

Sounder Visual Indicator Bases



Product overview

Product	XP95 Sounder VID Base (Red Flash) - Isolating
Part No.	45681-330
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Product	XP95 Sounder VID Base (Red Flash) - Slow Whoop - Isolating
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Product information

Sounder Visual Indicator Bases are made up of a loop-powered sounder and beacon combined with a standard XP95/Discovery mounting base. They are used to signal a fire alarm in enclosed areas.

Sounder Visual Indicator Bases can be used with either a detector fitted or a cap for operation as a stand-alone alarm device.

Sounder Visual Indicator Bases are supplied with a built-in isolator. A version without an isolator is also available.

- Two volume ranges 55 - 75 dB(A) and 75 - 91 dB(A)
- Synchronisation of 'alert' and 'evacuate' tones
- Flash synchronisation of Visual Indicators
- Individual and group addressing

Technical data

All data is supplied subject to change without notice. Specifications are typical at 24V, 25°C and 50% RH unless otherwise stated.

Supply voltage	17-28 V dc polarity sensitive
Digital communication	XP95, (Discovery and CoreProtocol compatible)

Protocol pulses	5 V - 9 V peak to peak
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Maximum loop current consumption at 24 V dc

Quiescent	300 μ A
Switch-on surge	1.2 mA for <1 second

Operated at 55-75 dB or 71-91 dB	5 mA
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Sound output - maximum	91 dB (A)
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Operating temperature	-20°C to +60°C
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Humidity 'no condensation'	0-95% RH
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Designed to IP Rating	IP21C
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Dimensions	115 mm diameter x 40 mm height
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Weight	160 g
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Materials	Body - white flame-retardant polycarbonate Diffuser- translucent flame-retardant polycarbonate
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Features

The synchronisation of tones ensures the integrity of the signal - tones from different sounders do not merge into one signal that could be mistaken for a different tone.

The low volume range is useful in areas such as hospitals where a fire alert is initially intended to warn staff only. The sounder is set to the high range for general use.

Group addressing is a simple method of alerting an entire group or group of rooms without delay.

For systems requiring isolators at every point the built-in isolator saves installation time and cost.

The built-in acoustic self-test means that the sounder listens to itself when it is switched on. If no sound is detected a fault signal is transmitted when the sounder is polled.

The visual indicator self-test is achieved by means of an LED monitoring circuit. If the LEDs do not draw current when the sounder visual indicator base has been switched on a fault signal is transmitted when the device is next polled.

Electrical operation

The Sounder Visual Indicator Bases are loop-powered so need no external power supply. They operate at 17 V - 28 V dc and are polarity sensitive.

Volume adjustment

The volume level of the sounders is adjusted using the eighth segment of the address DIL-switch. Set to position 0, low volume (55 - 75 dB(A)) is selected, set to position 1, high volume (75 - 91 dB(A)) is selected.

Tone frequency and sound pressure levels

The tone frequency of the sounders together with sound pressure levels are published in a separate document PP2203 available from: www.apollo-fire.co.uk

Addressing

The Sounder Visual Indicator Bases respond to their own individual addresses set with a DIL switch. They also respond to both a group address - set with a four-segment DIL switch and to a synchronisation address which is embedded in the unit.

Addresses 1 to 111 are used exclusively for individual addresses; addresses 112 to 126 are used for group addressing. Any Sounder Visual Indicator Bases on a loop may be freely assigned to a group. The address for any group *must* be chosen from the range 112 to 126.

Addresses 112 to 126 may be used as individual addresses but only if the four-segment DIL switch is not used i.e. group addressing is disabled. If the four-segment DIL switch was set to any number other than the default 127, a pre-set analogue value of four would be transmitted to indicate a fault.

The Sounder Visual Indicator Bases are normally polled by the individual address. If more than one Sounder Visual Indicator Base is activated it is possible for the sounders to be synchronised with each other.

Group addressing

It may be desirable in alarm conditions to switch more than one Sounder Visual Indicator Base simultaneously. To enable this devices may be controlled as a group and given a group address which is common to all Sounder Visual Indicator Bases in the group. When a device recognises its group address it will process the output bits but it will not return any data to the control panel on that address. If it is required to confirm the status of the outputs of devices under group address control it is necessary to interrogate all devices in the group at their individual addresses.

Self-test

Self-test is an important safety feature that has been incorporated into the bases: when a base is switched on it tests itself by checking the actual sound output and flash operation. If no sound is detected within five seconds of the bases being switched on it will transmit an analogue value of one (= sounder fault) when it is next polled. If no current is drawn by the LEDs an analogue value of two (= beacon fault) is transmitted. If neither element is operating an analogue value of three (= sounder and beacon fault) is transmitted on the next polling.

This feature can also be used during commissioning or periodical maintenance testing. Simply activate the sounder for at least five seconds and check the control panel for a fault signal. If none is received the Sounder Visual Indicator Base is working properly.

Protocol compatibility

The Sounder Visual Indicator Bases will operate with control equipment using the Apollo XP95, Discovery and CoreProtocol protocols. The features of the Sounder Visual Indicator Bases are available only when they are connected to a control panel with the appropriate software.

Synchronisation

It is possible to synchronise the sound and flash outputs of all Sounder Visual Indicator Bases connected to a loop. The method of synchronisation depends on the design and configuration of the control panel. Further information should be obtained from the panel manufacturer.

EMC Directive 2014/30/EU

The Sounder Visual Indicator Bases comply with the essential requirements of the EMC Directive 2014/30/EU, provided that they are used as described in this data sheet.

A copy of the Declaration of Conformity is available from the Apollo website: www.apollo-fire.co.uk

Conformity of the Sounder Visual Indicator Bases with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Construction Products Regulation 305/2011/EU

The Sounder Visual Indicator Bases comply with the essential requirements of the Construction Products Regulation 305/2011/EU.

A copy of the Declaration of Performance is available from the Apollo website: www.apollo-fire.co.uk