

Tire Pressure Monitor System

C78890 Cars, Pick-ups, & SUVs

User Manual



A. Product Overall:

- **Components:** 4 External valve sensors, 1 LCD Display & 2-pc Tool Set
(Power Adaptor optional accessory)
- **Frequency:** HF 433.92MHz
- **Features:**
 1. Detection of each tire pressure range: (10~70PSI)
 2. Accuracy of the tire pressure ± 2 PSI
 3. Accuracy of the Tire Temperature $\pm 3^{\circ}\text{C}$
 4. Tire Temperature Detecting Range: $-30 \sim + 85^{\circ}\text{C}$
 5. High or Low-Pressure Alarm setting boundary.
 6. High Temperature of Tire Alarm.
 7. Temperature unit settings: $^{\circ}\text{C}$ & $^{\circ}\text{F}$
 8. Real-time LCD Digital indication on remote screen.
 9. Tire Pressure Calibration units: PSI, BAR, & KPA
 10. Reserved 40M Tire Recognition codes.

● **Alarm Types shown on Display:**

1. **Indication of High-Pressure Alarm:** LCD flashing on specific wheel with High-Pressure Value shown and “Beep” sound provided.
2. **Indication of Low-Pressure Alarm:** LCD flashing on specific wheel with Low-Pressure Value shown and “Beep” sound provided.
3. **Indication of High Temperature Alarm:** LCD flashing showing temperature value and “Beep” sound provided
4. **Indication of Sensor Low-Battery Warning:** Shown on LCD display
5. **Indication of Display Low-Battery Warning:** LCD flashing indication on the Power light & “Beep” sound.
6. **Indication of Sensor Malfunction Alarm:** Shown on LCD display (Display self-examine).

● **Specification:**

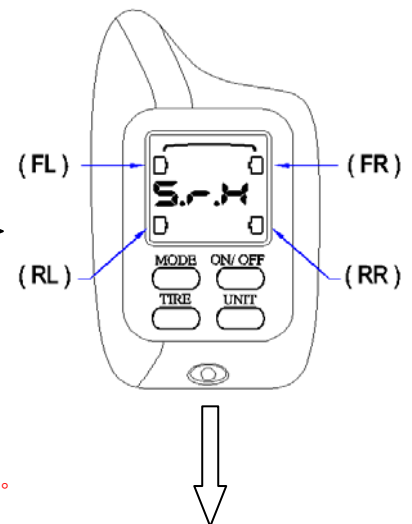
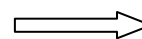
| | Sensors | LCD Display |
|------------------------------|---|---|
| Dimension | φ 26.0* H: 25. 0 (mm) | 76mm (L) x 42.5mm (W) x 19.5mm (H) |
| Weight | 14.0g ± 0. 5g (w/Battery contained) | 36.5g ± 0. 5g (Battery Excluded) |
| Power Supply | CR2032 3V Lithium (1~2 year Lifetime or above 2 years when under normal condition) | 2 x 3A' Battery Alkaline type or (Power Supplied line 12V) |
| Frequency | 433.92MHz | 433.92MHz |
| Operating Temperature | -30°C ~ + 85°C | -20°C ~+80°C |

*Specification is subject to change for product performance without any notice

B. Installation: (Always have the display power on before installation of sensors)

Label on Sensor

1. Labeled with **FL:** Front Left Wheel.
2. Labeled with **FR.:** Front Right Wheel.
3. Labeled with **RL.:** Rear Left Wheel.
4. Labeled with **RR.:** Rear Right Wheel.



Installation of Sensor:

SUGGESTION: With the display power on, the communication of sensor & display will run well prior to the installation of sensor ◦

1. Make sure the top part and bottom house of the sensor are tightened (Applied with enclosed wrench)
2. Remove original valve cap from stem
3. Screw-on the enclosed Hex nut on the valve; then, mount the valve sensor onto the valve stem. Make sure the Hex nut is being tighten in reverse clockwise direction to affix with the bottom part of the Valve Sensors ◦

NOTICE: To Check the valve if it is leaking after installation , it can be confirmed from the display to see if the pressure has dropped down.



Installation of Display:

1. Place the LCD display at a best view place, then, have the display power ON (or applying Motorbike DC12V power wire)

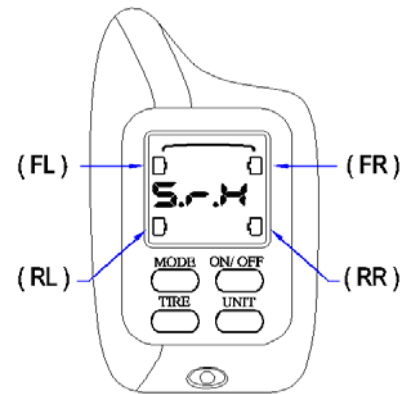
C. About the Display Panel :

ON/OFF: Power on/off.

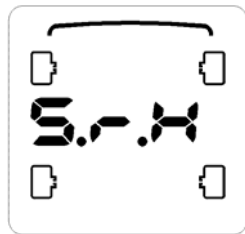
MODE: To check the internal setting value. Press 1 time
To run a cycle-check (High & Low Pressure value & High temperature)

TIRE: To check actual tire pressure & temperature value.
To run a cycle-check press 1 time

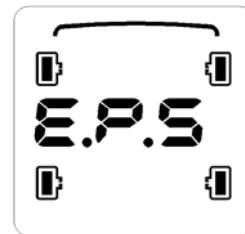
UNIT: To switch the calibration unit for pressure & temperature.



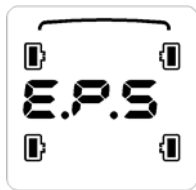
D: Explanation of Circumstances :



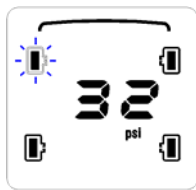
⊙Power on. System is checking ◦



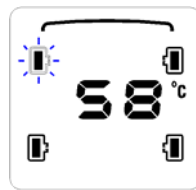
⊙Display receiving data from 4 different wheel, pressure is normal (within High/Low setting)



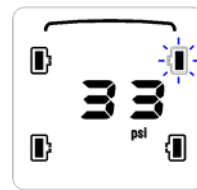
1.



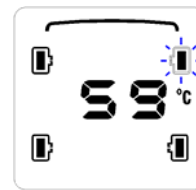
2.



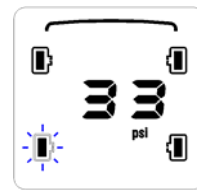
3.



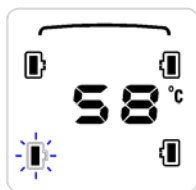
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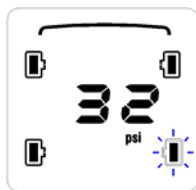
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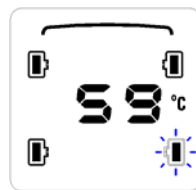
6.



7.



8.

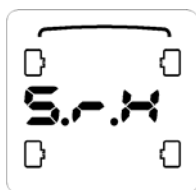


9.

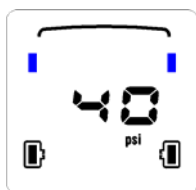


10.

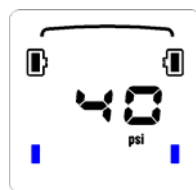
⊙When pressure is normal, press TIRE-Key to check Actual Pressure & Temperature value ◦
(Cycle order: starting with FL. Wheel--FR. Wheel Pressure & Temperature. Then, RL. Wheel--RR. Wheel Pressure & Temperature)



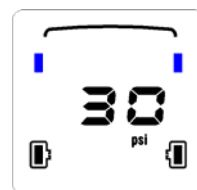
1.



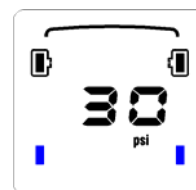
2.



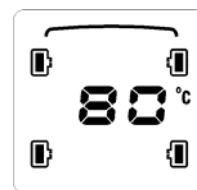
3.



4.

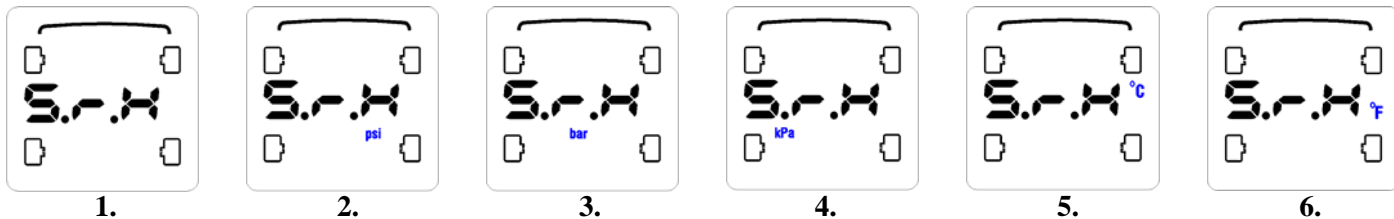


5.



6.

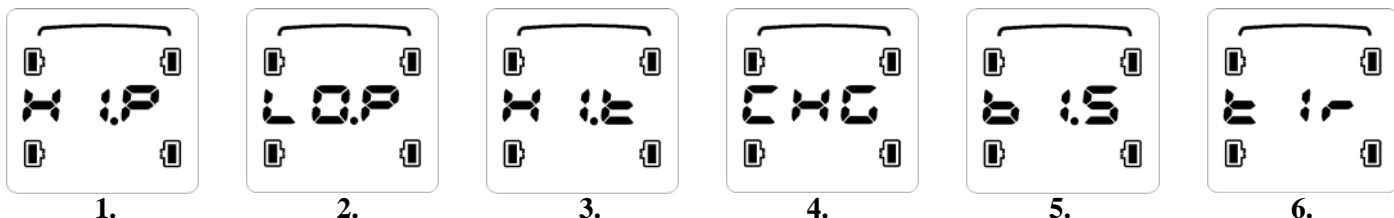
⊙When power is on, press MODE-Key to check internal High, Low Pressure & Temperature setting value ◦
(Cycle order: Starting first FL. FR. wheels & RL, RR wheels--High pressure, then, FL. FR. wheels & RL. RR. wheels--Low pressure, & FL. FR. wheels & RL. RR. wheels--High temperature and return to original)



1. 2. 3. 4. 5. 6.

©When power is on, press UNIT-Key to switch the calibration unit of pressure or temperature
(This setting is done separately)

Press UNIT-Key for 2-second until the calibration unit is shown. Then, press UNIT-Key to make selection. Press TIRE-Key to confirm the unit, the system will return to "Power-On" screen.

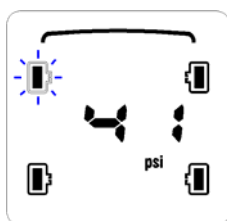


1. 2. 3. 4. 5. 6.

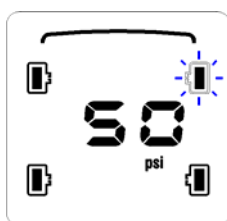
©When making any adjustments on the settings (pressure & temperature setting done separately), first, press UNIT-Key and press TIRE-Key in the same time. The display would show as diagram 1. (Hi.P.) setting. Press "MODE-KEY" to make a selection from diagram 1~6, make sure to press TIRE-KEY after a specific selection. (To quit the above diagram 1~6 selection mode, simply press UNIT-Key)

Illustration of above diagrams:

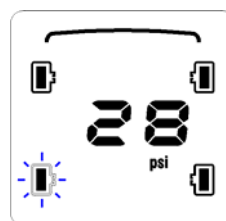
1. To adjust the H-Pressure Alarm value (Internal Setting: : 40PSI/ 2.79bar/ 279kPa)
2. To adjust the L-Pressure Alarm value (Internal Setting: 30PSI/ 2.10bar/ 210kPa)
3. To adjust H-Temperature Alarm value (Internal Setting: 80°C/ 176°F)
4. Tire Rotation (This feature only works for Internal Type Valve Sensors)
5. Options of LED backlight on/off (ON or OFF)
6. Number of wheels shown on display (3 types: 2, 4, or 5 wheels)



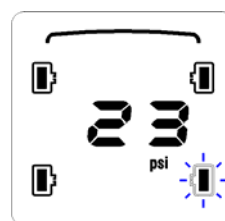
©FL wheel H. pressure



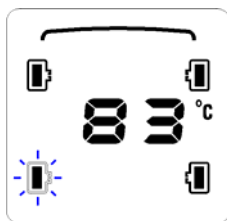
©FR wheel H. pressure



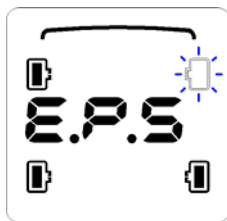
©RL wheel L. pressure



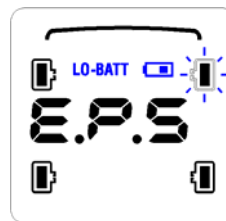
©RR wheel L. pressure



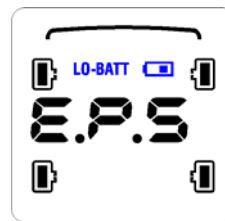
©RL wheel H. temperature



©FR wheel sensor malfunction
(The sign is flashing)



©FR wheel sensor L. battery
(Sign on FR wheel& LO-BATT)



©Display L. battery
(LO-BATT sign flashing)

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 AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

 COWEAHTH PRECISION TECH. CO., LTD.

 ASPIRIT ENTERPRISE, INC.

Email: tire.monitor@msa.hinet.net

Tire Pressure Monitor System

M78890 Motorbike

User Manual



A. Product Overall:

- **Components:** 2 External valve sensors, 1 LCD Display & 2-pc Tool Set
(Power Supplied Line optional accessory)
- **Frequency:** HF 433.92MHz
- **Features:**
 1. Detection of each tire pressure range: (10~70PSI)
 2. Accuracy of the tire pressure ± 2 PSI
 3. Accuracy of the Tire Temperature $\pm 3^{\circ}\text{C}$
 4. Tire Temperature Detecting Range: $-30 \sim + 85^{\circ}\text{C}$
 5. High or Low-Pressure Alarm setting boundary.
 6. High Temperature of Tire Alarm.
 7. Temperature unit settings: $^{\circ}\text{C}$ & $^{\circ}\text{F}$
 8. Real-time LCD Digital indication on remote screen.
 9. Tire Pressure Calibration units: PSI, BAR, & KPA
 10. Reserved 40M Tire Recognition codes.

● **Alarm Types shown on Display:**

1. **Indication of High-Pressure Alarm:** LCD flashing on specific wheel with High-Pressure Value shown and “Beep” sound provided.
2. **Indication of Low-Pressure Alarm:** LCD flashing on specific wheel with Low-Pressure Value shown and “Beep” sound provided.
3. **Indication of High Temperature Alarm:** LCD flashing showing temperature value and “Beep” sound provided
4. **Indication of Sensor Low-Battery Warning:** Shown on LCD display
5. **Indication of Display Low-Battery Warning:** LCD flashing indication on the Power light & “Beep” sound.
6. **Indication of Sensor Malfunction Alarm:** Shown on LCD display (Display self-examine).

● **Specification:**

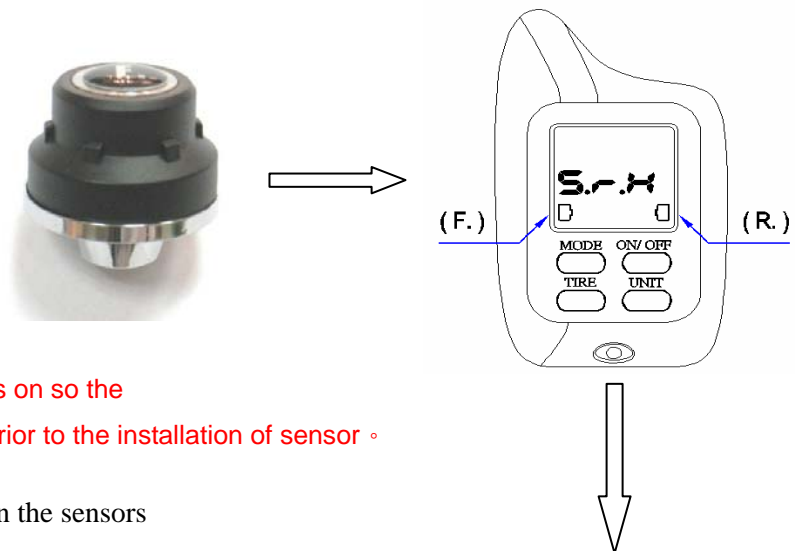
| | Sensors | LCD Display |
|------------------------------|---|---|
| Dimension | φ 26.0* H: 25. 0 (mm) | 76mm (L) x 42.5mm (W) x 19.5mm (H) |
| Weight | 14.0g ± 0. 5g (w/Battery contained) | 36.5g ± 0. 5g (Battery Excluded) |
| Power Supply | CR2032 3V Lithium (1~2 year Lifetime or above 2 years when under normal condition) | 2 x 3A' Battery Alkaline type or (Power Supplied line 12V) |
| Frequency | 433.92MHz | 433.92MHz |
| Operating Temperature | -30°C ~ + 85°C | -20°C ~+80°C |

*Specification is subject to change for product performance without any notice

B. Installation: (Always have the display power on before installation of sensors)

Label on Sensor

1. Labeled with **F.:** Front Wheel.
2. Labeled with **R.:** Rear Wheel.



Installation of Sensor:

SUGGESTION: Make sure the display power is on so the communication of sensor & display is normal prior to the installation of sensor ◦

1. Make sure the top and bottom are tighten on the sensors (Applied with enclosed wrench)
2. Remove original valve cap from stem
3. Screw-on the enclosed Hex nut on the valve; then, mount the valve sensor onto the valve stem. Make sure the Hex nut is being tighten in reverse clockwise direction to affix with the bottom part of the Valve Sensors ◦

NOTICE: To Check the valve if it is leaking after installation, it can be confirmed from the display to see if the pressure has dropped down.



Installation of Display:

1. Place the LCD display at best view place, then, have the display power ON (or applying Motorbike DC12V power wire)

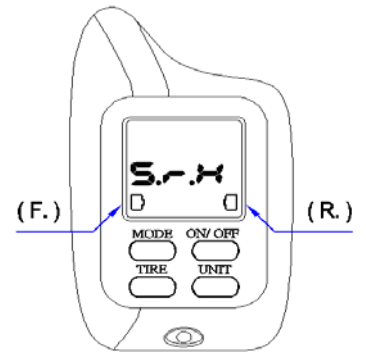
C. About the Display Panel :

ON/OFF: Power on/off.

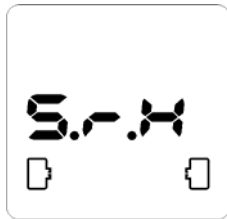
MODE: To check the internal setting value. Press 1 time
To run a cycle-check (High & Low Pressure value & High temperature)

TIRE: To check actual tire pressure & temperature value.
To run a cycle-check press 1 time

UNIT: To switch the calibration unit for pressure & temperature.



D: Explanation of Circumstances :



⊙Power on. System is checking ◦



⊙Display receiving data Front & Rear wheel pressure is normal (within High/Low setting)



1.



2.



3.



4.

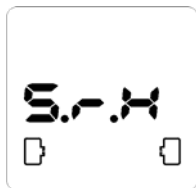


5.

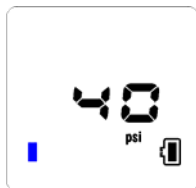


6.

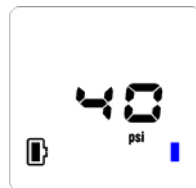
⊙When pressure is normal, press TIRE-Key to check Actual Pressure & Temperature value ◦
(Cycle order: starting with F wheel-Pressure & Temperature. Then, R wheel-Pressure & Temperature)



1.



2.



3.



4.

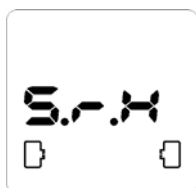


5.

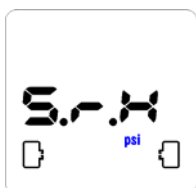


6.

⊙When power is on, press MODE-Key to check internal High, Low Pressure & Temperature setting value ◦
(Cycle order: Starting F. & R. wheel-High pressure, F. & R. wheel-Low pressure, F. & R. wheel—High temperature and back to previous status)



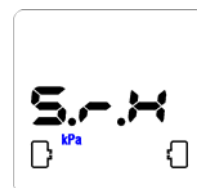
1.



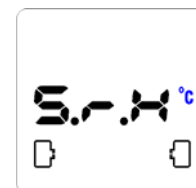
2.



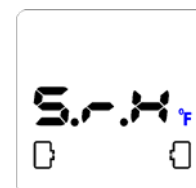
3.



4.



5.

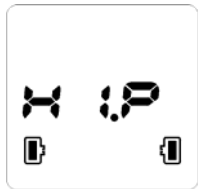


6.

⊙When power is on, press UNIT-Key to switch the calibration unit of pressure or temperature

(This setting is done separately)

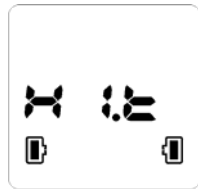
Press UNIT-Key for 2-second until the calibration unit is shown. Then, press UNIT-Key to make selection. Press TIRE-Key to confirm the unit, the system will return to "Power-on" mode ◦



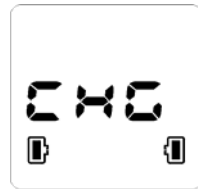
1.



2.



3.



4.



5.



6.

©When making any adjustments on the settings, first, press UNIT-Key and press TIRE-Key in the same time. The display would show as diagram 1. (Hi.P.) setting.

Press "MODE-KEY" to make a selection from diagram 1~6, make sure to press TIRE-KEY after a specific selection. (To quit the above diagram 1~6 selection mode, simply press UNIT-KEY)

Illustration of above diagrams:

1. To adjust the H-Pressure Alarm value (Internal Setting: F.-40PSI/ 279kPa ; R.-45 PSI/ 314kPa)

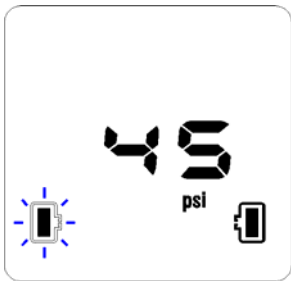
2. To adjust the L-Pressure Alarm value (Internal Setting: F.-25PSI/ 175kPa ; R.-30 PSI/ 210kPa)

3. To adjust H-Temperature Alarm value (Internal Setting: 80°C/ 176°F)

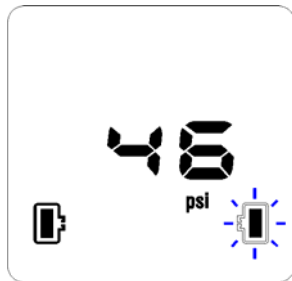
4. Tire Rotation (This feature only works for Internal Type Valve Sensors)

5. Options of LED backlight on/off (ON or OFF)

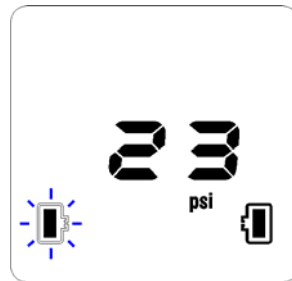
6. Number of wheels shown on display (3 types: 2, 4, or 5 wheels)



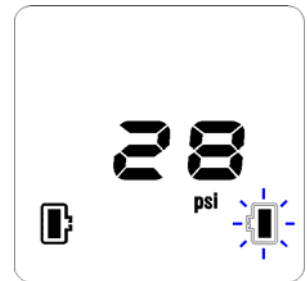
©F. wheel H. pressure



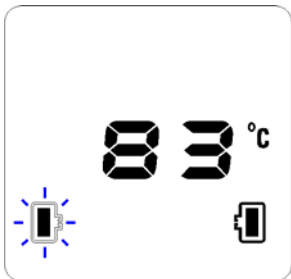
©R. wheel H. pressure



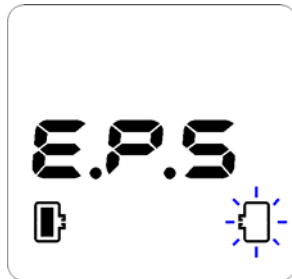
©F. wheel L. pressure



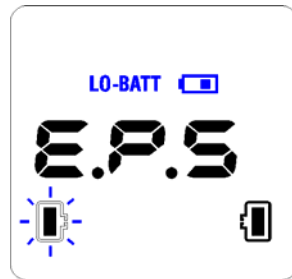
©R. wheel L. pressure



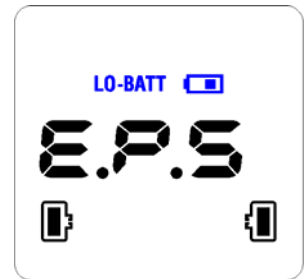
©F. wheel H. temperature



©R. wheel sensor malfunction
(The sign is flashing)



©F. wheel sensor L. battery
(Sign on F wheel& LO-BATT)



©Display L. battery
(Lo-BATT sign flashing)

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 AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

 COWEAHTH PRECISION TECH. CO., LTD.

 ASPIRIT ENTERPRISE, INC.

Email: tire.monitor@msa.hinet.net

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

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.