

2 / 4 / 6 Wheels TPMS Retrofit Kit User Manual CT60(VS-63W015)

Contents

1.Warning	02
1.1 FCC and CE regulations	02
1.2 Product warning	02
2.Product Parts List	04
3.Product Specifications	04
4.TPM Sensor Installation	05
4.1 Sensor Assembly Process	05
4.2 Figure of completed installation	06
5.TPM Receiver Installation	07
5.1 Receiver Appearance	07
5.2 Installation Steps	07
5.3 Installation of Antenna Pad.....	08
6.Driving Mode	09
7.Setting mode	11
8.Abnormal Warning and Symbol Illustration	17
9.Troubleshooting	18

1. Warning

1.1 FCC and CE Regulations

This tire pressure monitoring system has complied with Article 15 of the FCC and CE regulatory requirements of the USA and EU, but it is still needed to pay attention to the following two items:

- (1) Other harmful interferences may affect the system's normal operation.
- (2) Abnormal operation may cause the system to fail.

1.2 Product Warning

1.2.1

Do not operate a TPMS receiver while driving. The company is exempt from all consequences because of driver's careless and improper operation.

1.2.2

The system adopts the wireless transmission of signals. In some special circumstances, interference or erroneous methods of operation or installation method errors may cause weaker signal or its inability to receive signals. If the insulation adhesive sticker of the windshield contains metal material, it will be likely to affect reception conditions. If the tire pressure and temperature readings on the TPMS receiver are displayed as "—", this condition represents the receiver cannot receive signals emitted by the sensors. Drive the vehicle away from the current location (nearby there may be signal interference) or drive the vehicle to a tire shop to check.

1.2.3

If the battery status of the TPMS sensors inside the tire is low (because abnormal conditions continue to occur, the battery may make the TPMS sensors continuously emit signals to warn the driver, so that battery life is shorter than the normal life), Please go as soon as possible to the specified service stations to confirm whether the TPMS Sensors need to be replaced.

1.2.4

Please change the Receiver's dry battery or sensor while the Receiver's dry battery power is low or Sensor Low battery warning is in alarm condition, or it may cause that the TPMS cannot be operated and alarm normally. You will take all risks and responsibilities for this.

1.2.5

Temporary resealing or re-inflation products containing internal sealants or propellants in any tire assembly may adversely affect the operation of the sensor/transmitter. The product manufacturer does not assume any liability as a result of these.

1.2.6

Do not leave the sensors in contact with chemicals, it may cause the sensors cannot be operated normally.

1.2.7

The TPMS needs to be installed by qualified personnel in accordance with installation manual to enjoy related warranty. If improper assemble or disassemble process damages the sensor, it will not be covered by warranty.

2. Product Parts List

NO	ITEM	Quantity
1	Sensor	2 pieces for - 2 wheel 4 pieces for - 4 wheel 6 pieces for - 6 wheel
2	Valve package (valve and screw)	
3	Tire pressure monitoring receiver	
4	Cigarette lighter cable(Vin=12V)	1
5	Suction cup holder	1
6	User manual	1
*7	Antenna Pad	1

*** : Only for long trailer or long axle vehicles retrofit kit.**

3. Product Specifications

Receiver Specification

Applied Vehicle Type:

Passenger car/SUV (Sport Utility Vehicle)/MPV (Multi-Purpose Vehicle)/SUV or MPV + one-axle Trailer.

(The distance from the front axle of driving vehicle to the farthest axle on the trailer is less 8 m)

The driving vehicle is pick-up or truck with two-axle trailer, it should use the antenna pad to be equipped with the receiver (the distance from the front axle of driving vehicle to the farthest axle on the trailer is over 8 m)

ITEM	Spec
Power supply	12V DC ---
Current Consumption	120mA
Operating Frequency	433MHz
Operation temperature	-20°C~85°C (-4°F~185°F)
Storage temperature	-40°C~85°C (-40°F~185°F)
Pressure Monitoring Range	0 ~115 psi±1.5 psi (0 ~ 800 kPa±10 kPa)
Temperature Monitoring Range	-40°C~125°C±3°C (-40°F~257°F±5.4°F)
Size	116.5 x 53 x 25 mm (4.5"x2.1"x1")
Weight	95g (3.4 Oz)

4. TPM Sensor Installation

4.1 Sensor Assembly Process

(Fig 1) Loosen the tire. Fix both sides of the tire and press, and make it bulge.

(Fig 2) Remove the tire. The valve faces the mounting arm in the one o'clock direction, remove the tire.

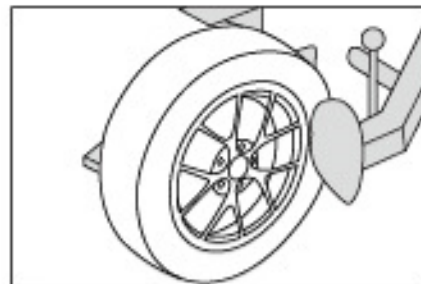
(Fig 3) Remove the sensor. Loosen the fixing screw, allow the sensor separate from the valve, and release the nut to take it apart from the valve.

(Fig 4) Insert sensor, metal valve stem and valve screw into wheel. Place the slanted surface of the stem face to the rim surface. Hold in place in hand. Loosely screw into place so sensor drop angle can be adjusted. From outside wheel, put on valve stem nut.

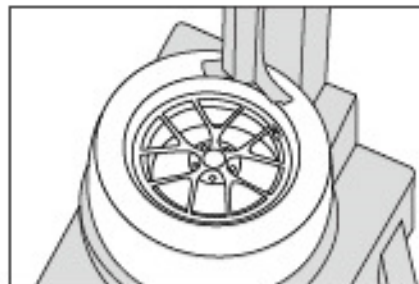
(Fig 5) Holding sensor down against wheel bottom, tighten valve stem nut to 4.0Nm with torque wrench.

(Fig 6) Holding sensor down against wheel bottom, tighten valve stem screw to 2.0Nm with torque wrench, place the valve cap.

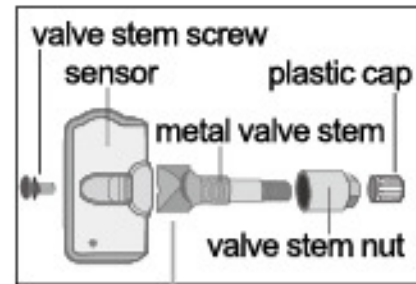
Note: Mount the tire. Grip the rim edge, and the valve is opposite to the mounting arm, avoid hitting the sensor during arm operation.



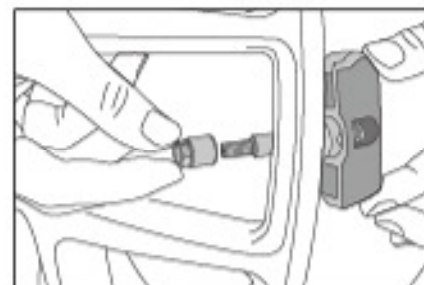
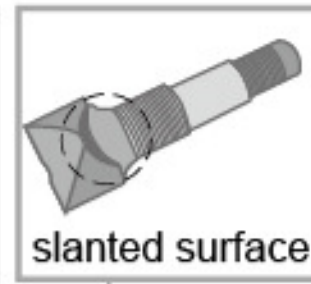
(Fig 1)



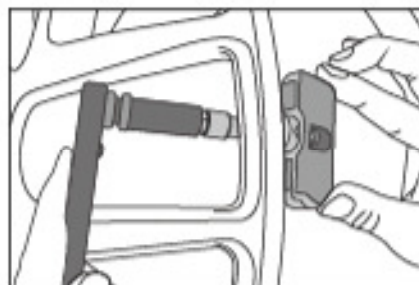
(Fig 2)



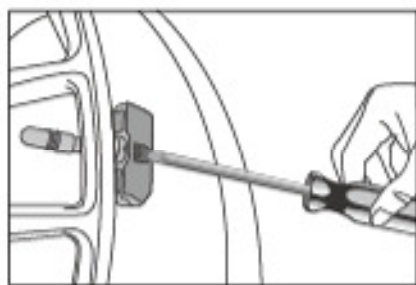
(Fig 3)



(Fig 4)



(Fig 5)



(Fig 6)

Note 1: When sensor installation is done, please make sure to adjust the tire alignment in order to reduce abnormal shake by tires.

Note 2: Valves and screws are not covered by warranty, you will need to replace new valves or screws when sensor or grommet replacement is needed.

Note 3: Recommend to check valve for pressure leakage all the time to ensure your safety.

4.2 Figure of completed installation



5. TPMS Receiver Installation

5.1 Receiver Appearance:

【6-Wheel】



【4-Wheel】

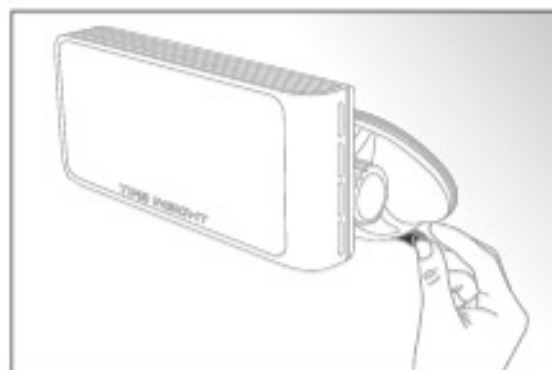


【2-Wheel】



5.2 Installation Steps

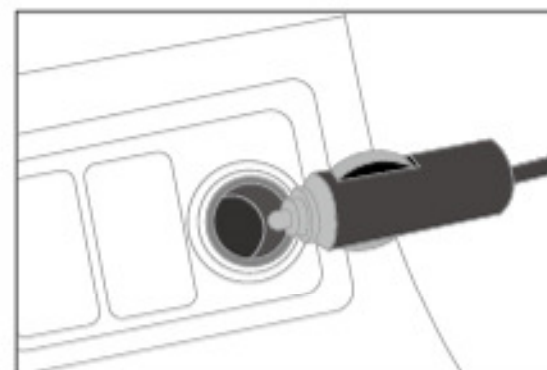
- 5.2.1. Combine the TPMS receiver with the suction cup holder, adjust to the proper angle and adsorb it on the windshield.
- 5.2.2. Insert the power cable into the bottom of the Receiver.
- 5.2.3. Insert the cigarette lighter side of the power cable into the cigarette lighter socket to supply power.



(Fig 1)



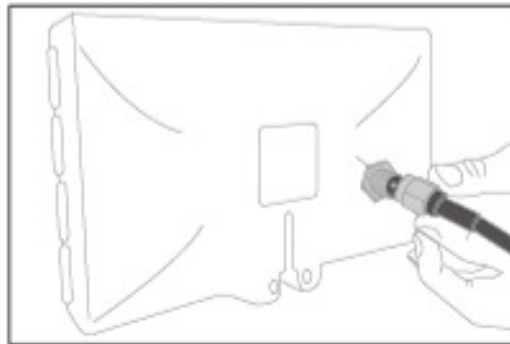
(Fig 2)



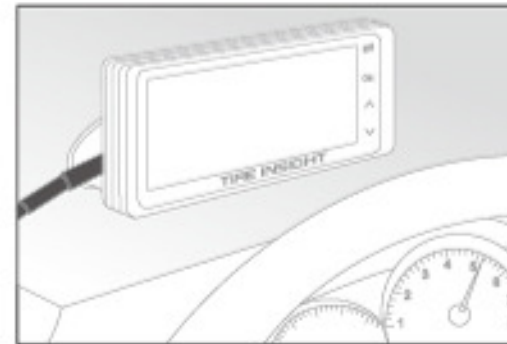
(Fig 3)

Antenna pad installation : (Example: driving vehicle is SUV)

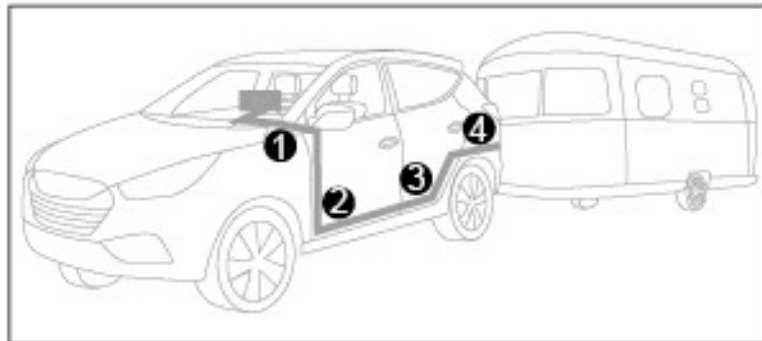
5.3 Installation of Antenna Pad



(Fig 1)
Connect and screw in the antenna extension to the rear side of the Receiver.

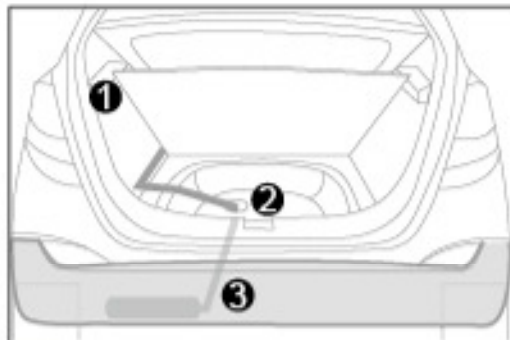


(Fig 2)
Adhere the Receiver onto the windshield by means of the vacuum grip support.



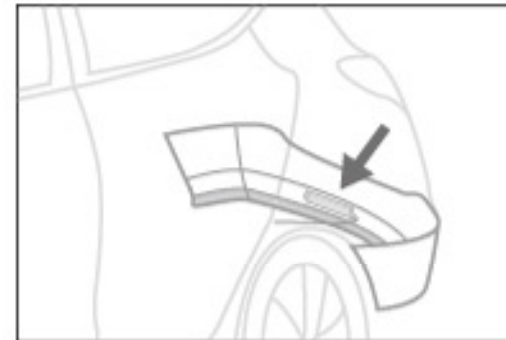
(Fig 3)

1. Extend the antenna cable from the Receiver to the left side, around the driver seat.
2. The antenna cable can be placed underneath the car's carpet or next to the car cabin sealing.
3. Extend the antenna cable all the way next to the rear left seat and through the trunk (remember to fix it well). Alternatively, you can place the cable through any available gaps.



(Fig 4)

1. Lift the spare tire cover in the trunk.
2. Make the antenna cable go through the orifice located at the spare tire compartment, pulling it outside.
3. Adhere the antenna onto the inside surface of the rear bumper.



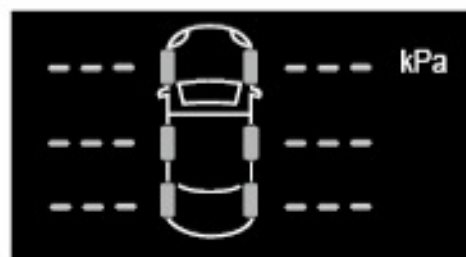
(Fig 5)

- ※ Clean the inner surface of the rear bumper where you will place the antenna to make sure it is fixed well.

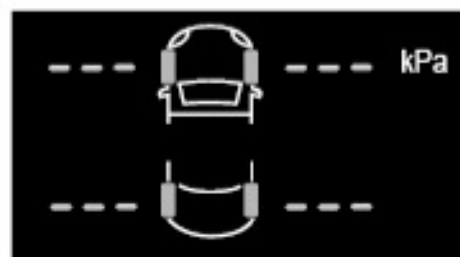
6 .Driving Mode

When the ACC is switched on, the LED screen will display the Driving Mode as depicted below.

【6-Wheel】



【4-Wheel】



【2-Wheel】



Functions under Driving Mode

1. Tire pressure display
2. Tire temperature display
3. Volume adjustment
4. Screen display ON/OFF

Operating Instruction:

The screen displays tire pressure and tire temperature in rotation under Driving Mode when the power is on. (rotate every 5 seconds)

6.1 Tire pressure Display : kPa (Pressure units)

During the Driving mode, the default value for tire pressure is set to 214 kPa.

Press “” to limit the screen displays Tire Pressure only.

If you would like to change units, make changes under Setting mode to choose.

6.2 Tire Temperature Display : °C (Temperature units)

The default value for temperature is set as 60°C .

Press “” to limit the screen displays Tire Temperature only.

If you would like to change units, make changes under Setting mode to choose.

※Default value

Pressure units	Default tire pressure value	Temperature units	Default tire temperature value
kPa	214 kPa	°C	60°C
psi	31 psi	°F	140°F
Bar	2.1 Bar		

6.3.1 Volume Adjustment:

During the Driving Mode, press   to adjust the volume.

6.3.2 Mute Alarm:

When an alarm occurs, press  to mute it. Unless a new abnormal condition occurs or other tires issue a warning, the alarm sound will continue. Alternatively, restart the receiver to mute it.

6.4.1 Screen OFF:

Hold **OK** for 3 seconds to turn off the screen (it will go into sleep mode).

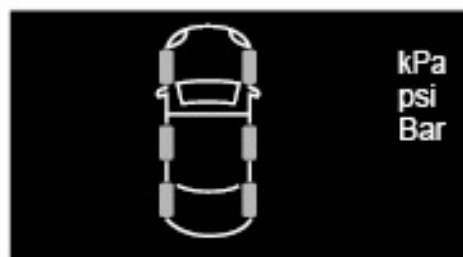
6.4.2 Screen ON:

Press any button to wake the LED display. It will also be lit when a tire alarm appears.

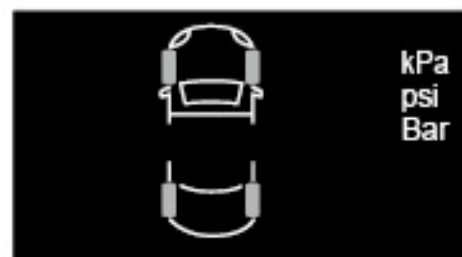
7. Setting mode

Hold “**≡**” for 3 seconds to switch back to the Setting mode during the Driving Mode, shown as below.

【6-Wheel】



【4-Wheel】



【2-Wheel】



Functions under Setting mode.

(Press **✓** to show the functions below;
Press **⬆** to go back to the last step.)

1. Tire pressure unit setting
2. Tire temperature unit setting
3. Axle number setting
4. ID Learning
5. Tire Position Rotation Setting

※ Hold “**≡**” for 3 seconds to switch back to the Driving mode during the Setting Mode.

Operating Instruction

7.1 Tire Pressure Unit Setting

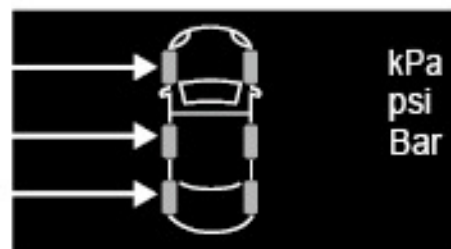
7.1.1 The screen will show "kPa" "psi" and "Bar" by default.

7.1.2 Press **OK** then the units will blink, now press **▲▼** to select desired unit, then press **OK** to confirm.
You will have 60 seconds to make the changes; if no changes are made within that period, the receiver will beep to warn that the settings have not been completed.

7.1.3 Adjust the desired tire pressure value for each set of tires, press **▲▼** to increase or decrease.

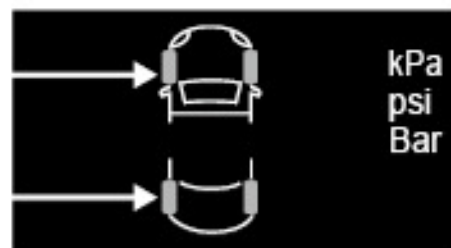
【6-Wheel】

- 1.(LF– Left Front & RF – Right Front)
- 2.(LR– Left Rear & RR – Right Rear)
- 3.(TL– Trailer Left & TR – Trailer Right)



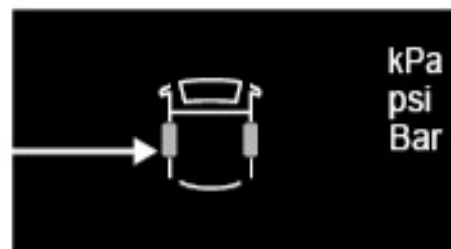
【4-Wheel】

- 1.(LF– Left Front & RF – Right Front)
- 2.(LR– Left Rear & RR – Right Rear)



【2-Wheel】

- 1.(TL– Trailer Left & TR – Trailer Right)



7.1.4 Press **OK** once the pressure is set to the desired value.

7.1.5 When you have completed the settings for all tires, you will hear three short beeps indicating that the changes have been saved successfully.

7.2 Tire Temperature Unit Setting

7.2.1. The screen will show " °C " and " °F " by default

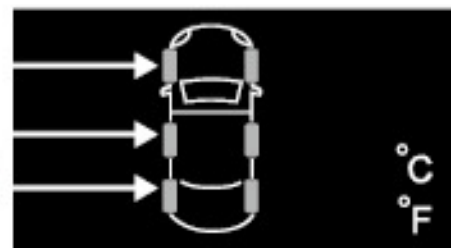
7.2.2. Press **OK** then the units will blink, now press **▲▼** to select desired unit, then press **OK** to confirm.

7.2.3. Adjust to the desired tire temperature value for each set of tires, press **▲▼** to increase or decrease.

7.2.4. Press **OK** once the temperature is set to the desired value.

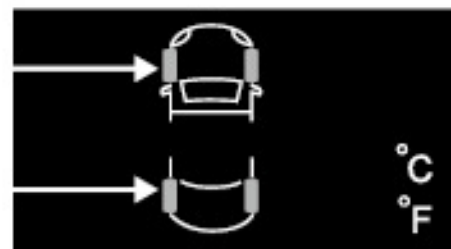
【6-Wheel】

- 1.(LF– Left Front & RF – Right Front)
- 2.(LR– Left Rear & RR – Right Rear)
- 3.(TL– Trailer Left & TR – Trailer Right)



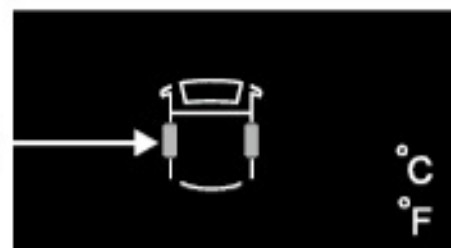
【4-Wheel】

- 1.(LF– Left Front & RF – Right Front)
- 2.(LR– Left Rear & RR – Right Rear)



【2-Wheel】

- 1.(TL– Trailer Left & TR – Trailer Right)



7.2.5. When you have completed the settings for all tires, you will hear three short beeps indicating that the changes have been saved successfully.

7.3 Axle number setting

7.3.1. The screen will show the default axle number.

7.3.2. Press **OK** and the numbers will start flashing.

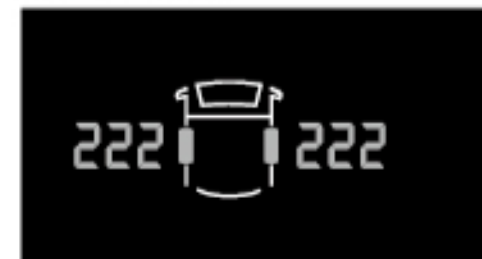
【6-Wheel】



【4-Wheel】



【2-Wheel】



7.3.3. Press **▲** **▼** to select the number of axles, and then press **OK** to confirm.

Pressing **▲** will increase one axle.

Pressing **▼** will decrease one axle.

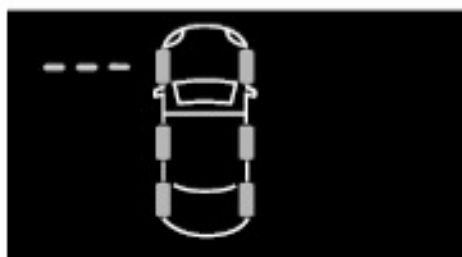
7.3.4. Finally, press **OK** and the receiver will beep, indicating that the setting has been saved.

The receiver will automatically go to the next step.

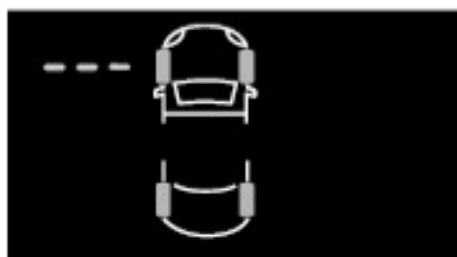
7.4 ID Learning

7.4.1. The screen will show “---” at the Left Front tire by default.

【6-Wheel】



【4-Wheel】



【2-Wheel】



7.4.2. Press **OK** and the display “---” will start blinking for ID learning. Each tire will have 120 seconds to complete the ID learning after the blinking starts. The receiver will emit a long beep and go back to the ID Learning Mode if it doesn't receive any signal from tire deflation within 120 seconds.

7.4.3. Deflate the corresponding tire, the receiver will beep when receiving the signal; the ID learn setting is finished when the screen shows the sensor's ID number.

7.4.4. Press **✓** for the next tire ID learning

6-Wheel :

(LF-Left Front→RF-Right Front→RR-Right Rear→LR-Left Rear→TL-Trailer Left
TR-Trailer Right)

4-Wheel :

(LF-Left Front→RF-Right Front→RR-Right Rear→ LR-Left Rear)

2-Wheel :

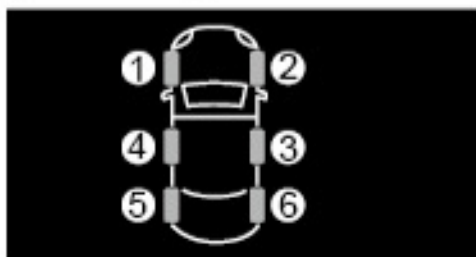
(TL-Trailer Left→TR-Trailer Right)

7.4.5. After completing the ID learning for all tires, press **OK**.

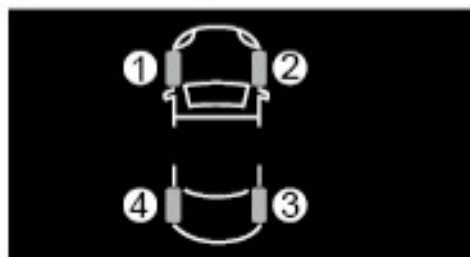
7.5 Tire Position Rotation Setting

7.5.1. The tire position display will be shown.

【6-Wheel】



【4-Wheel】



【2-Wheel】



- 7.5.2. Press **OK** to enter tire position rotation mode, digit 1 at the LF position will blink by default. Then press **▲▼** to select the original tire position which needs to be changed and then press **OK** again, and the digit at that selected position will turn green. If no change is made in this mode for 60 seconds, the receiver will beep to that warn setting has not been completed successfully.
- 7.5.3. Then press **▲▼** to select the new position to which you want to move the previously selected position, and press **OK** to confirm; the digit at the new position will also turn green.
- 7.5.4. The digits at both exchanged positions will remain displayed in green for 3 seconds to show which 2 tires are exchanged. Then they will automatically turn back to red.
- 7.5.5. Then the screen shows the new positions; if you need to exchange more than one pair of tires, press **OK** to repeat the procedure.

8. Abnormal Warning And Symbol Illustration

When the TPMS sensor transmits an abnormal signal to the receiver, a warning symbol will be displayed and a “-beep-” will be emitted as an audio alarm. The abnormal value is shown on the corresponding tire on the receiver.

Note:

- 1.Warning of excessive high tire pressure indicates tire pressure has been risen to 50% or more of the standard tire pressure value set by the user.
- 2.Warning of excessive low tire pressure indicates that the tire pressure has decreased by 20% or more of the standard tire pressure value set by the user, or that the tire pressure is ≤ 150 kPa (21.8psi).
* For example, if the standard tire pressure value is 214kPa (31psi), when tire pressure is increased to ≥ 321 kPa (46.5psi) or decreased to ≤ 171 kPa (24.8psi), the receiver will alarm.
- 3.The default temperature is 60°C, when tire temperature is increased to $\geq 60^\circ\text{C}$, the receiver will alarm.
* For the standard tire pressure value, please refer to the placard which be attached to the side of the driver seat.*

Symbol		Display on numbers	Display on tires
	Alarm for excessively high/low tire pressure	Red	Red,Blink
	Alarm for excessively high tire temperature	Red	Red,Blink
	TPMS system anomaly warning	“---”Red	Red,Blink
	Vehicle battery is low ($\leq 11.5\text{V}$)		Red

9. Troubleshooting

Issue	probable causes	Solution
ID learn failed	• Wireless signal interference. • Tire pressure deflated amount not enough.	• Remove receiver to other area. • Keep deflating the tires.
Pressure anomaly warning	• Low pressure.	• Please go to the tire shop to inflate the tires to prevent an erroneous alarm.
Screen shows the pressure and the temperature as “---”	• In traffic jam, or vehicle stays still. • Signal interference due to sensor's angle.	• Move the car to another area. • Keep driving for few minutes, make tires rotate to capture signals.

In the event of any questions and inquiries about warranty, you may contact your local dealer or CUB directly.

Thank you for your support by purchasing TIRE INSIGHT tire pressure monitoring system products.
We wish you a safe drive!