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JAPAN

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APS400LED
**12/24V Reversing System
with LED Distance Guidance**

SPECIFICATIONS

GENERAL

- Detection Range: 0.3 ~ 1.5
- Rated Voltage: 12/24V DC
- Operating Range: 9-32V DC
- Current Draw: <350mA
- Dust / Water Proof: IP67 Control Box
- Operating Temperature: -30 to +85°C

LED INDICATORS

- Proximity Alert: 1.1 - 1.5M Slow Flash
0.6 - 1.0M Medium Flash
0.4 - 0.5M Fast Flash
0.0 - 0.3M Solid Light
- Arm Type: Flexible Polymer
- Arm Length: 192mm

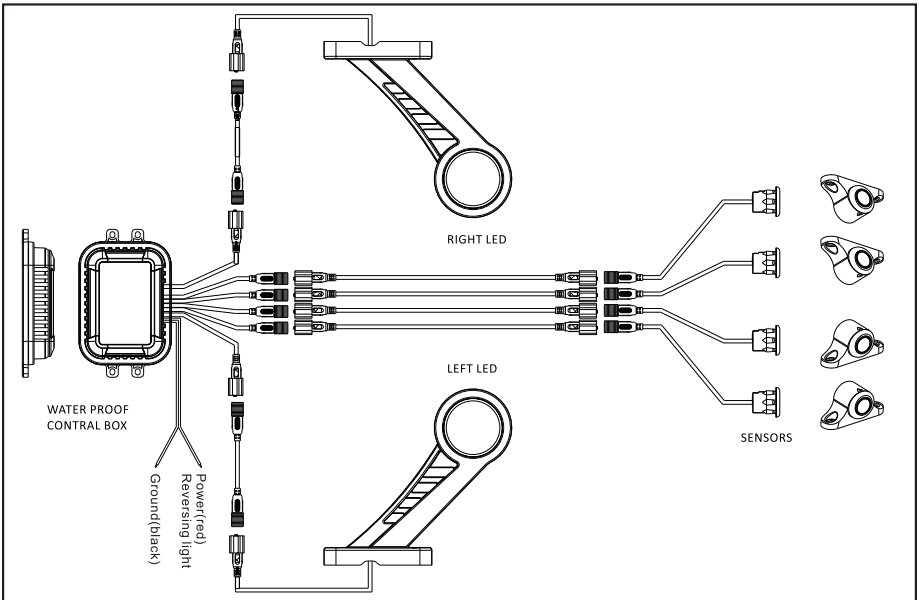
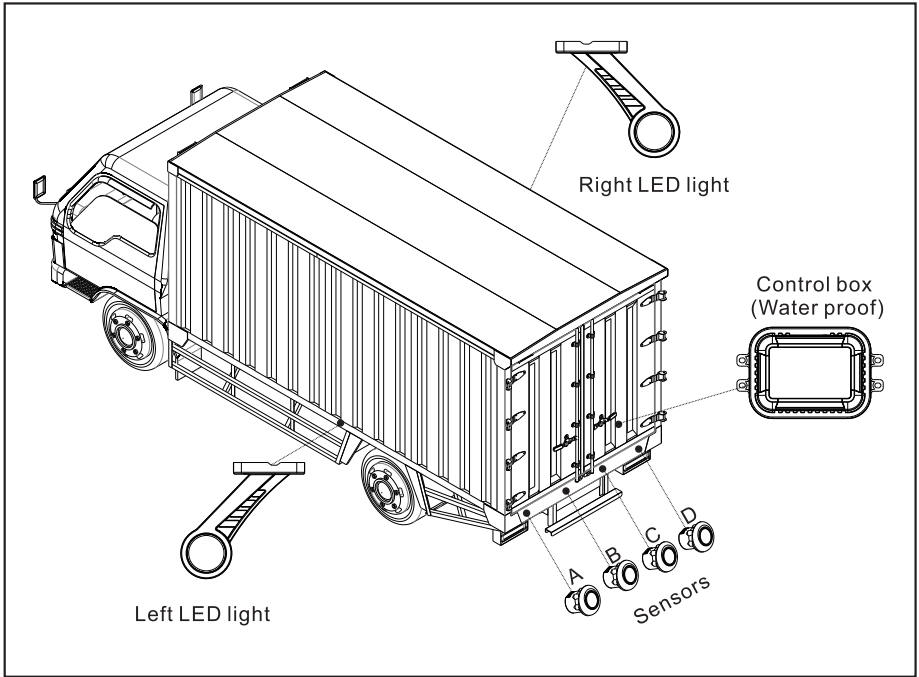
SENSORS

- Detecting Distance: 0.0 - 1.5M
- Detection Reaction Time: <100ms
- Sensor Type: Rubber
- Colour: Black
- Sensor Cable Length: 2 x 3M Lead
2 x 6M Lead
- Sensor Installation: Flush, Under or Top Mount
Flush Mount Angle Shims

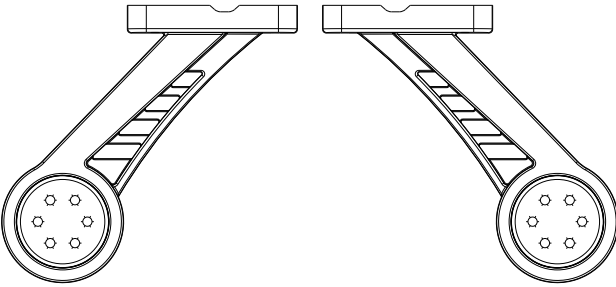
INCLUDES

- 4 Sensors
- LED Indicators
- Control Box
- Sensor Mounts
- Installation Hardware

GENERAL INSTALLATION DIAGRAM

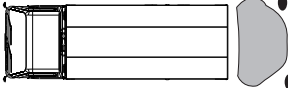
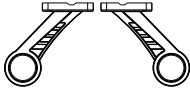
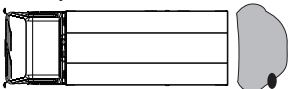
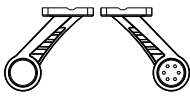
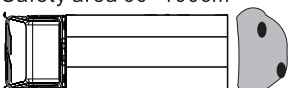
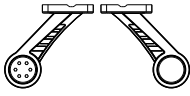
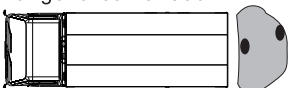
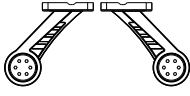
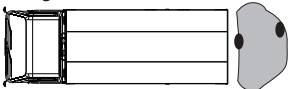
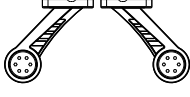


LED LIGHT

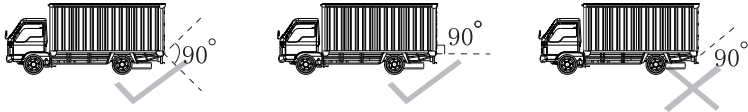


a. ≥ 1.6 metres = no light
 b. 1.1 – 1.5 metres = slow flashing (1.25 times per second)
 c. 0.6 – 1.0 metre = medium flashing (2.5 times per second)
 d. 0.4 – 0.5 metre = fast flashing (5 times per second)
 e. ≤ 0.3 metre = solid light

LED LIGHT STATUS

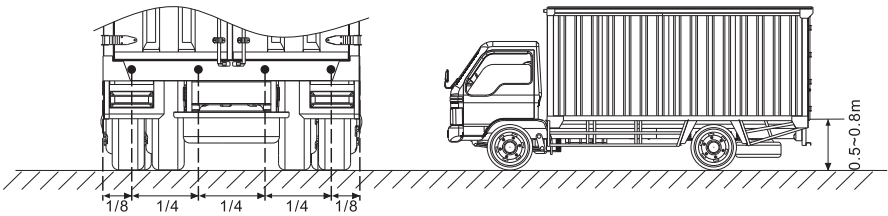
<p>Safety area ≥ 160cm</p> 	
<p>Safety area 110~150cm</p> 	<p>No light</p>  <p>flashing.....flashing.....</p>
<p>Safety area 60~100cm</p> 	 <p>flashing....flashing....</p>
<p>Danger area 40~50cm</p> 	 <p>flashing..flashing..</p>
<p>Danger area ≤ 30cm</p> 	 <p>flashing.....</p>

SENSOR INSTALLATION DIAGRAM



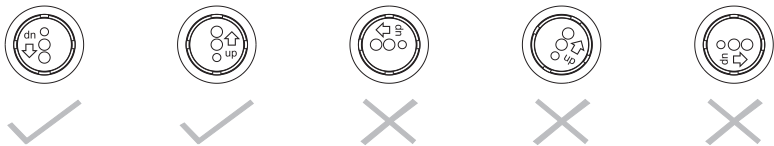
Fix the position of sensors. No obstacle should be detected at 90° from the top view otherwise the system will false alarm.

Installation distance diagram

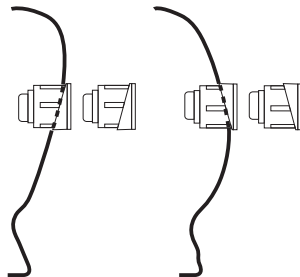


Best position for 4 sensors

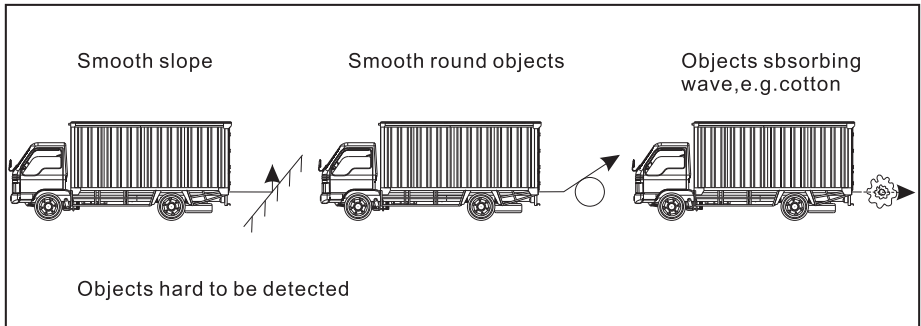
Installation diagram for sensors with direction markings



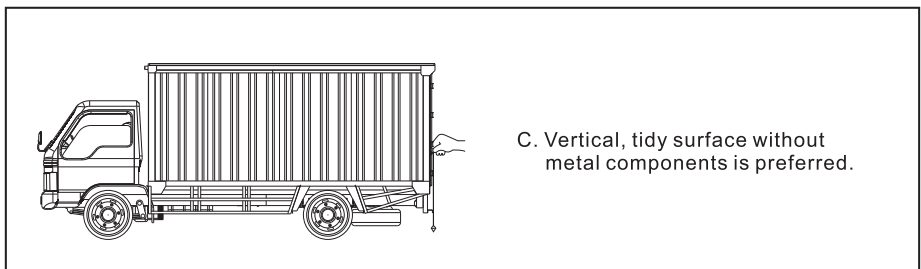
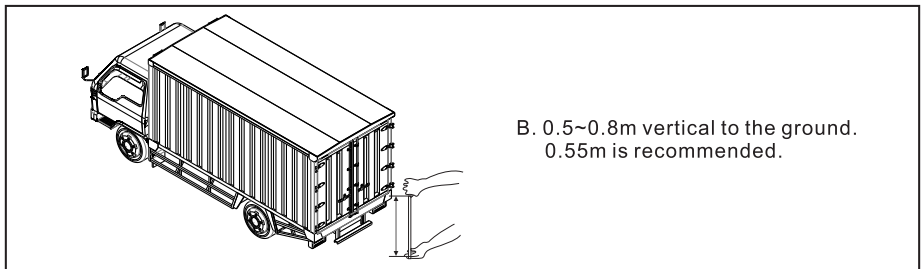
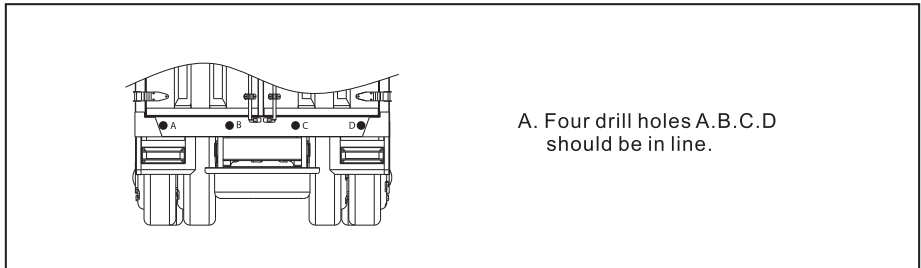
Installation diagram



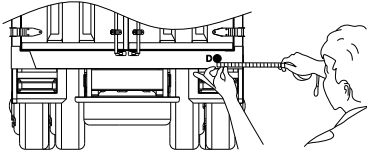
Installation when bumper is sloping to the ground.



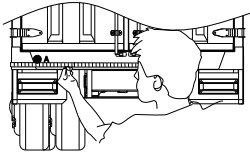
ADVISED POSITION TO INSTALL THE SENSOR



SELECT DRILLING POSITION FOR SENSOR A&D

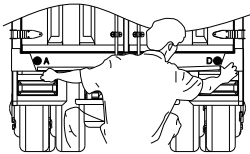


A. Choose suitable drilling positions for A and D sensor and mark.

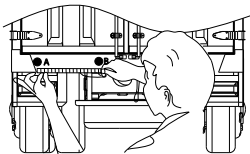


For best detection angle, position A & D sensor 1/8 from the edge.

SELECT DRILLING POSITION FOR SENSOR B&C

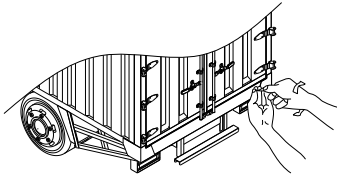


A. Measure the distance between sensor A and D.

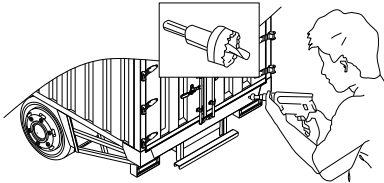


Divide distance by 3 and mark sensor B & C.

DRILLING

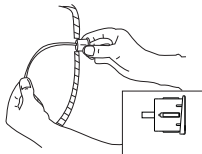


A. Use a small drill bit to locate position

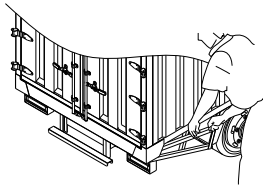


B. Drill with the bumper cutter supplied.

SENSOR INSTALLATION

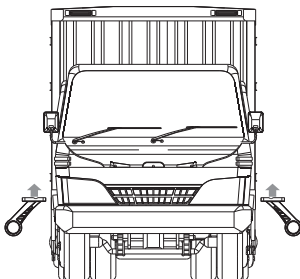


A. Insert the sensors into the holes and secure.



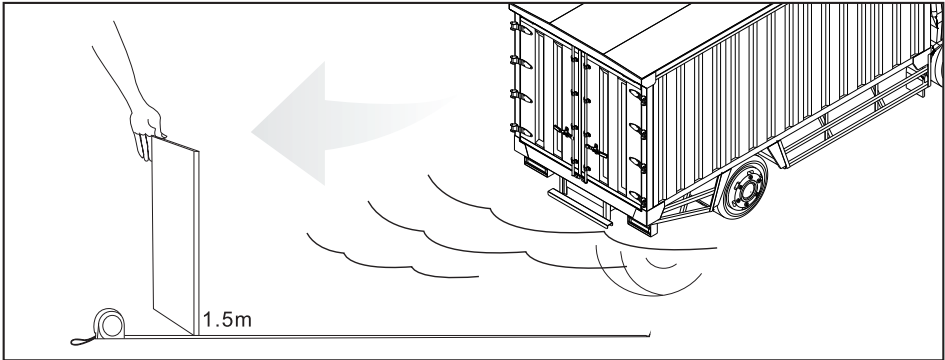
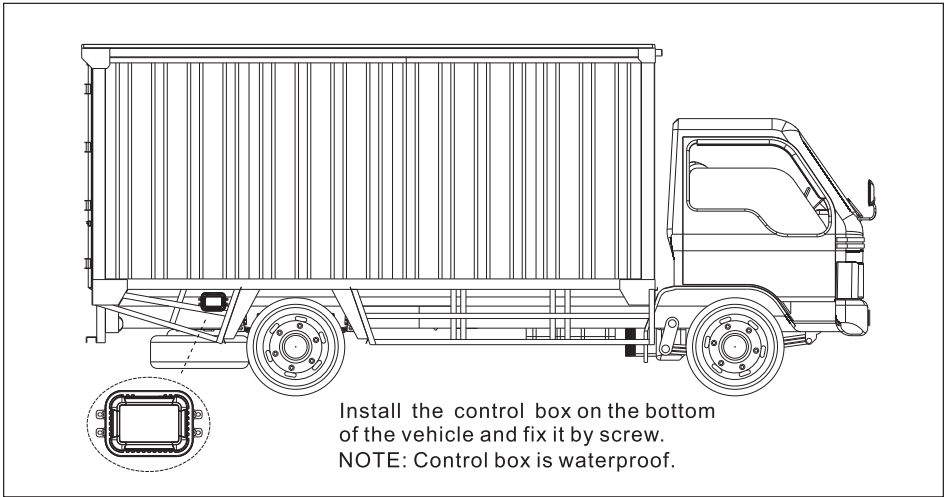
B. Arrange wiring neatly and securely.

LED LIGHT INSTALLATION



Install the LED light at the both side of vehicle and fixed it by screw.

CONTROL BOX INSTALLATION



PARKING SENSOR SYSTEM

This system consists of ultrasonic sensors, a control unit and two LED lights. This system detects the distance between the vehicle and obstructions by ultrasonic sensors installed at the rear of the vehicle. The distance and direction of the obstruction will be flashing light on the left & right LED light.

MAIN FEATURES

- LED lights
- LED flashing alarm
- Direction Indicators from left, middle and right channels
- Water proof control box
- Lines warn of the distance to obstacles

TECHNICAL SPECIFICATIONS

- Rated Voltage: 12V/24V
- Operating Range: DC 10~32V
- Operating Current: 10-120mA
- Detecting Distance: 0.3~1.5m
- Ultrasonic Frequency: 40KHz
- Working Temperature: -20~+70°C

- ≥1.6 metres = no light
- 1.1 – 1.5 metres = slow flashing (1.25 times per second)
- 0.6 – 1.0 metre = medium flashing (2.5 times per second)
- 0.4 – 0.5 metre = fast flashing (5 times per second)
- ≤0.3 metre = solid light

ALARM MODE

Detecting distance	LED light
≥1.6m	No flash
≥1.1~1.5m	flashing.....flashing.....
≥0.6~1.0m	flashing....flashing....
≥0.4~0.5m	flashing..flashing..
≤0.3m	solid light

INSTALLATION STEPS

1. Carefully choose position for sensors
2. Select drilling position for sensor A&D
3. Select drilling position for sensor B&C
4. Locate the position and drill
5. Install the sensors and hide the wires
6. Install the LED light
7. Install the control box(NOTE: The control box is waterproof)

TEST

1. Adjust the direction and orientation of sensors. Neaten the wiring after installation.
2. Connect the power wire to the reversing light circuit.
3. Connect the wires between control box and LED light.
4. After starting the car, the LED light will flash one time on power up. Insert one sensor into the control box port. within 1.0m of the sensor, it should detect normally.
Disconnect this sensor from the control box and use the same method to check other sensors. Then insert all sensors into matching ports.

NOTE

1. The car must be off during the installation
2. Performance may be affected in heavy rain, gravel roads, bumpy roads, hot or moist weather, or if the sensor is covered by ice or mud.
3. Other ultrasonic or electric waves(eg voltage reducers) may affect the performance of the system.
4. The sensors should be installed securely but not over-tight.
5. Rubber sensors are designed to avoid “Metal Resonance” in metal bumpers.
6. Avoid installing the digital control box in areas of interference or moisture.
7. Test the system to make sure it works correctly.
8. This system is a reversing aid and the manufacturer accepts no responsibility for an accident after the kit is installed.

WARRANTY

Congratulations on your purchase of a quality **axis** Mobile Safety System! You're joining thousands of satisfied customers who enjoy & experience the benefits of the products we distribute. In the unlikely event that some technical difficulty arises with your purchase, be assured that we are most anxious to see that the problem is quickly rectified to your satisfaction. Please familiarise yourself with the following simple conditions of our warranty. This warranty covers faults through component failure or failure of the product to operate in accordance with published specifications. Product failure as a result of unreasonable environmental conditions, accident, misuse, improper installation, unauthorised repair, vehicle electrical or wiring faults or neglect etc, will not be covered by this warranty. Removal and installation costs, if any, would be paid by the owner as well as any freight or postage costs of transporting the product to AudioXtra. AudioXtra shall not be liable or responsible for any loss of use of this product or any form of consequential loss.

CONSUMER WARRANTY

This product is warranted by AudioXtra Pty Ltd to be free from defects in materials and workmanship under **NORMAL USE** for a period of **TWENTY FOUR MONTHS** from the date of purchase.

WITHIN 30 DAYS OF PURCHASE DATE:

Please return the unit for replacement to our National Service Centre or the Retailer from where you made the purchase. All accessories must be included. Proof of purchase date **must** accompany the products.

AFTER 30 DAYS OF PURCHASE DATE:

Warranty repair and service is carried out by our National Service Centre. Repair and service will be carried out at no cost to the owner if proof of ownership and the date of purchase can be verified to the satisfaction of the authorised centre concerned with this repair. This proof should take the form of either:

- a) The warranty card accompanying this product, stamped and dated by the dealer.
- b) A Tax Invoice or Receipt showing full details of original vendor, purchaser, model number and serial number.

COMMERCIAL WARRANTY

A product used in or associated with a commercial application will carry a limited SIX MONTH warranty. An abnormal commercial application is one where usage, dust, vibration, heat/cold and other environmental conditions exist at an extreme level.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Please complete details below in the event of warranty service being required.

Purchaser's Name: _____

Purchaser's Address: _____

Model Number: APS400LED **Serial Number:** _____

Dealer Name: _____ **Date of Purchase:** / /

Dealer Address: _____

Invoice/Sales Docket no: _____

General Hints: To expedite service and prompt return of the equipment, please:

- a) Clearly describe the fault in detail
- b) Safely and securely pack the unit for transport
- c) Include your return address
- d) Provide proof of purchase date as outlined above

National Service Centre:

10 STODDART ROAD, PROSPECT, SYDNEY NSW 2148 Australia
Telephone: (02) 8841 9000 Fax: (02) 9636 1204
email: services@audioxtra.com.au

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