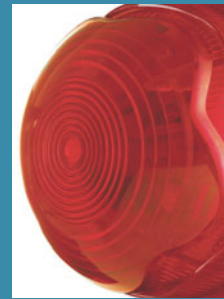


## Banshee Excel™ Sounder Range



Fire Alarms

Banshee

Electronic Sounders

BS 5839-1

FlashDome

Evacuation

Audible Alarm

EN 54-3

Beacons

# Banshee Excel™

The Banshee Excel™ range of sounders, beacons, sounder beacons and accessories represents the most modern, acoustically advanced and by far the most versatile range of conventional electronic sounders, combined units and dedicated beacons available on the market today.

All sounders and sounder beacons (apart from the Banshee Excel™ BD Bedroom Sounder) come with 32 user-selectable tones incorporating low frequencies, high frequencies, European, American and Australian norms and all industry-standard frequency patterns. Tested and approved to EN 54 Part 3, the Banshee Excel™ range boasts leading acoustics, aesthetically pleasing designs and low power consumption.



The Banshee Excel™ BS Base Sounder is the thinnest platform sounder on the market and is renowned for its 360° sound dispersal. The Banshee Excel Lite™ sounder beacon units offer all the functionality of the Banshee Excel™ sounders, together with either Xenon or LED beacon technology and several different coloured lenses to enhance the evacuation signal. The Banshee Excel™ FlashDome stand-alone beacon features ultra-efficient LEDs and is ideal for use in fire alarm systems which need to be upgraded or designed for conformity to DDA requirements. Together, the Banshee Excel™ products are unmatched for diversity and ease of installation.

The Banshee Excel™ range is complemented by a wide selection of accessories to suit all applications.

## Banshee Excel™ CH & PH Sounders

Banshee Excel™ is manufactured in flame retardant ABS and is available in three colours, making it suitable for a wide range of alarm and signalling applications.

The unit is available with two different sound modules; model CH is fitted with a professional capsule driven horn, whereas the PH version has an innovative and highly efficient piezo horn for lower-cost applications. All models use the push and twist bayonet fitting Banshee™ base.



- Available with two different horn options
- 32 user-selectable tones - industry standard compatible
- Very low current consumption
- EN 54-3 tested and compliant with the CPD
- VdS approved and LPCB approval pending
- Uses same bases as Banshee™ - simple push and twist bayonet mounting with locking screw
- Available in three colours - red, white or grey
- Easy to install with side and rear cable entry
- Robust 'two in two out' 2.5 mm<sup>2</sup> terminals
- Three selectable volume levels
- Rated to IP66 or IP45
- Extensive family of accessories for a wide range of applications
- Recyclable



## Banshee Excel™ BS Base Sounder

The slimmest sounder in its class, the Banshee Excel™ BS supplies true omni-directional sound output and is fully compatible with the other sounders in the range.



- 32 tones designed to be compatible with other Banshee Excel™ sounders
- EN 54-3 tested and compliant with the CPD
- Slimmest profile in the industry
- Low current consumption
- Available in white or ivory to match to detectors
- Omni-directional sound (see Polar Plot page 5)
- Front plate for stand-alone use available
- Three selectable volume levels
- Installer friendly terminals
- Ceiling or wall mounting
- Robust and easily connected 'two in two out' 2.5 mm<sup>2</sup> terminals
- Supplied with fixing screws



## Banshee Excel Lite™ CHX, CHL & PHL Sounder Beacons

The Banshee Excel Lite™ combines the aesthetics and performance of the Excel Sounder with either a very bright and efficient Xenon Beacon (CHX model) or a low-current LED Beacon (CHL & PHL models). The LED Beacon version is available with either the professional capsule driven horn (CHL) or the piezo horn (PHL) sounder.

Manufactured in flame retardant polymer, the units are available in a choice of base colours and up to 5 different lens colours, making it suitable for a range of fire and security dual notification applications as well as DDA-compliant installations. All models use the push and twist bayonet fitting BansheeMT base.

- Available with either Xenon or LED Beacon with a red or white body
- LED Beacon version available with two different sounder horn options
- Choice of lens colours (CHX: 5 colours, CHL: 3 colours, PHL: 2 colours)
- Sounder has 32 user-selectable tones - industry standard compatible
- Very low current consumption
- EN 54-3 tested and compliant with the CPD
- VdS approved and LPCB approval pending
- Easy to install with side and rear cable entry
- Robust 'two in two out' 2.5 mm<sup>2</sup> terminals
- Choice of three volume levels
- Rated to IP66 or IP45
- Uses same bases as Banshee™ - simple push and twist bayonet mounting with locking screw
- Extensive family of accessories for a wide range of applications
- Recyclable



Choice of lens colour:



## Banshee Excel™ FlashDome LED Beacon

The Banshee Excel™ FlashDome features ultra-efficient LEDs and is ideal for use in fire alarm systems which need to be upgraded or designed for conformity to DDA requirements.

The FlashDome is 100% compatible with the rest of the Excel Sounder and Sounder Beacon range and utilises the same shallow and deep bases and broad range of accessories.



- Ultra-efficient LEDs
- Very low current consumption
- Sleek, low-profile design
- Compatible with other Excel Sounders and Sounder Beacons and accessories
- Uses same bases as Banshee™ - simple push and twist bayonet mounting with locking screw

## Banshee Excel™ BD Bedroom Sounder

A low cost alternative for fire applications in hotels and residential environments.

- Low current - 7mA
- Available in white or red
- Fits standard 25 mm back box



# Specification

Model	Banshee Excel™ CH & PH	Banshee Excel Lite™ CHX, CHL & PHL	Banshee Excel™ BS	Banshee Excel™ FlashDome	Banshee Excel™ BD
Description:	Sounder	Sounder Beacon	Base Sounder	Beacon	Bedroom Sounder
Operating Voltage (Vdc):	9-30	9-30	9-30	10-28	24
Operating Voltage EN54-3 (Vdc):	24 (20 -28)	24 (20 -28)	24 (20 -28)	-	-
Tone Current Consumption (mA):	See Sound Output Table*	See Sound Output Table*	See Sound Output Table*	-	7 (Typical)
Flash Current Consumption (mA): <sup>#</sup>					
- @24 Vdc	-	40 (CHX), 16 (CHL & PHL)	-	5	-
- @12 Vdc	-	90 (CHX), 12 (CHL & PHL)	-	5	-
Sound Output (dBA Typ @1m):	See Sound Output Table*	See Sound Output Table*	See Sound Output Table*	-	90
Tones Available:	See Sound Output Table*	See Sound Output Table*	See Sound Output Table*	-	Fast Sweep: 750-850 Hz swept at 9 Hz Continuous: 815 Hz
Body Colours:	Red, White or Grey	Red or White	White or Ivory	Red	Red or White
Body Material:	Flame Retardant ABS	Flame Retardant ABS	Flame Retardant ABS	Flame Retardant ABS	Flame Retardant ABS
Lens Colour (Polycarbonate):	-	CHX: Red, Clear, Amber, Blue, Green CHL: Red, Clear, Amber PHL: Red, Amber	-	Red	-
Temperature Range (Deg C):	-40 to +70	-20 to +55 (CHX & CHL) -20 to +70 (PHL)	-40 to +70	-20 to +70	TBC
Environment Category / IP Rating:	Type A/IP45 Std Base Type B/IP66 Deep Base	Type A/IP45 Std Base Type B/IP66 Deep Base	Internal use only	Type A/IP45 Std Base Type B/IP66 Deep Base	Internal use only
Volume Control:	High, Medium (-10 dBA), Low (-20 dBA)	High, Medium (-10 dBA), Low (-20 dBA)	High, Medium (-6 dBA), Low (-12 dBA)	-	-
Light Output Rating (Cd):	-	TBC	-	1	-
Flash Rate (Per Second):	-	1	1	1	-
Termination:	Screw terminals for 0.28 mm <sup>2</sup> to 2.5 mm <sup>2</sup> wire conductor				

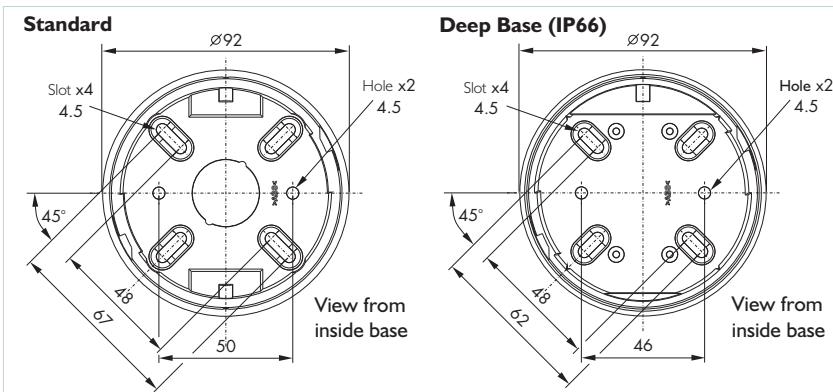
\* See Sound Output Table on back page of this document

<sup>#</sup>Flash current consumption is additional to sounder current, where applicable (CHX, CHL, PHL)

All units that use the common base meet minimum requirements of IP21C Shallow Base and IP33C Deep Base in accordance with EN54-3

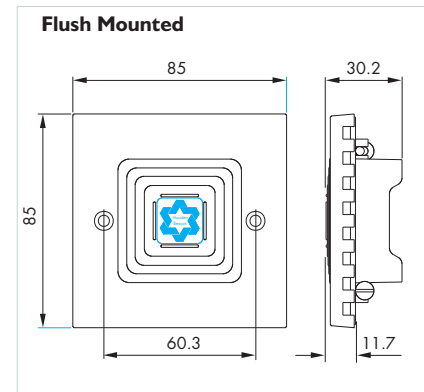
## Installation

### Banshee Excel™ Common Base

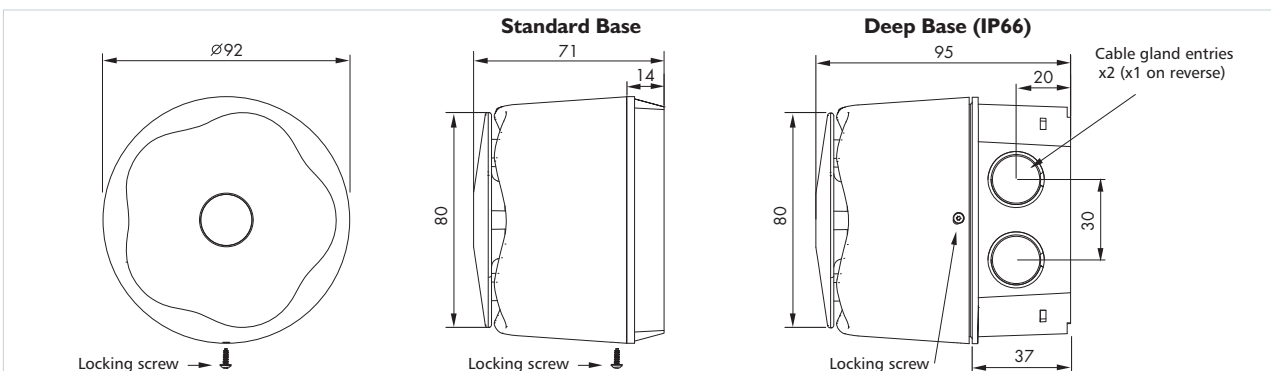


Used with Banshee Excel™ CH & PH, Banshee Excel Lite™ CHX, CHL & PHL and Banshee Excel™ FlashDome

### Banshee Excel™ BD Bedroom Sounder



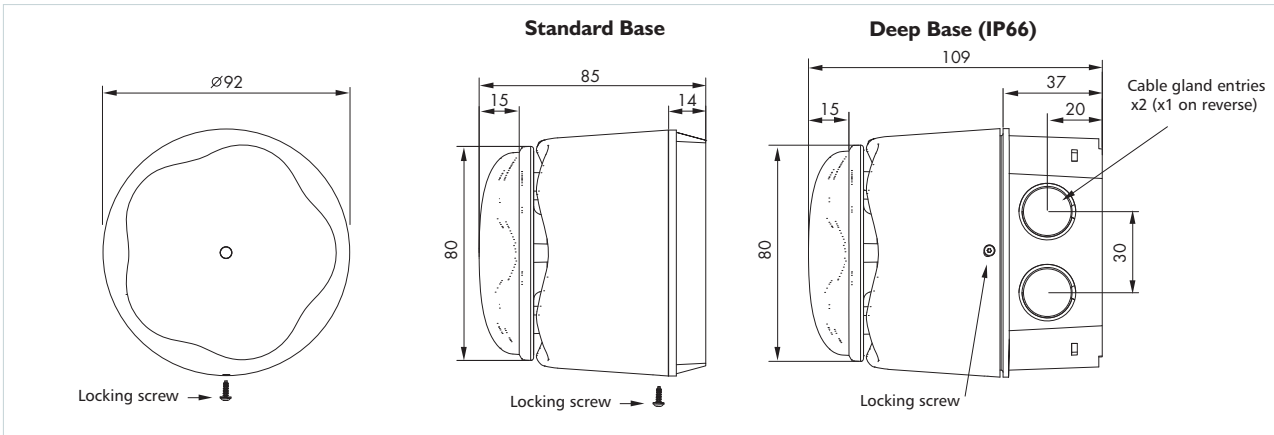
### Banshee Excel™ CH & PH Sounder



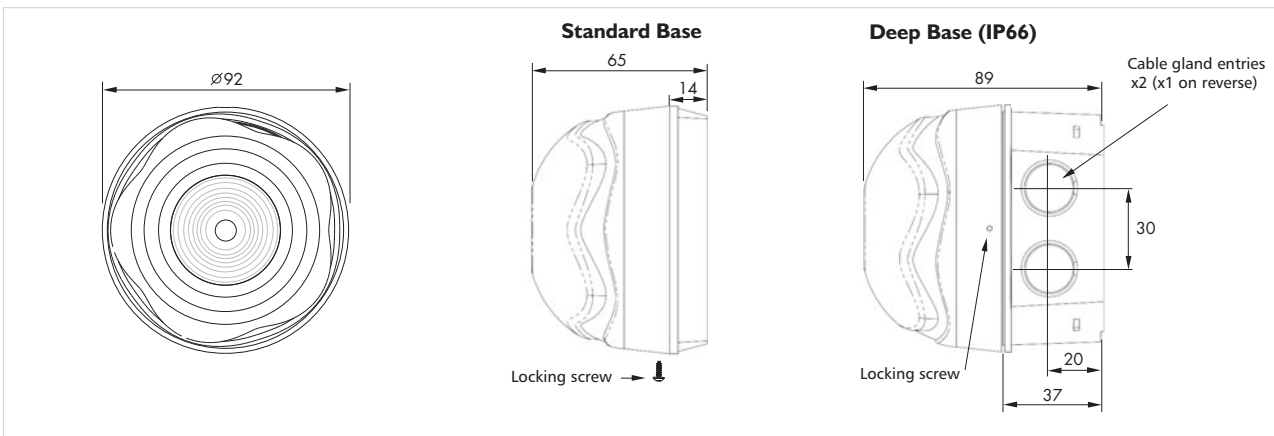
Dimensions (mm)

# Installation

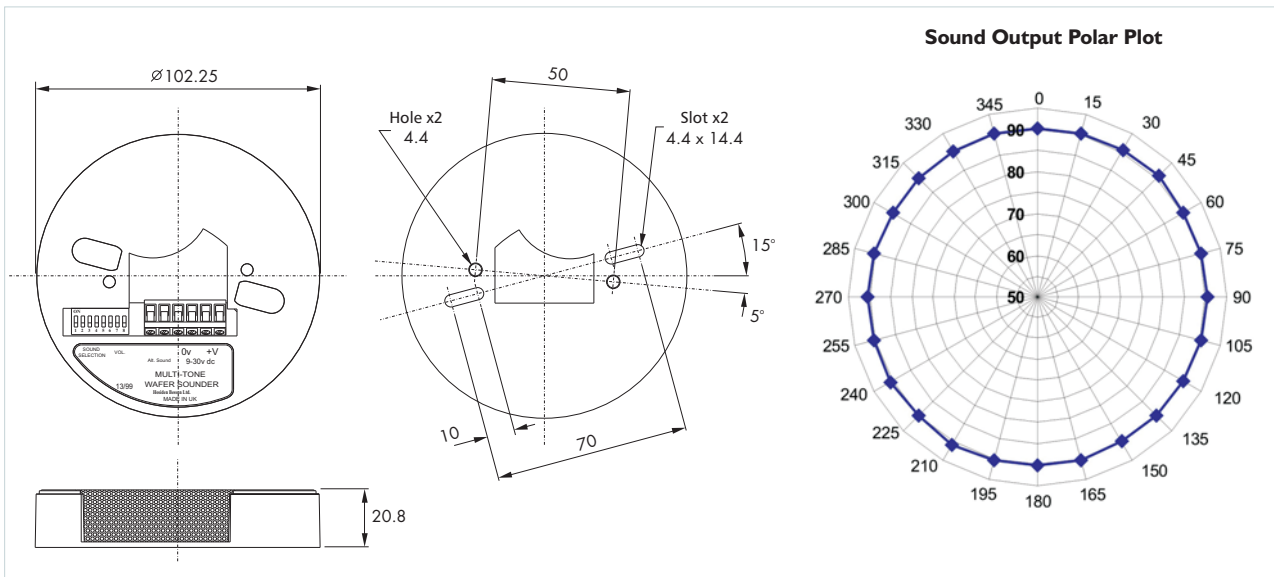
## Banshee Excel Lite™ CHX, CHL & PHL Sounder Beacon



## Banshee Excel™ FlashDome Beacon











## Banshee Excel™ BS Base Sounder



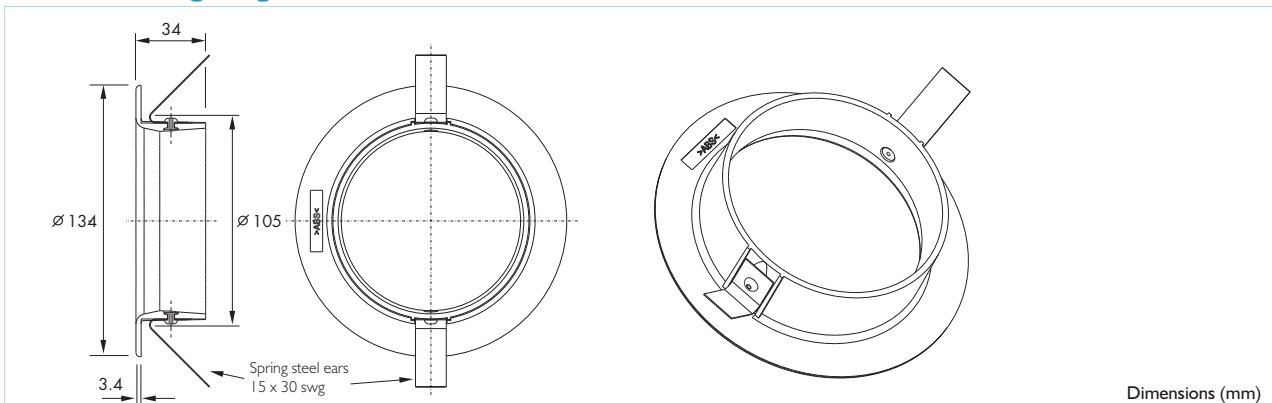
Dimensions (mm)

# Accessories

Accessory	Description	Part No.	Use with Banshee Excel™:							
			CH	PH	BS	BD	Lite CHX	Lite CHL	Lite PHL	FlashDome
	Flush Mounting Ring	8502900	■	■	□	□	■	■	■	■
	Combination Bracket	8503000	■	■	□	□	■	■	■	■
	Mains Pack 110/230 Vac to 24 Vdc	8502700	■	■	□	□	■	■	■	■
	Wall Fixing Clip	8503100	■	■	□	□	■	■	■	■
	Base Sounder Cable Spacing Ring	8502800	□	□	■	□	□	□	□	□
	Steel Web Stopper: Low Profile Cage (Supplied with full fixing kit)	S-9617	■	■	□	□	■	■	■	■
	Steel Web Stopper: Base Sounder - Surface Wiring Cage (Supplied with full fixing kit)	S-9605	■	■	■	■	■	■	■	■
	Steel Web Stopper: Base Sounder - Flush Wiring Cage (Supplied with full fixing kit)	S-9604	■	■	■	■	■	■	■	■

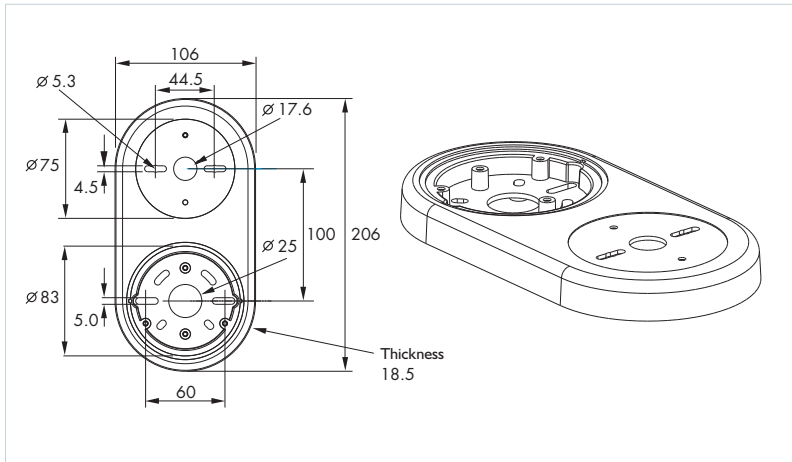
## Accessories Installation

### Flush Mounting Ring

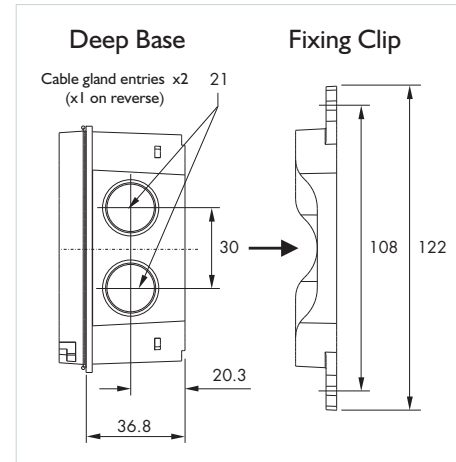


# Accessories Installation

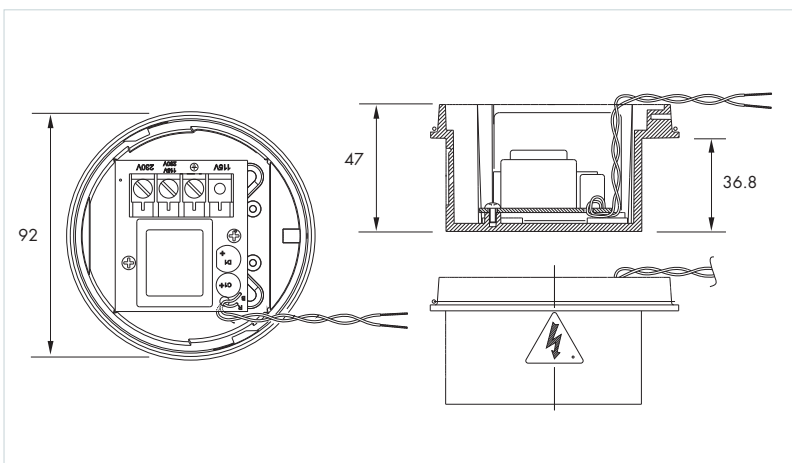
## Combination Bracket



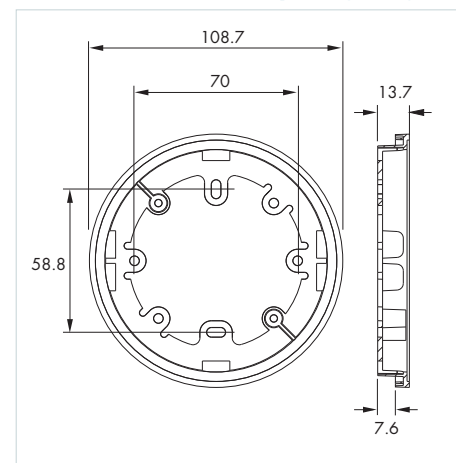
## Wall Fixing Clip & Deep Base



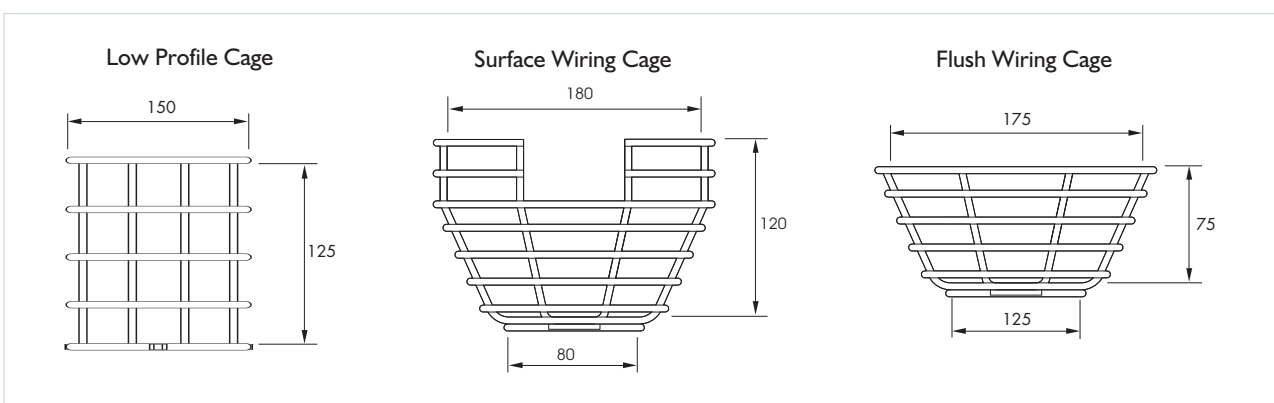
## Mains Pack



## Base Sounder Cable Spacing Ring



## Steel Web Stoppers



Dimensions (mm)

# Sound Output Table & Tone Specification

Tone Information				Banshee Excel™ CH				Banshee Excel™ PH				Banshee Excel Lite™ CHX				
				(12V)		(24V)		(12V)		(24V)		(12V)		(24V)		
No.	DIL SW 1 2 3 4 5	Description	Frequency and timing	2nd Tone	dBA	mA	dBA	mA	dBA	mA	dBA	mA	dBA	mA		
1	0 0 0 0 0	Banshee Buzz LF	800Hz to 950Hz swept at 120Hz	4	94	6	101	12	91	5	99	12	94	6	100	12
2	1 0 0 0 0	<b>Banshee Fast Sweep LF*</b>	<b>800Hz to 950Hz swept at 9Hz</b>	4	94	6	101	12	91	5	100	12	94	6	100	12
3	0 1 0 0 0	Banshee Slow Sweep LF	800Hz to 950Hz swept at 3Hz	4	94	6	101	12	92	5	100	12	94	6	100	12
4	1 1 0 0 0	Banshee Continuous LF	Continuous at 900Hz	4	94	6	101	12	92	6	100	14	94	6	100	12
5	0 0 1 0 0	Banshee Fast Sweep LF (New)	830Hz to 970Hz swept at 9Hz	4	95	6	101	12	92	5	100	12	93	6	100	12
6	1 0 1 0 0	<b>Medium Sweep LF*</b>	<b>800Hz to 970Hz swept at 1Hz</b>	7	96	6	101	12	93	5	101	13	94	6	100	12
7	0 1 1 0 0	Continuous LF	Continuous at 950Hz	7	96	6	102	13	90	5	95	10	94	6	99	13
8	1 1 1 0 0	Back Up Alarm LF	Intermittent at 950Hz 1 sec on, 1 sec off	4	96	8	102	14	90	5	95	10	93	6	99	14
9	0 0 0 1 0	Alternate LF	Alternating 800Hz/1000Hz at 1Hz	4	94	6	100	13	87	4	96	9	94	6	100	13
10	1 0 0 1 0	Medium Sweep LF	800Hz to 1000Hz swept at 0.5 secs	4	95	6	101	12	92	5	100	12	94	6	100	12
11	0 1 0 1 0	Alternate LF	Alternating Tones 800/950 at 3Hz	4	96	6	101	12	89	4	96	10	94	6	101	12
12	1 1 0 1 0	Banshee Buzz HF	2400Hz to 2900Hz at 120Hz	15	102	16	110	35	102	14	109	32	102	16	109	35
13	0 0 1 1 0	Banshee Fast Sweep HF	2400Hz to 2900Hz at 9Hz	15	103	17	110	35	102	13	109	30	103	17	110	35
14	1 0 1 1 0	Banshee Slow Sweep HF	2400Hz to 2900Hz at 3Hz	15	103	17	110	35	103	14	110	33	103	17	110	35
15	0 1 1 1 0	Banshee Continuous HF	Continuous 2900Hz*	15	103	19	110	39	98	8	104	17	103	19	109	39
16	1 1 1 1 0	Banshee Fast Sweep HF (New)	2450Hz to 3100Hz swept at 9Hz	15	103	18	110	36	102	12	109	27	103	18	109	36
17	0 0 0 0 1	Back Up Alarm HF	Intermittent at 2900Hz 1 sec on, 1 sec off*	15	104	18	110	36	99	8	105	17	103	18	109	37
18	1 0 0 0 1	Alternate HF	Alternating Tones 2400/2900 at 3Hz	15	104	16	110	36	99	10	105	23	104	17	110	36
19	0 1 0 0 1	<b>Slow Whoop*</b>	<b>500Hz rising to 1200Hz over 3.5 secs, silence 0.5 sec</b>	4	95	6	101	12	92	5	100	11	95	6	101	12
20	1 1 0 0 1	<b>Din Tone (DK)*</b>	<b>1200Hz falling to 500Hz over 1 sec, silence 10mS, repeat</b>	4	93	5	100	10	90	4	98	9	93	5	100	10
21	0 0 1 0 1	<b>French Fire Sound*</b>	<b>554Hz for 100mS and 440Hz for 400mS</b>	4	90	4	96	7	86	3	93	6	90	4	96	7
22	1 0 1 0 1	Australian Alert Signal	420Hz repeating 0.625 sec on, 0.625 sec off	4	89	3	95	6	81	3	88	5	89	3	94	6
23	0 1 1 0 1	Australian Evacuation Signal	500Hz to 1200Hz sweeping, 3.75 secs on, 0.25 secs off	4	95	6	103	12	92	5	100	11	95	6	101	12
24	1 1 1 0 1	US Temporal Tone LF	950Hz for 0.5 sec on, 0.5 sec off for 3 phases, silence for 1.5secs and repeat	4	95	5	101	10	90	4	95	8	93	5	99	10
25	0 0 0 1 1	US Temporal Tone HF	2900Hz for 0.5 sec on, 0.5 sec off for 3 phases, silence for 1.5secs and repeat	15	104	13	110	26	99	6	105	13	103	13	109	27
26	1 0 0 1 1	Swedish Tone (Fire)	Intermittent 660Hz 150mS on, 150mS off	26	90	3	96	6	76	3	83	5	90	3	96	6
27	0 1 0 1 1	Swedish Tone (All Clear)	Continuous 660Hz	27	91	5	97	9	77	4	83	8	91	5	97	9
28	1 1 0 1 1	ISO8201 LF	Intermittent 970Hz 500mS on, 500mS off	28	93	5	99	10	86	4	92	7	90	5	96	10
29	0 0 1 1 1	ISO8201 HF	Intermittent 2900Hz 500mS on, 500mS off*	29	103	13	110	27	99	6	105	13	103	13	109	27
30	1 0 1 1 1	BT Banshee (FP1063.1)	Yodel 800Hz/1000Hz, 0.25sec each frequency	31	93	6	100	12	87	4	96	10	94	6	100	12
31	0 1 1 1 1	BT Banshee (FP1063.1)	Continuous 1000Hz	31	90	6	96	14	84	4	89	9	88	6	94	14
32	1 1 1 1 1	Bell Tone	Bell Tone	32	96	12	101	25	88	5	94	10	94	12	99	25

				Banshee Excel Lite™ CHL				Banshee Excel Lite™ PHL				Banshee Excel™ BS				
1	0 0 0 0 0	Banshee Buzz LF	800Hz to 950Hz swept at 120Hz	4	94	6	100	12	90	4	98	11	85	6	91	13
2	1 0 0 0 0	<b>Banshee Fast Sweep LF*</b>	<b>800Hz to 950Hz swept at 9Hz</b>	4	94	6	100	12	90	4	99	11	84	6	90	13
3	0 1 0 0 0	Banshee Slow Sweep LF	800Hz to 950Hz swept at 3Hz	4	94	6	100	12	91	4	99	11	84	6	90	13
4	1 1 0 0 0	Banshee Continuous LF	Continuous at 900Hz	4	94	6	100	12	91	5	99	14	84	6	90	13
5	0 0 1 0 0	Banshee Fast Sweep LF (New)	830Hz to 970Hz swept at 9Hz	4	93	6	100	12	91	5	99	11	84	6	90	13
6	1 0 1 0 0	<b>Medium Sweep LF*</b>	<b>800Hz to 970Hz swept at 1Hz</b>	7	94	6	100	12	92	5	99	11	84	6	90	13
7	0 1 1 0 0	Continuous LF	Continuous at 950Hz	7	94	6	99	13	89	5	95	11	84	7	90	14
8	1 1 1 0 0	Back Up Alarm LF	Intermittent at 950Hz 1 sec on, 1 sec off	4	93	6	99	14	89	5	95	11	84	4	90	8
9	0 0 0 1 0	Alternate LF	Alternating 800Hz/1000Hz at 1Hz	4	94	6	100	13	87	4	95	10	84	7	90	14
10	1 0 0 1 0	Medium Sweep LF	800Hz to 1000Hz swept at 0.5 secs	4	94	6	100	12	91	4	99	11	84	6	90	13
11	0 1 0 1 0	Alternate LF	Alternating Tones 800/950 at 3Hz	4	94	6	101	12	89	5	96	10	84	7	90	14
12	1 1 0 1 0	Banshee Buzz HF	2400Hz to 2900Hz at 120Hz	15	102	16	109	35	100	13	108	30	90	15	96	30
13	0 0 1 1 0	Banshee Fast Sweep HF	2400Hz to 2900Hz at 9Hz	15	103	17	110	35	101	12	108	29	92	15	98	30
14	1 0 1 1 0	Banshee Slow Sweep HF	2400Hz to 2900Hz at 3Hz	15	103	17	110	35	102	13	109	30	90	15	96	30
15	0 1 1 1 0	Banshee Continuous HF	Continuous 2900Hz*	15	103	19	109	39	98	15	103	27	94	13	100	30
16	1 1 1 1 0	Banshee Fast Sweep HF (New)	2450Hz to 3100Hz swept at 9Hz	15	103	18	109	36	101	12	108	27	87	14	94	31
17	0 0 0 0 1	Back Up Alarm HF	Intermittent at 2900Hz 1 sec on, 1 sec off*	15	103	18	109	37	98	12	103	27	95	8	101	16
18	1 0 0 0 1	Alternate HF	Alternating Tones 2400/2900 at 3Hz	15	104	17	110	36	98	11	105	23	94	13	100	28
19	0 1 0 0 1	<b>Slow Whoop*</b>	<b>500Hz rising to 1200Hz over 3.5 secs, silence 0.5 sec</b>	4	95	6	101	12	91	5	99	12	88	5	95	10
20	1 1 0 0 1	<b>Din Tone (DK)*</b>	<b>1200Hz falling to 500Hz over 1 sec, silence 10mS, repeat</b>	4	93	5	100	10	89	4	97	9	87	5	93	10
21	0 0 1 0 1	<b>French Fire Sound*</b>	<b>554Hz for 100mS and 440Hz for 400mS</b>	4	90	4	96	7	85	3	92	6	84	4	90	8
22	1 0 1 0 1	Australian Alert Signal	420Hz repeating 0.625 sec on, 0.625 sec off	4	89	3	94	6	81	3	87	5	83	3	90	5
23	0 1 1 0 1	Australian Evacuation Signal	500Hz to 1200Hz sweeping, 3.75 secs on, 0.25 secs off	4	95	6	101	12	91	5	99	10	88	5	94	10
24	1 1 1 0 1	US Temporal Tone LF	950Hz for 0.5 sec on, 0.5 sec off for 3 phases, silence for 1.5secs and repeat	4	93	5	99	10	89	4	95	9	84	4	90	8
25	0 0 0 1 1	US Temporal Tone HF	2900Hz for 0.5 sec on, 0.5 sec off for 3 phases, silence for 1.5secs and repeat	15	103	13	109	27	98	9	103	20	95	6	101	13
26	1 0 0 1 1	Swedish Tone (Fire)	Intermittent 660Hz 150mS on, 150mS off	26	90	3	96	6	75	3	81	5	86	3	92	6
27	0 1 0 1 1	Swedish Tone (All Clear)	Continuous 660Hz	27	91	5	97	9	75	4	84	9	87	5	93	10
28	1 1 0 1 1	ISO8201 LF	Intermittent 970Hz 500mS on, 500mS off	28	90	5	96	10	85	8	91	9	83	4	91	8
29	0 0 1 1 1	ISO8201 HF	Intermittent 2900Hz 500mS on, 500mS off*	29	103	13	109	27	97	9	102	20	95	8	101	17
30	1 0 1 1 1	BT Banshee (FP1063.1)	Yodel 800Hz/1000Hz, 0.25sec each frequency	31	94	6	100	12	87	4	96	9	84	7	90	14
31	0 1 1 1 1	BT Banshee (FP1063.1)	Continuous 1000Hz	31	88	6	94	14	80	4	87	10	84	8	90	16
32	1 1 1 1 1	Bell Tone	Bell Tone	32	94	12	99	25	87	5	93	11	80	6	87	12

Notes:

\*Tones highlighted in bold are approved under the Construction Product Directive.

Sound output (dBA) and current (mA) values are typical.



Quality System Certificate No. 456  
Assessed to ISO 9001:2000

