



# Instruction Manual

*Advanced Blind Spot Sensor System*

RVS-129



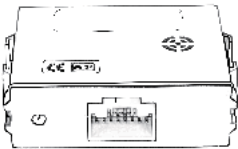

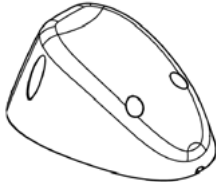

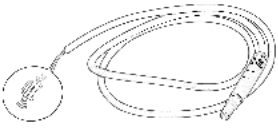

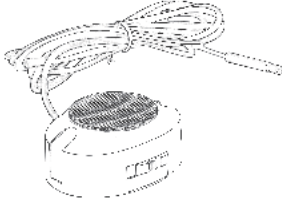

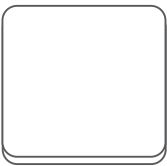
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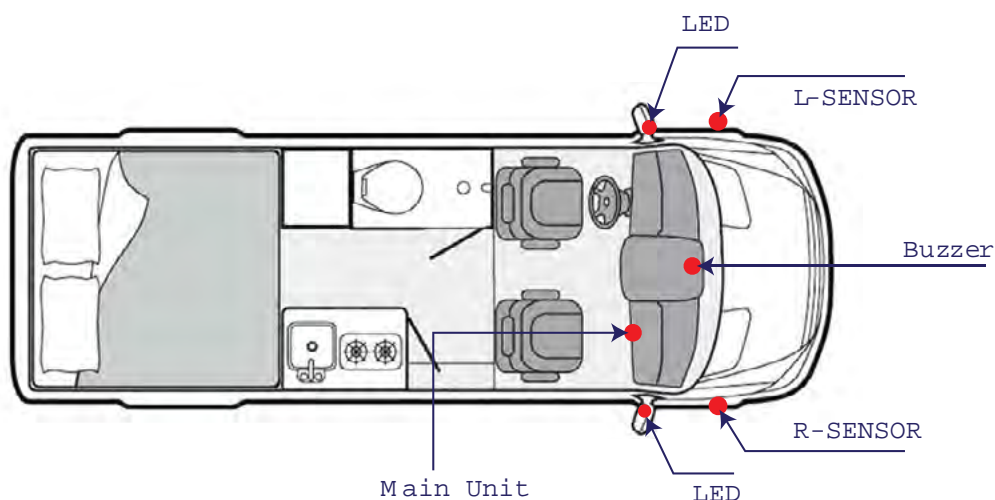
## Item List

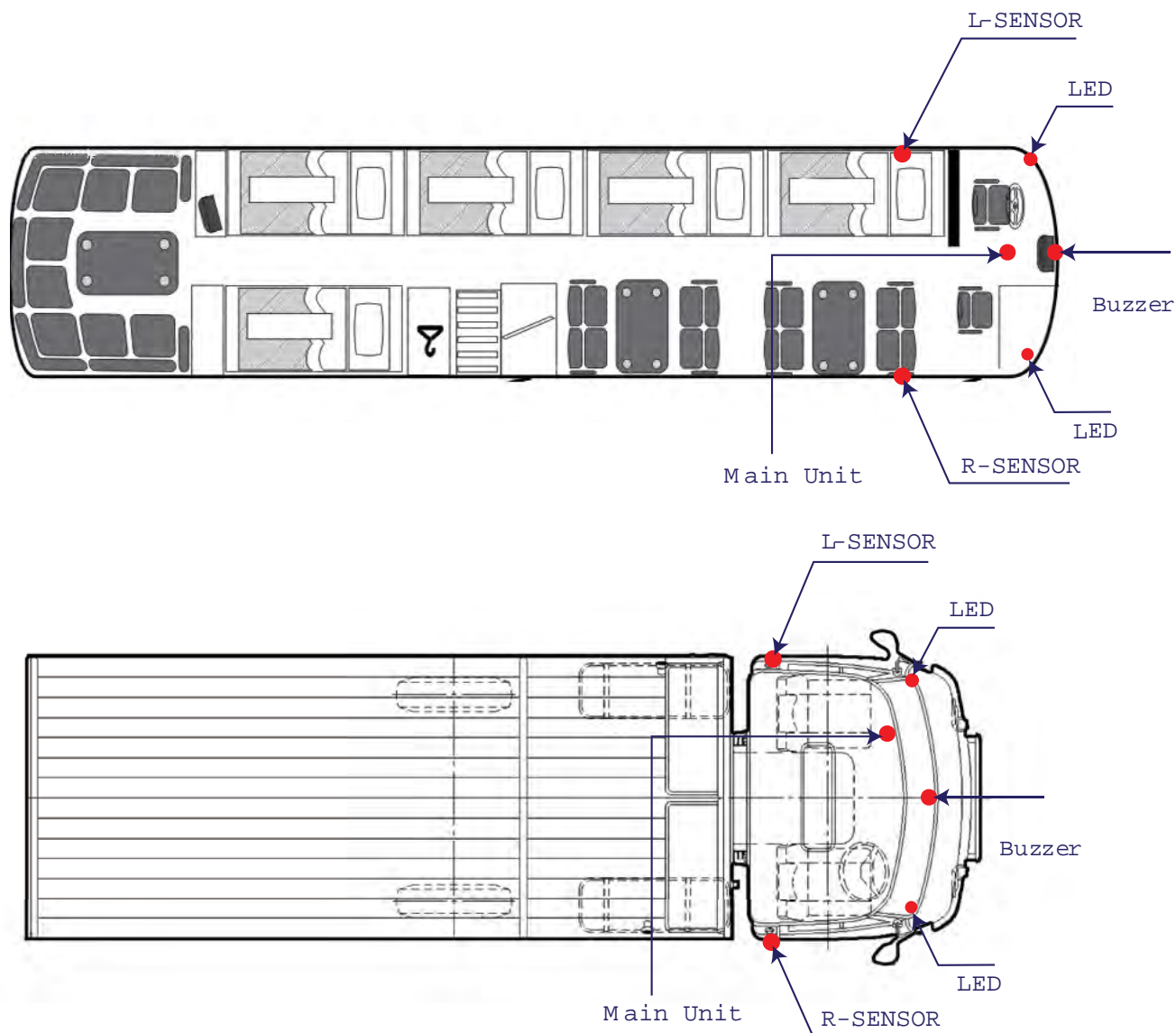
			
Main Unit 1PCS	Main Harness 1PCS	Radar Sensor 2PCS	Sensor Extension Cable 2PCS
			
LED Indicator 2PCS	GPS Antenna 1PCS	Buzzer 1PCS	LED Extension Cable 3PCS
	Tools for installation: insulation tape, multi-meter, screwdriver, cleaning cloth, tape.		
3M Velcro 4PCS			

## Technical Specification

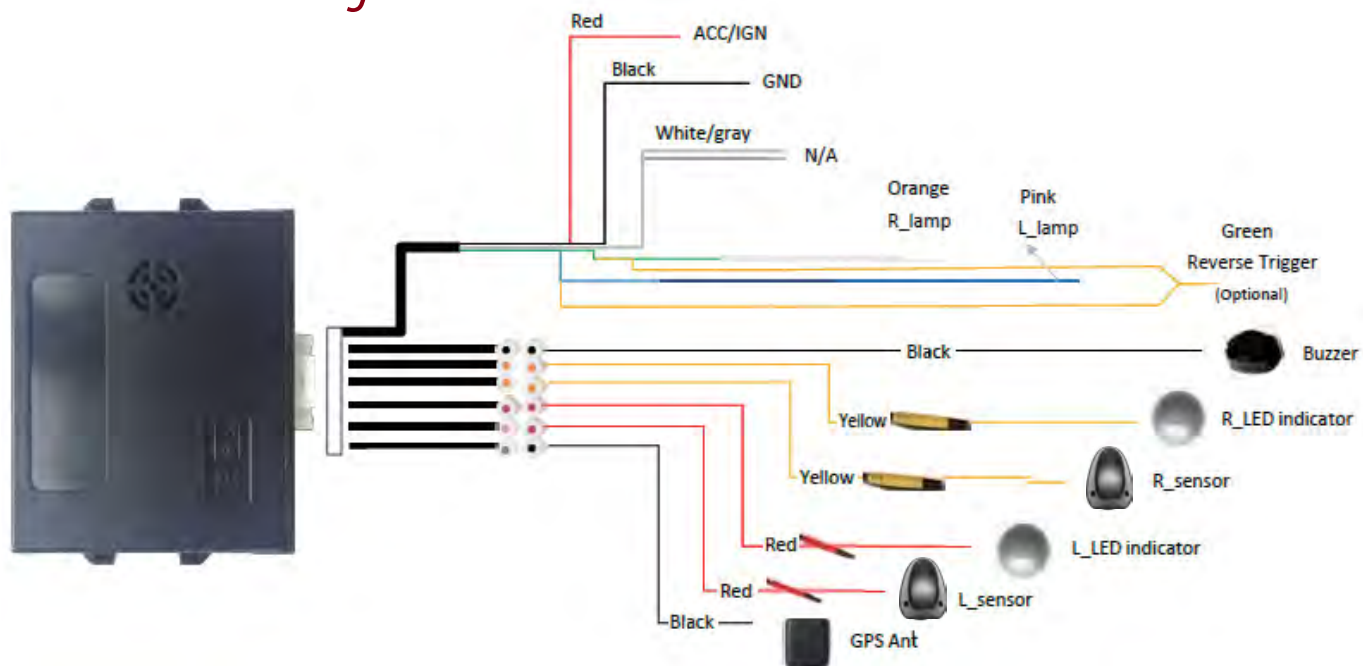
Operating frequency	24.0 ----24.25GHZ
Transmit power	15dbm
Detection range	40 degree (Horizontal )
Detection ability	5 targets can be detected at the same time
Speed range	0.35mph---137mph
Speed accuracy	< 0.35mph
Direction of movement	Approached or overtaken by vehicles
Speed Restriction	1.The GPS Antenna 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	Truck : 1ft-82ft 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 °C ~ + 85 °C

## Wiring Diagram





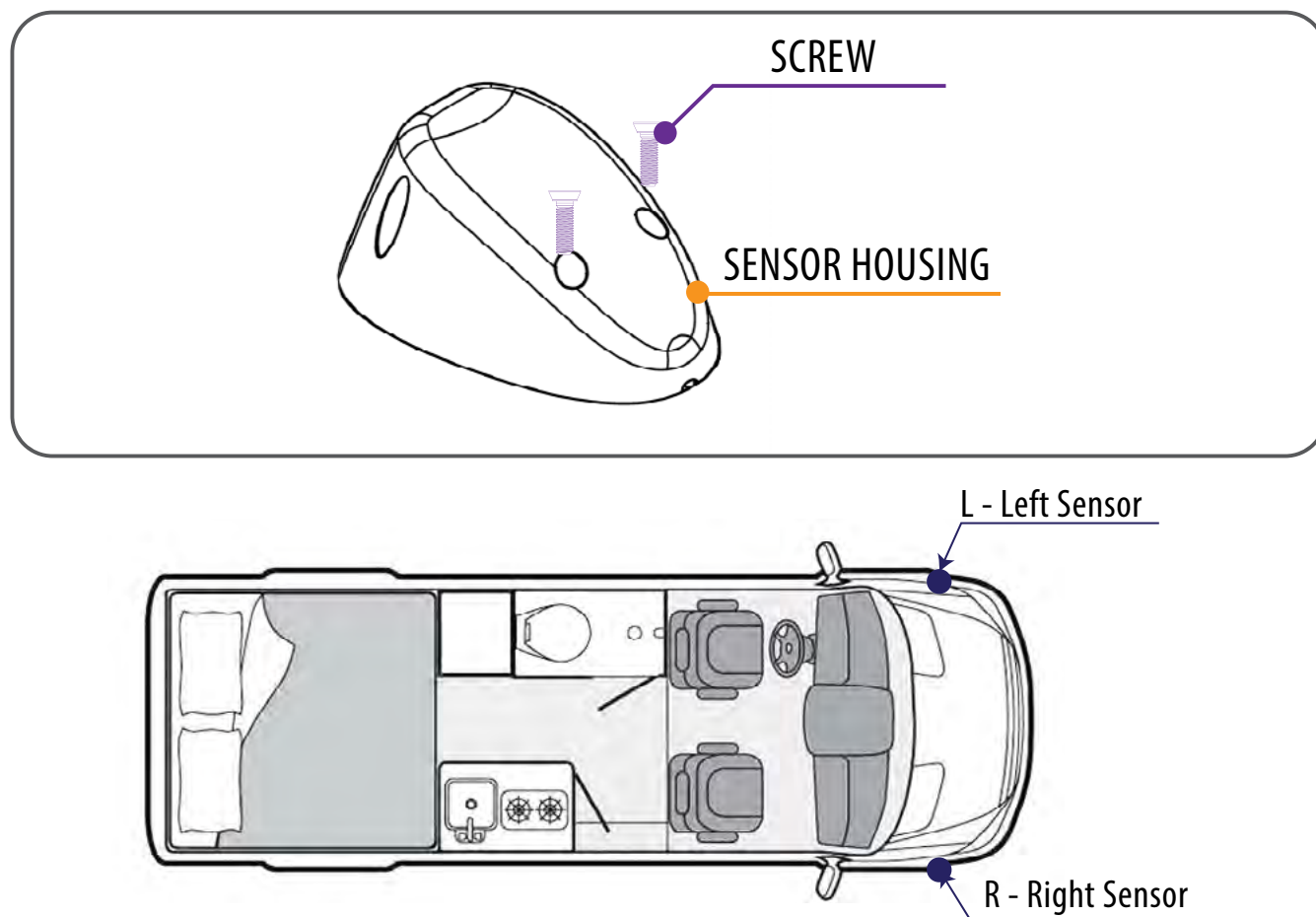
Wire Connection Diagram



## Installation Guide

### Step 1. Sensor Installation

Installation requirements: sensors should be mounted to the front corner of the vehicle, Using screws to fix the sensor on the front of the vehicle.



Step 2. Installation of the left/right turn signal  
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 RVS-129 wire harness to the correct signal wires.



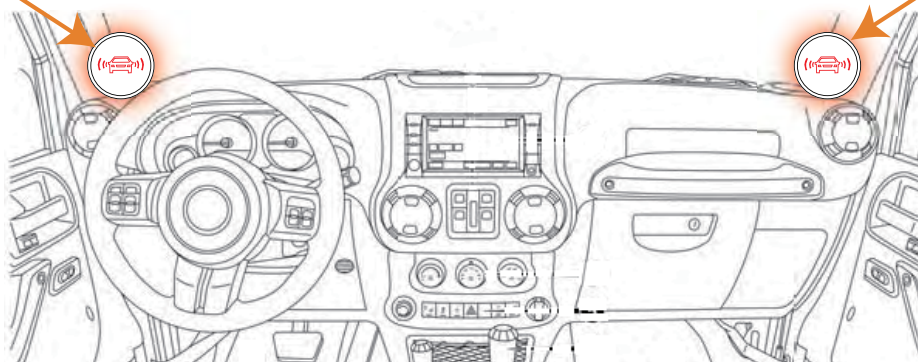


## Step 3. LED Indicator Installation

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

L - Left LED

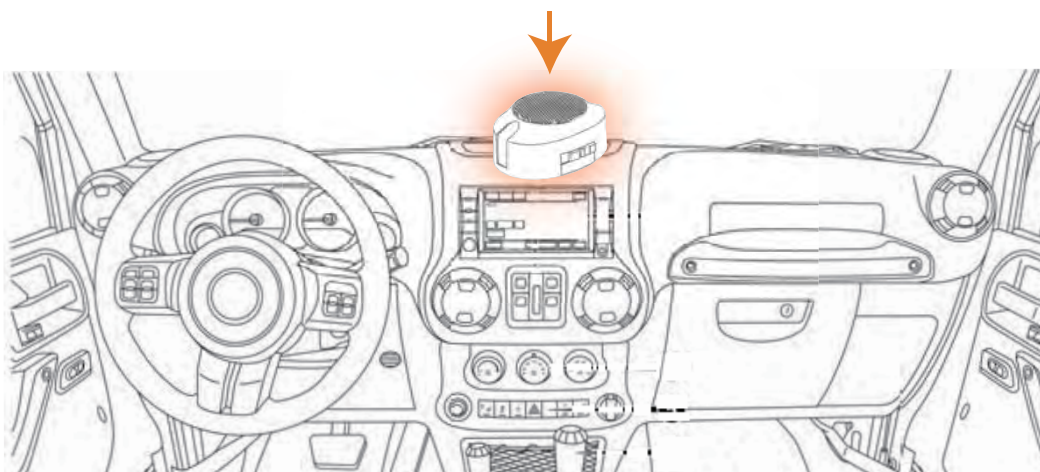
R - Right LED



## Step 4. Buzzer Location

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

Buzzer



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

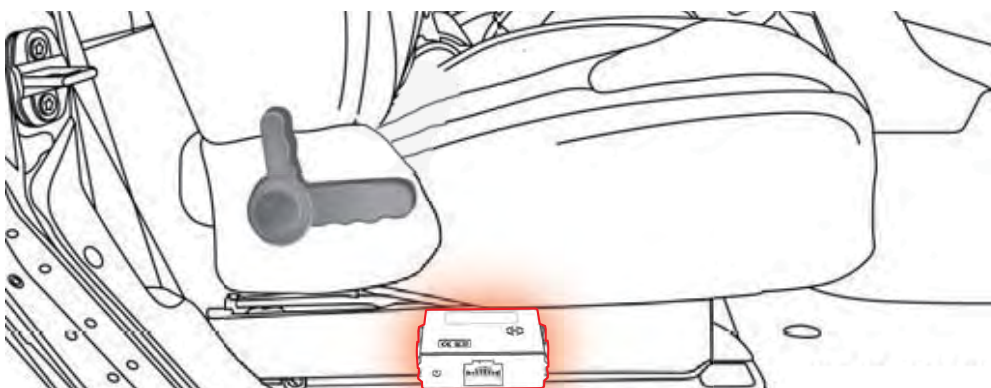
**NOTE!**

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 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)

## Step 6. Man Box Location

While installing the main box, use tape to mount it on the cab



## Alert Conditions

1. When the vehicle is on, the system would start detecting objects in the blind spot area in the lane next to and behind the vehicle 50 feet.
2. When vehicles are approaching and their speed is faster than our own speed.



## *Alert Characteristics*

### 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.



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 Effected Products: RVS-128, RVS-129

### Summary

This bulletin address three solutions to the issue of false alarms with the RVS-128 and RVS-129:

- Sensors installed oriented.
- 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

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 sensor field of view

If there are 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, especially, not only may have reflections from the shape of the wheel well but 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  $40^\circ$  or  $20^\circ$  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.

*If you have questions about this product, contact:*



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***Rear View Safety  
1797 Atlantic Avenue  
Brooklyn, NY 11233  
Tel: 1.800.764.1028***

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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 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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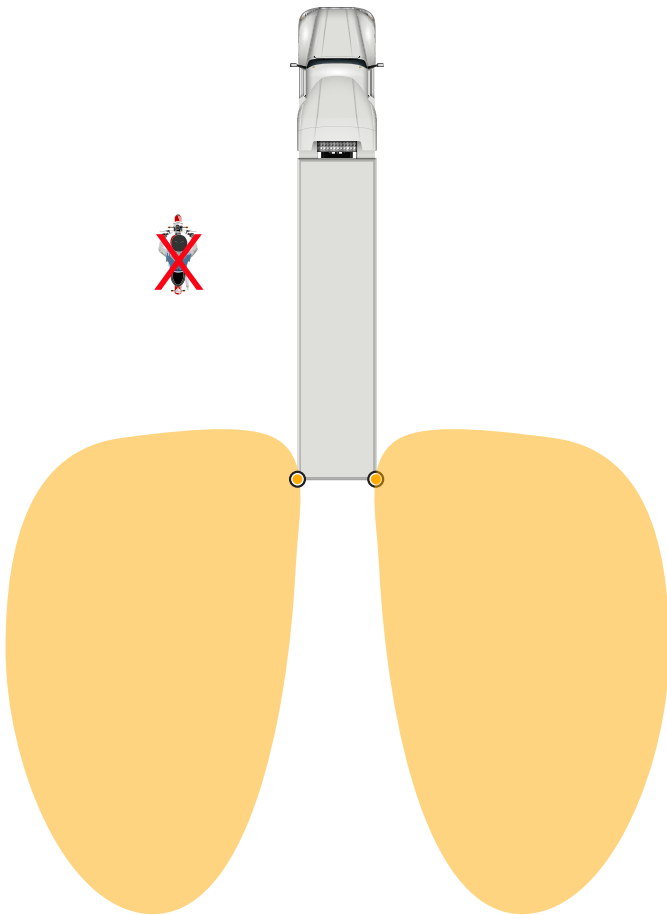
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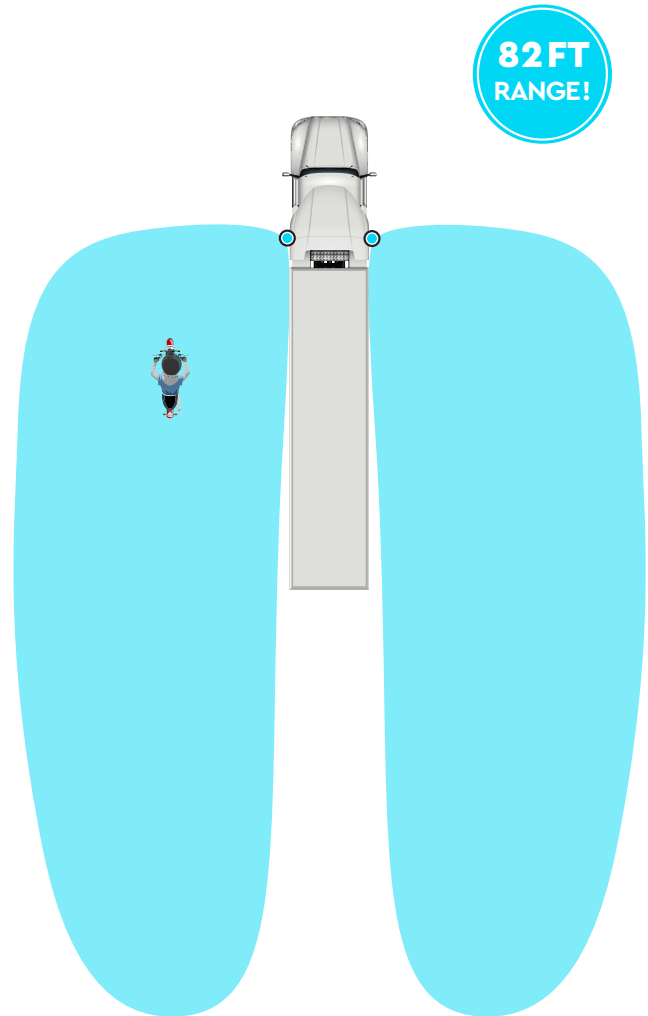


## THE RVS DIFFERENCE

COMPETITION  
Sensors mounted  
in rear corners



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



THE RVS DIFFERENCE



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