

ZA831 V3 Addressable Multisensor, Sounder, Beacon

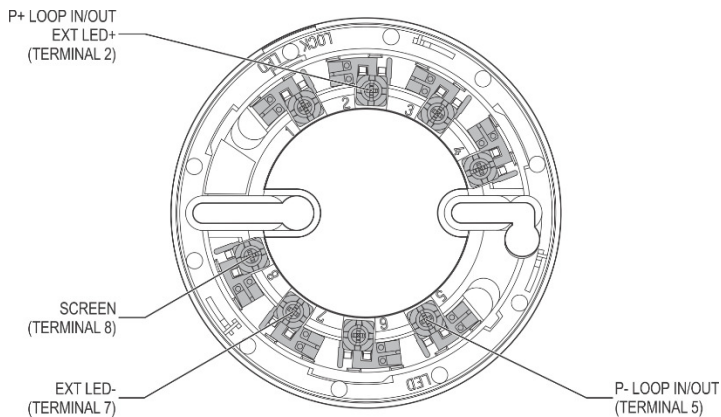
Description	Addressable Multisensor, Sounder, Beacon
Specification	EN54-3 Type A, EN 54-5 Class A1R, EN54-7, EN54-23
Compatibility	ZEOS protocol addressable systems
Mounting	Plugs into ZASBASE surface base
Area coverage	80m ² , subject to local codes
Wiring	2 core loop
Indication	Dual LED's on either side of the detector. Alarm (continuous red), Service and Fault (flashing red), Healthy (flashing green)

Parameters		
Supply Voltage	Loop powered: 20V to 30V DC	
Current - Quiescent	300uA	
Current – Device in alarm	Total: 4,6mA (Sounder 1,3mA, Beacon 1,3mA, Driver 2mA)	
Sounder Type	Type A	
Smoke sensor operation	Light Scatter	
Heat Class	A1R	
Sounder operation	Piezo Electric	
Sounder Frequency	Alternating tone 800HZ - 1kHz	Continuous Tone 1kHz
Beacon operation	LED	
Operating temperature	-10 to 75 degrees Celsius	
Max Humidity	95% RH non condensing	
Weight	120g without base; 160g with base	
Dimensions	107mm Diameter; 54mm Height	
Color	White	
Material	ABS	
Sound Level @ 1m (A weighted readings)		
<u>Angular displacement (°)</u>	<u>Sound Level (dB) Alternating tone 2,5 - 3,5 kHz</u>	<u>Sound Level (dB) Continuous Tone 3,5 kHz</u>
15	87	85
45	81	81
75	94	91
105	92	90
135	77	75
165	85	83
Beacon (EN54-23)		
IP CODE (EN54-3 as per EN60529:1991)	IP21C	
Mounting position	Ceiling mount parallel to the floor with light dome facing the floor	
Coverage Volume	Open Class	
Maximum Height	The radiation pattern height is 2.18m	
Volume dimensions	2m X 2m	
Flash frequency	0.5Hz	

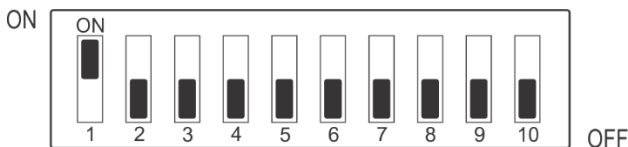


1. Wiring Specifications

Base Connections	
Terminal	Connection
2	P+ Loop IN/OUT & EXT LED (+)
5	P- Loop IN/OUT
7	EXT LED (-)
8	Loop cable screen terminal



2. D.I.L Switch Configuration



Switches 1-7 used to configure the device address.

Switches 8 & 9 used to set device type.

Switch 10 Sounder group mapping (*if fitted*).

3. Address Switches Binary Weights

1 ON = 1	4 ON = 8	7 ON = 64
2 ON = 2	5 ON = 16	
3 ON = 4	6 ON = 32	

4. Sensor Type Identification On Panel

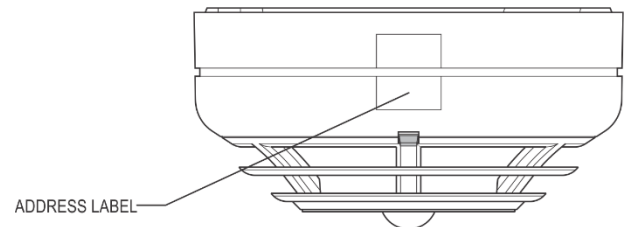
Sensor Type	Panel display	Healthy Analogue Value
Heat Only	DET SOUND	21
Smoke Only	DET SOUND	23
Smoke & Heat	DET SOUND	25

5. Set Device Type

Switch Setting	Sounder Beacon activated by	Mapping trigger (CDM)	Sensor Type
8 ON 9 ON	ONLY Beacon – No Sounder	ANSI	Multi-sensor (Smoke and Heat Static plus Rate of Rise)
8 OFF 9 OFF	Global EVAC or Programming	ANSI	Multi-sensor (Smoke and Heat Static plus Rate of Rise)
8 ON 9 OFF	Global EVAC or Programming	ANSI	Heat Only (Static Heat only no Rate of rise)
8 OFF 9 ON	Global EVAC or Programming	ANSI	Smoke Only

For Heat Only Static plus Rate of Rise use one of the two multi-sensor switch settings. Set the detector to Heat only via panel menu 6-3-1

6. Address Label



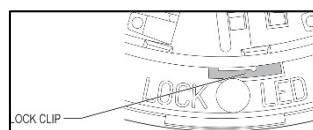
A set of Address labels are supplied with each addressable panel.

Fit the Address label on the recessed area of the detector as indicated on the diagram above. The Address label displays the loop number and device address on the loop. The first digit on the label display the loop number followed by the 3 digit device address. E.g. 1005 is Loop 1 Device number 005.

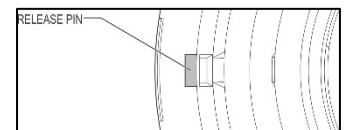
7. Base Lock

To lock detector into base, remove the lock clip on the base using a small screwdriver. To unlock the device from its base, push in the release pin on the detector and turn the detector anticlockwise. The release pin is located next to the detector LED. See diagrams for details.

Lock



Release



8. Sounder Synchronization

The ZA831 V3 beacon and sounder outputs are synchronized across the loop. If used with the Valkyrie horn sounders, the Valkyrie alternating low frequency, Tone 800Hz-1000Hz, must be selected, on the Valkyrie horn sounders, for matching sound.