Trademarks

FOXWELL is trademark of Shenzhen Foxwell Technology Co., Ltd.

All other marks are trademarks or registered trademarks of their respective holders.

Copyright Information

©2023 Shenzhen Foxwell Technology Co., Ltd.
All rights reserved.

Disclaimer

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

Visit our website at

www.foxwelltech.us

For Technical Assistance, send us email at

support@foxwelltech.com

One-Year Limited Warranty

Subject to the conditions of this limited warranty, Shenzhen Foxwell Technology Co., Ltd (“FOXWELL”) warrants its customer that this product is free of defects in material and workmanship at the time of its original purchase for a subsequent period of one (1) year.

In the event this product fails to operate under normal use, during the warranty period, due to defects in materials and workmanship, FOXWELL will, at its sole option, either repair or replace the product in accordance with the terms and conditions stipulated herein.

Terms and Conditions

1 If FOXWELL repairs or replaces the product, the repaired or replaced product shall be warranted for the remaining time of the original warranty period. No charge will be made to the customer for replacement parts or labor charges incurred by FOXWELL in repairing or replacing the defective parts.

2 The customer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:

a) The product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized repair, misuse, neglect abuse, accident, alteration, improper installation, or other acts which are not the fault of FOXWELL, including damage caused by shipping.

b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of God, or battery leakage, theft, blown fuse, improper use of any electrical source, or the product was used in combination or connection with other product, attachments, supplies or consumables not manufactured or distributed by FOXWELL.

3 The customer shall bear the cost of shipping the product to FOXWELL. And FOXWELL shall bear the cost of shipping the product back to the customer after the completion of service under this limited warranty.

4 FOXWELL does not warrant uninterrupted or error-free operation of the product. If a problem develops during the limited warranty period, the consumer shall take the following step-by-step procedure:

a) The customer shall return the product to the place of purchase for repair or replacement processing, contact your local FOXWELL distributor or visit our website www.foxwelltech.us to get further information.

b) The customer shall include a return address, daytime phone number and/or fax number, complete description of the problem and original invoice specifying date of purchase and serial number.

c) The customer will be billed for any parts or labor charges not covered by this limited warranty.

d) FOXWELL will repair the Product under the limited warranty within 30 days after receipt of the product. If FOXWELL cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, FOXWELL at its option, will provide a replacement product or refund the purchase price of the product less a reasonable amount for usage.

e) If the product is returned during the limited warranty period, but the problem with the product is not covered under the terms and conditions of this limited warranty, the customer will be notified and given an estimate of the charges the customer must pay to have the product repaired, with all shipping charges billed to the customer. If the estimate is refused, the product will be returned freight collect. If the product is returned after the expiration of the limited warranty period, FOXWELL' normal service policies shall apply and the customer will be responsible for all shipping charges.

5 ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. FOXWELL SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY, RESULTING FROM THE PURC HASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF FOXWELL KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. FOXWELL SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.

6. Some states do not allow limitation of how long an implied warranty lasts, so the one-year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and

consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.

Safety Information

For your own safety and the safety of others, and to prevent damage to the equipment and vehicles, read this manual thoroughly before operating your tool. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this device. Always refer to and follow safety messages and test procedures provided by vehicle manufacturer. Read, understand and follow all safety messages and instructions in this manual.

Safety Message Conventions Used

We provide safety messages to help prevent personal injury and equipment damage. Below are signal words we used to indicate the hazard level in a condition.

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.

⚠ WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.

Important Safety Instructions

And always use your tool as described in the user's manual, and follow all safety messages.

⚠ WARNING

- Do not route the test cable in a manner that would interfere with driving controls.
- Do not exceed voltage limits between inputs specified in this user's manual.
- Always wear ANSI approved goggles to protect your eyes from propelled objects as well as hot or caustic liquids.
- Fuel, oil vapors, hot steam, hot toxic exhaust gases, acid, refrigerant and other debris produced by a malfunction engine can cause serious injury or death. Do not use the tool in areas where explosive vapor may collect,

such as in below-ground pits, confined areas, or areas that are less than 18 inches (45 cm) above the floor.

- Do not smoke, strike a match, or cause a spark near the vehicle while testing and keep all sparks, heated items and open flames away from the battery and fuel / fuel vapors as they are highly flammable.
- Keep a dry chemical fire extinguisher suitable for gasoline, chemical and electrical fires in work area.
- Always be aware of rotating parts that move at high speed when an engine is running and keep a safe distance from these parts as well as other potentially moving objects to avoid serious injury.
- Do not touch engine components that get very hot when an engine is running to avoid severe burns.
- Block drive wheels before testing with engine running. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). And never leave a running engine unattended.
- Do not wear jewelry or loose fitting clothing when working on engine.
- Don't connect or disconnect the equipments while the ignition is on or the engine is running.

Table of Contents

ONE-YEAR LIMITED WARRANTY **2**

SAFETY INFORMATION **5**

SAFETY MESSAGE CONVENTIONS USED 5
IMPORTANT SAFETY INSTRUCTIONS 5

1 USING THIS MANUAL **9**

1.1 BOLD TEXT 9
1.2 SYMBOLS AND ICONS 9
1.2.1 Solid Spot 9
1.2.2 Arrow Icon 9
1.2.3 Note and Important Message 9

2 INTRODUCTION **10**

2.1 TOOL DESCRIPTIONS 10
2.2 ACCESSORIES 12
2.3 TECHNICAL SPECIFICATIONS 12

3 GETTING STARTED **13**

3.1 POWERING UP THE TPMS SERVICE TOOL 13
3.1.1 Internal Battery Pack 14
3.1.2 External Power Supply 14
3.2 SHUTTING DOWN THE TPMS SERVICE TOOL 14
3.3 SCREEN LAYOUT OF HOME SCREEN 14

4 MY ACCOUNT **16**

4.1 REGISTRATION 16
4.2 SIGN IN 19
4.2.1 Product activate 20
4.3 MY ACCOUNT 21
4.4 MY PRODUCTS 22

5 UPDATE **22**

6 VCI MANAGER **23**

7 FIRMWARE UPDATE **26**

8 TPMS SERVICE OPERATIONS **28**

8.1 VEHICLE IDENTIFICATION **28**

8.1.1 AUTOVIN 28
8.1.2 VIN SCANNING 29

8.1.3 Manual Vehicle Selection 31
8.2 TRIGGER OPERATIONS 32
8.3 LEARN HELP 41
9 DATA MANAGER 45
9.1 IMAGE 46
9.2 PDF REPORT 47
9.2.1 How to Create a PDF Report 47
9.2.2 Review PDF Report 49
9.3 DATA PLAYBACK 49
10 SETTINGS 50
10.1 UNITS 50
10.2 LANGUAGE 50
10.3 FONT SIZE 50
10.4 MODULE SORTING 51
10.5 SORT TILES 52
10.6 REMOTE CONTROL 52
10.7 AUTOMATIC UPDATE 53
10.8 SYSTEM SETTINGS 53
10.9 GENERAL 53
10.10 UNINSTALL VEHICLE SOFTWARE 53
10.11 CLEAR APP DATA 54
10.12 PRINT SETTINGS 54
10.13 ABOUT 56
11 REMOTE SUPPORT 56
12 COVERAGE LIST 57
13 REMOTE KEY FREQUENCY MONITORING 58
14 SENSOR INFORMATION 58
15 AUXILIARY TOOLS 59

1 Using This Manual

We provide tool usage instructions in this manual. Below are the conventions we used in the manual.

1.1 Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

Example:

Select **TPMS** from the Home screen of the TS5000 application.

1.2 Symbols and Icons

1.2.1 Solid Spot

Operation tips and lists that apply to specific tool are introduced by a solid spot.

Example:
When VIN hotkey is selected, a menu that lists all available options displays. Menu options include:

- Automatic Read
- Scan VIN
- Manual Entry

1.2.2 Arrow Icon

▶An arrow icon indicates a procedure.

Example:

▶To connect to wall plug:

1. Connect the USB Type-C charge cable to the tool and plug it to the wall socket.
2. Press the power switch of the TPMS tool to power it on; meanwhile the TPMS tool starts charging automatically also.

1.2.3 Note and Important Message

Note

A NOTE provides helpful information such as additional explanations, tips, and comments.

Example:

NOTE
Test results do not necessarily indicate a faulty component or system.

Important

IMPORTANT indicates a situation, which if not avoided, may result in damage to the test equipment or vehicle.

Example:

IMPORTANT

Do not soak the tool as water might find its way into the tool.

2 Introduction

The brand new Android scan tool TS5000 is a professional TPMS diagnostic and maintenance tool which can activate / decode universal TPMS sensors, program Foxwell TPMS sensor and diagnose the original car tire pressure monitoring system. It provides a complete and smart solution for TPMS servicing.

2.1 tool Descriptions

This section illustrates external features, ports and connectors of the tool.

Figure 2-1 Front View

① **5.5” TFT LCD Touch Screen**- shows menus, test results and operation tips.

② **Power Status Indicator** - indicates the power status of the tool.

Figure 2-2 Side View

③ **Power Switch** - turns on the tool, goes to sleep mode or wake up the tool from sleep mode. Press and hold for 3 seconds for start or emergency shutdown. Double click to screenshot.

④ **USB Type-C Port** - connects to wall plug to charge the tool and can be used for data transfer.

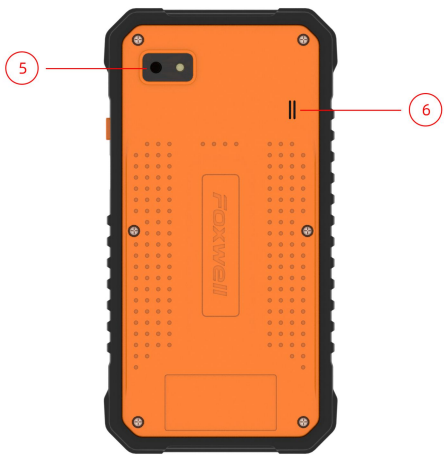


Figure 2-3 Back View

⑤ **Rear-Facing Camera** - takes pictures of VIN number, faulty parts and plates and shoots test videos.

⑥ **Speaker** – outputs audio.

IMPORTANT
Do not use solvents such as alcohol to clean display. Use a mild nonabrasive detergent and a soft cotton cloth.

2.2 Accessories

This section lists the accessories that go with the tool. If you find any of the following items missing from your package, contact your local dealer for assistance.

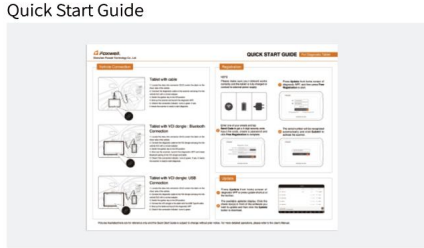
TS5000 Main Unit	VCI Dongle
Warranty Card	TYPE C Cable
User's Manual	Quick Start Guide 

Table 2-2 Accessories

2.3 Technical Specifications

Item	Description

Screen	5.5'' TFT Capacitive LCD screen; 720*1280 pixel
Operation System	Android 9.0
Processor	Quad-core, 1.3GHz
Memory	2GB
SSD Hard drive	32GB
Communication interface	Built-in WIFI 802.11 b/g/n Wireless LAN USB2.0 OTG/standard USB 2.0 HOST Bluetooth specification v2.1+EDR; Bluetooth 4.0 Low Energy (LE) (10-20 m)
Built-in Battery	5000mAh, Lithium-polymer battery, chargeable via 5V USB power supply
Protocols	ISO9141-2, ISO14230-2, ISO15765-4, K/L lines, Double K Line SAE-J1850 VPW,SAE-J1850PWM,CAN ISO 11898, High-speed, Middle-speed, Lows-peed and Single wire CAN, KW81, KW82, GM UART, UART Echo Byte Protocol, Honda Diag-H Protocol, TP2.0, TP1.6, SAE J1939, SAE J1939, SAE J1708,Fault-Tolerant CAN,CAN FD, DOIP
Working Temperature	-10 to 70°C
Storage Temperature	-20 to 80°C
Operating Humidity	5%-95% Non-Condensing
Dimensions	195*100*25mm (L*W*H)
Weight	0.87kg (Main unit)

Table 2-3 Technical Specifications

3 Getting Started

This section describes how to power on/down the TPMS service tool, provides brief introductions of applications loaded on the tool and display screen layout of the scan tool.

3.1 Powering up the TPMS Service Tool

Before using the TS5000 applications (including updating the TPMS service tool), please make sure to provide power to the tool.

The unit operates on any of the following sources:

- Internal Battery Pack
- External Power Supply

3.1.1 Internal Battery Pack

The tablet tool can be powered with the internal rechargeable battery. The fully charged battery is capable of providing power for 5 hours of continuous operation.

NOTE

Please turn off the tablet to save power when not use.

3.1.2 External Power Supply

The tablet can also be powered from a wall socket using the USB charging adapter. The tablet also charges its internal battery pack through USB Type-C cable.

3.2 Shutting Down the TPMS Service Tool

▶ To shut down the tool:

1. Press and hold the Power button of the tool for 3 seconds.
2. Click the **Power off** to shut down or **Reboot** to restart.

3.3 Screen Layout of Home Screen

After the tool turning on, the screen show main menu of the application.

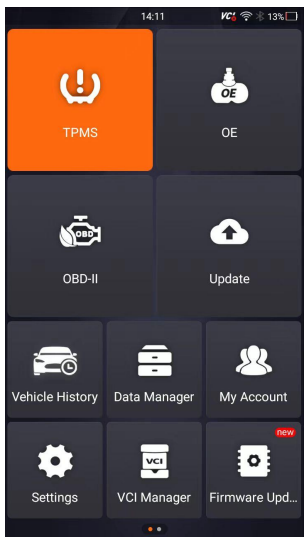


Figure 3-1 Sample Home Screen

3.3.1 Application Menu

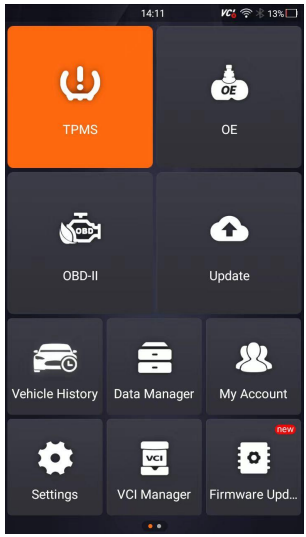


Figure 3-2 Sample Main Menu of Application

This section briefly introduces the applications that are preloaded into the tool:

- **TPMS** - leads to screens for TPMS function.
- **OE** - enters vehicle selection by selecting "sensor brand" and part number (OE number) at one time.
- **OBDII –** leads to OBDII screens for OBD system tests.
- **Update** - leads to screens for Foxwell ID registration and updating the tool.
- **Vehicle History** - leads to screens for test records.
- **Data Manager** - leads to screens for saved screenshots, pictures and test reports, and playing back live data, as well as debug logging data.
- **My Account** - displays your Foxwell ID information like registered products and personal information and allows for sending us feedbacks about the tool.
- **Settings** - leads to screens for adjusting default settings to meet your own preference and view information about the tool.
- **VCI Manager** – VCI manage (VCI binding, unbinding, rescan vehicle software).
- **Firmware Update** – VCI firmware update.
- **Remote Control** - leads to TeamViewer to get remote support from Foxwell team or remote vehicle diagnostic.
- **Coverage List** - Query the functions of model supported by the tool.
- **Remote key Frequency Monitoring** - to check the key frequency.
- **Sensor Information** - to check sensor information.
- **Auxiliary tools** - camera and file browser

4 My Account

This section introduces user account registration, login, device activation and other information.

When **My Account** application is selected, a menu with available options displays.

My Account Menu options typically include:

- My Account
- My Products
- Feedback and Suggestions

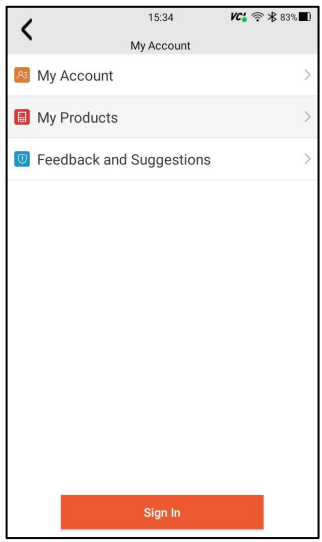


Figure 4-1 Sample My Account Screen

4.1 Registration

You are allowed to create a Foxwell ID with the built-in client.

To register with built-in client:

1. Press **My Account** or **Update** from home screen, the user login page will show, then press **Free registration** button to register an account.

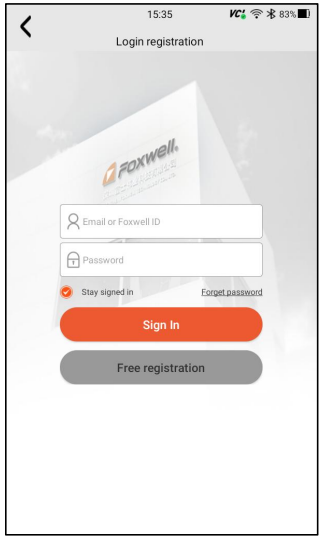


Figure 4-2 Sample Update Client Main Screen

2. Enter the User Name (use one of your existing mail addresses as user name), and press **Send Code** button for get a verification code, Foxwell will send a 4-digit verification code to the email you just entered.

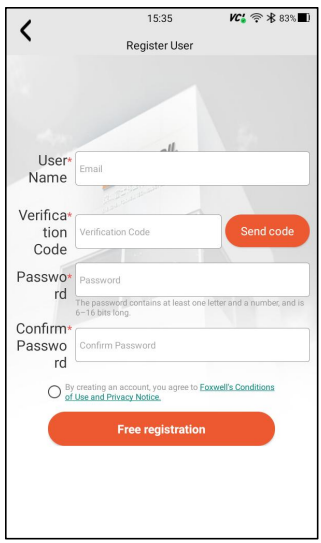


Figure 4-3 Sample ID Registration Screen

3. Get the security code in your mailbox, input the code as verification code. Then create a password and click **Free Registration** to complete.

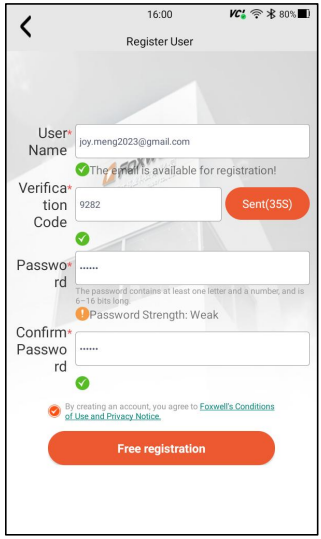


Figure 4-4 Sample ID Registration Screen

4. “The account has been created successfully” message will appear if you registered successfully.

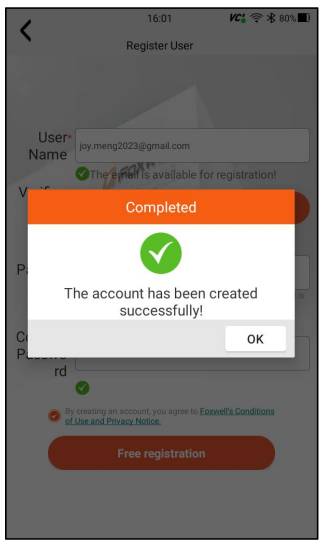


Figure 4-5 Sample Registration Done Screen

5. The serial number will show after registration. Click **Submit** to activate the product or press to back.

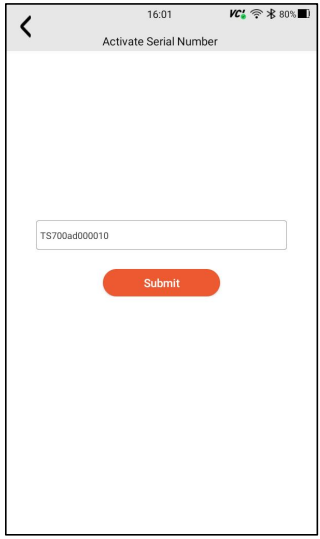


Figure 4-6 Sample Product Activation Screen

4.2 Sign in

Press **My Account** or **Update** from home screen, the user login page will show, enter your FOXWELL ID and password, and press **Sign in** button to sign in.

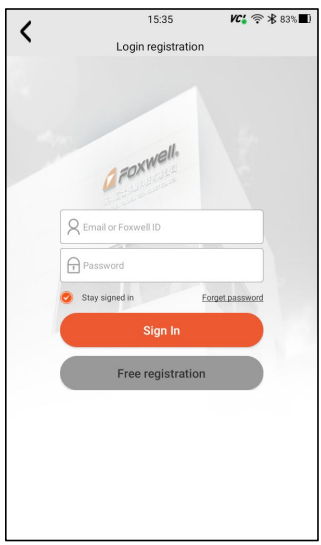


Figure 4-7 Sample Sign in Screen

4.2.1 Product activate

If you are logging in for the first time, it will prompt and guide you to activate the current device while sign in successfully.

▶ To activate product

1. Press **OK** button to activate product and press **Cancel** to back.

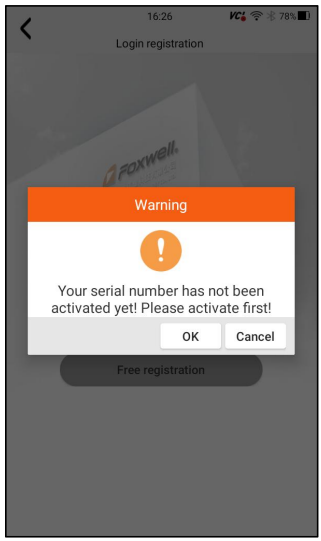


Figure 4-8 Sample Product Activation Screen

2.Click Submit to continue the activation and press < to give up activation.

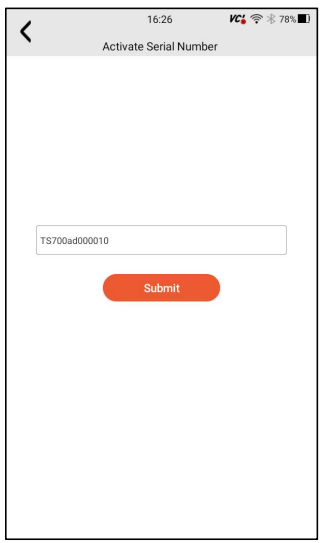


Figure 4-9 Sample Product Activation Submit Screen

3. “Product is activated successfully” message will appear if activate successfully.

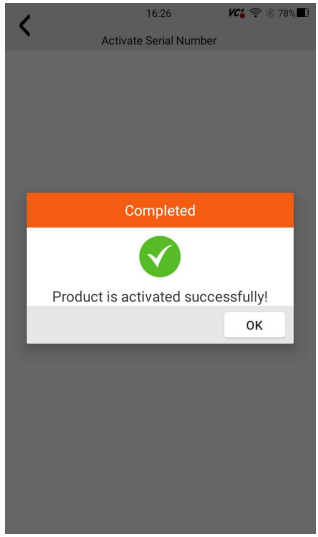


Figure 4-10 Sample activate success Screen

4.3 My Account

My Account option allows you to check and modify or complete your account information including user name, e-mail, telephone, address and so on.

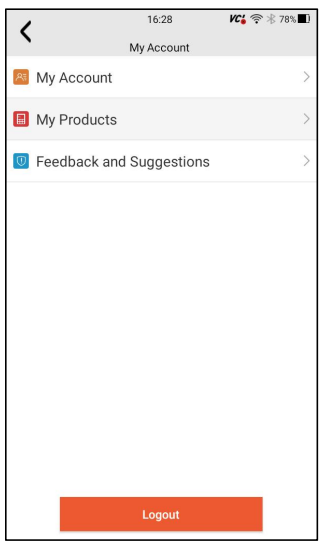


Figure 4-11 Sample My Account Screen

4.4 My Products

This option let you activate a new product and manage activated products including serial number and expiration date.

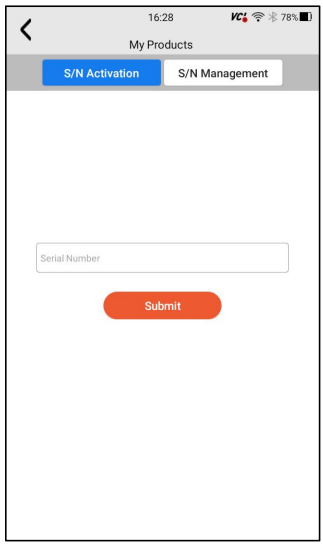


Figure 4-12 My Product Screen

5 Update

The tool can be updated to keep you stay current with the latest software development. This section illustrates how to register and update your scan tool. You can register both on Foxwell website or by the built-in update client.

NOTE

Before registration and updating, please make sure your network works correctly and the tablet is fully charged or connect to external power supply.

To update the TPMS application:

1. Press **Update** of TS5000 application, and the update client starts up automatically.
2. The available updates display. Click the check box(s) in front of the software you wish to update and then click the **Update** button to download.
3. When all the items are updated, an “Update Done” message displays.

NOTE

Please make sure your network works correctly and the tablet is fully charged or connect to external power supply.

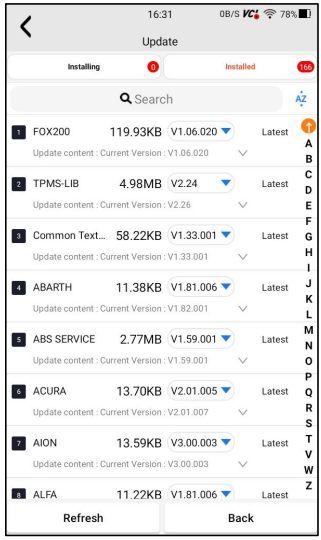


Figure 5-1 Sample Update Screen

6 VCI Manager

VCI Manager is used to unbind and bind the built-in VCI. When the built-in VCI needs to be replaced, you need to use this function to unbind the old VCI and re-bind the replaced built-in VCI.

NOTE

This function cannot be bound to an external VCI, but can only be bound to a built-in VCI.

▶ VCI unbind & rebind：

1. Click **VCI Manager** application on the TS5000 home screen.
2. After clicking Unbind a VCI dongle, it will display whether to unbind the current VCI. When clicking OK, it will execute unbind, rebind, and refresh the vehicle.

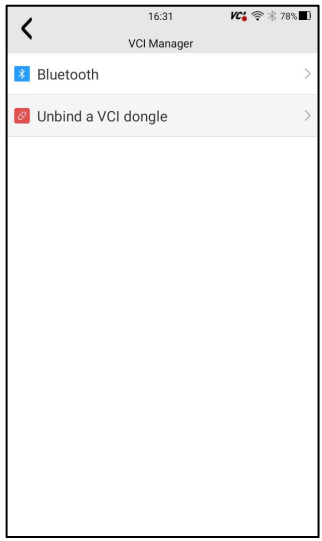


Figure 6-1 Sample Unbind a VCI dongle

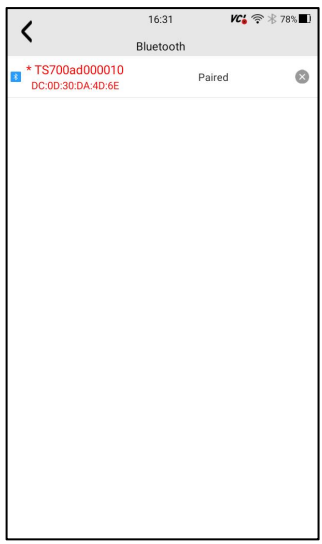


Figure 6-2 Sample Unbinding Confirmation Prompt

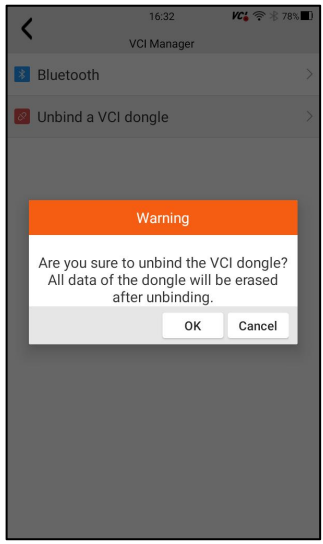


Figure 6-3 Sample Unbinding Current VCI

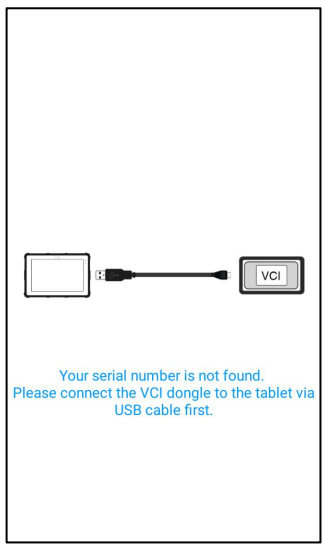


Figure 6-4 Sample Bind New VCI Successfully

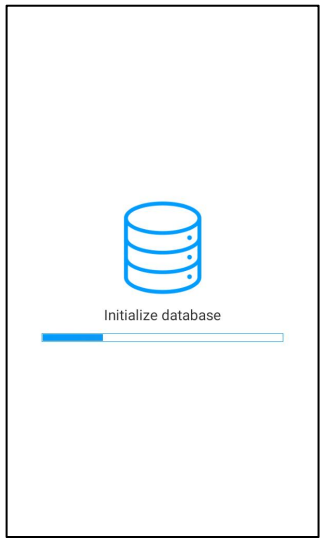


Figure 6-5 Sample Rescan Vehicle Software

7 Firmware Update

This application allows you to update the firmware of TS5000.

To update the firmware:

1. Click the **Firmware Update** application on the TS5000 home screen.
2. Check and download the firmware package.
3. After the download is completed, it will automatically jump to the **Firmware Update** function module.
4. Check the battery level to ensure that the battery level should be greater than 20%.
5. It will start update automatically if there is an update available. If update failed, please follow the on-screen instructions to troubleshoot and repeat the update.

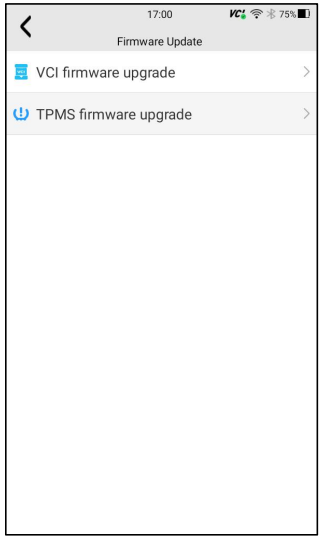


Figure 7-1 Sample Firmware Update Screen

6. “VCI firmware successfully message” will appear if update successfully.

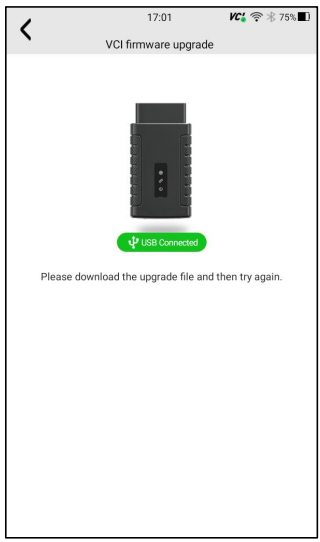


Figure 7-2 Sample Firmware Update Successfully Screen

NOTE

If there is a firmware update available, the update file will be downloaded and saved automatically when you try to update the software. And you will be prompted to upgrade the firmware.

8 TPMS Service Operations

The TPMS application is used to check the TPMS sensor conditions, program the Foxwell sensors, perform the TPMS Relearn procedure and basic TPMS diagnostic functions.

8.1 Vehicle Identification

This section illustrates how to use the tool to identify the specifications of the vehicle under test.

It typically identifies a vehicle by any of the following means:

- AutoVIN
- VIN Scanning
- Manual Selection

8.1.1 AutoVIN

AutoVIN allows to identify a vehicle by automatically reading the vehicle identification number (VIN).

To identify a vehicle by AutoVIN:

1. Select **TPMS** from home screen of the TS5000 application.
2. Click AutoVIN button and the tool will automatically reading the vehicle identification number (VIN).
3. When the scan tool builds connection with the vehicle, the VIN number displays. If the Vehicle Specification or VIN code is correct, press the **OK** to continue.

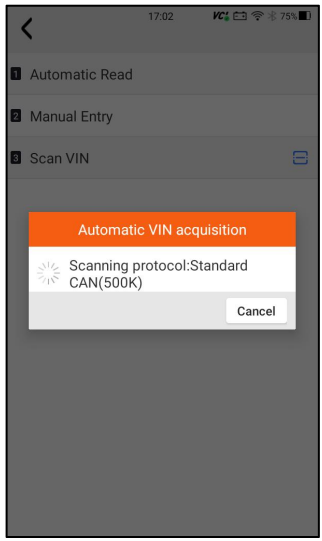


Figure 8-1 Sample Automatic Read Screen

4. If it takes too long to get the VIN code, press **Cancel** to stop and input the VIN manually. Or if failed to identify the VIN, please input the VIN manually or click **Cancel** to quit.

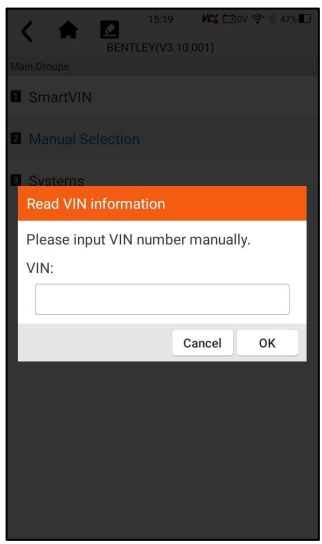


Figure 8-2 Sample Manual Entry Screen

8.1.2 VIN Scanning

VIN Reading allows to identify a vehicle by scanning the vehicle identification number (VIN).

To identify a vehicle by VIN Scanning:

1. Select **TPMS** from home screen of the TS5000 application.
2. Click button and scan the VIN number on the nameplate of the car.

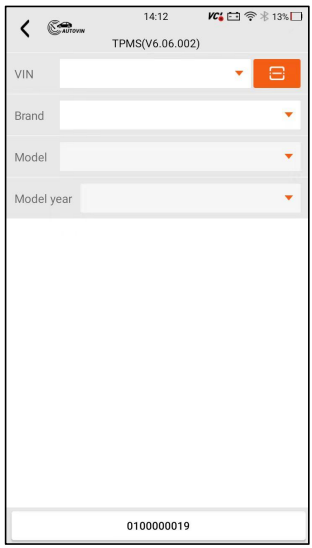


Figure 8-3 Sample Vehicle Selection Screen

Figure 8-4 Sample Smart VIN Screen

3. If the Vehicle Specification or VIN code is correct, press the **OK** to continue. If incorrect, please enter a valid VIN number manually.

8.1.3 Manual Vehicle Selection

Manual Selection identifies a vehicle by making several selections according to certain VIN characters, such as brand, model and year, .

To identify a vehicle by manual vehicle selection:

1. Select **TPMS** from home screen of the TS5000 application.
2. Choose Brand-Model--Model year according to the car information.

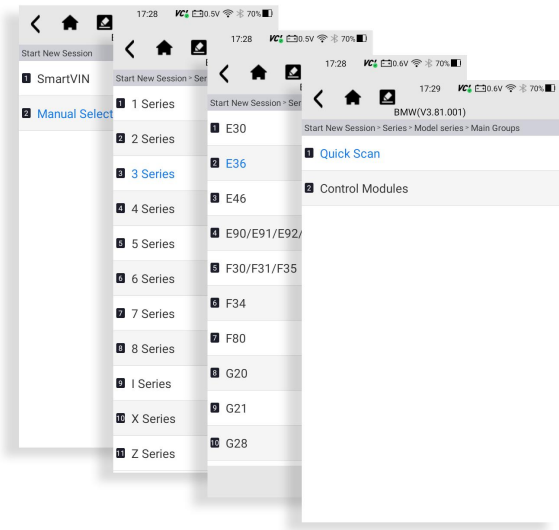


Figure 8-5 Sample Manual Vehicle Selection Screen

3. Click **Enter** button to get the TPMS function page.

8.1.4 TPMS Service Screen Layout

The TPMS service typically include three functions:

Trigger/ Programming/Diagnosis/ Learn Help

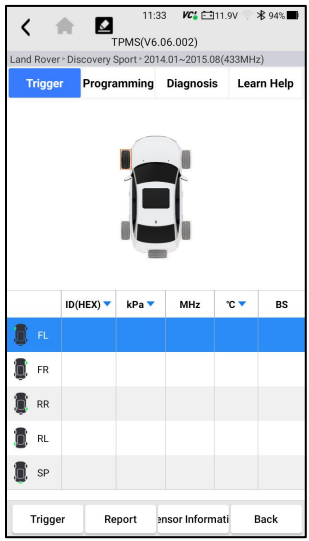


Figure 8-6 Sample TPMS Service Screen Layout

8.2 Trigger Operations

The sensor trigger function allows activating of TPMS sensor to view sensor data such as sensor ID, tire pressure, tire temperature, sensor battery, sensor position, and sensor frequency.

▶To Trigger TPMS sensor

1. Tap **Trigger** Tab.
2. Tap the desired wheel position on the vehicle thumbnail. Hold the tool with the symbol (in the top right corner) close to the tire sidewall near the valve stem, and then press the Trigger button. The tool will send low frequency signal to trigger the sensor.
3. The sensor data of the selected wheel will display on the table of the screen once the sensor is successfully activated and decoded.

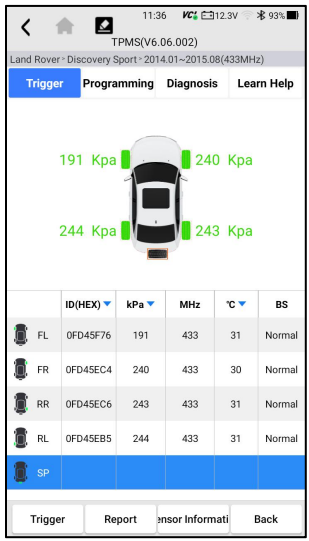


Figure 8-7 Sample Trigger TPMS Screen

NOTE:

The tool will perform TPMS check in a sequence of FL (front left), FR (front right), RR (rear right), RL (rear left) and SP (spare, if any).

4. Wheel with a feedback icon, red or green vertical rectangle, indicates sensor trigger has been finished. Refer to Table 11-1 for details.

Icon	Result	Description
(green)	Sensor activated successful	TPMS sensor is successfully activated and decoded. The table on the right side of the screen displays the sensor information.
(red)	Sensor activated failed	If the search period expires and no sensor is activated or decoded, the sensor may be mounted incorrectly or cannot function. The table on the right side of the screen displays “Failed”. If as sensor with a duplicate ID has been read, the screen displays a message “Sensor ID duplicated”. In the case, repeat the test procedure.

Table 11-1 Possible results for triggering

8.2 Programming Operations

The programming function is used to program the sensor data to the Foxwell sensor and replace the faulty sensor (poor battery life or malfunction). The

TS5000 is easy to use with a proven efficiency and guaranteed accurate results.

There are four options available when programming Foxwell sensor: Manual Create, Clone by Activation, Automatic Create (1-16), Clone by OBD.

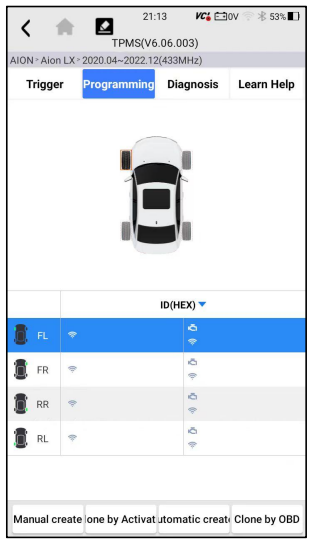


Figure 8-8 Sample Programming Function Screen

Main Section

Column 1 – displays tire positions

Column 2 – displays programming IDs

Column 3 – displays the retrieved sensor IDs by activation

Column 3 – displays the retrieved sensor IDs by OBD

NOTE:

Programming function will only work with Foxwell sensor. Currently, there are two models available: Clamp-in Sensor and Snap-in Sensor, both with two types, one with 433MHz frequency, and one with 315MHz frequency. The Clamp-in Sensor is taken as an example in this manual. Please choose the proper Foxwell sensor when programming.

8.2.1 Manual Create

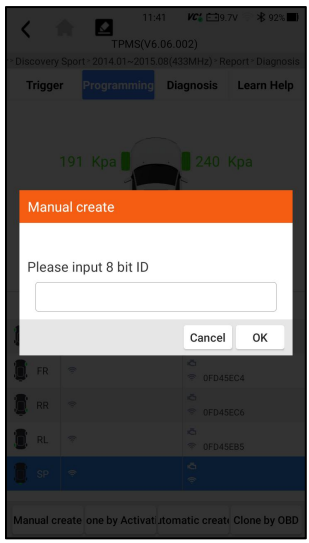
This function allows you to manually enter sensor IDs. You can enter a random ID or the original sensor ID.

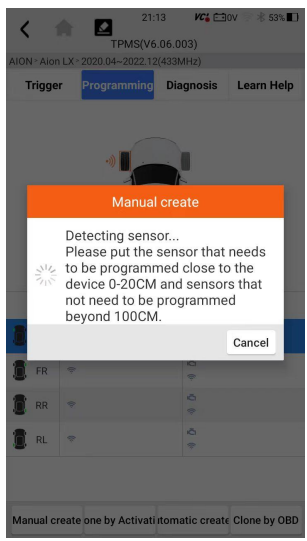
NOTE:

Do not enter the same ID for different sensors.

To manual create

1. Tap the **Programming** tab.
2. Select the specific wheel on the screen.
3. Tap **Manual Create** button.
4. Enter the characters in the prompted screen. Tap OK to finish and save the sensor ID, or Cancel to exit.





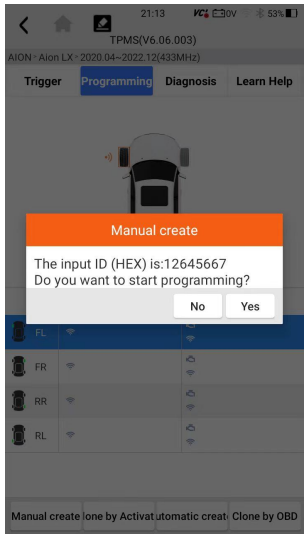
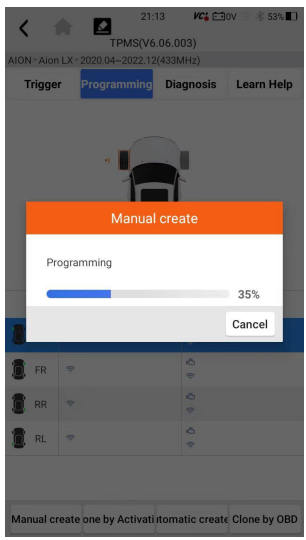


Figure 8-9 Sample ID Input Screen

5. Place the proper Foxwell sensor near the top right of the tool to start programming.



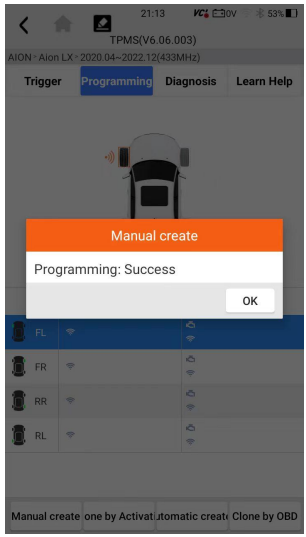


Figure 8-10 Sample Manual Create Function Screen

If multiple sensors were detected, will pop up message to remind remove the excess sensors.

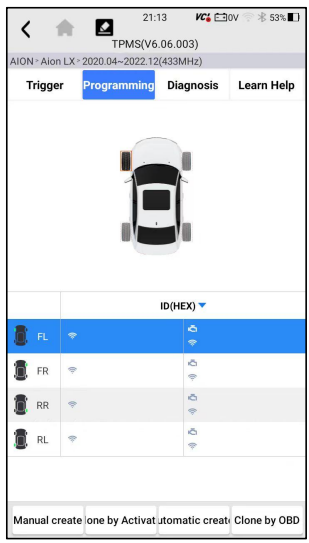


Figure 8-11 Sample Manual Create Function Screen

8.2.2 Clone by Activation

This function allows user to automatically write in the retrieved original sensor data to the Foxwell sensor. It is used after the original sensor is triggered.

To perform Clone by Activation, user needs active the installed sensor firstly, if succeed, the sensor ID will display.

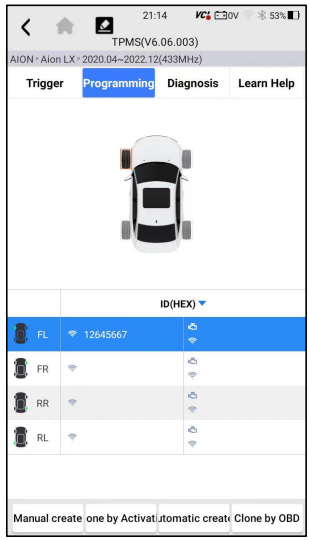
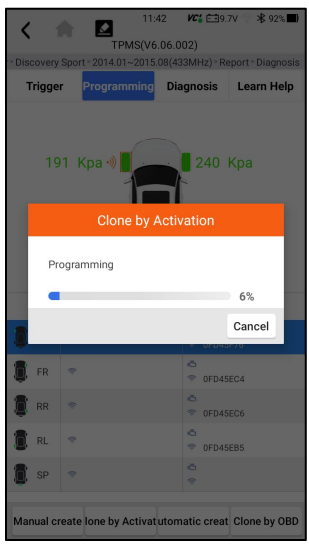


Figure 8-12 Sample Clone by Activation Function Screen

Then put the Foxwell sensor that need to be programmed close to the device 0-20cm and sensors that not need to be programmed beyond 100cm.



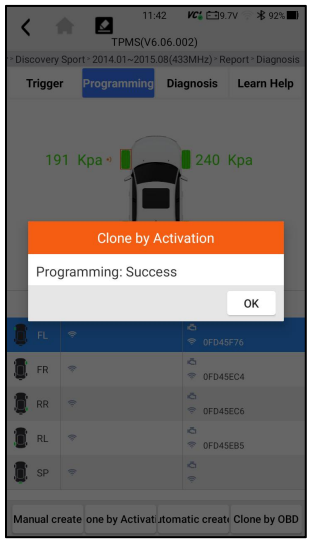


Figure 8-13 Sample Clone by Activation Function Screen

8.2.3 Automatic Create (1-16)

This function is designed to program the Foxwell sensor by applying random IDs created according to the test vehicle, when it is unable to obtain the original sensor ID.

To Automatic Create

1. Tap **Programming** tab.
2. Select the specific wheel on the screen.
3. Tap the **Automatic Create** functional button on the screen.
4. Place the proper Foxwell sensor near the top right of the tool to write the new created sensor ID into the Foxwell sensor.

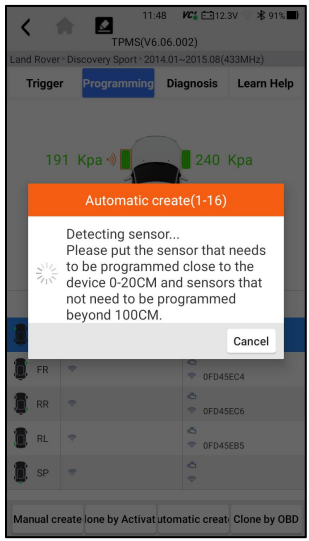
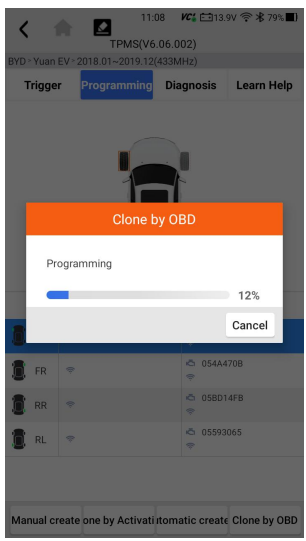


Figure 8-14 Sample Automatic Create Function Screen

After programming is finished, the new programmed Sensor ID will display on Column 2 of the table.

8.2.4 Copy by OBD

This function allows users to write the saved sensor information into Foxwell sensor after performing Copy by OBD function, the sensor ID will appear on the table in Programming screen. Select the specific wheel on the screen, and then tap Copy by OBD button.



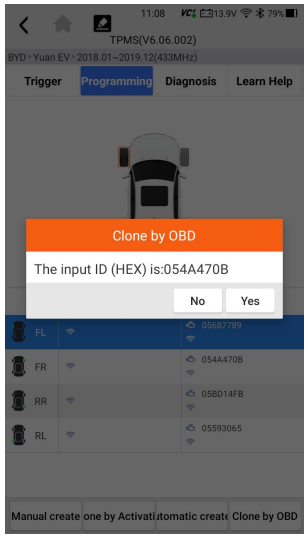


Figure 8-15 Sample Copy by OBD Function Screen

Place the proper Foxwell sensor near the top right of the tool, and tap OK to start programming the saved sensor information to the Foxwell sensors. The programmed sensor ID will appear on Column 2 of the table.

8.3 Learn Help

This function introduces the relevant information of the sensor, such as manufacturer, sensor frequency, OE number, learning type, learning method and learning steps etc. The OEM sensor information and specification, and relearn procedure for each vehicle will display on the right side of the screen. The Learning method of TPMS mainly includes:

OBD relearn, **Automatic relearn**, **Static relearn**, **Clone Sensor**.

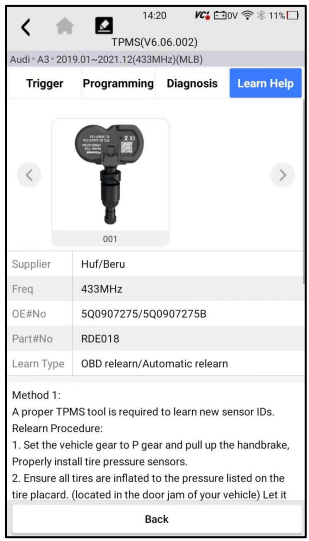


Figure 8-16 Sample Learn Help Screen

8.3.1 OBD Relearn

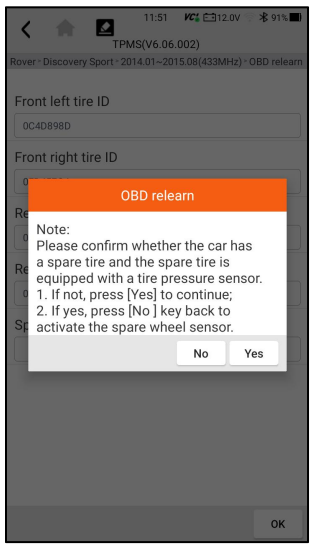


Figure 8-17 Sample OBD Learn Help Screen

To perform OBD Relearn

1. Install the tire pressure sensor correctly.
2. Inflate all the tires to the rated value in the nameplate(usually on the door or door frame).
3. Using the TPMS tool, activate each sensor.

4. Turn on the ignition on (to ON/RUN/START).
5. Connect the TPMS tool to the OBDII interface, and use OBD relearn function to write the sensor ID.
6. Keep the ignition switch on (ON/RUN/START) and reactivate each sensor in turn.
7. Turn off and then turn on the ignition on.
8. Drive the vehicle at a speed of not less than 30 km/h for at least 10 minutes, to ensure that the tire pressure system works normally (the tire pressure light is off).

NOTE:

Different models have different OBD relearn methods. Please read the relearn procedure carefully before performing the relearn function.

8.3.2 Automatic Relearn

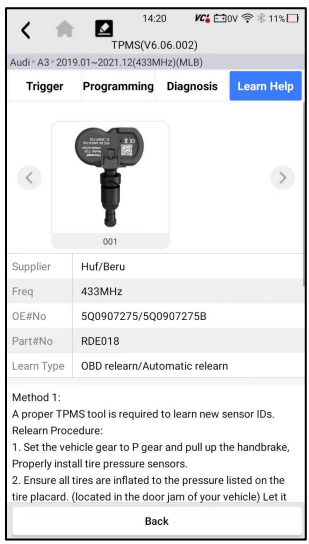


Figure 8-18 Sample Automatic Relearn Help Screen

To perform Automatic Relearn

1. Install the tire pressure sensor correctly.
2. Park for at least 15 minutes.
3. Inflate all the tires to the rated value in the nameplate(usually on the door or door frame).
4. Turn on the ignition on (to ON/RUN/START).

5. Operate the instrument panel to let the vehicle enter the automatic relearn mode (if need).
6. Drive the vehicle at a speed of 30-100 km/h for at least 15 minutes, to ensure that the tire pressure system works normally (the tire pressure light is off).

NOTE:

Different models have different Automatic relearn methods. Please read the relearn procedure carefully before performing the relearn function.

8.3.3 Static Relearn

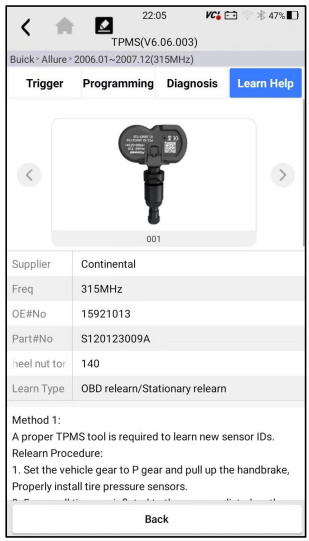


Figure 8-19 Sample Automatic Relearn Help Screen

To perform Static Relearn

1. Install the tire pressure sensor correctly.
2. Inflate all the tires to the rated value in the nameplate(usually on the door or door frame).
3. Turn on the ignition switch (turn to ON/RUN/START).
4. Operate the instrument panel to let the vehicle enter the static relearn mode(if need) . Usually the horn will beep twice and the left light will be on.
5. Complete the learning process according to the device or multimedia display screen. If successful, the horn will beep once.

6. Drive the vehicle for at least 15 minutes, to ensure that the tire pressure system works normally (the tire pressure light is off).

NOTE:

Different models have different static relearn methods. Please read the relearn procedure carefully before performing the relearn function.

8.4.4 Clone Sensor

Use one of the following method to copy according to the actual situation.

1. Copy by activation
2. Copy by manually input the sensor IDs. (notice the data format is decimal or hexadecimal)

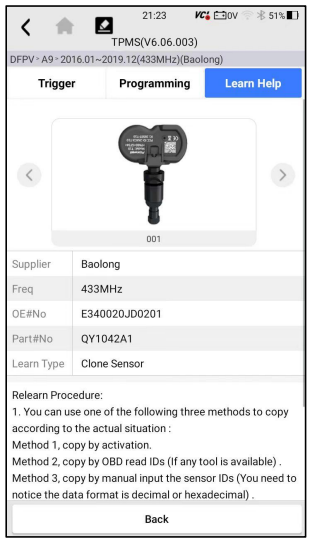


Figure 8-20 Sample Automatic Relearn Help Screen

9 Data Manager

Data Manager menu let you review stored screenshots and test reports, playback recorded live data and other saved files.

Typical menu options include:

- Image
- PDF
- Data Playback
- Data Record
- Report
- TPMS Report

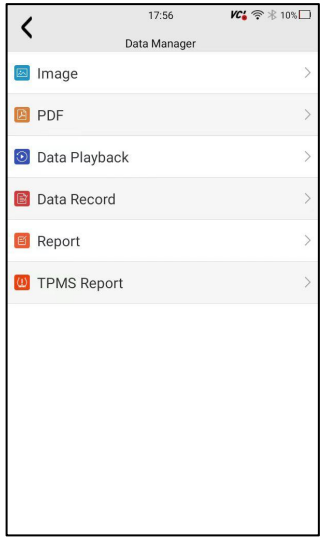


Figure 9-1 Sample Data Manager Screen

9.1 Image

Image option leads to screens for review of stored screenshots. In case a failure of TS5000 application or the Android system occurs, please just take a screenshot and send it to our team to help with the troubleshooting.

1. If want to save data of current screen, press after sliding down the notice bar to take a screenshot.
2. Press **Data Manager** from home screen of TS5000 application, select **Image** from Data Manager.
3. To delete a picture, tap button **Delete** and answer **OK** to delete. Press **Print** to print the pictures and press **Rename** to change the picture name.
4. Long press one of the pictures to edit all pictures like **Rename** or **Delete**.

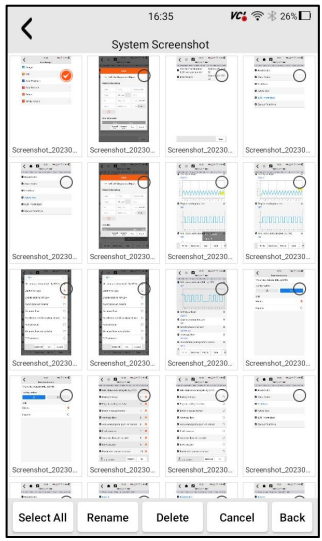


Figure 9-2 Sample All Pictures Edit Screen

9.2 PDF Report

PDF option leads to screens for review of the vehicle test reports. You just need to press the PDF icon on the test screen, add a description and press **OK** button to save.

9.2.1 How to Create a PDF Report

To create a PDF report:

1. Press **Data Manager** from home screen of TS5000 application.
2. Press Report from Data Manager.
3. Press any reports saved.

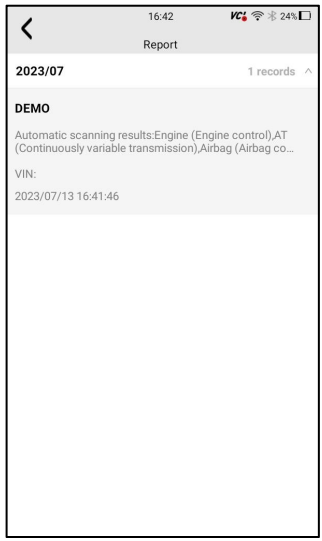


Figure 9-3 Sample of Reports Screen

4. Press Save to save changes. Press PDF to create PDF file.

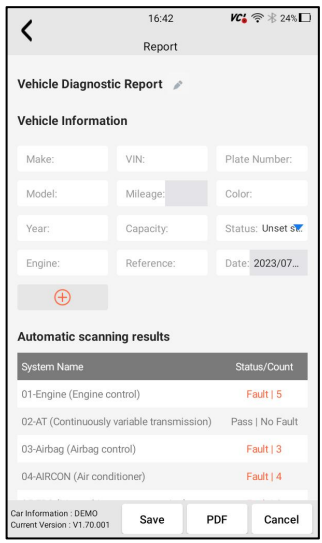


Figure 9-4 Sample of Report edit Screen

5. If press PDF, the PDF review screen will be displayed. Press **Print** to print the report or press **Email** to share the report.

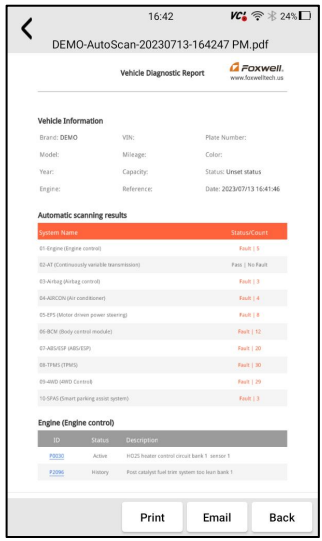


Figure 9-5 Sample of Report edit Screen

9.2.2 Review PDF Report

To review the PDF reports:

1. Press Data Manager from home screen of TS5000 application.
2. Press PDF and all available PDF files will be displayed.
3. Long press the screen to edit all PDF files like Rename or Delete the files.

9.3 Data Playback

The **Data Playback** option leads to screens for review of recorded live data. Playing back a recording is just like using the scan tool on a live vehicle. It let you review live data in text, graph and graph merging formats. Playback speed and direction (forward or reverse) can also be controlled.

To review recorded live data:

1. Press **Data Manager** from home screen of TS5000 application.
2. Press **Data Playback** and all available records display.
3. Press any records to view the details.
4. To view parameter graphs, press the **Graph** tab. And to merge the graphs, press the tab **Merge Graph** or press the tab **Multi Graph** to view multiple plots.
5. To move forward or reverse back of the playing, just drag the progress bar forward or reverse. Press the ⏸ button to stop.
6. Long press the record to Rename or Delete the records.

10 Settings

This section illustrates how to program the tool to meet your specific needs. When Settings application is selected, a menu with available service options displays. Menu options typically include:

- Unit
- Language
- Font Size
- Module Sorting
- Sort Tiles
- Remote control
- TPMS Sales Region Change
- System Settings
- General
- Uninstall Vehicle Software
- Clear app data
- Print Settings
- About

10.1 Units

Selecting **Unit** opens a dialog box that allows you to choose between Imperial customary or metric units of measure.

▶ To change the unit setup:

1. Press **Settings** from home screen of the TS5000 application.
2. Press **Unit** and available unit system display.
3. Select a unit system.

10.2 Language

Select **Language** opens a screen that allows you to choose system language.

▶ To configure system language:

1. Press **Settings** from home screen of the TS5000 application and select **Language**. Then all available language options display.
2. Select your preferred language to change.

10.3 Font Size

This option allows you to change the font size of application.

▶ To change font size:

1. Press **Settings** from home screen of the TS5000 application, and then select **Font Size**.

2. Select your preferred font size, then press **Confirm** to change, or press **Back** to give up.

10.4 Module Sorting

This option allows you to modify the display order of other modules.

To change module sorting:

1. Press **Settings** from home screen of the TS5000 application, and then select **Module Sorting**.

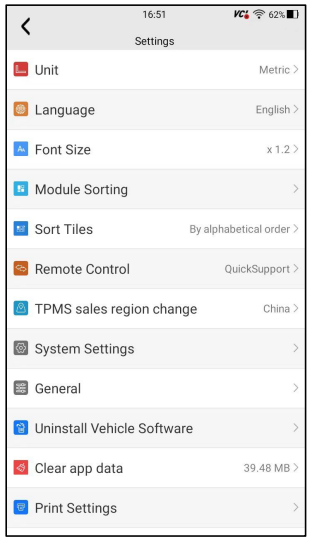


Figure 10-1 Sample Before the modification,
the Update Module is displayed behind the Maintenance module

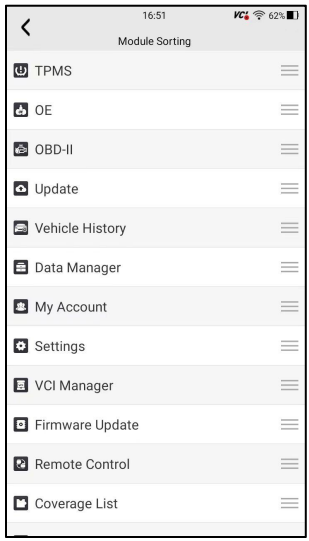


Figure 10-2 Sample Before the modification,
the Update Module is displayed behind the Maintenance module

2.Long press the icon ☰ on the right side of the module that needs to be modified for about 2 seconds, and then drag it up and down. The final position of the module is the same as the display order of the home screen.

3. Click ↩ to display whether to apply the current settings interface, click OK to apply the current changes, click Cancel to discard the current changes.

10.5 Sort Tiles

This option allows you to change the sort for Brand of vehicles. There are two sorting methods available by alphabet or by frequency of use.

▶ To change sort

1. Press **Settings** from home screen of the TS5000 application, and select **Sort Tiles**.
2. Select your preferred sort order.

10.6 Remote control

This option allows you to select a tool of remote control. There are two remote tools available TeamViewer QuickSupport or AnyDesk.

▶ To change remote control

1. Press **Settings** from home screen of the TS5000 application, then select **Remote control**.

2. Select your preferred tool.

10.7 Automatic Update

This option allows you to enable/disable automatic update notice. If it is enabled, an orange update mark will show on the upper right of the TPMS software icon whenever there is a new version available.

10.8 System Settings

This option provides you a direct access to the Android system settings, like sound, display, system security and etc. Refer to Android documentation for more information.

10.9 General

This option lets you to turn on/off the prompt when saving a file or login & registration when started the tool.

10.10 Uninstall Vehicle Software

This option allows you to uninstall the vehicle software installed in the tool.

To uninstall a vehicle software:

1. Tap **Settings** application on home screen of TS5000.
2. Tap the **Uninstall Vehicle Software** option on the option list.
3. Choose the vehicle software you want to delete or choose **Select All**.

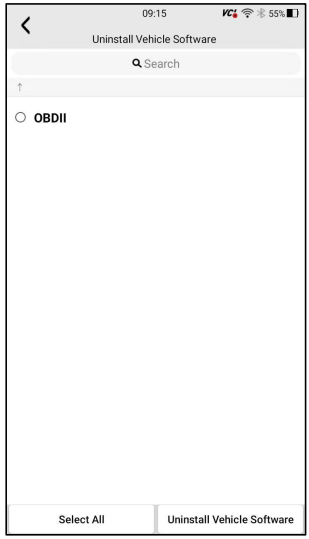


Figure 10-3 Sample Uninstall Vehicle Software Screen

4. Press **Back** to quit or and press **OK** to uninstall.

10.11 Clear app data

Generally, after the application running for a period of time, some cache data will be generated. As time goes by, the cached data will become larger and larger, which will affect the operation of the device. This option allow you to clear the cache data of the app.

10.12 Print Settings

This option allows you to print any data or information anywhere and anytime either via PC network or Wi-Fi.

To setup the printer connection:

1. Tap the **Settings** application on home screen of TS5000.
2. Tap the **Printing Settings** option on the option list.

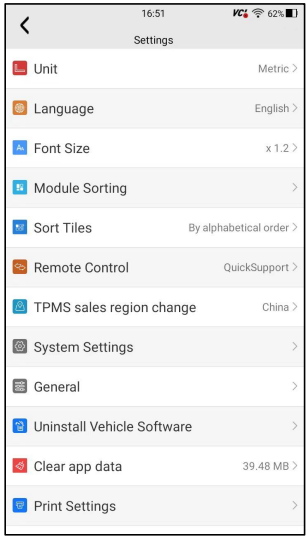


Figure 10-4 Sample Print Settings Screen

3. Tap **Print Plugin Manager** and turn on the Mopria Print Service, then TS5000 will search for available printers automatically.

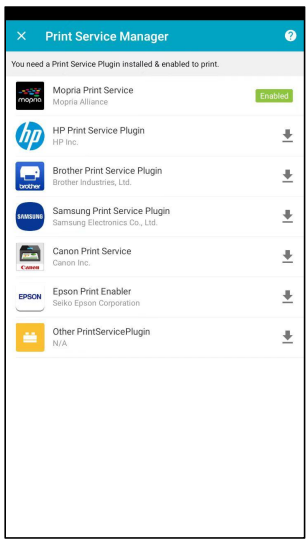


Figure 10-5 Sample Print Service Manager Screen

4. Select Mopria Print Service.
5. Choose the right printer.
6. Select a available printer, then press **PRINT TEST PAGE** button at the right-bottom.

7. Choose the file or report you want to print and press the print icon . Click on the red marked part to select an available printer. Click the blue marked part to make more settings for the printer, such as paper size, number of copies, etc.

NOTE

1. Please make sure the printer and the TS5000 in the same Wi-Fi or Network when printing.
2. If Mopria Print Service driver can't workable for your printer, please download the driver to work for your printer on Print Service Manager.

10.13 About

Selecting **About** option opens a screen that shows information about the TS5000, such as serial number, hardware and software version and etc.

To view information of your scan tool:

1. Press **About** from home screen of the TS5000 application.
2. A screen with detailed information of the tool displays.

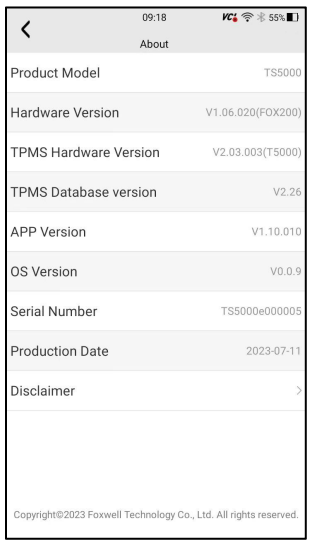


Figure 10-6 Sample Tool Information Screen

11 Remote Support

Remote Control enables you to get remote support from Foxwell with TeamViewer when you have issues with Foxwell products.

There are two remote control tools TeamViewer QuickSupport and Any Desk. About how to set the tool of default, please refer to 12.5 Remote control.

To use QuickSupport for to remote control:

1. Click the **Remote Control** icon on the main menu of the TS5000 to start TeamViewer QuickSupport. Press < for return.

Figure 11-1 Sample QuickSupport Screen

2. Send your ID to us to let our team to take control your tablet.

12 Coverage List

Coverage List enables you to get more support and information by input Foxwell product and car brand.

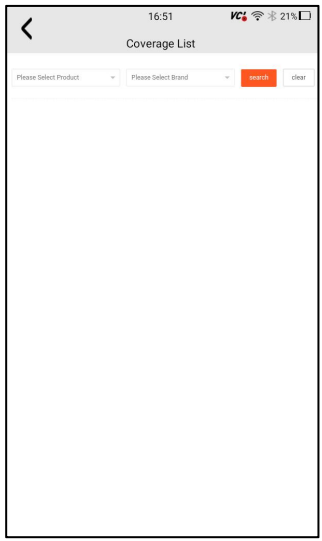


Figure 12-1 Sample Coverage list Screen

13 Remote Key Frequency Monitoring

This section illustrates how to check RF Remote Keyless Entry (key FOB) with the trigger tool.The TS5000 tests 315MHz and 433MHz key fobs only, and checks only for a signal present.

14 Sensor Information

This section helps to check own sensor information.

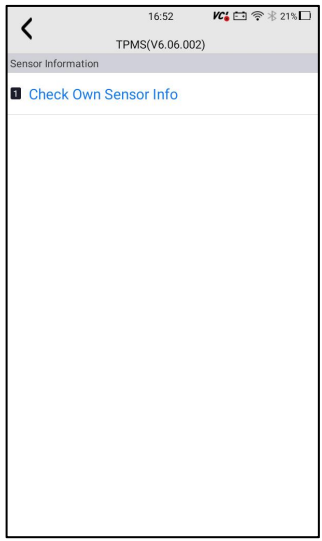


Figure 14-1 Sample Sensor information Screen

15 Auxiliary Tools

More auxiliary tools can be found like camera and file browser.