

# TOYOTA PLUG & PLAY TPMS TY1.0



*Enjoy it.*

## CAUTIONS

### Safety Notes

This TPMS (Tire Pressure Monitoring System) has been manufactured according to established safety guidelines. However, dangers may still occur if the safety notes in this manual is not observed. This manual is intended to familiarize the user with the TPMS's important functions. Read this carefully, prior to using the appliance. Keep this manual in an easily accessible location. In addition, do observe the instructions of the devices used in conjunction with this appliance.

### Road Safety

Always observe the following notes for road safety:

- Device must be used in a way that complements the safety of the user when driving the vehicle. It is recommended for the user to park at an appropriate location when examining the tires in case of abnormal alert.

### General Safety

- Device is intended for installation and operation in a vehicle with 12V vehicle system outage, hence the device must be installed 500mm away from the DVD or high power equipment to prevent signal disruption.
- Do not dismantle or modify the device. Installation or repair should be performed by a specialist. Blaupunkt is not liable for any loss or damage resulting from unauthorized disassembly or modification to the device.
- Device is designed to monitor tire pressure and temperature only. Driver is responsible for the upkeep of the tires.
- Blaupunkt is not liable in case of loss of sensors. Contact your Blaupunkt dealer to purchase new sensors.
- Package comes with pre-set sensor for designated tires. In case of sensor replacement or change of sensor location, ensure the sensor are reprogrammed before operating.
- Please do not operate the device under such conditions (extremely high temperature or extremely low temperature); ensure that the temperature within the car ranges from -30°C to 80°C before you begin installation process and during operation.

- For abnormalities, please refer to the "Trouble-shooting" section. Consult with Blaupunkt dealer for further examining, in case if the problem cannot be resolved.

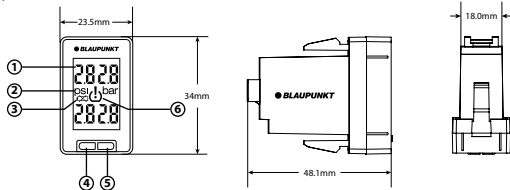
This manual may be updated from time to time without any notice.

### Disclaimer

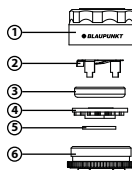
In no event shall Blaupunkt be liable for any direct, indirect, punitive, incidental, special consequential damages to property or life and whatsoever arising out of or connected with the use or misuse of our products. USA & CANADA: This product is not intended for sale in the United States and Canada. If purchased in the U.S. or Canada, this product is purchased on as-is basis. No warranty, whether expressed or implied is provided in the U.S. or Canada.

## STRUCTURE & FUNCTIONS

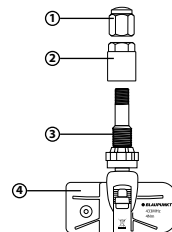
### Display



### External Sensor



### Valve Sensor



### Functions

#### Display

1. Data Display
2. Pressure Unit
3. Display Battery Status
4. OK Button
5. Setting Button
6. TPMS Alarm Icon

#### External Sensor

1. Sensor Cover
2. Battery Holder
3. Battery
4. Sensor
5. Rubber Seal
6. Base

#### Valve Sensor

1. Dust Cap
2. Aluminium Alloy Nut
3. Aluminium Alloy Valve
4. Transmitter

## SPECIFICATIONS

### Sensor

Operating frequency	433.92 ± 0.05MHz
Battery voltage	1.8V ~ 3.3V
Operating temperature	-30°C ~ 60°C (External Sensor) -40°C ~ 105°C (Valve Sensor)
Pressure range	0~8 Bar / 0~116 PSI

### Display

Operating current	<20mA
Operating frequency	433.92± 0.05MHz
Operating voltage	+12V
Operating temperature	-30°C ~ 80°C
Pressure display range	0~6.8Bar/0~99PSI

### Default Value

High pressure value	3.1 Bar / 45 PSI
Low pressure value	1.8 Bar / 26 PSI
High temperature value	80°C

### Precision

Temperature	+/-2°C
Pressure	0.1 Bar / 1.5 PSI

### Temperature unit

1 °C = 33.8 °F = 274.15 K

### Air pressure unit

1 Bar = 14.5 PSI = 100 Kpa = 1.02Kgf/cm<sup>2</sup>

### Accessories

#### Display



1x Power cable

#### TPMS TY1.0E



4x external sensor



4x anti-theft nuts



1x spanner  
(keep in car)



4x built-in battery

#### TPMS TY1.0V



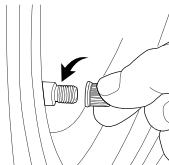
4x valve sensor



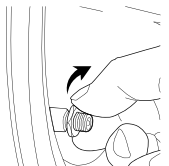
4x warning label

## EXTERNAL SENSOR INSTALLATION

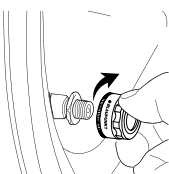
1. Remove the valve cap.



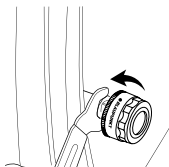
2. Screw in the nut.



3. Screw on the sensor.



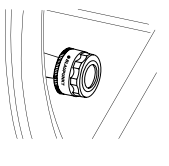
4. Tighten up the nut to the sensor by using the spanner.



5. Spray soap water on the nozzle to check for leakage problem.

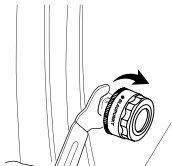


6. Clean the area before using it.

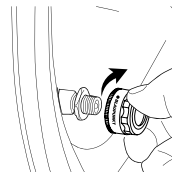


## EXTERNAL SENSOR BATTERY REPLACEMENT

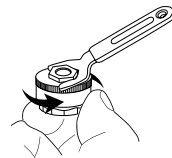
1. Unscrew the nut.



2. Unscrew the sensor.



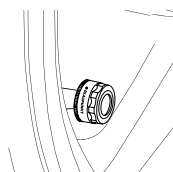
3. Unscrew the sensor cover by using spanner.



4. Replace new battery.

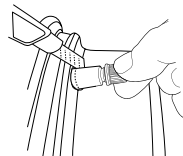


5. Refer to "Sensor Installation" steps.

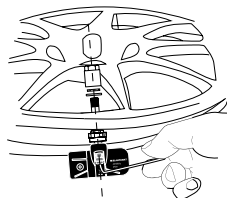


## VALVE SENSOR INSTALLATION

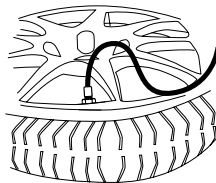
1. Remove the original air valve from the wheel barrel.



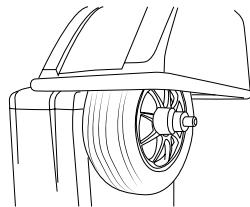
2. Install & adjust the valve sensor onto the wheel barrel. Screw & tighten the nut & valve.



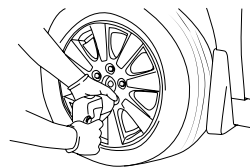
3. Inflate the tire after installation.



4. Rebalance the wheel to ensure radial uniformity.

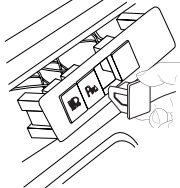


5. Reinstall the balanced wheel onto the vehicle.

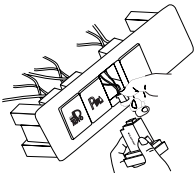


## DISPLAY INSTALLATION

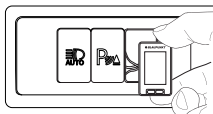
1. Disassemble blind switch from the original vehicle switch panel.



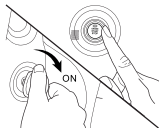
2. Connect the power cable to the display. Then, connect the power cable to ACC & ground wire. (Refer to the Wiring Diagram)



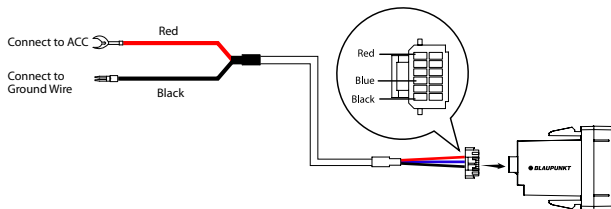
3. Embed the display into the empty switch slot.



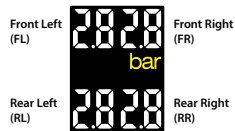
4. The display is turned on when ACC on.



## WIRING DIAGRAM



## DIFFERENT SCENARIO



1. **Normal**
  - Displays real time tire pressure & temperature of 4 tires.



2. **High Pressure**
  - Di-Di-Di-Di-Di-Di-



3. **Air Leakage**
  - Di-Di-Di-Di-Di-Di-



4. **High Temperature**
  - Di-Di-Di-Di-Di-



5. **Sensor Failure**



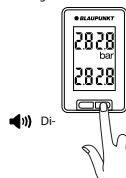
6. **Low Battery**
  - Di-Di-Di-Di-Di-



**1. Sensor Pairing Setting**

(It is required only when the sensors has switched location or be replaced)

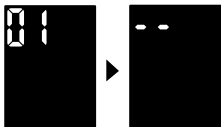
- a) Press & hold setting button to enter setting interface.



- b) After entering the setting interface, P1 will be shown.



- c) Press OK button to enter pairing mode. Press the setting button to switch the preferred position, press OK button to select. Press & hold setting button again to return back to the first pairing order. (Pairing order : Front Left > Front Right > Rear Right > Rear Left)

**d) • External sensor**

- Disassemble the external sensor from the front left tire & reinstalled, for sensor ID pairing activation.

**• Valve sensor**

- Releasing the air from tire continuously instead of intermittently, ensure that the releasing process is not less than 8 second.
- Do not exceed the maximum pressure of tire during inflating.

- e) When system receives the signal, you will hear "Di-" which indicates successful sensor pairing (new sensor ID will be displayed). Then, it will continue to next order.

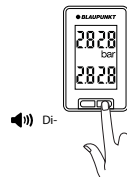


- Ensure that there is only one of the tire with sensor is activated during pairing, otherwise there is no guarantee that the sensor ID that really needs to be paired will be paired into the receiver.
- To cancel the current pairing process by pressing return key, however pairing process cannot be canceled after pairing process is successful.

**2. Tire Position Exchange Setting**

(It is required only when the tires has switched location)

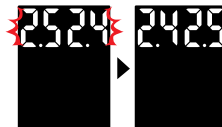
- a) Press & hold setting button to enter setting interface.



- b) Press setting button again, P2 will be shown.



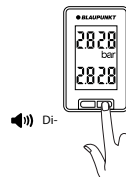
- c) Press OK button, the digits on the top left & top right will flash. Press the setting button again to switch preferred position, press OK button to select. You will hear "Di- Di-" which indicates successful.



- d) Press & hold the setting button to exit setting interface.

**Threshold Value Setting**

- a) Press & hold setting button to enter setting interface.



- b) Press setting button will be shown.



- c) Press OK button, then press the setting button to switch between threshold value interface (**High Pressure Value & Low Pressure Value**). Select the preferred interface by pressing OK button. The digit will flash then press the setting button to adjust the preferred value & press OK button to select.

**• High Pressure Value Setting Interface**

### • Low Pressure Value Setting Interface



d) Press & hold the setting button to exit setting interface.

### 4. Unit Switching

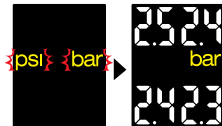
a) Press & hold setting button to enter setting interface.



b) Press setting button thrice, P4 & default pressure unit will be shown.



c) Press OK button, then press the setting button to switch pressure unit. Press OK button to select the preferred unit.



d) Press & hold the setting button to exit setting interface.

If any of the following problem occur, please resort to Troubleshooting for the possible solutions. Consult Blaupunkt authorized dealer if problem persist.

Problems	Solutions
Air leakage after sensor installation	The tire valves may not be universal standard, please check with the local workshop.
No tire data are displayed after completing installation	Ensure ACC is turned on.
Missing or lost sensor	Please purchase new sensor.
External sensor battery low	Please replace with battery CR1632.
Change of tire location	Please reprogram the corresponding sensors.







**Designed and engineered by Blaupunkt Competence Centre**

TPMS TY1.0E  
1 311 21 008 45 01

TPMS TY1.0V  
1 311 21 009 45 01