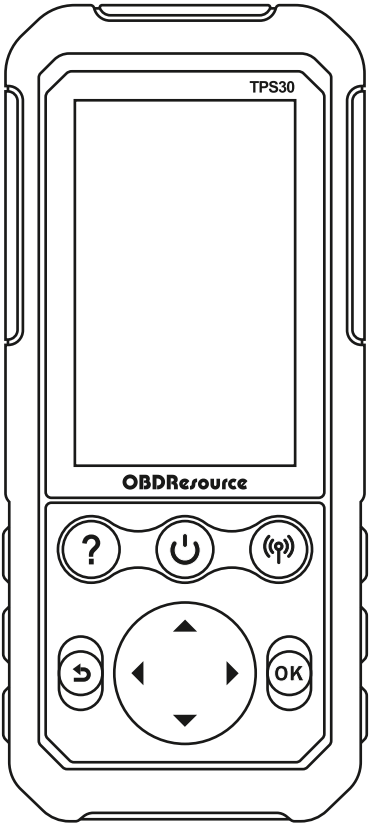
TPS30

User Manual

Professional TPMS Tool All in One



Version: A05

FCC REQUIREMENT

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

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

(1) This device may not cause harmful interference.

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

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

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

FCC WARNING

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure

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

The mobile device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.733 W/kg.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions a minimum of 15mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

COPYRIGHT INFORMATION

demark ownership remains with the original company.

This equipment is used by professional technician or maintenance personal.

REGISTERED TRADEMARK

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You can visit the website: http://www.obdresource.com for information about OBDResource products.

CATALOG

STATEMENT

- This manual exclusively provides instructions for operating the OBDResource TPS matching instrument. The company holds no responsibility for any consequences arising from using these instructions for operating other equipment.
- The company shall not be held responsible for accidents resulting from user or third-party actions or for any costs associated with damages or losses caused by user abuse, misuse, unauthorized alterations, repairs, or failure to adhere to the operation and equipment maintenance requirements as outlined in the manual. The company disclaims any liability for related expenses.
- This manual is based on the current configuration and functions of the product. Please note that in the event of new configurations or additional functions being added to the product, this manual may be subject to changes without prior notice.

PRECAUTIONS FOR VEHICLE SERIES HOST MAINTENANCE AND USE

- This machine does not allow unauthorized removal.
- Avoid causing strong collisions with the unit and avoid placing the unit close to the magnetic field.
- Do not leave the unit in a high-temperature or low temperature environment for a long time.
- To protect the screen, please avoid from using sharp objects.
- To clean the unit, avoid using water and chemical solvents. Instead, use a soft cloth dampened with a mild detergent.

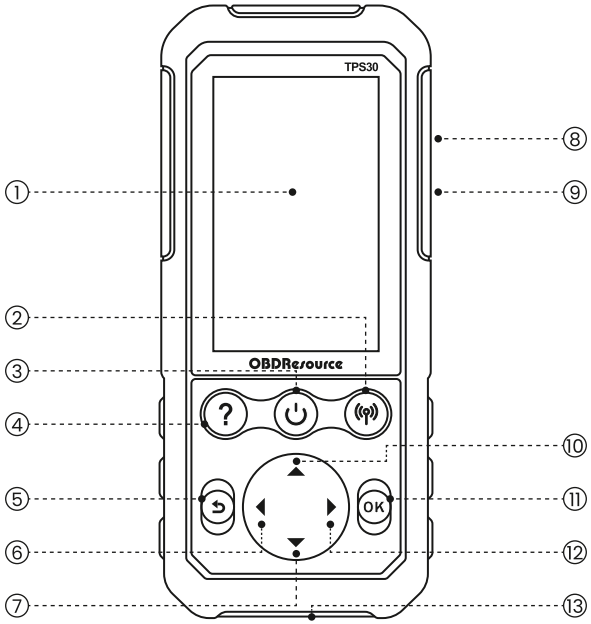
VEHICLE INSPECTION PRECAUTIONS

- Operate the unit in compliance with the safety regulations of the automobile repair industry. Exercise particular caution regarding the potential impact or damage resulting from environmental factors such as acid, alkali, toxic gases, high pressure, and heavy objects.
- Before starting the engine, make sure that the parking brake is pulled and the shift lever is placed in neutral (manual transmission) or park (automatic transmission).
- Locate the diagnostic seat and verify that the diagnostic seat cable is intact. Connect it to the main engine for diagnostic purposes. If the cable is damaged or unnecessary for testing, refrain from connecting to avoid potential damage to the main engine. If needed, use a multimeter to measure the diagnostic seat voltage.

INSTRUMENT USE PRECAUTIONS

- During testing, handle this product with care and keep it away from heat and electromagnetic fields to prevent any interference with the host device.
- To prevent damage to the sensor and the vehicle's ECU, avoid disconnecting the circuit when the electrical components are energized. This is necessary to prevent self-inductance and mutual inductance currents from causing harm.
- It is strictly prohibited to bring magnetic objects near the vehicle control unit while the appliance is operating normally. Doing so may cause damage to the vehicle control unit.
- To ensure safety, never operate the diagnostic equipment while driving the vehicle to avoid accidents.

1. Product Keyboad and Function Description



NO.	NAME	DESCRIPTION
①	TFT Screen	Display menu and test results
②	Activation Key (FR Key)	Send confirmation when TPMS wirelessly recognizes and programs
③	Power Key	Press 3 seconds to turn on/off device
④	Help Key	Providing help information

NO.	NAME	DESCRIPTION
⑤	Back Key	Return to the previous menu interface
⑥	Left Key	Option moves to the left
⑦	Down Key	Option moves down
⑧	TF Card Solt	TF card insert place
⑨	USB Port (Type C)	Connect the USB cable to charge the TPS30
⑩	Up Key	Option moves up
⑪	OK Key	Confirm OK
⑫	Right Key	Option moves to the right
⑬	OBD Cable Port	Use for connecting to vehicle ECU through OBD interface

Product Specifications:

DISPLAY	4.3 inch TFT color display (vertical screen), resolution 480*800
BATTERY	Polymer lithium battery 3500 mAh/3.7V (4.2V charging)
CHARGING PARAMETER	Battery charging current limitation 2A
TF CARD	Product including 16G 10 class TF card to save data and upgrading
MACHINE OPERATING TEMPERATURE	0°C ~ 50°C (32°F ~ 122°F)
SIZE	94*39*212mm / 3.70*1.54*8.35Inch

2. Battery Charging

The power can be supplied through the following methods:

- Charge the battery by connecting the PC via a USB cable.
- Charge the battery with a USB power adapter.
- The power supply can be accomplished using the OBDII diagnostic pedestal. Please note that when the diagnostic pedestal is powered, the battery charging function is disabled. The tire pressure matching system is equipped with a built-in 3500mAh/3.7V lithium-ion polymer rechargeable battery. Once fully charged, the built-in battery ensures continuous operation of the equipment for a minimum of 5 hours.

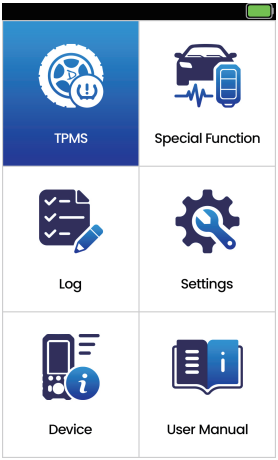
3. Device ON/OFF

To turn on the device, briefly press the on/off key for approximately 3 seconds. When the device is powered on, a short press of the on/off key (about 3 seconds) will turn it off. Alternatively, you can set the system's automatic shutdown time in the 'Settings' menu. Please follow the steps below to access the 'Settings' menu and configure the automatic shutdown time.

1. Select **【Auto Power Off】** in **【System Settings】**.
2. Set the automatic shutdown time in the pop-up window.
3. Press the **【OK】** key to complete the settings. The system will shut down automatically when it reaches the preset time without any operation.

4. Tire Pressure Diagnosis

Tire pressure diagnosis includes: tire pressure system diagnosis, programming sensor, position learning, sensor information and other functions.

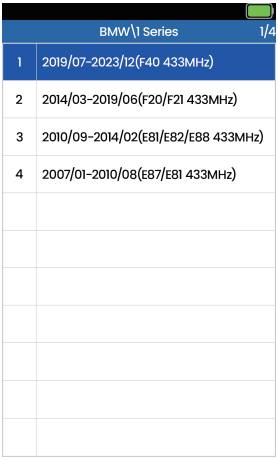


4.1 Tire Pressure System Diagnosis

This function is used to detect the tire pressure system and sensor status. When diagnosing the tire pressure system, it is necessary to activate all the sensors installed on the test vehicle, connect the vehicle, turn on the ignition switch, and the device automatically reads the sensor in the computer board. ID and fault code. The specific operation method is as follows:

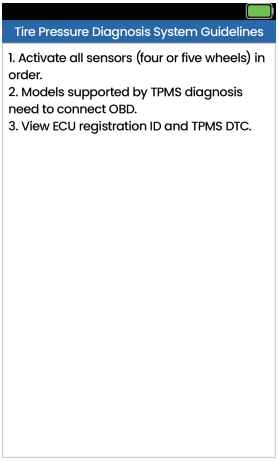
How To Diagnose The Tire Pressure System?

1) Selection of test vehicle system, vehicle type and production year;



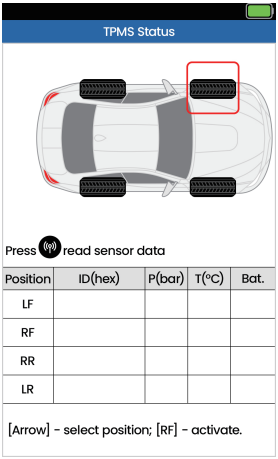
2) Select【**TPMS Diagnosis**】;

3) Read the “Tire Pressure Diagnosis System Guidelines” carefully and press the【OK】key to continue;

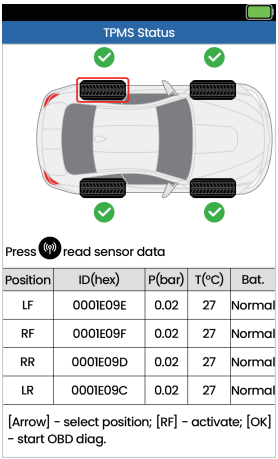


If the previous data is saved on the device, the following prompt will be displayed, press the【OK】key to to clear the previously stored data, or press the【 】key to use the previously stored data;

4) Press【 】button activate all sensors installed on the test vehicle separately;



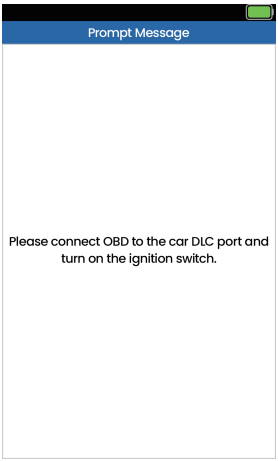
5) If the sensor is activated successfully, the position of the activated sensor, sensor ID, tire pressure, tire temperature and battery level will be displayed at the bottom of the screen, as shown below;



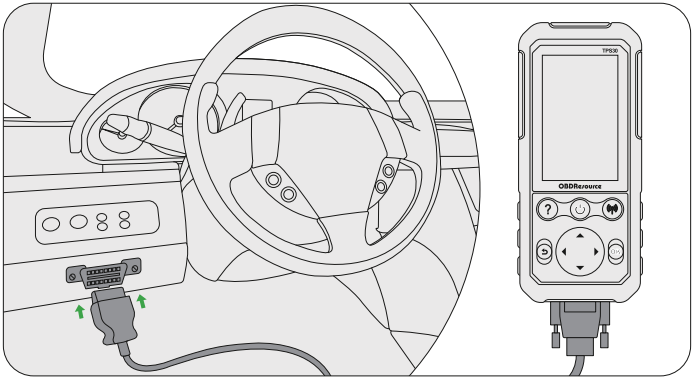
The Activation Status Prompt Is As Follows:

	Successful Activation		**Repeat Activation**
	Failed Activation		

6) When all the sensors have been successfully triggered, press the 【OK】 key, the following prompt appears on the screen, as shown in Figure 1-1. Please connect the OBD line to the vehicle DLC interface, and turn on the ignition switch, as shown in Figure 1-2;

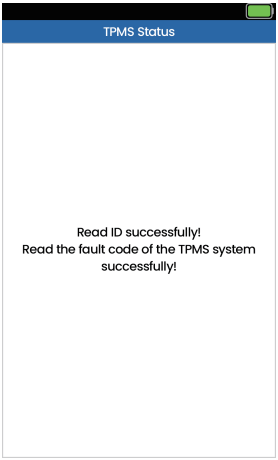


(Figure 1-1 Connection Prompt)

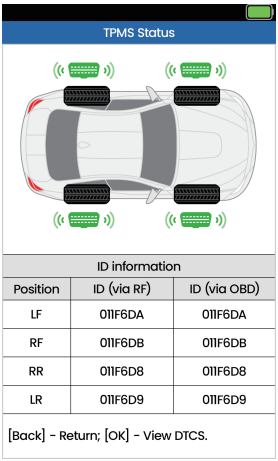


(Figure 1-2 Connecting The Vehicle)

7) After connecting the vehicle, press the【OK】key, the matching meter will automatically read the sensor ID and TPMS system fault code stored in the computer board;



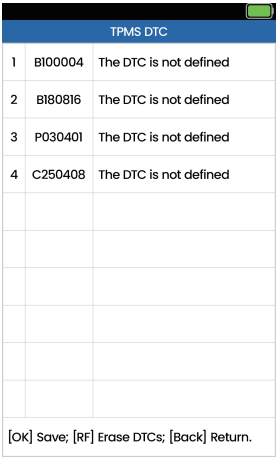
8) Press the 【OK】 key, the screen will display the comparison between the ID value stored in the computer board and the tire ID value;



Comparison Result:

	**Green**	Computer Board ID and Sensor ID Matching
	**Red**	Computer board ID does not match sensor ID

9) Press the 【OK】 key to view the retrieved TPMS system fault code. As shown in the figure below, press the 【((•))】 key to automatically clear the fault code and re-retrieve the computer board to ensure that all fault codes have been deleted, or Press the 【OK】 key to store the fault. Code and can be viewed in the "Data Record".



4.2 Sensor Programming

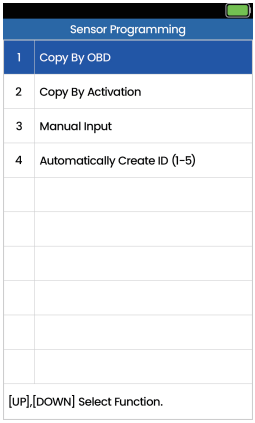
The OBDResource sensor can be programmed in four ways: copy by OBD, copy by activating, manual input, and automatically create ID (1-5).

4.2.1 Copy By OBD

Using OBD copying is to program the sensor ID registered in the computer board to the new OBDResource sensor. When the new programming sensor is installed on the same wheel, it is recommended to write the ID to the computer board without performing the "location learning" functions. This method (if available) programs a new sensor.

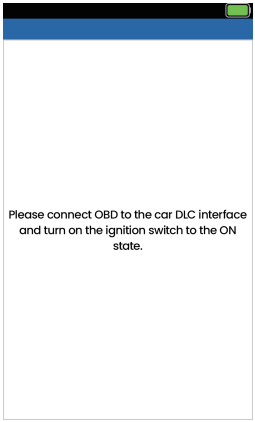
How To Copy By OBD?

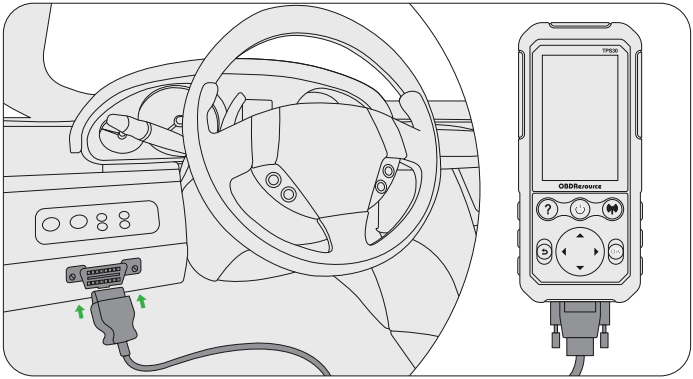
1) After the vehicle selection is completed, select **【Copy By OBD】** in **【Sensor Programming】**;



2) When the prompt pops up, press the 【OK】 key to to clear the previously stored data, or press the 【↩】 key to use the previously stored data;

3) When the following message appears on the screen, as shown in the figure below. Please connect the OBD line to the vehicle DLC interface, then turn on the ignition switch, as shown in Figure 2-1;





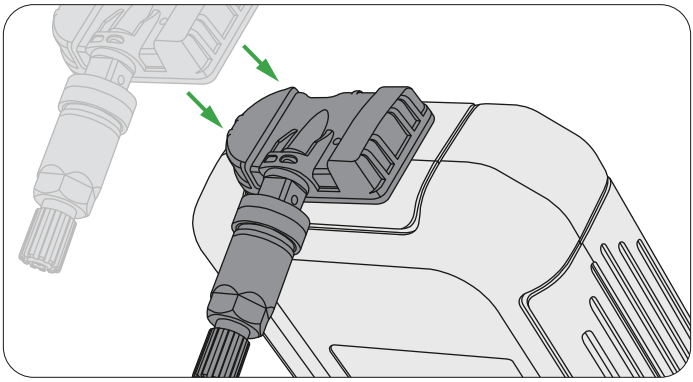
(Figure 2-1 Connecting The Vehicle)

4) Press the【OK】key, the matching instrument will automatically read the sensor ID saved in the computer board and display it on the screen;

Copy By OBD		
1	LF	00C39005(Hex)
2	RF	00C39022(Hex)
3	RR	00C39025(Hex)
4	LR	00C39042(Hex)

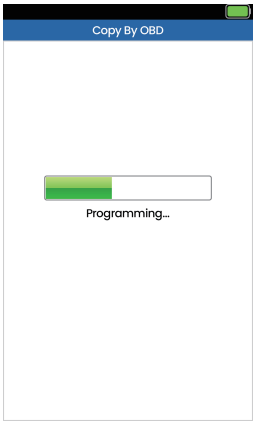
[UP],[DOWN] Select Function.

5) Place a OBDResource sensor within 10cm from the top of the matching instrument;

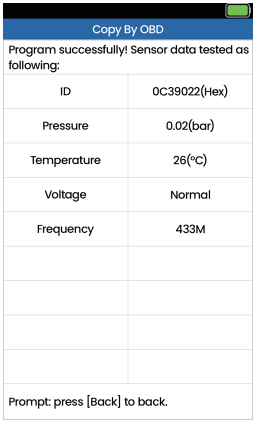


6) Select a sensor ID and press the 【OK】 key to start detecting nearby sensors;

7) When a sensor is detected, the programming function is automatically performed;



8) If programming is successful, the sensor ID, pressure, temperature, frequency and voltage will be displayed on the screen as shown below;



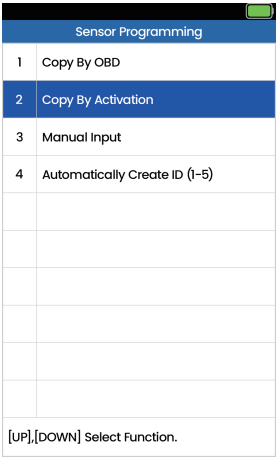
9) Press the【 ⮌ 】key to repeat steps 4-8 to continue programming other sensors.

4.2.2 Copy By Activation

This function is used to activate the original sensor and retrieve the sensor ID, then program the original sensor ID to the new OBDResource TP-Sensor, since the original sensor has been written to the vehicle's computer board, so when the new programmed sensor is mounted to the same wheel, No need to perform learning functions.

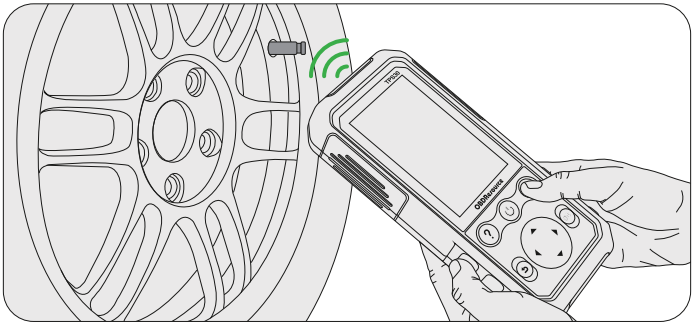
How To Copy By Activation?

1) After the vehicle selection is completed, select【**Copy By Activation**】in【**Sensor Programming**】;

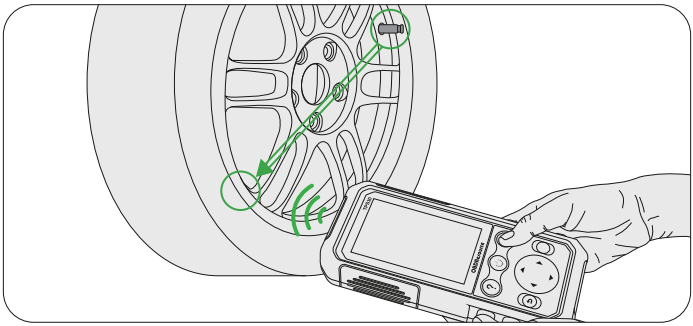


2) Press 【((•))】 button to start activating the sensor;

3) When the sensor is activated, it is required to be as close to the sensor as possible from the outer edge of the tire (because the hub is metal, which will lead to weak signal and cannot activate the sensor), and the head of the matching instrument is facing the sensor, as shown below. If the sensor is not read out, you can try to read the sensor at different positions and angles.

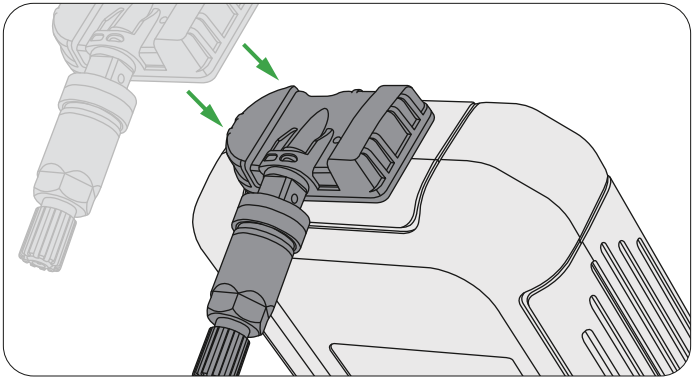


For some model of Ford's vehicle it use a Banded Sensors vehicle, the sensor is positioned exactly at 180 degrees of the valve nozzle. The sensor needs to be deactivated in that direction;



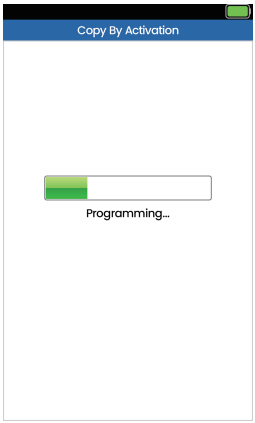
4) If the activation is successful, the original sensor ID is displayed at the bottom of the screen, as shown below;

5) Place a new OBDResource sensor on the top of the TPS30. The optimal distance between the TPS30 and the sensor to be programmed is less than 10cm(4 inch), as shown below;

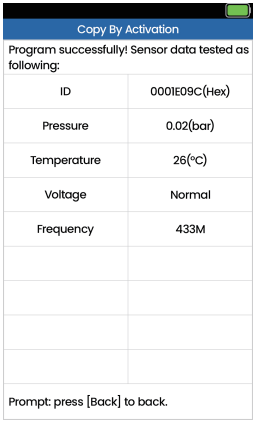


6) Press the 【((o))】 key, the OBDResource TPS30 starts to detect nearby sensors;

7) When a sensor is detected, the programming function is automatically performed;



8) If the programming is successful, the sensor ID, pressure, temperature, frequency and voltage will be displayed on the screen as shown below;

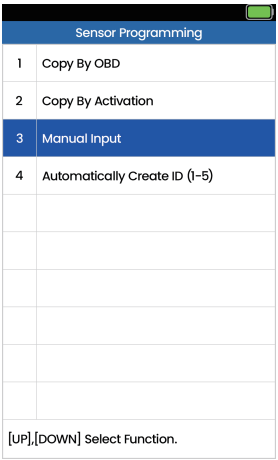


4.2.3 Manual Input

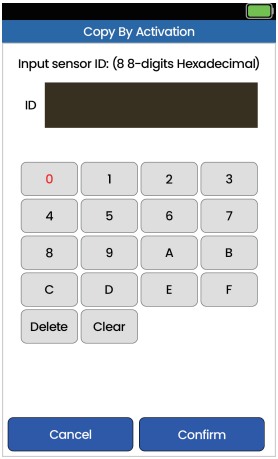
This function is used to manually enter the original sensor ID and program it into the new OBDResource sensor, since the raw sensor ID entered manually is already stored in the tire pressure system computer board, so if the newly programmed sensor is also installed in the same Wheel position, no need to perform "location learning" function.

How To Manually Input The Sensor ID?

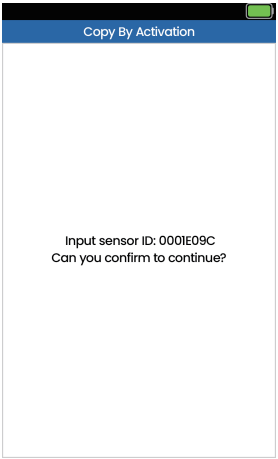
1) After the vehicle selection is completed, select【**Manual Input**】in【**Sensor Programming**】;



2) Enter the 8-digit sensor ID number, the OBDResource TPS30 will automatically detects the length of the ID;

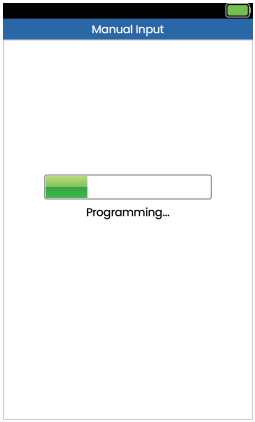


3) Select【**Confirm**】, press the【**OK**】key to continue programming;

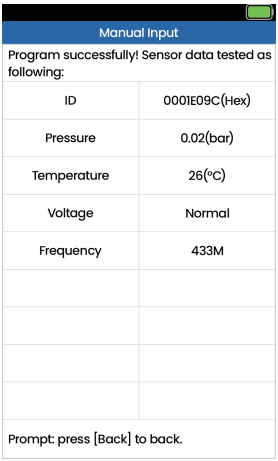


4) The OBDResource TPS30 will automatically detects the nearby sensor. The optimal distance between the matching instrument and the sensor to be programmed is less than 10cm;

5) When a sensor is detected, the programming function is automatically performed;



6) If the programming is successful, the sensor ID, pressure, temperature, frequency and voltage will be displayed on the screen as shown in the figure;

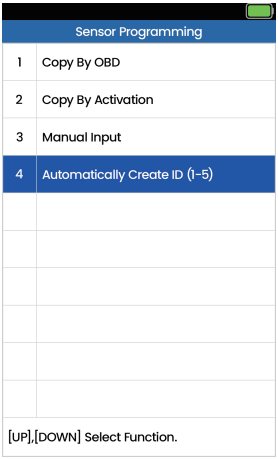


4.2.4 Automatically Create ID (1-5)

This function is used to create a random ID for 1-5 OBDResource sensors. This new ID is different from the ID stored in the tire pressure system computer board. Therefore, the sensor must be re-learned into the tire pressure system computer board.

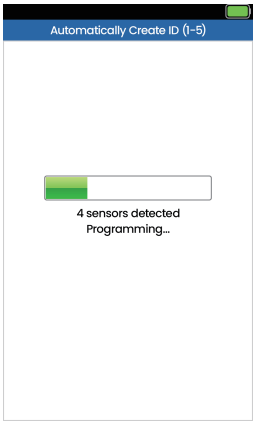
➢ **How To Automatically Create 1-5 OBDResource Sensors?**

1) After the vehicle selection is completed, select **【Automatically Create ID (1-5)】** in **【Sensor Programming】**;

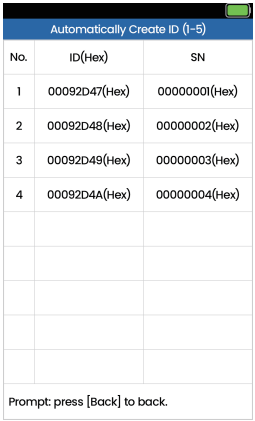


2) The OBDResource TPS30 will automatically detects the nearby sensor. The optimal distance between the matching instrument and the sensor to be programmed is less than 10cm;

3) When a nearby sensor is detected, press the 【OK】 key to start programming the sensor;



4) If the programming is successful, the sensor ID and SN number will be displayed on the screen, as shown in the figure;



4.3 Location Learning

There are three ways to position learning: Stationary, Automatic and OBD.

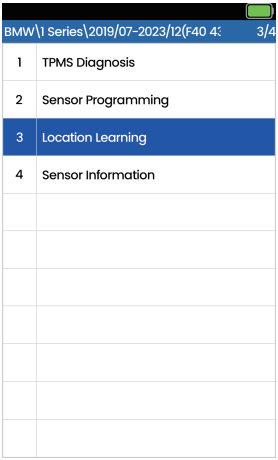
For some vehicles, the re-learning function can be completed by driving. For details on the process, please refer to the "Learning Process Guide" on the screen.

OBD Learning

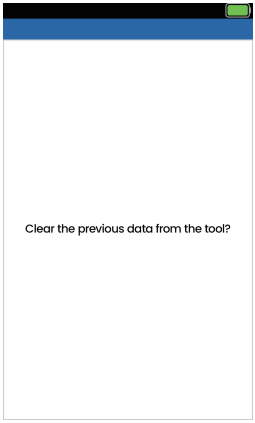
The OBD learning function allows the matcher to directly write the tire pressure sensor ID into the tire pressure system module. Before performing OBD learning, please activate all sensors as follows:

How To Learn By OBD?

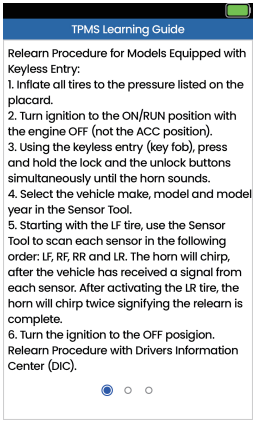
1) After the vehicle selection is completed, select 【**Location Learning**】;



2) When the following prompt pops up, press the【OK】key to to clear the previously stored data, or press the【↩】key to use the previously stored data;

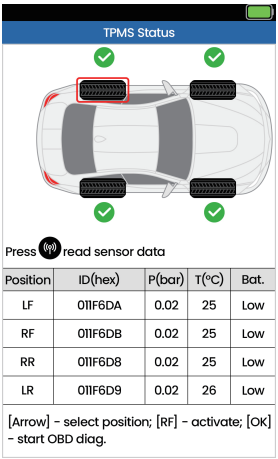


3) At this point, please read the "Learning guide" carefully and press the【OK】key to continue;



4) Press the【 】key to activate all sensors installed on the vehicle separately;

Note: If you in step 2 to use the previously stored data, you do not need to activate the sensor again.

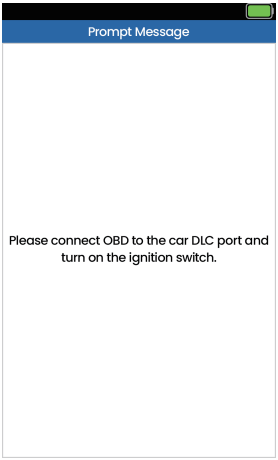


The Activation Status Prompt Is As Follows:

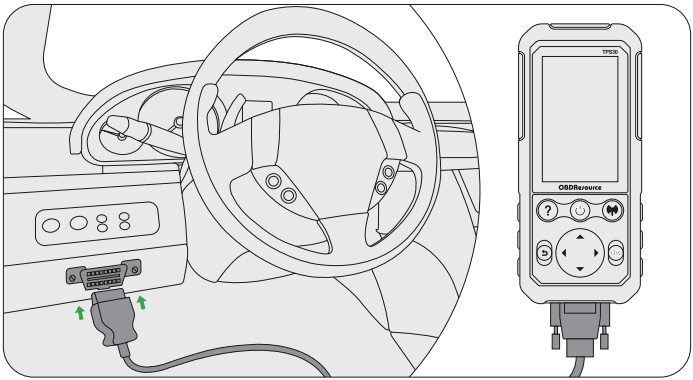
	Successful Activation		**Repeat Activation**
	Failed Activation		

Note: All sensors should be activated successfully without any duplicate ID.

5) When all the sensors are activated successfully, with the support of the vehicle, press the【OK】key, and the TPS30 device will prompt the user to connect to the vehicle, as shown below;

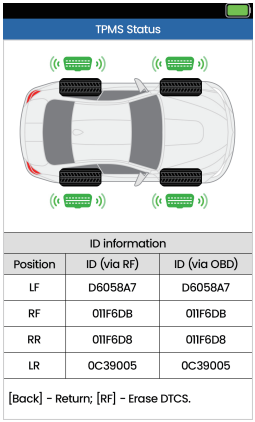


6) Follow the on-screen instructions to connect the vehicle, as shown below, and turn on the ignition switch. After the connection is completed, press the【OK】key to continue;



7) The device writes the sensor ID to the computer board, please wait; if the OBD learning is successful, the sensor ID is written into the computer board;

8) Press the【OK】key to view the sensor ID information, as shown below;

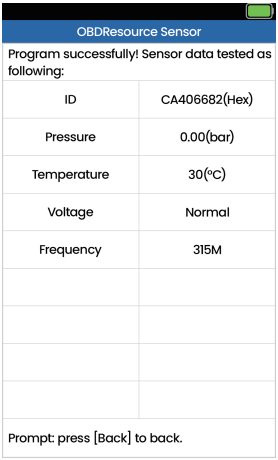


9) Press the 【((•))】 key to automatically erase the fault code in the computer board and re-check the ECU to ensure that all fault codes have been deleted.

4.4 Sensor Information

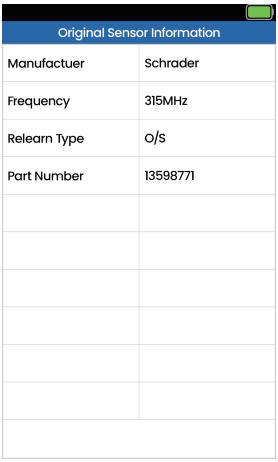
4.4.1 OBDResource Sensor Information

When using the OBDResource TPS30 to view the OBDResource sensor information, the optimal distance between the matching instrument and the OBDResource sensor is less than 10cm. the TPS30 will automatically read and display the sensor information, as shown in the figure;



4.4.2 Original Sensor Information

View original sensor information for the selected model.



5. Special Function

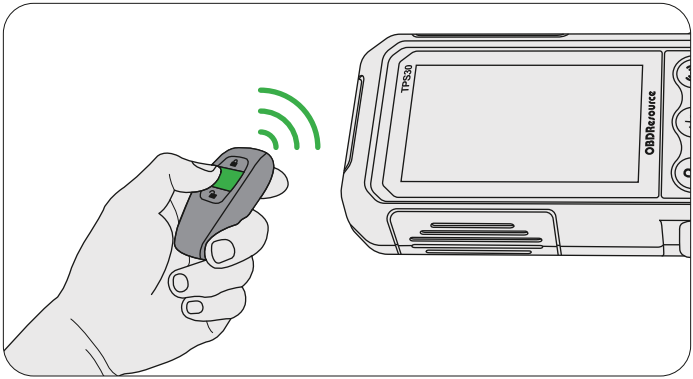
This function is used to remotely test the signal strength and frequency of the remote control key.

How To Test The Signal Strength Of The Remote key?

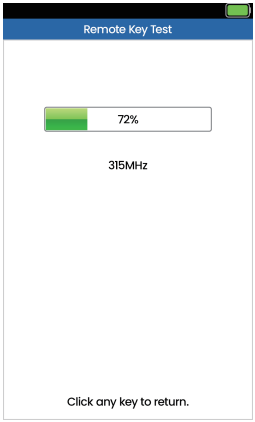
1) Select 【**Remote Key Test**】in the special function;

2) Put the key close to OBDResource TPS30 device, as shown in figure 3-1, press the any key on the remote control key to detect. If the key works and the remote control key sends a signal,

the device will emit a buzzing sound, the screen shows as figure 3-2. If the key does not work, the device will do nothing. To ensure that each button works properly, please test each button in turn.



(Figure 3-1)



(Figure 3-2)

6. Data Record

6.1 Last Test

The **"Last Test"** feature makes it easy for users to view the last under test record and help users quickly enter the last test car brand and model.

6.2 Data Playback

"Data Playback" function allows users to view saved tire pressure system detection trouble codes.

7. System Settings

Enter【**System Settings**】, the setup menu is displayed as follows:

- **Language**

  Set the operating language of the device.

- **ID Format**

  Set the ID display format to hexadecimal, decimal or automatic.

- **Pressure Unit**

  Set the pressure unit to kPa, Psi or Bar.

- **Temperature Unit**

  Set the temperature unit to Fahrenheit or Celsius.

Distance Unit

Set the distance unit to km or miles.

Tone Setting

Select to turn the tone on or off.

Auto Power Off

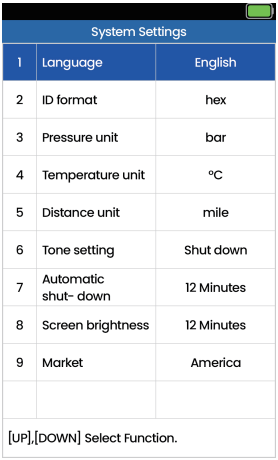
Set the system automatic shutdown time.

Market

Users should setup European, American or Asian markets according to different regions. The data types of different markets are slightly different.

Screen Brightness

Increase or decrease screen brightness.



8. Device Information

About

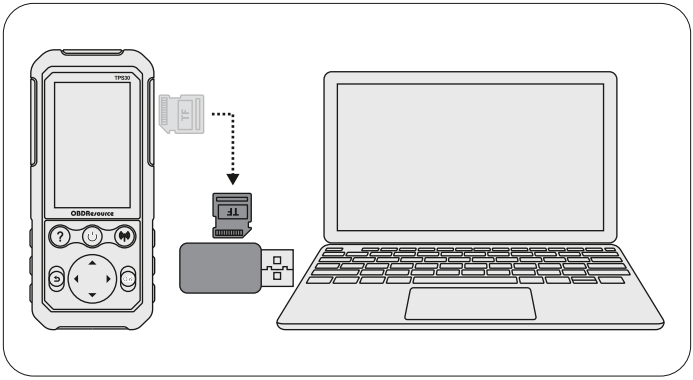
This function can view device information such as device serial number and software version.

9. Update

Please update your device software on a Windows-based computer. Make sure your computer is connected and working. Update steps as follows:

1) Please download the latest upgrade files from official website, www.obdresource.cn, un-zip the Zip;

2) Connect to laptop via TF card reader, shown in the figure;



3) Format the removable disk, copy and paste all upgrade files into it;

4) Insert the TF card back to TPS30, then wait for the upgrade complete, shown as below.

Note	During the upgrade process, do not disconnect or remove the TF card, do not shut down the device.
	Before formatting, it is important to create a complete backup of all the files stored on the TF card.

10. Maintenance and Storage Environment

➢ Equipment Maintenance

1) The surface of the screen will absorb dust due to static electricity. It is recommended to buy a special wiper for LCD screen

to clean the screen of the main unit;

2) Do not wipe the dust with your fingers to avoid fingerprints. Do not use chemical cleaners to wipe the device;

3) Do not use equipment such as banana water, engine cleaners, or gasoline to dissolve equipment;

4) When the device is dirty, please cut off the power, wring the soft damp cloth and wipe the surface of the case.

Storage Environment

1) Store the matching instrument in a flat, dry, temperature-friendly place when not in use;

2) Do not place the matching device in direct sunlight or near a heating device;

3) Do not place the device within the magnetic field;

4) Do not place it where it is susceptible to smog or water or oil splashing;

5) Do not place in a location subject to vibration, dust, moisture or heat.

Host Protection

1) Try to gently handle the device to avoid impact;

2) When connecting the test leads and the car diagnosis, carefully insert and remove the screws. When using, tighten the fastening screws to avoid damage to the interface during the movement. After use, loosen the screws and then unplug the main test leads to avoid damage to the diagnostic interface;

3) After using the device, put the test leads and other accessories back into the box to avoid losing.

11. Guarantee Card

Hello! We appreciate your purchase of our products. In order to provide you with better service, please read the following instructions carefully, fill out the guarantee card completely, and store it in a safe place after purchasing the products.

<table>
<tr><td>Name</td><td colspan="2"></td><td>Email</td><td></td></tr>
<tr><td>Purchase Date</td><td colspan="2"></td><td>Cotact Number</td><td></td></tr>
<tr><td>Address</td><td colspan="2"></td><td>Product Name</td><td></td></tr>
<tr><td>Order Number</td><td colspan="4"></td></tr>
<tr><td rowspan="4">Repair Records</td><td>Date</td><td colspan="3">Cause of failure and solution</td></tr>
<tr><td></td><td colspan="3"></td></tr>
<tr><td></td><td colspan="3"></td></tr>
<tr><td></td><td colspan="3"></td></tr>
</table>

Warranty Statement:

If you encounter any quality issues with the product that require repair, please send both the warranty card and the purchased product back to our company for after-sales service. We will be pleased to assist you with the necessary repairs.

Manufacturer

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Web: www.obdresource.com
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CE FC RoHS Made in China

Tech Support Group

Version Number: A05

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