

CPS120MA2



Consensic

Data Sheet

Solar Tire Pressure Monitoring System Manual

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DAT-046



Company

Wuxi Consensic Electronic Technology Co., Ltd. (Consensic, Inc .) Is an emerging MEMS design and manufacturing of American-owned enterprises. Founded in 2009, the company is headquartered in southern San Francisco, California, USA, and has a management team with extensive sensor and semiconductor experience. set up. We are committed to continuous innovation and market-competitive sensor manufacturing, offering more choices for micro-packages for advanced integrated systems. Through continuous technological innovation, we provide our customers with more competitive MEMS products.

Wuxi Consensic Electronic Technology Co., Ltd. has core capabilities in MEMS design, manufacturing and testing to provide customers with high precision and highly reliable MEMS products and solutions. From silicon to test design quality and reliability, we strive to exceed customer requirements. Company creation at the beginning of the company, we have been in close contact with our customers and partners, and we have created a success together with the win-win concept of hand in hand.

Safety

Thank you for purchasing our tire pressure monitoring system (TPMS). This system is designed to provide you with more protection while driving, and it will alert the car tires in advance.

After installing the TPMS, the system can monitor tire pressure and temperature conditions in real time. If any abnormal tire pressure and temperature are detected, the system will send a warning sound and a bright flashing icon to inform the driver in real time. Real-time reminders and handling of problems can avoid traffic accidents and ensure the safety of drivers and passengers.

In addition, the installation of this system can effectively help improve the comfort of the vehicle, improve driving safety, reduce vehicle wear and tear, reduce fuel consumption and reduce prevent burst probability of occurrence of tire.

Please read the instruction manual before using this product. If you have any questions, please contact the purchaser or call customer service. Thank you!

1、 FCC considerations

This system has complied with the requirements of Article 15 of the US FCC regulations, but the following precautions must be met when operating:

1 . 1 This product may be because of other harmful interference cause the system can not be operated.

1 . 2 Abnormal system operation may cause the system to fail.

1 . 3 This system and tested equipment complies with the Digital C limits the lass B, in accordance with Article 15 FCC, these limits are designed to provide significant protection against interference signals source appears in residential areas. Such devices will generate wireless RF signals that, if not installed and properly used, will cause some sources to interfere with wireless communications. However, even if it is properly installed, it cannot be completely ensured that no interference will occur. If this product will interfere with the wireless radio or television when the recipient machine, the user can decide whether to turn off the product. Users can also adjust the correct frequency to solve the problem. Possible methods are as follows: :

A、 Re-adjust the antenna B、 increase the distance between the device and the system

C、 Change the position and connection mode of the receiver

2、 Product use precautions

2 . 1 Please pay attention to safety during driving, do not operate and observe the system frequently.

2 . 2 This system uses the sensor transmitter to measure the pressure and temperature in the tire and transmit it by radio signal. During normal operation, the receiver will receive the normal tire pressure and temperature with specific values. any of th when a plurality of sensors or transmitters to monitor tire pressure in a tire or tire temperature anomalies, the sensor transmitter immediately sends an alarm signal to a wireless tire pressure monitoring system of the vehicle, when the receiver receives tires After the abnormal signal, the corresponding tire abnormality will be issued immediately and the driver will be notified with the corresponding alarm icon, text and corresponding tire pressure and temperature values. The driver should immediately check and repair the tire to avoid the tire. Accidents caused by improper pressure or high temperature.

2.3 General Tire will have a natural micro-leakage phenomenon, the tire's pressure is reduced over time, this is normal, and not directly install the product Association.

2.4 Driving the process air is influenced by thermal expansion and contraction, low air pressure is high, this is normal, and not directly related to the installation of the product.

2.5 Improper installation of this system will affect the use of this product or cause damage to the product. Always hire an experienced tire installation technician to install it. Be careful not to damage the sensor transmitter when you need to disassemble the tire again. The valve with built-in sensor transmitter is not suitable for repeated disassembly and assembly.

2.6 Use a specially configured power cord, and the power cord cannot be bundled around the receiver. Failure to do so will damage the machine or affect signal reception and will not be covered by a free warranty.

2.7 80% of DVD equipment, multi-function rearview mirrors or other high-power equipment in the market have electromagnetic interference. It is recommended that the receiver be more than 50 CM away from such products, so as not to affect the stability of the receiving signal. The best use position in the car is the upper left corner of the A-pillar front, the upper right corner, and the middle of the front two seats (away from the central control).

2.8 All information on the product performance, specifications, warranty information, etc. are subject to change without notice.

This system transmits signals wirelessly. Therefore, under certain special environmental conditions, the system may cause the wireless signal to be weakened or the signal is not received due to interference factors or incorrect operation methods or improper installation methods. If the receiver continues for 100 minutes will not receive the signal of a tire, should the car away from the current location (there is a strong wireless signal interference possible in the vicinity), or as soon as possible to the designated tire factory warranty, whether sensors in the tire inspection or a fault occurs in the tire mass The battery of the sensor is exhausted (the battery may be abnormal due to frequent abnormal conditions, and it is necessary to continuously transmit radio waves to warn the driver that the battery life is shorter than the normal service life).

3、 The scope of use of the system

The wireless tire pressure monitoring system requires proper installation methods and the system is installed by qualified operators in accordance with the steps in the installation manual. The system can operate correctly and provide warranty . Product warranty will no longer be available if the sensor is damaged due to improper installation or disassembly .

* It is recommended to replace or inspect the "tire valve" regularly every year to avoid air leaks in the tire valve.

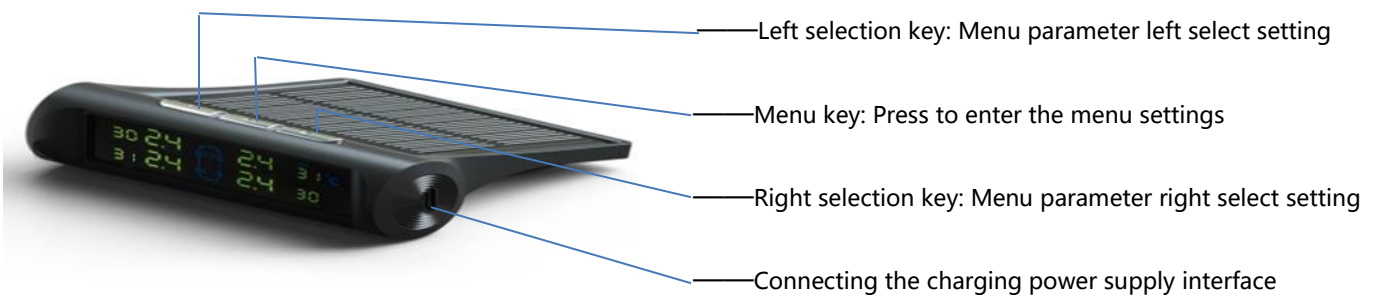
4、 Product composition

Sensor * 4、 Receiving host * 1

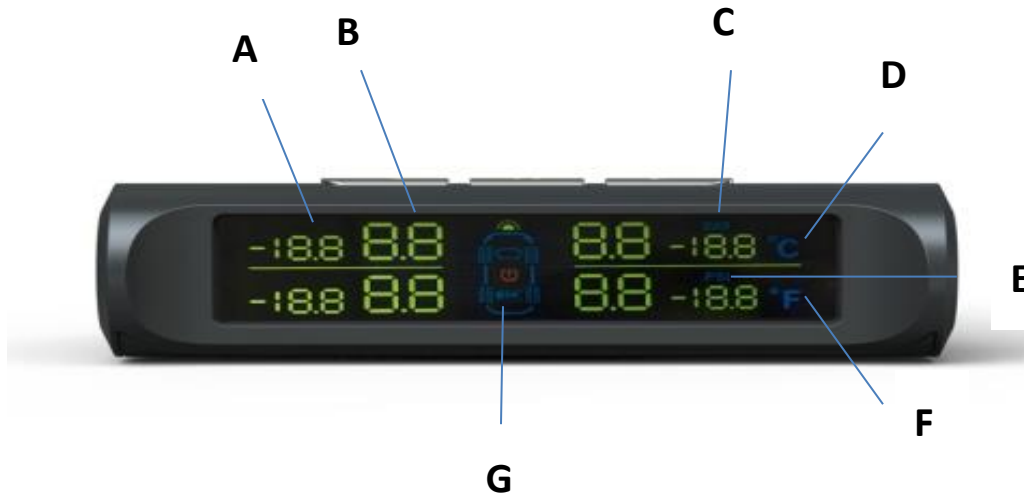
Product

One, the receiving host introduction

1、 Button / Interface description



2、 The display interface



A、 current tire temperature value B、 current tire pressure value C、 pressure unit

D、 temperature unit E、 US air pressure unit F、 Hua Celsius unit G、 battery power indicator

3、 Abnormal / Alarm information

3 . 1 Leak alarm

When either a within a transmission cycle of the tire pressure falls below 1.8 bar, the alarm buzzer sounds rapid, while the corresponding tire pressure data and icons, and icons leak TPMS icon flashes continuously, press any key to stop the alarm buzzer; stop The alarm is released after the air leak.

3 . 2 Low pressure alarm

Detected in any one tire pressure is lower than the default 1.8Ba R & It when the alarm buzzer sounds, and the corresponding tire pressure data and icons, and icons TPMS low pressure icon flashes continuously, the low pressure warning threshold default factory setting 1.8 Bar , for All : (GB "references car use GB / T2978-2008 car tire specifications, size, pressure and load"), different models models please refer to the standard tire pressure value on the doorpost car or the tire shop, 4S shop consultation exercise after Adjustment.

3 . 3 High pressure alarm

When detected in any one tire pressure is higher than the default 3Ba R & It when the buzzer sounds, and the icon corresponding to the tire pressure and force data and TPMS icons icon flashes continuously with the high pressure, high pressure alarm threshold default factory setting . 3 Bar , suitable for all car use (reference: GB " GB / T2978-2008 car tire specifications, size, pressure and load"), please refer to different types of models standard tire pressure value on the doorpost car or the tire shop, 4S shop advice after Adjustment.

3 . 4 High temperature alarm

When detected at any of a tire temperature is higher than a predetermined temperature threshold, the alarm buzzer sounds, and the corresponding wheel tire icon and temperature data and the TPMS icons temperature icon flashes continuously when the temperature is below the alarm threshold . 1 deg.] C after The alarm is released; the factory default setting of the temperature threshold is 70 °C.

Two , the function settings

The user can set the parameters according to their own vehicle conditions or actual needs. If the settings are not modified, the system defaults to the factory state; otherwise, the user You can also use the factory reset function to restore improper settings to the system default state. Press and hold the "Menu" button for 3 seconds to enter the system setting state. If there is no operation within 120 seconds, the system will automatically exit to the standby state. The settings without confirmation will not be saved .

1、 Unit settings (factory default is Bar , °C)

The standby state is long press " Left key" 3 seconds to enter the main interface, as shown in (3) , press the "Menu button" 3 seconds, the upper right corner has BAR icon, (1) in FIG operation setting state, left and right PSI menu key to select the unit, and then press the "menu button" to select the temperature setting unit, as shown in (2) the right to select the temperature, degrees Fahrenheit handover. after identifying the desired units, long press the "menu button" for 3 seconds to complete the set.



Figure (1)



Figure (2)

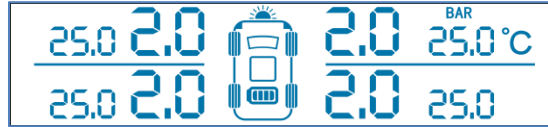


Figure (3)

2. Change the upper and lower limits of the tire pressure value (factory default is high pressure 3 Bar / low pressure 1.8 Bar , high temperature 70 °C)

Standby state is long press " Left key " 3 seconds bell, into the main interface , i.e., FIG. (3) . Press the "menu button" 3 seconds to enter the set state; Press the " Menu button " 2 into the upper limit set pressure " H_{the}l " screen, as shown in (4) selecting the left and right keys to enter the "air upper limit pressure setting " , three press "food bond " into the pressure lower limit setting " L_o " interface , selecting the left and right key to enter the "air under the threshold setting " ; four times by "food bond " to enter the temperature limit set " H_{the}l " screen , as shown in (5) through the right selection button to set a maximum temperature limit , after setting long press "food bond " can.



Figure (4)

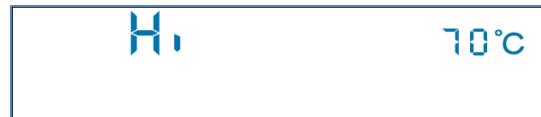


Figure (5)

3. Set the tire pairing

The standby state is long press " Left key " 3 seconds to enter the main interface , press " Right key " 3 seconds pairing state, press the "menu button" for switching the wheel , as shown below.



Figure (6)



Figure (8)

Figure (7)



Figure (9)

At this point, the interface icon will jump. The default is the state of the left front wheel pairing. Pressing the "Menu button" will cause the ID to flash in the upper right, the ID appearing in the lower left blinking 2 times, and the ID appearing in the lower right blinking 3 times. Select the four positions of "Left Front" -> "Right Front" -> "Left Rear" -> "Right Rear" and perform the pairing mode of the tire sensor. When the desired paired tires are selected, only the tires in the screen are selected. Displaying the wheel "ID" code and the wheel tire icon blinking continuously, the sensor of the tire is activated. When the receiver receives the signal from the corresponding sensor, it hears two drops and displays a new "ID" code indicating that the sensor has successful pairing. After the four tires are matched, press and hold the "Menu" button to save and exit, return to the main interface.

4、Tire exchange

Standby state is long press " Left key " 3 seconds bell, into the main interface , long press 3 seconds "right key " into the tire matching mode, there is a tire flashing icon, press left " select key " into the tire transposing operation, according to the pattern, matches the corresponding tire; exchange as front left and right, as shown in (6) Fig (7); selected left front tire deflation / pneumatic , other tire change and right front wheels under the search to the left front wheel ID code activated; is selected from the right front tire deflated / inflated , other tire change, front left wheel the search right front ID code is activated, press " menu key " to save and exit , to complete the exchange of the left front and right front wheel.

Three , Parameters and warranty

1, Receiving host parameters

Operating voltage: 3.7-5 V

RF transmission frequency: 433.92 MHz \pm 5 0 KH

Bright screen working current: < 30 m A

Operating temperature: -20 °C -80 °C

Storage temperature: -30 °C -90 °C

Display mode: LCD screen

RF signal receiving sensitivity: -90 dbm

Black screen Operating current: < 0.2 m A

2, Warranty terms

The one-year product warranty is guaranteed for one year from the date of purchase (consumable parts and accessories that need to be replaced regularly) are not included here. During the warranty period, if the product at fault under normal operational use, the company will provide free replacement or repair; insurance company stay more change other new products, product rights or of equal value.

The original warranty cannot be provided if :

1. The product is not operated in accordance with the instruction manual;
2. When the product is abused or misused due to accident or negligence and is damaged;
3. In the Company or the Company granted outside the maintenance service at the right time and cause damage;
4. Damage caused by transportation;
5. Other failures or damages caused by non- product design, technology, manufacturing, quality and other issues.

All products are subject to failure of the Company or the Company granted the right to maintenance for repair, along with details of the fault and produce the original purchase invoice. This warranty is required countries that purchase locally can take effect

This warranty is only limited to the conditions described herein, the Company will be liable for any special, with the sale of this product-related secondary or will be responsible for the damage occurred. This warranty provides you with specific legal rights, but may also have other rights that vary from country to country.

The color of the product provided in this sales package may differ from the color shown on this manual or on the package. Picture only for reference, technical surgery specifications are subject to change without notice. Parts supply may vary by market, please check with your local agent.

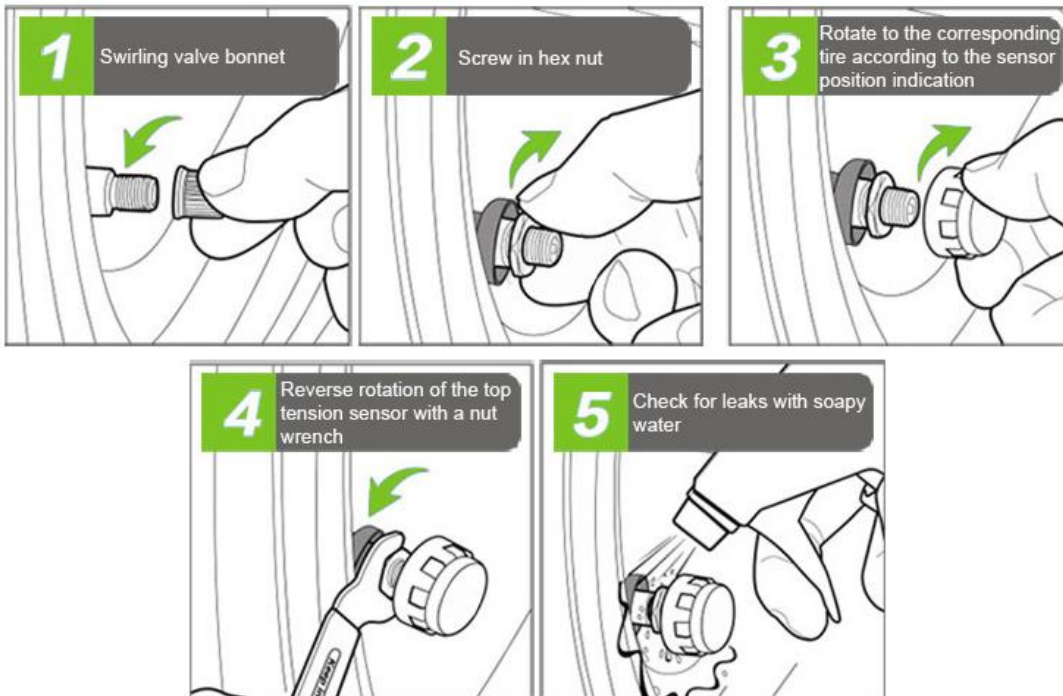
Customer's name		Phone	
Address			
Product name			
Product type	Built-in <input type="checkbox"/> External <input type="checkbox"/>	Date	
Product number		Colour	
(Seal and signature office)			

Maintenance records

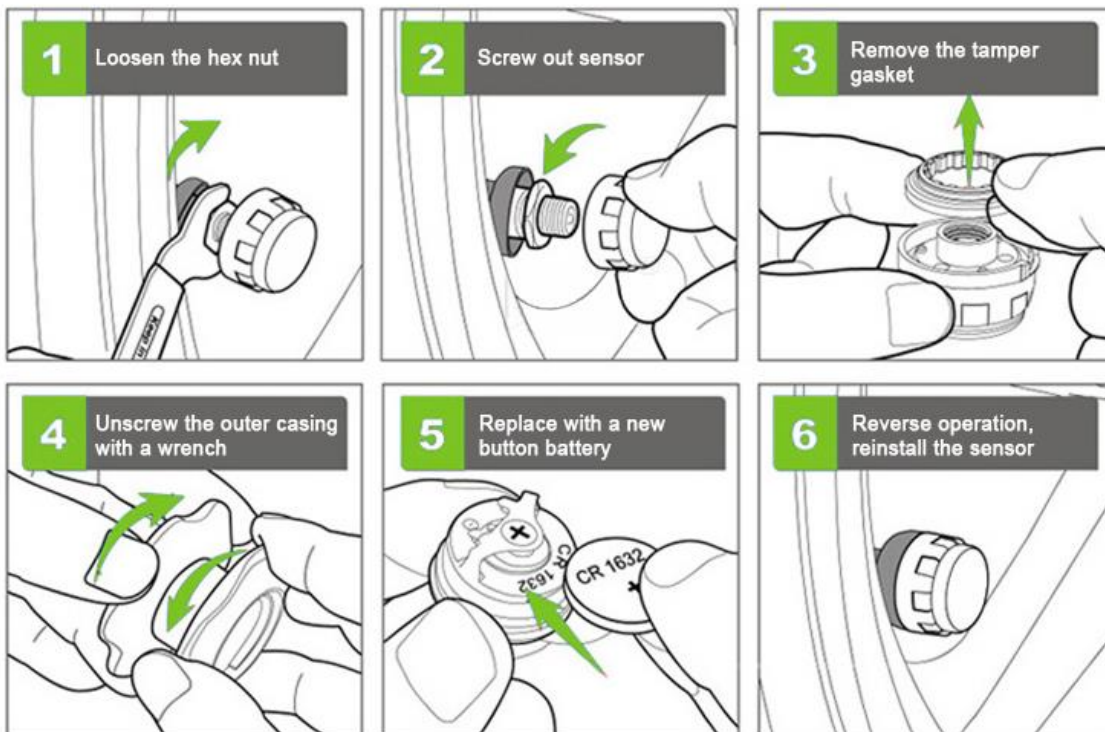
Repair date	Fault phenomenon	Cause of issue	Maintenance staff

External sensor installation instructions

External sensor installation diagram



External sensor replacement battery diagram



Disclaimer

Information in this datasheet is provided solely to enable implementation and use of Consensic products. The specifications and characteristics are subject to change without notice. Consensic reserves the right to make changes without further notice to any products herein.

“Typical” parameters provided in this datasheet can and do vary in different applications and actual performance may vary over time. Customers must validate all operating parameters for their application.

Consensic is not responsible for direct, indirect, incidental or consequential damages resulting from any defect, error or failure to perform. In no event, regardless of cause, shall Consensic incur any liability for any damages of any kind, including, but not limited to, any direct, indirect, special, incidental, punitive or consequential damages arising out of, resulting from, or any way connected to the use of the product, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, and whether based on this agreement or otherwise, even if advised of the possibility of such damages, and whether or not injury was sustained by persons or property or otherwise; and whether or not loss was sustained from, or arose out of, the results of, the product, or any services that may be provided by Consensic.

The customer assumes all responsibility and liability for proper and safe handling of the goods. It is the customer's responsibility to take any and all appropriate precautions with regard to electrostatic discharge. Also be aware that the products herein may not be regulatory compliant or agency certified (FCC, UL, CE, etc.).

No License is granted under any patent right or other intellectual property whatsoever. Consensic assumes no liability for applications assistance, customer product design, software performance, or infringement of patents or any other Intellectual property rights of any kind.

The latest news about the product, please ask the manufacturer or follow manufacturer's web site :

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