

# MINERVA

## Audible Alarms

### Key Features

- Wide range of both bells and electronic sounders

- High sound output characteristics

- Low current consumption

- Clean lines, modern styling

- Easy to install, low installation costs

- Weatherproof units for outdoor use

- Distinct sounds available

- Motorised and Solenoid bells available

- Wide range of voltages available

- Addressable Loop Powered Banshee



A range of sounders to meet a wide variety of alarm applications where loud, penetrating and distinctive warning must be given to alert people of fire situations. In addition, multi-tone electronic sounders can give a variety of sounds to signal other conditions e.g. "extinguishing gas release imminent", etc. Other types of sounder ie: flameproof or intrinsically safe versions are available upon request.

## Electronic sounders

The electronic sounders each offer a choice of distinctly different sounds. These sounders have low current consumption and are therefore ideally suited for use in noisy areas where a large number of units are required. The compact size and modern styling mean that these units can be used in prestigious buildings. Most electronic sounders have an adjustment to control the sound output level.

## Bells

The bells are the underdome type, with a high resonance pressed alloy-steel gong to ensure a loud clear-tone ring. The operating mechanism is fully enclosed and the gong is red stove enamelled for long life. The bells are designed for internal use, but gasket sealed conduit boxes can be provided for external use.

## \*LPBB520

The loop powered addressable sounder unit is a low frequency Banshee that can be both controlled and powered via the Minerva analogue addressable fire controller. With this facility, no separate sounder circuit needs to be installed, providing significant cable installation savings. The sounder output is set at a continuous fast sweep (9 time/sec) but may be pulsed (alert signal) under the control of the Minerva Fire Controller.

## Technical Information

SOUNDER TYPE	WEIGHT (Kg)	ENCLOSURE TO IP	CURRENT CONSUMPTION @ 24 Vdc	SOUND OUTPUT db @ 1m	FREQUENCY H2	SOUND OPTIONS
150mm 6" Solenoid Bell	1.3	IP20/44	50mA	91	Ringling	A
150mm 6" Motorised Bell	1.0	IP22	25mA	92	Ringling	A
200mm 8" Motorised Bell	1.8	IP22	28mA	94	Ringling	A
Banshee LF	0.25	IP45/66	17mA	103	800-950	ABCD
Banshee HF	0.25	IP45/66	25mA	103	2500-3000	ABCD
Banshee Loop Powered*	0.30	IP45/66	See note above	100	800-950	B
Bedlam	0.30	IP66	30mA	113	2300-2900	ABCD
FM Bedroom Sounder	0.19	IP44	7mA	90	800-950	B
Squashni Sounder	0.18	IP43	20mA	85	800-970	ABCD
YODALARM YO3	0.24	IP54	30mA	96	800-1000	ABE
YODALARM YO5	0.55	IP54	20mA	91	800-1000	ABE
YODALARM YO8	2.42	IP54	330mA	112	800-100	ABE

A - Continuous  
B - Fast sweep ie: 9 times/sec

C - Slow sweep ie: 3 times/sec  
D - Buzz ie: 120 times/sec

E - Interrupted

## Installation

### Spacing

Fire alarm sounders should be distributed throughout the buildings(s) and should be of distinct sound to avoid confusion with any other alarms.

For systems designed in accordance with the BS 5839:Pt 1, the minimum sound level required is 65 dB(A) or 5 dB(A) above the normal background noise level, whichever is the greater. For premises where the audible alarm should rouse sleeping persons, the minimum sound level should be 75 dB(A) at the bedhead with all of the doors shut. A large number of quieter sounders may be preferable to a few loud sounders to prevent noise levels in some areas becoming too loud. The sitting and spacing of the fire alarm sounders may require careful consideration and sound level tests before finalising the design.

### Wiring

Wiring for the sounder circuit will be monitored and hence the sounders are polarity conscious. An appropriate end of line device must be fitted to the terminals of the last sounder. Due consideration must be given to the type of cable selected and the expected volt-drop under operating conditions.

### Fixing

All sounders have mounting holes for fixing onto standard electrical conduit boxes. For increased protection, gaskets or sealed boxes are available.

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