903RV
Instruction Manual

Wireless tire pressure and temperature monitoring system

Contents

Precautions

Please read the following precautions carefully before installing this product:

1. The receiver should be installed in a position that does not affect theline of sight of the driver.
2. The receiver should be fixed to avoid falling off during driving.
3. After installing the transmitter, check whether the tires of the vehicleare leaking. If necessary, apply soapy water to the air nozzle to checkif there is a leak.
4. Take care to avoid tires blowing up when the air pressure is too high,and pay attention to fuel consumption and balance when the air pressure is low.
5. This product allows effectively monitoring tire in real time, but it can't avoid safety accidents. Therefore, tires of good quality are as important as ensuring normal tire pressure through this product.
6. Pay attention to driving safety when you check the pressure and temperature while driving.

Installation Precautions:

1. The monitor will sleep automatically if it does not detect any vibration in 5 minutes. A slight vibration will automatically turn it on to detect the data sent by the transmitter.
2. There is a wireless connection between the sensor and receiver and the transmission distance is far enough. Many anti-interference functions have been designed to minimize the possibility of interference.
3. In the course of driving, the tire pressure will have a high or low change due to the thermal expansion and contraction of air, which is a normal phenomenon.
4. Tires usually have natural air leakage. This is a normal phenomen -on and has no direct relationship with the installation of this product.

Product details

Monitor

"SET" :Holding down SET button to start the setting mode or saving the setup.

" + " :Click + shortly to select.

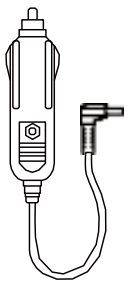
" - " :Holding down - button for 6 seconds to turn off or turn on. Click - button shortly to select.

"OK" :Holding down OK button to match the sensor ID with monitor. Holding down OK and SET button together for matching the repeater.

Accessories for monitor:
Monitor,Holder,Repeater(Optional),Charging cable

Holder

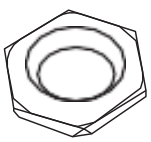
Repeater(Optional)



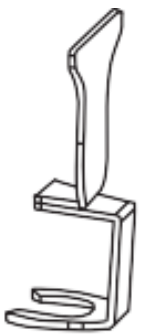
Charging cable

Accessories for external sensor model TP:
Sensor:6 to 22pcs
Anti-theft nuts,Spanner for sensor,Label sticker for sensor
Other accessories will be paired according to the sensor.

TP sensor:6 to 22pcs



Anti-theft nuts

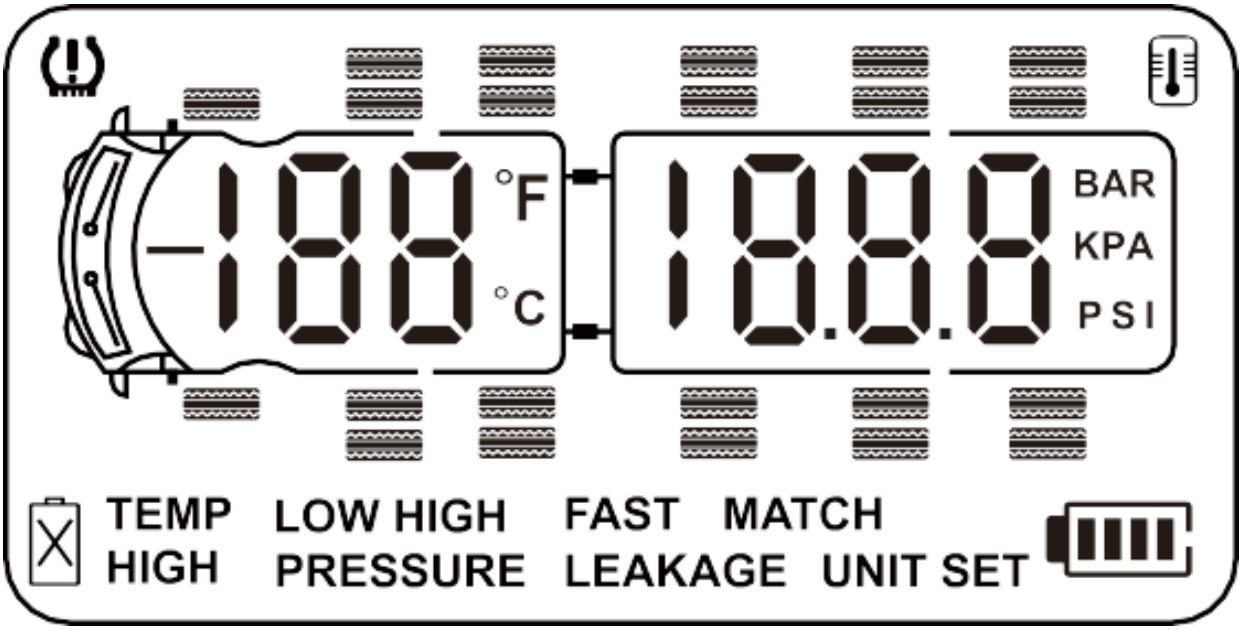


Spanner for TP external sensor

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22		

Label sticker for sensor

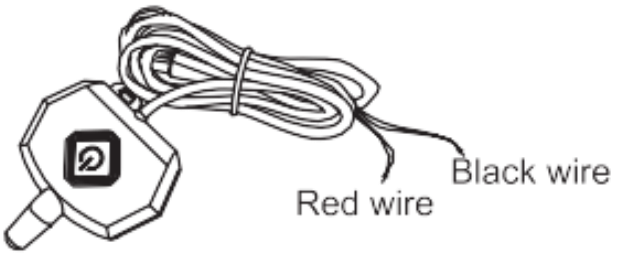
Description for LED screen



Icon describtion	
	Warning of tire temperature exceeding normal value
MATCH	Match sensor ID or rematch for replacing sensor or monitor
HIGH PRESSURE	Warning of tire pressure exceeding normal value
LOW PRESSURE	Warning of tire pressure lower than normal value
FAST LEAKAGE	Warning of emergency leak
	Warning of sensor low power
	Monitor battery level
°F °C	Temperature unit (℃ or ℉)
BAR PSI KPA	Pressure unit (BAR,PSI,KPA)

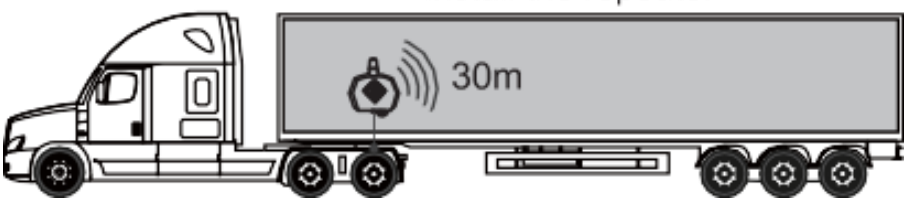
Installation of monitor and repeater

❶ Installation of monitor：Hold the back clip with the bracket and fix it on the windshield，adjust the viewing angle as needed



Repeater:Optional,strengthen the signal

Install the repeater



Repeater can make sure to strengthen the signal within 30m.Red cable connects with the anode of the battery,and the black cable connects with the cathode.

Caution : Please must make sure the monitor match with the sensor successfully so that the repeater can transfer the signal after connecting with the power. (Repeater:Just connect with the power.It will turn on automatically and transfer the signal,no need to turn it on or turn it off)

❷ Installation of repeater:Choose a suitable location of vehicle to install the repeater at first. Next connect the repeater cable with vehicle and match with the monitor. Then paste the sticker on repeater to fit for vehicle .Finally tighten repeater with nuts.(We suggest to install the repeater to near by the head of vehicle.) Refer next page to learn how to match the repeater with monitor.

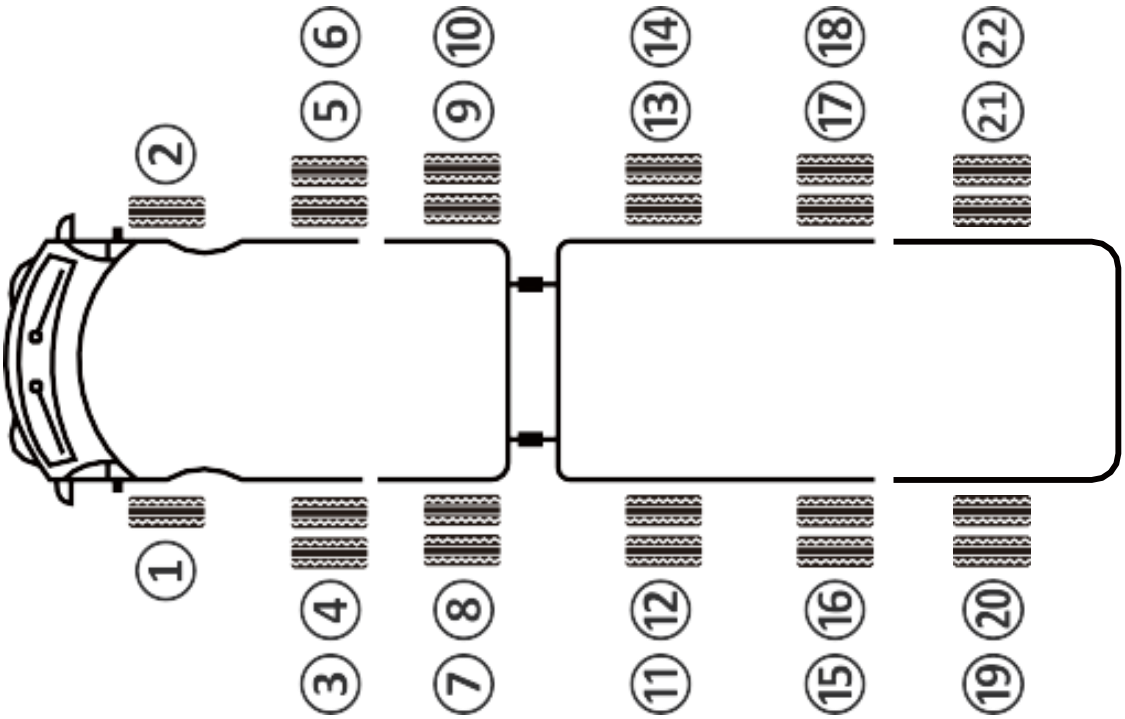
When the car will be parked for a long time, you can turn it off/on manually. When the monitor is off, you can press and hold the - button for 6 seconds to turn it on; when the monitor is on, you can press and hold the - button for 6 seconds to turn it off. When the battery is low, the monitor turns off automatically.

Position for label sticker(Suggestion)

Position for label sticker(Suggestion)

Caution:Please paste the label sticker for the corresponding sensor housing before matching,so as not to confuse.

Location of label sticker shows as follow:



Users should match the sensor ID to the monitor after receiving it for the first time if there are no sticker labels on the sensor housing. See matching instructions on page 6.

Matching sensors

1. Hold the OK button for 3 seconds and wait until it enters matching mode.

2. Press + or - button to choose the tire where you are placing the sensor then install the sensor in the tire valve.

3. When you hear Bi or Beep sound press the OK button to save.

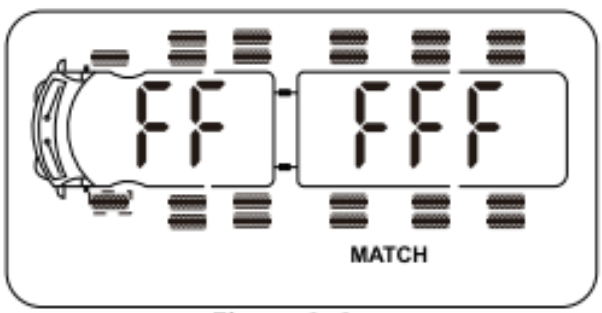


Figure1-1

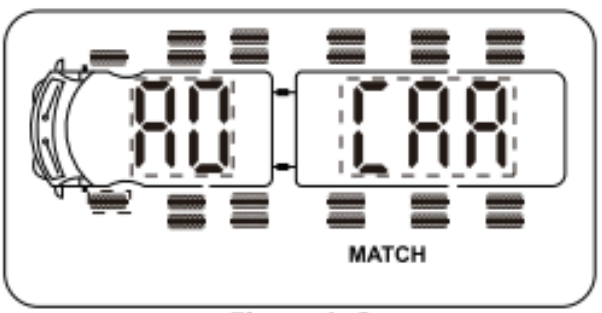


Figure1-2

Fig1-1 (FF FFF means there is no sensor assigned yet)
Fig1-2 (A0 CAA means there is an existing sensor assigned)

Important note: The original sensor data will be deleted once a new sensor it matched on the same tire location.

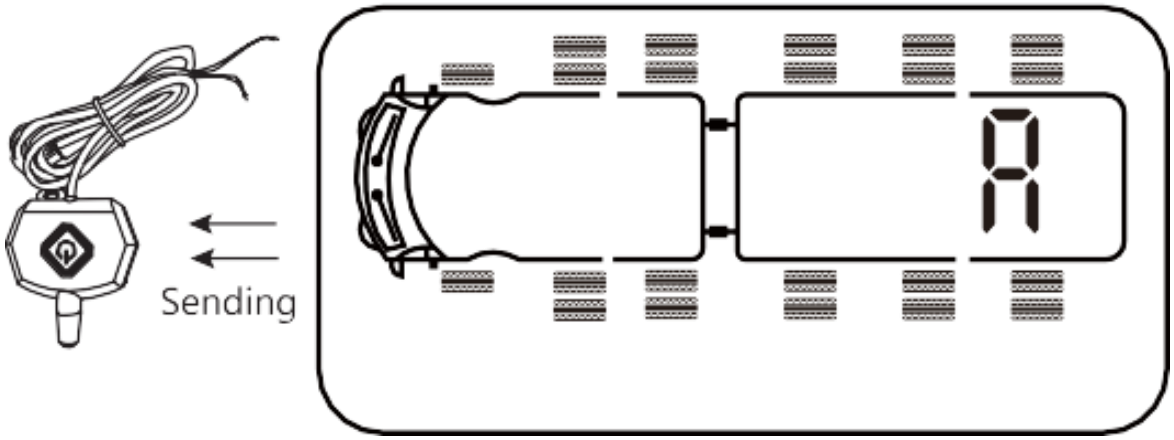
Matching repeater

In a fleet, a head of tow often needs to be connected to multiple trailers. It is more convenient to use if installing a new repeater for new trailer. Please make sure the installed sensors and new repeater at first if replace new trailer. Then close the monitor to repeater and transfer the data of trailer sensor as blow. Please try to drive vehicle to check if it is connected. Screen will show the tire pressure and temperature on second axles means match successfully.

Repeater received data from monitor(Add a new repeater at late stage)

Synchronously click and hold the "SET" and "OK" buttons for 3s at standby mode, the monitor will send signals after "Bi" voice alert twice. Then holding the "⏻" for 6s on repeater then it will receive signals from monitor after the Bi voice alert one time .The monitor will alert " Bi "voice twice and show full data after matching successfully ,then turn into standby mode automatically. (The monitor will alert with" Bi " voice one time if matched error with the repeater, and show full data on screen, then turn into standby mode automatically)

Repeater received data from monitor



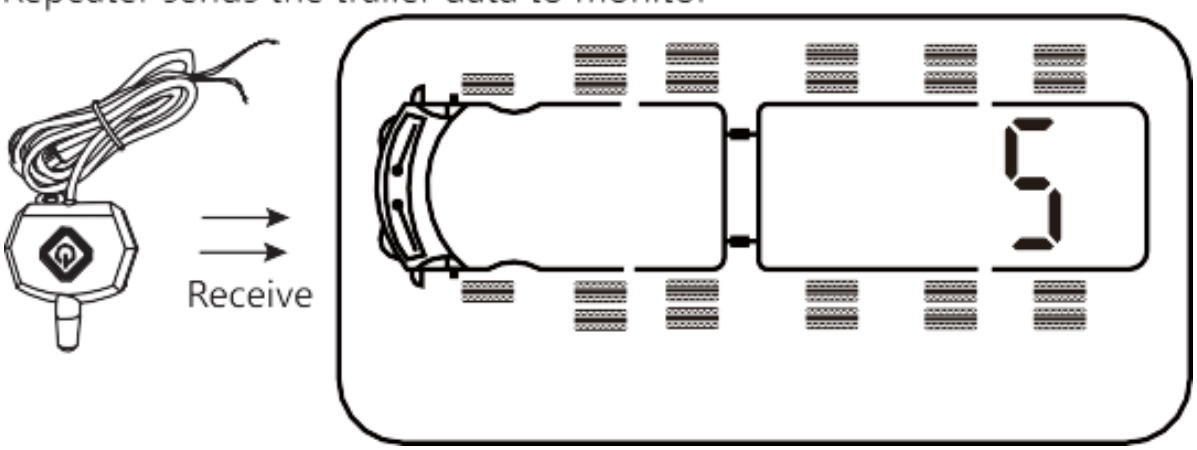
It's no need to replace the sensor in this step. Please keep the newly installed trailer repeater away from the trailer of the old repeater as soon as possible, to prevent matching errors or sensor connection errors .

Matching repeater

Monitor received data from repeater(Replace the trailer)

Synchronously click and hold the "SET" and "OK" buttons for 6s at standby mode, the monitor will receive signals after "Bi" voice alert one time. Then holding the "⏻" for 3s on repeater and it will send data to the monitor after the Bi voice alert twice .The monitor will alert " Bi "voice twice and show full data after matching successfully ,then turn into standby mode automatically.

Repeater sends the trailer data to monitor



Factory default and setting parameter

1 The factory settings are as follows

Pressure unit	BAR/PSI/KPA
Upper limit of tire pressure	12.1BAR(175PSI/1210KPA)
Lower limit of tire pressure	6.9BAR(100PSI/690KPA)
Temperature unit	℃/℉
Tire temperature alarm value	65℃/149℉

Relationship among pressure units PSI, kPa and BAR

1BAR=14.503PSI 1BAR=100KPA

! Holding down the SET button for 3 seconds to enter the factory setting mode of monitor. There are 4groups of settings that can be reset, as follows:

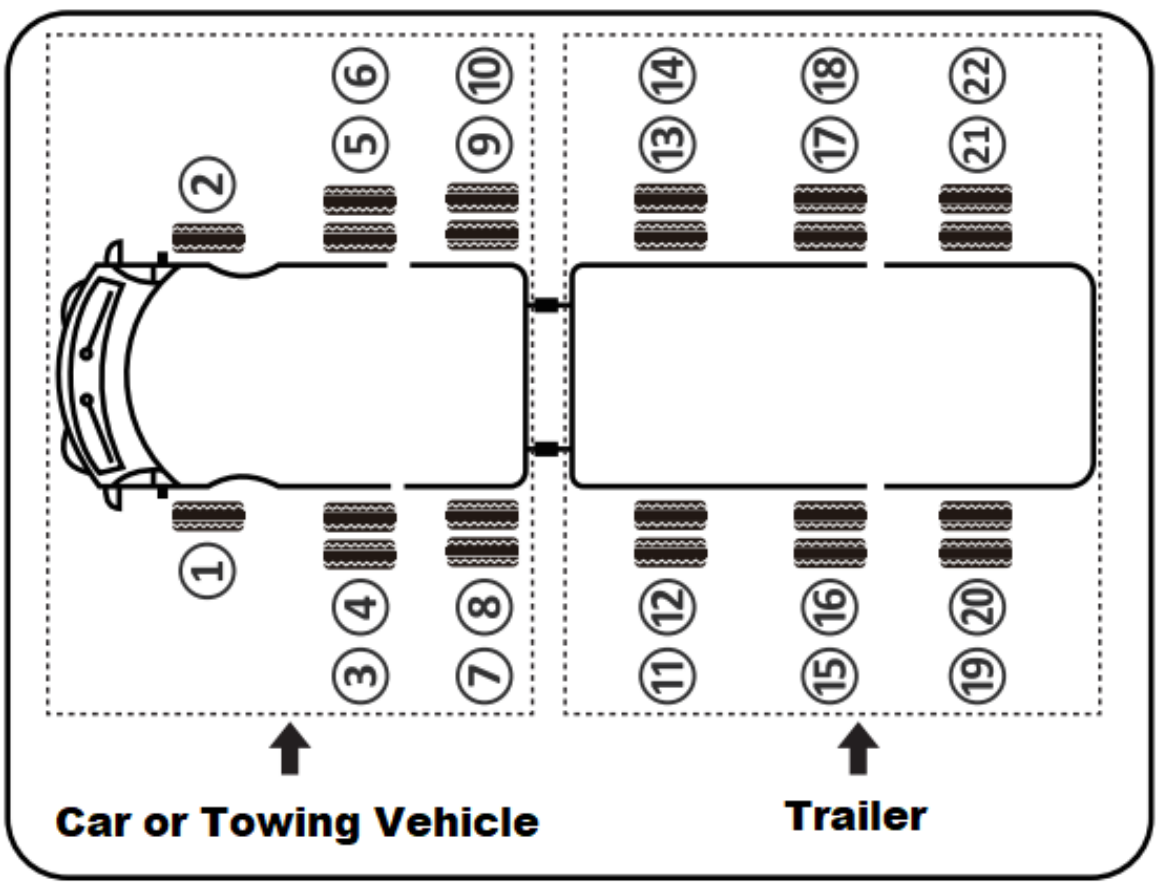
1.Pressure unit setting
2. Temperature unit setting
3. High and low pressure alarm value setting
4. High temperature alarm value setting

Display diagram of sensor position

Please install the appropriate position of the vehicle tire while using it for the first time. The factory default location of the tire corresponding is shown below, please stick with the corresponding label on the sensor housing (if labeled)

Car or Towing Vehicle No. (1,2,3,4,5,6,7,8,9,10)
Trailer No. (11,12,13,14,15,16,17,18,19,20,21,22)

You'll need to match the sensor again if replacing a new sensor or changing the location of the tire sensor.

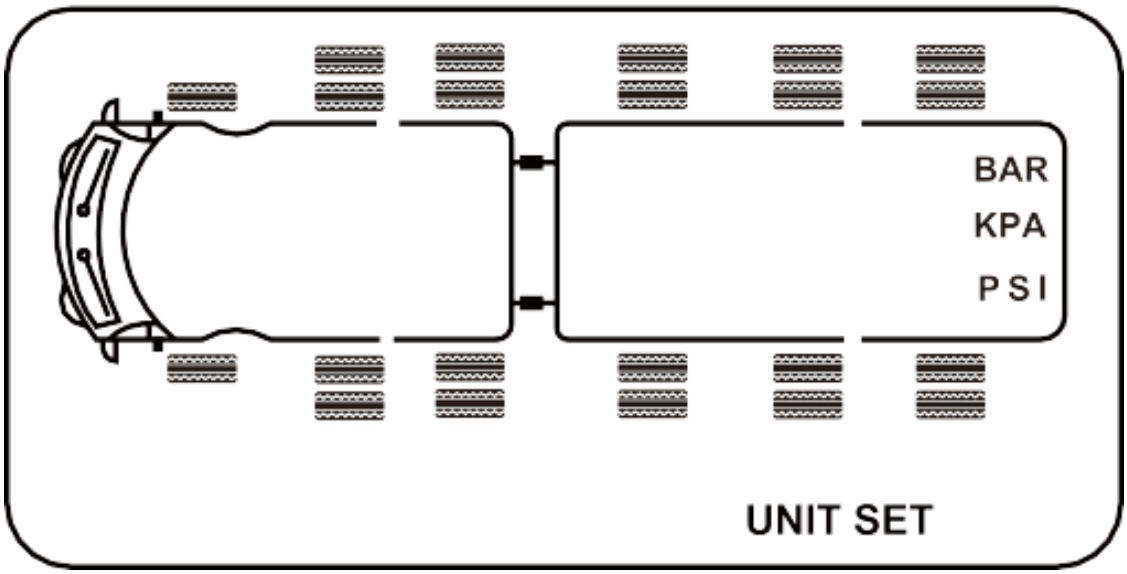


Setting units

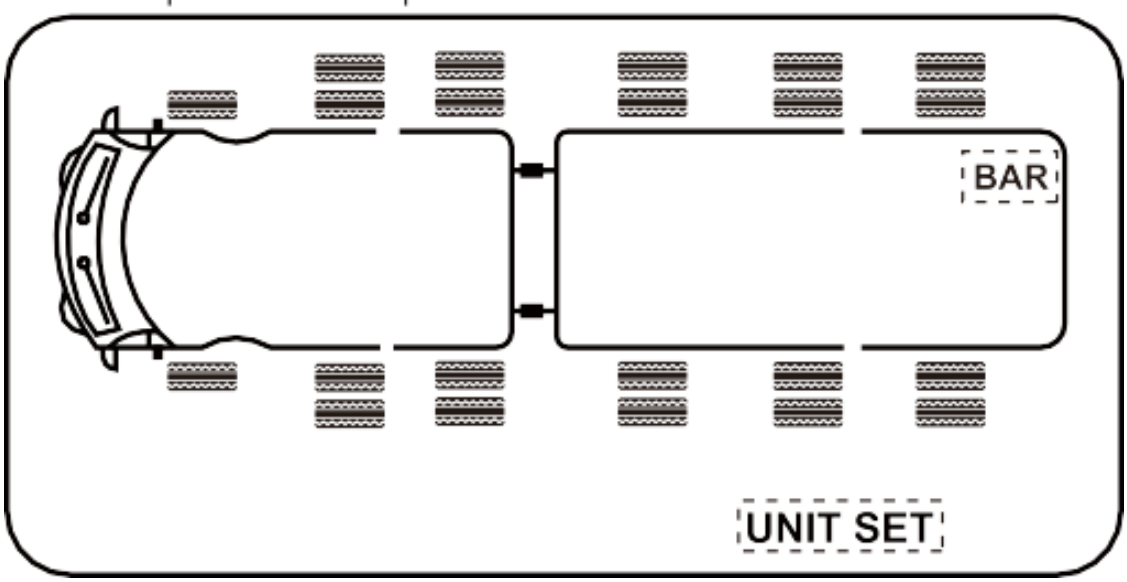
Pressure unit setting

Holding down SET button for 3 seconds to enter setting mode in standby. Click + or - button to select pressure unit setting as below,then click SET button to starting. Click + or - to select the pressure unit. Click SET button to confirm. Finally holding down SET button for 3 seconds to save and exit.

Pressure unit setting interface



For example:Select the pressure unit BAR



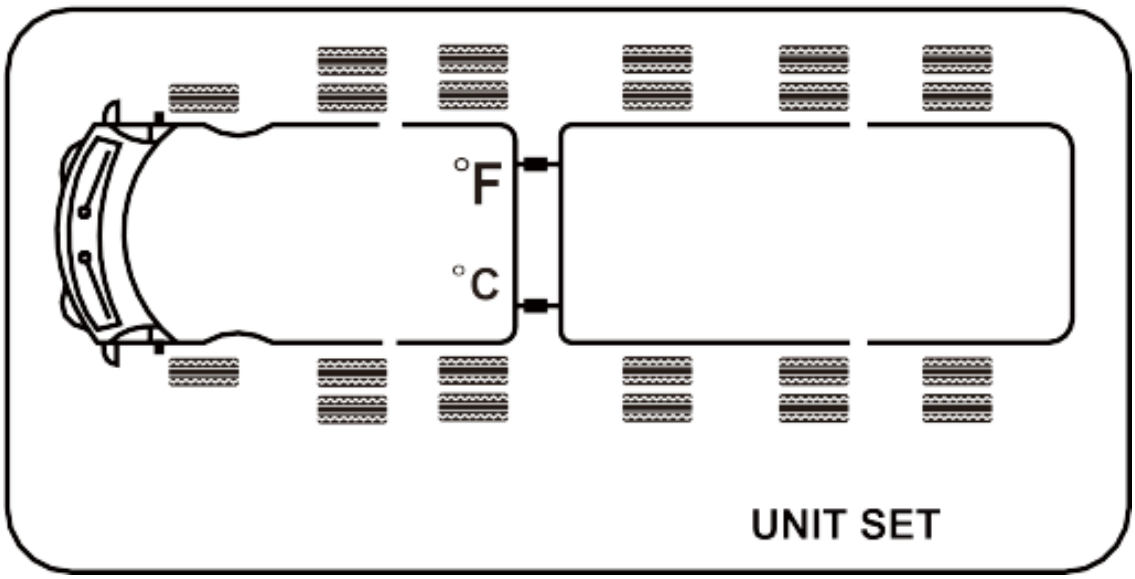
Selected pressure unit flash

Setting units

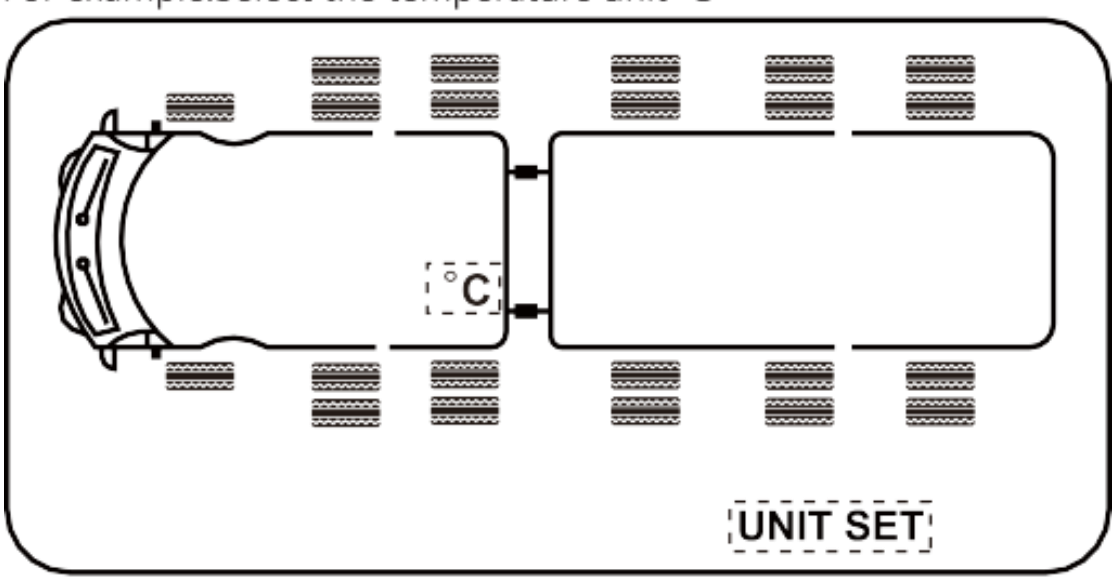
Temperature unit setting

Holding down SET button for 3 seconds to enter setting mode in standby. Click + or - button to select temperature unit setting as below,then click SET button to starting. Click + or - to select the temperature unit. Click SET button to confirm. Finally holding down SET button for 3 seconds to save and exit.

Temperature unit setting interface



For example:Select the temperature unit ℃

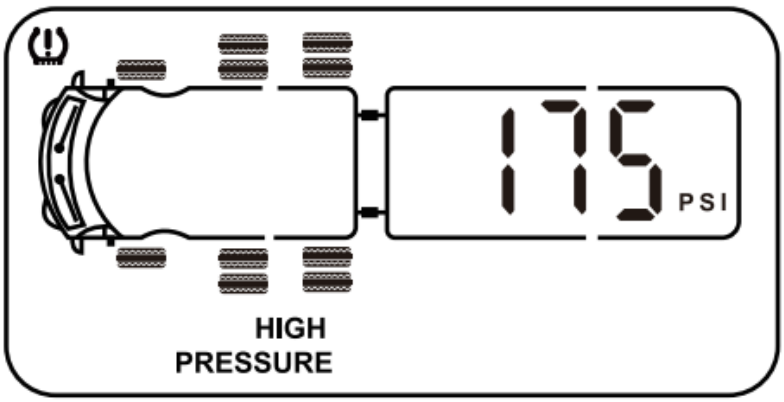


Selected unit flash

Alarm Value Setting

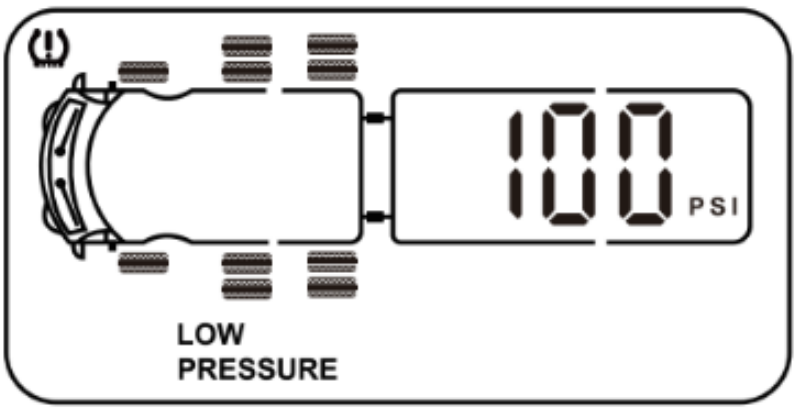
High Alarm Value Setting of the Car or Towing Vehicle -

1. Hold down the SET button for 3 seconds to enter setting mode.
2. Press + or - button to select the Car or Towing Vehicle "HIGH PRESSURE" alarm value as below, and press SET button to select.
3. Press + or - button to adjust the high-pressure alarm value then press SET button to confirm.
4. Then hold down the SET button for 3 seconds to save and exit.



Low Alarm Value Setting of the Car or Towing Vehicle

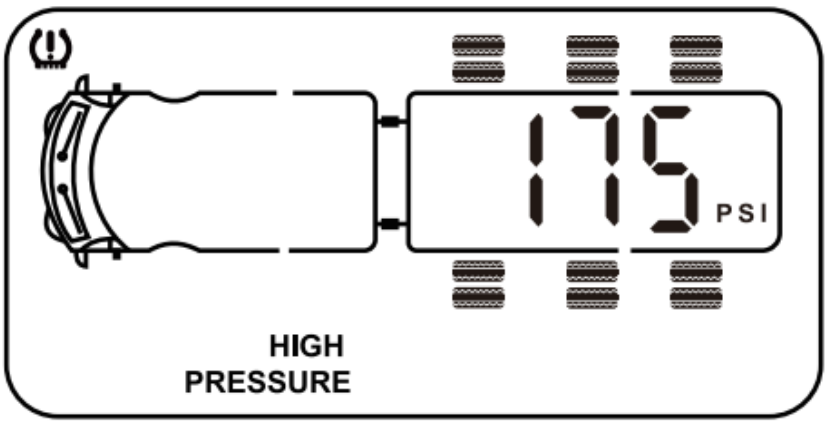
1. Hold down the SET button for 3 seconds to enter setting mode.
2. Press + or - button to select the Car or Towing Vehicle "LOW PRESSURE" alarm value as below, and press SET button to select.
3. Press + or - button to adjust the high-pressure alarm value then press SET button to confirm.
4. Then hold down the SET button for 3 seconds to save and exit.



Alarm value setting

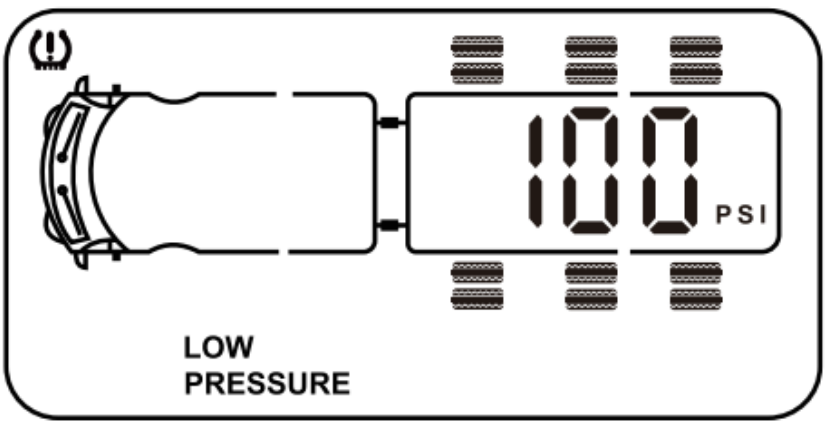
High Alarm Value Setting of the Trailer

1. Hold down the SET button for 3 seconds to enter setting mode.
2. Press + or - button to select the Trailer "HIGH PRESSURE" alarm value as below, and press SET button to select.
3. Press + or - button to adjust the high-pressure alarm value then press SET button to confirm.
4. Then hold down the SET button for 3 seconds to save and exit.



Low Alarm Value Setting of the Trailer

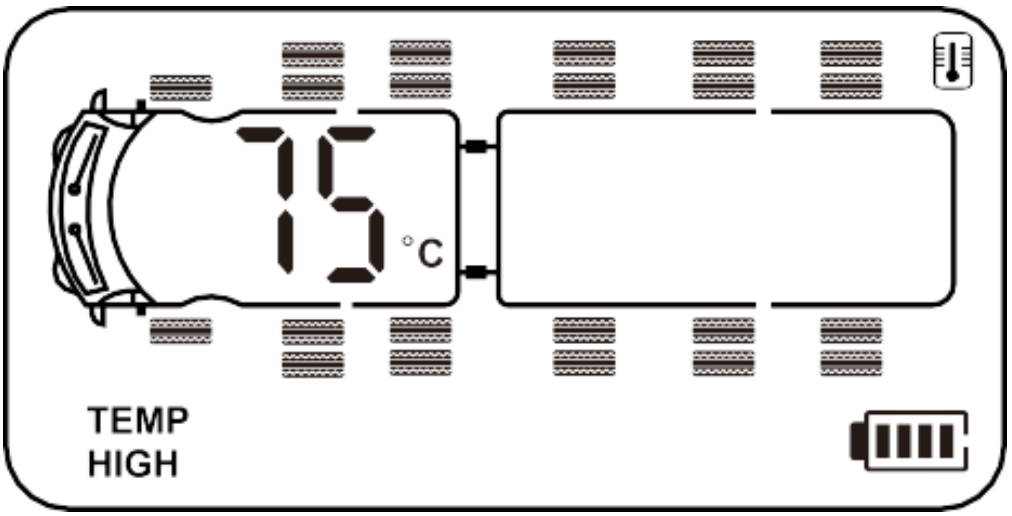
1. Hold down the SET button for 3 seconds to enter setting mode.
2. Press + or - button to select the Trailer "LOW PRESSURE" alarm value as below, and press SET button to select.
3. Press + or - button to adjust the high-pressure alarm value then press SET button to confirm.
4. Then hold down the SET button for 3 seconds to save and exit.



Alarm value setting

Tire temperature alarm value setting

Holding down SET button for 3 seconds to enter setting mode in standby. Click + or - button to select " HIGH TEMPERATURE "alarm value as below,then click SET button to starting. Click + or - to adjust the high temperature alarm value. Click SET button to confirm. Finally holding down SET button for 3 seconds to save and exit.



Alarming state

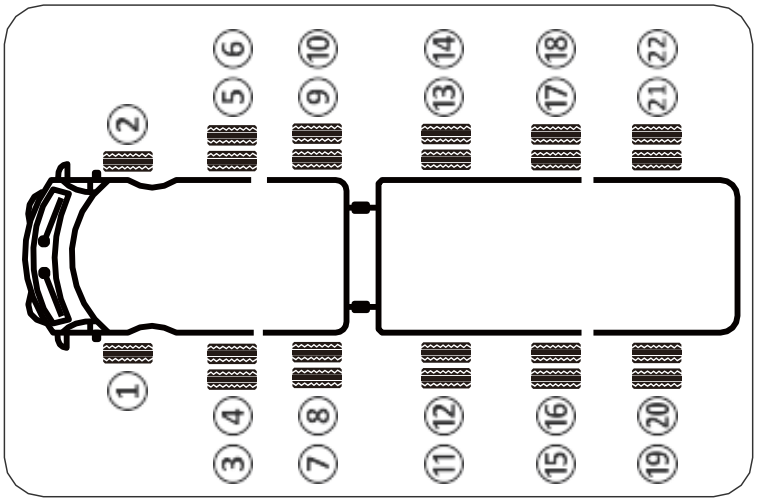
When the tire pressure and temperature exceed the user-defined safety range, the corresponding parameters and fault icons on the monitor screen will flash, accompanied by alarm sound. You can press any button to cancel the alarm sound, but the fault icon remains on and flashes until all tire failures are removed.For example, the alarm values set by the user are as follows:

For example,alarming value setting by user as below:

High pressure alarm value：175PSI(12BAR/1200)、

Low pressure alarm value: 100PSI(6.9BAR/690)、

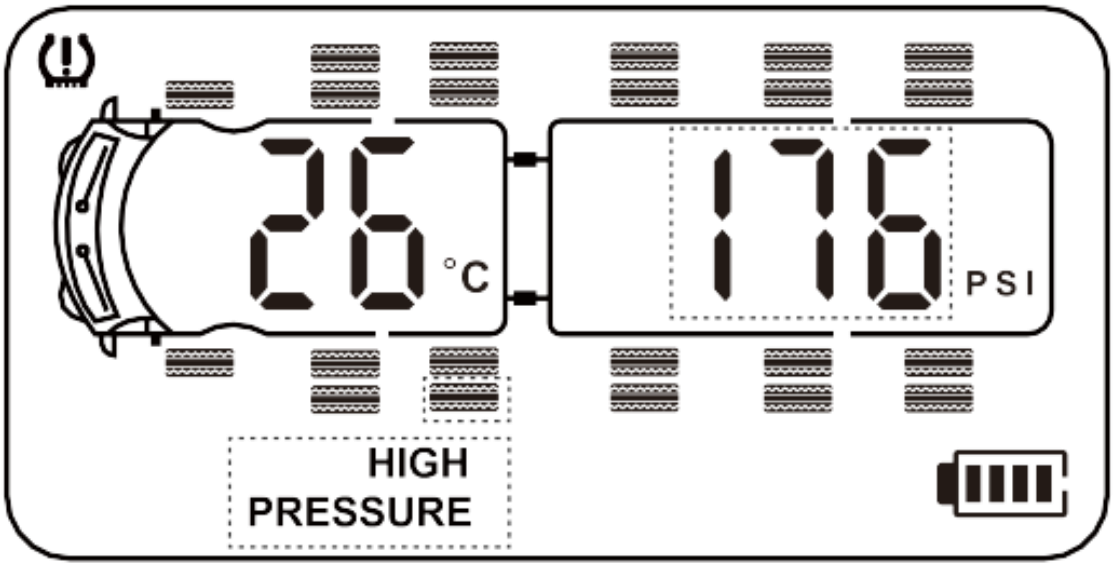
High temperature alarm value:65℃



Tire pressure sensor diagram

High pressure alarm

For example: When the pressure of No. 7 tire is 176PSI(exceeding user set value)the monitor will display as below,accompanied by alarm sound.

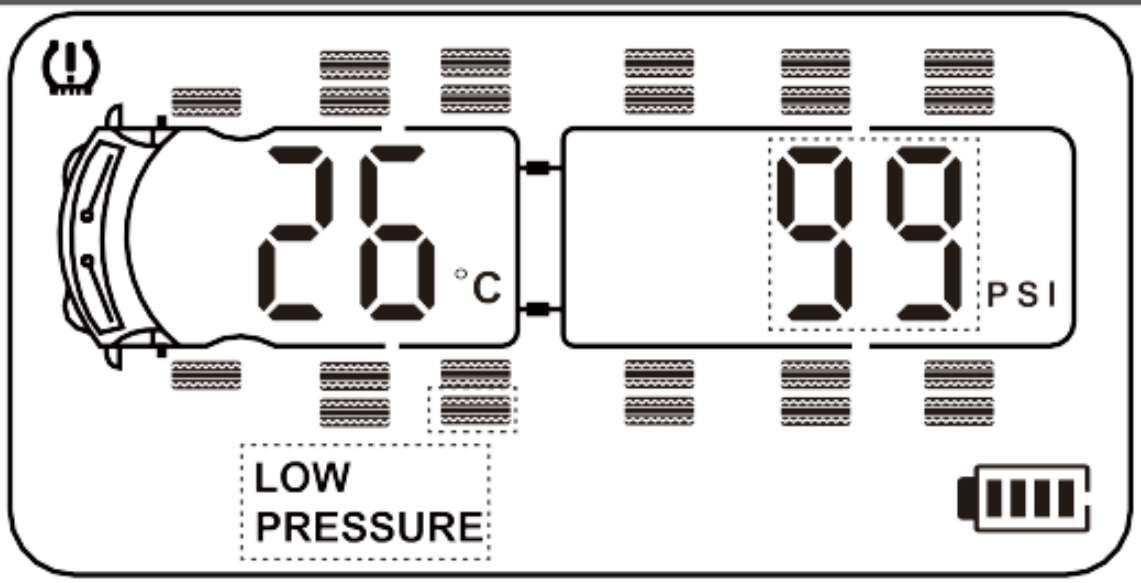


Circled icons will be flashing

Alarming state

Low pressure alarm

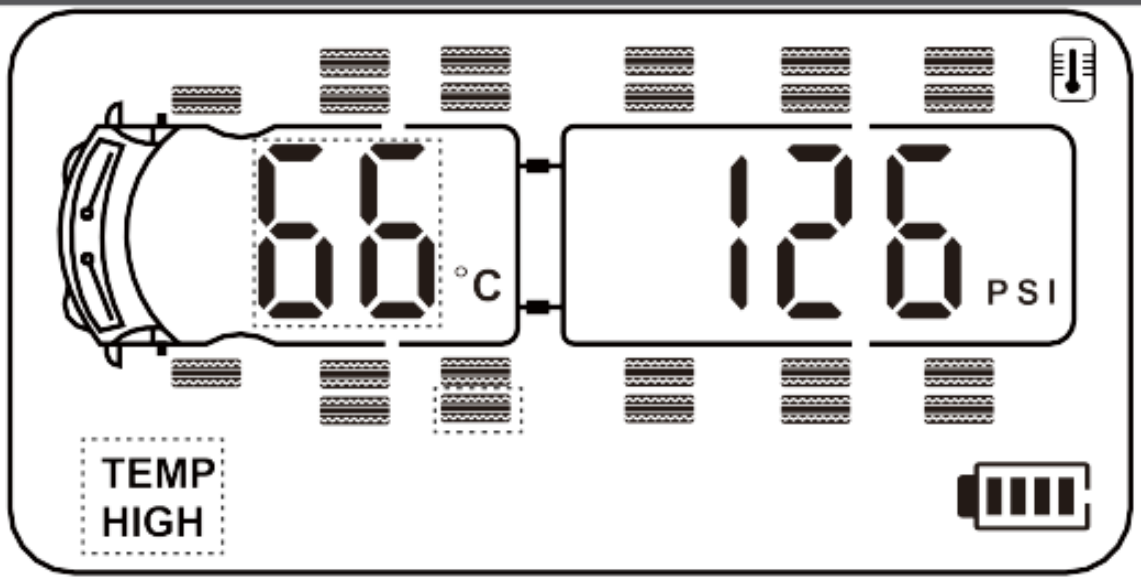
For example: When the pressure of No. 7 tire is 99PSI (lower thanuser set value), the monitor will display as below,accompanied by alarm sound.



Circled icons will be flashing

High temperature alarm

For example: When the temperature of No. 7 tire is 66°C (exceedinguser set value),the monitor will display as below,accompanied by alarm sound.

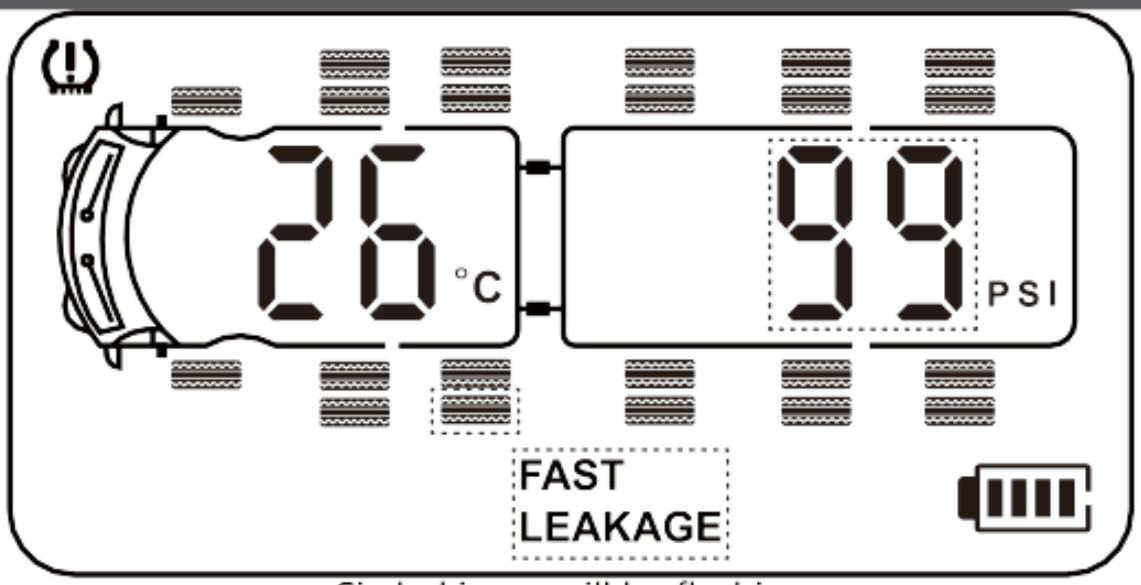


Circled icons will be flashing

Alarming state

Air leakage alarm

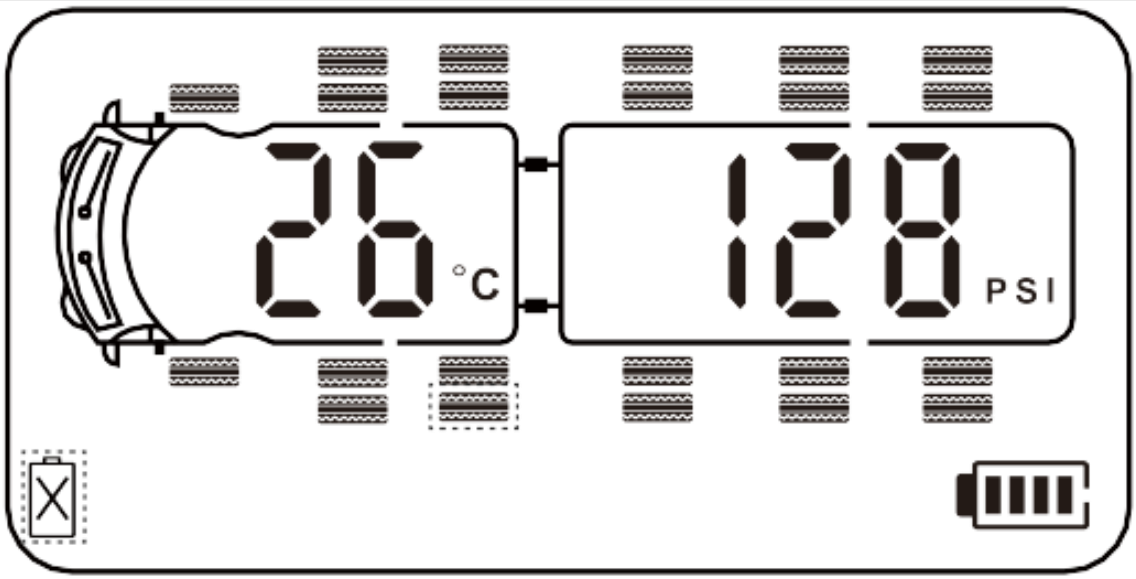
When No.7 is leaking,monitor will show corresponding tire pressure and icon flashes with sound.



Circled icons will be flashing

Sensor low power alarm

When sensor battery power is low,corresponding tire sensor and battery low level icon will flash on monitor and icon with sound.



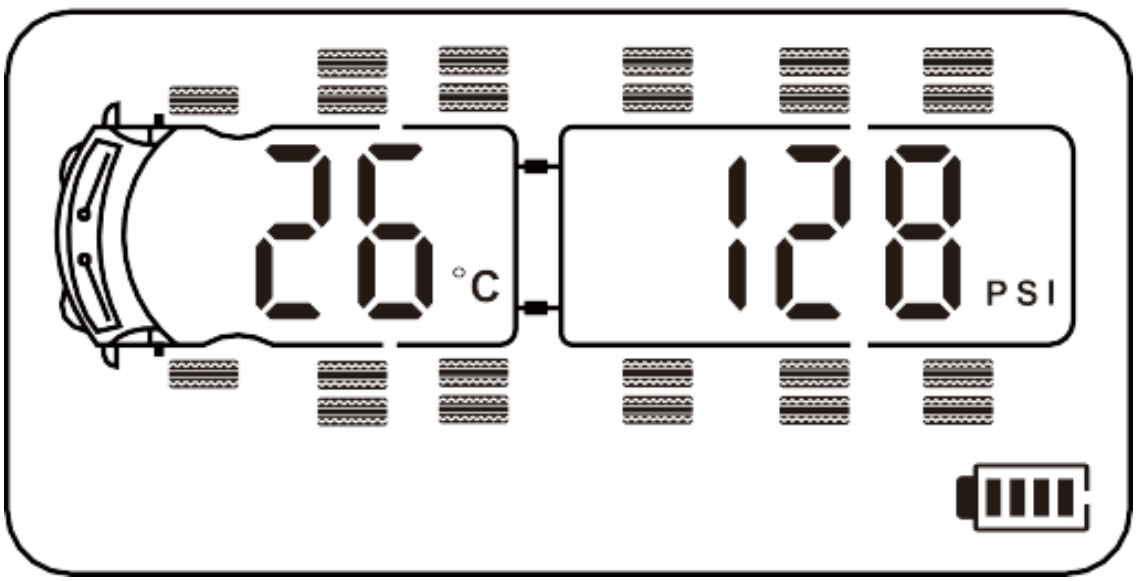
Circled icons will be flashing

Other functions of monitor

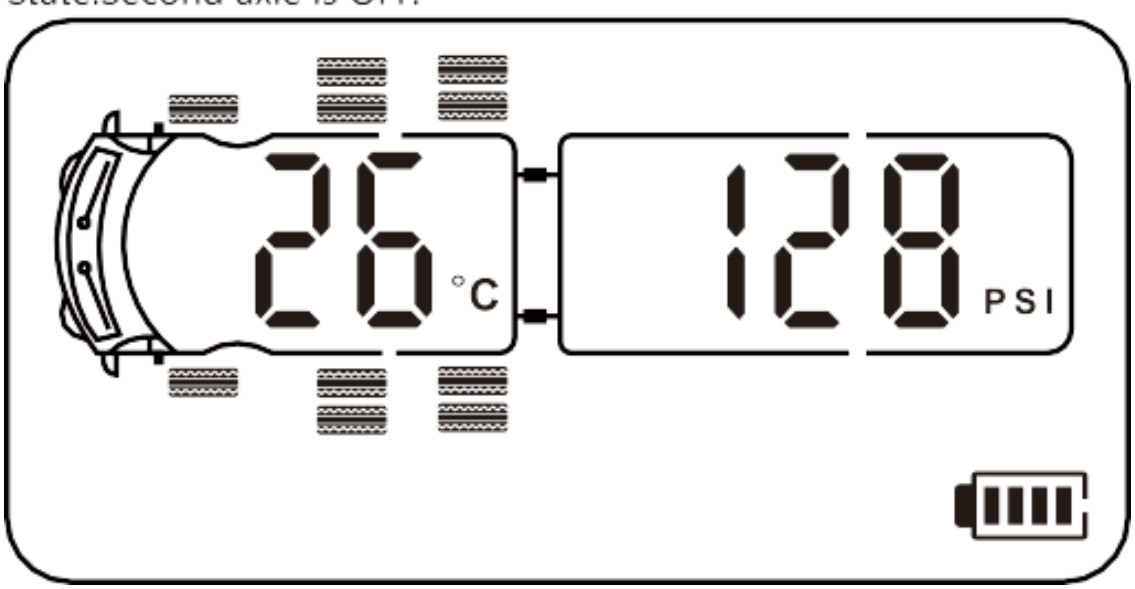
Turn the Second axle's sensor ID ON or OFF

In working state,hold down the SET and + buttons until beeps to turn ON or OFF the Second axle

State:Second axle is ON.



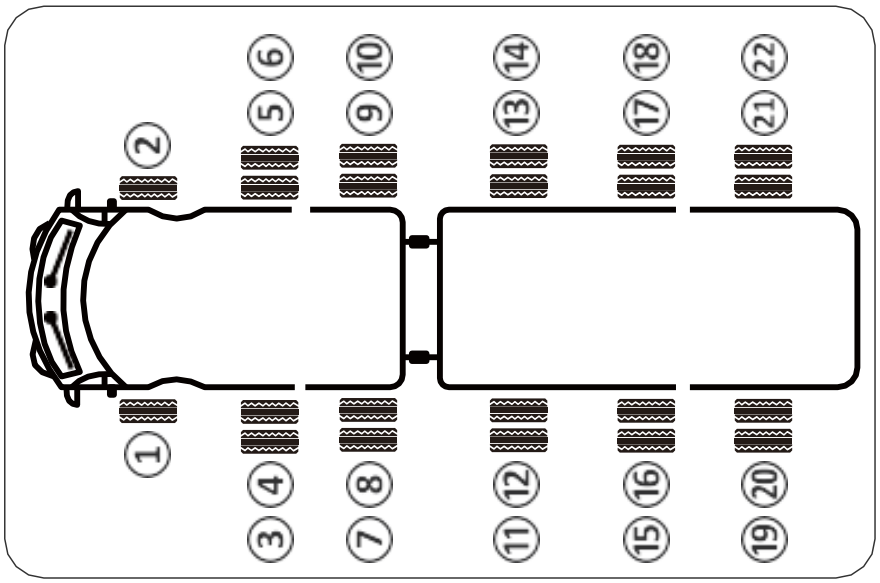
State:Second axle is OFF.



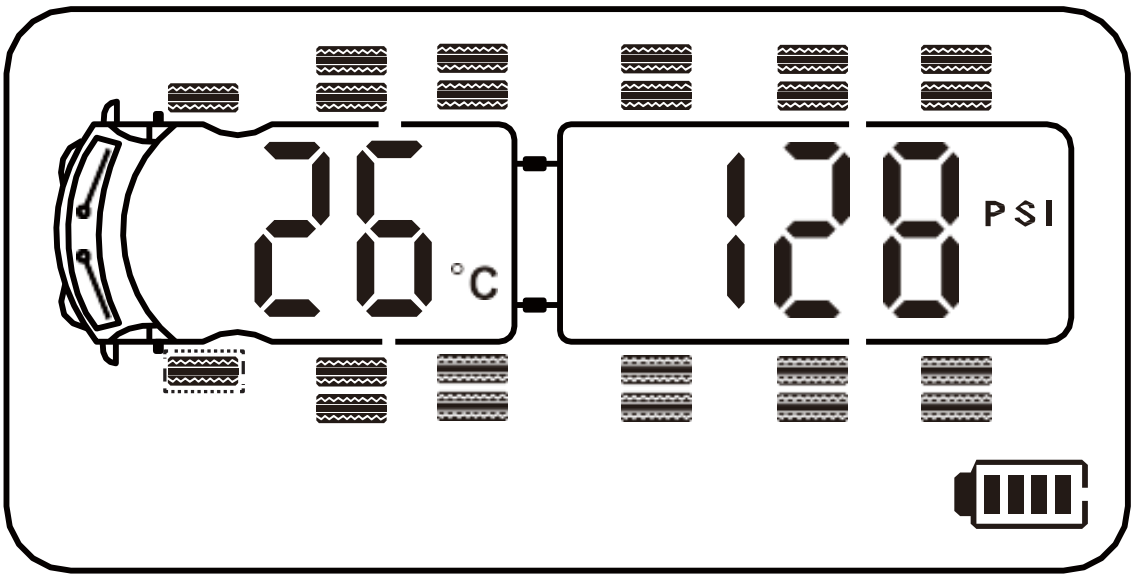
Other functions of monitor

Read the tire pressure and temperature individually

In standby,Click + or - button to select the tire sensor value to read, and the selected tire pressure and temperature is flashing.



Tire pressure sensor diagram



For example:Reading the NO.1 sensor and tire

and value on monitor will flash.

Normal working mode,monitor will show all the tire pressure and temperature in turn and switch automatically for each tire.

Other functions of monitor

Turn individual sensor ID on or off

Holding down + and - button together until show like figure 1 or figure 2.Then click + or - to select the tire sensor location and then click the SET to turn it on or turn it off. Finally click and holding SET to save and exit to standby.

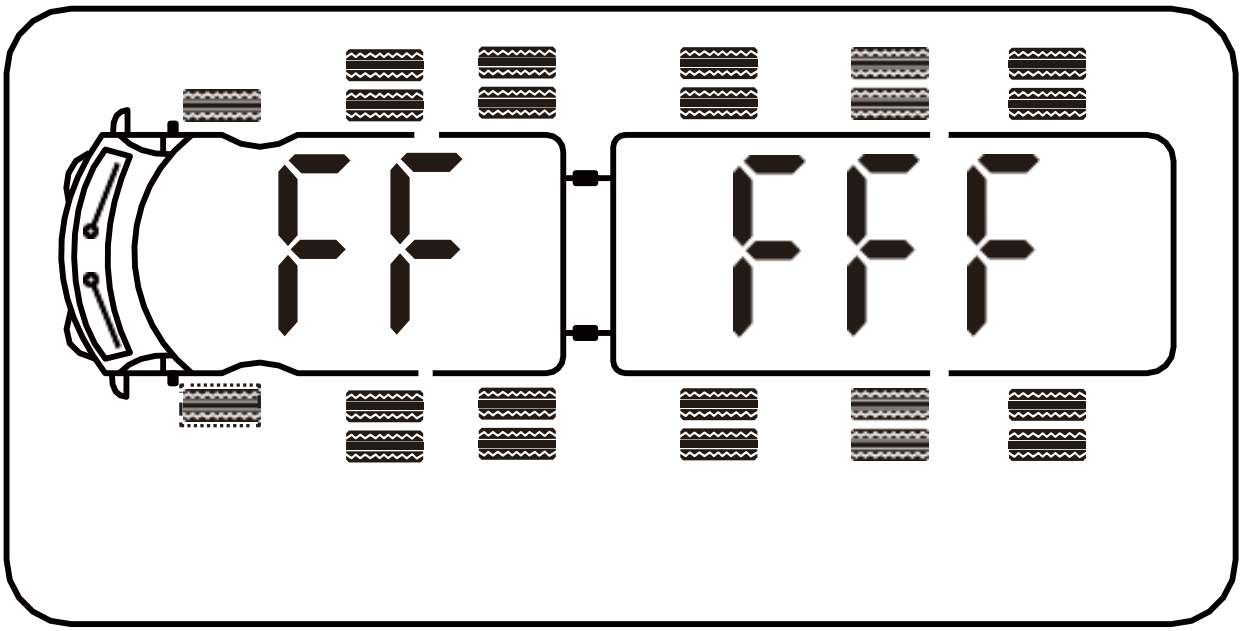


Figure 1:Show FF FFF or sensor ID if turn on

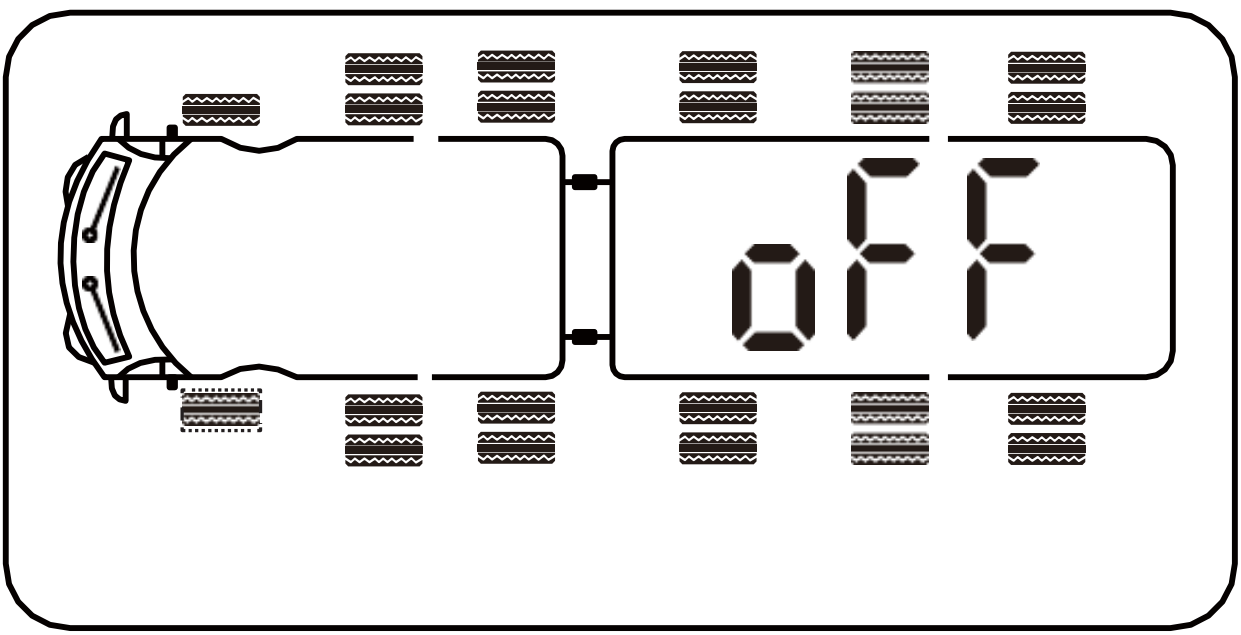
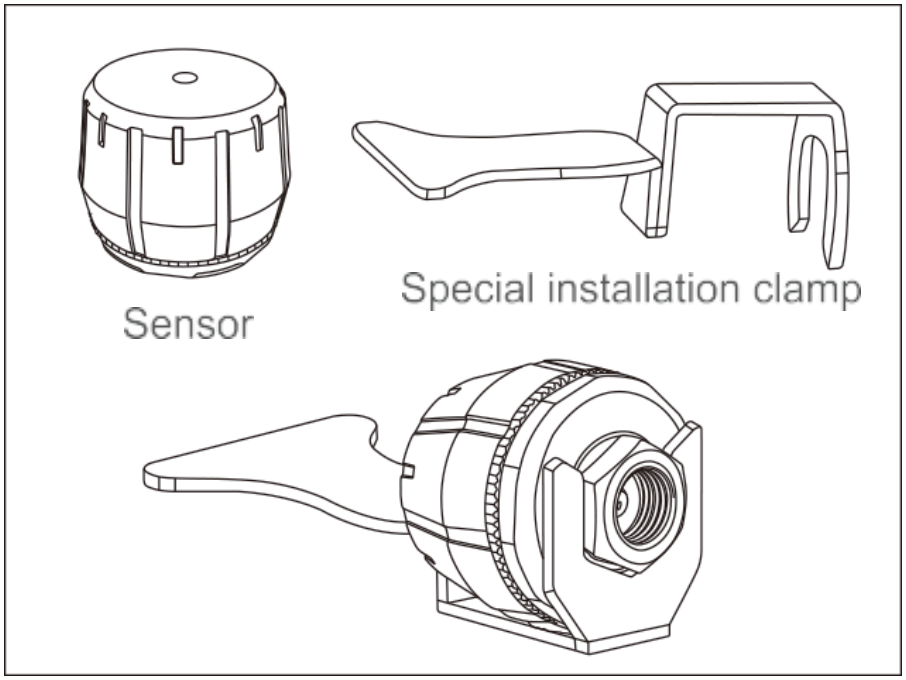


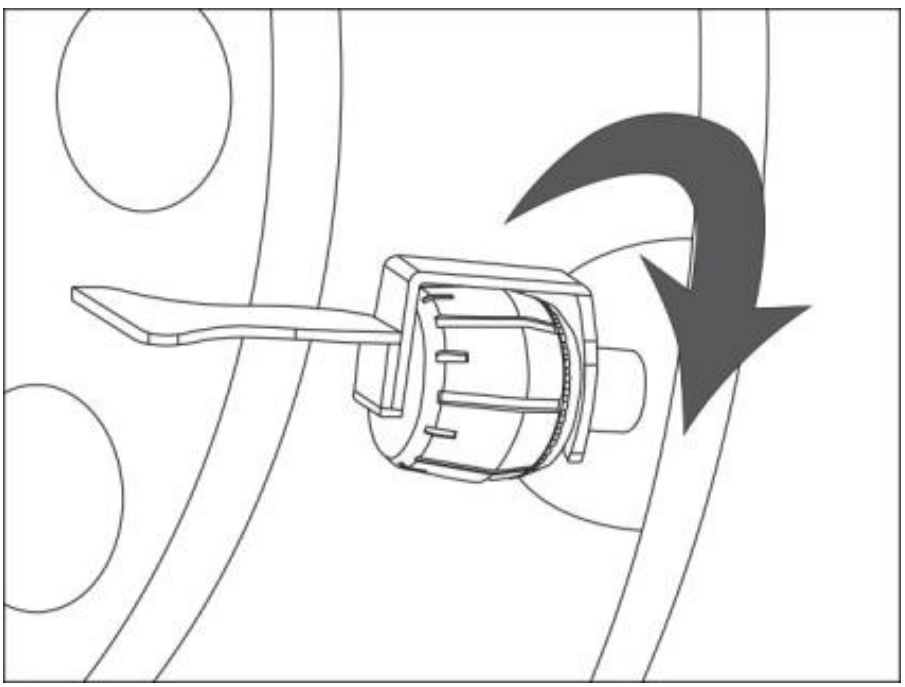
Figure 2:Show OFF if turn off

TP External sensor installation

Normal sensor installation method



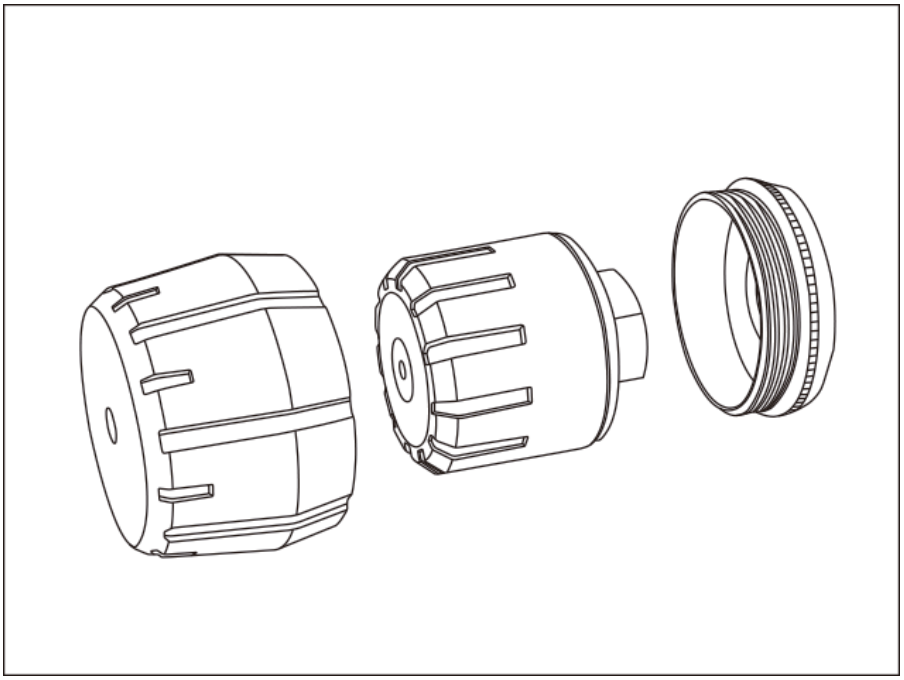
1 Put the sensor into a special clamp.



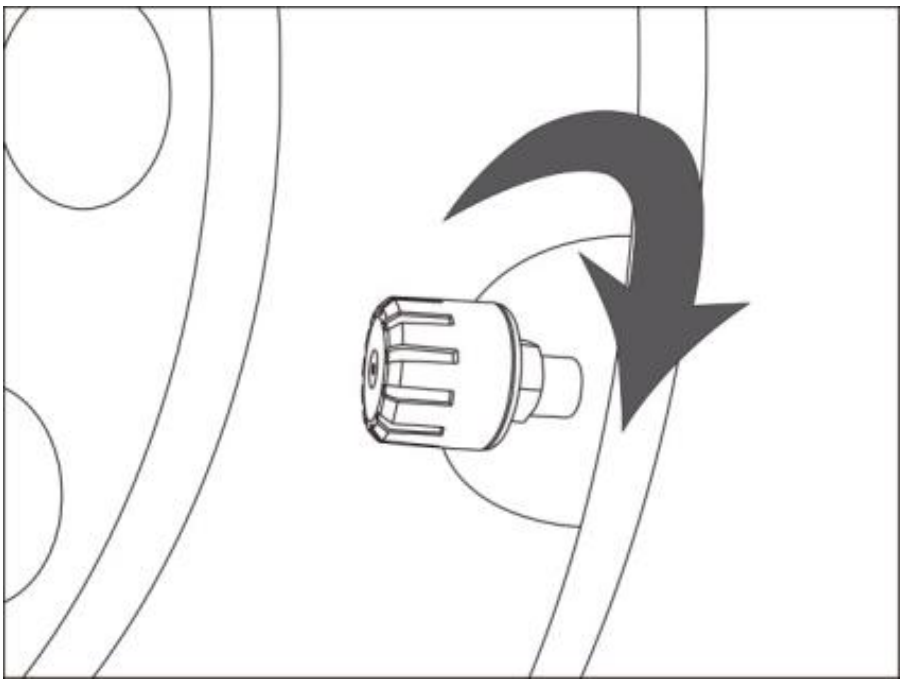
2 Tighten the sensor by clockwise.

TP External sensor installation

Remove anti-theft case sensor installation method



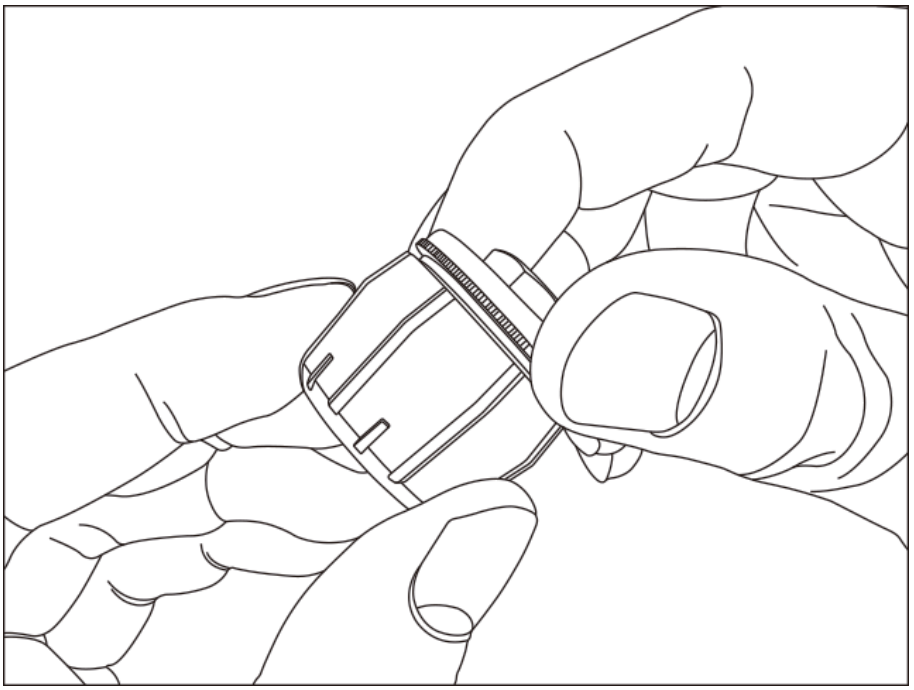
1 Unscrew the first floor housing by anticlockwise, take out the sensor.



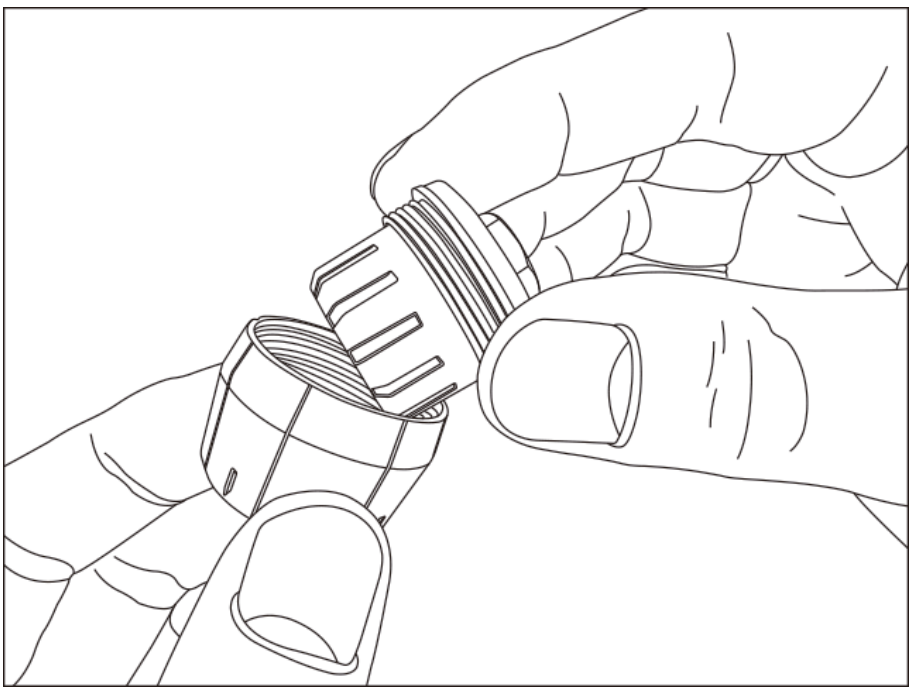
2 Tighten the sensor by clockwise.

Replace TP external sensor battery

caution:sensor battery has been installed before delivery, please don't take down if you don't want to replace battery.

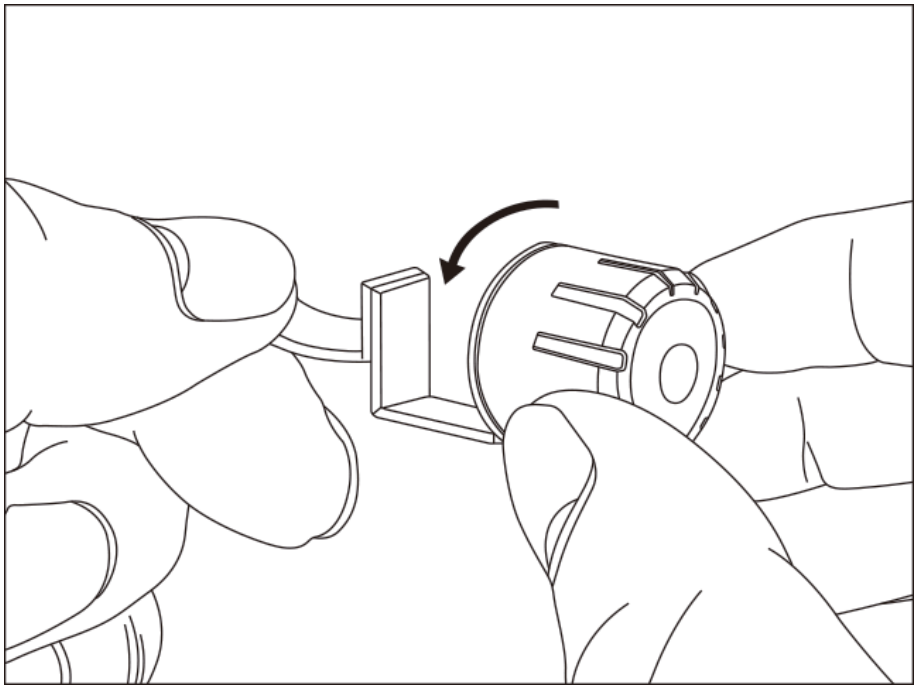


1 Unscrewing by anticlockwise directly.

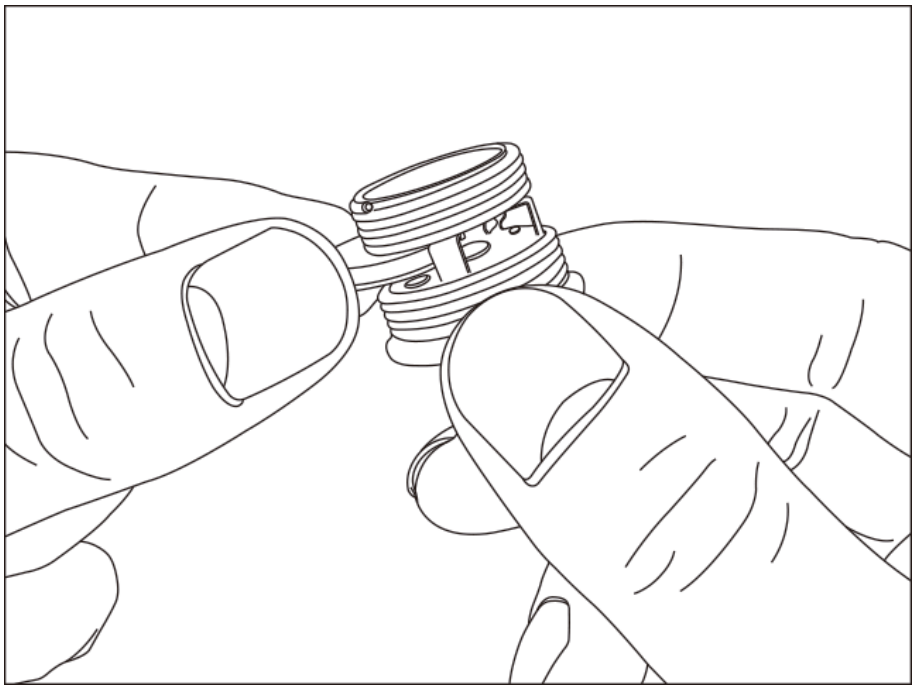


2 Take out the first floor anti-theft housing and cap.

Replace TP externalsensor battery



3 Unscrew the inner case of sensor by anticlockwise after using a special clamp to fasten sensor.



4 Take the battery out .(Put into a new battery.)

Parameter of TP external sensor

Sensor/Emitter Specification
Working humidity : 100%
Weight : 18G(TP)
Size(diameter*height) : 28.5mm*26.5mm(TP)
Battery rated capacity : 120mA
Standby current : 1μA
Pressure testing range : 0~14BAR(0~203PSI)
Temperature testing range : -40℃~+135℃
Emission frequency : FSK433.92MHZ

Notice and Statement

•Safety of car tyre can not be relied on products all.Driver should periodically check the tires, make sure the tire puncture, cut, drum kits and other injury - free.

•When product warn ,car should be stopped as soon as possible and deal with it.

•Product cannot predict sudden tire damage caused by external forces.

•Don't operate this product while driving.

•Sensor battery life associated with mileage of the car.

Failure exclude

❶ Monitor can not display properly

Ⓐ Ensure the monitor is turned on.

Ⓑ Ensure whether the battery is installed.

Ⓒ Ensure whether the battery polarity of the monitor is wrong.

Ⓓ Check whether the battery is low power. Battery may be have no electricity after being used for a long time. It is recommended to check whether the monitor has a display after the power cord is connected.

Ⓔ If use the vehicle power supply, please ensure it is connected properly.

Ⓕ Check whether the monitor come into sleep mode. This mode will start automatically while the vehicle is stopped. At the time the power of the monitor is consumed minimally. The monitor can be awakened and restore normal state when the vehicle traveling again , or the monitor is shaken, or press a button on the monitor.

Ⓖ If the above treatment methods are unable solve the problem, please contact the local dealer.

❷ Monitor do not display tire status sporadically

Ⓐ Check whether the sensor is closed to the vehicle. Because the data transmission between the sensor and the monitor is in a wireless way. This way is limited to the distance.

Ⓑ Check whether the sensor installed the CR1632 lithium battery.

Ⓒ Check whether the sensor installation is right.

Ⓓ Check whether the sensor has no electricity. Battery may be have no electricity after being used for a long time. We recommended to replace a new one.

Ⓔ When you need to replace battery, please take off the battery and wait 10s, then install it.

Ⓕ Check whether the sensor is not confused. Because each sensor has a unique ID number, the monitor could only recognize the same set sensor.

Ⓖ If the above treatment methods are unable solve the problem, please contact the local dealer.

Failure exclude

❸ **When the monitor show the low battery power icon and still be used,it will lead to abnormal phenomenon. If you recharge it, it will be restore normal.**

❹ **Monitor screen display wrong color**

Check whether the temperature is too high in vehicle（above 65℃), when the temperature return to normal lever, it will display properly.

❺ **Monitor screen update slow down**

Check whether the temperature is too low in vehicle （lower than -20℃） , when the temperature return to normal lever, it will display properly.

❻ **The monitor do not display tire data after rebooting**

When the sensor detect tire pressure with more than 1 PSI, the sensor will transmit the data to the monitor, the monitor will display the data when the vehicle is running.

❼ The model used for the vehicle range (pressure range within 217PSI/15BAR) like bus,coach ,car, automobile,sedan,limousine, sports car, coupe,SUV,wagon,caravan,van,truck,trailer,all-terrain vehicle, taxi and so on.