



SMART EYE

Instructions Manual



Introduction

This system detects the distance of obstacles and warns the driver, thus preventing accidents. This system consists of several sensors, a central control processor and a display panel. It uses 3 methods to warn the driver, including digital, warning sound and flash light.

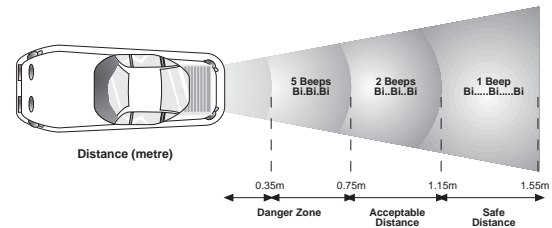
Special features of this system

- * This system is compatible to car of both DC12V and DC24V.
- * 3 character digital display to show the obstacle distance.
- * 4 warning alarm expose the car rear onstacle distance.
- * 2 direction indicator lamps show the direction of obstacle.

Warning method

Warning Sound	Distance between car rear and obstacle	Digital Display
NIL	$1.55\text{m} \leq S$	Display actual distance
Slow Beep	$1.15\text{m} \leq S < 1.55\text{m}$	Display actual distance
Slow Beep	$0.75\text{m} \leq S < 1.15\text{m}$	Display actual distance
Fast Beep	$0.35\text{m} \leq S < 0.75\text{m}$	Display actual distance
Continuous Beep	$S > 0.35\text{m}$	Display 0.00

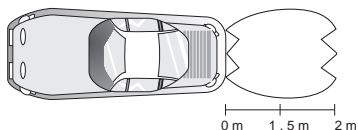
Distance between car rear and obstacle



Sensing scope diagram

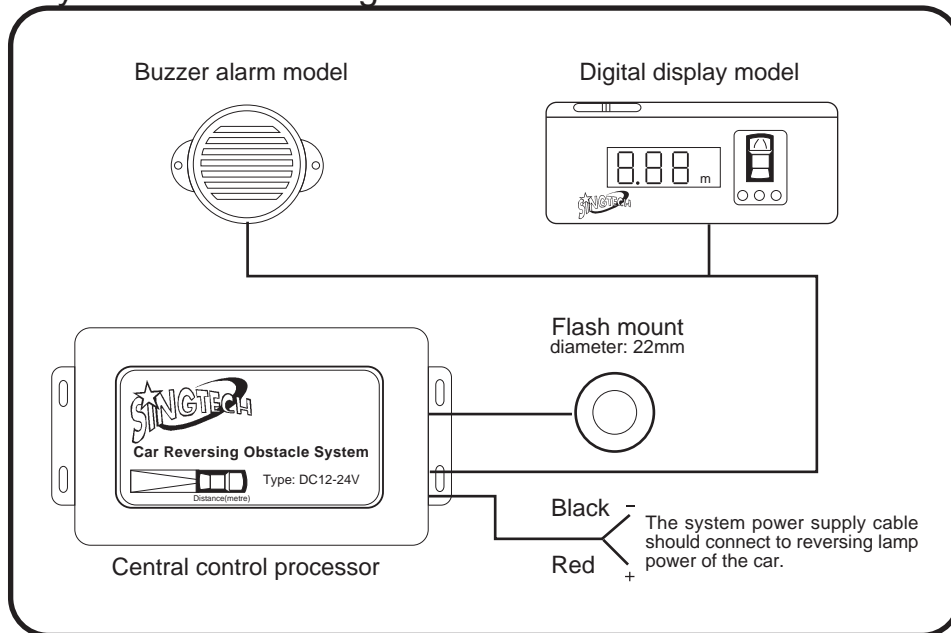


Top view of sensing scope

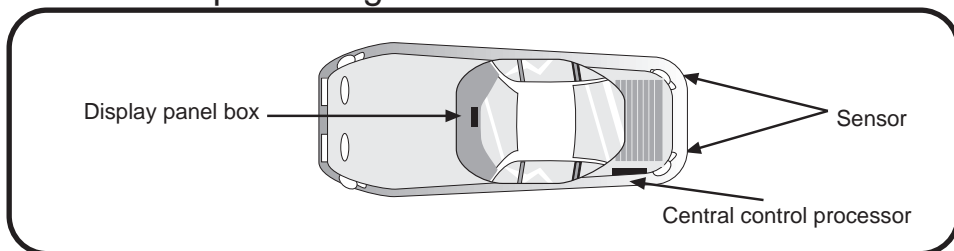


Side view of sensing scope

System connect diagram

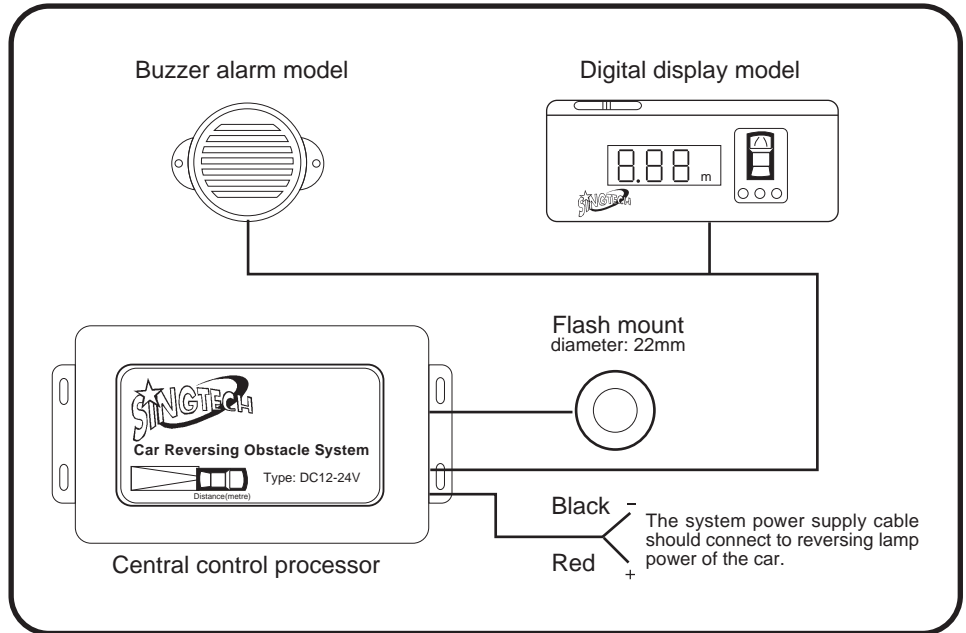


Installation place diagram





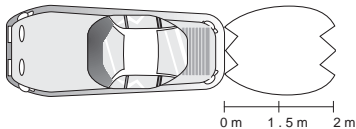
System connect diagram



Sensing scope diagram

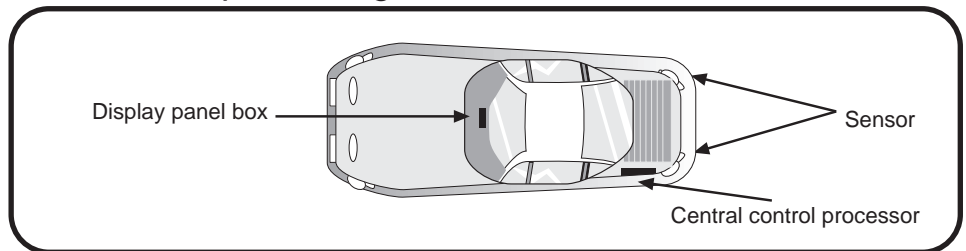


Top view of sensing scope



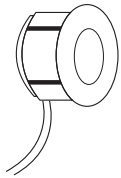
Side view of sensing scope

Installation place diagram

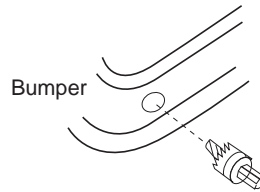


Flash Mount Sensor

Feature: To install this type of sensor, a hole must be drilled on the bumper. The diameter of the hole is $\varnothing 22$.



Flash mount
Diameter: 22mm



Bumper

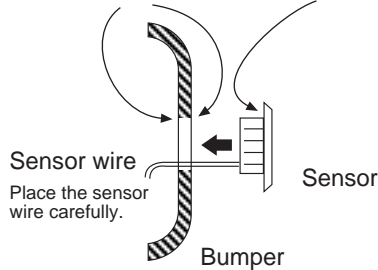
Drilling head
Diameter: 22mm

Process to install Flash Mount sensor

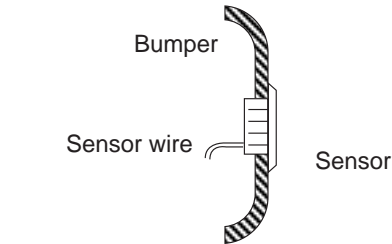
Step 1: Place the sensor into bumper

The sharp edge of the hole needs to be removed first

Add some glass glue surroundingly into it.



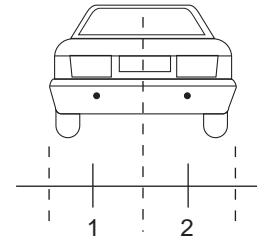
Step 2 Completion



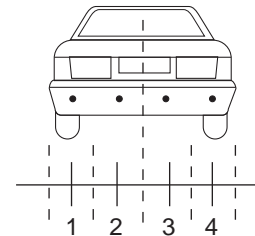
Side view of Sensor after installation

The horizontal distance between two sensors

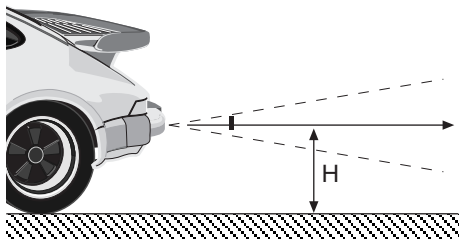
While installing 2 sensors



While installing 4 sensors



Adjust the sensor angle



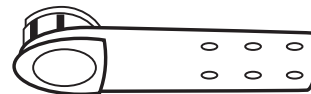
If $H \leq 0.6\text{m}$, place the sensor with 5~10 degree upward angle surface

If $0.6\text{m} \leq H < 0.8\text{m}$, place the sensor surface horizontally

If $H \leq 0.8\text{m}$, place the sensor with 5~10 degree downward angle surface

Private car lorry and motorvan installation

The installation of sensors for this kinds of vehicle can use the metal plate as the right digram (require additional accessory change). Other process is similar to above steps.



(Optional)

Installation of display panel

Please place the display panel in the suitable position inside the car, then place the cable correctly. If the car is too long, please use an extending cable which is sold separately.

Routine maintenance

The design of this system device is reliable and it does not require any special maintenance. If the sensor surface is covered with dust or sand, please clean it carefully with water. Please do not use polishing paper or screw driver as they may cause permanent damage to the sensors.

Note: In no event shall the manufacturer be responsible or liable for any special, indirect, incidental or consequential damages or injuries resulting from installing or using this system.

Test and Adjustment

Caution: The display panel can be changed, But sensors and central control processor cannot be exchanged. Each sensor must be plugged into the appropriate socket and sensors cannot be switched. If any problem occurs during testing and adjustment, please analyze the problem and not to switch the sensors at random.

Testing and Adjustment steps:

- First step: Connect display panel and control processor. Put the display panel at the back of the car tentatively and turn on the power supply of the central control processor.
- Second step: Set to reversing driving mode transmission. The reverse lamp and car model lamp turns on. The display panel shines at a small light point.
- Third step: Plug Sensor no.1 into the appropriate socket. When you are standing 1.5m in front of the sensor, the display panel should show the distance correctly. Repeat the procedures to test sensor no.2 and no.3. After testing all the sensors, please plug these 3 sensors into the relevant socket holes.
- Fourth step: Most problem are result of improper installation of the sensors. Please check the connection and the position of sensors to eliminate this problem.

To solve the problem with built-in type sensors:

If the display panel displays 0.00m, the sensor needs to be changed. If the display panel displays other value, the sensor may detect ground, please place the sensor surface with a few degree upward angles. Alternatively, you may reduce the sensitivity by adjusting the control processor.

