Blind Spot Detection and Turn Assist System

User Manual

B122-009NA1-A2, B122-009NA1-A3, B122-010NA1-A2, B122-010NA1-A3,
B122-073NA1-A0, B122-072NA1-A0, B122-075NA1-A0, B122-074NA1-A0

CUB ELECPARTS INC.

Contents

1.Disclaimer

① Before using this product, please read the instructions and warnings carefully, and ensure to use the product correctly.

② Although this product offers blind spot detection and warning functions, it may still provide sporadic false alarms or does not report due to factors such as the driving area, environment, driving behavior, road conditions, weather, and other factors. Hence, this product does not guarantee 100% detection and warning accuracy. Drivers should abide by the traffic rules, stay alert, pay attention to actual road conditions at all times, drive carefully, and DO NOT rely too much on this product to avoid accidents.

③ If the sensing areas of the sensors are obscured by objects such as stickers, stains, bicycle rack, trailer, etc., it will affect the system detection.

④ To ensure the normal operation of this product, please allow a legitimate dealer or a professional technician to install it.

⑤ Our company shall not be liable for any damages caused by the driver's failure to comply with the matters mentioned above.

⑥ DO NOT use this product for other purposes other than those described in this operation manual.

⑦ **FCC Statement:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

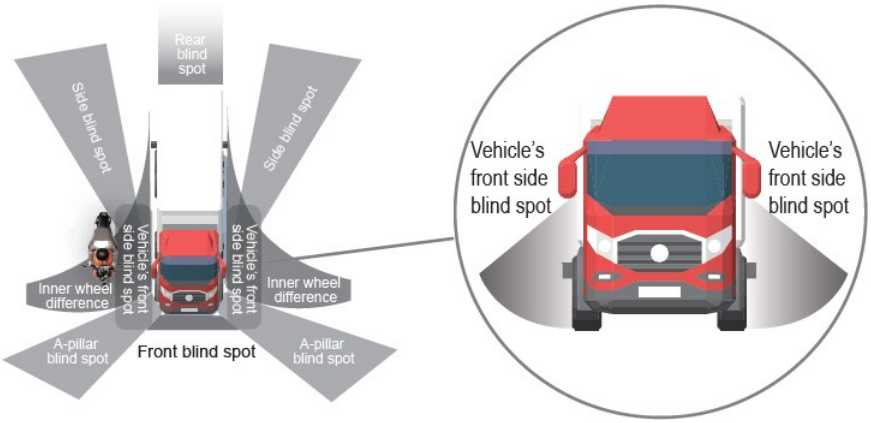
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

IC ISED STATEMENT:
THIS DEVICE CONTAINS LICENCE-EXEMPT TRANSMITTER(S) THAT COMPLY WITH INNOVATION, SCIENCE AND ECONOMIC DEVELOPMENT CANADA'S
LICENCE-EXEMPT RSS(S). OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
(1) THIS DEVICE MAY NOT CAUSE INTERFERENCE,
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION OF THE DEVICE.
L'ÉMETTEUR EXEMPT DE LICENCE CONTENU DANS LE PRÉSENT APPAREIL EST CONFORME AUX CNR D'INNOVATION, SCIENCES ET DÉVELOPPEMENT
ÉCONOMIQUE CANADA APPLICABLES AUX APPAREILS RADIO EXEMPTS DE LICENCE.
L'EXPLOITATION EST AUTORISÉE AUX DEUX CONDITIONS SUIVANTES :
(1) L'APPAREIL NE DOIT PAS PRODUIRE DE BROUILLAGE;
(2) L'APPAREIL DOIT ACCEPTER TOUT BROUILLAGE RADIOÉLECTRIQUE SUBI, MÊME SI LE BROUILLAGE EST SUSCEPTIBLE D'EN COMPROMETTRE LE
FONCTIONNEMENT.
IMPORTANT NOTE:
IC RADIATION EXPOSURE STATEMENT:
THIS EQUIPMENT COMPLIES WITH IC RSS-102 RADIATION EXPOSURE LIMITS SET FORTH FOR AN UNCONTROLLED ENVIRONMENT. THIS EQUIPMENT SHOULD
BE INSTALLED AND OPERATED WITH MINIMUM DISTANCE 20CM BETWEEN THE RADIATOR & YOUR BODY.
CET ÉQUIPEMENT EST CONFORME AUX LIMITES D'EXPOSITION AUX RAYONNEMENTS IC ÉTABLIES POUR UN ENVIRONNEMENT NON CONTRÔLÉ. CET ÉQUIPEMENT
DOIT ÊTRE INSTALLÉ ET UTILISÉ AVEC UN MINIMUM DE 20 CM DE DISTANCE ENTRE LA SOURCE DE RAYONNEMENT ET VOTRE CORPS.

2. Product Introduction

As large vehicles have a larger size, they would generate more blind spots. When turning, the drivers cannot view the pedestrians and vehicles entering the blind zones caused by the inner wheel difference, leading to frequent traffic accidents. The “Difference of Radius between Inner Wheels” of a vehicle is a disparity between the inner front wheel’s turning radius and the inner rear wheel’s turning radius when it turns. Due to the presence of the inner wheel difference, when the vehicle turns, the motion trajectories of the front and rear wheels do not coincide. If you only pay attention to the passable space of the front inner wheel but forget the inner wheel difference while turning, it may cause an accident, causing the rear inner wheel to drive off the road or collide with other objects.



In response to this problem, this product comes with a set of blind spot sensors for installing on the left and right sides of the vehicle exterior to detect the blind spots caused by inner wheel difference and the left and right blind spots of the vehicle body based on different speeds and conditions when driving. The system can also provide active warnings through visual and audible alerts to remind the drivers to pay attention to other vehicles when they enter the detection zones, thus protecting the safety of passengers and pedestrians.

The safety assist functions provided by this system include:

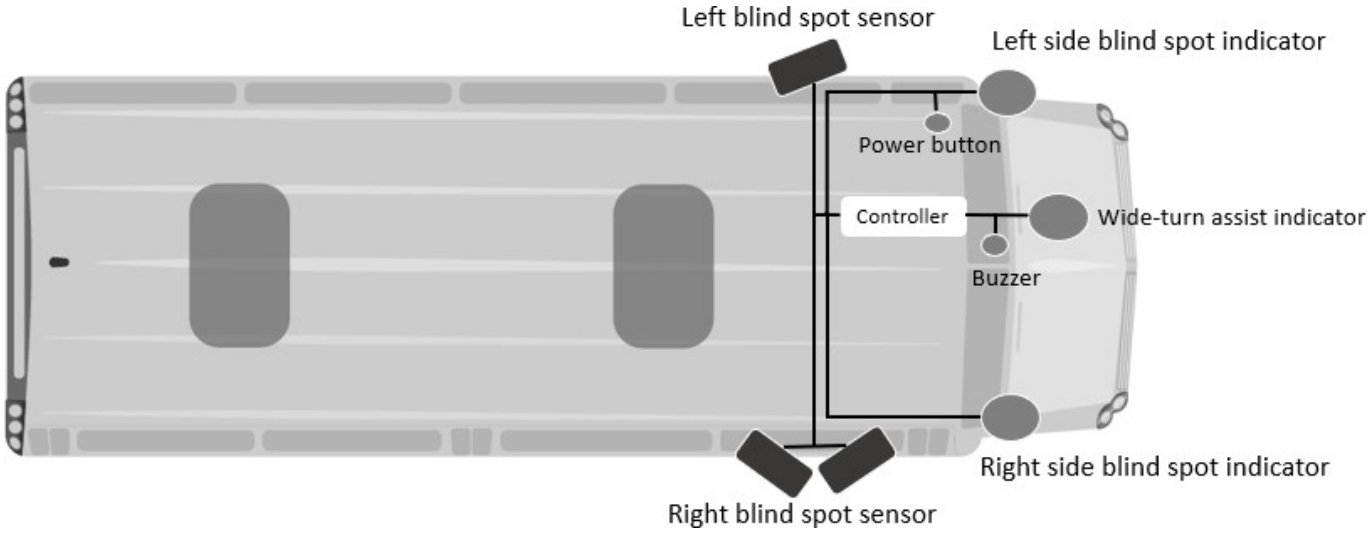
- BLIND SPOT DETECTION (BSD)
- LANE CHANGE ALERT (LCA)
- WIDE-TURN ASSIST (WTA)

3. System Specifications

3.1 System contents

1. Sensor (Single Radar) x 1
2. Sensor (Combo Radar) x 1
3. BSD Indicator (Left) x 1
4. BSD Indicator (Right) x 1
5. WTA Indicator x 1
6. Cable set x 1 set
7. Accessories x 1 set

3.2 System layout



4. System Operation

4.1 System operation

System Status	BSD Indicators	WTA Indicator	Audible Warning
System Startup/Restart	Illuminate for 3sec	Yellow & red lights flash alternatively	A long beep for 3sec
System turn on (Operation via the power button)	Flash twice	Red light flashes twice	2 short beeps
System turn off (ACC OFF)	No	No	No
Left sensor Failure	Light up	No	DO RE MI sound
Right sensor Failure / System Error	Light up	Yellow lights up	DO RE MI sound

※ If the troubleshooting is not ruled out, the system will issue an alarm every five minutes.

Indicators brightness adjustment:

1. When the system is turned on and the vehicle speed is 0km/h(0mph), a continuous short press of the system button twice will trigger the indicators brightness to change once. This operation allows you to adjust three brightness adjustments of the indicators. The description is as follows: A continuous short press of the system switch twice for the first time will cause all indicators to flash 3 times in high brightness, a second continuous short press of the system switch will cause all indicators to flash 3 times in mid-brightness, and a third continuous short press of the system switch will allow all indicators to flash 3 times in low brightness. If you stop the operating system switch halfway, the indicators will be displayed in a previously set brightness.

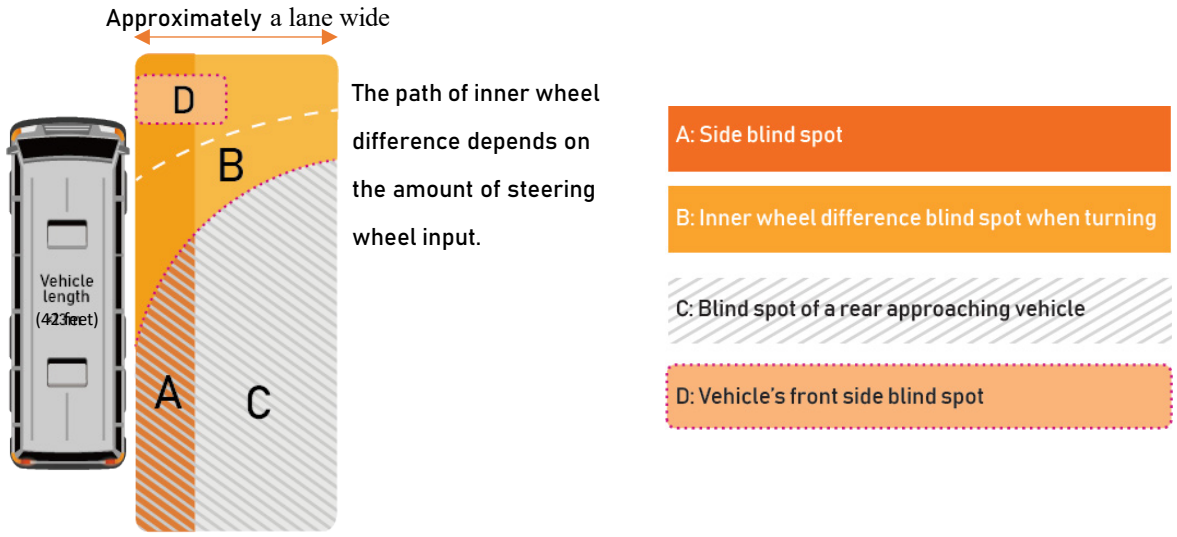
Note: When adjusting the brightness, the wide turn assist indicator will only light up in red.

2. Once the system's power is cut off, the indicators brightness will resume its installation setup brightness. To adjust the brightness of the indicators, you need to repeat operation 1.

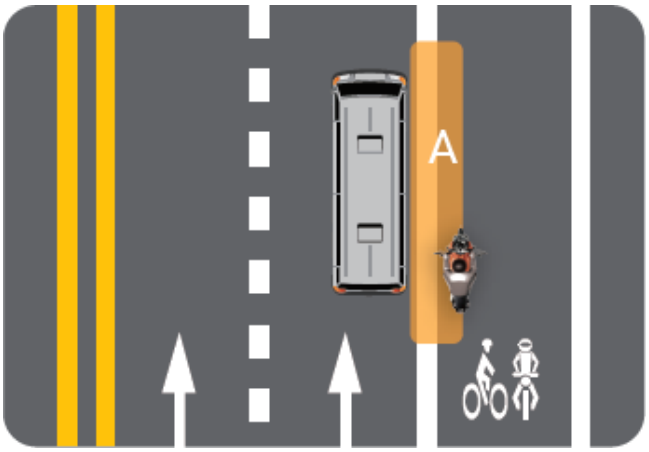
3. The blind spot sensors will continue to detect during the operation setting. If a vehicle enters a warning zone at this time, the indicator may first display a desired brightness before giving the warning.

4.2 WIDE- TURN ASSIST

Upon activated (ACC ON), this system will start to operate and detect the conditions around your vehicle at any time. When your vehicle is turning at a low speed (between 0-29km/h or 0-18mph), the system will start the wide turn assist detection. The detection range and zones are shown below.

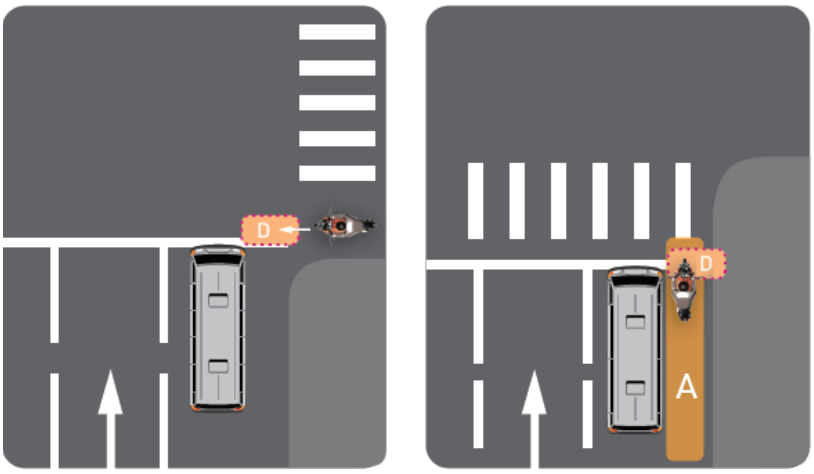


◆ If the wide-turn assist indicator on the dashboard lights up red, it indicates that there may be a vehicle in the following zones: Please be sure to slow down or stop driving.

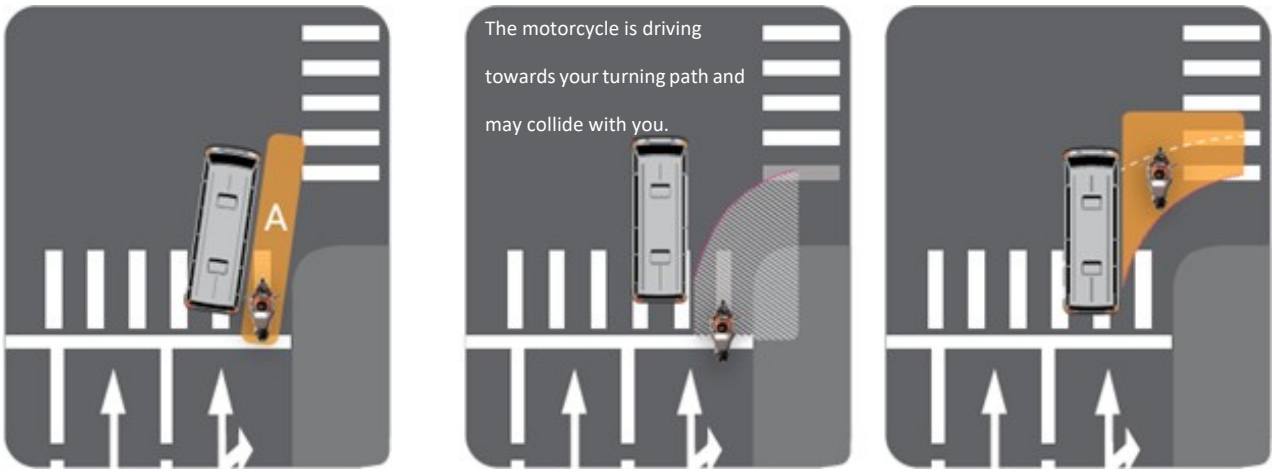


◆ If the red wide-turn assist indicator lights up when you start accelerating your vehicle after stopping at the traffic light, it indicates that there may be a vehicle on the right or front right side of your vehicle. Please be sure to stop driving to avoid accidents. If the red wide-turn assist indicator flashes and continues to emit short warning beeps

when you start accelerating your vehicle after stopping at the traffic light, it indicates that there may be a vehicle coming towards you at ahead on the right. Please drive cautiously to avoid accidents.



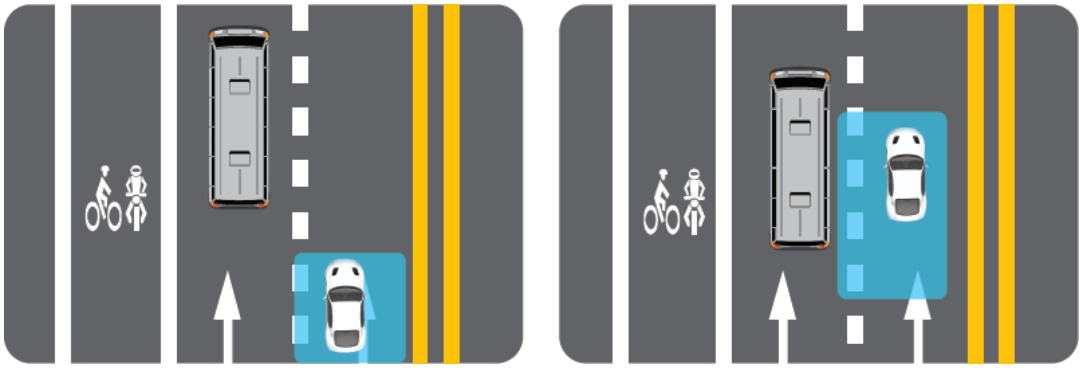
- When you turn on the turn signal light and wish to make a turn, this system will increase its alert level. If the red wide-turn assist indicator on the dashboard flashes and continues to emit short warning beeps, it indicates that there may be a vehicle in the following zones: Please slow down and check your surroundings before safely continuing.



4.3 BSD and LCA

If you are driving at a speed exceeding 30km/h (19 mph), this system will detect the blind spots on both sides of your vehicle. If there is a vehicle entering the detection zones, the system's blind spot indicators will light up to give a warning. If you turn on the turn signal light and wish to change lane, the system will increase its warning level, and the blind spot indicators will give warning flashes. The warnings are explained as follows:

- When the blind spot indicator on the right A-pillar lights up or flashes, it indicates that there is a vehicle entering the right side of your vehicle or a vehicle approaching from the rear right side at high speed. Please slow down and check your surroundings before safely continuing.



- If the blind spot indicator on the left A-pillar lights up or flashing, it indicates that there is a vehicle entering the left side of your vehicle or a vehicle approaching from the rear left side at high speed. Please slow down and check your surroundings before safely continuing.