User Manual

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Welcome

Dear customer,

Thanks for buying our product. It is our great honor to provide our best service to you. Your satisfaction is our goal and your support will be highly appreciated and it is the driving force of our progress!

We’re specialized in TPMS products and won good reputations from our customers because of our good quality and service. Since our company established, we’re subjected to the " Credit comes first.and the client is the God. " business philosophy, to fulfill the "Grasp the opportunity to blaze new trails, developed strong competitive products" as the principle of service. Regard “People-oriented, Reputation fist" as our corporate culture.

Please read this manual carefully before using our product. With full pictures and their accompanying essay in detailed we introduce you the operation of our product Intuitively. By the way, due to product

production date, different batches, indicating that the actual use of the product may be different, specifications are subject to the phisycal product.
Thank you again for your choose and support. Meanwhile we hope that you guys may send us feedback during the course of you use it. Your suggestion and support are the driving force of our progress! "Happy to go out, peacefully come back" is our hope, and finally we sincerely wish you family all happy, everything goes well.

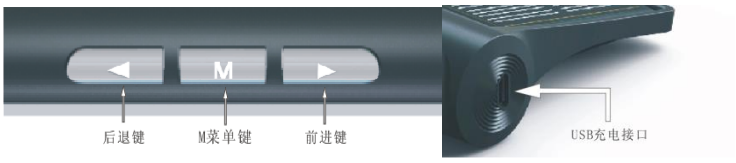
Product specifications

Transmitter sensors, processors and the features	
Processor type	SP370 (Infineon) German technology
Battery	maxell Model: 3V 530mhA, 2450hr life Panasonic Model: 3V 570mhA, 2450hr life
Working temperature	-40℃~125℃
Working current	Peak Value < 9mA
Sleep current state	0.6uA
Monitor the pressure range	0.0-4.3Bar 1(Bar)=0.1(Mpa)=100 Kpr=1.0197162kgs/cm²
Work Data Transmitte Interval	Transfer signals every 30 seconds to 50 seconds
Work transmission frequency	Transfer signal By: 315mhz

Product Overview

1. Receiver host

2. Press key and input/output



Safety significance of Tire Pressure Monitoring System

1. Tires are the most important part of the car, which means significant to the safety of driving, dues to too much terrible traffic accidents caused by its problem. As a matter of fact, to keep standard tire pressure and timely detection of tire leaks is the key to safe driving. For the time being, fix direct tire pressure monitoring system is the major mature way monitor the tire pressure.
2. This product is a direct tire pressure monitoring system, it can be real-time monitoring of tire pressure and temperature status, in time give out alarm once abnormal situation happen. You needn't check by eyesight or percussion tires or other unscientific methods to determine whether the tire is leak. Don't worry about the pressure or temperature is too high to be nervous.

Remark:
Always keep the standard tire pressure, safe driving, not only can prevent puncture, but also reduce fuel consumption and extend tire life.

Working principle of tire pressure monitoring system

The Tire Pressure Monitoring System (TPMS) is designed to monitor the internal pressure and temperature of the tire by means of a sensor mounted on the tire and to transmit the collected data to the driver in the cab Of the receiver. TPMS can monitor the vehicle tire pressure and temperature information in real time. Alarm give out as long as low pressure, high pressure, air leakage, high temperature and other abnormal situation, to remind the driver who need to take corresponding effective measures to play a role in safety assistance to achieve car travel more Safe, reliable, comfortable, and economical.

Product List

Please check the list according to the following products, if any accessories or missing information, please consult with the dealer you purchased.

Item	Product/Decription	Qty(pcs)
1	Receiver Host	1
2	Sensor	4
3	UBS cable	1
4	User manual/Waranty card	1
5	Certificate	1
6	Sensor warning lable	4

Your Attention
This product is only applicable to the tire pressure which not exceed 3.0Bar four-wheeled car/van.

Installation steps
1.Receiver host installation
A. Pick out the receiver host and fix it to the dashboard in good position by non-slip pad or 3M glue.
B. First to use this product please make sure there is full battery in it. In case low battery or battery ran out you need to charge it with USB cable connect to the car charger plug. As soon as the battery is fully charge, it needn't USB charging since it can be charged by solar itself.

Your Attention
This product will detect the tire and give out alarm tips automatically, so we don't need to pay extra attention to the tire so that you can focus on your driving accordingly. During the cause of driving, if you want to check air pressure and temperature values, you need to stop the car at first. Safety is priority.

2. Sensor installed

A. Put your car on the lift platform and set the car lifted to the appropriate height. Use wind gun spin each tire to remove the screws, and remove the tire and do some remark. (As shown below)

B. Remove the tire from the valve core and let the tire be placed on the workbench of the tire removal machine and peel the tire off the wheel. (As shown below)

C. Remove the original valve from the removed hub and clean the valve and remove the sensor. Specify the position according to the sensor label (for example, the left front wheel can only correspond to the left front wheel sensor, left front tire Is not installed right front wheel sensor), and the sensor installed in the original to remove the valve position, and then use a special sleeve to tighten the sensor, and fixed screws. (As shown below)

D. Coated the edge of tire with lubricant and then put the tire back to the wheel hub which fixed a sensor already. According to your tire standard pressure spec to pump up the tyres. Then put the tire on the balance machine table to do wheel alignment. (As shown below)

E. Remove the tires from the balance machine table and reload the tires into the car. Pick out the warning lable and stick to the position where the sensor is installed on the wheel hub (Tips: carefully removing the tire and the sensor inside). (As shown below)

F. Please repeat the above steps, to make sure all set sensor already installed.

Reminder
Testing is necessary after the installation of sensor to ensure TPMS can be used. For example when a car running for certain journey that can be checked the receiver host to see whether data is good to receive. Any questions, please contact customer service for technical support.

Receiver host turn on / off key function introduction

1. Turn on/off switch

A. In the condition of power off, you can choose back key, M key(Menu key), forward key of the receiver host to turn on the TMPS.

B. In the condition of power on, you can only choose back key, hold on it to turn off the TMPS.

Your Attention
By manual shutdown, TMPS will not reboost automatically during your driving. You can only choose back key, M key or forward key to re-start the TMPS.

2. M Key

In the condition of receiver host working mode, hold on M key to “Menu and Settings", in which you choose "select and confirm" button.

3. Forward key

In the condition of receiver host working mode, hold on forward key for 3 seconds to clear all data from the main interface. Since then the display will shows 0.0, “Add” key will apears in the settings menu.

4. Back key

In the condition of receiver host working mode, hold on back key for 5 seconds to turn off the TPMS, “Reduce” key will apears in the settings menu

Receiver host and sensor pairing

Pairing way A: Pick out and turn on the TPMS, hold on "M" key to enter the air pressure setting interface, then click the "M" key for 7 times to enter the tire matching settings interface, (as shown below) and click the forward key or back key untill the display shows icon - -/. Twist down the cap of the valve, which fixed the sensor already.Make sure tire pressure remains between 0.7-1.5Bar, by tire inflation or deflation, they can pair themselves. Once hearing the receiver host gives out "Di..Di..Di .." buzzer sound, the sensor has been paired success, at the same time the barometric data values and temperature data values will show on the screen.

Pairing way B: when way A is not working please try the way B. Move out to your can/vain to outside for real run pairing. Pick out and turn on the TPMS, hold on "M" key to enter the air pressure setting interface, then click the "M" key for 7 times to enter the tire matching settings interface, (as shown below) and click the forward key or back key untill the display shows icon - -/. Make your

driving speed up to 25KM / H and run 500M distance, or runing time enough 5 minutes, self-paring will be done. Once hearing the receiver host gives out "Di..Di..Di .." buzzer sound, the sensor has been paired success, at the same time the barometric data values and temperature data values will show on the screen.

Your Attention

When you fixed the sensor, receiver host should be in the conditon of working. While complete the installation the sensor, in the inflatable or do the balance correction, it can also self-paring. Otherwise, it can not be paired.

Pairing way: four each tire pairing method is the same, please use the same method for them.

Receive host function settings

1. Introduction to main interface functions

A. Pick out the TPMS and turn on R (As shown below)

B. As soon as sunlight radiation is strong enough to solar charge condition, the display will show up the icon " ", solar charge is now working. TPMS battery icon is flashing.

C. This icon" "is stand for TPMS battery. This icon is flashing at the time of recharging by Solar or USB cable.

D. This icon is stand for Sensor battry. When sensor battry is ran out, this icon will light on and TPMS will give out “Di..Di” two short buzzer alarm to tell us low battery.

E. This icon“ ”is stand for sensor alarm. when the pressure increases or decreases, this icon will flash and TPMS will give out “Di..Di” two short buzzer alarm.

F. This icon “ ”is stand for high temperature of tire. When the temperature is exceed the setting temperature, this icon will light on and TPMS will give out “Di..Di” two short buzzer alarm.

G. This icon“ ”is stand for Tire pressure indicator. When sensor transmitte data signal, this icon will flash 2 times.

H. This icon“ Bar / Psi ”is pressure unit，“ Bar ” is the unit use in China while “ Psi ” is the unit use of foregn countries.

I. These icons“ / ”is temperature unit, “ ” is the unit use in China while“ ” is the unit use of foregn countries.

J. This icon“0.0”is stand for tire pressure. When sensor working in normal transmitte mode. This icon

will show kinds of update data of pressure.

K. This icon “ ” is stand for tire temperature. When sensor working in normal transmitte mode. This icon will show kinds of update data of temperature.

2. Receiver host function settings introduction

Pick out receiver host and turn it on. TPMS pressure and temperature interface is synchronized display. The temperature shows on both lowe left and lowe right corner, there 4 middle icons are pressure display. (As shown below)

Turning on the TPMS and hold on M key to enter pressure unit setting interface. (As shown below). Click forward key or back key there will be two icons Bar / Psi for your choose. Select the one you need then click M key to save.(At the same time save next item setting) or wait for 15 seconds, it can be save automaticallyand back to main interface.

When TPMS is working, hold on M key to enter pressure setting interface. Click M key one more time enter temperature unit setting interface. (As shown below) When enter this interface please click forward key or back key there will be two / units for your choose. Select the one you need, click M key again to save. (At the same time save next item setting) or wait for 15 seconds, it can be save automaticallyand back to main interface.

When TPMS is working, hold on M key to enter pressure setting interface. Twice click M key enter low pressure alarm setting interface. (As shown below). Click on forward key or back key to set the tire pressure to 1.8 Bar. Normally tire normal pressure "2.0-2.8Bar" low pressure can not be lower than "1.8 Bar".

(Tire low air pressure setting)

When TPMS is working, hold on M key to enter pressure setting interface. Three times click M key enter tire high air presssure alarm setting interface. (As shown below). Click forward key or back key to set the tire air pressure to 3.0 Bar. Normally tire normal pressure "2.0-2.8Bar" High air pressure can not be higher than "3.0 Bar".

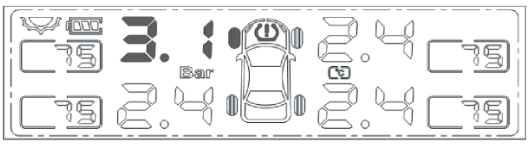
(Tire high pressure setting)

When TPMS is working, hold on M key to enter pressure setting interface. Six times click M key enter tire high temperature alarm setting interface. (As shown below). Click forward key or back key to set the tire temperature to 75℃. Normally tire normal temperature range is -5℃ - 75 ℃,High temperature vaule can not exceed 75℃.

Remark
Standard inflatable pressure is generally 2.4Bar.
According to the regional environment set temperature, the general high temperature alarm is 75 ℃.
The relationship between standard inflation pressure and alarm pressure:
Tire high pressure alarm value = standard inflatable pressure × 125%;
Tire Low Pressure Alarm Value = Standard Inflation Pressure × 75%.
Such as:
Tire high pressure alarm value = 2.40 × 125% = 3.00Bar
Tire low pressure alarm = 2.40 × 75% = 1.80Bar
The maximum tire pressure of this product factory default is: 3.00Bar; minimum pressure value: 1.80Bar.

High pressure alarm

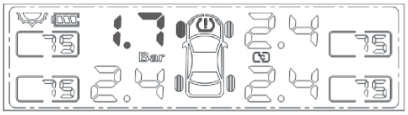
When Receiver host detects that a tire pressure value has changed, but does not exceed the setting value, the receiver host alarm icon " " and the tire pressure indicator " " flashes together with the tire data value, and gives out "Di..Di" two buzzer sound. If the tire pressure value exceeds "3.00Bar" of setting. and and tire data value are flashing together and give out continuous “Di..Di..Di…” buzzer sound. (As shown below)



(High Pressure Alarm)

Low pressure alarm and rapid tire leak alarm
When Receiver host detects that a tire pressure value has changed, but does lower than setting value,

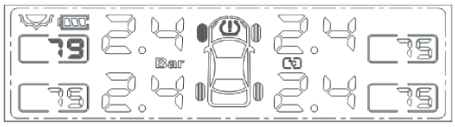
the receiver host alarm icon " " and the tire pressure indicator " " flashes together with the tire data value, and gives out "Di..Di" two buzzer sound. If the tire pressure value lower than "1.80Bar" of setting. and and tire data value are flashing together and give out continuous “Di..Di..Di…” buzzer sound. (As shown below)



(Low pressure alarm and rapid tire leak alarm)

High temperature alarm

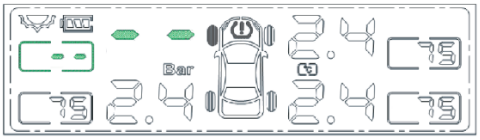
When Receiver host detects that a tire temperature exceeds the setting value, the receiver host alarm icon " " and the tire pressure indicator " " flashes together with the tire data value, and gives out continuous “Di..Di..Di…” buzzer sound. (As shown below)



(High temperature alarm)

No signal alarm

During the course of driving, when the receiver host does not receive the signal transmitted from the sensor for 10 minutes, its alarm icon will be flashing continuously. but the tire pressure indicator " " is not flashing. No data shows on tire pressure and temperature area. But only icon “ / ” light on. gives out continuous “Di..Di..Di…” buzzer sound. (As shown below)

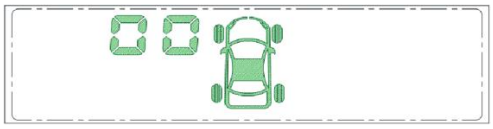


(No signal alarm)

Tire exchange setting

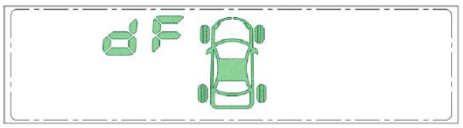
If you want to exchange the tires, it needn’t re-install the sensor, just need to adjust data in receiver host. Turn on receiver host and hold on M key to enter pressure setting interface. 12 times to click M key to enter adjust data. (As shown below). 00 is stand for front-left tire, 01 is stand for front-right tire, 02 is stand for back-left tire. 03 is stand for back-right tire. If you want to change front-left tire to back-right tire, please choose 00 and click forward key or back key to 03 and hold on forward

key for 4 seconds to confrim setting. When complete setting, 03 and 0.0 exchange their position. The other tire exchange method is the same way.



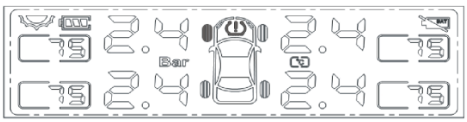
Reset

When receiver host is working, hold on M key to enter pressure setting interface, click M key for 15 times to dF interface. (As shown below). Click forward key or back key, now dF shows on the position of back-left icon. Click again M key to confirm and save, back to main manu. After these setting, all data will be reset to initial state.



Sensor low battery alarm

When the receiver host detects a tire sensor battery is going to ran out, the sensor battery icon, the location of the tire icon, and the alarm icon " / / are all flashing at the same time.Receiver host will give out" Di,Di,Di ... "alarm warning, Indicates that the sensor is in low battery. (As shown below)



Your Attention
When you select each setting, if you do not choose the next item in 15 seconds, it will return to the main interface.
Before setting please read this manual carefully to avoid errors.

Receiver host parameter settings

1. Function Set Unit Table

Item	Icon/Unit	Remark
1	Bar / Psi	Chinese Identify units/Other countries Identify unit
2	/	Degree Celsius /Fahrenheit Identify unit
3		Thermometer Tire temperature is too high dentify units
4		Tire sensor battery unit
5		Solar Identify unit
6		Receiver host polymer lithium battery unit
7		Data receiving unit
8		Alarm warning unit

9	dF	Factory set unit
10	HI	High pressure setting unit
11	HH/	Tire sensor pairing unit
12	0.0/01/02/03	Tire sensor exchange unit
13	Lo	Standard inflatable pressure setting

2. Factory default table

Item	Name/Unit	Standard data values
1	Lo/ Bar	1.8Bar
2	HI/ Bar	3.0Bar
3	High Tem./℃	75℃
4	Bar	Bar
5	Temperature	℃

Technical Specifications

1. Battery life

Device	Battery life
Receiver host	Polymer battery recharge 400 times, capacity loss 25%
Sensor	5 Years

A. Receiver host

Working Temperature	-20℃——85℃
Working Frequency	315MHZ
Test the reception sensitivity	-91dbm
USB Input voltage	DC-5v
Working Current	Peak：14mA，Standby：2.5-2.6mA

Battery capacity	400mA
Solar charging current	100mah

C. Sensor

Working Temperature	-40℃——125℃
Working Frequency	315mhz
Working humidity	MAX95%
Tire monitoring range value	0bar——3.5bar Deviation±0.013
Tire temperature monitoring range value	-40℃——125℃ Deviation±3℃
Battery lift	5 years
Transmit power	R & D environment test below -17db

Frequently Asked Questions

1. When we need to do tire alignment operation

The sensor fix to the tire by Front-left/Front-right/Back-left/Back-right. Tire alignment can only be done after tire position exchange.

2. When TPMS will give out the alarm?

During in the course of driving, if the tire nail leak, pressure is too high or too low, the temperature is too high, the battery is low, the icon will be light on and machine will give out alarm.

3. Complete TPMS installation, a tire does not display data information?
A. Car can only receive tire pressure sensor data in driving.
B. Check whether the distance between the receiver host and the tire pressure receiver is within a reasonable range. If the distance is reasonable, please re-pair.
C. The above method can not solve the problem, please contact customer service center.

4. When receiver host turn no, why tire pressure data is not show on the display at once?
In order to reduce power consumption and extend the service life of the sensor, the sensor will not transmit the signal at the time of car parking and the tire pressure is not abnormal. At this point we need to start the can, the speed is faster than 20KM / H and exercise a distance, the sensor will goes into timing launch mode, to transferred real-time update data so that receiver host will show on the display.

Reminder
1. Please use this product correctly and use it within its permitted range.
2. The installation process should be strictly in accordance with the contents of this manual operation, be sure to have experienced tires to install technicians to disassemble, if due to improper installation and bring undesirable problems, the Company will not be responsible for any problem.
3. When you need to dismantle the tire, please pay attention to tire pressure sensor, to avoid any damage caused.
4. In the set threshold, to strictly comply with the scope of the threshold, different models should be in accordance with its tire parameters or instructions. Sales agents set the range and parameters already, which we do not need to modify.
5. Please check battery capacity daily. It is special require to do check before your driving.

Important statement
1. This product is the car tire pressure, temperature monitoring of the electronic device, in the above conditions can remind the driver to take timely measures to eliminate hidden dangers, but can not ignore the tire itself should be good at any time requirements. Driver should check the following conditions in accordance with the requirements of user manual: whether the tire pattern has reached the limit of wear, whether the tire has no abrasion, unilateral wear, fracture, crack, perforation and other defects. By the tire itself, the existence of the above-mentioned defects, resulting in tire burst accident, does not belong to the product quality responsibility. This product can alert the driver of the risk of puncture, but not able to avoid the occurrence of puncture (Please pay attention to working principle of TPMS products).

2. The product shows tire pressure and temperature data,which is for reference only and warning, and not able to prevent the occurrence from car traffic accidents.

3. During the cause of driving, please do not operate receiver host button frequently or often focus on the display, so as not to distract attention. When TPMS give out alarm, driver should immediately slow down or stop the car for full check untill you make sure all tires are ok before you come back to the your drive.

4. Not proper installation will do harm to TPMS operation, even worse will bring damage to this product.So it is suggested the installation should be handled by professional skiller according to manual.

5. Explosion-proof membrane of the car will affect the signal reception.

6. Harmful wireless signals may be interference and impaction to the use of TPMS, while lead to unstable signal reception.

7. Not allow self-modification, change the system and any other incorrect operation, otherwise the resulting system can not be the normal operation of the adverse consequences borne by the driver.

8. This product complies with relevant laws and regulations of the national automotive electronics products, in line with the national radio management committee "micro power (short distance) radio equipment technical requirements", and related civil electronic equipment electromagnetic compatibility requirements.

Conditions & Warranty

Dear users,
First of all thank you choose our product. In order to better protect your driving and provide you better service, please carefully read the user manual and warranty, keep certification and warranty card in good, it is not able to be re-submited once been lost, hope for understanding!

During the warranty period, our dealer or customer service center is responsible for product repairing or product replacement as long as it is in accordance with the terms of our company. (unless other rules by law) Free changing of product materials, design and tenical defects.

Product warranty must meet the following content to get our warranty service:

1. We need you have dealer’s chop and fill in buyer detailed information in the warranty card and send back to our factory and show the purchasing slip as well.
2. The product warranty is one year. Date start from the purchasing time on the invoice, and show us accordingly.
3. You have 7 days free of charge for the return service of our company duces to our product quality problem since the date of purchase. Within one year of failure, free of charge to have reparing service.
4. Warranty service does not include the shell, batteries, anti-skid pads and other consumables.

Blow effects will not be covered within the warranty:
A. Expires the warranty
B. Not in accordance with the requirements of the use of correct operation, maintenance, storage and cause damage
C. Damage caused by other repair service without our authorization
D. User open, repair, modify the product himself
E. Inject something into the tire, such as leak-proof glue and some other chemicals which can damage the sensor, thus affecting the TPMS working.
F. Abrasion or corrosion may lead to damage the TPMS
G. Model number or serial number or commodity is not matched with that in the warranty card.

H. Due to irresistible force (floods, fire off, earthquakes, typhoons) caused damage
I. Any damage caused by human or improper operation
6. Our company reserves the right to explain the product warranty rules.
7. To ensure that your legitimate rights and interests to be better protection, it need you read the user manual and important statements when you buy.
8. if the law provides for certain warranty content is not included in the warranty terms, then follow the laws and regulations.
9. Our company warranty liability is limited to the replacement of materials or supply of similar products, maintenance products, etc.

Warning:
Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE :
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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE :
This equipment 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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into 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.

RF exposure compliance statement:
This device has been evaluated to meet the general RF exposure requirement