Car Reversing Aid Parking System

Model No.
JP-1018, Wireless RF operation
JP-1017, Wireless RF operation
JP-1016-LP

INSTALLATION AND OPERATING INSTRUCTIONS

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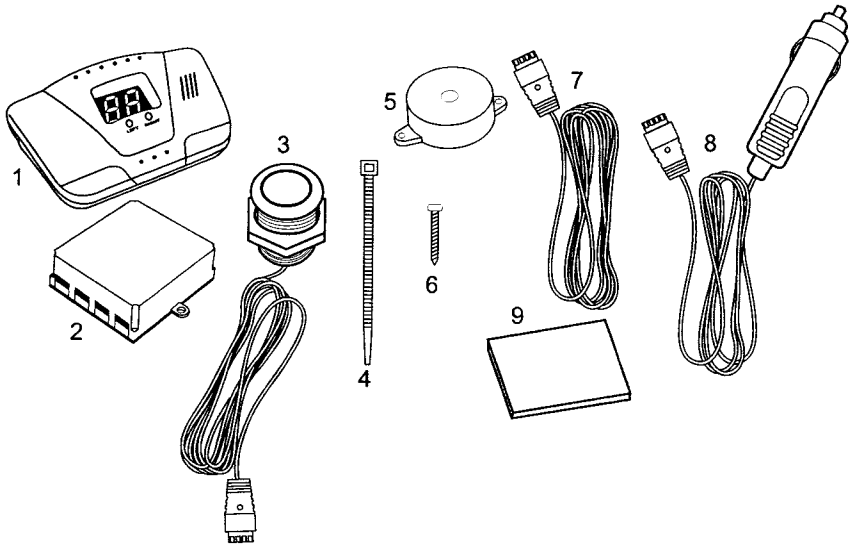


No.	Part Name	Description
1	Display Unit	X 1 for Model JP-1018, JP-1017 Only
2	Transmitter Unit	X1
3	Sensor Kit	X4 for JP-1018 X3 for JP-1017 X2 for JP-1016L
4	Cable Tie	X8
5	Buzzer	X1 For JP-1016-LP only
6	Screw	X8
7	Transmitter Power Cord	X1
8	Display Unit Power Cord	X1 for JP-1018, JP-1017
9	Double Face Form Label	X2

1. INTRODUCTION

Congratulation on your purchase of this production "Parking Sensor" which will install on rear bumper proper position to detect any obstacle behind the vehicle via sound wave. Adds Led light flash (only for JP1017/JP1018) & Beeper to assist driver get to know where is obstacle and its position.

The Model JP1017 / JP1018 both are specially design for bus, lorry vehicle. They are working at radio frequency for long distance operation. It helps driver to prevent crash from alongside of vehicle or behind. Super wide angle detecting to make sure safety. When beginning to use this production, you will be surprised at its user-friendly design considering the system delivers features benefits that nor only anticipate but exceed your protections.

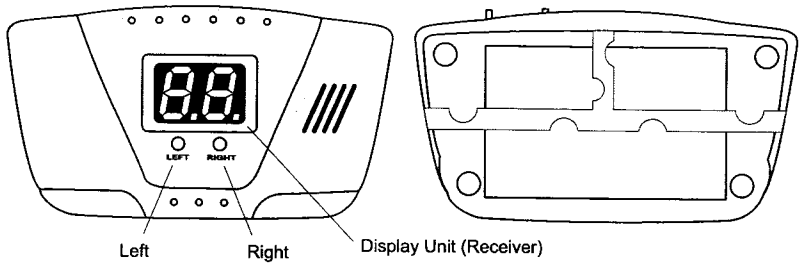
Features

- Reduce parking time in city area - especially parking easily bump-to-bump situation.
- Help to avoid accidental impact to human body, animal and prevent to damage vehicle by obstacle.
- In reverse parking you feel safety, more convenient and peace of mind.
- Super wide detecting angle that prevent side impacting, convenient for parking in garage.
- Waterproof, anti-rust type sensors designed to operate in most environments.

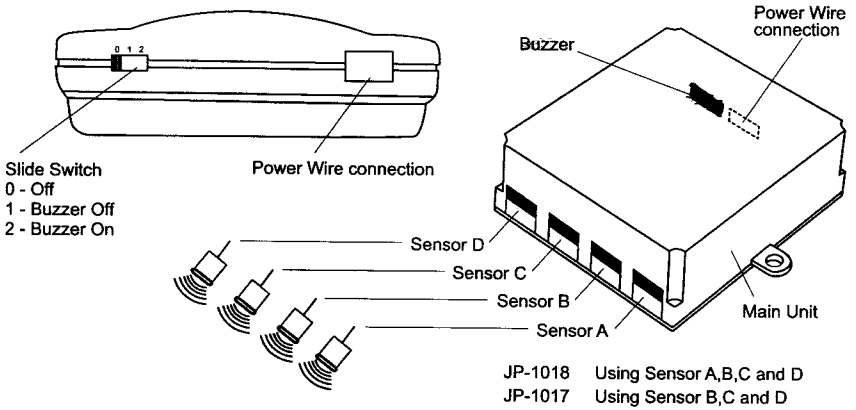
2. POINTS TO NOTICE BEFORE INSTALLATION

2.1 Description

(FrontView) (RearView)



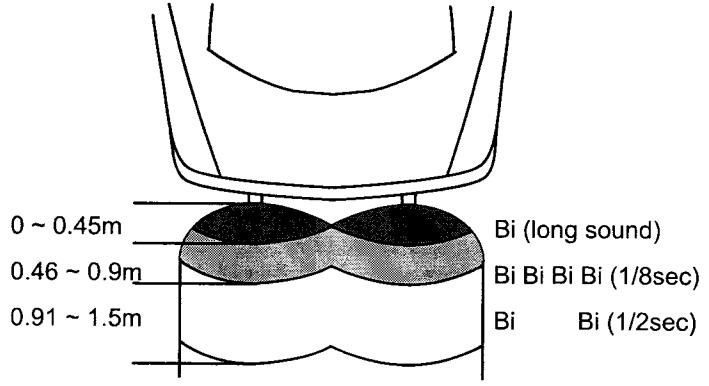
(BackView)



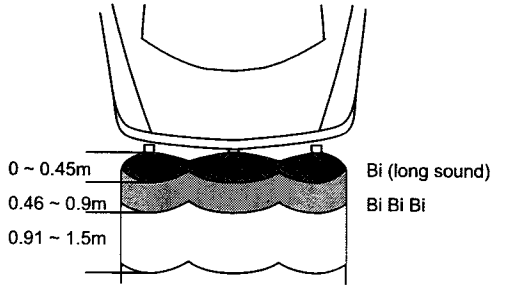
JP-1018 Using Sensor A,B,C and D
JP-1017 Using Sensor B,C and D

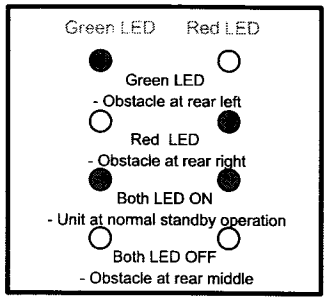
2.2 Detecting Range, Display And Warning Signal

JP-1016-LP

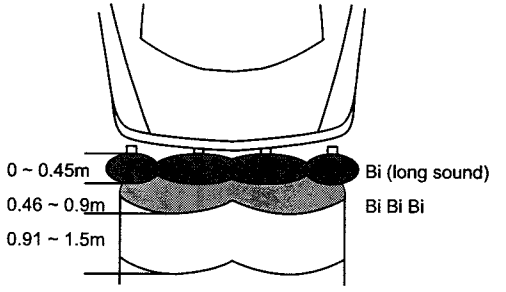


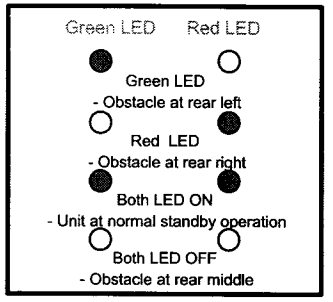
JP-1017





JP-1018





2.3 (i) DETECTING FUNCTION (For Model No: JP-1016-LP)

- Reversing vehicle, the buzzer "Beep....Beepeep" between rear bumper and obstacle is about 91 cm to 150 cm.
- Reversing vehicle, the buzzer "Beep..Beep..Beep" between rear bumper and obstacle is about 46 cm to 90 cm.
- Reversing vehicle, the buzzer "Beep..." Long Sound between rear bumper and obstacle is about 0 cm to 45 cm.

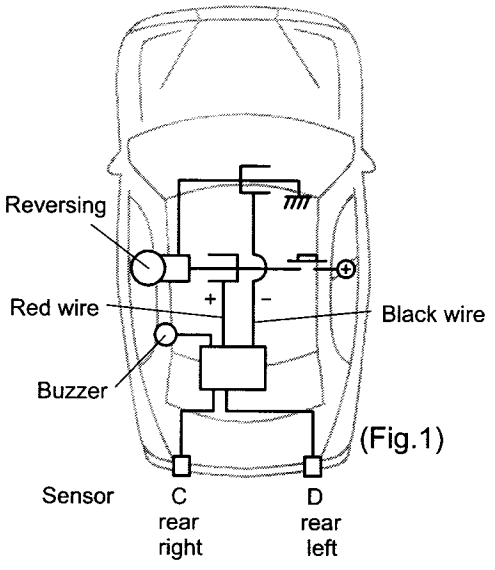
2.3 (ii) DETECTING FUNCTION (For Model No: JP-1017 & JP-1018)

- Reversing vehicle, the buzzer "Beep....Beepeep" between rear bumper and obstacle is about 91 cm to 150 cm.
- Reversing vehicle, the buzzer "Beep..Beep..Beep" between rear bumper and obstacle is about 46 cm to 90 cm.
- Reversing vehicle, the buzzer "Beep..." Long Sound between rear bumper and obstacle is about 0 cm to 45 cm.
- Display Unit shows the distance figure. The resolution is 10cm.
  -Red LED ON - Obstacle at rear right
  -Green LED ON - Obstacle at rear left
  -Both LED ON - "PARKING SENSOR" at normal standby operation
  -Both LED OFF - Obstacle at rear middle

3. INSTALLATION

3.1 (i) Installation of sensors

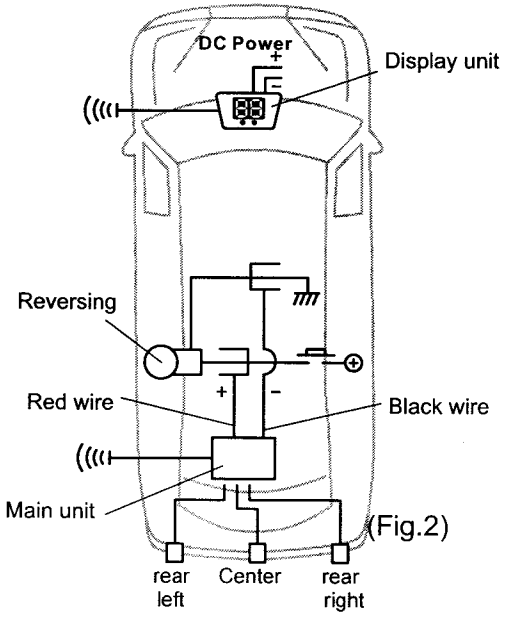
Ensure that the gear lever is in neutral during installation. Below is a wiring diagram (Fig.1) for the JP-1016-LP showing the necessary connections.



(Fig.1)

3.1 (ii) Installation of sensors

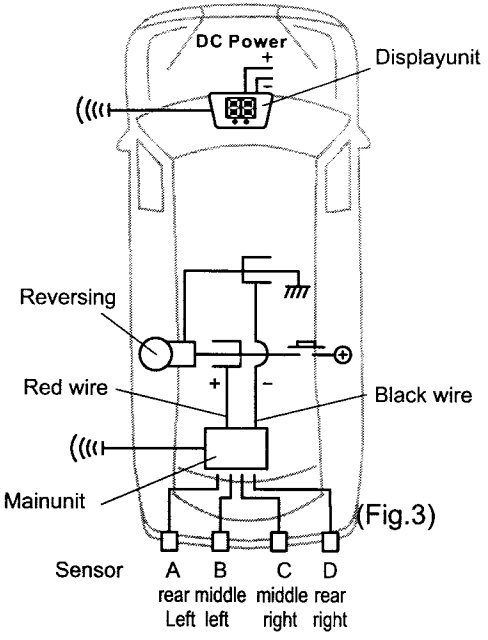
Ensure that the gear lever is in neutral during installation. Below is a wiring diagram (Fig.2) for the JP-1017 showing the necessary connections



(Fig.2)

3.1 (iii) Installation of sensors

Ensure that the gear lever is in neutral during installation. Below is a wiring diagram (Fig.3) for the JP-1018 showing the necessary connections



(Fig.3)

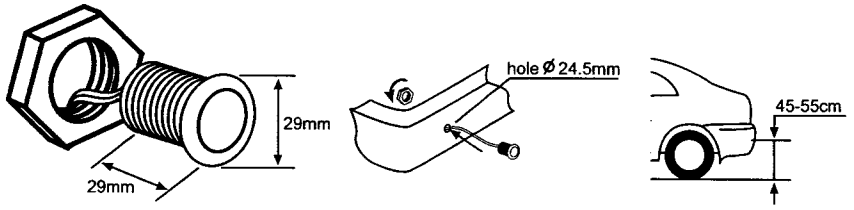
3.2 Wiring the sensor

Having chosen the location of the sensors, you will need to attach the wires to the main unit according to wiring drawing. Otherwise the "PARKING SENSOR" can not show the lateral direction (Left side & Right side) correctly.

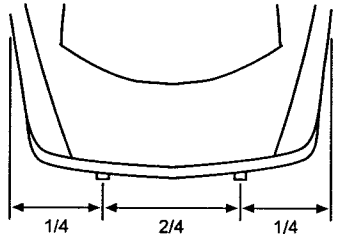
3.3 Wiring the Main Unit

You now require to connect the red and black power wires to your vehicles reversing light wires. The red power wire should be connected to the positive reversing light wire (This is the wire which becomes lives when you select reverse gear). Then connect the black power wire to the ground wire from the reversing light.

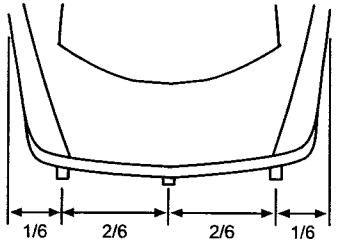
3.4 SENSOR DIMENSIONS AND INSTALLATION POSITION



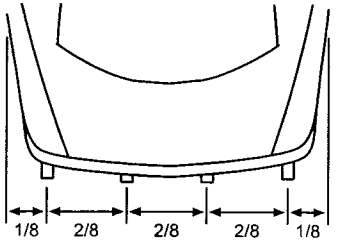
JP-1016-LP



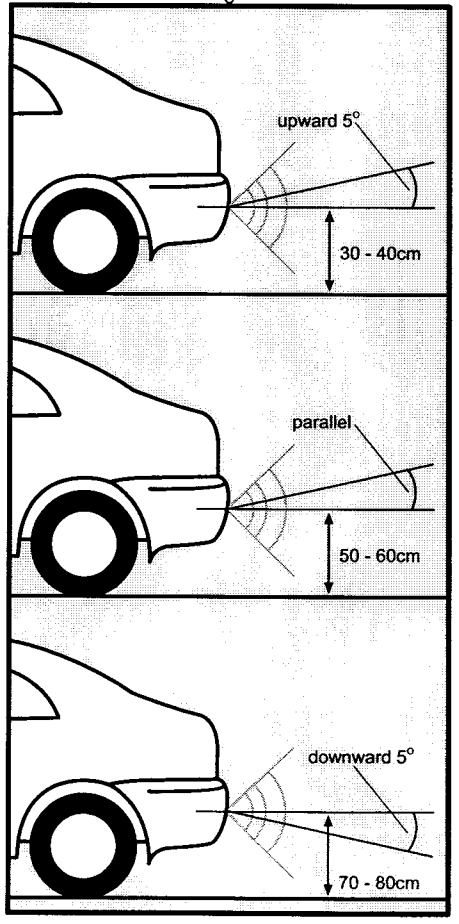
JP-1017



JP-1018



Remarks : Adjust the sensor angle against different installation height.



3.5

Drill the hole Ø24.5mm at rear bumper of apposite position. Insert the sensors at the hole and wiring to the main unit at the right position.

4. OPERATION

When you select reverse gear you will hear a beep. This indicates that the "PARKING SENSOR" is working and has been activated. As you begin to reverse and an object behind your vehicle comes within range, you will hear a beeping sound from the PARKING SENSOR. The frequency or pitch depends on the range of the object being detected.

Model	JP-1018, JP-1017 JP-1016-LP	JP-1018 JP-1017
Distance	**Audio Alert**	**Visual Alert**
0.91 - 1.5M	Beep	Distance Display & Left , Right or Middle obstacles indication
0.46 – 0.9M	Beep-Beep-Beep	
Below 0.45M	Continuous Tone	

5. FAULT FINDING

Problem	Reason	Solution
The system work even as the transmission gear is not in "Reverse" position	There are some mistakes on power line wiring.	Make sure the red / black wire of 4 pin power line is connected to reversing light +/- power line
There is no buzzer sound / LED display as vehicle reverse (The reversing light is ON)	1. No. power suppliers to main unit. 2. Bad connection between buzzer / LED / main unit. 3. The main unit is damaged.	1. Check the red / black wire of 4 pin plug with a multimeter. 2. Make sure a good conductivity between buzzer / LED / main unit. 3. Replace good main unit.
Two short "beep" sound / LED display 2 direction light not on.	1. Bad connection between on side sensor and main unit. 2. One side of sensor is damaged.	1. Check LED display in which direction light not on. Re-plug again & ensure good connection. 2. Replace new sensor.
Reversing vehicle, the buzzer / LED unstable when the obstacle behind vehicle.	1. Some wiring conductivity is not good. 2. In some particular situation	1. Check the power / LED / buzzer sensor conductivity with E.C.U.
Reversing vehicle, the buzzer / LED falsely daring while no actual obstacle is existing.	1. The sensors are not installed securely. 2. As the sensors are installed on some plastic cover and cause resonance.	1. Re-install the sensor fixedly. 2. Move the sensor to another. Location try again.
The system always works abnormal in certain place but normal in other place.	The sensor receivers interference from other ultrasonic transmission.	In this case, the system is OK the interference source must be eliminated.

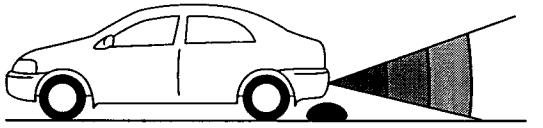
6. SPECIFICATION

Working Voltage Range : 11-26V
Power Consumption : Less than 0.5W
Sensor Frequency : 40KHz

7. EXAMPLE OF FAULT CASE

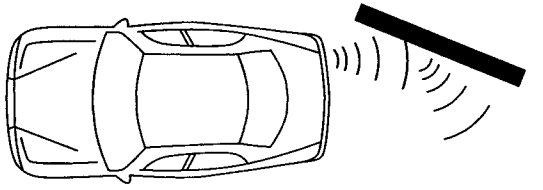
Due to the different obstacle position, reflective angle at obstacle surface, different size & composite material. The reflective sound signal may not be received completely. And the complicated environment also affect the return sound wave signal.

Case A



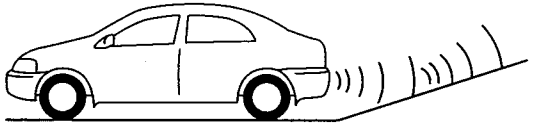
The obstacle under the car bumper.

Case B



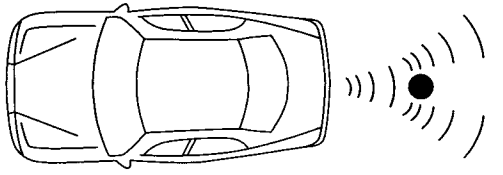
The round bar obstacle too small & smooth to reflect the sound wave signal completely and stable.

Case C



Sound wave signal can not reflect completely and stable.

Case D



IMPORTANT:

(i) SELECT SUITABLE DC POWER SOURCE FOR DISPLAY UNIT. IMPROPER CONNECTION MAY DAMAGE THE UNIT. TWO DIFFERENT VERSIONS ARE AVAILABLE FOR SELECTION (DC 12V OR DC 24V)

(ii) Radio interference is caused by the presents of another radio Controlled parking sensor operating on the same frequency at your product. Multiple user should not be operated on the same frequency at the same time neighbouring.

Warning : Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE : This equipment has been tested and found to comply with The limits for a Class B digital device, pursuant to Part 15 Of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ☐ Reorient or relocate the receiving antenna.
- ☐ Increase the separation between the equipment and receiver.
- ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ☐ Consult the dealer or an experienced radio/TV technician for help.