

# iCheck TPMS



TYRE PRESSURE MONITORING SYSTEM



## Instruction Manual

Model IC005 / IC008 / IC010

**PROTECT MORE THAN JUST  
YOUR TYRES.  
WITH AUSTRALIA'S BEST.**





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## 1. PRODUCT INFORMATION

### 1-1. Product Feature

Thank you for choosing iCheckTPMS. Our tyre pressure monitoring system allows you to monitor not only your tyre pressure and temperatures but also your caravan wheel bearing and hub temperatures. A world first.

Please read the manual in full to familiarise yourself with all its features and benefits before installing the system.

### 1-2. iCheckTPMS IntelliData™

What is IntelliData™?

Unlike iCheckTPMS, other tyre pressure monitoring systems can be difficult to set up, especially when setting your high and low alarm pressures for each wheel, for car and then caravan, which generally run different pressures.

With our exclusive IntelliData™, it's much easier and quicker. Here's how.

On cold tyres, simply screw the wheel sensors onto your tyre valves. This sets the benchmark alarm pressure alerts. If a tyre pressure increases by 25% (from the cold benchmark pressure), it will give a visual and audible alarm. If a tyre pressure drops by 15% (from the cold benchmark pressure), it will give a visual and audible alarm. With this feature, you do not have to set different high and low pressures for your tow vehicle or caravan; simply screw them on and you're done.

### 1-3. Intelligent Off Road Mode

When the need arises to reduce the air pressure of your tyres, simply unscrew the wheel sensors, air them down, and reinstall the sensors. This then sets a new benchmark with pressure alerts if the tyre's pressure rises by 25% or drops by 15%. Every time your sensors are removed and reinstalled, they reset to the current pressure so there's no need to keep readjusting your high and low pressure alarms.

Clever huh?



#### **1-4. iCheckTPMS InstaData™**

What is InstaData™?

Currently other TPMS systems have wheel sensors that go into sleep mode after a short period of time and no movement, and are only activated by motion, generally at speeds over 25km/h.

Here lies the problem... if your caravan has been sitting for some weeks or months and has a slow leak you won't know until your halfway down the road. Having hooked up ready for your trip then only to be made aware that you have low pressures in one or more tyres.

This then is a pain having to pull over and put air in your tyres on the side of the road. Keep in mind too that there is visually no difference between a tyre with 40PSI and 20PSI and there is no way of telling whether you have low pressures in your car and or caravan before you leave, (unless checked manually with a tyre pressure gauge).

The iCheckTPMS wheel sensors send data every five minutes to the monitor whether in motion or not via our exclusive InstaData™.

This means as soon as you hop in your car with your caravan on tow you will have the latest PSI data before you even drive out the driveway.

#### **1-5. iCheckTPMS Signal Booster**

A signal booster is recommended for larger caravans OR if you experience electronic interference caused by some wireless electronics in your vehicle or caravan. Even some smaller caravans may require a signal booster.

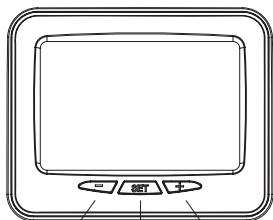
If your experiencing inaccurate or delayed readings or a complete signal loss, this is a sign that you require a signal booster.

The iCheckTPMS signal booster solves the issue by receiving the sensor's signal and boosting it to the monitor in your vehicle. It essentially acts as a bridge between the sensors and the monitor, extending the range and improving signal reliability.

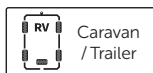
## 2. PRODUCT ACCESSORIES

### Monitor Components and Icons

Power On/Off  
Press and hold the  
+ and - buttons  
for 3 seconds.

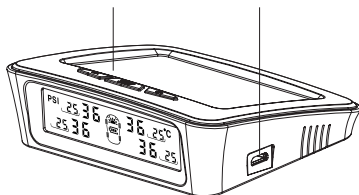


-                      SET                      +



Solar Panel

Power Socket





| Icon | Indication            |
|------|-----------------------|
|      | Tyre Position         |
|      | Sensor Low Battery    |
|      | Monitor Power Level   |
|      | Tyre Alarm Status     |
|      | Solar Power Indicator |
|      | Booster Indicator     |



LCD Monitor



Non Slip Pad



USB Power Cable



Wheel Sensor



Sensor Opening Tool



Lock Nut Spanner



Lock Nut



Rubber O Ring



Caravan Wheel Bearing Sensor (Optional)



Signal Booster (Optional)

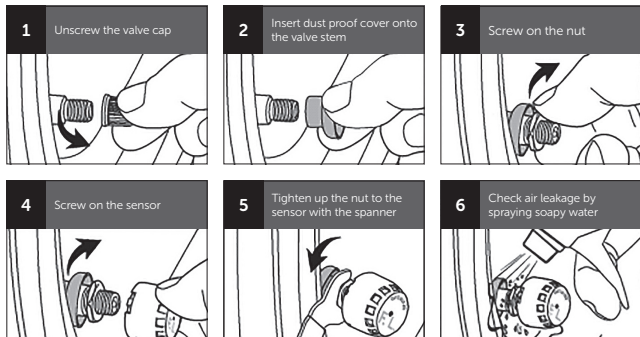
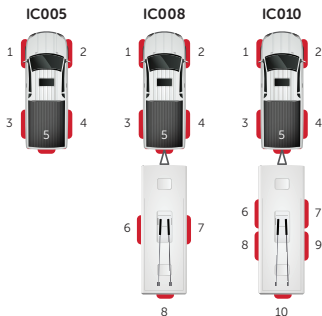


Rubber Dust Cover

### 3. SENSOR INSTALLATION

Each sensor has been marked with a position number and has been paired to the monitor from factory. Please install the sensors according to the below diagram.

#### Wheel Sensor Location



**Please Note:** Use of the lock nuts and rubber dust covers is optional. Non use will not affect performance or warranty of your product.





## 4. PRODUCT SETTINGS

| Factory Default Setting |      |
|-------------------------|------|
| Pressure Unit           | PSI  |
| Temperature Unit        | °C   |
| High Temperature Alert  | 70°C |

### 4-1. Change Unit

In standby mode, press and hold the '+' button for 3 seconds to switch between PSI / BAR pressure units.

In standby mode, press and hold the '-' button for 3 seconds to switch between °F / °C temperature units.

### 4-2. Switch Display to View Vehicle Spare Tyre / Trailer Spare Tyre

Press the '+' or '-' buttons in standby mode to scroll through to spare tyre status.

### 4-3. Benchmark Pressure Set Automatically

Turn on the monitor and install the wheel sensors onto cold tyres. This will become the benchmark pressure. When a tyre pressure increases by 25%, or drops by 15% from the benchmark pressure, the monitor will alert you by a visual and audible alarm.

### 4-4. Wheel Bearing Sensor High Temperature Alert Setting

The factory default alarm is set to 70 degrees Celsius. To adjust higher or lower, press and hold the 'set' button for 3 seconds and release after the beep, the tyre icons and temperature value will flash at the same time. Press the '+' or '-' buttons to select your preferred alarming status. After the new setting is complete, press the 'set' button for 3 seconds to save the data and return to the normal display interface.

### 4-5. Caravan Disconnect Feature

Press and hold the '-' button for 6 seconds and release after the second beep.



#### **4-6. Caravan Connect Feature**

Press and hold the '+' button for 6 seconds and release after the second beep.

#### **4-7. Restore Factory Settings**

Turn off the monitor. Then turn the monitor back on and 'within' 3 seconds, press and hold the 'set' button and release after the beep.

### **5. INSTALLATION TIPS**

1. Please fully charge the unit before first time use.
2. Before installing the wheel sensors turn on the monitor and make sure you have cold tyre pressures before installation of the wheel sensors.
3. Due to air expansion and contraction, tyre pressures and temperatures will change whilst driving.
4. All sensors in this unit have been pre-set individually for each tyre in the factory. Whenever the location of a tyre is changed it is necessary to put the numbered sensor back to its original position as per the factory default wheel sensor location.
5. When installing the monitor on the dash, ensure it is placed securely and does not obstruct the driver's view of the road.



## 6. SPECIAL FEATURES

### 6-1. Monitor Battery Saving Mode

The monitor has a battery saving mode and will automatically go into 'sleep mode' after ten minutes of no movement and will automatically 'wake up' upon entering the vehicle.

### 6-2. Automatic Backlight

The monitor has an auto backlight feature that is activated in low light situations and for night-time driving.

### 6-3. Manually Turn On/Off Backlight

If you choose to manually turn on the backlight you can do so. In standby mode, press the 'set' button once (short beep). To turn it off, press the 'set' button once (long beep). Once turned off, it will revert to 'automatic' backlight function.

### 6-4. Solar Powered Charging

The monitor has a built-in solar panel, allowing for indefinite use without the need for charging via the included USB cable. Please note that if you position your monitor where it receives little to no sunlight, the internal battery will give several weeks of use before the need to recharge.

### 6-5. Alarm Mute

If you happen to get an alarm, it will give an audible and visual warning. To mute the alarm simply push any button. The visual warning will remain until the fault has been rectified.

## 7. MONITOR FEATURES

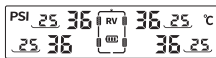
- Automatic solar power recharging.
- Pressure and temperature alarm.
- Visual and audible alarm.
- Selectable pressure unit (PSI, BAR).
- Selectable temperature unit (°C, °F).
- Automatic awake feature.
- Automatic backlight.
- Built in rechargeable lithium battery.
- Monitor up to 10 tyres (including spare tyres).
- Display temperature and pressure simultaneously.

### 7-1. Monitor Tyre Display

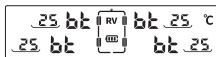
Depending on which kit you have, the monitor will be divided into 3 interfaces to display the pressure value of up to 10 tyres, and 4 bearing sensors. The first interface displays the vehicles 4 tyres. The second interface displays the caravan tyres. The third interface displays the caravan wheel bearing temperatures. The screen rotates every 5 seconds. If you want to see your spare tyre status, press the '+' or '-' buttons to switch the display view.



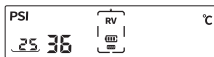
↓ 5s



↓ 5s

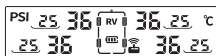


Press the '+/-' buttons to switch to spare tyre status



### 7-2. Signal Booster Icon

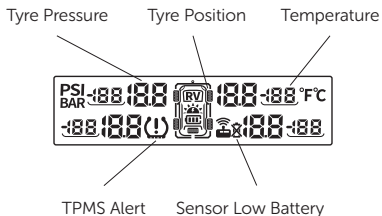
If using an iCheckTPMS signal booster, the monitor display will show the signal booster icon indicating it is powered on and receiving data correctly.



Signal Booster Icon



## 8. ALARM STATUS



| Alert                    | Alert Status   |
|--------------------------|----------------|
| High Pressure Alert      | ▬ (!) +25% PSI |
| Low Pressure Alert       | ▬ (!) -15% PSI |
| High Temperature Alert   | ▬ (!) 70 °C    |
| Fast Leakage Alert       | ▬ (!) 36/32 ↓  |
| Sensor Low Battery Alert | ▬ ✕            |
| Sensor Lost Signal Alert | - - - -        |

## 9. SENSOR PAIRING

### 9-1. TPMS Sensor Pairing

If the need arises to replace a sensor or change the location of pre-paired sensors follow these simple steps.

Press the 'set' and '+' buttons for 3 seconds until a beep is heard to enter the sensor pairing mode. It will start with the vehicle's passenger front wheel flashing. Press the '+' button to scroll through to the desired wheel location for the new sensor to be programmed to. Then screw the sensor onto the tyre valve and wait for a beep (up to 20 seconds). Once a beep is heard, press, and **hold** the 'set' button until another beep is heard to save the new data and return to standby mode. Repeat this process for any additional sensors.



After the passenger front tyre has successfully paired

### 9-2. Wheel Bearing Sensor Activation and Pairing

All wheel bearing sensors need to be activated and paired to the monitor, (to prolong the shelf life of the internal battery prior to first time installation). Activation can be done just prior to, or after they have been installed on the hub bearing dust caps.

Press the 'set' and '-' buttons for 3 seconds until a beep is heard. The passenger front wheel will flash. Whilst the wheel icon is flashing, hold the magnet against the sensor where the arrow is pointing and within 3 seconds the monitor will beep, and the temperature will show. To save, press and **hold** the 'set' button again until a beep is heard to save the new setting and return to standby mode. Repeat this process for the other sensor/s.



bt = Bearing Temperature

After the passenger front wheel has successfully paired



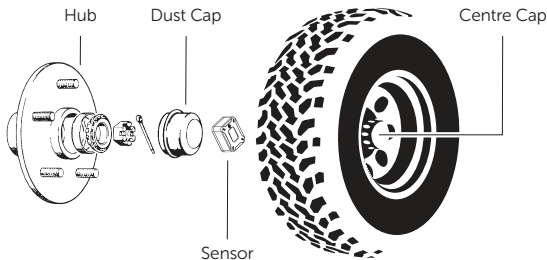
### 9-3. Wheel Bearing Sensor Deactivation

Whilst your caravan is not in use you have the option of deactivating the bearing sensors to further prolong the battery life. With the monitor turned on, hold the magnet against the bearing sensor where the arrow is pointing and within 20 seconds the temperature display will disappear. The sensor is now deactivated and in sleep mode. Repeat this process with all other sensors. To reactivate, follow the instructions on page 14, 9-2.

## 10. WHEEL BEARING SENSOR INSTALLATION

Remove the centre caps from your wheels to expose the metal bearing dust cap. Make sure there is enough room between the bearing dust cap and the inside of the wheel centre cap for the sensor to be installed. Please note that some wheel types may need to be removed to gain access to the dust cap.

Thoroughly clean the hub dust cap surface before installing. If necessary, use a scotch brite pad to scuff the surface and then wipe down with a wax and grease remover. Make sure the surface is clean and dry and free of any oils or grease before installation. Once the surface is completely clean and dry, firmly push and hold the sensor in place for 20 seconds. It's advisable not to drive for 24 hours to allow the 3M adhesive to thoroughly bond to the dust cap surface.



**Please Note:** Most dust caps have a flat surface to mount the bearing sensor too, however, if you have a curved surface or the dust cap has raised lettering you may need to replace them with dust caps with a flat surface and are easily found at your local trailer or caravan store.

## 11. MONITORING YOUR HUB / BEARING TEMPERATURES

When monitoring your bearing temperatures, you are generally looking for one, or maybe more, bearings that are running hotter than the others. If all the temperatures are within a couple of degrees of each other this is a good sign that they are all operating correctly. If you notice that one is considerably hotter this could be an early warning sign of a potential problem with either your bearing, hub, or even your brake calipers.

You will get a feel for it based on the weight of your rig. Typically, you will find the bearings will run around 15-20 degrees above the ambient temperature. Higher temperatures than this provide an indication that there is more friction than necessary and there maybe something wrong.

## 12. TECHNICAL SPECIFICATION

### 12-1. Display Parameters

|                        |                               |
|------------------------|-------------------------------|
| Working temperature    | -20°C ~ 80°C                  |
| Storage temperature    | -30°C ~ 85°C                  |
| Output voltage/current | DC 5V                         |
| Frequency              | 433.92 MHz                    |
| Monitor Dimension      | 104 (L) * 82 (W) * 29.5 (H)mm |
| Sensor Weight          | 91g                           |





## 12-2. TPMS Sensor Parameters

|                         |                                |
|-------------------------|--------------------------------|
| Pressure Range          | 0 ~ 6 BAR (0 ~ 99PSI)          |
| Working Temperature     | -40°C ~ 80°C                   |
| Storage Temperature     | -40°C ~ 85°C                   |
| Input Voltage / Current | DC 3V                          |
| Frequency               | 433.92 MHz                     |
| Transmission Power      | <10dBm                         |
| Pressure Accuracy       | $\pm 0.1$ BAR ( $\pm 1.5$ PSI) |
| Temperature Accuracy    | $\pm 3^{\circ}\text{C}$        |
| Size (Diameter * High)  | 21mm * 17.5mm                  |
| Weight                  | 9g                             |
| Replaceable Battery     | Yes                            |
| Battery Life            | 12 - 18 Months                 |

## 12-3. Wheel Bearing Sensor Parameters

|                         |                         |
|-------------------------|-------------------------|
| Working Temperature     | -30°C ~ 93°C            |
| Input Voltage / Current | DC 3V                   |
| Frequency               | 433.92 MHz              |
| Transmission Power      | <10dBm                  |
| Temperature Accuracy    | $\pm 3^{\circ}\text{C}$ |
| Size (L x W x H)        | 30 x 24 x 15mm          |
| Weight                  | 11g                     |
| Replaceable Battery     | No                      |
| Battery Life            | Approximately 2 Years   |

### 13. SENSOR BATTERY REPLACEMENT

When the sensor low battery icon 'X' shows on the monitor and the corresponding tyre icon in flashing, the sensor battery needs replacement. Replace using CR1632 Lithium batteries.

1. Hold the sensor inside the sensor opening tool and open sensor cover in a clockwise direction.



2. Take out old battery.



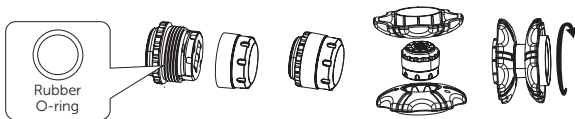
3. Replace with a CR1632 Lithium, ensure positive '+' is facing upwards.



CR1632  
Lithium Battery

CR1632  
Lithium Battery

4. When replacing batteries please ensure to replace with new rubber o-rings that are supplied in the kit.





## 14. FAQ'S / SPECIAL NOTES

**Q. What if my car already has a factory tyre pressure monitoring system?**

A. You can still use the iCheckTPMS as it will also show your tyre temperatures and your spare tyre data.

**Q. What is the battery life of the wheel sensors?**

A. Depending on how often you use your vehicle, you will get approximately a 12-18 month life span from the batteries.

**Q. Are the sensors waterproof?**

A. Yes. The wheel sensors have an IP67 waterproof rating. They can withstand a 30 minute immersion in up to one meter of water.

**Q. Do I need to get my wheels re balanced after installing the sensors?**

A. No. The wheel sensors only weigh 9 grams and won't affect the balance of your wheels.

**Q. Why is one side of the monitor displaying higher pressures and temperatures?**

A. This is quite common as the heat from the sun can increase the temperature and pressure of your tyres if one side of the vehicle is in direct sunlight.

**Q. Do I need to use the rubber dust covers and lock nuts supplied in the kit?**

A. No. Although advisable, the dust covers and lock nuts are there for theft prevention and sensor protection only.

**Q. I purchased the IC008 eight sensor kit, but I want to use it on my dual axle caravan?**

A. You can still use this kit for your dual axle caravan however you will need to reprogram two sensors so the monitor will then display your caravan's four wheels. Install sensors 1,2,3,4 (refer to page 8) on your vehicle, sensors 6 and 7 on the front axle of the caravan and reprogram sensors 5 and 8 to the rear axle on your caravan (refer to page 14). Once completed your monitor will then display your vehicles four wheels and your caravans four wheels on alternating screens.



10 MINUTE DIY INSTALLATION



DASH MOUNT



BUILT IN SOLAR PANEL



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