



TIRE PRESSURE MONITORING SYSTEM



Suitable for all types of vehicles from 4~22 wheels

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Introduction

► **Thank you for choosing SecuTire .**
To ensure your proper operation, please read this manual
carefully.
Kysonix Inc. holds the right of the manual's final explanation.

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► Notices

Congratulations! As the owner of this state-of-the-art wireless tire pressure monitor system, you will enjoy the improved convenience and benefits of having tire pressure information automatically monitored while you are driving.

SecuTire system consists of sensor transmitter and receiving display, which can monitor low tire pressure inside each tire and transmit this data to the receiver.

Having carried out the correct installation procedure (see Installation section in this manual), SecuTire system is ready to use.

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► FCC Notice

This system complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This system may not cause harmful interference, and (2)This system must accept any interference received, including interference that may cause undesired operation.

This system 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. If not installed and used in accordance with the instructions, the radio frequency energy the system generates, uses and radiates may cause harmful interference to radio communication. However, there's no guarantee that interference will not occur in a particular situation.

If this system does cause harmful interference to radio or television reception, which can be determined by turning the system off, the user is encouraged to try to correct the interference by the following measures:

Reorient or Relocate the receiving antenna.

- Increase the separation between the receiver and the system.
- Connect the equipment to 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.

Changes or modifications to this system without the express approval of Kysonix Inc. may void the user's authority to the product warranty.

► European Regulations

This system complies with all European Electromagnetic compatibility regulations (95/54/EC and EN300 220-1). This system has been tested and found to comply with the above regulations, and in addition it meets the requirements for low powered transmitters/receivers as defined by the relevant radio approval authority. The regulations are designed to provide reasonable protection against harmful interference or susceptibility. Changes made to this system without the express approval of Kysonix Inc. may void the user's authority to use the system.

► System Installation and Usage

► SecuTire System and Tire Maintenance

This system is designed to identify and display tire operating status and activate an alert when pressure irregularities are detected. It is the responsibility of the driver to react promptly to the alerts. Abnormal tire inflation pressure should be corrected at the earliest opportunity.

► System Installation and Usage

Use of SecuTire requires that it has been properly installed and programmed by qualified personnel according to Kysonix Inc. documentation. This includes the Owner's Manual and supplementary installation instructions.

► This system is suitable for use from cars to heavy truck with maximum cold inflation pressure of 120 PSI or 8.3 Bar.

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► Reacting to Alerts

When an alert condition is detected, reduce vehicle speed to an appropriate safe level and proceed to a safe stopping location where the tire can be inspected and serviced. The low pressure alert indicates that the air has dropped to a selected minimum.

► Power Connection

If your display is connected to an unkeyed cigarette lighter socket, unplug it when you park the vehicle for extended periods (more than three days) to avoid draining the battery.

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► Operation

- The sensing transmitter mounted into the valve stem makes up of pressure monitor and wireless transmitter, which presets the lowest tire pressure. When tire pressure drops to the warning value, the transmitter will send alarm signal. After signal coding, it will make “Bi” sounds to warn the driver through the LED light of corresponding tire position in the display(The audible warning won’t be activated unless the switch is on. After activating, the sounds will last for 30 seconds, stop for 30 seconds and keep going like this till the tire pressure becomes normal.).
- The system will monitor the tire pressure continuously even when the vehicles are parked.
- When the display receives data signal from the transmitter, the corresponding tire position on the display will light. Please press “Reset” to judge whether it’s due to low pressure or low battery of the transmitter. Then press “Reset” to refresh after checking and adjusting.
- If the low pressure warning is neglected for a while, all the indicators in the display will light to draw the driver’s attention. If there’s more than one signal light is flashing, please press “Reset” to eliminate.
- Note: The signal transmitted between the receiver and the sensing transmitter has been encrypted for decreasing the signal disturbance to the least. If the sensing transmitter needs to be added or replaced, please contact local supplier.

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► Operation

- The design of this system makes it easy to install. Don’t need to use special kits or professional skills.
- This system consists of signal receiver and display, installed above or under the dash (using a auxiliary bracket), or in the reserved hole above or under the dash.
- Note: For some vehicle with diesel engine, if its trailers need to install this system, it’s suggested that external antenna be installed at the bottom of the vehicle.
- If there’s no reserved hole in your vehicles, you need to make an installation hole according to corresponding size for the receiver.
- If there’s no space for the receiver, please be suggested to purchase a fixed bracket (dia. 2¹/₈ inch) from local supplier or place an order for part # TAT-E-TJ-1 to our after-sales department.
- ► **Caution: Qualified personnel must perform installation procedures strictly to ensure that the transmitters are properly installed and undamaged. It does not include any standard procedures normally required in the process of replacing a tire (I.e. lubrication, proper inflation and deflation procedures and any other procedures deemed necessary by the manufacturer or dealer).**

The equipment and images in this manual only use one manufacturer’s tire changer and may not apply to you.

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Display Installation

Display Installation(Square)



1.Unfold the reserved hole



2.Install the receiver into the hole



3.Fix the receiver till the spring impacted

Display Installation(Rechargeable)



1. The SecuTire Display can be easily mounted on top of the dashboard.

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Display Installation

Display Installation(Round)



1.install the receiver into the ferrule



2. prepare other parts



3. fix the parts



4. finish installation

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Sensor Installation



1. Unscrew the cover of the valve stem, make the bottom of the transmitter aiming at the valve



2. Fasten the bottom of the transmitter by using the special spanner.



3. Install the battery (one of designated model)



4. Cover the sensor and fasten it by using special

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► Power connection: plug in power



For common vehicles, the receiver can connect in-car power or cigarette lighter. As eternal installation, the receiver could be connected directly with the in-car power. However the installation procedures must be performed by a trained personnel.

1. Connect the power of cigarette lighter



2. Connect in-car power



Zero curve

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Battery Replacement



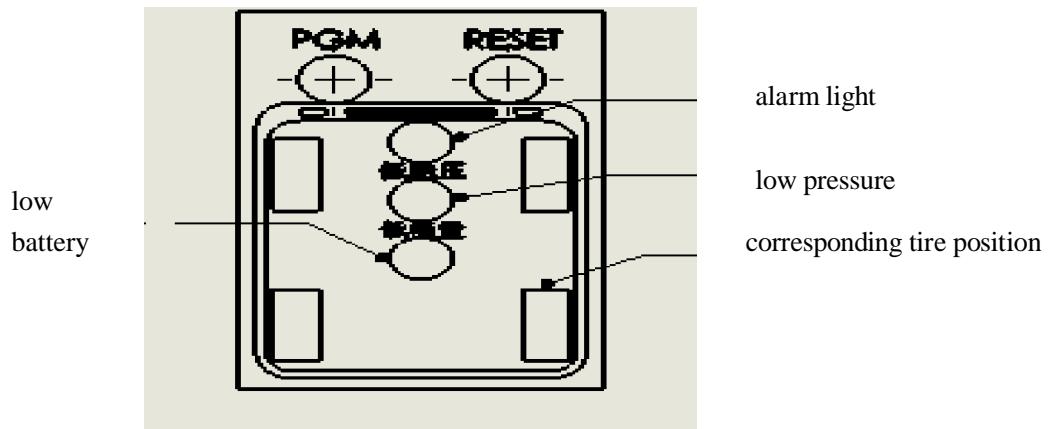
1. Unscrew the sensor cover and take out the used battery.



2. Replace new batteries(designated model)(Attention to the pole direction)

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Panel Description of Display

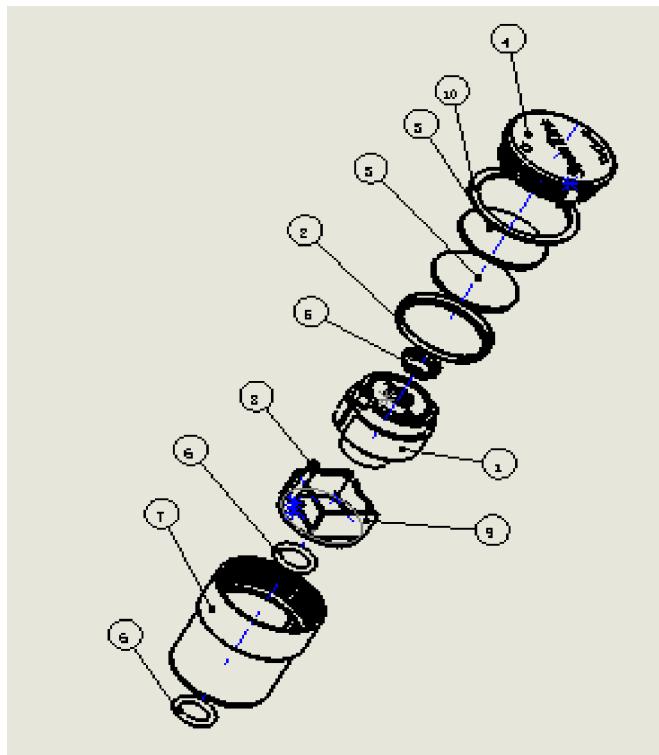


PGM: For Study

RESET: Reset

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Components Description of Sensor Transmitter



Item #	Name	Qty
1	Base couple	1
2	Copper Ring	1
3	Battery	1
4	Lid couple	1
5	Spring	1
6	O Ring	2
7	Lower base	1
8	Copper plate	1
9	PC Panel	1
10	L Ring	1
11	Outer coat	1

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► TAT-E-4F Parts view (take 4 Wheel for example)



1. Receiving Display (Square)

2. Sensor Transmitter

3. Special spanner

4. Wires

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System Maintenance & Simple Troubleshooting

► Battery Replacement

This system is easy to install and maintain. The battery can be used for 3 years. You only need to check the battery between times and replace the battery inside the transmitter. When the tire pressure drops to the warning value, the receiver will meantime monitor the battery power, if the battery needs to be replaced, the display will read low battery and the corresponding tire light will flash.

► Simple Troubleshooting

► Judge whether the battery has power or not.

You can remove the sensor transmitter from the valve stem during its working, then reset the battery and tighten the cover of the transmitter. If there's low pressure warning (visible and audible warning), that means the battery is in good work. After checking, you can reset the transmitter to the valve stem.

► Judge whether the transmitter works or not.

If the battery works right or just after replacing the new battery, remove the transmitter from the valve stem while the display working, then the system will have a visible and audible warning through the display. If not, that means the transmitter can't work right and should be replaced.

The replacement of transmitter and other accessories can be fulfilled through booking from the factory. Details please see the parts view.

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After-sales service

If there's quality problem in one month after our item installation, the items can be returned or replaced. If there's quality problem in one year, the items can be repaired for free. Technical and maintenance service will be offered during the item life.

TEL 0791-8161652

We will charge for the following during the warranty period (as per cost price):

- 1 Sensor loss and damage caused by operators
- 2 Parts damage caused by improper operation

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► **Technical Specification**

Sensor Transmitter	
Battery life	> 3 Years Nominal, replaceable
Operating Temp.	-40°C to 125°C
Weight	20 gm
Size	Dia25.4mm X H28.5mm
Frequency	433.92 MHz
Pressure range	4 wheel:0-2.5kg/cm ² 6 or 6+ wheel: 0-8.33kg/cm ²
Voltage	3V(DC)
Operating Range	20-25m

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► **Basic Receiver**

Power	20mA Nominal 125mA Maximum during alert
Operating Temp	-40°C to 125°C
Frequency	433.92 MHz ±75KHz
Size	L45mm X W25mm X H44mm(4 Wheel)
Weight	55 gm
Voltage	12V 24V DC

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Appendix

Glossary

Cold Pressure The vehicle manufacturer recommended inflation pressure of a tire at ambient temperature (18°C)

Low Pressure Alert The audible and visual alert activated when the tire's actual pressure drops to the programmed value (Usually

Receiver The electronic module receives data from the transmitter and displays tire pressure alerts..

Transmitter Measures contained air pressure and transmits this data to the Receiver.

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Attention

1. Changes or modifications to this system without the express approval of Kysionix Inc. may void the user's authority to the product warranty.
2. When installing the battery to the sensor, please keep the positive electrode (symbol +) facing on. (See Fig2)
3. Please turn off or block the power before install the power lead to avoid harming the electronic loop.
4. Attention to the battery of the transmitter. Please replace the battery when it reads low voltage.
5. If there's no reserved hole on the dash and a new hole has to be cut, please do according to the size in fig1:

L: 40mm W: 24mm H:41mm

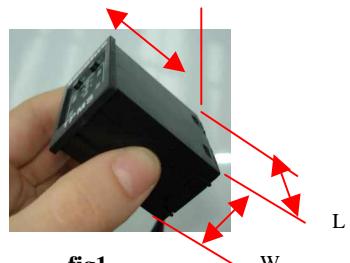


fig1



fig2

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Components and Accessories



1. Receiving Display

4. Cigarette lighter plug

2. Sensor Transmitter

5. Special spanner

3. Wires

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Components and Accessories



1. Receiving Display

4. Receiving antenna

7. Fixed nut(Standard)

2. Sensor Transmitter

5. Wires

3. Special spanner

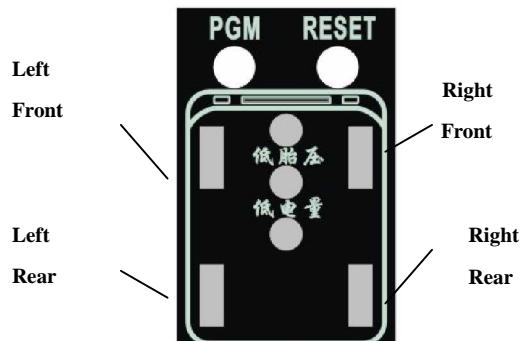
6. Receiver(Round)Fixed Bracket 1

8. Receiver(Round)Fixed Bracket 2

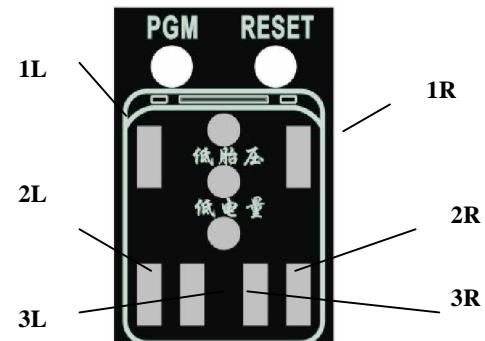
SecuTire Part No. View

Part No.	Parts Description
TAT-E-4F-F-LF / RF -LR / RR	Transmitter (For 4 Wheel)
TAT-E-4F-R	Receiver (For 4 Wheel)
TAT-R-4F	Square receiver (For 4 Wheel, rechargeable)
TAT-R-6F	Square receiver (For 6 Wheel, rechargeable)
TAT-E-6F-F-1L / 2L / 3L -1R / 2R / 3R	Transmitter (For 6 Wheel)
TAT-E-6F-R	Receiver (For 6 Wheel)
TAT-E-10Y-F-1L/2L/3L/4L/5L -1R/2R/3R/4R/5R	Transmitter (For 10 Wheel)
TAT-E-10Y-R	Receiver (For 10 Wheel)
TAT-E-CIG-1	Cigarette lighter plug
TAT-E-BAT-1	Battery
TAT-E-TJ-1	Receiver(Roundness)Fixed Bracket 1
TAT-E-TJ-2	Receiver(Roundness)Fixed Bracket 2

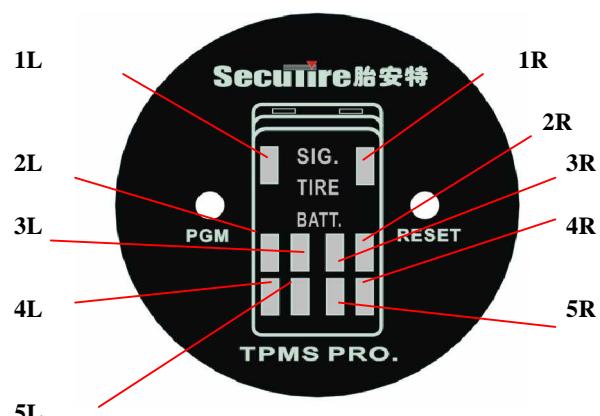
Illustration



TAT-E-4F-R 4 Wheel



TAT-E-6F-R 6 Wheel



**TAT-E-10Y-R
(10 Wheel)**



**TAT-E-6Y-R
6 Wheel**

Note The serial number in sensor transmitter is the same with the above.

Vehicles applicable

Model	Vehicles
TAT-E-4F	Car
TAT-R-4F	
TAT-E-6F	6 Wheel Bus, Heavy Duty Truck, Van
TAT-E-6Y	
TAT-R-6F	
TAT-E-8Y	8 Wheel Bus, Heavy Duty Truck, Van
TAT-E-10Y	10 Wheel Bus, Van
TAT-E-14Y	14 Wheel Tractor & Trailer
TAT-E-18Y	18 Wheel Tractor & Trailer
TAT-E-22Y	22 Wheel Tractor & Trailer