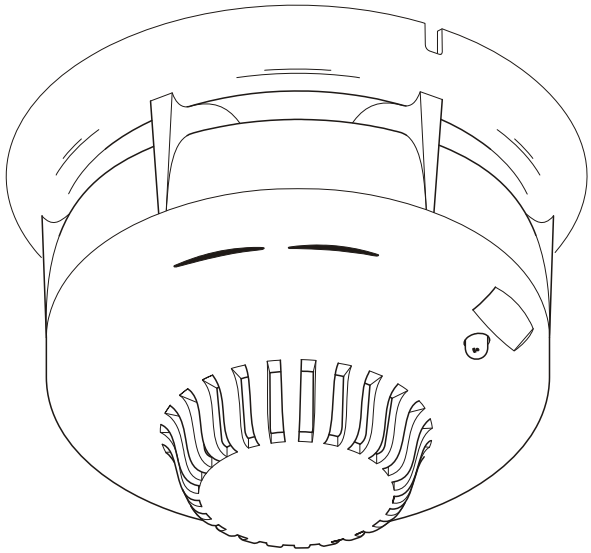

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Product Description

Description

Across the world disability legislation increasingly requires visual alarm signals to be employed to ensure equal response from people with hearing impairment. With sound levels conforming to EN54 Part 3 in addition to the visual indication, the ZP755BV-3 Addressable Sensor Base Sounder Beacon is perfectly suited for use where disability legislation is in force or where high levels of background noise exist.

Application

It provides both audible and visual warnings from a single, addressable, loop wired unit.

Featuring an identical profile to the ZP755B sensor base sounders, the ZP755BV-3 can minimise the number of installation points required throughout a building, significantly lowering both the capital value of equipment and the loop wiring costs of the completed system.

The ZP755BV-3 features the wide sound distribution design, with an 'all around' sound output of 90 dBA. The unit's high efficiency acoustic design and sound transducer as well as the low current Light Emitting Diode (LED) visual element, enables combinations of up to 35 sounder beacons to be connected to a one kilometre loop of 1.5 mm^2 cable. A plug-in base accepts all loop and screen connections, prior to the sounder/beacon connection. A volume control is included for areas where a reduced sound output is required.

The ZP755BV-3 range features a unique self-test facility - automatically activated during routine sounder testing. A built in microphone circuit measures sound output level and automatically signals the sounder address and location to the control panel, should volume fall below the expected test level.

In systems where loop lengths or current requirements are excessive, ZP755BV-3 sounders can be powered directly from an external power supply. All ZP755BV-3 sounders incorporate switch settings enabling them to be assigned a unique address, which is polled by the panel every two seconds.

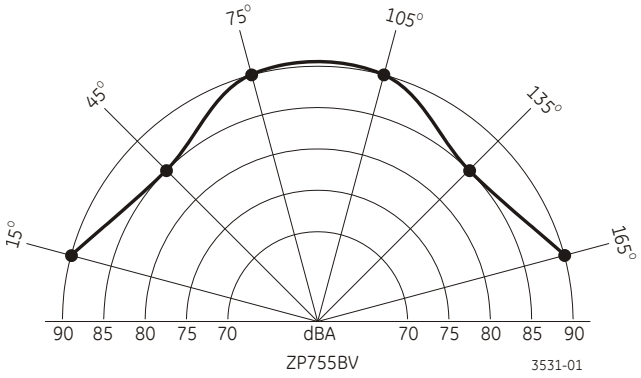
All sound types comply with BS 5839 Part 1:1988 recommended frequencies (in accordance with EN54 Part 3).

Moulded in high impact thermoplastic, the sounder is available in white.

Specifications

Design Specification:	EN54 Part 3
Designation:	Addressable Sensor Base Sounder/Beacon
Model No./Part No.	
ZP755BV-3 (white):	178901
Compatibility:	All Ziton analogue addressable systems
Mounting	Surface - with plug-in base
SPB-2W (white):	180901
SPB-2G (grey):	181001
Addressing method:	7-way Dipswitch
Wiring:	2-core loop
Monitoring:	
Sound output level –self-test facility	
Operating power level tested continuously	
Sound output:	Wide

CNPP anechoic sound levels



Operating voltage:	External supply – 18 to 30 VDC
	Loop supply – ZP protocol 19.5 - 20.5 V pulsed, max. 4 V line loss

Current (line powered)

Quiescent (RMS):	500 µA
Alarm (RMS):	6 mA
Alarm (maximum avg. - excl. device address):	14 mA
Alarm (maximum at device address):	14 mA

Current (externally powered)

Quiescent (RMS):	470 µA
Alarm (RMS):	500 µA
Max number:	35 per 1 km loop (subject to cable size and sounder spacing)
Strobe frequency:	Flash rate 1.1 seconds
Light output:	Less than 1J xenon element

Tone Name	Description	Freq Hz	Cycle time (freq)
UK-conts	Continuous (UK)	980	Continuous
UK-inter	Intermittent fast 0.5s (UK)	980	1s (1 Hz) 0.5s on 0.5s off
UK-dual	Two tone (UK)	980 670	0.5s tone 1 0.5s tone 2
Australia	Slow whoop ascending	500-980	4s
Australia ISO7731	Alert	440	0.55s on, 0.55s off ± 10%
Sweden	Fast pulse	670	0.33 – 0.55s (3-4 Hz) Pulse ratio >0.35 < 0.7
Netherlands	Slow whoop ascending	500-1200	4s 3.5s on 0.5s off
ISO	Temporal ISO8201 3 pulse+wait	980	4s 0.5s on/0.5s off 1.5s wait
France	Two tone	554 440	90-110ms 380-420ms = 500 ms ± 5%
Germany	Fast whoop descending	1200-500	1s no “off”
Silent+Beacon	Silent		

Environmental

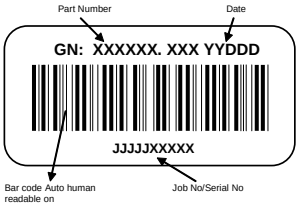
Application:	Indoor use
EN60529 rating:	IP21C
Temp. range:	-10 to 70 °C
Humidity range:	10% to 95% RH (non-condensing)

Construction

Material:	Moulded thermoplastic
Dimensions (∅ x D):	127 x 47 mm incl. plug-in base
Colour:	White
Weight:	156 g

Manufacturer traceability

A barcode label is affixed to each product (see example below). This label reflects, amongst other things, the date of manufacture of the product in the form YYDDD.



These numbers are interpreted as follows:

YY = year of manufacture

DDD = day of manufacture

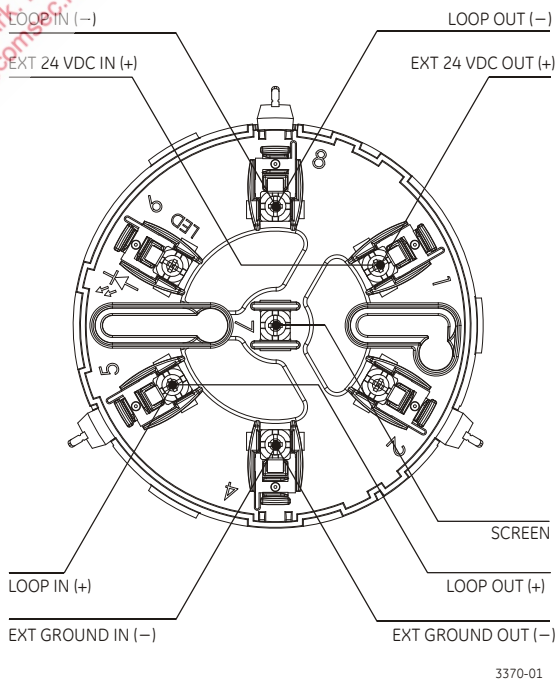
For example the numbers 07134 would indicate that the product was manufactured on the 134th day of the year 2007, that is 14th May 2007.

Physical installation

Connecting wiring

Loop wiring for the plug-in base. There is no wiring between the sounder and plug-in base. See Figure 1, plug-in base supplied separately.

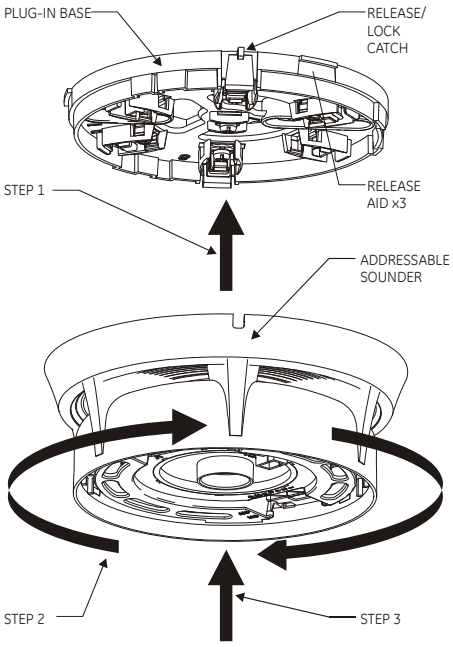
Figure 1



Mounting the sounder

Align the addressable sounder to the plug-in base. Push up (step 1) and turn the sounder until it clicks into place (step 2). Push the sounder up once more to engage (step 3). See Figure 2 on the next page.

Figure 2



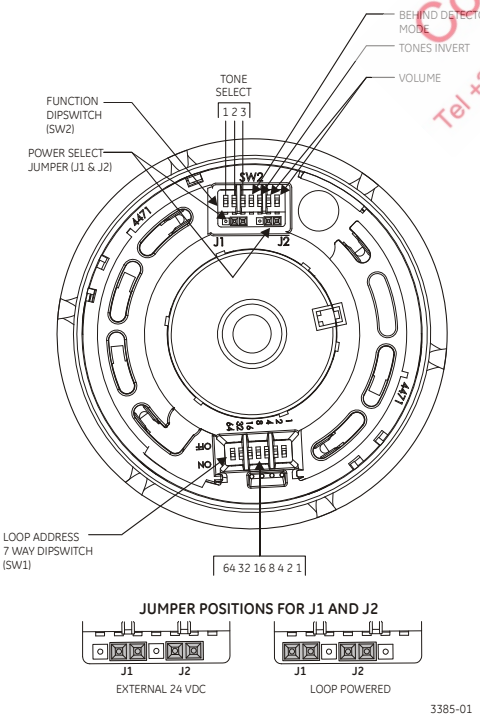
Operating power

The ZP755BV-3 can be powered directly from its address loop (setting 1), or externally from a 24 VDC supply (setting 2). See Figure 3 below.

Setting the address

The switch is used to set the device address in binary code. The switch may be set to represent all addresses from 1 to 127. See Figure 3 below.

Figure 3



Operating modes

The ZP755BV-3 sounder has 2 modes of operation, which are selected using switch 4 on dipswitch SW2. It may be operated as a dedicated sounder or with a ZP detector fitted. See Figure 3 in the adjacent column.

1. Operation as a stand-alone sounder

Own unique loop address	Switch 4 = OFF

1.1 Navigate to the following menu to tag the sounders as SAB:

ZP3 Panel Menu/Setup/Sounders/SAB/Add SAB.

The Planner program can also be used.

1.2 To map an alert to evac function the first input type must be a fast flash input. The sounder will sound the alert tone in response to a fast flash input. The sounder will sound the evac tone when the input configured as steady is triggered, overriding the alert tone.

2. ZP755 Sounder with detector fitted

Address matched to detector address	Switch 4 = ON

2.1 Navigate to the following menu to configure the sounder for use with a detector:

ZP3 Panel Menu/Setup/Sounders/Add SAB.

The Planner program can also be used.

2.2 Only one sounder option will be available, i.e. secondary sound types.

2.3 If a sounder is set to the same address as a detector, then the sounder will sound automatically when that detector operates. All other required operations must be programmed at the panel.

Note: The secondary tone will be selected whether triggered by a fast flash or steady flash.

Tone settings

See Figure 4 below.

Two different tones can be programmed to operate from the panel. In ZP755BV-3 mode these tones are selected using switches 1, 2 and 3 on the function dipswitch SW2.

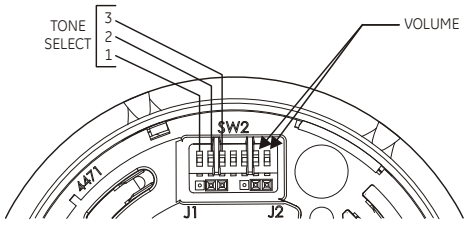
For mode selection, refer to Operating modes.

Note: In the ZP panel I/O mapping menu, outputs are programmed as "steady" or "flashing". The link to the table on the following page is as follows:

Tone A = Panel setting "steady."

Tone B = Panel setting "fast flash/slow flash."

Figure 4



Device mode		DIP Switch setting (1) (2) (3)	Tone Invert setting Switch 5	Mapping input type	
				Fast flash	Steady
				Tone Type	
				Tone A primary/alert	Tone B secondary/evac
ZP755	0		ON	UK intermittent	UK continuous
ZP755	1		ON	UK continuous	UK two - tone
ZP755	2		ON	UK two - tone	UK intermittent
ZP755	3		ON	AUST whoop	AUST alert
ZP755	4		ON	SWE	NED
ZP755	5		ON	ISO	FRA
ZP755	6		ON	GER	Silent
ZP754	7		ON	UK intermittent	UK continuous

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Tone invert setting

By using switch 5 on the function dipswitch SW2 the selected Tone A and Tone B can be interchanged.

Note: This switch will be factory set to ON as shown in Figure 4.

Volume dipswitch settings

Level 1 being the lowest volume level, and level 4 the highest.

- 00 – level 1
- 01 – level 2
- 10 – level 3
- 11 – level 4

Number of sounders per loop

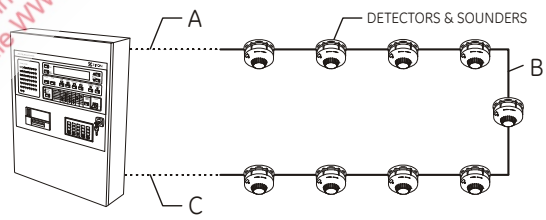
See Figure 5.

The ZP755BV-3 sounder can be powered directly from the loop of a ZP3 panel. The table below, read in conjunction with figure 5, gives the quantity of detectors and sounders that can be connected to a 2 core screened loop of:

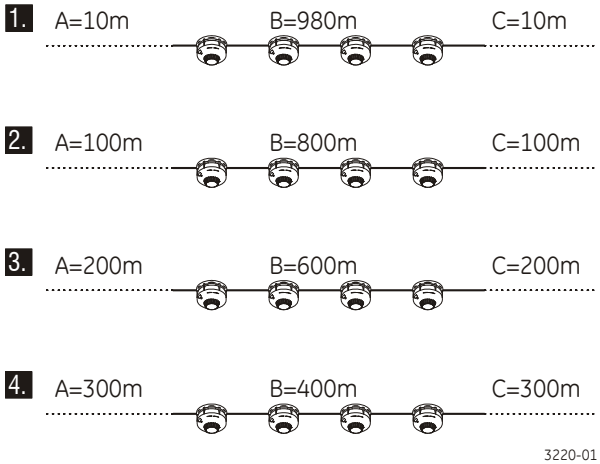
1000 metres cable size 1.5 mm²

1. **10 metres panel to devices**
   60 detectors and 35 sounder beacons
   90 detectors and 30 sounder beacons
2. **100 metres panel to devices**
   50 detectors and 35 sounder beacons
   90 detectors and 30 sounder beacons
3. **200 metres panel to devices**
   40 detectors and 35 sounder beacons
   90 detectors and 30 sounder beacons
4. **300 metres panel to devices**
   40 detectors and 30 sounder beacons
   90 detectors and 25 sounder beacons

Figure 5



A = Cable length panel to first sounder
B = Cable length first to last sounder
C = Cable length last sounder to panel



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