Tire pressure monitoring system

# TPMS

# USER MANUAL

**Solar Power TPMS**

**Kind reminding:**
**1.Unplug the charger when fully charged.**
**2.Charging environment must be under 45℃.**
**3.Monitor charging voltage must be 5V DC.**
**IF YOU DON´T FOLLOW ABOVE REQUIREMENTS, IT´S EASY TO DAMAGE THE PRODUCT.**

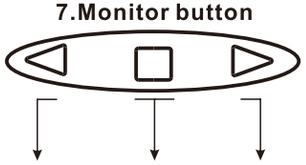
## SPECIAL REMINDING

**1.Before using, press the left button ◁ for 3 seconds to turn on, then charge the monitor for 3 ~ 4 hours.**
**2.Solar automatic charging.**
**3.The system preset with alarm value, no matter air pressure over 3.0Bar(43Psi) or under 1.8Bar(26Psi), temperature over 68℃, as well as quick or slow air leakage, it will alarm.**
**4.Suggested air pressure range: 2.2~2.3Bar (32~34Psi) in summer and 2.4~2.6Bar (35~38Psi) in winter.**
**5.Regarding to solar charging, the charging current will change according to the intensity of sunlight.**
**6.Charging method as following.**

A: USB

B: 5V DC

**7.Monitor button**

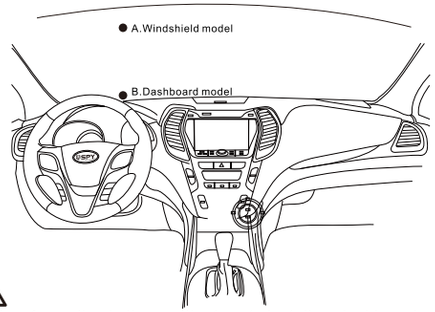


left button setting button right button

**Notice: When monitor battery runs out or monitor in low power (The monitor power icon indicates ) , it needs to charge in time.**

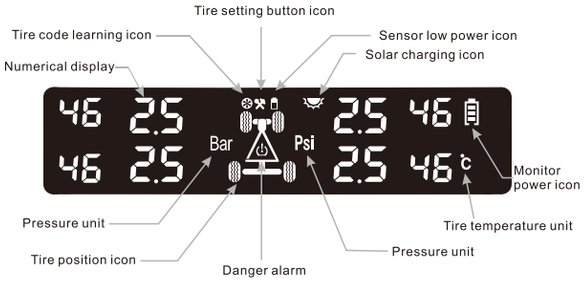
40113500200

## Monitor Installation Position

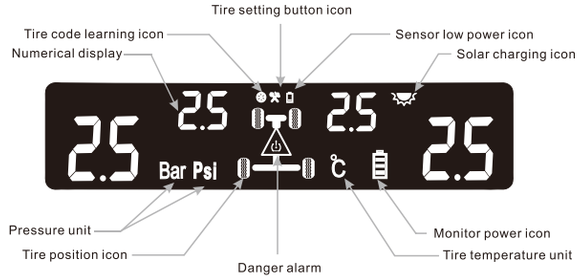



Notice: According to the monitor type to install on dashboard or windshield, the monitor location should be far away from metal, car DVR, DVD or other car electronic products.

**A Type Monitor Icon(tire pressure and temperature show together)**



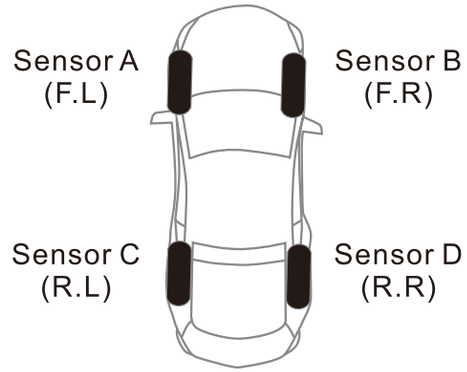

**B Type monitor Icon(tire pressure and temperature show alternately)**




## Function Specification

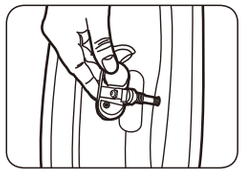
**1.After parking, the monitor will automatically go to sleep mode, and will start to work when triggered by movement.**
**2.In power off status, press left button ◁ for 3 seconds to turn on the monitor. In power on status, press left button ◁ to turn off monitor.**
**3.Start monitor in the sunlight, the monitor will keep in high luminance for 30 seconds and go to adjustable luminance mode (press left button ◁ to choose high, middle or low luminance). The factory setting is low luminance. If without sunlight, the monitor will automatically go to low luminance power saving mode.**
**4.In power on status, press right button ▷ for 3 seconds, the monitor can restore factory setting. There is a Be... sound to indicate setting success.**
**5.When the monitor alarms, press any button to turn off the sound.**
**6.In power on status, press setting button □ for 3 seconds to set the system parameter.**

## Sensor Installation Position

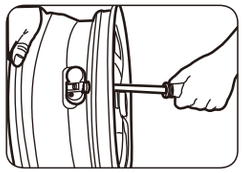



## Internal Sensor Installation

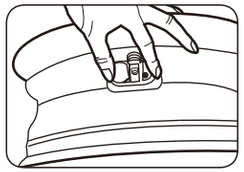
1. Remove the origin valve and install the sensor



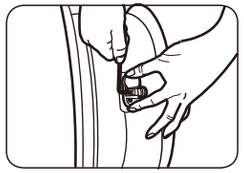
2.Lock sensor valve screw by sleeve



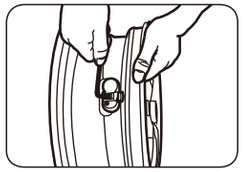
3. Put the sensor on the wheels in order to touch well



4. Hand on and press the sensor housing, tighten the screw behind the sensor by hexagonal screw driver

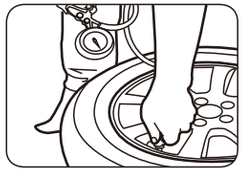


5. Don't fit the screw too tight

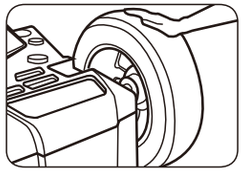


6. The picture after installation .

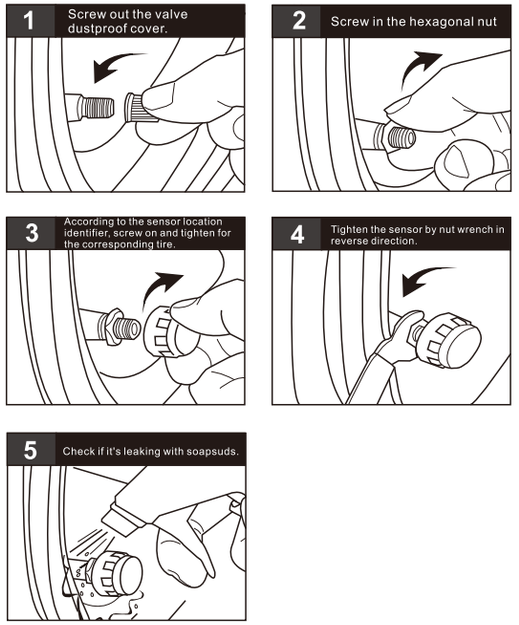

7. Charge Nitrogen gas



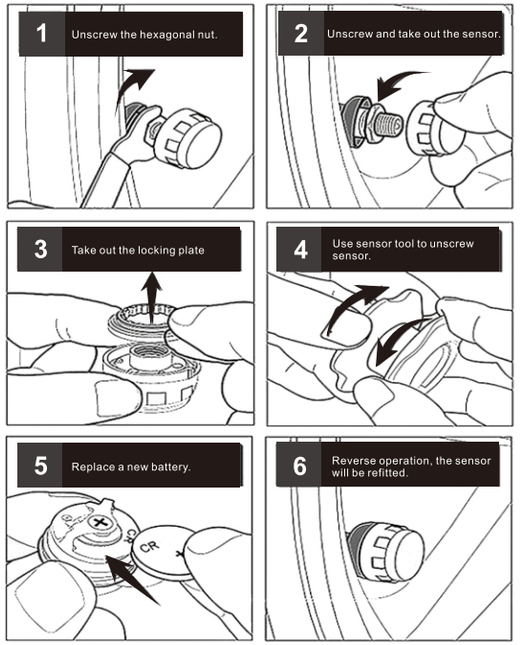
8. Balance tire



## External Sensor Installation




## Battery Replacement



# Alarm and Function Description

## 1 Low pressure alarm


When tire pressure below 1.8Bar(26Psi), the monitor will alarm with Bi-Bi-Bi sound and monitor in high luminance level. The corresponding tire icon flashes.

## 2 High pressure alarm


When tire pressure over 3.0Bar(43Psi), the monitor will alarm with Bi-Bi-Bi sound and monitor in high luminance level. The corresponding tire icon flashes.

## 3 High temperature alarm


When tire temperature over 68℃, the monitor will alarm with Bi-Bi-Bi sound and monitor in high luminance level. The corresponding tire icon flashes.

## 4 Sensor low power alarm


When the sensor battery below 2.1V, sensor low power icon appears, the monitor will alarm with Bi-Bi-Bi sound and monitor in high luminance level. The corresponding tire icon flashes.

## 5 Sensor failure alarm


When the sensor failure, after driving for a certain time, the monitor will alarm with Bi-Bi-Bi sound and monitor in high luminance level. The Er icon and corresponding tire icon flash.

# Monitor Parameters Setting

## 1.Learning code

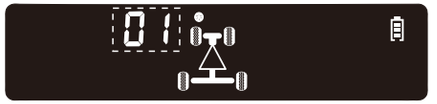
**The product had been paired in factory. No need to learning code.**
**If replace sensor battery or change tire position, it needs to learning code again, and the steps as followings.**

**1** Press setting button ☐ for 3 seconds, enter into the setting interface.

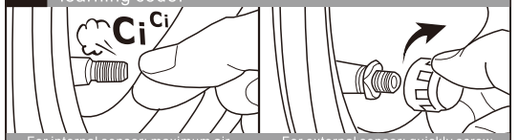
**2** In the setting interface, see tire learning icon flashing.

**3** Press left button ◁ once, enter into A tire learning code status.

**4** Front left A tire icon flashes




**5** Quickly screw in sensor, or make air exhaust to learning code.



For internal sensor: maximum air exhaust for 5~10 seconds.

For external sensor: quickly screw in the sensor

**6** A Be sound heard, it means the learning code success.


Note: After front left A tire learning code success, press right button ▷ once, repeat above steps to finish learning code for other tires.

**7** After learning code success, press setting button ☐ twice to exit


Value refresh [speed over 20KM/H(12.4MPH)]

## 2.High pressure setting

**1** Press setting button ☐ for 3 seconds, enter into setting interface.

**2** Press right button ▷ once

**3** Tire setting button is flashing

**4** Press left button ◁ once to enter into high pressure setting, press left button ◁ again to adjust the left digit.

**5** High pressure first digit is flashing.


**6** Press right button ▷ to change the digit.

**7** Change the digit as you want, then press left button ◁ once to confirm.

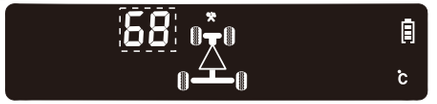
When a beep sound heard, it means the high pressure setting success.

## 3.Low pressure and high temperature setting

**Refer to high pressure setting method, repeat step 1-3, continue to press left button ◁ once, then press right button ▷ once to enter into low pressure setting interface. Repeat step 1-3, continue to press right button ▷ twice to enter into high temperature setting interface.**

**1** Low pressure setting interface


**2** High temperature setting interface




## 4.The pressure unit setting

**Press setting button ☐ for 3 seconds to enter into setting interface, press right button ▷ once to see tire setting button is flashing, press the left button ◁ once to see high pressure setting value, and then press right button ▷ 3 times to see Bar icon flashing. It means the pressure unit is Bar now.(Notice: If see Psi icon flashing, the measurement unit is Psi). Press the left button ◁ once, will hear a Be sound, at this moment Psi icon flashing, the pressure unit has been changed. Press setting button ☐ twice to exit and pressure unit setting success.**

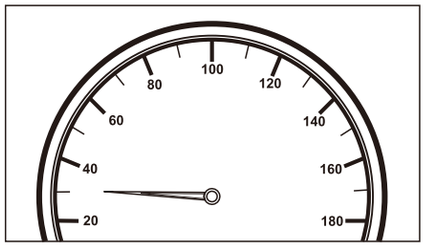
**1** Pressure unit setting interface


## 5.Restore to factory setting

**In power on status, press right button ▷ for 3 seconds, the monitor can restore factory setting. There is a Be... sound to indicate setting success. It will automatically clear the previous setting value.**

## Data refresh

The system will automatically refresh the value of tire pressure and temperature when car speed over 20KM/H(12.4MPH)
**Note: After installation please drive to refresh the value.**




Parameter:
Receiver working voltage:5V
Receiver default alarm value:
High pressure:3.0Bar(43Psi)
Low pressure:1.8Bar(26Psi)
High temperature:68℃
External sensor working voltage: 3.0V CR1632 battery
Internal sensor working voltage: 3.6V
Sensor pressure range:0~3.5Bar(0~50Psi)
Display solar charging self-protection:
The display wil stop solar charging when vehicle's inside temperature over 65℃. And it will start to charge when the temperature below 45℃.

**Note: 1Bar=14.5Psi=100KPa=1.02Kgf/cm$^2$**

**Trouble Shootings:**

**Sensor interface leak gas:** Nozzle edge is usually caused by uneven gap

**Sensor lost**

Buy new sensors from our company, then learn the new code for matching

**The battery runs out**

Please replace new CR1632 3.0V battery by yourself

**Tire conversion processing**

Such as the tire replacement position, the sensor must identify the location of their respective housing swap.

**Notes and Statement**

This product is only suitable for tire pressure within safe 12V battery model vehicle; not suitable for trucks or 4 wheels vehicle with tire pressures over 3.5Bar/50Psi

Tire safety must not rely on this product,should regularly check the tire, make sure without puncture, tirecut, bulge and other damages.

External sensor battery life is related with car's mileage, working temperature can not exceed -20$^0$C ~ +70$^0$C

Internal sensor working temperature range-40$^0$C ~+100$^0$C

**Note:** This system can monitor effectively the automobile wheels' tire pressure and temperature, but could not prevent the occurrence of unexpected accidents.

The Company will not be liable for any resulting from the damage of this product caused by direct or indirect losses.