

8.26 Sunroof Initialization

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

8.27 Suspension Calibration

This function enables you to adjust the height of the body.

It needs to be performed in the following cases:

- 1) When replacing the body height sensor, or control module in the air suspension system.
- 2) When the vehicle height is incorrect.

8.28 Language Change

This function is used to change the system language of the vehicle central control panel.

8.29 Intelligent Cruise Control System Diagnosis

It is used for matching after the intelligent cruise control module is replaced or repaired.

8.30 AC System Relearn/Initialization

AC system relearn/ initialization must be performed when the vehicle AC ECU or actuator is replaced or the ECU memory is lost.

8.31 Seats Calibration

This function is applied to match the seats with memory function that are replaced and repaired.

8.32 AFS (Adaptive Front-lighting System) Reset

This function can be used to initialize the adaptive headlamp system. The adaptive headlamp system can decide whether to turn on the headlamp

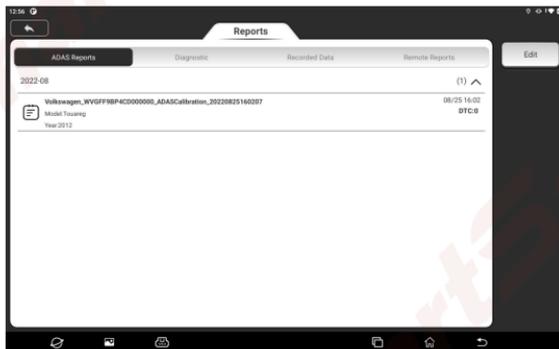
automatically according to the environmental light intensity, and monitor the vehicle's speed and body posture, and adjust the lighting angle of the headlamp timely.

8.33 EGR Learning

This function is used for learning after EGR (Exhaust Gas Recirculation) valve cleaning or replacement.

9. Reports

This option is used to view and manage saved vehicle test reports and test records. On the home screen, tap **Reports** to enter the following page:



If the test report is saved during the ADAS calibration process, it will be displayed under the label **ADAS Reports**;

If the diagnostic report and fault code report are saved during the vehicle diagnosis, the report will be displayed under the **Diagnostic** tab.

Click a single report in the report list to view the report details, print and share the report.

- Tap **Edit** to delete the selected test report, rename the report and share the report.
- Tap **Filter** to select the report type and enter the vehicle VIN number, car series, model or customer name to filter the required from the report list.

If the detected data is recorded on the read data stream screen, the detected data is displayed in the **Recorded Data** tab.

Tap the test record to be played back to enter the following screen:



Select the data stream option, and then tap **OK** to enter the playback page:



Screen Button Description:

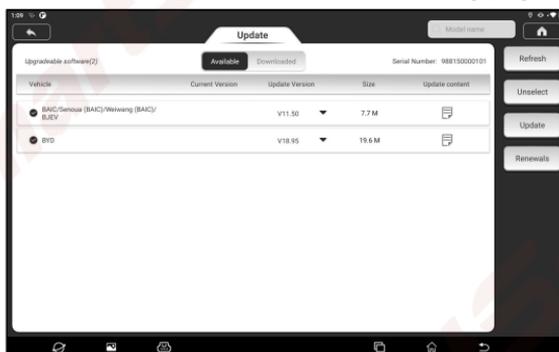
Graph	Play back the selected data stream options graphically.
Combine	Play back the selected data stream options in a combined form.
Value	Playback the selected data stream options numerically.
Frame Playback	Play back the recorded data stream frame by frame.
Auto Playback	Automatic playback of the recorded data stream.

If the diagnosis report is saved during remote diagnose, the report will be displayed under the **Remote Reports** tab.

10. Update

When a new model is added or a new version of software is available, the system will prompt the user to update. It is recommended that the user update to the latest version in time.

On the main interface, tap **Update** to enter the following page:



10.1 Update

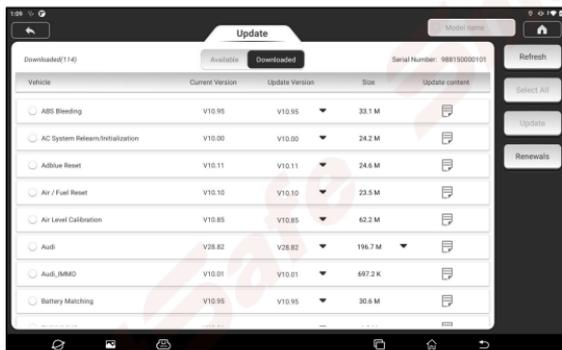
Under the **Available** tab, tap **Select All** to select all upgradable software or check the software that needs to be upgraded, and tap **Update** to start downloading the software installation package. After the download is complete, the software will be automatically installed .

Note: During the update, ensure that the network connection is normal and stable. If you need to update a lot of software, it may take a long time (depending on the network speed), please wait in patience.

To cancel the selection of the software, click the check box in front of the software.

Tap the **Downloaded** tab, and the list shows the currently downloaded

software. You can view the software version, installation package size, and software update content on this interface.



10.2 Renew Subscription

If the software subscription is due or expires, the system will prompt you to renew your subscription.

Tap **Renewals** on the bottom of the screen to enter the payment screen.

1. Tap **Subscription Renewal Card** (*need to buy it from the local dealer where you purchased the tool).
2. Input the 24-digit pin code of Subscription Renewal Card and then tap **Submit** to finish the renewal.



3. Go to update center to update the diagnostic software.

11. Remote Diagnose

The module is used to remotely assist users in diagnosis operations. Tap **Remote Diagnose** to enter the following page:



11.1 Messages

Tap **Messages** to enter the messages page, here you can see all the messages received.



11.2 Contacts

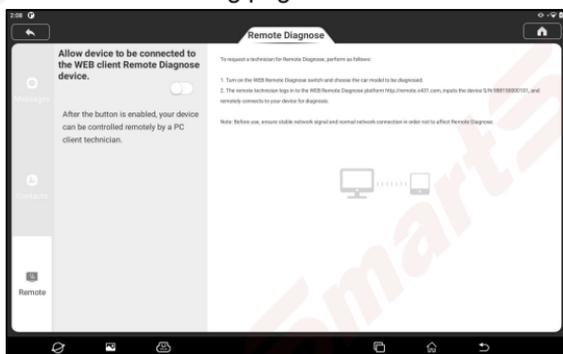
Tap **Contact** to enter the following page. Here you can see the contact list including maintenance technicians and added friends.



Enter “Username/Nickname/Serial Number” in the search bar to search and add a friend. The added friends will appear in the contacts list. Select the maintenance technician in the list to enter the interactive page. In the interactive page, you can communicate with text and voice messages, send files and pictures, invite remote diagnose assistance, etc.

11.3 Remote

Tap **Remote** to enter the following page.



To request a technician for Remote Diagnose, please follow the below steps.

1. Turn on the WEB Remote Diagnose switch and choose the car model to be diagnosed.
2. The remote technician logs in to the WEB Remote Diagnose platform <http://remote.x431.com>, inputs the device S/N, and remotely connects to your device for diagnosis.

Note: Before use, ensure stable network connection in order not to affect Remote Diagnose.

12. Feedback

If an unsolvable problem or diagnostic software problem is encountered during diagnosis, the user can report the problem (the last 20 test records) back to us. After receiving your feedback, we will follow up and deal with it in time, so as to improve our product quality and user experience.

There are three available options:

Feedback	Displays a list of all models that have been tested.
History	Click to view the progress of all submitted diagnostic feedback.
Offline-list	Click to view the diagnostic feedback of upload failure due to network problems. Once the network is restored, the system will automatically upload the data to the server.

Under the **Feedback** tab, click the corresponding model or special function of the diagnosis record to enter.



Tap **Choose File** to open the target folder, select the diagnostic log that needs feedback, and then select the corresponding diagnostic feedback problem type. Enter the fault description and contact information of the feedback person in the text box. Then tap **Submit Result** to send it to us.

After receiving your fault feedback, we will follow up your feedback report in time. Please pay attention to the progress and results of diagnosis feedback in **History**.

13. Toolbox

The toolbox mainly integrates some expansion modules related to the maintenance of vehicle parts, such as tyre tread depth measuring, oscilloscope, multimeter, current clamp and videoscope. Each module basically consists of two parts: hardware and software. The APPs of these modules are integrated on the iSmartLink D01, and these APPs need to work with the corresponding compatible hardware (optional).

13.1 Tyre Tread Depth Measuring

This function module needs to work with tyre tread depth measuring equipment (optional) to detect the tyre tread data and tyre wear status of four-wheel passenger vehicles, so as to provide reference for vehicle tyre replacement and vehicle maintenance. For specific operation, please refer to the product user manual attached with the equipment.

13.2 Oscilloscope

This functional module needs to work with a new energy oscilloscope multimeter (optional), which can enable automobile repair technicians to quickly judge the fault of automobile electronic equipment and circuits. For specific operation, please refer to the product user manual attached with the new energy oscilloscope multimeter.

13.3 Multimeter

This functional module needs to work with a new energy oscilloscope multimeter (optional), which can measure physical parameters such as voltage, resistance and frequency. For specific operation, please refer to the product user manual attached with the new energy oscilloscope multimeter.

13.4 Current Clamp

This functional module needs to work with a new energy current clamp (optional), which can perform AC/DC current test and DC voltage test. For specific operations, please refer to the product user manual attached with the new energy current clamp.

13.5 Videoscope

This functional module needs to work with videoscope equipment (optional), which can detect invisible or inaccessible parts in the engine, fuel tank and brake system. For specific operations, please refer to the product user manual attached with the videoscope device.

14. Setting

This option is used to set the system and view device information.

14.1 Network and Internet

To set the wireless network connection, please perform the following steps:

 *Note: The power consumption of the device increases after the WLAN is enabled. You are advised to turn off the WLAN when it is not in use to save power.*

1. On the home screen, tap **Settings** -> **Network and internet** -> **Wi-Fi**.
2. Tap or slide the WLAN switch on. The device automatically scans for available wireless networks.
3. Select the network you want to connect to:
 - If you choose an open network, you can connect directly to that network.
 - If you choose an encrypted network, you will need to enter an access password before you can connect.
4. When "Connected" is displayed, it means the connection is successful.

14.2 Bluetooth

Used to set up Bluetooth communication connection.

1. On the home screen, tap **Settings** -> **Connected Devices**.
2. Tap **Pair New Device**. The tablet automatically scans for available devices. Select the device you want to connect to. A dialog box will pop up on the tablet and the selected device. After confirming the correct pairing code, tap **PAIR** on both the tablet and the device to complete the Bluetooth connection.

14.3 Apps & Notifications

It is used to manage App permissions and view application notifications.

14.4 Battery

Used to view the App power usage and enable the power saving mode of the device.

14.5 Display

Used to set and adjust device display parameters.

14.5.1 Brightness

1. On the main interface, tap **Settings** -> **Display** -> **Brightness Level**.
2. Drag the slider to adjust the brightness.

In addition, users can also slide down the screen to bring up the system shortcut bar to adjust the screen brightness.

14.5.2 Adaptive Brightness

Tap or slide the **Adaptive Brightness** switch to open to enable the device to automatically adjust and optimize the display brightness of the device according to the ambient light conditions.

14.5.3 Wallpaper

This option is used to set the wallpaper picture of the device.

14.5.4 Screen Timeout

This option is used to set the automatic screen-down time of the device.

1. On the main interface, tap **Settings** -> **Display** -> **Screen Timeout**.
2. Select a screen timeout period.

14.5.5 Screen Saver

This option enables the screen saver function and sets the screen saver background.

14.5.6 Font Size

This option is used to set the font size displayed on the device screen.

14.6 Sound

Used to set the device volume.

14.7 Storage

It is used to manage App storage space and clear App data and caches.

14.8 Privacy

It is used to manage device privacy rights. This includes the permission for an App to access device data, whether characters are displayed briefly when entering a password, and whether notifications are displayed when the screen is locked.

14.9 Location

Used to manage Apps' access to and use of device location information.

14.10 Security

Used for security management such as device lock screen encryption, blocking/allowing the installation of applications from unknown sources.

14.11 System

Used to set device system information, including setting of device language and input methods, gesture, date and time parameters, backup, reset and multi-user access etc.

14.12 USB management

Used to set the USB switch of the device.

1. After you select this option, set the USB switch status to ON. In this case, the USB Type-C port is only used for charging.
2. Deselect this option and set the USB switch status to OFF. In this case, the USB Type-A port on the device stops being used. The USB Type-C port can be used to charge the device and connect the computer to transfer files.
3. Connect the computer through the USB Type-C interface of the device, slide down the screen, "Charging this device through USB" will be displayed, click this option, the USB debugging window will pop up. Click the USB mode you want to use.



 *Note: Keep the USB switch ON when the device uses Wi-Fi for wireless diagnosis.*

15. Personal center

15.1 VCI

This option allows you to manage all your activated VCI devices

15.2 Activate VCI

This item lets you activate the VCI connector in case you ignore the Activate VCI step in process of the product sign-up.



Enter the product serial number and activation code and Tap **Activate**.

15.3 Firmware Fix

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



15.4 Data Sample

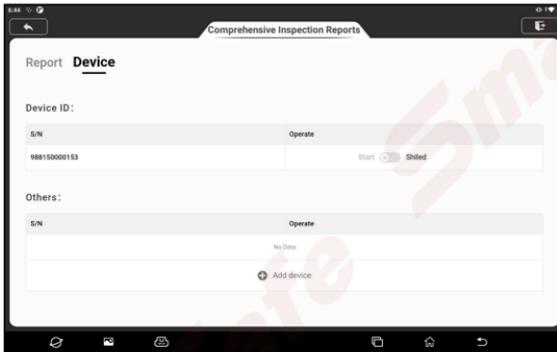
Used to manage the recorded data stream sample files.

15.5 Comprehensive Inspection Reports

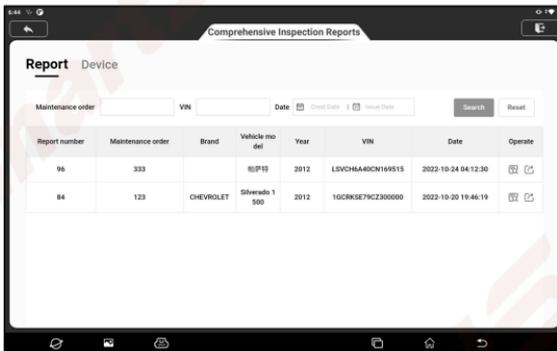
Used for the multi-device collaborative cloud reporting system to automatically generate the single test reports with the same maintenance order number into a comprehensive report.

Tap **Comprehensive Inspection Reports** -> **Device** -> **Add Device** in the personal center, enter the device ID in the pop-up dialog box, and then tap **Save** to add the device.

 *Note: The test report of a device can be collected to generate a comprehensive report only after adding the device.*



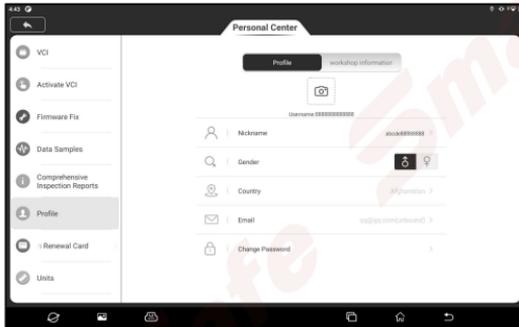
Tap **Report** to view and share the generated comprehensive inspection report.



Note: To generate the test reports of different devices into a comprehensive inspection report, please enter the same maintenance number when saving the test reports of different devices.

15.6 Profile

Use this item to view and configure personal information.



15.7 Subscription Renewal Card

This item is used to check the status of the subscription renewal card.



15.8 Units

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



15.9 Diagnostic Software Clear

This item allows you to hide/clear the diagnostic software that is not frequently used.

Note: Removing software may completely delete the software from the tool. If some software is not used and the tool runs out of space, you can use this feature to remove it. To re-download it, go to **Update** -> **Available**.

15.10 About

The software version information and disclaimer are included.



15.11 Login/Logout

Tap **Log Out** button to log out.

16. Other

16.1 E-mail

This module is used to receive and send e-mail.

16.2 Gallery

This feature can be used to take photos, videos and manage galleries (including screenshots).

16.3 Recording Master

A simple-to-use, convenient and quick screen recording software. Support recording screen playback, GIF animation and sharing functions.

16.4 Camera

The module is used to take photos and record videos.

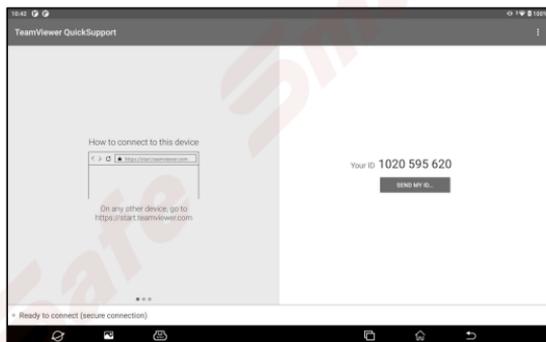
16.5 File Management

This module is the file and program manager. Users can access and create folders directly on the device without connecting to a computer.

16.6 TeamViewer

In case of equipment operation problems, you can use this module to request assistance from the other party.

After you start Remote control (TeamViewer QuickSupport), QuickSupport will automatically assign your ID, and the screen displays as follows:



Send your ID to the other party. After the other party enters your ID in TeamViewer, tap **Connect to Partner** to remotely control your device.

16.7 Browser

This module can be used to browse the web.

16.8 System OTA Upgrade

This module is used to upgrade the system.



After entering, tap **Check Version**, the system starts to check whether the current version is the latest version. If the version is the latest, the system will prompt **Current version is the latest version**.

 *Note: When performing OTA upgrades, ensure that the device has at least 70% power and that no programs are running during the upgrade.*

16.9 Video Player

This module is used to play music and video files.

17. Frequently Asked Questions

1. How to save electricity?

- 1) Close the screen when the device is not in use.
- 2) Shorten screen standby time.

- 3) Reduce the screen brightness.
- 4) Disable the WLAN connection if you do not need to use the WLAN.

2. Failed to communicate with vehicle ECU?

Please confirm:

- 1) Check whether the VCI connector is properly connected.
- 2) Whether the ignition switch of the vehicle is turned on.
- 3) If the above are confirmed to be normal, please send the vehicle type, year, model and VIN code to us through **Feedback** module.

3. Unable to enter vehicle ECU system?

Please confirm:

- 1) Whether the test vehicle is equipped with this system.
- 2) Check whether the VCI connector is properly connected.
- 3) Whether the ignition switch of the vehicle is turned on.
- 4) If the above are confirmed to be normal, please send the vehicle type, year, model and VIN code to us through **Feedback** module.

4. The detection connector is not energized when connected to the vehicle.

Please confirm:

- 1) If the VCI connector is improperly connected, reconnect the connector.
- 2) Poor line contact of vehicle diagnosis seat.
- 3) The vehicle battery itself has a serious power deficit.
- 4) The detection connector is damaged.

5. How to reset the iSmartLink D01 tablet?

Please reset the device according to the following procedures:

- 1) On the home screen, tap **Settings** -> **System** -> **Reset Options**.
- 2) Tap **Erase All Data (Factory Reset)**.
- 3) Tap **Erase All Data** and wait for the system to recover until the tablet automatically restarts.

⚠ Warning: Resetting the device will result in the loss of device data. Before using it, please

ensure that important data has been backed up.

FCC Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Warranty

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

SMARTSAFE 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 SMARTSAFE shall not be liable for any consequential or incidental damages.

Final determination of defects shall be made by SMARTSAFE in accordance with procedures established by SMARTSAFE. No agent, employee, or representative of SMARTSAFE has any authority to bind SMARTSAFE to any affirmation, representation, or warranty concerning SMARTSAFE 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 SMARTSAFE authorized dealer. Your order should include the following information:

- Order quantity
- Part number
- Part name

Statement:

SMARTSAFE 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 SMARTSAFE, SMARTSAFE does not bear any responsibility arising from misunderstandings.