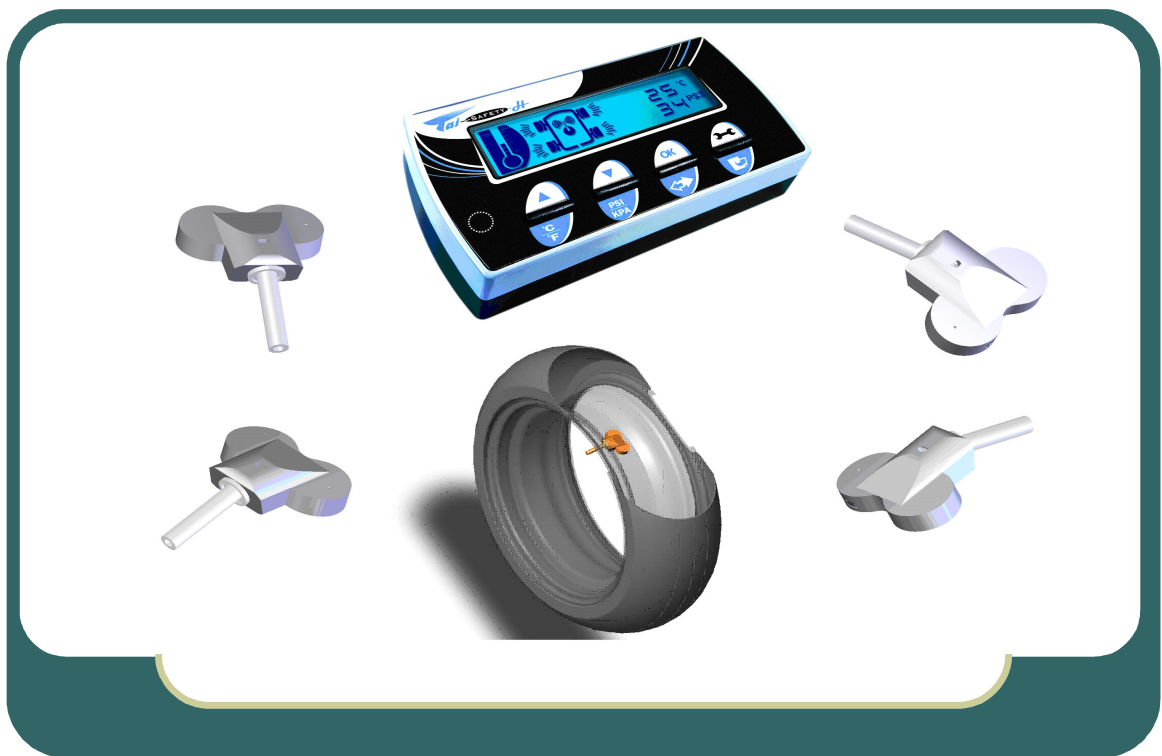


## Tai-Safety-H Tire Pressure Monitoring System (TPMS)

# USER MANUAL



Thank you for purchasing the Tai-Safety Tire Pressure Monitoring System (TPMS). Please read this user manual carefully before operating this product, To ensure proper operation, please read and follow all the instructions, especially the "IMPORTANT SAFETY INSTRUCTIONS" and "SAFETY PRECAUTIONS". Please keep this user manual for future reference.



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## **IMPORTANT SAFETY INSTRUCTIONS**

- ❖ Read this instruction thoroughly.
- ❖ Retain this instruction for future reference.
- ❖ Heed all warnings and cautions to prevent possible malfunction.
- ❖ Follow all instructions. Improper installation could damage this product or shorten its service time.
- ❖ Install the product in accordance with the manufacture's instructions.

## **INTRODUCTION**

Thank you for purchasing the Tai-Safety Tire Pressure Monitoring System. We hope that you will enjoy the great performance with this product. This Tire Pressure Monitoring System (TPMS) was designed for increasing, reliability, and understanding on tire conditions of your car. Tai-Safety has had designed several different types of Tire Pressure Monitoring System for applying to trucks, cars, and motorcycles. For truck, sensors are implemented inside tires and are fixed on wheels by stainless clamps; for both car and motorcycle, sensors are fixed on by air valves. Once you properly install the Tai-Safety TPMS in your vehicle, sensors inside tires will automatically monitor pressures and temperatures of tires in real-time, and send these data to receiver through wireless communications. When there is any abnormal pressure (under or over inflated) and/or temperature of tire detected, the receiver will warning driver immediately through flash light and alarm voices. This system ensures you are driving in safety. Since TPMS requires implementing sensors inside tires of vehicles and keep working on such a rigor environment (inside of the tire of your vehicle), it will correctly and effectively work only with proper installation. In order to prevent potential danger and obtain maximum benefit from your set, please observe the following instructions when installing and operating the product.Keep this manual for future reference, and record all sensors' ID numbers and serial number of your set, they are important data of this product.



## **About This Manual**

- ❖ The information in this manual is subject to change without notice.
- ❖ This manual has been created with extra care. In case that you have any comments or questions regarding this manual, please contact your local dealer or our Customer Service Center.
- ❖ Before operating this set, please fully understand the prerequisite such as specifications or constraints of the hardware and software. We are not responsible and have no liability for any loss, damage or injury as a result of misuse.
- ❖ All other products and company names used in this manual are trademarks or registered trademarks of their respective owners.

## **About Hardware**

You may not reproduce, copy, use, modify, and/or repackage in whole or in part of this product, which are prohibited by law.

## **About Software**

You may not alter, decompile, disassemble, decrypt, or otherwise reverse-engineer the Software installed in this product, which are prohibited by law.

## **FCC Notice**

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

**Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

## **SAFETY PRECAUTIONS**

For your safety, please read the following precautions carefully before using this product. Improper use would cause serious personal injuries and/or damage to your vehicle or this product.

## **WARNING**

Never ignore the instruction. There are risks of serious injuries or damage vehicle.

- ❖ For your safety, never try to disassemble or repair the product by yourself.
- ❖ Do not insert liquids or any foreign objects (such as metals or flammable items) inside the unit.  
In case it happens, unplug the Power Cord, and contact your dealer immediately.
- ❖ Do not remove cover, or modify the product.  
Contact your local dealer to perform servicing such as inspection, adjustment, or repair work.
- ❖ Do not place any objects on top of the unit.  
Objects such as
  - Liquid containers (vase, pot, cup, cosmetics or liquid medicine).
  - If water or any liquid spill onto the receiver unit, it may cause short-circuit and result in damage to your vehicle or this product.
  - In case that it happens, unplug the Power Cord, and contact your dealer immediately.
  - Do not place anything heavy on top of the receiver unit.
- ❖ Do not expose this unit to rain or moisture.  
Beware when you use this product outside or on a convertible automobile, especially in rainy, or snowy weather, and at the beach or waterfront.  
When the product gets wet, it could cause damage to your vehicle or this product.
- ❖ Do not do anything that may damage the Power Cord.  
Do not damage, modify, twist, forcibly bend, heat, or pull excessively the Power Cord.  
Do not place heavy objects on top of the Power Cord.  
If the Power Cord is damaged, contact your dealer for repairs or exchange.
- ❖ Use only with designated power supply voltage.  
To prevent the risk of fire and electrical shock, operate this product only with the power supply voltage indicated on this manual.
- ❖ Beware not to drop or have any impact on the unit.  
In case that you drop or have any impact on the unit, unplug the Power Cord and contact your local dealer immediately.

## **CAUTION**

Do not ignore the instruction. There are possibilities of personal injuries and/or property damage.

- ❖ Do not place the unit at the dusty place.  
It could cause malfunction.
- ❖ Do not install this product near the medical devices.  
To prevent malfunction of the medical devices, do not use this product and the medical devices in the same vehicle.
- ❖ Connect the power plug securely.  
Improper connection will cause over current and may result in malfunction.  
If the plug is not fitted for the cigarette socket, contact your local dealer for replacement.

- ❖ Do not handle the Power Cord with wet hands.  
It could result in electrical shock.
- ❖ Do not pull the cord when you unplug the Power Cord.  
It may damage the cord and could result in fire or electrical shock.  
Hold the plug when disconnecting it.

## **Components**

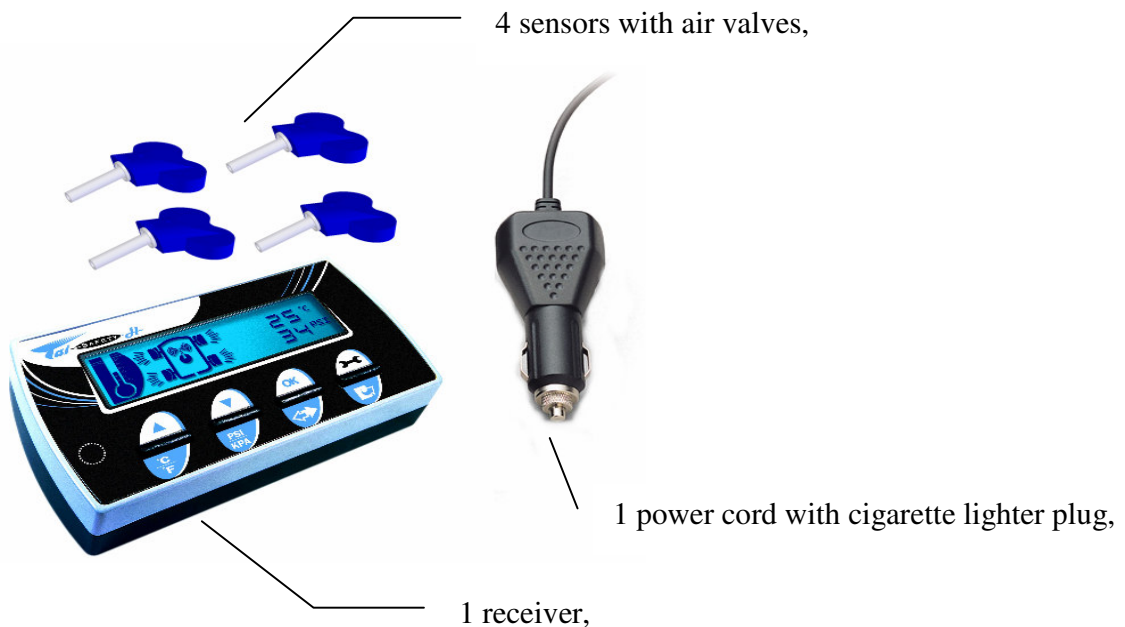


Figure 1 Contains of one package

## **System Installation and Usage**

Tai-Safety Tire Pressure Monitoring System (TPMS) was designed for increasing security, reliability, and understanding on tire conditions of your car. Tai-Safety has several different types of Tire Pressure Monitoring System for applying to trucks, cars, and motorcycles. For truck, sensors are fixed by stainless clamps; for both car and motorcycle, sensors are fixed on by air valves. Once you properly install the Tai-Safety TPMS in your vehicle, sensors inside tires will automatically monitor pressures and temperatures of tires in real-time, and send these data to receiver through wireless communications. When there is any abnormal pressure (under or over inflated) and/or temperature of tire detected, the receiver will warning driver immediately through flash light and alarm voices. The system can improve your driving safety only under correct installation.

## CAUTION

- ❖ Installing the TPMS requires removing tires from vehicles.
- ❖ Balancing is necessary after TPMS installed.  
Please get help from professional tire shop if necessary.
- ❖ To increase work efficiency and simplify installation procedure of TPMS, it is recommended installing sensor into tire one after one.

### New Installation

Tai-safety TPMS was a directly tire pressure monitor system, i.e. it directly measure pressure and temperature of your vehicle tires no matter your vehicle was parking or moving. It is necessary to install one pressure sensor into each tire. The sensor installed inside tire, will keep going to measure pressure and temperature of tire since it was successfully installed, and send these data to the receiver placed in vehicle. After correctly installed on vehicle, Tai-safety TPMS will guard all tire situations and warning driver if any abnormal condition detected to prevent serious accident during vehicle moving.

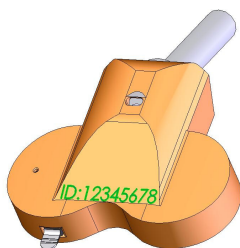
#### Installation steps:

##### Step 1: Check components

Open Tai-safety TPMS package, check the supplied components before installation.  
In case of missing or damaged, please contact the dealer immediately.

##### Step 2: Check identification number

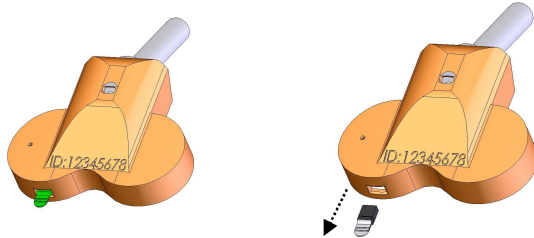
Check sensors, there should be an identification number (ID) marked on the top of individual sensor, and this ID was unique. After installing one sensor into one tire, this unique ID will make this tire become unique and easy to identify.



##### Step 3: Set up the receiver

Plug the attached power cord into Receiver and insert the other terminal to the cigarette electrical socket of vehicle. You can adjust parameters of receiver according to your requirement.

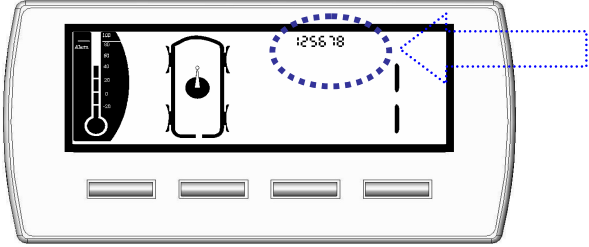
Step4: Enable and Test sensors before installing



Sensors must be enabled before installed into tires. To enable a sensor only need pull out the jumper. Switch receiver into ***Tire ID Search and Position Setup Mode*** and search for ID of this sensor.

## ⚠ CAUTION

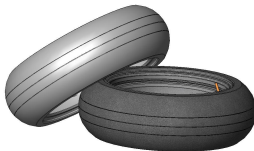
❖ Only first two and last four digitals of ID will show on panel of receiver, for example, if ID is 12345678, only 125678 will be shown.



Step 4: Installing one sensor into tire

Since sensors must be installed to inner side of tires, it require separate rim and tire, mount sensor to rim, install tire on rim, rebalance and install wheel back to vehicle. Please get help form professional tire shops or your local dealer if necessary. Procedures of Install one sensor into tire are following.

1. Remove the tires from vehicles.



2. Deflate the tires and separate rim and rubber tire.

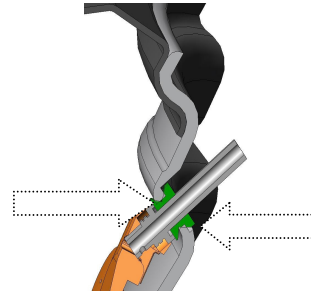
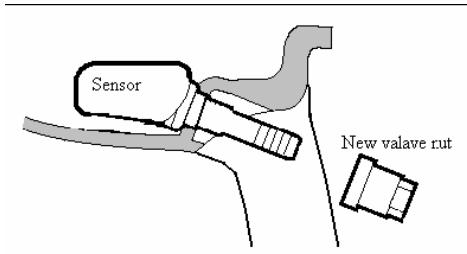


3. Fix sensor on rim with proper approaches.

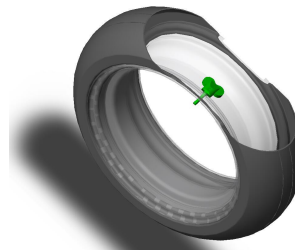


### CAUTION

- ❖ For air valve type sensor, typical torque of new valve nut is 3~5 N-m(30~50 kgf-cm).
- ❖ In order to guarantee sealing, be sure that the rubber rings are properly positioned between rim and valve.

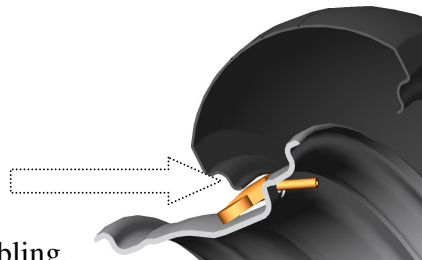


4. Assemble rim and rubber tire together, and inflate to their typical pressures.



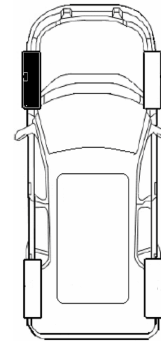
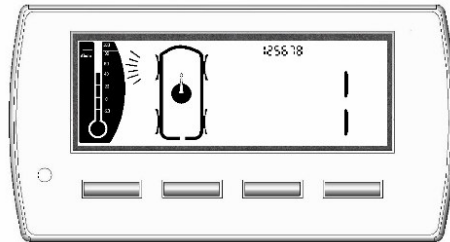
### CAUTION

- ❖ Do not damage sensor during tire assembling.



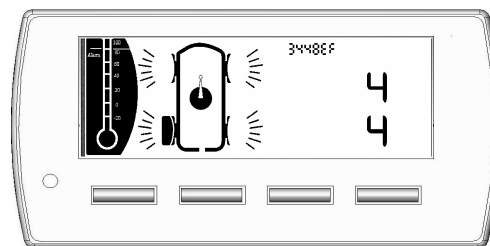
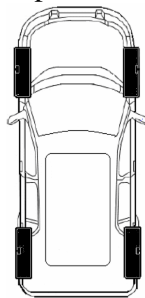


5. Balance wheel.
6. Install wheel to correct position of vehicle.
7. Use receiver to search ID of this tire again, and assign this ID to the position respect to this tire installation. Make sure that the sensor inside tire was keeping work well.



Steps 5: Continue to install all other sensors with the same procedure.

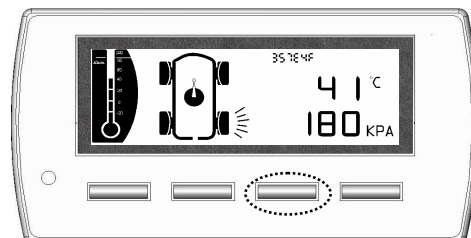
Install all tires to the right positions of vehicle. Using receiver to search and assign all IDs to correct position respect to tire installation.



Steps 6: Setup pressure and temperature thresholds according to tire type.

## CAUTION

- **Do not mix up each tire's ID, or the detected tire parameter may not be correct!**
- It is easy to identify each tier's ID by changing it's pressure (slightly deflate) and monitor the receiver for checking this pressure variation and tire position.
- Check all recorded tire IDs by press Key 3. Each single press on Key 3 can call one tire parameters out, including temperature, pressure, and identification code. Continually press on Key 3 can read tire parameters one by one.



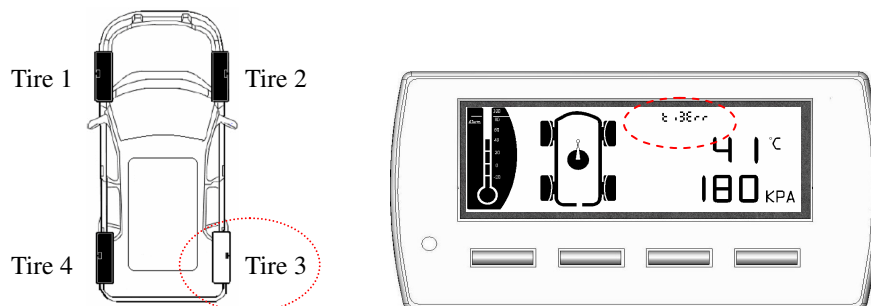
## Tire maintenance

Do not damage sensor during any tire maintenance. After any tire maintenance, including tire repair, balancing, changing, etc., please check tire IDs again. Positions of IDs recorded in receiver must be the same with installation positions of tires. User can easily check all recorded tire IDs by press Key 3. Each single press on Key 3 can call one tire parameters out, including temperature, pressure, and identification code. Continually press on Key 3 can read tire parameters one by one.

## Troubleshooting a Tired Battery

Since TPMS sensors enabled, they will keep consuming their internal battery energy. The consumption rate of battery power was depend on various factors, including temperature, road condition, driving speed, etc., so, the battery life may not be the same for all sensors, even for sensors installed at the same time. If the battery of sensor tired, transmission signal may too weak to receive. When it occurs, Receiver will fail to receive signal from sensors, and warning message will be shown on displayer.

For example, if battery of sensor installed on tire 3 tired, Numeric row 1 of displayer will shows “ti 3 Err”.



It is easy to check all tire conditions by press Key 3. Each single press on Key 3 can call one tire parameters out, including temperature, pressure, and identification code. Continually press on Key 3 can read tire parameters one by one. If no any meanful message form tire received, both temperature and pressure will show “0”.

