



# TYREDOG TD-1800F-X TPVMS External Pressure Vibration Monitoring System User Guide

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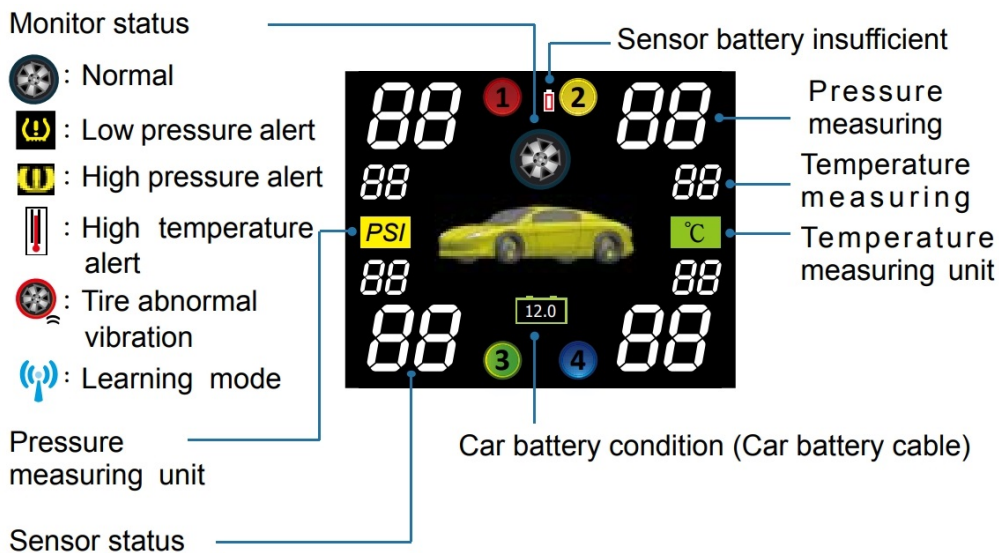
## TYREDOG TD-1800F-X TPVMS External Pressure Vibration Monitoring System User Guide



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## Graphic User Interface Description



- : Monitor reset, but not updated
- : Data received
- : Abnormal tire
- : Data not received
- : Car battery under normal condition
- : Car battery power insufficient

### Monitor battery status (AAA battery)

No icon Normal

: Low battery

This TPVMS except tire pressure, temperature detection, also with the tire abnormal vibration detection function, which may reconnaissance vehicle tires other abnormal phenomena, can also become a tool for more warning function.

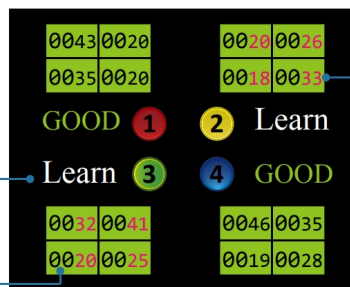
## Display description:

Learn : collecting vehicle vibration parameters

GOOD : A vehicle without abnormal vibration

Alarm : A tire abnormal vibration

This parameter number represents when the vehicle is moving and repeatedly detect vibrations

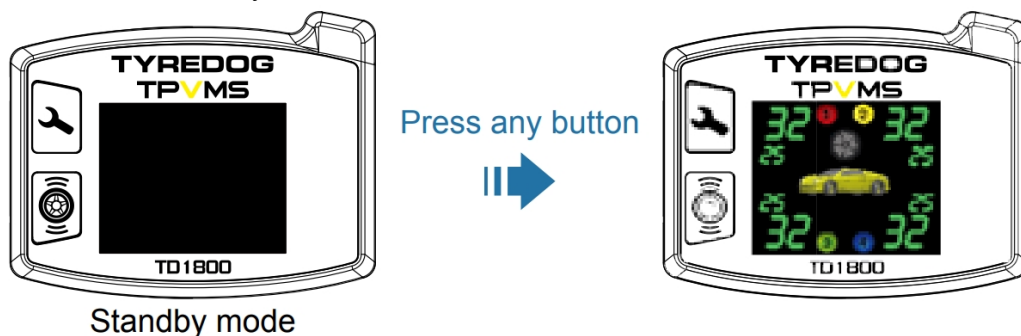


This number is by vehicle vibration parameters calibrated for alarm warning

## Standby mode

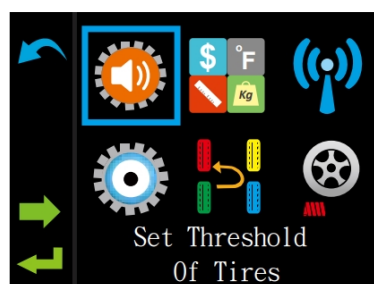
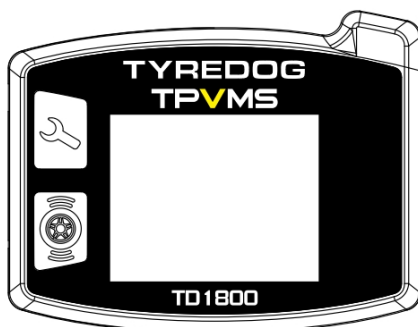
After turn on, if more than 30 seconds don't press any button, monitor will automatically enter standby mode. In this mode, screen didn't display any information, but still continue receive information. Therefore, power consumption is very minimal, can improve battery life. To trigger the monitor, press any button. Under this mode, if the tire pressure alarm occurs, monitor will active from energy saving mode and displays the abnormal on the screen. (If use external power supply will maintaining display state, doesn't enter standby mode.)

Under the standby mode there is no tire abnormal vibration detection.



## Operating instructions

When press the upper button for about three seconds, the TFT monitor will show setting mode. There are six main selections can be choose as Alarm setting, Measurement setting, New sensor setting, Set other, Wheel position cheage, Set vibration. Under this mode, the lower button is the select button , the upper button is the quit button . When press the lower button for three seconds is the confirm button . If in setting mode idle for 15 seconds will change to normal display mode.



Setting mode



**Quit:** Press the upper button once.



**Select:** Press the lower button once

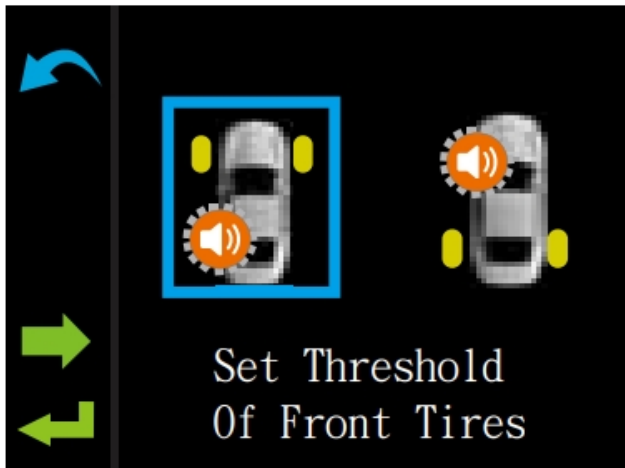


**Confirm:** Press the lower button for 3 seconds



**: Set Threshold Of Tires**

The warning range of pressure and temperature for front and rear wheel can be set separately. In this feature, click upper button is the exit key, click the lower button is to increase the warning range, when holding the upper button and press the lower button is to decrease the warning range. After setting complete press the upper key to exit.



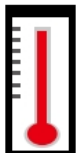
- Set Threshold Of Front Tires



- Set Threshold Of Rear Tires



- Max Temperature Setting. Default value=70°C.



- Low Pressure Setting. Default value=26PSI.



- High Pressure Setting. Default value=45PSI.



## ABNORMAL SITUATION

**A.** When the tire pressure or temperature exceeds a set value, the receiver will show the alarm diagram and repeat the alarm sound 10 times. When pressure or temperature returns to within the standard values, warning display clears the screen and return to the normal pressure display.

- Tire pressure under low warning range



- Tire pressure over high warning range



- Tire temperature over the safety setting range




### Abnormal tire vibration warning

If the device display abnormal vibration alert, it is recommended to check the particular tire for abnormal issue, such as rim deformation, deformation or fetal skin peeling on the tire, or by the sensitivity setting function will adjust sensitivity low, and then observe whether there is a more serious abnormal condition occurred ; or may be re- calibrated by a calibration function, and then continuously monitors the condition of the wheels of the vehicle again.

When the tire abnormal alarm is on, press the down button to stop the warning tone.

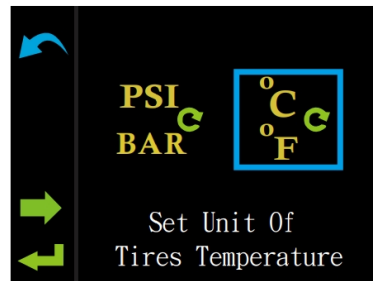
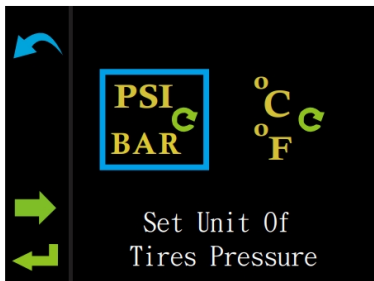


 Strongly suggest that as long as tire warning is on, check tire situation first to ensure safety.



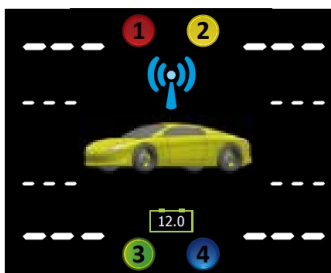
#### :Set Unit

Monitor can support four types of pressure measuring units PSI, KPA, BAR, Kg/Cm. Two types of temperature measuring units °C °F. You can choose by your own request.


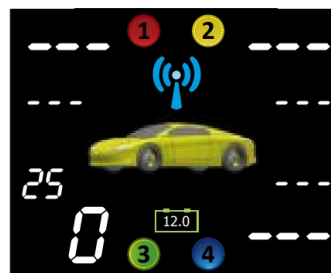


#### : Learn New Sensor

This feature is mainly supplied to the solution when the sensor is missing. Because the monitor can only identify the same id group of sensors, other sensors can't be read, then just order a new sensor and re-learning the new sensor.



Install the  
sensor battery

#### :Change Position Of Tires

(This feature is only available for internal type sensors use.)

### C. Monitor runs out of power

Battery power in monitor will decrease by daily operation and when power level is lower to some extent, battery low indicator in TFT monitor will appear to remind driver of time to replace battery. Please change monitor battery as early as possible to make sure system function well.

### D. Car battery running low

When using the DC power from car to supply receiver power, if the car battery power is less than 10.5V, the receiver will display in red letter.

### E. Sensor runs out of battery sensor power shortages

Sensors for the electronic detection devices, requires the use of power-driven functions, and lithium batteries have power to limit the use of its stockpile, because the sensor battery will reduced gradually, if the sensor battery is

running low then the low sensor battery will appears in figure shows, please replace the sensor lithium batteries, in order to collect accurate tire information.

- Monitor runs out of power



- Car battery running low



- Sensor runs out of battery



#### :Set Other

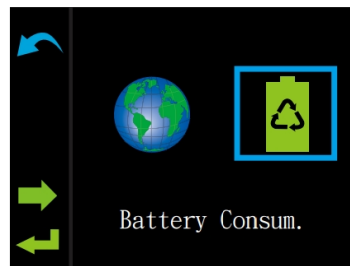
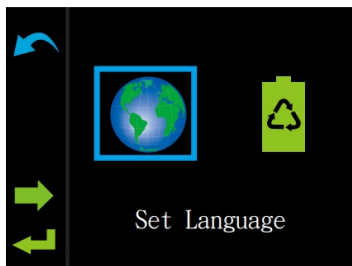
Under the system settings mode selectable language settings and battery settings can be select by users.

This unit provides multilingual for user to select.

This unit feature two battery settings – Save Mode, 24H Trace Mode.

Save Mode: when the vehicle is in parking position for over 20 minutes, the unit will directly into the sleep mode, no longer be monitored in order to extend battery life.

24H Trace Mode: will continue to monitor the vehicle in parking position, in order to obtain the latest tire information.

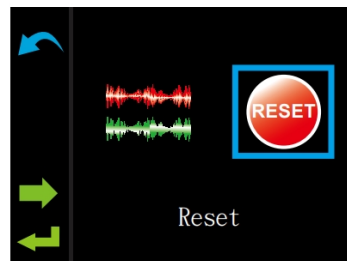
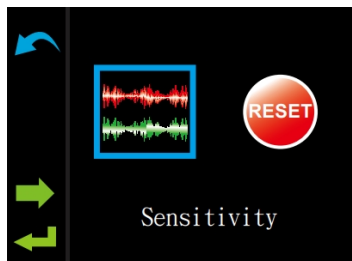


### :Set Vibration

In the tire vibrate setting mode selectable sensitivity settings and tire recalibration settings, users are free to select the sensitivity.

**Sensitivity:** sensitivity is divided into 0-7 level, level 0 is off, the greater the level of sensitivity of the more sensitive. The higher the sensitivity adjustment may be vulnerable due to the rugged pavement caused by abnormal vibration alert is triggered.

**Reset:** four tires reassess the vibration of the vehicle and began collecting four vibration analysis parameters. When the sensor after disassembly, tire change a wheel or other movement strongly recommend you to use this function to re- calibrate.



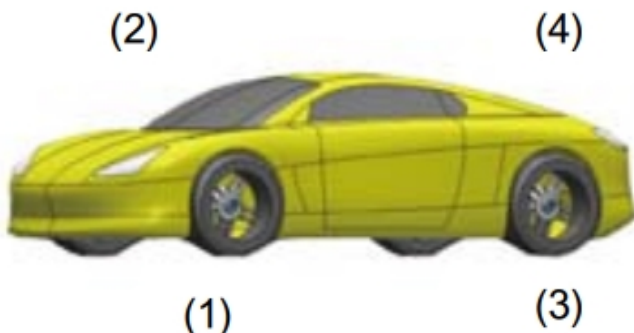
This feature requires a second source of power supply.

**During sensor installation please check and make sure no crack or aging on the rubber part, and should be checked regularly to enhance driving safety.**


## The installation of External Sensors

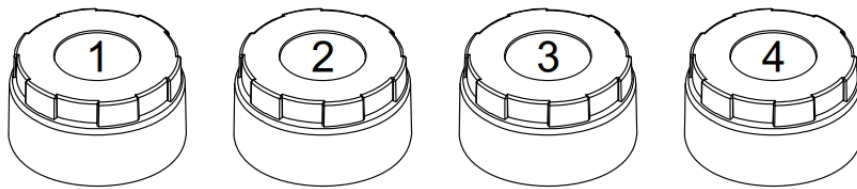
As each sensor has its own position, you have to make sure its pre-set position. When inserting batteries in every sensors please don't mix up sensor caps and every sensors have own positions and sensors map could give guidance for user to install.

1. means " Front Left Tire ".
2. means " Front Right Tire".
3. means " Rear Left Tire ".
4. means " Rear Right Tire ".





 Make sure sensor body won't mix up with other sensor cap.

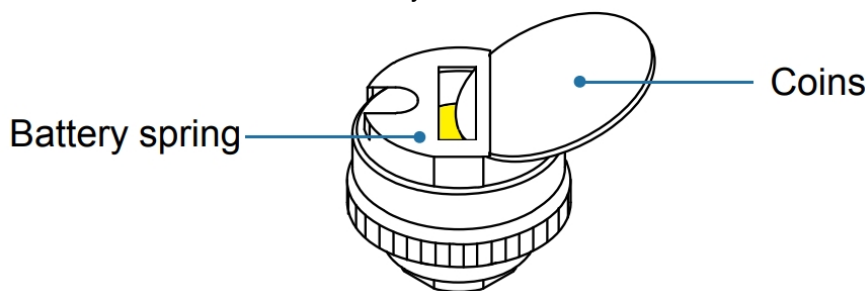


**Note:**

Due to the sensor consumes very small battery power, so that the remaining battery power could be retained for some time, in the process of resetting the battery and cause malfunctions. Battery replacement is recommended, should be discharged on the sensor, please follow these steps:

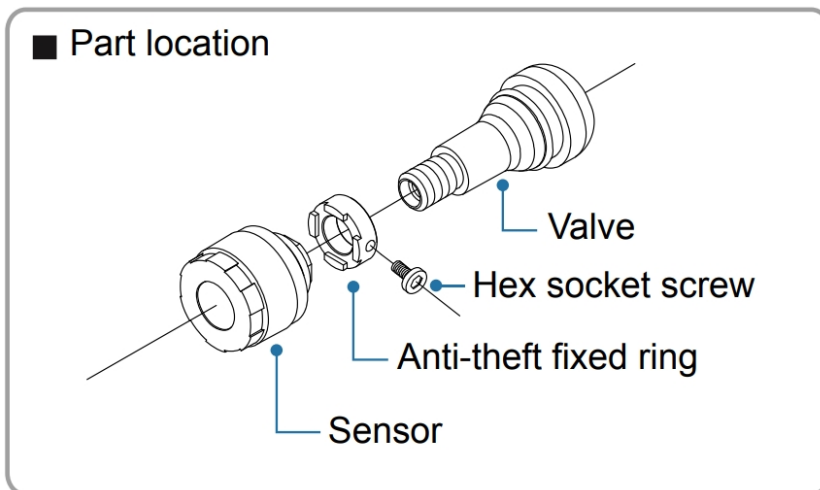
**A.** Could use metal objects, such as coins, keys... etc., into the sensor at the same time touching the battery metal holder and yellow color area (battery holders negative), to achieve the power discharge. As shown in the photo.

**B.** Then re-insert the lithium battery into sensor.




**Anti-theft tool for External sensor (Optional)**

**Part location**



 Screw and ring tighten distance is 0.7mm.

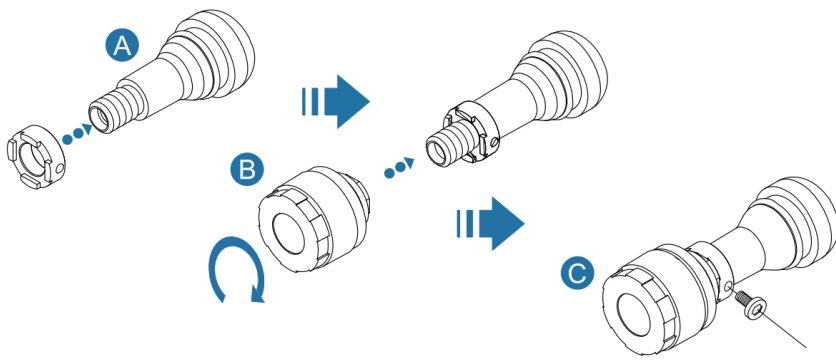
 Make sure the screw is facing outward.

※ Hex key size  $\varphi 2.5\text{mm}$ .

**A.** Place the ring on the valve.

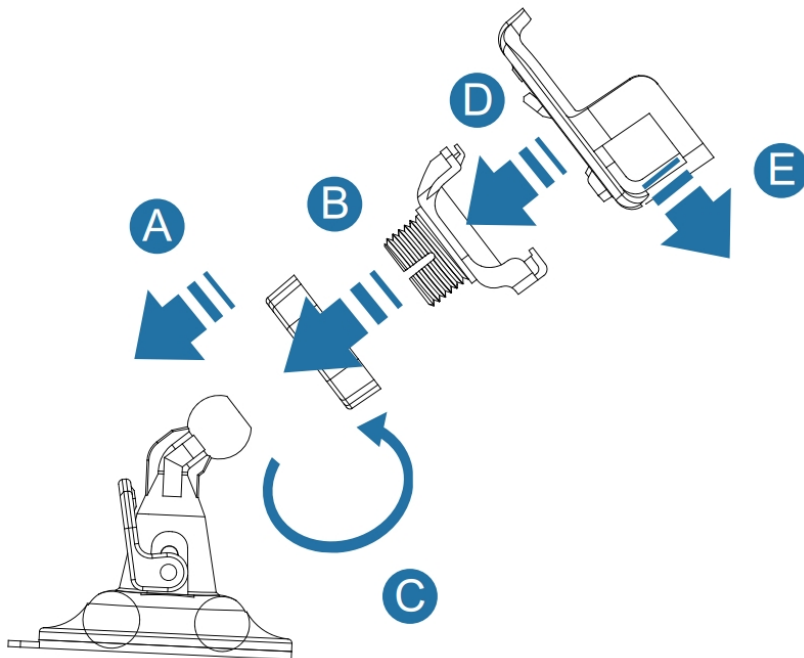
**B.** Install the sensor ( turn 5~7 times).

**C.** Use hex key to tight anti theft ring ( torque 0.71kg-cm (6.95N.cm)) make sure the ring is not loose.



## TFT monitor bracket installation

- A. Place the fixed lock ring under bracket stand.
- B. Insert the holder arm base on top of the plastic ball base.
- C. Adjust the proper position and tighten the fixed lock ring.
- D. Place the mortise of holder arm base into the slot of monitor of holder.
- E. Press the monitor holder until heard click sound.



### Note:

- Before fix bracket, chosen flat and clean surface is necessarily for better hold of bracket.
- To keep the screen clean, don't touch the surface. Handle the display unit by its edge.
- Be careful not to splash juice or other soft drinks onto the TFT monitor.
- Monitor should keep standing-up vertically. Up side down or lay down monitor could lead to dysfunction.

You can choose to use battery power or connect cigarette power cord to your car.

## Precautions

- A. Due to rubber valve stem aging under high temperature and expose under the sun, which may cause crack on the rubber stem, therefore, we recommended metal type of valve stem. (For external sensor)
- B. Please choose the installation location carefully so that the TFT monitor will not interfere driver is on the road.
- C. When read through tire pressure figures from TFT monitor, please precaution about driving safety.
- D. Please double confirm if sensors are fitted tightly. If necessary, please spreading soap water on the valve stem

to check any air leakage.

**E.** If tire pressure is getting down or dropping quickly, please stop car immediately to find out if tire is deflated or another other problem is happening.

**F.** The external sensor battery is lithium battery CR1632, please select the correct model. Lithium battery caution

1. Do not clip with metal object.
2. Can not swallow, recharge or throw into fire.

**G.** Please do not operate this device while you're driving.

**H.** Tire abnormal detect function

1. To operate with this function a straight power supply is a must have for the monitor, in order to maintain the correct instant detection.
2. All vibration parameter data display on the monitor is for reference analysis, and with the different type of vehicles may have different parameter data on the road environment factors .
3. After sensor disassembly, tire change or other movement on the wheel strongly recommend you to use the re-calibration function calibration.
4. This function is designed to monitor and detect tire conditions, there is no guarantee that the installation of this product will be able to prevent all situation ; in addition, due to road conditions and driving habits, there may not be able to detect and respond.
5. This function is for driving safety aids only.

## **Trouble Shooting**

**A.** Indications disappear from / do not appear in the display.

1. Please make sure if monitor has battery inserted.
2. Be sure to observe the correct polarity when installing the batteries.
3. Please make sure if battery has no power after use for a long time. Battery could run out of power and we suggest to replace with new battery.
4. Confirm whether the device is in standby mode, this mode is to restart automatically from energy saving mode, the energy saving mode is to minimal the power consumption of device, the user can press any button to trigger the device and turn on the device back to normal display.
5. If you use power cord, make sure if it is disconnected.

**B.** No connection between sensors and monitor

1. Please make sure if sensors are in a configured distance. This system, should be applied in passenger car. If installed in other kind of vehicle, the system doesn't guarantee its functionality.
2. Please make sure if sensor has battery inserted.
3. Be sure to sensor the correct polarity when installing the batteries.
4. Battery has no power after use for a long time. Battery could run out of power and we suggest to replace with new battery.
5. Reinstall the sensor battery. After removing the sensor battery, conduct discharge advanced motion to the sensors, this purpose is to reset the sensor.

6. Please make sure if your sensor has mixed with other systems'. As each sensor has its unique identified number and monitor can only receive pre-loaded identified number and cannot accept other new identified number.

**C.** When the low battery symbols appear on the monitor if the user continuous to operate may caused the monitor abnormal, the user can simply replacing new battery on the monitor and resume normal again.

**D.** Monitor in the 'standby mode'

Temporarily park car or drive car in a stable speed, which could let monitor get into 'standby mode'. It is a special design for power-saving purpose. You can press any button to wake it up.

**E.** Monitor falling from the windshield

1. Please make sure the surface of glass is clean and flat to give the best fitness to monitor bracket. Otherwise, the monitor could drop off.
2. When user install the suction cup, please selected slippery surface for good contact point.

**F.** Many environmental factors cause tire pressure rise and down as well. For example, hot weather or warm tire will lead rising tire pressure.

**G.** The pressure differences between the front and rear

Due to general vehicle engine location is in the front wheel, so during the driving process, the front wheel temperature is higher than the rear wheel, causing the front wheel pressure may be greater than the rear wheel PSI.

**H. Sensor temperature difference**

**Running engine, exposure under the sun, constant braking or near high temperature and other factors, can easily make sensor heat conditions inconsistent and cause the difference in temperature measurement.**

**I.** If these solutions do not help improve the situation, consult your nearest dealer.

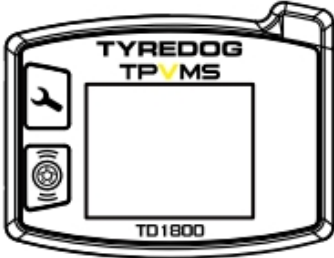
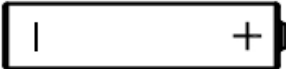
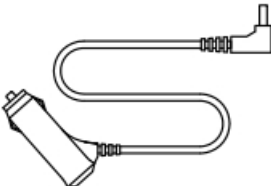
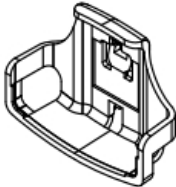
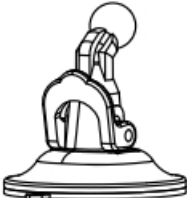
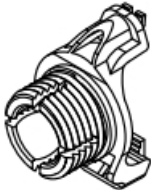

## **Product Specification**

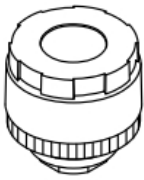

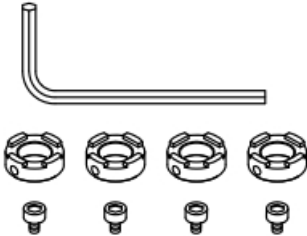
Frequency		315MHz	433.92MHz
Sensor	Pressure range	0 — 60PSI	
	Pressure accuracy	±1PSI	
	Temperature accuracy	±3 c	
	Operating voltage	3Volts DC	
	Operating temperature	-40'c — 125 c	
	Battery life	1-2 years (depends on working hours per day)	
	Dimensions	Diameter 20.5mm x Height 22.7mm	
	Weight	13.5g (±1)	
Monitor	Operating voltage	3Volts DC (Battery) / 12Volts DC (External)	
	Operating temperature	-20t — 80°C	
	Battery life	3 months (depends on working hours per day)	
	Dimensions	Length 70mmx Width 54.8mmx Height 24mm	
	Weight	74g (±1)	

※Specifications are correct at time of publication. Subject to change without notice.

### Product Package Content

Items	Content	Quantity
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TFT monitor		1 piece
AAA-1 .5V battery		2 pieces
Cigarette power cord		1 piece
User guide		1 piece
Monitor holder		1 piece
Suction cup bracket holder		1 piece
Holder arm base		1 piece

Fixed lock ring		1 piece
Tire pressure sensor		4 pieces
CR1632 lithium battery		4 pieces
Anti-theft tool		
	Spanner	1 piece
	Anti-theft fixed ring	4 pieces
	Hex socket screw	4 pieces

This product contains Lithium Button Batteries.



**WARNING: KEEP BATTERIES OUT OF REACH OF CHILDREN** Swallowing may lead to serious injury in as little as 2 hours or death due to chemical burns and potential perforation of the oesophagus.



If you suspect your child has swallowed or placed a button battery inside any part of the body seek medical advice immediately.

**Australia Poisons Hotline: 13 11 26**  
**New Zealand Poisons Hotline: 0800 POISON (0800 764 766)**

**Documents / Resources**



[TYREDOG TD-1800F-X TPVMS External Pressure Vibration Monitoring System](#) [pdf] User Guide  
TD-1800F-X, TPVMS External Pressure Vibration Monitoring System, TD-1800F-X TPVMS External Pressure Vibration Monitoring System