

WIRELESS TIRE PRESSURE AND TEMPERATURE MONITORING SYSTEM

TPMS

Instruction Manual

Model no.: MB-2N

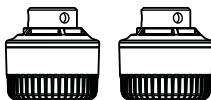
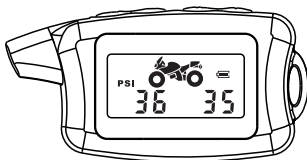


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1. TPMS MAIN FEATURES

Reduce Driving Risks

It was reported that an astonishing 75% of all running tires in the USA are under-inflated and 70% of fatal traffic accidents were caused by tire blowouts. With a TPMS, drivers are warned of abnormal tire conditions before it becomes dangerous.

Improve Fuel Economy

Today's tire designs make visual inspection of deflated tires very difficult. Very often, a 30% under-inflated tire looks very much like a fully inflated one. A TPMS will make sure your tire pressure is at its proper level. A 9PSI drop in tire pressure will cause approximately 4% increase in fuel consumption.

Prolong Lifetime of Tires

The following table shows a simple relationship between tire pressure and tire lifetime:

Tire Pressure	Tire Lifetime
20% under inflated	30% less
30% under inflated	45% less
20% over inflated	10% less

2. PRODUCT FEATURES

2-1. Sensor Features

- Reliable cap sensors, easy to install.
- Water resistant.
- Battery replaceable.
- Fast leakage alert.
- Individually coded sensors.
- Anti-theft design.

2-2. Monitor Features

- Long battery life.
- Reliable and easy to program.
- LCD displays 2 tires' pressure or temperature simultaneous.
- Configurable high/low pressure warnings.
- Configurable high temperature warnings.
- Vibration, Visible and audible alerts.
- Selectable temperature units (°C or °F).
- Selectable pressure units (PSI, BAR).
- Long range between sensors and monitor.

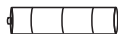
3. SYSTEM COMPONENTS



Monitor



Key-ring



AAA Battery



Sensors



CR1632 Battery

- ✱ According to customer requirement, if the battery is installed in the sensor.



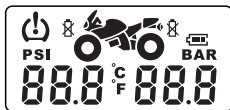
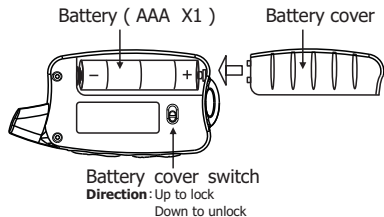
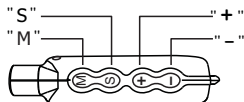
Sensor Waterproof Rubber Seal (Spare Part)



Hex Wrench

Item	Q'ty
Monitor	1pc
AAA Battery	1pc
Key-ring	1pc
Sensors	2pcs
Sensor Waterproof Rubber Seal (Spare Part)	2pcs
✱ CR1632 Battery	2pcs
Hex Wrench	2pcs

3-1. Monitor Components and Icons



Pressure Unit : BAR or PSI , user-selectable
Temperature Unit : °C or °F , user-selectable

Icon	Description
	Tire Indicator
	Faulty Icon
	Sensor Low Battery Indicator
	Monitor Battery Indicator

4. INSTALLATION

4-1. Sensor Location

Each sensor has been marked with a position number sticker, and sensors have been programmed into the monitor. Please install the sensors according to the picture below. Sensor can be re-coded when the sensor's position is changed.

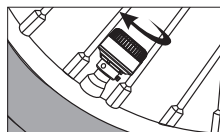


Noted:

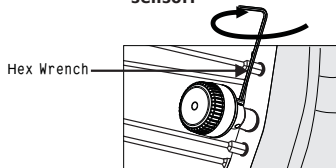
Please make sure the monitor is working when install the sensors, so that the monitor can receive the data immediately.

4-2. Sensor Installation

Remove the tyre valve cap and mount the corresponding sensor on the valve, then lock the screws with hex wrench for anti-theft.

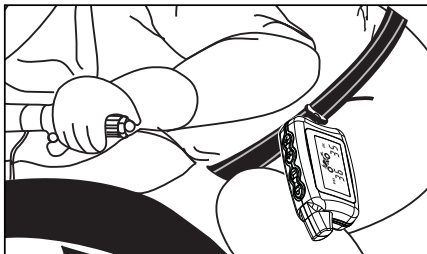


***Do not over tighten the sensor cap to prevent possible damage to the sensor.**



4-3. Monitor Installation

The monitor can be put in the pocket together with the motorcycle key or any other place you like. You do not need to check the tire pressure and temperature if there is no alert while driving. If you need to, please pay attention to the safety when checking tire data while driving.



4-4. Monitor Power on/off Setting

In standby mode, press the button "-" for 3 seconds, the monitor will issue a beep and turn off. The same method can turn on monitor.

5. PARAMETER SETTING

5-1. Factory Parameter

Pressure Unit:	PSI
High Pressure:	43PSI (3.0 BAR)
Low Pressure:	29PSI (2.0 BAR)
Temperature Unit:	°C or °F
High Temperature:	70°C (158°F)

5-2. Factory Default

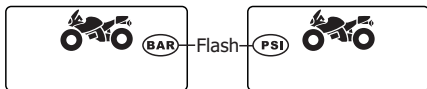
Remove the battery from the monitor, then press button "S" and "+" (don't release) and put the battery back to the monitor at the same time. The factory default settings will be restored.

5-3. Settings Sequence

In standby mode, press the button "M" for 3 seconds until a beep. Press the button "M" will scroll to the next parameter setting, and press button "+" or "-" to select the desired unit or value. Press the button "S" once will store the parameters.

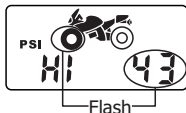
1). Pressure Unit Setting

When the pressure unit icon "PSI" flash, press button "+" or "-" to set the desired unit.



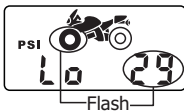
2). High pressure alert in the front tyre

When the front tyre icon and high pressure alert value flash, press button "+" or "-" to set the desired value.



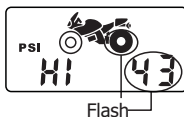
3). Low pressure alert in the front tyre

When the front tyre icon and low pressure alert value flash, press button "+" or "-" to set the desired value.



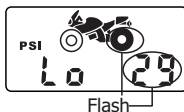
4). High pressure alert in the rear tyre

When the rear tyre icon and high pressure alert value flash, press button "+" or "-" to set the desired value.



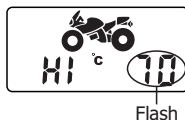
5). Low pressure alert in the rear tyre

When the rear tyre icon and low pressure alert value flash, press button "+" or "-" to set the desired value.



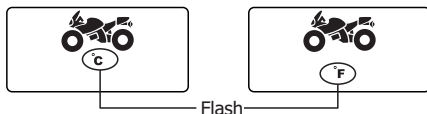
6). Temperature alert setting

When the temperature alert value flash, press button "+" or "-" to set the desired value.



7). Temperature unit setting

When the temperature unit "°C" flash, press button "+" or "-" to set the desired unit.



6. ALERTS

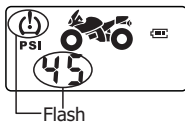
The sensors send pressure and temperature readings to the monitor every 5 minutes, if any reading is out of the pre-defined values, you will notice 4 things:

1. The monitor will vibrate;
2. An audible alarm(Bi..Bi...Bi...);
3. The green backlight will turn on;
4. The corresponding icons on the monitor will flash.

Press any button to switch the alarm,vibrate and green backlight off, the flashing icons will not be turned off until the correct pressure and temperature settings are restored to within range.

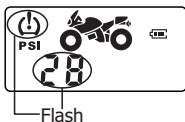
1). High pressure alert

When the tyre pressure is higher than the pre-defined value, for example 45PSI, You will notice 4 things same as page 4 alerts description.



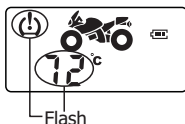
2). Low pressure alert

When the tyre pressure is lower than the pre-defined value, for example 28PSI, You will notice 4 things same as page 4 alerts description.



3). High temperature alert

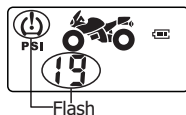
When the tyre temperature is higher than the pre-defined value, for example 72°C, you will notice 4 things same as page 4 alerts description.



4). Fast leakage alert

The sensor will send data immediately to the monitor when there is a fast leakage. you will notice 4 things same as page 4 alerts description.

e.g.: When the front tyre pressure suddenly drops from 36 PSI to 19 PSI, the fast leakage alert is as following:



5). Sensor low battery alert

The sensor will send data immediately to the monitor when the sensor is low battery you will notice 4 things same as page 4 alerts description.

e.g.: When the front tyre sensor is low battery, the monitor will alarm as the picture below:



7. PROGRAMMING SETUP

The sensors can be re-coded to the monitor if the sensors' position is changed.

7-1. Inflating code

1. Press the button "S" for 3 seconds until you hear a beep.
2. Mount the sensor to the tire.
3. The monitor will display the sensor ID code.
4. Press "S" shortly will turn to another tyre.
5. Repeater above operation for the other tire.
6. The monitor will exit to standby mode if there is no operation for 1 minute.
7. If there is no action in the monitor, rotate the sensor upwards or downwards for about 12 seconds to activate the G-sensor.



7-2. Input sensor code

1. Press and hold the button "S" for 6 seconds until the SECOND beep.
2. Press button "M" will scroll each byte of the ID code.
3. Press "+" or "-" to choose each byte of the ID code.
4. Press button "S" will turn to another tyre.
5. After sensors' ID code are input to the monitor, Press the button "S" for 3 seconds will store the ID code.
6. The monitor will exit to standby mode if there is no operation for 1 minute.



Noted:

The ID code displayed is one tyre's ID code, not all the sensors' code.

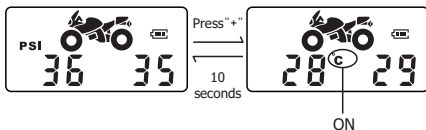
8. OTHER FUNCTIONS

8-1. Backlighting


The backlight will turn off if there is no operation or alarm in standby mode. Press any button to turn on the backlight, and it will be off after about 5 seconds if there is no operation or alarm.

8-2. Monitor display

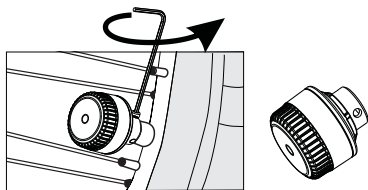
In standby mode, the monitor displays two tyres' pressure, press button "+" will turn to display temperature, It will turn to display pressure screen automatically after 10 seconds.



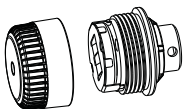
9. REPLACING THE SENSOR BATTERY

When the sensor low battery icon  shows on the monitor and corresponding tire icon is flashing, the sensor battery needs replacement. A CR1632 battery cell is recommended which operates at -40°C to +80°C. user can buy replacement batteries from local dealer.

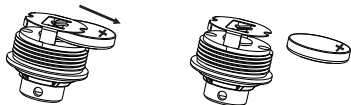
1. Use the hex wrench provided to remove the anti-theft screw and take out the sensor.



2. Unscrew the sensor cap.



3. Take the battery out.



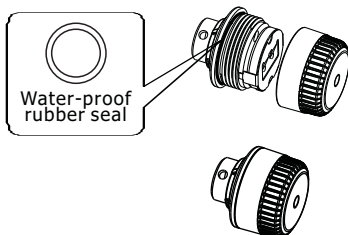
4. Replace a new CR1632 battery cell, ensure the positive + is facing upwards.



"-" "+"

CR1632 Lithium Battery

5. Check that the water-proof rubber seal is in its proper position. Screw the sensor cap back on.



10. SPECIFICATION

10-1. Monitor

Operational Temperature	-20°C ~ 80°C
Storage Temperature	-30°C ~ 85°C
Transmission Frequency	433.92MHz
Battery	AAA Battery x1
Size	77(L) x 39(W) x 18(H) mm
Weight	52g

10-2. Sensors

Operational Temperature	-40°C ~ 80°C
Storage Temperature	-40°C ~ 85°C
Pressure Range	0~50 psi(0~3.5 bar)
Pressure Accuracy	± 1.5 psi(± 0.1 bar)
Temperature Accuracy	± 3°C
Transmission Power	< 10dBm
Transmission Frequency	433.92MHz
Battery Life	3 years (CR1632 -40°C~80°C)
Size	21mm(diameter) 21mm(height)
Weight	12g

11. CAUTIONS

1. The monitor should be well fixed to avoid falling off during driving.
2. After the sensor installation, it is highly recommended to check for any air leakage.
3. This TPMS can effectively monitor tire pressure and temperatures but cannot prevent traffic accidents, regular tire inspection and maintenance is still necessary.
4. After the system is installed correctly, the driver does not need to stare at the monitor all the time while driving. Alerts will be issued when abnormal conditions are found in the tires.

****Information in this manual is subject to change without notice.***