The CAS-4S Vehicle Reversing Aid is an automatic back up alert system that warns drivers of potential obstacles while backing up their vehicle. Using ultrasonic echo location sonar technology the system is activated when the driver engages reverse gear. A 6 zone variable audio pulse alerts the driver of potential obstacles. The audio pulse intensity increases and the audio frequency changes as the vehicle backs closer to the obstacle. Additionally and exclusively, the CAS-4S includes a VDI (Voice Distance Indicator) module and uses an audible voice to inform the driver how close the rear of the vehicle is from the obstacle calling out the distance in feet starting a 8 ft then 5 ft, 3 ft, 2 ft, 12 inches, and finally crash.

The CAS-4S Vehicle Reversing Aid was designed for use on commercial sized vehicles such as buses, trucks, RV’s, ambulances and other vehicles in excess of 7 feet wide.

**CAS-4S Sonar Obstacle Detection Solution**

**CAS-4S - Key Features**

- Voice Distance Indication
- Blind Area Alerting
- Sonar Sensor Technology
- Long Range Detection of 8 feet
- Close Range Detection of 12 inches
- 4 Sensors for Wider Vehicles
- 40 ft Speaker Cable for Long Vehicles
Blind Area Alerting:
As with all sensing systems, there are blind areas in the sensing patterns due to the cone or triangular nature in the way the sonar pulse is emitted. Whenever an object moves from a covered area and into one of these blind areas, a special warning alert message and a very loud tone “OBJECT IN BLIND AREA” will be transmitted twice or until the operator takes the vehicle out of reverse. This is especially helpful for detecting moving objects such as a pedestrian, an animal, a forklift or other moving vehicles that may be behind your vehicle and in harm’s way.

Detecting Patterns:
The typical performance detecting pattern for the follow object types are:

<table>
<thead>
<tr>
<th>OBJECT</th>
<th>EFFECTIVE DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Wall</td>
<td>8 feet</td>
</tr>
<tr>
<td>Vehicles</td>
<td>5 to 8 feet</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>3 to 5 feet</td>
</tr>
<tr>
<td>Post - 3 ft tall, 3 in diameter</td>
<td>3 to 5 feet</td>
</tr>
</tbody>
</table>

General Specifications

- **Sensors**: 4 Acoustic, Surface Mount, Weatherproof
- **Dimension**: 8mm diameter
- **Frequency**: Transmits at 33.5 kHz
- **Detecting Angles**
  - Horizontal: Approximately 30 Degrees
  - Vertical: Approximately 50 Degrees
  - Detection Range: 12 Inches to 8 Feet
- **Speaker**
  - Type: 40mm Diameter Magnetic
  - Sound Output: 80 db at 10 cm

Power Specifications

- **Input**: 11 – 28 Volts DC
- **Operating Voltage**: 3.0 W

Environmental Specifications

- **Operating Temperature**: 122°F to -4°F

Physical Specifications

- **Dimensions**
  - Processor: 3.88 in x 2.75 in x 0.72 in
  - Sensor: 1.22 in x 1.22 in x 0.43 in
  - Speaker: 1.69 in x 1.96 in x 0.43 in
- **Sensor Cables**: 30 ft
- **Power Wires**: 6 ft
- **Speaker Cable**: 12 ft
- **Speaker Extension**: 40 ft

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CAS-4S40</td>
<td>CAS-4S40</td>
</tr>
<tr>
<td>CAS-41</td>
<td>CAS-41</td>
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<tr>
<td>CAS-42</td>
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<td>CAS-43</td>
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</tbody>
</table>

Order Desk: (312) 265-3828

Collision Avoidance Systems

www.collisionavoidancesystems.net

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