Back-up & Warning Alarms

Vital safety devices needed to warn workers and pedestrians that a vehicle is maneuvering. Our range includes bbs-tek® white sound® alarms; smart alarms which adjust to the ambient noise level; and speaking alarms, which provide a real speech warning of imminent danger.

Which alarm is for you?

Heavy duty
For plant, quarry and construction machines or environments with high ambient noise.

Medium duty
Ideal for commercial road going vehicles and environments with mid-level ambient noise.

bbs-tek® white sound®
The safest alarms in the world due to their instant locatability and directional sound. The multi-frequency alarms are only heard in the danger zone, thus eliminating noise nuisance for local residents.
### WHITE SOUND® SMART BACK-UP ALARM

#### SA-BBS-107 - Self-adjusting heavy-duty - 87-107 Decibels

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features</strong></td>
<td>• Alarm continually adjusts to 5-10dB above ambient&lt;br&gt;• Multi-frequency broadband sound&lt;br&gt;• Instantly locatable&lt;br&gt;• Sound confined to danger area&lt;br&gt;• Eliminates noise nuisance&lt;br&gt;• Sounder unit: Driver&lt;br&gt;• Hole centres: 153mm / 6&quot;</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>• Current: Max 1 Amp</td>
</tr>
<tr>
<td><strong>Durability &amp; standards</strong></td>
<td>• Mechanical vibration: 10G&lt;br&gt;• Operating temperature: -40 to +85°C / -40 to +185°F&lt;br&gt;• CE marked&lt;br&gt;• EMC approved: E&lt;br&gt;• SAE J994</td>
</tr>
</tbody>
</table>

#### SA-BBS-97 - Self adjusting - medium duty - 77-97 Decibels

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features</strong></td>
<td>• Alarm continually adjusts to 5-10dB above ambient&lt;br&gt;• Multi-frequency white sound alarm&lt;br&gt;• Instantly locatable&lt;br&gt;• Sound confined to danger area&lt;br&gt;• Eliminates noise nuisance&lt;br&gt;• Sounder unit: Driver&lt;br&gt;• Hole centres: 98-108mm / 3.8-4.2&quot;</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>• Current: Max 1 Amp</td>
</tr>
<tr>
<td><strong>Durability &amp; standards</strong></td>
<td>• Mechanical vibration: 10G&lt;br&gt;• Operating temperature: -40 to +85°C / -40 to +185°F&lt;br&gt;• CE marked&lt;br&gt;• EMC approved: E&lt;br&gt;• SAE J994&lt;br&gt;• NAS/PIEK approved for night-time delivery</td>
</tr>
</tbody>
</table>

#### BBS-107 - Heavy duty - 107 Decibels

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features</strong></td>
<td>• Multi-frequency broadband sound&lt;br&gt;• Instantly locatable&lt;br&gt;• Sound confined to danger area&lt;br&gt;• Eliminates noise nuisance&lt;br&gt;• Sounder unit: Driver&lt;br&gt;• Hole centres: 153mm / 6&quot;</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>• Current: Max 1 Amps</td>
</tr>
<tr>
<td><strong>Durability &amp; standards</strong></td>
<td>• Mechanical vibration: 10G&lt;br&gt;• Operating temperature: -40 to +85°C / -40 to +185°F&lt;br&gt;• CE marked&lt;br&gt;• EMC approved: E&lt;br&gt;• SAE J994</td>
</tr>
</tbody>
</table>
## WHITE SOUND® BACK-UP ALARM

### Features
- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Speaker
- Hole centres: 98-108mm / 3.8-4.2"

### Power
- Current: Max 0.3 Amps

### Durability & standards
- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C / -40 to +185°F
- CE marked
- EMC approved: e
- SAE J994

### BBS-92HV - Electric forklift - 92 Decibels
- 12-24Vdc
- IP68
- Size (WxHxD):
  - 127 x 76 x 65mm
  - 5 x 3 x 2.5 inches
- Lifetime warranty
- Part No: 1402

### BBS-82HV - Electric forklift - 82 Decibels
- 36-80Vdc (HV)
- Part No: 1322

### BBS-92ADR - Fuel tanker - 92 Decibels
- 2165

### BBS-97 - Medium duty - 97 Decibels
- 12-24Vdc
- IP68
- Size (WxHxD):
  - (BBS-97/92): 105 x 65 x 37mm
  - 4.1 x 2.5 x 1.5 inches
  - (BBS-87/82): 105 x 65 x 32mm
  - 4.1 x 2.5 x 1.3 inches
- Lifetime warranty
- Part No: 0935

### BBS-92 - Medium duty - 92 Decibels
- Part No: 0934

### BBS-87 - Medium duty - 87 Decibels
- Part No: 0897

### BBS-82 - Medium duty - 82 Decibels
- Power: Current: Max 0.5 Amps
- Durability & standards:
  - Mechanical vibration: 10G
  - Operating temperature: -40 to +85°C / -40 to +185°F
  - CE marked
  - EMC approved: E
  - SAE J994
  - NAS/PIEK approved for night-time delivery (BBS-82)
  - 12-24Vdc
  - IP68
  - Size (WxHxD):
    - (BBS-97/92):
      - 105 x 65 x 37mm
      - 4.1 x 2.5 x 1.5 inches
    - (BBS-87/82):
      - 105 x 65 x 32mm
      - 4.1 x 2.5 x 1.3 inches
  - Lifetime warranty
- Part No: 0896

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**alarms are covered by the following patents:**

- AU2007200517
- EP1289798B2
- CN100488807C
- JP4798474B2
- NZ522190
- GB2345392C
- USRE44912
<table>
<thead>
<tr>
<th>Model</th>
<th>Part No:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPEAKING ALARM</strong></td>
<td></td>
</tr>
<tr>
<td>BC-01HP(B) - Bespoke single message - 110 Decibels</td>
<td>1199</td>
</tr>
<tr>
<td>• 12-24Vdc</td>
<td></td>
</tr>
<tr>
<td>• IP68</td>
<td></td>
</tr>
<tr>
<td>• Size (WxHxD)</td>
<td></td>
</tr>
<tr>
<td>116 x 115 x 117.5mm</td>
<td></td>
</tr>
<tr>
<td>4.5 x 4.5 x 4.7 inches</td>
<td></td>
</tr>
<tr>
<td>• 2 year warranty</td>
<td></td>
</tr>
<tr>
<td>Features</td>
<td></td>
</tr>
<tr>
<td>• Real speech alarm</td>
<td></td>
</tr>
<tr>
<td>• BC-01HP message “Ssh! Stand well clear, vehicle reversing...”</td>
<td></td>
</tr>
<tr>
<td>• Bespoke message up to 8 seconds, under 4 seconds for best speech quality</td>
<td></td>
</tr>
<tr>
<td>• Sounder unit: Speaker</td>
<td></td>
</tr>
<tr>
<td>• Hole centres: 102mm / 4”</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
</tr>
<tr>
<td>• Current: 0.5 Amps</td>
<td></td>
</tr>
<tr>
<td>Durability &amp; standards</td>
<td></td>
</tr>
<tr>
<td>• CE marked</td>
<td></td>
</tr>
<tr>
<td>• EMC approved: E</td>
<td></td>
</tr>
<tr>
<td><strong>NIGHTSHIFT® SPEAKING ALARM</strong></td>
<td></td>
</tr>
<tr>
<td>BC-01(NS-B) - Bespoke single message - Nightshift - 90 or 0 Decibels</td>
<td>1198</td>
</tr>
<tr>
<td>• 12-24Vdc</td>
<td></td>
</tr>
<tr>
<td>• IP68</td>
<td></td>
</tr>
<tr>
<td>• Size (WxHxD)</td>
<td></td>
</tr>
<tr>
<td>122 x 84 x 50mm</td>
<td></td>
</tr>
<tr>
<td>4.8 x 3.3 x 2 inches</td>
<td></td>
</tr>
<tr>
<td>• 2 year warranty</td>
<td></td>
</tr>
<tr>
<td>Features</td>
<td></td>
</tr>
<tr>
<td>• Real speech alarm</td>
<td></td>
</tr>
<tr>
<td>• BC-01(NS) message “Ssh! Stand well clear, vehicle reversing...”</td>
<td></td>
</tr>
<tr>
<td>• Bespoke message up to 8 seconds, under 4 seconds for best speech quality</td>
<td></td>
</tr>
<tr>
<td>• Double engage reverse to cut-out or reduce sound</td>
<td></td>
</tr>
<tr>
<td>• Sounder unit: Speaker</td>
<td></td>
</tr>
<tr>
<td>• Hole centres: 102mm / 4”</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
</tr>
<tr>
<td>• Current: 0.5 Amps</td>
<td></td>
</tr>
<tr>
<td>Durability &amp; standards</td>
<td></td>
</tr>
<tr>
<td>• CE marked</td>
<td></td>
</tr>
<tr>
<td>• EMC approved: E</td>
<td></td>
</tr>
</tbody>
</table>
## SPEAKING ALARM

<table>
<thead>
<tr>
<th>Model</th>
<th>Part No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC-01(B) - Bespoke single message - 90 Decibels</td>
<td>0079</td>
</tr>
<tr>
<td>BC-02(B) - Bespoke dual message - 90 Decibels</td>
<td>0083</td>
</tr>
</tbody>
</table>

### Features
- 12-24Vdc
- IP68
- Size (WxHxD)
  - 122 x 84 x 50mm
  - 4.8 x 3.3 x 2 inches
- 2 year warranty

### Power
- Current: 0.5 Amps

### Durability & standards
- CE marked
- EMC approved: E
- 12-24Vdc
- IP68
- Size (WxHxD)
  - 122 x 84 x 50mm
  - 4.8 x 3.3 x 2 inches
- 2 year warranty

### Real speech alarm
- BC-01 message “Shh! Stand well clear, vehicle reversing...”
- Bespoke message up to 8 seconds, under 4 seconds for best speech quality
- Sounder unit: Speaker
- Hole centres: 102mm / 4”

## SPEAKING ATTACK ALARM

<table>
<thead>
<tr>
<th>Model</th>
<th>Part No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC-AA(B) - Single bespoke message - 110 Decibels</td>
<td>1465</td>
</tr>
</tbody>
</table>

### Features
- 12-24Vdc
- IP68
- Size (WxHxD)
  - 116 x 115 x 117.5mm
  - 4.5 x 4.5 x 4.7 inches
- 2 year warranty

### Power
- Current: 0.5 Amps

### Durability & standards
- CE marked
- EMC approved: E
- 12-24Vdc
- IP68
- Size (WxHxD)
  - 116 x 115 x 117.5mm
  - 4.5 x 4.5 x 4.7 inches
- 2 year warranty

### Real speech alarm
- Activated by panic button, repeats continuously until deactivated by hidden switch
- Sounder unit: Speaker
- Hole centres: 48mm / 1.9”

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Canada: +1 (604) 245 1752  contact@brigade-electronics.ca  www.brigade-electronics.ca
## Ancillaries

### VEHICLE INTERCOM

<table>
<thead>
<tr>
<th>Model</th>
<th>Part No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC-VI</td>
<td>0815</td>
</tr>
<tr>
<td>BC-VI-2</td>
<td>0875</td>
</tr>
</tbody>
</table>

**Features**
- Single touch timed relay
- Allows driver to cut-out alarm if reversing between the hours of 11.30pm-7.00am
- Auto-resets after 3-4 mins delay

**Power**
- 12-24Vdc
- 2 year warranty

**Durability & standards**
- CE marked
- EMC approved

**Size (WxHxD)**
- 122 x 84 x 50mm
- 4.8 x 3.3 x 2 inches

### ALARM ANCILLARIES

#### TCO-47 - Timed auto-reset Backalarm cut-out (dash mount)

| Part No: | 0663 |

**Features**
- Single touch timed relay
- Allows driver to cut-out alarm if reversing between the hours of 11.30pm-7.00am
- Auto-resets after 3-4 mins delay

**Power**
- 12-24Vdc
- 2 year warranty

**Durability & standards**
- CE marked
- EMC approved

**Size (WxHxD)**
- 122 x 84 x 50mm
- 4.8 x 3.3 x 2 inches

#### TCO-47-01 - Latched Side-turn alarm cut-out (dash mount)

| Part No: | 4752 |

**Features**
- Single touch timed relay
- Allows driver to cut-out alarm between the hours of 11.30pm-7.00am
- Resets by switch or ignition

**Power**
- 12-24Vdc
- 2 year warranty

**Durability & standards**
- CE marked
- EMC approved

**Size (WxHxD)**
- 122 x 84 x 50mm
- 4.8 x 3.3 x 2 inches

### ALARM ANCILLARIES

#### NS-2 - Nightshift Backalarm cut-out switch

| Part No: | 0334 |

**Features**
- Double engage reverse to cut-out alarm
- Resets when reverse gear disengaged (longer time delay for NS-3)
- No wiring necessary to cab

**Power**
- 12-24Vdc
- IP68
- 2 year warranty

**Durability & standards**
- CE marked
- EMC approved

### ALARM ANCILLARIES

#### NS-3 - Nightshift Backalarm cut-out switch (auto gearbox)

| Part No: | 0974 |

**Features**
- Double engage reverse to cut-out alarm
- Resets when reverse gear disengaged (longer time delay for NS-3)
- No wiring necessary to cab

**Power**
- 12-24Vdc
- IP68
- 2 year warranty

**Durability & standards**
- CE marked
- EMC approved