

# USER MANUAL TSB48-FR

### **1.1 Programming of Transmitter ID**

When the Receiver is powered for the first time, the screen shows "NSP", which means there is no transmitter programmed into it. If the user wants to program a new transmitter into the Receiver, the operation should be finished in programming mode. At this time, make sure the transmitter to be programmed has not been screwed onto the valve yet. Screw on transmitters until the programming has been finished and the Receiver returns to normal mode.

Each transmitter has 4 groups of ID, for example when program the transmitter with ID of 001 001 001 158 to front right tire position, the user only needs to input the last 3 digits "158". Receiver will record the rest 3 groups of ID automatically. Operation steps are as following:

1. After Receiver is powered, the screen will display "NSP", press P for 3 seconds to access the system programming mode, the first interface is for ID programming as shown below:



- 2. Press any of the four arrow keys to choose the tire position which needs to be programmed with a transmitter.
- 3. Then press S for 3 seconds to start programming and the digit flashes, then press up or down arrow key to adjust the number.



4. Once finish programming of the first digit, press  $\rightarrow$  to start programming the second digit which flashes. Press up or down arrow key to adjust the number.



5. Press  $\longrightarrow$  again to program the third digit which flashes. Press up or down arrow key to adjust the value.



- 6. When finish programming these 3 digits, press S for 3 seconds to save with the screen flashes twice, beep buzzes twice. Then it will automatically switch to next tire position.
- 7. Repeat the above operations to program ID of other transmitters.

## **1.2 Standard Pressure Programming**

For example, set the standard pressure of front right tire to 105 psi:

1. When finish programming ID, press P to access the standard pressure programming mode.

2. Then press any of the four arrow keys to choose the desired tire position.



3. Then press S for 3 seconds to set the first digit which flashes. Press up or down arrow key to adjust the value to 1.



4. Once finished

programming



flashes and then press up or down arrow key to adjust the value to 0.



5. Once finished programming the second number, press  $\rightarrow$  to program the third digit which flashes and then press up or down arrow key to adjust the value to 5. Then press S for 3 seconds to save the setting.





Note: The default standard pressure is set to 100 psi in factory.

## **1.3 System Time Programming**

- Function: The system clock was preset in the factory. It is the base of the alarm record, user can check the current date and time as follows:
- 1. When finish programming the standard pressure, press P to access interface for inquiry and programming of time/date, the first interface displays the year, 1 07 stands for the year 2007:



2. Press key to access the second interface, 211 stands for November as shown below:



3. Press the 🗍 key to access the third interface, 312 stands for 12th day as shown below:



4. Press the key to access the fourth interface, 416 stands for 16O'clock as shown below:



5. Press the  $\bigcup$  key to access the fifth interface, 533 stands for 33 mins.

As shown below:

Under any interface of system time inquiry, press S for 3 seconds to start programming. For example change the year to "09", under the year interface, press S for 3 seconds, the second digit flashes, press up or down arrow key to adjust the value. Then press  $\implies$  key, the third number flashes, then press the up or down arrow key to adjust the value to "9". At last press S for 3 seconds to save the change with screen flashes twice and beep buzzes twice. Then it automatically switches to

next interface for programming.

## **1.4 Programming of Temperature and Pressure Unit**

 After program the system time, press P to access interface for programming temperature and pressure unit. The first interface displays the temperature unit. As shown below:



At this time, press up or down arrow key to switch to the pressure unit interface. As shown below:



2. Under any interface displaying temperature or pressure, press S key for 3 seconds to start programming. Take change the temperature unit as an example: under the temperature unit interface, press S key for 3 seconds, the temperature unit "°C" starts flashing. Press up or down arrow key to select the needed temperature unit.

After select the desired unit, press S key for 3 seconds to save with the beep buzzes twice. Temperature unit will stop flashing.



## **1.5 Deletion of transmitter ID**

1. When finish programming temperature and pressure unit, press P to access the transmitter deletion interface. Only the programmed and received transmitter will be shown and only the last 3 ID digits will be shown:



- 2. Press any of the four arrow keys to locate the tire position to be deleted.
- 3. Press S key for 3 seconds to delete with the screen flashes twice and beep buzzes twice to confirm the deletion. Then it automatically switches to next transmitter location.
- Note: After programming, press P key for 3 seconds to return to normal mode.

## **IV. Installation of TPMS ST@HDR Transmitter**

Before install the transmitter, make sure the transmitter has been programmed into the receiver and receiver is under normal mode. If no transmitter is programmed or transmitter signal is not received after program, the screen will display "NSP".



When the transmitter is screwed onto the valve according to the programmed position, the Receiver can receive the signals and then display the transmitter location icon, pressure, temperature information on the screen. When all programmed transmitters are received by the Receiver and the pressure or temperature are in proper state, the screen displays "ON".



## **1. Installation of Transmitter:**



Note:

1,If a sensor is not learned by monitor, screw off the sensor and check if the programmed sensor ID is right. If sensor ID is incorrect, check ID The code and location settings are incorrect, please refer to sensor ID programming and re-program the sensor ID.

2,Please check whether the sensor strap is tied tightly in the process of installing the sensor.

3,If there is a sensor damaged or lost, it will not affect the work of other sensors. You need to replace with new sensor. The sensor ID programming and installation can be referred to its steps.

Installing steps:

1. Pull the tire and tie the sensor strap to the hub;

2. Inflate the tire to the standard pressure recommended by the vehicle manufacturer

or required by the customer;

3. After the sensor be installed, the sensor can immediately sense the pressure and

temperature inside the tire and transmit the collected data to the monitor . The monitor will display the data on the screen within six minutes of the sensor transmitter being installed.

Note: 1. Please set the standards pressure of each tire on monitor before install the transmitter. The standard pressure for each tire location has been preset to100PSI in factory.

2. If one of your transmitters is broken or lost, user only needs to replace this one.

#### Sensor parameter

Mid-frequency: 434.13 MHz

Transmitting Power: 0 dBm

Input Voltage: 3.6V (Battery)

Static Current: < 0.7uA

Operating temperature range: -40°C~125°C

Storage temperature range:  $-40^{\circ}$ C  $\sim 125^{\circ}$ C

Transmitter weight: about 24 g

#### Federal Communications Commission (FCC) Interference Statement

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 generate, 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 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.

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

#### **RF exposure warning**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **Canadian Compliance Statement**

This device complies with Industry Canada license-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

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

Le present appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage;

2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

#### **IMPORTANT NOTE:**

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.