



## Owner's Manual

### BSS1

Microwave Radar Blind Spots System

Version1.2

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## I. Items list

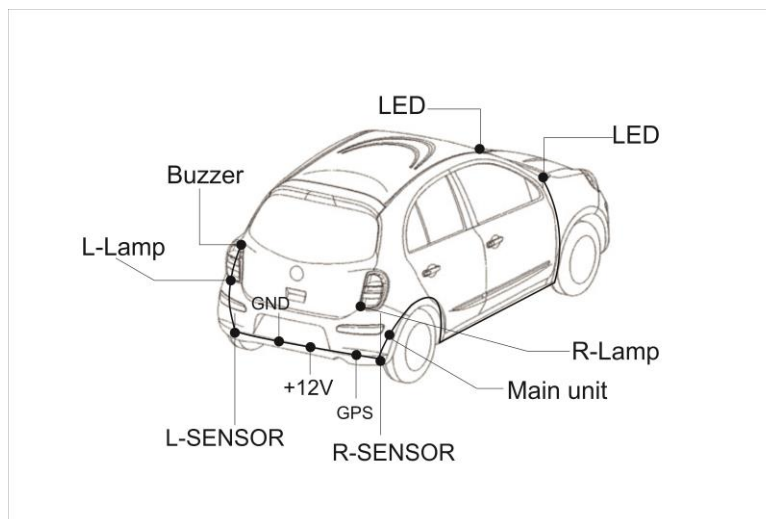
Number	Item Name	Quantity	Picture
1	Main Unit	1PCS	
2	Main Harness + Extension Cable	1SET	
3	Radar Sensor	2PCS	
4	LED Indicator	2PCS	
5	GPS Antenna	1PCS	
6	Buzzer	1PCS	
7	3M Velcro	4PCS	

Tools for installation: angle gauge; insulation tape; multi-meter; screwdriver; cleaning cloth; tape.

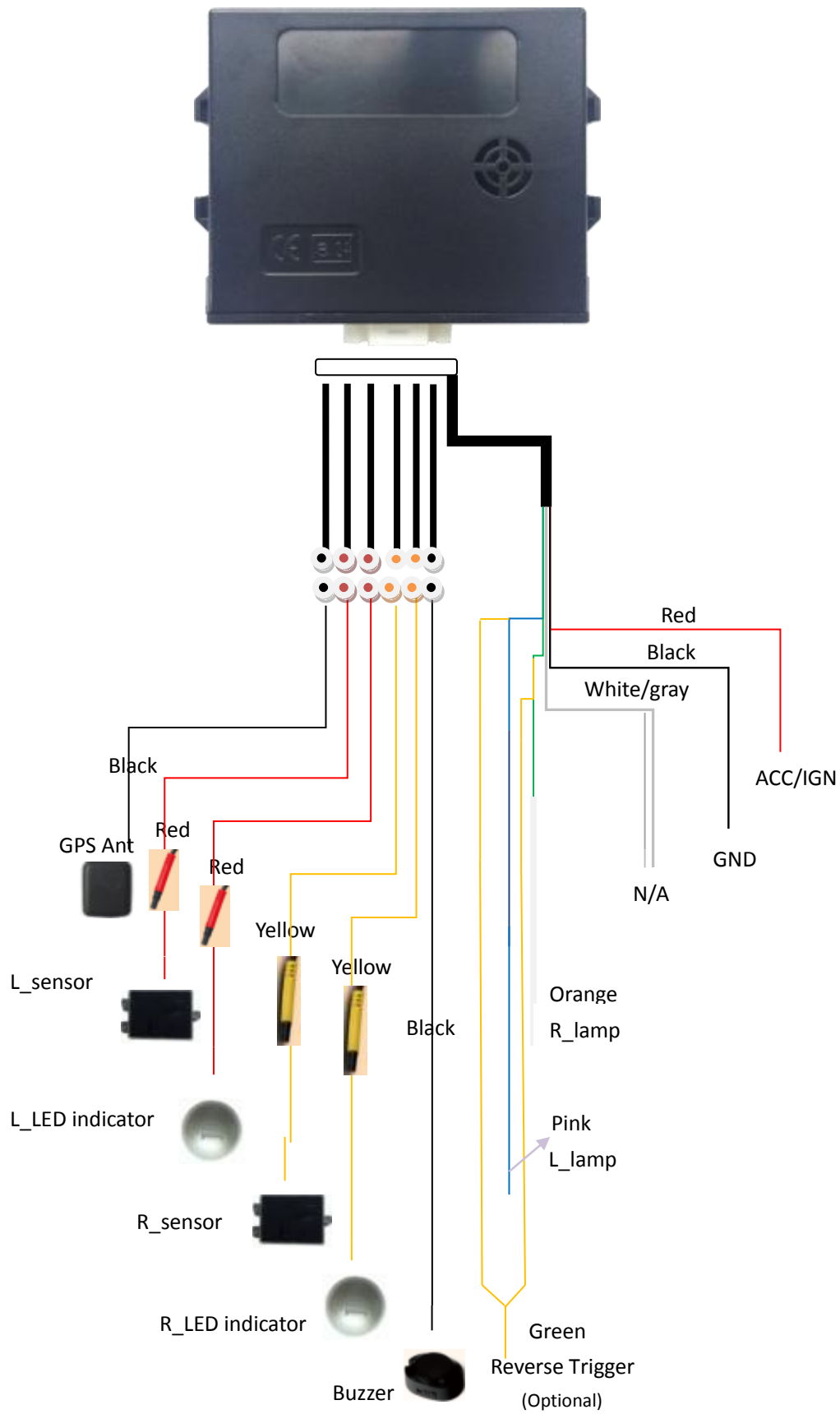
## II. Technical specification

Operating frequency	24.0 ----24.25GHZ
Transmit power	15dbm
Detection range	40 degree ( Horizontal )
Detection ability	5 targets can be detected at the same time
Speed range	0.5mph---137mph
Speed accuracy	< 0.5mph
Speed Restriction	<ol style="list-style-type: none"> <li><b>1. The GPS Antenna when connected activates notifications over 20mph (Example LED + Speaker)</b></li> <li><b>2. If No GPS signal is detected or satellites not found, the system will give notifications at any speed.</b></li> </ol>
Direction of movement	Approached or overtaken by vehicles
Detection range	Truck : 1ft-60ft Car : 1ft-50ft Motorcycle:1ft-33ft Pedestrian:1ft-23ft
Operating voltage	9---35V
Waterproof	Radars: IP65 / Cables: NOT waterproof
Working current	< 200mA
Working temperature	-40°C~ + 85°C

## III. Installation Diagram



#### IV. Wire Connection Diagram



## V. Installation Guide

### 1. Sensor Installation

Installation requirements: sensors should be adhered to the inner corner of the bumper with supplied Velcro. The angle should be between 20 to 25 degrees with the height ranging from 13-35 inches. (Fig.1-Fig.2)

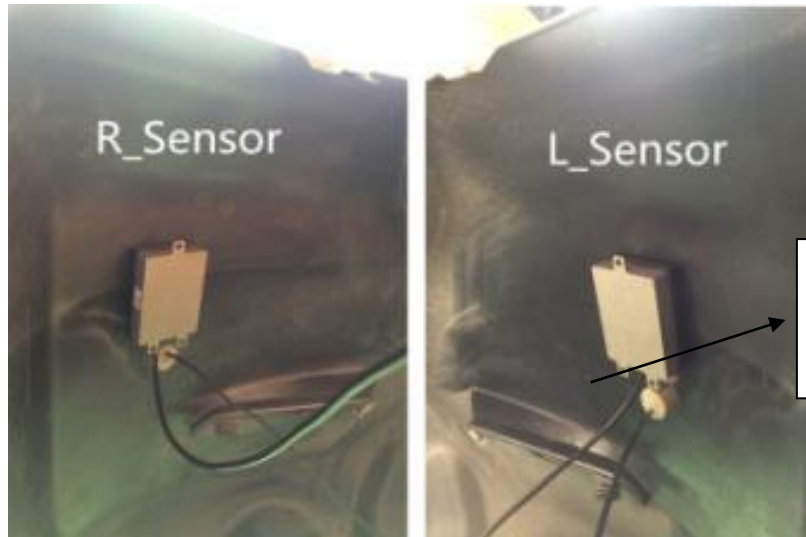


Fig.1

Fig.2



Fig.3



Fig.4

Step1: Measuring method: Measure the rear bumper using the angle gauge to locate the 20 to 30 Degrees angle. (Fig.3-Fig.4)

**The microwave sensors are only intended for plastic bumpers.  
Please note the BSS1 is NOT applicable for metal bumpers.**

Step2: Locate the desired position for the sensors. (Fig.5 - Fig.6)



Fig.5



Fig.6

Step3: Remove the rear bumper to clean the surface for the sensors. (Fig.7)



Fig7

**Make sure the surface is clean before Velcro placed with sensors.**

Step4: Place the provided Velcro (*To Help Absorb Vibration*) on the surface of the sensors (black side) and the desired location on the bumper (See image below).

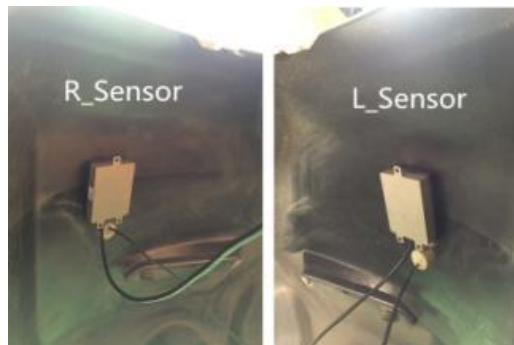


Fig.8

Fig.9

## 2. Installation of the left/right turn signal.

Step 5. Using the voltage Multi-meter, locate the left and right turn signal trigger wires behind the tail lamp. Once verified, connect the left and right signal wires of the BSS1 wire harness to the correct signal wires.



Fig10



Fig11



Fig12

## 3. LED indicator installation:

Step 6. Place the LED indicators where it is visible for the driver. Ideally on the A-pillar or in field view side mirrors.



Fig.13

Fig.14

## 4. Speaker location:

Step 7. While installing the speaker, make sure it is not obstructed by any panels inside the vehicle.



Fig.15

Step 8. Tuck the wires neatly to hide and prevent wire pinch.

### Note

#### Illumination of the LED indicator on the control box:

1. The LED comes on solid when the system is first powered up;
2. The LED blinks slowly while the GPS module is connected to the satellite;
3. The LED blinks quickly while sensing moving objects that are approaching in the blind spot (same frequency as to the alarm LED indicators & the buzzer);
4. The LED maintains the last blinking status after the alerts have ended (the last blinking status of alarming is off / on randomly)



## 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 50 feet. (Fig.16)
2. When vehicles are approaching and their speed is faster than our own speed.

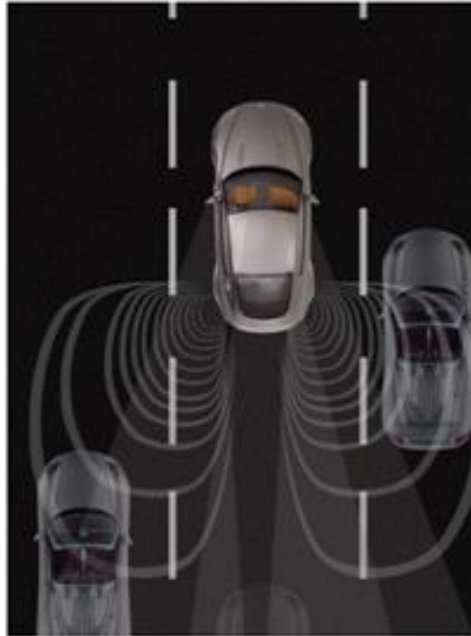


Fig.16

## VII. How does it alert?

A: Blind detection on right side:

1. R-LED indicator will be activated when there is an object approaching to the right side blind area of your vehicle (see Fig.16).
2. If the right turn signal of your vehicle is triggered at the same time, the R-LED indicator will be blinking and the buzzer will be beeping as well (with the same frequency).

B: Blind detection on left side:

1. L-LED indicator will be activated when there is an object approaching to the left side blind area of your vehicle (see Fig.16).
2. If the left turn signal of your vehicle is triggered at the same time, the L-LED indicator will be blinking and the buzzer will be beeping as well (with the same frequency).

C: The LED and buzzer will standby (no activity) if there is no object approaching to the blind area of your vehicle.

D: During reversing, the R & L LED will be blinking according to the approaching object detection of each side.

**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 20mph	<b>Normal behavior in this case. The GPS needs to detect +20mph to trigger the sensors</b>

**IX. Technical Support Contact Info.**

- Telephone: **1-877-777-8811 (within USA only)**
- Email: [tech1@rydeenmobile.com](mailto:tech1@rydeenmobile.com)
- Web Address: [www.rydeenmobile.com](http://www.rydeenmobile.com)

## **X. Limited Warranty**

Rydeen North America Inc. (a manufacturer of "Rydeen" products) warrants this product (BSS1) 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.
5. Shipping address for Rydeen Customer Service Department is following:  
**Rydeen North America Inc 2701 Plaza Del Amo, Unit 705, Torrance, California 90503, USA**

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