



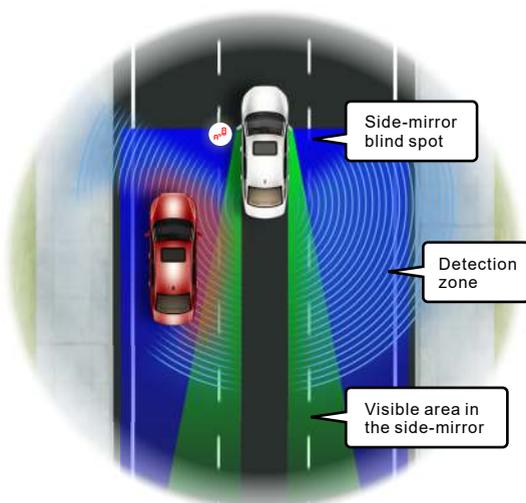
BLIND SPOT DETECTION KIT

INSTALLATION GUIDE



Blind Spot Detection Kit with Microwave Sensor 3rd Gen.

Blind Spot Detection (BSD) Kit is designed for reducing the risk of side-rear blind spot. BSD Kit assists the driver in lane change when the driver cannot easily observe the side-rear blind spot in the adjacent lane due to the limited visibility of the side rear view mirror. The system detects the vehicle travel in the blind spot and warns via the visual and audible alert to achieve the collision avoidance.



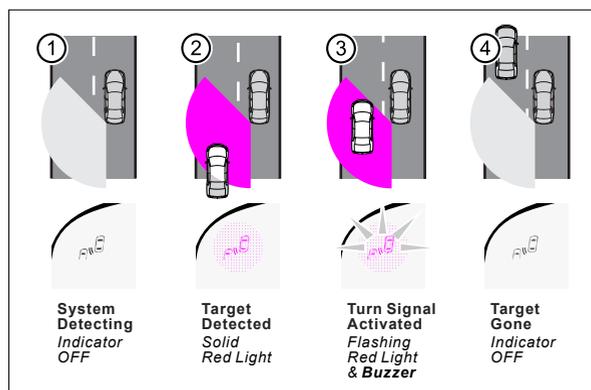
Specs

Operating Voltage: 12V DC
 Current Consumption: 200mA
 Power Consumption: 2.4W
 Operating Temperature Range: -40°C ~ +85°C
 Detecting Range: 50ft (15m)

1 Operating Instruction

1.1 BSD Function

The system will become engaged once the ACC is on (indicators will illuminate as yellow). When the traveling speed is greater than 30km/h (18.65 MPH), the system turns into the standby status, the indicator will turn off (1). The 3rd gen microwave sensor will detect every vehicle traveling within the blind spot in adjacent lanes. The indicator will illuminate as red when system detect the target vehicle in the detecting status (2).

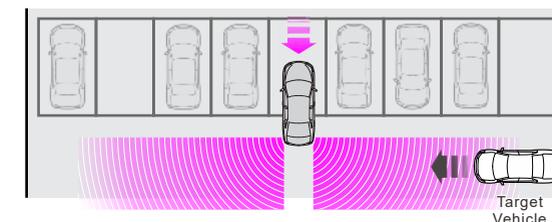


If the driver activates the turn signal of the affected side while a target vehicle is detected (3), the system will chime and the indicator will flash at the same time to warn. The indicator and buzzer alert will dismiss after the target vehicle move out of the detection zone (4).

NOTE:
 *Blind Spot Detection Kit is a warning aid for driver only. It will not help driver with the action of changing lane.
 *Blind Spot Detection kit in GPS mode may not be functional when driving through the tunnel or underground parking lot due to the weak GPS signal intensity.
 *The brightness of LED indicator will reduce when turning on the sidelights or headlights.

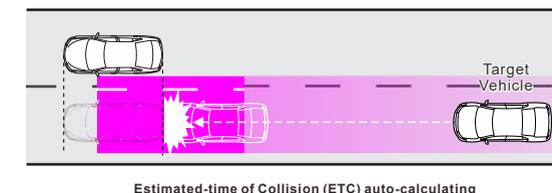
1.2 RCTA Function

The Rear Cross Traffic Alert system will notify the driver of cross traffic when backing out of a parking spot. The detection zone of the RCTA is approximately 15m(50ft) for both rear sides of the vehicle and 6m (20ft) right behind. The system engages when shifting the shift lever to R and the yellow LED turn off to indicate a standby status. If a cross traffic vehicle is detected, RCTA will provide a warning by chime and flashing red light on the affected side.



1.3 LCA Function

The Lane Change Alert system helps to reduce the risk of a lane change collision with a vehicle rapidly approaching the side blind spot. The system detects the adjacent lane vehicles before the vehicles travel into the blind spot (30m /100 ft range), calculates the Estimated-time of Collision (Simulating that lane change action is taken) to judge the potentiality of lane change collision.



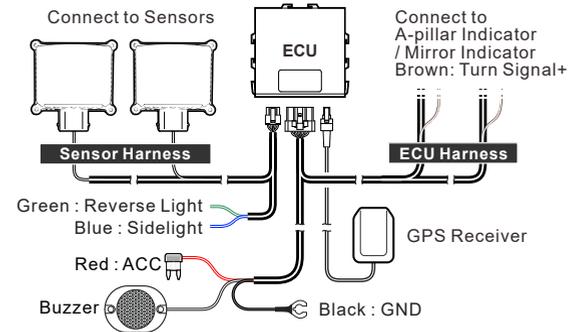
NOTE: The BSD will continue engaging when the target vehicle move into the blind spot detection zone (even without triggering the LAC warning).

NOTE: Please read thoroughly before starting installation and check that kit contents are complete.

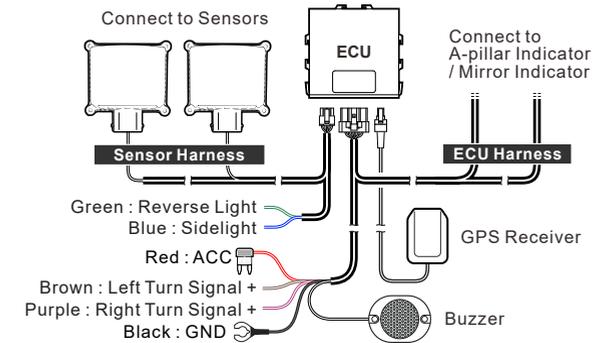
| | | | |
|--|--|---|--|
|  ECU |  Microwave Sensor |  Buzzer |  ECU Harness |
|  Sensor Harness |  A-pillar Indicator Dual-stage |  A-pillar Indicator Basic |  GPS Receiver |
|  Side-mirror Indicator |  Mounting Bracket |  Indicator Connector for Dual-stage Indicator |  A-pillar Indicator Hole Saw for Basic Indicator |
|  Double-sided Tape |  Installing Screw |  Drill Bit |  Blind Rivet |
|  Sensor Angle Guide | NOTE: Optional items are not included in the standard set. | | |

2 Harness Wiring

2.1 Harness Connection - Dual-stage Indicator



2.2 Harness Connection - Basic Indicator



2.3 Wiring for RIGHT-HAND Drive

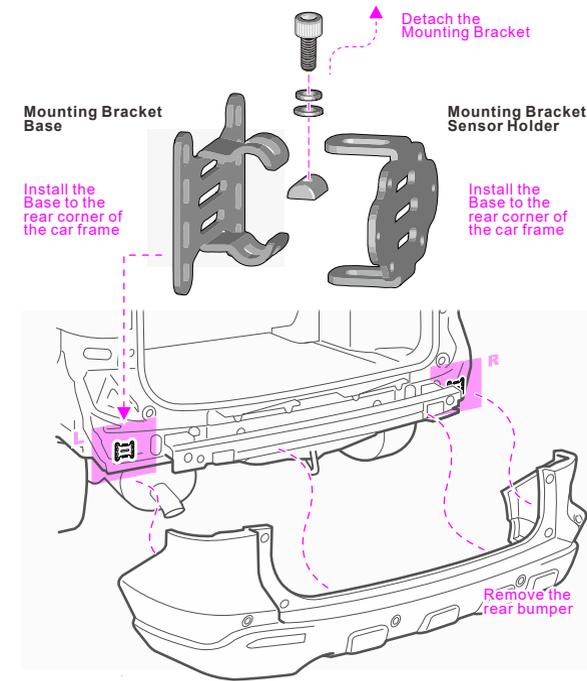
To install the system for right-hand drive, simply route the longer end of the indicator sensor to the left side, and the longer end of sensor harness to the rear-left for the left sensor. **For the right-hand wiring of basic indicator harness, interchange the left / right turn signal wires (brown - right / purple - left).**

3 Sensor Installation

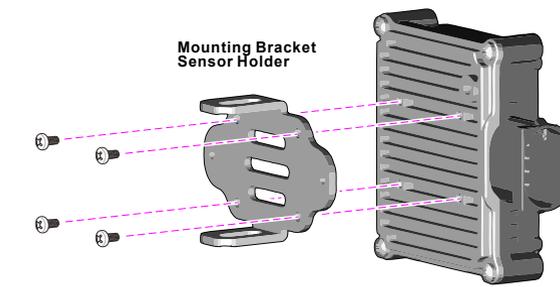
3.1 Install with Bracket

Remove the rear bumper of the vehicle and detach the mounting bracket. Install the bracket base to the car frame first. The mounting location should be at **Rear Corner of the Car Frame** and keep at least 18in (45cm) height from the ground. Drill the installing holes for the bracket base with included drill bit and fasten the base with the blind rivets.

NOTE: Make sure that neither the obstruction trim nor metal structure will shield the sensor transceiver side area behind the rear bumper. The proper installation location will vary depending on the specific car frame structure and the shape of rear bumper.

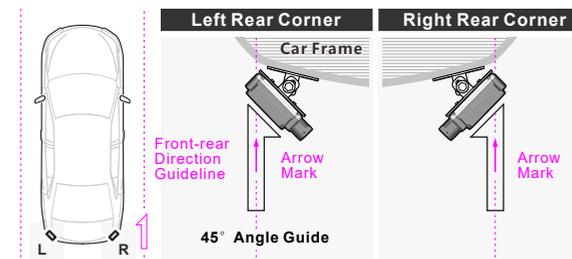


Mount the microwave sensor to the bracket holder. Reassemble the mounting bracket back to the bracket base that installed on the car frame. **See 3.2 for sensor angling details.**



3.2 Sensor Angling

Use the included 45 degree Angle Guide to adjust the installation angle for the sensors. Align the arrow mark on the Angle Guide with the front-rear direction guideline (which is parallel with the car front-rear direction), hold this angle and fasten the sensor.

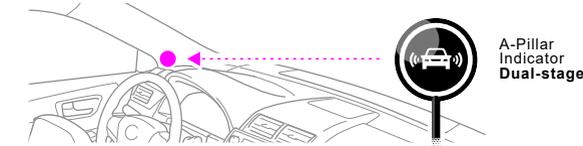


NOTE: Always point the side with connector toward the rear center of the car body.

4 Indicator Installation

4.1 A-Pillar Indicator - Dual-stage Type

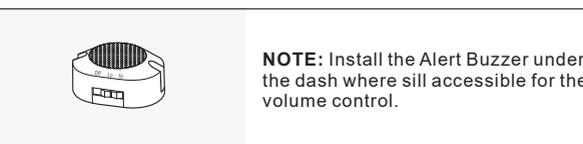
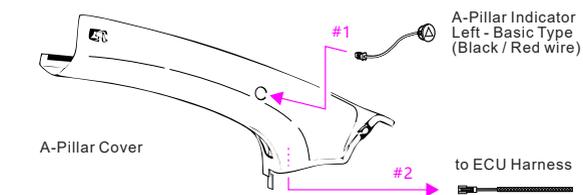
Stick the LED indicator to the A-pillar trim cover by the outside rear view mirror where is easy for notice. Route the wire down to the lower dashboard and connect to the ECU Harness. **See 4.4 for indicator wire connection.**



4.2 A-Pillar Indicator - Basic Type

Remove the A-Pillar cover, check for a location for drilling mounting hole (no obstructions behind). Drill the pillar cover with supplied $\phi 15\text{mm}$ hole saw (in counter-clockwise mode).

Insert the LED indicator in the proper orientation. Route down the A-Pillar and connect to the ECU Harness. Re-install the A-Pillar covers.

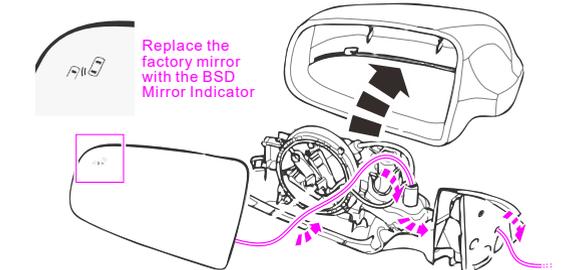


NOTE: Install the Alert Buzzer under the dash where sill accessible for the volume control.

4.3 Side-Mirror Indicator

To install Side-Mirror Indicator, detach the door mirror from the front door. Replace the factory mirror with the mirror indicator.

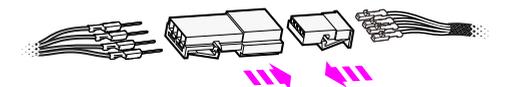
Disassemble the covers, route the Indicator wire through the door mirror base to the mounting holder. Re-install the door mirror back to the front door.



Route the wire through the door bellow into the vehicle. Assemble the rear-view mirror to the front car door and connect the indicator wire to the ECU harness. **See 4.4 for indicator wire connection.**

4.4 Indicator Connection

Assemble the indicator connector before connecting to the ECU. Insert the crimp pins into the plugs according to the color of wires correspondingly.



| ECU Harness | Indicator Wire |
|--------------|----------------|
| WHITE/BLACK | RED |
| BLACK | BLACK |
| YELLOW/BLACK | YELLOW |
| BROWN | BROWN |

NOTE: DO NOT assemble the connector prior to route the wire through the rear view side mirror.