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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 units 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.

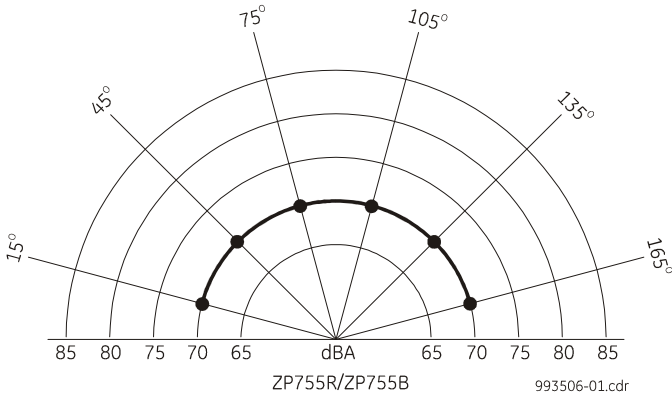
Continuous, intermittent and two-tone outputs are available, from which any combination can be chosen to provide alert and evacuate, two stage alarms. All sound types comply with BS 5839 Part 1:1988 recommended frequencies (in accordance with EN54 Part 3).

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. | |
| ZP755RB-2R (red): | 177401 |
| ZP755R-2W (white): | 177501 |
| Compatibility: | Ziton analogue addressable systems |
| Mounting: | Surface - with plug-in base |
| SPB-2R (red): | 180801 |
| SPB-2W (white): | 180901 |
| Addressing method: | 7-way Dipswitch |
| 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 sec on/off) |
| Tone 3 | two tone warble 980 Hz/670 Hz |
| Sound distribution: | Wide |

CNPP anechoic sound levels:



| | |
|---|--|
| Operating voltage: | External supply – 16 to 30 VDC Loop supply – ZP protocol 19.5 - 20.5 V pulsed, max. 4 V line loss |
| Current (RMS)-quiescent: | 820 µA |
| Current alarm (RMS): | 4.5 mA |
| Current alarm (max. avg. - excl. device address): | 7.5 mA |
| Max number: | 60 per 1 km loop (subject to cable size and sounder spacing) |
| Environmental Application: | Indoor use |
| EN60529 rating: | IP50 |
| Temp. range: | -10 to 70 °C |
| Humidity range: | 10% to 95% RH (non-condensing) |
| EMC: | CPD compliant |
| Construction Material: | Moulded thermoplastic |
| Dimensions (∅ x D): | 127 x 69 mm |
| Colour: | White or red |
| Weight: | 205 g |

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 in the adjacent column. Plug-in base supplied separately.

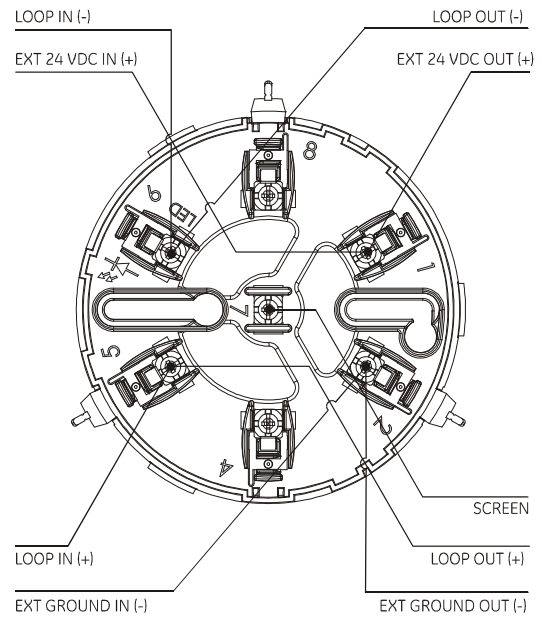


Figure 1

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.

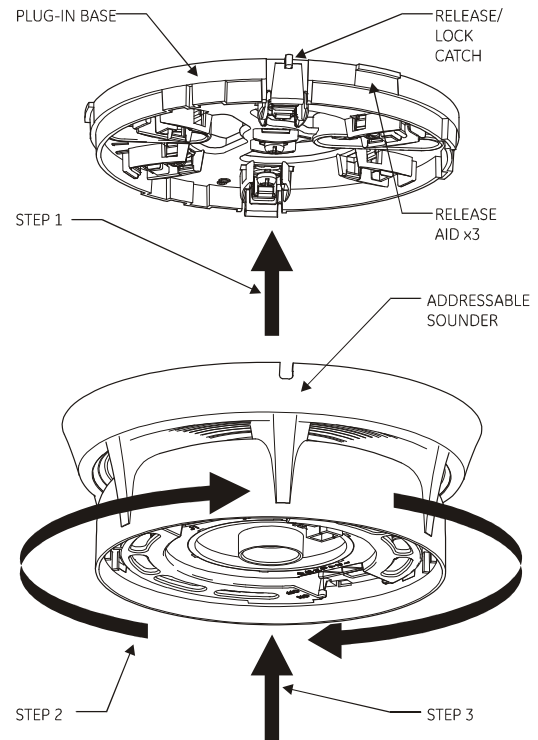


Figure 2

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.

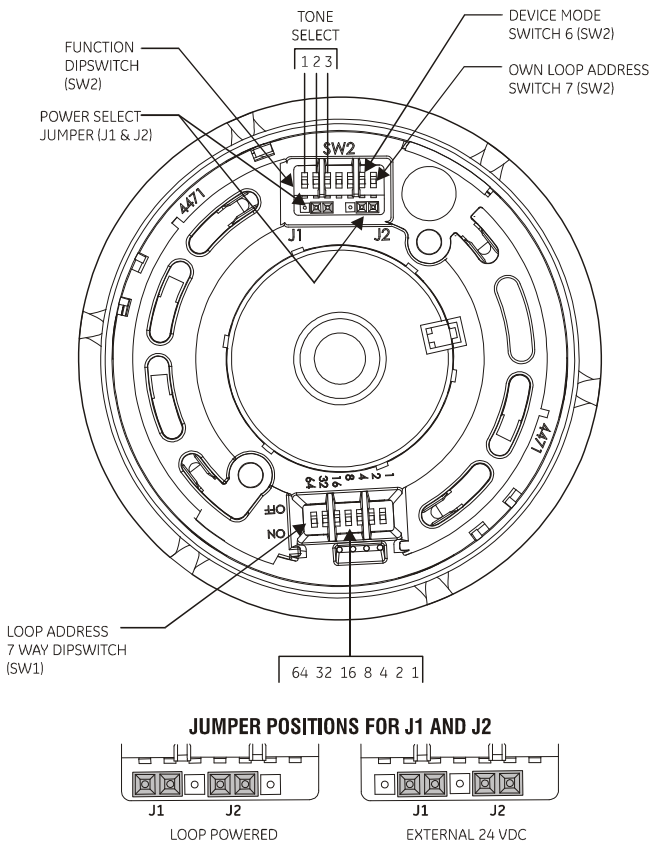


Figure 3

Operating Modes

The ZP755R-2 sounder has 2 modes of operation, which are selected using switch 7 on dipswitch SW2. This model is always operated as a dedicated room sounder. See Figure 3.

1. Operation as a Stand-alone Sounder

| | |
|-------------------------|---------------|
| Own unique loop address | Switch 7 = ON |
|-------------------------|---------------|

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

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.

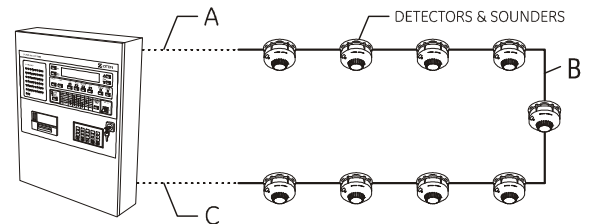
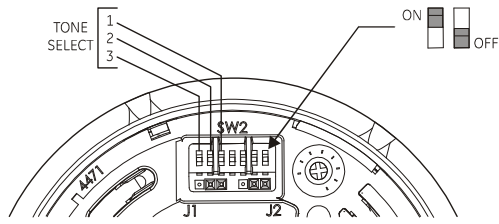
Two different tones can be programmed to operate from the panel. In ZP755R-2 mode these tones are selected using switches 1, 2 and 3 on the function dipswitch SW2.

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 following page is as follows:

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

Tone B = Panel setting "steady."

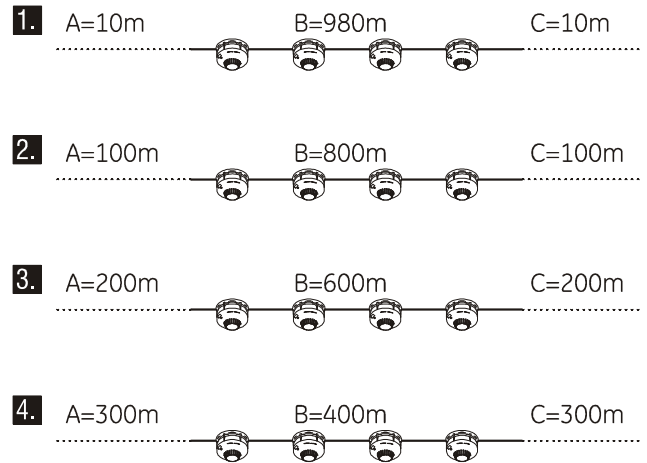


| Switch setting for device mode Switch 6 | Device mode | DIP Switch setting (1) (2) (3) | Mapping input type | |
|---|-------------|--------------------------------|----------------------|-----------------------|
| | | | Fast flash | Steady |
| | | | Tone Type | |
| | | | Tone A primary/alert | Tone 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

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

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 1.5 mm²

- 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