

993363-01.cdr



## 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. Conforming to EN54 Part 3, the ZP755HAV-2 Addressable Sounder Beacon is perfectly suited for this application and indeed any involving high levels of background noise.

### Application

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

Featuring an identical profile to the ZP755 HA horn sounder, the ZP755HAV 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 units high efficiency acoustic design and sound gun transducer as well as the low current Light Emitting Diode (LED) visual element, enables combinations of up to 20 sounder beacons to be connected to a one kilometer loop of 1.5mm<sup>2</sup> cable. A plug-in base accepts all loop and screen connections, prior to the horn sounder beacon connection.

The ZP755HAV-2 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, ZP755HAV-2 sounders can be powered directly from an external power supply. All ZP755HAV-2 sounders incorporate switch

settings enabling them to be assigned a unique address, which is polled by the panel every two seconds.

Continuous, intermittent and two-tone outputs are available, from which any combination can be chosen to provide alert and evacuate, two stage alarms. All sound types comply with BS 5839 Part 1:1988 recommended frequencies (in accordance with EN54 Part 3).

The ZP755HAV-2 features the wide sound distribution design, with an 'all around' sound output of 90 dBA.

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

## Specifications

Design specification: EN54 Part 3  
Designation: Addressable Omni-directional Sounder Beacon

Model No/Part No.:

ZP755HAV-2R (Red) 178001

ZP755HAV-2W (White) 178101

Compatibility: All ZP3 analogue addressable systems

Mounting: Surface - with plug-in base

SPB-2R (red) 180801

SPB-2W (white) 180901

Addressing method: 7 way Dip switch

Wiring: 2 core loop

Monitoring: ZP loop - open and short circuit  
fault sound output level - self test facility

Sound output:

Tone 1 continuous 980 Hz

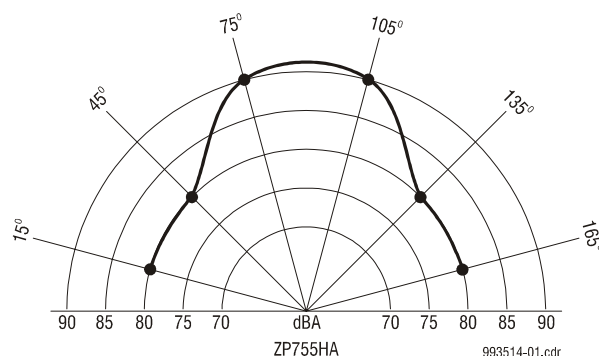
Tone 2 intermittent 980 Hz (0.5 secs on/off)

Tone 3 two tone warble 980 Hz/670 Hz

Sound distribution:

ZP755HAV wide

CNPP anechoic sound levels:

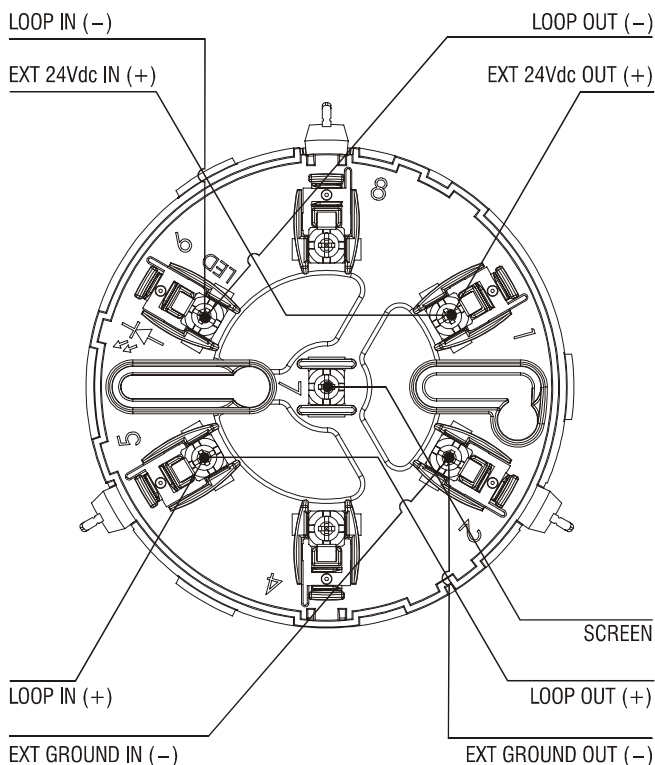


Operating voltage: 16 – 24 volts, pulsed address line  
 Current (quiescent): 800µA  
 Current (average active): 11 mA  
 Max number: 20 per 1km loop (subject to cable size and sounder spacing)  
 Light output: Equivalent to 1J xenon element  
 Frequency: flash rate 1.3 seconds  
 Environmental:  
 Application: Indoor use  
 EN60529 rating: IP50  
 Temp range: -10°C to 70°C  
 Humidity range: 10% to 95% RH (non condensing)  
 EMC: CE marked  
 Construction:  
 Material: Moulded thermoplastic  
 Dimensions: 127mm (Dia) x 113mm (D)  
 Colour: White or red  
 Weight: 305g

## Physical Installation

### Connecting Wiring

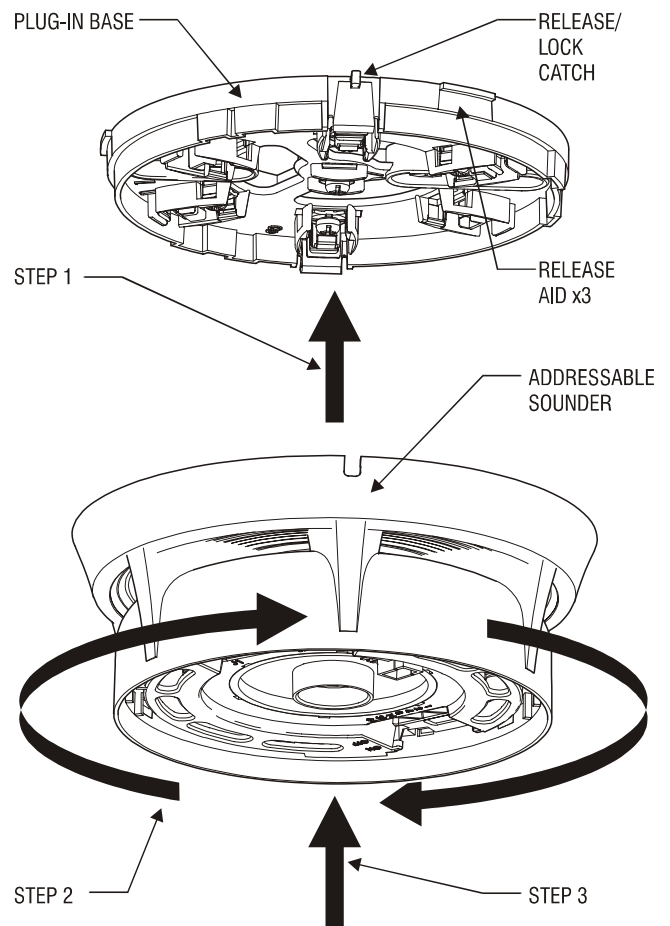
Loop wiring for the plug-in base. There is no wiring between the sounder and plug-in base. See Figure 1 below. Plug-in base supplied separately.



**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 below.



993367-01.cdr

**Figure 2**

### Operating Power

The ZP755HAV-2 can be powered directly from its address loop (setting 1), or externally from a 24 Vdc supply (setting 2). See Figure 3.

### 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.

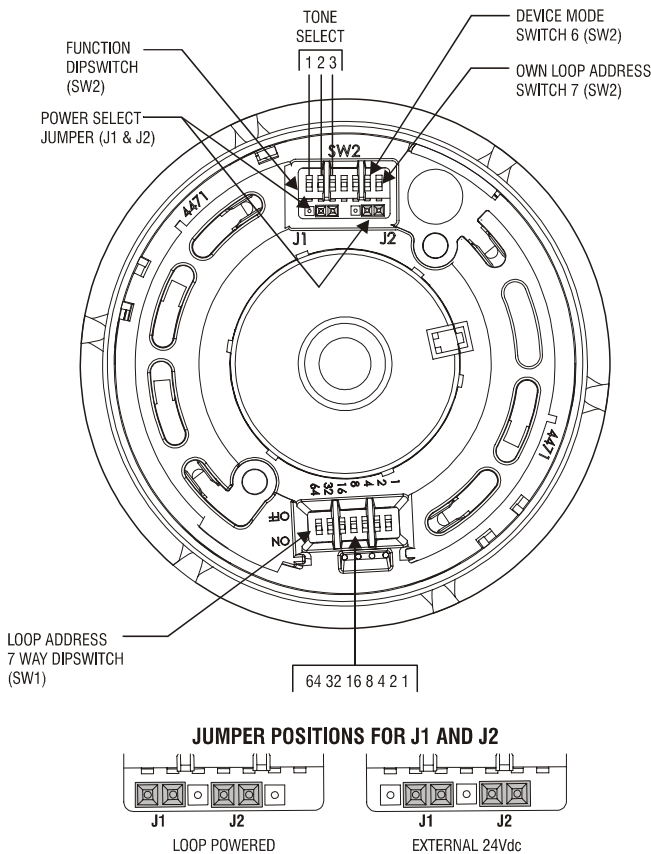


Figure 3

Operating Modes

The ZP755HAV-2 sounder has 2 modes of operation, which are selected using switch 7 on dipswitch SW2. It may be operated as a dedicated sounder or with a detector fitted. See Figure 3.

1. Operation as a stand alone sounder

Own unique loop Address	Switch 7 = ON
-------------------------	---------------

- 1.1 Navigate 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.

Emulation

The ZP755HAV-2 can operate as a ZP755HAV-2 or emulate a ZP754. See Figure 4.

1. ZP755 mode

Set switch 6 (dipswitch SW2) to OFF. Provides user selectable 2-tone operation and full monitoring. Operates with ZP3 software 1.18 or higher.

2. ZP754 Emulation Mode

Set switch 6 (dipswitch SW2) to ON. Emulates ZP754, provides 2 fixed tones. Use with ZP5 panels or ZP3 panels with legacy software.

Tone Settings

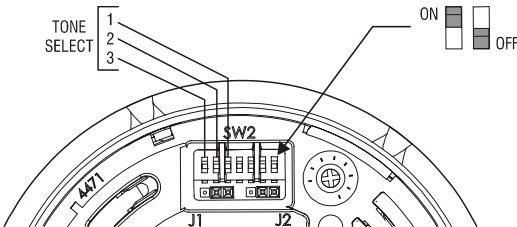
See Figure 4 – Operating Modes.

Two different tones can be programmed to operate from the panel. In ZP755HAV-2 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 right is as follows:

- Tone A = Panel setting "fast flash/slow flash."
- Tone B = Panel setting "steady."



Switch setting for device mode Switch 6	Device mode	DIP Switch setting (1) (2) (3)	Mapping input type	
			Fast flash	Steady
			Tone Type	
			Tone A primary/alert	Tone B secondary/evac
OFF	ZP755	0	Intermittent	Continuous
OFF	ZP755	1	Continuous	Intermittent
OFF	ZP755	2	Continuous	Two - Tone
OFF	ZP755	3	Two - Tone	Continuous
OFF	ZP755	4	Two - Tone	Intermittent
OFF	ZP755	5	Intermittent	Two - Tone
OFF	ZP755	6	Not Used	
ON	ZP754	7	Intermittent	Continuous

993337-01.cdr

Figure 4

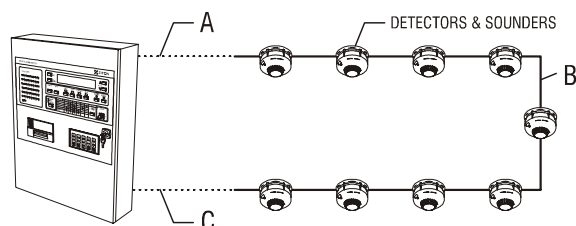
## Number of Sounders Per Loop

See figure 5.

The ZP755HAV-2 sounder can be powered directly from the loop of a ZP5 or 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 1.5mm<sup>2</sup>**

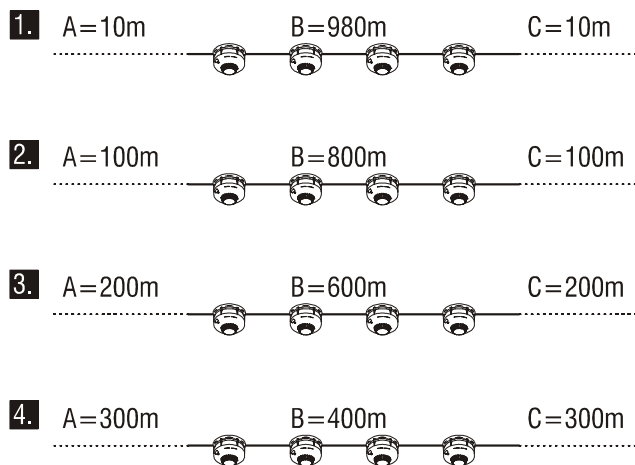
- 1. 10 metres panel to devices**
  - 80 detectors and 20 sounders
  - 100 detectors and 15 sounders
- 2. 100 metres panel to devices**
  - 80 detectors and 20 sounders
  - 100 detectors and 15 sounders
- 3. 200 metres panel to devices**
  - 60 detectors and 20 sounders
  - 100 detectors and 15 sounders
- 4. 300 metres panel to devices**
  - 40 detectors and 20 sounders
  - 110 detectors and 15 sounders



A = Cable length panel to first sounder

B = Cable length first to last sounder

C = Cable length last sounder to panel



993220-01.cdr

**Figure 5**