

## AW-D316 Conventional Sounder Beacon User Manual

### I. Overview



**AW-D316 Conventional Sounder Beacon** can give audible and visual alarms after being connected to a DC24V power supply. It can be used with a bus-type fire alarm control panel through an output module. After receiving a start command given by the fire alarm control panel following an accident, the output module will start the Sounder Beacon. After that, the Sounder Beacon will give a dazzling visual alarm signal and a harsh audible alarm signal to remind the persons on the scene of the accident of the fact that a fire has occurred on the site quickly and the necessity to take related evacuation measures, thus preventing the fire accident from becoming a major one. The Sounder Beacon may be used to give audible alarms and visual alarms at the scenes of accidents. It is applicable to places like high-rise residential buildings, public places, hotels, amusement buildings, factories, shopping centers, hospitals, schools, office buildings and stock exchanges, and particularly to the places with a low visibility or the possibility of generation of smoke.

### II. Product features

- ✓ Meet both EN54-3 and EN54-23
- ✓ Designed with an upper cover and a lower cover and installed on an independent base, it can be installed, debugged and maintained conveniently.
- ✓ Suitable for wall and ceiling mount application
- ✓ Providing 16 tones.
- ✓ Highly efficient LED technology and specially designed lens
- ✓ Light output synchronization.

### III. Technical Specification

1. Executive Standard: EN54-3/EN54-23 Type A indoor
2. Operating voltage: DC24V(20V~28V)
3. Operating Current:  $\leq 100\text{mA}@DC24V$
4. Sound output:  $\geq 75\text{dB(A)} @ 1\text{m(Tone 1)}$ .
5. Number of tones: 16
6. EN54-23 coverage: C-3-8/W-2.4-6
7. Flash rate: 0.5Hz
8. Flash color: white
9. Light output synchronization: meets EN54-23
10. Protection class: IP21C
11. Operating temperature:  $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$  Relative Humidity:  $\leq 95\%$  (non-condensing)
12. Material Lens/Body: Flame retardant PC/ABS

13. Dimension:  $\phi 110\text{mm} \times 108\text{mm}$  (with base), See Fig1.
14. Weight: about 266g

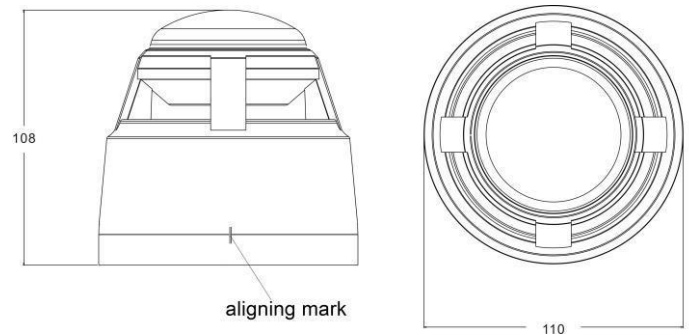


Fig.1

### V. Tone Setting

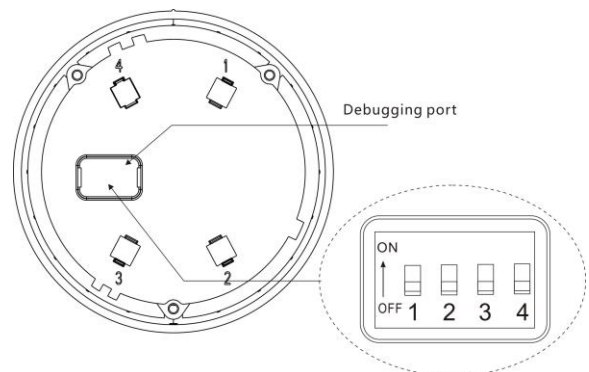


Fig.2

The tone of the sounder beacon can be set by the 4-way DIP switch, which is at the back of the main body (see Fig. 2). For more detail, please refer to the Tone Table.

Tone Table		
Tone	Switch	Description
1	0,0,0,0	667Hz-2000Hz@0.22Hz
2	1,0,0,0	970Hz
3	0,1,0,0	800Hz/970Hz@2Hz
4	1,1,0,0	800Hz-970Hz@1Hz
5	0,0,1,0	970Hz 1s off/ 1s on
6	1,0,1,0	970Hz 0.5s/ 630Hz,0.5s
7	0,1,1,0	500Hz-1200Hz $\times 3, 3.5\text{s on}/0.5\text{s off}$
8	1,1,1,0	2840Hz,0.5s on/0.5s off $\times 3 / 1.5\text{s off}$
9	0,0,0,1	2840Hz,0.4s on,0.3s off
10	1,0,0,1	550Hz,0.7s/1000Hz,0.33s
11	0,1,0,1	1500Hz-2700Hz@3Hz
12	1,1,0,1	2400Hz
13	0,0,1,1	500Hz~1200Hz@0.33Hz
14	1,0,1,1	2400Hz-2900Hz@9Hz
15	0,1,1,1	2400Hz-2900Hz@3Hz
16	1,1,1,1	500Hz-1200Hz,3.75s on/0.25s off

Note: e.g. "1,0,0,0" means "Switch 1 is ON, Switch 2-4 are OFF".

**VI. Installation**

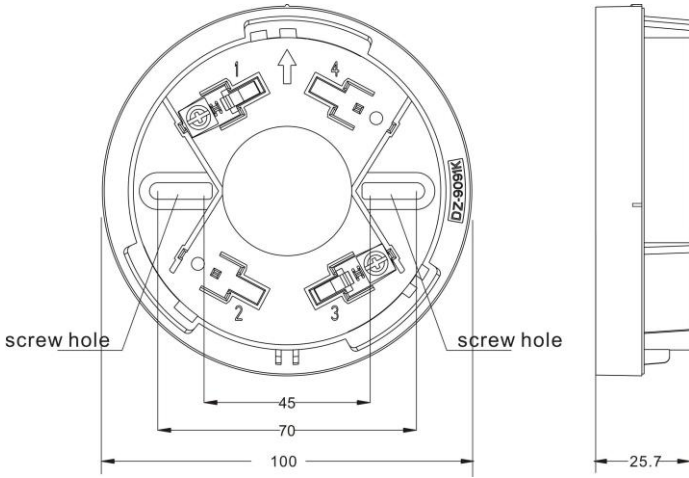


Fig. 3 Base and wiring diagram

1. Use two M4 screws to fix the DZ-9091K base via the two elliptic screw holes(see Fig.3), then connect the power cables with the Terminal 1& 3 (1 connected with positive,and 3 with negative.1.5mm<sup>2</sup> or above fire cable for the power input is recommended.), finally twist the main body onto the base.
2. If the sounder Beacon is required to be tamper-proof, fix it with ST2.9×5 self- tapping screws through the tamper-proof hole (see Fig. 4)on the base.

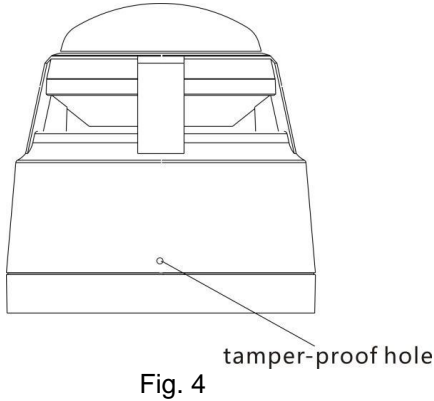


Fig. 4

**VII.Sound Level Data(EN54-3 approved)**

Tone1:667Hz-2000Hz@0.22Hz,MaxVolume,dB(A)@1m

Angle	Horizontal		Vertical	
	20V	28V	20V	28V
15°	77.5	81	78.1	81.4
45°	77.9	81.1	78.4	81.7
75°	84.4	88.1	84.8	88.6
105°	84.6	87.7	84.7	87.9
135°	77.3	80.4	76.6	80
165°	77.9	81.3	77.5	81.5

**VIII.Coverage Volume(EN54-23 approved)**

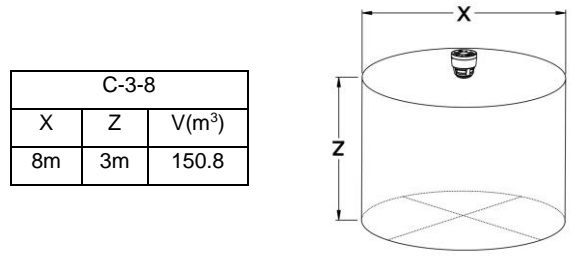


Fig. 5 Ceiling mount coverage volume

C-3-8		
X	Z	V(m <sup>3</sup> )
8m	3m	150.8

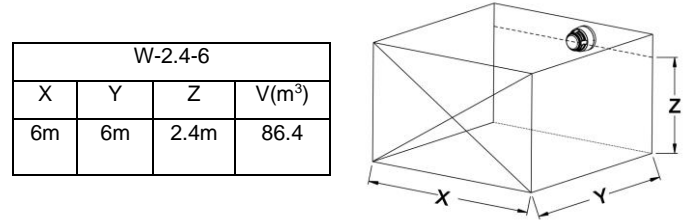


Fig. 6 Wall mount coverage volume

W-2.4-6			
X	Y	Z	V(m <sup>3</sup> )
6m	6m	2.4m	86.4



  
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