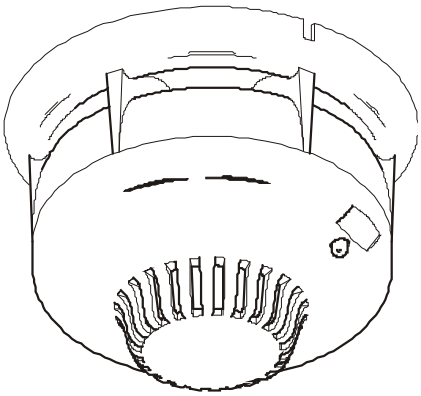
ZP755BV-4 Addressable Base Sounder with Visual Indicator Installation Sheet



Description

The ZP755BV-4 is an addressable base sounder with visual indicator, designed for use in Ziton analogue addressable fire detection and alarm systems.

Note: The visual indicator of this product does not comply with EN 54-23 and must not be used in fire alarm installations where fire notification beacons are required.

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 device plugs into a base that is purchased separately. See Table 1 for a list of model numbers.

Table 1: Models

Number	Description
Sounder,	
ZP755BV-4P	Base sounder/Visual indicator, Polar white
Cover,	
ZP755-COV-P	Cover for ZP755B Base sounder with no detector, Polar white
ZP755-COV-R	Cover for ZP755B Base sounder with no detector, Red
Base,	
SPB–2P	Base, Polar white

Installation

To install the device:

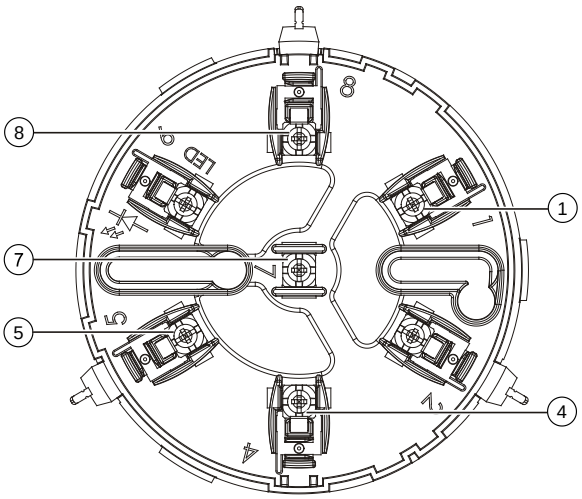
1. Wire the base
2. Set the operating power
3. Set the address
4. Set the operating mode
5. Set the tone
6. Set the volume
7. Mount the sounder onto the base

The details of each step are given below

Wiring the base

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

Figure 1: Loop wiring for the base



1. Ext. 24 VDC+ IN/OUT
4. Ext. 24 VDC ground IN/OUT
5. Loop+ IN/OUT
7. Shield
8. 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 shown in Figure 2.

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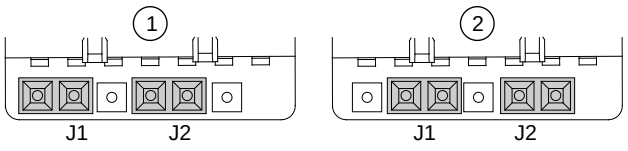
Figure 2: Power-selection jumper configuration



1. Loop powered
2. External 24 VDC

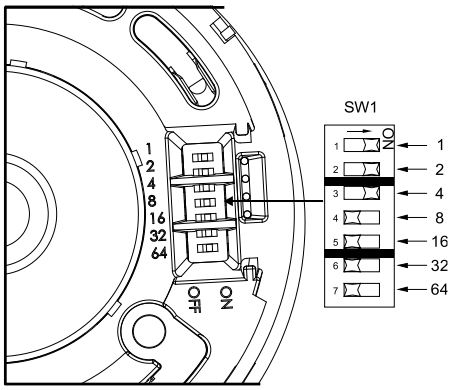
Note: When using an external power supply, use only one that is CE and EN 54-4 compliant to power all the sounders on the same loop. Ensure connection to number 1 and number 4 in addition to the loop wiring number 5 and number 8.

Setting the address

The sounder includes a seven-segment DIP switch (SW1) for assigning device addresses. Each switch segment has a decimal value as 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.

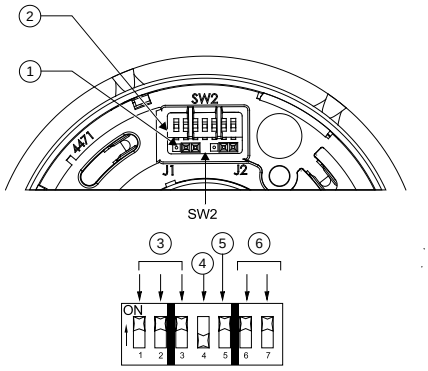
Figure 3: Address switch setting



Mode, tone, and volume settings

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

Figure 4: Mode of Operation switch settings



1. Power selection jumpers
2. SW2 configuration switch
3. Tone
4. Addressing mode
5. Visual indicator operating mode
6. Volume

Setting the **addressing mode**

Configure the base sounder to operate with or without a detector at the same address as shown in Table 2.

Table 2: Setting address mode

Switch	Setting	
SW2-4	OFF	The sounder is stand-alone with a unique loop address not used by another detector.
SW2-4	ON	The sounder shares the address with a detector to expand the number of devices supported by the loop.

Configure the base sounder to enable or disable the visual indicator as shown in Table 3.

Table 3: Setting Visual Indicator operating mode

Switch	Setting		
SW2-5	ON	Enable the visual indicator.	
SW2-5	OFF	Disable the visual indicator.	Not recommended with Silent tone.

Setting the volume

Use SW2-6 and SW2-7 to set the volume. Level 1 is the lowest volume setting, and level 4 is the highest as shown in Table 4. Refer also to the measured anechoic sound levels in Figure 7.

Table 4: Volume settings

00 – Level 1	10 – Level 2	01 – Level 3	11 – Level 4
			
Average dBA measurement			
3 dBA less than level 2.	3 dBA less than level 3.	3 dBA less than level 4.	Certified tones [1].

[1] UK-continuous, UK intermittent, UK two-tone are EN 54-3 compliant.

Setting the tone

The control panel can operate the sounder in two different pre-programmed tones, by selecting SW2-1, SW2-2, and SW2-3. Refer to Table 5 Tone settings.

Note: Two additional tones are available, the Class change and the Visual indicator only tone. However, these tones may not be available for legacy control panels. Please refer to the configuration options of your control panel to confirm tone availability.

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Table 5: Tone settings

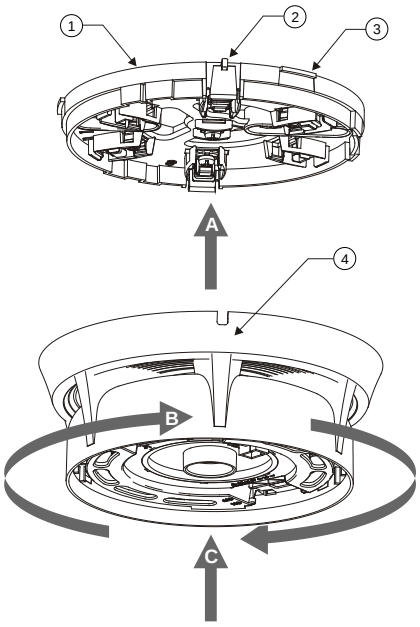
Device mode		SW2 switch setting -1-2-3	Primary warning	Secondary evacuation	Attention (nonfire)
ZP755	**0**	▬ ▬ ▬	UK intermittent	UK continuous	Class change
ZP755	**1**	▀ ▬ ▬	UK continuous	UK two-tone	Class change
ZP755	**2**	▬ ▀ ▬	UK two-tone	UK intermittent	Class change
ZP755	**3**	▀ ▀ ▬	Australian whoop	Australian alert	Class change
ZP755	**4**	▬ ▬ ▀	Swedish tone	Dutch slow whoop	Class change
ZP755	**5**	▀ ▬ ▀	ISO8201	French two-tone	Class change
ZP755	**6**	▬ ▀ ▀	German	Visual indicator only	Class change
ZP754	**7**	▀ ▀ ▀	UK intermittent	UK continuous	Class change

Table 6: Tones

Tone name	Description	Freq (Hz)	Cycle time
UK continuous [1]	Continuous (UK)	980	Continuous
UK intermittent [1]	Intermittent fast 0.5 s (UK)	980	1s (1 Hz) 0.5 s on, 0.5 s off
UK two-tone [1]	Two-tone (UK)	980 670	0.5 s tone 1 0.5 s tone 2
Australian whoop	Australian slow whoop ascending	500 to 980	4 s
Australian alert [2]	Australian alert ISO7731	440	0.55 s on, 0.55 s off ± 10%
Swedish tone	Swedish fast pulse	670	0.33 – 0.55 s (3-4 Hz) Pulse ratio >0.35 < 0.7
Dutch slow whoop	Dutch slow whoop ascending	500 to 1200	4s 3.5 s on 0.5 s off
ISO8201	Temporal ISO8201 3 pulse and wait	980	4 s 0.5 s on/0.5 s off 1.5 s wait
French two tone	French two-tone	554 440	90-110ms 380-420ms = 500 ms ± 5%
German	German fast whoop descending	1200 to 500	1 s no “off”
Class Change	3 tones and wait	1000, 1200, 1500	4s
Visual Indicator only	Silent and visual indicator only		

[1] The tones UK-continuous, UK-intermittent, and UK-two-tone are EN 54-3 compliant.
[2] ISO7731.

Figure 5: Mounting



1. Base
2. Release aid (3X)
3. Release/lock catch
4. Addressable sounder

Mounting the sounder

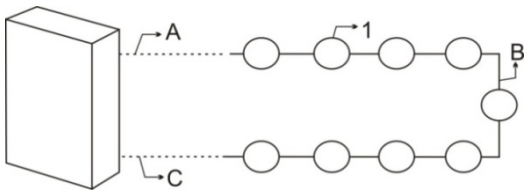
Align the addressable sounder to the base. Push up (A) and turn the sounder until it clicks into place (B). Push the sounder up once more to engage (C). Refer to Figure 5.

To remove the sounder from the base, the three release aid tabs must be depressed, and then the sounder can be detached.

Sounders per loop

The sounder can be powered directly from the loop of Ziton control panels. Use Table 5 Tone settings, in conjunction with Figure 6, to determine the quantity of detectors and sounders that can be connected to a two-core shielded loop when loop powered.

Figure 6: 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 7: Maximum detectors and sounders per loop

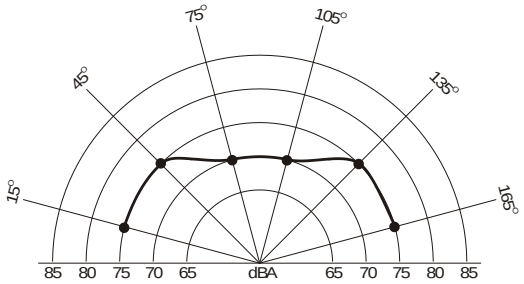
A	B	C	Quantity allowed [1]
10 m	980 m	10 m	60 detectors and 35 sounders 90 detectors and 30 sounders
100 m	800 m	100 m	50 detectors and 35 sounders 90 detectors and 30 sounders
200 m	600 m	200 m	40 detectors and 35 sounders 90 detectors and 30 sounders
300 m	400 m	300 m	40 detectors and 30 sounders 90 detectors and 25 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)	500 µA
Alarm (RMS)	6 mA
Alarm (excluding device address)	14 mA max.
Alarm (at device address)	14 mA max.
Current (externally powered)	
Quiescent (RMS)	470 µA
Alarm (RMS)	500 µA
Maximum 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
Tones	See Table 5 Tone settings. See Table 6 Tones.
Sound distribution	Wide
Measured anechoic sound levels	See Figure 7
Monitoring	
Operating power level	Tested continuously
Sound output level	Self test facility
Compatibility	Ziton analogue addressable systems
Addressing method	7-segment DIP switch
Mounting	Surface, with base
Wiring	Two-core loop
Construction	
Material	Moulded thermoplastic
Weight	156 g
Dimensions (Ø × D)	127 × 47 mm incl. base
Operating environment	
Temperature	−10 to +60°C
Relative humidity	10 to 95%, noncondensing
Storage temperature	−20 to +70°C

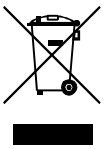
Figure 7: Measured anechoic sound levels



Note: These measurements correspond to the highest level for the EN 54-3 compliant tones of UK-continuous, UK intermittent, and UK-two-tone.

Regulatory information

This section includes both regulatory information and a summary on the declared performance according to the Construction Products Regulation 305/2011. For detailed information refer to the product Declaration of Performance.

Certification	CE
Certification body	0370
Declaration of Performance number	360-5202-0199
Year of first CE marking	14
Product Identification	ZP755BV-4P
Intended use	See DoP point 3
Essential characteristics	See DoP point 9
Manufacturer	Gulf Security Technology Co.,Ltd 80, Changjiang East Road, QETDZ, Qinhuangdao, Hebei Province, China 066004 Authorized EU manufacturing representative: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, Netherlands
European Union directives	1999/5/EC (R&TTE directive): Hereby, UTC Fire & Security declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
	2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

Contact information

For contact information, see www.utcfssecurityproducts.eu.

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