

# CAR-B30 Instructions

Microbrain Intelligent Technology Co., Ltd.

## Disclaimer

Please read this statement carefully before using this product. Once used, it shall be deemed to be the approval and acceptance of the contents of this declaration. Please strictly follow the manual to install and use the product. In case of any damage caused by improper use, Microbrain Intelligent Technology Co., Ltd. shall not be liable for the corresponding loss and compensation. This product is the intellectual property rights of Microbrain Intelligent Technology Co., Ltd. Without permission, no reproduction in any form is allowed. The Use of this product and manual will not result in patent infringement.

## 1.Product Specifications

### 1.1 Product Specifications

Features	Technical specifications	Parameters
System properties	Operation voltage	9-16v
	Operation temperature	-40~80°C
	Power consumption	2.5W
	Waterproof grade	IP67
	Frequency band	79GHz
	Refresh rate	20Hz
	Communication interface	TTL serial port
Antenna performance	Dimensions	28*28*22.5mm
	Number of receiving and sending channels	1Tx4Rx
	Pitch beam width	±25°
Detection performance	Horizontal beam width	±55°
	Distance resolution	0.2m
	Speed resolution	0.2m/s
	Speed Range	±200km/h
	Ranging accuracy	0.2m
	Speed measurement accuracy	0.2m/s
	Angle measuring accuracy	1°
Detection distance	50m	

### 1.2 Self-inspection

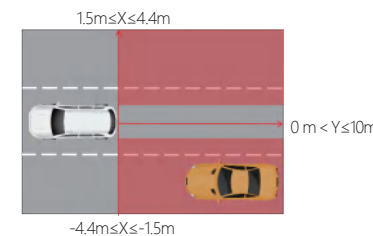
The equipment is in good condition if the LEDs flash 2 times after the device is powered on;

### 1.3 Alarm Strategy

Set the radar as the center of XY axis.

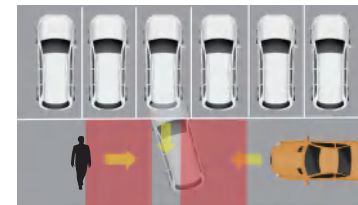
#### ■ Blind Spot Detection Function-BSD

- System activated speed:  $V \geq 10\text{Km/h}$
- Detection range (APP configurable):  $1.5\text{m} \leq X \leq 4.4\text{m}$ ,  $-4.4\text{m} \leq X \leq -1.5\text{m}$ ;  $0\text{m} < Y \leq 10\text{m}$ .
- Alarm Strategy: If there is a target moving at the same direction in the alarm area, the LED will flash.



#### ■ Rear Cross Traffic Alert Function-RCTA

If there is a target (vehicle or passerby) cross the detection area when reversing, the LED will flash.



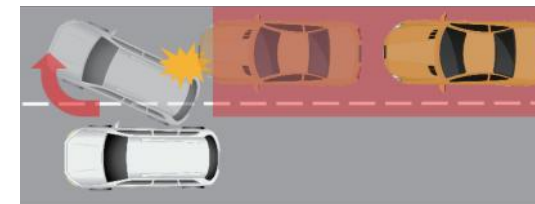
#### ■ Active Overtake Alarm Function-AOA

- System activated speed:  $V \geq 10\text{Km/h}$
- Detection range (APP configurable):  $1.5\text{m} \leq X \leq 4.4\text{m}$ ,  $-4.4\text{m} \leq X \leq -1.5\text{m}$ ;  $0\text{m} < Y \leq 10\text{m}$ .
- Alarm Strategy: If there is a target moving at the same direction in the alarm area when overtaking, the LED will flash.

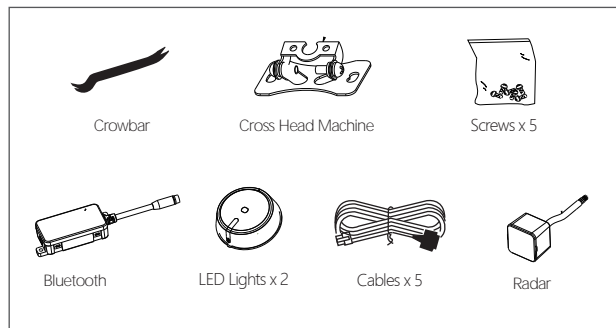


#### ■ Lane Change Assist Function-LCA

- Detection range (APP configurable):  $1.5\text{m} \leq X \leq 4.4\text{m}$ ,  $-4.4\text{m} \leq X \leq -1.5\text{m}$ ;  $0\text{m} < Y \leq 50\text{m}$ .
- Alarm Strategy: When the TTC (Time To Collision) is less than 5.0s, the LED will flash to prevent collision with vehicles behind when changing lanes.



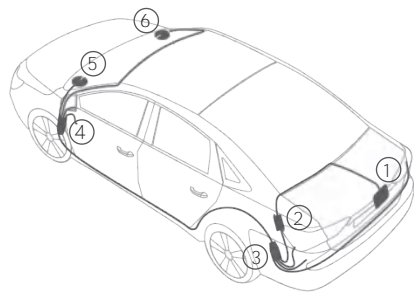
## 2.List of Materiels



## 3.Wiring Diagram

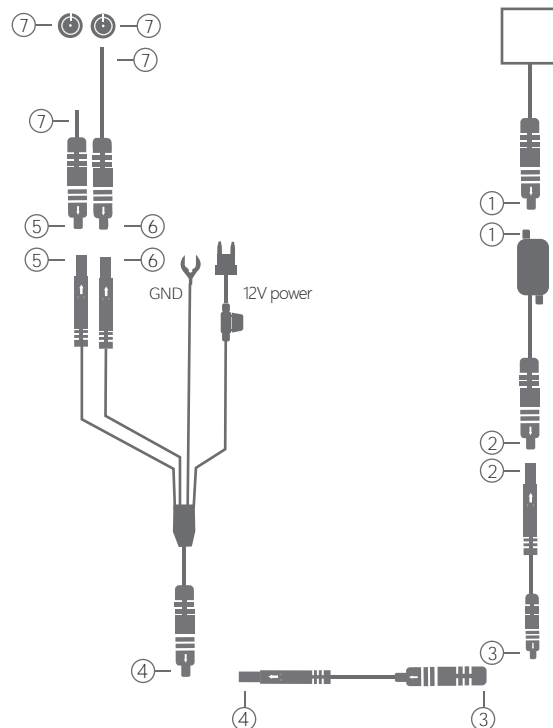
### 3.1 Cable Wiring

- ① Radar;
- ② Bluetooth;
- ③ Main harness;
- ④ Extension cord ;
- ⑤ Left light;
- ⑥ Right Light;



### 3.2 Cable Connection Instruction

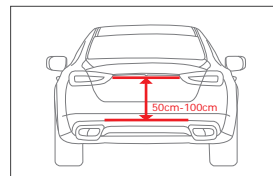
- Join the conector according to the number identification.
- The connection is designed for left-hand drive. If it is right-hand drive, please change 5-5/6-6 to 5-6.



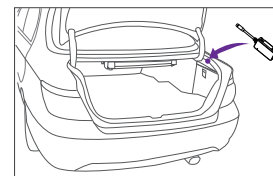
## 4.Installation Instruction of the Sensor

### 4.1 External Installation of Radar Sensor

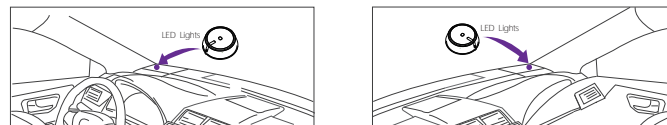
- The radar must be installed in the middle of the rear of the vehicle with the external mounting bracket;
- To avoid blocking the license plate, the installation position can be appropriately left or right. Then you should modify the parameter in the APP accordingly. Please refer to the app operation guide.
- The installation height of the radar should be between 50cm and 100cm;



### 4.2 Bluetooth Box Installation Location

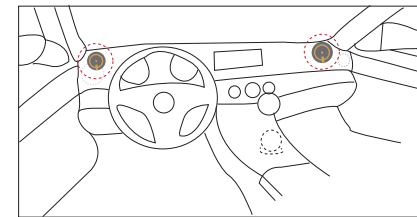


### 4.3 LED Installation Location

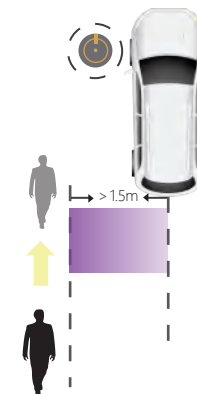


## 5.Testing and Debugging

- Start the vehicle, the both LED shouldflash twice;



- Approaching the vehicle from left or right behind at a speed greater than 10km/h, the LED on the same side will flash;



## 6.Product Warranty Card

Product model	
Date of sale	
Installation date	
User name	
User phone number	

### Warranty Terms:

- Three years upon the purchase date.
- Product abnormalities that occur due to normal operation or use according to the instructions, as well as failures caused by abnormal quality of product components, are covered by the warranty.

### Disclaimer:

This product is a driving warning auxiliary product. We are not responsible for any direct or indirect losses caused to customers due to product reasons. The company reserves the right of final interpretation of the product.

Microbrain Intelligent Technology Co. , Ltd.

Address: Chentai Science Park, Yuelu District, Changsha, Hunan, China.

After sales service: +86 731 89909918