

## INSTALLATION GUIDE – CANbus System with Display



### Vehicle Types: Straight Trucks and Tractor/Trailers

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.

The CANbus/Displa 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 The Display .....	4
1.3	Installing CANbus Unit .....	5
1.4	Installing Antennas .....	6
1.5	Installing TPMS Sensors .....	6
1.6	Trailer Installation .....	7
1.7	Installing Tractor ID Box .....	7
1.8	Installing Gen II Trailer Box .....	8
1.9	Installing Antennas .....	8

### Part 2: System Programming

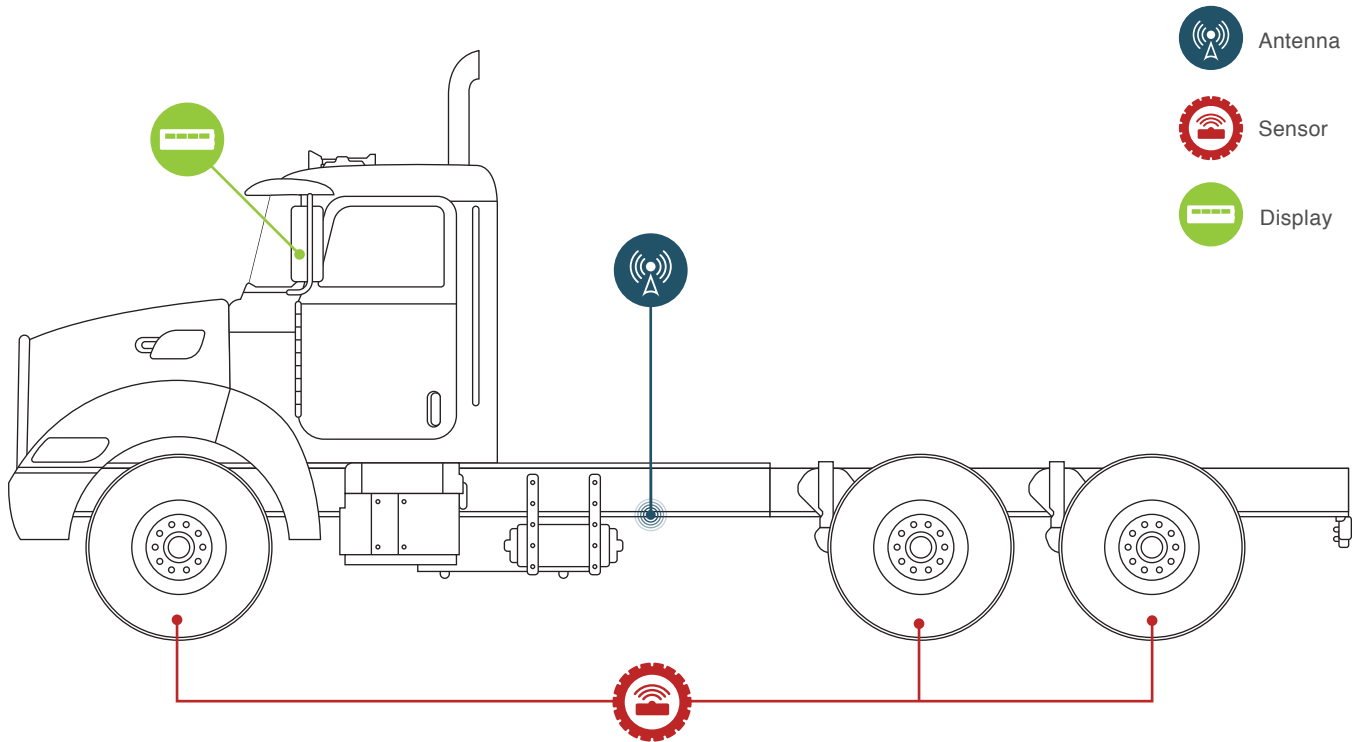
2.1	Programming Gen II Trailer Box .....	9
-----	--------------------------------------	---

### Part 3: Reading Integrated Display

3.1	Reading The Display .....	10
-----	---------------------------	----

## PART 1 : System Installation

### 1.1 Straight Truck/Tractor Installation



### 1.2 Mounting The Display

Find location in dash, remove factory knock-out, or drill 2.15" hole and mount the display unit, or use standard after market bracket.

## PART 1 : System Installation

### 1.3 Installing the CANbus unit

1. Install the CANbus behind the engine cowl.
2. Connect the supplied harness to the 6-pin connector on the Valor CANbus:

#### Standalone

- ▶ Connect WRN-G harness to the Valor CANbus
- ▶ Connect power to the WRN-G harness

#### Geotab

- ▶ Plug IOX-CAN into GO7 device
- ▶ Connect Valor GO harness to IOX-CAN (white end into Valor)

#### Geotab + cab display

- ▶ Plug WRN-G harness into Valor CANbus
- ▶ Plug Valor Go harness into WRN-G harness

#### Peoplenet

- ▶ Connect DFL harness to vehicle CAN/power
- ▶ Plug other end of DFL harness into Valor CANbus

#### Peoplenet + cab display

- ▶ Connect DFL harness to vehicle CAN/power
- ▶ Plug WRN-G harness into Valor CANbus
- ▶ Plug other end of DFL cable into WRN-G harness

3. Find a power source at fuse panel. Connect the power leads to the power source, and key on power.
4. Connect the 3M Extension to the antenna pole on the CANbus.

## PART 1 : System Installation

### 1.4 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 CANbus down either through the firewall or along the side post and through the floor board ending up under the driver seat.
5. Connect the single 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.
7. Run the antenna cable along the left (driver) side of the vehicle and connect to one of the two female ends of the Splitter.
8. **DO NOT OVER-TIGHTEN THE CABLES TO THE SPLITTER. HAND-TIGHTEN ONLY.** Wrap with electrical tape.

### 1.5 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.

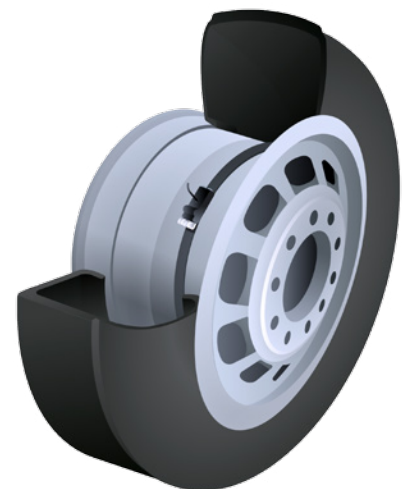
#### Suggested Tire/Sensor Positioning:

#### Straight Truck (6-Wheel)

- 1A – Left Steer
- 1D – Right Steer
- 2A – Left Outside Drive
- 2B – Left Inside Drive
- 2C – Right Inside Drive
- 2D – Right Outside Drive

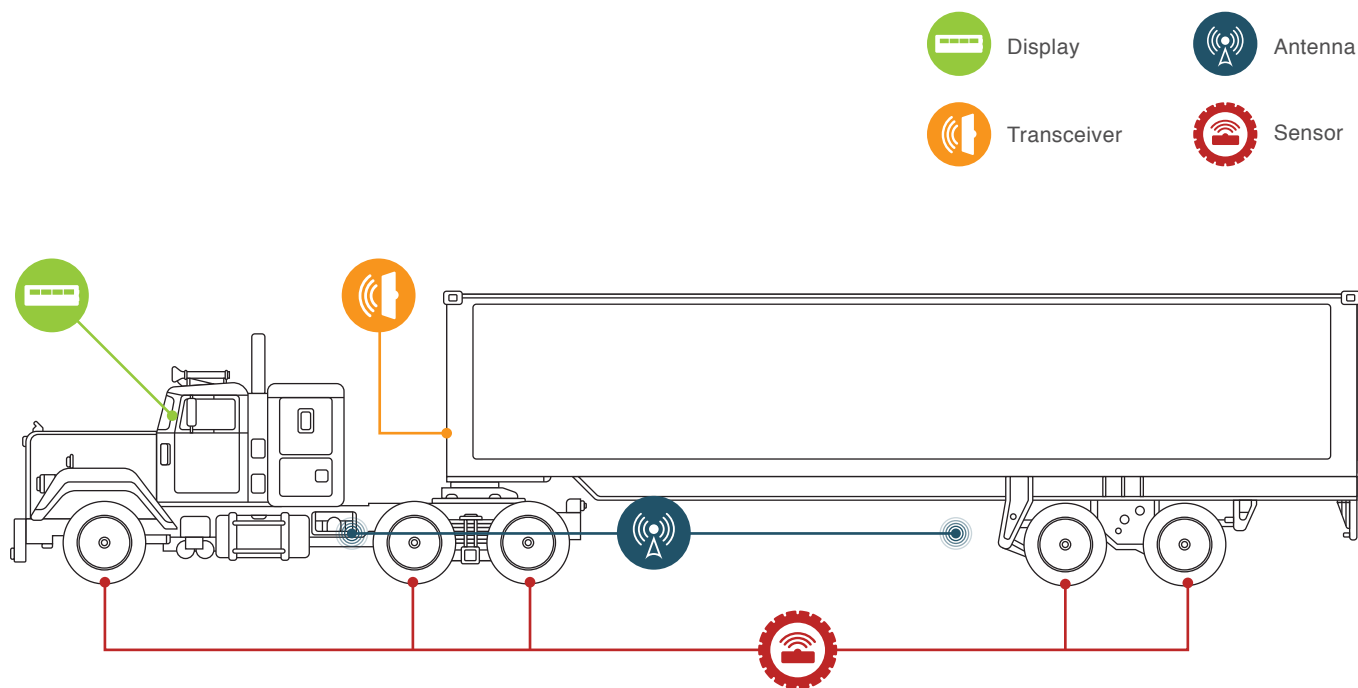
#### Straight Truck/Tractor (10-Wheel)

- 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



## PART 1 : System Installation

### 1.6 Trailer Installation



### 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.

## PART 1 : System Installation

### 1.8 Installing Gen II Trailer Box

1. Attach the Trailer Box to the front of the trailer.
  2. 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)
- 

### 1.9 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 connection 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 Programming Gen II Trailer Box

For sensor programming please refer to the instructions: “*TPMS Setup Guide*” provided by your Valor Sales Representative.

#### Suggested Tire/Sensor Positioning:

##### 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

**PART 3 : Reading The Display**

**3.1 Reading The Display**

Once the system is turned on, press the left button and hold until the display starts to toggle from tire to tire and axle to axle. For more detailed instructions please refer to the instructions “*Valor Ametek Gauge*” provided by your Valor Sales Representative.

