

Universal 2 Sensor No Drill Parking Sensor Kit

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Product Features

- 2 sensor parking solution
- No need to drill into the bumper
- Audible 3-zone alerts
- No additional control box needed
- Use for plastic bumpers only
- Easy to install

Part Components

A) 2 Sensors B) Wiring harness C) Accessories



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TOOLS REQUIRED

- Wire stripper
- Tape
- Digital Multi-meter
- Cutter
- Alcohol wipes/cleaning pads

Attention! When testing the aftermarket equipment, ensure that all factory equipment is connected before cycling the key to ignition.

TECHNICAL TIP

Installation

NOTE: This installation may require the removing of the bumper to get the proper sensor alignment.

1. Before removing of the bumper (if it is needed) iBEAM suggests measuring the placement of the sensors on the outside of the bumper with the provided ruler and painters tape.
2. Tape off the vertical mounting location 15-24 inches from the ground. Find the flattest surface possible. (Figure A.1)
3. Find the center of the bumper. Tape off two positions between 10 and 20 inches from the center on the left and right hand side. Again, find the flattest surface possible. (Figure A.2)
4. These tape markswill be used to indicate where on the opposite side the sensors will be mounted once the bumper is removed.
5. Remove the bumper. Each vehicle is different. Take care with removal, lay a cloth on the ground to protect the exterior paint from damage.

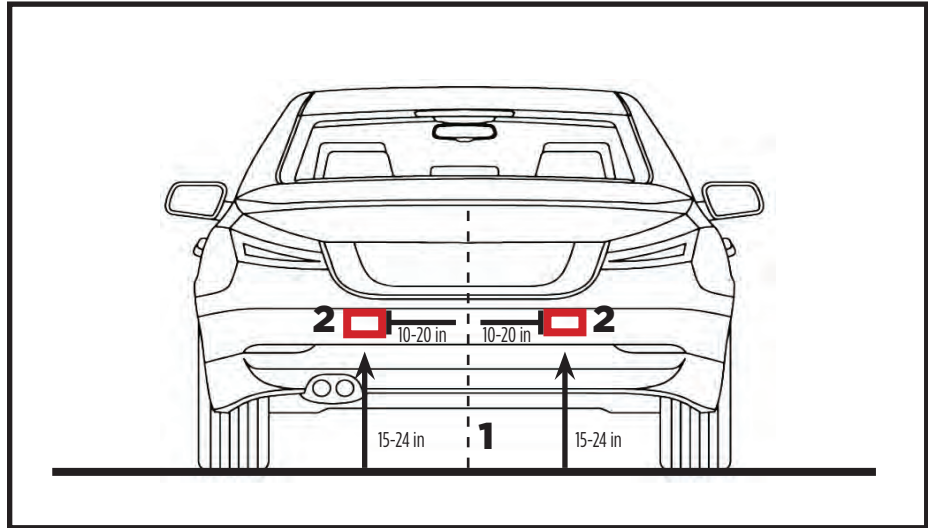


Figure A

INSTALLATION

Camera Installation

1. Mount the camera with either the surface mount or the license plate mount. If wanting the surface mount, the two small screws will need to be removed to remove the license plate mount and replace with surface mount.
2. Remove the tail light from the vehicle to allow access to the light bulbs wiring. (If help is needed, review the vehicles owners manual section on replacing the tail light bulbs.) (Figure A)
3. Find the wiring that connects to the reverse bulb. There is normally 2 wires. (Figure B) Strip the insulation to expose the copper wire.
4. Using a Digital Multi-meter on the DC Voltage setting, to verify the reverse wire. (Figure C)
5. Connect the wires from the camera
 - Connect the **RED** wire to reverse, either found at the taillight or another source for reverse.
 - Connect the **BLACK** wire to chassis ground.

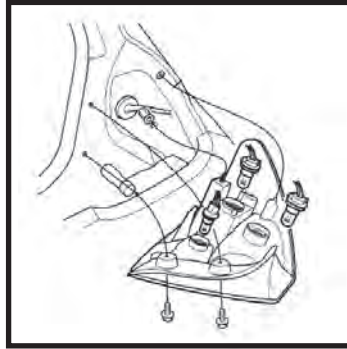


Figure A

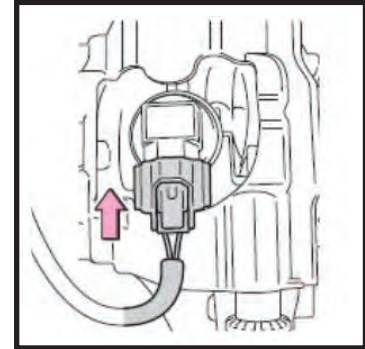


Figure B

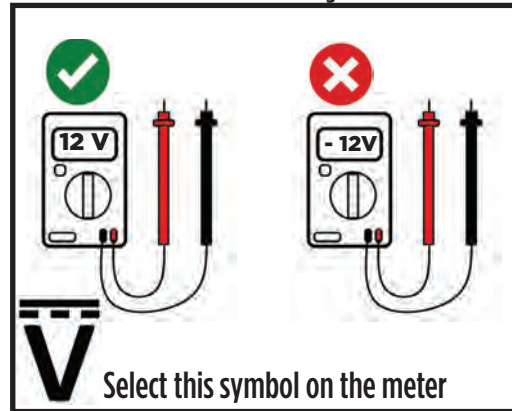


Figure C

INSTALLATION

Mounting of Sensors (Figure A)

NOTE: This installation may require the removing of the bumper to get the proper sensor alignment.

1. Using the painters tape on the outside of the bumper as a guide, re-measure the desired sensor location on the inside of the bumper.
 - 10-20 inches from the bumper center
 - 15-24 inches from the ground

NOTE: Measurements do depend on the vehicles itself. There is a 4 inch tolerance on the measurements listed, but measurements can vary by vehicle. For example, a SUV may have a higher measurement from the ground.

2. Clean the surface thoroughly where the sensors will be mounted on the inside of the bumper. Some dirt may cause the sensors to give false alerts.
3. Remove the backing from the 3M double sided tape and use the provided adhesion promotor to assist in improving the adhesion to the bumper. Mount the sensors with the connector side mounting down towards the ground. Make sure the sensors are as straight as possible to each other and on the flatest surface possible on the bumper.

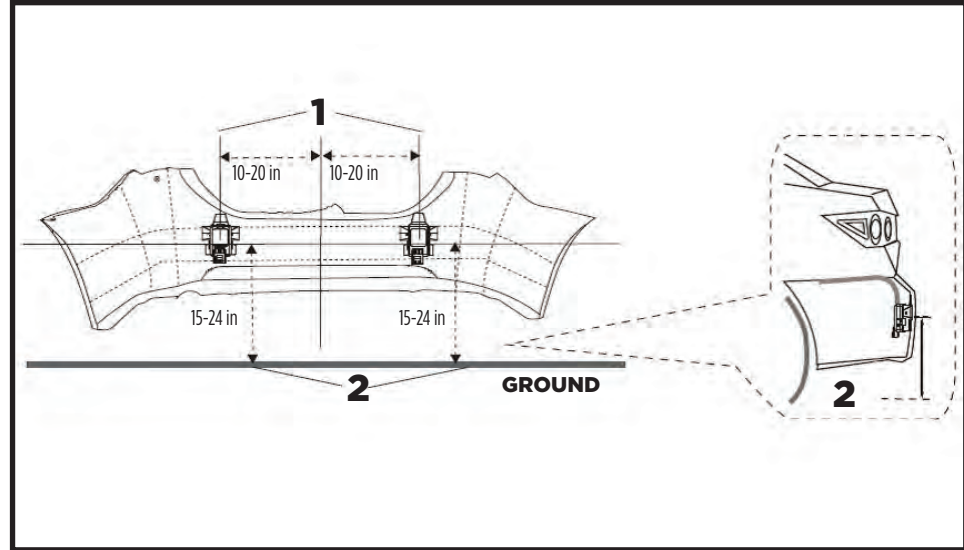


Figure A

INSTALLATION

Running the wiring

1. Carefully find a safe location to run the wires along the bumper or underside of the bumper on the vehicle. Use zip ties to secure the wiring to the vehicle. Please keep away from moving parts and anything that would cause too much heat near the wiring. (Figure A)
2. Find a suitable location to gain access to the inside of the vehicle.
3. Mount the Audible buzzer inside the vehicle in a good location that the driver will hear the alerts clearly. The wires may need to be extended if the location is desired near the front of the vehicle.
4. Remove the double sided tape and mount to a flat surface. If needed the adhesion promoter can be used here also. (Figure B)
5. Plug the buzzer in. Please keep the connector next to the buzzer available. This is for the calibration button which is used in the next step. This button does NOT need to remain plugged in after calibration is finished.

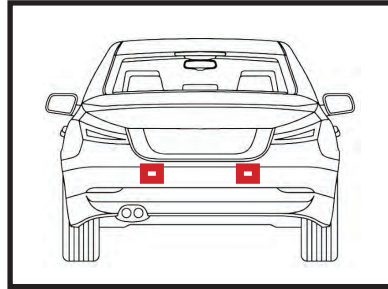


Figure A

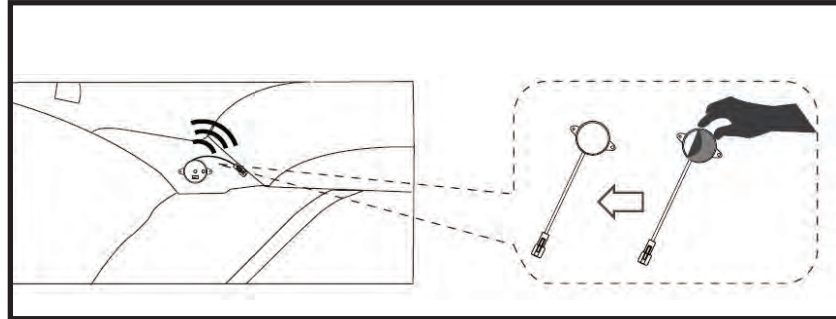


Figure B

CALIBRATION

Calibration

1. Complete the installation, put the bumper back in place, make sure power and ground are connected and the buzzer is plugged in. Connect the provided push button to the harness near the buzzer connection.
2. Check power up and make sure there are no moving object within 3 feet of the rear of the vehicle. (Figure A)
3. Press and hold the calibration button for more than 3 seconds to activate the parking sensor system. You should hear two continuous beeps. If not please repeat step 3.
4. Check function of the parking sensors.
5. There should be 3 zones of alerts
 - Level 1: 3.2 FT to 2 FT - slow beeping
 - Level 2: 2 FT to 1 FT - faster beeping
 - Level 3: less than 1 FT - constant beeping

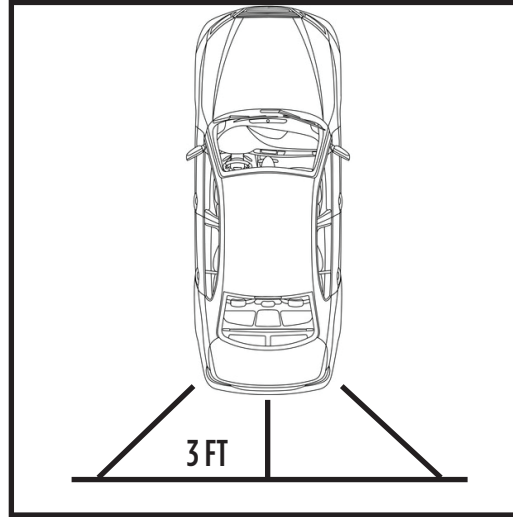


Figure A

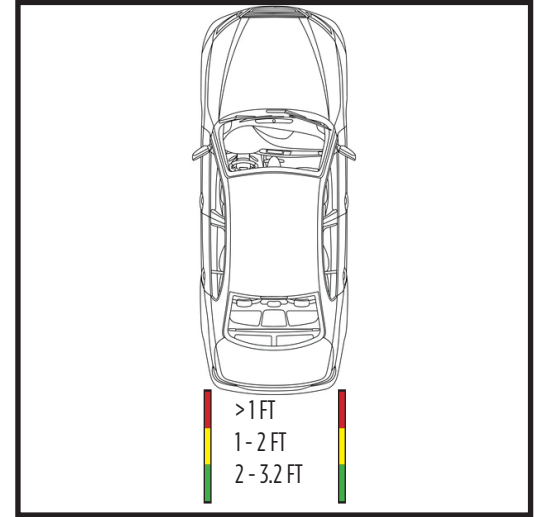
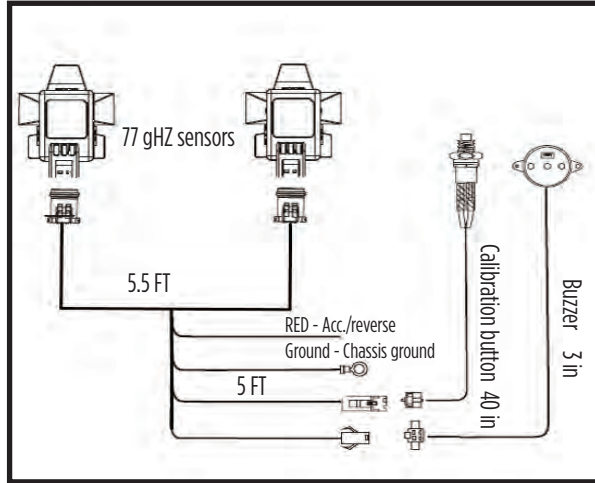


Figure A

WIRING DIAGRAM AND SPECS



Configuration	Dual sensors
Operating Freq.	77-81Ghz
Active condition	Speed < 10km/h and reverse gear
Field of view (Horz)	144 degrees
Alert range	3.2 FT max
Weight per sensor	16g
Dims per sensor	64.8 x 47.4 x 21.7 mm
Operation/storage temp	- 40 to 85 C
Power consumption	200 mA @ 12 VDC
Water resistant	IP67
Voltage range	8 - 18V



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INSTALLATION INSTRUCTIONS
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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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.
- Professional Installation is required..

This device complies with radio frequency (RF) exposure limits adopted by the Federal Communications Commission for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.