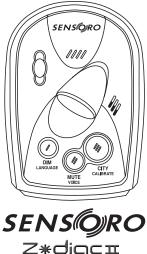
# OPERATION **E**



11464 R01 1000318 R01

Talking Radar/Laser Detector with Digital Vehicle Compass



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## CONGRATULATIONS

You have acquired the SENSORO ZODIAC II from PNI Corporation, the talking radar/laser detector with a digital vehicle compass. The SENSORO ZODIAC II incorporates the same compass technology used in built-in compasses for GM, Ford, and Chrysler vehicles, to provide highly accurate and reliable compass readings in a radar/laser detector.

#### Features

- · Protection against all radar/laser bands
- Alert on all types of radar signals: Constant-On, Instant-On, and POP signals
- 360° laser coverage that protects you against laser guns in all directions
- Undetectable by all radar detector sensing devices used in the USA
- Patented digital compass that displays 8 cardinal points: N NE E SE S SW W NW
- Dual screens: detector display at front and compass periscope display on top
- Text display backlit by LEDs
- 4 driving modes: Highway1 Highway2 City1 City2
- 4-step brightness control: Bright Dim Dimmer – Dark
- · Audio on/off (Mute off/on) selection
- Auto demute (Auto mute off)

## PACKAGE CONTENTS

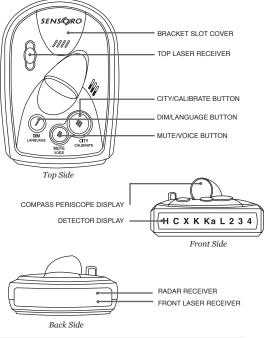
- Auto audio control (Auto quiet)
- Volume control by rotary thumb wheel
- Voice alert on/off selection
- Voice alert language selection English or Spanish
- · Tutorial mode that demonstrates detector operations
- · Memory retention on previous user settings
- · Easy-to-use windshield mounting
- · Manual compass calibration
- 12V DC input power use the power cord included in the package

#### Package Contents

Your SENSORO ZODIAC II package includes the following components:

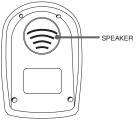
- The SENSORO ZODIAC II detector (1ea)
- Mounting bracket (1ea)
- Suction cups (3ea)
- Coiled 12V DC power cord (1ea)
- Operation manual (1ea)
- Quick Guide (1ea)

### **IDENTIFYING THE PARTS**



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## **IDENTIFYING THE PARTS**





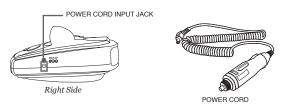
MOUNTING BRACKET

Bottom Side





Left Side



## **INSTALLING THE DETECTOR**

#### **Mounting Guidelines**

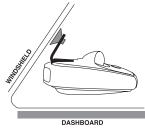
The SENSORO ZODIAC II can be mounted on your windshield using the bracket provided.

- Mount on the windshield in a centered location within the driver's reach so that the buttons can be easily accessed. Make sure that the mounted device does not obstruct the view of the driver.
- Do not mount behind windshield wipers, metal surfaces, ornaments, or mirrored sunscreen glass, as it will affect radar/laser signals. Tinted glass does not affect radar/laser signal reception.
- Do not mount close to strong stereo speakers, as it will affect compass accuracy.
- Conceal the SENSORO ZODIAC II when you leave your vehicle to prevent theft and to minimize the detector's exposure to extreme temperatures, which can temporarily impair performance.

## **INSTALLING THE DETECTOR**

#### Windshield Mounting Instructions

- 1. Install the suction cups by sliding them into the holes on the mounting bracket so that combined, it makes assembled bracket kit.
- 2. Pull out the bracket slot cover from the detector.
- 3. Place the assembled bracket kit onto the detector where the bracket slot cover was removed.
- 4. Press the bracket base firmly against the windshield until the suction cups securely take hold.
- 5. Bend the angle of the mounting bracket, if necessary, to adjust for best viewing and detection angle.
- 6. Plug the small connector of the power cord into the 12V DC power input jack located on the side of the detector.
- Plug the power cord adapter into the lighter socket in your vehicle.



#### **Power & Volume Control**

Plug the adapter of the provided 12V DC power cord into the lighter of your vehicle, and plug the small connector at the other end of the 12V DC power cord into the power jack of your detector. This will send power to the detector when your vehicle is running. To turn on the detector, rotate the wheel controller (located on the side of the detector) until you hear it click. To turn off the detector, rotate the wheel controller in the opposite direction until it clicks again. You can also use the controller to adjust the volume level by turning it up or down within the range that it does not click.

- **Opening Diagnosis:** The detector performs a single loop of checking and demonstrating its audio, visual, and voice alert capability for about 3~5 seconds each time it is powered on.
- Voice Preamble: While the opening diagnosis is running, the voice preamble lets you know which user settings you used last. The user setting options announced by voice preamble are:
  - "HIGHWAY1" or "HIGHWAY2" or "CITY1" or "CITY2"
  - "BRIGHT" or "DIM" or "DIMMER" or "DARK"
  - "VOICE ON" or "VOICE OFF"
  - One beep after the voice message of "HIGHWAY" means Highwayl, and two beeps after "HIGHWAY" means Highway2. This is the same for City1 and City2 options.

- ▲ If the voice alert language is set to Spanish mode, the voice preamble will occur in Spanish.
- Even when the voice alert mode is turned off, the detector will give the voice preamble. The voice alert "on/off" feature controls alert-related voice messages only.

#### **Brightness Control**

Press the DIM button repeatedly (for less than 2 seconds each time) to toggle between 4 different brightness levels. The brightness options are: Bright – Dim – Dimmer – Dark. Dark is not the complete blackout option. Once the brightness level is set, a corresponding voice message will follow. The corresponding voice messages are: "BRIGHT (CLARO)" or "DIM (DEBIL)" or "DIMMER (MAS DEBIL)" or "DARK (OSCURO)". In Spanish alert mode, the corresponding voice messages are spoken in Spanish. The factory default mode is Bright.

When a signal is detected, alerts are always displayed in Bright, regardless of the brightness level you've selected. The display returns to your setting following the alert. Also, even when the voice alert feature is turned "off", the detector will still announce which user interface you selected because it is not an alert-related message.

#### Voice Alert Language Selection

Press and hold the LANGUAGE button (= DIM button) repeatedly (for more than 2 seconds each time) to toggle between English and Spanish mode. The factory default is English mode. Spanish mode is engaged with the voice message of "UOZ ESPAÑOLA" and English mode with "ENGLISH UOICE".

You can always choose either English or Spanish for your voice alert system. When the detector is set in English mode, it will speak only in English, and when in Spanish mode, only Spanish.

#### Audio On/Off Selection

Press the MUTE button repeatedly (for less than 2 seconds each time) to toggle between Mute On (Audio Off) and Mute Off (Audio On). The factory default mode is Mute Off. Mute On is turned on with the voice message of: "MUTE ON (SONIDO DESACTIVADO)" and Mute Off with: "MUTE OFF (SONIDO ACTIVADO)". Mute On/Off can be used when you manually turn the audio alert off, or restored while the detector is reporting alerts.

Mute On will be automatically reset to Mute Off when you turn the detector off. Mute On does not remain in the detector's memory due to the Auto Demute feature.

- Auto Demute: Mute On will silence the audio alarm for the remainder of an existing signal and for any new alert received within 30 seconds of the last signal. Then the detector automatically resets itself to Mute Off, so that the next signal threat can be received.
- Auto Audio Control: Auto Audio will have the detector report with reduced audio alarms for continuously detected alerts. When a signal is constantly reported for more than 5 seconds, the detector will gradually reduce the audio level in your vehicle. The reduced audio level will continue for new alerts detected within 60 seconds from the previous alert.

#### Voice On/Off Selection

Press and hold the VOICE button (= MUTE button) repeatedly (for more than 2 seconds each time) to toggle between Voice On and Voice Off. The factory default mode is Voice On. Voice Off is activated followed by the voice message: "UOICE OFF (UOZ DESACTIVADA)" and Voice On with the voice message: "UOICE ON (UOZ ACTIVADA)".

Voice alert messages always occur first. Audio and visual alert messages occur next when the detector

is set to "UDICE ON" mode. When the detector is set to "UDICE OFF" mode, you will not be notified by voice alerts, but by audio and visual alerts only.

Since the detector has the Auto Audio control and the Auto Demute feature, you can optimize your alert system without the hassle of mixing the Voice On/Off and Mute On/Off features.

#### **Highway & City Mode Selection**

Press the CITY button repeatedly (for less than 2 seconds each time) to toggle through 4 different radar band selectivity & sensitivity modes. The modes are: Highway1 (H1) - Highway2 (H2) - City1 (C1) - City2 (C2). The factory default mode is H1. H1 is engaged with the voice message: "HIGHWAY (CARRETERA)" followed by one beep, H2 with the voice message of "HIGHWAY (CARRETERA)" followed by two beeps, C1 with "CITY (CIUDAD)" followed by one beep, C2 with "CITY (CIUDAD)" followed by two beeps.

The detector detects all radar band (X, K, Ka) signals at H1 and C1, while it detects only K and Ka band signals at H2 and C2. Also, it detects with full sensitivities at both highway modes and with reduced sensitivities at both city modes. It detects laser signals at all times regardless of these highway and city modes.

- H1 detects X, K, and Ka signals with full sensitivities.
- H2 detects only K and Ka signals with full sensitivities.
  H 2
- C1 detects X, K, and Ka signals with reduced sensitivities.
  - С
- C2 detects only K and Ka signals with reduced sensitivities.

#### **Compass Calibration**

Press and hold the CALIBRATE button (= CITY button) for more than 2 seconds to access compass calibration mode. In English mode, the calibration mode starts with the voice message: "START YOUR CALIBRATION" and (after 2 seconds) "DRIVE YOUR VEHICLE IN TWO COMPLETE CIRCLES". In Spanish mode, the messages are: "EMPIEZA CALIBRAR" and (after 2 seconds) "HAGA DOS VUELTAS ENTERAR" EN SU COCHE". The detector flashes the 4 compass LEDs one after another (clockwise) until the calibration is completed.

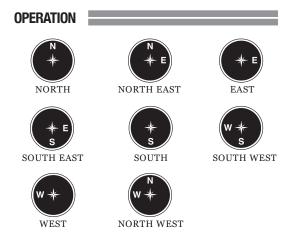
Perform the calibration on a level surface and following these steps:

- Turn the detector on. (See Power & Volume Control .)
- Mount the detector on the windshield in your vehicle. (See INSTALLING THE DETECTOR.)

- Press and hold the CALIBRATE button (= CITY button) until you hear the detector talk and see it flashing the compass LEDs clockwise, one after another.
- Drive your vehicle in two circles. The size of the circles and the direction that you drive does not matter. The circles do not need to be perfect circles but must be completed in the same direction. Each circle should take a minimum of 20 seconds but no more than 1 minute to complete.
- Press the CALIBRATE button (= CITY button). The detector will end the compass calibration with the voice message: "CRLIBRATION COMPLETED" (English mode) or "CRLIBRACION LOGRADA" (Spanish mode) and with the 4 compass LEDs flashing twice. The compass screen will indicate which direction your vehicle is pointing, Calibration is now complete.

While the detector is calibrating, the front screen will remain completely blacked out.

- When to Calibrate: The compass must be calibrated:
  - When the detector is used for the first time in a vehicle, and
  - When the detector is mounted in a new location.
- **Compass Display:** The compass periscope displays 8 cardinal points. (*See graphics next page.*)



#### **Tutorial Mode**

Turn the detector on while holding the CITY button and the detector will demonstrate how it operates when each radar and laser band signal is detected. Each time it demonstrates a different band, it starts with the corresponding band ID voice messages: "X BAND (BANDA X)", "K BAND (BANDA K)", "KA BAND (BANDA AN)", "K BAND (BANDA K)", "KA BAND (BANDA KA)", and "LASER BAND (BANDA LASER)", followed by the corresponding visual displays and audio tones.

· X band Constant-On signal detected operation



- X band Instant-On or POP signal detected operation
  X 234
- · K band Constant-On signal detected operation



- K band Instant-On or POP signal detected operation
  K 234
- Ka band Constant-On signal detected operation



- Ka band Instant-On or POP signal detected operation
- Laser band detected operation
- All LEDs on HCXKKaL234

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## **CARE AND MAINTENANCE**

Press any button to exit the all-LEDs-on status with one beep sound, which is the end of the tutorial mode. The detector automatically enters detection mode and begins detecting signals. The detector uses the same audio, visual, and voice alerts as used in the tutorial mode when it reports real alerts.

• **Signal Strength Meters:** The numbered LEDs are called signal strength meters when they are displayed together with a radar band LED (X, K, or Ka) to indicate the strength of a detected signal. The higher the number, the stronger the signal. When the numbered LEDs are used together with H or C LED, they demonstrate the level of the highway or city mode you've set.

#### CARE AND MAINTENANCE

Here are some tips to help you care for your SENSORO ZODIAC II:

- To deter theft, remove the detector from your windshield when you leave your vehicle.
- Avoid extended exposure to direct sunlight. Remove the detector from your windshield when your vehicle is parked for an extended period of time. On hot days, the temperature inside your vehicle can reach levels that could damage the detector

## TROUBLESHOOTING

• Do not expose the detector to rain, moisture, spray cleaners, or liquids that could damage the internal circuitry of the detector.

#### **Fuse Replacement**

The lighter socket adapter of the power cord has a replaceable 2-Amp SAG fuse located below the silver tip. To check or replace the fuse, slowly and carefully unscrew the tip of the plug, making sure the spring and silver tip located inside the plug do not fly out when you remove the cap. Check fuse and replace if necessary.

Your SENSORO ZODIAC II is designed for reliable service. If you encounter a problem, however, please refer to the TROUBLESHOOTING section of this manual before making a service call.

#### TROUBLESHOOTING

The SENSORO ZODIAC II will not power up.

- Make sure that the Power & Volume On/Off thumb wheel is turned on.
- Check all power cord connections.
- Check the fuse in the lighter socket adapter and replace if necessary.
- Check lighter socket. Clean if dirty.
- Check your vehicle's fuse panel (refer to your vehicle's manual).

## TROUBLESHOOTING

The SENSORO ZODIAC II did not alert when passing an officer.

 Not all police cars have radar/laser, or the radar/ laser may not be in use at that time you passed the officer

The SENSORO ZODIAC II signal is weak.

- Set the detector to H1 or H2 mode.
- Make sure the detector is level to the road.
- Make sure the radar window or the top laser receiver is not obstructed. Move the detector if necessary.

The SENSORO ZODIAC II beeps over bumps or when using vehicle's equipment or electrical accessories, such as brakes, windshield wipers, power windows, etc.

- · Check power cord for loose connections.
- Vehicle has electrical noise. Install a filter capacitor  $(470\mu F; 35$ -volt, or larger capacitance value) on the back of the lighter socket across the power connection.

## SPECIFICATIONS

Radar

- · Receiver type: Dual conversion superheterodyne
- Antenna type: Linear polarized, self-contained
- Detector type: Scanning frequency discriminator
- Frequency operation:
  - X band; 10.525 GHz  $\pm 50$  MHz
  - K band; 24.150 GHz ±100 MHz
  - Ka band (superwide); 34.700 GHz ±1,300 MHz
  - Safety radar; 24.100 GHz

Laser

- Receiver type: Pulsed laser signal receiver
- Detector type: Digital signal processor pulse width discriminator
- Optical sensor: Dual convex condenser lens and high speed photo diode detector

Compass

- Accuracy: 5 degrees
- Resolution: 45 degrees

General

- Temperature range: -4°F to 140°F (-20°C to 60°C)
- Power requirements: 12V to 16V DC, 350 mA, negative ground
- Dimensions: 2.0" H x 2.85" W x 4.2" L
- Weight: 3.8 ounces

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## SERVICE AND REPLACEMENT

Specifications are subject to change without notice. Performance may vary with driving behaviors and driving environments. U.S. patents apply: #6, 549, 145. Other patents pending.

#### SERVICE AND REPLACEMENT

For fastest service, contact or return your SENSORO ZODIAC II to the place of purchase. If you wish to return the detector for replacement or repair to PNI Corporation, please follow the following procedures:

- 1. Products returned to PNI must be pre-authorized by PNI with an RMA (return material authorization) number marked on the outside of the package. Obtain an RMA number by contacting PNI Corporation:
- By phone: 1 (888) 422-6672 (toll-free in the U.S. only) or at (707) 566-2260
- By fax: (707) 566-2261
- By e-mail: sales@pnicorp.com
- 2. Provide proof of purchase, such as a mechanical reproduction or carbon copy of a sales receipt. If you send your original receipt, it will not be returned. Proof of purchase must show printed date of purchase, model number, and place of purchase. Once you have acquired an RMA number, pack the detector securely to prevent damage in transit. If possible, use the original packing material and box.

#### SERVICE AND REPLACEMENT

Be sure to send the entire product.

- 3. Ship prepaid and insured by way of a traceable carrier such as United Parcel Service (UPS), Roadway Parcel Service (RPS), or First Class Mail to avoid loss in transit.
- 4. With the issued RMA number written on the outside of your package, send your proof of purchase and description of the problem to the following address:

#### PNI Corporation 5464 Skylane Boulevard, Suite A Santa Rosa, CA 95403-1084

5. Type or print your name and address where the replacement should be delivered. After receipt of your documents and detector, a replacement detector will be sent to you. Please allow two to three weeks from receipt of your returned product to delivery of your replacement.

# FC ZODIAC II · QJ3-IFS-11428

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.

In addition, any changes or modifications to this product, which are not expressly approved by PNI Corporation in writing, could void the user's authority to operate this product.

#### WARRANTY INFORMATION

LIMITED WARRANTIES; LIMITATION OF LIABILITY for Sensoro radar detectors, model Zodiac II

PNI Corporation ("PNI") manufactures its products, which include accessories, from parts and components that are new or equivalent to new in performance and expressly warrants to the original retail purchaser who is also the original user that this product will be free of defects in workmanship and materials for one (1) year from the date of purchase. Implied warranties are limited to such person for the same period.

If the product is found by PNI to be defective, PNI's entire liability and your exclusive remedy for breach of warranty, express or implied, shall be that PNI will repair or replace the product and return the product or its replacement to you at no charge, provided that you ship the product to PNI at your expense with a description of the defect and subject to the other conditions of this warranty. Should the product prove to be irreparable, PNI may substitute an equivalent product of the same or similar style and of a value not in excess of the original purchase price of your product. PNI warrants the repaired or replacement product to be free from defects in material and workmanship for the balance of the original warranty period, extended by the time period from your shipment to PNI for repair or replacement until the repaired or replaced product was received by you.

#### WARRANTY INFORMATION

This warranty will be void if the serial number or other identification marks on the product or its accessories have been defaced, damaged or removed. This warranty does not cover wear and tear due to normal use, or damage to the product as the result of improper usage, neglect of care, alteration, accident or unauthorized repair, nor does this warranty apply to the battery necessary to operate the product.

This warranty is extended only to the original retail purchaser who is also the original user and may not be transferred or assigned to subsequent owners. In order to validate your warranty, you must provide proof of purchase acceptable to PNI, together with the product shipped for warranty repair/replacement. Products returned to PNI must be pre-authorized by PNI with an RMA (return material authorization) number marked on the outside of the package. Please refer to the Service and Replacement section for PNI Corporation contact information.

THE FOREGOING WARRANTY IS GIVEN IN LIEU OF AND PNI DISCLAIMS ALL OTHER EXPRESS WARRANTIES OR REPRESENTATIONS IN FACT OR IN LAW WITH RESPECT TO THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OR REPRESENTATION THAT USE OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR FREE.

#### WARRANTY INFORMATION

Except for the breach of warranty remedies set forth herein, or for personal injury, PNI shall have no liability for any indirect or speculative damages (including, but not limited to, consequential, incidental, punitive and special damages) relating to the use of or inability to use this product, whether arising out of contract, negligence, tort, or under any warranty theory, or for infringement of any other party's intellectual property rights, irrespective of whether PNI had advance notice of the possibility of any such damages, including, but not limited to, loss of use, revenue or profit. In no event shall PNI's total liability for all claims regarding the product exceed the price paid for the product. PNI neither assumes nor authorizes anyone to assume for it any other liabilities.

Some states and provinces do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary by state or province.