

STEELMATE
Automotive

TP-05E

Think safety think Steelmate



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PP10077/A

*TPMS with external sensors
Match original car A/V monitor*



Manual

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Important notice

- This unit is only for vehicles with 12V DC and its tire pressure is within 3.5 Bar/50 Psi
- This unit should be installed by a professional technician according to the installation manual
- TPMS (tire pressure monitoring system) is designed to help the driver to monitor the tire irregularities. It is the driver's responsibility to react promptly to alerts. Abnormal tire pressure should be corrected ASAP.
- This is a wireless RF product, therefore, the signal may be affected by the poor environment, RF interference, low sensor battery or a damaged sensor.
- We do not guarantee or assume liability for the loss of the TPMS sensors.

About the product

This TPMS matches with the original car A/V monitor. It can work with PAL or NTSC monitor. The external wireless sensor measures the tire pressure and temperature, and easy for installation. Once installed in your vehicle, the system will automatically monitor tires in real-

time for pressure and temperature. When there is any abnormal tire pressure and/or temperature happened, the system will, in real-time, transmit signals to activate an alarm and warning the driver about tire problem.

Our TPMS can help you to avoid tire accidents due to tire failure, to reduce the fuel consumption and to extend the tire life.

Technical specification

Sensor:

Operating frequency:	433.92MHz
Battery voltage:	3V
Operating temperature:	-20°C~+60°C/ -4°F~140°F
Pressure range:	0~3.5 Bar/0~50Psi

Control unit:

Working frequency:	433.92 MHz
Working voltage:	9~16V
Working temperature:	-40°C~+85°C -40°F~185°F

Air pressure unit

1 Bar = 14.5 Psi = 100K Pa = 1.02 Kg/cm²

Key features

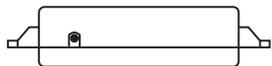
- Match with original car A/V monitor
- Easy-to-install external sensor with locking design
- Visual and audible warning for abnormal tire pressure and temperature
- Remote button to turn on TPMS on monitor
- Stable wireless signal transmission
- The monitoring pressure range can be set manually

Remote button & Installation



Press the remote button to control the TPMS

Pairing



Press and hold the Set button on the ECU



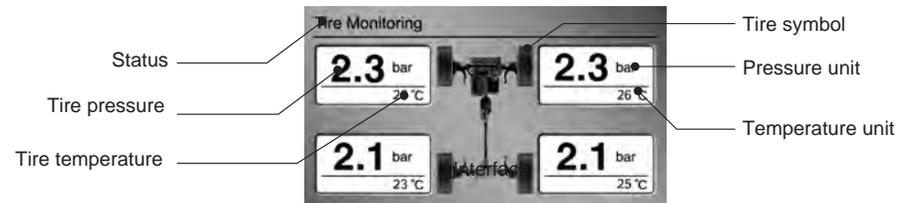
Press the remote button once



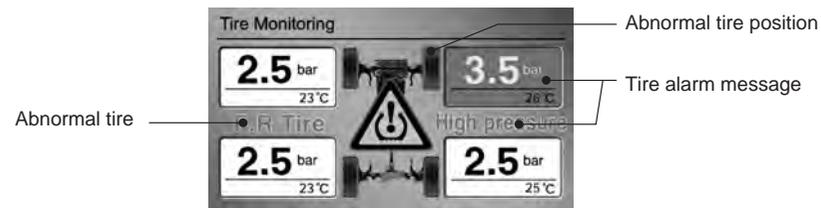
The tire monitoring interface will show on the display automatically to indicate the pairing successful

Interface of the TPMS

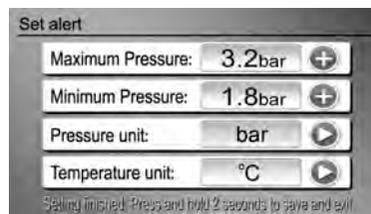
1. Main Interface



2. Alarm Interface



3. Setting Interface



- Press and hold the remote button 4 seconds to enter the setting mode.
- Short press the button to increase / change parameter. If the parameter in excess of maximum, the parameter will down to minimum.
- Press and hold the button 2 seconds to save and enter next parameter setting.

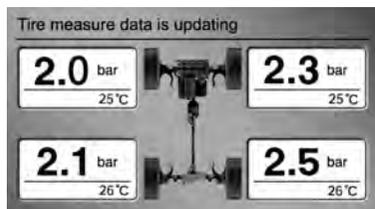
Default settings:

Maximum Pressure:	3.5 bar	(Adjustable range: 2.8~3.5 bar)
Pressure Unit:	bar	(Psi and Kg/cm ² are optional)
Minimum Pressure:	1.8 bar	(Adjustable range: 1.7~2.4 bar)
Temperature Unit:	°C	(°F is optional)
Maximum Temperature:	75°C	(Can not be changed)

How does the system work

Once the ACC is turned on, after 25 seconds the speaker will chirp once and A/V monitor will perform self-test. The latest tire information will be showed while no tire data updating (Picture 1), Once receive the new tire data signal, the updated tire data will be showed on the display. (Picture 2)

The system will exit the TPMS monitor interface without pressing the remote button 4 seconds.



Tire measure data is updating (Picture 1)



Tire monitoring (Picture 2)

Tire status Indication

Press the remote button once, the speaker will chirp once and the system will enter the tire information interface. The system will exit the information interface automatically after 8 seconds.



Press the remote button once



Tire information interface

Alarm warning for abnormal tire conditions

When the tire is abnormal (high pressure, low pressure, high temperature, fast leak, slow leak, low sensor battery or abnormal sensor), the speaker will chirp 5 times and enter the alarm interface. The corresponding abnormal tire symbol and information box will turn to red, the abnormal tpresure value or abnormal temperature value will turn to yellow, the speaker will chirp every 5 seconds. Press the remote button once, the system will alarm every 1 minute.



1. F.R (Front Right) tire high pressure



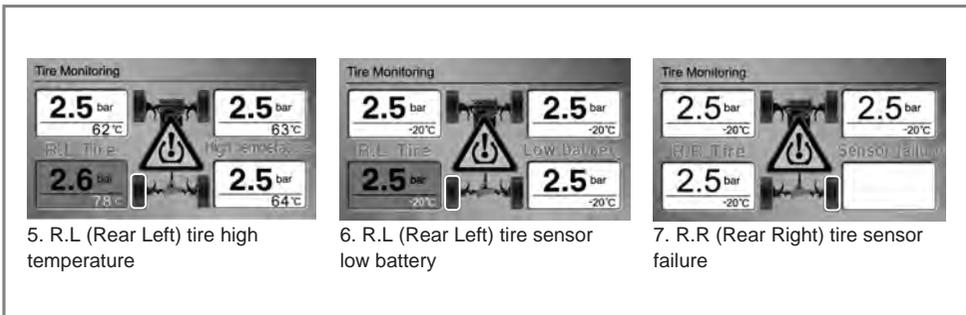
2. R.R (Rear Right) tire low pressure



3. F.L (Front Left) tire fast leak



4. R.L (Rear Left) tire slow leak



5. R.L (Rear Left) tire high temperature

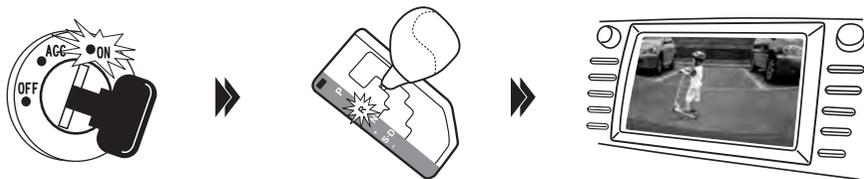
6. R.L (Rear Left) tire sensor low battery

7. R.R (Rear Right) tire sensor failure

Upgrade function

Rearview camera (optional)

When ACC is on and the reverse gear is engaged, the A/V monitor will show the rear view image automatically.



Rear view image priority: When ACC is on, as long as the reverse gear is engaged, the A/V monitor will only show the rear view image.

TPMS sensor programming

All sensors in this unit have been pre-set individually for each tire in the factory. Once the labeled sensors are installed in the corresponding tires, there will be no need to program the sensors.

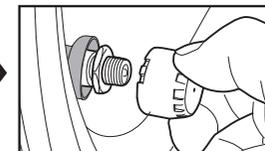
Whenever a tire position is changed, the sensor must be changed correspondingly.



25 seconds after ACC on, press the remote button 5 times to enter the sensor programming interface



Press the remote button to choose the tire which you want to program



Screw the new sensor to the corresponding tire



The system will receive the sensor signal and the corresponding tire pressure value will be showed on the monitor. Press the remote button once to confirm the programming.

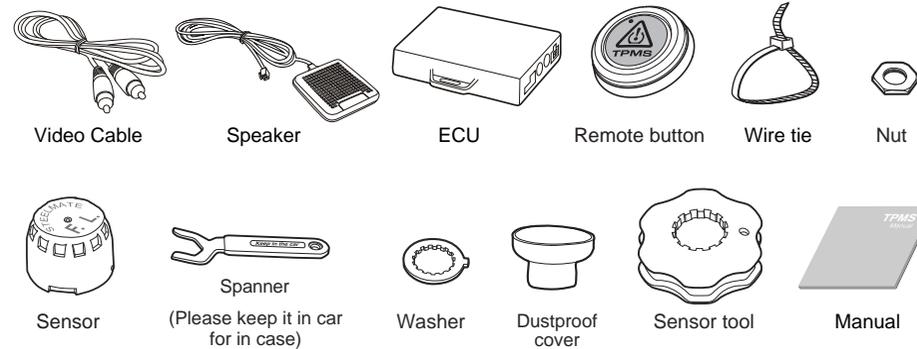


After all sensors are programmed successfully, press and hold the remote button to save and exit the programming interface.



The system will show the new tires information on the monitor after programming successfully

Packing list



Remote button installation

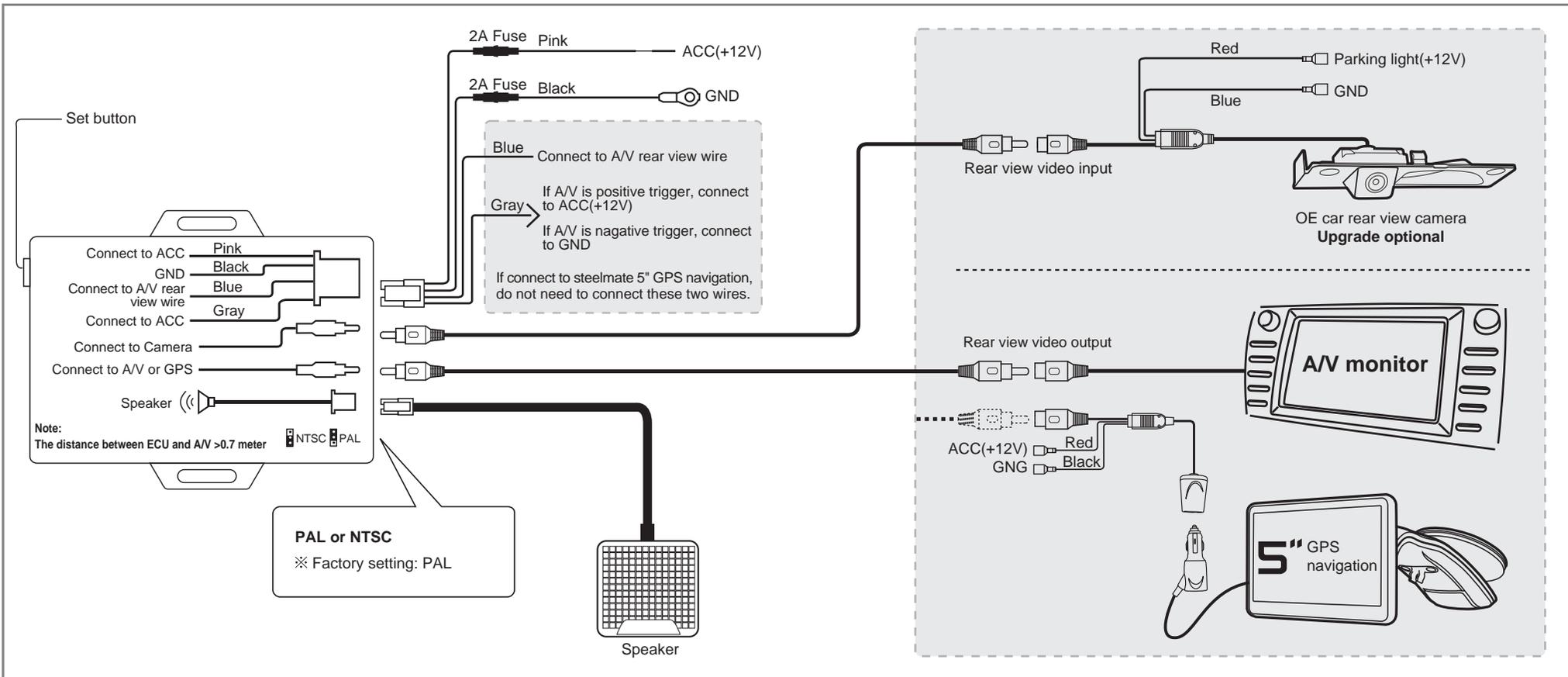


Glue the remote button on the dashboard for the driver easy to reach (refer to picture at right)

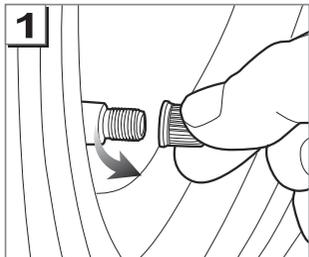


Press the remote button to enter the tire information interface

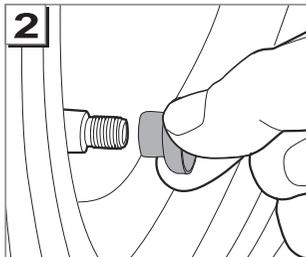
Wiring diagram



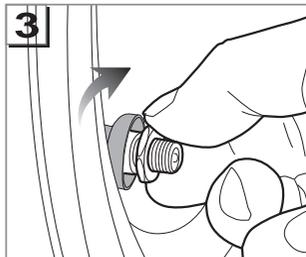
Sensor installation



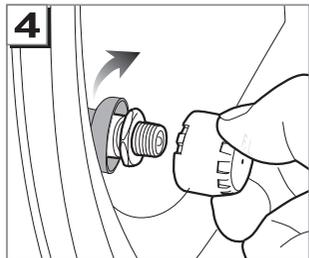
1
Unscrew the valve cap



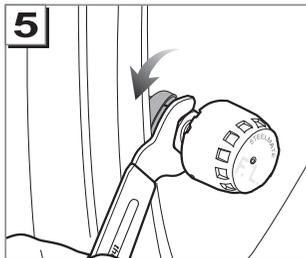
2
Insert the dustproof cover into the valve stem



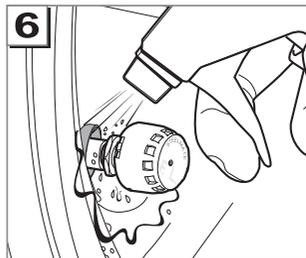
3
Screw in the nut



4
Screw on the sensor

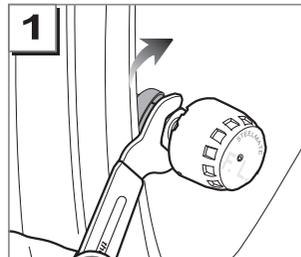


5
Tighten up the nut to the sensor by using the spanner

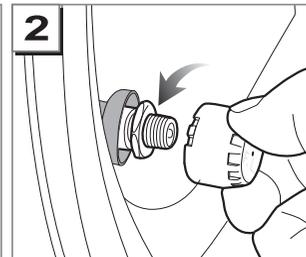


6
Check air leakage by spraying soapy water

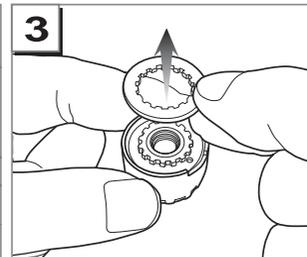
Sensor battery replacement



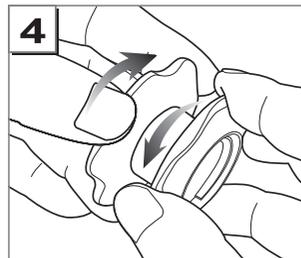
1
Unscrew the nut



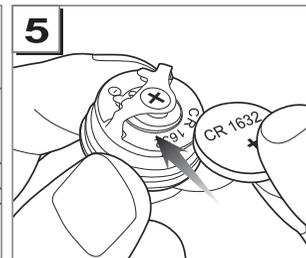
2
Unscrew the sensor



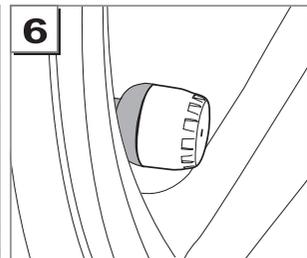
3
Take out the washer



4
Unscrew the sensor cover by using the sensor tool



5
Replace the battery



6
Follow the "Sensor Installation" steps above

Trouble shooting

1. After the installation, there is no tire information on the display?

- 1) The sensors are not programmed to the display, please reprogramm the sensors.
- 2) The display is not turned on.
- 3) The video cable is not connected

2. When ACC is turned on, there is tire information on the display but the tire symbol is flashing slowly.

The display shows the previous tire information. Once the new tire information is received, the tire symbol will stop flashing.

3. There is no tire information for a specific tire.

- 1) There is a problem with the sensor.
- 2) The sensor is not programmed to the display.
reprogram the sensor.

4. After installation, leakage is found.

The tire valves are not the standard type, please replace the standard one.

5. Sensor is lost.

Please buy a new sensor from your local distributor.

6. Sensor battery is low.

Please replace the battery of CR1632.

7. Tire locations are changed.

Whenever a tire position is changed, the sensors must be changed correspondingly.