

Features

- ✧ Providing 16 tones.
- ✧ Using ultra bright LEDs as source for light indication.
- ✧ Loop powered and external 24V power supplied.
- ✧ Power-saving consumption mode and normal consumption mode (normal consumption mode is defaulted)
- ✧ Single/dual address programmable.
- ✧ Working modes: sounder and strobe, strobe only, and sounder only.
- ✧ Standard: EN 54-3.

Description

I-9403 Intelligent Sounder Strobe (the sounder strobe) is an audible and visual alarm device installed in field, which can be activated by fire alarm control panel in fire control center. After activated, it will generate strong audible and visual alarm signal to warn people in field. The sounder strobe can use together with a 25.5mm high shallow base or a 40mm high deep base. Deep base is used if there is no special statement in this manual.

Connection & Cabling

Terminals on the base are shown in Fig. 2.

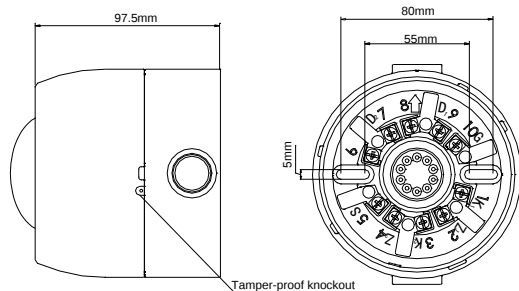


Fig. 1

Fig. 2

Z1(2), Z2(4): Loop of the control panel, polarity-insensitive.

D1(9), D2(7): To external 24VDC power, polarity-insensitive.

Recommended Wiring

1.5mm² or above fire cable for D1, D2, Z1 and Z2, subject to local codes.



Installation

- ✧ When surface mounted, the sounder strobe should be placed 0.2m from the ceiling for normal space height. When the conduit is embedded, the base should be mounted on the back box. When conduit is surface mounted, the deep base should be adopted. Knock the knockout hole, and connect the conduit with it. The mounting hole spacing and mounting direction of the sounder strobe with a deep base are shown in Fig. 2. Mounting method is shown in Fig. 3a and Fig. 4. The conduit must be embedded when the shallow base is used, as shown in Fig. 3b.

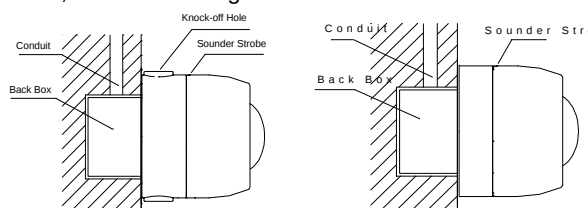


Fig. 3a

Fig. 3b

- ✧ The base and the sounder strobe are twisted together. When mounting, remove the sounder strobe, thread cables through the cable entry in the base and connect with corresponding terminals, then twist the sounder strobe onto the base.

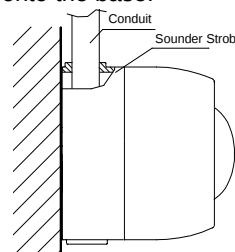


Fig. 4

- ✧ If the sounder strobe is required to be tamper-proof, knock down the knockout as shown in Fig. 1 and fix it with ST2.9×6.5 self-tapping screws (in this case, it can only be removed by a cross screwdriver).

Application

Address, tone, programming method, working mode, consumption mode can be set through P-9910B programmer.

✧ Tone, single/dual address mode and consumption mode can be set as the same as *programming the parameter of a module* by P-9910B programmer. Refer to Table 1 for parameters and *P-9910B Installation and Operation Manual* for details.

✧ Working mode can be set as same as *programming device type* by the programmer, refer to *P-9910B Installation and Operation Manual* for details.

- Sounder and strobe (defaulted): 24;
- Sounder only: 20;
- Strobe only: 21.

✧ In single address mode, the sounder strobe will sound the preset tone with flash frequency $1.4 \times (1 \pm 20\%) \text{Hz}$ when activated.

✧ In dual addresses mode,

- The sounder strobe will sound the pre-alarm tone (refer to Table 1) with flash frequency $0.7 \times (1 \pm 20\%) \text{Hz}$ when activating the first address;
- The sounder strobe will sound a preset tone (refer to Table 1) with flash frequency $1.4 \times (1 \pm 20\%) \text{Hz}$ when activating the second address;
- The sounder strobe will sound the preset tone (refer to Table 1) with flash frequency $1.4 \times (1 \pm 20\%) \text{Hz}$ when activating the first and second address together.

✧ Wiring diagram

➤ Fig.5 shows that the sounder strobe is loop-powered.

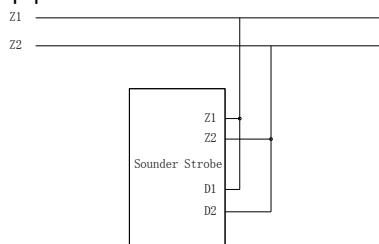


Fig. 5

➤ Fig. 6 shows that the sounder strobe is supplied by an external 24V power.

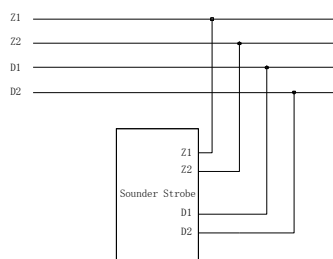


Fig. 6

✧ An example shows that how to set the sounder strobe addressed 25 as dual addresses, tone 15 and normal consumption mode.

Switch on the P-9910 programmer, input the password and press the *Function* key and number 3. Enter 63 and the *Program* key. The setting is successful when P appears on the display. The sounder strobe is now to be programmed Address No. 25 and 26.

✧ Table 1 shows tone mode, programming method, consumption for the sounder strobe (Single address, tone 14 and normal consumption are defaulted).

Table 1

Parameter	Tone	Programming method	Consumption mode
01	01	Single address	Power-Saving
02	02		
03	03		
04	04		
05	05		
06	06		
07	07		
08	08		
09	09		
10	10		
11	11		
12	12		
13	13		
14	14		
15	15		
16	16		
17	01	Dual addresses	
18	02		
19	03		
20	04		
21	05		
22	06		
23	07		
24	08		
25	09		
26	10		
27	11		
28	12		
29	13		
30	14		
31	15		
32	16		
33	01	Single address	Normal
34	02		
35	03		
36	04		
37	05		
38	06		
39	07		
40	08		
41	09		
42	10		
43	11		
44	12		
45	13		
46	14		
47	15		
48	16		
49	01	Dual addresses	
50	02		
51	03		
52	04		
53	05		
54	06		
55	07		
56	08		
57	09		
58	10		
59	11		
60	12		
61	13		
62	14		
63	15		
64	16		

Sound Level Data

Distance 1m

(unit:dB)

	Angle	Horizontal				Vertical			
		20V		28V		20V		28V	
		Normal Mode	Power-saving Mode	Normal Mode	Power-saving Mode	Normal Mode	Power-saving Mode	Normal Mode	Power-saving Mode
Tone 01	15°	91	81	94	85	90	79	93	85
	45°	92	84	95	88	91	80	94	87
	75°	93	88	97	92	92	87	96	90
	105°	93	89	96	92	92	88	96	90
	135°	92	86	95	89	91	81	94	88
	165°	90	83	94	85	89	79	93	84
Tone 02	15°	86	81	90	85	86	81	90	85
	45°	90	86	93	89	89	85	91	88
	75°	95	88	96	92	94	88	9	92
	105°	92	88	95	92	92	89	95	93
	135°	90	84	92	89	89	84	92	88
	165°	88	82	92	86	86	81	92	85
Tone 03	15°	86	80	88	84	85	79	87	84
	45°	88	83	91	87	86	80	91	83
	75°	92	85	95	89	91	81	95	84
	105°	92	85	95	89	91	80	96	85
	135°	88	82	90	86	87	80	87	85
	165°	85	81	87	84	84	79	86	84
Tone 04	15°	86	81	88	85	86	81	90	85
	45°	88	86	92	89	87	85	91	88
	75°	94	86	98	89	94	85	97	89
	105°	94	86	97	90	93	86	97	89
	135°	90	84	95	88	90	84	94	88
	165°	89	82	92	86	88	82	91	86
Tone 05	15°	87	81	90	84	86	80	89	83
	45°	91	88	93	92	90	80	92	84
	75°	93	89	96	94	93	80	95	85
	105°	93	89	97	93	93	81	96	86
	135°	90	87	93	90	89	81	91	84
	165°	87	81	91	84	86	80	90	83
Tone 06	15°	86	79	89	83	85	78	90	82
	45°	91	83	93	87	90	84	92	87
	75°	93	87	96	91	94	87	96	91
	105°	93	88	96	91	93	88	95	90
	135°	89	83	92	87	88	83	90	86
	165°	85	80	89	83	85	79	89	83
Tone 07	15°	86	76	88	78	85	75	88	77
	45°	92	81	95	85	91	81	94	84
	75°	92	83	97	87	92	83	96	87
	105°	91	83	95	87	91	83	94	86
	135°	92	80	96	84	91	79	95	84
	165°	86	77	90	82	86	76	90	81
Tone 08	15°	90	80	94	82	89	79	93	81
	45°	94	81	97	84	94	81	96	84
	75°	96	84	99	87	95	84	98	87
	105°	96	84	99	88	96	85	99	88
	135°	93	81	97	85	93	81	97	84
	165°	89	79	92	82	88	78	91	81

Continue

	Angle	Horizontal				Vertical			
		20V		28V		20V		28V	
		Normal Mode	Power-saving Mode	Normal Mode	Power-saving Mode	Normal Mode	Power-saving Mode	Normal Mode	Power-saving Mode
Tone 09	15°	84	81	87	84	83	81	86	84
	45°	89	84	93	87	88	82	93	83
	75°	92	88	95	92	93	81	96	83
	105°	92	88	95	92	92	82	94	83
	135°	89	83	93	87	88	82	92	82
	165°	85	80	88	83	84	81	89	82
Tone 10	15°	86	80	90	83	85	79	89	82
	45°	90	83	94	87	90	83	93	87
	75°	94	89	97	93	93	89	96	92
	105°	93	89	97	93	92	88	97	93
	135°	93	84	95	87	92	84	95	86
	165°	86	80	90	83	86	79	91	83
Tone 11	15°	88	78	91	81	88	78	90	80
	45°	91	81	93	85	90	81	92	84
	75°	93	85	95	89	92	84	95	88
	105°	93	86	96	89	92	85	95	89
	135°	90	82	94	85	89	81	93	85
	165°	88	77	92	81	87	77	91	81
Tone 12	15°	85	81	88	84	84	81	88	83
	45°	89	84	92	88	88	84	92	87
	75°	92	88	96	91	92	87	95	91
	105°	92	87	96	91	92	86	95	91
	135°	89	83	93	87	88	83	92	87
	165°	85	80	88	83	84	80	88	83
Tone 13	15°	85	78	89	79	84	77	89	79
	45°	91	81	93	85	90	81	93	85
	75°	94	86	97	90	93	86	97	90
	105°	94	86	98	89	93	85	96	89
	135°	90	82	95	85	90	81	94	85
	165°	87	78	90	81	86	77	91	81
Tone 14	15°	87	80	91	84	86	79	90	84
	45°	93	84	96	89	92	83	96	88
	75°	96	89	100	91	95	88	99	91
	105°	95	88	99	91	95	87	98	90
	135°	92	84	95	87	91	84	95	86
	165°	88	80	91	83	87	79	91	82
Tone 15	15°	84	78	87	82	83	77	87	81
	45°	86	82	89	85	86	78	88	81
	75°	90	84	93	89	89	78	92	81
	105°	90	85	93	88	90	77	93	82
	135°	86	81	89	85	85	78	89	81
	165°	84	77	87	81	83	77	87	80
Tone 16	15°	85	83	87	88	84	82	88	87
	45°	88	87	93	90	88	86	92	90
	75°	91	89	96	94	90	89	95	93
	105°	92	89	95	92	91	88	95	92
	135°	88	87	91	90	88	87	90	88
	165°	85	83	88	87	85	83	87	87

Specification

Operating Voltage	Loop: 24V (20V~28V) Power: 24V (20V~28V)
Standby Current	Power-saving mode: - Loop-powered: Loop monitor current $\leq 2\text{mA}$ Start current $\leq 9\text{mA}$ - External 24V power supplied Loop monitor current $\leq 1\text{mA}$ Start current $\leq 2\text{mA}$ Power monitor current $\leq 1\text{mA}$ Start current $\leq 9\text{mA}$ Note: The sounder strobe can only work at power-saving mode when loop-powered with the maximum of 20 sounder strobes in the loop. Normal mode: - Loop powered Loop monitor current $\leq 2\text{mA}$ Start current $\leq 35\text{mA}$ - External 24V power supplied Loop monitor current $\leq 1\text{mA}$ Start current $\leq 2\text{mA}$ Power monitor current $\leq 1\text{mA}$ Start current $\leq 35\text{mA}$
Flash Frequency	- Single address: $1.4 \times (1 \pm 20\%) \text{ Hz}$ - Dual addresses: First address activated: $0.7 \times (1 \pm 20\%) \text{ Hz}$ Second address activated: $1.4 \times (1 \pm 20\%) \text{ Hz}$
Programming Method	Single/dual address (refer to Table 1)
Programming Range	1~242
Ingress Protection Rating	IP33
Operating Temperature	$-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$
Relative Humidity	$\leq 95\%$, non condensing
Enclosure Material	ABS
Dimension (L×W×H)	$\phi 110\text{mm} \times 97.5\text{mm}$ (deep base) $\phi 110\text{mm} \times 83\text{mm}$ (shallow base)
Mounting Hole Spacing	55mm~80mm
Weight	About 355g (deep base) About 327.2g (shallow base)

Tone Type

Tone	Description
01	970Hz
02	800Hz /970Hz @ 2Hz
03	800Hz -970Hz @1Hz
04	970Hz 1s off/1s on
05	970Hz, 0.5s/630Hz, 0.5s
06	500Hz -1200Hz×3, 3.5s on/0.5s off
07	2850Hz, 0.5s on/0.5s off×3/1.5s off
08	2850Hz 0.4s on,0.3s off
09	550Hz,0.7s/1000Hz,0.33s
10	1500Hz -2700Hz @3Hz
11	2400Hz
12	500Hz -1200Hz @0.33Hz
13	2400Hz -2900Hz @9Hz
14	2400Hz -2900Hz @3Hz
15	800Hz-970Hz@3Hz
16	500Hz-1200Hz,3.75s/0.25s off
Pre-alarm	800Hz 1s off/1s on

Accessories and Tools

Mode	Name	Remarks
P-9910B	Hand Held Programmer	Order separately
C-94DB	base	Order separately

Limited Warranty

GST warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

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