

## Product description

### Description

The ZP755WV-2R is an addressable, weatherproof sounder/beacon, designed for use on Ziton analogue addressable fire detection and alarm systems. Conforming to EN54 Part 3, the sounder has been developed for outdoor applications, or for use in areas where the ingress of water can be expected, for example where hygiene requirements demand regular washing or hosing down of the protected area. It provides both audible and visual warnings from a single, addressable, loop wired unit.

### Application

Installed directly onto the wiring loop - the ZP755WV-2R 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 unit's high efficiency acoustic design and sound transducer, provides a forward sound dispersion with an output of 90 dBA. It also has the low current Light Emitting Diode (LED) visual element, enabling combinations of up to 30 sounder beacons to be connected to a one-kilometre loop of 1.5 mm<sup>2</sup> cable. 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.

The ZP755 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.

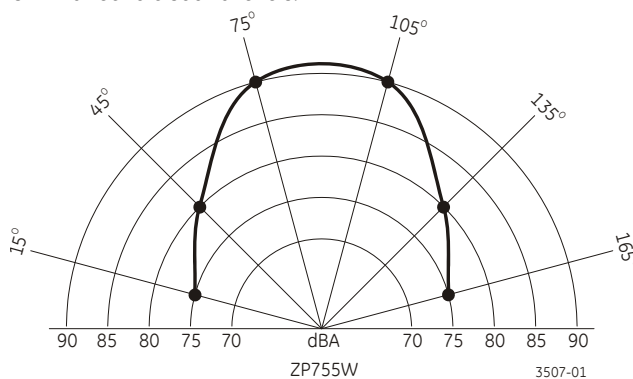
In systems where loop lengths or current requirements are excessive, ZP755WV-2R sounders can be powered directly from an external power supply. All ZP755WV-2R sounders incorporate switch settings enabling them to be assigned a unique address, which is polled by the panel every two seconds.

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 red.

## Specifications

Design Specification:	EN54 Part 3
Designation:	Addressable Weatherproof Sounder/Beacon
Model No./Part No.	
ZP755WV-2R (red)	178701
Compatibility:	Ziton analogue addressable systems
Mounting:	Surface
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:	Narrow
Sound level (at 1m):	90 dBA minimum
CNPP anechoic sound levels:	



Operating voltage:	External supply - 18 to 30 VDC
	Loop supply - ZP protocol 19.5 - 20.5 V
	pulsed, max. 4 V line loss



#### Current (line powered)

Quiescent (RMS): 820  $\mu$ A  
Alarm (RMS): 5 mA  
Alarm (maximum avg.  
- excl. device address): 26.3 mA  
Alarm (maximum at  
device address): 27 mA

#### Current (externally powered)

Quiescent (RMS): 470  $\mu$ A  
Alarm (RMS): 500  $\mu$ A  
Max number: 30 per 1 km loop (subject to cable size  
and sounder spacing)

#### Environmental

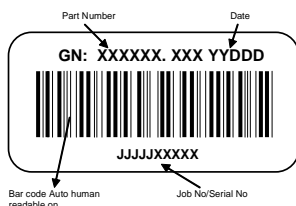
Application: Outdoor use  
EN60529 rating: IP33C  
Temp. range: -10 to 70 °C  
Humidity range: 10% to 95% RH (non-condensing)

#### Construction

Material: Moulded thermoplastic  
Dimensions (W x D): 120 x 150 mm  
Colour: Red  
Weight: 300 g

#### Manufacturer traceability

A barcode label is affixed to each product (see example below). This label reflects, amongst other things, the date of manufacture of the product in the form YYDDD.



These numbers are interpreted as follows:

YY = year of manufacture

DDD = day of manufacture

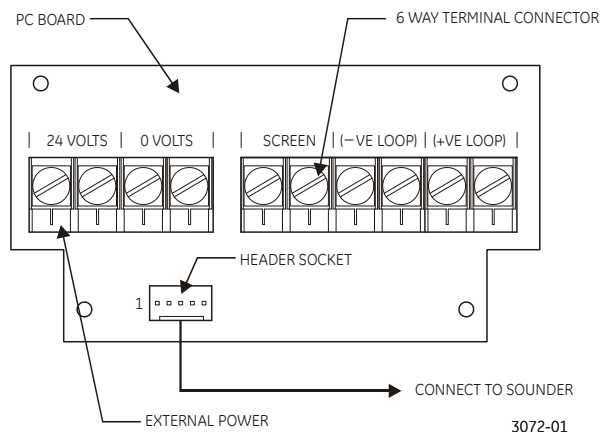
For example the numbers 07134 would indicate that the product was manufactured on the 134<sup>th</sup> day of the year 2007, which is 14<sup>th</sup> May 2007.

## Physical installation

### Connecting wiring

Loop and optional external power cables connect to terminals on the back box. See Figure 1 below.

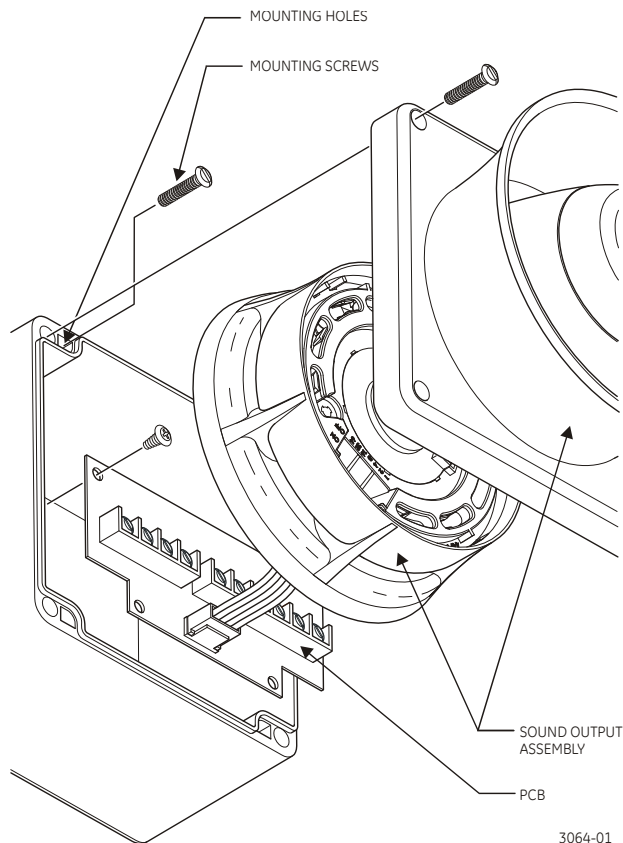
Figure 1



### Mounting the sounder

Insert four M4 X 25 mm screws through the mounting holes and secure the sounder back box to the surface. See Figure 2.

Figure 2





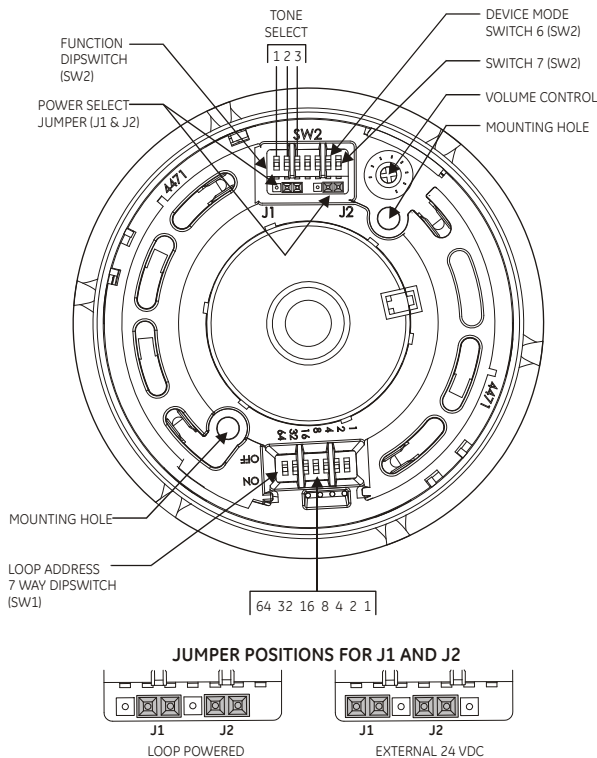
## Operating power

The ZP755WV-2R can be powered directly from its address loop (setting 1), or externally from a 24 VDC supply (setting 2). See Figure 3 below.

## 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 below.

Figure 3



## Operating modes

The ZP755WV-2R sounder may be operated as a dedicated sounder when switch 7 on dipswitch SW2 is set to ON. See Figure 3 above.

## Operation as a stand-alone sounder

Own unique loop address	Switch 7 = ON
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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.

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 ZP755WV-2R can operate as a ZP755WV-2R or emulate a ZP754. See Figures 3 and 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 Figures 3 and 4.

Two different tones can be programmed to operate from the panel. In ZP755WV-2R 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."

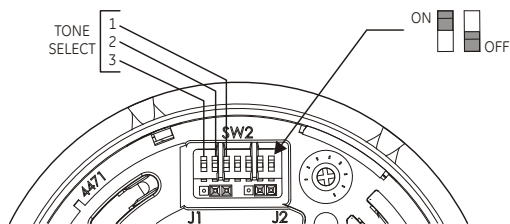
## Volume setting

See Figure 4. Volume can be adjusted using the volume control potentiometer.

**Warning:** To conform to EN54 Part 3 sound output levels, the volume control pot **MUST** be set to the fully clockwise position. If the volume is adjusted lower for any reason, it **MUST** be returned to the fully clockwise position.



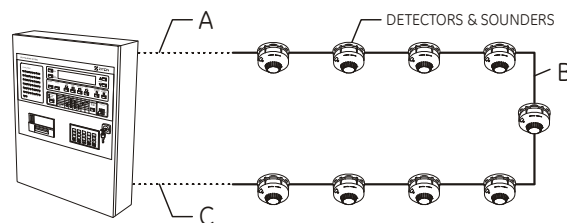
Figure 4



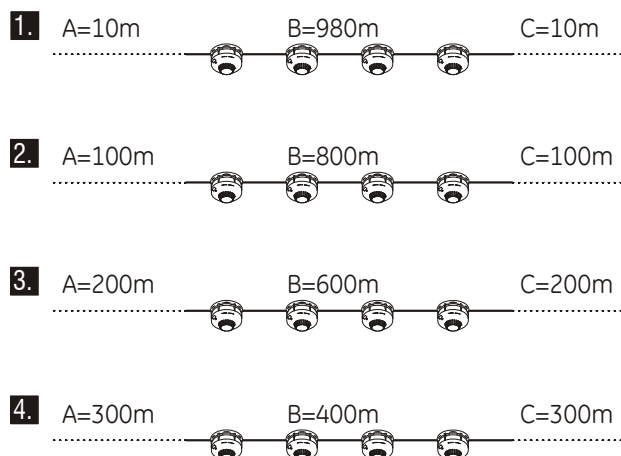
Switch setting for device mode Switch 6	Device mode	DIP Switch setting (1) (2) (4)	Mapping input type	
			Fast flash	Steady
			Tone Type	
			Tone A primary/alert	Tone B secondary/evac
OFF	ZP755	0	Intermittent	Continuous
OFF	ZP755	1	Continuous	Intermittent
OFF	ZP755	2	Continuous	Two - Tone
OFF	ZP755	3	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

3050-01

Figure 5



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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## Number of sounders per loop

See Figure 5.

The ZP755WV-2R sounder can be powered directly from the loop of a 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 mm<sup>2</sup>

- 10 metres panel to devices**  
30 detectors and 30 sounder beacons  
100 detectors and 20 sounder beacons
- 100 metres panel to devices**  
30 detectors and 30 sounder beacons  
100 detectors and 20 sounder beacons
- 200 metres panel to devices**  
30 detectors and 30 sounder beacons  
100 detectors and 20 sounder beacons
- 300 metres panel to devices**  
20 detectors and 20 sounder beacons  
110 detectors and 10 sounder beacons