WIRELESS TIRE PRESSURE AND TEMPERATURE MONITORING SYSTEM

TPMS

Monitors up to 38 tires in real time

Instruction Manual
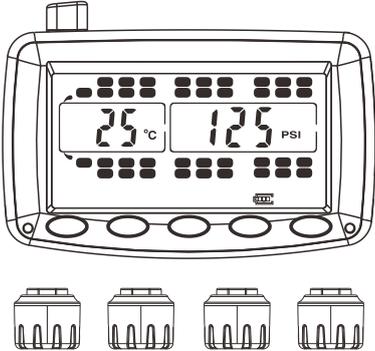
TABLE OF CONTENTS

TPMS

1. TPMS MAIN FEATURES

1-1. Reduce Driving Risks

Reduce Driving Risks

It was reported that an astonishing 75% of all running tires in the USA are under-inflated and 70% of fatal traffic accidents were caused by tire blowouts. With a TPMS, drivers are warned of abnormal tire conditions before it becomes dangerous.

Improve Fuel Economy

Today's tire designs make visual inspection of deflated tires very difficult. Very often, a 30% under-inflated tire looks very much like a fully inflated one. A TPMS will make sure your tire pressure is at its proper level. A 9PSI drop in tire pressure will cause approximately 4% increase in fuel consumption.

Prolong Lifetime of Tires

The following table shows a simple relationship between tire pressure and tire lifetime:

Tire Pressure	Tire Lifetime
20% under inflated	30% less
30% under inflated	45% less
20% over inflated	10% less

1-2. Safety Note

Please read this carefully before installing TPMS:

1. The monitor should be installed inside the vehicle where it does not affect normal driving.
2. The monitor should be well fixed to avoid falling off during driving.
3. After the sensor installation, it is highly recommended to check for any air leakage.
4. During driving the tire temperature will rise dramatically and pressure will increase at the same time. When over-temperature alert happens please park your vehicle for cooling down to avoid brake failure or tire blowouts.
5. If tire pressure keeps rising up or dropping down rapidly during driving, please park your vehicle immediately and check the tire thoroughly.
6. When tire pressure is found higher than standard please drive smoothly, when it's lower than standard please notice the oil consumption and keep balance.
7. This TPMS can effectively monitor tire pressure and temperatures but cannot prevent traffic accidents, regular tire inspection and maintenance is still necessary.
8. Please make sure of safe driving when checking tire pressure and temperature.
9. After the system is installed correctly, the driver does not need to stare at the monitor all the time while driving. Alerts will be issued when abnormal conditions are found in the tires.

1-3. Installation Note

1. Monitor will automatically enter sleep mode after 15 minutes without motion sensed, as soon as there's slight vibration it'll be turned on and receive data from sensors. If there're sensor data missed from display, please wait and it'll be updated when tire pressure change.
2. Sensors and monitor are wireless connected, with long transmission distance and anti-interference. But if the vehicle is too long, please additionally install a transceiver for assuring effective data transmission.
3. Due to the thermal expansion and contraction of air, it's normal that tire pressure and temperature will be slightly higher or lower than standard during driving.
4. Air inside the tire will be slowly leaking out and tire pressure will decrease with time, it has no direct causality with TPMS.
5. Please contact your local distributor for any installation question.

2. PRODUCT FEATURES

2-1. Monitor Features
➢ Reliable and easy to install.
➢ Large LCD screen.
➢ Built-in rechargeable lithium battery.
➢ Vibration wake up.
➢ Automatic backlight.
➢ Configurable high/low pressure warnings.
➢ Configurable high temperature warnings.
➢ Visible and audible alerts.
➢ Selectable pressure units.
➢ Monitors up to 38 tires maximum.
➢ Long range between sensors and monitor.
➢ Connect / Disconnect trailer in display.
➢ Pressure and temperature displayed simultaneously.
➢ Automatic wake up and ID code programming between monitor and sensor.

2-2. Sensor Features
➢ Reliable cap sensors, easy to install.
➢ Water resistant.
➢ Replaceable sensor batteries.
➢ Fast leakage alert.
➢ Individually coded sensors.
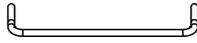➢ Anti-theft design.

2-3. Transceiver Features (Optional parts)
➢ Maintains signal stability.
➢ Records sensor ID, trailer ID and tire pressure and temperature limits.
➢ Supports truck and trailer exchange.
➢ Transferable trailer sensor data between monitor and transceiver.
➢ Visible and audible alerts.
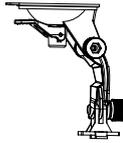➢ Fixed alert for high temperature (90°C)
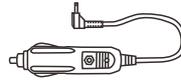
TPMS

3. SYTEM COMPONENTS
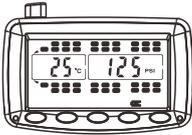
|				
Monitor	Monitor Holder	Suction Cup	Power adaptor	Bracket& Screw
*Sensors	Sensor Waterproof Rubber Seal (Spare Part)	Hex Nuts	Wrenches	Power Cable
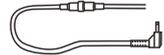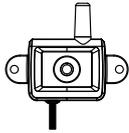
Transceiver (optional)

Item	Q'ty	Item	Q'ty
Monitor	1pc	*Sensors	Depends on customer request(4~38pcs)
Monitor Holder	1pc	Sensor Waterproof Rubber Seal	Same as sensor
Suction Cup	1pc	Hex Nuts	Same as sensor
Power adaptor	1pc	Wrenches	2pcs
Bracket	1pc	Power Cable	1pc
Screw	2pcs	Transceiver	Depends on customer request(optional)

Sensors quantity depends on customer requirement, maximum can code up to 38 sensors.

3-1. Monitor Components and Icons
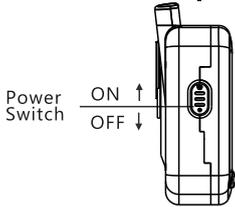
Power Switch
ON ↑
OFF ↓
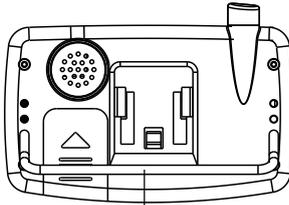
Monitor Holder

Power Socket

Antenna

TEMP LOW
HIGH PRESSURE
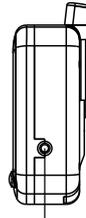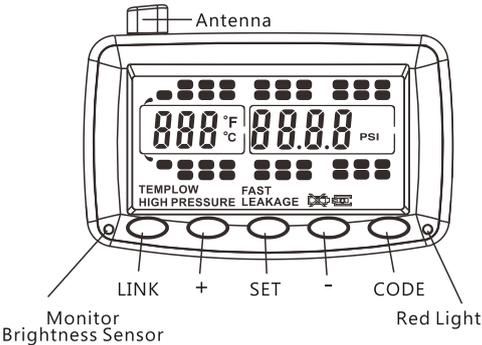
FAST
LEAKAGE

LINK   +   SET   -   CODE

Monitor Brightness Sensor

Red Light

Icon	Description
▬	Tire Indicator
TEMP HIGH	High Temperature
LOW PRESSURE	Low Pressure
HIGH PRESSURE	High Pressure
FAST LEAKAGE	Fast Leakage
⊠	Sensor Low Battery Indicator
▭	Monitor Battery Indicator

Pressure Unit : BAR or PSI, user-selectable
Temperature Unit : °C or °F, user-selectable

4. PROGRAMMING SETUP

4-1. First Time Set Up

For 4 sensors default setting, Factory has been programmed four sensors to monitor, each position marked 1,2,12,13, please install each sensor to the correct tire position as per its label as below:
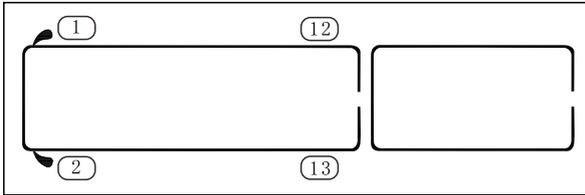
If you want to program sensor for more than 4pcs or need to replace a new sensor, please follow **4-2. Programming Sensor Codes** process to re-program.

Note: It is recommended to label the sensor's position of the tires as below.

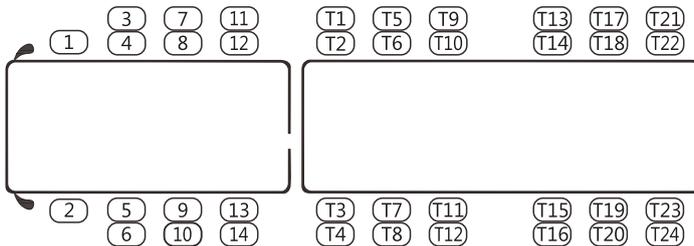| Tractor Axle	Label	Trailer Axle	Label	Trailer Axle	Label
1	1,2	1	T1-T4	4	T13-T16
2	3-6	2	T5-T8	5	T17-T20
3	7-10	3	T9-T12	6	T21-T24
4	11-14				

4-2. Programming Sensor Codes

PROGRAMME SENSOR ID INTO MONITOR THROUGH INFLATION

1. In standby mode, press and hold the **CODE** button for 3 seconds, release it after the beep to enter the coding mode. A flashing tire icon is displayed together with the letters **FFF FFF** for un-programmed tire or sensor's ID code for programed tire(Image 4-1).
2. Press the **+** or **-** button to select the desired tire.
3. Mount the sensor on to the valve, the sensor will send its ID code to the monitor

TPMS

automatically. A beep will be issued and the tire position is stored together with sensor's ID code**.**

4. The tire icon and ID code will keep flashing (Image 4-2).
5. Press the **+** or **-** button to select the other tire and repeat for all the tires.
6. The programmed sensors' ID can be saved automatically.
7. After all sensors' ID code are programmed to the monitor, press the **CODE** button for 3 seconds to exit.
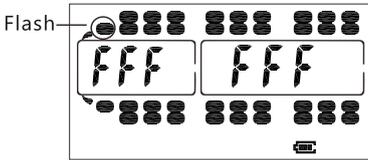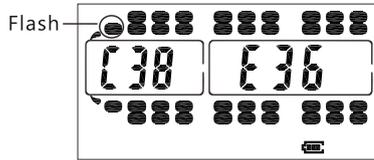

Image 4-1   Image 4-2

INPUT SENSOR ID CODE TO THE MONITOR DIRECTLY

1. In standby mode, press and hold the **CODE** button for 6 seconds until the second beep (do not release after the first beep).
2. Press the **+** or **-** button to select the desired tire, and press **SET** button to confirm.
3. Press the **CODE** button to scroll through each digit code.
4. Press the **+** or **-** button to change the value of each digit code.
5. Then press **SET** button to save the ID code.
6. After all sensors' ID code are input to the monitor, press the **CODE** button for 3 seconds to exit.

Note: If a sensor is coded twice into the same monitor, the previous setting will be deleted automatically.

LF (low frequency) CODE (not available for all sensor types)

1. In standby mode, press and hold the **CODE** button for 3 seconds, release it after the beep to enter the LF coding mode. A flashing tire icon is displayed together with the letters **FFF FFF** for un-programmed tire or sensor's ID code for programmed tire.
2. Press the **+** or **-** button to select the desired tire.
3. Press the **CODE** button, a flashing tire icon and **LF** are displayed together with letter "**Id**".
4. Place the sensor close to the monitor and press the **CODE** button once the letters **Id** with a flashing **LF** will be displayed and a red light will be lit on the monitor (Image 4-3).
5. On receiving the code, the monitor will issue a long beep and the tire position is stored together with sensor's ID code. The tire icon on the monitor will keep flashing after the code is received successfully.
6. If the monitor does not receive the code within 6 seconds, an error message **Err** will be displayed. A double-beep will be issued and the red light goes out (Image 4-4). Move the sensor closer to the monitor and repeat step 4 and 5.
7. The tire icon and sensor's ID code will keep flashing.
8. Press the **+** or **-** button to select the other tire and repeat the above operations for all the tires.

9. The programmed sensors' ID can be saved automatically.
10. After all sensors' ID code are programmed to the monitor, press and hold the **CODE** button for 3 seconds to exit.
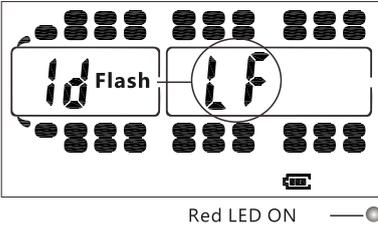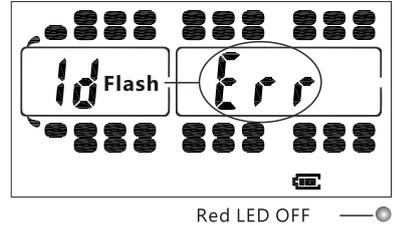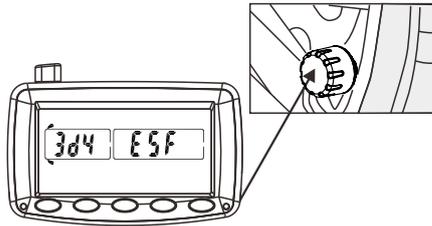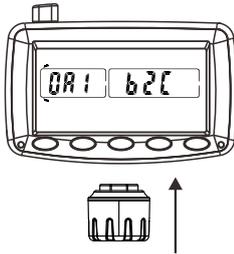

Red LED ON

Image4-3

Red LED OFF

Image4-4

Note: When programming a sensor,please keep other sensors at least 1meter away to avoid ID confusion. If a sensor coded twice into the same monitor, the previous setting will be deleted automatically.

4-3. Deleting Sensor ID

In Sensor Code Mode
1. In standby mode, press and hold the **CODE** button for 3 seconds, release it after the beep to enter the coding mode. A flashing tire icon and ID code are displayed. Press the **+** or **-** button to select the desired tire.
2. Press and hold the **SET** button for 3 seconds. A double-beep sound will be issued after the sensor code is deleted successfully. If no further action is made after 3 minutes, the system will return to standby mode automatically. To return to standby mode immediately, press and hold the **CODE** button for 3 seconds until a beep is issued.

In Review ID Code Mode
1. In standby mode, press the **CODE** button to enter the review ID mode. A flashing tire icon and sensor's ID code are displayed. Press the **+** or **-** button to select the desired tire.

TPMS

2. Press and hold the **SET** button for **3** seconds. A double-beep sound will be issued after the sensor code is deleted successfully. If no further action is made after 3 minutes, the system will return to standby mode automatically. Press the **CODE** button will return to standby mode immediately.

4-4. Deleting all Sensors ID

1. In standby mode, press the **CODE** button to enter the review ID mode. A tire icon and sensor's ID code will flash.
2. Press and hold the **LINK** button for **3** seconds. During this period, a double-beep will be issued. The message **dEL ALL** will display on the monitor.
3. Press the **SET** button to confirm the delete operation or press the **CODE** button to cancel. If no further action is made after 3 minutes, the operation is automatically cancelled and the system will return to standby mode.

4-5. Viewing ID Code

In standby mode, press the CODE button to enter the view mode, the monitor will display sensor's ID code if the tire position is programmed with a sensor, while it will display FFF FFF if the tire position is un-programmed. Press the + and - buttons to select the tires you want to review. It returns to standby mode after 3 minutes or by pressing the CODE button.
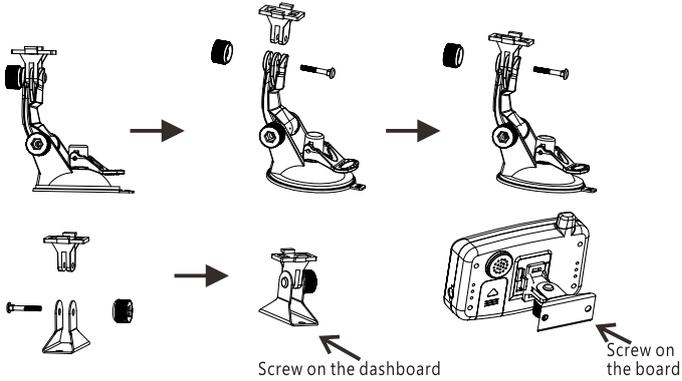
5. INSTALLATION

5-1. Monitor Installation

1. Install the monitor inside the vehicle cabin without obstructing the driver's vision of the road.
2. Place the monitor on the dashboard or mount it onto the windscreen using the suction cup provided.
3. Plug the power adapter into the cigarette lighter and connect the power cable to the monitor or plug the power cable and connect to the vehicle power.
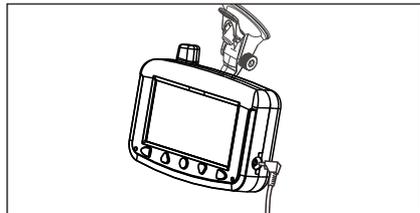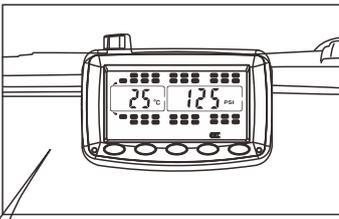
1. Please place the monitor properly without obstructing driver's vision of the road.
2. Please make sure the monitor is firmly fixed and won't be moving during driving.
3. Please make sure of safe driving when checking tire pressure and temperature.
4. TPMS will alert automatically as soon as there're abnormal situation in tire, it's unnecessary to check frequently as it might disperse your attention in driving.

5. If the bracket is needed, please follow the instructions below. Be sure not to obstruct the driver's vision when the monitor is installed.


Screw on the dashboard

Screw on the board

Note: Make sure the monitor will not obstruct driver's vision of the road.
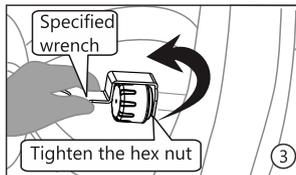
5-2. Sensor Installation

1. Screw the hex nut onto the valve stem threads until it bottoms out.

2. Screw the correctly marked sensor onto the valve stem for that tire position. Tighten the sensor until the air stops leaking and the sensor bottoms-out on the valve stem. Then give it a quarter turn more to seat it. Do Not Over Tighten!

3. Use your fingers to screw the hex nut up to the bottom of the sensor. Using the provided wrench, tighten the hex nut against the bottom of the sensor. This will prevent the sensor from being removed. Keep the wrench in a safe place for future use.

4. To inflate or deflate the tire, you must remove the cap sensor.

Anti-theft hex nut

Tire valve

①
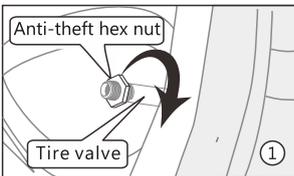
① Install the anti-theft hex nut onto the tire valve.

Sensor

②
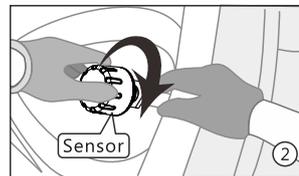
② Install the sensor onto the tire valve clockwise.

Specified wrench

Tighten the hex nut

③

③ Tighten the anti-theft hex nut counterclockwise until the nut is tightened against the sensor.

TPMS

5-3. <u>Transceiver Installation (optional parts)</u>

The repeater is used to strengthen/amplify the sensor signal forward to the display. A repeater is packaged with this system.

The repeater comes with two wires, one red (+) and one black (-). Simply tie the red wire to a positive source and black wire to a ground or negative source. The repeater is weather resistant. There is no set-up needed for the repeater.

Motorhome: We recommend installing the repeater in one of the rear basement compartments where there is a 12v power source. Mount the unit inside the bay but against the outer wall. Do not put the repeater in the engine compartment because of excessive heat. Do not put the repeater in the rear closet because the metal in the mirror will block the repeaters RF signal.

5th Wheel: We recommend installing the repeater in or near the battery compartment under the front overhang. Mount it with Velcro or two-sided tape to the inner. An alternate mounting place is on the top of the pin-box. Use industrial two-sided tape and mount the repeater on the upper slope of the pin-box. Run the positive lead to the break-away switch (which has 12v power while driving). Ground the negative lead to complete the circuit.

Travel Trailer: We recommend installing the repeater in the battery box on the front of the trailer. If the battery box is metal, hook the lines to the battery, then run the lines outside of the box and mount on the side of the battery box or the front tongue of the travel trailer.

Be sure in all cases the red indicator light is glowing and every 2-3 minutes (with the display on) the red light blinks. DO NOT push the button the red light is mounted in!

If the light is not on, check your connections, source power or the in-line fuse on the positive lead of the repeater for issues.

Power Supply (−)−Black
Power Supply (+)−Red
Fuse-2A
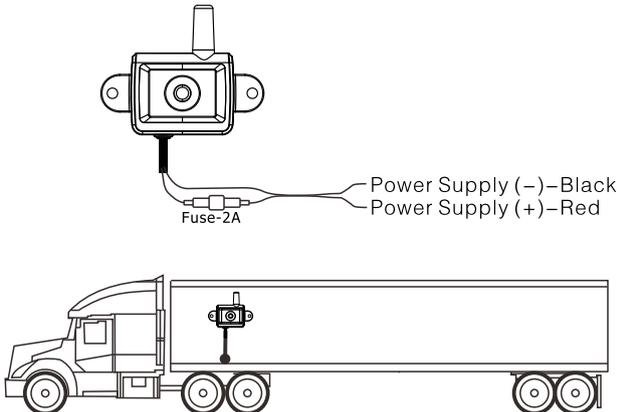
6. TRANCEIVER FUNCTION

6-1. Operation as Signal Repeater

The transceiver requires no programming to operate as a signal repeater. The red light stays on while power is connected and flashes while data is being transmitted or received.
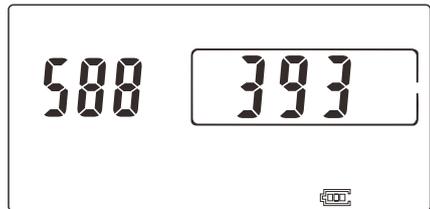
6-2. Operation for Trailer Exchange

Where multiple trailers are in use, a transceiver is fitted to each trailer. Each transceiver is given its own ID and stores the trailer alert settings and sensor IDs.

6-3. <u>Entering Tractor & Trailer ID for the First Time</u>

1. In standby mode, press the **LINK** button on the monitor a six digits ID will be displayed for the current tractor.
2. Press the **LINK** button again will display the six digits ID of the trailer.
3. Press the **LINK** button for the 3rd time, the system will enter the tractor ID coding mode.
4. Press the **LINK** button for the 4th time, the system will enter the trailer ID coding mode.
5. Press the **+** or **-** buttons to scroll through numbers from 0-9. Press the **CODE** button will set the digit and move the cursor to the next digit.
6. Press and hold the **CODE** button for 3 seconds to store the ID. If no action is taken for 1 minute, the system will return to the standby mode without making any changes.
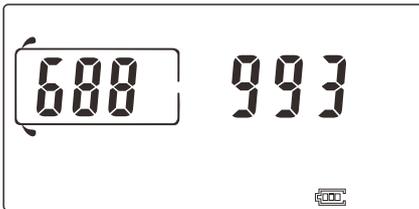
| **Example 1:** Tractor ID (608993) and a flashing tractor. | **Example 2:** Trailer ID (500393) and a flashing trailer. |

6-4. <u>Monitor Sending Data to Transceiver for the First Time</u>

If using the transceiver for the first time, you will need to code all the sensors, input the trailer ID, set the high/low pressure alerts and send the trailer data to the transceiver.

1. In standby mode, press and hold the **LINK** button on the monitor for **6** seconds to enter **sending mode**. Do not release it after you hear the 1st beep. A flashing **Send** will be displayed on the monitor.
2. Press and hold the button on the transceiver for 3 seconds until a beep is issued. The monitor will now send the sensor IDs, pressure and temperature data and the trailer ID to the transceiver. On successful transmission, the monitor will issue a long beep together with trailer ID and tire icons.
3. On error, or if the transceiver does not receive the data within 2 minutes, the monitor will issue a double-beep and a flashing **FAIL** will be displayed on the monitor.
4. Press any button or wait 3 minutes to return to standby mode.

TPMS

Note: The transceiver can only store the latest trailer's data it will automatically update the data if the data is received from the monitor.

6-5. Transceiver Send Data to Monitor (For Trailer Exchange)

1. Press and hold the button on the transceiver for 3 seconds until you hear the 2nd beep and the LED will be lit.
2. Press and hold the **LINK** button for 3 seconds on the monitor within 2 minutes. All the tire icons will be displayed on the monitor with a flashing **ACCEPt** message. Here the system enters the receiving ID mode.
3. The transceiver will send the sensor IDs, pressure and temperature data and the trailer ID to the monitor.
4. On receiving the data, the monitor will display all the tire icons in the trailer and the trailer ID. The trailer icon will flash for 3 minutes then exit. Press any button within that 3 minutes period to escape and cancel the operation.
5. On error, or if the transceiver does not receive the data within 2 minutes, the monitor will issue a double-beep and a flashing **FAIL** will be displayed with the trailer tire icons.
6. Press any button or wait 3 minutes to return to standby mode.

Note: The transceiver can only store the latest trailer's data even if no sensor data was recorded for tires in the trailer it will automatically update the data if the data is received from the monitor.

7. PARAMETER SETTINGS

1. In standby mode, press and hold the **SET** button for 3 seconds, release it after the beep.
2. Press the **SET** button repeatedly to scroll thru the different parameters.
3. Press the **+** or **-** button to adjust the desired settings.
4. Press and hold the **SET** button for 3 seconds then release it after the beep to save the settings.
5. If no action is taken for 1 minute, the system will return to the standby mode without making any changes.

7-1. Factory Default

Pressure Unit:	PSI
High Pressure:	175PSI (12.1 BAR)
Low Pressure:	100PSI (6.9BAR)
Temperature Unit:	°C
High Temperature:	70°C (158°F)

Note: To restore the factory default settings, turn on the monitor and press the **SET** button at the same time. The factory default settings will be restored without changing the ID code information.
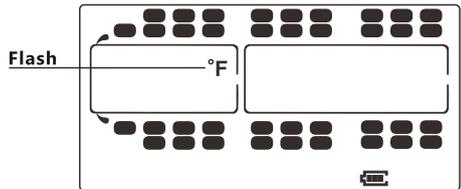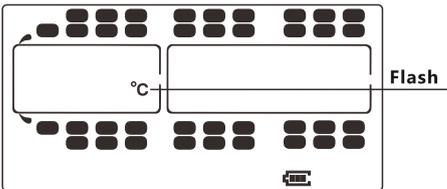
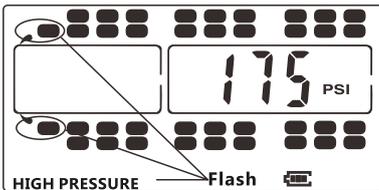## 7-2. Settings Sequence
1. Pressure Unit
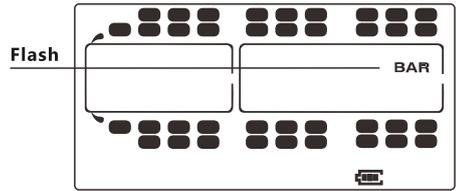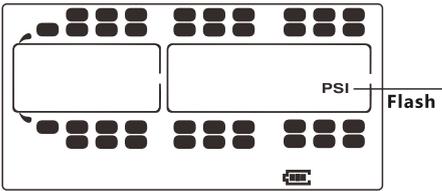
While the **PSI** or **BAR** icon is flashing, Press the **+** or **-** button to select .
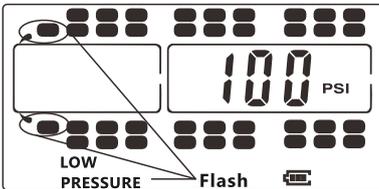
2. Temperature Unit

While the ^{0}C or ^{0}F icon is flashing, Press the **+** or **-** button to select.

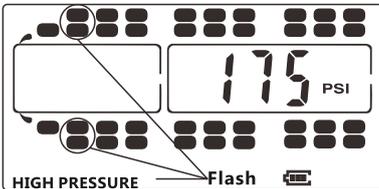## 3. High Pressure Alert in 1st Axle

While both tires in the 1st axle and the **HIGH PRESSURE** icons are flashing, press the **+** or **-** button to adjust.

4. Low Pressure Alert in 1st Axle

While both tires in the 1st axle and the **LOW PRESSURE** icons are flashing, press the **+** or **-** button to adjust.

5. High Pressure Alert in 2nd Axle

While 4 tires in the 2nd axle and the **HIGH PRESSURE** icons are flashing, press the **+** or **-** button to adjust.

TPMS

6. Low Pressure Alert in 2ⁿᵈ Axle

While 4 tires in the 2ⁿᵈ axle and the **LOW PRESSURE** icons are flashing, press the **+** or **-** button to adjust.
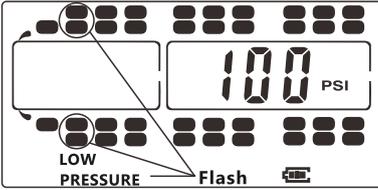
7. High Pressure Alert in 3ʳᵈ Axle

While 4 tires in the 3ʳᵈ axle and the **HIGH PRESSURE** icons are flashing, press the **+** or **-** button to adjust.
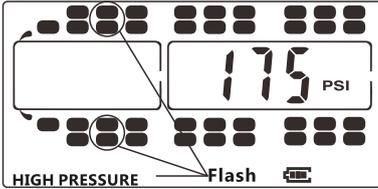
8. Low Pressure Alert in 3ʳᵈ Axle

While 4 tires in the 3ʳᵈ axle and the **LOW PRESSURE** icons are flashing, press the **+** or **-** button to adjust.

9. High Pressure Alert in 4ʳᵈ Axle

While 4 tires in the 4ʳᵈ axle and the **HIGH PRESSURE** icons are flashing, press the **+** or **-** button to adjust.
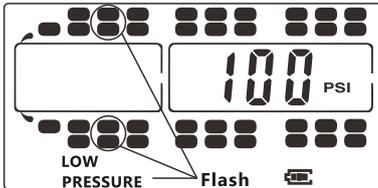
10. Low Pressure Alert in 4ʳᵈ Axle

While 4 tires in the 4ʳᵈ axle and the **LOW PRESSURE** icons are flashing, press the **+** or **-** button to adjust.
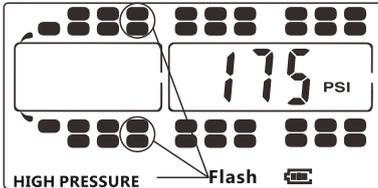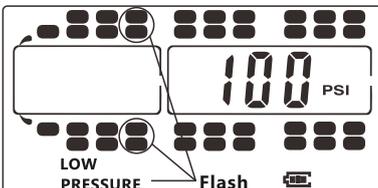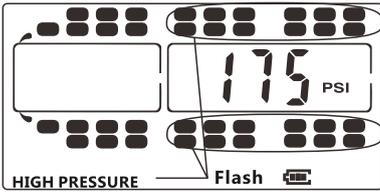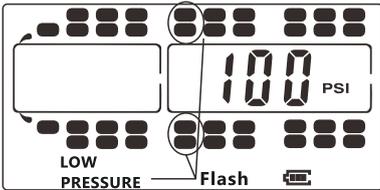
11. High Pressure Alert in trailer

While 24 tires in the trailer and the **HIGH PRESSURE** icons are flashing, press the **+** or **-** button to adjust.
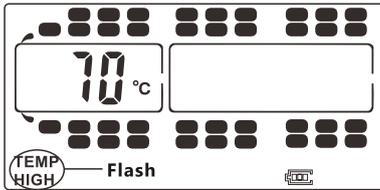
HIGH PRESSURE — Flash

12. Low Pressure Alert in trailer

While 24 tires in the trailer and the **LOW PRESSURE** icons are flashing, press the **+** or **-** button to adjust.

LOW PRESSURE — Flash

Note: High pressure and low pressure alert for axle 1, axle 2, axle 3, axle 4 and trailer are adjusted separately.

13. High Temperature Alert

While the **TEMP HIGH** icon is flashing, press the **+** or **-** button to adjust.

TEMP HIGH — Flash

8. ALERTS

The sensors send pressure and temperature readings to the monitor every 5 minutes. If any reading is out of the pre-defined values, you will notice 3 things:

1. An audible alarm;
2. The red light on the monitor will flash;
3. The corresponding icon on the monitor will flash.

Press any button to switch the alarm off. However, the red light will not be turned off until the correct pressure and temperature settings are restored to within range. The factory preset values are:

|	
High Pressure:	175PSI (12.1 BAR)
Low Pressure:	100PSI (6.9 BAR)
High Temperature:	70°C (158°F)

TPMS

8-1. Monitor Alerts

1. High Pressure Alert

When the sensor detects high pressure in a tire, it will send an alert to the monitor immediately. The **HIGH PRESSURE** will show on LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light. Press any button to turn off the alarm. However the flashing red light and icons will continue until the problem is corrected.
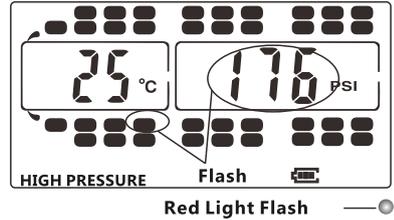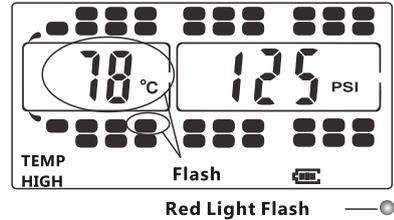
2. Low Pressure Alert

When the sensor detects low pressure in a tire, it will send an alert to the monitor immediately. The **LOW PRESSURE** will show on LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light. Press any button to turn off the alarm. However the flashing red light and icons will continue until the problem is corrected.
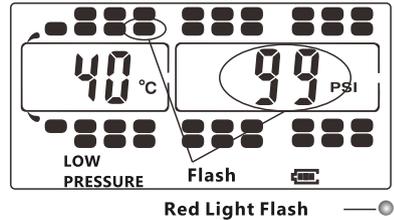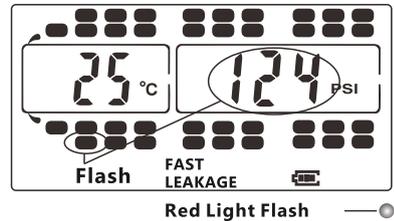
3. High Temperature Alert

When the sensor detects high temperature in a tire, it will send an alert to the monitor immediately. The **TEMP HIGH** will show on LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light. Press any button to turn off the alarm. However the flashing red light and icons will continue until the problem is corrected.

4. Fast Leakage Alert

When the sensor detects abnormal loss of tire pressure, it will send an alert to the monitor immediately. The **FAST LEAKAGE** will show on LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light. Press any button to turn off the alarm. However the flashing red light and icons will continue until the problem is corrected.

5. Sensor Low Battery Alert

When the sensor detects low battery level, it will send an alert to the monitor immediately. The low battery icon will show on LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light. Press any button to turn off the alarm. However the flashing red light and icons will continue until the problem is corrected.
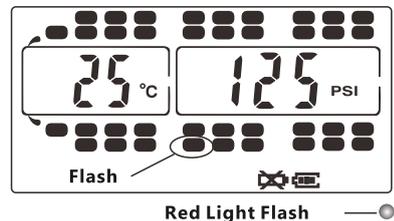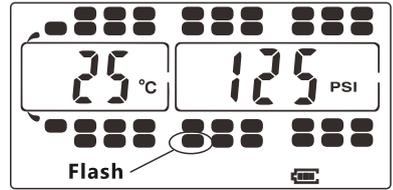
• 15 •

6. Sensor Disconnected Alert

When the monitor hasn't received data from sensor for more than an hour, the corresponding tire icon will flash on LED with a beep.

Flash

8-2. Transceiver Alerts(optional parts)

1. High/Low Pressure and Fast Leakage Alerts

When the sensor detects high/low pressure abnormalities and fast leakage, it will send an alert to the **transceiver** immediately. The audible alarm will be on together with the flashing red light. Press any button on the transceiver to turn off the alarm. However the flashing red light will continue until the problem is corrected.

2. High Temperature Alert

The transceiver has a fixed temperature alert at 90℃. The sensors send the temperature readings to the transceiver every 5 minutes. If the temperature is above 90℃, an audible alarm will be on together with the flashing red light. Press any button on the transceiver to turn off the alarm. However, the flashing red light will continue until the temperature is dropped below 90℃.

TPMS

9. OTHER FUNCTIONS

9-1. Normal Scrolling Display
During normal operation, the monitor scrolls through and displays the tires one by one for 5 seconds. An audible alarm will be issued if one of the sensor data is not received by the monitor for more than 60 minutes. You can manually scroll through and select the tire by pressing the **+** or **-** button. A manually selected tire will be displayed for 10 seconds.

9-2. Backlighting
The monitor has a built in light and motion sensor. The backlight only turns on when it detects the vehicle is in motion and when it is dark enough. The monitor will be in sleep mode to conserve battery life if the motion sensor detects the vehicle has stopped for a while. It will turn on again when it detects the vehicle is moving again. Press any button on the monitor to turn on the backlight manually, to turn it off, press and hold the **+** button for 3 seconds.

9-3. Connecting/Disconnecting the Trailer
When the trailer is not connecting to the tractor, press the **LINK** and **-** buttons at the same time, the trailer and its tire icons will be removed temporarily. Press the **LINK** and **+** buttons at the same time, the trailer and its tire icons will re-appear.
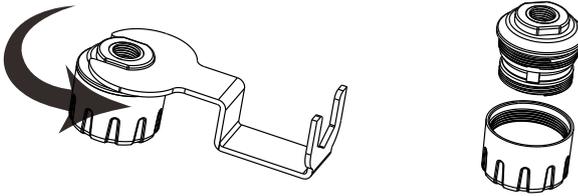
9-4. Charging the Monitor
The lithium-ion battery inside the monitor, when fully charged, is capable of running for 60 hours. When the ▭ appears, a recharge is required.

10. REPLACING THE CAP SENSOR BATTERY (CR2032)

(1). Remove the sensor from the tire valve stem.

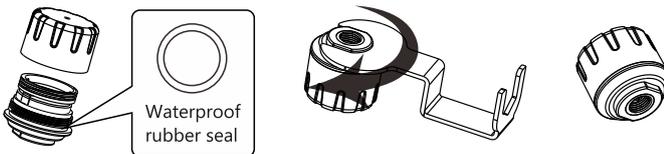Specified wrench

Loosen the hex nut
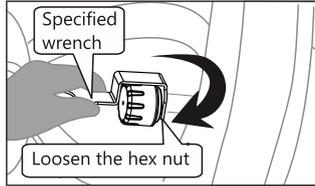
(2). Use the specified wrench to open the sensor cap counterclockwise.

(3). Slide the battery out of the cage sideways. Note that the (+) side is up. Replace with a new CR2032 battery that is 3+ volts.

CR2032

(4). At this time check the "O" ring at the base of the threads. Be sure it is in place. If it is worn or broken, replace it.

Waterproof rubber seal

TPMS

11. SPECIFICATIONS

11-1. <u>Monitor</u>

Operational Temperature	-20℃ to +80℃
Storage Temperature	-30℃ to +85℃
Charger Input Voltage	DC 8 to 30V
Transmission Frequency	433.92MHz
Size	116(L) x 68(W) x 25(H) mm
Weight	138g

11-2. <u>Sensors</u>

Operational Temperature	-40℃ ~ 80℃
Storage Temperature	-40℃ ~ 85℃
Pressure Range	0~13 bar, 0~188 psi
Pressure Accuracy	±1.5 psi(±0.1 bar)
Temperature Accuracy	±3℃
Transmission Power	<10dBm
Transmission Frequency	433.92MHz
Battery Life	2 years
Size	24.4mm(diameter) x 23.1mm(height)
Weight	16.8g

11-3. <u>Transceiver(optional parts)</u>

Operational Temperature	-20℃ to +80℃
Storage Temperature	-30℃ to +85℃
Working Voltage	12 to 24V
Transmission Power	<18dBm
Transmission Frequency	433.92MHz
Size	78(L) x 63(W) x 16(H) mm
Weight	125g

12. CAUTIONS

1. The monitor should be installed inside the vehicle where it does not affect normal driving.

2. The monitor should be well fixed to avoid falling off during driving.

3. After the sensor installation, it is highly recommended to check for any air leakage.

4. This TPMS can effective monitors tire pressure and temperatures but cannot prevent traffic accidents regular tire inspection and maintenance is still necessary.

5. After the system is installed correctly, the driver does not need to stare at the monitor all the time while driving. Alerts will be issued when abnormal conditions are found in the tires.

*Information in this manual is subject to change without notice.
Implementation Standard: Q/YAT001-2017