TPMS

Monitor up to 34 tires in real time
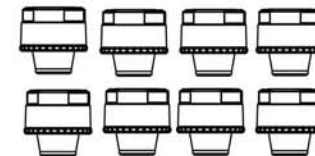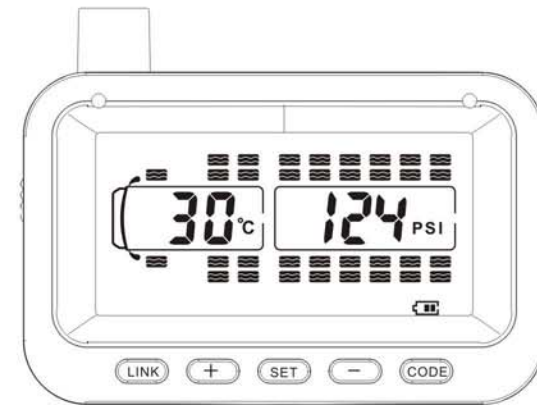
Contents

1.Production introduction

1-1. Introduction

Thanks for choosing our TPMS products. The system is used to monitor the pressure and temperature data of each tire .After the alarming condition is set up by the user, the system will alarm in case of abnormal pressure and temperature to make the driver be alerted of danger driving. The system also enhance fuel efficient, prolong tire life and to make the driving more comfortable.

Be sure to read the user guide carefully before installation and keep the manual for future use.

1-2. Caution

It is highly recommended to read the instructions below before install the system:

1. The monitor should be installed inside the vehicle where it does not affect normal driving.

2. The monitor should be well fixed to avoid falling off during driving.

3. The tires' temperature and pressure will increase while driving. The vehicle should be stopped for cooling if there is high temperature alarm and avoid braking problem or tire blowout.

4. Driver should stop the vehicle and get off to check the tire if there is continue high pressure or slow leakage alarm.

5. When the pressure is too high, it should pay attention to drive carefully to prevent puncture; when tire pressure is too low, pay attention to fuel consumption and balance

6. The system can effectively monitor tire pressure and temperature but cannot to avoid traffic accident after tire prevent puncture. Using quality tire product and correct tire, Pressure monitoring is still necessary.

7. After the system is installed correctly, the driver does not need to stare at the monitor all the time and feel interrupt during driving.

1-3.INSTALLATION TIPS

1. Wireless connection between the sensor and the monitor, and the transmission distance is far enough. Designed a number of anti-interference function, which is the possibility of interference is very low.

2. Usually there will be a normal tire leak of natural phenomena, tire pressure value decreases with time, this is a normal phenomenon, with the installation of this product is no direct relationship.

3. Should you have any question or problem while installation, please contact with your local distributor

4. Installation Notes

4-1 Monitor Installation

1. Install the monitor inside the vehicle cabin without obstructing the driver's vision of the road.
2. Place the monitor on the dashboard or mount it onto the windscreen using the suction cup provided.
3. Plug the power adapter into the cigarette lighter and connect the power cable to the monitor or plug the power cable and connect to the vehicle power.
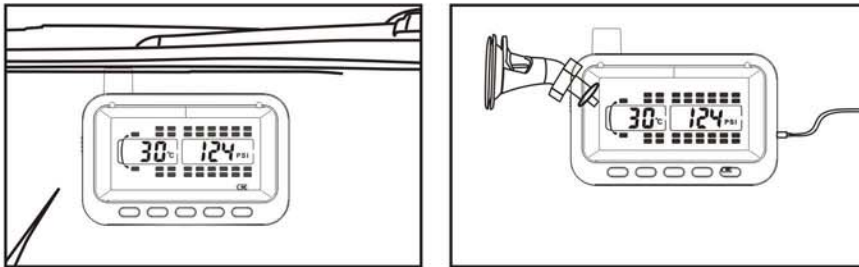
Monitor On / OFF

When attempting long parking period of time, please switch off power on the left of the monitor.
Up toggle On / Down toggle Off. Monitor automatically shuts off monitor when power is low, please recharge monitor power for your convenience.

4-2 Transmitter (optional)

4-2.1 Installation Position

1. For Bus: Install transceiver in the middle range of all sensors for best result.
2. For Truck with trailer: Install transceiver in the tail end of the truck.
3. Transceiver must install outside the vehicle under the frame, avoid water, rain from damage the transceiver.
4. Secure and tighten up transceiver and all wires from bumpy and shacking off.

4-2.2 Attention

1. Transceiver is designed to amplify sensor signal blinks (red LED) when it's receiving or transmitting datas, it's a independent device form TPMS system, there's no setting requirement if a TPMS had already installed, when attempting on install TPMS and transceiver all at once, install TPMS system then transceiver.
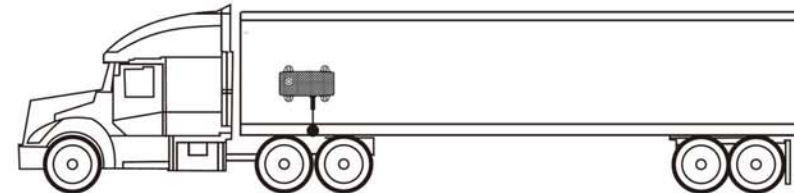
4-2.3 Input CurrentInput current

DC12V-36V Red wire to Positive, Black wire to negative.

Button and Red Led indicator.

Wire (-)Black

Wire (+) Positive
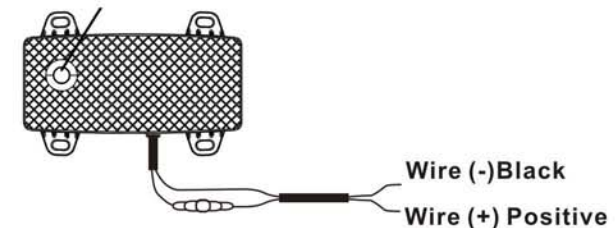
2.PRODUCT FEATURES

2-1.Monitor Features

* Reliable and easy to install.
* Large LCD screen.
* Built-in rechargeable lithium battery.
* Adjustable High/Low pressure warnings.
* Adjustable High temperature warnings.
* Visible and audible alerts.
* Selectable pressure units.
* Monitors up to 34 tires maximum.
* Long range between sensors and monitor.

2-2.Sensor Features

* Reliable cap sensors, easy to install.
* Water resistant.
* Replaceable sensor batteries.
* Fast leakage alert.
* Individually coded sensors.

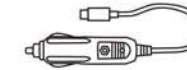### 2-3.Transmitter Features(Optional parts)

* Amplify signal strenth.
* Transferable trailer sensor data between monitor and transceiver.
* It is recommended to install transmitter on vechiles lenth over 7.5 meters(26.6ft),to ensure signal strenth,signal lose may cause warning failure.
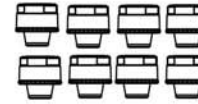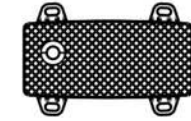
3.SYSTEM COMPONENTS

Monitor

Power Adapto

Monitor stand

Sensors

Sensors waterproof rubber seal（spare part）

Transmitter (optional)
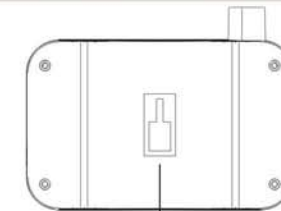
Item	Q'ty	Item	Q'ty
Monitor	1pcs	Sensors	Depends on customer request(6-34pcs)
Power Adaptor	1pcs	Sensors waterproof rubber seal(spare part)	Same as sensor
Monitor stand	1pcs	Transmitter (optional)	Depends on customer request(optional)

*Sensors quantity depends on customer requirement, maximum can code up to 34

3-1.MONITOR COMPONENTS AND ICONS
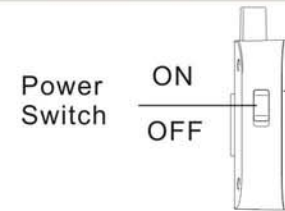
Power Switch — ON / OFF

Monitor Indicator

Description

Antenna

Monitor Brightness Sensor

Red Light

LINK   +   SET   −   CODE
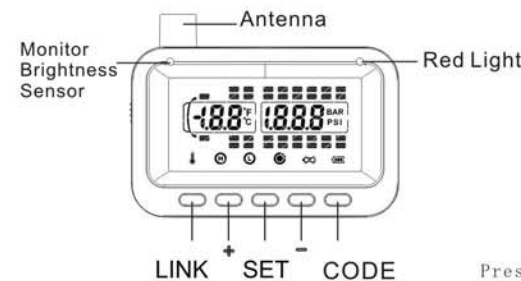
圖標	描述
▭	Tire Indicator
Ⓗ	High Temperature
Ⓛ	Low Pressure
⌁	High Pressure
◉	Fast Leakage
⊠	Sensor Low Battery Indicator
▦	Monitor Battery Indicator

Pressure Unit : BAR or PSI, user-selectable
Temperature Unit: ℃ or ℉, user-selectable

4-3 Sensor installation

Sensor and tire position indicator:
Each sensor has labeled installation number on matching tire indicator, it's factory default setting, Please install sensor to its matching position when doing initial install. Please refer **'Inflating ID leaning'** if user would like to self setting sensors manually.
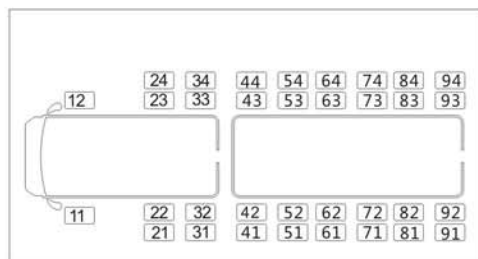
34 Wheels truck sensor matching numbers

Default Mounting Position.

Tips: please ensure to turn on the monitor firstly before install the sensor so that the monitor can receive the sensor data on time.
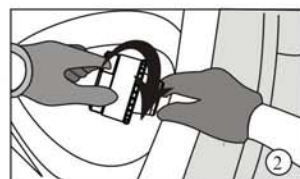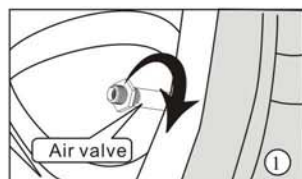
Tips:

1. Please mount the sensor in position according to label mark.

2. Low voltage alarm will appear when sensor battery voltage is low.

3. After mounting all sensor , please double check if there is air leakage by

   using soapy water in air intake.

Replacing the sensor battery

When the sensor low battery icon shows on the monitor and corresponding tire icon is flashing, the sensor battery needs replacement. A CR1632 battery cell is recommended which operates at

（1）Unscrew sensor upper lid and valve, counter clockwise sensor

（2）Take out battery.

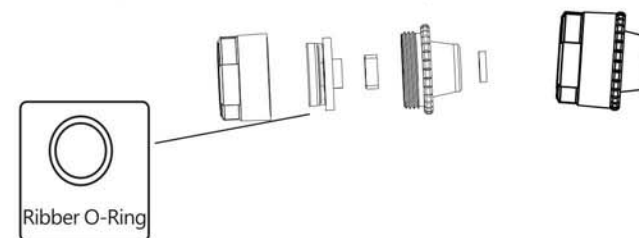

（3）Replace battery, Lithium battery CR1632, (+) side up.

CR 1632 Lithium Battery   CR 1632 Lithium Battery

（4）Clockwise screw up sensor shield Attention 1:Make sure washer is proper positioned, replace a new one if damaged.


Ribber O-Ring

5. Sensor ID Learning

5-1. Mark Sensor Number

1.When a new sensor been installed, sensor ID learning must be proceed to ensure system proper functional.

2.Please write down the number by following referral axels picture and label up on new sensors.

*Referral axles picture

| Tractor Axle	Label	Trailer Axle	Label
1	11,12	1	41-44
2	21-24	2	51-54
3	31-34	3-6	61-64,71-74,81-84,91-94
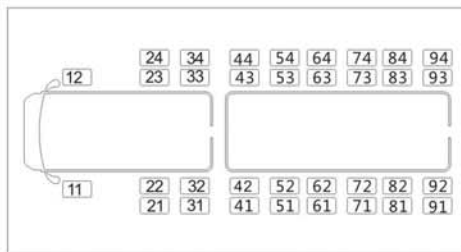
34 Wheels truck sensor matching numbers

5-2. Inflating ID learning

1. Press **CODE** 3 seconds to enter sensor learning mode.
2. Press **+/-** proceed to the matching ID number, then install new sensor.(Reference Picture 1）

3. Inflate tire, once sensor detects pressure change 4 digit ID number will be send to monitor.(Reference (Picture 2)
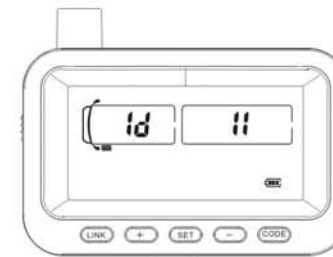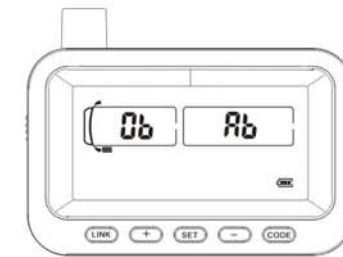
(Picture 1)   （Picture 2)

4.Press **SET**, after Beeb sound ID number become - - - -, it means ID learning done, and system will jump to next tire number, follow same procedure for multiple sensors ID learning.

5. When done press **CODE** 3 seconds to leave learning mode.

5-3. Delete ID number

In ID Checking Mode: (single ID number)

1. Short Press Code, red led light on and after beep sound enter checking mode.
2. Press **+/-** to the tire you would like to delete sensor ID.
3. Press **SET** for 3 seconds to, after beep beep sounds, 4 digit ID number will be appear on the screen, when deleting is done scree appears **FF FF**.
4. Long press **CODE** when beeps release **CODE** back to normal mode.
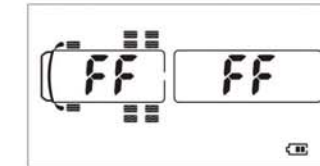
In sensor learning mode: (single ID number)

1. Press **CODE** 3 seconds to enter sensor learning mode.
2. Press **+/-** to the tire you would like to delete sensor ID.
3. Press **SET** for 3 seconds to, after beep beep sounds, 4 digit ID number will be appear on the screen, when deleting is done scree appears **FF FF.**
4. Long press **CODE** when beeps release **CODE** back to normal mode.

6.Unit setting

1. In normal mode **Press -** for 3 seconds, release button after the beep.
2. Press **SET** button to switch, **press - or +** for setting
3. When done long press **SET** button, release after the beep.

Factory Setting:

| Default Setting Press:	PSI
High Pressure Alarm	12.1BAR(175PSI)
Low Pressure Alarm	6.9BAR(100PSI)
Temperature	℃
High temperature Alarm	85℃(185℉)

Unit Setting Sequence:

6-1.Pressure unit:

When indicates **BAR** & **PSI**, Press **SET** to enter setting, press **- or +** to prefer unit, long press **SET** release it after the beep, and jump to temperature unit setting.

BAR
PSI
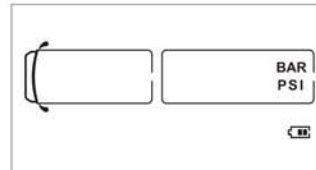
6 - 2. Temperature unit:

When indicates ℃ & ℉ , Press **SET** to enter setting, press **- or +** to prefer unit, long press **SET** release it after the beep, and jump to Tire High, low pressure alarm setting.

℉
℃
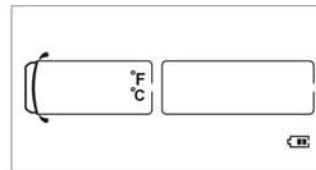
6 - 3. Tire High and Low pressure alarm setting:(P5)

Truck axles are able to set individually, 1st axle (2 wheels), 2nd axle (4 wheels), 3rd, axle (4 wheels) ,trailer axle(24 wheels).

High Pressure setting:123-260PSI Factory Setting: 175PSI
Low Pressure setting: 51-122PSI Factory Setting: 100PSI

P5   BAR

6-3.1 Truck 1st axle high, low pressure alarm setting

When truck 1st axle wheels and P5 flashes, press - + for preferred setting warming number.

P5   PSI

Truck 1st axle high temperature setting:

HI   175 PSI

Truck 1st axle low temperature setting:

Lo   100 PSI

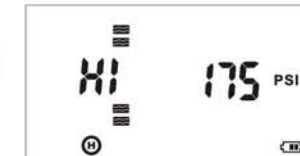### 6-3.2 Truck 2nd axle high, low pressure alarm setting

When truck 2nd axle wheels and P5 flashes, press - + for preferred setting warming number.

P5   PSI

Truck 2nd axle high temperature setting:

HI   175 PSI

Truck 2nd axle low temperature setting:

Lo   100 PSI
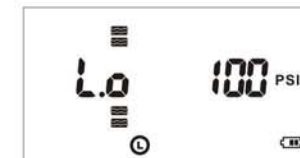
6-3.3 Truck 3rd axle high, low pressure alarm setting

When truck 3rd axle wheels and *PS* flashes, press - + for preferred setting warming number.

Truck 3rd axle high temperature setting:

Truck 3rd axle low temperature setting:

6-3.4 Trailer all wheels high, low pressure alarm setting

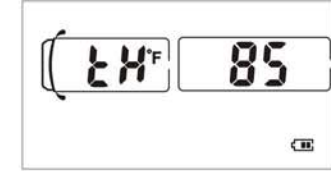When all trailer wheels and *PS* flashes, press - + for preferred setting warming number.

All wheels high temperature setting:

All wheels low temperature setting:

6-4.High Temperature alarm setting
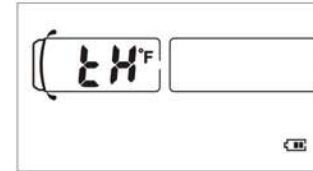
When *tH* indicates press **SET** to enter high temperature setting mode, 5 selectable units, 149℉-〉 158℉-〉 167℉-〉 176℉-〉 185℉, Press **-** or **+** for preferred high temperature alarm. Long press **SET** release it after the beep, and jump to tire rotating setting.

6-5. Tire rotating setting

When *EP* indicates press **SET** to enter rotating setting, make sure all wheels light disappear then
press **+** to tire wish to switch then press **-** to another tire, press **SET** button to switch.

(1)

(2)

(3)

(4)

7. ALARM CONDITION

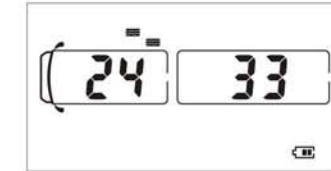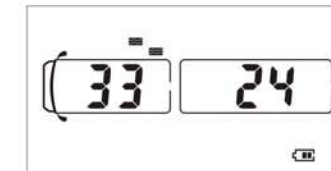High/Low Pressure Alert /High Temperature Alert/Fast Leakage Alert/Sensor Low Battery Alert.
The monitor turns the pressure and temperature of each tire in turn. The corresponding alert icon(🌡 Ⓗ Ⓛ ⦿ ∞ 🔋) and red LED will flash together with a warning beep when the sensor detects abnormal conditions from the tire. Press any button to switch the alarm off. Howerer, the red LED still flashes until all tire faults are released.

Eg.: Factory default setting

High Pressure Alarm	12.1BAR(175PSI)
Low Pressure Alarm	6.9BAR(100PSI)
High temperature Alarm	85℃(185℉)

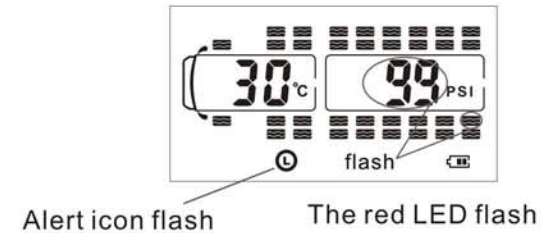## 7-1. High Pressure Alert

When the sensor detects high pressure in a tire, it will send an alert to the monitor immediately. the icon(Ⓗ) will show on the LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light.

Alert icon flash   The red LED flash
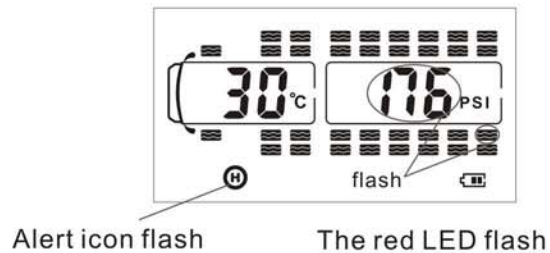
7-2. Low Pressure Alert

When the sensor detects low pressure in a tire,it will send an alert to the monitor immediately. the icon(Ⓛ) will show on the LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light.

Alert icon flash   The red LED flash

7-3. High Temperature Alert

When the sensor detects high Temperature in a tire,it will send an alert to the monitor immediately. the icon(🌡) will show on the LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light.

Alert icon flash   The red LED flash

7-4. Fast Leakage Alert

When the sensor detects abnormal loss of tire pressure,it will send an alert to the monitor immediately.the icon(⦿) will show on the LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light.
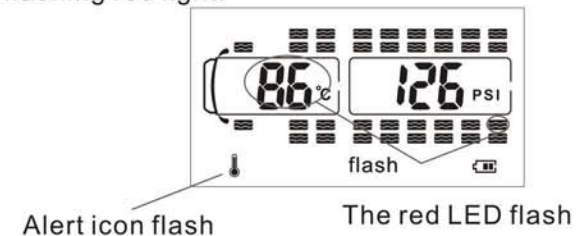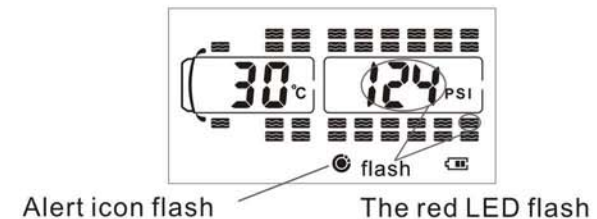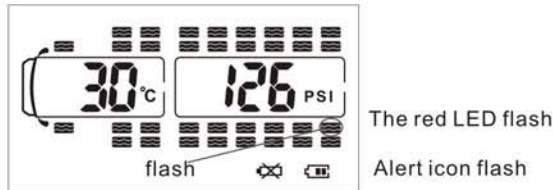
Alert icon flash   The red LED flash

7-5. Sensor Low Battery Alert

When the sensor detects low battery level, it will send an alert to the monitor immediately. the icon($\bowtie$) will show on the LCD and the corresponding tire icon will flash. The audible alarm will be on together with the flashing red light.

30℃ **126** PSI

The red LED flash

flash $\quad$ Alert icon flash

8.SPECIFICATIONS

8-1.Monitor

Working temperature	1-2 years	-20℃~80℃
Storage temperature		-30℃~80℃
Output Voltage		DC 8-30V
Frequency		433.92MHz
Size		110(L)*69(W)*20(H)mm
Weight		127g

8-2.Transmitter(optional parts)

Working temperature	-20℃~80℃
Storage temperature	-30℃~80℃
Working Voltage	12~24V
Transmission Power	<18dBm
Frequency	433.92MHz
Size	105. 8(L)*48(W)*17. 6(H)mm
Weight	75g

8-3.Sensors

Working temperature	-40℃~80℃
Storage temperature	-40℃~85℃
Pressure setting range	0-188PSI(0-13BAR)
Pressure Accuracy	±1.5PSI(±0.1BAR)
Temperature Accuracy	3℃
Transmission Power	<10dBm
Frequency	433.92MHz
Battery life	1-2 years
Size	22（R）X21(H)mm
Weight	10g

9.Friendly Reminder

1.Please install and place the TPMS system in proper position, manufacture and distributor shall not be liable for damage caused by miss usage or wrong installation.

2.Do not adjust the monitor while driving, all settings must be down when vehicle is parked manufacture and distributor shall not be liable for damage caused by using the system   monitor while driving.

3.the content and specification are subject to change without prior notice. Pictures in the article are just for illustration. Please take the actual product for reference.

TPMS

9.1 FCC Rules

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.

Caution: 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.