

# TPMS Motor User manual



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# 1.Before Use

## 1.1 Introduction

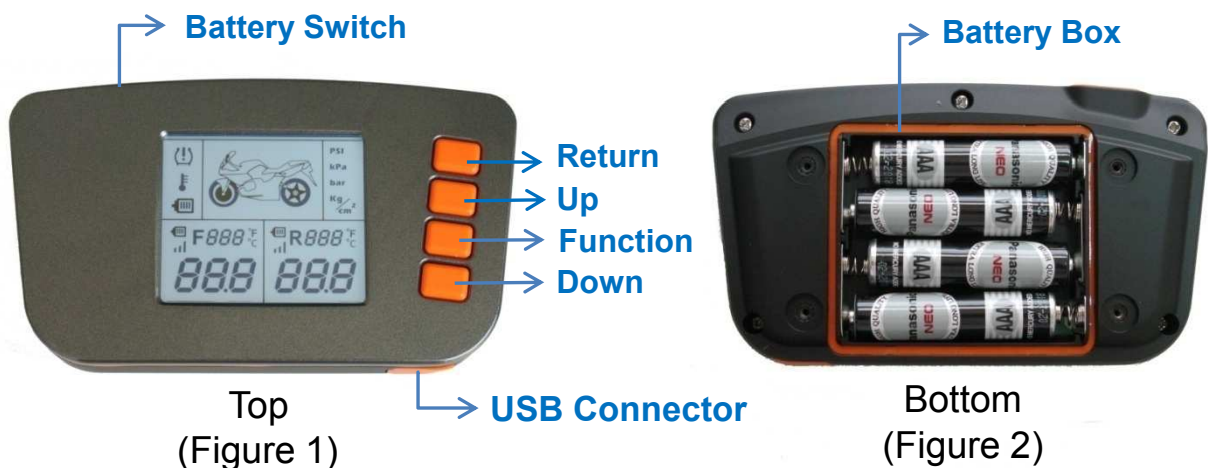
**TPMS(Tire Pressure Monitoring System)** which is safe equipment for vehicle by wireless transmitting can be reduced malfunction and issues for driver's safety with each **tire pressure** 、 **temperature** and **sensor battery** at any time.

TPMS will be beeped and shown icons on screen to remind driver if one detects any abnormal status from tire sensors.

## 1.2 Package Content

Parts	Quantity
Host unit	1
Battery of host unit (AAA)	4
Sensor	2
Battery of sensor(CR1632)	2
USB cable	1
Anti-theft nut	2
Spanner for anti-theft nut	1
Holder(Optional)	1
User manual	1

## 1.3 Product Layout

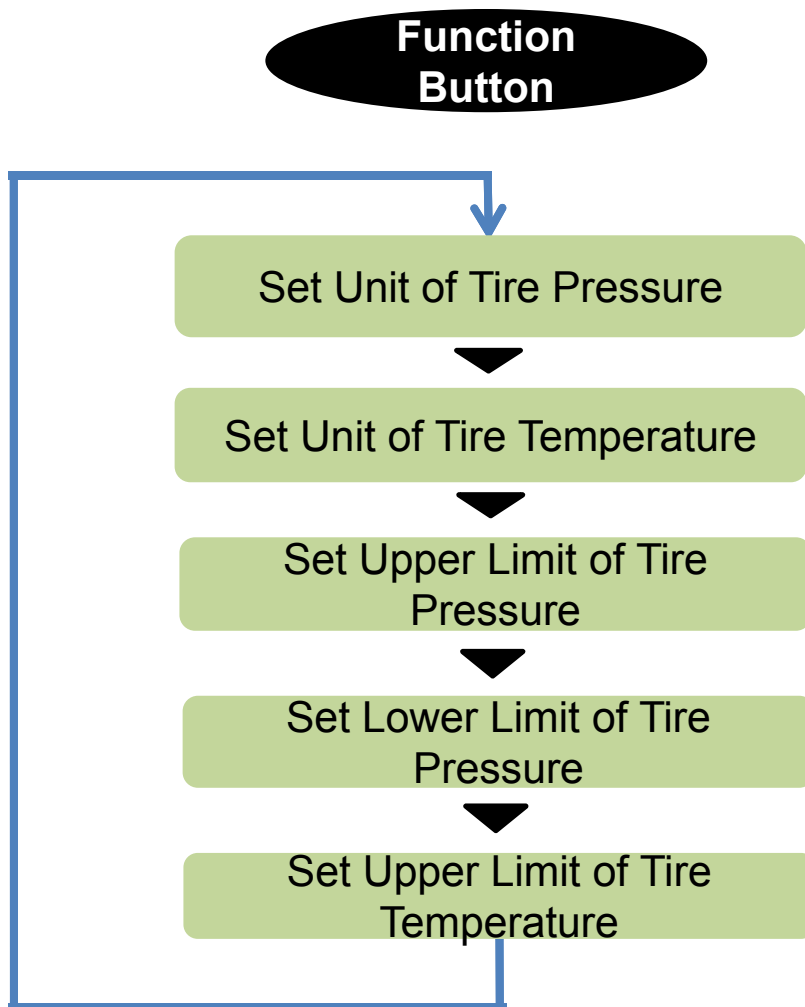


### ➤➤➤ 1.3.1 Function Button

Press [Function Button] that it can be shown setting mode in a cycle.(Figure 3)

### ➤➤➤ 1.3.2 Up/Down Button

Select which button you want function with [Function Button],and then changes value with [Up/Down Button].Press [Return Button] for leaving setting mode when you set.



(Figure 3)

## 2.Product Installation

### 2.1 Host Unit

There are two methods of power installation for host unit as below:  
For battery installation that remove four screws which is located back lid cover, open one and mount batteries (Alkaline or heavy duty: AAA) inside(Notice:“+” is positive / ”-” is negative), then lock back lid cover and turn on host unit with [Battery Button].(Figure 4~6)

#### Battery Installation



(Figure 4)



(Figure 5)



(Figure 6)

For USB power installation that get USB cable from package ,connect between USB connector(mini USB) which is located side on host unit and USB port(standard) which is located on the motor(Figure 7~9).

#### USB Power Installation



(Figure 7)



(Figure 8)



(Figure 9)

#### Remake:

For power installations and **please only choose one**. It must be kept off [Battery Switch] if someone uses two power installations simultaneously, otherwise it will be consumed power of batteries.

## ➤➤➤ 2.1 Host Unit

It has two types of holder for host unit as below:

For quick release type that install one to hole which is located back of host unit(Figure 10~11),please look for where it is consort for holder and fix with pushing down latch(Figure 11~12).

### Quick Release Type of Holder (Option)



(Figure 10)



(Figure 11)



(Figure 12)

For rear mirror type that install one to hole which is located back of host unit(Figure13~14),please look for where it is consort for holder and it must be a hole on vehicle for holder with removing original rear mirror(Figure15~17),assemble holder and rear mirror finally (Figure18).

### Rear Mirror Type of Holder (Option)



(Figure 13)



(Figure 14)



(Figure 15)



(Figure 16)



(Figure 17)



(Figure 18)



## ➤➤➤ 2.2 Sensor

Each sensor has unique ID (IDentification; Paired in manufacturing) and paste identified sticker on sensor (F:Front/ R:Rear).

1. Remove tire valve cap and screw in anti-theft nut. Confirm tire position of vehicle and sticker of sensor is match, then install sensor to tire valve and locking tightly(Figure19~22).



(Figure 19)



(Figure 20)



(Figure 21)



(Figure 22)

2. Screw in clockwise direction of anti-theft nut(Figure 23).
3. Get spanner from package, one hand fix anti-theft nut with spanner and other hand hold sensor, then screw out counterclockwise direction of anti-theft nut tightly with sensor each other(Figure 24~25).
4. Check sensor whether locking is sure or not.



(Figure 23)



(Figure 24)



(Figure 25)

## 2.3 Frequently Asked Questions (FAQ)

**FAQ1 : Host unit cannot receive RF(Radio Frequency) signal from all sensors after power on within 5 minutes.**

Answer –

1. Please confirm polarity of sensor battery.(Positive is side up and negative is facing down)
2. Please confirm fixed of sensor metal cover and touch tightly with battery.(Figure 26/ Figure 27)
3. Please confirm level of sensor battery; replace battery if voltage is less than 2.8V.
4. Please reinstall sensor battery again.
5. Remove sensor cap and check any stream or liquid into sensor so that metal cover or battery rust becomes malfunction.



(Figure 26)



(Figure 27)

**Notice:**

**The TPMS is based on wireless operation; it is possible reduced RF Signal or no RF signal due to environment interference 、 installation error and operation mistake.**

**Host unit didn't get updating RF signal from all sensors within 5 minutes that issue of tire will display tire pressure as “---” to remind driver for warning.**

**Please follow up as below if you have this situation as above:**

- 1. Drive away there.(It has another strong wireless signal for interference)**
- 2. Please check level of sensor battery.**
- 3. Please contact with your dealer for assistance.**

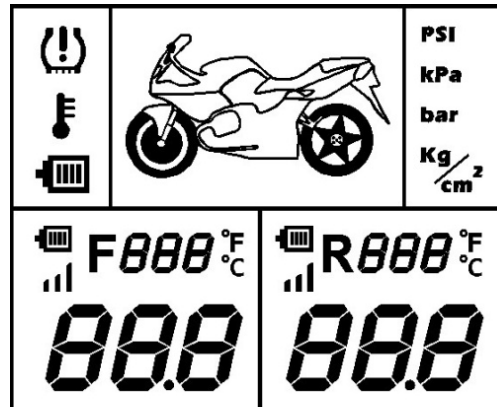
**FAQ2 : It has empty 、 lost and repeat sticker on sensors if someone bought product.**

Answer –

It paired ID code between host unit and sensors when the product manufactured, please contact with your dealer for resetting to avoid mistake position of tires and sensors if you have any questions.



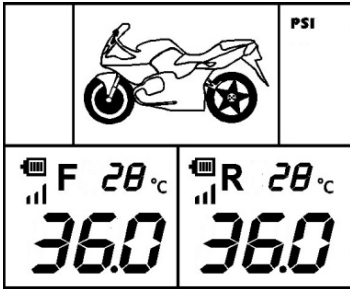
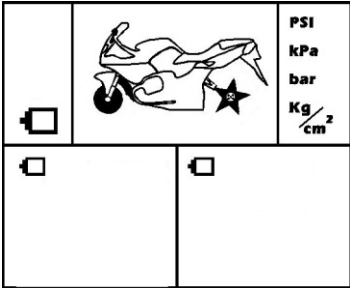
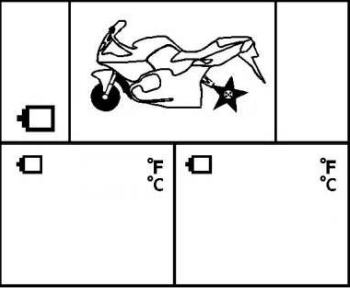
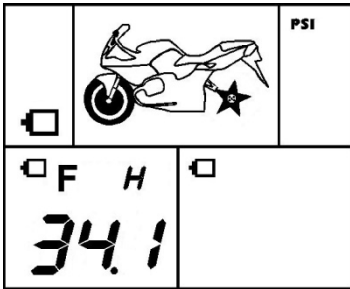
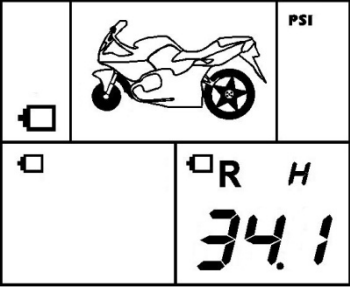
## 3. Operation



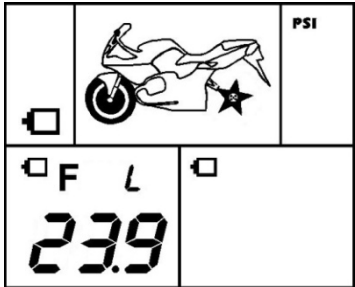
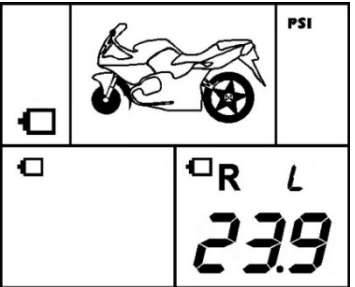
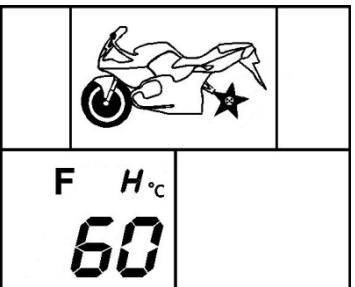
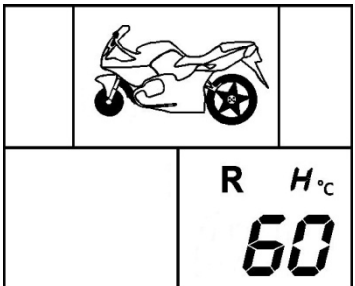
### 3.1 Check Communication

Step	Description	Screen
1	Choose only one of power installations (Battery (turned on [Battery Switch]) and USB), then into receiving mode.	
2	Display current tire pressure, temperature and sensor battery when host unit RF signal received. ("F" is front tire, R is rear tire)	
3	It will be turned off backlight of screen when host unit is idle more than 5 seconds, and keep going about 30 seconds that off all contents of screen.	

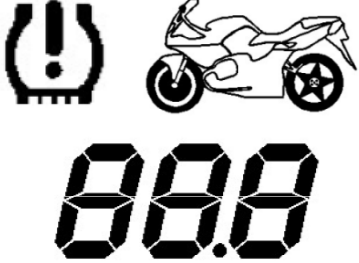


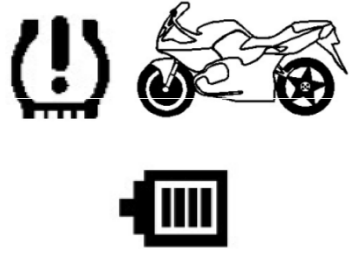
## 3.2 Function and Setting

Function Button	Description	Screen
None	Display position of tire for RF signal received from sensor.	
Press and Hold for 5 seconds	Display unit of tire pressure and adjust with [Up/Down Button] as PSI、kPa、bar、Kg/cm <sup>2</sup> .	
Press Once	Display unit of tire temperature and adjust with [Up/Down Button] as Celius(°C)、Fahrenheit(°F).	
Press 2 times	Display upper limit of front tire pressure and default value is 34.1PSI, adjust with [Up/Down Button].Range for various unit is as below: PSI:29.7–60.1,gap:0.7 kPa:205–415,gap:5 Bar:2.0–4.1,gap:0.1 Kg/cm <sup>2</sup> :2.0–4.2,gap:0.1	
Press 3 times	Display upper limit of rear tire pressure and default value is 34.1PSI, adjust with [Up/Down Button].Range for various unit is as below: PSI:29.7–60.1,gap:0.7 kPa:205–415,gap:5 Bar:2.0–4.1,gap:0.1 Kg/cm <sup>2</sup> :2.0–4.2,gap:0.1	

## 3.2 Function and Setting

Function Button	Description	Screen
Press 4 times	Display lower limit of front tire pressure and default value is 23.9PSI, adjust with [Up/Down Button].Range for various unit is as below: PSI:18.1–28.2,gap:0.7 kPa:125–195,gap:5 Bar:1.2–1.9,gap:0.1 Kg/cm2:1.2–1.9,gap:0.1	
Press 5 times	Display lower limit of rear tire pressure and default value is 23.9PSI, adjust with [Up/Down Button].Range for various unit is as below: PSI:18.1–28.2,gap:0.7 kPa:125–195,gap:5 Bar:1.2–1.9,gap:0.1 Kg/cm2:1.2–1.9,gap:0.1	
Press 6 times	Display upper limit of front tire temperature and default value is 60°C/140°F,adjust one with [Up/Down Button]. Range for various unit is as below: Celius:60~100°C Fahrenheit:140~212°F	
Press 7 times	Display upper limit of rear tire temperature and default value is 60°C/140°F,adjust one with [Up/Down Button]. Range for various unit is as below: Celius:60~100°C Fahrenheit:140~212°F	

### 3.3 Warning Icon

Description	Screen
<p>Tire pressure warning icon</p> <p>Display tire warning icon, blinking placement icon、pressure value and red backlight what behavior is light(3s) and dark(3s) and total 5 times at the same time when tire pressure is lower or higher than your setting value.</p>	
<p>Tire temperature warning icon</p> <p>Display tire warning icon, blinking placement icon、tire temperature warning icon、temperature value and red backlight what behavior is light(3s) and dark(3s) and total 5 times at the same time when tire temperature is higher than your setting value.</p>	
<p>Low level warning icon of host unit battery</p> <p>Blinking low level warning icon of host unit battery and red backlight what behavior is light(3s) and dark(3s) and total 5 times at the same time when level of battery remains last one.</p> <p>.※The symbol is located the upper left</p>	
<p>Low level warning icon of sensor battery</p> <p>Blinking low level warning icon of sensor battery and red backlight what behavior is light(3s) and dark(3s) and total 5 times at the same time when level of battery remains last one.</p> <p>※The symbol is located the lower right and left</p>	

## 4.Product Specification

### 4.1 Host Unit

Working Voltage	4.8~6.8V
Working Current	15~100mA
Working Temperature	-20~70°C
Storage Temperature	-30~80°C
Frequency	433.92MHz

### 4.2 Sensor

Working Voltage	3V
Working Current	-40~85°C
Storage Temperature	-40~85°C
Measuring Range	2.6V~3.3V
Battery Lifetime	1 ~ 2 year
Frequency	433.92MHz