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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.

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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.

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1 Startup

This product includes two parts, PTS1000 software and PTS1000 tool. The two parts are connected together to complete the TPMS related functions. The specific startup process is as follows.

1.1 PTS1000 Tool

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

Figure 1-1 Sample PTS1000 Tool

① The power supply and activating sensor indicator light: The power indicator light is always on after the device is started. It will flash when the sensor is activated, and is always on after activation;

② 5 sensors activating indicator light: Indicator light is on after the corresponding tire sensor is activated successfully; It flashes when the activation fails;

③ Power button: Press and hold the button for 3s will turn on the device and the power indicator will light up; if the USB cable is not plugged in, press and hold the button for 3s it will be turned off and the power indicator will turn off too; Click the power button to switch the tire position;

④ Activating button: After selecting the specific vehicle or OE number, the data will be automatically downloaded to the PTS1000 tool. After the download is complete, unplug the USB cable and press this button to activate the sensor.

1.2 PTS1000 Software

After installing the PTS1000 software, a shortcut key will be generated on the desktop.

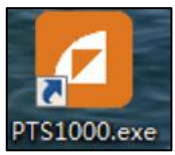

Figure 1-2 Sample PTS1000 Software Icon

1. Double-click the icon to start the software. If the PTS1000 tool is not connected to the computer, the startup interface will be shown as below, prompting the customer to "Connect devices PTS1000 via USB".

Figure 1-3 Sample PTS1000 Software Startup Interface

2. Connect the device to the computer through the USB cable. After successful connection, the "Car Selection Interface" will appear.

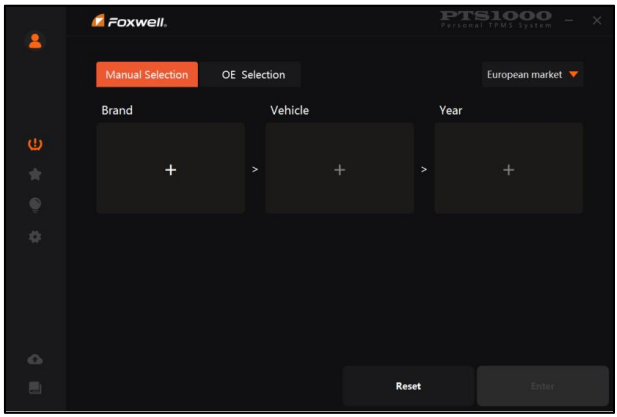

Figure 1- 4 Sample Vehicle Selection Interface

2 Vehicle Selection

There are two ways to select the car model: "Manual Selection" and "OE Selection".

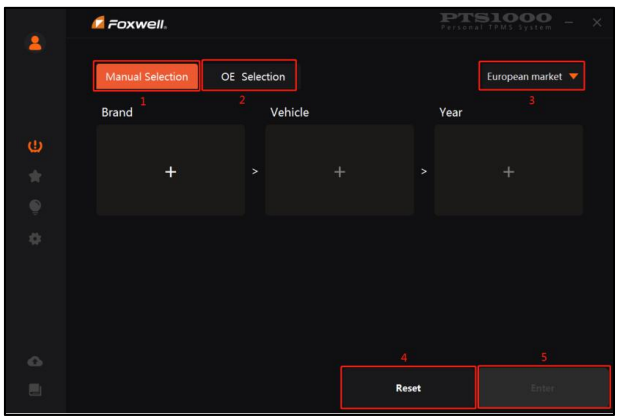

Figure 2-1 Sample Manual Selection

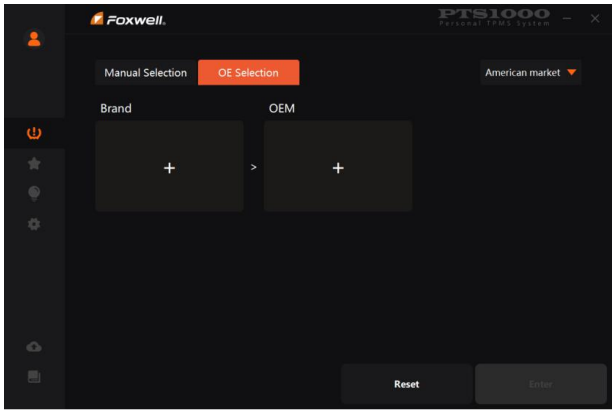

Figure 2-2 Sample OE Selection

1. Manual selection: select the corresponding vehicle by selecting the brand, model and year;

2. OE selection: select the corresponding vehicle by selecting the sensor brand and OE number;

3. It can switch to the corresponding sales area (the domestic version only has the Chinese area);

4. Reset can clear the selected vehicle information and re-select vehicle;

5. After selecting the vehicle, click the "enter" button to enter the function interface.

2.1 Manual Selection

The manual selection interface is shown in the below figures: select the brand, model, and year in turn. When selecting a brand and model, you can directly enter the brand and model through the "Search bar" to jump to the brand and model to be selected; you can also click the "letter navigation bar" under the "query dialog", it will automatically jump to the brand starting with the letter.

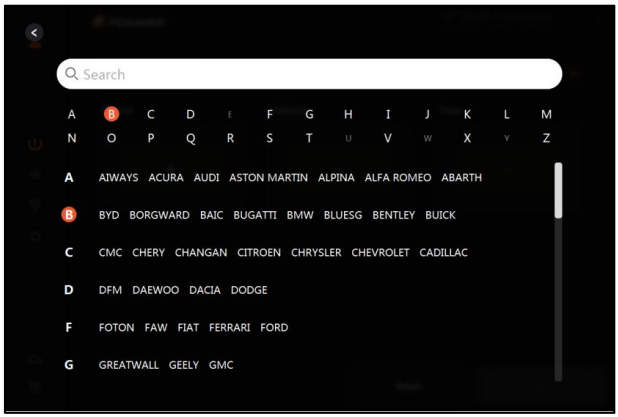

Figure 2-3 Sample Manual Selection - Brand Selection Interface

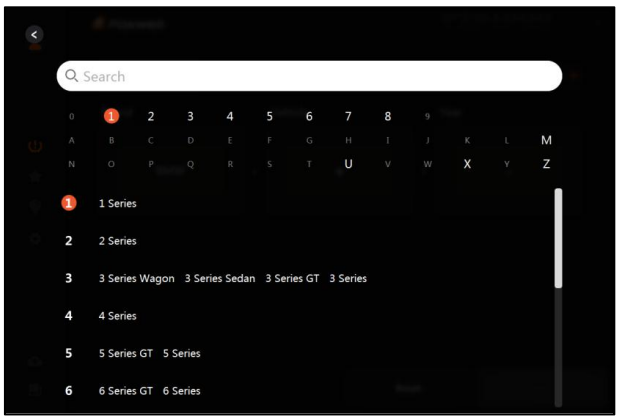

Figure 2-4 Sample Manual Selection - Model Selection Interface

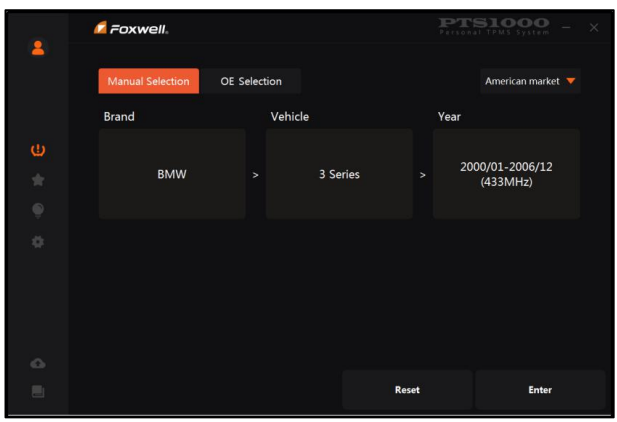

Figure 2-5 Sample Manual Car Selection Interface

2.2 OE Selection

The OE selection interface is shown in below figures , and the vehicle selection is performed by selecting "sensor brand" and part number (OE number) at one time.

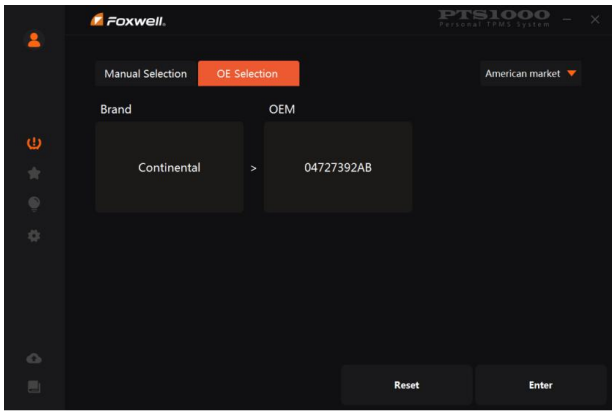

Figure 2-6 Sample OE Selection Interface

"OE number" is the abbreviation of the original sensor number, which is unique and almost all original sensors will print the OE number, sensor ID and other information on the sensor surface.

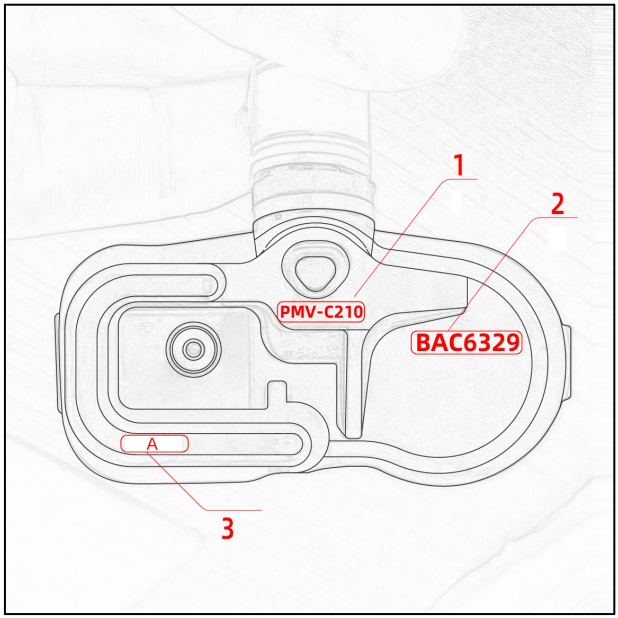

Figure 2-7 Sample A Original Sensor

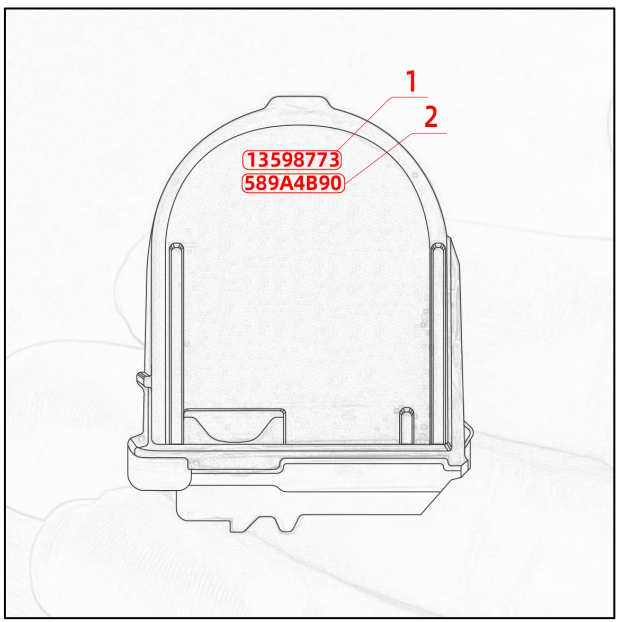

Figure 2-8 Sample B Original Sensor

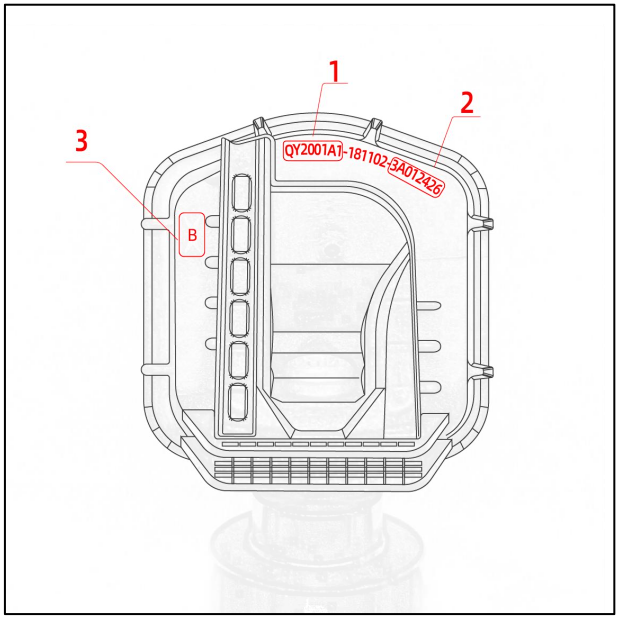

Figure 2-9 Sample C Original Sensor

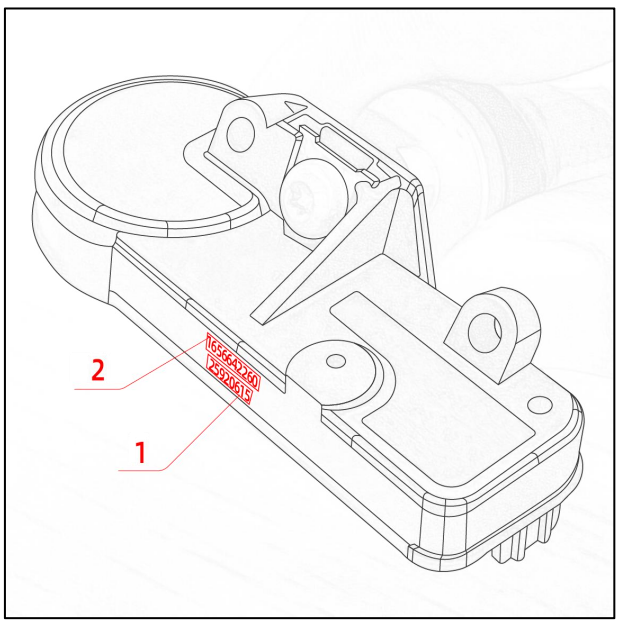

Figure 2-10 Sample D Original Sensor

1. The position marked with 1 is the OE number of the sensor. The OE numbers of the four original sensors above are: PMV-C210, 13598773, QY2001A1, 25920615;

2. The position marked with 2 is the ID information of the sensor. The ID numbers of the four original sensors above are: BAC6329 (hexadecimal), 589A4B90 (hexadecimal), 3A012426, 1656642260 (decimal);

3. The position marked 3 is the manufacturer of the sensor. It may also be on the back of sensor.

3 TPMS Function

This function mainly include, TPMS sensor activation, TPMS sensor programming (only FOXWELL sensor programming) and sensor relearn guide. After selecting the vehicle, click the "Enter" button to enter the TPMS related functions by which the activation and programming data will be downloaded to the PTS1000 tool.

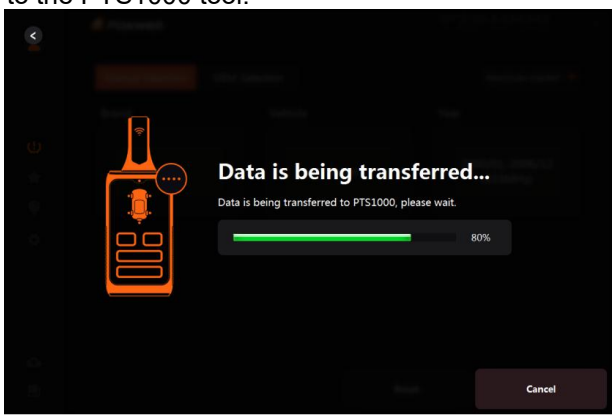

Figure 3-1 Sample Data Downloading Interface

If the data download is completed, it will enter the TPMS function interface. The software will show how to activate the sensor and obtain tire pressure data as shown in Figure 3-2, 3-3, 3-4, 3-5, 3-6. Otherwise, the download failure prompt interface will appear and it prompts the customer to unplug the PTS1000 tool.If the model has activated the sensor, the sensor information will be displayed directly after entering, as shown in Figure 3-7;

After entering the activation interface, there are 3 function buttons at the bottom, which are:
1. Vehicle favorite: You can save frequently used models as favorites, and use them next time;
2. Read activation data: Click this button to read the data of the activated sensor of the device;
3. Return: Click this button to return to the previous menu;

Figure 3-2 prompts the customer to unplug the PTS1000 tool to activate the vehicle tire pressure sensor;

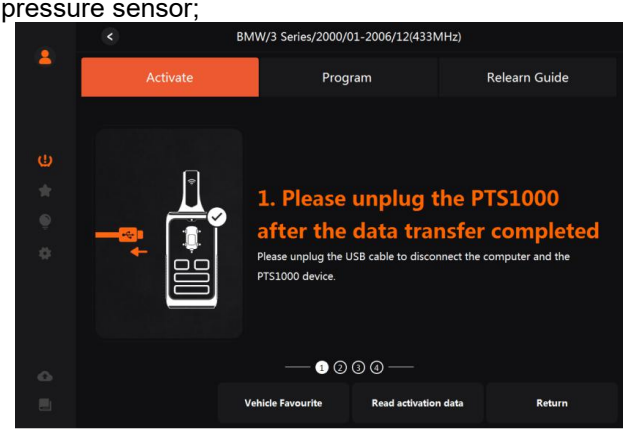

Figure 3-2 Sample Unplug The PTS1000 Tool

Figure 3-3 prompts the customer to activate the tire pressure sensor in the order of left front, right front, left rear, right rear, and spare tire (if any);

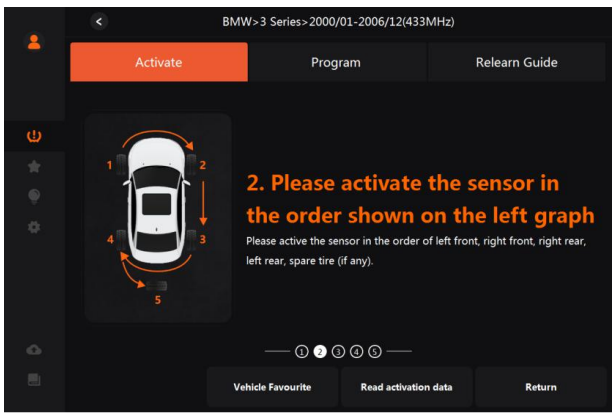

Figure 3-3 Sample Active Sensors

Figure 3-4 prompts the customer to switch to the desired tire.

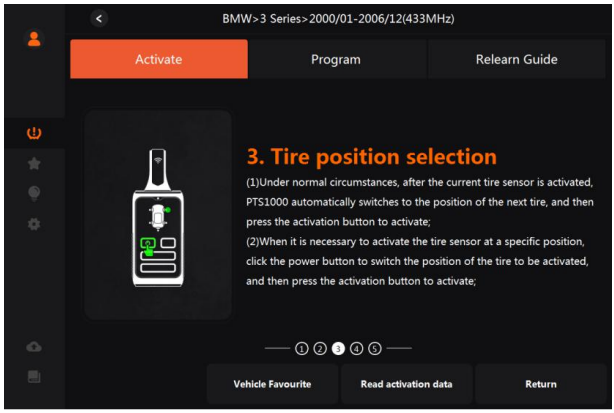

Figure 3-4 Sample Tire Position Selection

Figure 3-5: When activating the sensor, you need to align the device antenna at the position of the valve sidewall and then press the activation button;

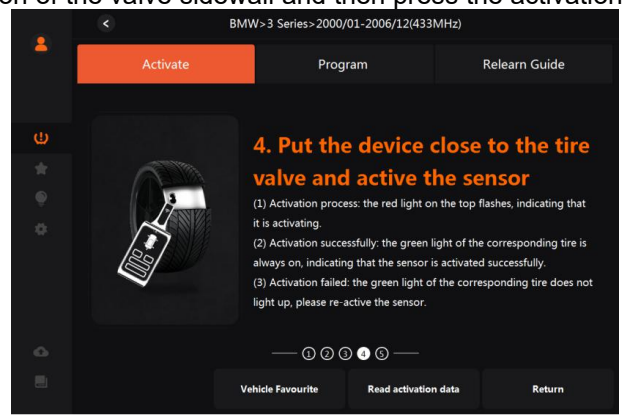

Figure 3-5 Sample Activation Operation Interface

Figure 3-6: After activating all tire sensors, connect the device to the computer, and click Read Activation Data to get the relevant information of the activated sensors.

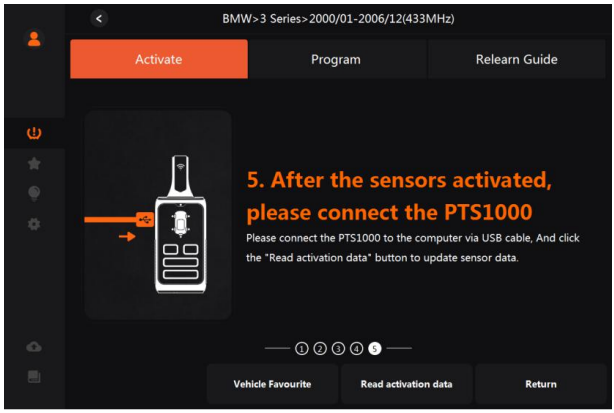

Figure 3-6 Sample Get The Activation Data Interface

3.1 Activation

3.1.1 Sensor Activation

According to the guidance of the activation interface, unplug the device and activate the tire pressure sensor in the left front, right front, right rear, left rear, and spare tire (if any) in turn from the left front wheel. The corresponding indicator light of the selected tire will flash, and the power indicator light will flash when the activation is in progress. After the activation is successful, the corresponding tire indicator light will be on. After activating all tires, connect the device to the computer again, click the "Read Activation Data" button of the PTS1000 software, and the software will obtain the ID, pressure, temperature, battery state and other related information of the activation sensor.

Figure 3-7 Sample Get Tire Pressure Data Interface

The activation function can be used to diagnose the quality of the sensor, and the ID obtained by activation can be used for the "Clone ID by Activation" function in programming.

3.1.2 Favorites

Click Favorites to add commonly used vehicles to Favorites. Next time when you select a car, you can directly enter Favorites to quickly select.

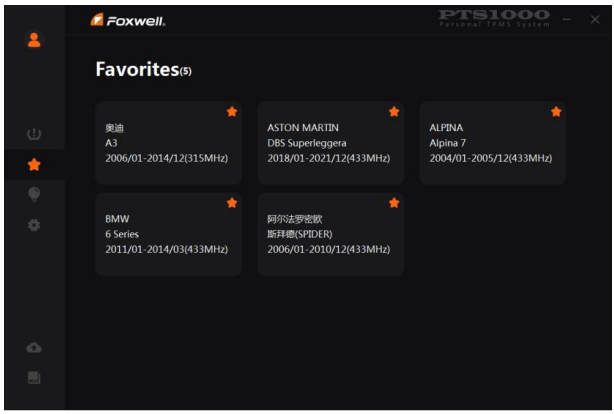

Figure 3-8 Sample Favorites Interface

3.2 Programming

There are three ways to program sensors, namely Manual create ID, Clone ID by Activation and Automatic create ID.

Figure 3-9 Sample Programming Interface

When programming, please pay attention to the following points:

1. Keep the distance between the sensor to be programmed and the PTS1000 tool at 0~20cm;

2. The distance between other sensors and the PTS1000 tool should be kept more than 100cm;

3. The disassembled old sensor needs to be kept away from the vehicle.

3.2.1 Manual Create ID

According to the original sensor format, it automatically defaults to decimal or hexadecimal. The format can also be modified as needed. The input box placeholder shows the length/digits of the ID. It is recommended to manually input the "original sensor ID" so that after the sensor programming is performed, you can directly install the tire for road test without performing the "sensor relearn function". Only one sensor can be programmed at a time when manually created.

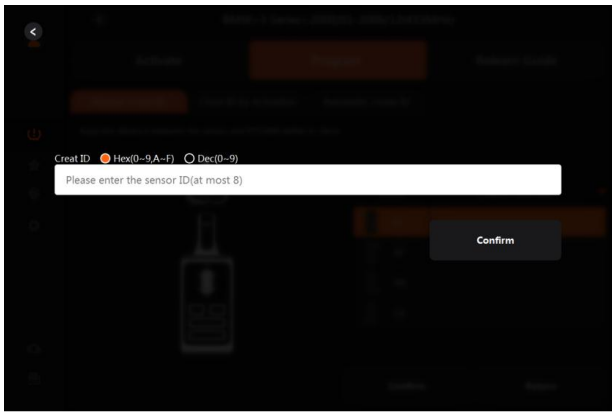

Figure 3-10 Sample Manual Create ID-Enter ID Interface

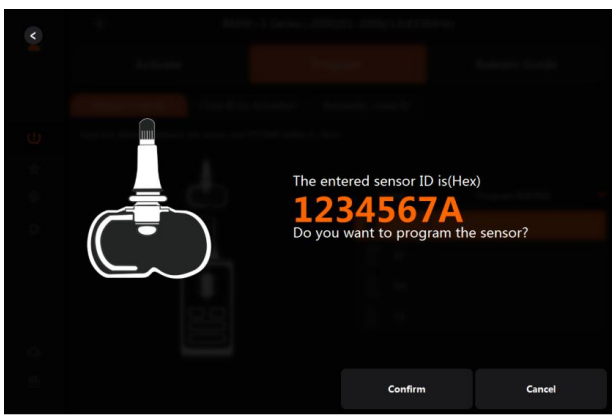

Figure 3-11 Sample Manual Create ID-Confirm ID Interface

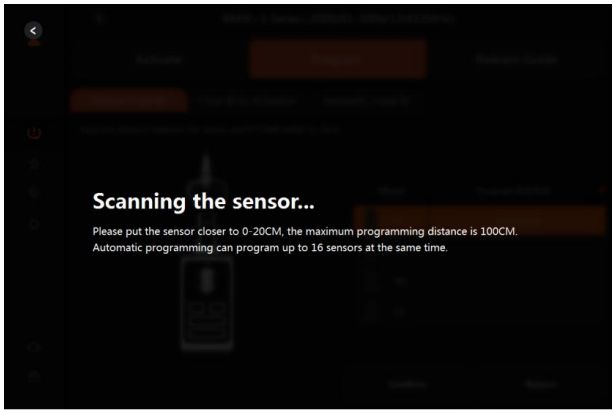

Figure 3-12 Sample Manual Create ID-Scanning The Sensor Interface

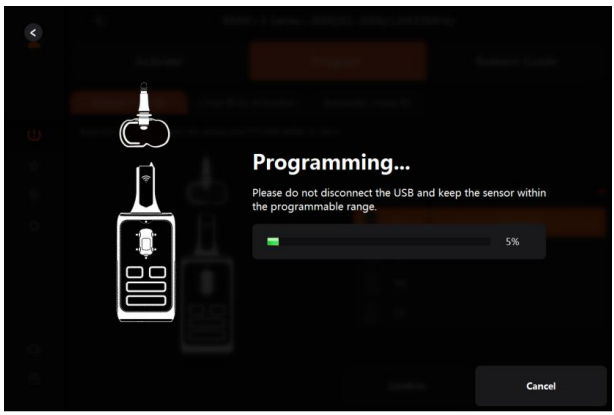

Figure 3-13 Sample Manual Create ID-Programming Interface

Figure 3-14 Sample Manual Create ID-Programming Completed Interface

3.2.2 Clone ID by Activation

The Clone ID by Activation interface is similar to manual create ID interface. You need to activate the vehicle sensor first, then connect the PTS1000 tool to the computer to obtain the activation data, and finally execute the activation clone function. The activation clone can only program one sensor at a time.

Figure 3-15 Sample Clone ID by Activation-Programming Complete Interface

3.2.3 Automatic Create ID

Automatic create ID can program up to 16 sensors at the same time. After the programming is completed, the corresponding sensor ID will be displayed. According to the prompt, place the sensor to be programmed around the device antenna, execute the automatic creation function, and the device will start to search for the sensor. The number of detected sensors will be prompted. After the programming is completed, the IDs of all programmed sensors will be displayed.

Figure 3-16 Sample Automatic Create ID-The Interface To Detect Sensor

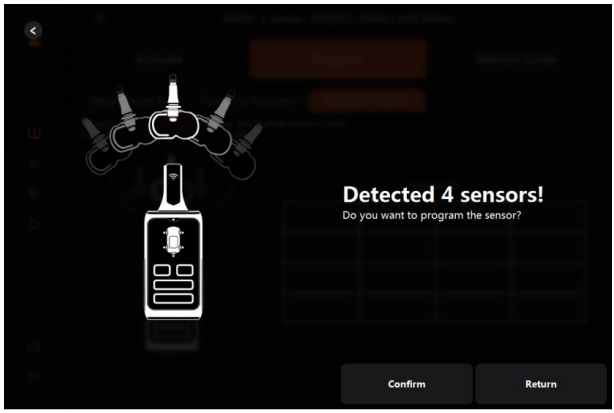

Figure 3-17 Sample Automatic Create ID-Detected Sensors Interface

Figure 3-18 Sample Automatic Create ID-Programming Completed Interface

3.3 Relearn Guide

The relearn function provides the method of TPMS sensor learning and the related information of the original sensor, such as: supplier, frequency, part number, etc. There are two learning methods for this vehicle, namely clone sensor and self-learning. Click > on the right to expand the corresponding learning method.

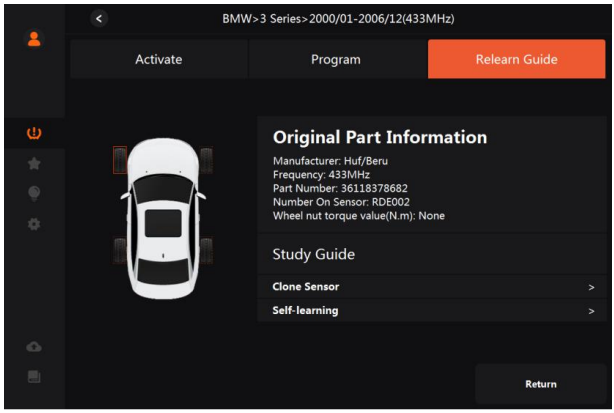

Figure 3-19 Sample Relearn Guide Interface

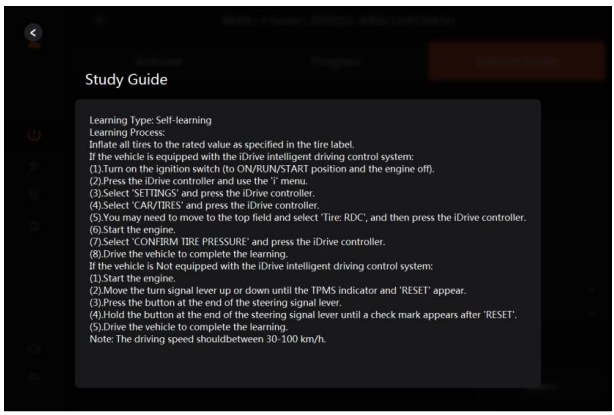

Figure 3-20 Sample Relearn Guide Expanding

You can complete sensor replacement and matching by referring to the methods provided in the relearn guide.

4 My Account

This section introduces user account registration and login. The customer can use the relevant functions of the product normally only after logging in first. After successful login, it will automatically jump to the TPMS function.

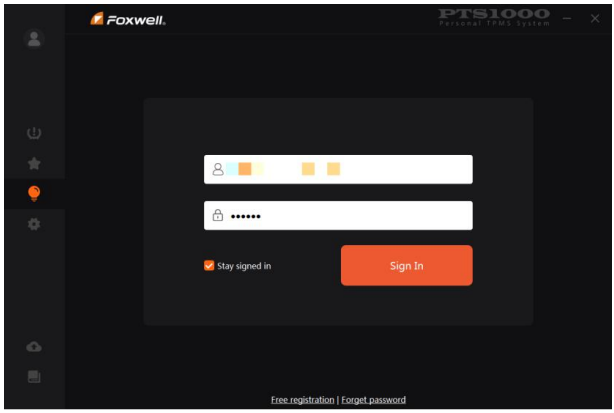

Figure 4-1 Sample Login and Registration Interface

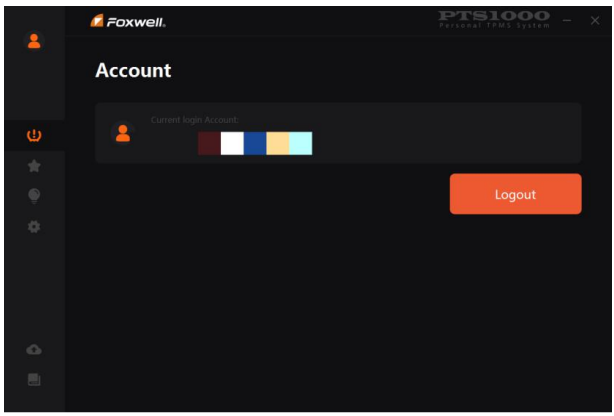

Figure 4-2 Sample Login Success Interface

5 Activation

It is necessary to activate and bind the product to the current user before the relevant functions of the product can be used normally.

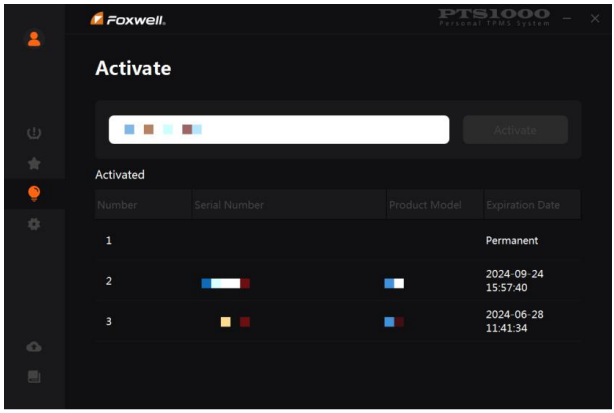

Figure 5-1 Sample Product Activation Interface

6 Setting

It includes settings for Language, Sensor ID Format, Pressure Unit, Temperature Unit and About.

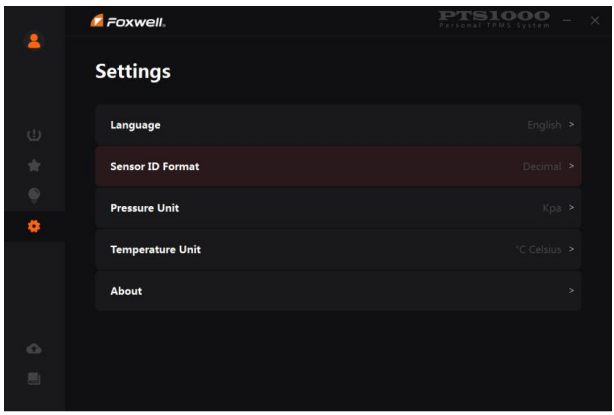

Figure 6-1 Sample Setting Interface

6.1 Language

The language flag is listed in the language setting option, select the corresponding flag, and select Yes in the confirmation interface to set the corresponding language.

Figure 6-2 Sample Language Setting Interface

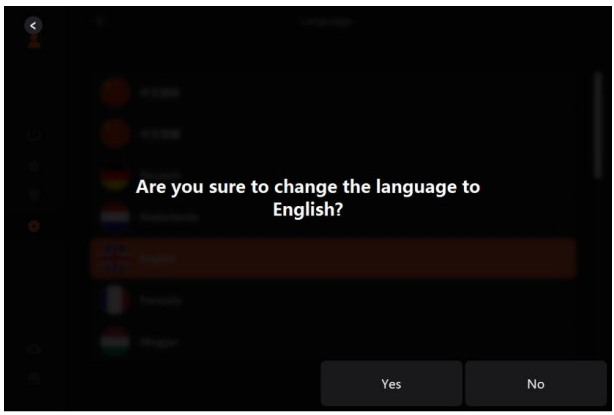

Figure 6-3 Sample Language Setting Interface

6.2 Sensor ID Format

In this selection, you can set the ID format to decimal or hexadecimal. Click the format you want to set, and select Yes in the confirmation interface.

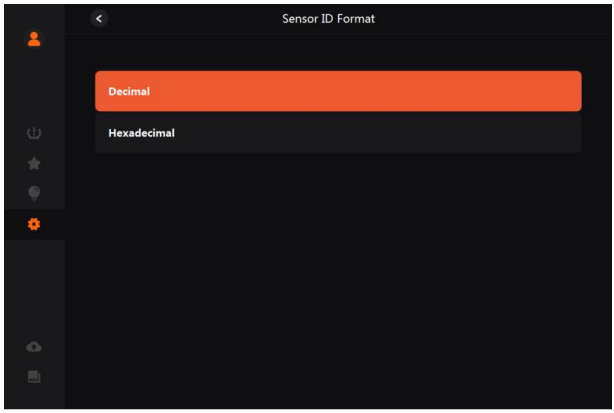

Figure 6-4 Sample Sensor ID Format Setting

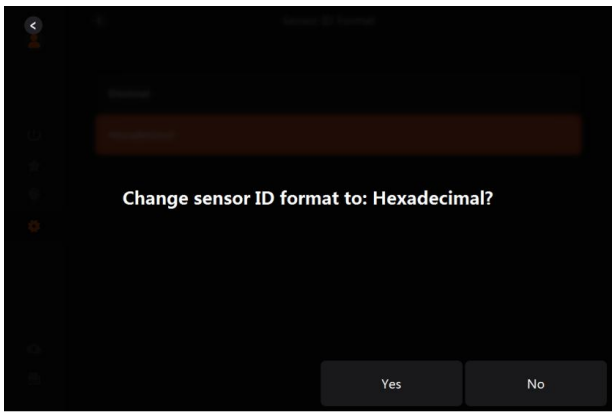

Figure 6-5 Sample Sensor ID Format Setting

6.3 Pressure Unit

The pressure unit can be set according to the demand, and Kpa/Psi/Bar can be set respectively.

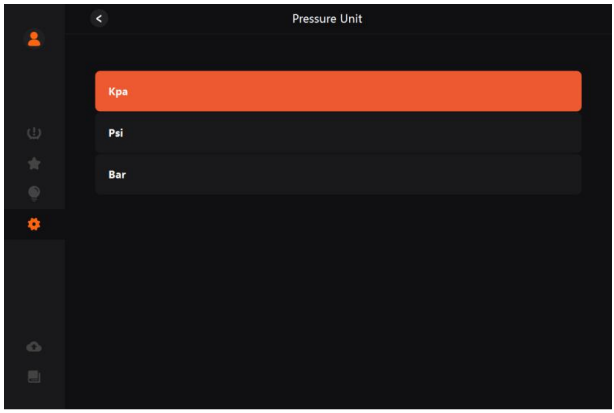

Figure 6-6 Sample Pressure Unit Setting

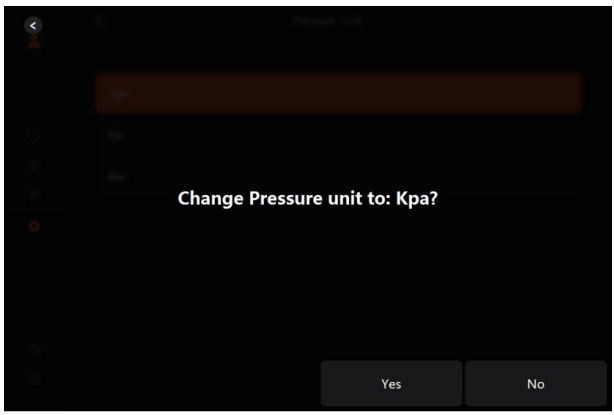

Figure 6-7 Sample Pressure Unit Setting

6.4 Temperature Unit

The temperature unit can be set according to the demand, and the facility degree/Fahrenheit can be set respectively.

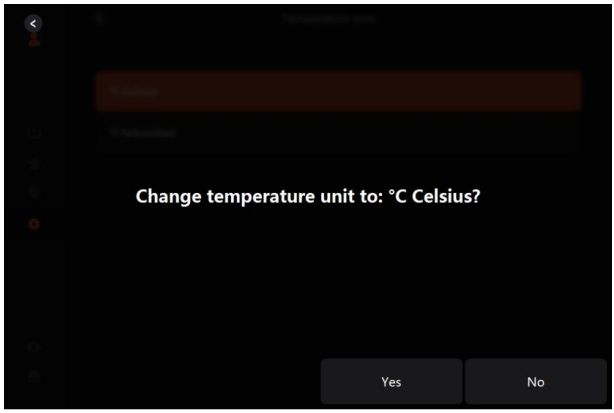

Figure 6-8 Sample Temperature Unit Setting

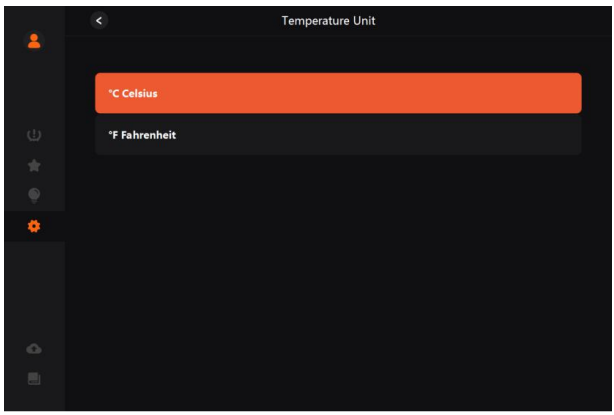

Figure 6-9 Sample Temperature Unit Setting

6.5 About

Through this selection, you can view the corresponding software version.

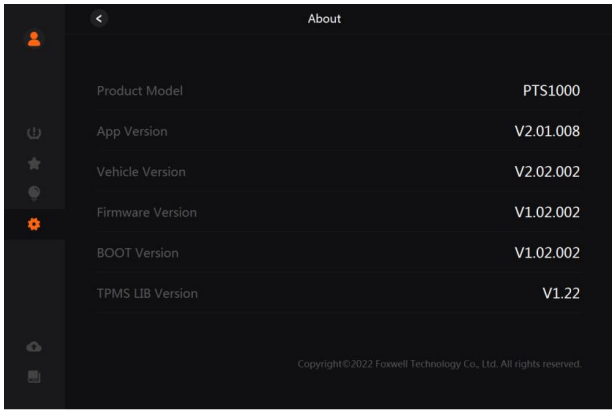

Figure 6-10 Sample About Interface

7 Update

This function is mainly used to update product-related software such as APP, BOOT, firmware, vehicle software etc.. When have a new version, it will automatically jump to this interface after starting the software to guide customers to complete the upgrade function.

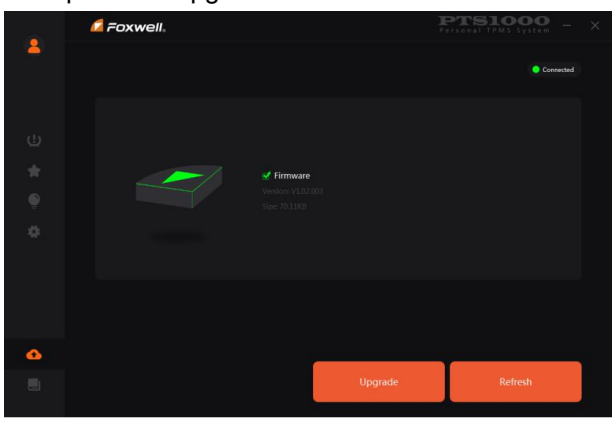

Figure 6-11 Sample Update Interface

8 Help

It is mainly used to provide user manual, basic function guide videos, tire pressure learning videos for special vehicles, etc., so that customers can get familiar with the product and learn to use it faster.

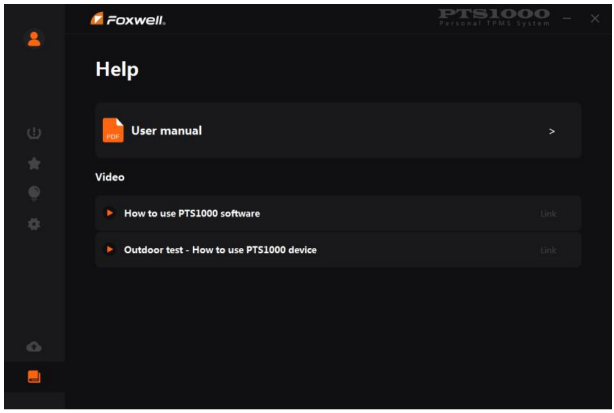

Figure 6-12 Sample Help Interface

FCC Statement

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