



## ‘Noiseless’ reversing alarms.

Reversing alarms are vital for vehicle safety yet their very use can cause noise nuisance and irritation to workers and local residents, especially when used out of normal working hours.

The bbs-tek alarm emits a unique “shh... shh...” sound which solves the problem. Its broadband sound is multi-frequency, replacing the narrow frequency band of conventional alarms. Its sound is instantly locatable so you immediately know which vehicle is reversing and where it is coming from. So it is much safer than conventional narrowband alarms. It is directional, concentrating the sound in the danger area so reducing noise nuisance. Broadband sound also dissipates more quickly beyond the danger zone, so it is much less of a nuisance to local residents and is less likely to be ignored by workers due to over exposure to the warning sound.

Many major commercial organisations and government bodies have already recognized the dual benefits of fitting bbs-tek to their public service vehicles, mobile plant and trucks.

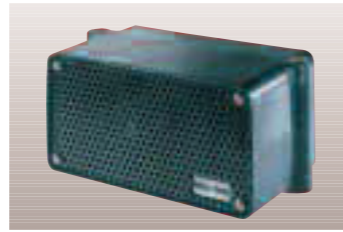
AS SEEN AND APPROVED BY  
THE NOISE ABATEMENT SOCIETY



## Broadband Sound Reversing Alarms

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All Broadband Sound Reversing Alarms have a LIFETIME WARRANTY.



BBS-107  
BBS-102

### Heavy Duty



Ideal for dump trucks, bulldozers, loading shovels and all heavy earthmoving machinery.

- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BBS-107	24	107	1.0	Driver	173x79x95	153
BBS-102	24	102	1.0	Driver	173x79x95	153



BBS-97  
BBS-92

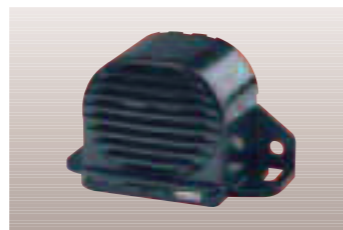
### Medium Duty



Ideal for trucks, buses and coaches, light mobile plant, forklift trucks and industrial vehicles.

- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BBS-97	12-24	97	0.5	Speaker	127x65x76	98-108
BBS-92	12-24	92	0.5	Speaker	127x65x76	98-108
BBS-87	12-24	87	0.5	Speaker	91x55x45	76
BBS-82	12-24	82	0.5	Speaker	91x55x45	76
<b>NIGHTSHIFT</b>						
BBS-90(NSR)	12-24	90-78	0.5	Speaker	127x65x76	98-108
<b>PETROL TANKERS</b>						
BBS-92(ADR)	12-24	92	0.5	Speaker	127x65x76	98-108



BBS-87  
BBS-82

### Electric Forklift Truck

#### Medium Duty



- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BBS-97HV	36-80	87	0.15	Speaker	127x65x76	98-108
BBS-92HV	36-80	82	0.15	Speaker	127x65x76	98-108
BBS-87HV	36-80	87	0.15	Speaker	127x65x76	98-108
BBS-82HV	36-80	82	0.15	Speaker	127x65x76	98-108



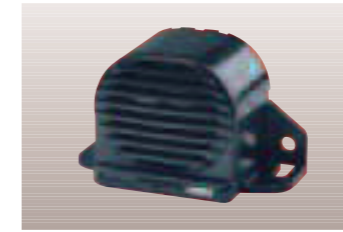
Medium Duty Broadband Alarms have a LIFETIME WARRANTY, Backchat and Constant Tone Alarms have a TWO YEAR WARRANTY.

**Medium Duty – Movement Indicators**



- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BBS-77	12-24	77	0.5	Speaker	91x55x45	76
BBS-72	12-24	72	0.1	Speaker	91x55x45	76
BBS-67	12-24	67	0.1	Speaker	91x55x45	76
BBS-62	12-24	62	0.1	Speaker	91x55x45	76



BBS-77  
BBS-72  
BBS-67  
BBS-62

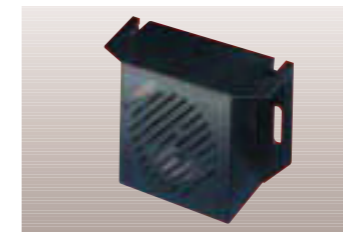
**bbs-tek® BACKCHAT® Speaking Reversing Alarms**



The reversing aid that speaks for itself! "Shh! Stand well clear, vehicle reversing..." Produces real speech with unrivalled quality and clarity. The voice is directional and commands attention, especially from children.

- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Dust/waterproof to IP68
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BBS-BC-01	12-24	90	0.4	Speaker	122x84x50	102



BBS-BC-01

**Constant Tone Alarms – Ideal as Forward Horns, In-Cab Warnings and other specialist applications**

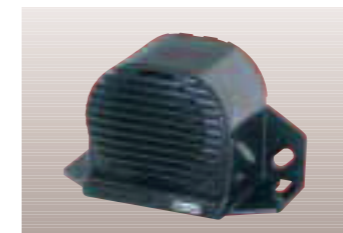
**Medium Duty**



Ideal for use as forward horn or other warning on a wide variety of specialist vehicles, forklift trucks and electric vehicles. Safer than a conventional horn, and eliminates noise nuisance and complaints. See page 5 for more information on the advantages of bbs-tek broadband sound alarms over conventional pure tone alarms.

- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
CT-BBS-97	12-24	97	0.3	Speaker	127x65x76	98-108
CT-BBS-92	12-24	92	0.3	Speaker	127x65x76	98-108
<b>HIGH VOLTAGE FORKLIFT TRUCK</b>						
CT-BBS-97HV	36-80	97	0.3	Speaker	127x65x76	98-108
CT-BBS-92HV	36-80	92	0.3	Speaker	127x65x76	98-108



CT-BBS-97  
CT-BBS-92  
CT-BBS-97HV  
CT-BBS-92HV





### Brigade Electronics – World leader in reversing alarms for over 30 years!

Brigade is pushing back the boundaries of reversing safety with its comprehensive range of reversing, speaking and constant tone alarms. The company that pioneered reversing safety in Europe leads the way with innovative technological and design advances.

The BACKALARM range is packed with product features that deliver true benefits to the user. These include improved reliability, increased sound pressure level accuracy, quicker and more accurate adjustment to ambient noise levels, easier and neater installation plus longer life.

#### Not all reversing beepers are the same!

Of the four types of sounder (Dome Speaker, Driver, Conventional Cone Speaker and Piezo) our unique and patented Dome Speaker design is the best option for high sound pressure level (SPL) models. It offers superb sound quality from a relatively low current consumption unit. It is tough, durable and guaranteed waterproof (IP68).

Next come Driver models. These are also tough, durable and guaranteed waterproof offering good sound quality for high SPLs. Conventional Cone Speakers are a good option for medium and low SPL models, but are unsuitable for high SPL models over 102dB(A). Most budget and light duty alarms use Piezo sounders, which are good for light duty applications but are not so tough or reliable and the SPL may reduce in low temperatures. Their piercing, high frequency sound may cause irritation and noise nuisance.

#### Lifetime Warranty

All new Brigade BACKALARMS come with a “no-quibble, fuss-free” lifetime warranty that covers the alarm for the life of the vehicle.

See page 60 for further details of Brigade Warranties across our product range.



All Self-Adjusting Backalarms have a LIFETIME WARRANTY. 9

### Self-Adjusting Smart BACKALARM® – Digital Self-Adjusting Volume

Takes the guesswork out of sound pressure level (SPL) selection. Ideal for vehicles or machines working in areas with widely differing ambient noise levels, where a fixed-volume reversing alarm will be either too quiet in loud environments (very hazardous), or too noisy in quiet environments (irritating and a nuisance).

Self-Adjusting Smart BACKALARMS, featuring digital sound sampling and a listening profile matched to worksite noise, are the world's most technically advanced self-adjusting reversing alarms. Continuous self-adjustment of their SPL reduces unnecessary loudness and irritation to operators and local communities. Self-Adjusting Smart BACKALARMS feature a small hidden and highly robust microphone by which they measure the ambient SPL. They then self-adjust their own SPL, up or down, to maintain just 5-10 dB louder. Loud enough to be heard, but not so loud as to cause a nuisance.

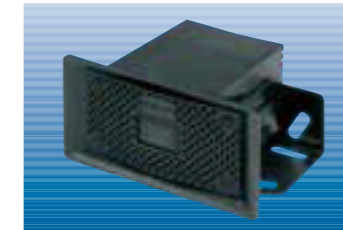
#### Heavy Duty



Ideal for dump trucks, bulldozers, loading shovels and all heavy earthmoving machinery. Features our unique and patented dome speaker. Double-reflex flared horn design for extra strength, durability, sound quality and constant sound pressure level (SPL), even under extreme temperatures.

- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
SA-800	12-24	87-112	0.3	Dome Speaker	156x85x108	111-114
SA-801	12-24	87-112	0.3	Dome Speaker	180x85x108	78-156
SA-600	12-24	82-107	0.3	Dome Speaker	127x80x80	92-112



SA-800  
SA-801  
SA-600

#### Medium Duty



For trucks, buses and coaches, light mobile plant and industrial vehicles. Carefully optimised frequency/loudness characteristics make these units clearly audible under typical working conditions without being a nuisance in the urban/highway environment.

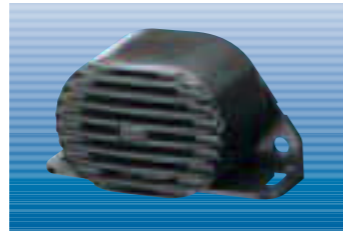
- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
SA-400	12-24	82-102	0.2	Speaker	100x72x32	76-82



SA-400





**BA-32 (NS)  
BA-42 (NS)  
BA-42(NS) ADR**

**NIGHTSHIFT™ Technology**

NIGHTSHIFT technology is our built-in override which enables reversing in built-up areas at night without disturbing local residents. Simply double-engage reverse gear quickly and the reversing alarm will either reduce in volume, or cut-out completely – depending upon the model selected. Resets automatically when reverse gear disengaged.

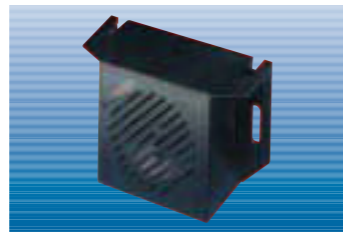
**NIGHTSHIFT™ BACKALARM® Reversing Bleeper**



For trucks, buses and coaches, light mobile plant and industrial vehicles. Carefully optimised frequency/loudness characteristics make these units clearly audible under typical working conditions without being a nuisance in the urban/highway environment.

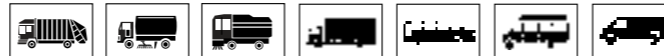
- Tough, durable, guaranteed waterproof (IP68)
- Conform to SAE J994 environmental standards
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BA-32(NS)	12-24	90/0	0.2	Speaker	91x49x41	76
BA-42(NS)	12-24	90/78	0.2	Speaker	91x49x41	76
<b>PETROL TANKERS</b>						
BA-42(NS)ADR	12-24	90/78	0.2	Speaker	91x49x41	76



**BC-01(NS)**

**NIGHTSHIFT™ BACKCHAT® Speaking Reversing Alarm**



The reversing aid that speaks for itself! "BLEEP! Stand well clear, vehicle reversing..." It reproduces real speech with unrivalled quality and clarity. The voice is directional and commands attention, especially from children. Ideal for all road vehicles.

- Dust/waterproof to IP68
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BC-01 (NS)	12-24	90/0	0.4	Speaker	122x84x50	102



**BLT-20(NS)  
BLT-20L(NS)**

**NIGHTSHIFT™ BACKALERT™ Combined Bleeper and Light**



The BACKALERT combined bleeper and light is as easy to install as changing a light bulb, giving the added safety of a reversing bleeper without the time, complication and cost of wiring and fitting. It uses a miniature 20 watt long-lasting halogen bulb with a silver-plated reflector and one of the smallest reversing beepers available anywhere. Simply replace one of your existing reversing light bulbs with a BACKALERT.

- Ideal for vans, minibuses and motorhomes

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	LIGHT
BLT-20(NS)	12	87/0	20 watt Halogen Bulb
BLT-20L(NS)	24	97/0	20 watt Halogen Bulb



**NS-2  
NS-3**

**NIGHTSHIFT™ Override Switches**

Can be used with any Brigade reversing alarm that does not already feature NIGHTSHIFT technology.

MODEL	VOLTS DC	SIZE (mm) (WxHxD)	LIGHT
NS-2	12-24	51x29x40	For manual gear boxes
NS-3	12-24	51x29x40	For auto gear boxes



Heavy and Medium Duty Fixed Volume Backalarms have a LIFETIME WARRANTY (except BA-32 which has a TWO YEAR WARRANTY).

**BACKALARM® – Fixed Volume**

**Heavy Duty**

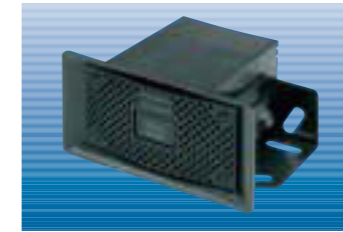


Ideal for dump trucks, bulldozers, loading shovels and all heavy earthmoving machinery. Features our unique and patented dome speaker (see page 8 for details). Double-reflex flared horn design for extra strength, durability, sound quality and constant sound pressure level (SPL), even under extreme temperatures.

Sound frequency of 1.9kHz is optimised for construction equipment. Lower frequency alarms are more likely to be masked by construction site noise, which is mainly lower frequencies of around 1.0kHz.

- Conform to SAE J994 environmental standards
- Tough, durable, guaranteed waterproof (IP68)
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

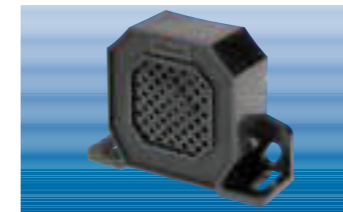
MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BA-890	12-24	112	0.5	Dome Speaker	156x85x108	111-114
BA-891	12-24	112	0.5	Dome Speaker	180x85x108	78-156
BA-680	12-24	107	0.3	Dome Speaker	127x80x80	92-112



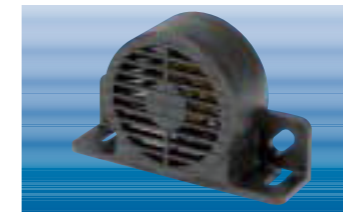
BA-890  
BA-891



BA-680

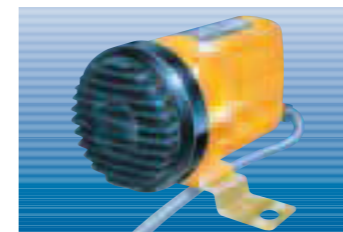


BA-470  
BA-460

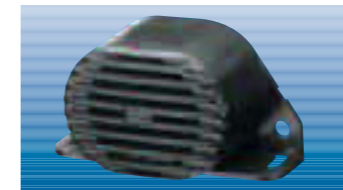


BA-170  
BA-160

BA-165  
BA-130



BA-13



BA-32



BA-760

**Medium Duty**



For trucks, buses and coaches, light mobile plant and industrial vehicles. Carefully optimised frequency/loudness characteristics make these units clearly audible under typical working conditions without being a nuisance in the urban/highway environment.

- Conform to SAE J994 environmental standards
- Tough, durable, guaranteed waterproof (IP68)
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- NightSilent model available (BA-165)
- Single bolt fitting available (BA-760)
- Can be steam-cleaned and pressure-hosed
- 100 v/m immunity (EMC)
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BA-470	12-24	102	0.3	Speaker	100x72x32	76-82
BA-460	12-24	97	0.2	Speaker	100x72x32	76-82
BA-170	12-24	102	0.3	Speaker	105x65x32	75-85
BA-160	12-24	97	0.2	Speaker	105x65x32	75-85
BA-165	12-24	97	0.2	Speaker	105x65x32	75-85
BA-130	12-24	87	0.2	Speaker	105x65x32	75-85
BA-13	12-24	90	0.3	Speaker	66x74x96	Single Bolt
BA-32	12-24	90	0.2	Speaker	91x49x41	76

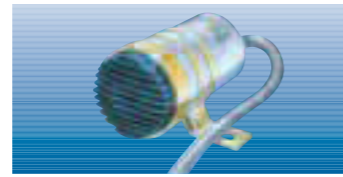
SINGLE (REAR) BOLT FITTING						
BA-760	12-24	97	0.2	Speaker	68x68x63	Single Bolt



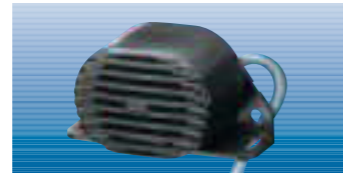
## Fixed Volume Tonal Reversing Alarms

12

BA-13PT has a LIFETIME WARRANTY, other models on this page have a TWO YEAR WARRANTY.



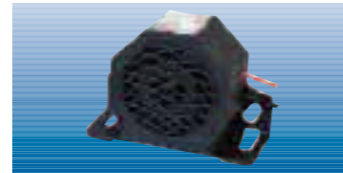
BA-13PT



BA-32ADR



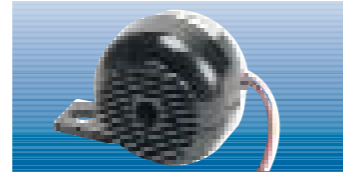
BA-57



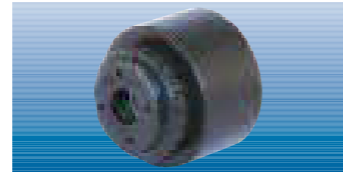
VRA-260



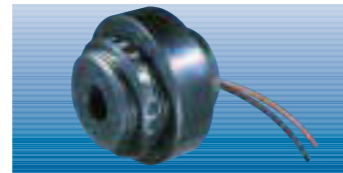
VRA-260(S), VRA-230(S)



VRA-390, VRA-390HV



VRA320NSR



VRA-320



VRA-320NS/NR MODULE

### ADR / Petroleum Tanker Specification



MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BA-13PT	12	90	0.2	Speaker	64x70x101	Single Bolt
BA-13PT	24	95	0.2	Speaker	64x70x101	Single Bolt
BA-32ADR	12-24	90	0.2	Speaker	91x49x41	76

Note: BA-13PT AND BA-32ADR models features special cable with braided armoured conduit to meet regulations.

### Light Duty



Suitable for most light vehicles and small forklift trucks. Includes an optional night-silent feature which automatically cuts out the bleeper when the vehicle lights are on.

- Electronics potted in epoxy against mud, water and vibration
- Dust proof/water resistant (IP66)
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BA-57	12-24	90	0.03	Piezo	48x60x48	Single Bolt

### Value Reversing Alarms



- Water resistant (IP67)
- 'e' marked (EMC)
- Mylar plastic speaker

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
VRA-260	12-80	97	0.08	Speaker	102x71x40	76-82
VRA-260(S)	12-80	97	0.08	Speaker	102x71x40	76-82
VRA-230(S)	12-80	87	0.08	Speaker	102x71x40	76-82

### Budget Reversing Alarms



- Water resistant (IP66)
- 'e' marked (EMC)
- Piezo ceramic sounder

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
VRA-390	12-24	90	0.05	Piezo	48x48x37	Single Bolt

#### FORKLIFT TRUCKS

VRA-390HV	36-80	90	0.5	Piezo	48x48x37	Single Bolt
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#### LIGHT CLUSTER FITTING

VRA-320NSR	24	90-78	0.2	Piezo	42x42x32	Single Hole
VRA-320	12-24	90	0.03	Piezo	40x40x31	Single Hole
VRA-320NS/NR	24	90-78	0.03	Piezo	40x40x31	44

Note: VRA-320NSR has an inbuilt NIGHTSHIFT sound reduction feature. VRA-320NS/NR module can be coupled with VRA-320 to provide NIGHTSHIFT sound reduction feature.

All Dual and Constant Tone Alarms have a TWO YEAR WARRANTY.

### Dual Function and Dual Tone Warning Alarms – Ideal for manlifts and specialist vehicles / machines

Dual tone alarms provide audible warning in hazardous areas associated with vehicles and mobile equipment. Dual tone sound warns of dangers specific to certain machines or equipment (lowering scissor lifts, rotating drive shafts, extending outriggers, etc.). Dual function alarms have two trigger wires and give both a conventional 'bleep' tone for reversing and either a dual tone or constant tone (depending on the model) warning for other dangers.

#### Medium Duty

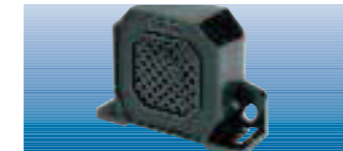


- Conform to SAE J994 environmental standards
- Tough, durable, guaranteed waterproof (IP68)
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

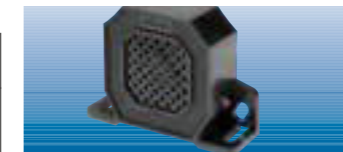
MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
DT-32	12-24	90	0.2	Speaker	91x49x41	76
DT-160	12-24	97	0.2	Speaker	105x65x32	75-85
DT-460	12-24	97	0.2	Speaker	100x72x32	76-82
DF-116	24	90	0.3	Speaker	105x65x32	75-85
DF-470	12-24	102	0.3	Speaker	100x72x32	82



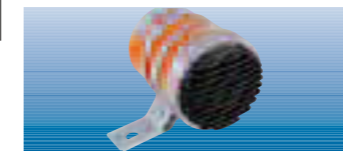
DT-32



DT-160



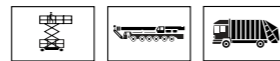
DT-460, DF-470



DF-116

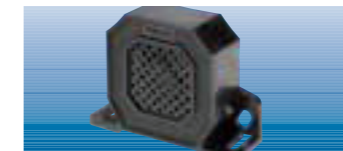
### Constant Tone Alarms – Ideal as Forward Horns, In-Cab Warnings and other specialist applications

#### Medium Duty



- Conform to SAE J994 environmental standards
- Tough, durable, guaranteed waterproof (IP68)
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
CT-470	12-24	102	0.3	Speaker	100x72x32	76-82



CT-470

#### Light Duty



- PCB fully potted in epoxy against mud, water and vibration
- Water resistant (IP66)
- CE and 'e' marked (EMC)
- Two metre twin core cable

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
CT-57TCA-2	12-24	90	0.02	Piezo	48x60x47	Single Bolt



CT-57TCA-2

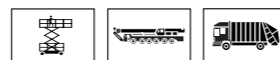


VCT-320



VCT-02

### Value Constant Tone Alarms and Forward Horns



- Water resistant (IP66)
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
VCT-320	12-24	90	0.05	Piezo	40x40x31	Single Bolt
VCT-02	24	90	0.05	Piezo	60x60x80	Single Bolt
VCT-012	12	85	0.05	Piezo	50x50x35	Single Bolt
VCT-024	24	85	0.05	Piezo	50x50x35	Single Bolt

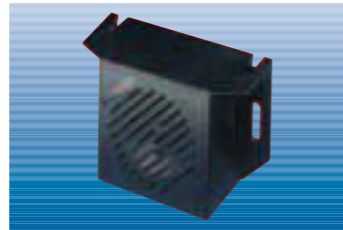


VCT-012/VCT-024

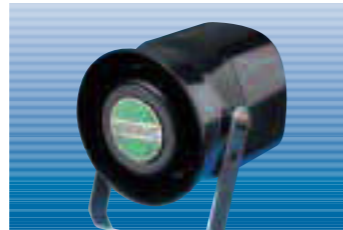
## Speaking Alarms

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All BACKCHAT and BACKALERT Alarms have a TWO YEAR WARRANTY.



**BC-01(NS) – Nightshift  
BC-01 – single message**



**BC-01HP – single message  
BC-02HP – twin message**



**BC-AA  
BC-AA(BUS)**

### BACKCHAT® Speaking Reversing Alarms



The reversing aid that speaks for itself! "BLEEP! Stand well clear, vehicle reversing..." It reproduces real speech with unrivalled quality and clarity. The voice is directional and commands attention, especially from children. Ideal for all road vehicles.

- Dust/waterproof to IP68
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- CE and 'e' marked (EMC)

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SOUNDER UNIT	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BC-01(NS)	12-24	90	0.4	Speaker	122x84x50	102
BC-01	12-24	90	0.4	Speaker	122x84x50	102
BBS-BC-01	12-24	90	0.4	Speaker	122x84x50	102
BC-01HP	12-24	110	0.4	Speaker	122x84x50	102
BC-02HP	12-24	110	0.4	Speaker	122x84x50	102

Single message = Reversing  
Twin message = Reversing and tail-lift lowering

### BACKCHAT® Speaking Attack Alarms



In moments of danger, the ATTACK ALARM is activated by a panic button. Its high sound level siren is followed by an urgent spoken message requesting assistance. The message is repeated continuously until deactivated by pressing the hidden 'off' switch.

- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- Dust/waterproof to IP67
- CE and 'e' marked (EMC)

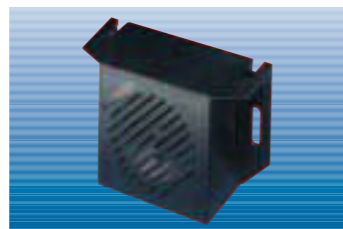
MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BC-AA	12-24	110	0.4	115x115x120	48
BC-AA(BUS)	12-24	110	0.4	115x115x120	48

### Bespoke Messages

Your own message eg: "Stand well clear Brigade vehicle reversing..." can be inexpensively incorporated into BACKCHAT Reversing Alarms and Attack Alarms.

Bespoke messages can be up to eight seconds long. Maximum speech quality is achieved with four seconds maximum messages.

MODEL	DESCRIPTION
BC-01(NS-B)	NIGHTSHIFT double-engage reverse gear single message (90dB)
BC-01(B)	Single bespoke message (90dB)
BC-02(B)	Two bespoke messages (90dB)
BC-01HP(B)	Single bespoke message (110dB)
BC-02HP(B)	Two bespoke messages (110dB)
BBS-BC-01(B)	bbs-tek Broadband Sound single bespoke message (90dB)
BC-AA(B)	Single bespoke attack alarm message (110dB)



**BC-01(H/Brake)  
BC-01(4W)(H/Brake)**

### BACKCHAT® Handbrake Warning Alarms



MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)
BC-01(H/Brake)	12-24	90	0.4	122x84x50	102
BC-01(4W)(H/Brake)	12-24	90	0.4	122x84x50	102

Message – "BLEEP, HANDBRAKE NOT APPLIED."

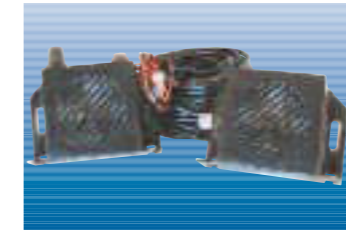


All BACKCHAT and BACKALERT Alarms have a TWO YEAR WARRANTY. 15

**BACKCHAT® Vehicle Intercom**

A two-way communication system, operating in either simplex (one way at a time) or duplex (two way) form. Master unit includes volume control. Provides clear, reliable communication and can be mounted internally or externally. Ideal for any vehicle on which the driver needs to communicate with others not in the cab; eg, refuse collection vehicle, horsebox, security vehicle, custodial transport, etc.

- Special circuitry to minimise background noise
- Solid-state, spark-free electronics, epoxy-sealed against mud, water and vibration
- Can be steam-cleaned and pressure-hosed
- Dust/waterproof to IP67
- CE and 'e' marked (EMC)



BC-VI  
BC-VI-2

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	CURRENT AMPS	SIZE (mm) (WxHxD)	HOLE CENTRE (mm)	OPERATING SYSTEM
BC-VI	12-24	80-95	0.4	122x84x50	102	SIMPLEX
BC-VI-2	12-24	80-95	0.4	122x84x50	102	DUPLEX

**Vehicle Intercom – Separate components**

MODEL	DESCRIPTION
BC-VI MASTER	12-24 Master unit
BC-VI SLAVE	Slave unit + 25 metres cable
BC-VI-2 MASTER	12-24 Master unit
BC-VI-2 SLAVE	Slave unit + 25 metres cable

**BACKALERT® Combined Bleeper and Light**

The BACKALERT combined bleeper and light is as easy to install as changing a light bulb, giving the added security of a reversing bleeper without the time, complication and cost of wiring and fitting. It uses a miniature 20 watt long-lasting halogen bulb with a silver-plated reflector and one of the smallest reversing beepers available anywhere. Simply replace one of your existing reversing light bulbs with a BACKALERT.



- Ideal for vans, minibuses, motorhomes, MPVs and cars



BLT-20  
BLT-20L

MODEL	VOLTS DC	SOUND LEVEL dB(A)@1m	LIGHT
BLT-20	12	87	20 watt Halogen Bulb
BLT-20L	24	97	20 watt Halogen Bulb

Also see NIGHTSHIFT models on page 10

**Switches and Timers**

MODEL	VOLTS DC	DESCRIPTION
TCO-47	12-24	Auto-reset cut-out
SW-16	-	Pigtail microswitch - electro-mechanical
PS/003	-	Magnetic proximity switch
SS/11/M	-	Mechanical 'swinging arm' switch
EC-009	12-24	In-Line timer, 4 or 8 seconds to cut-out
NS-2	12-24	Cut-out switch
NS-3	12-24	Cut-out switch for auto gear box
VRA-320NS/NR	12-24	Sound reduction module for BA-320

- 1 TCO-47 Auto-reset Backalarm cut-out. Dash-mounted single-touch timed relay. Allows driver to cut-out Backalarm if reversing on highway between 11.30pm-7.00am. Auto-resets after 3-4 mins. time delay.
- 2 SW-16 'Pigtail' microswitch. Easy installation adjacent to gearshift lever/linkage so that 'pigtail' tip is moved 1 inch.
- 3 PS/003 Magnetic Proximity Switch. Operates when magnet (fixed to gear linkage) is moved to within 0.5 inches or less of switch. 3 amps max rating.
- 4 EC-009 In-line timer. Allows Backalarm to sound for first few seconds only of reversing manoeuvre. (Choice of four or eight seconds.) Epoxy-sealed against mud, water and vibration.
- 5 NS-2/NS-3 NIGHTSHIFT Backalarm cut-out switch. Simply double-engage reverse gear quickly to deactivate the Backalarm. Re-sets when reverse gear disengaged. NS-3 has longer time delay for auto gear boxes. Epoxy-sealed against mud, water and vibration. Can be fitted in minutes alongside Backalarm at back of vehicle. **NO WIRING NECESSARY TO CAB.**

