

## TPMS (Tire Pressure Monitoring Systems)

Tire Pressure Monitoring Systems (TPMS) improves safety while driving. Once installed in your vehicle, the system will automatically monitor your tires in real-time for pressure. When any tire's pressure appear abnormal, the system will, in real-time, transmit signals to active an alarm and show a digital figure to warn the driver of a problem. The system aids safety, can extend the tire life and help reduce fuel consumption.

[www.orange-electronic.com](http://www.orange-electronic.com)



## **TPMS (Tire Pressure Monitoring Systems)**

### FCC Notice

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.

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 instruction, 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 factoring 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.

### **Caution :**

**Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.**

## System Scope of Use and Warnings

### Tire pressure Monitoring System, TPMS

This system is a sensing device designated to measure and display tire operation and / or activate an alert to the driver when pressure irregularities are detected. It is the responsibility of the driver to react promptly and with discretion to alerts. Abnormal tire inflation pressure should be corrected at the earliest opportunity.

### **Caution :**

**The system is wireless RF product; therefore, it may not receive a signal due to the poor environment or incorrect operating or incorrect installation. When the system continually cannot receive any signal from any tire sensor more than 10 minutes since the system switched on power for monitoring, the system will only show a blank “ ”. In this case it may be caused by a RF interference environment, a driver need to drive the vehicle and leave this place. If the display still cannot receive any correct signal from tire sensor, then, a driver need to find a nearby qualified tire maintain service for checking and maintain. It may be caused by a tire sensor damages or battery power consumption. (If it is in abnormal condition, the tire sensor will continually send warning signal for driver, thus it will consume the battery quickly than normal prediction.)**

### System Installation and Usage

Use of the TPMS requires qualified personnel according to the instructions here to have it properly installed. This system is suitable for use on a passenger car, SUV and 4x4 tires, with up to maximum cold inflation pressure of 510 kPa (Gauge) (be, low instruction is Guage value mentioned.)

### Reacting

When an alert or warning is received, reduce vehicle's speed and proceed to a safe location to stop where the tire can be inspected and / or

serviced.

The low-pressure alert indicates that the air pressure has dropped to a selected minimum of the tire content which has surpassed the threshold value set.

#### Use of Chemicals

Temporary resealing or re-inflating products containing internal sealants or propellants in any tire assembly may adversely affect the operation of the sensor/transmitter.

# Specification

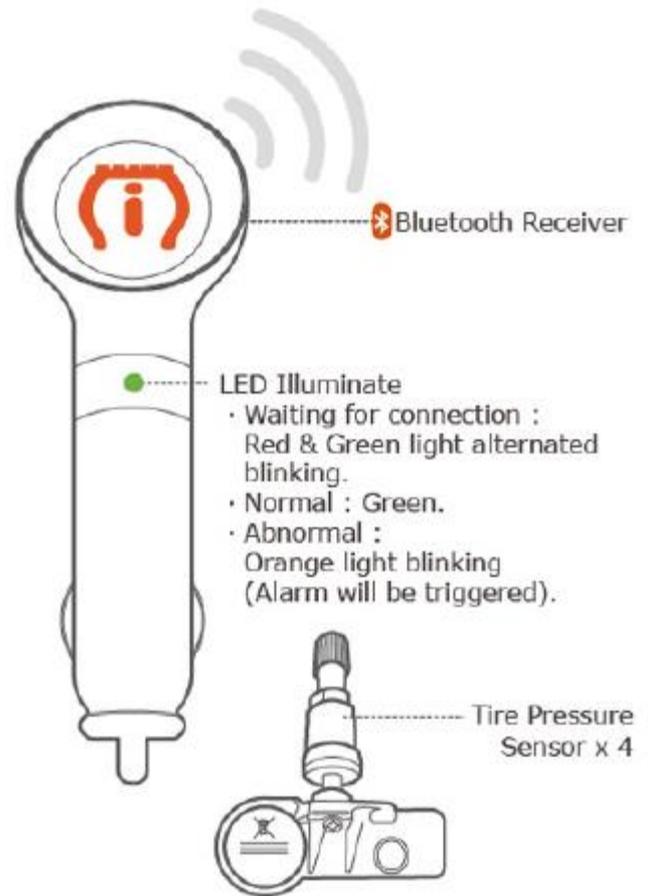
## RF Sensor module

Operating Temperature	-40 °C ~ 125 °C
Operating Humidity	95% max.
Operating Frequency	433.92MHz ± 50kHz
Pressure Monitoring Range	0~74 psi
Pressure Reading Accuracy	± 1 psi
Temperature Reading accuracy	± 4 °C
Weight	28g ± 3g

## Bluetooth Receiver Module

Operating Voltage	9V ~ 16V
Power Consumption	< 150 mA
Storage Temperature	-40 °C ~ 80 °C
Operating Temperature	-10 °C ~ 75 °C

## Product And Accessory



## First Time Use P458

Before experience P458, please download **【iTPMS】** from APPStore or Google Play.



### Pair Bluetooth receiver with smart phone

Plug receiver into car lighter socket.



Before experience this product, please download **【iTPMS】** from APPStores or Google Play



Wireless Receiver  
Plug and Use



# Android : Pair w/ Bluetooth receiver

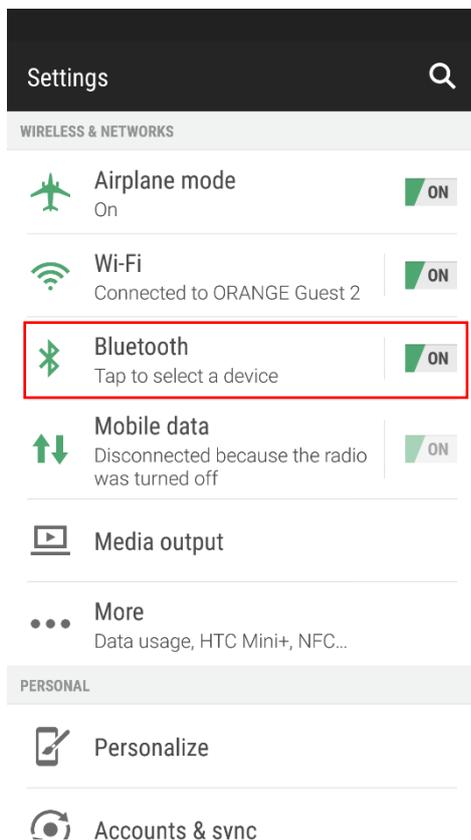
1. Click "setting".



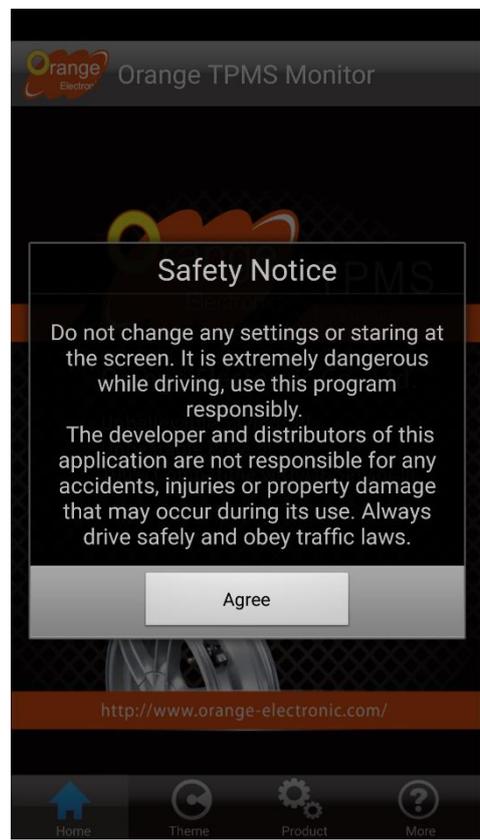
3. Select "Orange TPMS" APP.



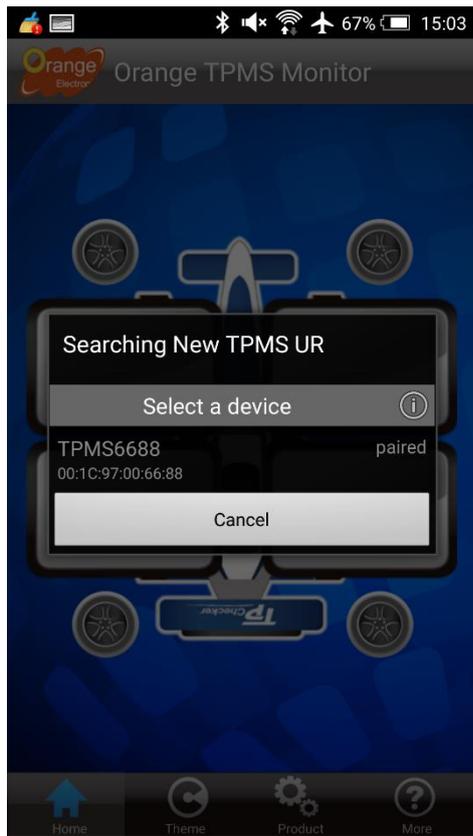
2. Turn "On" Bluetooth.



4. Click "I Agree" after reading reminder.



5. Select device to connect



7. Tire info will remain blank when fail or cancel to pair.



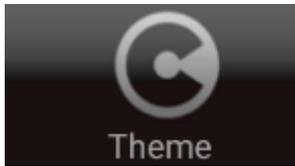
6 Main screen will show up when successfully pair.



## Main Entry Screen



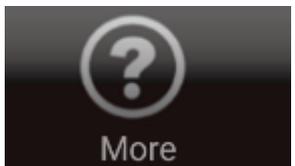
HOME



BACKGROUND



INFO



SETTING / Q&A



## HOME

### **【Main Page】 & 【Detail Entry】**

Touch the main page to switch screens.



## View your tires

Tire in **green** means both tire pressure and temperature is normal. It will be in **red** when any of the values is abnormal.



Find detail by means of clicking each of the tires. Digital will be in **red** in abnormal situation.



Under abnormal circumstance, Bluetooth and APP both will give **BEEP sound** to alert drivers.

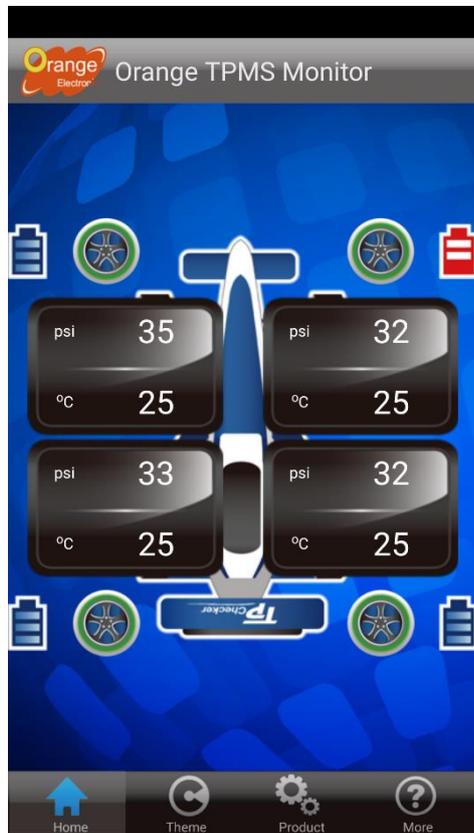
## TPMS Signal Receiving

“0” pressure/temperature in **red** will come up when signal got blocked or poor receiving. It is an alert to drivers for abnormal situation.



## Sensor Low Battery Voltage

“Battery” symbol will come out and stands aside of any one of the sensor battery voltage is low or out of battery.



## BACKGROUND

Upper : available for background color  
Down : available for vehicle drawing.



## INFO

### P458 product specifications

Tire Vitals Specification	
RF Sensor Module	
Storage Temperature	-40°C to 125°C
Operating Temperature	-40°C to 125°C
Humidity	Max 95%
Monitoring Pressure Range	0kPa ~ 510kPa (0 ~ 74psi)
Pressure Accuracy	±10kPa (at normal pressure)
Temperature Accuracy	±4°C
Transmission Power	MAX 80dBuV/m
Power Supply	3V Lithium battery
Sensor Weight	15 ±2gm (don't include valve and screw)
Bluetooth Receiver Module	
Operating Voltage	9V ~ 16V
Power Consumption	≤ 200mA

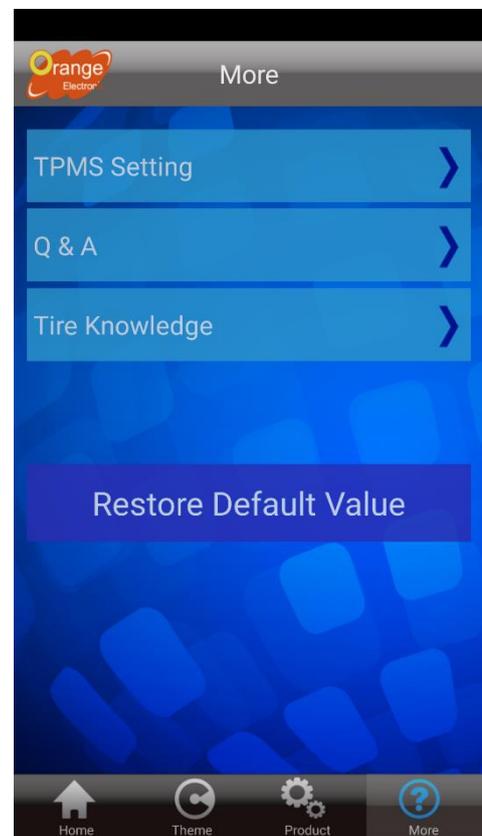
## SETTING / Q&A

### TPMS Setting : System setup

**Q&A** : Frequent question & answer.

**Tire tech info** : About tire safety

**Factory reset** : Erase setup and factory data setting.



## TPMS Setting

**Pressure** : unit & warning range

**Pair** : Locate sensor ID & tire position

**Rotation** : tire rotation (any 2 of the tires)

**Never Sleep** : screen ON

**Bios** : OTA Wireless update

**FW Version** : Bluetooth receiver version

**SW Version** : APP version



## TPMS Setting

**Pressure** :

**(Recommended refer to vehicle placard)**

Drivers can set up tire pressure warning level on APP. The system will alarm automatically when pressure is less than 80% or above 150% of the level.

End users can set up new level on APP under special circumstance, for instance, off-roading, that has to deflate pressure less than normal. TPMS system will give alarm in light of low pressure but end users can still use and drive. Recommend to carefully use the system under the circumstance and back to normal setting as soon as possible.

Warning range is within 20 to 48 psi.

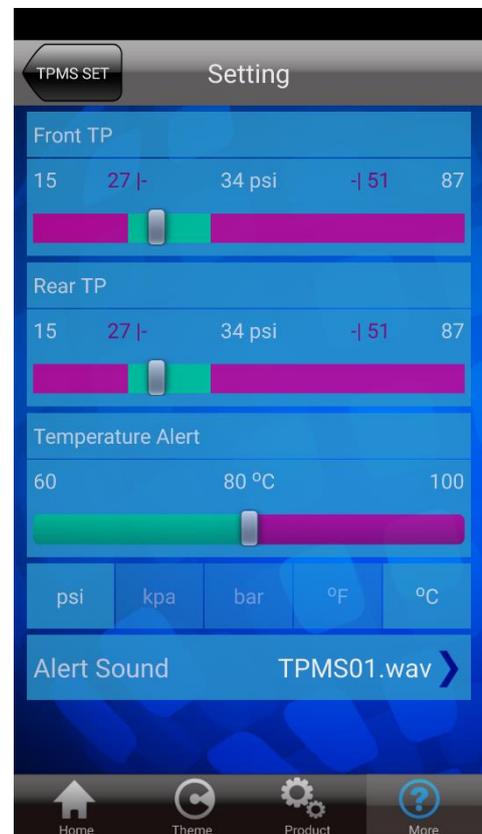
**Temperature** :

Temperature units are available to change.

**Unit** :

Pressure : psi / kpa / bar

Temperature : °C/ °F



## Pair :

Every signal sensor has unique ID number and pre-programmed in Bluetooth receiver. It is necessary to pair sensor ID with the receiver after sensor/receiver change. End users can go through the following process to help pair successfully.

**Select one of the following processes.**

- A. Deflation Relearn**
- B. Manual ID Input**

## Notice :

**Do not operate this function unless user has to swap new sensors or may cause tire position misplaced.**

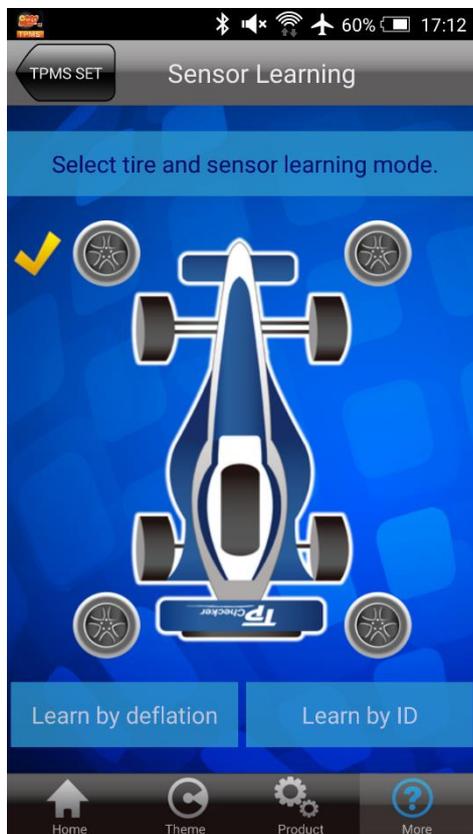


## Pair by Deflation Relearn :

< e.g. : **Left Front Tire (LF)** >

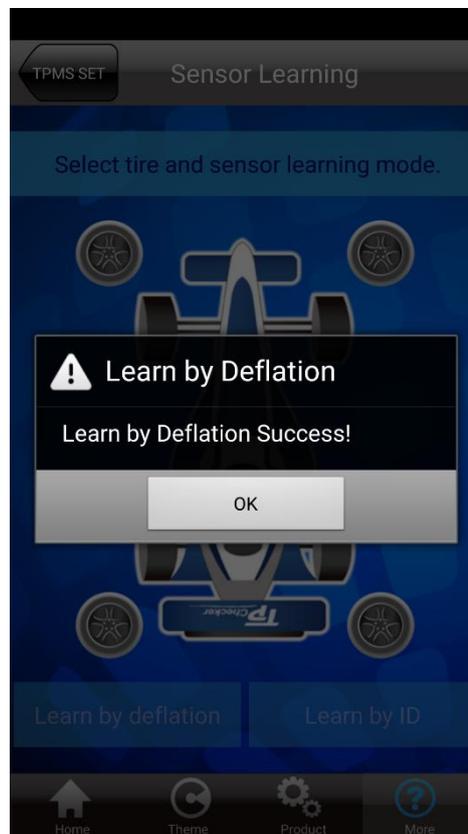
Step 1. Click "LF Tire"

Step 2. Select "Deflation Relearn"

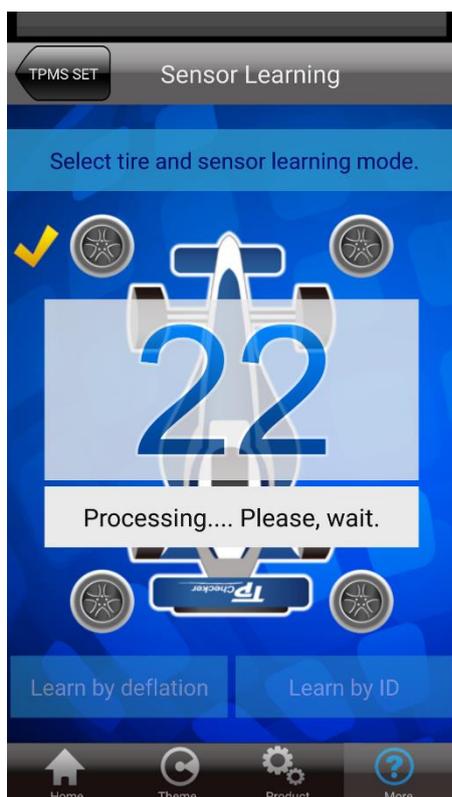


Step 4. Popup "Learn by Deflation Success !"

Step 5. Inflate to reach warning level..



Step 3. Click "Yes" and see countdown popup.



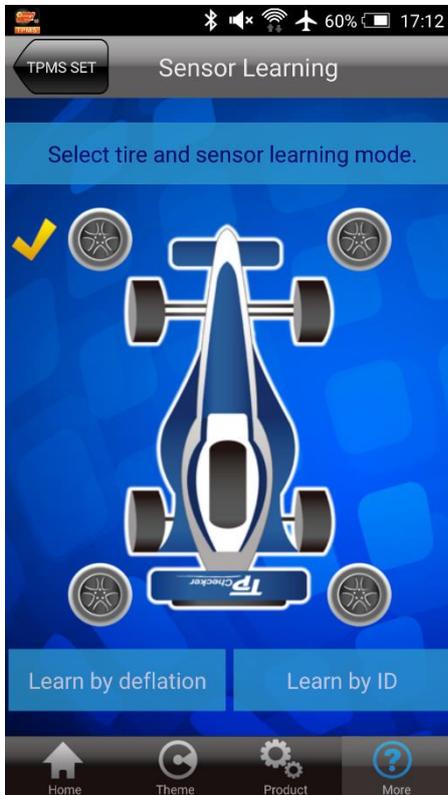
## Pair by Manual ID Input

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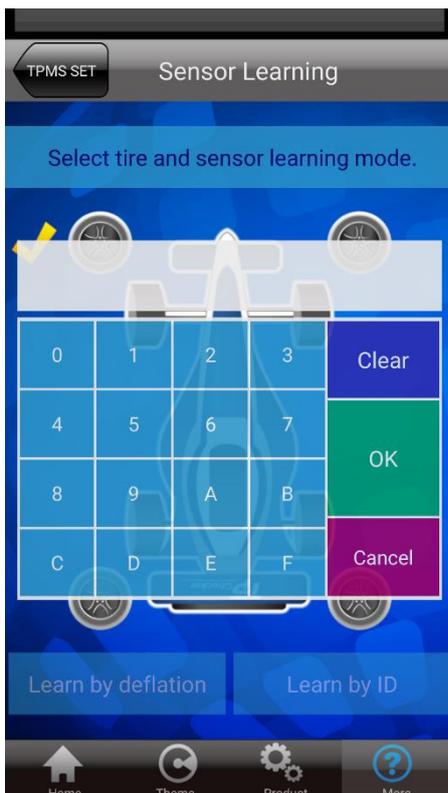
Step 1. Click "LF Tire"

Step 2. Select "ID number"

Step 3. Key in ID number (6 numbers)



Step 4. Click "OK"



Step 5. Learn by Enter ID ##### Processing.



Step 6. Popup "Learn by Enter ID Success!" and click "OK"



## Tire Rotation

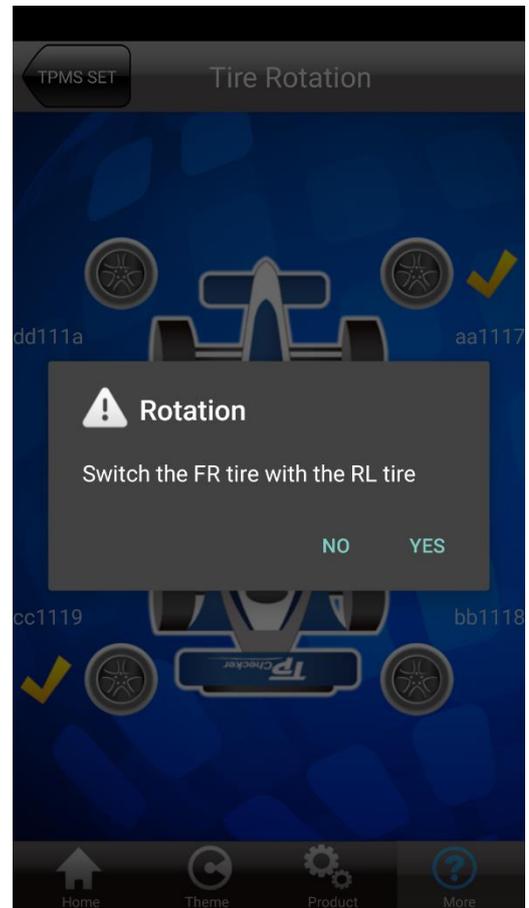
< e.g. : **Right Front (RF) to Left Rear (LR)** >

Step 1. Select RF and LR

Step 2. Click YES on popup.

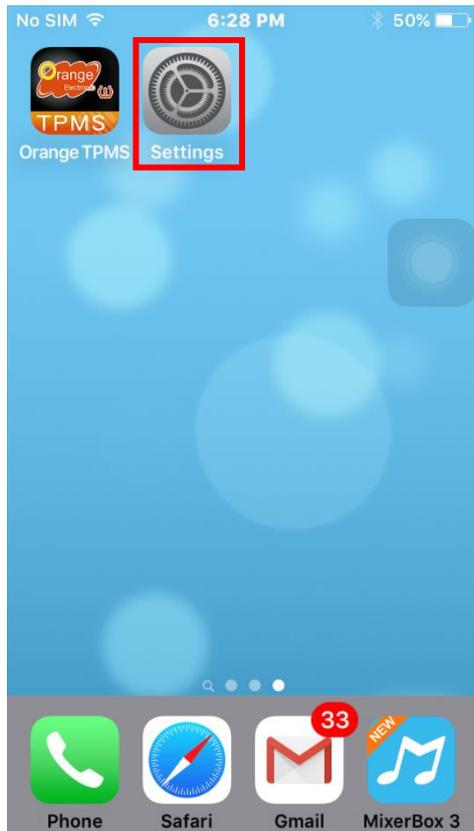


Step 3. Rotation success !

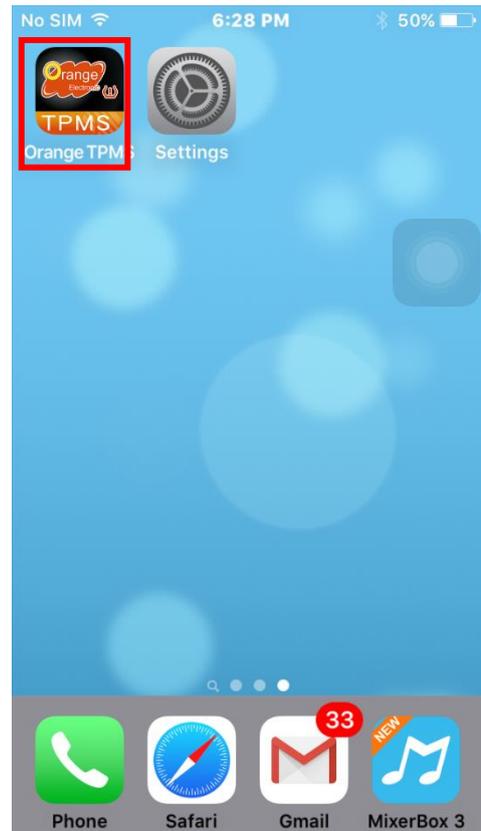


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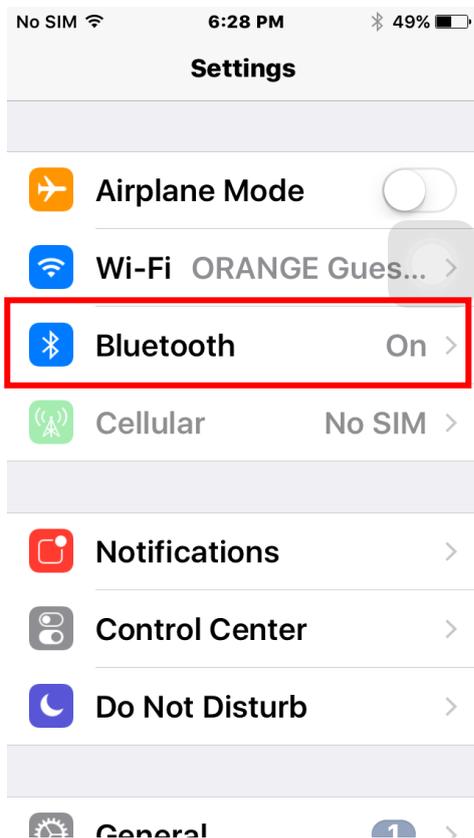
1. Click "setting".



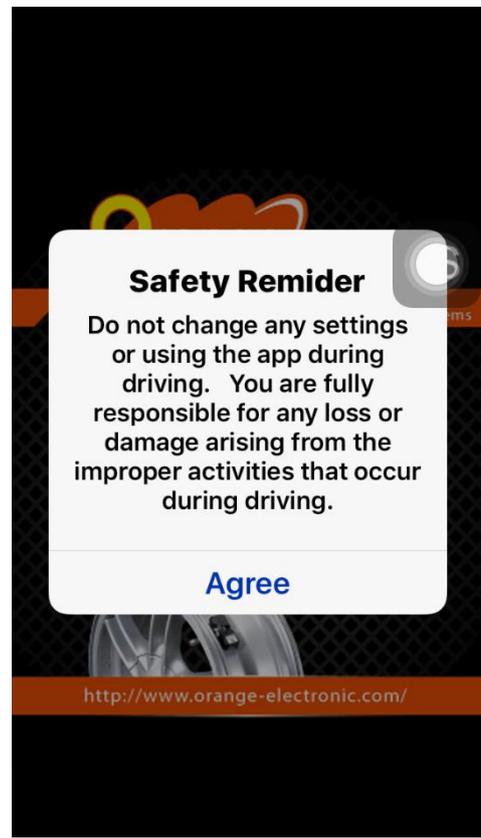
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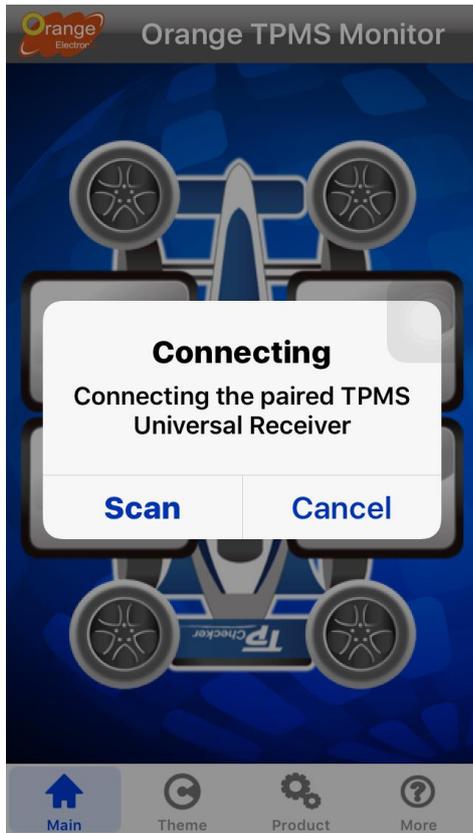
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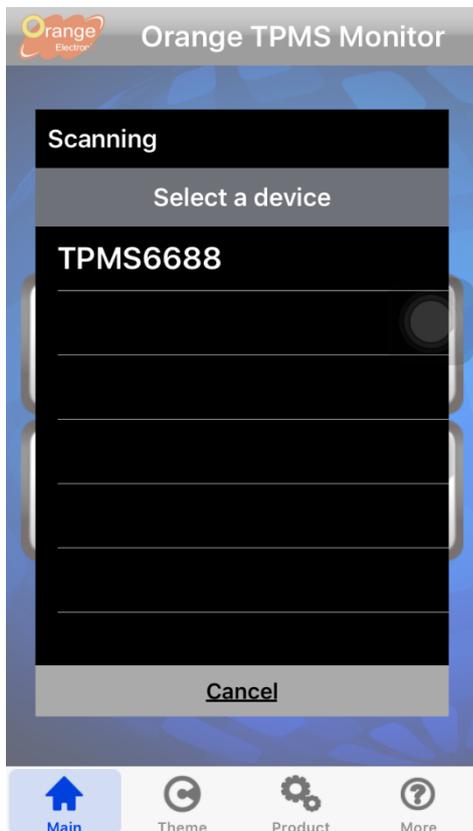
5. Click "Search"



7. White blanks for 4 tires when click "cancel" to unconnected with the Bluetooth receiver.



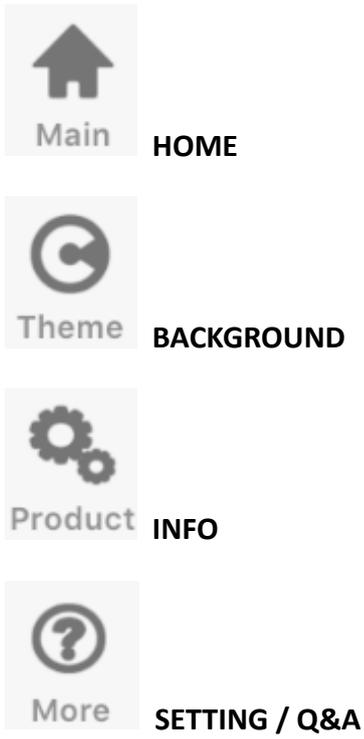
6. Select device to connect



8. Black blanks for 4 tires when successfully connect with the Bluetooth receiver.



## Main Entry Screen



## HOME

### **【Main Page】 & 【Detail Entry】**

Touch the main page to switch screens.



## View your tires

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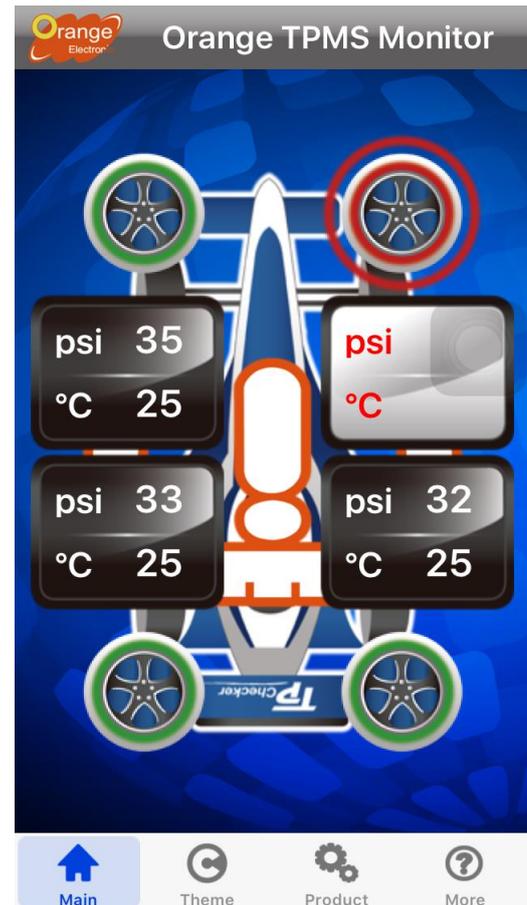
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<b>Bluetooth Receiver Module</b>	
Operating Voltage	9V ~ 16V

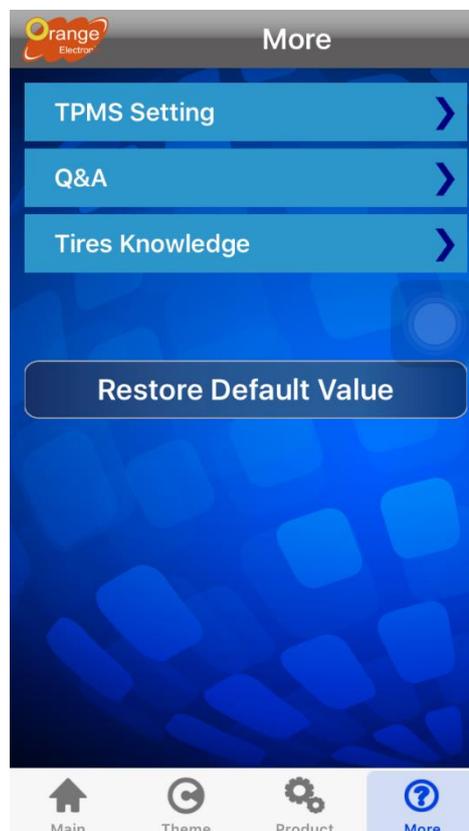
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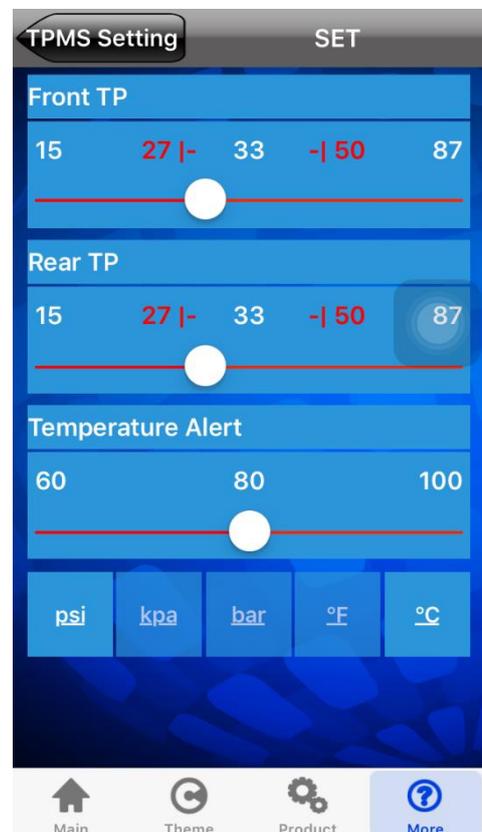
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- B. Manual ID Input**

## Notice :

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## Pair by Deflation Relearn :

< e.g. : Left Front Tire (LF) >

Step 1. Click "LF Tire"

Step 2. Select "Deflation Relearn"



Step 4. Popup "Learn by Deflation Success !"

Step 5. Inflate to reach warning level..



Step 3. Click "Yes" and see countdown popup



## Pair by Manual ID Input

< e.g. : **Left Front Tire (LF)** >

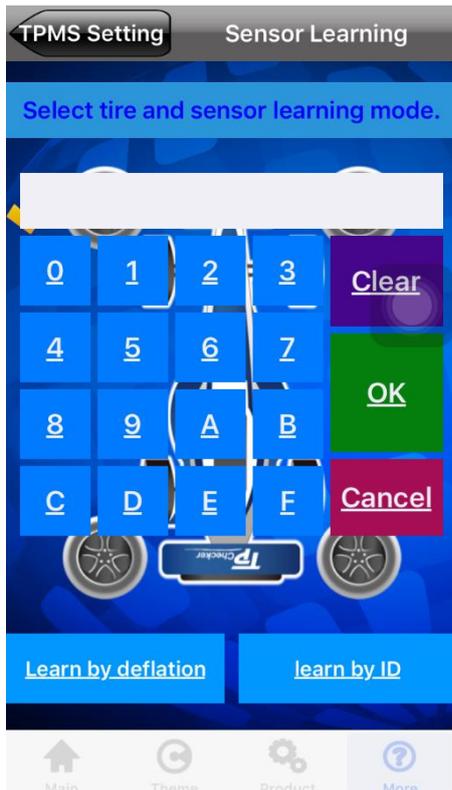
Step 1. Click "LF Tire"

Step 2. Select "ID number"

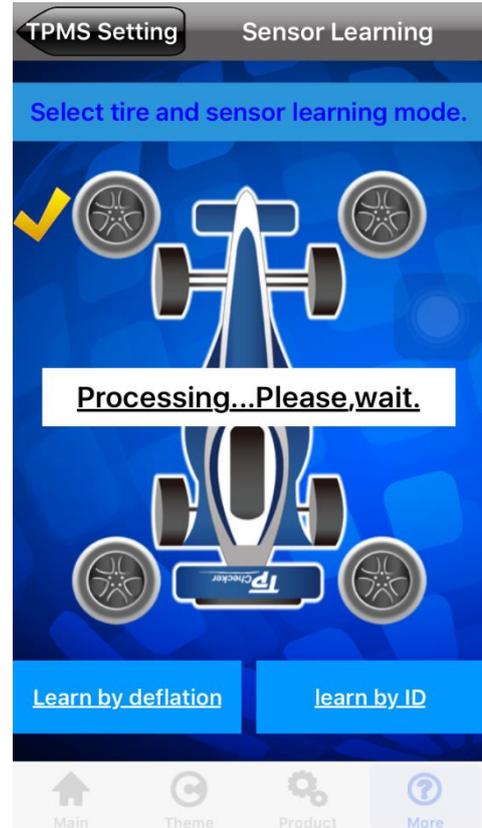
Step 3. Key in ID number (6 numbers)



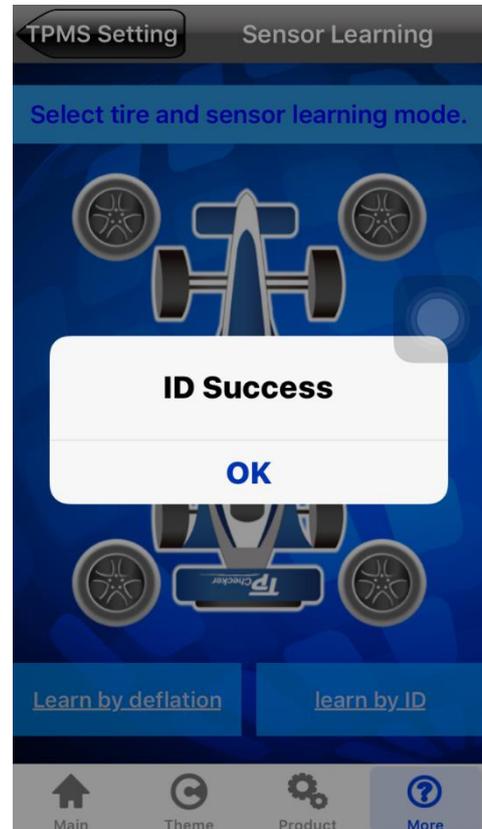
Step 4. Click "OK"



Step 5. Learn by Enter ID ##### Processing



Step 6. Popup "Learn by Enter ID Success!" and click "OK"



## Tire Rotation

< e.g. : Right Front (RF) to Left Rear (LR) >

Step 1. Select RF and LR



Step 3. Rotation in process.



Step 2. Click YES on popup.



Step 4. Rotation success !

