#### **FCC Statement**

 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.

(2)This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note:This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement, This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Model: TN01, FCC ID: 2AP2YTN01 Model: KC-01, FCC ID: 2AP2YKC-01 Model: TE05, FCC ID: 2AP2YTE05 Model: TN05, FCC ID: 2AP2YTN05



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www.promata.cn



# **Tyre Pressure Monitoring System**

Mata 2 series



# **Product Manual**



# WARNING

#### THIS PRODUCT CONTAINS BUTTON BATTERIES



The battery is hazardous. Keep batteries away from children, whether battery is new or old. If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours. Seek medical attention immediately if swallowed or placed inside any part of the body.

#### Welcome

Thank you for purchasing Promata® TPMS!

Promata® TPMS notifies you when your vehicle's tyre pressure is low/high, when it is going flat, or when tyre temperature is high. By helping to maintain proper tyre pressure and temperature, Promata® TPMS can increase your safety on the road. It can improve your vehicle's handling, better your fuel economy, reduce braking distance and decrease tyre wear.

# **⚠** For Your Safety

Before using the product, please kindly read and follow the manual instructions carefully.

- 1. This product must be correctly installed before use. Avoid damaging the sensor and the wheel when installing. Internal sensors should be installed according to manual instructions by a professional auto-technician.
- 2. This product is a safety accessory and cannot directly prevent puncture or tyre leakage. Please react promptly to the product warning signals and resolve abnormal tyre conditions before getting back on the road.
- 3. The user is responsible for safe driving, taking care of the vehicle, and ensuring the correct installation and use of the product. Sinotek assumes no liability for damages and losses.
- 4. When placed on the dashboard under strong sunlight, the display may heat up quickly. Be careful when handling the display and cover it with sunshade when you leave the vehicle.
- 5. All sensors are already paired to the display in the factory. Users DO NOT need to pair the sensors to use this product for the first time.

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# 1 Package Contents





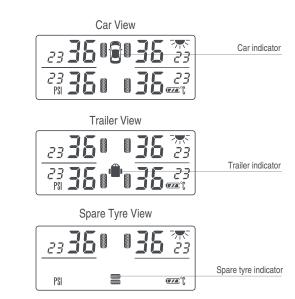
# 2 Display

#### A Brief Look



If trailer sensors are detected, the display switches between car view and trailer view. Spare tyre pressure can be checked by pressing witches.

Quick check: press  $\blacktriangleleft$  to switch from car view  $\rightarrow$  trailer view  $\rightarrow$  spare tyre view.



# **TPMS Warning Signals**

When the unit detects abnormal tyre conditions or low sensor battery, it will emit audio beeps and visual warning. Press any button to temporarily silence the alarm.



High pressure alarm



Low pressure alarm



High temperature alarm



Sensor failure signal



Low sensor battery



Spare tyre alarm\*
Spare tyre alarm will alert for high/low pressure
Spare tyre alarm will beep 15 times and fall silent.

# Charging the display

Charge the display via solar power or 5V type-C USB. When charging via solar power, the solar charging indicator will light up.

For first-time use, please charge the display for 3 hours.

When the display cannot be turned on, please charge it via 5V type-C USB for 3 hours.

# Display ON/OFF

To turn on the display: hold both the < and button for 3 seconds. To turn off the display: hold both the < and button for 3 seconds.

Automatic sleep: The display will sleep automatically when there is no

vibration detected after 4 minutes.

Automatic wake-up: The display will wake up automatically when it

detects vibration.

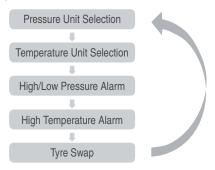
# 3 Function Settings

# Settings Mode

- 1) Enter **Settings Mode**: Hold button for 3 seconds until you hear a 'beep' sound, then short press button to rotate through the functions, press to make a choice.
- 2) Exit **Settings Mode**: Hold **b**utton till you hear two beeps.

NOTE: All changes to the settings are autosaved.

#### **Functions Rotation**



#### Pressure Unit Selection

- 1. Enter **Settings Mode**, "BAR" or "PSI" will flash.
- 2. Press > to choose between BAR or PSI.
- 3. Move onto other settings by short pressing , or exit Settings Mode by holding till you hear two beeps.

## Temperature Unit Selection

- Enter Settings Mode and rotate to Temperature Unit Selection, "C" or "F" will flash.
- 2. Press > to choose between °C or °F.
- 3. Move onto other settings by short pressing , or exit **Settings Mode** by holding till you hear two beeps.

## High and Low Pressure Alarm

Users are able to customize 4 sets of high/low pressure alarms, including:

- Car front wheels [HI/LO], car rear wheels [HI/LO].
- Trailer front wheels [HI/LO], and trailer rear wheels [HI/LO].

Car front wheels- High Pressure



Car front wheels- Low Pressure



- Enter Settings Mode and rotate to High Pressure Alarm settings [HI] for car front axial wheels.
- 2. Press or to choose the desired high pressure alarm threshold.
- 3. Short press to go to Low Pressure Alarm settings [LO] for car front axial wheels.

- 4. Press o r to choose the desired low pressure alarm threshold.
- 5. Short press to move onto the next set of axial wheels (e.g. car rear axial wheels).

Follow the same instructions to set the high/low pressure alarm threshold for car rear axial wheels, trailer front axial wheels and trailer rear axial wheels.

6. Once finished, move onto other settings by short pressing ✓ , or exit Settings Mode by holding ✓ until you hear two beeps.

Note: There are no specific high/low pressure settings for spare tyres.

Spare tyre 1 follows the trailer front wheels settings.

Spare tyre 2 follows the trailer rear wheels settings.

Spare tyre alarm will beep 15 times for high/low tyre pressure and then fall silent.

**Factory Settings** 

HI: 3.0 BAR / 43 PSI

LO: 2.0 BAR / 29 PSI

## High Temperature Alarm

- 1. Enter **Settings Mode** and rotate to **High Temperature Alarm Setting**.
- 2. Press or to choose the desired high temperature alarm threshold.
- 3. Move onto other settings by short pressing , or exit Settings Mode by holding button until you hear two beeps.

Factory Setting: 80°C/176°F

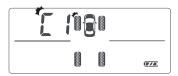
## Tyre Swap Function

The Tyre Swap Function is useful during wheel rotation, especially for internal sensors. The below example performs tyre swap on the front right wheel and the rear right wheel of the vehicle:

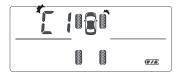
1) Original tyre pressure.



2) Enter **Settings Mode**, rotate to **Tyre Swap**. "C1" and " ■" will flash.



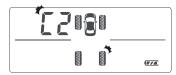
3) Press button once to select the first wheel (e.g. front right wheel) for **Tyre Swap**. "C1" and the selected wheel "" " will flash.



4) Press once "C2" and " " will flash.



5) Press button to select the second wheel (e.g. rear right wheel) for **Tyre Swap**. "C2" and the selected wheel " " " will flash.

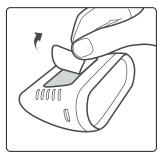


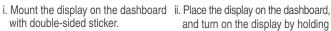
6) Press once, Tyre Swap is done. BAR or PSI will start flashing on the screen. Then, hold till you hear two beeps to exit Settings Mode.

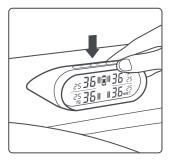


# Installation

# Display Installation







and turn on the display by holding and buttons.

## 

- For first-time use, please charge the display for 3 hours
- DO NOT install the display on top of the airbag compartment.
- Some products such as DVRs may cause electronic interference. The display should be mounted away from such products.

#### Sensor Installation Internal Sensor Installation- Mata 2



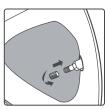
i. Remove the original tyre valve.



ii. Install the internal sensor.



iii. Inflate the tyre.



iv. Screw on the internal sensor valve cover.



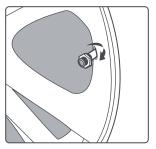
v. Check air leakage by spraying soapy water.



vi. Perform a dynamic wheel balance.

Warning: Do not damage the sensor valve.

#### External Sensor Installation - Mata 2E



i. Remove the original valve cap, thread the anti-theft nut through.



ii. Screw on the sensor.



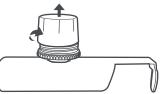
iii. Using the spanner tighten the anti-theft nut against the sensor.



iv. Check air leakage by spraying soapy water.

# Changing Sensor Battery (for external sensor only)

Battery replacement is only for external sensors. When the external sensor battery is low, please replace the sensor battery CR1632 by following the instructions below:

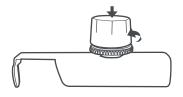


i. Unscrew the sensor cover.

ii. Remove the old battery.



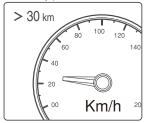
iii. Replace with new CR1632 battery (the + side faces upwards).



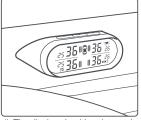
iv. Screw on the sensor cover.

#### Functional Test After Installation

Users may perform a functional test after installation.



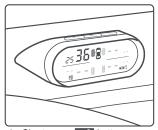
 i. Please drive the vehicle over 30km/h (19mph) for a few minutes.



ii. The display should update realtime data automatically. When all tyre data is displayed, the installation is a success.

iii. For Internal sensors: With sensors installed, inflate or deflate the corresponding tyre until data shows up on the display.

For External sensors: screw on the new sensor to the corresponding tyre until data shows up on the display.

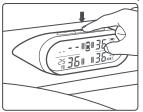


iv. Short press button once to save the data.

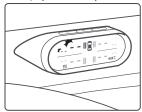
# 5 Sensor Pairing

#### $\bigwedge$ WARNING: NO NEED to perform sensor pairing for a new unit!

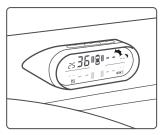
Sensor pairing is used to pair a new sensor or a missing sensor to the display. All units come with sensors already paired to the display in the factory.



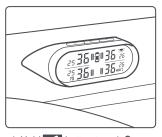
i. Press button 5 times to enter Sensor Pairing Mode with a 'beep' sound.



ii. Press or button to select the desired tyre position.



v. Press or to select the next tyre position to pair the other sensors.



vi. Hold button to exit **Sensor**Pairing Mode with two 'beep'

sounds.

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# 6 Sensor Deletion

Sensor deletion will delete data information of a particular sensor from the display. The display will stop receiving and showing data from that sensor:

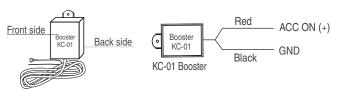
- 1. Press button 5 times to enter Sensor Pairing Mode with a 'beep' sound. The front left tyre position will flash.
- 2. Press or button to choose the sensor to delete, the chosen position will flash.
- 3. Press and hold button for 3 seconds, there will be a 'beep' sound and ' dE' will show on the screen in the chosen sensor position.
- 4. Press set button once to confirm deletion and the sensor will be deleted; if you do not want to delete that sensor, press or button to cancel.
- 5. To delete another sensor, repeat steps 2-4, or skip this step.
- 6. To save and exit Sensor Pairing Mode, hold down until you hear two consecutive 'beep' sounds.



Note: Deleted sensors can be re-paired to the display, see "Sensor Pairing" instructions (page 15).

## 7 KC-01 Booster Installation

- Strengthens sensor signals
- · Should be installed on the caravan / trailer
- When installing, the front side must be faced away from the metal parts
- · Ideally booster should be installed roughly equal distance to all the tyres
- The booster should be mounted by screw or tie.



# 8 Configuration with 5 Sensors or More

Here are some sample configurations with 5  $\sim$  10 sensors and their positions on the display.

Note: Do not install the spare tyre sensor(s) in the vehicle tyre position. The spare tyre sensor can only be displayed in the spare tyre position on the display.

#### 5 sensors including 1 spare tyre sensor





### 6 sensors including 2 trailer sensors





#### 8 sensors including 4 trailer sensors



## 10 sensors including 4 trailer and 2 spare tyre sensors



#### Spare Tyre View



# 9 Product Specifications

## Display

Frequency	Operating temperature
433.92MHz	-20~+70°C / -4~158°F

## Factory Default Settings

Default high pressure alarm	3.0 BAR/ 43 PSI
Default low pressure alarm	2.0 BAR/ 29 PSI
Default high temperature value	80°C/176°F

Note: Hold and buttons for 3 seconds to restore factory default settings.

## User selectable range for alarms

High pressure	Low pressure	High temperature
0.8 BAR~14 BAR	0.5 BAR~9.9 BAR	70~90°C
/ 12~99 PSI	/7~65 PSI	/ 158~194°F

Note: \*Low pressure threshold cannot be set higher than high pressure threshold.

\*When the pressure is more than 9.9BAR, the display can only show integers.

\*If the pressure is in PSI, the biggest number is 99PSI which can be shown on the display.

#### Sensor

	Internal sensor	External sensor
Weight	28g±1g	8g±1g
Operating frequency	433.92MHz±50KHz	433.92MHz±50KHz
Pressure monitoring range	0~8 BAR/ 0~116 PSI	0~8 BAR/ 0~99 PSI
Pressure accuracy	±0.1 BAR/±1.5 PSI	±0.1 BAR/±1.5 PSI
Battery life	6 years	2 years

# 10 Q & A

- Q Can I just install two sensors to monitor my trailer?
- A Yes. Please delete any sensors that are not going to be installed (page 17).
- Q How can I do a factory reset?
- A "Factory reset" will wipe pressure data and user-set parameters, it does not reset sensor positions. To do a factory reset, hold down both and buttons for 3 seconds to restore factory default settings.

- Q My vehicle is long and the rear tyres on my caravan cannot receive tyre info. What should I do?
- A Please install a booster KC-01 near the rear tyres. Booster KC-01 can be purchased separately.
- Q The display is missing data, what should I do?
- A 1. Ensure that all the sensors are present;
  - 2. Ensure there is no electronic interference around (e.g. turn off DVRs)
  - 3. Drive the vehicle over 30km/h for 5 minutes;
  - 4. Change sensor battery;
  - 5. If data is still missing, commence sensor pairing (page 15).
  - If the display is more than 10 meters from the farest sensor, a booster need to be installed.
- Q Do I need to perform a dynamic wheel balancing?
- A After installing internal sensors, dynamic wheel balancing is a must. Dynamic balancing is not required for external sensors.
- Q How to silence the display alarm?
- A You can press any button to temporarily silence the display.
- Q The display is constantly alarming for low pressure, how to keep it quiet?
- A 1. Change the low pressure alarm threshold.
  - 2. Switch off the display by holding < and button.
  - 3. Inflate the tyre to the appropriate pressure.

- Q What to do if I want to upgrade to 10 tyres?
- A Please purchase extra sensors from authorised stores and follow the sensor pairing instructions in this manual to pair the extra sensors to the display.
- Q If one of my TPMS sensors becomes lost or damaged, can I just buy a new sensor and pair it to my existing TPMS display?
- A Yes, our sensors are interchangeable. A new sensor can be easily paired to the display (page 15).
- What happens if I separate my trailer and my 4-wheel vehicle? Will the display alarm and report sensor failure?
- A If the display fails to receive all of the pre-paired tyre signals from the trailer at the same time, it will pause the status of trailer data. The display will not alarm.
- Q If I disconnect and reconnect my trailer to may car, do I need to pair the trailer sensors to the display each time?
- A No need. When the trailer sensors are close by, the system will be able to automatically detect these sensors and receive tyre data.

- Q During a wheel rotation, how can I make sure the sensors are in the right position?
- A There are two methods:
  - 1. External sensors can be taken off and installed to the correct position; or 2. Users can utilise the Tyre Swap function (page 9) to exchange two tyre positions each time, until all tyres are swapped to the correct position.
- After continuous exposure to direct sunlight, the LCD display becomes too dark to see. What should I do?
- A Please place the display in the shade. Its screen will brighten up when the temperature falls below 70°C. This is normal for LCD screens.
- Q The display warns me of low sensor battery, but it stops after a while. Why is that so?
- A There are two cases that the system "thinks" the sensor battery is low:

  1. The sensor battery is low. The user needs to change the battery ASAP.

  2. The temperature is less than -40 °C, the battery cannot output normal power. The user does not need to change the battery in this case.
- Q Where do I find help?
- A The first point of contact is your direct seller. For more help, send us an email to help@promata.cn.