



## enTIRE PressureAgent – Operating Instructions

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### Part of the enTIRE Wheels Tyre and Rim Management System

Proudly supplied by:

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## enTIRE PressureAgent – Operating Instructions

The enTIRE PressureAgent is a tool that allows you to download pressure data logged by the Data Logging Monitor for further analysis.

The enTIRE PressureAgent also allows you to configure many settings in the Data Logging Monitor.

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## Connecting your Monitor

You should first physically connect the monitor to your PC. You can't configure or download from the Data Logging Monitor until this is done.

### Option 1 - Connecting to your laptop (in vehicle)

Connecting your laptop to the monitor from inside the vehicle is easy. Simply connect the RS232 plug into your laptop to commence.

If your laptop does not have a serial port then you will need an adapter cable. Details are listed in the "Hardware and Software Requirements" section.

### Option 2 - Connecting to your laptop or PC (outside of the vehicle)

You can do this by taking the PressurePro Data Logging Monitor out of the vehicle and bringing it to a PC or laptop.

Connect the 9-pin connector into your laptop or PC to commence.

You will require a power source to connect the monitor into.

If your laptop does not have a serial port then you will need an adapter cable. Details are listed in the "Hardware and Software Requirements" section.

## Starting the enTIRE PressureAgent

Double click the enTIRE PressureAgent shortcut that appears in the "enTIRE" start menu group. You will be presented with the splash screen, and then taken to the main screen. If this is the 1st time you have used the system it will take you straight to the settings tab.



Figure 1-The enTIRE PressureAgent Splash Screen

## Establishing communication with the Data Logging Monitor

You will need to establish the port on which the PressurePro unit communicates. You should only need to perform this step the first time you connect your monitor to a particular computer.

You may also need to do this in situations when you are using a USB to Serial Adapter cable and you plug the cable into a different USB port to the one last used.

1. Click the "Settings" tab.
2. Make sure the monitor is physically connected using the required cables, and make sure that it has power by checking for the flashing light on the monitor.
3. Click the "Auto Find" button. The system will test each port and try to communicate with the monitor. The system will indicate when the right port is found.
4. You can check the port is correct by clicking the test button.

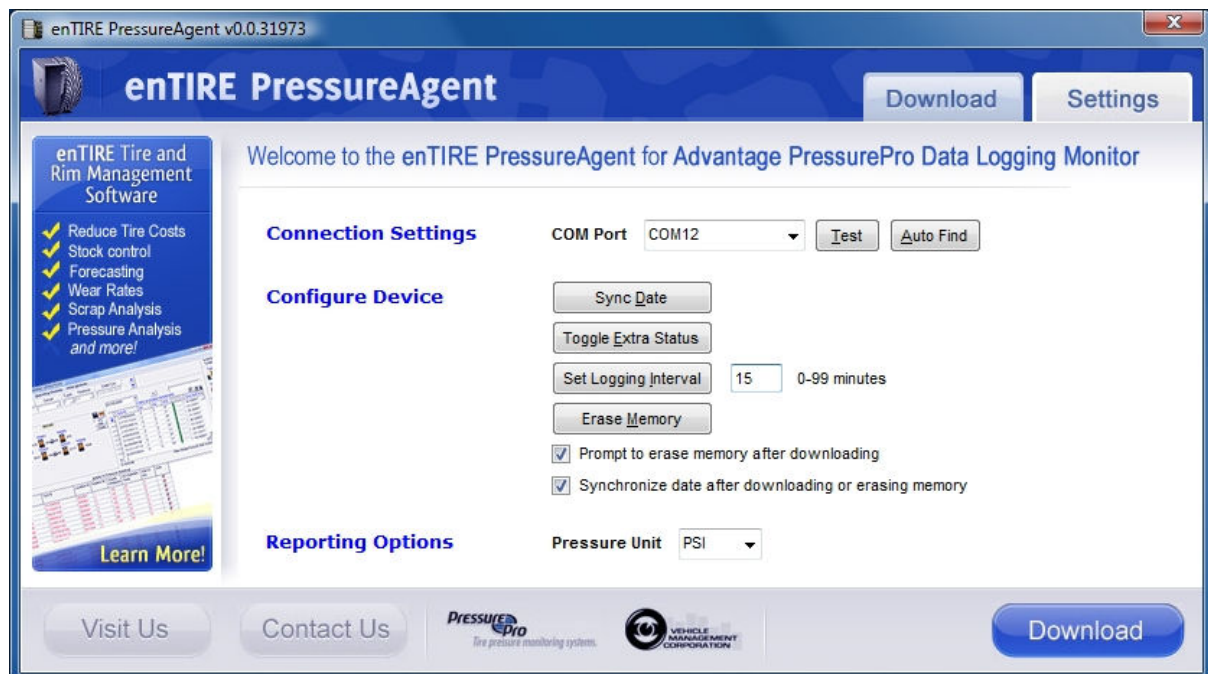


Figure 2 - Establishing communication settings

## Downloading the Data

The data can be downloaded into MS Excel format from within the “Download” tab



Figure 3 - The download screen before commencing download

***You must have the PressurePro monitor connected properly before you can continue.***

To download the data, simply click the “**Download**” button. The screen will change to indicate download progress.

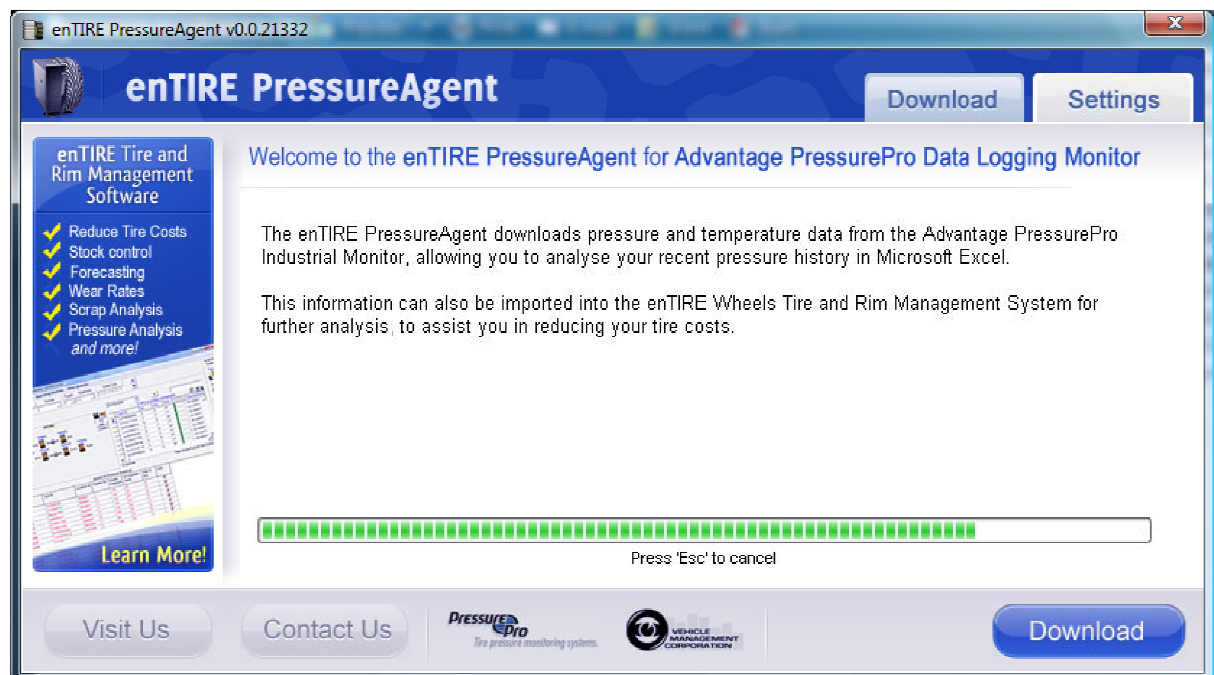


Figure 4 - The download screen in progress

The results will be displayed in an MS Excel workbook once the download is complete. The workbook will contain a main sheet containing summary graph and data. There will also be one sheet created for each position, containing full details of every reading logged for that position.

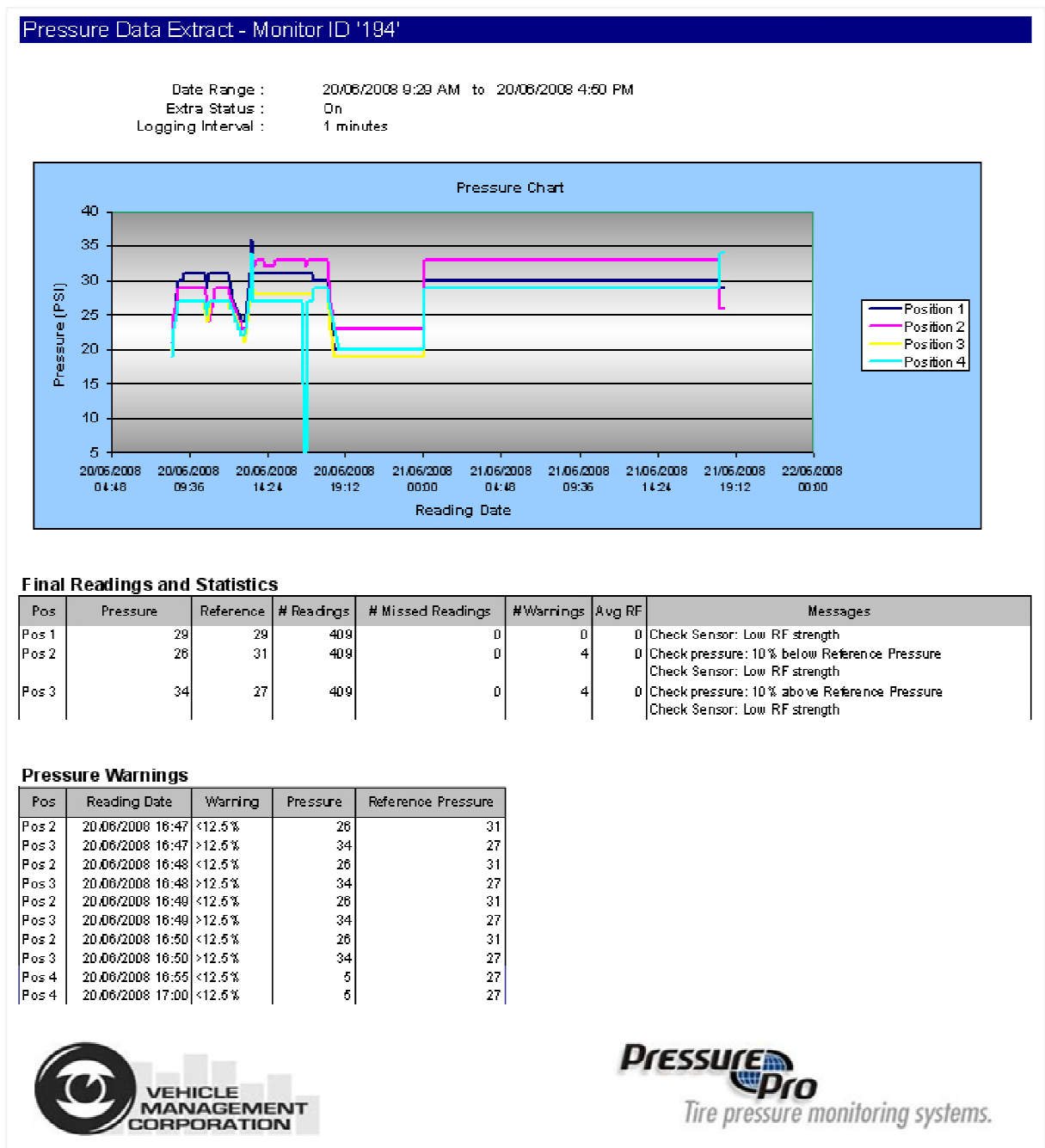


Figure 5 - The downloaded pressure results - summary sheet

## Summary Sheet - The data explained

### Graph

The graph shows one line per position showing each pressure reading logged.

### Final Readings and Statistics

This table displays potential issues found in the downloaded data. There will be one row per position.

Field Name	Description
Pos	The Position ID
Pressure	The last pressure logged for this position
Reference	The “reference” pressure. This is the pressure of the tyre when the PressurePro Sensor was last installed or reset by taking the sensor off pressure for 30 seconds.
# Missed Readings	This is the difference between the number of readings received from this sensor, and the maximum number of readings received by any sensor. Missed readings can be a symptom of poor RF strength, interference or sensor battery failure.
# Warnings	This is the number of warnings (audible alerts) that the Monitor has sounded, relating to high or low pressures detected. Details of when these occurred can be found in the table below and also the other sheets in the excel file.
Average RF	<p>This will only be received if “Extra Status” is turned on. This is the average signal strength above the ambient RF noise level, for the given position. Low RF strength (readings less than 3) could result in missed readings and could indicate interference from vehicle body or low battery and should be investigated. Readings of 6-9 for steer tyres and 3-6 for rear tyres are generally considered quite good.</p> <p>This will appear as “0” if “Extra Status” is not turned on.</p>
Messages	Textual messages that give a plain text description of potential issues.

### Pressure Warnings

This displays a listing of the Pressure Warnings generated by the monitor.

Field Name	Description
Pos	The Position ID
Reading Date	The date at which the warning occurred
Warning	The type of warning
Pressure	The actual pressure of the tyre at the time of warning
Reference Pressure	The reference pressure on that position at that point in time. This is the pressure of the tyre when the PressurePro Sensor was last installed or reset by taking the sensor off pressure for 30 seconds.

## Pressure Data Extract - Monitor ID '194' (Position 1)

Sensor ID : 75774  
 Number of Readings : 409  
 Number of Missed Readings : 0  
 Number of Warnings : 0  
 Average RF Strength : 0

\* Faults relate to % difference from Reference Pressure

Reading Date	Pressure	Temperature	Fault *	Reference Pressure	Signal Strength
20/06/2008 08:29	21	20		29	0
20/06/2008 08:34	23	20		29	0
20/06/2008 08:39	25	20		29	0
20/06/2008 08:44	26	20		29	0
20/06/2008 08:49	28	20		29	0
20/06/2008 08:54	30	20		29	0
20/06/2008 08:59	30	20		29	0
20/06/2008 09:04	30	20		29	0
20/06/2008 09:09	30	20		29	0
20/06/2008 09:14	31	20		29	0
20/06/2008 09:19	31	20		29	0
20/06/2008 09:24	31	20		29	0
20/06/2008 09:29	31	20		29	0
20/06/2008 09:34	31	20		29	0
20/06/2008 09:39	31	20		29	0
20/06/2008 09:44	31	20		29	0
20/06/2008 09:49	31	20		29	0
20/06/2008 09:54	31	20		29	0
20/06/2008 09:59	31	20		29	0
20/06/2008 10:04	31	20		29	0
20/06/2008 10:09	31	20		29	0
20/06/2008 10:14	31	20		29	0
20/06/2008 10:19	31	20		29	0
20/06/2008 10:24	31	20		29	0
20/06/2008 10:29	31	20		29	0
20/06/2008 10:34	30	20		29	0
20/06/2008 10:39	29	20		29	0
20/06/2008 10:44	30	20		29	0
20/06/2008 10:49	31	20		29	0
20/06/2008 10:54	31	20		29	0
20/06/2008 10:59	31	20		29	0
20/06/2008 11:04	31	20		29	0
20/06/2008 11:09	31	20		29	0
20/06/2008 11:14	31	20		29	0

Figure 6 - The downloaded pressure results - position sheet



## Positional Details - The data explained

### Summary Data at the top of the page

This gives summary information relating to this position. Most of this is also displayed in the main summary sheet.

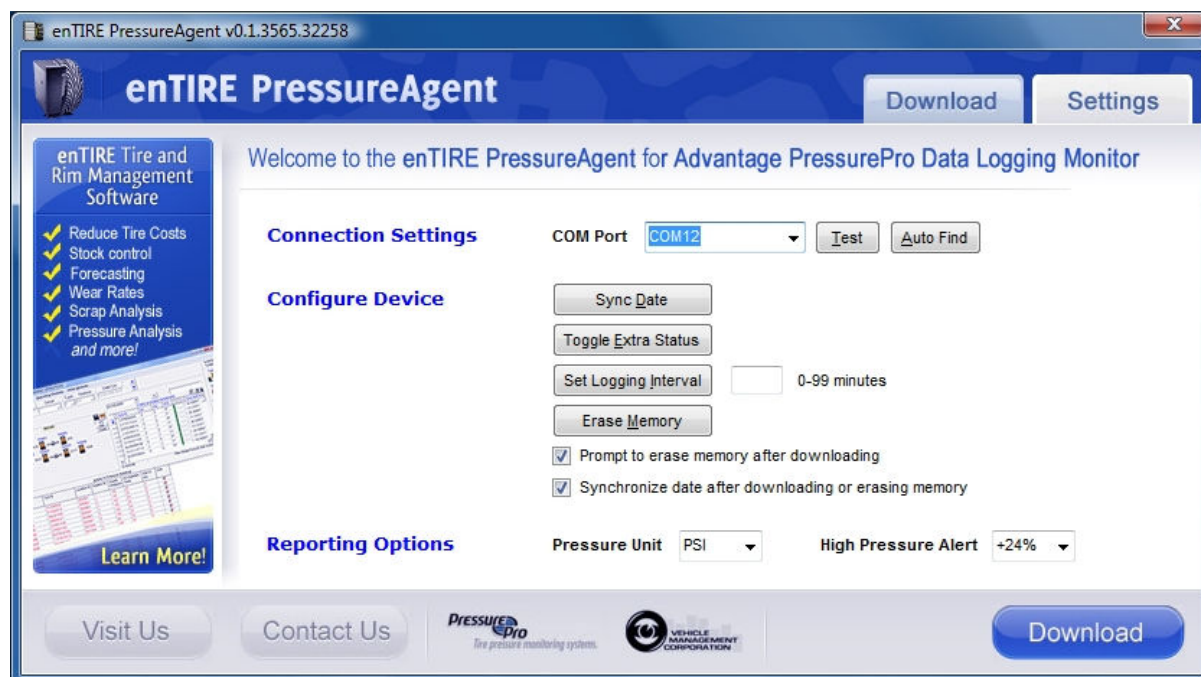
### Raw Data Table

This table displays a list of every pressure reading downloaded from the monitor. There is one row per logged pressure reading.

Field Name	Description
Reading Date	The date and time when the reading was logged
Pressure	The pressure logged
Temperature	<p>This is the temperature recorded by the sensor at the time the pressure was recorded, in degrees Celcius, with accuracy of +/- 20C.</p> <p>#0 = -50C to -30C temperature #1 = -30C to -10C temperature #2 = -10C to +10C temperature #3 = +10C to +30C temperature #4 = +30C to +50C temperature #5 = +50C to +70C temperature #6 = +70C to +90C temperature #7 = +90C to 110C temperature</p> <p>Temperature of -40 indicates temperature was not logged.</p>
Fault*	<p>These are fault s that are similar to those generated by the monitor.</p> <ul style="list-style-type: none"><li>• &gt;x% - Indicates this pressure reading is the HIGHER than the Reference Pressure by the percentage nominated in the settings tab. 12.5% is the default.</li><li>• &lt;12.5% - Indicates this pressure reading is 12.5% LOWER than the Reference Pressure</li><li>• &lt;25% - Indicates this pressure reading is 12.5% LOWER than the Reference Pressure</li></ul>
Reference Pressure	The “reference” pressure, i.e. the pressure of the tyre when the PressurePro Sensor was installed. Changes indicate the sensor has been removed from the tyre, and then re-fitted.
Signal Strength	<p>This is the signal strength above the ambient RF noise level, for the given reading. Low RF strength (readings less than 3) could result in missed readings and could indicate interference from vehicle body or low battery and should be investigated. Readings of 6-9 for steer tyres and 3-6 for rear tyres are generally considered quite good.</p> <p>This will appear as “0” if “Extra Status” is not turned on.</p>

## Configuring your Monitor

You can configure certain settings relating to the monitor and the enTIRE PressureAgent from the “Settings” tab.



## Connecting to your monitor & establishing communication

Please refer to the sections above relating to connecting your monitor and establishing communication with it. **You must have the monitor properly connected before you can proceed.**

<b>Sync Date</b>	This will set the date in your monitor to be the same as that on your PC or Laptop.
<b>Toggle Extra Status</b>	When this is ON, the monitor will store additional information including : <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Signal Strength</li> </ul> Please note that as Extra status stores more information for each reading this will result in lower number of readings being stored before the unit is full, at which point it will stop logging readings.
<b>Set Logging Interval</b>	This is the frequency in minutes at which the unit logs a reading for each position. The higher the frequency the more quickly the unit will fill its available memory.
<b>Erase Memory</b>	This will clear the monitor of all stored readings.
<b>Prompt to erase memory after downloading</b>	If switched on this will ask if you would like to erase the data on the monitor once the download is done.
<b>Synchronise date after downloading or erasing memory</b>	If switched on this will automatically set the date & time in the monitor to be the same as your laptop/pc anytime the monitor memory is erased or downloaded.
<b>Pressure Unit</b>	This sets the Pressure Unit that will be displayed when the pressure information is downloaded. This does not set the Pressure Unit on the display; this must be set directly on the monitor. Please refer to the PressurePro documentation if you wish to change the unit displayed

	on the monitor.
<b>High Pressure Alert</b>	This is the user configurable high pressure alert that will be reported when the data is downloaded. This is alert is in the download software (used in the warnings and charts on the output) only and does NOT affect the alerts/warnings produced by the monitor. If you wish to set the audible high pressure alert/warning in the monitor then you must do this directly on the monitor.

## Hardware and Software Requirements

You will require the following:

### Hardware

- Data logging monitor – (part #HDEPM34)
- RS232 fixed end power/data cord – (Part #AAPC7)

If you don't have a serial (RS232) port on your computer you will also require:

- USB to Serial conversion cable
- or*
- Serial card

***If you choose to remove the unit from the vehicle and download the information away from a vehicle you will also require an additional 12v power supply, with alligator clips or cigarette lighter socket. These are available at most electronics stores.***

### Software

- Microsoft Windows 2000, XP, Vista or Windows 7.
- Microsoft Excel version 2003 or 2007.