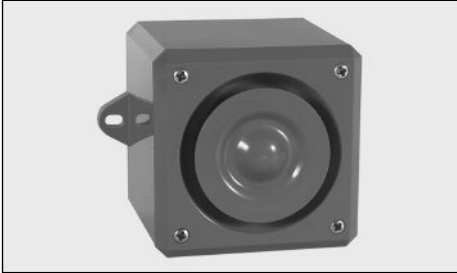
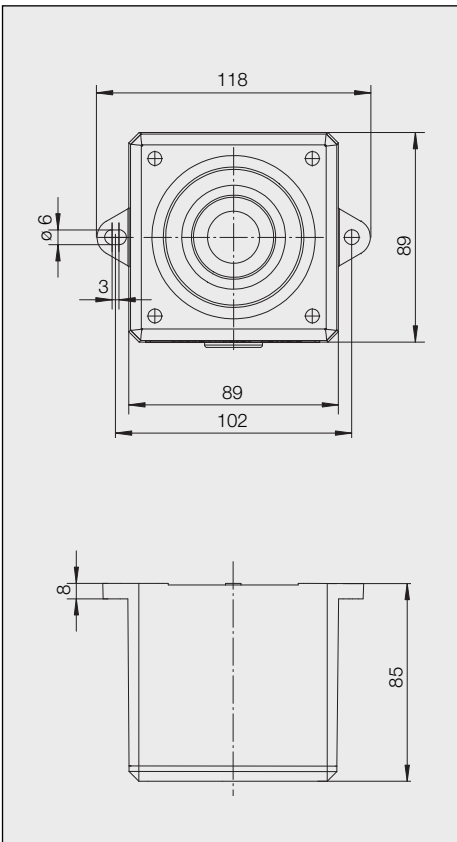




**AX03**



**Dimensions AX03**



**Installation**

The sounder can be affixed to most surfaces using screws through the external mounting lugs. A 20 mm gland entry is provided for the supply cable. The cable and gland must be fitted in accordance with the national and local regulations. It is not necessary to earth the sounder circuitry but earth tags should be used if earth continuity of conduit or cable sheathing needs to be maintained.

**Supply input**

Ensure that the supply is correct for the voltage rating of the sounder. Ensure that the supply is OFF before making any connection and wire only in accordance with the terminal label detail.

**Sound selection**

Ensure the supply is OFF before proceeding. All dc and ac units have selectable alarm sounds (see table below for details) and are selectable by means of the 5 way DIL switches SW1 for the first stage and SW2 for the second stage. For dc units the second sound is made available upon the application of a third wire connected to terminal TB 1/3 as shown in Fig. 1 while still connected to terminal TB 1/2. Alternatively first and second stage sound signals can be generated by supply reversal at terminals TB1/3 and TB1/4, see Fig. 2. For ac units the second stage is available upon the application of a third wire L to TB3, see Fig. 3.

**Mounting**

The AX03 series alarm units are mounted to a wall or bulkhead of suitable material using the lugs projecting from the side of the case. The lugs are bored 6 mm clearance on 102 mm centres. The recommended length of fixing screws is 20 mm. To maintain the integrity of the weather seal, the cable entry must be via a suitable sealed gland.

**Recycling**

The device may be completely recycled as electronic waste. When the device is disassembled, plastics, metals and electronics are to be disposed of separately.

**EMC-Directive**

The device complies with the requirements of the new EMC-directive 2004/108/EC and the low voltage directive 2006/95/EC.

The conformity with the above directives is confirmed by the CE sign.

## Technical Data

Housing	Polycarbonate
Colour	Red, similar to RAL 2002
Insulation class	II
Protection degree	IP 65 acc. to IEC 60529
Cable gland	intended for M20 x 1.5 or Self-sealing grommet
Volume	approx. 97-110 dB(A) (depending on signal tone)
Signals	32 different signal tones, see diagrams 2nd stage can be turned on externally
Temperature range	
Operation	-25 °C to +55 °C
Storage	-40 °C to +70 °C
Weight	AC 0.4 kg / DC 0.3 kg
Operating voltage	24 VDC, 115 VAC, 230 VAC
Connecting terminals	Clamping capacity 2.5 mm <sup>2</sup> solid conductor / 1.5 mm <sup>2</sup> stranded conductor

## Sound selection table

First and Second Stage	Frequency / Hz	Rept. rate	Switches 1 2 3 4 5	Special Application
1 Alternate two-tone	800 - 1000	0.5	1 1 1 1 1	Fire Alarms
2 Alternate two-tone	2500 - 3100	0.5	0 1 1 1 1	Security Alarms
3 Alternate fast two-tone	800 - 1000	0.25	1 0 1 1 1	Increased urgency
4 Alternate fast two-tone	2500 - 3100	0.25	0 0 1 1 1	Security deterrent
5 Alternate two-tone	440 - 554	0.4/0.1	1 1 0 1 1	AFNOR, France
6 Alternate two-tone	430 - 470	1.0	0 1 0 1 1	
7 Alternate v. fast two-tone	800 - 1000	0.13	1 0 0 1 1	
8 Alternate v. fast two-tone	2500 - 3200	0.07	0 0 0 1 1	
9 Alternate two-tone	440 - 554	2.0	1 1 1 0 1	Turn-out, Sweden
10 Continuous tone	700	-	0 1 1 0 1	All-clear, Sweden
11 Continuous tone	1000	-	1 0 1 0 1	
12 Continuous tone	1000	-	0 0 1 0 1	
13 Continuous tone	2300	-	1 1 0 0 1	
14 Continuous tone	440	-	0 1 0 0 1	
15 Interrupted tone	1000	2.0	1 0 0 0 1	
16 Interrupted tone	420	1.25	0 0 0 0 1	AS2220, Australia
17 Interrupted tone	1000	0.5	1 1 1 1 0	
18 Interrupted tone	2500	0.25	0 1 1 1 0	
19 Interrupted tone	2500	0.5	1 0 1 1 0	
20 Interrupted tone	700	6/12	0 0 1 1 0	Pre-vital mess, Sweden
21 Interrupted tone	1000	1.0	1 1 0 1 0	
22 Interrupted tone	700	4.0	0 1 0 1 0	Air-raid, Sweden
23 Interrupted tone	700	0.25	1 0 0 1 0	Local warning, Sweden
24 Interrupted tone	720	0.7/0.3	0 0 0 1 0	Industrial alarm, Germany
25 Int. fast rising volume	1400	0.25	1 1 1 0 0	
26 Fast siren	250 - 1200	0.085	0 1 1 0 0	
27 Rising constant, fall	1000	10/40/10	1 0 1 0 0	Industrial alarm, Germany
28 ISO 8201 Evacuation	800 - 1000	as std	0 0 1 0 0	Int. evacuation alarm
29 Fast whoop	500 - 1000	0.15	1 1 0 0 0	
30 Slow whoop	500 - 1200	4.5	0 1 0 0 0	Evacuation, The Netherlands
31 Reverse sweep	1200 - 500	1	1 0 0 0 0	Evacuation, Germany
32 Siren	500 - 1200	3.0	0 0 0 0 0	

Switch settings: ON=1 und OFF=0

The PFEER sound signals recommended by UKOOA are:

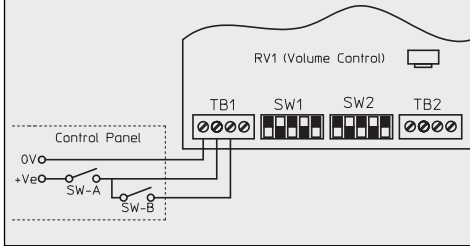
General Alarm	Sound signal 15	Interrupted tone 1000 Hz
PAPA	Sound Signal 31	Reverse Sweep 1200-500 Hz
Toxic Gas	Sound Signal 11	Continuous Tone 1000 Hz

### Warning:

Loud alarm sound. Wear ear defenders when testing, installing and commissioning.

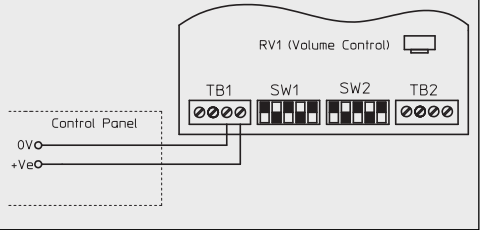
**Figure 1**

DC Input - second stage with third wire  
Line integrity: monitor via reverse polarity



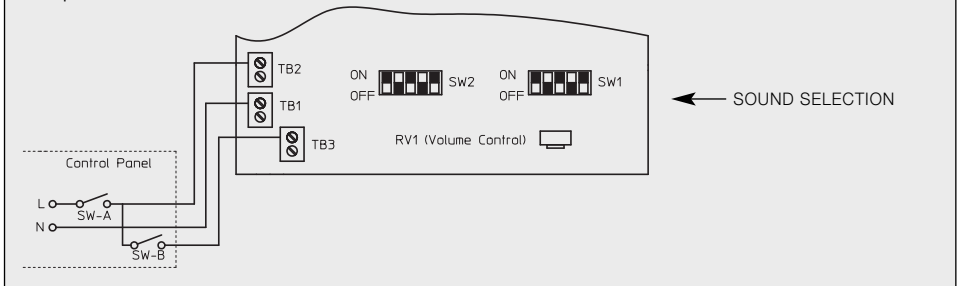
**Figure 2**

DC Input - second stage by supply reversal  
Line integrity: monitor via threshold (applied voltage  $\leq 1$  V)  
An end-of-line (E.O.L) resistor is required for line monitoring and it should be a minimum resistance of 3K3 ohms and 0.5 watts.



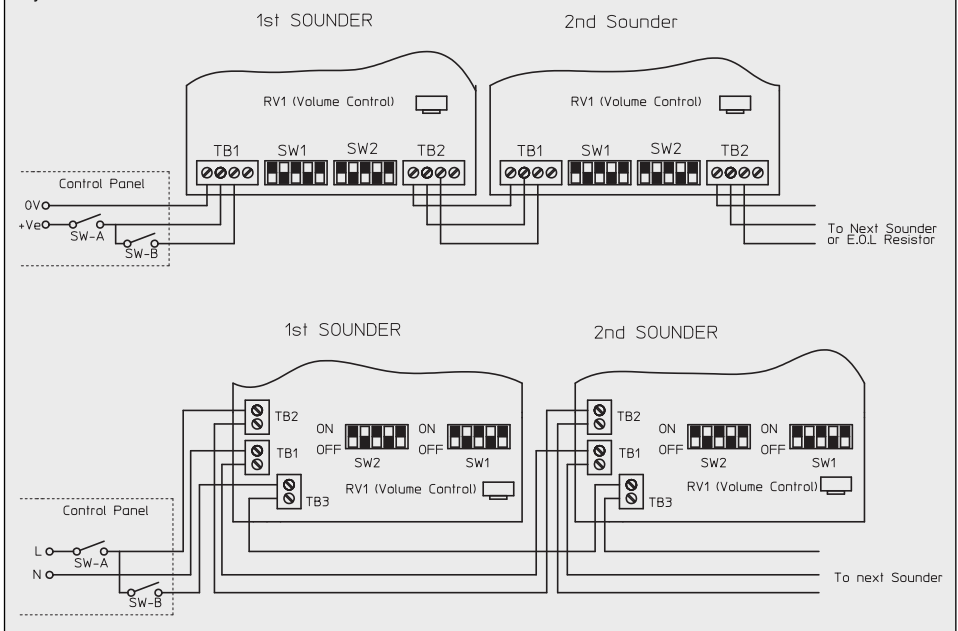
**Figure 3**

AC Input



**Figure 4**

System connection



## User information

1. The appliance has been designed for insulation class II and is only to be connected to, and operated with, the specified voltage. Specifications of polarity must be observed.
2. Ensure that the casing is not damaged.
3. The relevant codes of Practice and Trade Association requirements for safe operation must be observed.
4. Live components may become exposed when covers are opened or parts are removed. Before opening the appliance for alignment, maintenance, repair or replacement of parts, the appliance must be disconnected from all power supplies. If it is necessary to carry out alignment, maintenance or repair on the open and live device, this is only to be undertaken by a qualified specialist who has received corresponding instruction.
5. Capacitors may still be in a charged state even after the appliance has been disconnected from all power supplies.
6. The appliance is only to be operated under the specified ambient conditions and in the specified mode of operation. Unfavourable ambient conditions may cause damage to the appliance and put the user's life at risk. Unfavourable ambient conditions may be:
  - excessive air humidity (>75%, relative, condensing)
  - moisture, dust (observe protection class)
  - flammable gases, vapours, solvents
  - excessively high ambient temperatures (>55°C)
7. The ambient temperatures must be within the specified range.
8. The appliance is designed for both indoor and outdoor use.
9. The installation and commissioning of the appliance may only be carried out by a qualified specialist; the same applies to any repairs with original spare parts. The use of other than original spare parts may cause damage or injury.

Subject to alterations or errors



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