Tire Pressure Monitoring System

User Manual

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1. Product Introduction

With the new technology product: Bluetooth Tire Pressure Monitoring System (hereinafter referred to as BLE TPMS), the driver could get the accurate tire pressure and temperature at any time through smart phone by using this kit while driving. When the system detects abnormal status, it will alarm the driver actively, and show the abnormal data and its tire location on the "Vigorplus TPMS" APP (hereinafter referred to as APP).

2. Notice

Product Warning

2.1.1 Please completed APP settings before driving, do not operate the APP while driving. The company is exempt from all responsibilities that result from driver's carelessness and improper operation.

2.1.2 The system utilizes the wireless transmission of signals. In some special environments, frequency interference, faulty operation or faulty installation may result in weaker signals or inability to receive signals. If the insulation adhesive sticker of the windshield contains metallic material, it will affect the signal reception. When the alarm sounds and shows abnormal data, please drive the vehicle away from the current location (there may be signal interference in the surroundings) or drive the vehicle to a tire shop to be checked.

2.1.3 If the TPMS sensor is low on battery (if abnormal conditions exist continuously, the battery may make the TPMS sensors continuously emit signals to warn the driver, so the battery life will be shorter than expected), please replace with a new one immediately to ensure that BLE TPMS can normally operate.

2.1.4 Temporary resealing or re-inflation of product injected through the valve hole may adversely affect the operation of the sensor. The company is exempt from all responsibilities. Furthermore, do not place the TPMS sensor in contact with any chemicals. They might damage the sensor and prevent it from functioning properly.

2.1.5 Please close unused APPs or web pages while using the APP. Data receiving status of the APP may be affected by the loading of the smart phone.

3. BLE TPMS Specification

Operating Voltage Range	3V
Operating Humidity	≦95%
Operating Temperature	-20℃ to 85 ℃
Storage Temperature	-40℃ to 85 ℃
Pressure Monitoring Range	0 to 92 psi (0 to 640 kPa)
Temperature Monitoring Range	-20 ℃ to 85 ℃
Temperature Reading Tolerance	± 4℃
BLE Operating Frequency	2400MHz~2483.5MHz
RF Transmitter Power	4 dBm MAX
Average Idle Current	< 5uA at DC 3V
Average Running Current	< 22uA at DC 3V (Tx Interval:60s)
Transmitter Current (25℃)	< 15mA at DC 3V
Battery Life	> 1 year (under normal operating condition)
Normal Battery Capacity	Renata CR1632, DC 3V, 137mAh
APP Support	iOS, Android

4. BLE TPMS Package

BLE TPMS Sensor
User Manual
CR1632 Battery
Lock-Nut (Anti-theft Nut)
Wrench Tool

5. BLE TPMS Sensor Installation

5.1 BLE TPMS Sensor Accessories

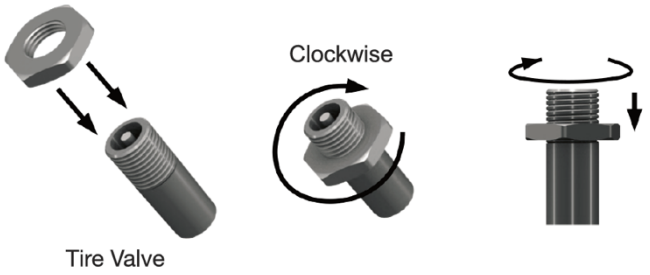
1. Anti-theft nut / 2. Anti-theft plate / 3.Sensor / 4.Battery / 5.Wrench

5.2 Installation Steps

This product is recommended with metal valve or replace the original valve regularly to ensure better quality.

Step 1

Lock the lock-nut the root of the valve thread.

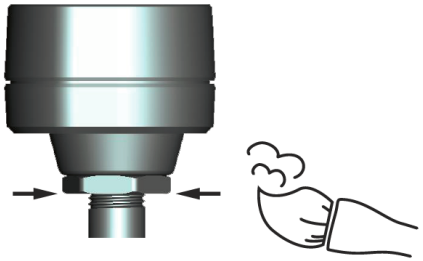


Step 2

Use the wrench to tighten the screw to complete the installation and then start to use.

Step 3

Apply soap water on valve stem nut to check whether produce bubble and air leakage. No bubbling means correct installation. In case there is bubbling, please re-install according to the procedure.



After installation, please download the APP to your smart phone, and proceed with all settings. (Please check item 7 Initial Setting)

6. APP Download and Installation

6.1 Operation System Required

TPMS system supports both smartphone for Android & iOS operation system. (Bluetooth 4.0)。

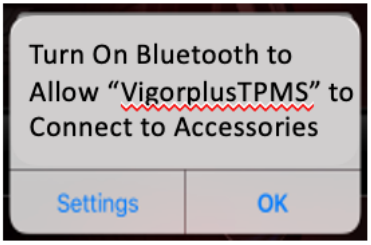
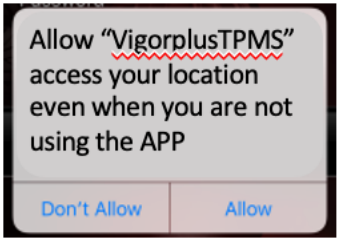
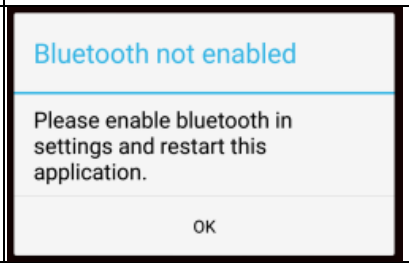
APP Download	Operation System	Compatible Smartphone
APPLE APP Store	iOS 8.0 or later	iPhone 4S, 5, 5S, 6, 6 Plus or later
Android Google Play Store	Standard Android 4.3 or later	Android Smart Phone

6.2 How to Download

Search in the Google Play Store or APPLE APP Store by keyword “VIGORPLUS TPMS” , in order to find the free APP.(Vigorplus TPMS)

After you install the APP, please reboot and make sure Bluetooth is enabled. Open the APP after installation is completed. A statement from the operation system will pop up, displaying “Bluetooth Service Disabled” and/or “Location Services Disabled”. Please choose “ok” to turn on the “Bluetooth” & “Location Services” function.

In case “Location Services” is not turned on properly, please turn it on in “Settings” (only for iOS system).

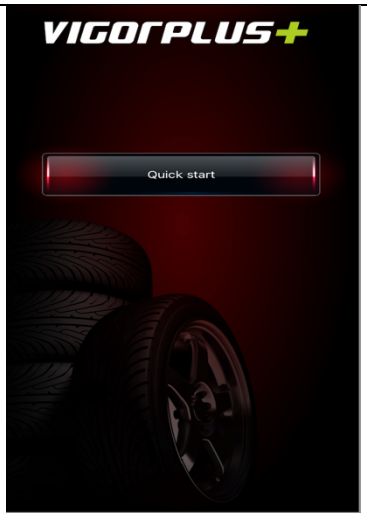
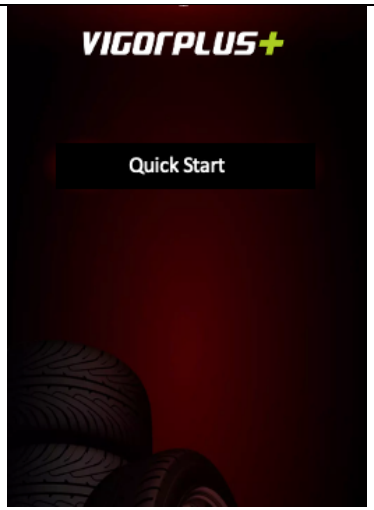
iOS version	Android version
 	

7. Settings & Add Device

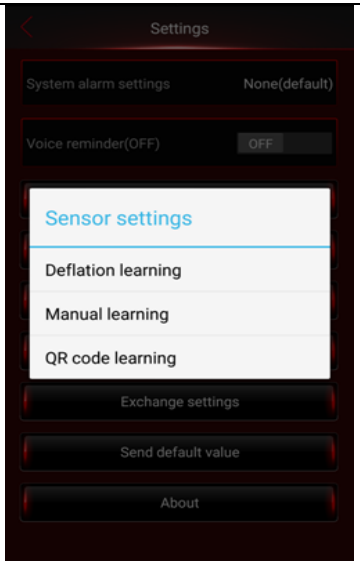
7.1 Introduction of Contents

Please make sure the “Bluetooth” & “Location Service” Settings functions are enabled when you start to use the APP.

iOS version	Android version	

 	 	Main Menu: Sign in successfully, open Left menu, click on the upper left corner "+" button to add a vehicle, select the vehicle type. This installation process can be implemented in Multi tires combination. Click on the upper left corner”  ”button to import data In the "Quick use" to add new vehicles and return, enter the "Cloud login", click "import" button, you can add "Quick use "vehicles to the "Cloud login". (This feature MUST network connection).

7.2 Sensor Settings

iOS version	Android version	
 	 	1.QR Code Settings : Select QR Code Settings. 2.Choose tire 1 (LF) The APP will scan QR code, showing new ID number on the data field. (Please ask a qualified tire shop to install the product if you are not sure how to install)

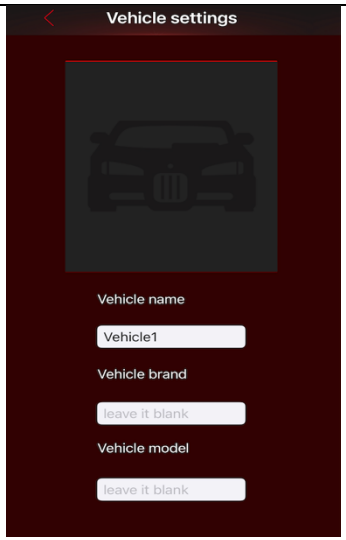
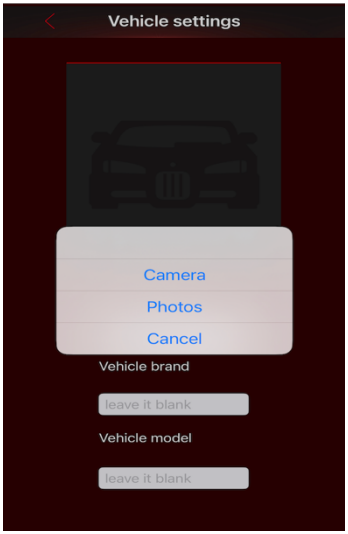
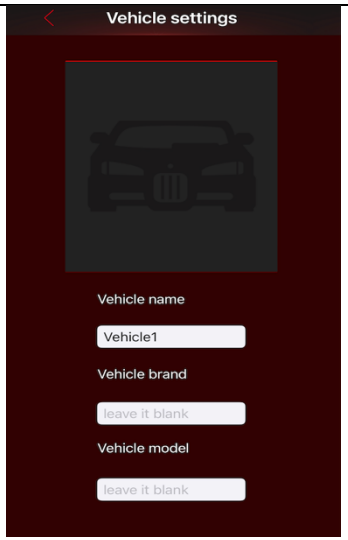
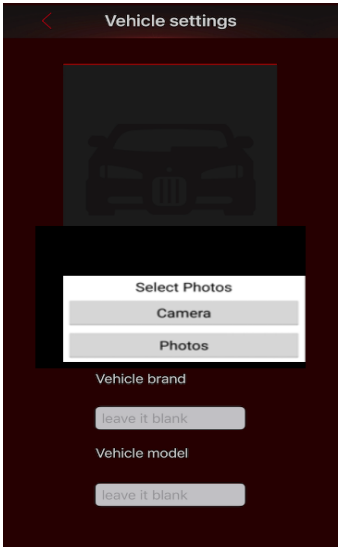
iOS version	Android version	
		3.QR Code completed. Using the same method, set up the ID learning for tires in sequence. 4.Long press on data field to clear the ID.

8. System Settings

iOS version	Android version	
		System Settings: Warning Audio Settings: warning Audio and mute . Voice reminder: voice OFF/ON Vehicle settings: vehicle edit. Monitored pressure range settings: Select kPa、psi、Bar、Kg/cm2 4 different pressure unit, ℃、℉ 2 different temperature unit and upper and lower limits. Sensor settings: Enter the sensor settings when using for the first time. Exchange settings: Tire exchange settings. Send default value: Settings value history record keeping. About: Disclaimer

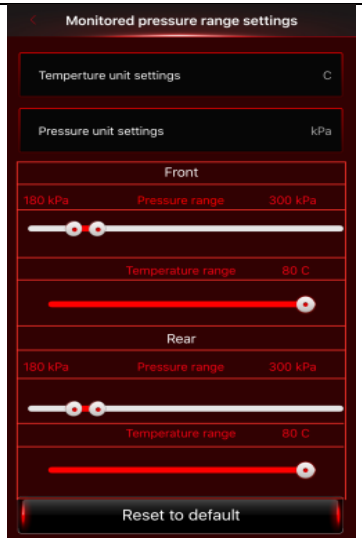
8.1 Vehicle Settings

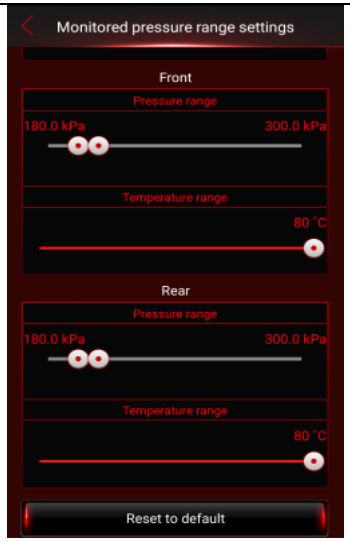
iOS version	Android version	

 	 	System Settings: 1.Select Vehicle Settings, enter vehicle name、brand、model. 2.Select Camera or Photos, then press the "Back “button to save the settings.

8.2 Monitored Pressure Range Settings

iOS version	Android version	



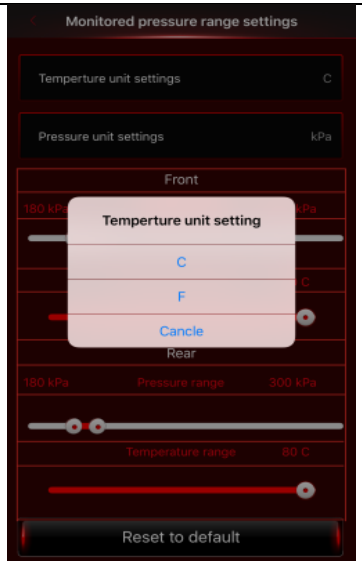


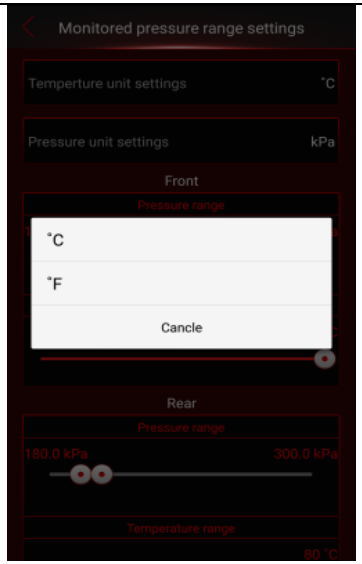
Monitored Pressure Range Settings: Select Monitored Pressure Range Settings.
1.Change settings on “front wheel” and “rear wheel” then press the “Back” button to save the settings. You can press “Reset to default” to reset all settings.
Note 3: For the standard tire pressure value, please refer to the placard located at the side of the driver’s seat.

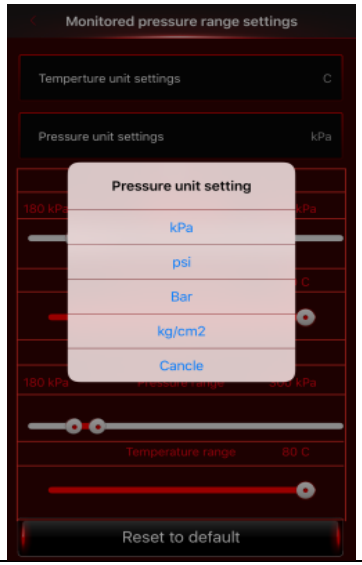
Maximum Temperature 80 ℃, default = 80 ℃ (176 ℉).

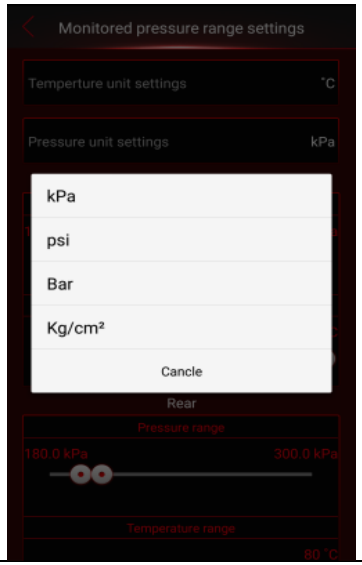
	Minimum tire pressure	Lower limits range	Maximum tire pressure	Upper limits range
2、3、4 wheel	26psi 180kPa 1.8bar 1.8kg/cm^2	0psi-36psi 0kPa-250kPa 0bar-2.5bar 0kg/cm^2-2.6 kg/cm^2	43psi 300kPa 3.0bar 3.1kg/cm^2	40psi-92psi 280kPa-640kPa 2.8bar-6.4bar 2.9kg/cm^2-6.5 kg/cm^2
6/38 wheel	100psi 690kPa 6.9bar 7.0kg/cm^2	0-110psi 0kPa-760kPa 0bar-7.6bar 0 kg/cm^2-7.8 kg/cm^2	150psi 1034kPa 10.3bar 10.5kg/cm^2	115psi-217psi 790kPa-1500kPa 7.9bar-15.0bar 8.1 kg/cm^2-15.3 kg/cm^2

iOS version	Android version	





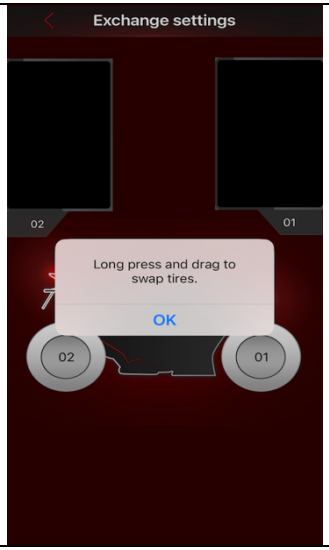
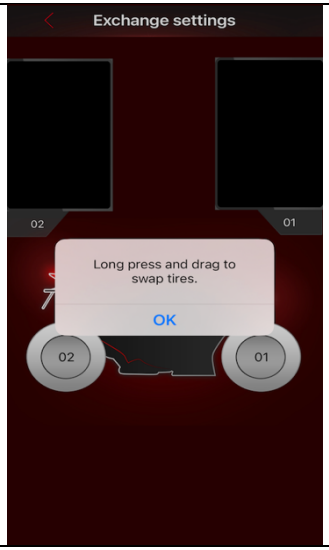




2.Temperature Unit: ℃, ℉;
2 different temperature units, then press the "Back “button to save the settings.

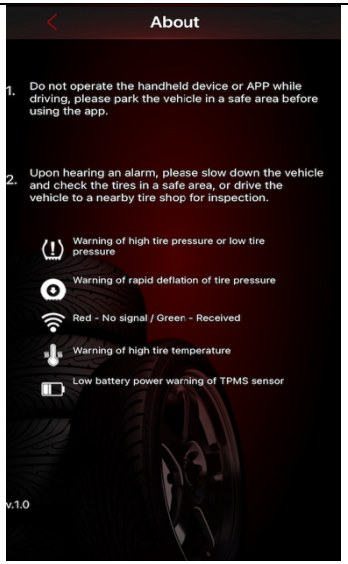
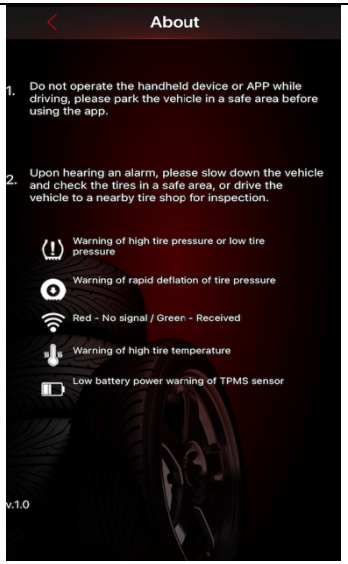
3.Pressure Unit: kPa, psi, Bar, Kg / cm2 4 different pressure units, then press the "Back “button to save the settings.

8.3 Exchange Settings

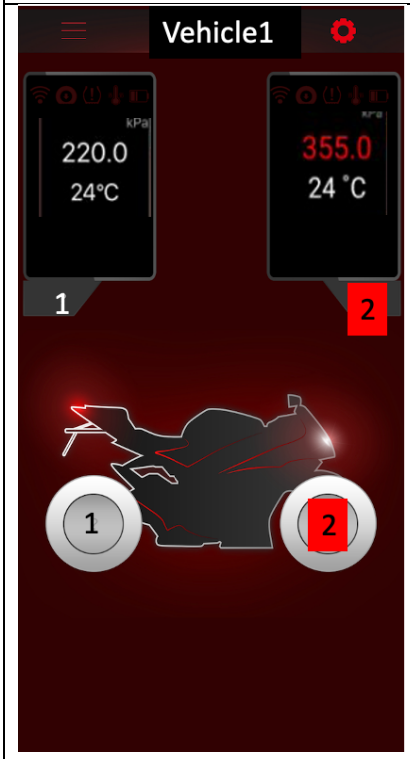
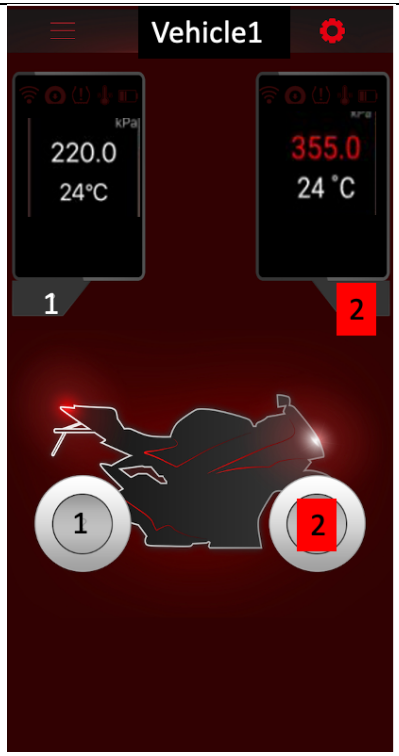
iOS version	Android version	
		Tire Exchange Settings: Drag the dialogue display of the tire to the desired location for all desired exchanged tires, then press the “Back” button to save the settings. It will display the new tire positions in sequence.

8.5 About

iOS version	Android version	

		About: “Product Information” is displayed. It describes the definition of “Warning Symbol”.

9. Alarms and Warnings

iOS version	Android version	
		System Warning： Displays the pressure, temperature and voice warning. When abnormal tire system status occurs, the value of the corresponding tire turns red, and it alarms with a sound and warning symbol. The warning symbols on each tire display, from the left to the right, are: no signal, rapid deflation, tire pressure warning, tire temperature warning and low battery power of sensor. If you do not want to hear the sound from the APP, please press mute and turn off voice reminder. Support landscape mode.

1. No signal
   The phone cannot receive any signal: red symbolizes
2. Warning of rapid deflation of tire pressure
   Any tire pressure that decreases rapidly.
3. Warning of high tire pressure or low tire pressure

Tire pressure is higher than maximum tire pressure value or lower than minimum tire pressure value on the APP.

4.  Warning of high tire temperature
   Tire temperature is higher than temperature maximum value on the APP.
5.  Low battery power warning of TPMS sensor
   Battery power of TPMS sensor is low.

10. Frequently Asked Questions

1. Q: After inserting the sensor ID number into the APP, the dialogue display remains without a value.
   A: TPMS sensor only transmits data when the sensor is on the vehicle with driving speed over 20 km per hour, or the vehicle is ignited after parking more than ten minutes, or the tire pressure difference at the moment is 30 kPa. During other times, data will not be transmitted in order to save power. You can check if the TPMS sensor is working normally through tire pressure increase or deflation.
2. Q: Smart phone has completed the installation of the APP, the sensor ID settings are done, and the vehicle is being driven, but no data is shown.
   A: Please restart the start phone and check if Bluetooth was turned off.
3. Q: There is no alarm sound or voice warning for abnormality of tires.
   A: Please check if the start phone has gone in silent mode or if the volume has been turned to lowest.
4. Q: There is alarm sound for tire abnormality but no voice warning.
   A: Some Android smart phones do not support voice services.