

Intelligent open-area sounder beacon 55000-005

Instruction Sheet
R10153GB0



Schneider Electric Fire & Security Oy

Sokerilinnantie 11 C
FI-02600 Espoo, Finland
Tel: +358 10 446 511
Website: www.schneider-electric.com
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Contents

1	Intelligent open-area sounder beacon 55000-005	4
1.1	Product Codes	4
1.2	Installation	5
1.3	Fault Finding	5
1.4	IP Rating	6
1.5	Individual address setting.....	6
1.6	Troubleshooting	6
1.7	Group Address Setting.....	7
1.8	Commissioning.....	7
1.9	Functional Test Data	7

1 Intelligent open-area sounder beacon 55000-005

The Intelligent Open-Area Sounder Visual Indicator is designed for use in open areas. All devices are powered directly from the loop and need no external power supply. They operate at 17–28V DC and are polarity sensitive. The Intelligent Open-Area Sounder Visual Indicator is designed for use in open areas.

A nominal sound output of 100dB(A) is achieved at a current consumption of 5mA in the case of the sounder and 8mA for the sounder beacon. Many control panels will be able to drive up to 20 sounders and up to 15 sounder beacons per loop on average. The maximum number of devices that may be connected to a particular loop should, however, be determined by a loop loading calculation using the Loop Calculator. Since the alarm devices are intended for use in open areas, it is possible for more than one device to be audible at any given point in a building. For this reason, the operation of all may be synchronized by the control panel. All the alarm devices can be assigned group addresses as well as individual addresses, so that the functional options of the sounder are identical with those of the Sounder Control Unit part no 55000-582 or 55000-182 (DIN-rail version).

The open-area alarm devices respond to their own individual address set with a DIL switch. They can also respond to a 'Group Address' which allows multiple sounders to be controlled simultaneously. A group address may be any spare address between 112 and 126 and is selected by means of a 4 segment DIL switch. A device under group address control must have an individual address between 1 and 111 otherwise a fault value of 4 is transmitted. Devices not using the group address facility may be addressed at any address (1–126).

1.1 Product Codes

Description	Product code
Intelligent open-area sounder beacon 55000-005	FFS06728112

1.2 Installation

1. Drill out the cable entries and mounting holes as required on the base (using a 20mm hole curren for the cable entries), taking care not to damage the electronics. Do not attempt to knock these out as the base will be damaged.
2. Secure the base to the mounting surface with pan-head screws. If IP65 integrity is required. Fit the weatherproof mounting bad between the base and the mounting surface. Fit the "O" ring to the base using a lubricant such as silicone grease.
3. Set the sounder address using the table overleaf.
4. To lock the sounder in the base, snip the break-out on the base rim (location shown in the figure below). Fit the sounder to the base.

1.3 Fault Finding

Fault Finding

Problem	Possible Cause
No response or missing	Incorrect address setting Incorrect loop wiring (polarity reversed)
Analogue value 1	Sounder failed
Analogue value 2	Beacon failed
Analogue value 3	Sounder and beacon failed
Analogue value 4	Incorrect group or individual address setting
Device fault	Incorrect group address setting
Device fails to operate	Control panel has incorrect cause and effect programming Incorrect group address setting Incorrect tone setting
Device difficult to fit to base	Insufficient lubricant on 'O' ring
Water ingress	Weatherproof mounting pad missing or damaged Incorrect cable glands Damaged base

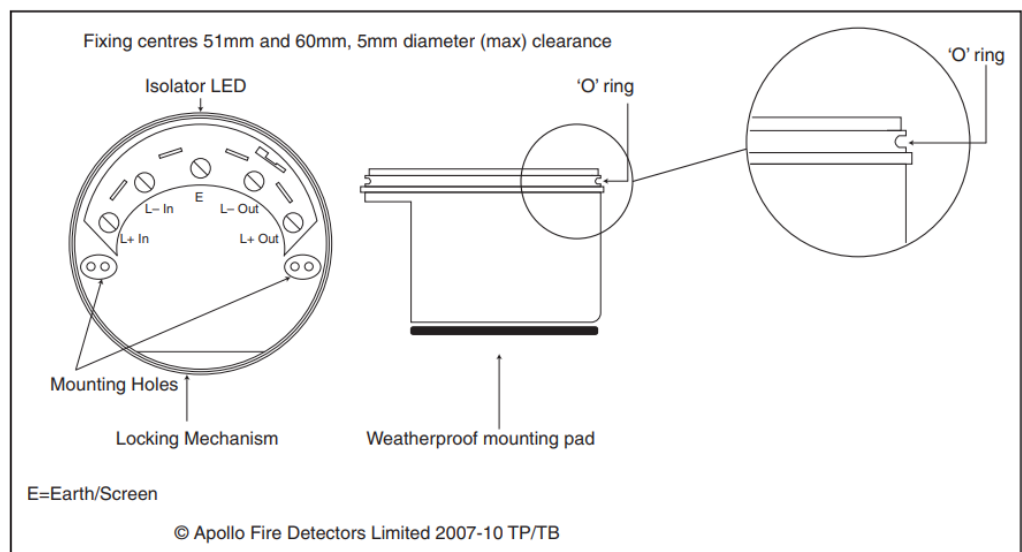


Fig 2 Base diagram

1.4 IP Rating

To maintain the integrity of the enclosure it is essential that suitable IP rated cable glands be used along with the “O” ring provided and weatherproof mounting pad.

1.5 Individual address setting

The address of the intelligent Multi-tone Souder Beacon is set using seven segments of the eight-segment DIL switch. The eighth segment is used to adjust the volume output. Segments 1-7 of the switch are set to “O” (ON) or “I”, using a small screwdriver or similar tool. A complete list of address settings is shown below.

DIL switch setting		DIL switch setting		DIL switch setting		DIL switch setting		DIL switch setting	
addr	1234567	addr	1234567	addr	1234567	addr	1234567	addr	1234567
1	1000000	11	1101000	21	1010100	31	1111100	41	1001010
2	0100000	12	0011000	22	0110100	32	0000010	42	0101010
3	1100000	13	1011000	23	1110100	33	1000010	43	1101010
4	0010000	14	0111000	24	0001100	34	0100010	44	0011010
5	1010000	15	1111000	25	1001100	35	1100010	45	1011010
6	0110000	16	0000100	26	0101100	36	0010010	46	0111010
7	1110000	17	1000100	27	1101100	37	1010010	47	1111010
8	0001000	18	0100100	28	0011100	38	0110010	48	0000110
9	1001000	19	1100100	29	1011100	39	1110010	49	1000110
10	0101000	20	0010100	30	0111100	40	0001010	50	0100110
51	1100110	61	1011110	71	1110001	81	1000101	91	1101101
52	0010110	62	0111110	72	0001001	82	0100101	92	0011101
53	1010110	63	1111110	73	1001001	83	1100101	93	1011101
54	0110110	64	0000001	74	0101001	84	0010101	94	0111101
55	1110110	65	1000001	75	1101001	85	1010101	95	1111101
56	0001110	66	0100001	76	0011001	86	0110101	96	0000011
57	1001110	67	1100001	77	1011001	87	1110101	97	1000011
58	0101110	68	0010001	78	0111001	88	0001101	98	0100011
59	1101110	69	1010001	79	1111001	89	1001101	99	1100011
60	0011110	70	0110001	80	0000101	90	0101101	100	0010011
101	1010011	106	0101011	111	1111011	116	0010111	121	1001111
102	0110011	107	1101011	112	0000111	117	1010111	122	0101111
103	1110011	108	0011011	113	1000111	118	0110111	123	1101111
104	0001011	109	1011011	114	0100111	119	1110111	124	0011111
105	1001011	110	0111011	115	1100111	120	0001111	125	1011111
								126	0111111

1.6 Troubleshooting

Before investigating individual units for faults, it is important to check the system wiring is fault-free. Each faults on data loops may cause communication errors.

1.7 Group Address Setting

In group mode the Intelligent Multi-tone Sounder Beacon responds to an additional address referred to as the group address, which is used to activate groups of sounders simultaneously. Individual units continue to respond to their own addresses and report their status in the normal way. A group address is set on a four-segment DIL switch which is factory set to 0000. A group address may be any spare address within-and only within-the range 112 to 126 inclusive. The required group address is set in accordance with the following table.

Note: group mode is disabled if the group address DIL switch is set to 0000, irrespective of the protocol message.

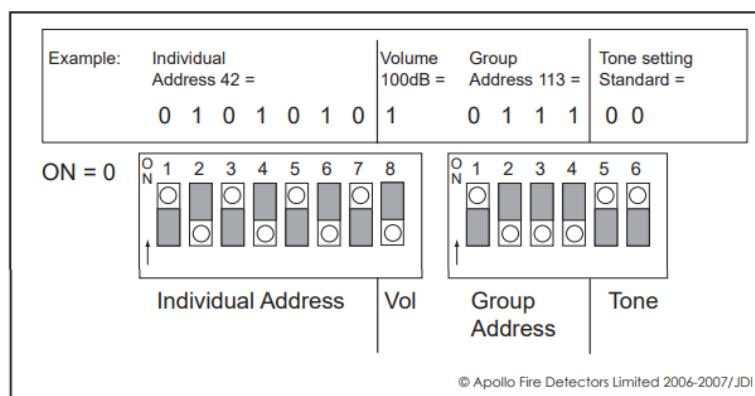


Fig 1 Example of Address and Tone Setting

Tone Setting

DIL 5	DIL 6	Tone Setting	Evacuate Tone	Alert Tone
0	0	Standard	Continuous Alternating	Pulsed
1	0	Slow Whoop	NEN2575	Continuous
0	1	DIN	DIN tone	Continuous
1	1	None	None	None

1.8 Commissioning

It is important that the Intelligent Multi-tone Sounder Beacon be fully tested after installation. An test set 5500-870, may be used to carry out functional testing of individual units. The test set can also perform data integrity tests of an entire system.

1.9 Functional Test Data

The sounder beacon is loop-powered and controlled by the control panel using the output bits in the communication protocol.