

Product description

Description

The ZP755R-2 is an addressable, sounder, designed for use on Ziton analogue addressable fire detection and alarm systems. Conforming to EN54 Part 3, the ZP755R-2 is developed for applications in individual rooms, sleeping accommodation or small compartments.

Application

Installed directly onto the wiring loop - the ZP755R-2 enables the system designer to offer a complete analogue addressable system on a single pair of wires. Installation costs are greatly reduced, whilst system integrity, sounder options and programmed alarm organisation are significantly increased.

The ZP755R-2 features the wide sound distribution design, with an 'all around' sound output of 70 dBA. The unit's high efficiency acoustic design and sound transducer, enables up to 60 Addressable Sensor Base Sounders to be connected to a one kilometre loop of 1.5 mm² cable. A plug-in base accepts all loop and screen connections, prior to the room sounder connection. A volume control is included for areas where a reduced sound output is required, but this control must be fully clockwise to conform to EN54 Part 3 sound output levels.

The ZP755R-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, ZP755R-2 sounders can be powered directly from an external power supply. All ZP755R-2 sounders incorporate switch settings

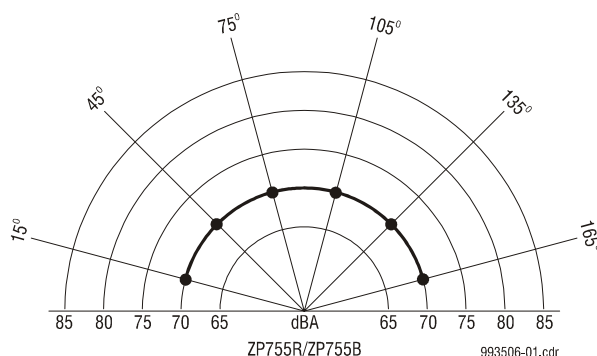
enabling them to be assigned a unique address, which is polled by the panel every two seconds.

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).

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

Specifications

Design specification:	EN54 Part 3
Designation:	Addressable Room Sounder
Model No./Part No.:	
ZP755R-2R (red)	177401
ZP755R-2W (white)	177501
Compatibility:	All Ziton 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:	wide
CNPP anechoic sound levels:	



Operating voltage:	External supply – 16V – 30Vdc Loop supply – ZP protocol 19.5V – 20.5V pulsed, max 4volts line loss
Current (quiescent):	800µA
Current (average active):	4.3 mA
Max number:	60 per 1km loop (subject to cable size and sounder spacing)

Environmental:

Application:	Indoor use
EN60529 rating:	IP50
Temp range:	-10°C to 70°C
Humidity range:	10% to 95% RH (non condensing)
EMC:	CPD compliant
Construction:	
Material:	Moulded thermoplastic
Dimensions:	127mm (Dia) x 69mm (D)
Colour:	White or red
Weight:	205g

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.

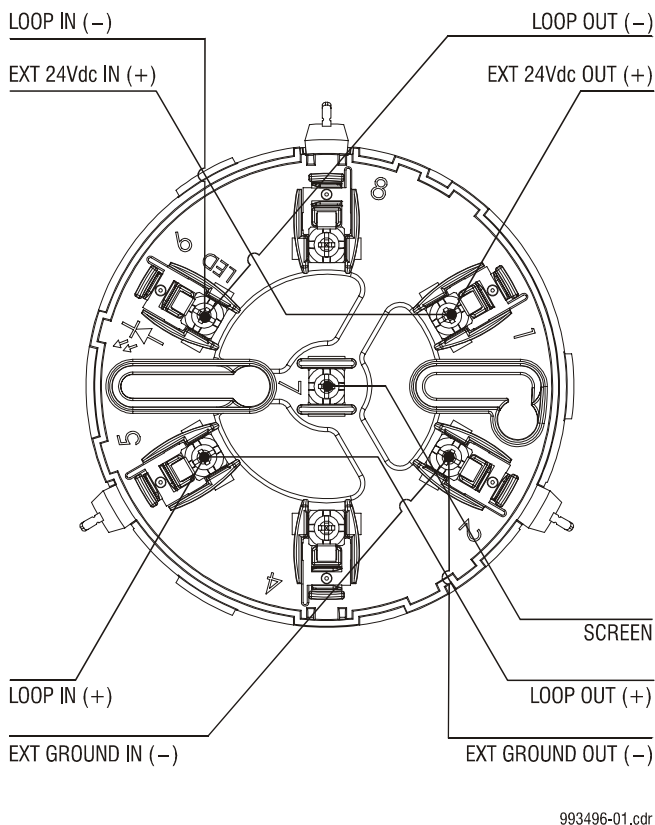
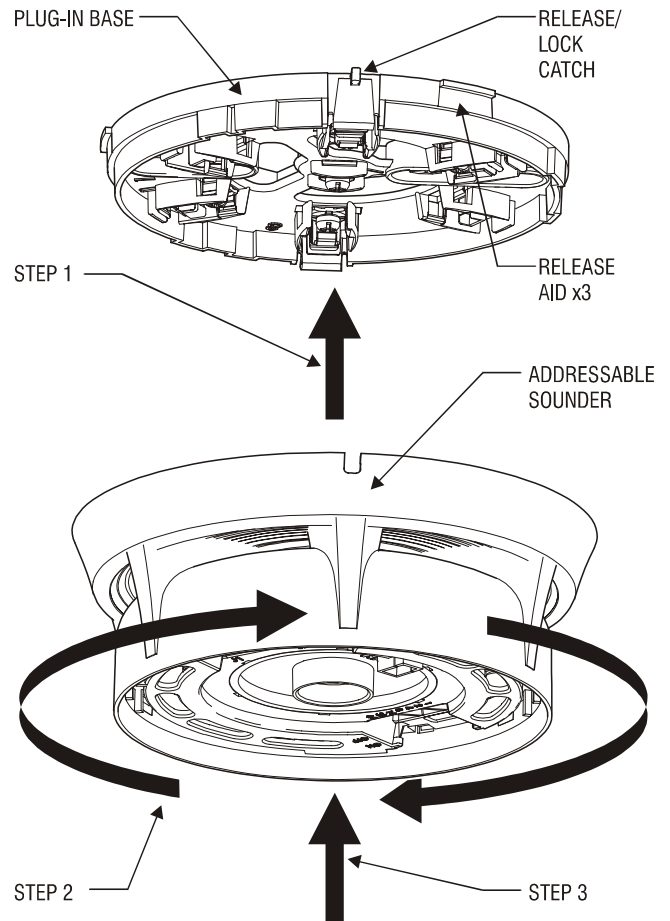


Figure 1

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.



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Figure 2

Operating Power

The ZP755R-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.

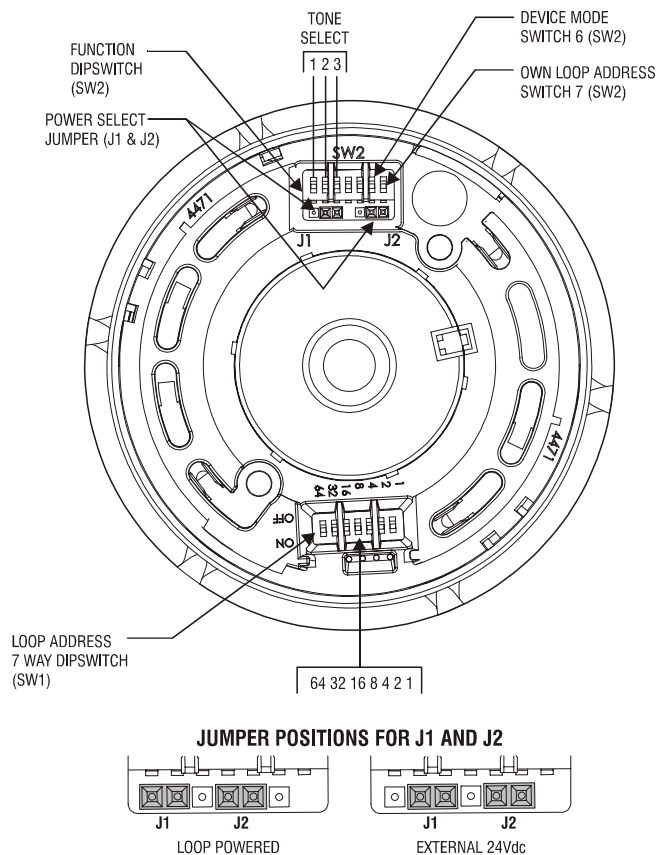


Figure 3

Operating Modes

The ZP755R-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
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- 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 ZP755R-2 can operate as a ZP755R-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.

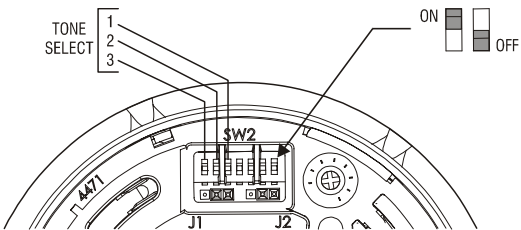
Two different tones can be programmed to operate from the panel. In ZP755R-2 mode these tones are selected using switches 1, 2 and 3 on the function dipswitch SW2.

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

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Figure 4

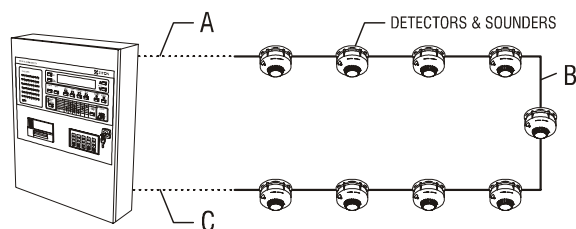
Number of Sounders Per Loop

See figure 5.

The ZP755R-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 1.5mm²

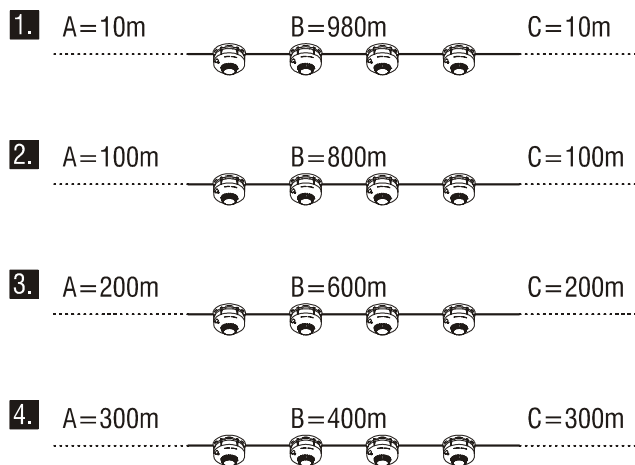
1. **10 metres panel to devices**
 - 50 detectors and 50 sounders
 - 63 detectors and 42 sounders
2. **100 metres panel to devices**
 - 45 detectors and 45 sounders
 - 63 detectors and 40 sounders
3. **200 metres panel to devices**
 - 40 detectors and 40 sounders
 - 63 detectors and 37 sounders
4. **300 metres panel to devices**
 - 37 detectors and 37 sounders
 - 63 detectors and 35 sounders



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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Figure 5