



# TIRE PRESSURE MONITORING SYSTEM **TPMS 2.2**



***Enjoy it.***



Operating and Installation Instructions

## CAUTIONS

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### Safety Notes

This TPMS (Tire Pressure Monitoring System) has been manufactured according to established safety guidelines. Nevertheless, risks may arise if the safety instructions outlined in this manual are not adhered to. The purpose of this manual is to acquaint the user with the crucial functions of the TPMS. Prior to operating the appliance, carefully read through this manual and store it in a readily accessible location. Furthermore, ensure compliance with the instructions for any devices used in conjunction with this appliance.

### Road Safety

Always adhere to the following guidelines for road safety:

- Utilize the device in a manner that enhances the user's safety while operating the vehicle. It is advisable for the user to park at a suitable location when inspecting the tires in the event of an abnormal alert

### General Safety

- The device is designed for installation and operation in a vehicle with a 12V system, and therefore, it should be installed at least 500mm away from the DVD or other high-power equipment to prevent signal disruption during a system outage.
- It is crucial not to dismantle or modify the device. Installation or repair should be carried out by a specialist. Blaupunkt assumes no responsibility for any loss or damage resulting from unauthorized disassembly or modification of the device.
- The device's primary function is to monitor tire pressure and temperature exclusively. The driver is responsible for maintaining the tires. Blaupunkt is not responsible for any loss of sensors. If sensors are lost, contact your Blaupunkt dealer to purchase new ones.
- The package includes pre-set sensors for designated tires. If sensor replacement or a change in sensor location is necessary, ensure that the sensors are reprogrammed before operating the device.

- Please refrain from operating the device under extreme temperature conditions (either extremely high or low). Ensure that the car's interior temperature falls within the range of -10°C to 60°C before beginning the installation process and during operation.

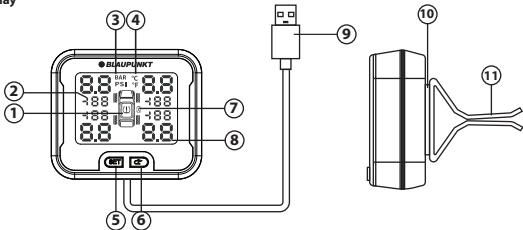
### Disclaimer

- Blaupunkt is not liable for any loss or damage caused or resulting from unauthorized disassembly or modification to the product.
- Under no circumstances shall Blaupunkt be held liable for any direct, indirect, punitive, incidental, or special consequential damages, whether related to property or life, arising out of or connected with the use or misuse of our products, including but not limited to issues of improper storage.
- USA & CANADA: This product is not intended for sale in the United States and Canada. If acquired in the U.S. or Canada, it is obtained on an "as-is" basis. No warranty, whether express or implied, is provided in the U.S. and Canada.

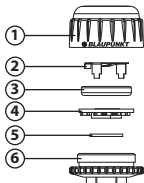
This manual may be updated from time to time without any notice. Visit [www.blaupunkt.com](http://www.blaupunkt.com) for more info.

## STRUCTURE & FUNCTIONS

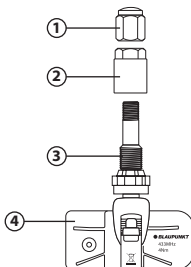
### Display



### External Sensor



### Valve Sensor



### Receiver

1. Pressure Alarm Icon
2. Tire Temperature Value
3. Pressure Unit
4. Temperature Unit
5. Set Button
6. Return Button
7. Sensor Battery Alarm icon
8. Tire Pressure Value
9. USB Power Supply Interface
10. Sticker
11. Fix Support

### 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 +/- 0.03MHz
Battery voltage	DC2.1V ~ DC 3.3V
Operating temperature	-20°C ~ 85°C (External Sensor) -40°C ~ 125°C (Valve Sensor)
Pressure range	0~8 Bar / 0~116 PSI

### Display

Operating current	<40mA
Operating frequency	433.92 +/- 0.05MHz
Operating voltage	12V/5V
Operating temperature	-30°C ~ 85°C
Dimension (LxWxH)	45 x 38.8 x 16.5mm

### Default Value

High pressure value	3.1Bar/45Psi
Low pressure value	1.8Bar/27Psi
High temperature value	85°C

### Precision

Temperature	$\pm 3^{\circ}\text{C}$
Pressure	0.15 Bar / 2.2 PSI
Temperature unit	$1^{\circ}\text{C} = 33.8^{\circ}\text{F} = 274.15\text{ K}$
Air pressure unit	$2\text{ Bar} = 14.5\text{ PSI} = 100\text{ Kpa} = 1.02\text{Kgf/cm}^2$

### Accessories

#### Display



#### TPMS 2.2E

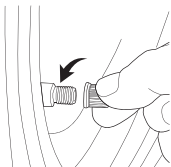


#### TPMS 2.2V

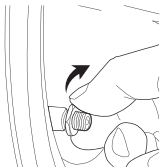


## EXTERNAL SENSOR INSTALLATION

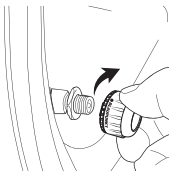
1. Remove the valve cap.



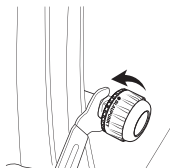
2. Screw in the nut.



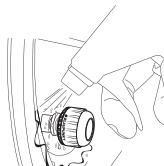
3. Screw on the sensor.



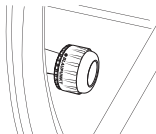
4. Tighten up the nut to the sensor by using the spanner.



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

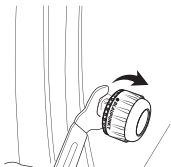


6. Clean the area before using it.

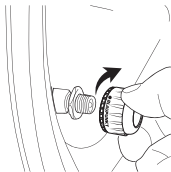


## EXTERNAL SENSOR BATTERY REPLACEMENT

1. Unscrew the nut.



2. Unscrew the sensor.



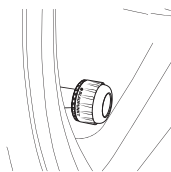
3. Unscrew the sensor cover by using spanner.



4. Replace new battery.

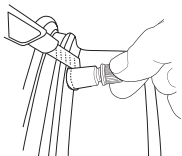


5. Refer to "Sensor Installation" steps.

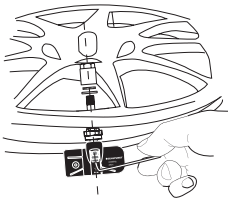


## VALVE SENSOR INSTALLATION

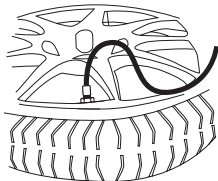
1. Remove the original air valve from the wheel barrel.



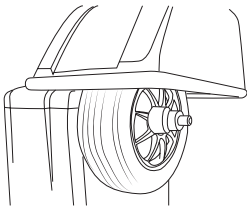
2. Install & adjust the valve sensor onto the wheel barrel. Screw & tighten the nut & valve.



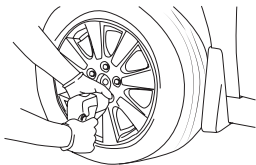
3. Inflate the tire after installation.



4. Rebalance the wheel to ensure radial uniformity.

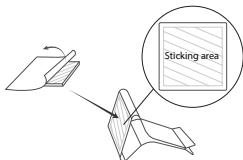


5. Reinstall the balanced wheel onto the vehicle.

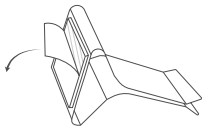


## DISPLAY INSTALLATION

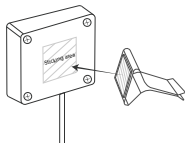
1. Remove the protective film from the 3M tape and place it on the bracket.



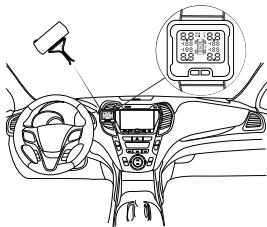
2. Remove the protective film from the other side of the 3M tape as well.



3. Place the bracket and affix it to the center of the back of the display.



4. Attach the display with the bracket to the blades of car's air conditioning vent, then adjust it to the desired position and angle.



## TROUBLESHOOTING

If any of the following problems occur, please refer to the Troubleshooting section for potential solutions. If the problem persists, seek assistance from an authorized Blaupunkt dealer.

Problems	Solutions
Air leakage after sensor installation	The tire valves may not be universal standard, please check with the local dealer
No tire data are displayed after completing installation	Ensure ACC is turned on If external sensor, check rubber seal condition New installation requires user to drive above 2 km/h for about 5min
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 Refer to Tire Position Exchange Setting (P2)



## DIFFERENT SCENARIO

Front Left  
(FL)

Front Right  
(FR)

Rear Left  
(RL)

Rear Right  
(RR)



### 1. Normal

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



### 2. Sensor Failure

- Emits beeping alarm sound



### 3. Low Pressure

- Emits beeping alarm sound



### 4. High Pressure

- Emits beeping alarm sound



### 5. Air Leakage

- Emits beeping alarm sound



**6. High Temperature**

- Emits beeping alarm sound

**7. Sensor Low Voltage**

- Emits beeping alarm sound

**1. First Start-up Interface****a) Booting-up Process interface****b) Standby Interface**

- First use

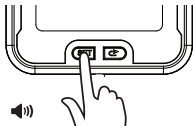


- After first used



## 2. Sensor Pairing

a) Press & hold button "SET" to enter Menu interface.



b) After hearing beeping sound, P1 will appear.



c) Press & hold button "SET" to enter the Sensor Pairing mode stored in display.



d) Short press "SET" to switch the preferred position & entering the Sensor ID (the tire symbol will move and the original sensor ID will display).



e) When the new Sensor ID left front wheel is detected, it is stored automatically. Then, it will continue to next order. Press button "⬅" to exit setting interface. (Pairing order : Front Left > Front Right > Rear Right > Rear Left)

### f) • 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.

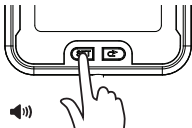


- Ensure that there is only one of the tire with sensor is activated during pairing, otherwise there is no guarantee that the sensor ID that really needs to be paired will be paired into the receiver.
- To cancel the current pairing process by pressing return key, however pairing process cannot be canceled

### 3. Tire Position Exchange Setting

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

- a) Press & hold button "SET" to enter Menu interface.



- b) After hearing beeping sound, P2 will appear.



- c) Press & hold button "SET" to enter the Sensor change interface.

- d) The left and right front wheel interfaces wait for exchange confirmation. Air pressure display flashes until confirmed.

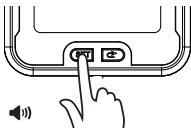


- e) Press and hold button "SET" to confirm front wheel ID adjustment and tire replacement. Once the tire replacement is successful, the system will beeps twice. Press button "←" to exit setting interface.



### 4. Threshold Value Setting

- a) Press & hold button "SET" to enter Menu interface.



- b) After hearing beeping sound, P3 will appear.



c) Press & hold button **"SET"** , then Short press button **"SET"** again to switch between threshold value interface (**High Pressure Value, Low Pressure Value & High Temperature Value**)

• **High Pressure Value Setting Interface**



• **Low Pressure Value Setting Interface**



• **High Temperature Value Setting Interface**

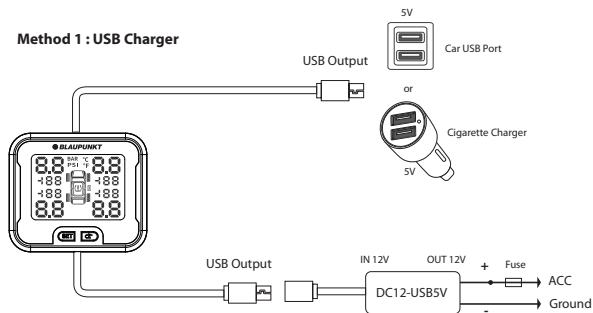


d) Select the preferred interface by press and hold button **"SET"** . The digit will flash then press the button **"SET"** again to set the value & long press **"SET"** to confirm.

e) Press button **"⬅"** to exit setting interface.

## WIRING DIAGRAM

### Method 1 : USB Charger



### Method 2 : Hardwire Kit (Optional)





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R0

TPMS 2.2 E  
1 311 24 015 45 01

TPMS 2.2 V  
1 311 24 016 45 01