



## OPERATION GUIDE

### **RV BLIND SPOT DETECTION SYSTEM: FOR TOWABLES**

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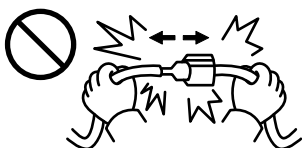
# 1. WARNING

1. THE RV BLIND SPOT DETECTION SYSTEM DOES NOT REPLACE ANY FUNCTIONS DRIVERS SHALL ORDINARILY PERFORM IN DRIVING A MOTOR VEHICLE, NOR DOES IT DECREASE THE NEED FOR DRIVERS TO STAY VIGILANT AND ALERT IN ALL DRIVING CONDITIONS, TO OBEY ALL THE SAFE DRIVING STANDARDS, PRACTICES, TRAFFIC RULES AND REGULATIONS.

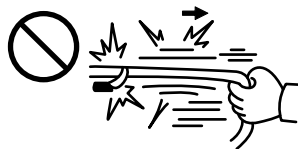
2. CUB DOES NOT GUARANTEE 100% ACCURACY IN THE DETECTION OF VEHICLES OR PEDESTRIANS, AND THEREFORE DOES NOT GUARANTEE THE PERFORMANCE OF ANY RELATED AUDIO OR VISUAL WARNING SIGNALS. FURTHERMORE, ROAD, WEATHER AND OTHER CONDITIONS MAY ADVERSELY AFFECT THE VEHICLE'S BLIND SPOT DETECTION SYSTEM RECOGNITION AND RESPONSE CAPABILITIES.

3. CAREFULLY READ THIS OPERATION GUIDE AND ITS IMPORTANT SAFETY INSTRUCTIONS AND WARNINGS PRIOR TO INSTALLING OR USING THE RV BSD SYSTEM.

4. IT IS RECOMMENDED THAT THE INSTALLATION BE CARRIED OUT BY QUALIFIED PERSONNEL.

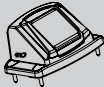
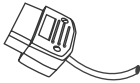


Do not pull the connectors with excessive force.



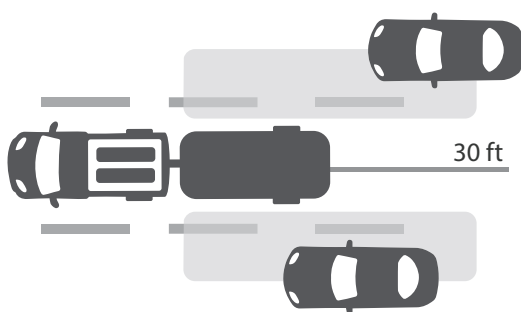
Do not pull the harness with excessive force.

## 2. SYSTEM CONTENTS

| No. | ITEM                    | Qt'y | PICTURE                                                                             |
|-----|-------------------------|------|-------------------------------------------------------------------------------------|
| 1   | Right RV Radar          | 1    |    |
| 2   | Left RV Radar           | 1    |    |
| 3   | Radar Mounting Gasket   | 2    |    |
| 4   | Control Unit            | 1    |    |
| 5   | Indicator Display       | 1    |    |
| 6   | Trailer Harness Set     | 1    |                                                                                     |
| 7   | Tow Vehicle Harness Set | 1    |                                                                                     |
| 8   | OBD II Cable            | 1    |  |
| 9   | Manual Set/Accessories  | 1    |  |

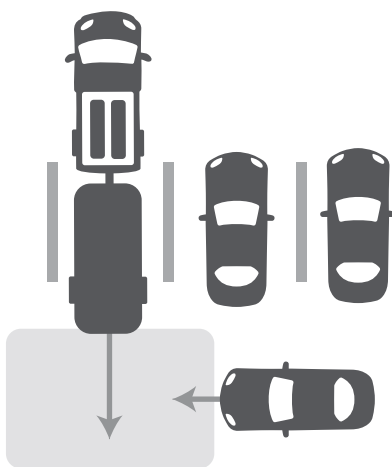
### 3. INTRODUCTION

The RV Blind Spot Detection System is designed to aid in detecting vehicles that may have entered the vehicle blind spot zone, which is represented by the vehicles in the diagram below. The detection area is on both sides of your trailer, extending rearward from the trailer to approximately 30 feet beyond the trailer. The system is designed to alert you of vehicles, which will not allow for a safe lane change.



### 4. REAR CROSS TRAFFIC ALERT (RCTA)

The Rear Cross Traffic Alert (RCTA) is activated when the vehicle is placed in 'reverse'. An audible tone will be heard and the corresponding warning indicator lamp will flash when a pedestrian or vehicle is detected approaching and resulting in an impact of approximately 2 seconds. The system is capable of monitoring the rear cross traffic zones up to a 60 ft range.



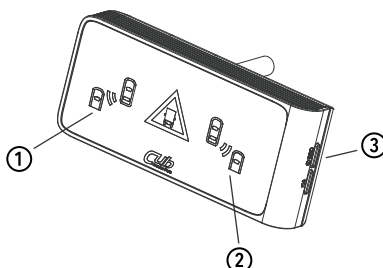
## 5. SYSTEM SPECIFICATIONS

| No. | ITEM                           | SPECIFICATIONS                                                |
|-----|--------------------------------|---------------------------------------------------------------|
| 1   | Operating Temperature          | -40°C ~ +80°C                                                 |
| 2   | Storage Temperature            | -40°C ~ +85°C                                                 |
| 3   | Environmental Protection Level | Radar : IP67                                                  |
| 4   | Input Voltage Range            | 9V - 16V                                                      |
| 5   | Current Consumption            | Max. 800mA ± 5% @12V                                          |
| 6   | Alarm Level                    | Level I : LED On (Constant)<br>Level II : LED Flash+Buzzer On |
| 7   | Specifications                 | ISO 17387/ISO 16750                                           |
| 8   | Radiation Regulations          | FCC / NCC                                                     |

## 6. OPERATION

### Indicator

- ① Left Side Blind Spot Indicator
- ② Right Side Blind Spot Indicator
- ③ POWER button



### System Power

1. The system will automatically activate when the ignition is turned on. The warning indicator lamps ① ② illuminate for 3 seconds during startup.
2. The system may be deactivated by pressing and holding the POWER button ③ for 3 seconds, the indicator lamps ① ② will blink twice to confirm.
3. The system may be reactivated by pressing and holding the POWER button ③ for 3 seconds, the indicator lamps ① ② will illuminate for 3 seconds to confirm.

### System Activation

1. Connect trailer to tow vehicle along with all safety equipment and electrical connections.
2. Connect trailer BSD connection to tow vehicle connector.
3. Start vehicle.
4. Indicator lamps ① ② will illuminate for 3 seconds to confirm activation and run self-diagnostics.
5. If there are errors, the system will flash the indicator lamps ① ② and sound tones to indicate the problems. Please use the TROUBLESHOOTING section for more help.
4. The Blind Spot Detection System will turn on when you start the engine and begin driving forward above approximately 12mph.

### Blind Spot Indicator Lamps

1. The left indicator ① will illuminate when a vehicle is in your left blind spot while driving. This indicator will flash and an audible tone will sound when your left turn signal is activated while there is a vehicle in the left blind spot.
2. The right indicator ② will illuminate when a vehicle is in your right blind spot while driving. This indicator will flash and an audible tone will sound when your right turn signal is activated while there is a vehicle in the right blind spot.

## 7. ERROR DIAGNOSTICS

It is possible that the Blind Spot Detection System will trigger an alert even though there is no vehicle in the blind spot zone. The Blind Spot Detection System can detect objects such as: construction barrels, guard rails, lamp posts, etc. Occasional false alerts are normal.

| STATUS                       | SOUND                                         |
|------------------------------|-----------------------------------------------|
| Controller HMI CAN TX Failed | Do Re Mi                                      |
| Radar System Error - Master  | Do Re Mi                                      |
| Sleep Mode                   | 1 second beep, stop .5 second & 1 second beep |
| System Initialization        | 3 second beep                                 |

## 8. TROUBLESHOOTING

| ISSUE              | SYMPTOM                                               | POSSIBLE CAUSE                               | POSSIBLE SOLUTION                                                                                                           |
|--------------------|-------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Power On Self-test | The system does not respond after starting the engine | Incorrect connection or control unit failure | Confirm that the IGN, wiring, fuse, and controller are connected.                                                           |
|                    | The indicator does not light up                       | Damaged indicator                            | Contact your dealer                                                                                                         |
|                    |                                                       | Disconnected indicator                       | Verify connection                                                                                                           |
|                    | The buzzer makes no sound                             | Damaged buzzer                               | Contact your dealer                                                                                                         |
|                    |                                                       | Disconnected buzzer                          | Verify connection                                                                                                           |
|                    | The power switch does not work                        | Damaged power switch                         | Contact your dealer                                                                                                         |
|                    |                                                       | Disconnected power switch                    | Verify connection, press and hold the switch for 2 seconds.                                                                 |
| System Operation   | [ Do Re Mi ] alarm                                    | Radar disconnection or no OBD connection     | Abnormal power supply, wiring, or radar, please contact your dealer.                                                        |
|                    | Did not enter sleep mode after 5 minutes of IGN off   | IGN lead connected to constant power         | Change the IGN to a switched power source connection location                                                               |
| Functions          | No Level 1 BSD alert                                  | Vehicle speed is less than 12 mph            | Normal operation                                                                                                            |
|                    |                                                       | Bad connection from OBDII                    | The vehicle is not compatible. Please contact the dealer.                                                                   |
|                    |                                                       |                                              | Press the RESET button on the control unit after starting the engine. Check the system again after the reboot is completed. |
|                    | No Level 2 BSD alert                                  | Turn signal leads not connected              | Confirm turn signal leads are connected                                                                                     |
|                    | No RCTA alert                                         | Reverse lead not connected                   | Confirm that the reverse lead is connected                                                                                  |



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