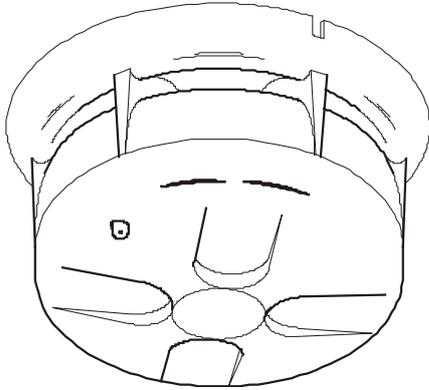# ZP755R-2 Addressable Room Sounder Installation Sheet

Description

The ZP755R-2 is an addressable room sounder designed for use on Ziton addressable fire detection and alarm systems.

The device includes a volume control, an address-setting switch, programmable tone settings, and a pair of jumpers to select the operating power — from the 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

Model number	Description
Sounder:	
ZP755R-2R	Addressable room sounder, Red
ZP755R-2P	Addressable room sounder, Polar white
Sounder Plug-in Bases:	
SPB-2R	Plug-in base, Red
SPB-2P	Plug-in base, Polar white

Installation

To install the sounder 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. There is no wiring between the sounder and plug-in base.

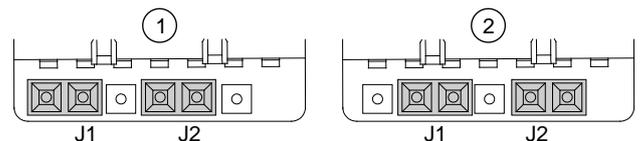**Figure 1: Loop wiring for the plug-in base**
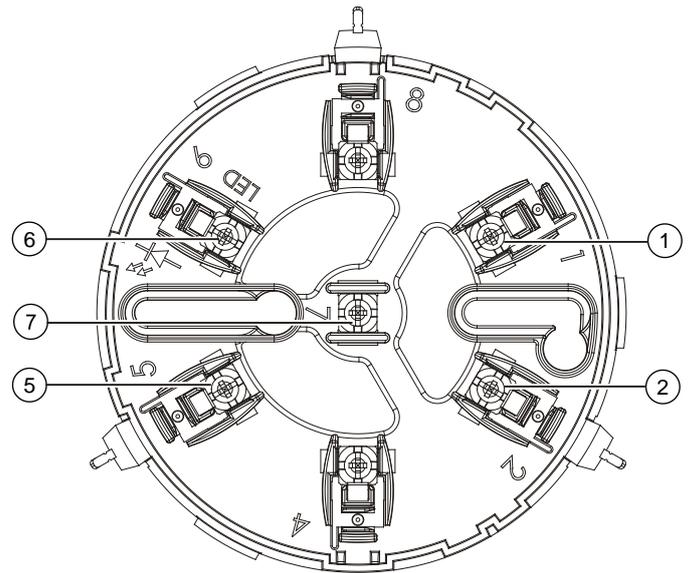
1.	Ext. 24 VDC+ IN/OUT	6.	Loop − IN/OUT
2.	Ext. 24 VDC ground IN/OUT	7.	Shield
5.	Loop+ IN/OUT		

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 shown 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.
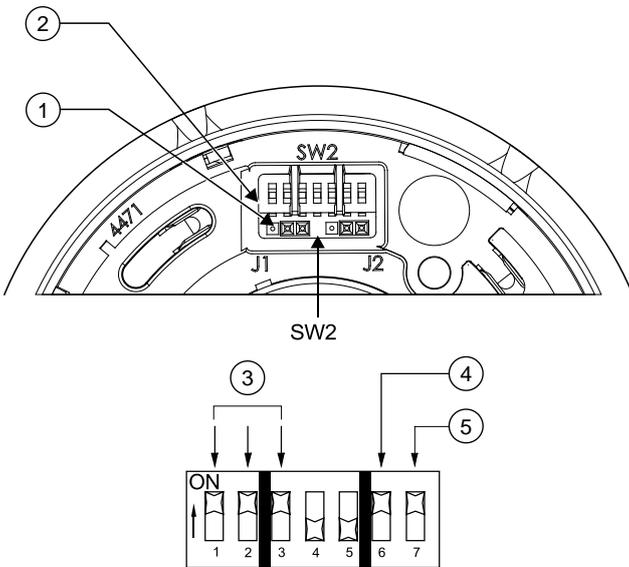
Figure 3: Address switch setting
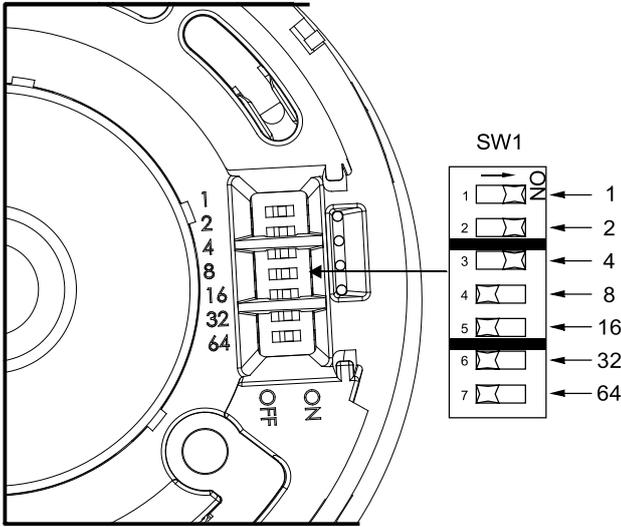
Mode and tone settings

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 device is always operated as a dedicated room sounder. This mode is selected using SW2-7.

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.

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 ZP755R–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

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

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.
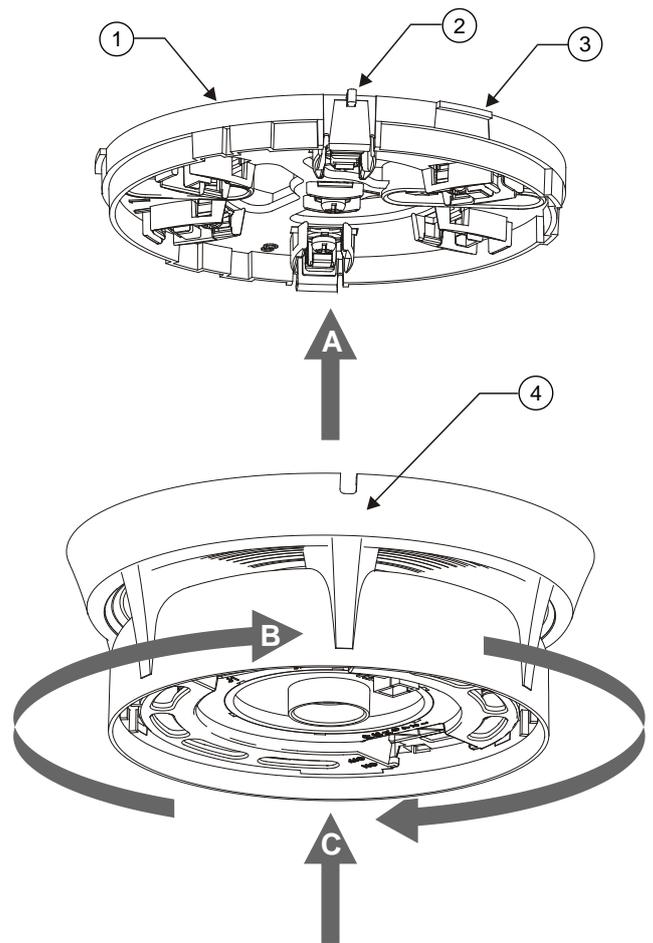
Figure 5: Volume control
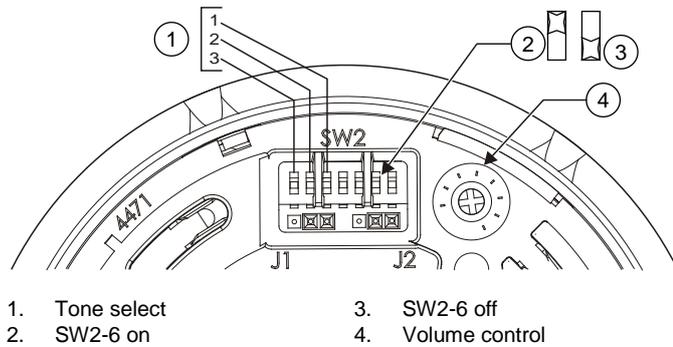
1. Tone select
2. SW2-6 on
3. SW2-6 off
4. Volume control

Mounting the sounder onto the base

Refer to Figure 6. Align the addressable sounder to the plug-in base. Push up (A) and 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.
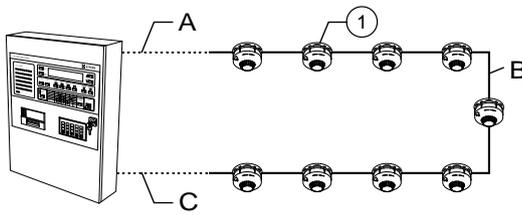
Figure 6: Mounting

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. See Table 4, in conjunction with Figure 7, 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	70 dBA (all around)
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	See Figure 8
Monitoring	
ZP loop	Open and short circuit fault
Sound output level	Self test facility
Compatibility	Ziton addressable systems
Addressing method	7-segment DIP switch
Mounting	Surface, with plug-in base
Wiring	Two-core loop
Construction	
Material	Moulded thermoplastic
Colour	Red or Polar white
Weight	205 g
Dimensions (Ø × D)	127 × 69 mm

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
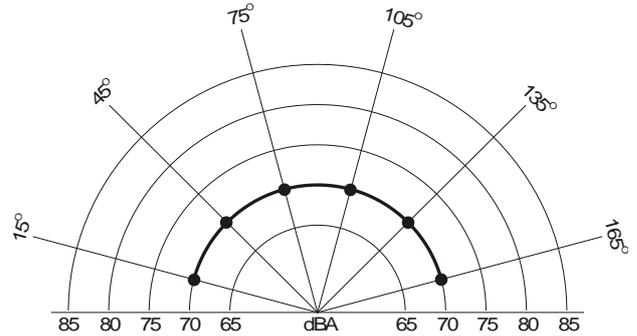
Regulatory information

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	360-5201-0299
Year of first CE marking	14
Product Identification	ZP755R-2
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.