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Subject to the conditions of this limited warranty, VAPON Technology Co., Ltd ("VAPON") warrants to its customers that this product is free of defects in materials and workmanship at the time of its original purchase for a subsequent period of one (1) year.

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

Terms and Conditions

1 If VAPON 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 VAPON 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 VAPON, including damage caused by shipping.

b) The product has been damaged by external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, 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 products, attachments, supplies or consumables not manufactured or distributed by VAPON.

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4 VAPON 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, or contact your local VAPON distributor or visit our website www.vapontech.com for further information.

b) The customer shall include a return address, daytime phone number and/or fax number, a 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) VAPON will repair the product under the limited warranty within 30 days after receipt of the product. If VAPON cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, VAPON, 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, VAPON's normal service policies shall apply and the customer will be responsible for all shipping charges.

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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 or

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 the 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 the 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

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 malfunctioning 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 the 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 an engine.
- Do not connect or disconnect the equipment while the ignition is on or the engine is running.

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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 TyreIQ S5 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 scanner and plug it to the wall socket.
2. Press the power switch of the scan tool to power it on; meanwhile the scanner 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

9

TPMS Service Tool TyreIQ S5 User's Manual V1.0

 M

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

Important

IMPORTANT: Indicates a situation, if not avoided, may cause damage to the test equipment or the vehicle.

Example:

IMPORTANT

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

2 Introduction

A professional-grade Android-based TPMS tool engineered for high-volume workshops. Full sensor activation, programming, and relearn capability across 98%+ global vehicle coverage with a 5.5-inch touchscreen and real OBD-II diagnostics.

2.1 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, Low-speed 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 ~ 70°C
Storage Temperature	-20 ~ 80°C
Operating Humidity	5%-95% Non-Condensing

Dimensions	195*100*25mm (L*W*H)
Weight	0.87kg (Main unit)

Table 2-1 Technical Specifications

2.2 Scanner Descriptions

This section describes the scanner's external components, ports and connectors.



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 scanner.



Figure 2-2 Side View

- ③ **Power Switch** - turns on the scanner, puts the device into sleep mode, or wakes it from sleep mode. Press and hold for 3 seconds to power on the device or perform an emergency shutdown. Double-click to capture a screenshot.
- ④ **USB Type-C Port** - connects to wall plug to charge the scanner and can also 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 the display. Use a mild, nonabrasive detergent and a soft cotton cloth.

2.3 Accessories

This section lists all standard accessories included with the scanner. If any items are missing from your package, please contact your local authorized dealer for support.

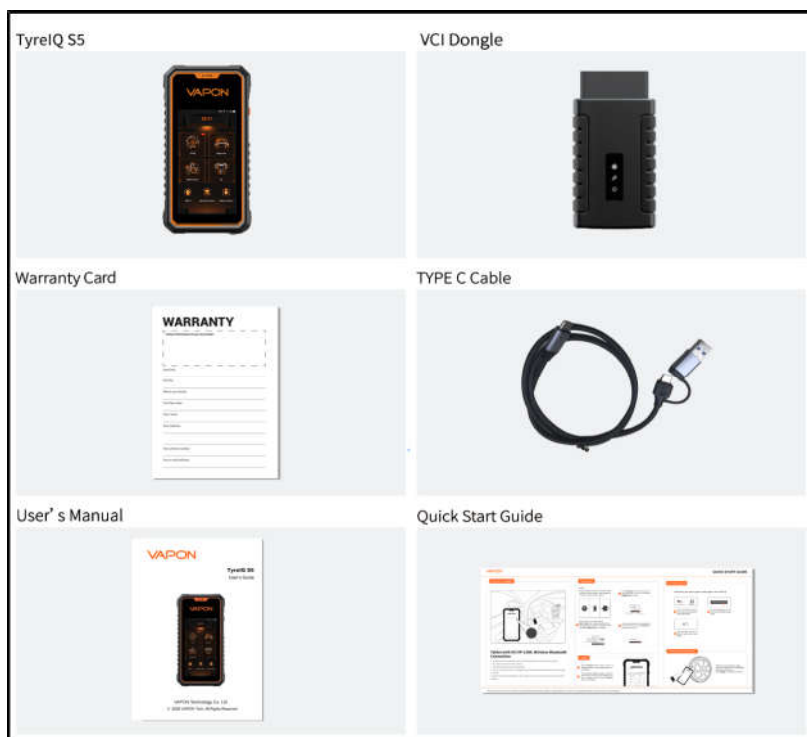


Table 2-2 Accessories

3 Getting Started

This section explains how to power the TPMS service tool on and off, introduces the preinstalled applications, and describes the home screen layout.

3.1 Powering up the TPMS Service Tool

Before using the TyreIQ S5 applications (including updating the TPMS service tool), please make sure to provide power to the scanner.

The unit operates on any of the following sources:

- Internal Battery Pack
- External Power Supply

3.1.1 Internal Battery Pack

The tablet scanner 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 in 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 a 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 scanner for 3 seconds.
2. Click the **Power off** to shut down the device, or **Reboot** to restart it.

3.3 Screen Layout of Home Screen

After the scanner turning on, the screen shows main menu of the application.

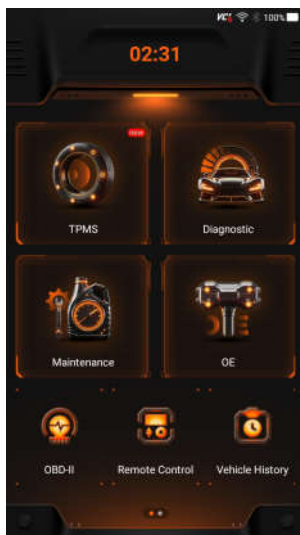


Figure 3-1 Sample Home Screen

3.3.1 Application Menu

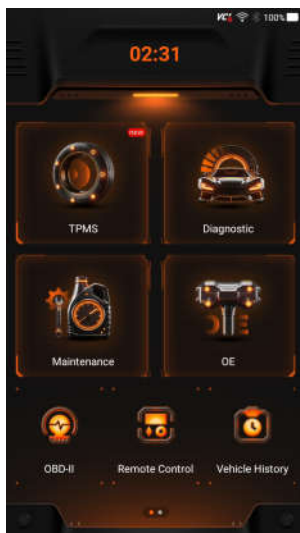


Figure 3-2 Sample Main Menu of Application

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

- **TPMS** - leads to screens for TPMS function.
- **Diagnostic** - leads to test screens for diagnostic trouble code information, freeze frame, live data and ECU information.

- **Maintenance** - leads to screens for commonly used special functions like Oil light reset, EPB, BRT, DPF etc.
- **OE** - enters vehicle selection by selecting "sensor brand" and part number (OE number) at once.
- **OBDII** - leads to OBDII screens for all 9 generic OBD system tests.
- **Remote Control** - leads to TeamViewer to get remote support from VAPON team or remote vehicle diagnostics.
- **Update** - leads to screens for VAPON ID registration and updating the scanner.
- **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 VAPON ID information like registered products and personal information.
- **Settings** - leads to screens for adjusting default settings to meet your own preference and view information about the scanner.
- **VCI Manager** - VCI management (VCI binding, unbinding, rescan vehicle software).
- **Firmware Update** - VCI firmware update.
- **TPMS Coverage List** - query the functions of model supported by the scanner.
- **Remote key Frequency Monitoring** -check the key frequency.
- **Sensor Information** - check sensor information.
- **Auxiliary tools** - camera and file browser

4 TPMS Service Operations

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

4.1 TPMS Service Screen Layout

The TPMS service typically includes three functions:

Trigger/ Programming/Diagnosis/ Learn Help

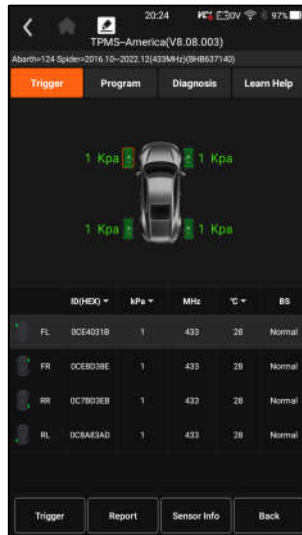


Figure 4-1 Sample TPMS Service Screen Layout

4.2 Trigger Operations

The sensor trigger function allows you to activate a 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 a low-frequency signal to trigger the sensor.
 3. The sensor data of the selected wheel will be displayed on the screen table once the sensor is successfully activated and decoded.

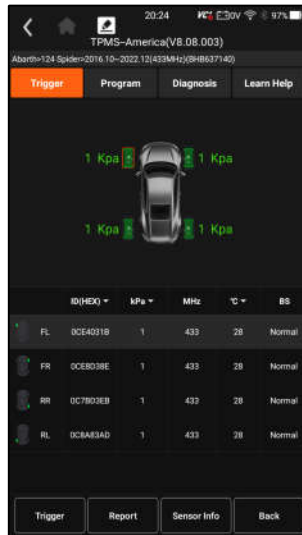


Figure 4-2 Sample Trigger TPMS Screen

NOTE:

The tool will perform the 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 malfunctioning. The table on the right side of the screen will show "Failed". If a sensor with a duplicate ID has been read, the screen displays a message "Sensor ID duplicated". In the case, repeat the test procedure.

Table 4-1 Possible results for triggering

4.3 Programming Operations

The programming function is used to program the sensor data into the Vapon sensor and replace the faulty sensor (poor battery life or malfunction). The TyreIQ S5 is easy to use with a proven efficiency and guaranteed accurate results.

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

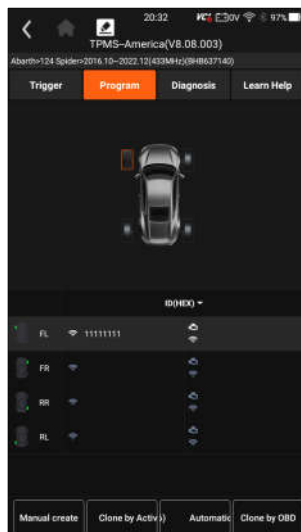


Figure 4-3 Sample Programming Function Screen

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:

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

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



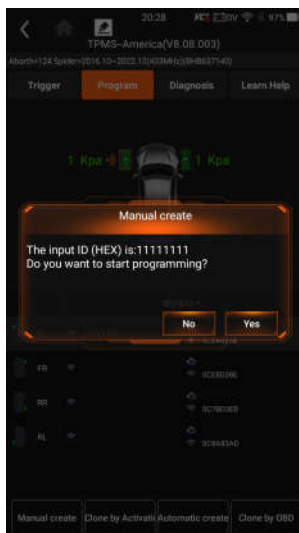
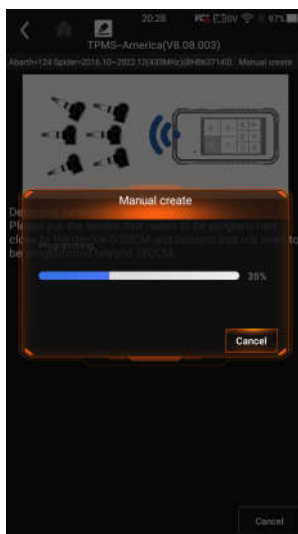


Figure 4-4 Sample ID Input Screen

5. Place the proper Vapon sensor near the top right of the tool to begin programming.



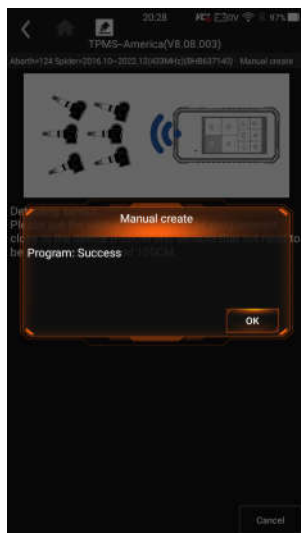


Figure 4-5 Sample Manual Create Function Screen

If multiple sensors are detected, the tool will pop up a message to remind you to remove the excess sensors.

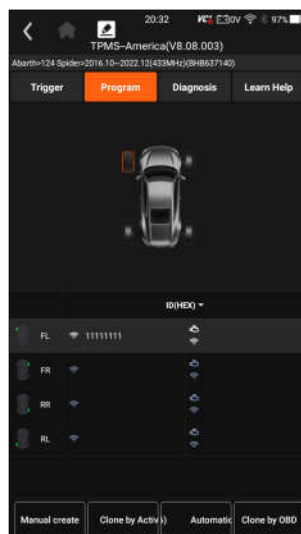


Figure 4-6 Sample Manual Create Function Screen

4.3.2 Clone by Activation

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

To perform Clone by Activation, the user needs to activate the installed sensor first, if succeed, the sensor ID will be displayed.

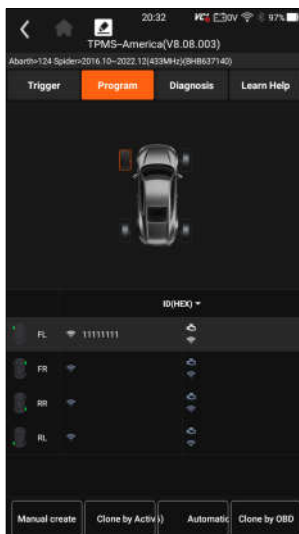


Figure 4-7 Sample Clone by Activation Function Screen

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

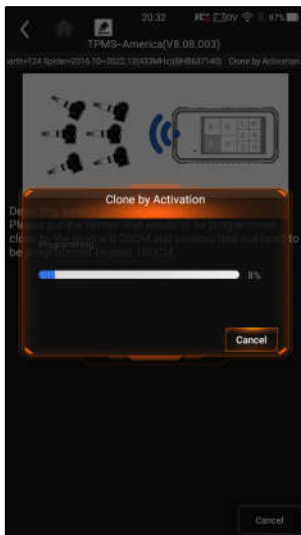




Figure 4-8 Sample Clone by Activation Function Screen

4.3.3 Automatic Create (1-16)

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

▶ To Perform Automatic Creation

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 Vapon sensor near the top right of the tool to write the new created sensor ID into the Vapon sensor.

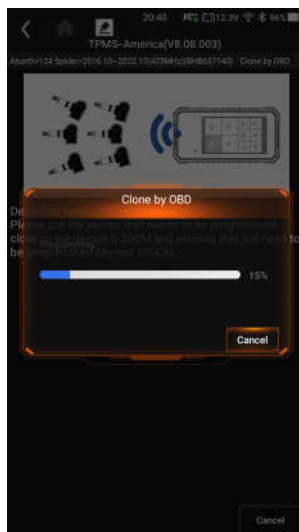


Figure 4-9 Sample Automatic Create Function Screen

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

4.3.4 Copy by OBD

This function allows users to write the saved sensor information into Vapon 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.



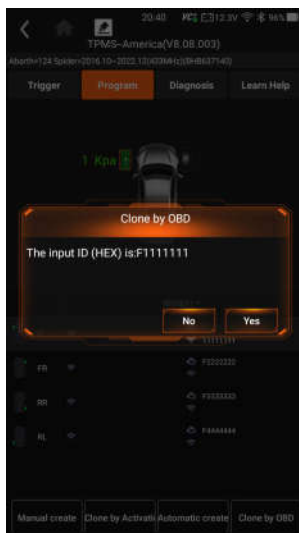


Figure 4-10 Sample Copy by OBD Function Screen

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

4.4 Learn Help

This function introduces the relevant information of the sensor, such as manufacturer, sensor frequency, OE number, learning type, learning method, learning steps etc. The OEM sensor information and specifications, and relearn procedure for each vehicle will be displayed on the right side of the screen.

The Learning method of TPMS mainly includes:

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

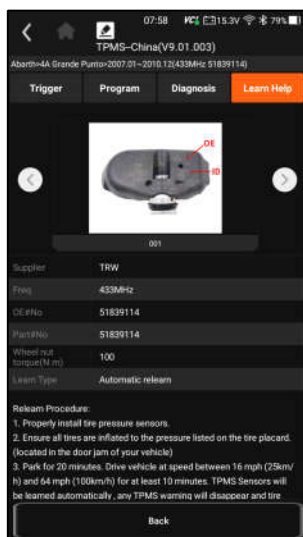


Figure 4-11 Sample Learn Help Screen

4.4.1 OBD Relearn

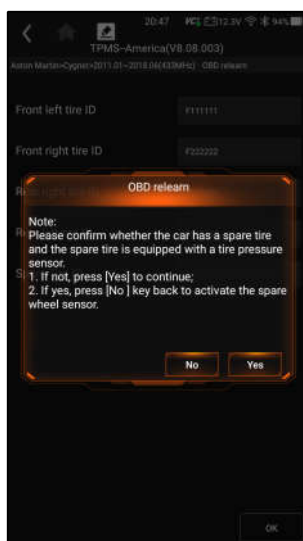


Figure 4-12 Sample OBD Learn Help Screen

- ▶ To perform OBD Relearn
1. Install the tire pressure sensor correctly.
 2. Inflate all the tires to the rated value on 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.

4.3.2 Automatic Relearn

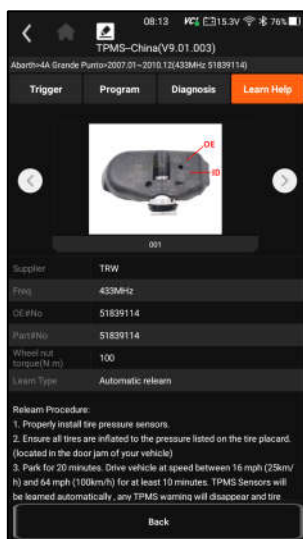


Figure 4-13 Sample Automatic Relearn Help Screen

- ▶ 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 make the vehicle enter the automatic relearn mode (if needed).
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.

4.4.3 Static Relearn



Figure 4-14 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.

4.4.4 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 4-15 Sample Automatic Relearn Help Screen

5 Diagnostic Operations

5.1 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

5.1.1 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 TyreIQ S5 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 will be displayed. If the Vehicle Specification or VIN code is correct, press the **OK** to continue.

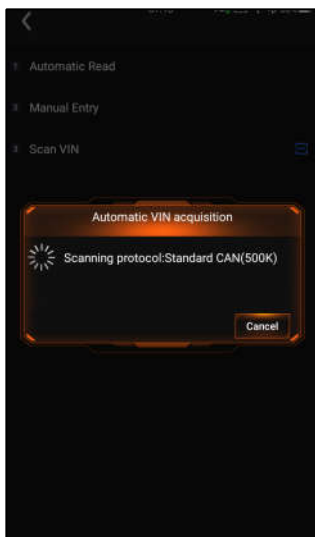


Figure 5-1 Sample Automatic Read Screen

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



Figure 5-2 Sample Manual Entry Screen

5.1.2 VIN Scanning

VIN Reading allows the user 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 TyreIQ S5 application.
 2. Click  button and scan the VIN number on the nameplate of the car.

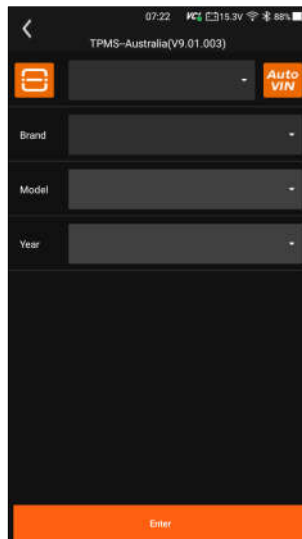


Figure 5-3 Sample Vehicle Selection Screen

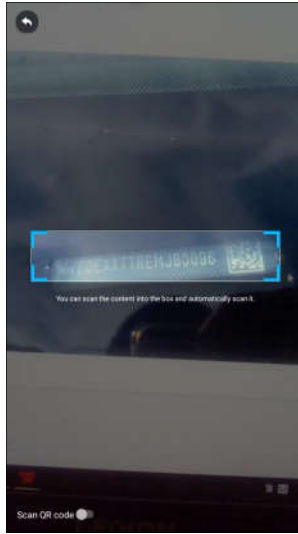


Figure 5-4 Sample Smart VIN Screen

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

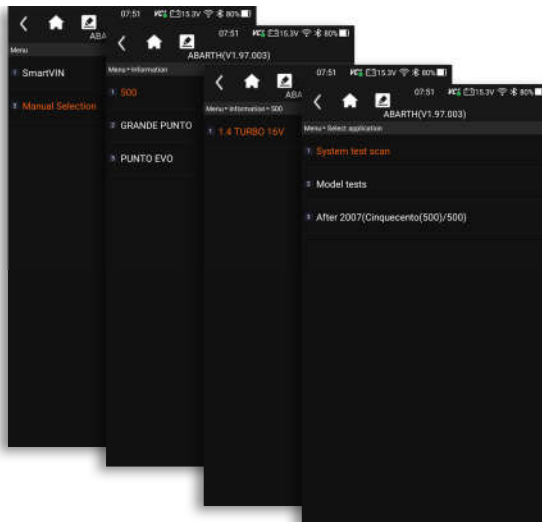
5.1.3 Manual Vehicle Selection

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 TyreIQ S5 application.
2. Choose Brand-Model--Model year according to the car information.



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

5.2 Diagnostic Operation

After a system is selected and the scanner establishes communication with the vehicle, the Function Menu will be displayed. The general menu options are :

- Read Codes
- Clear Codes
- Live Data
- ECU Information

NOTE

Not all function options listed above are applicable to all vehicles. Available options may vary by the year, model, and make of the test vehicle.

5.2.1 Read Codes

Read Codes menu helps you read trouble codes, which are found in the control unit. There are 3 types of code status:

- Present/Permanent/Current
- Pending
- History

Present/Permanent/Current codes, stored in a control module, are used to help identify the cause of a trouble or troubles about a vehicle. These codes have occurred a specific number of times and indicate a problem that requires to repair.

Pending codes are also referred to as maturing codes that indicate intermittent faults. If the fault does not occur within a certain number of drive cycles (depending on vehicle), the code clears from memory. If a fault occurs a specific number of times, the code matures into a DTC and the MIL illuminates or blinks.

History codes are also referred to as past codes that indicate intermittent DTCs that are not currently active. Code history is number of engine starts since DTC(s) were first detected (to see if they are current or intermittent).

-  To read codes from a vehicle:
1. Press **Read Codes** from Select Diagnostic Function menu. A code list including code number and its description will be displayed. The red icon  means there is help information available for the code. The green icon  means there is freeze frame available.

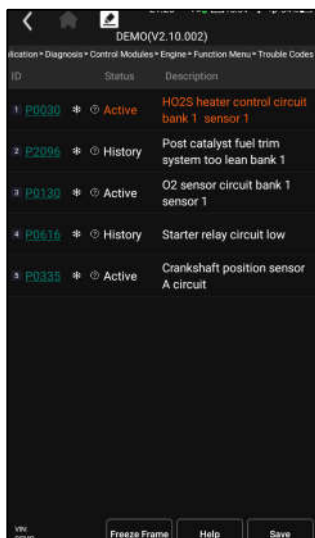


Figure 5-6 Sample Trouble Code Screen

- **Freeze Frame** - select one fault code from the code list and click the **Freeze Frame** button at the bottom bar. The screen will display freeze frame detail data, a snapshot of critical vehicle operating conditions automatically recorded by the on-board computer at the time of the DTC set. It is a good function to help determine what caused the fault.

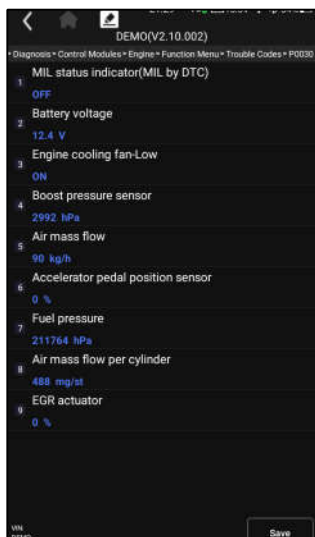


Figure 5-7 Sample Freeze Frame Screen

- **Help** - select one fault code from the code list and click the **Help** button on the screen. The screen will display the detailed descriptions of the fault code and repair guide.

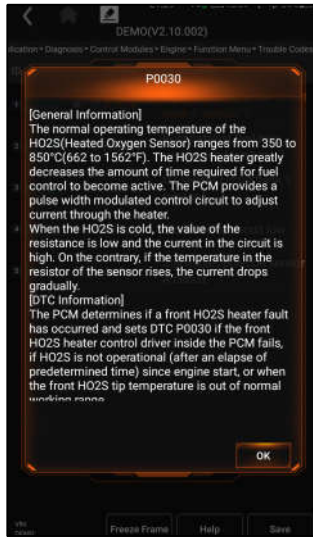


Figure 5-8 Sample DTC Help Screen

2. Slide up and down to view additional information when necessary.
3. Press **Save** to store DTC information. Press  to print the information if needed. Press  to exit.

5.2.2 Clear Codes

Clear Codes menu lets you clear all current and stored DTCs from a selected control module. It also erases all temporary ECU information, including freeze frame, so make sure that the selected system is completely checked and serviced by technicians and no vital information will be lost before clearing codes.

NOTE

- To clear codes, make sure that the ignition key is switched to ON with the engine off.
- Clearing Codes does not fix the problem that caused the fault! DTCs should only be erased after correcting the condition(s) that caused them.



To clear codes:

1. Press **Clear Codes** from Select Diagnostic Function menu.

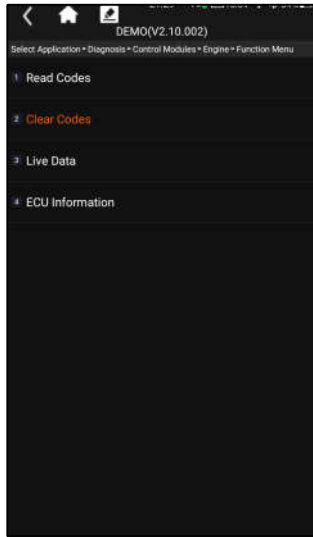


Figure 5-9 Sample Function Menu Screen

2. Follow the on-screen instructions and answer questions about the vehicle being tested to complete the procedure.
3. Check the codes again. If any codes remain, repeat the Clear Codes steps.

5.2.3 Live Data

The **Live Data** menu lets you view real-time PID data in text and plot formats, learns good sensor data and compare it with faulty data, and record live data from a selected vehicle electronic control module.

There are two ways to select the PID data from a control module:

- All Data
- Custom List

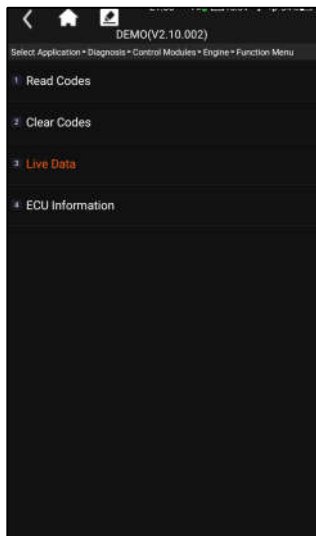


Figure 5-10 Sample Function Menu Screen

5.2.3.1 All Data

All Data menu lets you view all live PID data from a selected control module.

- ▶ To view all live PID data:
1. Press **Select ALL** for select all live PID data and press **Deselect ALL** to deselect all items.



Figure 5-11 Sample Function Menu Screen

- Press **OK** to complete the selection and all readings will be displayed in text format by default. And click  can change the data to a graph.

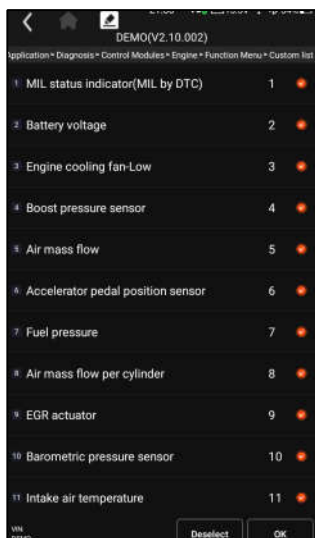


Figure 5-12 Sample Live Data Selection Screen

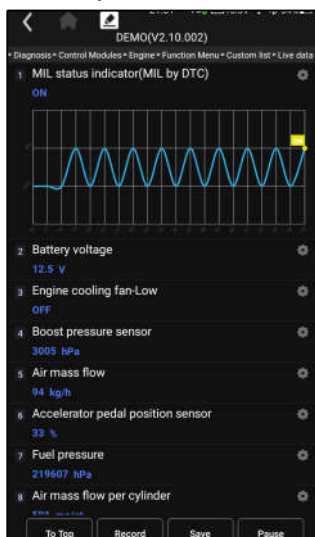


Figure 5-13 Sample Live Data Screen

Name	Description
To Top	To move a data line to the top of Data List screen
Batch Top	To select some data line to the top of Data List screen

Record	To make record of live data
Save	To save the live data of current frame
Pause	To stop recording live data

Table 5-1 Live Data Screen Button Screen

3. Swipe the screen up and down to view additional information when necessary.
4. To move a data line to the top of Data List screen, just tap the line to select and then press the button **To Top**. To view data records or test reports, and press the button **History**. To make records of live data, just tap the button **Record**, and press **Pause** to stop recording at any time. To save the data, tap the **Save** icon.

5.2.3.2 Custom List

Custom List menu lets you minimize the number of PIDs in the data list and focus on any suspicious or symptom-specific data parameters.

- ▶ To create a custom data list:
1. Press **Custom List** from the menu to display all available parameters from the selected control module.
 2. The custom data stream selection screen displays. Tap the lines you wish to select it. The numbers showing on the right side indicates the order of selection and the live data will show as this order.

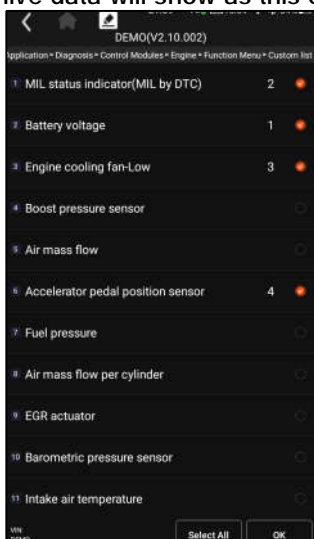


Figure 5-14 Sample Custom List Selection Screen

3. To deselect an item, tap the line again. Alternatively, tap **SELECT ALL** or **Deselect ALL** to select or deselect all items at once.
4. Press **OK** to complete the selection, and all selected items display.

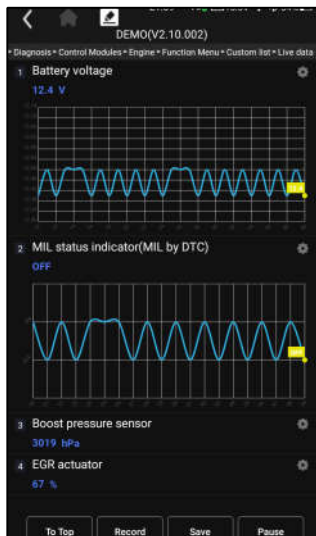


Figure 5-15 Sample Live Data Screen

5.2.3.3 Record data

Data Record is for recording the running data of the current control module.

▶ To Record Data

1. Press the **Record** button to record all selected live data, then it will show the record time and frames.

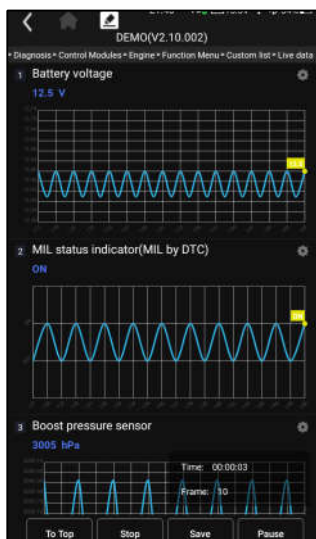


Figure 5-16 Sample Live Data Record Screen

2. Press the **Stop** button to create a record, then press **OK** to save the record into Data Playback of Data Manager.

Figure 5-17 Sample To Stop Live Data Record Screen

5.2.4 Active Test

Active Tests, also known as Actuator Tests, are bi-directional diagnostic tests on vehicle systems and components. The tests let you use the scanner temporarily activate or control a vehicle system or component, and when you exit the test, the system/component returns to normal operation.

Some tests display a command to the operator. For example, if “Press Brake Pedal” is displayed, the operator has to press and hold the brake pedal and then continue. The sequence, number and type of tests are dictated by the control module.

On some systems, the actuator tests cannot be restarted until the ignition key is switched off for some time. Alternatively, briefly start and run the engine, shut down, turn the ignition to the run position, then re-initiate the actuator tests.

IMPORTANT

The tests activate a component, but they do not check if the component is working correctly. Make sure the components to be tested are in good condition and correctly mounted.

NOTE

Available tests depend on the control module under test and the vehicle itself.



To start a test:

1. Press the **Active Test** from the menu and a list of available options will be displayed.
2. Select an option to start the test and live data of the selected test displays.
3. Follow the on-screen instructions to make proper selections and operations to complete the tests.
4. Press  to exit.

5.2.5 ECU Information

The **ECU Information** screen displays the identification data of the control module under test, such as the control module identification string and the control module coding.



To read ECU information:

1. Press **ECU Information** from Select Diagnostic Function menu.

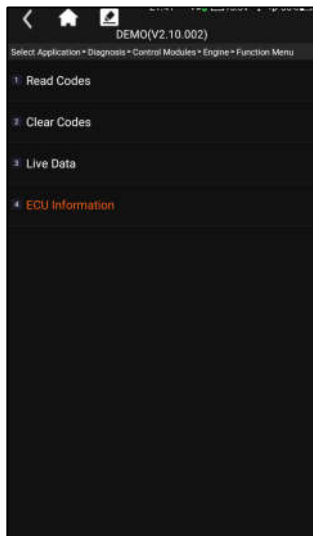


Figure 5-18 Sample Function Menu Screen

2. A screen with detailed information of the selected control module displays.

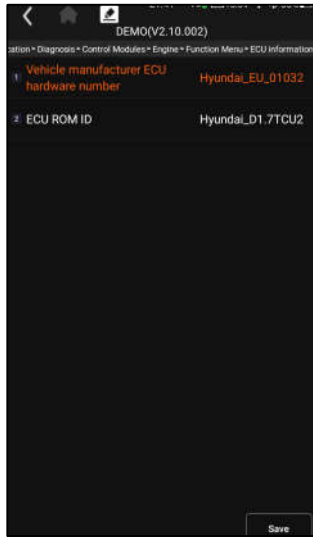


Figure 5-19 Sample ECU Information Screen

3. Press  to print the information if needed. Press  to exit.
4. Press **Save** to store ECU information screen and Press **OK** to complete save or Press **Cancel** to give up.

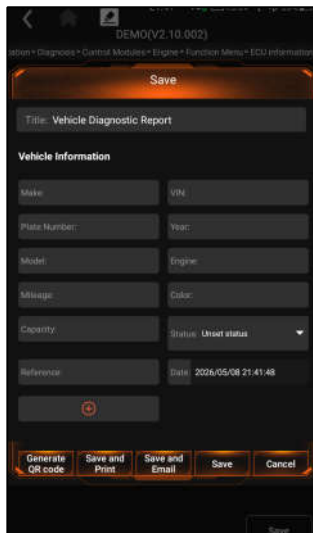


Figure 5-20 Sample ECU Information save Screen

6 My Account

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

When the **My Account** application is selected, a menu with available options will be displayed.

My Account Menu options typically include:

- My Account
- My Products
- Feedback and Suggestions

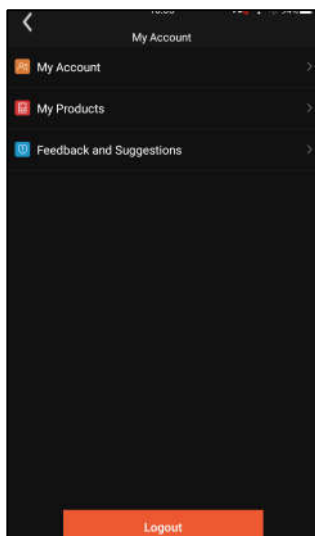


Figure 6-1 Sample My Account Screen

6.1 Registration

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

- ▶ To register with built-in client:
1. Press the **My Account** or **Update** from home screen of TyreIQ S5 diagnostic application, the user login page will be displayed, then press the **Free registration** button to register an account.

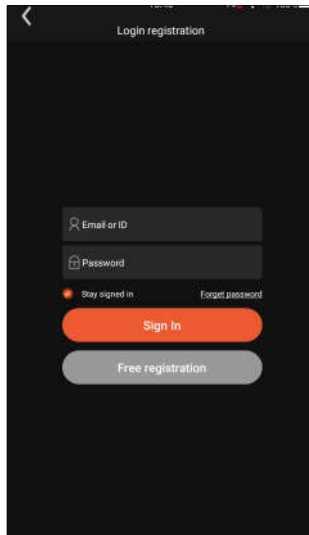


Figure 6-2 Sample Update Client Main Screen

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

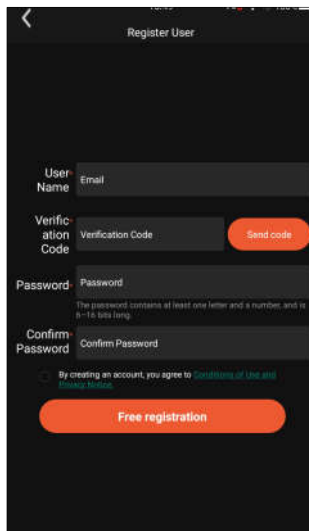


Figure 6-3 Sample ID Registration Screen

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

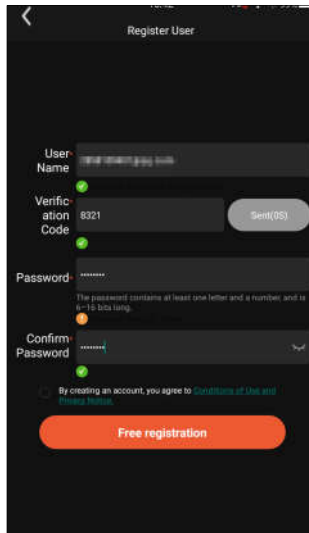


Figure 6-4 Sample ID Registration Screen

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

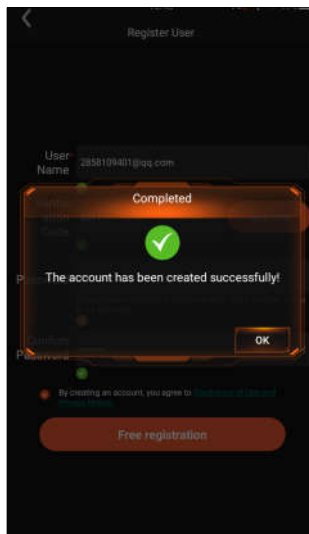


Figure 6-5 Sample Registration Done Screen

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

6.2 Sign in

Press the **My Account** or **Update** from home screen of TyreIQ S5 diagnostic application, the user login page will be displayed, enter your VAPON ID and password, and press the **Sign in** button to sign in.

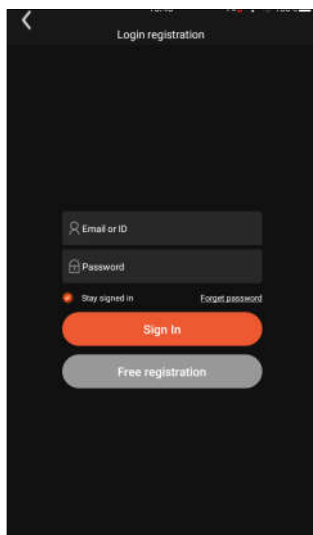


Figure 6-6 Sample Sign in Screen

6.2.1 Product activation

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

▶ To activate product

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

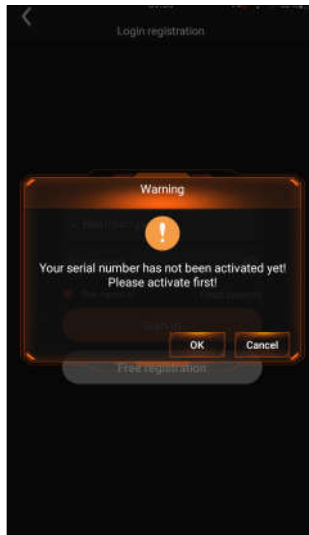


Figure 6-7 Sample Product Activation Screen

2. Click **Submit** to continue the activation, and press  to cancel the activation.

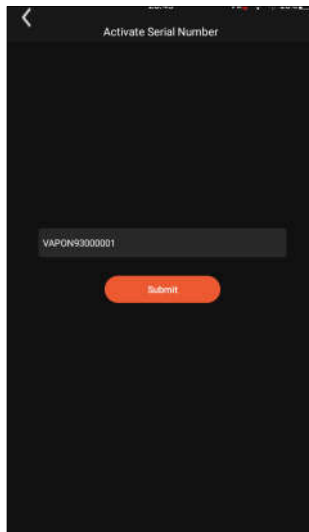


Figure 6-8 Sample Product Activation Submit Screen

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

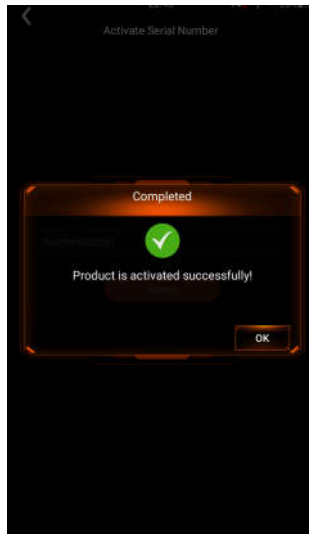


Figure 6-9 Sample activate success Screen

6.3 My Account

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

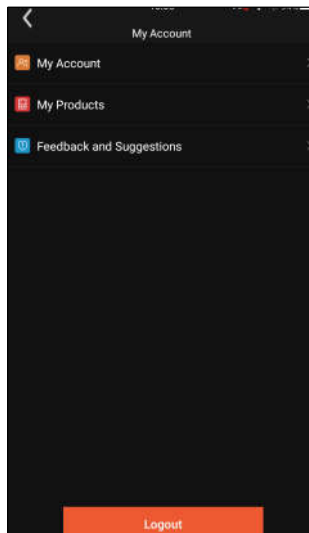


Figure 6-10 Sample My Account Screen

6.4 My Products

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

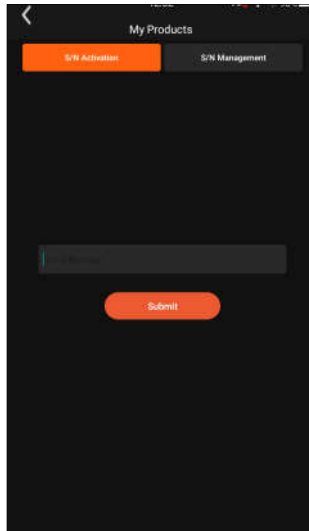


Figure 6-11 My Product Screen

7 Update

The tool can be updated to keep you up stay current with the latest software development. This section illustrates how to register and update your scan tool. You can register both on Vapon 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 TyreIQ S5 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

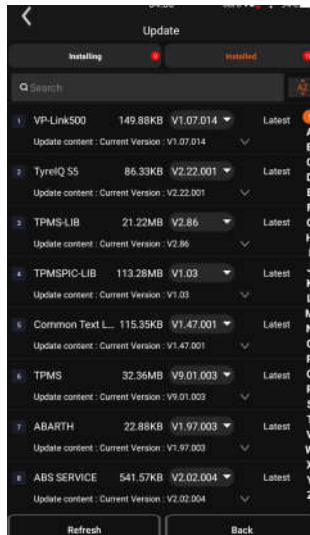


Figure 7-1 Sample Update Screen

8 VCI Manager

VCI Manager is used to unbind and rebind 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 the **VCI Manager** application on the TyreIQ S5 home screen.
 2. After clicking Unbind a VCI dongle, it will display whether to unbind the current VCI. When select OK, it will execute unbind, rebind, and refresh the vehicle connection.

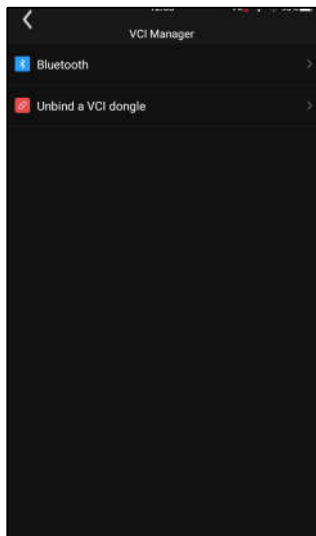


Figure 8-1 Sample Unbind a VCI dongle

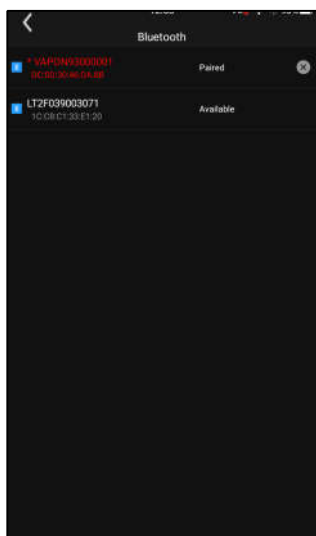


Figure 8-2 Sample Unbinding Confirmation Prompt

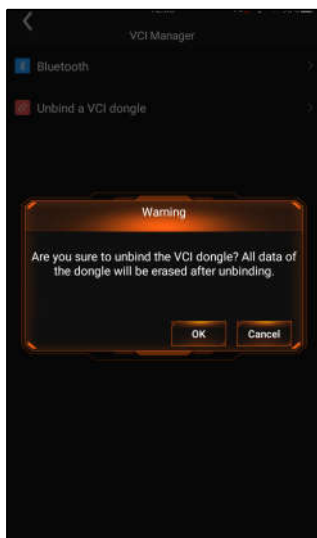


Figure 8-3 Sample Unbinding Current VCI

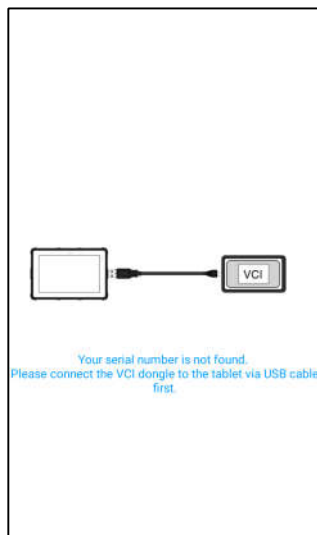


Figure 8-4 Sample Bind New VCI Successfully

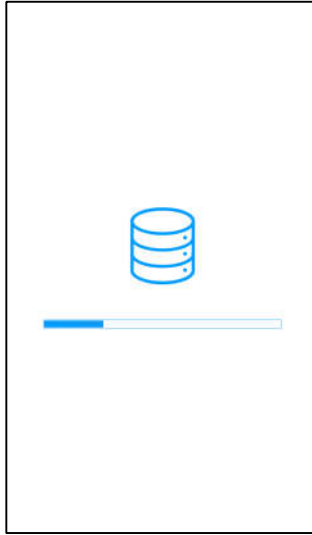


Figure 8-5 Sample Rescan Vehicle Software

9 Firmware Update

This application allows you to update the firmware of TyreIQ S5.

- ▶ To update the firmware:
 1. Click the **Update** application on the TyreIQ S5 home screen.
 2. Check and download the firmware package.
 3. When 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 is 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 process.

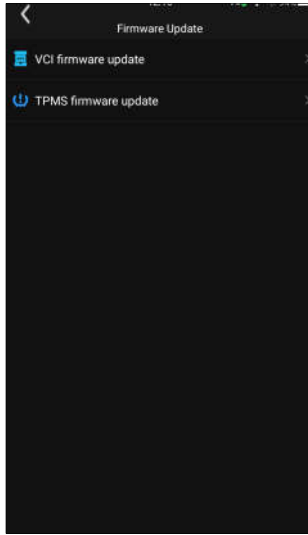


Figure 9-1 Sample Firmware Update Screen

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

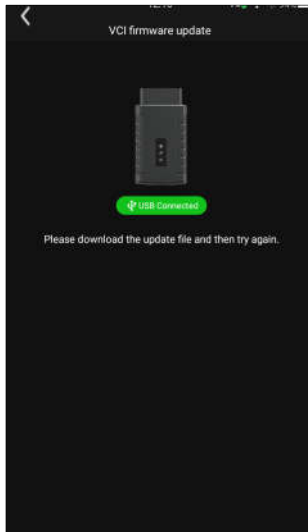


Figure 9-2 Sample Firmware Update Successfully Screen

NOTE

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

10 Data Manager

Data Manager menu lets you review stored screenshots and test reports, play back recorded live data and other saved files.

Typical menu options include:

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

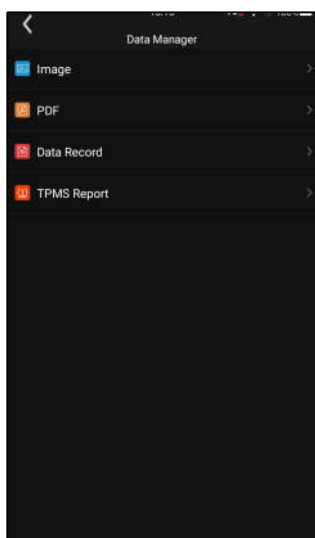


Figure 10-1 Sample Data Manager Screen

10.1 Image

Image option leads to screens for review of stored screenshots. In case a failure of TyreIQ S5 application or the Android system occurs, please just take a screenshot and send it to our team to help with the troubleshooting.

1. If you want to save data of current screen, press  after sliding down the notice bar to take a screenshot.
2. Press **Data Manager** from the home screen of TyreIQ S5 application, select **Image** from Data Manager.
3. To delete a picture, tap the **Delete** button 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**.

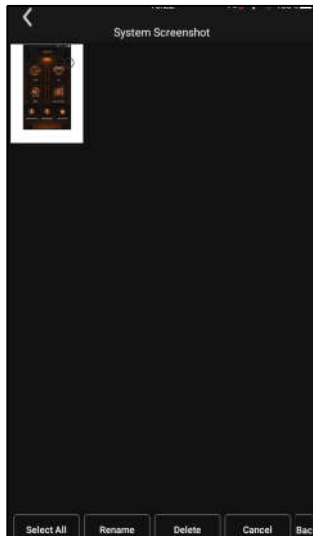


Figure 10-2 Sample All Pictures Edit Screen

10.2 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 it.

10.2.1 How to Create a PDF Report

- ▶ To create a PDF report:
 1. Press **Data Manager** from the home screen of TyreIQ S5 application.
 2. Press **Report** from Data Manager.
 3. Press any reports saved.



Figure 10-3 Sample of Reports Screen

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

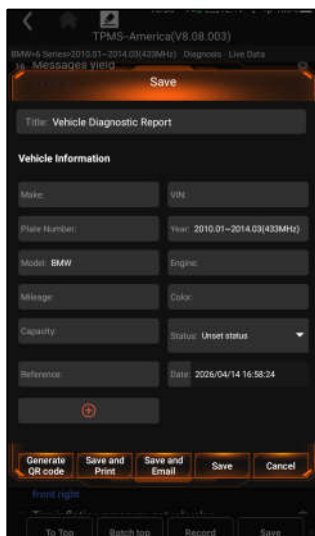


Figure 10-4 Sample of Report edit Screen

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 10-5 Sample of Report edit Screen

10.2.2 Review PDF Report

- ▶ To review the PDF reports:
 1. Press Data Manager from home screen of TyreIQ S5 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.

10.3 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 lets 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 TyreIQ S5 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.

11 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 will be displayed. 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

11.1 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 TyreIQ S5 application.
 2. Press **Unit** and available unit system display.
 3. Select a unit system.

11.2 Language

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

- ▶ To configure system language:
1. Press **Settings** from the home screen of the TyreIQ S5 application and select **Language**. Then all available language options display.
 2. Select your preferred language to change.

11.3 Font Size

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

- ▶ To change font size:

1. Press **Settings** from the home screen of the TyreIQ S5 application, and then select **Font Size**.
2. Select your preferred font size, then press **Confirm** to change, or press **Back** to give up.

11.4 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 TyreIQ S5 application, and then select **Module Sorting**.

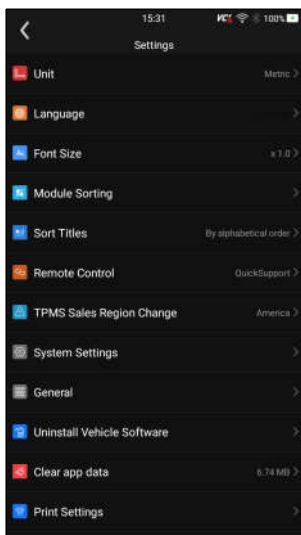


Figure 11-1 Sample Before the modification,
the Update Module is displayed behind the Maintenance module

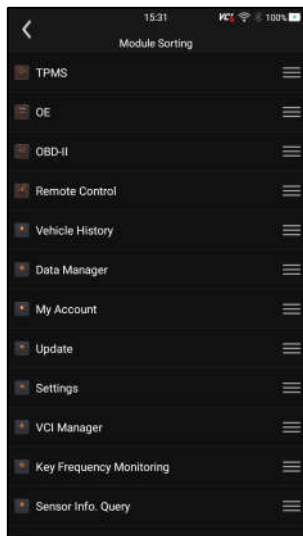


Figure 11-2 Sample Before the modification,
the Update Module is displayed behind the Maintenance module

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.

11.5 Sort Tiles

This option allows you to change the sort for the 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 TyreIQ S5 application, and select **Sort Tiles**.
 2. Select your preferred sort order.

11.6 Remote control

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

- ▶ To change remote control
 1. Press **Settings** from the home screen of the TyreIQ S5 application, then select **Remote control**.

2. Select your preferred tool.

11.7 Automatic Update

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

11.8 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.

11.9 General

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

11.10 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 the home screen of TyreIQ S5.
2. Tap the **Uninstall Vehicle Software** option on the option list.
3. Choose the vehicle software you want to delete or choose **Select All**.

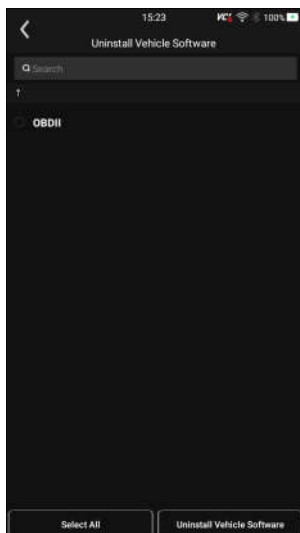


Figure 11-3 Sample Uninstall Vehicle Software Screen

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

11.11 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 allows you to clear the cache data of the app.

11.12 Print Settings

This option allows you to print any data or information at any time, from any location either via PC network or Wi-Fi.



To setup the printer connection:

1. Tap the **Settings** application on the home screen of TyreIQ S5.
2. Tap the **Printing Settings** option on the option list.

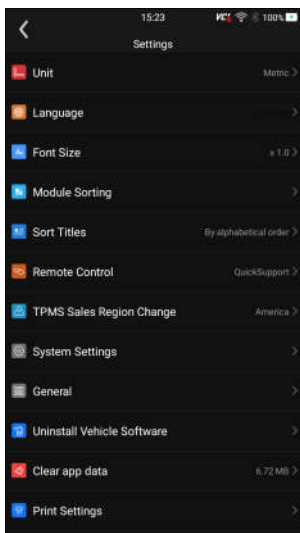


Figure 11-4 Sample Print Settings Screen

3. Tap **Print Plugin Manager** and turn on the Mopria Print Service, then TyreIQ S5 will search for available printers automatically.

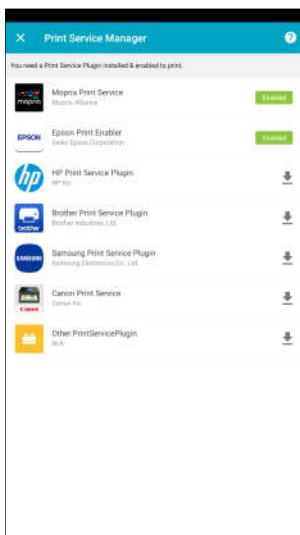


Figure 11-5 Sample Print Service Manager Screen

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

7. Choose the file or report what 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 TyrelQ S5 in the same Wi-Fi or Network when printing.
 2. If Mopria Print Service driver can't work for your printer, please download the driver to work for your printer on Print Service Manager.
-

11.13 About

Selecting **About** option opens a screen that shows information about the TyrelQ S5, 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 TyrelQ S5 application.
2. A screen with detailed information of the tool displays.

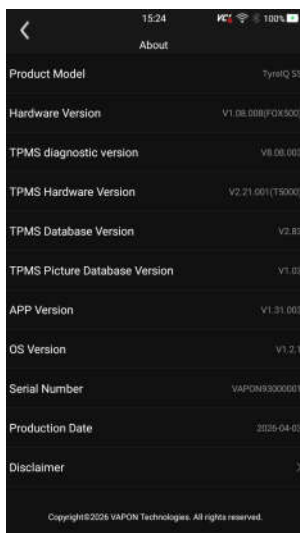


Figure 11-6 Sample Tool Information Screen

12 Remote Support

Remote Control enables you to get remote support from Vapon with TeamViewer when you have issues with Vapon 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 TyreIQ S5 to start TeamViewer QuickSupport. Press  to return.



Figure 12-1 Sample QuickSupport Screen

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

13 Coverage List

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

The screenshot shows a mobile application interface titled "TPMS Cover List". It features two main search sections. The first section, "Query By Vehicle", includes dropdown menus for "Sales Area", "Manufacture Area", "Vehicle", "Model", and "Year", along with "Search" and "Clear" buttons. The second section, "Query By OE Number", has a text input field labeled "Please Enter OE Number" and "Search" and "Clear" buttons. At the bottom, there is a legend: "* A=Automatic Release S=Static Release O=OBD Release C=Close".

Figure 13-1 Sample Coverage list Screen

14 Remote Key Frequency Monitoring

This section illustrates how to check RF Remote Keyless Entry (key FOB) with the trigger tool. The TyreIQ S5 tests 315MHz and 433MHz key fobs only, and checks only for a signal present.

15 Sensor Information

This section helps to check own sensor information.

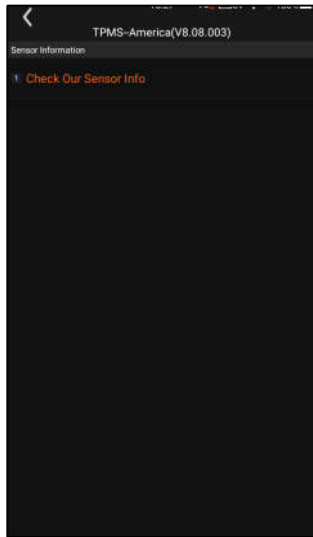


Figure 15-1 Sample Sensor information Screen

16 Auxiliary Tools

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

FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.