

USER MANUAL

D9 Smart Diagnostics System

V6.5

Shenzhen Xtooltech Intelligent Co., LTD

Please read this user manual carefully before using the D9 Smart Diagnostics System. When reading the manual, please pay attention to the words "Note" or "Caution" and read them carefully for appropriate operation.

TRADEMARKS

XTOOL is a registered trademark of Shenzhen Xtooltech Intelligent CO., LTD. In countries where the trademarks, service marks, domain names, logos, and the name of the company are not registered, Xtool claims that it still reserves the ownership of the unregistered trademarks, service marks, domain names, logos, and the company name. All other marks for the other products and the company's name mentioned in the manual still belong to the original registered company.

You may not use the trademarks, service marks, domain names, logo, and company name of Xtool or other companies mentioned without written permission from the trademark holder.

Xtool reserves the right to the final interpretation of this manual content.

COPYRIGHT

Without the written consent of Shenzhen Xtooltech Intelligent Co., Ltd., any company or individual shall not copy or backup this operation manual in any form (electronic, mechanical, photocopying, recording, or other forms).

DECLARATION

This manual is designed for the usage of the D9 Smart Diagnostics System and provides operating instructions and product descriptions for users of the D9 Smart Diagnostics System.

No part of this manual can 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 Xtool.

Use the device only as described in this manual. Xtool is not responsible for any consequences of violating the laws and regulations caused by using the product or its data information

Xtool shall not be liable for any incidental or consequential damages or for any economic consequential damages arising from the accidents of individual users and the third parties, misuse or abuse of the device, unauthorized change or repair of the device, or the failure made by the user not to use the product according to the manual.

All information, specifications, and illustrations in this manual are based on the latest configurations and functions available at the time of printing. Xtool reserves the right to make changes at any time without notice.

OPERATION INSTRUCTIONS

For safe operation, please follow the instructions below:

- Keep the device away from heat or fumes when you are using it.
- If the vehicle battery contains acid, please keep your hands and skin or fire sources away from the battery during testing.
- The exhaust gas of the vehicle contains harmful chemicals, please ensure adequate ventilation.
- Do not touch the cooling system components or exhaust manifolds when the engine is running due to the high temperatures reached.
- Make sure the car is securely parked, Neutral is selected or the selector is at P or N position to prevent the vehicle from moving when the engine starts.
- Make sure the (DLC) diagnostic link connector is functioning properly before starting the test to avoid damage to the Diagnostic Tablet.
- Do not switch off the power or unplug the connectors during testing, otherwise, you may damage the ECU and/or the Diagnostic Tablet.

CAUTIONS!

- Avoid shaking or dismantling the unit as it may damage the internal components.
- Do not use hard or sharp objects to touch the LCD screen;
- Do not use excessive force;
- Do not expose the screen to strong sunlight for a long period.
- Please keep it away from water, moisture, high temperature, or very low temperature.
- If necessary, calibrate the screen before testing to ensure the accuracy of LCD performance.
- Keep the main unit away from strong magnetic fields.
- Please keep your device always connected to the Internet. When the device is off the Internet for 30 days, The Diagnostics APP may be locked and you need to synchronize data with the Internet to activate it.

AFTERSALES-SERVICES

 \bowtie

E-Mail: supporting1@xtooltech.com (for amazon)

supporting2@xtooltech.com (for AliExpress, eBay and others)



Tel: +86 755 21670995 or +86 755 86267858 (China)

Monday through Friday

09:00~18:30 (UTC/GMT+08:00)



Official Website: www.xtooltech.com

Please provide your device serial number, VIN code, vehicle model, software version, and other details when seeking technical support. If there are screenshots or videos, it will better help us locate your problem.

Content

TR		ARKS	I
СС	OPYRIG	нт	I
DE		ATION	I
OF	PERATI	ON INSTRUCTIONS	I
CA	UTION	S!	II
AF	TERSA	ALES-SERVICES	II
1	GENE	ERAL INTRODUCTION	1
	1.1.	Tablet Overview	1
	Fron	t View of Tablet	1
	Back	View of Tablet	2
	Host	Ports	2
	1.2.	VCI box	3
	Fron	t/Back View	3
	Top/I	Bottom View	3
	1.3.	Technical Specifications	4
	1.4.	Packing Kit	5
2	GETT	ING STARTED	6
	2.1.	Activation	6
	2.2.	Main Interface	7
	Oper	ration System	7
	Main	Menu	9
	Func	tion Buttons	10
	Navi	gation Buttons	10
	Notif	ication Bar	11

	2.3.	Factory Reset11
3	UPDA	TE & DELETE14
	3.1.	Update software14
	3.2.	Delete Software
4	DIAG	NOSTICS16
	4.1.	Vehicle Connection16
	4.2.	Vehicle Selection17
	4.3.	Diagnostics Functions20
5	SPEC	IAL FUNCTIONS
	5.1.	OIL RESET
	5.2.	ЕРВ
	5.3.	SAS
	5.4.	DPF
	5.5.	BMS RESET
	5.6.	THROTTLE
	5.7.	INJECTOR CODING40
	5.8.	GEARBOX MATCH42
	5.9.	GEAR LEARNING43
6	REPC	DRT45
	6.1.	Report45
	6.2.	Replay47
	6.3.	File Manager
7	SETT	INGS48
	7.1.	Language
	7.2.	Units
	7.3.	Bluetooth
	7.4.	My Workshop Info52

	7.5.	VCI Information	53
	7.6.	About	54
8	REMO	IOTE ASSISTANCE	55
9	FAQ.		56
	Q1: Fa	ailed to generate Diagnostics report	56
	Q2: Ho	low to print Diagnostics report	57
	Q3: Fa	ailed to extract files	57
	Q4: Ma	failbox supported错词	! 未定义书签。
	Q5: Ho	low to make an appointment for remote support	58
	Q6: Ho	low to generate and upload diagnostic log files	58
	Q7: Ho	low to switch language	58
	Q8: Fa	ailed to diagnose vehicle	58
	Q9: Fa	ailed to activate or register	58
	Q10: F	Failed to turn on when charging	59
	Q11: F	Failed to open the Diagnostics app	59
	Q12: F	Failed to enter Vehicle menu	59
	Q13: C	Can't receive the email after sharing the diagnostic report	60
10	WA	ARRANTY & SERVICES	61
11	CO	OMPLIANCE INFORMATION	61
	FCC C	Compliance	61
	CE		62
	UKCA	۹	62
S⊦	IENZHE	IEN XTOOLTECH INTELLIGENT CO., LTD	63

1 GENERAL INTRODUCTION

The D9 smart Diagnostics system is an advanced scanning tool based on the Android operating system. It supports multi-language switching and is suitable for different countries and regions.

The advantage of this scanner is not only its comprehensive functions, including complete system Diagnostics, full OBD II functions, various reset functions can also achieve a faster and more accurate Diagnostics.

The D9 Smart Diagnostics system mainly includes:

- Tablet
- VCI box
- Main test cable
- Connectors
- Power adapter

Before performing the Diagnostics program, please make sure that the VCI box is successfully connected to your vehicle, and connect the VCI box with Bluetooth on the tablet.

Some old cars with non-OBD2 standard protocol need to be connected with our VCI box through specific pin connectors.

Using the wrong connector may cause your car to be unrecognized by the diagnostic tool.

Please confirm the OBD connector specifications configured on your car before connecting.

1.1. TABLET OVERVIEW

The main unit of the D9 Smart Diagnostics System is the tablet. It allows you to operate all Diagnostics functions, and it can also work as a normal Android tablet.

FRONT VIEW OF TABLET



Figure 1-1 Sample of Tablet Front View

The front of the tablet is mainly a touchable display screen, you can use your fingers to operate on the screen to finish most of the Diagnostics process.

BACK VIEW OF TABLET



Figure 1-2 Sample of Tablet Back View

- ① **Camera**: Used for taking pictures.
- ② **Tablet Holder**: Used to support the tablet, hold the tablet on the steering wheel or adjust the tablet height as needed.
- ③ **Nameplate**: Show the basic information about the tablet such as product name and serial number, etc.
- ④ **Loudspeaker**: It supports external sound playback.

HOST PORTS



Figure 1-3 Sample of Tablet Host Ports

- ① **USB 3.0 port**: Used for data transfer for tablet & PC communication, and data transfer with VCI box when working, also supports ECU programming for vehicles with DOIP protocol
- 2 VGA port: DB15 port, a reserved interface can be used for charging.
- ③ **DC charging port**: Charging port, connected to the power adapter to charge the device.
- ④ **Power button**: Long press to turn the device on/off, short press to switch the device into sleep mode. Hold for about 20 seconds to force shut down the device.

1.2. VCI BOX

To communicate with the vehicle via OBD, D9 also comes up with a VCI box. The tablet needs a Bluetooth connection with the VCI box to get access to all software.

(D) Although some functions (like EEPROM Adapter) will not need you to communicate to the vehicle, please power up the VCI box using a 12V power adapter to get access to the software.

FRONT/BACK VIEW



Front

Back

Figure 1-4 Sample of VCI Box, screen 1

- ① **Display Screen**: Show status of the VCI box-like battery voltage, Bluetooth connection, and car communication status.
- 2 **Nameplate**: Show basic information about the VCI box, like the serial number.

D Make sure that you're using the VCI box that is paired with the tablet, or it will not communicate. The serial number of the VCI box must be the same as the serial number of the tablet.

TOP/BOTTOM VIEW





Тор

Bottom

Figure 1-5 Sample of VCI Box, screen 2

- DB15 Port: Used to connect the VCI box to the OBDII port on the vehicle.
 USB-B Port: Used to connect the VCI box to the tablet using USB-B to USB3.0 cable

1.3. TECHNICAL SPECIFICATIONS

Table 1-1 Specification

Item	Description
os	Android System
Processor	Quad-core processor 1.8GHz
Ram	2 G
Rom	64G/128 G
Display	9.7-inch capacitive, 1024×768 resolution
Connectivity	 USB Wi-Fi Bluetooth
Camera	8-megapixel autofocus rear camera with flash
Sensor	Gravity sensor
Audio Input/ Audio Output	Microphone/ Loudspeaker
Ports	 USB3.0 DC charging port VGA port
Battery	10000mAh 3.7V lithium polymer battery
Input Voltage	12V DC
Operating Temperature	-10~50°C
Relative Humidity	< 90%
Dimensions	315.07×218.35×34.61 mm

1.4. PACKING KIT

Table 1-2 Packing List

Category	No.	Name	QTY
	1	HONDA-3	1
	2	ΤΟΥΟΤΑ-17	1
	3	BMW-20	1
	4	KIA-20	1
	5	MAZDA-17R	1
	6	NISSAN-14	1
	7	GM/DAEWOO-12	1
	8	SUZUKI-3	1
	9	FIAT-3	1
	10	HYUNDAI/KIA-10	1
Test connector	11	AUDI-4	1
	12	MITSUBISHI-12+16	1
	13	UNIVERSAL-3	1
	14	CITROEN-2	1
	15	BENZ-38	1
	16	BENZ-14	1
	17	SELFTEST	1
	18	OBD II-16	1
	19	DB15 Main Cable	1
	20	Battery Cable	1
	21	Cigar Lighter Cable	1
	1	Tablet PC	1
	2	VCI Box	1
	3	USB3.0 To Type_B Main Cable	1
Host group	4	Charger for Tablet	1
	5	Power Cable US	1
	6	Power Cable EU	1
	7	USB3.0 Data Cable (Connect to PC)	1
	1	Color Carton	1
	2	Packing List	1
Accessories	3	Tool Case	1
	4	Desiccant	4
	5	User Manual	1

2 GETTING STARTED

2.1. ACTIVATION

After first-time users press and hold the power button to turn on the system, the system will automatically enter the guide process and request to select the language for the operating system.

Please select language
简体中文
English
Español
français
Deutsche
1000
NEXT
version:V0.5.2

Figure 2-1 Sample of Selection Languages

After setting the system language, you will enter the activation page, as shown in the figure below. You can also click the "Trial" button in the upper right corner to try it out before activation.



Figure 2-2 Sample of Activation (Screen 1)

Click Start Activate to enter the activation page, as shown below:

< Back		TRIAL
	Activate	
	, lotted	
Email		
🖂 l have	e read and agreed User protocol And Privacy policy	
	ок	

Figure 2-3 Sample of Activation (Screen 2)

A pop-up window showing **Activation Success** indicates that you have completed the first boot setup, click **OK** to enter the diagnostic system and start using the device.

Back		TRIAL
	Activate	
	Activation success	
	еок	
	I have read and agreed User protocol And Privacy policy	

Figure 2-4 Sample of Activation (Screen 3)

2.2. MAIN INTERFACE

OPERATION SYSTEM

The picture below (Fig 2-5) is the home screen of the operating system of the device. You can also return to this interface at any time by clicking the home button on the bottom navigation bar.



Figure 2-5 Sample of OS Main page

The app icons are as follows:

Table 2-1

Items	Descriptions
	Browser
	Gallery
	Application Menu
	ES File Explorer
Ó	Android Settings
+	D9 SMART DIAGNOSTICS SYSTEM

- a) **Browser**: Click on the browser icon to enter the browser to view the official website of Xtool or search for other information.
- b) Gallery: Click the Gallery icon to enter the album and you can quickly view the pictures or screenshots stored on the device. You can select the picture you need, click the share button on the upper right, and send the picture to your mobile phone or PC via Bluetooth or USB connection
- c) **Application Menu**: Show all the apps that you have installed into the device, also allows you to manage them.
- d) **ES File Explorer:** You can manage APP, music, files, pictures, etc. in the device in this function, and you can also use Local/Home/Cleaner to clean up files.

(D) If you need to check the files inside the D9 Smart Diagnostics System app (not recommended), please use the file explorer inside the D9 Smart Diagnostics System app.



Figure 2-6 Sample of ES File Explorer

- e) Android Settings: This allows you to check and change the settings of the Android system, including network, battery status, language, device info, and factory reset.
- f) D9 Smart Diagnostics System: This app provides full system diagnostic functions and also offers a range of specialist maintenance services.

(D) It will be referred to as the "D9 Smart Diagnostics System App" later in this manual.

MAIN MENU

Every time start the tablet, you will automatically enter the D9 Smart Diagnostics System app with the following main screen. Tap on the Diagnostics application button on the menu, the main menu will be shown as below:



Figure 2-7 Sample of APP Main Page

This main menu contains Function Buttons and Navigation Buttons. The touch screen navigation is made up of several menus, and you can quickly access functions by clicking on the icons. A detailed description of the menu structure can be found in the next section *Function Buttons*.

FUNCTION BUTTONS

The following table briefly describes each function button.

lcon	Description	
EQ	Auto Scan for vehicle	
\$	Includes various special functions for vehicles	
	Enter vehicle Diagnostics menu	
	Enter TeamViewer for remote support	
	Update the software through the Internet	
	Select the language and unit shown in the app, and check the Bluetooth status, device info, and workshop info	
	View extended functions like checking reports and checking the Xtool official website	
	Check the Diagnostics report that is recorded on your device, prints it as PDF files, or share it with other devices	

Table 2-2

NAVIGATION BUTTONS

Instructions for operating the navigation bar buttons at the bottom of the screen, as described in the table below:

Table 2-3

Items	Descriptions
	Press for screenshot
Ц-	Decrease volume
\triangleleft	Back to the previous interface
	Shows recently used applications
	Back to the main interface of the Android system
\$\$	Increase volume
≫≈	Showing the Bluetooth states

ر ت	Click this button to return to the diagnostic vehicle interface
	Press for screen recording

NOTIFICATION BAR

Slide down to open the notification bar. You can adjust the brightness of the screen when you need it, and you can also connect Wi-Fi and so on.



Figure 2-8 Sample of NOTIFICATION BAR

2.3. FACTORY RESET

After using the device for the first time or resetting the factory settings to the device, the system will automatically enter the Activation Guide program.



This page allows you to set the language of the device operating system

Figure 2-9 Sample of How to Select Languages

After selecting the system language, click **Next** to enter the Wi-Fi connection page, as shown below:

K Back	(
	Connect wifi	
	yunjia_18	Ŕ
	yunjia_18	(ç .
	WZIP	(?
	WZIP	(;-
	HUAWEU-BFB4	ંર

Figure 2-10 Sample of Selecting Wi-Fi

Select a network to connect to on the Wi-Fi connection page.

After a successful network connection, the automatic system will jump to **Factory mode** to download the software:

	Factory mode	(((-
AdobeAcrobat_17.5.180092.apk		Downloading
TeamViewerQS13.apk		Downloading
TeamviewerqsAddon14.apk		Installation success
X100PADP_V3.7.2_C152.apk		Downloading

Figure 2-11 Sample of Factory Mode

Once the software has been downloaded, the tablet will automatically reboot and request the system language selection again.

Ple	ease select language	
	简体中文	
	English	
	Español	
	français	
	Deutsche	
	NEXT	
	version:V0.5.2	

Figure 2-12 Sample of Selecting Languages

After setting the system language, you will enter the activation page, as shown in the figure below. You can also click the "Trial" button in the upper right corner to try it out before activation.

< Back		TRIAL
	Welcome	
	Dear user, Thank you for using this product. This product needs to be activated online. If there is no network currently, you can also click the Trial button in the upper right corner to try this product.	
	START ACTIVATE	

Figure 2-13 Sample of Activation, Screen 1

Click **Start Activate** to enter the activation page, as shown below:

Back	TRIAL
Activate	
Activate	
Email	
I have read and agreed User protocol And Privacy policy	
ок	

Figure 2-14 Sample of Activation, Screen 2

A pop-up window showing **Activation Success** indicates that you have completed the first boot setup, click **OK** to enter the diagnostic system and start using the device.



Figure 2-15 Sample of Activation, Screen 3

<u>*D* If you meet problems like "Registration failed", please check your network or contact Xtool aftersales services: supporting@xtooltech.com</u>

3 UPDATE & DELETE

3.1. UPDATE SOFTWARE

After activating the device, please update the software in "**Update**" first. The device will pull all currently supported software packages from our servers, and you can download them as needed. To access the update application, open the Diagnostics application and click UPGRADE, and it will show as below:

+	C		Update		Q
1	DIAGNOSISCHRYSLER	V8.33	2020-09-30 10:47:39		- 1
2	DIAGNOSIS LAMBORGHINI	V12.10	2021-04-17 03:01:06		- 1
3	IMMOBILIZERLEXUS	V26.74	2020-12-28 03:24:12		- 1
4	IMMOBILIZERKIA	V27.25	2021-01-04 08:38:52		- 1
5	DIAGNOSISGM	V11.01	2020-09-30 02:13:50		- 1
6	DIAGNOSISMINI	V11.52	2021-04-17 02:35:01		- 1
7	DIAGNOSISGQCQ	V7.00	2020-10-20 05:07:36		- 1
8	DIAGNOSISFIAT	V10.40	2020-11-04 01:19:18		- 1
9	IMMOBILIZERFAWJB	V26.12	2019-12-11 09:40:06		- 1
					Update All
	国 -	\triangleleft	= ☆ ⊄	+ 📌 🚑 🕨	þ

Figure 3-1 Sample of How to Update Vehicle Software

D9 Smart Diagnostics System has a three-year free subscription when activated. When you click "update" and it shows "your device is now out of subscription", please contact your dealer.

3.2. DELETE SOFTWARE

Long-press the unwanted software until it has been selected, then click the **Delete** button shown on the upper part of the screen. And you can select and delete multiple software at once.

Cancel Delete 71%				
0	Dimosis for	Diorosis for	Dimosis for	Diprosis for
OBDII	DEMO	SAAB	DACIA	RENAULT
V21.05	V5.30	V6.06	V9.90	V9.90
Dimosis for 🕜 🖻	Dimosis for POP		Dimosis for PDS	Dionosis for
FIAT	PORSCHE	VOLVO	FERRARI	CITROEN
V10.60	V12.41	V11.04	V5.37	V11.10
Dionosis for	Dimosis for 🛛 📴	Dimosis for 🕜 🖻	Dimosis for PDF	Dimosis for 🕜 🖻
PEUGEOT	GAZ	ABARTH	AUDI	ALFA ROMEO
V10.90	V5.43	V10.60	V13.10	V10.60
Dionosis for	Dimosis for 🗾 📴	Dimosis for POP	 • • • 	Dionosis for 🕜 🖻
ROLLS- ROYCE	SEAT	BENTLEY	MERCEDES	LANCIA
V11.76	V13.10	V13.10	V20.51	V10.60
	⊑ √- <	⊒ 습 ସ+	* 🛱 🕻]1

Figure 3-2 Sample of How to Delete Vehicle Software

** When the device prompts that the memory is insufficient, you can delete the models that are not frequently used to release the memory.

4 DIAGNOSTICS

The diagnostic application can read ECU information, read and clear DTC and check living data and freeze frames. The Diagnostics application can access the electronic control unit (ECU) of various vehicle control systems, including the engine, transmission, anti-lock braking system (ABS), airbag system (SRS), perform kinds of actuation tests, helping the mechanics and technicians quickly locate and troubleshoot problems.

4.1. VEHICLE CONNECTION

To start the Diagnostics process, the VCI communication box should establish communication with the vehicle.

For D9, it is compatible with both Bluetooth communication and wired communication to connect the tablet and VCI box.

Bluetooth Connection



Figure 4-1 Sample of How to Connect Device to Vehicle via Bluetooth

1 V204 BOX ;2 Main Test Cable; 3 OBD Adapter;

• Wired Connection

Please follow the steps below.

- 1. Turn on the tablet.
- 2. Connect the vehicle, the VCI box, and the tablet following the diagram below (Figure 4-1 & Figure 4-2). Usually, the OBD port is located under the dashboard, inside the driver's footwell.
- 3. Wait for the VCI box to communicate with the tablet, then click into the menus to perform the functions.



Figure 4-2 Sample of How to Connect Device to Vehicle via Wire

1) Data Cable for USB 3.0 to Type B; 2) V204 BOX ; 3) Main Test Cable; 4) OBD Adapter;

(D) If necessary, please connect the VCI box with the tablet using the USB 3.0 to type-B cable, especially when working on some processes that need to transfer lots of data, like reprogramming ECU.

<u>*D*</u> For models with DoIP *protocol* communication, please be sure the device is connected to VCI box by wire

4.2. VEHICLE SELECTION

Click the "**Diagnostics**" icon on the main screen and get into the Diagnostics menu. All brands will be shown on the screen.

Please select the region of your vehicle, click the correct brand, and start the Diagnostics process.

≦ Europe		sia America	China	Australia Q
ଘୁ AUTO SCAN	s for	Diagnosis for	Diagnosis for	Diagnosis for
SCAN CODE	EMO V5.23	GAZ	SEAT	ABARTH
		Diagnosis for	Diagnosis for	Diagnosis for
VAUXHALL	CITROEN	BMW	PORSCHE	RENAULT
V9.73	V10.96	V11.53	V12.31	V9.64

Click the VIN button in the upper left corner, you can choose to enter the vehicle Diagnostics through the first 3 ways of *AUTO SCAN MANUAL ENTER*.

AUTO SCAN

It supports automatic reading of vehicle VIN code. You also can tap on the button "AUTO SCAN" on the Diagnostics system entrance to use this function.

1 your model is not recognized, please try the following steps:

- ① UPDATE all software, and check whether the APP is updated in [Settings]
- Please click Diagnosis on the main menu to enter the model selection menu, manually select the engine system to read the ECU information, and check whether the VIN is written in the engine;
 Contact the Xtooltech technical team to provide the VIN code to confirm whether the model supports automatic identification of VIN.

Please make sure that the car and the device are well connected before using this function.



Fig 4-3 Sample of AUTOSCAN

MANUAL ENTER

It supports manual input of car VIN code. When entering the VIN code manually, make sure that the 17 characters entered are correct to avoid reading failure.



Fig 4-4 Sample of Manually Inputting Vin

• SELECT VEHICLE BY AREA

In addition to the above 2 methods, you can also choose a car brand according to the region. You can select the vehicle model that needs to be diagnosed according to the area, as shown below:



Figure 4-5 Sample of Vehicle Selection by Ares

OBD-II supports reading the related fault codes of PCM; DEMO, a demonstration program; Click this button to experience and learn the operation process of the diagnostic function

For some of the vehicle brands (like Volkswagen), when you click on the software, there are several ways to select the model or system you want to run a Diagnostics, including **Automatic Detection**, **Manual Selection**, and **System Selection**.

S VW V12.10	VW V.	12.10	
Automatic Detection	Manual selection	System selection	

Fig 4-6 Sample of Vehicle Detection Method

Automatic Detection will automatically identify the vehicle's VIN code, and then read the information of your target diagnostic object. If you choose "Manual selection", then you can continue to select the vehicle brand, year, and model of the vehicle in the sub-menu to diagnose the vehicle. Enter "System Selection", you can also diagnose the vehicle according to the system according to your needs after selecting the model.

O OBDII menu supports reading the common fault codes in the engine. The DTCs may not be the same when compared with using common Diagnostics software.

<u>*DEMO</u> is a demonstration program. You can perform basic Diagnostics functions without connecting to the car.</u></u>*

4.3. DIAGNOSTICS FUNCTIONS

D9 Smart Diagnostics System supports the Diagnostics functions shown below:

- Read ECU Information
- Read/Clear Trouble Code
- Read Live Data
- Actuation Test (Bi-Directional Control)
- Freeze Frame
- Special functions

RENAULT V9.93> Duster ii ph> Sy	Injection RENAULT V9.93> Duster ii ph> System Selection> Injection		
Read ECU Information	Read trouble code	Clear trouble code	Live data
Read freeze frame	Actuation test	Special functions	

Figure 4-7 Sample of Diagnostics Function

This function is to read ECU version information, which is the equivalent of "**System Identification**" or "**System information**" in some electronic control systems, which means to read ECU-related software and hardware versions, models, and production date of diesel engine, part number, etc.



Figure 4-8 Sample of ECU Information

Read Trouble Code

Read trouble codes that are stored in ECU. For the fault code, the diagnostic instrument will give specific detailed definitions and explanations to help you locate and eliminate the car fault.

Read ECU Information	Read TroubleClear TroubleCodeCode	Live Data
	INFO	
Actuation Test	No fault	
	ок	



Clear Trouble Code

It allows clearing current and historical trouble codes memory in ECU, under the premise that all the troubles are eliminated. There are two types of fault codes, one is a permanent fault code and the other is a non-permanent fault code. The former requires manual troubleshooting of the car before it can be cleared with a diagnostic tool. Non-permanent fault codes can be cleared directly with the diagnostic tool.



Figure 4-10 Sample of Clear DTC

(D) The trouble codes can't be erased without eliminating all the troubles, which will cause the diagnostic tool to always read the trouble code because the code will always be saved in ECU.

Read Live Data

That is to read the parameters of the running engine, such as oil pressure, temperature, engine speed, fuel oil temperature, coolant temperature, intake air temperature, etc. Based on these parameters, we can judge directly where the problem lies, which helps to narrow the scope of maintenance. For some vehicles, during their actual operation, the problems such as performance characteristics offset, sensitivity reduction, can be judged in live data.

In the process of Diagnostics, if the device shows "**System is OK**" or "**No Trouble Code**", it means there is no related trouble code stored in ECU or some troubles are not under the control of ECU, most of these troubles are mechanical system troubles or executive circuit troubles, it is also possible that signal of the sensor may bias within limits, which can be judged in Live Data.

1 Diagnosis request		9	Q
DEMO V5.30> Automatic Detection> System Diagnosis> Drive System> Digital Engine Elec	ctronics> Live Data		E)
Name	Value	Unit	
Engine speed	6171.75	1/min	8
Coolant temperature	-48.00	degree C	8
Engine oil temperature	3020.25	degree C	8
Emissions warning light: Status	off		۲
Emissions warning light: Distance travelled since activation	N/A	km	8
Status, engine warning light	148		8
Operating time since engine start	6020.00	s	8
Operating hour counter	3756.00	min	8
0 / 83 Cancel Selected Custom Combine D	ata recording	Pause	
ᆋ 덕- <>	€ E	þ	

Figure 4-11 Sample of PIDs List

• Click the magnifying glass on the top right, you can search for related PIDs based on keywords

Q oxygen	Cancel
Oxygen sensor before catalytic converter: Status ()	
Oxygen sensor after catalytic converter: Status ()	
Oxygen sensor before catalytic converter, heating: Status ()	
Oxygen sensor after catalytic converter, heating: Status $\left(\right)$	
Oxygen sensor before catalytic converter: Voltage (V)	
Oxygen sensor after catalytic converter: Voltage (V)	
Oxygen sensor emissions control: Status ()	
Oxygen sensor after catalytic converter: Air ratio value ()	
Oxygen sensor before catalytic converter: Air ratio value ()	
ਙ ਖ਼- ⊲ ≡ ☆ ਖ਼+ 券 🗐 🗔	

Figure 4-12 Sample of the PIDs List related by Key Words

Custom

Support to show the selected PIDs. Click Display All, back to the page which displays all PIDs

1 Diagnosis request		Q	65%
DEMO V5.30> Automatic Detection> System Diagnosis> Drive System> Digital Engine Ele	ctronics> Live Data		
Name	Value	Unit	
Oxygen sensor before catalytic converter: Status	15		8
Oxygen sensor before catalytic converter, heating: Status	off		\bigotimes
Oxygen sensor after catalytic converter: Status	13		8
Oxygen sensor after catalytic converter, heating: Status	2		8
Oxygen sensor before catalytic converter: Voltage	20.12	V	8
5 / 83 Display All	ata recording	Pause	
⊑ ⊄- ⊲ ≡ ☆ ⊄+ **	r de la companya de l	1	

Figure 4-13 Sample of Custom the PIDs

• Data recording

Supports recording the current data value in the form of text, you can view the recorded files in *Reports->Data Replay.*

Pause

Click this button to pause the timeline of timeline

Combine

Support to select multiple PIDs and click 【Combine】 to make different graphs into one chart.



Figure 4-14 Sample of the PIDs Combination

*Note: When customizing the graphs, the number of PIDs selected at a time should not exceed 5

Actuation Test

The actuation test, also known as bidirectional control, is a generic term used to describe sending and receiving information between one device and another.

The vehicle engineers responsible for designing computer control systems programmed them so a scan tool could request information or command a module to perform specific tests and functions. Some manufacturers refer to bidirectional controls as functional tests, actuator tests, inspection tests, system tests, or the like. Reinitialization and reprogramming also can be included in the list of bidirectional controls.

	Actuat	tion Test	
DEMO V5.22> Automatic sele	ction> Diagnosis> System Diagnosi	s> Drive> Digital Engine Electronics> A	Actuation Test
General	Injectors (activate only when engine is running)	Cooling air routing (if fitted)	Charging

Figure 4-16 Sample of the Actuation Test Menu

This function allows the device to send information to and receive information from, vehicle control modules. For example, in the case of OBD II generic information Mode 1 (which relates to data parameters), the scan tool user initiates a request for information from the powertrain control module (PCM), and the PCM responds by sending the information back to the scan tool for display. Most enhanced scan tools also can actuate relays, injectors, and coils, perform system tests, etc. Users could check the individual part to see what is working properly by actuation test.

	Electric fan			
DEMO V5.22> Automatic selection> Diagnosis> System Diagnosis> Drive> Digital Engine Electronics> Actuation Test> General				
Execute function:	Electric fan			
Test process:	Activation for 20 seconds (up to max. 90Degree C engine temperature)			
	Continue Disable			
년 스	ן ≡ ∆ ל+ וא* פי ים			

Figure 4-17 Sample of the Actuation Test



When the signal of the sensor is abnormal, the ECU will save the data at that moment of failure to form a freezeframe. It is usually used to analyze the reasons that may lead to car failures.

The living data items supported by vehicles of different brands are not the same, so the freeze frames displayed when diagnosing vehicles of different brands may also be different. Some vehicles may not have the option of a freeze-frame which means that the model does not support this function.

Take **Renault Duster ii ph** as an example, after selecting the system to enter the lower freeze frame menu, the device will list all the fault codes under the system.

Users can click on a fault code, such as **DF1068** to view the freeze frame recorded by the car when the fault code occurs, including context when the fault appeared, and current context and additional data.

Refrigerant pressure sensor voltage Accelerator pedal	Current
Accelerator pedal	
position Fault on gangs 1 and 2 of the pedal potentiometer.	Current
Pedal potentiometer circuit track 1 Signal outside lower limit	Current
Pedal potentiometer	
	of the pedal potentiometer. Pedal potentiometer circuit track 1 Signal outside lower limit Pedal potentiometer

Figure 4-18 Sample of the Freeze frame for Renault Duster ii ph (Screen 1)

↓	DF:	1068	* 72%
RENAULT V9.93> Automatic Det			
Context when fault appeared	Current context	Additional data	
	^		
E	$\Box - \Box = \uparrow$	∆ ⊄+ ⊁* ੴ	▶ 1

Figure 4-19 Sample of the Freeze frame for Renault Duster ii ph (Screen 2)

Context when fault appeared: record the live data when fault appeared to help the user to know the vehicle status. *Some vehicles don't support this function; users will get a prompt when they click the menu.

Current context: Displays the current live data stream associated with the DTC

	Current cont	* 72%					
REN	RENAULT V9.93> Automatic Detection> Duster ii ph> System Selection> Injection> DF1068						
NO.	Name	Value	Unit				
1	Current context:						
2	Water temperature	-40.0	deg C				
3	Computer supply voltage	11.97	V				
4	Engine speed	0	rpm				
5	Vehicle speed	0.00	km/h				
6	Engine torque	0.00	nm				
7	Refrigerant pressure	34	bar				
8	Refrigerant fluid sensor voltage	-322.68	V				
	Save as reference	ata recording Pause	Graph				
		ಭ+ ೫ ಔ ಾ					

Figure 4-19 Sample of the Freeze frame for Renault Duster ii ph (Screen 3)

Additional data: record other data related to the fault

RENAULT V9.93> Automatic Detection> Duster ii ph> System Selection> Injection> DF1068						
NO.	Name		Val	ue	Unit	
1	Additional data:					
2	Mileage since fault last disappear	ed			km	
3	Mileage since last appearance of	fault			km	
4	Number of occurrences of fault					
5	Distance when fault first occurred	1			km	
6	Distance travelled with fault pres	ent			km	
		Save as reference	Data recording	Pause	Graph	

Figure 4-20 Sample of the Freeze frame for Renault Duster ii ph (Screen 4)

Special functions

Special functions			*	8%
Erase	Configurations	Other configurations		

Usually, special functions provide various reset or re-learning function menus for most vehicle systems. You can easily and quickly solve some faults through special functions for your car. After some functions are successfully executed, fault codes will be generated, which need to be cleared manually after the car is running for a little while.

And under each system, you can view the special features supported by that system. Different models and systems often have different special functions. Even for the same system of the same model, the years and ECU type may lead to different special functions supported.

5 SPECIAL FUNCTIONS

D9 Smart Diagnostics System also supports 20+ commonly used special reset functions, allowing you to quickly access your vehicle system for various scheduled services, maintenance, and reset performance, eliminating the need to reset after resolving common problems. The special functions interface is shown below:



Figure 5-1 Sample of Special Function

Due to the limitation of screenshots, the special functions shown in this picture are not complete.

① All special functions supported by the D9 Smart Diagnostics System are subject to the actual special functions displayed on the device.

D Please make sure the vehicle you're working on supports the original functions.

Below we will introduce the most commonly used service & maintenance functions

5.1. OIL RESET

Reset the Engine Oil Life System, which calculates the optimum oil life change interval based on the vehicle's driving conditions and climate. The oil life reminder must be reset each time the oil is changed so that the system can calculate when the next oil change is required.

This function can be performed in the following cases:

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

The operation guidelines of the Oil Reset function are shown below:

- 1. Enter the **Oil Reset** menu and choose relevant models according to the vehicle being tested.
- 2. Follow the instructions displayed and press **OK** after completing the instructions shown.

1	XTS	71%
	28.14> GM> Cadillac> Auto Reset> XTS	
20	2013-2020	
	Turn on the ignition switch, do not start the engine. If it is a one-button start car, please press and hold the start button for 5-10 seconds	
	ок	

Figure 5-2 Sample of oil reset function (screen 1)

- 3. Enter the Maintenance mileage reset menu.
- 4. Input reasonable value of mileage and press OK.
| 5 | 2013-2020 | 1
71% |
|------------------------------|--|-----------------|
| AMERICA V28.14> GM> Cadilla | ic>Auto Reset> XTS> 2013-2020 | |
| Maintenance
mileage reset | Maintenance mileage reset | |
| | Input data:0100.(out of range,Do overflow handling!) | |
| | 100 | |
| | Cancel | |
| | | |
| | | |

Figure 5-3 Sample of oil reset function (screen 2)

5. Message of [Reset success] displayed when Oil Reset function has successfully performed.

5.2. EPB

Electronic Parking Brake (EPB) System reset is a popular special function. You can use this function to reset the electronic parking brake system and brake pads, which also supports the brake pad replacement (retraction, release of the brake pump), G-sensor, and body angle calibration. This function has multiple uses and can safely and effectively maintain the electronic brake system. These applications include deactivating and activating brake control systems, assisting in controlling brake fluid, opening and closing brake pads, setting brakes after replacing brake discs or brake pads, etc.

- If the brake pad wears the brake pad sense line, the brake pad sense line will send a signal to the onboard tablet asking for replacing the brake pad. After replacing the brake pad, you must reset the brake pad. Otherwise, the car alarms.
- 2. Reset must be performed in the following cases:
 - The brake pad and brake pad wear sensor are replaced.
 - The brake pad indicator lamp is on.
 - The brake pad sensor circuit is short, which is recovered.
 - The servo motor is replaced.

The operation guidelines of the EPB function are shown below:

- 1. Enter the EPB menu and choose relevant models according to the vehicle being tested.
- 2. Follow the instructions displayed and press YES after completing the instructions shown.

C	VW	48%
	23.84× VW	
т	Other Type Cars	
	Insert the key and turn on the ignition switch to ON, Do not start the vehicle .Release the handbrake at the same time ! If the replacement of the brake pads is completed , The electronic brake fault light is still on , After driving for a while , The fault light will disappear .	
	No	

Figure 5-4 Sample of EPB function (screen 1)

3. Enter the **Enter maintenance mode** menu and release the handbrake brake. And press **OK** after completing the instructions shown.

5	Other Type Cars	48%
EUROPE V23.84> VW> Other Ty	pe Cars	
Read fault code	Enter maintenance mode	Exit maintenance mode
	Please release the handbrake brake	
	ок	

Figure 5-5 Sample of EPB function (screen 2)

- 4. Wait until the message 'Successful operation' pops up. And press OK to exit the menu.
- 5. Enter the **Exit maintenance mode** menu and wait until the message of "**Successful operation**' popes up.

5.3. SAS

Steering Angle Sensors (SAS) System Calibration permanently stores the current steering wheel position as the straight-ahead position in the SAS EEPROM. Therefore, the front wheels and the steering wheel must be set exactly to the straight-ahead position before calibration. In addition, the VIN is also read from the instrument cluster and stored permanently in the SAS EEPROM. On successful completion of calibration, the SAS fault codes will be automatically cleared.

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

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

The operation guidelines of the SAS function are shown below:

- 1. Enter the SAS menu and choose relevant models according to the vehicle being tested.
- 2. Enter the Set steering angle sensor menu and follow the instructions displayed.

*	2007/2011	75%
	deo> 2007/2011	
Set steering angle sensor	Set steering angle sensor	
	Turn the ignition switch ON, press [OK] button to Continue.	
	ок	
	UK .	

Figure 5-6 Sample of SAS function (screen 1)

3. Wait until the following instruction is displayed and press Yes after completing the instructions shown.

1)	2007/2011	75%
		Mondeo> 2007/2011	
	t steering gle sensor	Set steering angle sensor	
		Make sure the vehicle is parked on level ground remains stationary. Confirmed that the steering wheel is in the neutral position. Whether to continue?	
		No	

Figure 5-7 Sample of SAS function (screen 2)

4. Follow the instructions displayed and press **OK** after completing the instructions shown.

Ð	2007/2011	75%
AMERICA V	7.57> Ford> Mondeo> 2007/2011	
Set st angle	Set steering angle sensor	
	Turn the ignition switch on, and do not start the engine. The steering wheel is rotated 10 degrees left and right, then back to the middle position.	
	ОК	

Figure 5-8 Sample of SAS function (screen 3)

5. Wait until the following instruction is displayed and press **OK** after completing the instructions shown.

4	2007/2011	75%
AMERICA V7.57>	• Ford> Mondeo> 2007/2011	
Set steel angle se	Set steering angle sensor	
	Turn the ignition switch on, and then turn the ignition switch on after 3 seconds.	
	ок	

Figure 5-9 Sample of SAS function (screen 4)

6. Message of '**Function execution is completed**' displayed when SAS function has successfully performed.

5.4. DPF

The Diesel Particle Filter (DPF) function manages DPF regeneration, DPF component replacement teach-in, and DPF teach-in after replacing the engine control module (ECM).

The ECM monitors driving style and selects a suitable time to employ regeneration. Vehicles driven a lot at idling speed and low load will attempt to regenerate earlier than vehicles driven more with higher load and speed. For regeneration to take place, a prolonged high exhaust temperature must be obtained.

In the event of the car being driven in such ways that regeneration is not possible, i.e., frequent short journeys, a diagnostic trouble code will eventually be registered in addition to the DPF light and "Check Engine" indicators displaying. A service regeneration can be requested in the workshop using the diagnostic tool.

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

DPF regeneration may be performed in the following cases:

- The exhaust back pressure sensor is replaced.
- The PM trap is removed or replaced.
- The fuel additive nozzle is removed or replaced.
- The catalytic oxidizer is removed or replaced.
- The DPF regeneration MIL is on and maintenance is performed.
- The DPF regeneration control module is replaced.

The operation guidelines of the DPF function are shown below:

- 1. Enter the **DPF** menu and choose relevant models according to the vehicle being tested.
- 2. Enter the **DPF regeneration** menu.
- 3. Read carefully and complete the **requisites** listed before performing the DPF regeneration function. And press **OK** after completing the instructions shown.

1	DPF regeneration	58%
	> DPF(Diesel oil)> Europe> VW> Auto scan> DPF regeneration	
	1.6L	
1.	 Test prerequisites : 1. The filling level of the fuel tank is at least full 1/4. 2. Vehicles equipped with automatic transmissions : Shift lever hooked in P files . 3. Vehicles with manual transmission : Shift lever into neutral . 4. Depress the parking brake . 5. Close the hood . 6. Turn on electrical appliances . 	
	Cancel	

Figure 5-10 Sample of DPF function (screen 1)

- 4. Read the fuel tank level and make sure that it fulfills the requirement displayed.
- 5. Read the carbon deposit load.
- 6. Choose the drive to warm up and follow the instructions listed below. And press OK after completing the instructions shown.

_	1.6L		58%
DPF/GPF V7.20> DPF(D	iesel oil)> Europe> VW> Auto scan> DPF regeneration		
Current carbon load	(Calculated)	24.14	g
Current carbon load	1.6L		g
	About to drive to warm up , Start the engine ar note : If equipped with manual gearbox , Depress the If equipped with automatic transmission , Dep	e clutch ;	
	ок		
			Next step

Figure 5-11 Sample of DPF function (screen 2)

7. Read the note carefully and follow the instructions shown on the screen. And press **OK** after completing the instructions shown.

Ð	1.6L	58%
DPF/GPF V7	.20> DPF(Diesel oil)> Europe> VW> Auto scan> DPF regeneration	
Current co	1.6L	gree C
Rated tem prompt : By increas reached fa	note I Fire hazard I During emergency regeneration , The exhaust gas temperature at the tailpipe may be as high as 300 degree C, Emergency regeneration time up to 40 minute ; In order not to damage the parts of the suction device , To test whether the suction device can be used in this situation ; if it is possible , Use exhaust tube only , Otherwise, please test in the open space ; Vehicles must be parked on high temperature resistant ground during emergency regeneration ;	igree C
	ок	
	N	ext step

Figure 5-12 Sample of DPF function (screen 3)

8. Follow the instructions displayed and press **OK** after completing the instructions shown. Please pay attention to the Note.



Figure 5-13 Sample of DPF function (screen 4)

9. Press the **OK** button to start the regeneration.

€	1.6L		5896
DPF/GPF V7.20> DPF(Diesel oil)>	Europe> VW> Auto scan> DPF regeneration		
Temperature in front of the p	articulate filter	148.22	degree C
Rated temperature	1.6L		degree C
prompt : Slowly increase the speed to To ensure optimal regenera before the particulate filter	Whether to start emergency regeneration	n next ?	
	No Yes		
			Next step

Figure 5-14 Sample of DPF function (screen 5)

10. Wait for the value of the carbon deposit to decrease until a message of 'Emergency regeneration has been **completed**' popes up, this process may take up to 40 minutes.

5	1.6L	58%
DPF/GPF V7.20> DPF(Diesel oil)> Europe> VW> Auto scan> DPF r	egeneration	
Regeneration duration	0.00	min
Carbon deposit	22.78	g
Rotating speed	781	rpm
Waste temperature upstream of turbocharger	143.41	degree C
Upstream of particulate filter	143.21	degree C
Downstream of particulate filter	112.38	degree C
		Next step

Figure 5-15 Sample of DPF function (screen 5)

11. Wait for **2 minutes** to let the particulate filter cool down.

C	1.6L	57%
DPF/GPF V7.20> DPF(Diesel oil)> Europe> VW> Auto scan> DPF	regeneration	
Current carbon load (Calculated)	24.14	g
Current carbon load (Measurements)	1.32	g
Let the engine run at idle again 2 Minutes to cool down particulate filter	n the hot 120	s
		drop out

Figure 5-16 Sample of DPF function (screen 6)

12. Press drop out to exit the DPF function.

5.5. BMS RESET

The Battery Management System (BMS) allows the scan tool to evaluate the battery charge state, monitor the close-circuit current, register the battery replacement, and activate the rest state of the vehicle.

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

Battery matching must be performed in the following cases:

• The main battery is replaced. Battery matching must be performed to clear original low battery information and prevent the related control module from detecting false information. If the related control module

detects false information, it will invalidate some electric auxiliary functions, such as automatic start & stop function, sunroof without one-key trigger function, power window without automatic function.

• Battery matching is performed to re-match the control module and motoring sensor to detect battery power usage more accurately, which can avoid an error message displayed on the instrument cluster.

The operation guidelines of the BMS Reset function are shown below:

- 1. Enter the BMS Reset menu and choose relevant models according to the vehicle being tested.
- 2. Turn on the ignition switch.
- 3. Press **OK** to continue the BMS function.
- 4. Enter battery capacity (within the given range) and press OK after the input.

5	Porsche		21%
BMS V16.71> Porsche			
911	Choose battery size (Ah)	Cayenne(9YA)	
	Enter battery capacity (0-255)		
Panamera 970	000 Cancel OK		

Figure 5-17 Sample of BMS function (screen 1)

5. Enter the **battery manufacturer** and press **OK** after the input.

5	Battery technology		21%
BMS V16.71> Porsche			
lithium FeP	Battery ma	anufacturer	12V Coil
	Battery manufacturer		
Condenser	000		EFB
	Cancel	ОК	
double AGM	EMB	Undefined	unknown

Figure 5-18 Sample of BMS function (screen 2)

6. Enter the **10-digit battery serial number** and press **OK** after the input.

	Battery technology		
lithium FeP	Battery s	erial number	12V Coil
Condenser	Enter 10-digit serial r	number	EFB
double AGM	Cancel	ок Undefined	unknown
double AGM	EMD	ondermed	unknown

Figure 5-19 Sample of BMS function (screen 3)

5.6. THROTTLE

Throttle Position Sensor (TPS) Match, 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.

The operation guidelines of the Throttle function are shown below:

- 1. Enter the Throttle menu and choose relevant models according to the vehicle being tested.
- 2. Enter the Auto Recognition menu and turn on the ignition switch.
- 3. Read carefully and complete the **requisites** listed before performing the throttle regeneration function. And press **OK** after completing the instructions shown.



Figure 5-20 Sample of throttle function (screen 1)

4. Wait until all the parameters are read and displayed.

S Auto Recognitio	on	649
EUROPE V28.49> BENZ> Passenger Car		
Engine speed(rpm)	0	<= 10
Coolant temperature(deg C)	48.00	5.00-100.00
Intake air temperature(deg C)	12.00	<= 40
Accelerator pedal position(%)	0.39	<= 5
Throttle regulator	Already learned	Status
F1:Exit F2:Match the throttle limit position	F1	F2

Figure 5-21 Sample of throttle function (screen 2)

5. Press the F2 button and wait until a message of 'Match successfully' pops up.

5.7. INJECTOR CODING

This function can write the identification code of the fuel injector into the ECU so that the ECU can recognize and work normally. Write actual injector code or rewrite code in the ECU to the injector code of the corresponding cylinder for controlling accurately and correcting cylinder injection quantity.

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

D In general cases, there is no need to do the coding matching function after cleaning.

The identification of the fuel injector includes its working accuracy value and type value. When replacing it, you need to find the corresponding model for replacement.

@ At present, mainstream cars support injector coding functions.

The operation guidelines of the Injector Coding function are shown below:

- 1. Enter the **Injector coding** menu and choose relevant chassis models according to the vehicle being tested.
- 2. Enter the Fuel injection nozzle injection volume adjustment menu.

Read the note displayed carefully and press **OK** after the reading.

Ð	X166	43%
	0.10>GL Series>X166	
Fueli	Fuel injection nozzle injection volume adjustment	
volun adjus	When replacing the fuel injector, the fuel injection quantity of the injector must be adjusted. After replacing one or more fuel nozzles, the corresponding adjustment value of the replaced fuel nozzle must be input into the control unit according to different cylinders. Injection The nozzle fuel injection quantity can be adjusted by manually inputting the 5-digit matching value. (Note: Please use the adjusted value printed on the fuel injector)	
	Cancel	

Figure 5-22 Sample of injector coding function (screen 1)

3. Read and confirm the value stored in the cylinders.

1	X1	.66	43%
EUROPE V10.1	> GL Series> X166		
Fuel inje	Fuel injection nozzle inje	ction volume adjustment	
nozzle ir volume	fuel injector) control unit:	5555N	
adjustm	The value stored in the Y76/2 (cylinder 2 fuel injector) control unit:	5555N	
	The value stored in the Y76/3 (cylinder 3 fuel injector) control unit:	5555N	
	The value stored in the Y76/4 (cylinder 4 fuel injector) control unit:	5555N	
	C	к	

Figure 5-23 Sample of injector coding function (screen 2)

4. Enter the **Change the value of cylinder** menu of the replaced injector(s), enter the **new 5-digit value**, and then press **OK**.

5	me adjustment		43%
Change the value of cylinder	Change the value of cylinder 3	Change the value of cylinder	
	Please enter a new 5-digit value (not including: I, J, O, Q, V):	4	
Change the value of cylinder 5	5555N		
	Cancel		

Figure 5-24 Sample of injector coding function (screen 3)

- 5. Wait until the message 'Write successfully' pops up.
- 6. Turn off the ignition switch.
- 7. Wait until the message asked you to turn on the ignition switch.
- 8. Re-enter the **Fuel injection nozzle injection volume adjustment** menu to check whether the new value(s) are shown.

Ð	X1	66	42%
	> GL Series> X166		
Fuel inje	Fuel injection nozzle inje	ction volume adjustment	
nozzle in volume	The value stored in the Y76/1 (cylinder 1 fuel injector) control unit:	3333T	
adjustm	The value stored in the Y76/2 (cylinder 2 fuel injector) control unit:	5555N	
	The value stored in the Y76/3 (cylinder 3 fuel injector) control unit:	3333T	
	The value stored in the Y76/4 (cylinder 4 fuel injector) control unit:	5555N	
	0	к	

Figure 5-25 Sample of injector coding function (screen 4)

5.8. GEARBOX MATCH

After changing the gearbox or changing the gearbox ECU, you need to use the gearbox matching function to re-match the engine and the gearbox.

D Before resetting the gearbox, please check the gearbox control unit to ensure that there is no fault code. If there is a fault code, the gearbox memory function cannot be reset. Please road test after reset.

The operation guidelines of the Gearbox Matching function are shown below:

- 1. Enter the **Gearbox matching** menu and choose relevant models according to the vehicle being tested.
- 2. Enter the **Reset adaptive value** menu.
- 3. Turn on the ignition without starting the engine.
- 4. Read the note and press **OK** to continue the Gearbox Matching function.

₽	Auto scan	47%
TRANSMISS	ION PROGRAMMING V16.52> AMERICA> CHRYSLER> Auto scan	
Reset value	Reset adaptive value	
	When the transmission or any components are replaced , Need to perform this function . This function resets all learned gear shift adaptive values without factory settings	
	Cancel OK	

Figure 5-26 Sample of gearbox matching function (screen 1)

5. Wait until the message 'Successful operation' pops up.

5.9. GEAR LEARNING

The crankshaft position sensor learns crankshaft tooth machining tolerance and saves to the tablet to more accurately diagnose engine misfires. If gear learning is not performed for a car equipped with a Delphi engine, the MIL turns on after the engine is started. The diagnostic device detects the DTC P1336 'Gear not learned'. In this case, you must use the diagnostic device to perform gear learning for the car. After gear learning is successful, the MIL turns off. This function can complete the self-learning of the gearbox and improve the quality of shifting.

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

The operation guidelines of the Gear learning function are shown below:

- 1. Enter the Gear learning menu and choose relevant models according to the vehicle being tested.
- 2. Turn on the ignition switch to start the vehicle.
- 3. Enter the **Tooth Learning** menu.

Read carefully and complete the **requisites** listed before performing the gear learning function. And press **OK** after completing the instructions shown

1	2014-2015Year	ΫD
	ARN V5.25> GM> Buick> Excelle> 2014-2015Year	
Toot	Tooth Learning	
	Learning conditions: 1.Start the engine, put the gear lever in P or N gear, pull up the handbrake, and run at idle speed for more than 10S. 2.The water temperature is greater than 37 degrees. 3.Turn off other loads on the car and do not turn on the air conditioner.	
	No Yes	

Figure 5-27 Sample of gear learning function (screen 1)

4. Read the instructions displayed and press **Yes** to start the learning process.

	2014-2015Year	Ę.
TOOTH LEA	NRN V5.25> GM> Buick> Excelle> 2014-2015Year	
Toot	Tooth Learning	
	About to start the learning process, click Yes to start, and press the accelerator pedal to the end and hold it until the prompt is successful.	
	No Yes	

Figure 5-28 Sample of gear learning function (screen 2)

- 5. **Press the accelerator pedal** down and hold it until a message of 'The **learning is successful**, please release the accelerator pedal.' pops up.
- 6. Release the accelerator pedal and press **OK** to exit the gear learning function.

6 REPORT

A diagnostic Report is used for viewing and printing the saved files, such as Live Data, Trouble Codes, or pictures generated in the process of Diagnostics, users also can view a record of which cars have been previously tested. It includes 3 parts:

- Report
- Replay
- File Management



Figure 6-1 Sample of Report

6.1. REPORT

This feature provides a history of diagnostic reports, where you can view and delete the vehicle's diagnostic reports according to your needs.

5	Report	
GM 2021-05-15 10:59:36		Delete
日产 2021-05-12 16:18:37		Delete
DEMO 2021-05-12 14:31:24		Delete

Figure 6-2 Sample of Report List

When you open the report, located in the header of the table is the studio information you filled in advance in the system setup, then the information of the vehicle, including the Diagnostics date and time, VIN, vehicle brand, Diagnostics path, etc., as shown as below:

	Report SN:D8-00000
orkshop Information	
Company :	Address :
Website :	Telephone :
Mailbox :	Contact Person :
Time:2021-06-01 13:45:58	VIN:
Mileage: 0 km	Vehicle Name: GM
Diagnosis Route:	
	Engine Control Module (Exit) Print PDF Re
년 -	

Figure 6-3 Sample of Report

Print PDF Report

As you can see, you also could click " **Print PDF Report** " at the bottom right corner to output the pdf report. If you need to close the report, you could tap on the button "**Exit**".

Please follow the below steps to print your report ▼

Step 1: Install an APP that can drive your target printer. Add the printer and input the IP address of the printer in the APP, or you can contact your dealer for help.

Step 2: Back to the Android main menu, go to Settings -> Printing-> Turn the printer on.

Step 3: Report-> Choose report-> Print PDF Report-> Print

	Save to Document Cloud
Report	Print
VIN: WBAWX3102G0L60271 Vehicle name: X'F25	Settings Help
	Share Feedback



Step 4: Click the top-left corner of the screen and choose the printer you added before. Then click the button on the right to print.



Figure 6-5 Sample of Report, Screen 2

6.2. REPLAY

This function allows you to replay the living data recorded during the Diagnostics process.

▲	Data Playback	
DEMO_1636686809781.cds 2021-11-12 11:13:40		Delete
DEMO_1636686494089.cds 2021-11-12 11:08:16		Delete

Figure 6-6 Sample of Data Playback, Screen 1

Before replaying the living data, please make sure you click on the "Save to Reference" button during the Diagnostics

🗂 Data Playback			
NO.	Name	Value	Unit
1	Coolant level	sufficient	
2	Washerfluid level	sufficient	
3	Fuel level sensor, left	358	Ohm
4	Fuel level sensor, right	75	Ohm
4 Fuel level sensor, right 75 Ohm			
	$\blacksquare \ \ \Box = \ \ \Box$	ጚ+ ∦ ॎऀ॒ ा	

Figure 6-7 Sample of Data Playback, Screen 2

6.3. FILE MANAGER

This function allows you to check and delete files on the device. Please use this function under the guidance of professionals. Ordinary users are not recommended to use it by themselves!

📥 Internal Storage	🖻 Diagnosis	
🖹 External Storage	📄 bins	
Storage of diagnosis details	📄 profile	
	EN_SYSTR.BIN	
	libscan.so	
	location.txt	
	D zoo.bin	
L. L	⊴- ⊲ ≡ ∴ ⊴+ ** ⊡	

Figure 6-8 Sample of File Manager

7 SETTINGS



Click the Settings button to adjust the default settings and view the information on the D9 SMART DIAGNOSTICS SYSTEM. There are several options available in the system settings:

- Language
- Units
- Bluetooth
- My Workshop Info
- VCI Info
- About

7.1.LANGUAGE

The languages supported by this device are listed in **Settings**. In areas outside the English area, the default language is English and the local official language. Users can switch between English and local official languages on the device by themselves. If you need to switch other languages, please contact the dealer to unbind the current language configuration and rebind it to the language configuration you need to switch. After the configuration is successfully changed, you can switch the target language.

	Setting
🌐 Language English	简体中文
🖉 Unit Metric System	繁體中文
8 Bluetooth	عربي
民 Workshop Information	Deutsch
R VCI information	English 🗸
<i>i</i> About APP:V4.21.2_5.75	Español
	فارسی
	Français
	Bahasa
	Italiano
⊑ ⊄- ⊲ ≡	□本語 = 合 〔+ 券 ፼ ⊡1

Figure 7-2 Sample of Language Selection

① This will only change the language of the APP. If you want to change the system language, please go to Android Settings.

- How to change the language of your software?
- Step1: Contact your dealer and leave a message about the language you need and the S/N of your device. The technician will modify the language configuration for you in the background.
- Step2: Settings->Language->Choose language
- Step3: OS Settings->Language & input->Choose Language
- Step4: Back to Updates to pull all packages again

7.2. UNITS

You can switch the unit used by the system. D9 provides you with metric, imperial, and U.S. units. You can directly click on the unit when you need it, after the switch is successful, a blue checkmark will be shown behind the unit's name.

			Setting
	Language	English	Metric Units 🗸
	Unit	Metric Units	Imperial Units
*	Bluetooth	00:19:01:74:24:E3	U.S. Units
R	Workshop I	Information	
R	VCI informa	ation	
i	About	APP:V4.23.1_5.81	

Figure 7-3 Sample of Units Selection

7.3. SELF-TEST

Please use this function to determine if the device is in good working status before diagnosing. When in use, the VCI box needs to be powered on.

▲ PRECAUTIONS FOR USE

• Please use an external power supply to VCI box, and it is forbidden to connect the car during the self-test, otherwise it may cause serious damage or failure of the car;



Figure 7-3 Sample of Self-test

After making sure that you have not connected the device to the car, please click **OK** to start the self-test procedure.

		Setting	* s2%
	English	OBDII-P2	ОК
🖉 Unit Me	tric Units	OBDII-P3	ОК
💿 Self-test	ок	OBDII-P6	ОК
Bluetooth C4:95:4D	:9A:4E:94	OBDII-P7	ОК
Workshop Information		OBDII-P8	ОК
Firmware Information		OBDII-P9	ОК
i About APP:V4.2	28.1_6.68	OBDII-P10	ОК
_		OBDII-P11	ОК
		OBDII-P12	ок

Figure 7-4 Sample of Self-test, screen1

	Setting	P 92%
🜐 Language English	SINGLE CAN	ок
🖉 Unit Metric Units	J1708-485	ОК
📀 Self-test OK	J1587-232	ОК
8 Bluetooth C4:95:4D:9A:4E:94	J1850-VPW	ОК
Workshop Information	J1850-PWM	ОК
E Firmware Information	DTS LINE	ОК
i About APP:V4.28.1_6.68	5V SIGNAL	ОК
	NEGATIVE SIGMAL	OK
	CLK SIGNAL	ОК
	Self-test	

Figure 7-4 Sample of Self-test, screen2

The self-test procedure will check the communication status of each line and display it in the list as below. If the communication status of a certain line is **NG**, it may affect the models based on those lines. If the self-test fails, do not diagnose the car with the faulty line.

7.4. BLUETOOTH

You can check the Bluetooth connection status here. If you meet any communication issues, please check the Bluetooth status first.



Figure 7-5 Sample of Bluetooth Selection

7.5. MY WORKSHOP INFO

Click on **My Workshop Information**, you can input your workshop information here. As shown in the figure below, you just need to fill in the valid information in the corresponding column and click "**SUBMIT**". And then it will show your workshop information in the report when you generate a diagnostic report, including your company name, address, website, telephone, and mailbox.

1	Setting
Language English	Please fill in the following information, which will be displayed in the diagnosis report
🖉 Unit Metric System	Company
8 Bluetooth	Address
民 Workshop Information	Website
良 VCI information	Telephone
<i>i</i> About APP:V4.21.2_5.75	Mailbox
	Contact Person
	Submit
<u> </u>	≡ △ ⊄+ 券 ⊡ు

Figure 7-6 Sample of Workshop Information

7.6. VCI INFORMATION

You can view the VCI information here, including the VCI firmware name, the latest firmware version, the currently used firmware version, and the VCI firmware type. If the current firmware version is lower than the latest firmware version, you can choose to update your firmware version and click "**Update VCI Firmware**" to complete the operation.

	Setting
Language English	VCI firmware name
🖉 Unit Metric System	Latest VCI firmware version
8 Bluetooth	Current VCI firmware version
民 Workshop Information	
民 VCI information	
<i>i</i> About APP:V4.21.2_5.75	
	Update VCI firmware
희 다- < =	E ☆ ↓+ 🛠 🖽 🖬

Figure 7-7 Sample of VCI Firmware Information

7.7. ABOUT

Tap on **ABOUT**, you can check the serial number and APP version here.

5	Setting
Language English	APP V4.21.2_5.75
🖉 Unit Metric System	SN X100MAX-00001
8 Bluetooth	VCI
民 Workshop Information	
Reference VCI information	
About APP:V4.21.2_5.75	

Figure 7-8 Sample of About Information

8 REMOTE ASSISTANCE

Tap on "**Remote**" to start the TeamViewer quick support program, which is a simple, fast, and secure remotecontrol screen. You can use this application to enable them to control your tablet on a PC through the TeamViewer software, thereby obtaining temporary remote support from the Xtool technical support center.

	* 💎 57% 13:45
TeamViewer QuickSupport	:
How to connect to this device Vour ID - On any other device, go to https://start.teamviewer.com	
Activating TeamViewer	
⊑ ⊄- < = ☆ ⊄+ ** @ :	•1

Figure 8-1 Sample of Activating Team Viewer, Screen 1

Tablets and mobile devices running TeamViewer are identified by a globally unique ID. When the remote application is started for the first time, the ID will be automatically generated according to the hardware characteristics and will not be changed in the future. This TeamViewer ID can individually access all TeamViewer clients.

Before launching the remote desktop application, make sure that the tablet is connected to the Internet so that you can access the tablet to receive remote support from a third party. If you encounter problems and are not able to solve them, you could open this application and ask for remote assistance.

To obtain remote support from your partners or Xtool After-service Center:

1. Turn on the power of the tablet.

2. Click **Remote** in the Diagnostics application. The TeamViewer screen is displayed, and the device ID will be generated.

3. Your partner must install the remote-control software on his/her tablet by downloading the full version of the TeamViewer program (http://www.teamviewer.com) online, and then start the software on his/her tablet at the same time, to provide support and remote control of the tablet.

4. Provide your ID to the partner or Xtool technician, and then wait for him/her to send you a remote-control request.

5. A pop-up window will be shown asking you to confirm to allow the remote-control program to control your device.

6. Click Allow to accept, or click Reject to reject.

9 FAQ

Q1: FAILED TO GENERATE DIAGNOSTICS REPORT

- Currently only perform diagnostic functions, that is, read ECU information, read code and clear code, live data, freeze frame, which can trigger a diagnostic report. Other functions, such as immobilization and maintenance services will not be displayed in the report.
- 2. After entering the Diagnostics menu, you need to perform one specific function before the system can generate a Diagnostics report normally. After the Diagnostics is completed, you need to step back to the previous menu step by step to generate the Diagnostics report successfully. If the APP is killed directly, the report also cannot be triggered.
- 3. If the report still cannot be generated after troubleshooting according to the above prompts, please try to exit the APP, enter the system settings, and then choose to clear the APP cache.

Enter the path: Setting>>Apps>>Diagnostics>>Clear Cache

• Sample as follows:

<u>1</u>			* 💎 🛢 15:11
Setti	ngs		
Wirele	ss & networks		
•	Wi-Fi	*	Bluetooth
0	Data usage		More
Device			
٠	Display	۰	Sound & notification
	Storage		Battery
	Battery saver	۲	Apps
	ScreenshotSetting		
	$\blacksquare \ \ $	} (ל+ ⊁ [*] (∰ ו

Fig 9-1 Sample1: How to clear APP cache

■ <u>1</u>		* 💎 🗎 15:11
÷	Apps	:
	DOWNLO	DED ON SD CARD
L	Adobe Acrobat 45.70MB	
+	Diagnosis 149MB	
.	Mopria Print Service 148MB	
الله الله ا	QuickSupport 52.51MB	
۲	QuickSupport Add-On AOSP 14 1.89MB	

Fig 9-2 Sample1: How to clear APP cache

<u>t</u>					\$ 💎 🗎 15
- App info					
STORAGE					
Total					573MB
Арр					69.10MB
USB storage app					0.00B
Data					80.36MB
SD card					424MB
MOVE T	O SD CARD			CLEAR DATA	
Cache					60.00KB
				CLEAR CACHE	
LAUNCH BY DEFAULT					
No defaults set.					
				CLEAR DEFAULTS	

Q2: HOW TO PRINT DIAGNOSTICS REPORT

The XTOOL device is compatible with third-party print drivers. You can download the printer driver you need in the browser that comes with the tablet to install it, and then set your printer in the OS settings. After the setting is completed, you can print it in the **Report**.

Q3: FAILED TO EXTRACT FILES

Since the XTOOL tablet is equipped with an Android system, you have to confirm the system type of receiver.

For Android: supports transferring files via Bluetooth, USB cable, etc.;

For IOS: only supports transferring files through a wired connection (Bluetooth connection is not available).

Q4: PASSWORD ERRORS AND ACCESS ISSUE WHEN ACCESSING MAIL

This device based on android system supports various mailboxes, including Hotmail, Outlook, Yahoo, Gmail, etc. When you set up the email, please make sure that the email client configuration address you entered is correct.

If you try to use your Mail in a third-party email client using less secure sign-in technology, you might get a "Server password has changed" or an "Authentication failed" error message. This is because those email apps use outdated security protocols and the E-Mail service providers might have disabled access to them by default now.

You have options to keep using your E-Mail securely and without interruption:

- Use the specific Mail website in the browser, such as <u>mail.yahoo.com</u>; <u>mail.google.com</u>
- Install the specific Mail app on our Android devices.

<u>* Due to the adjustment of Google's security policy, from May 31, 2022, the Android system of this</u> device will no longer support users to log in to their Gmail accounts in the mail client. To use the Gmail

<u>mailbox service, please log in to the web version of Gmail in the browser or use the app password for</u> <u>email after turning on Google's two-step verification.</u>

For specific steps, please contact: xtoolonline@outlook.com

Q5: HOW TO MAKE AN APPOINTMENT FOR REMOTE SUPPORT

Please contact your dealer, or send an email to our technical support center. (Email address: supporting@xtooltech.com) And our technical support team will confirm the time of remote support with you.

Q6: HOW TO GENERATE AND UPLOAD DIAGNOSTIC LOG FILES

The device will automatically generate and store the diagnostic logs. When the device is connected to the Internet, it will automatically upload all the stored diagnostic logs to the backend system.

Q7: HOW TO SWITCH LANGUAGE

- 1. Contact your dealer and leave a message about the language you need and the S/N of your device, The technician will modify the language configuration for you in the backend system.
- 2. Settings->Language->Choose language
- 3. Back to Updates to update all the software again

Q8: FAILED TO DIAGNOSE VEHICLE

- 1. Contact your dealer to confirm whether the vehicle model is supported by the scan tool you owned.
- Check whether the vehicle is properly connected (e.g. whether the ignition is ON, and the Diagnostics of some vehicles need to turn on the engine), If your tablet is equipped with a VCI box, please check the status of the VCI box indicator.
- 3. Confirm whether you have entered the correct Diagnostics menu.
- 4. Confirm whether the **AUTO-SCAN** function can assist you to enter the correct Diagnostics menu, or whether the **OBDII** function works.
- 5. Check whether the software is the latest version, if not, please update to the latest version first.

Q9: FAILED TO ACTIVATE OR REGISTER

For 'Activation Failed'

Generally caused by network instability, please switch to a more stable network and try to activate again.

For 'Registration Failed'

Generally, it is caused by the connection timeout or the sending timeout, please check whether you have blocked the outgoing network traffic to non-US regions like China. We recommend that you unblock and try to register again.

Q10: FAILED TO TURN ON WHEN CHARGING

In the charging state, you need to first press the power button to light up the screen (showing the charging status). Then press and hold the power button for 4-5 seconds until the boot animation is shown on screen.

Q11: FAILED TO OPEN THE DIAGNOSTICS APP

A11: With PROMPT "Sync your device. the device has been offline for more than 30 days. you should connect INTERNET SYNC DEVICES TO THE NETWORK STATUS!", the tablet has to connect to the network every 30 days, otherwise, the Diagnostics app will be locked and disabled until the device is connected to the network. If you have ruled out the network problem and ensured that the device can be connected to the Internet normally, and your device still cannot use the diagnostic function, please contact our technical team (supporting@xtooltech.com)

Q12: FAILED TO ENTER VEHICLE MENU

If you encounter the following two prompts, please delete the package and download it again to diagnose

'Failed'



'License exception'



It's usually caused by an uncompleted software package under stable network status, users could delete the corresponding software and redownload it.

Q13: CAN'T RECEIVE THE EMAIL AFTER SHARING THE DIAGNOSTIC REPORT

If your device says "Sent successfully" after you have shared the diagnostic report but your email does not receive it, this is due to your email service provider blocking our outgoing emails in the background.

Please whitelist the following email address: feedback@xtooltech.com

10 WARRANTY & SERVICES

Shenzhen Xtooltech Intelligent Co., LTD.(the Company) warrants to the original retail purchaser of this XTOOL device that should this product or any part thereof during normal usage and under normal conditions be proven defective in material or workmanship that results in product failure within one year from the date of purchase, such defect(s) will be repaired, or replaced (with new or rebuilt parts) with Proof of Purchase, at the Company's option, without charge for parts or labor directly related to the defect(s).

The Company shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the device.

- 1. This warranty does not apply to:
- 2. Products subjected to abnormal use or conditions, accident, mishandling, neglect, unauthorized alteration, misuse, improper installation/repair, or, improper storage;
- 3. Products whose mechanical serial number or electronic serial number has been removed, altered, or defaced;
- 4. Damage from exposure to excessive temperature or extreme environmental conditions;
- 5. Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;
- 6. Defects in appearance, cosmetic, decorative, or structural items such as framing and non-operating parts;
- 7. Products damaged from external causes such as fire, dirt, sand, battery leakage, blown fuse, theft, or improper usage of any electrical source.

11 COMPLIANCE INFORMATION

FCC COMPLIANCE

FCC ID: 2AW3IP901

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;
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Warning

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

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 by 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.

Specific Absorption Rate (SAR) information

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluations of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. FCC RF Exposure Information and Statement the SAR limit of the USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: This device has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the tablet kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain an 0mm separation distance between the user's body and the back of the tablet. The use of belt clips, holsters, and similar accessories should not contain metallic components in their assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements and should be avoided.

CE

Declaration of conformity

Herby, Shenzhen Xtooltech Intelligent Co., Ltd declares that this Car Diagnostics Tablet, P901 complies with the essential requirements and other relevant provisions of Directive 2014/53/EU. By Article 10(2) and Article 10(10), this product is allowed to be used in all EU member states.

UKCA

Herby, Shenzhen Xtooltech Intelligent Co., Ltd declares that this Car Diagnostics Tablet P901 satisfies all the technical regulations applicable to the product within the scope of UK Radio Equipment Regulations (SI 2017/ 1206); UK Electrical Equipment (Safety) Regulations (SI 2016/ 1101); and UK Electromagnetic Compatibility Regulations (SI 2016/ 1091) and declare that the same application has not been lodged with any other UK Approved Body.

SHENZHEN XTOOLTECH INTELLIGENT CO., LTD

Company address: 17&18/F, Building A2, Creativity City, Liuxian Avenue, Nanshan District, Shenzhen, China

Factory address: 2/F, Building 12, Tangtou Third Industrial Zone, Shiyan Street, Baoan District, Shenzhen, China

Service-Hotline: 0086-755-21670995/86267858

Email: marketing@xtooltech.com

supporting@xtooltech.com

Fax: 0755-83461644

Website: www.Xtooltech.com