TPMS user manual

Model: CT07
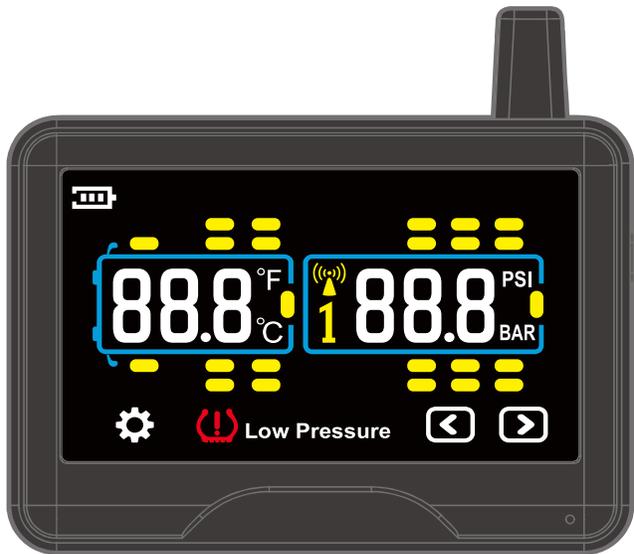
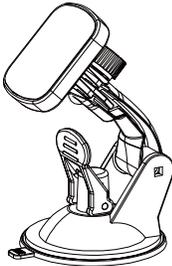# CONTENTS

1. TPMS kit Contents

The monitor and accessories

5" Touch Screen Color Display
(1pc)

Suction cup
(1pc)
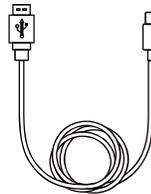
USB Cable
(1pc)

2. Monitor introduction

LCD Color
Touchscreen Display

Antenna

Turn on

Turn off

12v USB-C
Charging Port

Red LED alert light
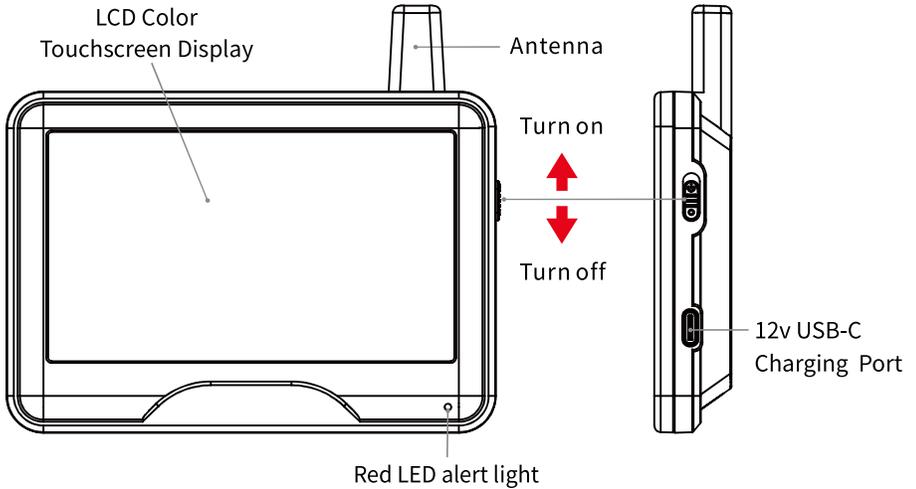
ICONS	Description	ICONS	Description
	Tire Icon	⚙	SETTING
	Tire Programmed	📶	Signal Booster
	Tire Normal	⚠	Pressure Warning
	Tire Alert	🗴	Sensor Low Battery
PSI/BAR	Pressure Unit	🌡	Temperature Warning
°F/°C	Temperature Unit	1	Trailer Icon

3. SYSTEM DEFAULT SETTINGS

Pressure Unit	PSI
Temperature Unit	ºF
High Pressure Alert	125 PSI
Low Pressure Alert	90 PSI
High Temperature Alert	158ºF
Power Unit Cold Tire Pressure	
Steer Axle	100 PSI
Drive Axle	100 PSI
Spare Tire	100 PSI
Power Unit Manual Input High and Low Pressure Alert	
High (Axle1/2/3/S)	125 PSI
Low (Axle1/2/3/S)	90 PSI
Trailer Cold Tire Pressure	
Trailer # 1/2/3/4/5	100 PSI
Trailer Manual Input High and Low Pressure Alert	
High (Axle1/2/3/S)	125 PSI
Low (Axle1/2/3/S)	90 PSI

Note: Default pressure settings are based on the cold tire pressure. Once the customer enters into "Manual Input High and Low Pressure Alert" to set the cold pressure manually, "System is currently using manually input high/low pressure settings" will appear on the screen.

4. COLD TIRE PRESSURE (CTP) SYSTEM DEFAULT SETTINGS

Cold Tire Pressure (CTP) defaults alerts are 25% above CTP for High Pressure and 10% below CTP for Low Pressure.

| Example Scenarios	
Steer Axle	CTP of 100 PSI
Axle 1 HIGH Alert	125 PSI (100 PSI CTP x 125% = 125
Axle 1 LOW Alert	PSI) 90 PSI (100 PSI CTP x 90% = 90
Drive Axle	PSI) CTP of 110 PSI
Drive Axle 2/3 HIGH Alert	138 PSI (110 PSI CTP x 125% = 138
Drive Axle 2/3 LOW Alert	PSI) 99 PSI (110 PSI CTP x 90% = 99
Spare	PSI) CTP of 120 PSI
Spare HIGH Alert	150 PSI (120 PSI CTP x 125% = 150
Spare LOW Alert	PSI) 108 PSI (120 PSI CTP x 90% = 108 PSI)

5. MAIN SCREEN

Remove protective film from Display by lifting the tab in the upper right corner.
Slide power slide switch to ON position.
Startup Screen will appear after ~5 seconds, followed by the **Settings Icons Screen**
or, if sensor(s) are already programmed, the Power Unit/Trailer **Main Screen** will appear
after approximately 5 seconds.
If no sensors are paired to the Display, the **Settings Menu Screen 1** will change to the
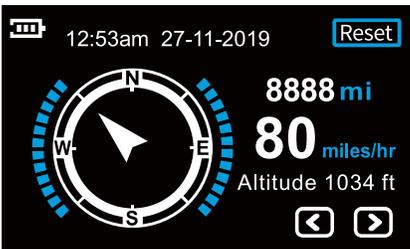Power Unit/Trailer **Main Screen** after approximately 1 minute, 30 seconds.
Note: When the display receives the paired sensor information, the corresponding
pressure and temperature data will be displayed on the Power Unit/Trailer **Main
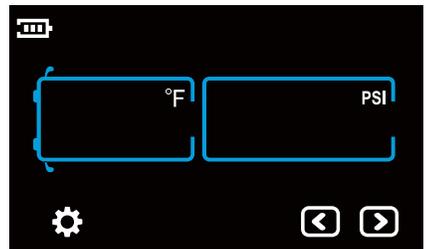Screen.**
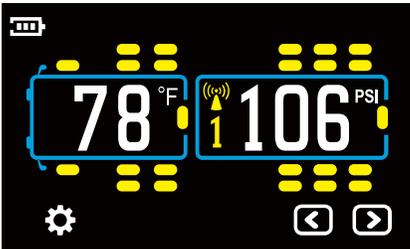
Power Unit/Trailer **Main Screen**
(if sensors already programed)
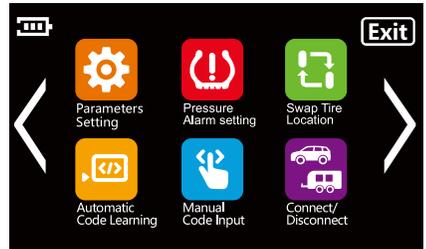
Settings Menu Screen 1
(if no sensors are programed)

GPS Interface Screen (left and right arrows bring up GPS)
(**Note:** GPS feature may not be available on certain models)

Power Unit/Trailer **Main Screen**
(appears after 1 minute, 30 seconds)

Touch [◀] or [▶] to switch between Power Unit/Trailer **Main Screen** and **GPS Interface Screen** (this is not a navigation tool). Please allow up to 15 minutes for the GPS to initialize the first time.

6. UNDERSTANDING YOUR TIRE ALERTS

When there is an alert, the tire position will change from yellow to red, will display the corresponding alert with icons, audible alarm will sound (beep) and LED will flash red.
When you silence the alert by touching the screen, The alert will not sound again as the unit cycles back to the alert tire. The alert text continues to flash and the tire remains red. LED stays on as long as the alert is active.
If you leave the alert active it remains on the same alert tire for 10 seconds before resuming the monitoring cycle. Display does not cycle through other tires until you silence the alert.
After 10 seconds if alert has not been silenced display will continue to visually cycle through the rest of the programmed tires, keeping the alert tire in red.
Note: During active audible and visual alerts, all other active tires are being monitored.

Power Unit/Trailer **Main Screen**
Switches to each programmed tire position every 5 seconds.
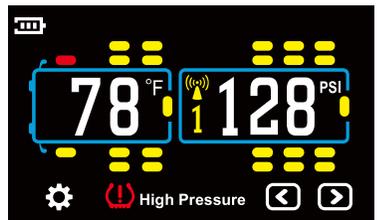Displays repeater icon when receiving repeater signal.
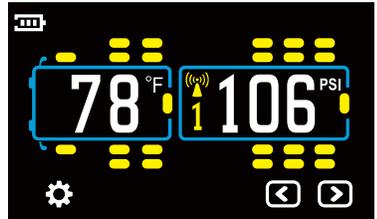
High Pressure Alert
Example: High Pressure threshold is 125 PSI.
Tire position will start flashing red.
High Pressure indicator and icon will flash, once every second.
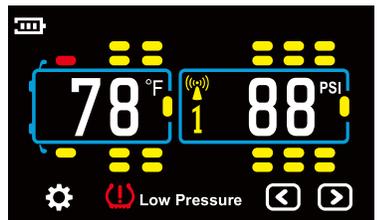Audible alert will sound.

Low Pressure Alert
Example: Low Pressure threshold is 90 PSI.
Tire position will start flashing red.
Low Pressure indicator and icon will flash, once every second.
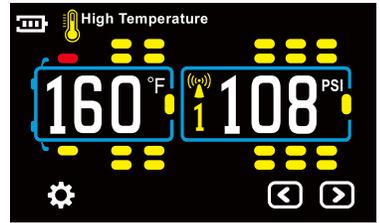Audible alert will sound.

High Temperature Alert

Example: High Temperature threshold is 158ºF.
Tire position will start flashing red.
High Temperature indicator and icon will
flash, once every second.
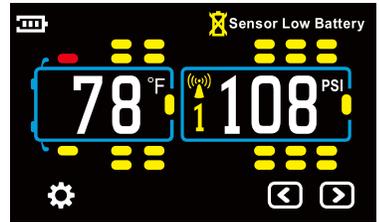Audible alert will sound.

Sensor Low Battery Alert

Example: Sensor Low Battery icon shown.
.Tire position will start flashing red.
.Sensor Low Battery indicator and icon will
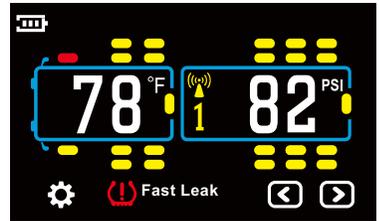 flash, once every second.
.Audible alert will sound.

Fast Leak Alert

Example: Loss of 2 PSI or greater in less than
one minute.
Tire position will start flashing red.
FAST LEAK indicator and icon will flash,
once every second.
Audible alert will sound.

Alerts Multiple Tire Positions

When there is more than one alert at the same time,
display will cycle through the multiple alerts.
Touch screen to silence audible alert.
Display will resume cycling through all
programmed tire positions. You can manually
select any programmed tire position by
touching that tire position.
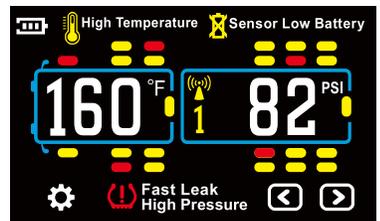
7. OTHER FUNCTIONS

Normal Display Scrolling
The tire icons will automatically scroll through. Each tire position will be displayed for approximately 5 seconds. You can manually cycle through the displayed tires by touching the tire icon on the screen.

Back-lighting and Motion Detection
The display is equipped with a light sensor and a motion sensor. The back-light will turn on when the vehicle is in motion and there is a little ambient light. If the vehicle has been motionless for a while and the display is on the internal battery, the display will "go to sleep" until the vehicle resumes motion.

Display Sleep Mode
When the display detects no motion for 10 minutes, it will enter into sleep mode automatically, the screen turns off until motion is detected.

Display Auto-hide
If the display does not receive data from paired sensors, power unit or trailer for 15 consecutive minutes, the display will automatically "hide" those sensors. Sensors will appear when they are in range.

8. PARAMETER SETTINGS

Note: If Display senses no input for 90 seconds, it will exit to **Main Screen** automatically.
To adjust Default Settings, touch main screen settings icon ⚙ to enter into **Settings Menu Screen 1.**
This will be the first step for the remaining sections.

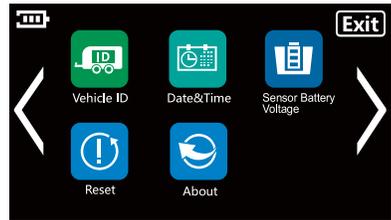Touch 〈 or 〉 to switch between **Settings Menu Screen 1** or **Settings Menu Screen 2.**
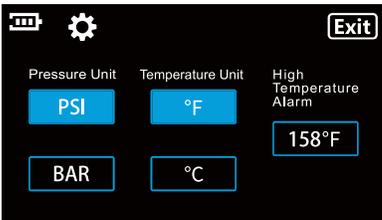

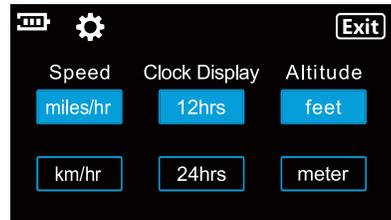Power Unit/Trailer **Main Screen**

Settings Menu Screen 1

or
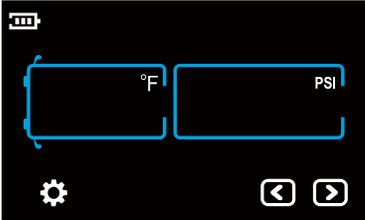
Settings Menu Screen 2

Touch ⚙ to enter into Parameters Settings. Touch 〈 or 〉 to switch between **Parameter Settings Screen 1** or **Parameter Settings Screen 2.** Change options by selecting Pressure, Temperature, High Temp Alert, Speed, Clock, Altitude.
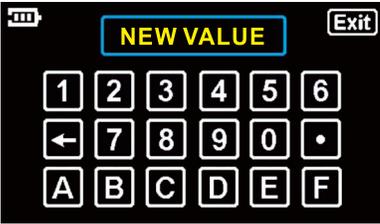

Parameter Settings Screen 1

or

Parameter Settings Screen 2

Example: To change High Temperature Alert (default is 158ºF) touch the High Temp Alert unit and use the **Keyboard Input Screen** to change setting. Touch Exit to return to **Parameters Settings** screen. Touch Exit again.

Keyboard Input Screen

To save your input, touch **Exit and Save**. To cancel, touch **Exit without Saving**. Selection returns you to **Main Screen**.

9. COLD TIRE PRESSURE ALERT SETTINGS - POWER UNIT

The following instructions will utilize the **Default** High/Low Pressure Alert thresholds. For **Manual High/Low Pressure Alert** thresholds, go to page 13.
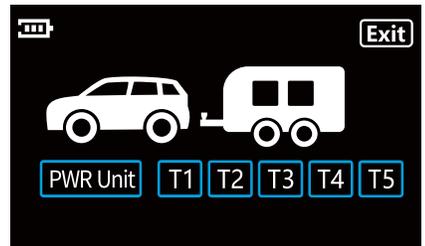
Note: When inputting **Cold Tire Pressure** (CTP) with this option, **High Pressure Alert** will be set at 25% above CTP and **Low Pressure Alert** will automatically be set at 10% below CTP.

To adjust **Cold Tire Pressure** settings, touch ⏻ to enter into **Pressure Alert Settings**.

Touch 〔Power Unit〕 to enter **Power Unit Cold Pressure** screen.

Settings Menu Screen 1

Power Unit or Trailer Selection Screen

Power Unit Cold Pressure Screen

Keyboard Input Screen

To set **Steer Axle, Both Drive Axles** and **Spare Tire** cold tire pressure, touch [100 PSI] to enter the **Keyboard Input Screen.** Enter your preferred Cold Tire Pressure.
Note: If Drive Axles require different pressure settings please refer to Page 13 **Manual Setup.**

Touch [Exit] to exit **Keyboard Input Screen** after Steer Axle, Drive Axle and Spare Tire cold tire pressure settings are changed. **Power Unit Cold Pressure** screen will appear.

Power Unit Cold Pressure Screen

Exit and Save or Exit Without Saving

Touch [Exit] again to exit **Power Unit Cold Pressure** screen. To save your input, touch **Exit and Save.** To cancel, touch **Exit without Saving.** Selection returns you to the Power Unit/Trailer **Main Screen.**

## 10. COLD TIRE PRESSURE ALERT SETTINGS - TRAILERS

The following instructions will utilize the **Default** High/Low Pressure Alert thresholds. For **Manual** High/Low Pressure Alert thresholds, go to page 13.
Note: When inputting **Cold Tire Pressure** (CTP) with this option, **High Pressure Alert** will be set at 25% above CTP and **Low Pressure Alert** will automatically be set at 10% below CTP.
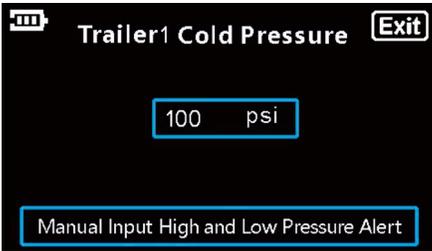To adjust default **Cold Tire Pressure** settings, touch ⏻ to enter into **Pressure Alert Settings.** Touch T1, T2, T3, T4 or T5 to enter **Trailer Cold Pressure** screen.
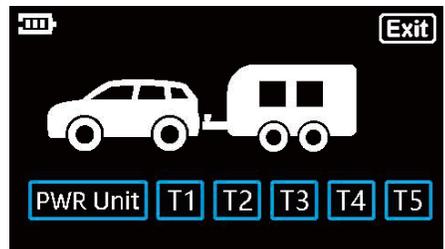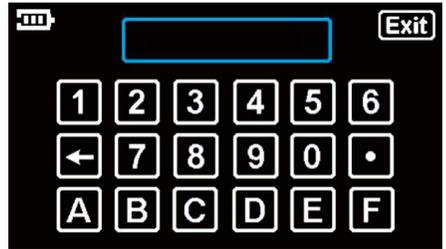
Settings Menu Screen 1

Power Unit or Trailer Selection Screen

Trailer 1 Cold Pressure Screen

Keyboard Input Screen

To set **Trailer Axle** cold tire pressure, touch [100 PSI] to enter the **Keyboard Input Screen**. Enter your preferred Cold Tire Pressure.

Touch [Exit] to exit **Keyboard Input Screen** after **Trailer Axle** cold tire pressure settings are changed. **Trailer Axle Cold Pressure** screen will appear.

Trailer Axle Cold Pressure Screen

Exit and Save or Exit Without Saving

Touch [Exit] again to exit **Trailer Axle Cold Pressure** screen. To save your input, touch **Exit and Save**. To cancel, touch **Exit without Saving**. Selection returns you to the Power Unit/Trailer **Main Screen**.

11. MANUAL HIGH/LOW PRESSURE ALERT SETTINGS

Note: High Pressure Alert defaults are set at 25% above Cold Tire Pressure setting and **Low Pressure Alert** will be set at 10% below Cold Tire Pressure setting.
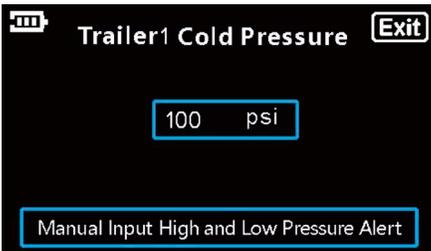To manually adjust **High and Low Pressure Alert** values, touch [⏻] to enter into **Pressure Alert Settings**. Touch [Power Unit] , [T1] , [T2] , [T3] , [T4] or [T5] to enter respective **Cold Pressure** screen. **Example:** Touch [T1] .

Settings Menu Screen 1
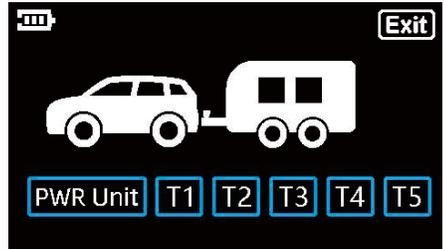
Power Unit or Trailer Selection Screen

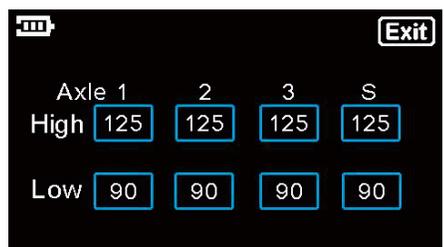

Trailer 1 Cold Pressure Screen (Example)

Manual Input High/Low Pressure Alert Value Screen
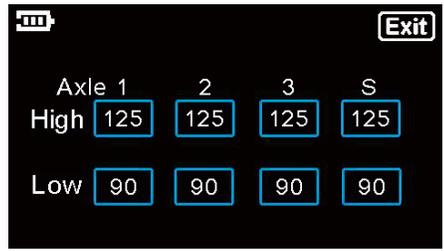
Touch [Manual Input High and Low Pressure Alert] to enter the **Manual Input High/Low Pressure Alert Value** screen. **NOTE**: LOW SETTING **MUST** BE ADJUSTED PRIOR TO HIGH SETTING. To change **Pressure Alert Value**, touch the box that corresponds to the axle you would like to change (**1, 2, 3** or **S**pare).
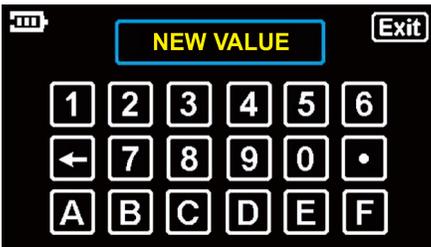
Keyboard Input Screen

Manual Input High/Low Pressure Alert Value Screen

This will bring up the **Keyboard Input Screen**. Enter your preferred **Low Pressure Alert Value**. Touch [Exit] to exit **Keyboard Input Screen** and repeat steps for remaining **Pressure Alert Value** for this axle and then repeat for the remaining axles and spares. Touch [Exit] again to exit **Manual Input High/Low Pressure Alert Value** screen. To save your input, touch **Exit and Save**. To cancel, touch **Exit without Saving**. Selection returns you to the Power Unit/Trailer **Main Screen**.

12. SWAP TIRE LOCATION

Note: Only tires with paired sensors can be swapped. In the **Swap Tire Location** screen currently programmed tires will show as solid green color.

Touch [icon] to enter into **Swap Tire Location** settings.

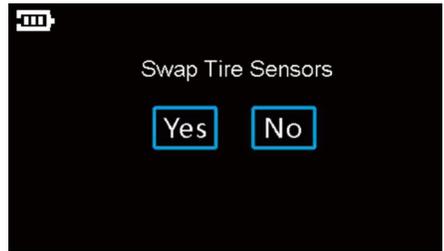Touch [Power Unit] to enter **Power Unit Tire Position** settings.

Settings Menu Screen 1
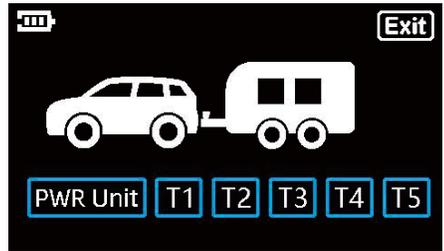
Power Unit or Trailer Selection Screen
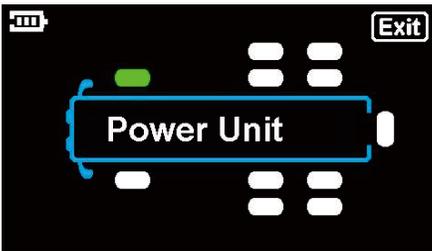
Power Unit Swap Tire Sensors Screen

Swap Tire Sensors Screen

Touch [icon] to select the tire you want to swap (selected tire will flash green). Touch the [icon] icon for the tire you want to swap to (both tires will flash green). **Swap Tire Sensors** screen will appear.

Touch [Yes] to save selected tire swap and exit to **Main Screen.** Touch [No] to cancel selected tire swap and exit to **Main Screen.**

Swap Tire Location for Trailers

Touch [icon] to enter into **Swap Tire Location** settings.

Touch [T1], [T2], [T3], [T4] or [T5] on the **Swap Tire Sensors** screen to swap trailer tire location, and repeat power unit steps above.
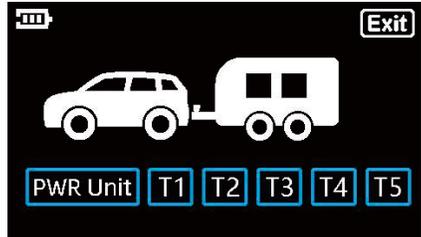
13. AUTOMATIC CODE LEARNING
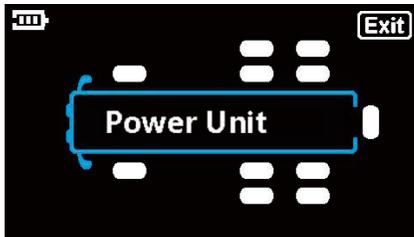
Touch [⊡] to enter into **Automatic Code Learning** settings.

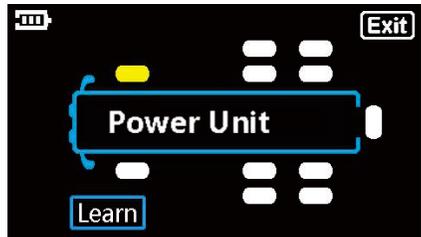Touch [Power Unit] to enter **Sensor Code Learning** settings for power unit.

Settings Menu Screen 1

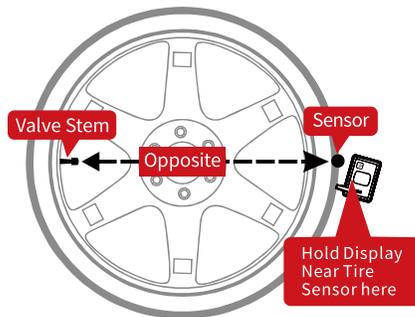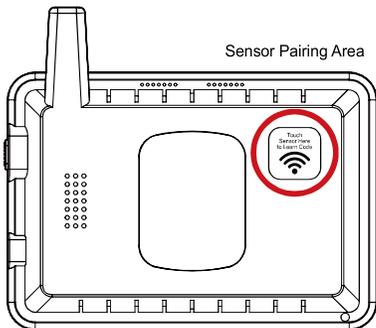**Power Unit or Trailer Selection Screen**

Power Unit Tire Position Screen

Power Unit Tire Position Screen

Touch [   ] to select the tire you want to code to the sensor. Selected tire will flash white and yellow and the [Learn] icon will appear on the screen.

Sensor Pairing Area

Valve Stem   Sensor
Opposite
Hold Display Near Tire Sensor here

Internal Sensor Position is opposite of Valve Stem

Touch [Learn] icon. Icon will change to [Learn]. Touch a sensor to the **Sensor Pairing Area** on back of the display (see image above) to learn sensor ID code.
Note: For internal sensor hold the **Sensor Pairing Area** to the tire, at the sensor location, which is located 180° from the valve stem (see image above).

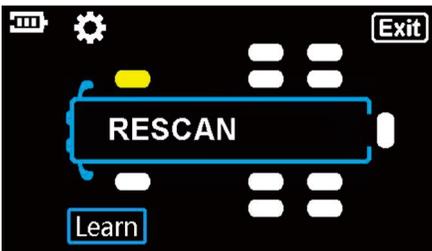## 14. AUTOMATIC CODE LEARNING (cont.)

Sensor Code Capture Screen
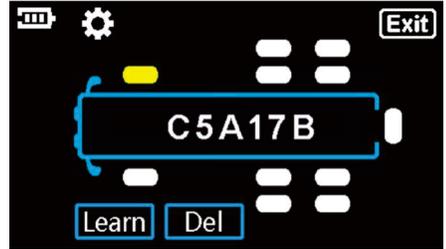
Power Unit Sensor Code Learning Screen

If sensor code learning is successful, sensor ID code (Example: C5A17B) will appear on **Sensor Code Capture** screen with options to **Exit and Save**.
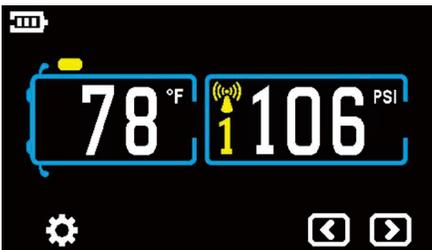
Power Unit Sensor Code Learning Screen

Note: If sensor code learning is unsuccessful, **RESCAN** will appear on **Sensor Code Learning** screen (after ~10 seconds).
Touch Learn icon to attempt to learn sensor code again. Repeat above steps until sensor is coded.

After successful code learning, touch **Exit and Save** to return to sensor code learning screen. The programmed tire position will blink yellow and sensor code will show (Example: C5A17B) in power unit on **Sensor Code Learning** screen.

Power Unit/Trailer **Main Screen** (after 1st sensor learning)

Note: If the Cold Tire Pressure (CTP) has not yet been set, the tire positions will flash red and alerts will sound. Tap the screen to silence, touch main screen settings icon to to get to the main screen and follow **Cold Tire Pressure Alert** settings instructions on pages 11-12.

Repeat for remaining tire positions.

Touch **Exit**   to finish and return to **Main Screen**. Learned code tire positions will blink yellow and will show pressure and temperature readings.

Automatic Code Learning for Trailers

Touch to enter into **Automatic Code Learning** settings.

Touch **T1** , **T2** , **T3** , **T4** or **T5**   to enter **Sensor Code Learning** settings for respective trailers and repeat previous power unit steps.
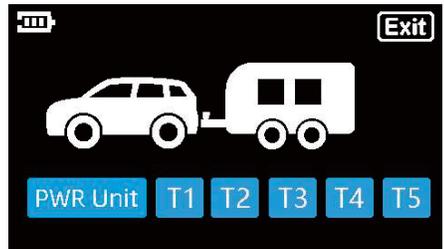
15. CONNECT/DISCONNECT

Note: This example shows Trailer Units. All connected units will show as blue icons with white text.

Touch to enter into **Connect/Disconnect Tire** settings.

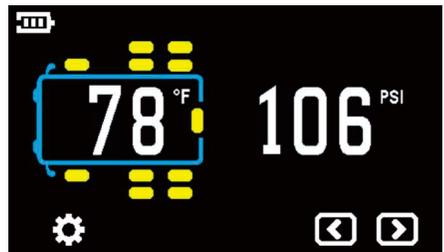Touch **T1** , **T2** , **T3** , **T4** or **T5** on the **Connect/Disconnect Tire** screen.

Settings Menu Screen 1

Power Unit or Trailer Connect/Disconnect Screen
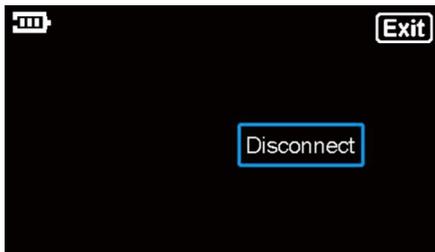

Power Unit/Trailer **Unit Disconnect Screen**

Power Unit/Trailer **Main Screen**

Touch **Disconnect**   to disconnect the trailer selected. then select **Exit and Save**. **Main Screen** will now show the unit disconnected.
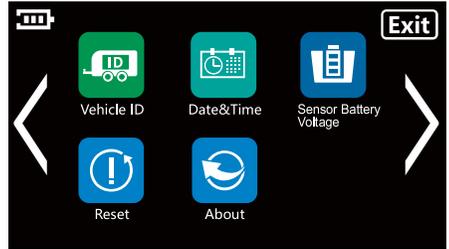
16. CUSTOM VEHICLE ID

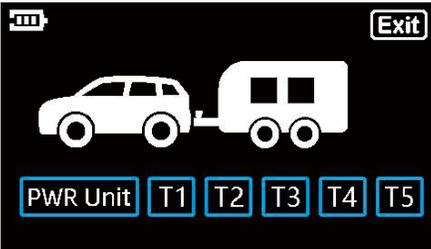**Note:** If Display senses no input for 90 seconds, it will exit to **Main Screen** automatically.

To adjust Default Settings, touch main screen settings icon ⚙ to enter into **Settings Menu Screen 1.** Touch ❭ to switch to **Settings Menu Screen 2.** This will be the first step for the remaining sections.
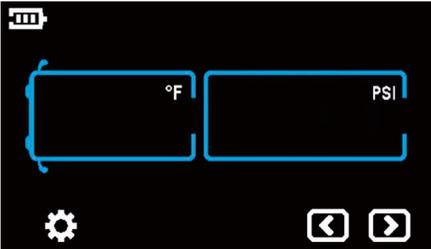
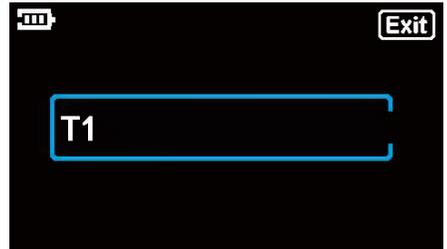Power Unit/Trailer **Main Screen**

Settings Menu Screen 2

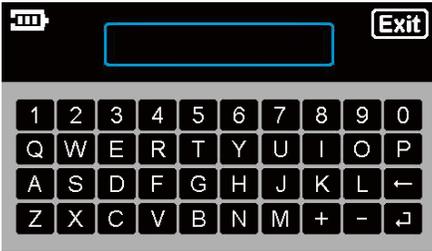Power Unit or Trailer Selection Screen

Trailer 1 Vehicle ID Screen

Touch 🔲 to enter into **Vehicle ID** settings.
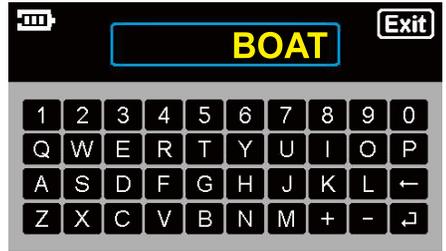**Note:** This example shows Trailer 1.
Touch T1 , T2 , T3 , T4 or T5 to enter **Vehicle ID** settings for respective trailer.

Touch T1⬜⬜⬜ to enter **Full Keyboard Input** screen

17. CUSTOM VEHICLE ID (cont.)

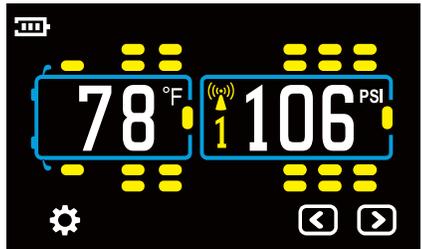**Full Keyboard Input Screen**

Full Keyboard Input Screen

Enter new name for Trailer 1. **Example:** "BOAT".

Touch ⬅ to delete character.

Touch [Exit] or [⏎] to exit **Full Keyboard Input** screen after vehicle ID settings are changed.

Exit and Save or Exit Without Saving Screen

Power Unit/Trailer **Main Screen**

To save your input, touch **Exit and Save**. To cancel, touch **Exit without Saving**.
Selection returns you to the Power Unit/Trailer **Main Screen**.
Custom Vehicle ID's for Remaining Trailers and Power Unit.
Touch 🔳 to enter into **Vehicle ID** settings.

Touch [T2] , [T3] , [T4] , [T5] or [Power Unit] to enter **Vehicle ID** settings for remaining trailers or power unit and repeat previous steps to change Vehicle ID.

18. DATE & TIME SETTINGS

Note: Default Time Zone is set to CST(UTC-06:00).

Settings Menu Screen 1

Power Unit or Trailer Selection Screen

Exit and Save or Exit Without Saving Screen

To change your preferred **Time Zone**, touch [icon] to enter into **Date & Time** settings. Touch the preferred **Time Zone** in the available menu.

Touch [Exit] to exit **Time Zone** screen. To save your input, touch **Exit and Save**. To cancel, touch **Exit without Saving**. Selection returns you to the Power Unit/Trailer **Main Screen**.
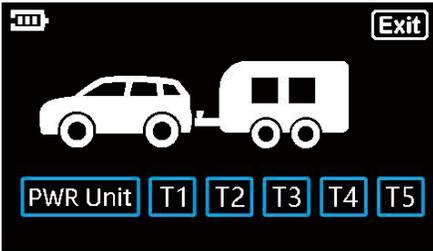
Note: GPS automatically sets Date and Time. No further adjustment is necessary. Please allow up to 5 minutes for the unit to capture satellites and begin to report.

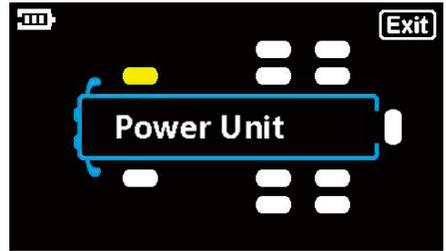**Note:** GPS feature may not be available on certain models.

19. SENSOR BATTERY VOLTAGE

Settings Menu Screen 2
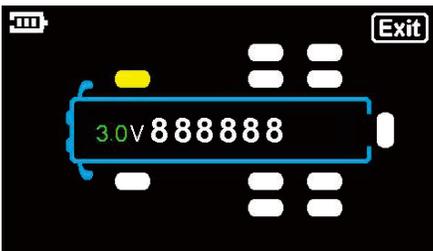

Power Unit or Trailer Selection Screen

Power Unit Tire Position Screen

Touch 📋 to check into **Sensor Battery Voltage**.

Touch T1, T2, T3, T4, T5 or Power Unit to view **Sensor Battery Voltage** readings for respective trailers or power unit.

Touch any ⬜ icon to check the sensor voltage.

Power Unit Tire Position Screen

Sensor Battery Voltage will be shown, along with selected tire position and sensor and ID code.
Touch Exit to return to the Power Unit/Trailer **Main Screen**.

Sensor Battery Voltage Number Key
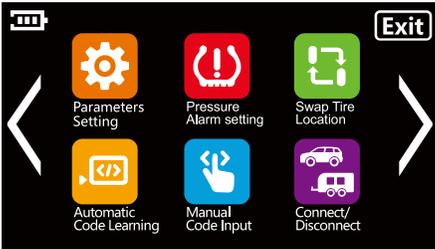A numeric voltage value will be displayed in one of 3 colors:

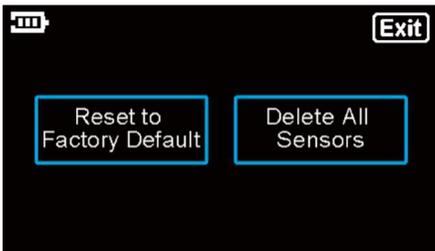|	
🟩	Battery in Good Condition
🟨	Battery is Marginal
🟥	Replace Battery or Internal Sensor

20. RESET

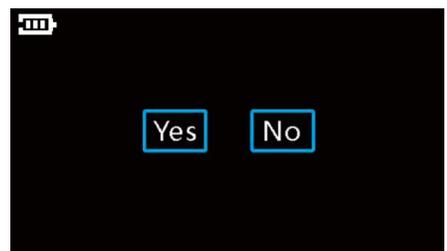**To Reset System to Factory Defaults:**

Settings Menu Screen 1
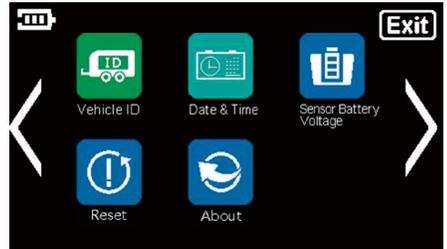
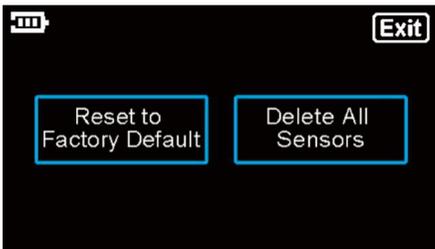Settings Menu Screen 2

Power Unit or Trailer Selection Screen

Yes or No Selection Screen

To reset the system to factory default settings, touch 🔘 to enter into **Reset** screen.
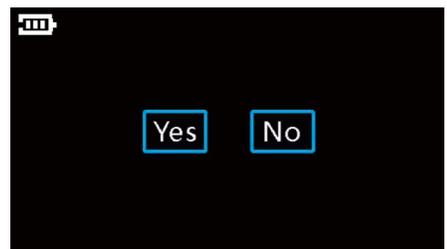
Touch [Reset to Factory Default] to **Reset To Factory Default**. Touch [Yes] to reset to factory default settings. Touch [No] to exit without changes. Both options will return to **Main Screen.**

To Delete All Sensors (and retain any user-modified parameter settings):

Power Unit or Trailer Selection Screen

Yes or No Selection Screen

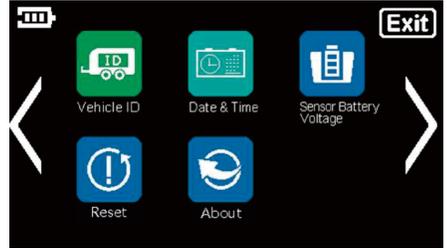To **Delete All Sensors**, touch 🔘 to enter into **Reset** screen.

Touch [Delete All Sensors] to **Delete All Sensors**. Touch [Yes] to delete all programmed sensors.

Touch [No] to exit without changes. Both options will return to **Main Screen.**
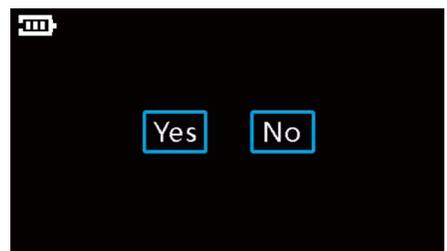
21. ABOUT

Settings Menu Screen 1

Settings Menu Screen 2

Power Unit or Trailer Selection Screen

Yes or No Selection Screen

To review system information, touch 🔄 to enter into **About** screen.
About menu will display current Hardware and Software Version Information.
Touch 【Exit】 to return to the Power Unit/Trailer **Main Screen**.

22. DISPLAY SPECIFICATIONS

Temperature Operating Range	-4°F - 176°F / -20°C - 80°C -22°F -
Storage Temperature Range	185°F / -30°C - 85°C
Display Input Voltage	5 to 24V DC
Frequency	433.92 MHz
Size	5.28"(L) x 4.59"(W) x 0.83"(D) 134(L) x 116.5(W) x 21(D)mm
Display Weight	8.35 oz. / 236.5 grams