

RYDEEN[®]

find your road

■ BF-450PM



■ BF-470P



BF-450PM
BF-470P

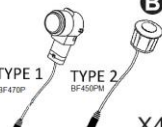
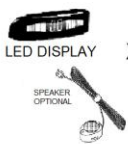
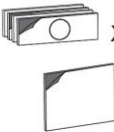
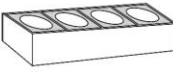
Owner's Manual

Ultrasonic Parking Sensor Systems

⚠ WARNINGS ⚠

- **THE FOLLOWING INSTRUCTIONS ARE INTENDED FOR AUTHORIZED RYDEEN MOBILE INSTALLERS ONLY.**
- Dropping any components in the system or subjecting it to excessive shock and vibrations as this may cause it to malfunction and is not covered by warranty.
- **The Control Box of the Parking Sensor System IS NOT WATERPROOF.** Avoid exposing it to rain or other forms of excessive moisture.
- **Water damage is not covered under the warranty.**
- **CAN BUS Vehicles:** There is NO NEED TO CUT AN ORIGINAL VEHICLE WIRE YOU MUST SPLICE WIRE ONLY AND OBTAIN POSITIVE POWER (+12V).
- **MUST CHECK BEHIND BUMPER FOR ANY METAL BRACKETS OR INTERNAL BRACES BEFORE DRILLING**
- **The use of Rydeen Parking Sensor system should never replace normal operational and safety precautions needed for reversing a vehicle.**
Caution should always be taken in ANY vehicle operation.

1. Kit Contents

 A X1	 B TYPE 1 BF470P TYPE 2 BF450PM X4	 C BF470P ONLY X4	 D X1	 E LED DISPLAY SPEAKER OPTIONAL X1
 F EXTENSION CABLES X4	 G Power Wire X1	 H X1	 I X4 X1	 J Paint Mask X1

2. Painting the Sensors

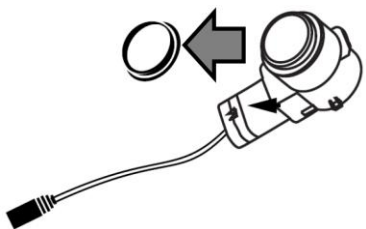
1) Preparation

For BF470P

Make sure the silicon rubber rings are not installed around the sensor head

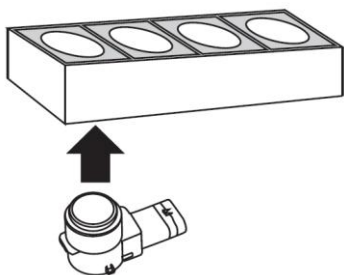
For BF450PM

Remove the plastic rings (**silicon rubber is not removable, do not attempt to remove**)



- 2) Sand the surface of sensors with a fine sandpaper (1000 or 1200 grit) for better paint adhesion. Clean the sensor well to be free from sanding dust.

3) Place the sensors inside the paint mask box (provided).

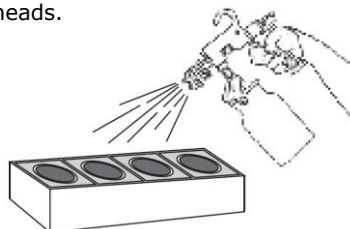


4) Spray and paint

Apply a thin coat of paint. Let it dry then paint again for better paint coating coverage.

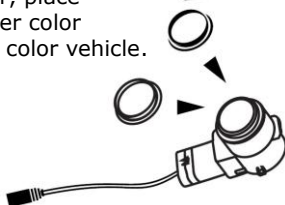
(For BF450PM)

Paint the plastic rings together with the sensor heads.



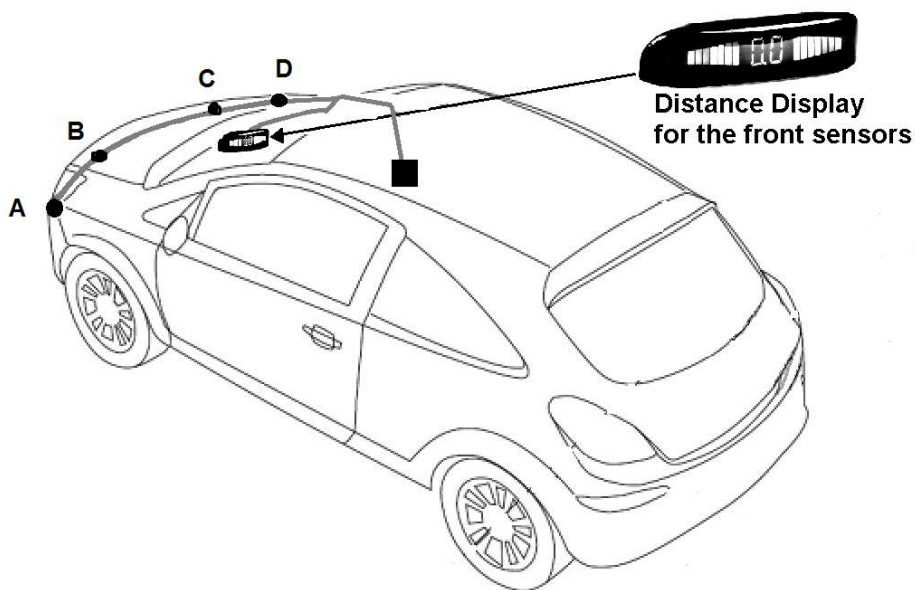
5) (BL470P ONLY)

Depending on the vehicle body color, place white silicon rubber rings for a lighter color vehicle, place black rings for a dark color vehicle.



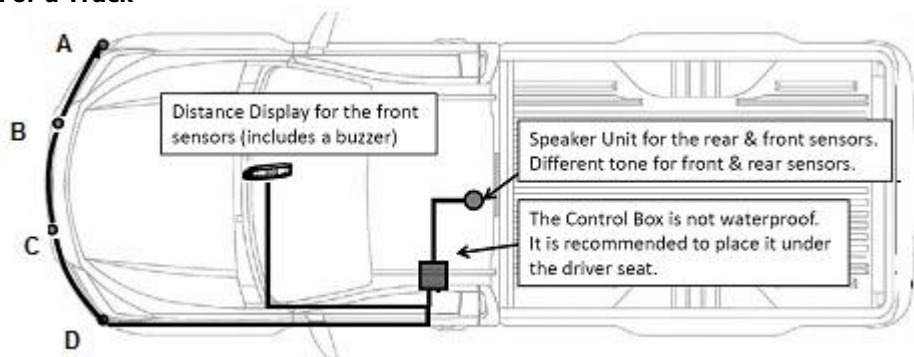
3. System Overview

For a Passenger Car



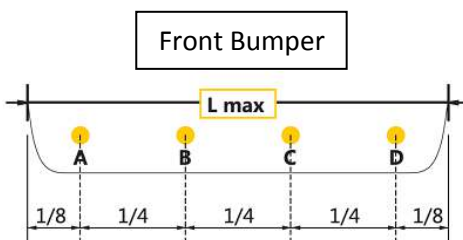
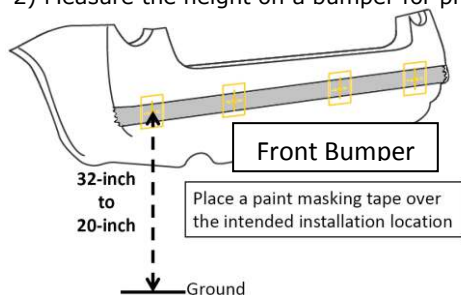
Place the LED display and control box inside a vehicle. Avoid from water damages. The beeping sound from LED display will indicate the distance between the sensors and the object. Shorter pitch tone sound indicates getting closer to objects.

For a Truck



4. Front Sensor Installation

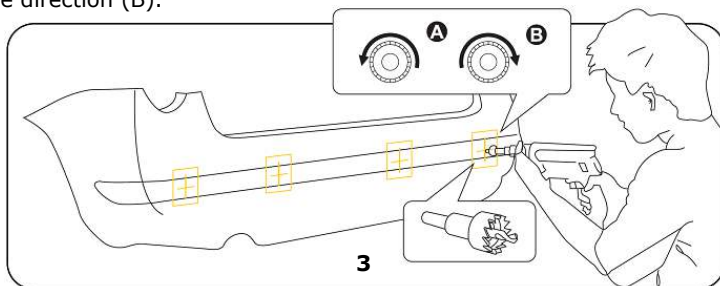
- 1) The proper placement of the sensors is important both for appearance and for the proper operation of the unit. Sensors should be mounted at 90° angles to the ground. It is important to avoid obstructions caused by bumper shape.
- 2) Measure the height on a bumper for proper installation locations.



- 3) Generally, it is the best to mount the sensors as high as possible in the bumper. Use paint masking tape and mark the location as above diagram for the proper spacing of the sensors.

Important!
MUST CHECK BEHIND THE BUMPER FOR ANY METAL BRACKETS
OR INTERNAL BRACES BEFORE DRILLING

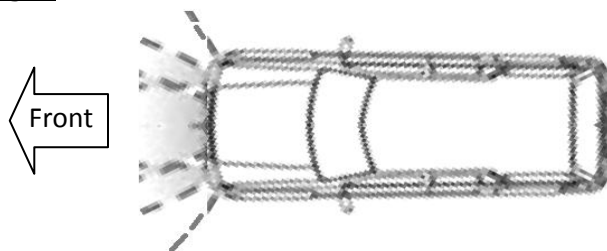
- 4) Also be sure that the bumper surface and the sensors will fit at 90° to the ground. Make sure the hole surface is clean and start cutting the bumper surface in counter clockwise direction (A) first to prevent from paint to chip, then drill the hole in clockwise direction (B).



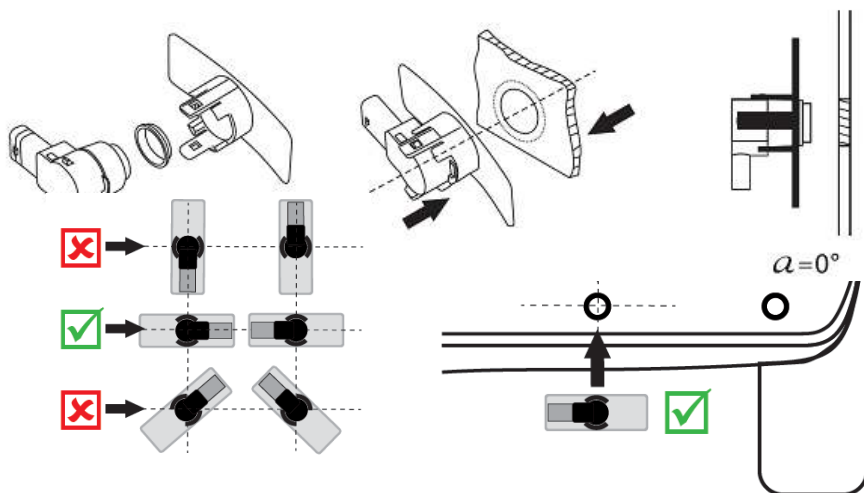
4. Front Sensor Installation (Continued)

For both BF470P and BF450PM, it is recommended to place the two front sensors at the two front corners of a vehicle. Height should be between 20 to 32-inch and it is the best to place 2 sensors (sensor A & D) at 45-degrees location for the front corners distance detection. The front sensors distance detection range is 0 to 4-feet.

Connect the BRAKE wire (GREEN) to a positive charge wire of the vehicle brake light.

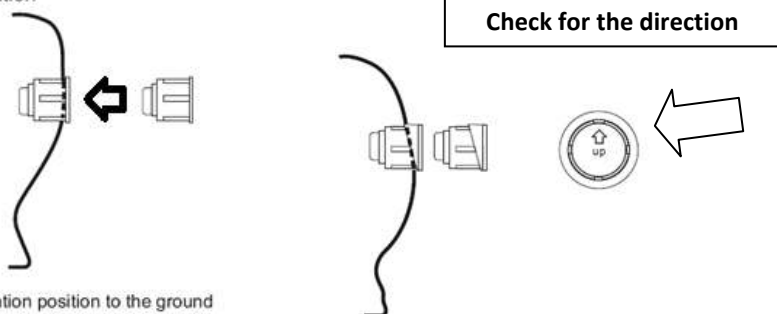


BF470P sensors MUST be installed inside the bumper and only the sensor head to exposed to outside. Bumper removal is required for this installation.



BF450PM sensors MUST be installed from outside of the bumper. Please check the direction arrow  and make sure of the correct orientation.

Sensor installation



Vertical installation position to the ground

5) It is important not to drill the hole larger than the measurement indicated.

MUST use the hole saw (provided) or use an UNIBIT (19mm diameter) .

6) Route the sensor wires through the bumper to a suitable location in the vehicle cabin or rear hatch.

7) RED wire of the main harness to connect to ignition wire (12-volt +) ACC.

8) BLACK wire of the main harness to be connected to a stable ground.

9) BRAKE wire (GREEN) to be connected to a positive charge wire of the vehicle brake light to activate the front sensors.

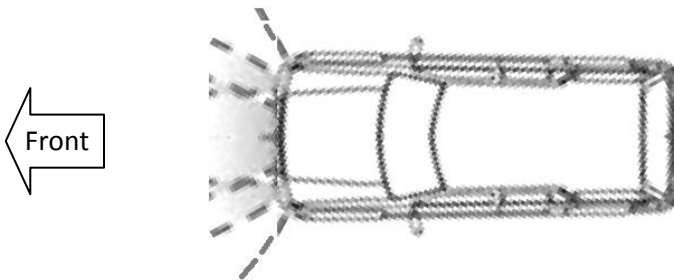
10) After routing and attaching the cables, use an offal (small block of wood, etc) to press the sensors into place. **NEVER push the sensor heads (center portion) to push into the bumper.**

Important!

- Do not use the negative charge wire of the vehicle back-up light for ground. Some vehicles have a “check bulb” feature that makes that wire not a true ground.
- The system may not detect a small and round pole (such as a fire hydrant or light pole, etc).
- When the vehicle approaches a rising slope, the slope may not be detected, as most of the signal will be reflected up and not back at the vehicle.

5. Detecting Ranges

The front two sensors’ detection range is 4-feet. It is pre-adjusted for detecting distances to a vehicle next to you while exiting from and entering into a parking space to avoid scratching your vehicle. The sensors are activated while pressing on the foot brake pedal and remain activated for 22-second after releasing the pedal.



6. Technical Support Contact Info

If you have other questions about the **RYDEEN Parking Sensor Products**, please contact your retailer or Technical Support:

- Telephone: **1-877-777-8811 (within USA only)**
- Email: **tech1@rydeenmobile.com**
- Web Address: **www.rydeenmobile.com**
- Tech Forum: <http://rydeen.forumotion.com/>

One Year Limited Warranty

Rydeen North America Inc. (a manufacturer of "RYDEEN" products) warrants this product (Parking Sensor Systems) only to the original purchaser as described by the following:

Warranty Period

Rydeen warrants this product for a period of one (1) year from the original purchase date.

Warranty Coverage

This warranty covers all defects in material and workmanship except as specified below.

1. Installation by anyone other than an authorized RYDEEN retailer voids the warranty.
2. Any products distributed outside of the USA by Rydeen North America Inc. (RYDEEN) or which is not purchased in the USA or Canada unless the product is purchased through the USA Military Exchange Service.
3. Any product(s) which are purchased from an unauthorized retailer (in store or online).
4. Any products in which the serial number label or the model number label are removed, torn, modified or replicated.
5. Any damage defects or malfunctions resulting from any of following:
 - a) When defect occurs during shipment of product (freight carrier's responsibility).
 - b) Installation or removal of product.
 - c) Accidents, act of nature, misuse, abuse, neglect, unauthorized product modification or failure to follow product owner's manual instructions.
 - d) Any repair or attempt to repair without RYDEEN authorization.
 - e) Any other cause which is not related to product defect.
 - f) Any cosmetic damages due to normal wear and tear.
 - g) Any consumable items (such as fuse or batteries).

If any problems develop with your RYDEEN products during or after the Limited Warranty Period, or if you have any questions regarding the operation or installation of the product, you should contact your RYDEEN retailer. If the problem or your question is not handled to your satisfaction, please contact Rydeen Customer Service Department at 1-877-777-8811 (within the USA only) Monday - Friday between 9:00 AM to 4:00 PM Pacific Standard Time or visit www.rydeenmobile.com.



www.rydeenmobile.com

Rydeen North America Inc.
dba Rydeen Mobile Electronics
2701 Plaza Del Amo, Suite 705, Torrance, California 90503 USA

Phone: 1-877-777-8811 Fax: 1-310-943-3778

Copyright © 2014 Rydeen North America Inc. All Rights Reserved.

These materials are protected by copyright law and international treaties. Any unauthorized use, reproduction or distribution of these materials, or any portion herein, will result in severe civil and criminal penalties and fines. Violators will be prosecuted to the fullest extent of the law.