

FNM-420-A Sounder Indoor

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Invented for life



- ▶ Volume of up to 101.3 dB(A)
- ▶ Maximum current consumption of less than 3.9 mA
- ▶ Up to 100 sounders per LSN loop
- ▶ Immediate synchronization
- ▶ 32 different tone types can be selected (incl. DIN tone)

The indoor sounders are used independently for signaling an alarm directly at the fire location.

Functions

The device allows to select 32 types of alarm and evacuation tones (including DIN tone 33404, part 3) for different requirements.

You can adjust the sound pressure by five levels according to the operational environment. Depending on the tone type and volume set, the sound pressure varies between 65 dB(A) and 101.3dB(A).

Sounders of the same LSN loop and with the same tone type provide immediate synchronization. The device maintains LSN loop functions in the event of wire interruption or short-circuit thanks to two integrated isolators.

Change of the device settings can be done in the FSP-5000-RPS programming software.

Certifications and approvals

Complies with

- EN 54-3:2001
- EN 54-17:2005

Region	Certification	
Europe	CE	FNM-420-A-WH, FNM-420-A-RD
	CPD	0832-CPD-1006 FNM-420-A-RD_FNM-420-A-WH
Germany	VdS	G 210002 FNM-420-A-WH/-RD
Poland	CNBOP	0912/2011 FNM-420-A-RD -B-RD -A-WH
	MOE	UA1.016.0113309-11 FNM-420-A-WH_FNM-420-A-RD

Installation/configuration notes

- The device is intended for indoor use.
- The current consumption depends on the tone type selected and is maximum 3.9 mA.
- The maximum number of devices on each loop depends on the cable diameter and the total current of the loop.
Use the Fire System Designer for reliable loop planning.
- This device cannot be used with the FPA-5000 type A panel controller.

Tone types

No.	Tone type	Frequency / modulation	Volume dB(A)	EN 54-3** dB(A)
1*	Sweeping tone = DIN tone	1200-500 Hz at 1 Hz, off 10ms	99.0	93.9
2	Sweeping tone	2400-2900 Hz at 50 Hz	98.7	
3	Sweeping tone	2400-2900 Hz at 7 Hz	99.6	
4	Sweeping tone	800/1000 Hz at 7 Hz	99.0	
5	Intermittent tone	1000 Hz at 1 Hz	101.2	
6	Intermittent tone	1000 Hz / 0.25 s on, 1 s off	100.5	
7	Alternating tone	800/1000 Hz at 1 Hz	101.3	
8	Continuous tone	970 Hz	99.1	94.7
9	Alternating tone	800/1000 Hz at 2 Hz	101.0	
10	Intermittent tone	970 Hz / 0,5 s on/off, 3 tones per 4 cycles	99.0	94.0
11	Intermittent tone	2900 Hz / 0,5 s on/off	100.1	
12	Intermittent tone	1000 Hz / 0,5 s on/off	101.2	
13	Sweeping tone	800/1000 Hz at 1 Hz	100.3	
14	Alternating tone	510 Hz / 610 Hz / 0,5 s on/off	97.8	
15	BMW tone	800 Hz / 60 s on, 10 s off, 3 cycles	95.0	
16	Intermittent tone	2900 Hz at 1 Hz	99.2	
17	Alternating tone	2400/2900 Hz at 2 Hz	99.4	
18	Sweeping tone	2400-2900 Hz at 1 Hz	101.2	
19	Sweeping tone	1400-2000 Hz at 10 Hz	97.3	
20	Sweeping tone	500-1200 Hz / 0.5 s	98.5	
21	Continuous tone	2900 Hz	98.1	

22	Sweeping tone	800/1000 Hz at 50 Hz	99.8	
23	Alternating tone	554 Hz/100 ms + 440 Hz/400 ms	95.7	
24	Slow Whoop	500-1200 Hz in 3,5 s, off 0,5 s	100.1	96.0
25	Intermittent tone	2900 Hz / 150 ms on, 100 ms off	99.6	
26	Continuous tone	660 Hz	97.6	
27	Intermittent tone	660 Hz; 1,8 s on/off	97.6	
28	Intermittent tone	660 Hz / 150 ms on/off	96.4	
29	USA temporal 3 tone ISO 8201	610 Hz	97.7	
30	US Temporal Pattern LF	950 Hz / 0,5 s on/off x 3 then 1,5 s off	95.8	
31	3. Hi/Lo	1000/800 Hz (0,25 s on/alternate)	100.7	
32	Thyssen Krupp tone	450/650 Hz at 2 Hz	96.5	

* Default setting; tone in line with DIN 33404, part 3

** Results from EN54-3 testing: lowest value at 15 V at maximum volume level, measured on the measurement axis with the highest results. All other measurements are taken 'on axis' and are not third party verified. Sound pressure level specified with a tolerance of ± 3 dB(A). Constant sound pressure level between 22 V and 33 V operating voltage.

Parts included

Qty.	Components
1	Sounder Indoor
1	Key to open the housing

Technical specifications

Electrical

Operating voltage	15 V DC to 33 V DC
Current consumption	
• Quiescent state	< 1 mA
• Alarm	< 3,9 mA

Mechanics

Connections (inputs/outputs)	0,28 mm ² to 2,5 mm ²
Dimensions (H x W x D)	105 x 105 x 95 mm
Housing	
• Material	Plastic, ABS
• Color	red, similar to RAL 3001 white, similar to RAL 9010
Weight	
• Without packaging	250 g
• With packageing	300 g

Environmental conditions

Permissible operating temperature	-25 °C to +70 °C
Permissible storage temperature	-25 °C to +85 °C
Protection class as per EN 60529	IP 42 *

* Manufacturer's declaration, not third party approved

Special features

Sound pressure level at a distance of 1 m	max. 101.3 dB(A)
Frequency range	440 Hz up to 2,90 kHz

Ordering information**FNM-420-A-WH Sounder Indoor, white**

for signaling an alarm directly at the fire location, for LSN improved technology
Order number **FNM-420-A-WH**

FNM-420-A-RD Sounder Indoor, red

for signaling an alarm directly at the fire location, for LSN improved technology
Order number **FNM-420-A-RD**

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