



A nominal sound output of 100dB(A) is achieved at a current consumption of 5mA in the case of the sounder and 8mA for the sounder beacon.

Many control panels will be able to drive up to 20 sounders and up to 15 sounder beacons per loop on average. The maximum number of devices that may be connected to a particular loop should, however, be determined by a loop loading calculation using the Loop Calculator.

Table 1 Open-Area alarm devices

Product name	Part Number
Addressable intelligent open area sounder	5000-902
Addressable intelligent open area sounder beacon	5000-903
Base	45681-518SHA

Device type & Part no	Colour	Tone	Flash
Sounder 5000-902	red	Syncoln Slow whoop DIN	
Sounder beacon 5000-903	red	Syncoln Slow whoop DIN	Syncoln

FUNCTION

The Open-area Alarm Devices are loop-powered, wall mounted devices which are connected to any XP95® or Discovery® system.

The range comprises sounders, beacons and sounder beacons, all designed to fit to a common mounting base. Details are shown in Table 1 overleaf.

FEATURES

The alarm devices offer:

- three tones on standard devices; Syncoln, Slow Whoop and DIN – all of which comply with EN54–3:2001
- two volume settings 92dB(A) and 100dB(A)
- synchronisation of tones and flashes
- individual & group addressing
- built-in isolator (EN54 versions only)
- wire-to-base for simple interchange of device
- device locking facility

Since the alarm devices are 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.

All the alarm devices can 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 Syncoln.

ELECTRICAL CONSIDERATIONS

All devices are powered directly from the loop and need no external power supply. They operate at 17–28V DC and are polarity sensitive.

tone frequency and volume control

The alarm devices are supplied with three selectable tones and flashes either—Syncoln, Slow Whoop and DIN (see table 2) or Syncoln, Australia and New Zealand.

The Syncoln tone version 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 92dB ±3dB(A) if required.

SYNCHRONISATION

The sounder also offers synchronization 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 open-area alarm devices respond to their own individual address set with a DIL switch.

They can also respond to a 'Group Address' which allows 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 4 segment DIL switch. A device under group address control must have an individual address between 1 and 111 otherwise a fault value of 4 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 XP95 or Discovery protocol. The features of the Open-area alarm devices are available only when the device is connected to a control panel with the appropriate software.

MECHANICAL CONSTRUCTION

The alarm devices have a base which is fitted to the mounting surface and wired as a 'first fix'.

Dimensions and weight of Sounder Beacon:

All models:	104 x 97.5mm
Weight, sounder	225g
sounder beacon	260g
beacon	205g

TECHNICAL DATA

Operating voltage (polarity sensitive)	17–28V DC
Maximum Loop Current consumption at 24V	
switch-on surge,	1.2mA for <1 sec
quiescent	333µA
alarm, sounder 92/100dB(A)	5mA
alarm, sounder beacon	8mA
alarm, beacon	3.1mA
Maximum sound output (See PP2203 for full details) IP rating (standard version)	100dB(A) 65
Operating temperature	–10°C to +55°C

For sound pressure levels measured to EN54-3 see document PP2203 and for isolator operation information see document PP2090, both available upon request.

Note: All dB(A) figures are to within ±3dB(A)

DIL Switch Setting		Tone	Output Bit 1 set to logic 1	Output Bit 0 set to logic 1	Output Bit 0 & 1 set to logic 1
5	6				
0	0	SyncoIn Standard	SyncoIn alert & Beacon	SyncoIn Evacuate & Beacon	SyncoIn Evacuate & Beacon
1	0	Slow Whoop	Constant tone & Beacon	Dutch NEN2575 & Beacon	Dutch NEN2575 & Beacon
0	1	DIN Tone	Constant tone & Beacon	German DIN33404 & Beacon	German DIN33404 & Beacon
1	1	SyncoIn Standard	SyncoIn alert & Beacon	SyncoIn Evacuate & Beacon	SyncoIn Evacuate & Beacon

Table 2 Tone selection

