

G8R

Parking Assist System

Manual

## Contents

, # s

User's Manual		Installation Manual
Disclaimer	1	Installation diagram
Important notice	1	Wire connection 1
About the product	2	Sensor installation 1
Key features	3	Camera installation 1
Technical specifications	3	ECU installation 1
Brief introduction	4	Speaker installation 1
Self-test function	4	Connecting to In-Dash A/V monitor 1
How does the system work	5	Function testing 1
System setting	6	Troubleshooting1

# Parking Assist System

User's Manual

### Disclaimer

The parking assist system is designed as a driver assistance device, and should not be used as a substitute for safe parking practices. The area into which the vehicle is to be reversed must be constantly visually monitored while parking.

Gator reserves the right to change the product information without prior notice.

### Important notice

Gator parking assist systems help to provide assistance when reversing and parking. Driving skills, such as slowing down, use of mirrors etc. is always essential.

- 1.Please turn off the power supply before connecting the camera to the ECU.
- 2.To ensure clear view, please keep the camera lens clean and keep it away from sharp items.
- 3. This unit is for vehicles with 12V DC only.
- 4.Unit should be installed by a professional auto technician.
- 5. Route wiring harness away from heat sources and electrical components.
- 6. Please check the diameter of the hole saw to be compatible with flush mount camera and sensors respectively.

7. It is strongly recommended to check the position of the sensors before the actual drilling of the holes.

Perform test after finishing the installation.

## **About the product**

G8R is Gator's new parking assist systems with rearview cameras. G8R works well with most OE In-Dash A/V monitors.

The rearview camera is a 120° wide angle camera. It is shock, vibration and water resistant and suitable for automotive use. The system will project perfect image even in low light (1 Lux) conditions.

Turn ACC on and engage reverse gear,

the mirror image behind the car will be projected in-Dash A/V monitor, in the mean time, the system will self-test all the sensors automatically.

Once the self-test function is

completed, the system will start scanning the rear area. If there is any object within the detection range, the image and digital distances (obstacles at the left and right side of the vehicle) will appear on the monitor while the audible sound will change tones when the distance gets shorter with voice warning.

Each piece of our products has passed the most stringent test before releasing to the market. It performs well at a wide temperature range. Equipped with Gator's rearview camera parking assist system in your car, you can not only hear the audible warning sound, see the digital distance, but also view what is happening behind the vehicle.

### **Key features**

- Built-in flush mount or Micro-Tab camera
- Micro camera(optional) with 120 angle lens
- Compatible with most In-Dash A/V monitors
- · Performs well at night or in overcast weather
- Shock, vibration and water resistant camera
- · PAL or NTSC mode available
- · Accurate digital distance and clear rearview shown on the monitor
- · Dual guidance by camera and ultrasonic sensors
- · Audible and voice warning, volume adjustable
- Self-test function
- · Anti-false alert technology

## **Technical specifications**

For parking assist system:

Voltage: 10.5~16V

Working current: ≤ 250mA

Detecting range: 0.1~2.5m Display range: 0.3~2.5m

Beep volume: 70 ~ 90dB Operating temperature: -40°C ~ +85°C

For rearview camera:

Video standard:

PAL or NTSC

Graphic sensor: Color sensor Picture element: 640 (H) x 480(V)

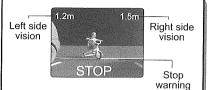
Horizontal resolution: 400 TV lines

Minimum illumination: <1 Lux

120° View angle: Operating temperature:Camera (-30°C

~+80°C)

#### **Brief introduction**



#### 1. Rearview on the LCD monitor

The color camera automatically projects the image behind the car to the monitor once the reverse gear is engaged.

#### 2. Digital distance

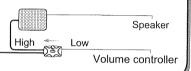
Obstacle distance display range:0.3~2. 5m.

The distance detected by the sensors will be shown on the left and right side of the monitor. The digital number on the display will be refreshed every 0.1m. When the obstacle distance is less than 0.3m, "STOP" will be shown on the display and the speaker will beep continuously or the voice will command "STOP" (only for the model with voice warning function).

#### 3. Speaker and volume controller

The system will inform the driver the obstacle's distance with beeps or human voice warning (for models with voice warning function).

The volume can be adjusted as needed

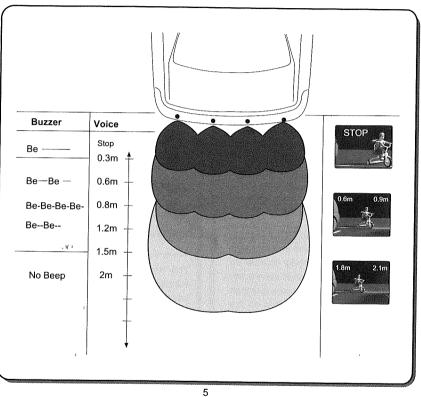


## Self-test function

The system will test the sensors automatically when the reverse gear is selected.

- 1) If all the sensors are functioning, the system will beep once.
- 2) If there is any problem with the sensors, the system will beep three times to indicate that one or more sensors are damaged.

## How does the system work



## System settings



#### 1. Adjust parking assist lines setting mode

In reversing mode, press and hold "K1" button to enter the parking assist lines setting mode

Press "K2" button to select the suitable parking assist lines (3 different modes), then press K1 button to save the settings.



Suggested for butterfly mount camera



Suggested for flush mount camera



Parking assist lines off mode

### 2. Adjust the width of parking assist lines (3 different modes)

In reversing mode, press and hold "K2" button to enter the parking assist lines width setting mode.

Press "K1" button to adjust the width of the parking assist lines and press "K2" button to save the setting.

#### 3. Adjust color saturation

In reversing mode, press and hold K1+K2 button for 3 seconds, the color saturation icon appears.

Press K1 to reduce and press K2 to increase the color saturation. The system will automatically save the settings and exist after 3 seconds.

#### 4. Adjust brightness

In reversing mode, press and hold K1+K2 button for 5 seconds, the brightness icon appears.

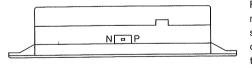
Press K1 to reduce and press K2 to increase the brightness. The system will automatically save the settings and exist after 3 seconds.

#### 5. Adjust contrast

In reversing mode, press and hold K1+K2 button for 7 seconds, the contrast icon appears.

Press  $K1^{v}$  to reduce and press K2 to increase the contrast. The system will automatically save the settings and exist after 3 seconds.

All the settings will be recorded by the system automatically.

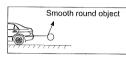


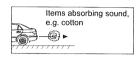
For NTSC type in-dash DVD monitor, you need select the switch to "N" position and change the camera with NTSC type to match.

## **Attention**

False detection may occur in the following situations:

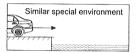


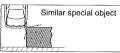












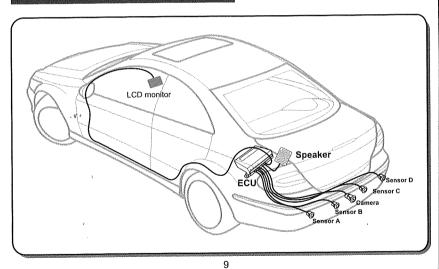
- After installation, fully test the system before use.
- Heavy rain, dirt on the camera or a damaged sensor may cause blurred vision or incorrect détection.
- Ensure that the self-test function is complete and indicates no malfunction before reversing.

The product is a driver assistance device. No warranty as to the operating efficiency of the system or prevention of accidents is guaranteed.

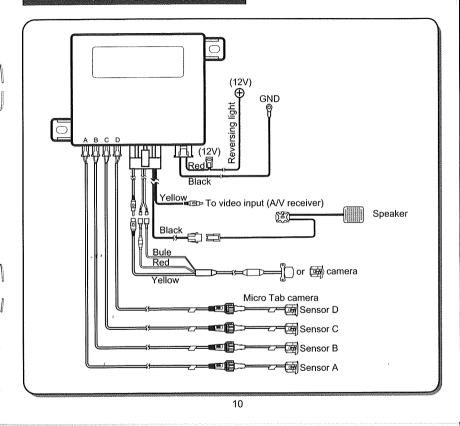
## Parking Assist System

Installation Manual

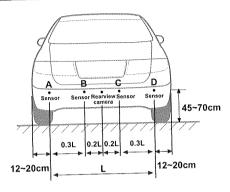
## Installation diagram



## Wire connection

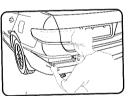


## Sensor installation

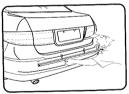




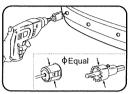
1. Select a proper surface area which is 45~70cm to the ground as a horizontal guideline.



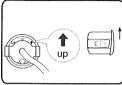
2. Select a smooth surface area along the horizontal guideline, and 12~20cm away from the left and right side. Mark them for A and D sensors.



3. Divide the distance between sensor A and D into three parts. Mark the average point for B and C sensor.



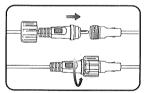
4. Check the size of the hole saw to be matching the diameter of the sensors before drilling any holes.



5. Install the sensor vertically, the "up" sign must be on upside.



6. Install the sensor into the hole and mount firmly in the bumper.

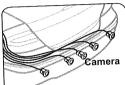


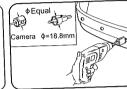
7. Insert the plug into the socket and turn the sealing screw cap tightly.

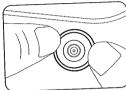
\* The sensor shown above may be different from the product.

## Camera installation

## Flush mount camera installation







Insert the camera and press into the hole firmly.

## Micro Tab camera installation



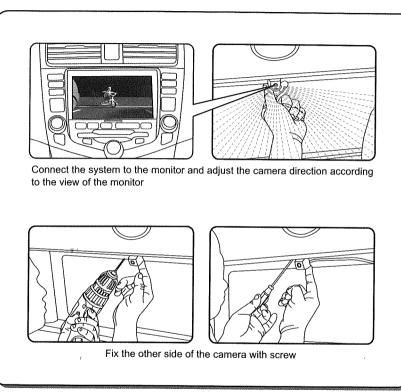


Choose a proper place above the number plate and drill a hole to fix one side of the Micro Tab

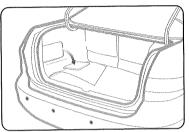


Fix one side of the camera with screw

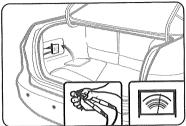
camera



## **ECU** installation

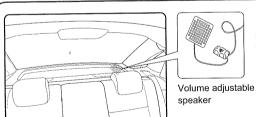


Mount ECU on the driver's side of the trunk.



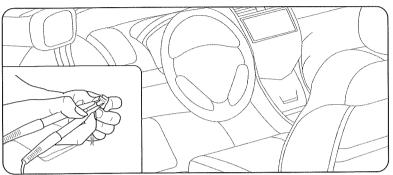
Connect the red wire to the reversing light wire (+).

# Speaker installation

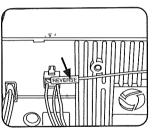


Mount the speaker and the volume controller at a suitable place near the back windshield in the car.

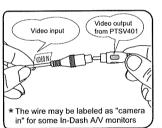
## Connecting to In-Dash A/V monitor



1. Identify the reversing light wire (+) in the driving compartment.

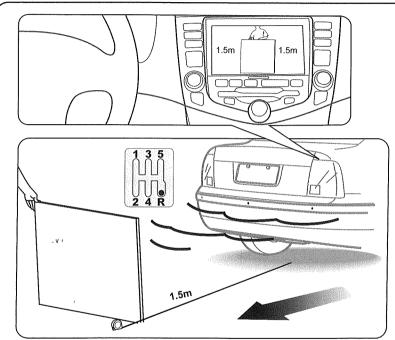


2. Connect the reversing light wire (+) with the reversing signal input wire at the back of the In-Dash A/V monitor.



3. Insert the video output plug into the video input socket of the In-Dash A/V monitor.

## Function testing



Use a flat board (1.0x1.5m) standing behind the car, reverse slowly to test each function respetively as shown in the manual.

## **Troubleshooting**

- 1. There is no image on the LCD monitor
  - 1) Check whether the power supply wire is connected correctly?
  - 2) Check whether the ignition is turned to ACC ON?
  - 3) Check whether the reverse gear is selected?
  - 4) Check whether all wire connections are correct?
  - 5) Check whether the video output plug is connected to the video-in socket of the LCD monitor?
- 6) Check whether if the function setting of the monitor is correct.
- 2. The display indicates a defective sensor.
  - 1) Check whether the sensor surface is clean.
  - 2) Check whether the sensor wires are plugged in the ECU properly.
  - 3) Check whether the sensor wires are damaged or not.

- When reverse gear is selected, 0. 5m~0.6m will be shown on the LCD monitor.
  - 1)Check whether sensors are mounted too low or detecting the ground?
  - 2)Check whether the sensor is installed up-side-down.
  - 3) Unplug 1 sensor at a time to check for response.
- 4. Audible voice or warning sound is too low.
  - 1) Adjust the volume to a certain level.
- 5. Blurred image on the LCD monitor
  - 1) Check whether there is dirt or water on the lens of the camera.
  - Clean the lens with a wet cotton swab and then dry it with a soft clean cloth.

## 6. If the problem persists, please follow these steps:

- A. For consumers: contact your dealer or nearby service center.
- B. For installer or dealer:

. W 2

- 1) Check the wire connection.
- 2) Replace the ECU and recheck the system.
- 3) Test the sensors with certified ECU using a flat wooden board.
- 4) Plug the certified sensors into the ECU and recheck.
- 5) Email your questions to us and we will reply ASAP.