PressurePro
THE BEST IN TPMS

PressurePro User Manual

TPMS+

PressurePro
Tyre Pressure Monitoring

TYRESAFE
AUSTRALIA

Product Description
Pre-Installation
Setup
FAQ
Tips
Data logging
Contact details

PRESSUREPRO DESCRIPTION

PressurePro is a wireless electronic Tyre Pressure Monitoring System (TPMS) that is designed to display current tyre pressures on demand, whether moving or stationary. PressurePro systems, which can be used on all pneumatic tyres, consists of two basic components: Tyre Sensors that screw onto the valve stems of the tyres, and the Pulse monitor. The Sensors read tyre pressures every 7 seconds (12,343 times a day), and transmit a coded RF signal to the Pulse monitor every 5 minutes assuring timely information. If an alarm level is reached the PressurePro Sensors will override the normal update and alert the monitor immediately (see "Alerts" section). During an alert, the tyre location light flashes on the monitor, the current pressure reading for that tyre flashes, and an audible alert sounds.

PressurePro systems provides users with the market's most comprehensive alert schedule, with two low pressure alerts, a high pressure alert, a high temperature alert, a fast leak alert, and a cross axle alert, all user customizable.

PressurePro is a monitoring system and will not prevent tyres from losing pressure or failing but it can provide early notice of potential problems and alert to low tyre pressure situations. Because of the quirks of RF Transmissions and interference, no guarantee of signal reception can be made. PressurePro is not meant to function as a pressure gauge or low pressure indicator.

TYRESAFE
AUSTRALIA

PRE-INSTALLATION INSTRUCTIONS

When Sensors are installed, they recognize the tyre's current pressure as their BASELINE, therefore the tyre pressure at the time of installation is important. It is recommended to install Sensors with all tyres inflated to the manufacturer's recommended pressures while the tyres are "cool". Installation in the morning before vehicle movement is optimal, but not necessary. Installation can be done when tyres are "warm", though doing so, without manually resetting the reference pressures may cause false alerts. If installation is done while tyres are "warm", simply reset the reference pressures: MENU -> VEHICLE SETTINGS -> REF PRESSURES -> AXLE REF PRESSURE or VEH REF PRESSURE -> Select Axle or Vehicle -> Adjust reference pressure using the UP (^) or DOWN (v) arrows -> Use the SEL button to save the new reference pressure

*NOTE: AXLE allows the user the ability to control reference pressures by axle, VEH allows the user the ability to control the reference pressure based on the virtual unit or vehicle

Tyres and valve stems should be carefully inspected prior to installation of the system to ensure that they are in good condition. Defective valve stems must be replaced. At times, it may be necessary to clean the threads of the valve stem with a wire brush or tapping tool before installing a Sensor.

The valve core (the small valve inside the valve stem) must depress fully and release air for the Sensor to activate. The Sensor might not activate properly if the valve core pin is not flush with the end of the valve stem, allowing a good release of air to interface with the Sensor. It is not unusual to find valve cores installed too deep, which will cause the Sensor to not activate properly. The valve core should be centered. Check valve core by pressing the end of a thumbnail directly into the valve core to make sure it releases a "burst" of air.

NOTE - When installing Sensors on vehicles with aluminum valve stems: New autos may include factory installed TPMS Systems. New vehicles with TPMS utilize aluminum valve stems while PressurePro Sensors are made with brass threads. Brass will bond to aluminum due to the galvanic action between the different metals. When installing PressurePro Sensors to aluminum stems, carefully apply dielectric grease, an anti-seize compound, to the aluminum stem being careful to apply only to the threaded area of the valve stem. **IMPORTANT: For vehicles with aluminum valve stems remove Sensors every 4 weeks to ensure there is no fusing. If storing the vehicle for extended periods, remove the Sensors from the aluminum stems.**

INITIAL SYSTEM SET-UP & CONFIGURATION

First things first! Upon initial powering of your PressurePro Monitor, please take a minute to configure your unit's time and date and vehicle configuration, and – if you want – set your custom alert settings.

GIVE IT POWER!

- Find your PressurePro power cord.
- Connect your the 6-Pin Molex connecter to your Monitor.
- Connect opposite end to a 12V power source (via an accessory lighter or hard-wiring).

SET TIME AND DATE:

- Your Monitor will automatically take you to a screen prompting you to set your time and date and will walk you through the set-up. *Use arrow keys to select date and time settings.*
- When complete, press MENU to leave 'Display' screen and return to the Vehicle Settings Menu.

CONFIGURE VEHICLES (if monitoring more than 1 unit):

- From the main menu, use UP arrow to scroll to "Vehicle Settings" and push SEL.
- If you have a tow vehicle, or are monitoring multiple vehicles, select "+/- Vehicles", and use arrows to scroll through and activate the desired number of vehicles. *When finished, press MENU to return to the Vehicle Settings Menu.*

SELECT VEHICLE ID (NAME TSA 001):

- From Vehicle Settings Menu, Select "Vehicle ID" and select the vehicle you want to name.
- Follow the Monitor's prompts (using the arrows to name vehicle). Repeat as needed for all vehicles. *When finished, press MENU to return to Vehicle Settings menu.*

SET YOUR ALERTS:

- From Vehicle Settings Menu, Select "Alert Settings" and select the alert option you'd like to customize and follow the Monitor's prompts to change alert settings. *When finished, press MENU until returned to the main Menu.*

MONITOR BUTTON FUNCTIONS

POWER

- Power Monitor
- Returns Monitor to normal operation

ALERT

- Quick access prioritization of alerts
- Alert/Warning Indicator Reminder Light

MENU

- Power Monitor
- Returns Monitor to normal operation

SELECT

- Selects (and moves forward) Monitor functionality during programing and use.

UP/DOWN ARROWS

- Navigates through screens and positions

PROGRAMMING SENSORS

DO NOT PUT SENSORS ON TYRES. (You'd be amazed at the number of calls we receive which prompted this note.) Simply follow the simple steps below and you'll be set-up in minutes!

1. From the main Menu, scroll to and select "Sensors".

2. Select "Add Sensor".

3. If monitoring more than one unit, scroll to desired vehicle and select.

4. Scroll through and select the desired vehicle layout (or create a custom layout) following Monitor prompts.

When layout is selected, your Monitor will automatically populate your configuration and default to the front, left tyre position for installation. To choose another position, use your arrows to scroll to desired location then press SEL.)

5. Press SEL to install a Sensor to noted location. *Your Monitor will begin searching for a Sensor reading.*

6. Attach a Sensor to the noted location's valve stem, and wait for a reading to populate (this can take up to 60 seconds).

7. When a pressure populates, press SEL to lock in the Sensor and move to next location.

Repeat steps 5-7 needed for all desired locations. *When finished, press the power button twice to place Monitor in operation mode.*

FREQUENTLY ASKED QUESTIONS

WHAT SHOULD BE DONE IF A LOW PRESSURE ALERT IS SOUNDED? Immediately pull over and check low tyre. Be sure to check valve stem for damage. If no visual leaks are spotted, perform a soap bubble test on the area to locate the leak.

CAN I STORE MY VEHICLE WITH THE MONITOR ON? The Monitor draws 25mA to 100mA of power. It is possible the monitor could drain the vehicle's battery over an extended period of time. If storing vehicle for more than one month it is recommended that you unplug monitor and remove Sensors (see "Tips" section – "Vehicle Storage").

DOES MONITOR NEED TO BE POWERED BY LIGHTER ACCESSORY? No. Hardwiring is a preferred method of powering as it reduces back feed interference. Connect the red wire to a 12 or 24-volt DC positive power source (direct wire to the battery is not required). The black wire should be connected to a ground or chassis. WHEN DIRECT WIRING, IT IS IMPORTANT TO INSTALL A 2 AMP IN-LINE, FAST BLOW FUSE WHICH PROTECTS THE MONITOR FROM VOLTAGE SPIKES. MONITORS DAMAGED DUE TO HIGH VOLTAGE FROM AN UNFUSED LINE ARE NOT COVERED BY WARRANTY.

CAN MONITOR BE USED INDEPENDENTLY ON FRONT OR BACK VEHICLE?
Yes – MENU -> VEHICLE SETTINGS -> +/- VEHICLES -> Scroll to desired Vehicles to turn "ON"/"OFF" (Using the "SEL" button). Note: Vehicle Layout settings, programmed sensors, reference pressures are saved when a vehicle is turned "OFF"

WHAT HAPPENS WHEN I REMOVE A SENSOR TO INFLATE A TIRE? Monitor will display "00" reading. After 15 minutes, the Monitor displays 3 dashes (- - -).

WHAT IS THE "REMINDER" ALERT? After an alert has been acknowledged with a button press, the amber TPMS Alert/Warning Quick Indicator Light will remain solid as a reminder of the alarm/warning condition.

HOW DO I DELETE SENSORS? Menu -> Sensors -> Delete Sensors -> Scroll to desired vehicle A-E (if applicable) -> Scroll to desired tyre location -> Confirm deletion

CAN I USE A SEALANT OR EQUALIZER POWDER IN THE TYRE WITH PRESSUREPRO? If using a sealant or powder, PressurePro recommends the use of a filtered valve stem (or filtered core) to reduce the chance of the Sensor becoming clogged.

TYRE PRESSURES INCREASE WHILE DRIVING - DO I NEED TO DO ANYTHING? No. While driving, it is normal for tyres to increase pressure and temperature. Ideally for automotive use an operating range of 10 – 15% over cold is normal.

DO I NEED TO REBALANCE MY TYRES WHEN USING A SENSOR? The Sensors weigh 17 grams, on large tyres (RV/Truck) this seldom necessitates a tyre be balanced. Smaller tyres may require a rebalancing. It is recommended though not absolutely necessary.

WHEN DO MY SENSORS TRANSMIT?

1. Within 60 seconds of screwing Sensor onto the valve stem.
2. Every 5 minutes while updating, under normal conditions.
3. At a 12.5% & again at 25% drop from baseline pressure.
4. When a Sensor is removed from its valve stem.
5. When an over pressure event is logged

IF I UNPLUG OR LOSE POWER, MUST I REPROGRAM MONITOR? No. Settings are always retained unless physically deleted. Monitor displays 3 dashes (- - -) until Sensors send a new updated reading within the normal 5 minute reporting period.

DURING INSTALLATION, NO SIGNAL WAS RECEIVED FROM THE SENSOR. Higher radio frequency (RF) transmissions propagate mostly via straight lines and along line-of-sight pathways. PressurePro Sensors are required to accomplish a daunting task, i.e. transmit from a vehicle's tyres to the Monitor. If a Sensor fails to give a pressure reading, slightly move the Monitor, remove the sensor for 20 seconds, and reattach sensor.

AFTER INSTALLATION, PRESSURE READINGS DROP ON DISPLAY – ACTUAL TYRE PRESSURE REMAINS CORRECT. The probable cause is poor interaction between the Sensor and valve core. Unscrew the Sensor and again, hand-tighten the Sensor. (Be sure the Sensor and valve stem are not cross-threaded.) If condition persists, contact your Distributor/Dealer.

POWER CORD & FUSE / WHY DOESN'T MY MONITOR TURN ON? If your Monitor does not power, make sure the cord is properly connected. Check the fuse located in the cigarette lighter end of the cord by unscrewing the silver ring (at the silver tip) of the plug. Remove the bolt centered in the cigarette lighter end. Replace if necessary with a 2 amp in-line, fast blow fuse. IF DIRECT WIRING, IT IS IMPORTANT TO INSTALL A 2 AMP IN-LINE, FAST BLOW FUSE WHICH PROTECTS THE MONITOR FROM VOLTAGE SPIKES. MONITORS DAMAGED DUE TO HIGH VOLTAGE FROM A NON-FUSED LINE ARE NOT COVERED UNDER THE PRESSUREPRO WARRANTY.

HOW DO I CHANGE BETWEEN MEASUREMENT UNITS? The PressurePro Monitor can display pressure and temperature values in imperial or metric units. The observation of incorrect values for all locations can sometimes be the first indication that the Monitor has been placed into an alternate unit of measurement. The TPMS+ Monitor shows the measurement unit to the right of all readings. MENU -> DISPLAY -> MEASUREMENT UNITS -> PRESSURE or TEMPERATURE -> Select desired unit of measurement

WHAT SHOULD I DO IF A SENSOR IS LOST OR DAMAGED? Contact your Dealer or Distributor to order a new Sensor.

WHAT HAPPENS DURING A BLOWOUT? During a blowout (or situation with complete loss of pressure) the Monitor will signal you of a 25% loss in pressure and read "00". There may be instances, such as in a catastrophic blowout, when a Sensor or stem is blown off the tyre, the vehicle moves out of signal range and no signal (alert) is received.

TIPS

VEHICLE STORAGE: If storing your vehicle for extended periods, remove the Sensors. Mark each Sensor's location so it can be replaced on the same tyre location from where it was removed (eliminating the need for reprogramming), or use a sectional storage device (similar to a tackle box divider system). When putting the system back on, power up Monitor first, next screw Sensors onto their original wheel locations. Pressure readings will display on Monitor (can take up to 1 minute for new readings to report). PressurePro system is now active.

CAUTIONS: (1) Know the general condition of tyres before moving the vehicle. Running on deflated tyres can ruin a tyre. (2) The 17gm Sensor, on a typical RV or large truck, *normally* will not require the tyre be rebalanced. Smaller tyres may require rebalancing. (3) It is important to make sure valve stems are in good condition.

REMOTE ANTENNA FOR UNIQUE APPLICATIONS: Due to the unique features of RF signals and the construction and interference from electronics on some vehicles, an Optional Antenna Kit or Echo Repeater may be needed. Contact your Dealer/Distributor.

RESETTING BASELINE PRESSURE: MENU -> VEHICLE SETTINGS -> REF PRESSURES -> AXLE REF PRESSURE or VEH REF PRESSURE -> Select Axle or Vehicle -> Adjust reference pressure using the UP (^) or DOWN (v) arrows -> Use the SEL button to save the new reference pressure

*NOTE: AXLE allows the user the ability to control reference pressures by axle, VEH allows the user the ability to control the reference pressure based on the virtual unit or vehicle

TYRESAFE
AUSTRALIA

DATA LOGGING CAPABILITIES

PressurePro Monitors come standard with data logging capabilities. If your Monitor is powered, it is saving data sent from your Sensors. The data logging capabilities allow drivers to view a complete, time-stamped history of the performance of their tyres when manually downloaded. PressurePro's TPMS+ Monitor allows transfer of the complete data log by way of a micro SD. Data logs will export in .xml format, and works with many programs. PressurePro suggests MsExcel.

Export Instructions: MENU -> VEHICLE SETTINGS -> Logging (Scroll DOWN (v) for more options) -> Logging -> EXPORT LOG

Features and benefits of the data logging function

- Time stamped data
- Set logging interval from 1 to 99 minutes
- Can log up to 45 days of data for most configurations and logging intervals
- Displays data for each tyre /sensor separately
- Summary report to view all system alerts during current logging period
- Data provided per each logging event
    1. Sensor SET of Reference pressure (which alerts are based upon)
    2. Pressure for each tyre
    3. Tyre temperature
    4. Signal strength from each position
    5. All alerts

What you can infer from the data

1. When vehicle starts moving.
2. When vehicle comes to stop for long periods of time (>15 minutes).
3. Dangerous operating conditions. Temperature is displayed at all times, specifically when the tyre temperature has reached the danger zone of 100°C (>200°F). Tyre rubber compounds begin to break down at these temperatures.
4. If proper cold pressures are being maintained.
5. When sensors are removed from tyre and for how long.
6. When a tyre began to lose air, when it alarmed and how long it ran in an alert condition.
7. When data logger was turned off. (Optionally Password Controlled)
8. Validation of driver statements.

SPECIFICATIONS

SENSOR

Sensor Transmit Range	Approx. 300 feet (Line-of-Sight) +
Operating Frequency	433.92 MHz FM
Operating Temperature Range	-40°C / -40F to +150°C / 302F
Sensor Weight	.66 oz. (17 grams)
Sensor Dimensions	1.01" H x 1.11" Dia.
Sensor Batteries	Internal, sealed unit
Sensor Pressure Range	8 to 299 PSI/55 to 1999 kPa/1 to 20.3 BAR
Sensor Low Voltage Shutdown	2.2 Volts
Accuracy	+/- 3% range up to 120 PSI +/- 5% from 120 PSI up

MONITOR

Monitor Power Requirements	12 or 24 VDC; draws 50 mA in standby.
Monitor Dimensions	4.5” W x 3.0” H x 1.0” D
Monitor Tyre Positions	1 to 80 wheel positions
Pressure Alert Levels/Options	Alerts are completely customizable. For convenience, your Monitor comes factory set at the following levels. i. Low Pressure = 12.5% *and* 25% loss ii. High Pressure = 24% increase (user configurable) iii. Cross Axle Alert = 10% variation (user configurable) iv. Fast Leak Alert = OFF (user configurable)
Temp. Alert Levels/Options	200°F (User Configurable)
Built in Advanced Capabilities	RS232, J1939 & USB data feeds Data logging and download

US Letter Patent # 6,453,737 (Other Patents Pending)

PressurePro systems comply with Part 15, Class B of the FCC Rules.

Products using RF signals are subject to interference causing a loss of signal. Reception depends on the environment and conditions present at the time of use. PressurePro is a device meant for displaying tyre pressures and has been designed to be as reliable as possible with the use of RF transmissions. There is no guarantee of signal reception. This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. PressurePro is a device meant for displaying tyre pressures.

LIMITED WARRANTY

ONE YEAR LIMITED WARRANTY**:** Subject to the limitations and exclusions set forth in this Limited

Warranty, PressurePro is warranted by Advantage PressurePro, LLC (hereinafter “APP”) against defects in material or workmanship that result in a product failure during the one-year period following the date of purchase. This Limited Warranty applies only to claims made by the original end user (hereinafter “you”) and cannot be assigned, transferred or conveyed to any subsequent users.

EXCLUSIONS FROM COVERAGE: This Warranty does not apply to any claims arising from misuse, abuse, unauthorized repair or alteration, circumstances where PressurePro is improperly installed or improperly wired contrary to PressurePro product instructions; or damage or defect attributable to fire or other casualty, including, without limitation, acts of God or exposure to abrasive or corrosive materials or pollutants, or attributable to collision or other accidents involving vehicles upon which the PressurePro is installed. Removal or alteration of labels voids product Warranty. Only PressurePro accessories may be used with PressurePro products. The use of other accessories with PressurePro product is prohibited and can damage the PressurePro product. Warranty problems caused by use of accessories not supplied by APP will not be covered under the warranty.
LIMITATIONS: APP expressly limits the applicability of the implied warranty of merchantability and the implied warranty of fitness for a particular purpose to the one-year warranty period as provided herein. Some jurisdictions don’t allow limitations on how long an implied warranty lasts, so the above limitation may not apply.
To the extent permitted by law, the remedy of repair or replacement discussed below is the sole remedy available to the end user under this Limited Warranty. THIS LIMITED WARRANTY SPECIFICALLY EXCLUDES ALL INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. To the extent permitted by law, APP’s liability for PressurePro will not exceed the purchase price paid for the product.
NOTICE**:** This warranty gives you specific legal rights, and you may also have other rights, which vary in different jurisdictions.
EXCLUSIVE AGREEMENT**:** To the extent permitted by law, this One Year Limited Warranty is a complete and exclusive statement of the warranties, which apply to the PressurePro product; there are no express or implied warranties beyond those expressly stated above. No employee, agent, dealer or other person is authorized to give any warranties on behalf of the APP, except as authorized in writing.
STATUTE OF LIMITATIONS: To the extent permitted by law, in purchasing the PressurePro you agree that any action for breach of contract or warranty must be commenced within one year after the cause of action has accrued.
PROCEDURE**:** In the event that a product failure covered by this warranty occurs while this warranty is in effect, APP will, at its option, either: (a) repair the defective unit; (b) replace the defective unit with a new unit; or (c) replace the defective unit with a refurbished unit. APP will ship your repaired, new, or refurbished unit to you without charge for parts, service, or any other cost (except shipping and handling) incurred by APP or its representatives in connection with the performance of this warranty. Failed units covered under this warranty must be sent by you to APP with shipping prepaid by you. You are responsible for all costs incurred in the removal, reinstallation, and shipping of the unit. A copy of the sales slip received by you at the point of purchase of the unit must accompany the returned unit. Contact your supplier for all Warranty Return Authorizations.

Australasian Master Distributor

TyreSafe Australia

Contact; David Horne
+61 (0)439 830 930

davidh@tyresafe.com.au

http://www.tyresafe.com.au

PRESSUREPRO TPMS

FOR ORDERING OR TECHNICAL ASSISTANCE, CONTACT

WARRANTY AUTHORIZATION
For return authorization or warranty issues
Call TyreSafe Australia +61 (0) 439 830 930

IMPORTANT: Standard Warranty as per legislation applies, 12 month workmanship and manufacturing conditions.

Proudly Developed and Manufactured in the USA