

# Front & Rear Parking Sensor System

VTSR200/VTSR220 User's manual

### 1.Parts list



A Control Box ×1



B Hole Saw×1



C Front Sensor X4



D Rear Sensor X4



E 23ft speaker cable ×1



F Video input ×1



G Video output ×1



H 25ft Power Line ×1

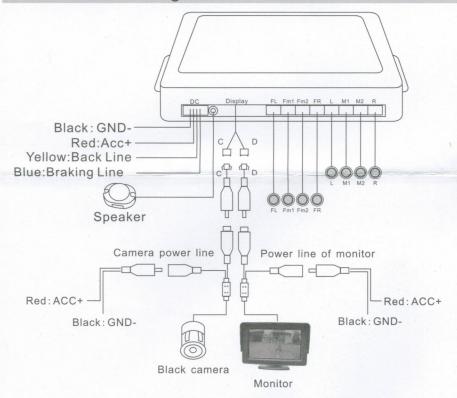


I Sticker × 1



J User's Manual×1

### 2.Installation Diagram

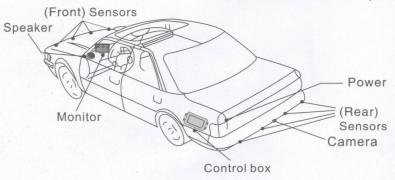


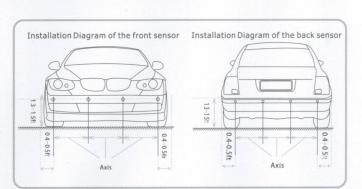
- 1.When shifting gear into reverse and hit the brake simultaneously, the front and back sensors will work at the sametime .Detecting distance of the front sensors is 1.2ft~3ft, the detecting distance of the rear sensors is 1.2ft~6.6ft. The distance and orientation of the nearest obstacle in front of the car or behind the car will be shown on the monitor.
- 2. When braking during driving ,the front sensors will work .The detecting distance is 1.2ft~3ft,the rear sensors will not work.
- 3. When braking finished, the front sensor will continuously be working in 10s. After 10s, the sensor will stop automatically.

#### Sensor installation

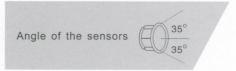
Determine the place to install the sensor and distance between the sensor according to width of the rear bumper.

Installation of front and rear sensors: It will be better to install the sensors at an even place which is vertical. Before opening the holes, connect the reverse radar and poweron the unit for trail test, so as to choose the best place for the detectors to yield best effect.





# Installation guide



Round open-cell detector (opening diameter Ø 22)



(opening diameter Ø 22)

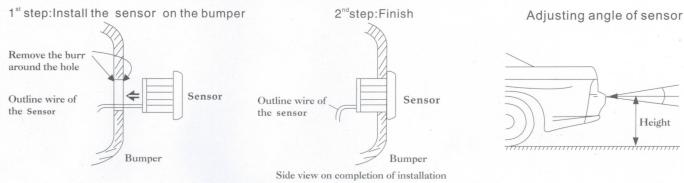


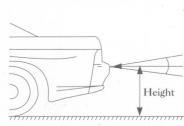
opening the hole with the bit of drill (opening diameter Ø 22)

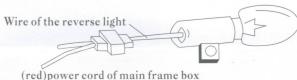
Before opening the holes, connect the sensor and the control box. After powering the unit, choose a proper place for the trial installation. Choose the right place for the sensor to achieve the best detecting angle and distance.

Suggestion: 1.4-1.8ft above the ground at and even place on the bumper.

Characteristics: It is necessary to open holes on the bumper when installing the sensor. Open diameter is 22mm, Sensor fall into two kinds as show in the following drawing:







# Circuit installation

Draw the guiding wire of the sensor into the trunk through slit of the car body. Insert the wire into the corresponding sensor interface in the control box. Stabilize with care the wire of the parking sensor in the bumper.

The mainframe box should be installed at a clean and dry place in the car or truck. Connect the 12V red power cord to the homopolar wire of the reverse signal light with a clip.

Control box connecting: Black to GND-, Red- to ACC+, Yellow to reverse power, Blue to Braking power.

#### Problems and solutions

Problems	Causes	Solutions
No reaction from the system while the gear is switched into reverse gear.	No power input.	Check whether the powercord is properly connected.
There are obstacles within the detecting area, but the display shows no reaction.	Improper connection of the detector or the display is wrongly connected	Check the connection and the plugs.
There is no obstacle within the dete cting area, but constant warning and stop prompting occur.	There is dirt on the parking sensor	Clean the sensor and lower the sensitivity
There is no obstacle within the detecting area, but fixed distance is shown in the display.	The distance from the ground is detected.	Adjust the angle of the detector.

#### Technical parameters of the reverse radar

Detecting distance of the front sensor	1.2ft-3ft
Detecting distance of the rear sensor	1.2ft-6ft
Value of ultra-sonic frequency	40KHZ
Voltage Tolerance	11V~13V
Working temperature range	-86°F- +158°F
Decibel(distance of 10 cm)	90~105dB