

EASYGUARD EBS001

EASYGUARD EBS001 Blind Area Detection System User Manual

Model: EBS001

Brand: EASYGUARD

1. INTRODUCTION AND OVERVIEW

The EASYGUARD EBS001 Blind Area Detection System is a vehicle assistance device engineered to improve driving safety, particularly during lane changes. It employs two 24 GHz millimeter-wave radars, typically mounted on the rear bumper, to monitor objects in adjacent lanes within a range of 6-12 meters. When a moving object enters the vehicle's blind area, the system provides visual and audible alerts to the driver, reducing the risk of collisions.

This system is designed to be an auxiliary aid and should not replace safe driving practices or reliance on mirrors and direct observation.

2. PRODUCT FEATURES

- Left blind area detection
- Right blind area detection
- Left steering warning
- Right steering warning
- Lane-changing reminder
- High-speed frequency 24GHz millimeter-wave sensors for the left rear and right rear of the vehicle
- Detection range: 6-12 meters
- Buzzer warning indicators for right and left side
- Warning LED indicators illuminate to warn of a moving object

3. PACKAGE CONTENTS

The EASYGUARD EBS001 system typically includes the following components:

- Two (2) 24GHz Microwave Radar Sensors
- Two (2) LED Warning Indicators (Left and Right)
- One (1) Buzzer
- Main Wiring Harness
- Sensor Extension Cables
- Mounting Brackets and Hardware



Figure 3.1: Complete package contents of the EBS001 system.

Dimension



Figure 3.2: LED Warning Indicators.

4. SPECIFICATIONS

Specification	Value
Model Number	EBS001
Sensor Technology	24GHz Millimeter-wave Radar
Detection Range	6-12 Meters
Operating Voltage	DC12V
Mounting Type	Plastic Bumper Mount
Display Style	LED Indicators

Control Method	Touch (for system activation/deactivation, if applicable)
Item Weight	2.29 pounds
Product Dimensions	10.43 x 3.94 x 7.09 inches
Country of Origin	China



Figure 4.1: Dimensions of a single radar sensor unit.

5. SAFETY INFORMATION AND IMPORTANT NOTES

- This system is an **auxiliary device only** and should not be relied upon completely for safe driving. Always operate your vehicle according to actual traffic conditions and use traditional mirrors and visual checks.
- The ACC (Accessory) power cable must be connected to a circuit controlled by the vehicle's ignition switch. Connecting it to a constant 12V wire may lead to battery drain.
- This system is designed for installation on vehicles with **plastic bumpers only**. Metal bumpers can interfere with the radar sensor's performance.
- Professional installation by a qualified car alarm/audio installer is strongly recommended due to the

complexity of wiring and bumper removal.

- The system is compatible with most DC12V sedans, compact cars, SUVs, and MPVs.

6. INSTALLATION GUIDE

Installation of the EASYGUARD EBS001 system typically involves mounting the radar sensors, routing wiring, and connecting to the vehicle's electrical system. Due to the nature of the installation, professional assistance is advised.

6.1. Overview of Installation Steps

1. **Bumper Removal:** The rear bumper of the vehicle must be carefully removed to access the mounting locations for the radar sensors.
2. **Sensor Mounting:** Install the two radar sensors on the rear of the vehicle, typically behind the plastic bumper. Ensure they are mounted securely using the provided brackets and screws. The sensors should be positioned at a 20-degree angle relative to the vehicle's rear, as indicated by the supplied angle tool.
3. **Wiring Harness Routing:** Route the main wiring harness from the sensor locations into the vehicle's cabin. This often involves passing wires through existing grommets or drilling new holes (ensure proper sealing).
4. **Power Connection:** Connect the system's power wire to a switched 12V ACC power source (e.g., in the fuse box) and the ground wire to a suitable chassis ground point.
5. **LED Indicator and Buzzer Installation:** Route the wires for the LED indicators to the dashboard or A-pillars for optimal driver visibility. Install the buzzer in a discreet location under the dashboard where its alerts can be clearly heard.
6. **Testing:** Before reassembling the bumper and interior panels, perform a functional test of the system to ensure all components are working correctly.
7. **Reassembly:** Carefully reattach the rear bumper and any removed interior panels.



Figure 6.1: Installation Location Diagram and Basic Wiring.

6.2. Installation Video Guide

For a visual demonstration of the installation process, please refer to the official product video:

Your browser does not support the video tag.

This video demonstrates the functionality and installation process of the EASYGUARD Blind Area Detection System, including sensor mounting and wiring.

7. OPERATING INSTRUCTIONS

Once properly installed and powered, the EASYGUARD EBS001 system operates automatically to monitor your vehicle's blind spots.

7.1. Blind Spot Detection

- When a moving object (e.g., another vehicle) enters the detection range (6-12 meters) of your blind spot, the corresponding LED indicator (left or right) will illuminate.
- This visual alert indicates the presence of a vehicle in your blind area, prompting caution.

7.2. Lane Change Assistance

- If you activate your turn signal (left or right) while a moving object is detected in the corresponding blind spot, the LED indicator will flash rapidly.
- Simultaneously, the buzzer will emit three beeps to provide an audible warning.
- This dual alert system is designed to prevent unsafe lane changes when another vehicle is in your blind spot.

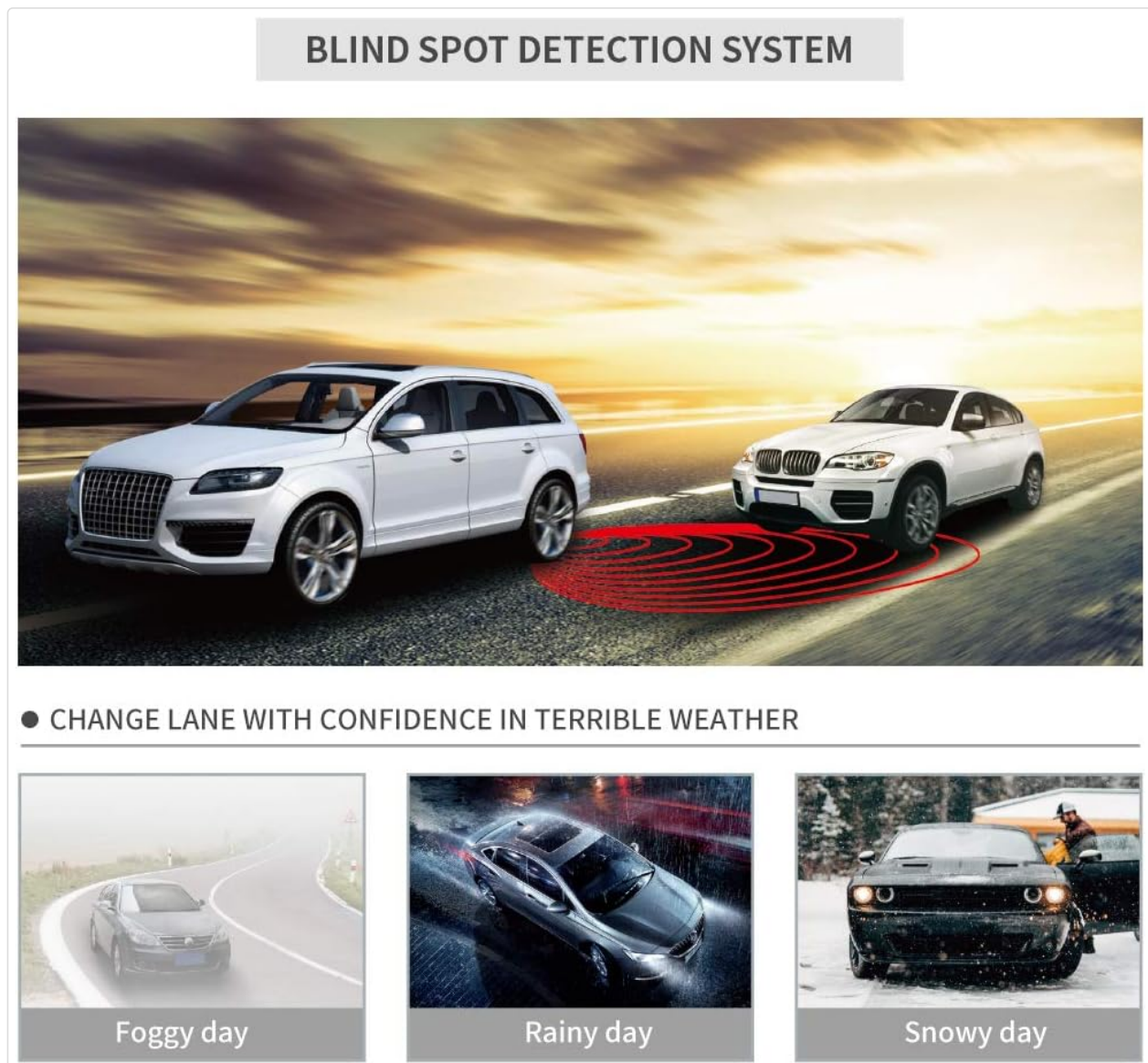


Figure 7.1: Key operational features of the system.

7.3. Performance in Various Weather Conditions

The 24GHz millimeter-wave radar technology is designed to perform effectively in various weather conditions, including:

- Foggy conditions
- Rainy conditions
- Snowy conditions

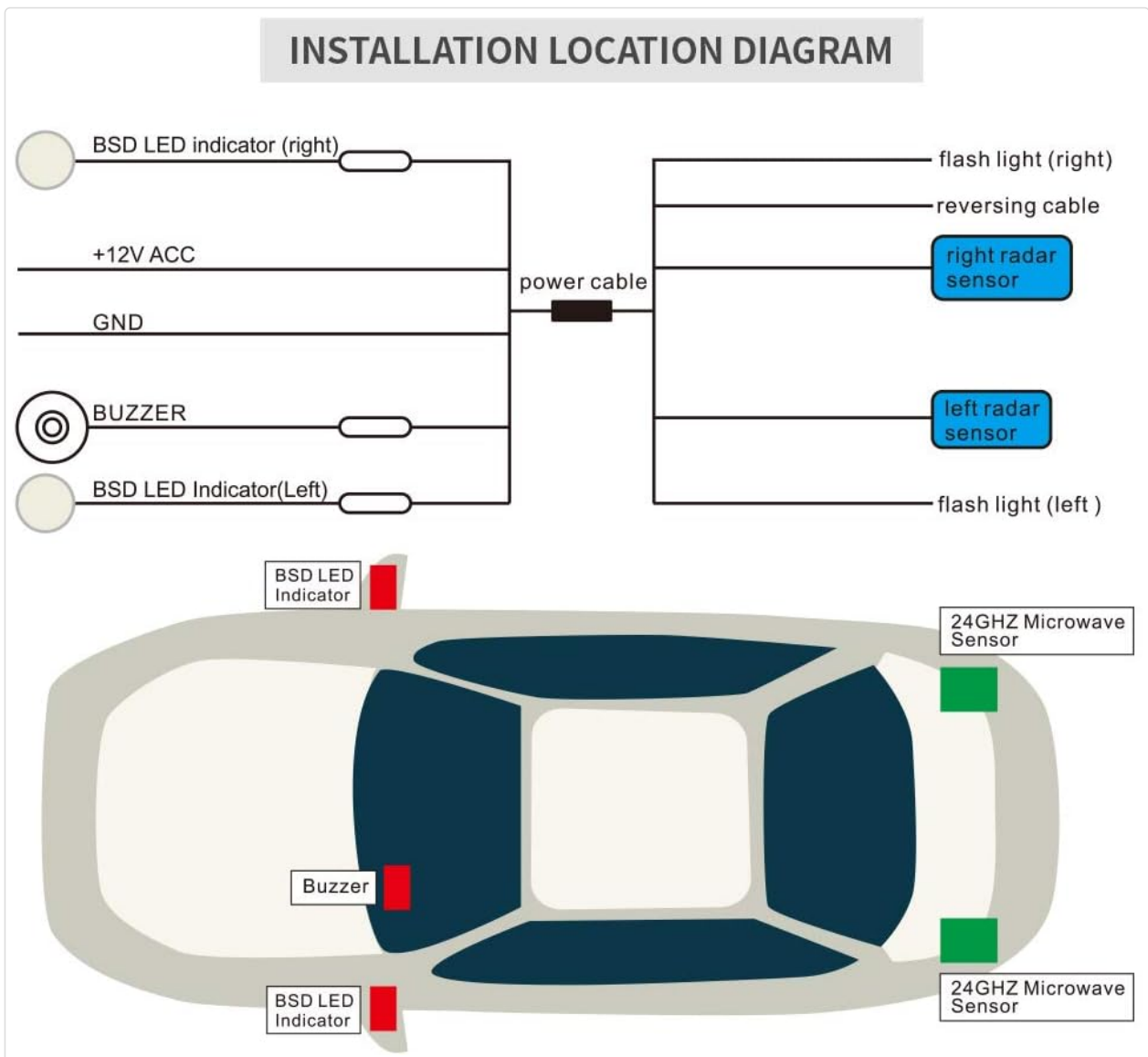


Figure 7.2: System performance in adverse weather.

8. TROUBLESHOOTING

If you experience issues with your EASYGUARD EBS001 system, consider the following common troubleshooting steps:

- **No Power/System Not Activating:**
 - Check the ACC power connection to ensure it is securely connected to a switched 12V source.
 - Verify the ground connection is secure and free of corrosion.
 - Inspect any inline fuses for the system and replace if blown.
- **False Alarms (LEDs light up randomly without objects):**
 - Ensure the sensors are securely mounted and their angle (20 degrees) is correct. Improper

alignment can cause erroneous readings.

- Confirm that no metal objects or vehicle components are obstructing the sensor's field of view or causing interference.
- Check for any loose wiring connections that might cause intermittent signals.

- **No Detection (System fails to alert for objects):**

- Verify that the sensors are clean and free from dirt, ice, or snow buildup.
- Ensure all wiring connections from the sensors to the main unit are secure.
- Confirm the sensors are correctly positioned and not obstructed by the bumper or other vehicle parts.

- **Buzzer Not Sounding:**

- Check the connection of the buzzer to the main wiring harness.
- Ensure the buzzer is not physically obstructed or damaged.

Note: This system primarily detects vehicles that are approaching or passing your vehicle. It may not consistently detect vehicles traveling at the exact same speed as your vehicle within the blind spot. This is a characteristic of the system's design.

9. MAINTENANCE

The EASYGUARD EBS001 Blind Area Detection System requires minimal maintenance to ensure optimal performance:

- **Keep Sensors Clean:** Regularly inspect and clean the area where the radar sensors are mounted on the rear bumper. Dirt, mud, snow, or ice can obstruct the sensors and impair their detection capabilities. Use a soft cloth and mild cleaning solution.
- **Periodic Inspection:** Periodically check all visible wiring and connections for any signs of wear, damage, or looseness. Ensure the sensors remain securely mounted.

10. WARRANTY AND SUPPORT

For technical support, warranty information, or any inquiries regarding your EASYGUARD EBS001 system, please contact the manufacturer:

- **Manufacturer:** ieasyguard.com
- **Support Email:** sales@ieasyguard.com

An English user manual and wiring diagram are typically included with the product. For further assistance, please reach out to the support team.