TPMS Receiver

User Manual

Model: TA86

SYSGRATION®

1. Product Introduction

With the new technology product: Bluetooth Low Energy Tire Pressure Monitoring System Retrofit Kit (hereinafter referred to as BLE TPMS), the driver could get the accurate tire pressure and temperature at any time through smart phone by using this kit while driving. When the system detects abnormal status, it will alarm the driver actively, and show the abnormal data and its tire location on the Multi Wheel Bluetooth TPMS APP (hereinafter referred to as APP).

2. Notice

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
. Reorient or relocate the receiving antenna.
. Increase the separation between the equipment and receiver.
. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 0.5 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 0.5 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Specification	
Operating Voltage	DC 12V/24V
Operating Humidity	90％ MAX
Operating Temperature	-20℃ to 70℃
Storage Temperature	-25℃ to 85℃
Operating Current	0.25A@12V, 0.2A@24V
Sound Pressure (min.)	85dB@15cm
Battery voltage detector	DC 5V~32V, ±0.1V
Operating Frequency	2400MHz~2483.5MHz
Receiving sensitivity	< -85dBm
RF Transmitter Power	4dBm MAX
View angle	12 O'Clock
Weight	20g

1. Introduction of Smart Voice TPMS Monitor

1.1 Product description

SYSGRATION

Left Button | Right Button

KPA PSI BAR | °C°F

| KPA PSI BAR | Pressure Unit | Abnormal Warning | °C°F | Temperature Unit |

Tire Pressure & Temperature Display

Low Battery

BatteryVoltage

1.2 Function description

1.2.1 Initial setting

Display	Descriptions
 Pic 1 Pic 2	Initial setting (Pic 1) 1. When power on, display HOME page. 2. And display battery voltage. 3. And then display warning symbol, and play welcome message. 4. Enter Monitoring mode, and receive sensors signal. 5. Sensors setup completed. The factory default for pressure unit is psi , after receiving the normal, warning symbol will disappear. (Pic2) **Note 1: Voice Monitor and TPMS Sensor have been paired. If adjustments are made in " Settings", please change the settings in " Voice Monitor".(1.2.3-1.2.4)**

1.2.2 Monitoring Mode

"Monitoring mode" provide 3 kind of value: Pressure, Temperature and Battery Voltage. Please press and hold the left button for 1.5 seconds to enter into "ID mode".(1.2.3)

Display	Descriptions
Pic 3 Pic 4	**Pressure data of sensors** Switch Pressure Unit : Please press the left button twice. It displays 3 kinds of pressure units, kPa, psi and bar in sequence.(Pic 3) Switch Temperature Unit : Please press the left button once.(Pic 4)

Display	Descriptions
 Pic 5 Pic 6	**Temperature data of sensors** Switch Temperature Unit : Please press the left button twice. <mark>It displays 2 kinds of temperature units, °C and °F in sequence.</mark> Switch Battery Voltage : Please press the left button once.(Pic 6)
 Pic 7 Pic 8	**Battery Voltage** Display the voltage real time. (Pic 7) Switch Pressure Unit : Please press the left button once.(Pic 8)

1.2.3 ID mode

Display each sensor ID number. Please press and hold the left button for 1.5 seconds to enter into "Settings mode" .(1.2.4)

Display	Descriptions
 one click button Pic 9	**Display sensor ID number** Switch tire Location: Please press the left button once, the order of the tire location is front-left (FL) → front-right(Fr) → rear-left (rL) → rear-right(rr). (Pic 9) Deflation Learning new sensor ID: Please press the left button twice.
 double click button Pic 10	**Learning new sensor ID number** Learning new sensor ID: Please press the left button twice. Choose front-left (FL) tire, sensor ID number "12345", reset sensor ID number to "-----" and search new sensor ID number, to deflation the tire need more than 15 seconds, It will look for the deflation signal, showing new ID number on the display.(Pic 10)

Display	Descriptions
  Pic 11	Deflation completed, display new ID number "16888".(Pic 11) Using the same method, set up the ID number learning for tires in sequence. If learning fail, it will showing pervious ID number"12345" Stop learning: Please press the left button once.

1.2.4 Settings mode

The product provide 3 kind of Monitored Settings : Monitored Pressure Range Settings of front tires、Monitored Pressure Range Settings of rear tires and Temperature range. Please press and hold the left button for 1.5 seconds to exit "Settings mode", and back to "Monitoring mode" (1.2.2) or saving new settings and reboot.(1.2.5)

Display	Descriptions
  1.5 seconds double click button Pic 12	**Monitored Pressure Range Settings of front tires** Please press and hold the left button for 1.5 seconds. And press the left button twice, it will display upper and lower limits. (Pic.12)

	Press the right button once to increase up 2.5kPa(0.36psi/0.1bar), and press the left button once to reduce down 2.5kPa (0.36psi/0.1bar) . (Pic 13)

Pic 13

double click button

Pic 14

one click button

Pic 15

Press the right button once to increase up 2.5kPa(0.36psi/0.1bar), and press the left button once to reduce down 2.5kPa (0.36psi/0.1bar) . (Pic 13)

Minimum Tire pressure : 10-250kPa (1.4-36.2psi/0.1-2.5bar).

Maximum tire pressure: 280-640kPa (40.6-92.8psi/2.8-6.4bar).

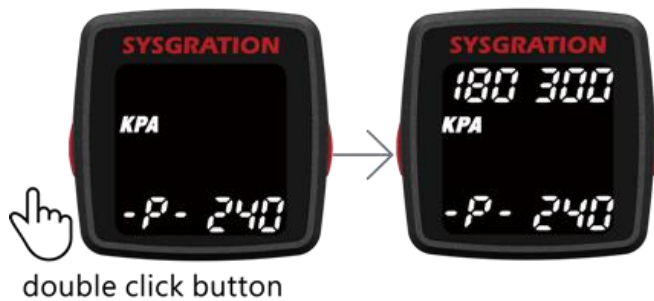The factory default Minimum tire pressure value is 180 kPa (26psi/1.8bar).

The factory default Maximum tire pressure value is 300kPa (43psi/3bar).

Using the same method, set up the other units in sequence.

Stop status: Please press the left button twice again; it will just display default value .(Pic 14)

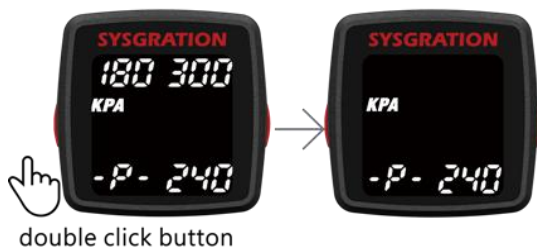Switch pressure range of rear tires: Please press left button once when stop status.(Pic 15)

Note : For the standard tire pressure value, please refer to the placard located at the side of the driver's seat.

double click button

Pic 16

Pic 17

double click button

Pic 18

Monitored Pressure Range Settings of rear tires

Please press and hold the left button for 1.5 seconds. And press the left button twice, it will display upper and lower limits. (Pic.16)

Press the right button once to increase up 2.5kPa(0.36psi/0.1bar), and press the left button once to reduce down 2.5kPa (0.36psi/0.1bar)(Pic 17) .
Minimum Tire pressure : 10-250kPa (1.4-36.2psi/0.1-2.5bar).
Maximum tire pressure: 280-640kPa (40.6-92.8psi/2.8-6.4bar).
Using the same method, set up the other units in sequence.

The factory default Minimum tire pressure value is 180 kPa (26psi/1.8bar).
The factory default Maximum tire pressure value is 300kPa (43psi/3bar).

Stop status: Please press the left button twice again; it will just display default value. (Pic 18)

Switch temperature range : Please press left button once when stop status.(Pic 19)

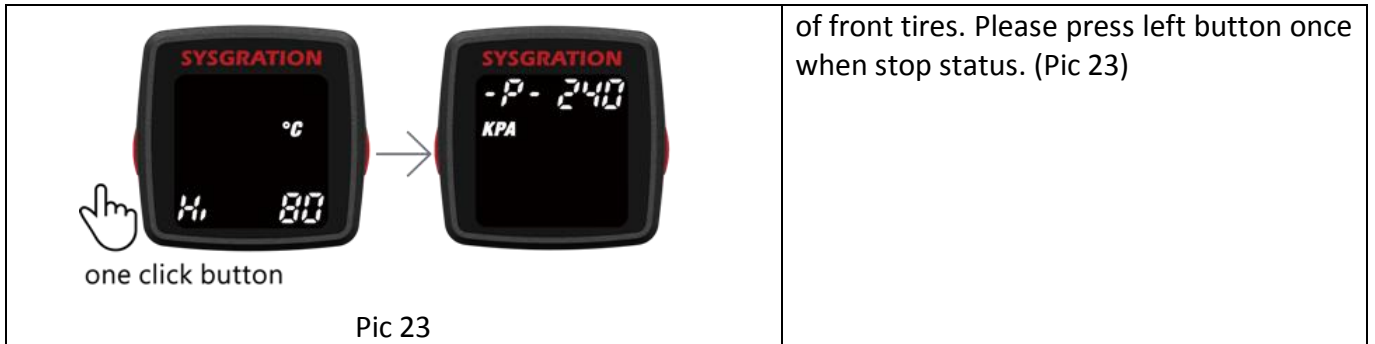|	
 one click button Pic 19	**Note** : For the standard tire pressure value, please refer to the placard located at the side of the driver's seat.
 double click button Pic 20 Pic 21 double click button Pic 22	**Temperature range settings** Press the left button twice and showing default range.(pic 20) Press the right button once to increase up 1 °C(1.8 °F), and press the left button once to reduce down 1 °C(1.8 °F) (Pic 21) . Tire temperature range: 60~80 °C (140~176 °F). The factory default Maximum Temperature value is 80°C / 176°F. Stop status: Please press the left button twice again; it will just display default value. (Pic 22) Switch Monitored Pressure Range Settings

Pic 23	of front tires. Please press left button once when stop status. (Pic 23)

Please press and hold left button for 1.5 sec to enter into "Monitoring mode"(1.2.2) or "Save sensor ID number and settings"(1.2.5)

1.2.5 Save sensor ID number and settings

Learning new sensor ID number or change settings (Monitored Pressure Range Settings of front and rear tires, Temperature range settings), press and hold left button to exit "Setting mode" for 1.5 seconds, it will display "Update" and save settings when setup completed, the system will reboot.

Display	Descriptions
Pic 24	**Save sensor ID number and settings** Display "Update" and save new settings, when setup completed, the system will reboot. (Pic 24)

1.2.6 Right button functions description

Monitoring all tire Pressure, Temperature and Battery voltage.

Display	Descriptions
 Pic 25a Pic 25b Pic 25c	Monitoring mode: Pressure 、 Temperature 、Battery voltage.(Pic 25) Mute/un-mute: Please press the right button once. Mute status, it won't voice remind if warning occurs. You can manual un-mute or wait 10 minutes for the mute function to cancel automatically. Tire status report: Please press the right button twice. And press the right button again can stop. Switch pairing mode: Press and hold the right button for 1.5 seconds.
 Pic 26	Pairing mode (Pic 26) Using mobile phone app to Settings (9.1). Switch Monitoring mode: Press the right button once.

1.2.7 Alarms and Warnings

Display	Descriptions
 Pic 27	Warning of high tire pressure or low tire pressure. (Pic 27) When the system detects abnormal status, it will flash and alarm the driver actively, and show the abnormal data and its tire location on the TPMS Monitor.
 Pic 28	Warning of high tire temperature. (Pic 28) When the system detects abnormal status, it will flash and alarm the driver actively, and show the abnormal data and its tire location on the TPMS Monitor.
 Pic 29	Low battery power warning of TPMS sensor. (Pic 29) When the system detects abnormal status, it will flash and alarm the driver actively, and show the abnormal data and its tire location on the TPMS Monitor.

Warranty Policy

Thank you for buying this product and giving us support. From the date of purchase, we provide a one-year warranty for the product, protecting the client's interest by providing product quality assurance. During the warranty period, under normal operation and in the event of a faulty product, the company is willing to repair the faulty product or have it replaced, enabling you to get the guarantee and demonstrating the company's responsible attitude toward products. But the product warranty must meet the following conditions：

1. Defective products need to be provided to local dealer to confirm purchase date and cause of defect.
2. Products must be operated correctly, as indicated in the user manual.
3. Product has not been disassembled by yourself.
4. The main cause of product failure is due to manufacture issues.

Disclaimer:

This product is only to be used as precautionary warning and provides to user as a convenient secondary safety equipment. Please follow the standard installation procedures or ask a qualified tire shop to install the product. If the tire has been damaged or traffic accident resulting from improper driving behavior occurs, the company will not be responsible for any civil or criminal liabilities.

Other relevant latest information of SYSGRATION TPMS is available at our website (http://www.sysgration.com/) and our Facebook Page (http://www.facebook.com/sysgration) for latest information.

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