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INSTALLATION GUIDE – 203 DISPLAY





(!) Vehicle Types: Straight Trucks, Tractor/Trailers, RVs and Buses

Max Sensing Pressure	Standard Cold Inflation Pressure	Low Pressure Warning Limit	High Pressure Warning Limit
188 PSI	72 PSI – 145 PSI	20% Below Set Pressure	30% Above Set Pressure

Quick Use Notice

Please Read Before Installation

Default values have been assigned to each axle for the following:

- Standard Cold Inflation Pressure (SCIP) found on tire sidewall
- Baseline Pressure set by user according to SCIP
- Low Pressure Warning -20% deviation from baseline pressure
- High Pressure Warning +30% deviation from baseline pressure
- High Temperature Warning set to 80°C (176°F)
- Leakage Warning air loss is greater than 4.8PSI in 16 seconds

Please read this Installation Guide carefully before using this product.

TPMS-203 is designed to monitor tire pressure and temperature. It is not designed to provide warning of sudden critical tire damage and blowout caused by external effects. The driver should react promptly to any warning and correct the problem.

Tires can fail for other reasons besides low pressure or overloading. Always be on the alert for any other tire problems as indicated by unusual noises, vibrations, uneven tread wear, or bulges on the tire! If any of these symptoms occur, have the tires checked immediately by a professional staff!



Table of Contents

Part 1: System Installation

1.1	Straight Truck/Tractor Installation	4
1.2	Mounting Integrated Display	4
1.3	Installing ID Modules	5
1.4	Installing TPMS Sensors	6
1.5	Installing Antennas	7
1.6	Trailer Installation	7
1.7	Installing Tractor ID Box	8
1.8	Installing Gen II Trailer Box	8
1.9	Programming Gen II Trailer Box	8
1.9.1	Installing Antennas	9

Part 2: System Programming

2.1	Turning Integrated Display ON/OFF	. 10
2.2	Programming Tire Pressure Baseline	. 10
2.3	Programming Date & Time	. 11

Part 3: Reading Integrated Display

3.1	Reading the Display	12
3.2	Switching between Pressure and Temperature	13
3.3	Switch between Axles	13

PART 1 : System Installation

1.1 Straight Truck/Tractor Installation



1.2 Mounting Integrated Display

- 1. Mount the integrated display on the windshield using supplied pedestal.
- 2. Please insure the location is clean and does not impair the driver's view of the road:
- 3. Attach pedestal to windshield.
- 4. Install sensor ID Modules to the back of the display (see section 1.3)
- 5. Return back plate and attach to pedestal
- 6. Connect to 12v power source:
 - a. Lighter socket via supplied lighter/power cable.
 - b. Hardwire Red positive, black negative. Key-on/Key-off if possible.
- 7. Attach antennas (see section 1.5)

PART 1 : System Installation

1.3 Installing ID Modules

Prior to installing wireless sensor on the rim, remove ID Module (taped to sensor) and insert into back of the display (see below).



Tractor (10-Wheel)

- 1A Left Steer
- 1D Right Steer
- **2A** Left Front Outside Drive
- 2B Left Front Inside Drive
- 2C Right Front Inside Drive
- **2D** Right Front Outside Drive
- 3A Left Rear Outside Drive
- 3B Left Rear Inside Drive
- **3C** Right Rear Inside Drive
- **3D** Right Rear Outside Drive

1.4 Installing TPMS Sensors

Once the ID module has been removed, attach sensor to corresponding rim. Suggested mounting location is near the air valve. Wipe the area clean with a cloth, remove the 3M adhesive protector and place on rim. Run steel band through sensor bracket and tighten (max 2ft/lb). Please note, sensor must be placed on the solid, NOT serrated portion of the band.



Suggested Tire/ID Module positioning:

Tractor (10-Wheel)



6

PART 1 : System Installation

1.5 Installing Antennas

- 1. Locate a place between the rear drive wheels. Attach the 8m antenna pointing downwards. Be sure not to locate near a heat source or where a moving part will be in contact with the antenna.
- 2. Run the cable along the left (driver) side of the vehicle to the front under the driver seat. Using wire ties, attach the cable to vehicle wiring harness (normally runs along the frame). If extra cable, loop up and wire tie out of the way making sure it does not interfere with any other item on the truck.

3. DO NOT OVER-TIGHTEN THE CABLES TO THE SPLITTER. HAND-TIGHTEN ONLY.

- 4. From the cab, run the 3m extension cable from the Integrated Display down either through the firewall or along the side post and through the floor board ending up under the driver seat.
- 5. Connect the female end of the Splitter to the 3m extension cable.
- 6. Locate a place between the steer wheels and attach the 3m cable antenna pointing downwards. Be sure not to locate near a heat source or where a moving part will be in contact with the antenna.
- Run the antenna cable along the left (driver) side of the vehicle and connect to one of the male ends of the Splitter.
- 8. DO NOT OVER-TIGHTEN THE CABLES TO THE SPLITTER. HAND-TIGHTEN ONLY. Wrap with electrical tape.



1.7 Installing Tractor ID Box

In order for the Trailer to communicate with a Tractor, an ID box is required. Attach the ID Box (if supplied) on the back of the Tractor (externally). *Please note, direct line of sight is needed between Tractor and Trailer ID boxes with the read range between 1 and 1.6 meters.*

1.8 Installing Gen II Trailer Box

- 1. Attach the Trailer Box to the front of the trailer.
- Connect the harness to the 12-pin Deutsch connector on the Gen II Trailer Box and wire to power source. (Red-positive, Black-negative)
- 3. Attach antennas (see section 1.9.1)

1.9 Programming Gen II Trailer Box

For sensor programming please refer to the instructions: "How to Program Valor Gen II Trailer Box" provided by your Valor Sales Representative.

Suggested Tire Locations for Programming:

Trailer (2 axle, 8-Wheel)

- 1A Left Outside
- 1B Left Inside
- 1C Right Inside
- 1D Right Outside
- **2A** Left Outside
- 2B Left Inside
- 2C Right Inside
- 2D Right Outside

1.9.1 Installing Antennas

- 1. Locate a place between the trailer wheels. Attach the 12m antenna pointing downwards. Be sure not to locate near where a moving part will be in contact with the antenna.
- 2. Run the cable from the rear of the trailer to the front and connect to the antenna connector on the Tractor ID Box. Using wire ties, attach the cable to the vehicle's wiring harness (normally runs along the frame).
- 3. If there is any extra cable, loop up and wire tie out of the way making sure it does not interfere with any other item on the truck

PART 2 : System Programming

2.1 Turning Integrated Display On/Off

The ON/OFF switch is located on the back of the Display.



2.2 Programming Tire Pressure Baseline

Once the sensors have been installed in the tires and ID Modules inserted in the back of the Display, please insure that all tires are at recommended/optimum pressure.

*Note: Tire should be cool before setting pressure baseline.

Press and hold the "Set Key" on the back of the display for 8-10 seconds, the display will beep and all pressure readings will go to 00.0. The next pressure recorded by the sensors will be the set baseline.

To confirm the baseline is set, press the set key once when the axle in question is showing on the display. Repeat for each axle.

PART 2 : System Programming

2.3 Programming Time & Date

Display facing forward, locate the toggle buttons on the right side. Press and hold the top toggle until the display beeps and displays -1- 015.

The Time and Date are listed by Year, Month, Date, Day of Week, Hour, Minutes. To scroll from Year to Month etc., press the top toggle. To change a setting within the event, press the bottom toggle.

Once the Time and Date are set, press and hold the top toggle until display returns to monitoring mode.

*Note: The Integrated Display has an internal time and date function that stores data which can be retrieved using Valor's SmarTool (for truck fleets only).

PART 3 : Reading The Display

3.1 Reading the Integrated Display

The unit displays tire pressure and temperature values of the tires being monitored.

On the right side of the display is a list of numbers indicating axle position. Up to 6 axles are available on the 203 Display. Tire pressure or temperature values are displayed left to right according to tire location.

Pressure and temperature values do not appear on screen at the same time. If the PSI indicator is illuminated, the unit displays tire pressure, if the °F indicator light is illuminated, the unit displays tire temperature values.



PART 3 : Reading The Display

3.2 Switching between Pressure and Temperature

To switch between pressure and temperature, press the bottom toggle located on the right side of the display (see graphic below). The PSI indicator light and the °F indicator light will illuminate depending on what is selected.

3.3 Switching between Axles

To switch axles, press the top toggle located on the right side of the display (see graphic below).

