

SENSOR USER MANAUL

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1.1 INTRODUCTION

Transmitter: Mounted inside the tyre on the centre of wheel using cradle and steel strap to continuously monitor tyre's pressure and temperature every 10-second and transmit data via RF to the integrated display at 30-second intervals when tyres are normal or 12-second when the tyres are abnormal.



Stainless Steel Strap: Tyre transmitters are mounted to the surface of the rim using a stainless steel strap which can be installed on hundreds of thousands of wheels world wide. It's the most reliable and universal method of transmitter installation.

ID Module: ID module is an international patented innovative technology used to identify tyre's position without any activation tool or complicated operation. Each ID module has an exclusive transmitter with the same ID code. The ID module is mounted in the display and Trailer ID box to register transmitter's ID code into the display that will recognize wheel positions as well as the baseline pressures for all tyres.



1.2 WORKING MODE

1.2.1 NORMAL PRESSURE INSPECTING

If the pressure and temperature of tire is normal, the transmitter will send pressure and temperature data every 30 seconds.

1.2.2 LOW PRESSURE WARNING MODE

If the pressure of tire is between 0.66 Bar and 4 Bar, the transmitter will send pressure and temperature data every 12 seconds.

1.3 INSTALLATION TRANSMITTER



Before installation, make sure you identify each pair of transmitter and ID module. There is a pair of transmitter & ID module, along with a rim label packed in a small white box, they have same ID code. For example: 01EB327F.



Install the transmitter in the wheel and paste the rim label on the rim. Then install the ID modules in the corresponding position of display and trailer ID box.

1.3.1 Installation Transmitter

1.3.1.1 Remove the wheel from the vehicle and then remove the tyre. Clean the area where the transmitter is to be installed.

1.3.1.2 Loose the steel strap. Wrap the strap around the centre of the rim in the lowest spot and mark it 5 cm (2") past worm gear.



1.3.1.3 Cut the extra strap tapered and file the rough edges.





The strap is under tension. Always use safety goggles or a face shield and gloves when mounting and dismounting the strap. Failure to follow these instructions may result in personal injury.

1.3.1.4 Install the tapered end of the strap through the opening of the cradle.



1.3.1.5 Remove the adhesive tape liner from cradle and paste transmitter beside the tyre valve. Keep the strap parallel to the wheel flange and ensure the strap is positioned in the lowest spot possible for correct transmitter and cradle retention.



NOTE: The transmitter must be positioned in the lowest spot possible and installed beside the tyre valve in order to know its approximate location after the tyre has been mounted.

NOTE: When fixing the transmitter on the rim, make sure the section of steel strap installed through the transmitter is complete NOT TOOTHED.



1.3.1.6 Position worm gear 4" (10 cm) away from the edge of the transmitter and tighten worm gear until the transmitter can not be moved. **DO NOT over tighten the strap, reference torque: 27-35 inch lbs (3-4 Nm)**



1.3.1.7 Indicate the location and ID code of the transmitter by applying the supplied rim label to a clean and dry location on the rim.



1.3.1.8 Mount the tyre on the rim, inflate tyre to standard cold inflation pressure specified on tyre sidewall and dynamic balance the wheel before it is put back on the vehicle.



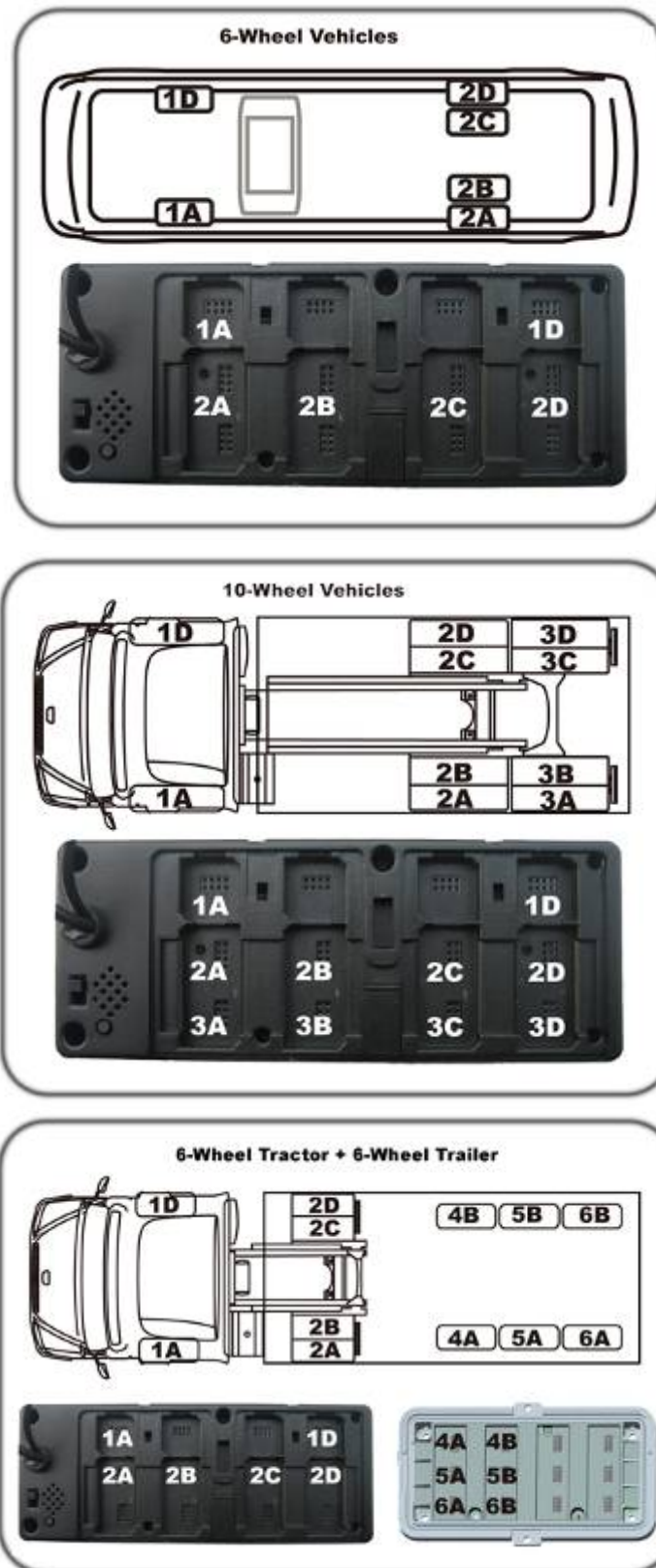
Ensure that the tyre beads and mounting hook do not touch the transmitter during mounting. Pay attention to the transmitter antenna not be clamped by tyre bead and broken by mounting hook. DO NOT inflate tyre higher than maximum pressure stamped on tyre sidewall.

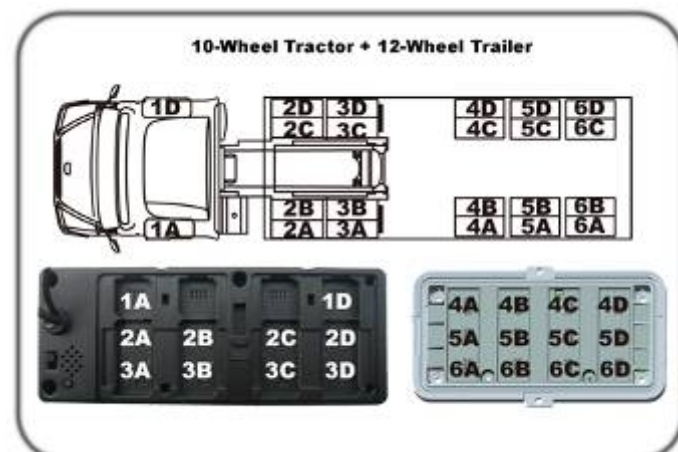
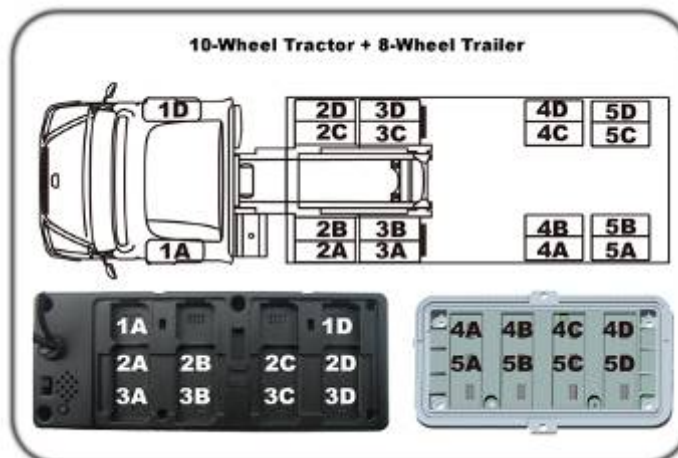
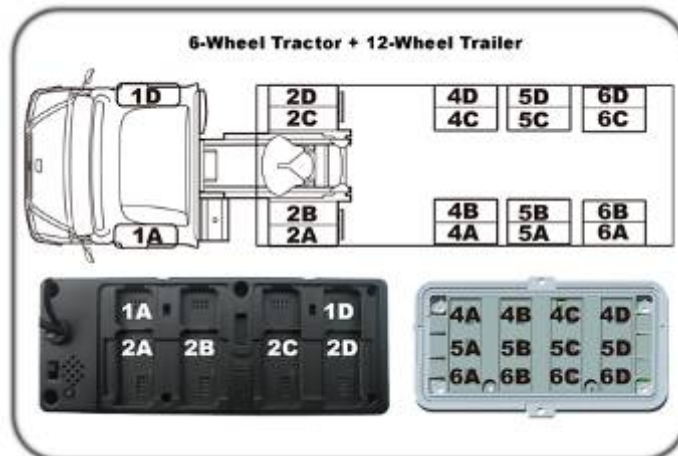
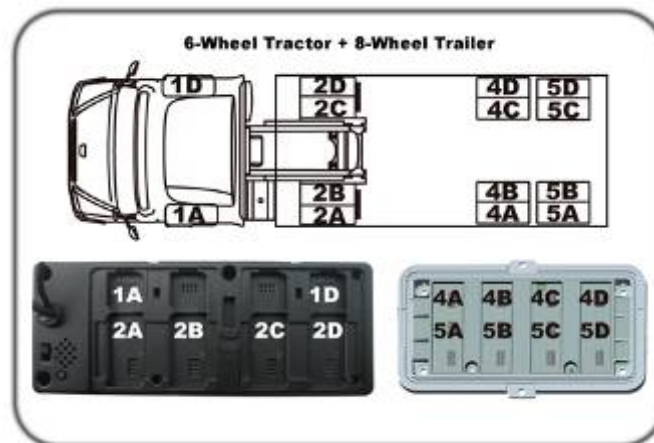
1.3.1.9 Use the same procedure to install the other transmitters. And record all ID numbers labeled on the rim in the Annex table so that you can attach the ID modules to the proper location

1.3.2 Installation ID module

1.3.2.1 Position relationship of ID module slots and tyres

The following diagrams are the default relationship between ID module slots and tyre position. After installing the transmitters in the wheels, their ID modules should be installed on corresponding ID module slots in display and trailer ID box.





1.3.2.3 Mounting of ID Module

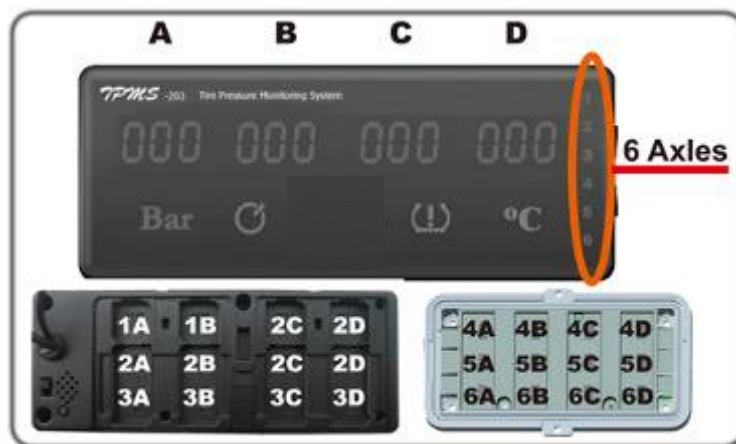
According to the figures above, install all ID modules in the back of display and trailer ID box.



Pay attention to the matching of needle plugs and slots when mounting ID module. If you can't find your vehicle configuration, please contact our customer service for suggestions.

1.3.2.4 Position relationship of ID module slots and screens

There are three axles of ID module slots in the back of display and trailer ID box respectively. The axle indicator "123456" on the display matches the six axles. For example, there are four ID modules mounted in Axle2, their data will be shown on the screen in line 2 from left to right.



NOTE: If no ID module is in the ID module slot, nothing will be shown on the corresponding screen. For example, no ID modules in axle 3, screens in line 3 do not illuminate.

1.3.3 Removing Transmitter

1.3.3.1 Deflate the tyre and remove the wheel weights from the rim. Push the tyre bead away from the rim. Make sure to always set the bead breaker at least 90 degrees from the valve stem to avoid damaging the transmitter.

1.3.3.2 Firmly fix the wheel on the turntable clamps. (If the mounting head of the tyre changer is positioned at 12 o'clock, then the valve stem should be at the 11 o'clock position.) Apply lubricant to both tyre bead and rim, and then demount the upper tyre bead.

1.3.3.3 Use the same procedure to demount the lower tyre bead. (If the mounting head of the tyre changer is at the 12 o'clock position, then the valve should also be at the 12 o'clock position.)

1.3.3.4 Final inspection: Visually inspect the rim and transmitter to ensure no damage has occurred.

1.4 PARAMETERS OF THE PRODUCTS

Transmitter

Weight: 70g (2.47 oz.)

Dimensions: 8.3 x 3.1 x 2.5 cm (3.27x1.22x0.98 inch)

Operating Temperature Range: -40°C to 105°C (-40°F to 221°F)
Pressure Accuracy: ± 0.25 Bar / 3.7 PSI (at 0°C ~50°C)
Temperature Accuracy: $\pm 3^\circ\text{C}$ (5.4 °F)
Battery Life: 5years at 20 hours driving per day
Maximum Range: 13Bar (188PSI)
Frequency: 433.92MHz

1.5 FCC's authentication announcement

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.

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. You can test that if this equipment does cause harmful interference to radio or television reception by turning the equipment off and on.

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

1.6 European regulations announcements

This device complies with all European Electromagnetic compatibility regulations (95/54/EC and EN300 220-1). The equipment has been tested and found to comply with the above regulations, and in addition it meets the requirements for low powered transmitters/receivers as defined by the relevant radio approval authority. The regulations are designed to provide reasonable protection against harmful interference or susceptibility.

1.7 CE directive announcement

This device complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the law of the Member states relating to electromagnetic compatibility. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device can accept any interference received, including interference that may cause undesired operation.