

Description:

The loop powered Integrated Base Loop Sounder is incorporated into the standard XP95 / Discovery mounting base that is compatible with the FireFinder Fire Alarm Control Panel.

This guide describes the installation of the following sounders.

Item No	Description
201-0110	Integrated Base Loop Sounder AS1670.4 (without verbal message)
201-0111	Integrated Base Loop Sounder NZ4512 (without verbal message)
201-0114	White Cap only

Note 1: Only connect the sounders to control panels using either the XP95 or Discovery protocol.

Note 2: The Integrated Base Sounder is not suitable for outdoor use.

Technical Data:

Operating voltage	17 to 28VDC
Sounder output	
Low output level setting	volume nominally 50dBA minimum to 75dBA maximum
High output level setting	volume nominally 75dBA minimum to 92dBA maximum
Current consumption at 24V DC	
quiescent	200µA
sounder operated at 92dBA	≈ 5mA

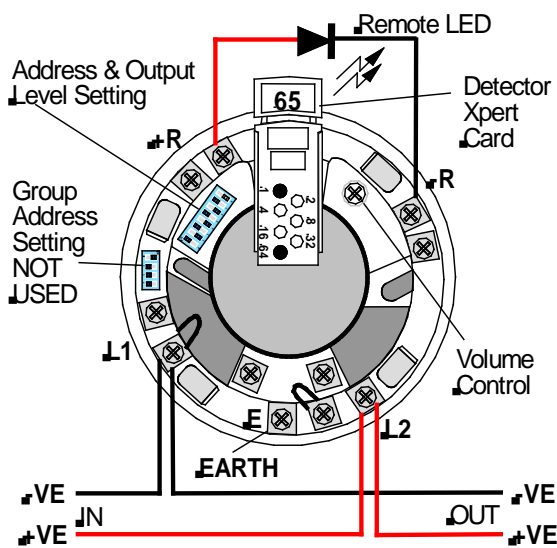


Figure 1: Integrated Base Loop Sounder Wiring

Installation:

Observe anti-static precautions at all times

1. The sounders may be secured to a standard conduit box or surface mounted if there is access through the mounting surface for cabling. If a detector is fitted, lock it if required by screwing in the grub screw on the detector head with a 1.5mm hex driver.

Standard Sounder Wiring:

1. The sounders are polarity sensitive (supply reversal protected) and will not function if wired incorrectly.
2. Observing polarity connect the positive and negative loop cables to the L2 and L1 terminals respectively. The wiring terminals accept solid or stranded cables up to 2.5mm². Functional earth or screen cables may be terminated to the EARTH connection. (See Figure 1)

Address Setting:

The address of the sounder is set using seven segments of the eight- segment DIL switch. The eighth segment is used to adjust the sounder output level. Segments 1- 7 of the switch are set to "0" (ON) or "1", using a small screwdriver or similar tool. A complete list of address settings is shown in on Page 3. If a detector is to be fitted, set the Xpert Card address as described on Page 2.



L = Output Level Setting (SW8)
0 = 50 - 75dBA
1 = 75 - 92dBA

Figure 2: Example of Sounder Addressing and Sounder Output Level

XPERT Card Addressing

Select the desired address and remove the pips indicated in black. Remove pips with a small screwdriver.



126: Expanded View

Address DIL Switch Settings

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

Testing: Testing is initiated from the control panel and should last for at least 5 seconds.

Note 3: Output bit 0 is set to 1 on two polling cycles to switch the sounder on.

Commissioning: It is important that the Integrated Base Sounder be fully tested after installation therefore, create an alarm situation and ensure the sound level is sufficient for the working environment.

Note 4: An XP95 Test Set may be used to carry out functional testing of individual units and data integrity tests of an entire system.

Functional Test Data

The sounder is controlled by the control panel using the output bits in the communication protocol.

Protocol bit use:

	Output Bit	Function	Input Bit	Function
Not Used. For information only	2	group mode 1 = off 0 = on	2	group mode confirmed 1 = group 0 = individual
ALERT	1	pulsed mode 1 = on 0 = off	1	pulsed mode confirmed 1 = on 0 = off
EVACUATION	0	continuous mode 1 = on 0 = off	0	continuous mode confirmed 1 = on 0 = off

Fault Finding

Problem

No response or missing

Possible Cause

Incorrect address setting
Incorrect loop wiring (polarity reversed)
Too many sounders between isolators (max of 39)
Too many sounders on loop

Analogue value 1

Sounder test failed

Sounder fails to operate

Control panel has incorrect cause and effect programming
Incorrect loop wiring