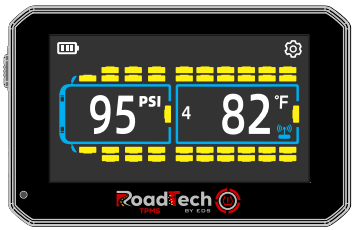
RoadTech TPMS BY EDS

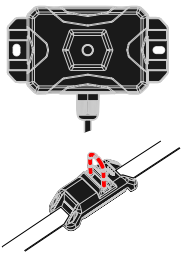
OEM Installation & Operation Manual

*Display: RT-FCT-1

*Repeater: RT-R-OEM

*Internal Sensor (only): RT-SN-1





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1.FEATURES

1-1.DISPLAY FEATURES

***4.3-inch LCD Touchscreen Display**
– High-resolution color touchscreen with USB-C charging interface.

***Magnetic Suction Cup Mount**
– Secure attachment with easy detachment for convenience.

***Rechargeable Lithium Battery**
– Integrated high-capacity lithium battery for extended operation.

***Adaptive Display Brightness**
– Automatically adjusts based on ambient lighting conditions.

***Configurable Vehicle Profile**
– Customizable settings for different vehicle types.

***Multi-Vehicle Monitoring**
– Supports up to seven vehicles, tracking a total of 165 tires, including 7 spare tires.

***Tire Pressure Unit Selection**
– User-selectable pressure units (PSI or BAR).

***Temperature Unit Selection**
– User-selectable temperature units (Celsius (°C) or Fahrenheit (°F)).

***Automated Alert Thresholds**
– Cold tire pressure input enables automatic high/low alert threshold configuration (default: +25% high, -10% low).

***Manual Alert Customization**
– Users can manually set high and low-pressure alert thresholds, and high temperature alert thresholds.

***Multi-Mode Alerts**
– Provides visual, text-based, audible, and warning icon notifications.

***Real-Time Data Display**
– Scrolling tire pressure and temperature readings; tap a tire position icon for individual tire details.
***Vehicle Connection Management**
– Automatically or manually connect or disconnect vehicles from the system.
***Tire Position Swap**
– Allows reassignment of tire locations for sensor accuracy.
***Customizable Vehicle Identification**
– Assign and configure unique Vehicle IDs.
***Sensor Battery Voltage Monitoring**
– Displays real-time sensor battery voltage levels.
***Flexible Sensor Pairing**
– Supports both Automatic Code Learning and Manual Code Input for seamless sensor programming.

1-2.SENSOR FEATURES

***Internal Sensor Installation –** Can be installed inside the wheel/tire assembly or pre-installed by the OEM.
***Battery Lifespan –** Designed to last approximately 4 to 5 years, with variations based on usage and environmental conditions.
***Leak & Temperature Detection –** Provides real-time alerts to the display for Fast Leak, Low Pressure, High Pressure and High Temperatures, ensuring prompt issue identification.
***Water Resistance –** Engineered to withstand exposure to moisture and environmental elements(IP67).
***Unique Sensor Identification –** Each sensor features a unique six-digit alphanumeric ID code etched onto the sensor for precise programming and system integration.

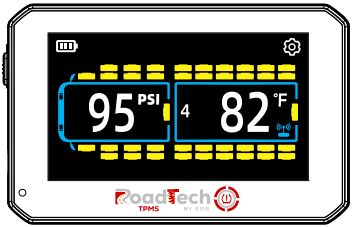
1-3.REPEATER FEATURE

*The repeater is a required component that must be installed to enhance sensor signal strength.

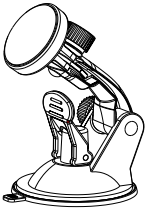
2. SYSTEM COMPONENTS

2-1.DISPLAY

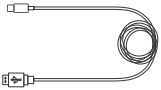
4.3” LCD Full Color Touchscreen Display (1pc)



Magnetic Suction Cup Mount (1pc)

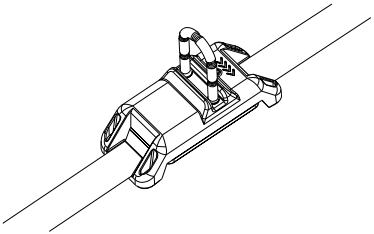


USB-C Charging Cable (1pc)



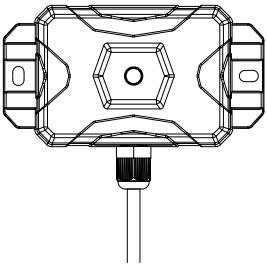
2-2.SENSOR

Slide-on Internal Sensor with Adjustable Metal Band (1pc)



2-3.REPEATER

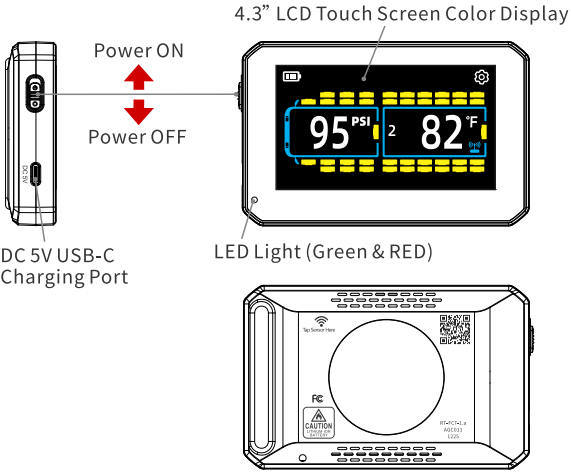
Repeater (1pc)



Two Screws

Note:
The repeater is a required component of your TPMS.
The warranty coverage could be cancelled if the repeater is not installed.

3.DISPLAY ICONS AND INTRODUCTION

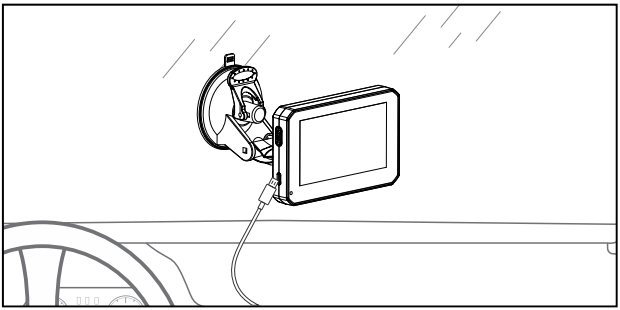


ICONS	Description	ICONS	Description
	Tire Normal (after coded)		Pressure Warning
	Tire Icon (not yet coded)		Temperature Warning
	Tire Alert (after coded)		Sensor Low Battery
PSI/BAR	Pressure Unit		Repeater Signal
°F/°C	Temperature Unit	2	Vehicle Icon (Vehicle 2 example)

4.DISPLAY INSTALLATION AND CHARGING

Display Installation:

Installing the display involves mounting the supplied magnetic display suction cup mount on the windshield, a side glass, or straight onto smooth, nonporous surfaces that are in a visible location without obstructing the driver's vision.



Display Charging:

Plug a USB cable into the vehicle’ s USB power port, and the USB-C end into the left side of the display charging port (DC 5V/800mAH) to charge the internal lithium-ion battery of the display, which is not removable.

You should charge the display, according to the icon in the upper left corner, and the three levels of the display battery are shown by the icons. The battery icon changes when the display is charging, and it disappears when the battery is fully charged. It will change the LED light from red to green.

Note: It can take between 4 and 5 hours for the internal battery to reach full charge when connected to a vehicular USB. During the initial charge, please leave the Display connected for at least 3 hours.

ATTENTION:

1. A 110V to 12V power supply should not be used to directly charge the device as this will cause damage to the display.
2. Once fully charged, disconnect the display from the power source to avoid over-charging and / or damaging the battery.
3. Because the display has a built-in lithium-ion battery, DO NOT place it in direct sunlight or in an area with high temperatures when the vehicle is not in operation / motion.

5.DISPLAY DEFAULT SETTINGS

Vehicle Type:

Vehicle 1:
》Steer (Y/N): Y
》No. Of Axles (1~3): 1
》Tires Per Axle (2/4): 2
》Spare (Y/N): Y

Vehicle 2 to 3:
》No. Of Axles (1~6): 2
》Tires Per Axle (2/4): 2
》Spare (Y/N): Y

Vehicle 4 to 7:
》No. Of Axles (1~6): 1
》Tires Per Axle (2/4): 2
》Spare (Y/N): Y

Parameters Setting:

Pressure Unit: PSI
Temperature Unit: °F
High Temperature: 158 °F

Pressure Alert Setting:

Need to define the cold pressure range the display will accept.

Vehicle 1 Cold Pressure
Steer Axle: 100 PSI
Drive Axle: 100 PSI
Spare Tire: 100 PSI

Vehicle 1 Manual Input High and Low Pressure Alert
HIGH (Steer /1/2/3/S): 125 PSI
LOW (Steer/1/2/3/S): 90 PSI

Vehicle 2 to 7 Cold Pressure, example is Vehicle 2
Vehicle 2 Cold Pressure: 100 PSI

Note: The Cold Pressure value entered for Vehicles 2-7 applies to all tires within the selected vehicle.

Vehicle 2 manual Input High and Low Pressure Alert
HIGH (Axles/S): 125 PSI
LOW (Axles/S): 90 PSI

COLD TIRE PRESSURE (CTP) DEFAULT SETTINGS

Example

Axle	CTP	High Pressure Alert (+25%)	Low Pressure Alert (-10%)
Steer Axle	90	112PSI	81PSI
Drive Axle	100	125PSI	90PSI
Spare tire	110	137PSI	99PSI

6.MAIN SCREEN

***Startup Procedure –** Activate the display by sliding the power switch, located on the left side, to the upward position. The screen will initialize immediately and transition to the main interface.

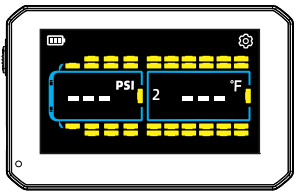
*The display will automatically rotate to each programmed tire position every 5 seconds.

Note: if an alarm occurs the display will move that to that position immediately.

*The repeater icon will appear on the display, when connected.

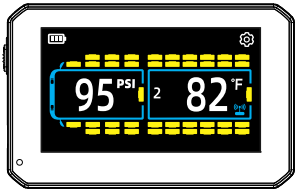
***Sensor Communication**

– If the display does not receive data from a paired sensor for 9 minutes, the corresponding tire pressure and temperature values will be represented by dashed lines (- - - - - -) on the main screen.



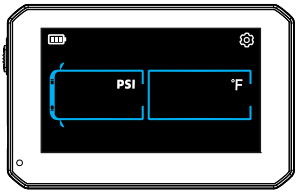
***Sensor Data Acquisition**

– Upon startup, the display retrieves programmed sensor data, displaying real-time pressure and temperature readings on the main screen. Full sensor data acquisition may take approximately 2 to 5 minutes.



* Example: normal display data, e.g.: 95PSI, 82°F.

*****Main interface when no sensors are programmed or waiting to acquire sensor data just after startup.



7.TPMS SYSTEM ALERTS

***Alert Notification**

– In the event of an alert, the corresponding tire position icon will change from yellow to red and begin flashing. The alert icon and associated text will also flash, accompanied by a flashing red LED indicator and an audible alarm.

***Alert Silencing & Visual Notification**

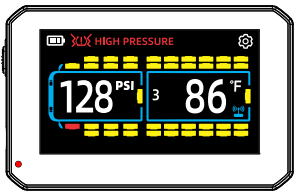
– You can silence the alert by tapping the LCD screen anywhere, the audible alert will not sound again. The display will continue to visually cycle through the rest of the programmed tires, keeping the alert tire in RED. When the unit cycles back to the alert tire, the RED tire icon, alert icon, corresponding text and RED LED continue to flash as long as the alert is active.

Note: During active audible and visual alerts, all other active tires are being monitored.

7-1.High Pressure Alert

Example: The pressure is 128 PSI, greater than the High Pressure Alert threshold of 125 PSI.

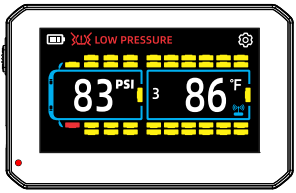
1). The corresponding tire position will flash RED.
2). HIGH PRESSURE icon will flash.
3). A red LED on display will flash.
4). An audible alert will beep.



7-2.Low Pressure Alert

Example: The pressure is 83 PSI, lower than the Low Pressure Alert threshold of 90 PSI.

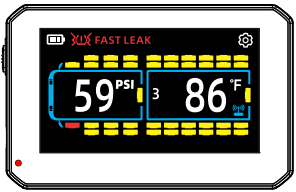
1). The corresponding tire position will flash RED.
2). LOW PRESSURE icon will flash.
3). A red LED on display will flash.
4). An audible alert will beep.



7-3.Fast Leakage Alert

Example: The Fast Leak Alert is triggered when the pressure loss is ⩾ 2 PSI per minute.

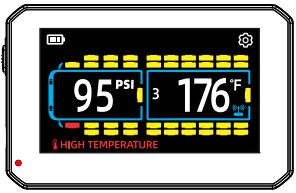
1). The corresponding tire position will flash RED.
2). FAST LEAK icon will flash.
3). A red LED on display will flash.
4). An audible alert will beep.



7-4.High Temperature Alert

Example: The temperature is 176 °F, greater than the High Temperature Alert threshold of 158 °F.

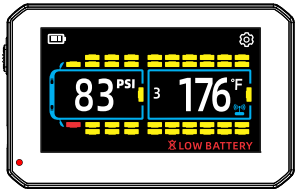
1). The corresponding tire position will flash RED.
2). HIGH TEMPERATURE icon will flash.
3). A red LED on display will flash.
4). An audible alert will beep.



7-5.Sensor Low Battery Alert

Note: When the sensor battery voltage drops to ⩽ 2.0V, the Low Battery Alert will activate and the corresponding sensor position will change to red.

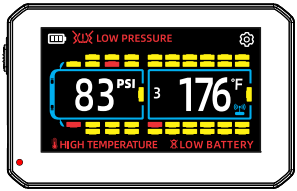
1). The corresponding tire position will flash RED.
2). LOW BATTERY icon will flash.
3). A red LED on display will flash.
4). An audible alert will beep.



7-6.Alerts Multiple Tire Positions

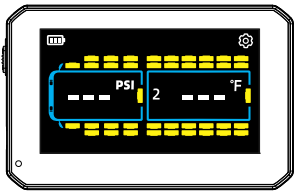
1).When multiple alerts occur simultaneously, the display will cycle through each active alert sequentially.

2).Tap the touchscreen to mute an audible alert. The display will continue cycling through all programmed tire positions. You can manually select any programmed tire position by tapping that tire position icon.



7-7. Sensor Loss Notification

If the display does not receive data from a sensor for 9 minutes, the pressure and temperature values will be replaced with dashed lines (--- ---), indicating a loss of sensor transmission. Possible causes include a depleted battery, out-of-range sensor, sensor malfunction, or the sensor not being installed on the tire.



8.OTHER FUNCTIONS

8-1.Normal Display Scrolling

The tire icons will scroll automatically, with each tire position displayed for approximately 5 seconds. You can manually cycle through the tires by tapping the corresponding icon on the screen.

8-2.Backlight and Motion Detection

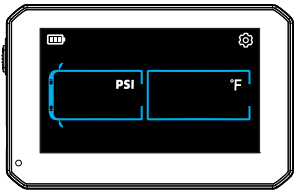
The display is equipped with both light and motion sensors. The backlight will automatically activate when the vehicle is in motion and ambient light is low. If the vehicle remains stationary for a period of greater than 10 minutes and the display is running on internal battery power, the display will enter a "sleep" mode until motion is detected again.

8-3.Display Sleep Mode

If no motion is detected for 10 minutes, the display will automatically enter sleep mode, turning off the screen until motion is detected.

8-4.Display Auto-Hide Vehicle

If the display does not receive data from the sensors of a programmed vehicle (Vehicle 1 through Vehicle 7) for 5 consecutive minutes, the corresponding tire icons and data will automatically be hidden. The sensors will reappear once they are within range and data is successfully received.



9.DISPLAY PARAMETER SETTINGS

Note: If no input is detected for 90 seconds, the display will automatically return to the **Main Screen**.

Icons explanation:

Parameter Settings Access Screen

or Page scroll

Enter Return to previous page

No Exit without saving

Yes OK Confirm or save

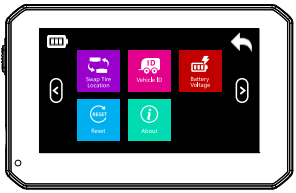
Learn Program the sensor

Del Delete ID code

SET Enter into Keyboard Input Screen to set value

To adjust Default Settings, Tap Main Screen to enter into **Settings Menu Screen 1**, Tap or to switch page between **Setting Menu Screen 1** or **Setting Menu Screen 2**.

Setting Menu Screen 1



Setting Menu Screen 2

10.Vehicle Type Settings

This is a **critical first step** in the setup process. Please configure this setting first before proceeding with the other steps or settings.

Note: The display supports monitoring of up to 7 vehicles. Vehicle 1 can track up to 15 tires, while Vehicles 2 through 7 can each monitor up to 25 tires. The system can manage a total of 165 tires, including spares.

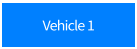
On **Setting Menu Screen 1**, Tap 

to enter into Vehicle Type setting, up to 7 vehicles can be entered.Tap 

to confirm, Tap  to exit.

Light blue background means this vehicle type has been configured by you.

Gray background means this vehicle type has not been configured.



Dark blue background means vehicle type has been selected for configuring.

Vehicle 1 :

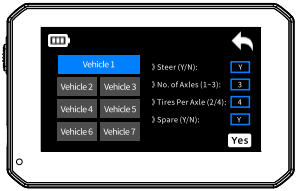
Note: Vehicle 1 Configuration – Designed for vehicles typically equipped with 2 steer tires and up to 3 axles, supporting a maximum of 15 tires, including the spare tire.

》Steer (Y/N): Tap square to select Y(Yes) or N(No);
》No. Of Axles (1~3): Tap square to select 1 or 2 or 3 axles;
》Tires Per Axle (2/4): Tap square to select 2 or 4 tires;
》Spare (Y/N): Tap square to select Y(Yes) or N(No);

Example:

Vehicle 1:

》Steer (Y/N): Y
》No. Of Axles (1~3): 3
》Tires Per Axle (2/4): 4
》Spare (Y/N): Y



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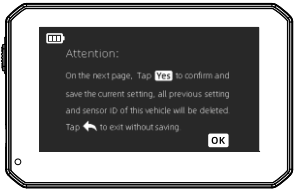

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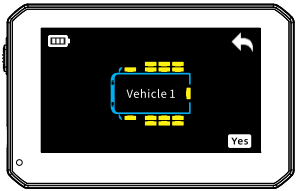


(3)

Note: Only Vehicle 1 supports two configurable steer tires, whereas Vehicles 2 through 7 do not. Vehicle 1 can function as an independent vehicle, such as a truck, or be combined with Vehicles 2 through 7 to form a multi-unit configuration, such as a truck-trailer setup.

Vehicle 2 to 7

Note: Vehicles 2 through 7 can each support six axles and up to 25 tires, including the spare. All axles within each vehicle will share the same settings.

》No. Of Axles (1~6): Tap square to select 1 or 2 or 3 or 4 or 5 or 6 axles;

》Tires Per Axle (2/4): Tap square to select 2 or 4 tires;

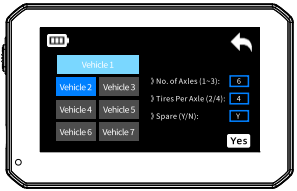
》Spare (Y/N): Tap square to select Y(Yes) or N(No);

Example is Vehicle 1 + Vehicle 2:
Vehicle 2:

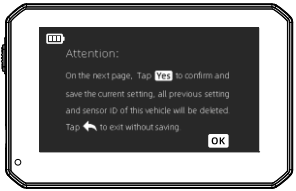
》No. Of Axles (1~6): 6

》Tires Per Axle (2/4): 4

》Spare (Y/N): Y



(1)



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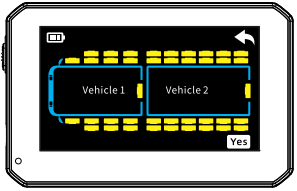
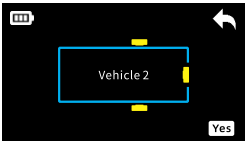
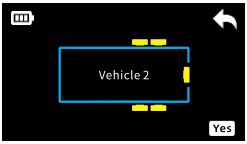


(3)

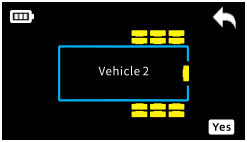
Vehicle 2 to 7 axle definitions:



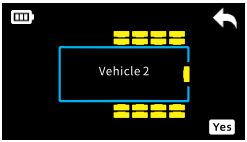
Selected 1 Axle
2 tires and spare tire



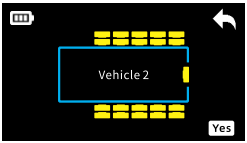
Selected 2 Axle
2 tires and spare tire



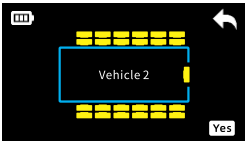
Selected 3 Axle
4 tires and spare tire



Selected 4 Axle
4 tires and spare tire



Selected 5 Axle
4 tires and spare tire



Selected 6 Axle
4 tires and spare tire

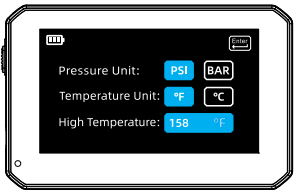
11. Parameters Settings

On **Setting Menu Screen 1**, Tap  to enter into parameters setting, change options by selecting Pressure unit, Temperature unit and High Temperature alert threshold setting. Tap  to exit.

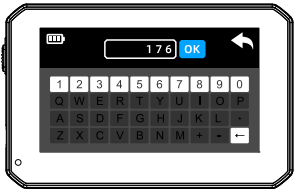
Example:

To change High Temperature alert to 176°F from the default setting of 158°F, Tap the High Temperature blue box and use the **Keyboard Input Screen** to input the new value 176, Tap  to save and exit, Tap  to exit without saving, Tap to return to **Setting Menu Screen 1**.

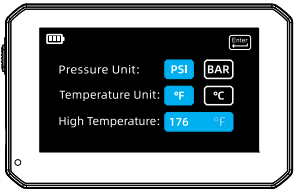
Setting Menu Screen 1



Parameter Setting Screen



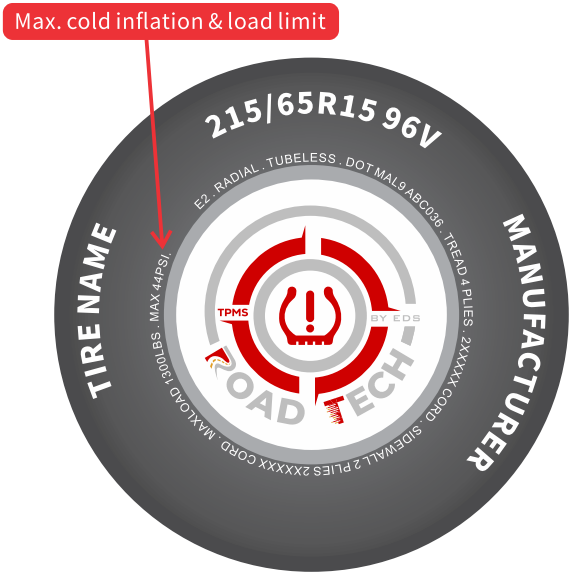
Keyboard Input Screen



Parameter Setting Screen

12. Pressure Alert Settings

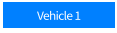
***Find your Max Cold Tire Pressure on the tire, find your vehicle specific CTP on the placard located in the left side of your trailer towards the front.**



Vehicle 1- Cold Tire Pressure (CTP) Configuration & Manual Alert Settings

Note: This option automatically sets the Low Pressure Alert threshold at 10% below CTP and the High Pressure Alert threshold at 25% above CTP when entering Cold Tire Pressure (CTP).

On **Setting Menu Screen 1**, Tap 

, Tap 

to enter into Vehicle 1 Cold Pressure Screen.

Vehicle 1 Cold Pressure has **Steer Axle/Drive Axle**(3 axles)/**Spare Tire** settings, find the CTP value on the manufacturers placard, usually located on the left side of your trailer towards the front. Tap **"Steer Axle"** or **"Drive Axle"** or **"Spare Tire"** to enter the **Keyboard Input Screen** to input your preferred Cold Tire Pressure value, Tap 

to save and exit, Tap 
to exit without saving.

Tap 

to set Vehicle 1 HIGH (Steer/1/2/3/S) and LOW (Steer /1/2/3/S) value manually, Tap each box 

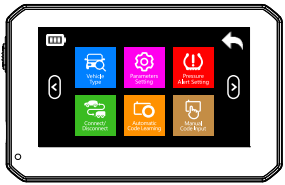
to enter the **Keyboard Input Screen** to input your preferred High Pressure and Low Pressure Alert threshold which has one steer axle, 3 drive axles and one spare tire, Tap 

to save and exit, Tap 
to exit without saving.

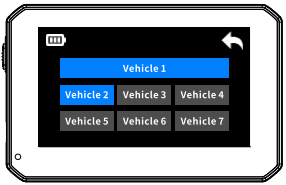
ATTENTION:
Please set the low pressure alert threshold first if the high pressure alert threshold is lower than the default low pressure alert threshold of 90 PSI or the low pressure alert level that was previously specified.

Please set the high pressure alert threshold first if the low pressure alert threshold is greater than the default high pressure alert threshold of 125 PSI or the previously specified high pressure alert threshold.

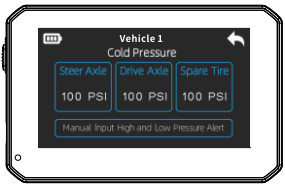
Note: The original default Vehicle 1 Cold Pressure value will change to dashed Lines - - - if the new Manual Input High and Low Pressure Alert value is applied.



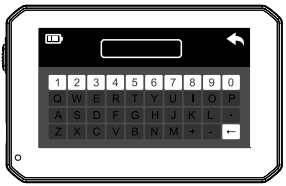
Setting Menu Screen 1



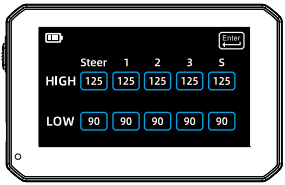
Vehicle Selection Screen



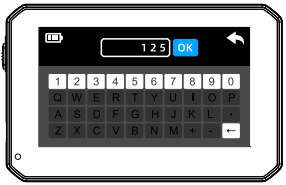
Vehicle 1 Cold Pressure Screen



Keyboard Input Screen



Manual Input High and Low Pressure Alert Value Screen



Keyboard Input Screen

Vehicle 2-7 - Cold Tire Pressure(CTP) Configuration & Manual Alert Settings

Note: This option automatically sets the Low Pressure Alert threshold at 10% below CTP and the High Pressure Alert threshold at 25% above CTP when entering Cold Tire Pressure (CTP).

On **Setting Menu Screen 1**, Tap 

, Tap Vehicle 2 to enter into Vehicle 2 Cold Pressure Screen. (Vehicles 2,3,4,5,6,7 to select from, example is Vehicle 2).

Tap "Axles" to enter the **Keyboard Input Screen** to input your preferred Cold Tire Pressure, Tap OK to save and exit, Tap ↩ to exit without saving.

Tap Manual Input High and Low Pressure Alert to set Vehicle 2 HIGH (Axles/S) and LOW (Axles/S) value, Tap each box 125 to enter the **Keyboard Input Screen** to input your preferred High Pressure and Low Pressure Alert threshold, Tap OK to save, Tap ↩ to exit without saving.

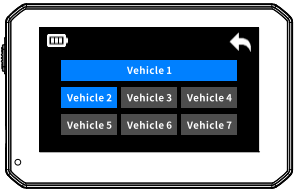
ATTENTION:

Please set the low pressure alert threshold first if the high pressure alert threshold is lower than the default low pressure alert threshold of 90 PSI or the low pressure alert level that was previously specified.

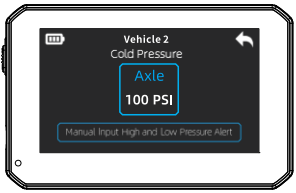
Please set the high pressure alert threshold first if the low pressure alert threshold is greater than the default high pressure alert threshold of 125 PSI or the previously specified high pressure alert threshold.

Note: The original default Vehicle 2 Cold Pressure value will be changed to dashes Line - - - if the new Manual Input High and Low Pressure Alert value is applied.

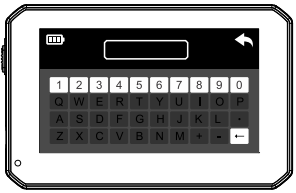
Setting Menu Screen 1



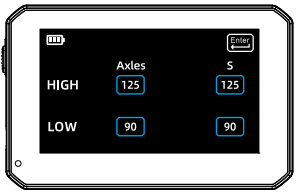
Vehicle Selection Screen



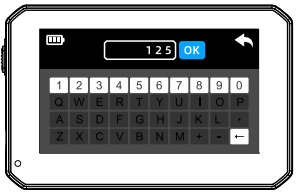
Vehicle 1 Cold Pressure Screen



Keyboard Input Screen



Manual Input High and Low Pressure Alert Value Screen



Keyboard Input Screen

13.Connect/Disconnect

On **Setting Menu Screen 1**, Tap 

, Tap dark blue background 

or each vehicle 2 to 7 to Disconnect Vehicle 1 or Vehicle 2 to 7, Tap  to exit.

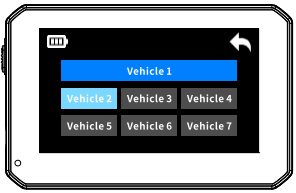
Tap 

, Tap light blue background 

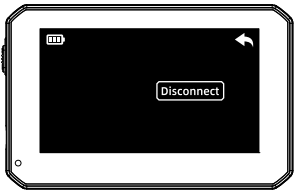
or each vehicle 2 to 7 to Connect Vehicle 1 or Vehicle 2 to 7, Tap  to exit.

Example shows Vehicle 2 to 7 disconnected:

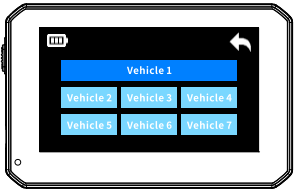
Setting Menu Screen 1



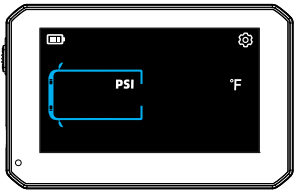
Vehicle Selection Screen



Vehicle Disconnect Screen



Vehicle 1 Connect and Vehicle 2 to 7 Disconnect Screen



Main Screen, Vehicle 1 Connect and Vehicle 2 to 7 Disconnect

Note: After connecting, the associated Vehicle 1 to 7 icon will change to a dark blue hue, and when unplugged, the associated Vehicle 1 to 7 backdrop will change to a light blue hue.

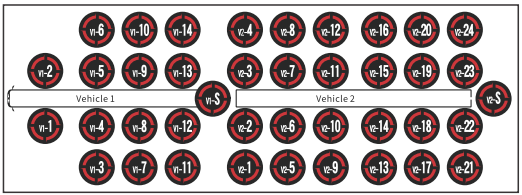
14. Sensor Programming

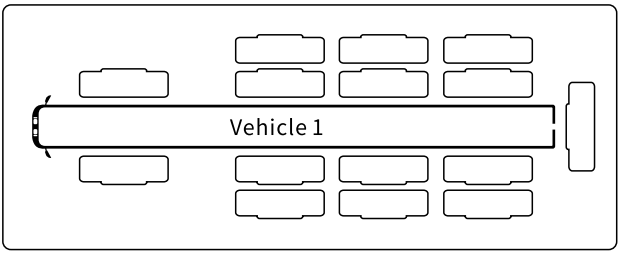
Items 15 and 16 below deal with programming sensor codes into the display.

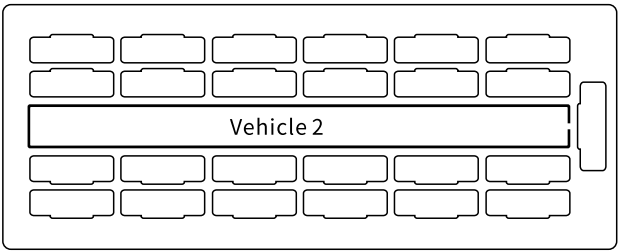
DIAGRAM FOR PROGRAMMED SENSOR REFERENCE

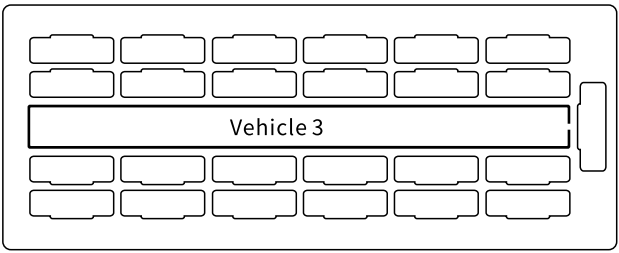
Once your sensors are paired, you may use these vehicle diagrams to record their six-digit ID code or sensor location number stickers to identify their tire position.

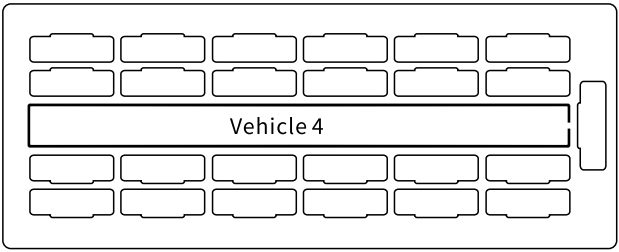
This enables you to quickly determine which sensor is set to which tire position.

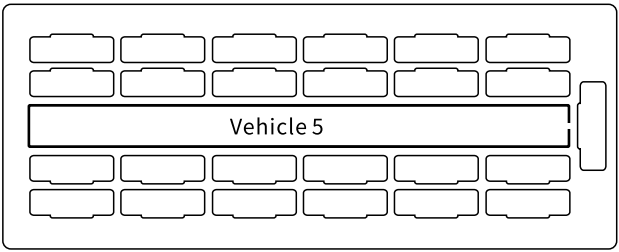


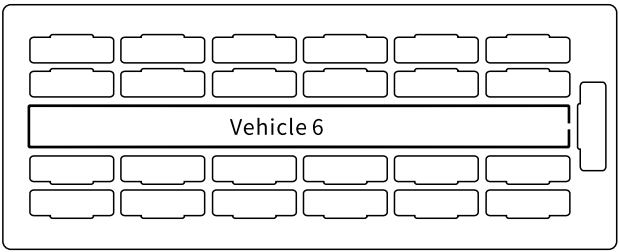

Vehicle 1

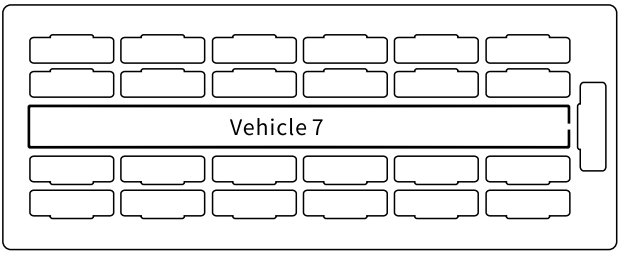

Vehicle 2


Vehicle 3


Vehicle 4


Vehicle 5


Vehicle 6


Vehicle 7

15. Automatic Code Learning (OPTION #1, first selection)

*Automatic code learning for Vehicle 1

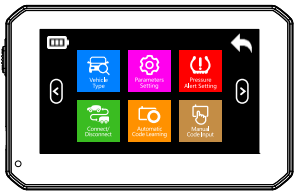
① On **Setting Menu Screen 1**, Tap 

, Tap 

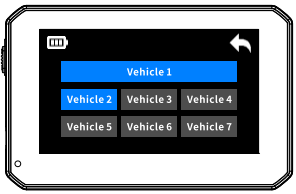
, Tap  to select the tire you want to code to the sensor, the selected tire will flash (white tire icon is without code, yellow tire icon is with code), the 

icon will appear on the screen. Tap 

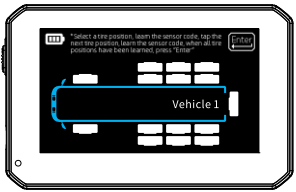
to SCAN sensor ID code to learn.



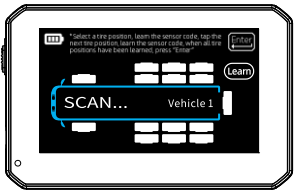
Setting Menu Screen 1



Vehicle Selection Screen

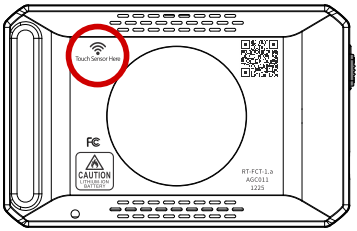


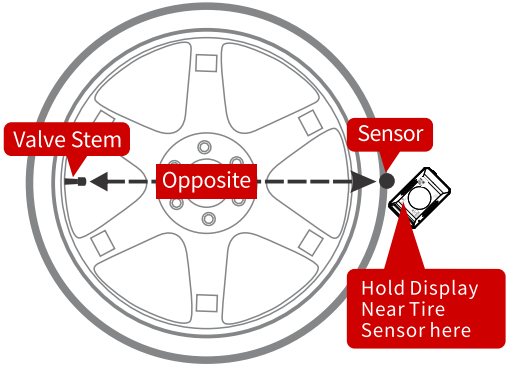
Vehicle 1
Sensor Code Learning Screen



Vehicle 1
Sensor Code Learning Screen

② Hold the display so that the sensor is located near the **“Touch Sensor Here”** on back top right of the display (see below image) to learn sensor ID code.



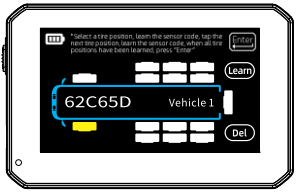


Internal Sensor Position is opposite of Valve Stem

Note: For the installed internal sensor, hold display **Touch Sensor Here** to tire, at the sensor location which is located opposite of the valve stem (see image above).

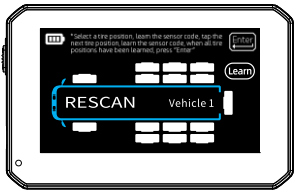
③ If sensor code learning is successful, One beep will sound, the programmed tire icon will change to Yellow and sensor 6 digit ID code (Example: 62C65D) will appear on **Sensor Code Learning Screen**. Repeat the same process to pair all remaining tires.

If an error is made while learning sensors,Tap Del to remove the selected sensor ID Code. Repeat the process to **Learn** the correct sensor and ID code.



Vehicle 1 Sensor Code Learning Screen

④ If sensor code learning fails, there will be two audible beeps and RESCAN will appear on screen, please tap Learn to SCAN sensor ID code, keep trying until successful.



Vehicle 1 Sensor Code Learning Screen

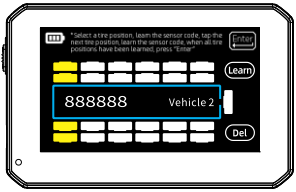
⑤ After all sensors are paired, Tap Enter to exit, Tap two times to return to **Main Screen**, programmed tire icon will blink yellow and will show pressure and temperature readings.

⑥ **Deleted a single tire ID code:** On the **Sensor Code Learning** , Tap yellow , Tap Del , the tire ID code is deleted.

Note: If the Cold Tire Pressure (CTP) has not been properly configured for your vehicle, the tire icon will flash red and an alert will sound. Tap the screen to silence the alert, then configure the CTP according to the Cold Tire Pressure Alert settings.

* Automatic code learning for Vehicle 2 to 7

On **Setting Menu Screen 1**, Tap , Tap each vehicle (Vehicle 2 to 7) to enter **Sensor Code Learning** settings for respective vehicles and repeat previous Vehicle 1 steps.



Vehicle 2 Sensor Code Learning Screen

16. Manual Code Input (OPTION #2)

*Manual Code Input for Vehicle 1

On **Setting Menu Screen 1**, Tap 

, Tap 

, Tap  to select the tire you want to input the ID code, the selected tire will flash (white tire icon is no code, yellow tire icon has code), the 

icon will appear on the screen. Tap 

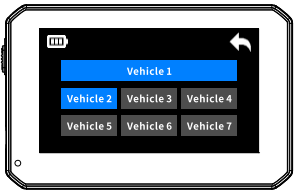
to enter the **Keyboard Input Screen** to input 6 digit ID code (Example: 23D177). Factory will laser 6 digit ID code on the sensor body for special internal sensor. Tap 

to save and exit, Tap 

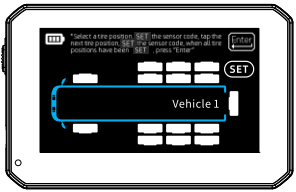
to delete. Repeat for all remaining tire positions.

Note: If the Cold Tire Pressure (CTP) has not been properly configured for your vehicle, the tire icon will flash red and an alert will sound. Tap the screen to silence the alert, then configure the CTP according to the Cold Tire Pressure Alert settings.

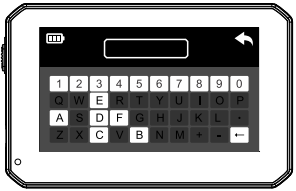
Setting Menu Screen 1



Vehicle Selection Screen

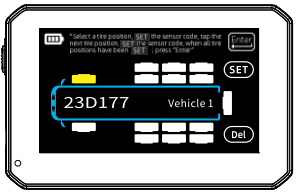


Vehicle 1
Sensor Code SET Screen



Keyboard Input Screen

Keyboard Input Screen

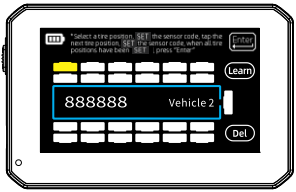


Vehicle 1
Sensor Code SET Screen

*Manual Code Input for Vehicle 2 to 7

On **Setting Menu Screen 1**, Tap 

, Tap each vehicle (vehicle 2 to 7) to enter **Sensor Code Learning** settings for respective vehicle 2 to 7 and repeat previous Vehicle 1' s steps.



Vehicle 2 Sensor Code Learning Screen

17. Swap Tire Location

Note: Only tires with paired sensors can be swapped.

***Swap Tire Location for Vehicle 1:**

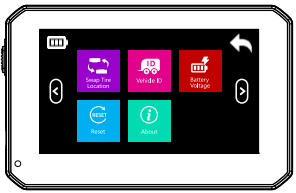
On **Setting Menu Screen 2**, Tap 

,Tap 

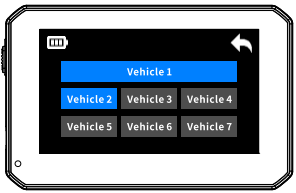
, Tap one  to select the tire you want to swap (selected tire will flash). Tap another  for the tire you want to swap to. **Swap Tire Sensors screen** will appear. Tap 

to save selected tire swap and exit to **Swap Tire Sensors Screen**. Tap 

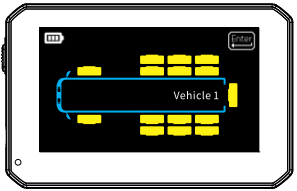
to cancel selected tire swap and exit to **Setting Menu Screen 1**.



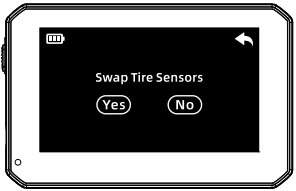
Setting Menu Screen 2



Vehicle Selection Screen



Vehicle 1 Swap Tire Sensors Screen

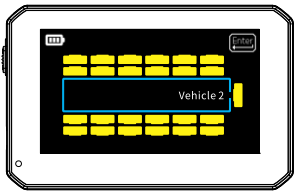


Swap Tire Sensors Screen

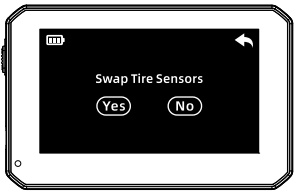
Swap Tire Location for Vehicle 2 to 7:

Tap 

, Tap each vehicle (Vehicle 2 to 7) on the **Swap Tire Sensors screen** to swap each vehicle which you want to swap tire location, and repeat Vehicle 1 steps above.



Vehicle 2 Swap Tire Sensors Screen



Swap Tire Sensors Screen

18.Custom Vehicle ID

Custom Vehicle ID's for Vehicle 1:

On **Setting Menu Screen 2**, Tap 

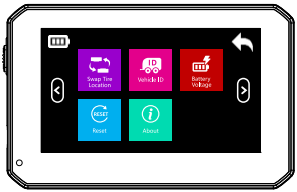
, Tap 

, Tap 

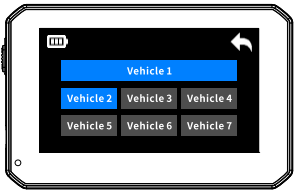
to enter the **Full Keyboard Input Screen** to input your vehicle ID. Tap 

to save and exit, Tap 
to exit without saving. Tap 

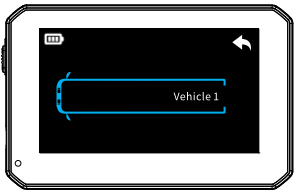
to delete the vehicle ID.



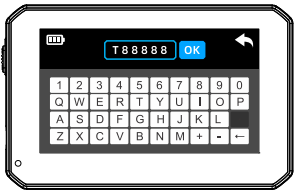
Setting Menu Screen 2



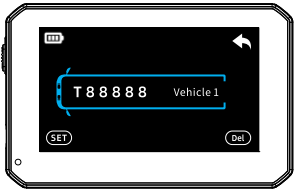
Vehicle Selection Screen



Vehicle 1 ID Screen



Full Keyboard Input Screen

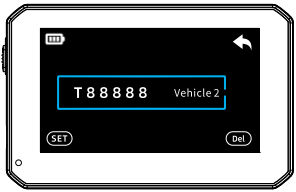


Vehicle 1 ID Screen

Custom Vehicle ID's for remaining Vehicle 2 to 7:

Tap 

, Tap each vehicle (vehicle 2 to 7) to enter Vehicle ID settings for remaining Vehicles and repeat Vehicle 1 steps above to change Vehicle ID.



Vehicle 2 ID Screen

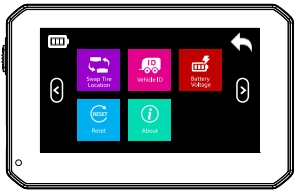
19. Sensor Battery Voltage

On **Setting Menu Screen 2**, Tap 

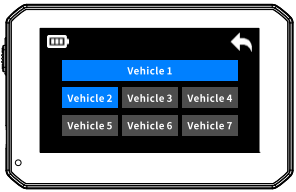
, Tap the vehicle that you want to check the sensor battery voltage, Tap any  icon to check the sensor voltage, The checking tire icon is flashing, Sensor Battery Voltage will be shown along with selected tire position 6 digit ID code. Tap 

to exit.

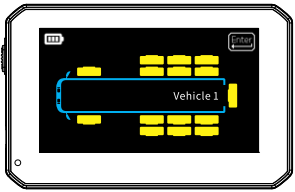
The example shows Vehicle 1 tire.



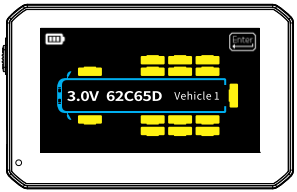
Setting Menu Screen 2



Vehicle Selection Screen



Vehicle 1 Tire Position Screen



Vehicle 1 Sensor Battery Voltage Reading Screen

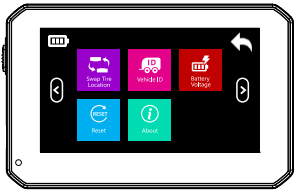
20.Reset

On **Setting Menu Screen 2**, Tap 

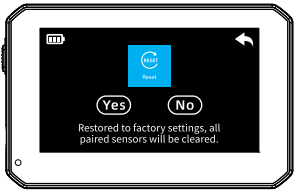
to **Reset System to Factory Defaults**. Tap 

to restore to factory settings, all paired sensors will be cleared, all input vehicle ID will be cleared. Tap 

or 
to exit.



Setting Menu Screen 2

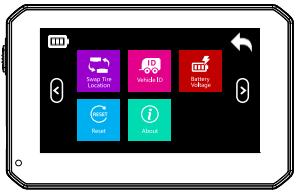


Reset Factory Default Setting Screen

21.About

On **Setting Menu Screen 2**, Tap 

to show system Version Information, Tap
to exit.



Setting Menu Screen 2

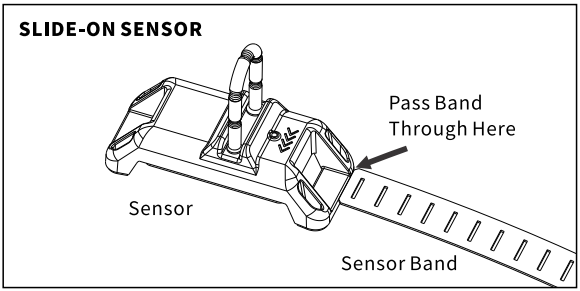
Version Screen

22.INTERNAL BAND SENSOR INSTALLATION

Always consult a Certified Safety Consultant before beginning any installation procedures. Read and understand all instructions thoroughly before servicing components.

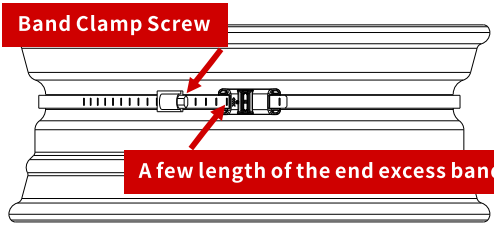
Preparing SLIDE-ON SENSORS with Metal Band:

Thread the end of the band through the sensor and slide the sensor. See below image.

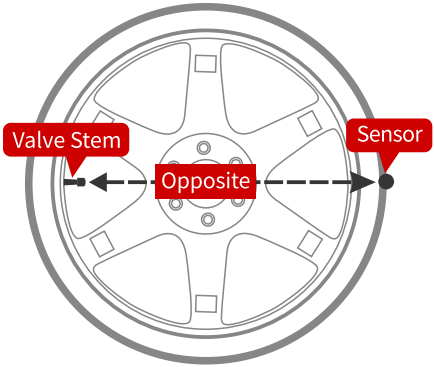


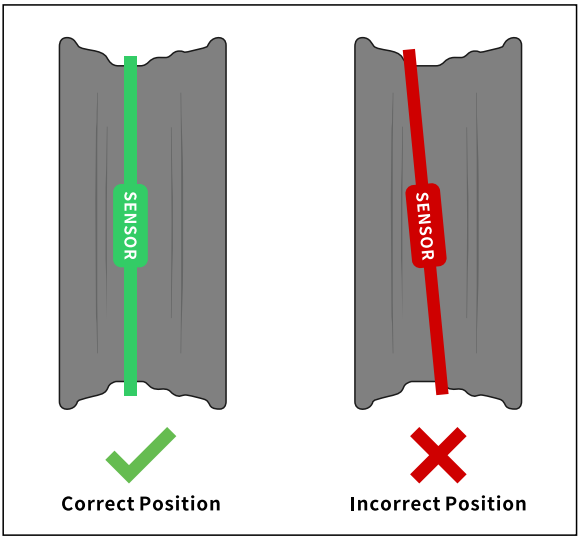
Installing Internal Sensor with Metal Band:

1. Remove the wheel from the vehicle and deflate the tire.
2. Remove the tire from the wheel.
3. Position the sensor and band clamp at the **center of the wheel hub** (opposite the tire valve stem). Thread a few length of the end of the excess band through the sensor body, then torque the band clamp screw to 26.5-35.4 in-lbs (3-4 N · m) on the wheel hub. Once tightened, the band tail will naturally extend through the sensor. Ensure the sensor does not shift laterally or rotate. See below image:



Pass band through band clamp screw, Then through sensor again to secure excess band.



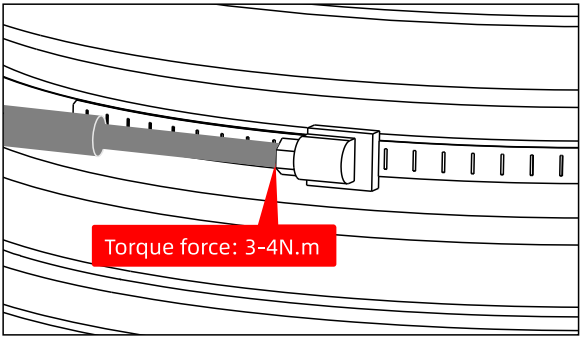


CAUTION:

1). Verify that the sensor band is securely installed on the wheel hub and does not shift laterally or rotate.

2). The sensor must be installed opposite from the tire valve stem.

4. Torque the band clamp screw to 26.5-35.4 in-lbs (3~4 N.m). See below image:



5. Reinstall the tire onto the wheel and inflate it to the manufacturer’ s recommended pressure.

6. Check the tire balance using a tire balance machine.

7. Reinstall the wheel/tire assembly onto the vehicle according to the manufacturer’ s instructions.

Recommended TPMS Internal Sensor Installation for Dual-Wheel Vehicles:

For proper performance, internal TPMS sensors should be installed opposite the valve stem on both inner and outer wheels.

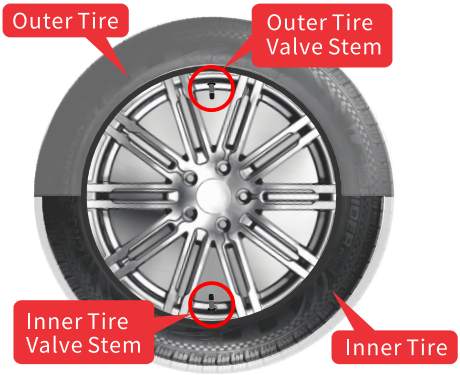
Installation Guidelines:

Outer Tire:

*The TPMS sensor must be positioned directly opposite the valve stem.
*Example: If the valve stem is at 12 o' clock, the sensor should be at 6 o' clock.

Inner Tire:

*Similarly, the TPMS sensor should be mounted opposite the valve stem.
*Example: If the valve stem is at 6 o' clock, the sensor should be at 12 o' clock.



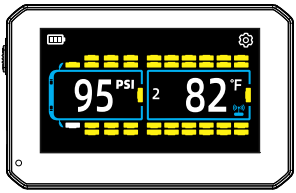
Note: For dual-wheel applications, install valve stems in opposing positions (180° separation) to ensure proper TPMS sensor pairing.

23. REPEATER INSTALLATION

The repeater is a required component of your TPMS.

The warranty coverage could be cancelled if the repeater is not installed.

The repeater icon will appear on the display, when connected.



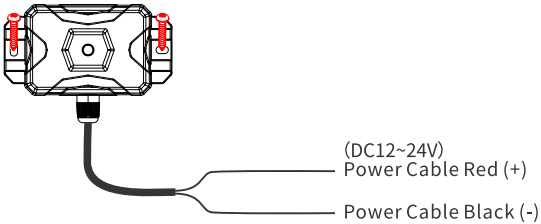
The sensor signal is strengthened or amplified and sent to the display via the repeater. This system comes with a repeater.

1. A 12V source that will remain continuous while driving is connected to the repeater.
2. Two wires, one black (-) and one red (+), are included with the repeater. Just attach the black wire to a ground or negative source and the red wire to a positive source.
3. There is no need for extra setup because the repeater is weatherproof.

Note:

When power is provided, the repeater will illuminate with a white light that is either constant or blinking. This occurs once the display is turned on and the sensors begin reporting. Occasionally, as information is being transmitted to the display, the light will blink.

If the light is off, look for problems with your connections, the power source, or the in-line fuse on the repeater's positive lead.



Please remember:

1. A repeater can be mounted inside a vehicle as long as there is no metal or signal interference. Installing a repeater outside the vehicle is advised if the signal is weak.

2. It is advised that the repeater be mounted near the vehicle's rear axle. Verify whether the repeater icon is shown on the display. The installation is successful if the repeater icon appears. If not, adjust the repeater installation position until the repeater icon appears on the screen.

24.TROUBLESHOOTING TIPS

1. How do I mount the display to the suction cup mount?
The suction cup mount has a magnetic plate that attaches to the back of the display. Simply mount the suction cup assembly in your desired location and place the display onto it.

2. What does the small antenna icon on the display screen indicate?
The antenna icon confirms that the repeater is functioning properly, amplifying signals from the tire sensors to the display.

3. How can I adjust the display brightness?
The display features an automatic brightness adjustment via a photo eye. It dims at night and brightens during daylight. Manual adjustment is not available.

4. What does the battery icon in the upper left corner of the Main Screen indicate?
The icon shows the charge level of the display' s internal battery.

5. How long should I charge the display' s battery for the first time?
Charge the display for 4 to 5 hours using the included USB-C cable.

6. How long does the display battery last, and can it be replaced?
The battery is designed to last the lifetime of the display and cannot be replaced.

7. How long will the screen stay on when running on battery power?
It is recommended to use the display on battery power rather than keeping it plugged in continuously. Charge it for several hours before trips.

Display Battery Management Note: The lithium battery performs best when regularly charged and discharged, which extends its lifespan.

8. How can I manually select a tire instead of waiting for the automatic scroll?
Tap the desired tire icon to instantly view its temperature and pressure.

9. How do I check tire information without waiting for the display to scroll?
On the Main Screen, tap the tire icon to view its details.

10. Does the display alert for low sensor battery voltage?
Yes. When a sensor battery is low, the tire icon turns red and flashes, accompanied by a "SENSOR LOW BATTERY" text, an audible beep, and a flashing red LED.

11. Can I retrieve the six-digit sensor code from the display?
Yes. On the screen displaying the sensor battery voltage, the sensor code will appear next to the voltage readout. Tap the tire icon to view it.

12. How do I reset the display?
Tap the "Settings" icon on the Main Screen, then select "Reset" and confirm with "Yes." This restores factory defaults and clears all paired sensors and vehicle IDs.

13. How do I set high and low tire pressure alerts?
The display automatically sets alerts when you input the Cold Tire Pressure (CTP): High Pressure Alert = 25% above CTP; Low Pressure Alert = 10% below CTP. You can also set these thresholds manually.

14. If I have a Tag Axle, how do I set up the High and Low pressure alerts in the display since there is no Tag Axle shown in the pressure sections?
To set up Tag Axle pressure, Tap “Pressure Alert Setting”, Tap “Vehicle 1”, Tap “Manual Input High and Low Pressure Alert”. From there, input the HIGH (High Pressure PSI, 25% above cold tire pressure) and LOW (Low Pressure PSI, 10%) pressure alert threshold.

15. What kind of alert will I get if one or more of my tires are out of the parameters I set?
You will receive three visual alerts (text, red tire icon, flashing red LED) and one audible beep.

16. What does a "Fast Leak" warning mean?
The tire is losing 2 PSI or more per minute. Pull over safely and inspect the tire immediately.

17. Can I silence the alert?
Yes. Tap anywhere on the screen to silence it.

18. Do I need to set high and low temperature alerts?
Only high-temperature alerts are available. Low temperatures below 158°F are preferable and do not require monitoring.

19. Should I use Automatic or Manual mode to pair a sensor?
Use "Automatic Code Learning" for easy pairing. For sensors with a pre-marked 6-digit ID, use "Manual Code Input."

20. Why don't I see tire pressure or temperature readings when I turn on the display?
The system takes about 2 minutes to acquire all sensor readings.

21. How can I hide tire icons for a trailer I'm not towing?
Use the "Auto-hide" feature: drive away from the unhooked trailer for about 5 minutes, and its icons will disappear. Alternatively, use "Connect/Disconnect" to hide it manually.

22. Why did my display go blank after stopping at a rest area?
The display enters sleep mode after 10 minutes of inactivity to conserve battery. Tap the screen or move the display to wake it.

23 Why do I see dashed lines for one of my sensors?
Dashed lines indicate a lost sensor signal, possibly due to interference, dead battery, or repeater malfunction. Troubleshoot the sensor as needed.

25.DISPLAY SPECIFICATIONS

Operating Temperature Range	-4°F to 176°F , -20°C to 80°C
Storage Temperature Range	-22°F to 185°F , -30°C to 85°C
Frequency	433.92 MHz
Pressure Range	0 to 188PSI , 0 to 13BAR
Input Voltage	DC 5V
Dimension(L*W*H)	4.96" x 3.15" x 0.86" 126 x 80 x 22 mm
Weight	7.76 oz , 220 grams

26.REPEATER SPECIFICATIONS

Operating Temperature Range	-4°F to 176°F , -20°C to 80°C
Storage Temperature Range	-22°F to 185°F , -30°C to 85°C
Frequency	433.92 MHZ
Transmission Power	≧10dBm
Working Voltage	DC 12 to 24V
Weight	3.53 oz , 100 grams
Dimension (L*W*H)	4.84" x 3.43" x 1.22", the wire length is 9.75" 123 x 87 x 31 mm, the wire length is 248mm

27.INTERNAL SENSOR SPECIFICATIONS

Operating Temperature Range	-40°F to 230°F , -40°C to 110°C
Storage Temperature Range	-40°F to 248°F , -40°C to 120°C
Frequency	433.92 MHz
Pressure Range	0 to 188PSI , 0 to 13BAR
Pressure Accuracy Range	±1.5 PSI , ±0.1 BAR
Temperature Accuracy Range	±5.4 °F , ±3 °C
Transmission Power	<10dBm
Approximate Battery Life	Up to 4 years, built-in CR2050HR, non-replaceable
Weight	1 oz , 28.5 grams
Dimension (L*W*H)	2.64" x 1.1" x 0.9" (including U Antenna 1.97") 67 x 28 x 23 mm (including U Antenna 50mm)

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Implementation Standard: GB26149-2017 - Made in China