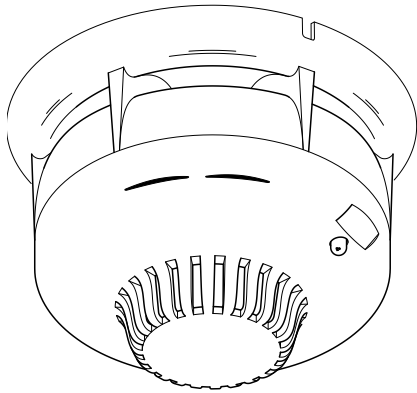




ZP755B-2 Addressable Sensor Base Sounder Installation Sheet



Description

The ZP755B-2 is an addressable sounder designed for use on Ziton analogue addressable fire detection and alarm systems.

The sounder includes a volume control, an address-setting switch, programmable tone settings, and a pair of jumpers to select the operating power — from the analogue addressable loop or an external supply. The sounder plugs into a base that is purchased separately. See Table 1 for a list of model numbers.

Table 1: Models

Model number	Description
Sounder:	
ZP755B-2P	Addressable sensor base sounder, Polar white
Base:	
SPB-2P	Plug-in base, Polar white

Installation

To install the device, follow these general steps.

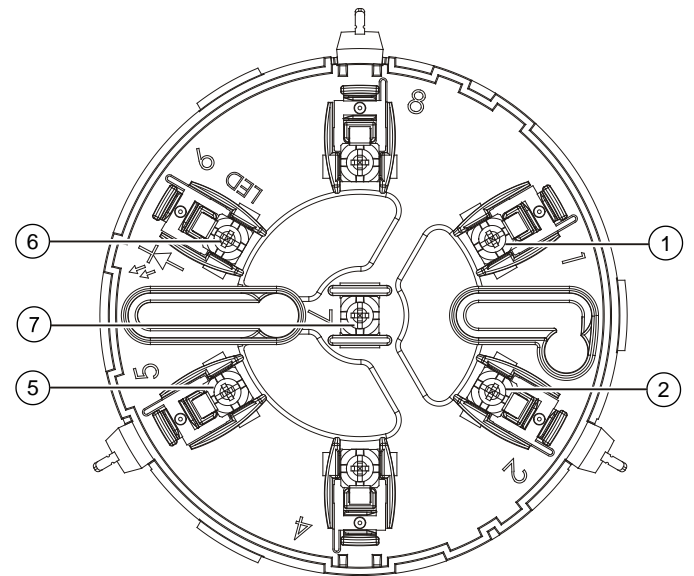
1. Wire the base.
2. Set the operating power.
3. Set the address.
4. Set the mode of operation.
5. Set the tone.
6. Set the volume.
7. Mount the sounder onto the base.

The details of each step are given below.

Wiring the base

Connect the loop wiring for the plug-in base as shown in Figure 1 below. There is no wiring between the sounder and plug-in base.

Figure 1: Loop wiring for the plug-in base

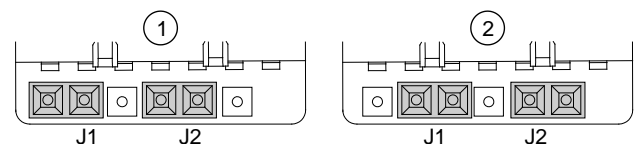


- | | |
|------------------------------|------------------|
| 1. Ext. 24 VDC+ IN/OUT | 6. Loop - IN/OUT |
| 2. Ext. 24 VDC ground IN/OUT | 7. Shield |
| 5. Loop+ IN/OUT | |

Setting the operating power

The sounder includes a pair of power selection jumpers, J1 and J2. To select the source of the sounder operating power, position the jumpers as show in Figure 2.

Figure 2: Power-selection jumper configuration



- | | |
|-----------------|--------------------|
| 1. Loop powered | 2. External 24 VDC |
|-----------------|--------------------|

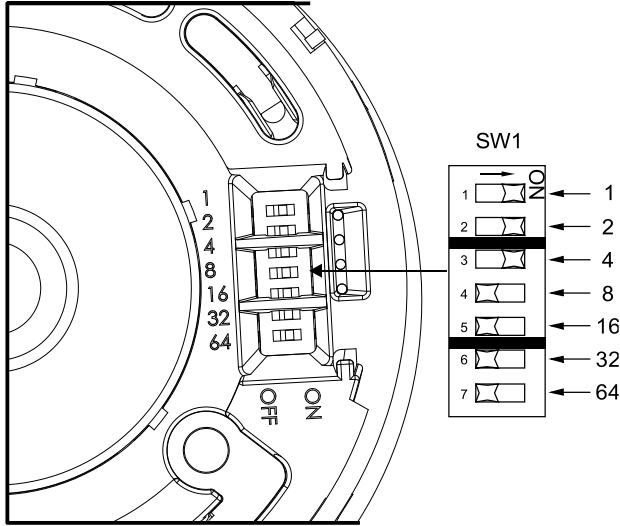
Note: When using an external power supply, use only one that is CE and EN 54-4 compliant to power all the sounders on the same loop.

Setting the address

The sounder includes a seven-segment DIP switch (SW1) for assigning device addresses. Each switch segment represents the value shown in Figure 3. The address is the sum of all the switch segments in the ON position. The switch is used to set the device address in binary code. The switch may be set to represent any address from 1 to 127.

For example, to select a device address of 007, set SW1-1, SW1-2, and SW1-3 to the ON position and the remaining switch segments to the OFF position.

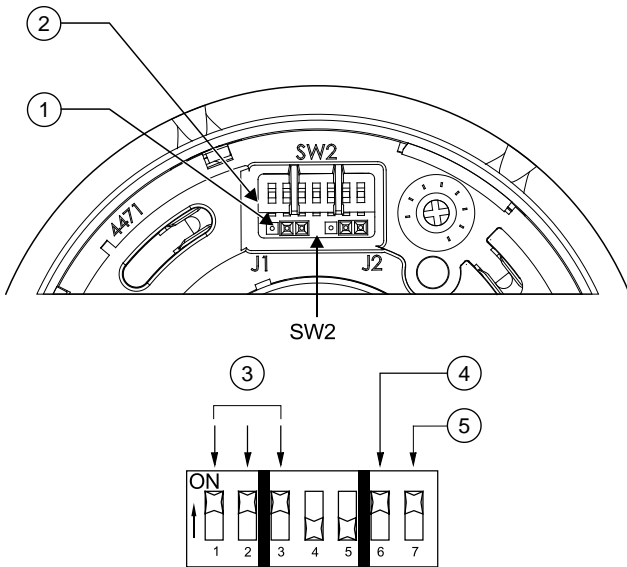
Figure 3: Address switch setting



Mode and tone settings

The sounder includes a seven-segment DIP switch (SW2) to select operating mode, device mode, and tone. See Figure 4.

Figure 4: Mode of operation switch settings



1. Power selection jumpers
2. SW2 configuration switch
3. Tone
4. Device mode
5. Operating mode

Setting the operating mode

The sounder has 2 modes of operation, which are selected using SW2-7. It can operate as a stand-alone sounder with its own unique loop address, or as a dedicated sounder with an address matched to the detector address.

To configure operation as a stand-alone sounder:

1. Set SW2-7 to ON.
2. Navigate to the following menu to tag the sounders as SAB:
`ZP3 Panel Menu/Setup/Sounders/SAB/Add SAB`
The Planner can also be used.
3. To map an alert-to-evac function, make the first input type a fast flash input.

The sounder will sound the alert tone in response to a fast flash input or an evac tone when the input configured as steady is triggered, overriding the alert tone.

To configure operation as a dedicated sounder:

1. Set SW2-7 to OFF.
2. Navigate to the following menu to configure the sounder for use with a detector:
`ZP3 Panel Menu/Setup/Sounders/Add SAB`
The Planner can also be used.
3. Only one sounder tone option is available: Secondary sound types.

ZP3 firmware 71910 v 3.11 and earlier:

If a sounder is set to the same address as a detector, then the sounder sounds automatically when that detector operates. All other required operations need programming at the panel.

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

Setting the device mode

SW2-6 selects whether the loop sounder operates in ZP755 mode or in ZP754 emulation mode as described in Table 2.

Table 2: SW2-6 mode selection switch

Mode	SW2-6	Output signal	Requirement
ZP755	OFF	User-selectable two-tone operation and full monitoring	ZP3 software v1.18 or later
ZP754 emulation	ON	Two fixed tones	ZP5 panels or ZP3 panels with legacy software

Setting the tone

Two different tones can be programmed to operate from the panel. In ZP755B-2 mode these tones are selected using SW2-1, SW2-2, and SW2-3. Refer to Table 3.

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

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

Table 3: Tone settings

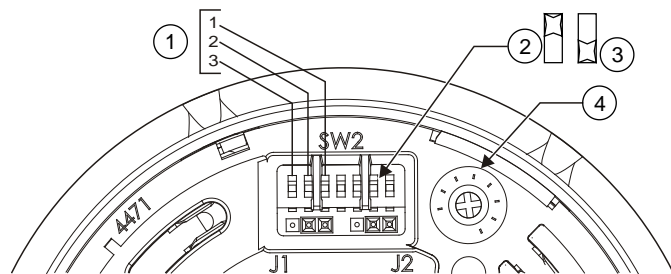
SW2-6 device mode switch setting	Device mode	SW2 switch setting -1 -2 -3	Mapping input type			
			Fast flash	Steady		
			Tone type			
			Tone A primary/alert	Tone B secondary/evac.		
OFF	ZP755	0	---	---	Intermittent	Continuous
OFF	ZP755	1	■--	---	Continuous	Intermittent
OFF	ZP755	2	■-■	---	Continuous	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

Setting the volume

The sounder has a volume control potentiometer to adjust the volume. Refer to Figure 5.

WARNING: To conform to EN 54 Part 3 sound output levels, the volume control *must* be set to the full clockwise position. If the volume is adjusted for any reason, it *must* be returned to the full clockwise position.

Figure 5: Volume control



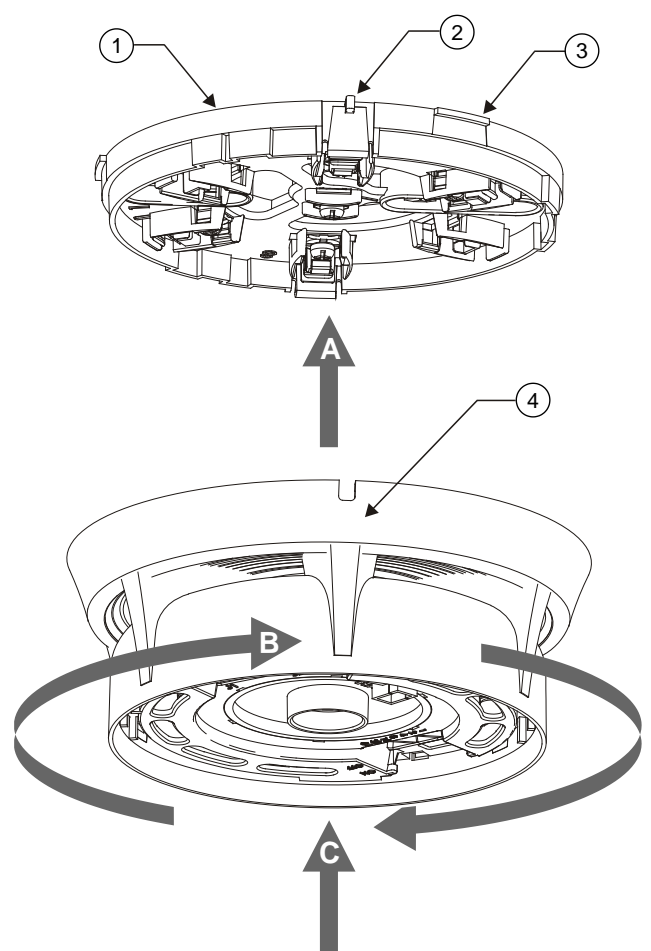
- 1. Tone select
- 2. SW2-6 on
- 3. SW2-6 off
- 4. Volume control

Mounting the sounder onto the base

Refer to Figure 6. Align the addressable sounder to the plug-in base. Push up (A), and then turn the sounder until it clicks into place (B). Push the sounder up once more to engage (C).

Reverse the above procedure to remove the sounder from the base.

Figure 6: Mounting

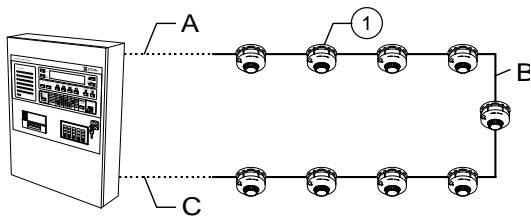


- 1. Addressable sounder
- 2. Release aid (3X)
- 3. Release/lock catch
- 4. Plug-in base

Sounders per loop

The sounder can be powered directly from the loop of a ZP5 or ZP3 panel. Use Figure 7 in conjunction with Table 4, to determine the quantity of detectors and sounders that can be connected to a two-core shielded loop.

Figure 7: Detector/sounders per loop



- A. Cable length panel to first sounder
- B. Cable length first to last sounder
- C. Cable length last sounder to panel
- 1. Detectors and Sounders

Table 4: Maximum detectors and sounders per loop

A	B	C	Quantity allowed [1]
10 m	980 m	10 m	50 detectors and 50 sounders 63 detectors and 42 sounders
100 m	800 m	100 m	45 detectors and 45 sounders 63 detectors and 40 sounders
200 m	600 m	200 m	40 detectors and 40 sounders 63 detectors and 37 sounders
300 m	400 m	300 m	37 detectors and 37 sounders 63 detectors and 35 sounders

[1] Using a two-core shielded loop of 1000 meters cable size 1.5 mm²

Specifications

Operating voltage	
External supply	18 to 30 VDC
Loop supply, ZP protocol	19.5 to 20.5 V pulsed, max. 4 V line loss
Current (line powered)	
Quiescent (RMS)	820 µA
Alarm (RMS)	4.5 mA
Alarm (excluding device address)	7.5 mA max.
Alarm (at device address)	23 mA max.
Current (externally powered)	
Quiescent (RMS)	470 µA
Alarm (RMS)	500 µA
Maximum number	60 per 1 km loop (subject to cable size and sounder spacing)
Sound output	
Tone 1	70 dBA. 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	
	See Figure 8
Monitoring	
ZP loop	Open and short circuit fault
Sound output level	Self test facility
Construction	
Material	Moulded thermoplastic
Weight	150 g
Dimensions (Ø x D)	127 x 69 mm
ZP710/ZP730	127 x 90 mm
ZP720	127 x 90 mm
ZP732/ZX732	127 x 97 mm
Compatibility	
	Ziton analogue addressable systems
Addressing method	
	7-segment DIP switch
Mounting	
	Surface, with plug-in base
Wiring	
	Two-core loop

Operating environment	
Temperature	-10 to +60°C
Relative humidity	10 to 95% noncondensing
Storage temperature	
	-20 to +70°C

Figure 8: CNPP anechoic sound levels

