



LOOP-POWERED 100dB SOUNDER

SOUNDER FOR OPEN AREAS

The Loop-Powered 100dB Sounder is designed for use in open areas and can be connected to any XP95 or Discovery system.

The most obvious advantage of the sounder is its output of 100dB(A). This can be adjusted to 92±3dB(A) if required. The sounder is, however, equipped with sophisticated electronic circuitry which gives the sounder the same addressing and synchronising functionality as the XP95 Sounder Control Unit.

The Loop-Powered 100dB sounder complements the Intelligent and Integrated Base Sounder ranges.

In addition to the above, Slow Whoop and Weatherproof versions are also available.

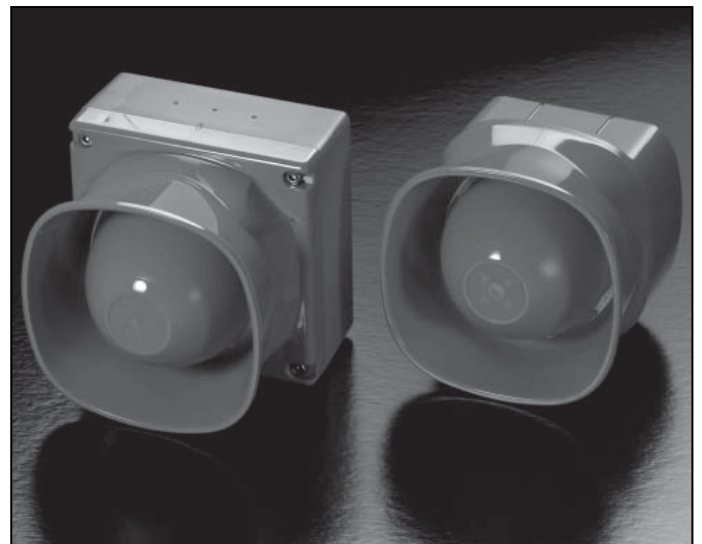
All 100dB sounders comply with the requirements of EN54 – 34 : 2001.

The Slow Whoop version, part nos. 55000-276 (red) and 55000-277 (white) is mechanically identical to the standard sounder but the tone is as specified in the Dutch standard NEN2575.

The weatherproof sounder, part nos. 55000-274 (red) and 55000-275 (white) complies with EN54 pt 3:2001

FEATURES

The 100dB sounder is connected to an XP95 or Discovery loop and is powered and controlled via the loop by the control and indicating equipment.



Part nos

Left: Weatherproof

100dB Sounder 55000-274 (red), 55000-275 (white)

Right: Loop-Powered 100dB Sounder

55000-278 (red), 55000-279 (white)

A nominal sound output of 100dB(A) is achieved at a current consumption of only 5mA. Many control panels will be able to drive up to 20 sounders per loop on average; the maximum number of sounders that may be connected to a particular loop should, however, be determined by a loop loading calculation.

Since the Loop-Powered 100dB Sounder is intended for use in open areas, it is possible for more than one sounder to be audible at any given point in a building.



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For this reason, the operation of all the sounders may be synchronised by sending address '0' in exactly the same way as for the XP95 Sounder Control Unit. Not only that, the 100dB sounder may be assigned group addresses as well as individual addresses, so that the functional options of the sounder are identical with those of the Sounder Control Unit.

ELECTRICAL CONSIDERATIONS

The Loop-Powered 100dB Sounder is powered directly from the loop and needs no external power supply. It operates at 17–28V DC and is polarity-sensitive.

STONE FREQUENCY AND VOLUME CONTROL

The sounder produces a pulsed alert tone of 984Hz, 1 second off and 1 second on, and a continuous evacuation tone of 644Hz for 0.5 seconds followed by 984Hz for 0.5 seconds.

The volume control can be used to adjust the sound from 100dB(A) to 92±3dB(A) if required.

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

ADDRESSING

The Loop-Powered 100dB Sounder responds to its own individual address set with a DIL switch. It also responds both to a group address, set by means of a 4-segment DIL switch, and to a pulsed-mode synchronisation address which is embedded in the unit.

MECHANICAL CONSTRUCTION

The Loop-Powered 100dB Sounder has a removable backbox with 6 knockouts for surface mounting. It is moulded in red ABS. Part Nos 55000–276, 277, 278 and 279 are Type A, ie, suitable for indoor use only. Part Nos 55000–274 and 275 are Type B, ie, they are suitable for use outdoors.

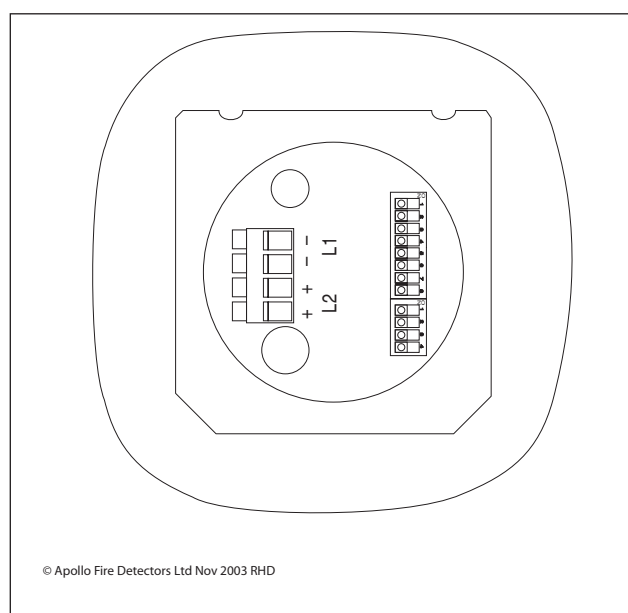
The weatherproof version has a square backbox with 3 centre points marked on the upper and lower faces.

Dimensions and weight of 100dB Sounders :

Standard: 106 x 95 (diameter x depth) 215g
 Weatherproof: 110 x 110 x 113 (L x W x H) 340g

TECHNICAL DATA

Operating voltage	17–28V DC (polarity sensitive)
Current consumption at 24V	
switch-on surge, <1s	1.2mA
quiescent	<1.2mA
sounder operated 100dB(A)	5mA
Sound output	SPL polar plot data is available in document PP2203, available on request
Operating temperature	–20°C to +60°C
Humidity (no condensation)	0–95%
IP rating (standard version)	21C
IP rating (weatherproof version)	66



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Fig 1 Rear view of sounder