



Owner's Manual

BSS3x

Microwave Radar Blind Spots System

Version1.1

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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	GPS Antenna	1PC	
7	Radar Puck Bracket	2PCS	
8	Installation Angle Tool	1PC	
9	Drill Bit and Rivets	Drill 1PC& Rivets 12PCS	
10	Zip Ties	10PCS	

II. Technical Specification

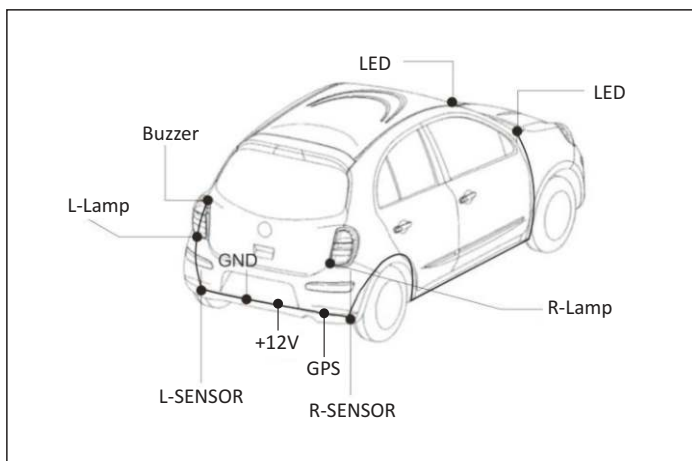
Detection Angle	70 degrees (Horizontal)
Speed Accuracy	< 0.5mph
Speed Restriction	The system will be only activated at the speed over 18mph
Direction of Movement	Vehicles Approaching or Vehicles You Are Passing
Detection Range	-6.5ft to 80ft
Operating Voltage	8V to 30V
Waterproof	Radars: IP67 / Cables: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

Important Safety Information

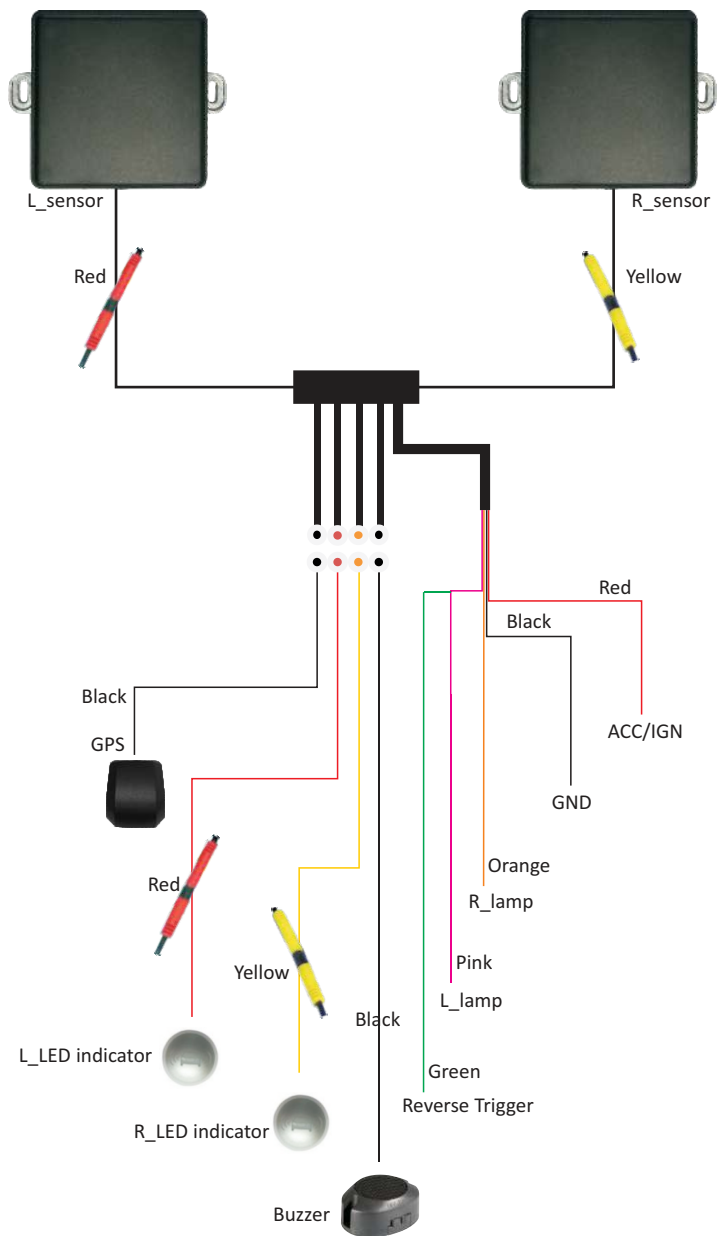
⚠ WARNING ⚠

THIS PRODUCT FUNCTIONS AS AN AID
FOR NOTIFYING THE PRESENCE OF OBSTACLES IN VEHICLE BLIND SPOTS.
IT DOES NOT DETECT ALL DANGERS AND OBSTACLES
AND IS NOT A SUBSTITUTE FOR YOUR JUDGEMENT AND CAREFUL ATTENTION.
BEFORE ANY MANEUVER, VISUALLY CHECK BOTH SIDES OF THE VEHICLE TO CONFIRM.

III. Installation Diagram



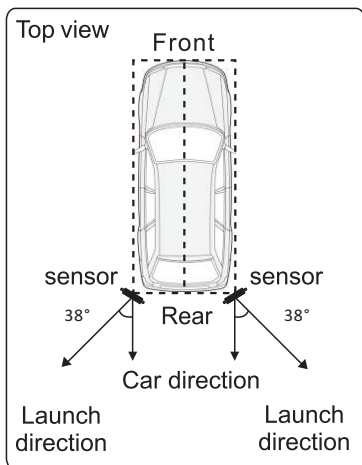
IV. Wire Connection Diagram



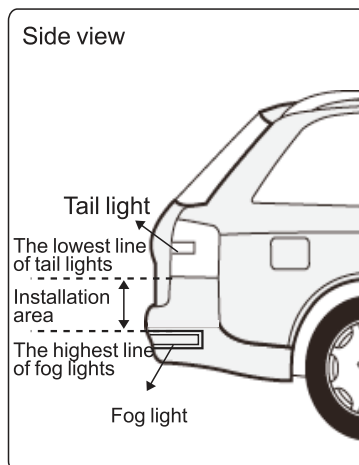
V. Installation Guide

1. Sensor Installation

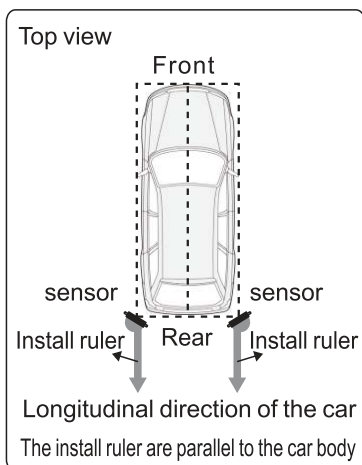
Use Supplied Tool to Set Proper Radar Puck Angle: the default installation angle is: 38 degree. Depending on actual situation, the install angle could be adjusted accordingly:



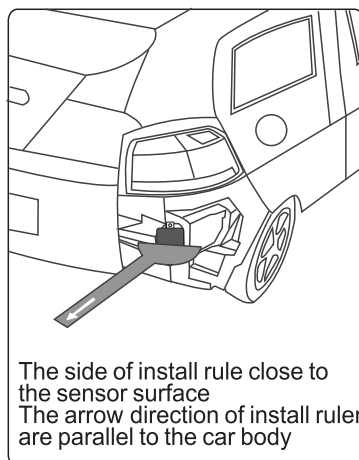
The two sensors will respectively installed the vehicle rear left and right corner parts, in the bumper



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

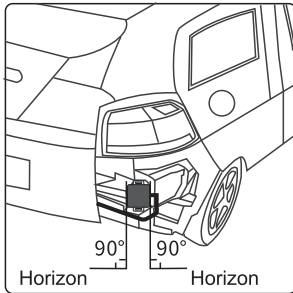


Install ruler using demonstration: the install ruler are parallel to the car body

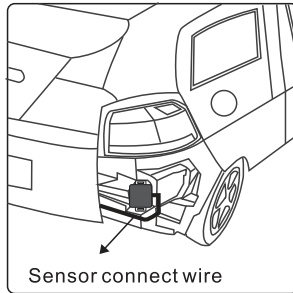


Install sensors: can be installed get help with install ruler

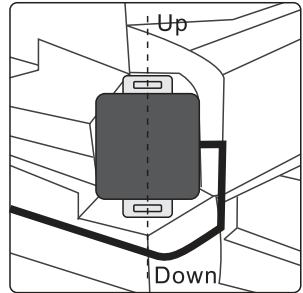
Mounting Radar Pucks with Provided Adjustable Brackets



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 BSS3x 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.

Step 6. While installing the GPS, make sure it is not obstructed by any panels inside the vehicle.



Fig.7

VI. Alert conditions:

When the system is on and functioning, the system is designed to detect the following events:

1. Blind spots while driving: Objects in the blind spot areas around your vehicle-in the lanes on the left/right and directly behind the vehicle at a distance of up to 82 ft (approximately 25 m).
2. Blind spots while being passed / overtaken: When vehicles are approaching / overtaking your vehicle from behind, or when your vehicle approaches and passes a moving vehicle.
3. Cross-Traffic Detection: When your vehicle is reversing, vehicles approaching from your left and right.

CAUTION

The BSS3x can detect not only objects approaching your vehicle from behind, but also detect objects your vehicle is approaching or overtaking. Under certain driving scenarios, the BSS3x may detect objects in an unintended way. The following conditions below are examples of scenarios where fault notifications may occur.

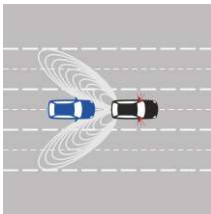


Fig 8

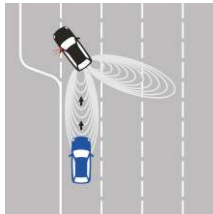


Fig 9



Fig 10

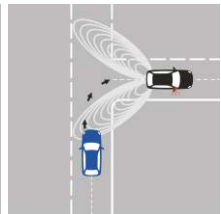


Fig 11

VII. System Indicators:

- A.** When the system is turned on each time (your vehicle ignition or ACC is switched on), both LED indicators will flash once to indicate system start up and initialization. Once a GPS connection is established, which may take up to 2 minutes, both LED indicators will flash twice to indicate the system is ready for use. The GPS connection is used to calculate your vehicle's speed. When your vehicle is traveling slower than the start speed setting 18mph(29km/h), the system will not produce warnings.
- B.** Blind spot detection toward the right rear of your vehicle:
1. The Right LED indicator will illuminate and remain illuminated when there is an object or vehicle approaching, or when your vehicle approaches and passes a moving vehicle.
 2. If your vehicle's right turn signal is activated when there is an object or vehicle approaching, or when your vehicle approaches and passes a moving vehicle, the Right LED indicator will flash repeatedly and the included speaker will beep (bi-bi-bi) one time.
- C.** Blind spot detection toward the left rear of your vehicle:
1. The Left LED indicator will illuminate and remain illuminated when there is an object or vehicle approaching, or when your vehicle approaches and passes a moving vehicle.
 2. If your vehicle's left turn signal is activated when there is an object or vehicle approaching, or when your vehicle approaches and passes a moving vehicle, the Left LED indicator will flash repeatedly and the included speaker will beep (bi-bi-bi) one time.
- D.** Cross-Traffic Detection:
1. When your vehicle is reversing and the system detects an object or vehicle approaching from your right, the right LED indicator will illuminate and remain illuminated and the included speaker will beep repeatedly.
 2. When your vehicle is reversing and the system detects an object or vehicle approaching from your left, the Left LED indicator will illuminate and remain illuminated and the included speaker will beep repeatedly.

Note: The system will not detect or warn of standing objects or objects moving under 5 mph (8 km/h).

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 or GPS does not work	Sensors or GPS module are covered by the metal bumper or other metal	Find the best location where the GPS antenna cannot be blocked by any metal
5	Unit does not work after GPS is connected	Blind spot system does not trigger the sensors if the speed is less than 18mph	Normal behavior in this case The GPS needs to detect +18mph 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 (BSS3x) 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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