Car parking sensor consists of ultrasonic sensors, digital control box, camera and LED/LCD/TFT display. This system detects the distance between the car and back obstruction with ultrasonic sensors installed at the rear bumper of car. The obstruction image will be shown via the camera. With the change of alarm sound, detect the safe area correctly. It is best choice for the safe of your car.

More eyes & More Safe
Connection diagram of camera type parking sensor system

Alarm Mode

<table>
<thead>
<tr>
<th>Stages</th>
<th>Distance</th>
<th>Awareness</th>
<th>Sound Alarm</th>
<th>Number</th>
<th>color</th>
<th>Video</th>
<th>LED/LCD</th>
<th>Bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt;250cm</td>
<td>Safe area</td>
<td>silence</td>
<td>1</td>
<td>white</td>
<td>No bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>160-250cm</td>
<td>Safe area</td>
<td>silence</td>
<td>1.6-2.5</td>
<td>white</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>100-150cm</td>
<td>Safe area</td>
<td>Dang...Dang</td>
<td>1.0-1.5</td>
<td>white</td>
<td>Green</td>
<td>1-6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>70-90cm</td>
<td>Alert area</td>
<td>Dang...Dang</td>
<td>0.7-0.9</td>
<td>white</td>
<td>Green</td>
<td>7-9</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>40-60cm</td>
<td>Alert area</td>
<td>Dang...Dang</td>
<td>0.5-0.6</td>
<td>white</td>
<td>Green</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0-30cm</td>
<td>Dangerous</td>
<td>DangDang...</td>
<td>0.0-0.4</td>
<td>white</td>
<td>Green</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Technical Date
1. Rate Voltage: 12V
2. Operation Voltage range: 9-16V
3. Rated Current: 20-200mA
4. Detecting distance: 0-2.5m
5. Ultrasonic Frequency: 40kHz
6. Working temperature: -20~+60°C
7. Display working temperature: -20~+60°C

INSTALLATION AND TEST
1. After the installation of sensors, tune the direction to the correct. Arrange the wire in good order.
2. Connect the red cable from control box to the positive of the reverse light, the black wire to the negative. Connect the red cable from the camera to the positive of the reverse light. Connect the green cable from the display to the positive of the display. The display should be connected to ACC power; the negative pole should be connected to the earth wire. (Refer to installation diagram).
3. Connect the display with the control box. Connect the Vout on the control box with the VIDEO 2 on the display.
4. Put the shift lever to the reverse gear, then the reverse lamp is lighten. In this situation, the display should show the image and there will be a white dot in middle of the bottom of image. Which indicate the system is under test status. Test: a. If the display does not show the rear view, please check that polarity of the power is correct, the cables are connected correctly, whether the voltage is or larger than 10.5. Check the plug on the display is well connected.

Alarm Mode

If the display is in disorder or show 0.0s or give sound continuously, please switch the power off, then select the reverse gear again. If the problems could not be solved, the control unit could be deemed as a defective and replace a new one.

5. It should work properly, if a person is at a distance of 1 m away from the front of the sensors.

Test: a. When testing the some sensor, if the display give continuous sound or show 0.0s, please check whether some parts of the car or some unwanted objects fall into the detecting range, or the hole is too small to let the sensor too light in it, or the sensors are near to some strong interference sources such as exhaust pipe, other wires; b. If the display show some number but there are nothing in front of the sensor, maybe the sensor is detecting the ground, please check the position and direction of the sensor. The sensors should be a little raised in horizontal. The sensors may detect the out shoot in the back, such as License plate, the spare wheel and the bumper etc. c. If the problems could not be solved after the testings, the sensors can be deemed as defective or the sensors does not match with the control box. The whole system should be replaced.

b. If the display is in disorder or show 0.0s or give sound continuously, please switch the power off, then select the reverse gear again. If the problems could not be solved, the control unit could be deemed as a defective and replace a new one.

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d. If the image is gradient or reversed, please check that the camera is installed according to the label.

6. For abnormal display such as strips, inclined lines, please check the matching between camera and display!

Note: A. The display can be interchanged, but the sensors & the control box, the sensors & the jacks are matched one by one. B. For the concern of safety, the display will only show 0.0s instead of 0.3-0.1, when detect something in the distance of 0.2 to 0.4m according to the software. In this situation, the display will beep for 1 second longer. Please pay attention to this while doing the adjustments.

NOTE
1. Please pay attention to the difference on the size of the driller for camera and the sensors.
2. When install the system, the car should be in powered off situation.
3. The performance maybe affect by the following situation: heavy rain, the gravel road, bumpy road, sloping road and bush; very hot, cold or moist weather, the sensors is covered by snow, ice mud, etc.
4. Other ultrasonic or electric wire, the instance of DC/AC switch or 24/12V switch maybe affect the performance of the system.
5. The sensor should not be installed too tightly or too loose.
6. The metal bumper maybe affect the performance of the system.
7. Don't locate the control unit near to other interference such as exhaust pipe or other wires.
8. Test the system to make sure it work well before using.
9. This system is a reversing aid and the manufacturer takes no responsibility for any accidents caused after the kit is installed.