

# **TyrePal TPMS External Sensor Kit TC215/ESK**

## **User manual**



**Innovative safety solutions for your peace of mind**

## 1. INTRODUCTION

This kit provides additional sensors to go with the TC215OEK monitor, for monitoring spare wheels on a trailer or the tyres on a towing car. The sensors can be used for tyre pressures up to 99psi.

The pack contains sensors, 2 locking keys, 1 pack of seals/ screws, 1 pair sensor tools, a label set and this instruction manual.

The TyrePal TPMS system can monitor up to 22 tyres on a car and trailer, but once the sensors are registered to the monitor, it only displays the wheel positions where sensors are registered.

## 2. IMPORTANT SAFETY NOTES

The TyrePal TPMS system can help you maintain tyre pressures for safety, fuel economy, tyre life and environmental impact.

It is your responsibility to ensure that it is suitable for your particular vehicle and that it is working correctly and properly maintained. Check the sensors and valve stems regularly, as some road salts can cause corrosion.

**The system does not replace the need to carry out regular checks on the condition and wear of the tyres.**

Keep the small parts and especially the batteries out of the reach of children. If a battery is swallowed, consult a doctor. Do not hold a battery with metallic tweezers as it will cause a short circuit and may lead to burning or explosion of the battery.

### **3. BEFORE INSTALLATION**

Before installing the system, ensure that it is suitable for your vehicle.

- Check that the operating pressure of your tyres is within the range of the system. i.e. 0-6.8 bar (0-99psi).
- Check that tyre valve stems are in good condition before fitting the sensors. We do not recommend using the system with aluminium valve stems as interaction between the sensor and the valve stem will cause corrosion.
- Do not fit sensors to tyres that have been treated with internal tyre sealant. The sealant may damage the sensor or impair its action.
- To avoid danger of damage to the sensors, check that sensor valve caps will remain mainly within the outside profile of the tyres when fitted.

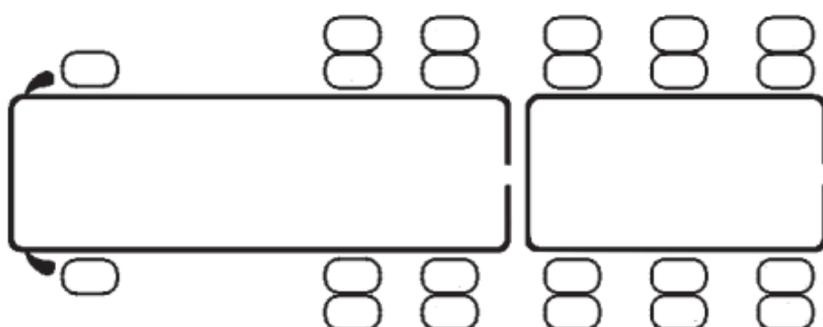
If the distance from the rear wheels to the monitor is greater than about 7 metres, we recommend the use of a TyrePal Smart Relay to increase the range of the sensors and improve the stability of the system.

#### ***3.1 Wheel balancing***

The weight of the sensors is within the tolerance generally achieved for wheel balancing, so there is usually no need for the wheels to be rebalanced after installing the system. If vibration is felt when driving at speed after fitting the system, the wheels must be rebalanced.

### 3.2 Sensors and wheel positions

Sensors are interchangeable and can be registered to any of the 22 possible wheel positions that can be displayed on the monitor. Once sensors are registered, the display only shows data from the registered positions. We recommend that you label each sensor to identify its position and record the positions here:

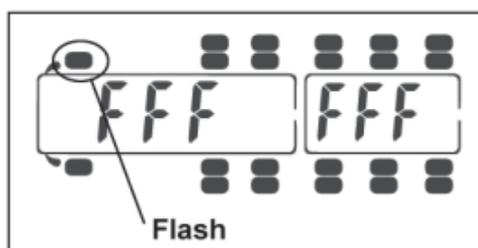


## 4. INSTALLATION

### 4.1 Install and register the sensors

The following procedure registers the sensors as they are installed.

1. In standby mode, press and hold the **CODE** button for 3 seconds. Release it after the beep to enter coding mode. A flashing tyre icon is displayed. If no sensor is registered to this position, the letters FFF FFF are shown. If a sensor is already registered, the sensor ID is shown.



2. Press the **+** or **-** button to select the desired tyre position.

3. Screw the sensor onto the tyre valve. As it senses the air pressure, the sensor sends its ID code to the monitor.



The monitor beeps and stores the tyre position with that sensor ID. If it does not register within a few seconds, unscrew the sensor and try again.

4. Press **+** or **-** buttons to select the other tyres and repeat for all the tyres that are to be monitored.

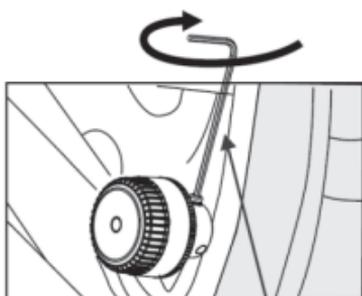
5. When all sensors are registered, press and hold the **CODE** button to exit.

If you need to delete a setting, use the **+** or **-** buttons to select the tyre position then press and hold the **SET** button for three seconds. A double beep confirms the ID has been deleted.

Note: If a sensor is coded twice to the same monitor, the previous setting will be deleted.

#### **4.2 Lock the sensors**

For added security, use the locking screw in the sensor can be tightened onto the valve stem using the hex key, but do not over tighten.



Hex key

If it is difficult to reach, take the sensor off and insert the locking screw into a different hole. Keep the hex key in a safe place!

### **4.3 Test for leaks**

When the sensors have been installed, test for leaks by brushing a little detergent and water on the valve stems. If bubbles appear, release the locking screw and re-tighten the sensor.

## **5. NORMAL OPERATION**

### ***5.1 Sleep mode***

The sensors have a sleep mode, which means that when the vehicle has been stationary for several minutes, they stop transmitting to save battery power. If the monitor is awake at this time, it will continue to display the latest received data for a period of time and then show a blank for tyre positions where no data has been received. Please note that it may take a few minutes for the monitor to receive signals from all the sensors when it first wakes up.

If a sensor battery is low, or if a signal is not received from a sensor for a period of 60 minutes, the monitor issues an alert.

### ***5.2 Sensor battery alert***

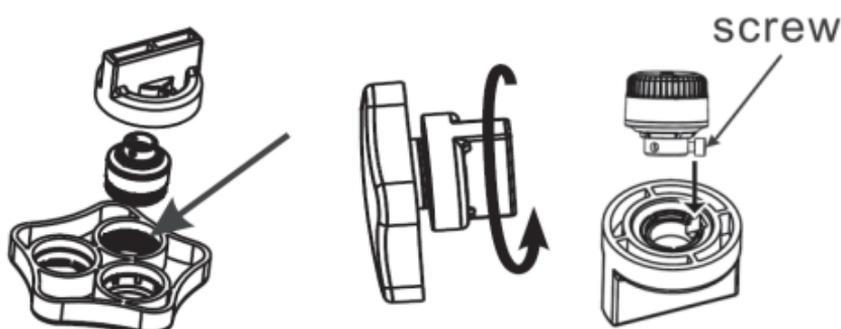
When a sensor battery needs replacing, a low sensor battery icon is shown, and the appropriate tyre icon flashes.



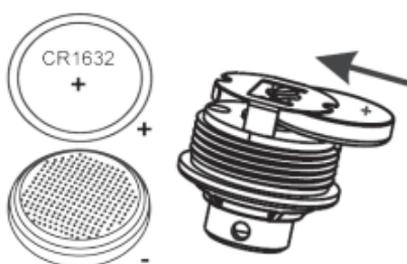
## 6. REPLACING SENSOR BATTERIES

When the sensor low battery icon is showing on the monitor and a corresponding tyre icon is flashing, the sensor battery needs to be replaced. The battery is a CR1632 lithium cell, which is available from TyrePal Ltd.

1. Use the hex key to slacken the locking screw, then take the sensor off the tyre valve.
2. Use the sensor tools to remove the battery cover from the sensor and expose the battery.



3. Replace the CR1632 battery making sure the positive + side is upwards and that it goes inside the metal cage, not on top of it.



4. Check that the waterproof rubber seal is in good condition and is correctly positioned. Then replace the battery cover, using the sensor tool to replace the cover.

## **7. TROUBLESHOOTING AND MORE INFORMATION**

Additional information about the system, including troubleshooting and advice on managing tyre pressures is provided on the TyrePal web site, [www.tyrepal.co.uk](http://www.tyrepal.co.uk), where it is regularly updated.

## **8. SPARES, SERVICE AND WARRANTY**

Spare parts including batteries and replacement sensors are available to purchase from the TyrePal web site.

Please register your guarantee by completing details on our web site.

The system is warranted to be free from manufacturing defects and is guaranteed for a period of twelve months from date of purchase. There are no user-serviceable parts inside the monitor and if internal parts have been tampered with, the warranty may be void. The warranty does not affect your statutory rights.

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