

RYDEEN[®]

find your road



Owner's Manual

SDA-BS900

Blind Spot Detection/ Lane Change

Assist System Version1.2

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I. Items list

Number	Item Name	Quantity	Picture
1	Main Harness & Extension Cable	1SET	
2	Radar Sensor	2PCS	
3	LED Indicator	2PCS	
4	LED Indicator Housing	2PCS	
5	Adjustable Buzzer	1PC	
6	Radar Puck Bracket	2PCS	
7	Installation Angle Tool	1PC	
8	Drill Bit and Rivets	Drill 1PC & Rivets 12PCS	
9	Zip Ties	10PCS	

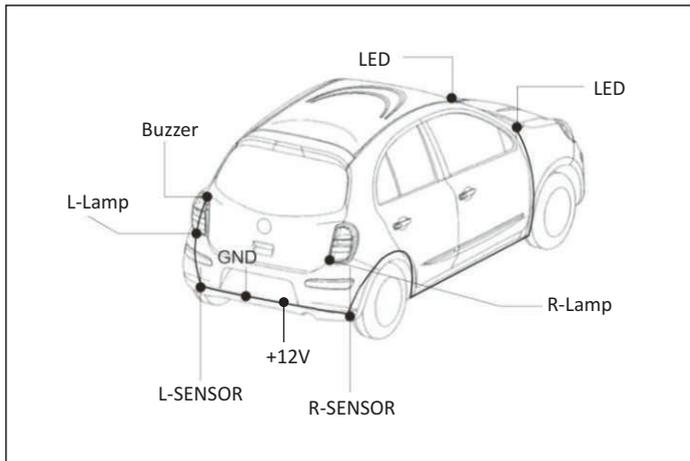
II. Technical Specification

Detection Angle	70 degrees (Horizontal)
Speed Accuracy	< 0.5mph
Speed Restriction	The system will be only activated at the speed over 18mph
Direction of Movement	Vehicles Approaching or Vehicles You Are Passing
Detection Range	-6.5ft to 80ft
Operating Voltage	8V to 30V
Waterproof	Radars: IP67 / Cables: NOT waterproof
Working Current	< 0.4A
Working Temperature	-20°C ~ + 70°C

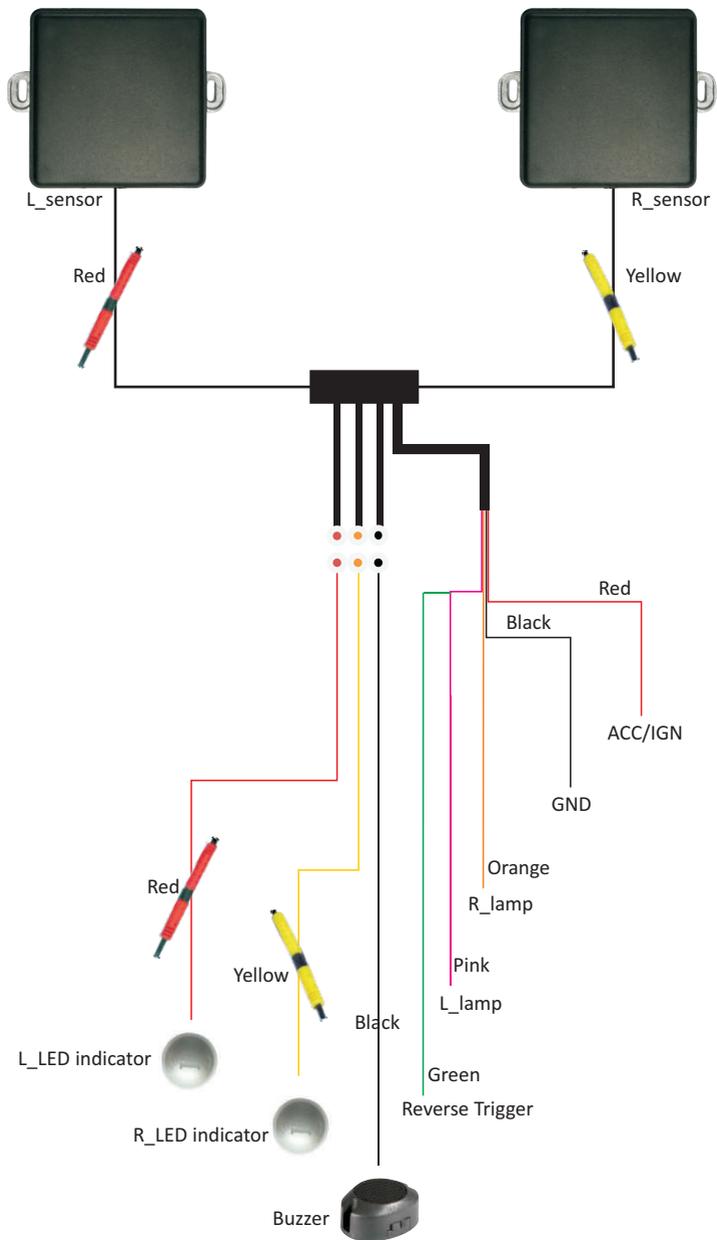
CAUTION

This product (blind spot safety system) functions as an aid for notifying presence of obstacles in vehicle blind spots. Be sure to look both sides of a vehicle to confirm safe maneuver.

III. Installation Diagram



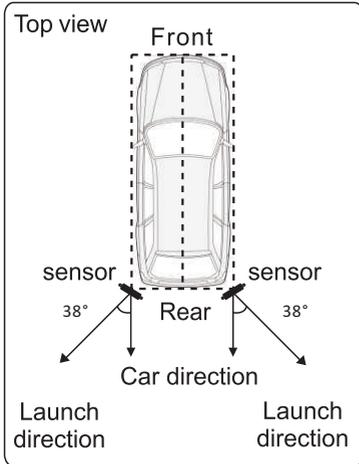
IV. Wire Connection Diagram



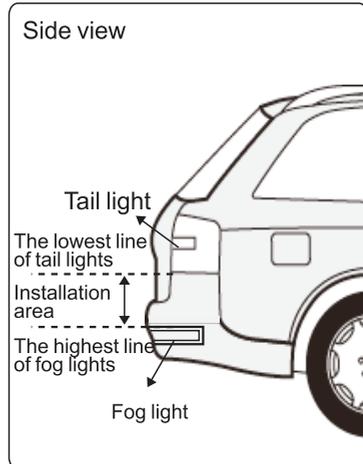
V. Installation Guide

1. Sensor Installation

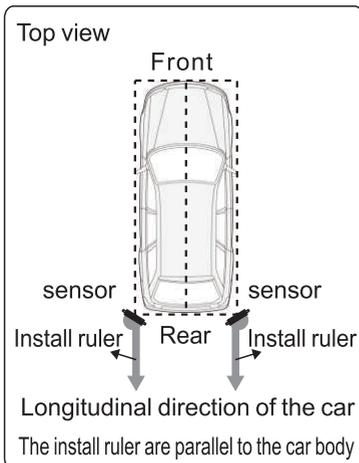
Use Supplied Tool to Set Proper Radar Puck Angle: the default installation angle is: 38 degree. Depending on actual situation, the install angle could be adjusted accordingly:



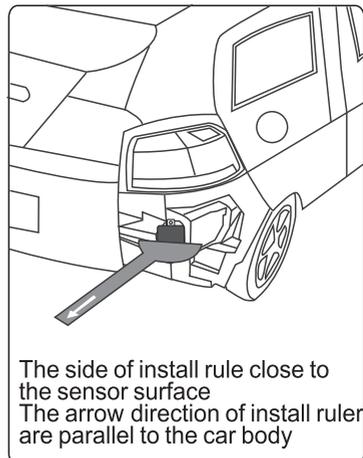
The two sensors will respectively installed the vehicle rear left and right corner parts, in the bumper



Height of sensor installation should be between the lowest line of tail lights and the highest line of fog lights

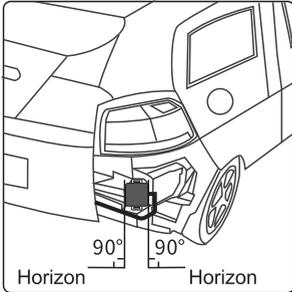


Install ruler using demonstration: the install ruler are parallel to the car body

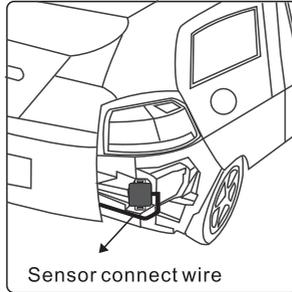


Install sensors: can be installed get help with install ruler

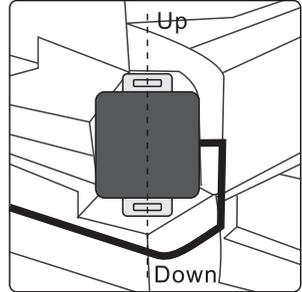
Mounting Radar Pucks with Provided Adjustable Brackets



When fixing the sensor, keep the metal back side close to the mounting surface, Keep both sides of the sensor perpendicular to the ground



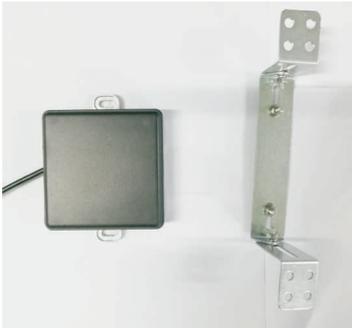
To make sure the connect wire from side, the sensor installed successfully as shown in the figure (Left installation the same as the above is ok)



The sensors correct installation details image (the correct placed direction)

Please follow directions below:

1) Prepare Materials:



2) Mount the sensor module on the bracket:



3) After found angle set, firmly screw or bolt the bracket to the car:



2. Installation of the left/right turn signal.

Step 2. Using the voltage multi-meter, locate the left and right isolated* turn signal trigger wires behind the tail lamp. Once verified, connect the left and right signal wires of the BSS2x wire harness to the correct signal wires.

* Vehicles with shared bulb for turn and brake light will cause confusion to systems behavior, in this case integrate wires from front isolated turn signals or side markers



Fig.1



Fig.2



Fig.3

3. LED indicator installation:

Step 3. Place the LED indicators where it is visible for the driver. Ideally on the A-pillar.



Fig.4



Fig.5

4. Speaker location:

Step 4. While installing the speaker, make sure it is not obstructed by any panels inside the vehicle.



Fig.6

Step 5. Tuck the wires neatly to hide and prevent wire pinch.

VI. Alert conditions:

1. When the vehicle is on, the system would start detecting objects in the blind area in the lane next to and behind the vehicle 80 ft. (Fig.7)
2. When vehicles are approaching, and their speed is faster than our own speed.
3. When you are passing vehicles, and their speed is slower than your own speed.

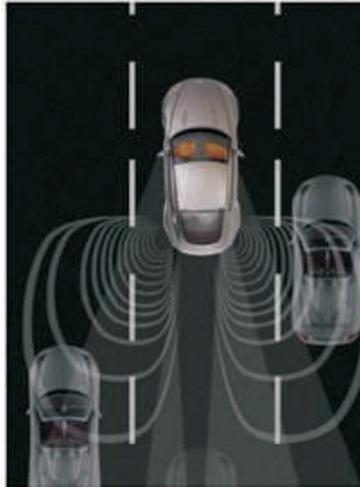


Fig.7

VII. How does it alert?

A. Blind detection on right side:

1. R-LED indicator will be activated and indicator will light up when there is an object approaching to the right side blind area of your vehicle at speed over 18 mph (see Fig.7).
2. If the right turn signal of your vehicle is triggered at the same time, the R-LED indicator will blink and the buzzer will be beeping as well at speed over 18 mph.

B. Blind detection on left side:

1. L-LED indicator will be activated and indicator will light up when there is an object approaching to the left side blind area of your vehicle at speed over 18 mph (see Fig.7).
2. If the left turn signal of your vehicle is triggered at the same time, the L-LED indicator will be blink and the buzzer will be beeping as well at speed over 18 mph.

C. The LED and buzzer will not light up (no activity) if there is no object approaching to the blind area of your vehicle.

D. When in reverse, the buzzer speaker will beep to give cross traffic notification and the LED will indicate the direction of incoming vehicles (or objects) are approaching. Notifications will not alert, for standing objects under 6 mph reverse speed.

VIII. Troubleshooting:

NO.	Issue	Reason	Solution
1	LED light does not work	Incorrect connection or pins not making contact	Check the harness and make sure connection is correct
		LED light is broken	Replace LED light
2	Opposite LED indicator	Microwave sensor or LED indicators are plugged in to the opposite connector	Make sure RED is driver side and YELLOW is passenger side.
3	Buzzer does not work	Wrong connection or pins not making contact	Check the harness and make sure connection is correct
		Defective buzzer speaker	Replace buzzer
4	Sensors does not work	Sensors module are covered by the metal bumper or other metal	Find the best location where the sensors cannot be blocked by any metal
5	Unit does not work after connected	Blind spot system does not trigger the sensors if the speed is less than 18 mph	Normal behavior in this case The sensors needs to detect +18 mph to trigger the sensors

IX. Technical Support Contact Info.

- Telephone: 1-877-777-8811 (within USA only)
- Email: tech1@rydeenmobile.com
- Web Address: www.rydeenmobile.com

X. Limited Warranty

Rydeen North America Inc. (a manufacturer of "Rydeen" products) warrants this product (BSS2x) only to the original purchaser as described following:

Warranty Coverage

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

1. Installation by anyone other than an authorized Rydeen Mobile Retailer may void 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.
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.

XI. To Obtain Warranty Service

If warranty service is required for your Rydeen product:

1. Please call 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 and obtain a Return Authorization Number (“RA”) Number.
2. Please pay for any shipping charge to Rydeen Customer Service Department.
Rydeen will pay the return shipping charge, if the repair or service was performed during the warranty period. Rydeen will ship freight collect (Recipient is responsible for shipping charge) if Rydeen determine the service was performed outside of warranty period or exclusions described above. Rydeen will not accept warranty service requests from outside of the U.S.A. even if product was purchased in the USA.
3. Please include a copy of your original purchase receipt including Rydeen Product model number, purchase date, retailer name/address and a RA Number whenever your product is sent for warranty service.
4. Shipping address for Rydeen Customer Service Department is following:

Rydeen North America Inc 2701 Plaza Del Amo, Unit 705, Torrance, California 90503, USA



Rydeen North America Inc. Dba
Rydeen Mobile Electronics
2701 Plaza Del Amo, Suite 705, Torrance, California 90503
Phone: 1-877-777-8811 Fax: 1-310-943-3778

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FCC WARNING

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.

Any 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator your body: Use only the supplied antenna.

IC Caution:

- English:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French:

Le présent appareil est conforme aux CNR d' Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l' utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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