OPEN AREA SOUNDER

S-A4021

PRODUCT INFORMATION

Open-Area Sounder has been designed for use in open areas and can be connected to any UL or Shield system.

A nominal sound output as per the table overleaf is achieved at a current consumption of 8.2 mA. Many control panels will be able to drive up to 20 sounders per loop on average. However, the maximum number of devices that may be connected to a particular loop should be determined by a loop loading calculation.

Since the Open-Area Sounder is 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 synchronised by the control panel.

The devices can be assigned either group or individual group addresses so that the functional options of the sounder are identical with those of the Sounder Control Unit.

ELECTRICAL OPERATION

The Open-Area Sounder is powered directly from the loop and needs no external power supply. It operates at 17 - 28 V DC and is polarity sensitive.

TONE FREQUENCY AND VOLUME CONTROL

The tone and volume control can be used to adjust the sound as per the table below.

SYNCHRONISATION

The sounder also offers synchronisation of continuous and pulsed tones. This ensures the integrity of alert-signals - tones from different sounders do not merge into one signal that could be mistaken for an ‘evacuate’ tone.

FEATURES

- Two volume levels - refer to table overleaf.
- Synchronization of tones.
- Individual and group addressing.
- Built-in Isolator.
- Loop-powered.

TECHNICAL DATA

Supply voltage	17-28 V dc
Modulation voltage	5-9 V peak to peak
Digital communication	Shield Protocol compatible
Maximum loop current consumption at 24V dc	
Normal standby	< 310 µA
Operated 28 V highest audibility	5.4 mA
Operated switch on surge	< 6 mA for one second
Operating temperature	-10°C to 55°C
Humidity (no condensation or icing)	0-95%RH
Designed to IP Rating	IP65
Dimension (diameter x height)	104 mm x 97.5 mm
Weight	105 g
Materials	Red flame-retardant polycarbonate

ADDRESSING

The Open-Area Alarm Devices respond to their own individual addresses set with a DIP switch.

They can also respond to a ‘Group Address’ which enables multiple sounders to be controlled simultaneously. A group address may be any spare address between 112 and 126

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SIGNALING UL LISTED

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The Open-Area Alarm Devices respond to their own individual addresses set with a DIP switch.

They can also respond to a 'Group Address' which enables 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 four segment DIP switch. A device under group address control must have an individual address between one and 111 otherwise a fault value of four is transmitted. Devices not using the group address facility may be addressed at any address (1 - 126).

PROTOCOL COMPATIBILITY

The alarm devices will operate only with control equipment using the Shield protocol.

The features of the Open-Area Alarm Devices are available only when the sounder is connected to a control panel with the appropriate software.

TONE SETTINGS

Output bit 1	Output bit 2	DIP5	DIP 6	Tone description	Tone	Tone type	Output dB(A) at 10ft
Low volume (DIP 8 = ON)							
0	1	0	0	UL	Continuous 2900 Hz	Alert	70.6
1	0	0	0	UL	ANSI 2900 Hz	Evacuate	67.8
0	1	0	1	New Zealand	Pulsed 420 Hz	Alert	71.8
1	0	0	1	New Zealand	1200-500 Hz Slow whoop	Evacuate	70.0
0	1	1	0	Australian	Pulsed 420 Hz	Alert	71.6
1	0	1	0	Australian	500-1200 Hz Whoop	Evacuate	67.3
0	1	1	1	Standard	Pulsed	Alert	72.9
1	0	1	1	Standard	Continuous alternating	Evacuate	75.0
High volume (DIP 8 = OFF)							
0	1	0	0	UL	Continuous 2900 Hz	Alert	79.1
1	0	0	0	*UL	ANSI 2900 Hz	Evacuate	75.3
0	1	0	1	New Zealand	Pulsed 420 Hz	Alert	75.9
1	0	0	1	New Zealand	1200-500 Hz Slow whoop	Evacuate	75.5
0	1	1	0	Australian	Pulsed 420 Hz	Alert	75.2
1	0	1	0	Australian	500-1200 Hz Whoop	Evacuate	71.7
0	1	1	1	Standard	Pulsed	Alert	78.3
1	0	1	1	Standard	Continuous alternating	Evacuate	80.8

Notes: All modes above 75 dB(A) are for public use, and below 75 dB(A) are for private use only as per UL 464.
* NFPA 72 evacuation only tone.

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SHIELD FIRE, SAFETY & SECURITY LTD
Unit 3, Endeavour Drive, Basildon-Essex, SS14 3WF, United Kingdom
Tel: +44 1708 377731 Fax: +44 1708 347637, E-mail: Shielduk@shieldglobal.com
www.shieldglobal.com