



SOLAR-POWERED & USB CHARGING **TPMS 2.1**



Enjoy it.

Operating and Installation Instructions

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 compliments 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 continuous usage, ensure TPMS display is charged at least 1 time a week or when used for more than 4 hours per day.
- For abnormalities, please refer to the "Trouble-shooting" section. Consult with Blaupunkt dealer for further examining, in case if the problem cannot be resolved.

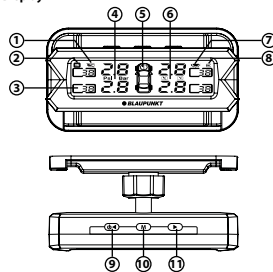
This manual may be updated from time to time without any notice.

Disclaimer

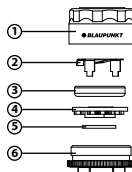
In no event shall Blaupunkt be liable for any direct, indirect, punitive, incidental, special consequential damages to property or life and whatsoever arising out of or connected with the use or misuse of our products. USA & CANADA: This product is not intended for sale in the United States and Canada. 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



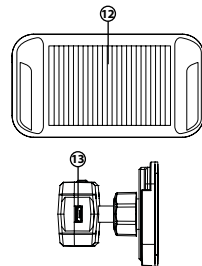
External Sensor



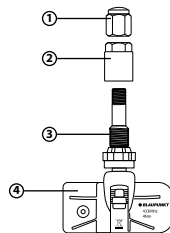
Functions

Display

1. Sensor Battery Status
2. High Temperature Warning
3. Tire Temperature Value
4. Pressure Unit
5. TPMS Alarm Icon
6. Temperature Unit
7. Solar Power
8. Display Battery Status
9. Power/ Left Button
10. Setting Button
11. Right Button
12. Solar Panel
13. USB Charging Port



Valve Sensor



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
Battery Model	CR1632 (External Sensor)

Display

Operating current	<20mA
Operating frequency	433.92±0.05MHz
Charging voltage	5V±0.5V
Operating temperature	-30°C ~ 80°C
Pressure display range	0~6.8Bar/0~99PSI
Battery Capacity	220mAh

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/cm²

Accessories

Display



1x USB cabel

TPMS 2.1E



4x external sensor



4x anti-theft nuts



1x spanner
(keep in car)



4x built-in battery

TPMS 2.1V



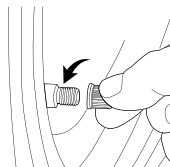
4x valve sensor



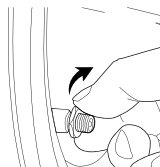
4x warning label

EXTERNAL SENSOR INSTALLATION

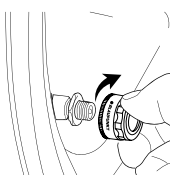
1. Remove the valve cap.



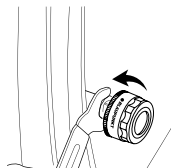
2. Screw in the nut.



3. Screw on the sensor.



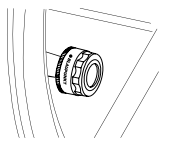
4. Tighten up the nut to the sensor by using the spanner.



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

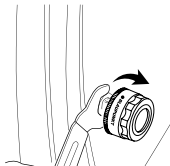


6. Clean the area before using it.

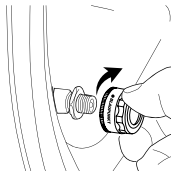


EXTERNAL SENSOR BATTERY REPLACEMENT

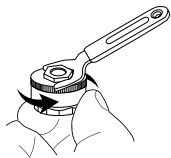
1. Unscrew the nut.



2. Unscrew the sensor.



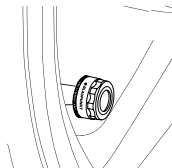
3. Unscrew the sensor cover by using spanner.



4. Replace new battery.

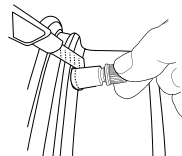


5. Refer to "Sensor Installation" steps.

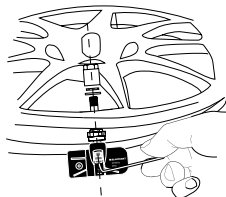


VALVE SENSOR INSTALLATION

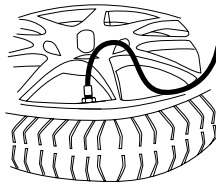
1. Remove the original air valve from the wheel barrel.



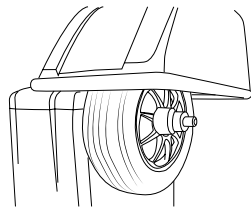
2. Install & adjust the valve sensor onto the wheel barrel. Screw & tighten the nut & valve.



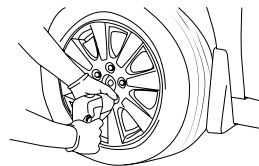
3. Inflate the tire after installation.



4. Rebalance the wheel to ensure radial uniformity.

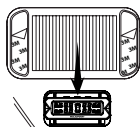


5. Reinstall the balanced wheel onto the vehicle.



DISPLAY INSTALLATION

1. Remove the 3M tape protective film to affix the display on the windscreen.

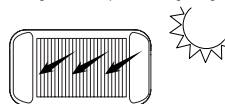


Display is suggest to install 500mm away from DVD or High power equipment to avoid electromagnetic interference.

2. The display supports solar power & USB charging mode. (Note: Charge the display with USB cable up to 4 hours before using for the first time and connect the USB cable to the display at overcast and rainy day.)

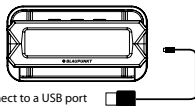
a) Solar Power

- Display will be charged automatically as long as the solar panel is facing sunlight.



b) USB

- Connect USB charger to the power supply input of the display.



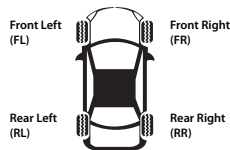
Connect to a USB port

TROUBLESHOOTING

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 the USB cable is connected to the display & charging up to 4 hours before using for the first time.
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.

DIFFERENT SCENARIO



1. Normal

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



2. High Pressure

- Di- Di- Di- Di- Di-



3. Air Leakage

- Di- Di- Di- Di- Di-



4. High Temperature

- Di- Di- Di- Di- Di-



5. Sensor Failure



6. Low Battery

a) Display



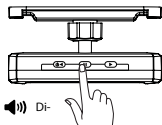
b) Sensor

- Di- Di- Di- Di- Di-



1. Unit Switching

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



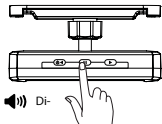
- b) After entering the setting interface, P1, Pressure units (Bar /PSI) & temperature units (°C/°F) will flash.



- c) Press button "M" for unit setting, press the button "▶" to switching pressure & temperature unit. Press button "M" again to confirm the preferred units. Press button "◀" to exit setting interface.

2. Threshold Value Setting

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



- b) Press button "▶", P2, Left Front tire icon will flash.



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

• High Pressure Value Setting Interface



• Low Pressure Value Setting Interface



• High Temperature Value Setting Interface

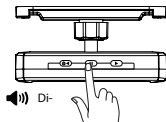


- d) Press button "◀" to exit setting interface.

3. Tire Position Exchange Setting

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

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



- b) Press button "▶" twice, P3 will flash.



- c) Press button "M", the digits on the top left & top right will flash.

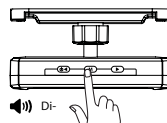


- d) Press the button "▶" to switch preferred position, press button "M" to select. Press button "◀" to exit setting interface.

4. Sensor Pairing Setting

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

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



- b) Press button "▶" thrice, P4 will flash.



- c) Press button "M" to enter pairing mode. The old sensor ID of front left will be shown on the display.



- d) Press the button "▶" to switch the preferred position (sensor ID of the corresponding tire position will be displayed), press button "M" to select. (Pairing order: Front Left > Front Right > Rear Right > Rear Left)



- 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.

e) • 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.

- f) 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. Press button "◀" to exit setting interface.





Designed and engineered by Blaupunkt Competence Centre

TPMS 2.1E

1 311 21 006 45 01

TPMS 2.1V

1 311 21 007 45 01