# MDVENT

#### Front or Rear Parking Sensor System

#### Model: PSD100

**Users Manual** 



#### Features

- Front or rear install
- Adjustable range to 7ft
- Adjustable sensitivity
- Upgradeable to a 4-sensor system (requires part #: PSD200/PSD200C)
- Learning capability to ignore vehicle mounted objects
- Auto-mute capability for use with a trailer
- Easy install active learning front system
- Includes 0°, 4°, 8° and 16° sensor sleeves to fit most bumpers
- Will not drain battery or void factory warranty
- Includes adjustable speaker with tricolor LED
- Works with any vehicle

# Warnings

This product is intended to assist in safe driving by signaling the driver of the distance to obstacles in close proximity to the vehicle while the vehicle is in reverse or moving forward slowly. You, as the driver, are solely responsible for the safe operation of your vehicle and the safety of your passengers according to your local traffic regulations. Do not use any features of this system to the extent it distracts you from safe driving. Your first priority while driving should always be the safe operation of your vehicle. Audiovox Electronics Corporation cannot accept any responsibility whatsoever for accidents resulting from failure to observe these precautions or safety instructions.

- 1. This product utilizes high voltage. Any unauthorized modifications or damage to the product may result in electrical shock. Handle all components with care. Inspect regularly for damage to components and cabling.
- 2. You are responsible for ensuring that the installation of this product does not void or affect the vehicle manufacturer's warranty. Audiovox Electronics Corporation or its subsidiaries are not liable in full or in part for improper installation resulting in loss or damage to your property, or for voiding all or part of the vehicle manufacturer's warranty.
- 3. Do not apply excessive force to any of the components contained within this kit. Excessive force used before, during or after installation that results in a damaged or non-functional part will void all warranties.
- 4. Please follow the procedures in this installation manual. Improper installation or modification of this product will void all warranties.

# **Product Description**

This Front or Rear Parking Sensor System is designed to assist the driver by providing an alert when the vehicle is traveling toward a nearby object. Never rely solely on this product to ensure the area is clear of children and/or obstructions. This product is not intended to replace existing safety procedures, but rather to add an additional safety tool for your vehicle.

# Using the Rear Sensor System

The rear sensors are activated when the vehicle is placed in reverse gear. Your backup sensing system transmits and receives ultrasonic waves from the sensors mounted in your vehicle's bumper. As the transmitted waves bounce off obstacles behind your vehicle and are received back by the sensors, the unit's control box converts these waves into warning sounds, or beeps, which alerts you, the driver, of obstacles behind your vehicle.

When the vehicle is placed in reverse, the system will beep once to confirm successful self-check and will then remain silent unless an object is detected. On initial detection of an obstacle, the system will beep slowly and the green LED will flash. As the vehicle nears the obstacle, the beeping will increase and the yellow LED will flash. When the obstacle is within 1.3ft of the vehicle, a constant tone will be heard and the red LED will flash.



The PSD100 system has a number of advanced features. Outlined below is the list of features and controls available for use:

#### Learning System (Rear Sensors Only)

If an object mounted on the vehicle is causing the Rear sensor system to false alarm (tow bar, rear mounted tire, bicycle rack etc.) you can 'train' the PSD system to ignore these obstacles.

- 1. Place the vehicle in an area at least 15ft away from obstacles.
- 2. Start the engine and leave it running.
- 3. Place the vehicle in and out of reverse gear 4 times at 1-2 second intervals, ending with the vehicle in reverse.

# When the vehicle enters learning mode, the LED display will display RED-ORANGE-GREEN alternately for 10 seconds silently. The system will then beep for 1 second to confirm that the 'training' was successful.

4. Once 'trained', whenever the vehicle is placed in reverse the LED will flash orange and then green and the system will beep twice (one long, one short) to alert the driver that part of the detection area is being ignored.

The learning system can be re-trained at any time by performing the training cycle explained above.

The system can be reset to default by removing the vehicle mounted obstacle and performing the training cycle.

Once the learning system has been reset, when placed in reverse, the system will only flash green once (showing that there is no area in the detection zone being ignored).

#### Mute Button (Rear Sensors Only)

The PSD100 system has a mute feature that allows you to silence the system when necessary. The system will remain muted until the vehicle ignition system has been turned off and back on again. To activate, press the button labeled "REAR SENSOR MUTE."

# **Using the Front Sensor System**

The front system is an advanced 'active learning system'. It is designed to be on permanently. If required, the system can be turned off by pressing the "FRONT SENSOR ON/OFF" button. This may be useful when using a car wash or driving off road.

The PSD system protects up to 2.5ft from your bumper. The system automatically reduces unwanted detection by going mute (silent) whenever the detection area is unchanged for more than four seconds. As soon as anything in the detection area (either the vehicle or the detected object) moves, the system becomes active again.

For example, when you drive up to a wall, the system will alert you to the distance from the wall. Once you stop moving, the system will beep for 4 seconds more and then go silent. If you begin to move again, the system will instantly re-active and alert you to the distance again.

When the vehicle is within 2.5ft of an obstacle, the LED will flash yellow and the vehicle will begin beeping. When the vehicle is within 1.3ft (40cm), the LED will flash red and a constant tone will be heard.

 Zone 2:
 0.8m - 0.4m

 0.8m - 0.4m
 0.4m - 0m

 1.3ft - 0 ft
 0.4m - 0m

# Maintenance

Though your backup system requires minimum care, you should maintain its condition and performance using the following the guidelines:

- Keep the control box away from moisture, extreme heat or cold.
- Keep the sensors free from snow, ice, and debris.

#### **Diagnostics**

REAR BU	MPER Sensor Speake	er/LED Signals
Speaker Sound	LED Display	
Long single beep	Yellow	System has been programmed
1 Beep	Green	System is functioning correctly
2 Beeps*	Red	1 Sensor are disconnected/ damaged
3 Beeps	Red	2-3 Sensors Disconnected/ Damaged
4 Beeps	Red	No sensors are connected
FRONT BL	IMPER Sensor Speak	er/LED Signals
Speaker Sound	LED Display	
No Sound	Green	Front system is active and functioning correctly
2 Beeps	Red	1 Sensor are Disconnected/ Damaged
3 Beeps	Red	2-3 Sensors Disconnected/ Damaged
4 Beeps	Red	No sensors are connected
1 Brief Beep	Red	Button has been pushed and front sensors are active.
2 Brief Beeps	Red	Button has been pushed and front sensors are NOT active.

\* When the learning mode is active there are 2 beeps (one short and one long) and the LED display flashes orange and green.

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