JohnDow Dynamic™

TPMS Solutions

BLE TPMS Sensor User Guide
Bluetooth Low Energy (BLE)
Tire Pressure Monitoring System (TPMS)

Internal
DY-BLE-I

External
DY-BLE-E

REV: 2/2023

151 Snyder Ave. Barberton, OH 44203

Product Introduction

Tire condition is critical for the safety of riders and drivers. The Dynamic BLE TPMS monitors pressure and temperature of vehicle tires with Internal or External OEM-grade, Low Energy Bluetooth Sensors (BLE). Users can then find this tire pressure information in the free App for iOS or Android devices including push notifications for low tire pressure and varying temperature.

Notice

Do not operate the App while driving. Dynamic (the Company) is exempt from all responsibilities that result from driver's carelessness and improper operation.

The system uses 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. 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).

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 responsibility of malfunction if these types of adjustments made to a tire occur. Furthermore, do not place the TPMS sensor in contact with any chemicals. Chemicals may damage the sensor and prevent proper functionality.

Your smartphone's or tablet's system load may impact timely data received in the App. If you notice a delay, close other apps or web pages not in use.

BLE TPMS Specification

DY-BLE-E SPECIFICATIONS

Operating Voltage	1.8V/3.6V
Operating Humidity	95% MAX
Operating Current	< 18mA
Storage Temperature	-40°F ~ 257°F
Operating Temperature	-4°F ~ 221°F

Monitored Pressure Range	0 ~ 185 PSI (0 to 1280kPa)
Monitored Temperature Range	-40°F to 221°F
Operating Frequency	2.4 GHz
Transmission Power	8dBm MAX
Battery Life	3 ~ 5 Years

DY-BLE-I SPECIFICATIONS

Rubber Valve (included)	Max cold inflation pressure up to 80 PSI (5.51 bar, 551kPa)
Metal Valve (optional)	Max cold inflation pressure 120 PSI (8.27 bar, 827kPa)
Optional Metal Valves	6-203, 6-225, 6-225B
Operating Temperature	-4°F to 185°F (-20°C to 85°C)

Max Speed Rating (Rubber)	115 MPH (18 5KPH)
Max Speed Rating (Metal)	155 MPH (249 km/h
Battery Life	3 ~ 5 years
Waterproof	IP67

App Download and Installation

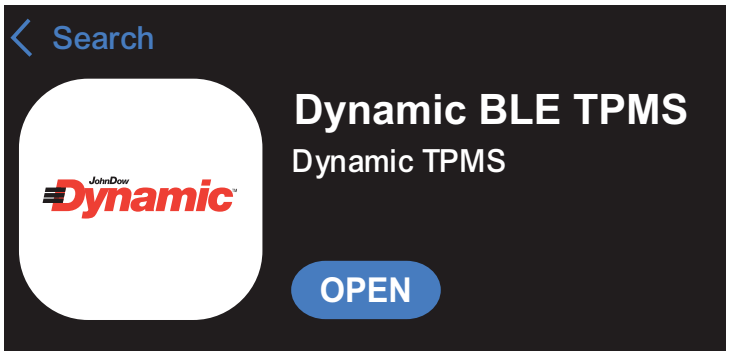
Operating System Requirements

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

How to Download

Search in the Apple App Store or Google Play Store for **Dynamic BLE TPMS**.

After installation, enable Bluetooth. Open the App. A pop up will display *Bluetooth Service Disabled* or *Location Services Disabled*. Click *OK* to turn on the Bluetooth and Location Services function. If Location Services is not functioning properly, turn it on in Settings (iOS only).



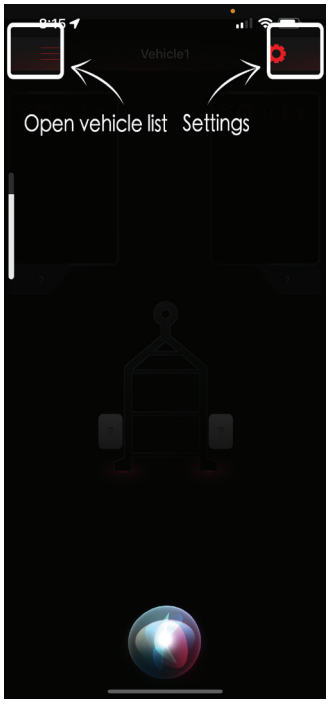
Settings & Add Device

Quick Start

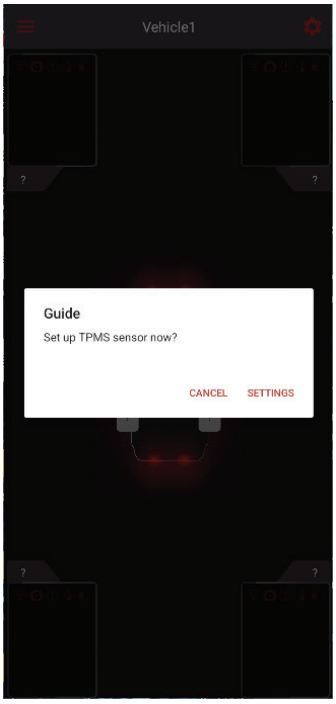
Quick Start

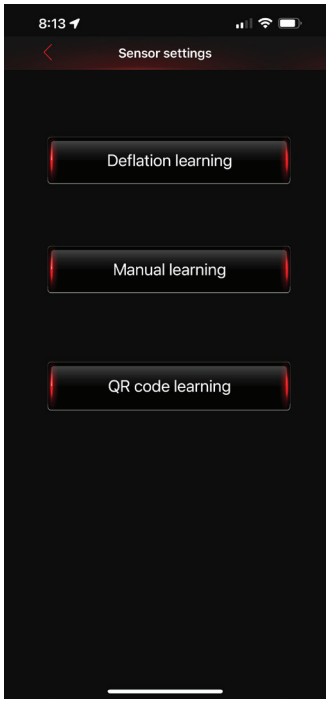
Click on the icon of what your TPMS Sensors will go on.

NOTE: The app can support up to 36 wheels at a time.



Click *Settings*.

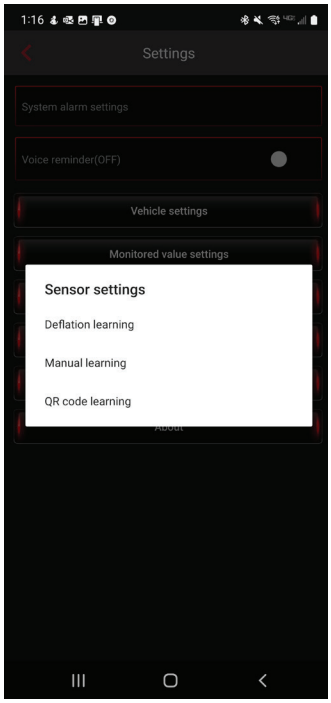


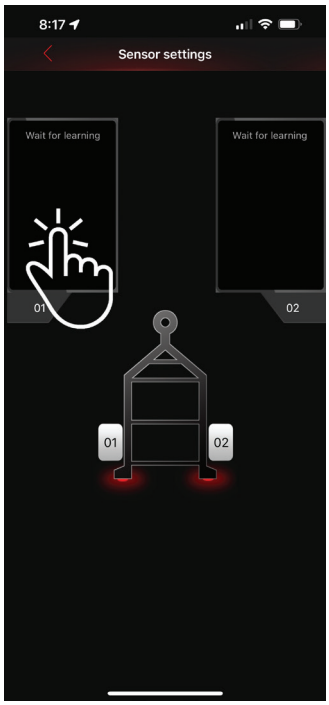


Sensor Settings:
There are three ways to pair the sensors to the App. **QR code**, **Manual**, and **Deflation**.

We strongly recommend using the QR learning option.

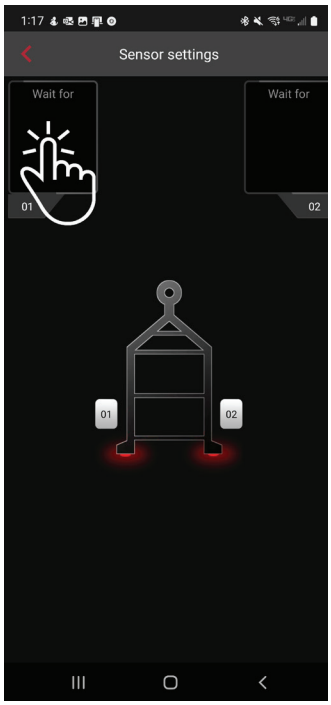
NOTE: Deflation set up is not applicable for external sensors; only internal.





QR Learning

Select the wheel location to pair the sensors.

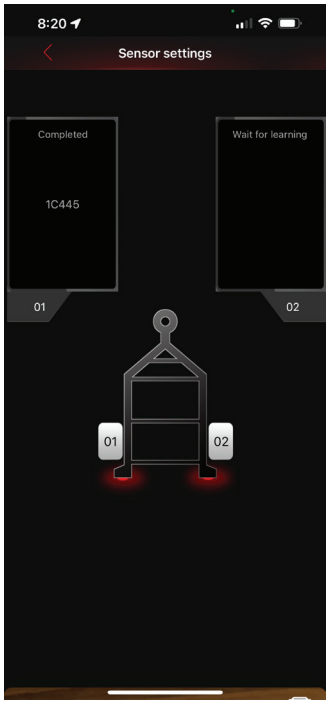


QR Learning

The app will open the camera and scan the QR code.

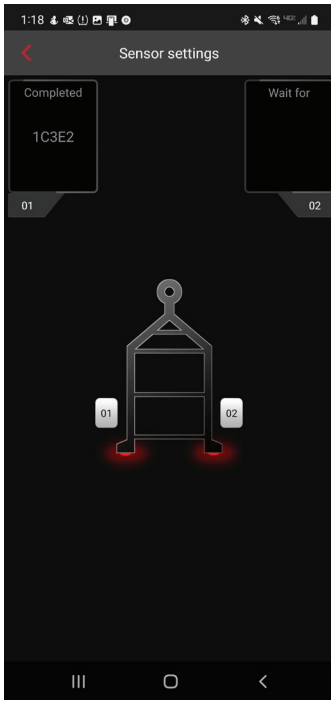
NOTE: This is the same for both external and internal sensors.

QR Learning

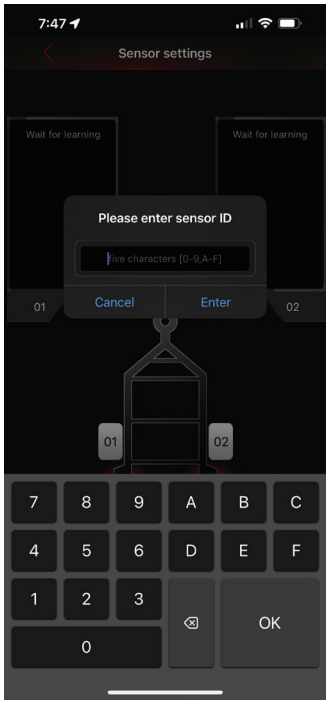


The ID of the sensor will show in the location field. Select the next wheel location and continue until you pair all sensors.

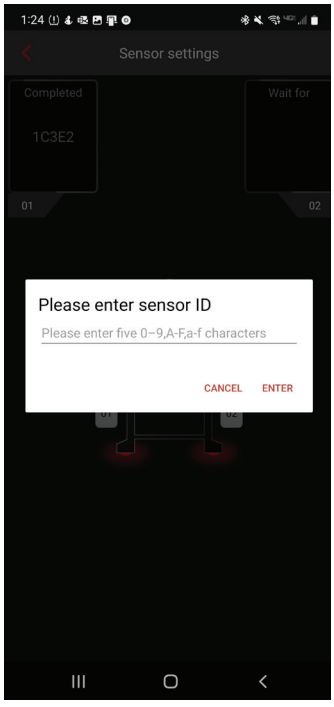
NOTE: This is the same for both external and internal sensors.



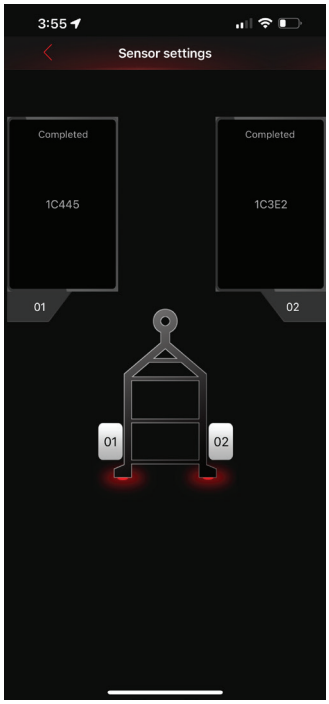
Manual Learning



Enter the ID of the sensor.

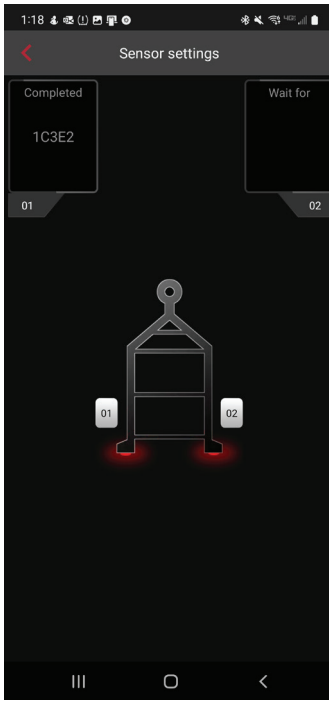


Manual Learning

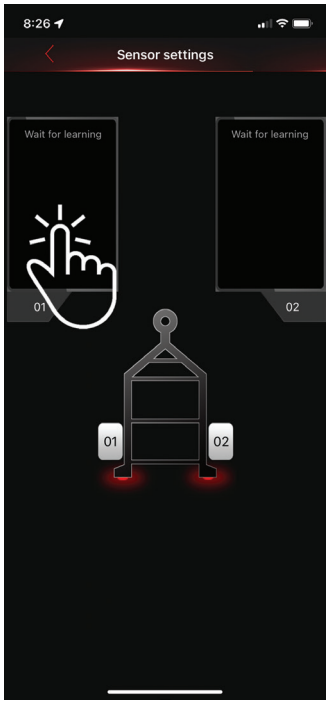


The ID of the sensor will show in the location field. Select the next wheel location and continue until you pair all sensors.

NOTE: This is the same for both external and internal sensors.

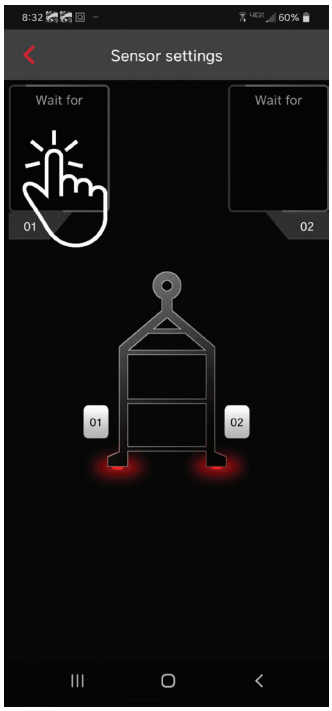


Deflation Learning

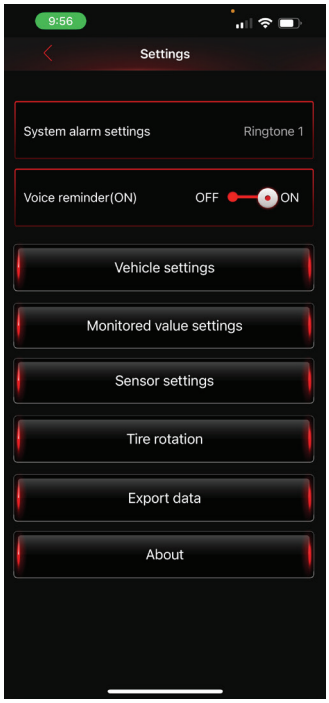


1. Choose tire and deflate the tire pressure. The App will look for the deflation signal, showing the new ID number on the dialogue display. Press *OK* to finish. It takes up to two minutes to perform this step.

   Once the Deflation Learning is complete, the new ID will show in the tire location field. Using the same method, set up the ID learning for all other tires.



System Settings & Warnings

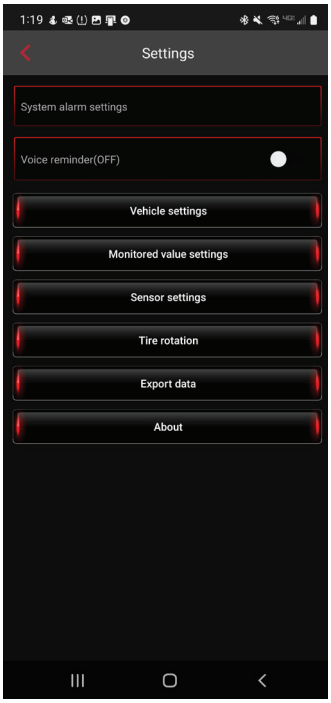


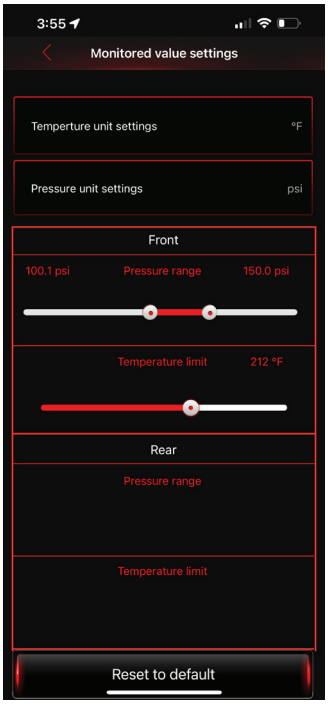
OVERALL SETTINGS

Monitored Valve Settings

Set up the ID of the sensor in the location field. Select the next wheel location and continue until you pair all sensors.

NOTE: This is the same for both external and internal sensors.



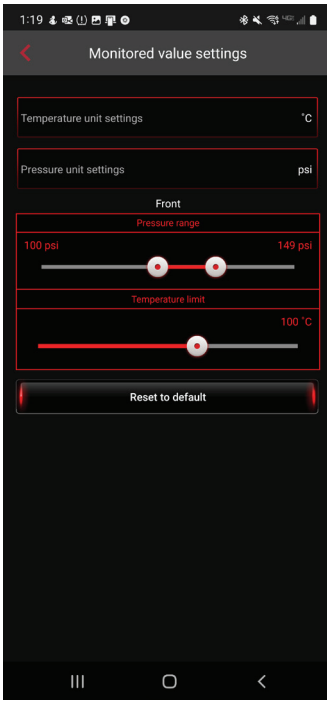


Monitored valve settings

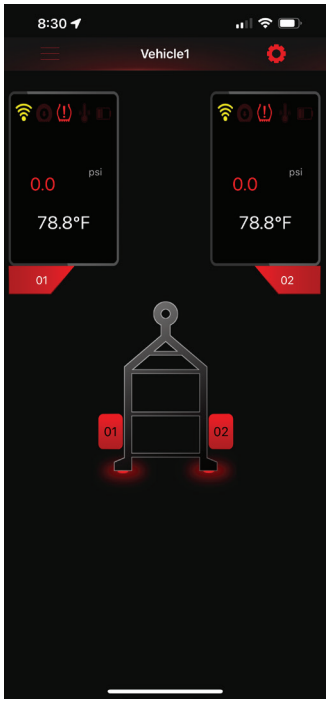
Temperature Unit settings: F or C

Pressure unit settings: kPa, psi, Bar, kg/cm2

Value range sliders: Use the slider to adjust the range. Anything outside of this set range will give an alert.



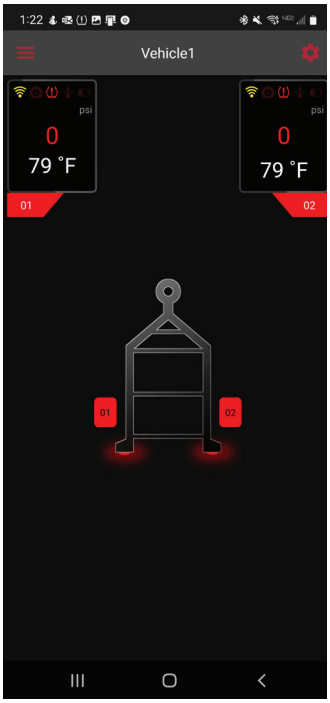
System Settings & Warnings



Pressure, Temperature and Voice Warnings

Any abnormal tire activity will turn red, show a warning symbol and activate an audible alarm.

You can press mute and turn off the audible voice reminder if needed.



Repeater Setup

The Repeater amplifies the overall signal distance up to 30 feet (10 meters) for longer trainers or when dealing with metal interference.

The Repeater utilizes 12 volt power and contains no batteries. Connect the red wire to Positive and the black wire to Negative 12 volt DC power from your hauling vehicle. No pairing needed.

DY-BLE-R SPECIFICATIONS

Operating Voltage	12V/24V
Operating Humidity	90% MAX
Storage Temperature	-40°F ~ 494.6°F
Operating Temperature	-4°F ~ 185°F
Operating Frequency	Bluetooth Low Energy 4.0, 2400MHz-2483.5MHz

Transmission Power	4dBm MAX
Receiver Sensitivity	< -85dBm
Operating Current	40mA MAX @ DC12V
Waterproof	IP67
Battery Life	3 ~ 5 Years