ZUS®

Smart Tire Safety Monitor

nonda®

User Manual

Quick Start

Reset Button
Long press: to restart
Short press: to stop
the alarm

White Lights
Bluetooth Status
LEDs on top
Flashing: waiting for
connection
Solid: connected

Warning Buzzer
No warning when tire
pressure is normal.
Alarms sound when tire
is in abnormal* status.

Green Light
Tire Status LEDs
Solid: normal status
Flashing: abnormal* status
Off: sensor signal lost
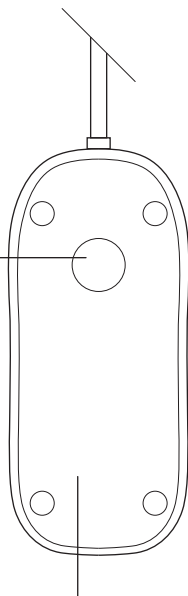
**Reversible USB
Output Port**
Charge your mobile
devices or GPS units.

* abnormal: high pressure / low pressure / high temperature /
sensor battery voltage low / no connection / sensor cannot
receive data, corresponding tire has an issue.

Introduction

We have developed a simple and easy-to-install Tire Pressure Monitoring System to meet the growing demand for a simple external kit to help upgrade your vehicle's tire safety.

Available as a self-installable external sensor kit, nonda's Smart Tire Safety Monitor features a USB-powered receiver with 4 external sensors that transmit data via Bluetooth directly to the ZUS app. Showing the tire pressure of all 4 tires in real time, the monitor can quickly detect punctures and/or excess temperature, giving both a visual and audible warning to alert the driver of possible tire failure. While the receiver utilizes a USB port, it does come with a USB output port for charging your mobile devices or GPS unit. As a result, you never lose a USB port.

At a Glance
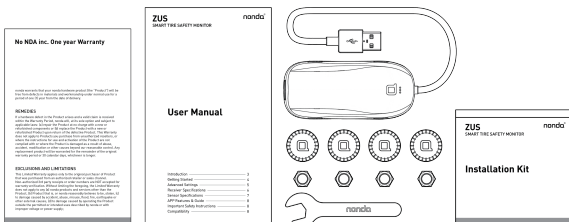
- Receiver x 1pc
- Screw-on Valve Cap Sensors* x 4 pcs
- Anti-theft Nut x 4 pcs
- Wrench x 1pc
- User Manual x 1pc
- Installation Kit Bag x 1 pc
- Warranty Information Card x 1pc

*Factory paired and labeled to indicate the correct tire with batteries pre-installed.

Getting Started

App Download, Receiver Connection & Sensor Installation

Connect the receiver to a USB car charger. Pair the receiver with your mobile device before installing the sensors.
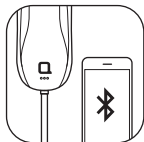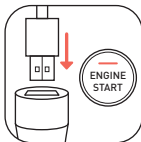
1 Search "**ZUS**" on the App Store or Google Play and download the app on your mobile phone.

2 Plug the **receiver** into a USB port & start the engine to power it up. Make sure you see the white lights blinking.

3 Open the **ZUS** app and turn on your device's Bluetooth. Click "add a device" and place your phone next to receiver to pair.
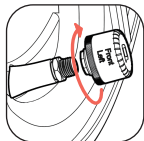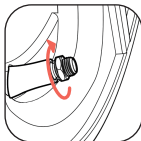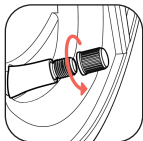
4 Unscrew the valve cap and put it into the **installation kit bag**, and keep it in your glove box for future use

5 Screw on the anti-theft nut to the end of the valve stem. If your tires have a long valve stem, see P5 for more info.

6 Screw the **sensor** clockwise onto the valve stem until it is tight.

The sensor caps are labelled with **F**ront **R**ight (**FR**), **F**ront **L**eft (**FL**), **R**ear **R**ight (**RR**), and **R**ear **L**eft (**RL**). Please install each sensor onto the respective tire.

Congratulations!

Sensor installation is complete! However, if you are worried about the sensors being stolen or air leaking, please follow the **optional steps** on the next page.

Advanced Settings

Anti-theft

If you are concerned about sensors being stolen, please tighten the **anti-theft nut** counterclockwise to the sensor.

Leak Check

If you are concerned that there may be an air leak, spray soapy water around the sensor and check whether there are bubbles coming out. If that is the case then please tighten the sensor.

Alarm Threshold Customization
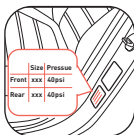
Configure the alarm settings as specified on your vehicle. Recommended cold inflation pressure is displayed on the owner's manual and on the placard (or sticker) placed on the vehicle's door, pillar, glove box, or fuel filler flap.

Troubleshooting Procedures

Should any of the sensors fail to show results, please note the following:

1. The receiver may not be properly connected. Please make sure the receiver is plugged into a USB charger and the white Bluetooth LED are blinking or solid.

2. Drive your vehicle above 14 mph (22 kph) for about 10 mins.

3. If any of the 4 sensors fail to show readings on the ZUS app, try installing the sensor on another tire and see if any readings appear. If not, please contact cs@nonda.us for further support.

If the above troubleshooting procedures don't work, please follow the aforementioned sensor installation steps to reinstall the sensor again. If it still does not work, please contact our customer service at cs@nonda.us.

Receiver Specifications

Features	Specifications
Diamensions & Weight	Cable length: 200mm; 7.9inch Diamensions: 85mm X 38mm X 17mm; 3.3in X 1.5in X 0.67in Weight: 33g; 1.16oz
Warning Buzzer	1. Buzzer warning is triggered in the following circumstances: sensors detect abnormal tire pressure or abnormal tire temperature; sensors detect tire leakage; sensor battery is low; sensor signal is lost. 2. Buzzer warning continues for 5 times unless the alarm status returns to normal or is manually disabled.
Radio Frequency: receiving data transmitted by external sensors	Operating Frequency: 433.92MHz
Wireless Bluetooth: data exchanged between wireless devices	Bluetooth 4.0 2.4GHz Max Output Power: -9dBm
USB Power Requirement	USB Power 5V (Car charger recommended; You can turn off the receiver by disconnecting receiver from charger.)
USB Output Port	Output for charging only; Charging speed depends on charger capacity; Maximum one device
Operating Temperature	-20°C ~ 85°C; -4°F ~ 185°F
Storage Temperature	-30°C ~ 85°C; -22°F ~ 185°F
Low Power Consumption Management	Tire Status LEDs will be turned off after all tires have been running normally for 5 mins. Tire Status LEDs will be turned on immediately if a tire is in abnormal* status.

White Light: Bluetooth Status LEDs on top **Flashing:** waiting for connection **Solid:** connected	**Warning Buzzer** No warning when tire pressure is normal. **Alarms** sound when tire is in abnormal* status.
Green Light: Tire Status LEDs **Solid:** normal status **Flashing:** abnormal* status	**Button** Long press: to restart** Short press: to stop the alarm

*abnormal: high pressure / low pressure / high temperature / sensor battery voltage low / no connection / sensor cannot receive data, corresponding tire has an issue.
** You will hear a long beep after restarting.

Sensor Specifications

Features	Specifications
Diamensions & Weight	Diameter: 21mm; 0.83in, Height: 18mm; 0.7in Weight: 7.1g; 0.25oz (without battery)
Tire Pressure Threshold	Pressure Range: 0 ~ 46psi; 0 ~ 3.2bar Confidence Interval: ±1.45psi; ±0.1bar
Tire Temperature Threshold	Temperature Range: -20°C ~ 120°C; -4°F ~ 248°F Confidence Interval: ±1°C; ±1.8°F
Radio Frequency	Operating Frequency: 433.92MHz Max Output Power: -22.48dBm
External Sensor Battery	Lithium Battery CR1632 3V x 1
Battery Life	Normal Usage: 1 Year+*
Operating Temperature	-40°C ~ 125°C; -40°F ~ 257°F
Storage Temperature	-40°C ~ 125°C; -40°F ~ 257°F
Operating Humidity	Maximum Humidity 95%
Water Resistance	IP67
Anti-theft	Anti-theft Nut & Wrench

*Battery life is calculated based on 3 hours of driving per day. Actual lifespan may vary depending on environmental temperatures.

Sensor Battery Replacement

ZUS app will alert you when the sensor battery needs to be replaced. Each sensor requires one **Lithium Battery CR1632.**

| Step 1 | Step2 | Step 3 | Step 4 | Step 5 |

Step 1: If you've tightened the **anti-theft nut,** unscrew the nut with the wrench.
Step 2: Unscrew the **sensor**.
Step 3: Open the sensor by unscrewing its cap.
Step 4: Replace the battery.
Step 5: Screw back the sensor cap and make sure it is tight. Use the wrench if needed.

APP Features & Guide

Shows tire pressure for all 4 tires in real time
Monitors pressure range: 0 ~ 46psi; 0 ~ 3.2bar
Adjustable alert threshold
Customizable pressure and temperature measuring units (psi/bar/kPa - °C/°F)
Air leakage alarm (Audible & Visual)
High temperature alarm (Audible & Visual)
Low battery voltage & lost sensor alarm (Audible & Visual)

Important Safety Instructions

Do not place any open flame source near the devices
Avoid dropping the devices
Do not disassemble
nonda Smart Tire Safety Monitor is for use with metal tire valve stems only. Installation of the Tire Sensors on non-metal tire valve stems may cause tire and/or tire valve stem damage which could result in serious personal injury or death.
Use of the Smart Tire Safety Monitor is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger the low tire pressure alert. Failure to maintain proper tire pressure can result in loss of control of the vehicle, which may lead to serious personal injury or death.
Keep out of the reach of children.
It is highly recommended the sensors be removed before the car is sent to an automatic car wash.
To avoid sensor corrosion, please re-install the sensors every two months.

Compatibility

Sensors monitor tire temperature (Celsius) and pressure (0~46 psi). Sensor signal covers 19.6 ft (5.9 m). COMPATIBLE WITH MOST CARS EXCEPT FOR RVs, TRAILERS, TRUCKS, OR MOTORHOMES.

No NDA inc. One year Warranty

nonda warrants that your nonda hardware product (the "Product") will be free from defects in materials and workmanship under normal use for a period of one (1) year from the date of delivery.

REMEDIES

If a hardware defect in the Product arises and a valid claim is received within the Warranty Period, nonda will, at its sole option and subject to applicable laws: (a) repair the Product at no charge with a new or refurbished components or (b) replace the Product with a new or refurbished Product upon return of the defective Product. This Warranty does not apply to Products you purchase from unauthorized resellers, or where the instructions for use and activation of the Product are not complied with or where the Product is damaged as a result of abuse, accident, modification or other causes beyond our reasonable control. Any replacement product will be warranted for the remainder of the original warranty period or 30 calendar days, whichever is longer.

EXCLUSIONS AND LIMITATIONS

This Limited Warranty applies only to the original purchaser of Product that was purchased from an authorized retailer or sales channel. Non-authorized 3rd party receipts or order numbers are NOT accepted for warranty verification. Without limiting the foregoing, the Limited Warranty does not apply to any (a) nonda products and services other than the Product, (b) Product that is, or nonda reasonably believes to be, stolen, (c) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (d) to damage caused by operating the Product outside the permitted or intended uses described by nonda or with improper voltage or power supply;

OBTAIN WARRANTY SERVICES

To obtain remedies under this Warranty, nonda must receive your claim before the end of the Warranty Period. You also must deliver the Product, in either its original packaging or packaging providing an equal degree of protection, to the address specified by nonda. Consumer shall bear the cost of shipping the device to nonda. By sending the Device, consumer agrees to transfer ownership to nonda. nonda may not return the original device to consumer. If the claim is justified based on this Warranty, nonda shall bear the cost of shipping the repaired or replacement device to the Consumer.

How To Make A Warranty Claim

Read through our warranty above; if you believe you are covered by the warranty please prepare following documents and send them to cs@nonda.us.
 1. A copy or screenshot of the original purchase invoice to verify your warranty (order id, purchase date, website or store)
 2. A description of the problem with a photo illustrating the physical damage
 3. Your shipping address including name, postal code and phone number
If you need software support only, you may contact us with your app account and phone operation system. We would be glad to help.

Please note that, in the European Union, any warranty period less than two years shall be increased to two years.

Regulatory Compliance

FCC Compliance Statement

Receiver FCC ID: 2AFZB-ZUTMBKRAV
Sensor FCC ID: 2AFZB-ZUTMBKRAVS

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.

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

NCC Statement

Administrative Regulations on Low Power Radio Waves Radiated Devices warning:

Article 12

Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to a approved low power radio-frequency devices.

Article 14

The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; If found, the user shall cease operating immediately until no interference is achieved.

The said legal communications means radio communications is operated in compliance with the Telecommunications Act.

The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

NCC 警語

根據交通部低功率電波輻射性電機管理辦法規定：

第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Declaration of Conformity

$C\epsilon$

Refer to article 10(9), shall be provided as follows:
Hereby, No NDA inc. declares that the radio equipment type Smart Tire Safety Monitor is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following Internet address: https://www.nonda.co/pages/regulation/.

Please note that, in the European Union, any warranty period less than two years shall be increased to two years.

Manufacturer: No NDA Inc.