Multi Wheel Bluetooth

Tire Pressure Monitoring System

User Manual

Model: External
1. PRODUCT INTRODUCTION ..................................................................................................... 2
2. NOTICE .................................................................................................................................. 2
3. BLE TPMS SPECIFICATION ........................................................................................... 3
4. BLE TPMS PACKAGE ........................................................................................................ 4
5. BLE TPMS SENSOR INSTALLATION ........................................................................... 4
6. APP DOWNLOAD AND INSTALLATION ...................................................................... 7
7. SETTINGS & ADD DEVICE ............................................................................................... 8
8. ALARMS AND WARNINGS ............................................................................................... 16
9. SYSTEM SETTINGS .......................................................................................................... 17
10. FREQUENTLY ASKED QUESTIONS ......................................................................... 24
11. WARRANTY POLICY ..................................................................................................... 24
1. Product Introduction

Tire condition is critical for the safety of riders and drivers, so getting a warning right from your vehicle that your tires have an issue could be a life saver. The BLU TPMS will monitor both the Pressure and Temperature of vehicle tires with external (D.I.Y.) IP Addressable O.E.M. Grade, Low Energy Bluetooth Sensors (BLE). All of this information is then reported in the free App for iOS or Android devices, including push notifications that tire pressure is low or temp out of parameters, no dedicated display required.

2. Notice

Product Warning

2.1.1 **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 adopts the wireless transmission of signals. In some special environments, frequency interference, improper operation or faulty installation may result in weaker signals or inability to receive signals. If the construction 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 go as soon as possible to a specified service station to confirm whether the TPMS sensor needs to be replaced.

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 any other Apps or web pages which are not in use when using the BLE App. Data receiving status of the App may be affected by the system load of the smart phone.
### 3. BLE TPMS Specification

**BLU, BLE Sensor Specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage</td>
<td>3V</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>95 % MAX</td>
</tr>
<tr>
<td>Operating Current</td>
<td>&lt;15 mA at DC 3V</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to 85 °C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 85 °C</td>
</tr>
<tr>
<td>Monitored Pressure Range</td>
<td>Passenger: 0 to 92 psi (0 to 640 kPa)</td>
</tr>
<tr>
<td></td>
<td>Truck: 0 to 185 psi (0 to 1280 kPa)</td>
</tr>
<tr>
<td>Monitored Temperature Range</td>
<td>-20 °C to 85 °C</td>
</tr>
<tr>
<td>Operating Frequency</td>
<td>2.4GHz</td>
</tr>
<tr>
<td>Transmission Power</td>
<td>4 dBm MAX</td>
</tr>
<tr>
<td>Battery Life</td>
<td>3 years (under normal operating condition)</td>
</tr>
<tr>
<td>Battery Capacity</td>
<td>130 mAh (CR1632)</td>
</tr>
<tr>
<td>Weight</td>
<td>9.5 g ± 0.5 g (including battery)</td>
</tr>
</tbody>
</table>

**Optional Voice Dongle Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage</td>
<td>5V</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>95 % MAX</td>
</tr>
<tr>
<td>Operating Current</td>
<td>&lt;900 mA at DC 5V</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to 85 °C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C to 85 °C</td>
</tr>
<tr>
<td>Sound Pressure (min.)</td>
<td>80dB@30cm</td>
</tr>
<tr>
<td>Operating Frequency</td>
<td>2.4GHz</td>
</tr>
<tr>
<td>Transmission Power</td>
<td>4 dBm MAX</td>
</tr>
<tr>
<td>Weight</td>
<td>10 ± 1 g</td>
</tr>
</tbody>
</table>
4. BLU TPMS Package

Part List:
BLE TPMS Sensor
CR 1632 Battery
Anti-theft lock
Lock-Nut
User Manual
Wrench
Voice Dongle (Optional)

5. BLU TPMS Sensor Installation

5.1 TPMS components and accessories

5.2 Installation Steps

NOTE: We recommend metal valve stems for durability.
Valve Stem
Lock Nut

Valve Stem

After installation, please download the App to your smart phone, and proceed with all settings. (Please refer to section 7 “Initial Setting”)

6
6.1 Operating System Requirements

The BLU TPMS system supports both Android & iOS operating systems. (Bluetooth 4.0 required).

<table>
<thead>
<tr>
<th>App Download</th>
<th>Operating System</th>
<th>Compatible Smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLE App Store</td>
<td>iOS 7.1.2 or later</td>
<td>iPhone 4S, 5, 5S, 6, 6S, Plus or later</td>
</tr>
<tr>
<td>Android Google Play Store</td>
<td>Standard Android 4.3 or later</td>
<td>Android Smart Phone</td>
</tr>
</tbody>
</table>

6.2 How to Download

Search in the Google Play Store or APPLE App Store by keyword “BLE” or ”TPMS”, in order to find the free App.( Multi Wheel Bluetooth TPMS App.

After you install the App, please restart the device and make sure Bluetooth is enabled. Open the App after restart is completed. A statement from the operating 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).
7. Settings & Add Device

7.1 Intro screen

Please make sure the “Bluetooth” & “Location Service” Settings are enabled when you start the App.

iOS version

Android version

Login:
Login Page (Pic 4a & 4b).

Enter email and password if already set up. If not, click “register” to begin process.
To Register:
Be sure the device is connected to the internet.
Enter desired email account.
Enter password. Password must be between 6 and 20 characters, capital, lower case and numbers.
Once submitted, you will receive an email to your account with an activation link. Click the link in the email to activate the account.

Forgot / Reset password:
To reset your password, please enter your registered email address. (Pic 6a/b)
An email will be sent to that email address.
Enter your password within 1 hour.
Note: If Voice Dongle and TPMS Sensor have been paired, and changes are made in the “System Settings” or “Exchange” tabs please change the settings in “Dongle” to match.
Main Menu:

To add vehicle:

Sign in and open left menu (Pic 7a/b), click on the upper left corner "+" button to add a vehicle, select the vehicle type .(2/3/4/6~36 wheel) (Pic 8a/b)
7.2 Sensor Settings

Sensor Settings:
There are 3 kinds of calibration between the device and the sensors, Deflation, Manual, and QR code. The following describes each method, you must use one of them to set up communication between the device and the sensors.

Deflation set up:
(not applicable for The external sensors, works only with internal sensors also available.)

1
Manual set up:
1. Select Manual Learning. (Pic 12a/b)
2. Choose tire “1” and key in the five character sensor ID (Please refer to last page: ID sticker), which might include “0-9”, “A-F”, or ”a-f”, when a blank space pops up. (Pic 13a/b) The sensor ID is also etched on the top of each sensor.

3. Manual learning is now complete. The ID should show in the data field for the tire previously chosen. Repeat process for the balance of tires.

4. Press and hold on the data field to clear the existing ID’s.
QR Code set up:
Select QR Code Settings. (Pic 15a/b)

Choose tire 1 (LF)
The APP will scan QR code, showing new ID number on the data field. (Pic 16a/b) repeat for balance of sensors.

NOTE: Make sure camera is properly focused on the top of the sensor.
3. The code will now show in the data field. Repeat the process for the remaining wheels.

4. Press and hold the data field to clear the ID’s if necessary.
8. Alarms and Warnings

**System Warning**

Pressure, temperature and voice warning. (Pic 18a/b)

When abnormal tire system status occurs, the value of the corresponding tire turns red, shows a warning symbol and an alarm sounds. The warning symbols on each tire display are shown below.

Press mute and turn off voice reminder to shut off audible alarm.

This screen supports landscape mode. (Pic19a/b)

**Warnings**

- No signal available for the device (shows in red)
- Rapid deflation of tire pressure
- High or low pressure warning (based on your settings)
- High tire temperature (based on your settings)
- Low battery power warning for TPMS sensor
9. System Settings

System Settings: (Pic 20a/b)

Warning Audio Settings: Audio and mute.

Voice reminder: Voice OFF/ON

Vehicle settings: Vehicle edit.(9.1)

Monitored pressure range settings: Select kPa、psi、Bar、Kg/cm² pressure units, ℃, ℉, temperature unit and upper and lower limits. (9.2)

Sensor settings: Enter the sensor settings when using for the first time.(7.2)

Voice dongle settings: Dongle settings.(9.3)

Exchange settings: Tire exchange settings. (9.4)

Send default value: Value history record keeping.

About: Disclaimer & Company Information.(9.5)

If adjustments are made in “System Settings” and “Exchange Settings”, please change the settings in “Dongle”. 
9.1 Vehicle Settings

System Settings:
1. Select Vehicle Settings, enter vehicle name, brand, model. (Pic 21a/b).

2. Select Camera or Photos, then press the "Back" button to save the settings. (Pic 22a/b)
9.2 Monitored Pressure Range Settings

Select Monitored Pressure Range Settings (Pic 23a/b),
1. Change settings on “front wheel” and “rear wheel” then press the “Back” button to save the settings.
You can press “Reset to default” (Pic 24a/b) to reset all settings.

NOTE: For the standard tire pressure value, please refer to the placard located at the side of the driver’s seat.
Default Value:
Maximum tire pressure:
psi = 43; kPa = 300; Bar = 3.0
Minimum Tire pressure:
psi = 26; kPa i=180; Bar = 1.8
Maximum Temperature:
°C = 80; °F = 176
2. Temperature Unit: °C, °F; Select temperature units (Pic 25a/b) then press the "Back "button to save the settings.

3. Pressure Unit: kPa, psi, Bar, Kg / cm2, select pressure units, (Pic 26ab) then press the "Back button to save the settings.
Voice Dongle Set Up:

NOTE: Recommended for 5V/2A car USB power adapter.

NOTE: If kit is purchased with the dongle it will already be paired to the sensors.

1. To pair dongle to sensors, press the red voice dongle button for 1.5 seconds. When you hear “beep,” unit is in the Bluetooth pairing mode (LED flashes Red and Blue light).

2. Enter “Voice dongle settings” function. (Pic 27a/b)

Click “TPMS_Dongle_sn” (random serial number) (Pic 28a/b).
3. The App will automatically download the settings when you hear “Setup completed”. (Pic 9a/b)

When writing data, do not remove the voice dongle.

Mute/ Un-Mute: Press the red button to mute. Press the red button again or wait 10 minutes for the mute function to cancel automatically.

Double click: Tire Status Report.
### 9.4 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.

### 9.5 About

About: (Pic 31a/b)

“Product Information” is displayed. It describes the definition of “Warning Symbol” and shows the link to the Company Website & Facebook.
10. Troubleshooting

1. 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 moving over 12 mph; is started after parked for over ten minutes; or the tire pressure difference at the moment is 30 kPa. When stationary, 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. Smart phone has completed the installation of the App, the sensor ID settings are done, and the car is being driven, but no data is shown.
   A: Please restart the device and be sure Bluetooth is turned on.

3. There is no alarm sound or voice warning.
   A: Be sure the phone is not in silent mode or that the volume has not been turned down all the way.

4. The alarm sounds for tire abnormality on screen but no voice warning is heard.
   A: Some Android smart phones do not support voice services. Please contact the smart phone manufacturer.

11. Warranty Policy

Thank you for buying this product. From the date of purchase, we provide a one-year warranty for the product against manufacturers defects. During the warranty period, under normal operation and in the event of a faulty product, the company will repair or replace the product at our discretion.

Product warranty claims must meet the following conditions:
1. Defective products need to be provided to local dealer to confirm purchase date and cause of defect.
2. Products must be operated correctly, as indicated in the user manual, abuse is not covered.
3. Product has not been altered or disassembled at time of return.
4. The main cause of product failure is due to manufacturing issues.

Disclaimer:
This product is only to be used as precautionary warning and provides to user as a convenient secondary safety device. Please follow the standard installation procedures or ask a qualified tire shop to install the product. If the tire has been damaged or traffic accident resulting from improper driving behavior occurs, the company will not be responsible for any civil or criminal liabilities.

Other relevant latest information of BLU TPMS is available at our website (www.techbyblu.com) and our Facebook Page (http://www.facebook.com/aacbrands) for latest information.
Warranty Certificate

Sensor ID Sticker

**WARRANTY PERIOD:**
One (1) Year

**PURCHASE DATE:**
Y. M. D.

**DISTRIBUTOR STAMP:**

Enter part number here: