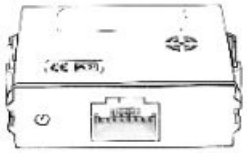
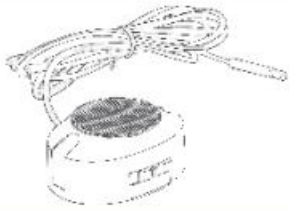
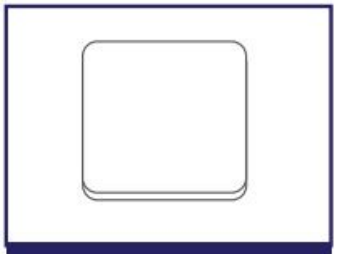
RVS-130 Advanced Blind Spot Sensor System Instruction Manual

Contents

RVS-130 Advanced Blind Spot Sensor System

Item List

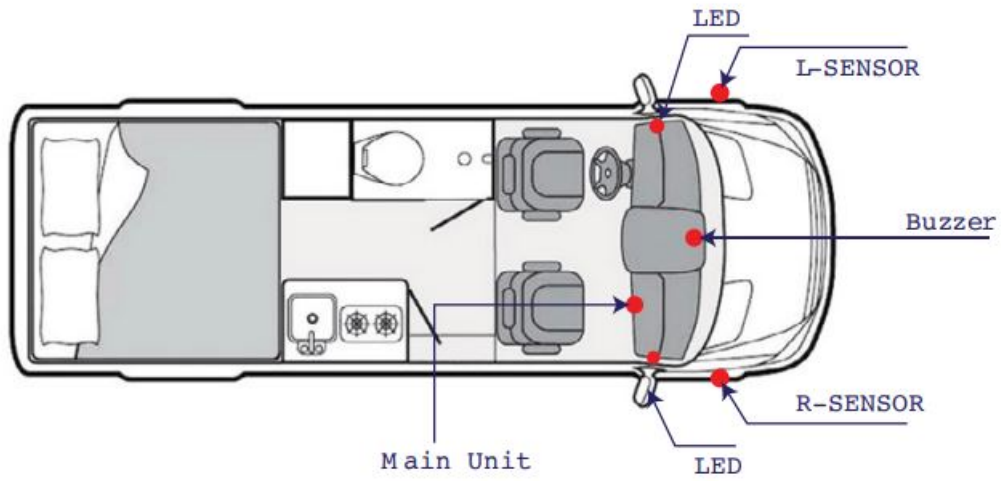
			
Main Unit 1PCS	Main Harness 1PCS	Radar Sensor 2PCS	Sensor Extension Cable 2PCS (one red one yellow)
			
LED Indicator 2PCS	GPS Antenna 1PCS	Buzzer 1PCS	LED Extension Cable 2PCS (one red one yellow)
			
3M Velcro 4PCS			

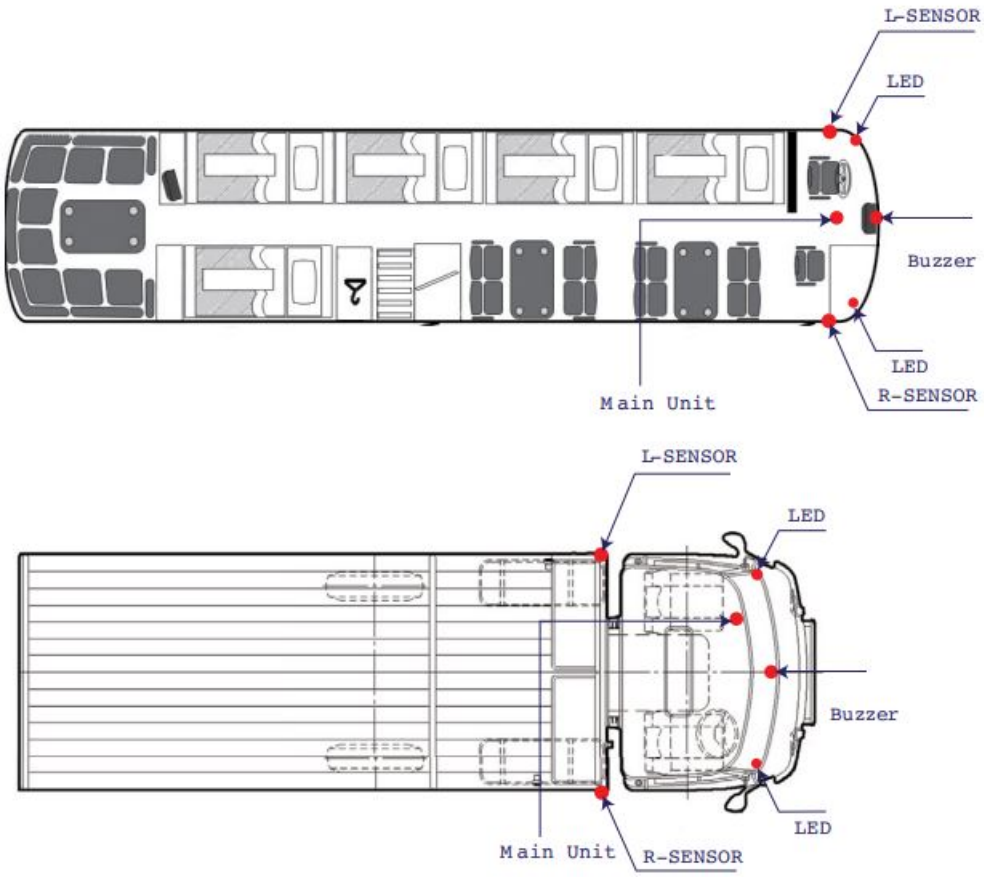
- Tools for installation: insulation tape, multi-meter, screwdriver, cleaning cloth, tape.

Technical Specification

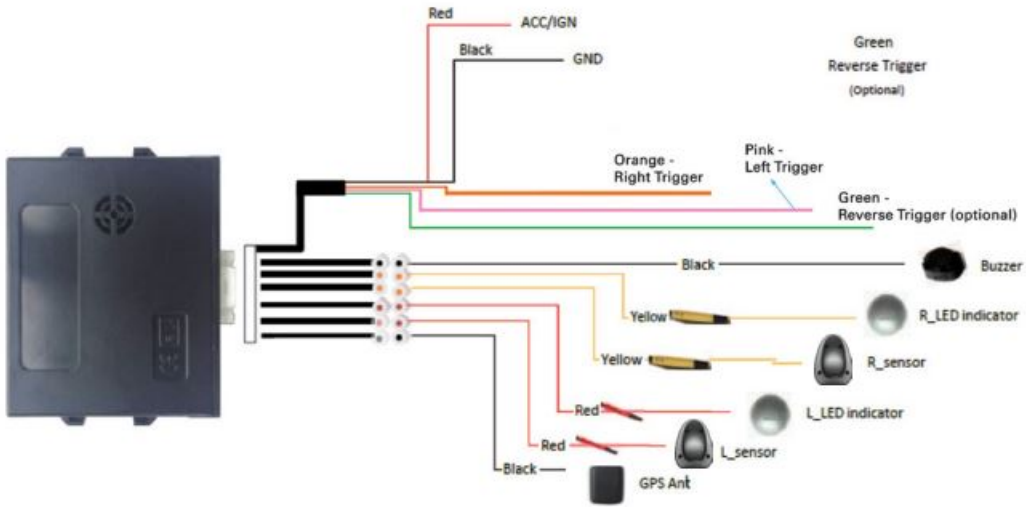
Operating frequency	24.0 —-24.25GHZ
Transmit power	15dbm
Detection range	40 degree (Horizontal)
Detection ability	5 targets can be detected at the same time
Speed range	0.35mph—137mph
Speed accuracy	< 0.35mph
Direction of movement	Approached or overtaken by vehicles
Speed Restriction 1.The GPS Antenna when connected activates notifications over 20mph (Example LED + Speaker) 2.If No GPS signal is detected or satellites not found, the system will give notifications at any speed.	
Detection range	Car: 1ft-50ft Motorcycle:1ft-33ft Pedestrian:1ft-23ft
Operating voltage	9—35V
cables waterproof	Radars: IP 67 / Cables: waterproof
Working current	< 200mA
Working temperature	-40℃ ~ + 85℃

Wiring Diagram





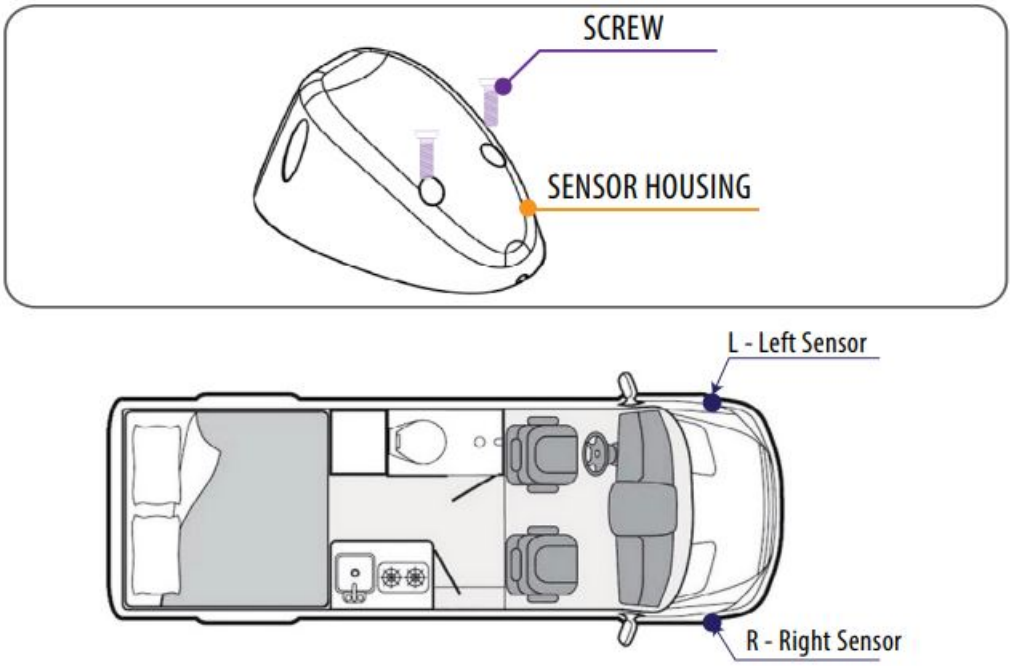
Wire Connection Diagram



Installation Guide

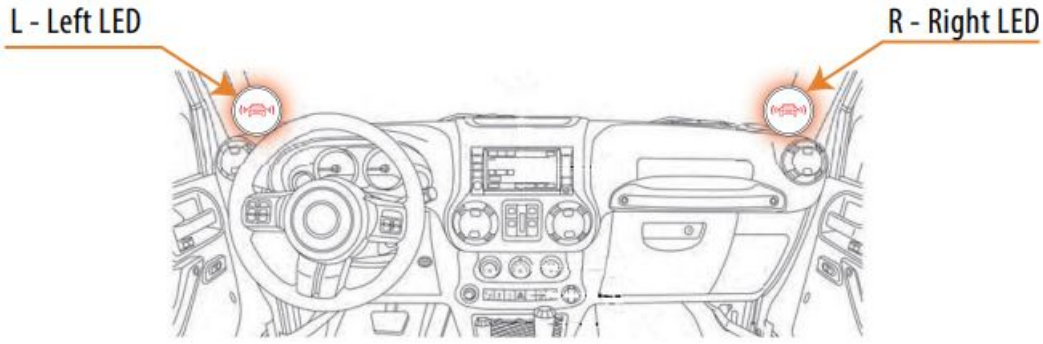
Step 1. Sensor Installation

Installation requirements: Sensors should be mounted on the widest part of the vehicle and as far forward as possible, Using screws to fix the sensor on the front of the vehicle.

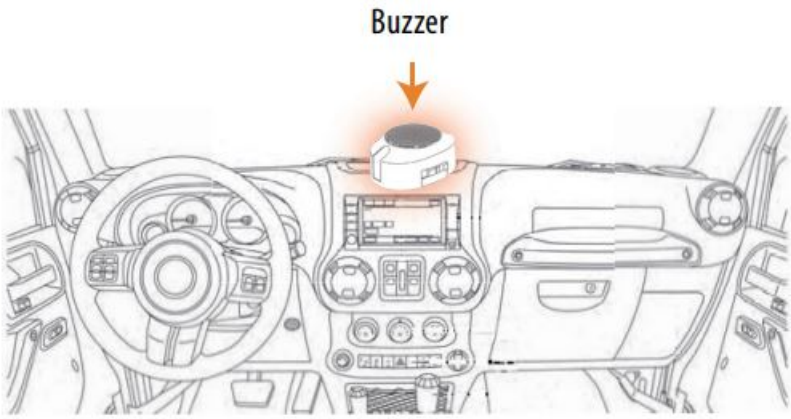


Step 2. Installation of the left/right turn trigger. Using the voltage Multi-meter, locate the left and right turn signal trigger wires behind the front turn signals. Once verified, connect the left and right signal wires of the RVS-130 wire harness to the correct signal wires.

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



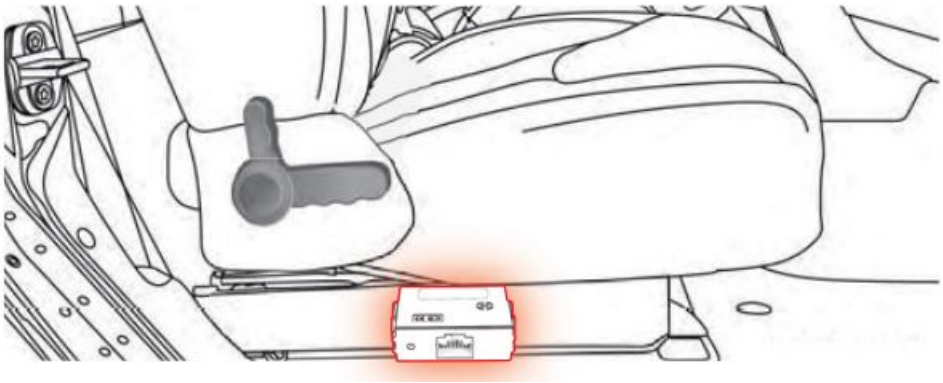
Step 4. Buzzer Location Ensure the speaker is installed in an accessible area to allow driver access to volume controls.



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

NOTE!
Illumination of the LED indicator on the control box:

Step 6. Main Unit Location While installing the main box, use tape to securely fasten it in place.



Alert Conditions

When the vehicle is on, the system should detect objects that are overtaking your vehicle in the lane next to your vehicle up to 50 ft. to the rear.

Alert Characteristics

- Blind detection on the 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).
- Blind detection on the 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).
- The LED and buzzer will standby (no activity) if there is no object approaching to the blind area of your vehicle.
- During reversing, the R & L LED will be blinking according to the approaching object detection of each side.

Troubleshooting

Issue	Reason	Solution
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
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.
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
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
Unit does not work after GPS is connected	Sensors or GPS module are covered by the metal bumper or other metal	Blind spot system does not trigger the sensors if the speed is less than 20mph

Customer Service Bulletin

CSB00101 Affected Products: RVS-128, RVS-129, RVS-130.

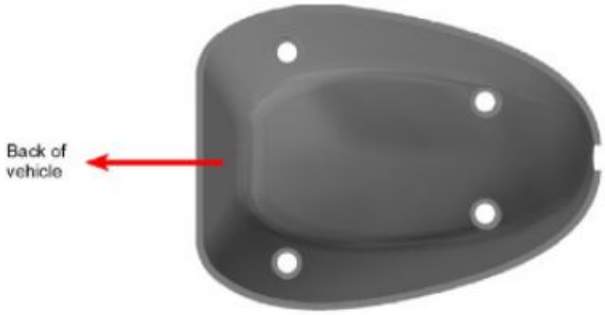
Summary
This bulletin addresses three solutions to the issue of false alarms with the RVS-128, RVS-129, and RVS-130:

- Sensor’s orientation.
- Large surface anomalies in the sensor field of view.
- Use of steel screws in conjunction with the environment, resulting in reflections to the sensors.

Issue
Occasionally, when the system is installed and tested, there are constant false alarms as the vehicle is moving even where there are no other vehicles in the area.

Solutions
Here are three additional possible causes and their solutions.

Wrong orientation
Change orientation to 180°. The sensor should be oriented with the flat bottom attached to the vertical side of the vehicle, perpendicular to the ground. The large end of the sensor should be directed toward the back of the vehicle.



Why incorrect orientation is a problem: The microwave signal is emitted out of the larger end of the sensor. The sensor will sense objects coming toward it. So, if it is pointing in the wrong direction, it may sense things that are stationary, such as trees, as moving toward it. This is especially seen when the sensor is pointing toward the front of the vehicle (all stationary objects would be moving toward the sensor and cause false alarms).

Surface anomalies in the sensor field of view
Large objects attached to the side of the vehicle or other large surface anomalies, such as the wheel well near the sensor, may cause reflections to the sensor resulting in false alarms. The wheel well it may have reflections from the shape of the wheel well or also the rotation of the wheel will look like objects traveling toward the sensor. To avoid this, be sure that objects are away from the viewing angle of the sensor and the wheel well is not in the viewing angle. The viewing angle of the sensor is a total of 40° or 20° on both sides of the horizontal line going from the sensor toward that back (see illustration).

With the wheel well, be sure that the viewing angle does not overlap it in any way. You may adjust the height or move the sensor slightly back if needed. It is recommended to have the sensor as forward as possible while avoiding the wheel well and staying near the preferred height.

Steel Screws
Occasionally, the steel screws may cause a problem. Sometimes the environment where the sensor is mounted plus the steel screws will result in signal reflections that are just right that they cause the system to give false alarms. To test for this, remove the steel screws and use double-sided tape to attach the sensors. Drive the vehicle and test to see if the problem clears. If it does, the false alarms may be caused by the steel screws. Replace the screws with #4-40 x 1” (length) nylon machine screws, #4-40 nylon hex nuts, and #4 nylon washers. This is very rare and should always be tested as prescribed above before using nylon fasteners.

SAFETY INFORMATION

If you have questions about this product, contact:

Rear View Safety 1797 Atlantic Avenue Brooklyn, NY 11233 Tel: 1.800.764.1028 IN NO EVENT SHALL SELLER OR MANUFACTURER BE LIABLE FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.

Before drilling please check that no cable or wiring is on the other side of the wall. Please clamp all wires securely to reduce the possibility of them being damaged while the vehicle is in use. Keep all cables away from hot/moving parts and electrical noisy components. We recommend doing a benchmark test before installation to ensure that all components are working properly.

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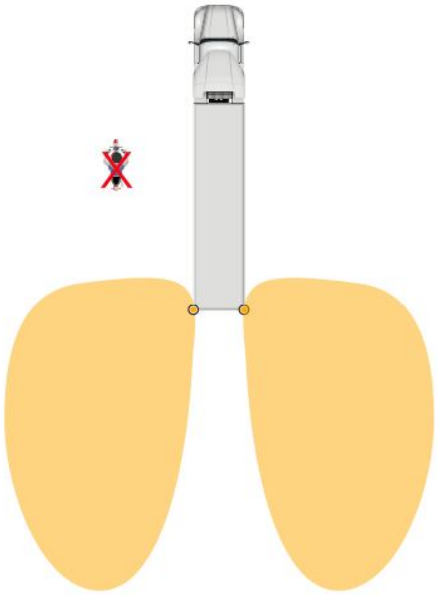
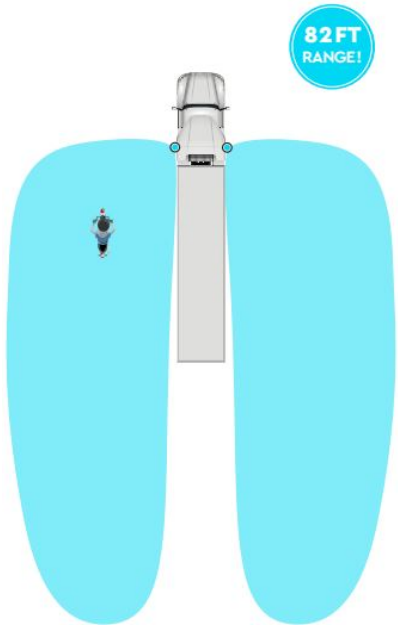
THE RVS DIFFERENCE

- COMPETITION Sensors mounted in rear corners



- THE RVS DIFFERENCE Our sensors mounted in the front of the vehicle



If you have any questions about this product, contact: Rear View Safety, Inc. 1797 Atlantic Avenue Brooklyn, NY 11233 800.764.1028

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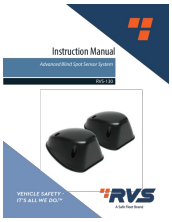
Documents / Resources

	RVS RVS-130 Advanced Blind Spot Sensor System [pdf] Instruction Manual RVS-130, RVS-130 Advanced Blind Spot Sensor System, RVS-130 Blind Spot Sensor System, Advanced Blind Spot Sensor System, Blind Spot Sensor System, Advanced Spot Sensor System, Spot Sensor System, Spot Sensor, Sensor, Sensor System