

**Group Address Setting**

In group mode the Supervised Control Module responds to an additional address referred to as the 'group address', which is used to activate groups of Supervised Control Modules simultaneously. (The module continues to respond to its own individual address and report its status from that address in the normal way.) The group address is selected by the four-segment DIL switch S2 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 by moving one or more of the segments on the switch to '1' (OFF). The following table shows the settings for the group address switch:

addr	DIL switch setting	addr	DIL switch setting
	1248		1248
112	1111	121	0110
113	0111	122	1010
114	1011	123	0010
115	0011	124	1100
116	1101	125	0100
117	0101	126	1000
118	1001		
119	0001		
120	1110		

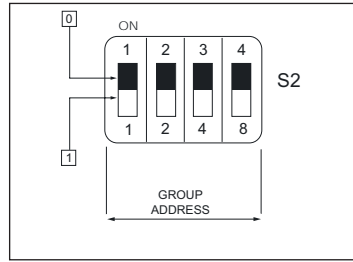


Fig 4. DIL Switch, S2

**Functional Test Data**

OUTPUT BIT	FUNCTION	INPUT BIT	FUNCTION
2	GROUP ADDRESS CONTROL	2	GROUP ADDRESS CONTROL CONFIRMATION
	1 = ENABLE 0 = DISABLE		1 = GROUP ADDRESS 0 = INDIVIDUAL ADDRESS
1	NOT USED	1	INDICATES WIRING CLASS
			1 = CLASS B 0 = CLASS A
0	SOUNDER ON	0	SOUNDER STATUS
	1 = ON 0 = OFF		1 = ON 0 = OFF

**Technical data**

Electrical	
Voltage	17–28V dc + 5–9V data pulses
Current Consumption	1mA
Sounder circuit	
Relay	volt-free UL derated contact 2A at 30V dc 0.6A at 125V ac end-of-line supervisory resistance = 47kΩ, 0.5W

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**Supervised Control Module Installation Instructions**

**General**

The Supervised Control Module, part no SIM-100S, monitors and controls a circuit of alarm sounders or public address speakers. It is mounted on a plastic fascia plate for use with a 4" electrical box. The module requires a separate 24V dc supply to power the sounders or PA system.

In addition to individual Supervised Control Module operation, multiple modules can be controlled simultaneously as a group.

A red LED flashes in synchronization with the current pulse reply from the device. When the module switches the sounders or PA system, the LED is illuminated continuously.

*Note: the Supervised Control Module is not designed for outdoor use unless it is mounted in a suitable weatherproof enclosure.*

**Installation**

1. Mount the electrical box as required and install all cables for termination.
2. Turn the fascia plate face down and locate the knock-outs corresponding to the threaded holes on the electrical box selected (Fig 1). With a small screwdriver and hammer, knock out these holes from the back of the fascia plate.
3. Connect the module for Class A or Class B wiring (Fig 2). Bit 8 of the DIL switch is used to select the class of wiring. All wiring must conform to local codes and regulations.

**Sounder Relay Functionality**

The sounder relay is controlled by bit 0 of the communication protocol. Group activation is achieved by output bit 2. If the supply voltage is removed, the sounder relay will not change state. When the Supervised Control Module is powered up, the relay will be in the same state as it was prior to the module being switched off but the

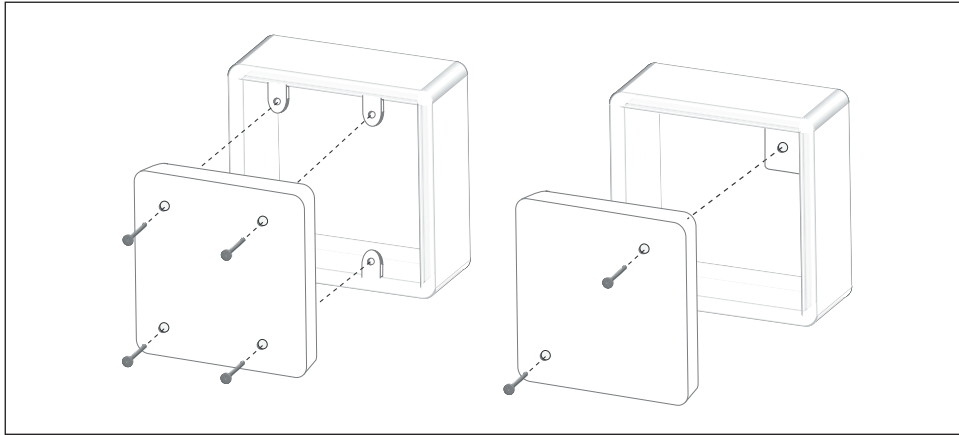
module will respond to output bits 0 and 2 four seconds after power has been applied. If the module has not been addressed, a relay reset will automatically be applied.

**Public Address Speakers**

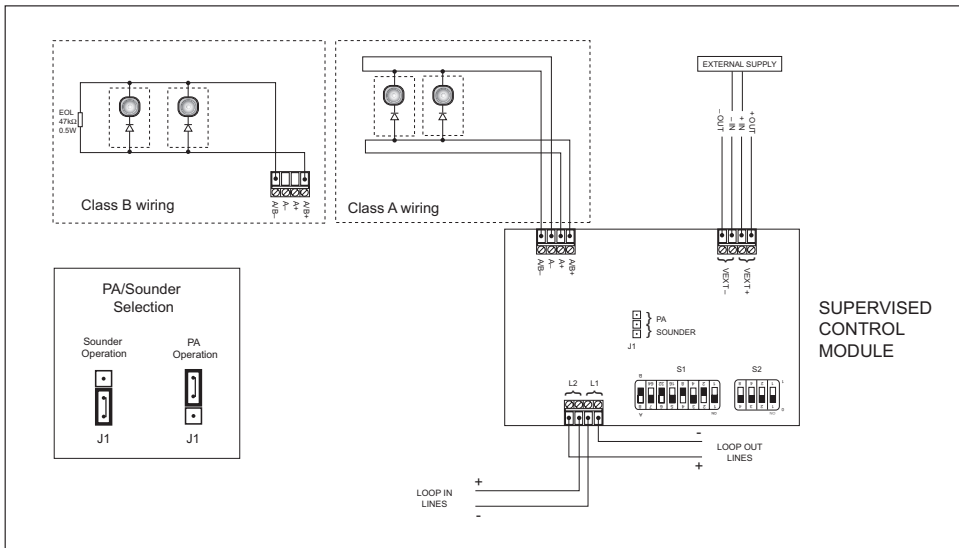
If the Supervised Control Module is to be used to drive speakers, the jumper J1 (Fig 2) should be set as indicated. The external supply should be replaced by an audio amplifier with a maximum of 70.7 Vrms with wire supervision capability as per NFPA 72.

**Notes**

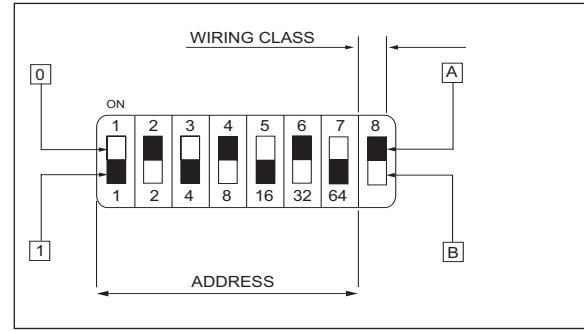
1. Any power supply connected to the relay contacts should be independent, regulated 24V dc and listed for fire protection with battery back-up.
2. All circuits are power limited except TB2 (sounder output) and TB3 (Vext I/P). If these terminals are connected to a non power limited source, remove the lower



**Fig 1. Mounting the Supervised Control Module**



**Fig 2. Wiring Diagram for Supervised Control Module**



**Fig 3. DIL Switch, S1**

portion of the power limited label along the kiss cut. Use only limited energy cable types FPL, FPLR or FPLP on power limited circuits.

**Address Setting**

Segments 1-7 of the DIL switch are used to select the address of the module. Each of the seven segments must be set to '0' (ON) or '1' (OFF) using a small screwdriver or similar tool. A complete list of address settings is shown below. (The eighth segment of the switch is used to select Class A or B wiring).

addr	DIL switch setting 1234567	addr	DIL switch setting 1234567	addr	DIL switch setting 1234567	addr	DIL switch setting 1234567	addr	DIL switch setting 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	111	1111011	121	1001111				
102	0110011	112	0000111	122	0101111				
103	1110011	113	1000111	123	1101111				
104	0001011	114	0100111	124	0011111				
105	1001011	115	1100111	125	1011111				
106	0101011	116	0010111	126	0111111				
107	1101011	117	1010111						
108	0011011	118	0110111						
109	1011011	119	1110111						
110	0111011	120	0001111						