



2. There is a switch on the back of the display. When you move the switch to "H" position, you will hear a sound changed circularly from mute to highest. You will also see a relative figure showing on the display, from "0" to "8". "0" means mute, "8" means highest. When you find one sound level is ok for you, move the switch to "L" position. The sound alarm for the system will be fixed at that level.

L  H ◀ VOLUME

Note: If you adjust the sound volume when the system is working (the vehicle is backing), you will see figures other than "0"~"8" on the display, this is a normal status and will not affect the sound adjustment. We suggest that you adjust the sound volume when the system is not working.



● Functions

1 DISTANCE DISPLAY

Display the distance between sensor and the closest obstacle.

2 SOUND WARNING

Indicate zone changes with different sound frequency.

3 ORIENTATION INDICATION

Denote the closest obstacle orientation with orientation icon .

4 ZONE CAUTION

Indicate zone stage with zone icon.

● Attentions



Reverse speed should be slow



Vehicle is in dangerous zone (2 ft/0.6 m)



Small and thin objects can be detected only at short distances



● Notes

Bullydog Reverse Backing Alert System adopts wide angle, high sensitivity sensors and technology of fuzzy data processing. Blind spots are virtually existent, depending upon type of object and installation. In some cases, the number that is indicated on display may not be 100% accurate due a number of factors, such as, level of the installed sensor, obstacle shape, location, angel and reflective character of object behind vehicle.

1. As shown in Fig. a, point B is lower than sensors, and point A has a strong reflection, the distance of CA will be shown first. When the obstacle is within the blind zone, neither A nor B will be detected. This usually occurs when the obstacle is lower than the level of sensors.

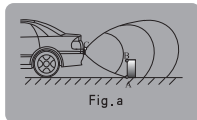


Fig. a

2. As shown in Fig. b, in case that the obstacle A is low, but still has strong reflection, during reversing, the distance between sensor and obstacle A is shown first. After obstacle A is within blind zone, the distance between sensor and obstacle B will be shown.

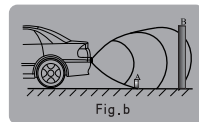


Fig. b

3. As shown in Fig. c, though point A is closer to the sensor than point B, the distance from sensor to point B is shown.

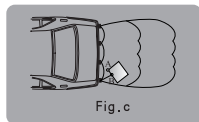


Fig. c

4. As shown in Fig. d, in case of small angle (α) of incidence to the obstacle, such as glass wall or other smooth plane, the obstacle is not detected.

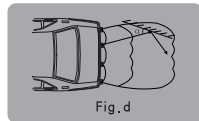
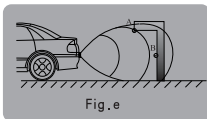


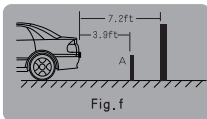
Fig. d



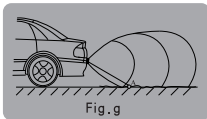
5. As shown in Fig. e, point B will be detected as vehicle moves closer, but point A will not be detected during entire time vehicle is in reverse.



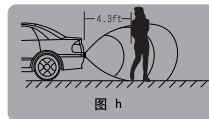
6. As shown in Fig. f, the reading may increase up and down between 3.9 ft and 7.2ft because of the small obstacle A is at the critical detecting point. The reading will be consistent as vehicle moves closer to obstacle A.



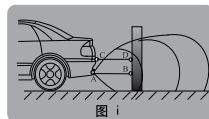
7. As shown in Fig. g, during certain conditions, if the car is angled towards the ground or on some road conditions with rough road, the sensors might detect the ground and alert.



8. As shown in Fig. h, not all obstacles can be detected from 8ft (2.5m). For instance, a person is detected from 4.3ft (1.3m) because of the weak reflection of clothes.



9. As shown in Fig. i, the distance is shown from sensor A to B, rather than C to D.



● Maintenance

1. Make sure that you keep sensors clean from dirt and sand buildup, and snow and ice buildup, otherwise, performance might be affected. Make sure that the gap on the sensor's center is clean at all times to avoid poor performance.
2. Painting of sensors is permitted, if you follow proper painting instructions.

**● Troubleshooting**

Problem	Cause	Remedy
display no reading when reversing	a. Power is not on b. Display is not connected well to controller	a. Check power connection b. Check the connection from display to controller
Wrong orientation indication	Wrong sensors' order	Change the order of sensors
Constantly display “-p-”	An object within 0.35m(1.15ft) is detected constantly	Adjust the sensors' position or angle
Display a fixed distance	a. Ground is detected b. Sensors' direction is wrong	Adjust the sensors' position or direction
distance display in disorder	SMI in wrong side	Set the SMI in right side
Orientation indicator not on	The sensor connector is not well plugged in	Check if the connector is firmly connected
Works properly as light is off while improperly as light is on	The connection of ground wire is wrong	Connect ground wire to the right place



Service items

● Warranty

Bullydog, supplier and dealer offers a 12 month warranty on all product from date of purchase, resulting from manufacturers defect.

● Service Condition

The warranty is subject to the following conditions:

1. Warranty invalidated for any reason other than faulty manufacture or parts.
2. Broken seal voids warranty.
3. No warranty claim will be validated unless the customer can establish purchase of the reverse backing alert system from Bullydog or its authorized retailers.



BULLY DOG

Premium Series

Reverse Backing Alert System