



TIRE PRESSURE MONITORING SYSTEM

Notice

- * Do not watch the device when driving.
- * This product is for passenger cars only.
- * Ensure to read through the user manual completely and fully understand the contents before use.
- * It is recommended that a tyre professional install this product.
- * This product is an effective tool to continuously monitor the tyre inflation point; this unit may not be effective during sudden deflation or accidents.
- * Do not use in conjunction with tyre foam filling products.
- * The monitor does not require constant observation. When there is abnormal tyre pressure or temperature, the display will automatically alarm with both a visual and audio cue.
- * Ensure that the in car display does not distract while driving.
- * This manual covers internal and external sensors.

TPMS Brief Introduction

This product includes four sensors and one in-car display. The sensor will detect the tyre pressure and temperature. Continuously transmitting the tyre pressure and temperature data, in wireless mode to the in-car display. When abnormal activity is detected, an alarm will be activated to alert the driver of the issue (both by an audio and visual alert).

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1. Display Installation

1. The unit may be affixed to the dashboard of the car, using the 3M adhesive tape supplied. Ensure that the display does not impair driving vision.
2. First time system boot, hold down the “OK” and “↶” button simultaneously for 3 seconds, until the LCD display comes to life. It is not required to shut down the unit in daily use. The unit will be in sleep mode in 15 minutes if there isn't any vibration detected.
3. To shut down, hold down the “OK” and “↷” button simultaneously for 3 seconds, on release you will hear a “beep” sound. This will indicate that the system is shutdown. This should only be required when resetting the unit.

2. Sensor Installation

2.1 External Sensor Install

- a. Ensure that the sensor is used in the corresponding position displayed on the sensor. LF- Left Front RF – Right Front LR – Left Rear RR – Right Rear
- External Sensor Install
- b. Install the anti-theft screw
 - c. Install the sensor
 - d. Tighten the sensor with nut provided nut wrench in reverse direction.
 - e. Check to ensure no leakage and sensor is securely fastened.



Remove the original valve cover and install the anti-theft screw on the valve.



Install the external TPMS sensor on the existing valve according to the dedicated location on each side of the vehicle.



Tighten to lock the external sensor using the spinner (provided) onto the valve.

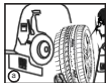


Ensure the external sensor is tightened properly and check for any possible air leakage before using it.

External Sensor Battery Replacement Step

1. Remove the outside cover.
2. Remove the old battery.
3. Install the new battery using battery type CR1632.
4. Replace the outside cover

2.2 Internal Sensor Install (This step should only be done by a tyre professional)



Uninstall wheel from vehicle and remove tyre from wheel.



Remove existing air valve from wheel barrel.



Kindly ensure valve hole on wheel is clean thoroughly.



Install & adjust TPMS sensor unit (adjustable) onto wheel to sit flush onto the wheel barrel.



Install the front side TPMS valve by screwing and tighten the valve socket on the face of wheel.



TPMS device installation completed, continue by fitting the tyre back onto the wheel.



Kindly rebalance the wheel and tyre to ensure radial uniformity.



Reinstall the balanced wheel onto vehicle to resume sensor set up.

- a. Remove the tyre from the wheel.
- b. Remove the old valve from the wheel.
- c. Ensure the valve hole area is clean.
- d. Install the internal sensor
- e. Lock the screw of the sensor on the outside of the wheel.
- f. Product should be as fitted shown.
- g. Replace tyre, check for leakage and balance the wheel.
- h. Reinstall on car.

Remarks:

1. Ensure the sensor calibration position when positioning sensor on the car.
2. After installation, ensure to check for leakage from the valve area.
3. Once installed as above, you are now ready to enjoy the added safety of your TPMS unit.
4. This product is a plug-and-play device. Everything has been preset already. Only when it is necessary, can you move to the contents below.

3. Pressure, Temperature, Voltage Display

To switch between the battery voltage, tyre pressure/ temperature display, short press the "SET" button.



Pressure display.



Battery voltage display.

4. Alarm

Alarm will sound when the monitor senses a safety issue. The corresponding tyre position symbol will flash, accompanied by a "beeping" sound.



1、 Low pressure.



2、 Leakage.



3、 High pressure.



4、 High temperature.



5. Low Battery voltage for sensor.



6. Sensor fail.

5. Setting The Unit

Setting the unit of pressure display

1. Long press “SET” button under the main interface as shown in the below interface.



2. Click “SET” button again into the below interface.



3. Click “SET” button again into the below interface.



4. Click “SET” button again into the unit of pressure interface, as below.



Press “OK” button during this interface, either Bar or Psi will flash.

Click “SET” button again to switch from the Bar or Psi pressure unit.

Press “OK” button to confirm, then click the button twice to exit.



6. Pairing

**Only required if choosing to change sensor position or singular replacement.*

6.1 Automatic Lightning Pairing For Internal Sensors (Quick Pairing)

The Internal Sensor has automatic lightning pairing function. Each sensor is free to be installed in any tyre. Tyre position will be automatically defined on the display within 2-5 minutes (speed >20km/h).

After 5 times of automatic pairing, the wheel position is locked & the automatic pairing function is inactivated for saving battery power. At the time when the wheel position is changed, press the “OK” button for 5 seconds until a beep is heard. Thus, the automatic lightning pairing function will be re-activated.

6.2 Manual Pairing For Internal Sensors(Standard Pairing)

a. In the pressure display interface (pictured), hold the “SET” button for 3 seconds and release when a “beep” is heard, the LCD will display the flashing left front wheel.



b. While the left front tyre symbol is flashing, press the “OK” button to show the ID learning mode. The ID number of the left front tyre sensor LCD is displayed as shown.



The left front ID is shown by the icon: 98A8bC08.

- c. In the pressure display interface (pictured), hold the “SET” button for 3 seconds and release when a “beep” is heard, the LCD will display the flashing left front wheel.



The right front ID is shown by the icon:4AAAb100

- d. Click the “OK” button to enter the learning mode (In the example below, we select left front tyre).



At this point, if you click the back button, you will be returned directly to the second step.

- e. Setup the sensors : Inflate or deflate corresponding tyre (left front in the above example)
- f. When the display receives a learning signal from the tyre sensor, it will prompt a beep and will show the latest sensor ID number. This will show that this sensor position is successfully set up.



The new sensor ID is :407A1109.

The system will automatically jump to the next sensor position. The order of sensor set up is FL—FR—RR—RL

g. When all tyres are set up, the display will stop at the rear left position and show its ID. Click “↶” button to exit the setup procedure.



Note: During every step you can click the ↶ button to cancel the current operation.

6.3 External Sensor Pairing

For an external sensor, follow the 6.2 steps to select the wheel on the monitor. Reinstall the sensor when the monitor shows the corresponding wheel position.

7. Threshold Adjustment

1. In the pressure display interface, click the “SET” button for 3 seconds until a “beep” is heard and the LCD displays the left front wheel.(Figure 1)
2. Click “SET” button to choose the tyre position.(Figure 2)



(Figure 1)



(Figure 2)

3. Click “SET” button again, to enter the threshold adjustment.
(Figure 3)



Figure 3

4. Click “OK” button to enter the high-pressure alarm threshold setting. Click “OK”, the value flashes. Click “SET” to change the value. Click “OK” to save the change.(Figure 4)



Click “OK” button and then click “SET” button can adjust pressure alarm threshold, adjusted to the required threshold, click “OK” button to confirm, the adjustment range is:36Psi-99Psi .

Figure 4

5. Click the “SET” button to set your personal low-pressure alarm threshold. Click “OK”, the value flashes. Click “SET” to change the value. Click “OK” to save the change.(Figure 5)



After you click “OK” button, and then click “SET” button, adjust low alarm threshold, adjusted to the required threshold. Click “OK” button to confirm, the adjustment range is: 26Psi-35Psi.

Figure 5

6. Click “SET” button, can enter the high temperature alarm threshold-setting interface, and Click “OK”, the value flashes. Click “SET” to change the value. Click “OK” to save the change. ((Figure 6)



After you click “OK” button, and then click “SET” button, adjust the temperature alarm threshold, adjusted to the required threshold. Click “OK” button to confirm, the adjustment range: 55°C- 99°C.

Figure 6

7. Click the ↶ button twice to exit.

8. Technology Parameters

External Sensor Technology Parameters

1. Working voltage: 2.1V-3.6V
2. Working frequency: 433.92MHz only transmit and 125kHz only receive
3. Pressure measurement range: 0-116Psi
4. Temperature measurement range: -30°C/85°C
5. Working temperature: -30°C/60°C
6. 433.92MHz: -10.3dBm.ERP)



is in conformity with the relevant Union harmonization legislation:

Radio Equipment directive: 2014 / 53 / EU

with reference to the following standards applied:

ETSI EN 300 220-1 V3.1.1 (2017-02)

ETSI EN 300 220-2 V3.1.1 (2017-02)

ETSI EN 300 330 V2.1.1 (2017-02)

Draft ETSI EN 301 489-1 V2.2.0 (2017-03)

ETSI EN 301 489-3 V2.1.1 (2019-03)

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

EN62311:2008

Adjustable Metallic Internal Sensor (Not OE) Technology Parameters

1. Working voltage: 2.1V-3.6V
2. Working frequency: 433.92MHz only transmit and 125kHz only receive
3. Pressure measurement range: 0-116Psi
4. Temperature measurement range: -40°C/105°C
5. Working temperature: -40°C/105°C
6. 433.92MHz: -10.3dBm(ERP)

conformity with the relevant Union harmonization legislation

Radio Equipment directive 2014 / 53 / EU with reference to the following standards applied:

Draft ETSI EN 301 489-1 V2.2.0 (2017-03)

ETSI EN 301 489-3 V2.1.1 (2019-03)

ETSI EN 300 220-1 V3.1.1 (2017-02)

ETSI EN 300 220-2 V3.1.1 (2017-02)

ETSI EN 300 330 V2.1.1 (2017-02)

EN62311:2008

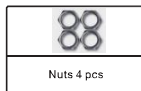
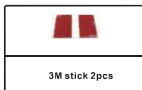
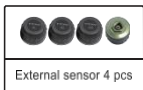
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TPMS Solar Display Technology Parameters

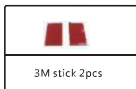
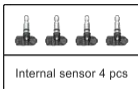
1. Power supply: Solar charge
2. Working voltage: 4.5V-6.0V
3. After charging the battery operating time: > 25 days(4 hours per day)
4. Working frequency: 433.92MHz
5. Display type: LCD
6. Alarm: Symbol, sound, light alarm
7. Working temperature: -30°C/85°C

9. Product List

External Product List Except The Display



Internal Product List Except The Display



10. Guarantee

One year of the guarantee period is provided with the conditions as following:

- a. In addition to the claims under the law and/or contract of sale which arise from material defects, the rights arising from this guarantee are granted by the seller to the customer.
- b. The product is guaranteed to be free of any defects. Parts that are subject to wear and tear such as batteries, or battery cells are not included in this guarantee.

The guarantee is excluded if

- The product has been misused or treated carelessly,
 - The product has been damaged due to excessive stress, incorrect use or external influence,
 - The defect has been caused by failure to observe the operating instructions,
 - A repair or a repair attempt has been carried out by personnel other than that of an authorized point of service.
- c. The guarantee period shall commence at the time of delivery of the product from the seller to the purchaser.
 - d. The place of purchase and the date of delivery shall be proven by submitting proof of purchase, for example, the sales receipt, invoice, delivery note or similar document.
 - e. Any defects that occur during the guarantee period should be submitted to the authorized point of service within 2 weeks since they happened. The defect will be remedied by delivery a product identical in construction. Further claims of the customer arising

from this guarantee, particularly claims for reimbursement of expenses, reduction, compensation of damages or the right of withdrawal, shall be excluded.

- f. The guarantee period shall not be extended if services are performed under the terms of the guarantee.
- g. The parts replaced when carrying out the repairs under warranty or the product retained in case of replacement delivery shall no longer be the property of the customers' or dealers'.
- h. If our customer services are called upon without due cause, the costs incurred will be charged to the customer.
- i. In case any defects occur, please contact your dealer or the service center in your country.

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 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.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Manufacturer information:

Zhejiang PDW Industrial Co., Ltd.

Quanxi Industrial Park, Wuyi County, Jinhua City, Zhejiang, P.R.

China 321200

Importer information:

City Pro car d.o.o.

Surcinska 5b, Belgrade, Serbia



TPMS

PDW 
Designed In Australia