

## ○ Important safety and warning

This section contains important information on the safety and efficient operation of your TPMS device. Read this information carefully before using your TP2 system (TPMS) .



### CAUTION

You are cautioned that any change or modification not expressly approved in this manual could void your authority to operate this equipment.

## ○ Important safety warning

It can be caused to death or serious injury in case of wrongly use.

- TP2 is strongly recommended to install at the authorized dealer shops by SEETRON Inc. or his representatives.
- TP2 is installed for the 6 to 26 tire BUS and Truck – with radial tires whose tire pressure is less than 120 PSI. TP2 cannot work for the tube tire vehicles.
- TP2 is designed to monitor tire pressure and temperature and transmit those data to the monitor inside the vehicles by wireless. It is unable to generate any warning signal in advance of the abrupt tire explosion.
- The valve nut should be tightened using a calibrated torque wrench to 10~10.5 N.m when you install it to the tire wheel. You should use torque wrench to tighten it and check the torque value after tightening. Improperly tightened tire pressure sensor may be loosened during the driving. If the nut of tire pressure sensor is over-tightened, sensor can be damaged. If the nut is under-tightened, it may cause air leaks.
- You may install the monitor in the cigarette socket or somewhere on the cockpit and may be unable to hear the warning alarm and display due to position of monitor. Install the monitor in visible and audible area.
- Do not place the monitor in the air bag deployment area.
- Do not place the monitor to interrupt your driving.
- The alert alarm can be disturbed by AV system in vehicle.
- TP2 is wireless device and there is no guarantee that interference will not occur by unexpected radio frequency energy. It may malfunction briefly.
- The antenna of receiver locates in the monitor. Keep certain distance not to interrupt the antenna.
- Do not adjust the monitor during driving.
- When the alert and warning occur, reduce speed and proceed to a safe location. And stop the car and check the tires.

TP2 is designed to provide convenience of preventing potential accidents, SEETRON shall not be liable for any accidents due to tire explosion or otherwise in terms of any law.





## ○ The general warning

It can be caused to serious injury or damage of TP2 in case of wrongly use.

- Do not shake or strike the TP2.
- All warranties are void when TP2 disassembled or modified without supervision of SEETRON Inc.
- The rubber seal of tire sensor valve should be replaced whenever you change the tire. Hardened rubber seal can cause air-leaks of tire.
- Do not inject any tire liquid or aerosol tire sealant into tires, as this may cause a malfunction of the tire sensor.
- TP2 tire sensor cannot be mounted in the temporary tire (spare-tire) and special design wheel that has the diameter of valve hole is not Ø 11.5 mm and special contour on the rim.
- The monitor in the cigarette socket may be loosened by rolling of long driving or rattle over the road. Check the power connection of monitor before start.
- When you install the monitor on the cockpit, demount the flexible power adaptor from the monitor and connect additional power cable. The matching of antenna may be influenced by location.
- Do not contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like.
- The TP2 will not be able to give any indication if tire get punctured during parking time.
- When the battery is discharged, the tire pressure sensor should be replaced.



### CAUTION

Max capacity of outlet connection at 24V inlet/outlet port

Do not connect the electric device over 200 mA. to outlet port. The outlet port is designed for low power device like GPS, radar detector, etc.

While the flexible power adapter is connected, do not input power through 24V input/output port together.



## NOTICES

### 1. FCC NOTICE

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. 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.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 2. European regulation

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. Changes made to this device without the express approval of Seetron Inc. may void the user's authority to use this device.

### 3. Alert & warning

The tire sensor TP2 warns of sudden loss of tire pressure and protects the driver against accident caused by defective tires and punctures.

- low pressure alert
- low pressure warning
- high temperature alert
- high pressure alert
- battery low warning
- broken sensor warning



### 4. specification

#### Tire sensor

Frequency: 433.92 MHz

Out put power : FCC Part 15.231 / EN300 200

Operating temperature  $-40^{\circ}\text{C}$  to  $125^{\circ}\text{C}$   
 $-40^{\circ}\text{F}$  to  $257^{\circ}\text{F}$

Operating pressure :  $0 \sim 120$  PSI (  $0 \sim 3.5$  bar )

Size L X H X W :  $69.5 \times 32.9 \times 13.2$  mm (  $2.7 \times 1.3 \times 0.5$  inch )

Weight : 39 g ( 1.37 oz )

Power : 3.6 VDC Battery

#### Monitor

Frequency : 433.92 MHz

Power consumption : below 100 mA

Operating temperature  $-20^{\circ}\text{C}$  to  $80^{\circ}\text{C}$   
 $-4^{\circ}\text{F}$  to  $176^{\circ}\text{F}$

Size L X H X W :  $78 \times 48 \times 24$  mm (  $3.1 \times 1.9 \times 0.9$  inch )

Weight : 80 g ( 2.82 oz )

Power : 12 VDC



## Installation and start

### Quick start guide

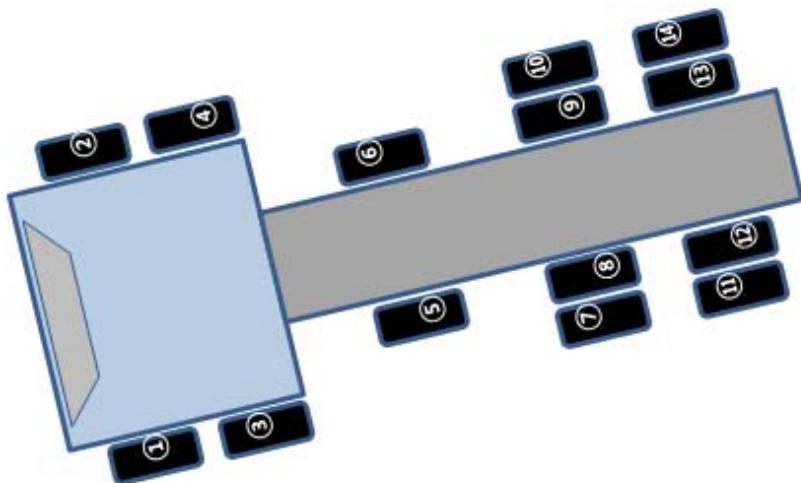
1. Plug in the monitor to cigarette socket and turn on the key to ACC mode  
**Caution: Do not keep ACC mode too long to prevent discharge of battery.**
2. Mount the tire sensor on the wheel
3. Confirm the monitor display shows all tire pressure.  
**NOTE : Check the tire pressure in ACC mode.**
4. Input your placard tire pressure in MENU1 tire pressure mode



ACC MODE

### Quick location guide of tire sensor

Four tire sensors ( No'1,2,3 &4....14 ) have preset location and mount the tire sensor according to No



**NOTE : If the tire sensor location does not correct, the wrong information shall be displayed on the monitor.**

## Mounting of tire sensor

1. Remove the tire and deflate the tire by removing valve core.  
Make the bead-unseating process by the bead breaker of tire changer. ( photo 1 )



photo 1

2. Remove the valve and mount the sensor valve.  
When the bead is too stiff, remove the tire from the wheel completely and mount the sensor valve.

**Caution :** Clean the bead seats and valve stem hole thoroughly.  
**Caution :** Lubricate the rubber seal ( grommet ) on the tire sensor.  
**Caution :** Push the sensor down gently into the hole to seat the rubber seal without wrinkle.



photo 2

3. Tighten the hex nut by hand until it contacts the wheel. Torque the hex nut to 10~10.5 N·m using a calibrated torque wrench. Tighten it slowly to reduce the spring back of rubber seal. ( photo 3 )



photo 3

## Installation of monitor

### 1. Installation on cigarette socket or 24V power outlet



- 1) Plug in the flexible power adaptor built-in monitor to the socket.
- 2) Adjust the viewing angle.

### 2. Installation on the cockpit



- 1) Demount the flexible power adaptor from the monitor and mount the stand. Position the monitor in any convenient location on the cockpit within sight and reach of the driver.
- 2) Connect the additional power cable to 12V in/out port.
- 3) Fix the monitor stand using double coated tape.

Caution : Do not place the monitor in the air bag deployment area.

## 2. Warning mode

Alerts and Warnings	Threshold and conditions
Low pressure Alert 	Lower than 18 PSI or sudden pressure drop
Low pressure warning 	When tire pressure falls below 20% or 25% of recommended tire pressure. The percentage can be preset in menu 2.
High temperature Alert 	When the tire temperature is higher than 80°C (176°F)
High pressure Alert 	Tire pressure is higher than 49 PSI ( 2 bar ) The high pressure can be preset in menu 10.
Battery low warning 	The battery of tire sensor is discharged
Broken sensor warning 	No transmission from the sensor

Under alert and warning mode, the red alarm backlight warning and alert icons and the audible alarm turn on and off continuously. Also, the warning and alert icons and tire location and the elapsed time information are displayed in sequence.

The icons and displays are as belows:

## MENU , SYSTEM

☞ Set light on time and light color

☞ Light on time

The monitor has an energy saving feature that turns light on/off to selected time only and it turns light on automatically when required to display alert or program the unit

☞ Light color is consist of two colors - normal and alert condition. The monitor has three combinations of light color as below table.

### Light color description

Icon	Normal condition	Alert condition
BU/RD 	BLUE	RED
GN/RD 	GREEN	RED
RD/BU 	RED	BLUE

