

ΩMEGA

RESEARCH & DEVELOPMENT TECHNOLOGIES, INC.

powered by STEELMATE®

DIY TPMS

Tire Pressure Monitoring System

SM-TP-71P

Manual

Specifications

Sensor:
Operating frequency: 433.92MHz
Transmitting Range: 4~6m (13~20 ft)
Battery voltage: 2.2V-3.6V
Operating temperature: -20°C~+60°C/
-4°F~+140°F

Pressure range: 0~3.5 Bar/0~50Psi
High pressure value: 3.3 Bar/47Psi
Low pressure value: 1.7 Bar/25Psi

Display:
Operating frequency: 433.92MHz
Operating voltage: 12V±3V
Operating temperature: -20°C~+70°C/
-4°F~+158°F

Accuracy:
Temperature: ±1°C/±2°F
Pressure: ±0.1 Bar/±1.5Psi

Air pressure unit of measurement:
1Bar = 14.5Psi = 100KPa = 1.02Kgf/CM²

NOTE: The SM-TP-71P uses Psi only.

Parts List

Display

Sensor X4
(Black Cover)

Sensor Cover X4
(Silver)

Washer X5
(1 spare included)

Nut X5
(1 spare included)

Dust Cover X4

Sensor disassembly tool

Spanner wrench

NOTE: Keep the tools in your vehicle to remove the sensors during tire service

Display & Sensor Overview

Data Display

Pressure Unit
(PSI/Bar)

Warning Indicator

Set Button

Sensor Cover

Sensor

Battery

Washer

Nut

Installing The Display

1

Remove the cigarette lighter or power outlet cover.

2

Plug in the display. It may turn on if the outlet has constant power. If not, see step 3.

3

Turn the ignition key to the "ACC" or "ON" position to power the display.

4

The display turns on. (It will turn off within 10 sec. of turning the engine off)

Installing The Sensors

1

Unscrew the valve cap.

2

Install the dust cover onto the tire's valve stem

3

Screw in the locking nut.

4

Screw the sensor on. Be sure to use the premarked location.

5

Tighten the locking nut against the sensor using the spanner wrench

6

Check for air leaks by spraying soapy water on the sensor. If there are no leaks, slide the dust cover onto the sensor.

Testing The System

1

The display will show current tire data once the vehicle speed exceeds 20km/h (12.4MPH)

2

Installation is complete once all 4 sensors are showing tire pressure data on the display

MA_SMT71P_REV0 5/8/14

Different Display Scenarios

Normal

All 4 tires will show normal pressure data.

Air Leak Detected

Fast leak : Bi-Bi-
Slow leak : Bi-Bi-

High Pressure

Bi-Bi-Bi-

High Temperature

Bi-Bi-

Low Sensor Battery

Bi-Bi-

Sensor Failure

Bi-

Replacing The Sensor Battery

1

Loosen the locking nut using the included spanner wrench.

2

Unscrew the sensor.

3

Remove the washer

4

Unscrew the sensor cover using the sensor disassembly tool.

5

Replace the battery

6

Reinstall the sensor by following the steps in "Installing The Sensors".

Programming The Sensors (NOTE: All sensors are preprogrammed from the factory)

1

Press the "SET" button 5 times. The display will beep once to confirm entry into programming mode.

2

The F. L. tire position will flash "-" once you enter programming mode to indicate it is waiting to receive data from the sensor. The other positions will display "-" steady.

3

Screw the new/marked sensor onto the tire's valve stem and tighten the locking nut with the spanner wrench.

4

Tire pressure will be displayed for the corresponding position. Press "SET" to save.

5

Press the "SET" button once to program the next sensor position and repeat steps 3-4.

6

Once all sensors are programmed, press the "SET" button for 10 seconds to exit programming. The display will beep twice to confirm.

Troubleshooting

1. Air leaks are detected from the sensor:

The valve stem may not use the standardized thread pitch. Please consult with a local tire shop to confirm.

2. Tire data is not displayed after installation:

Make sure the display is being powered when the vehicle's key is "ON"

3. Tire sensors are lost:

Replacement sensors are available for purchase.

4. The sensor battery is low:

Replace the sensor battery with a new CR1632 battery

5. The tire locations have changed:

Either move the sensors to the appropriate locations or reprogram the sensors.

NOTE:

1. This system is designed to monitor many tire irregularities. The driver has the responsibility to properly maintain tire condition.

2. The driver should react as soon as possible when alerted by this system.

3. Omega does not guarantee or assume liability for the loss of sensors.

4. All sensors are pre-programmed for each tire position.

5. When tires are rotated, the sensors must stay in their original positions.

6. The display will turn off when the power outlet being used turns off.

7. The brightness on the display will dim automatically after being powered on for 30 seconds.