

# FNM-420-B-RD Sounder Outdoor, Red

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Invented for life



- ▶ Volume of up to 102.5 dB(A)
- ▶ Maximum current consumption of less than 4.05 mA
- ▶ Up to 75 sounders per LSN 0300 A loop and 100 per LSN 1500 A loop
- ▶ Immediate synchronization
- ▶ 32 different tone types can be selected (incl. DIN tone)

The outdoor sounder is used independently for signaling an alarm directly at the fire location at outside areas.

## 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 102.5 dB(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	
Germany	VdS	G 210004 FNM-420-B-RD
Europe	CE	FNM-420-B-RD
	CPD	0832-CPD-1007 FNM-420-B-RD
Hungary	TMT	TMT-54/2009 FNM-420-A, FNM-420-B
Ukraine	MOE	UA1.016.0113311-11 FNM-420-B-RD

## Installation/configuration notes

- The device is intended for outdoor use.
- The current consumption depends on the tone type selected and is maximum 4.05 mA.
- The maximum number of devices on each loop depends on the cable diameter and the total current of the loop.  
Use the Bosch Planning Software 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 **
1*	Decreasing = DIN tone	1200-500 Hz at 1 Hz, pause 10 ms	99.3	92.1
2	Increasing	2400-2900 Hz at 50 Hz	99.9	
3	Increasing	2400-2900 Hz at 7 Hz	100.8	
4	Increasing	800/1000 Hz at 7 Hz	99.2	
5	Pulse tone	1000 Hz at 1 Hz	100.9	
6	Pulse tone	1000 Hz/0.25 s on, 1s off	100.4	
7	Variable tone	800/1000 Hz at 1 Hz	100.9	
8	Continuous tone	970 Hz	99.8	94.7
9	Variable tone	800/1000 Hz at 2 Hz	100.7	
10	Pulse tone	970 Hz/0.5 s on/off, 3 tones in 4 cycles	99.7	94.0
11	Pulse tone	2900 Hz/0.5 s on/off	101.1	
12	Pulse tone	1000 Hz/0.5 s on/off	100.8	
13	Increasing	800/1000 Hz at 1 Hz	100.4	
14	Variable tone	510 Hz/610 Hz/0.5 s on/off	97.5	
15	BMW tone	800 Hz/60 s on, 10 s off, 3 cycles	95.0	
16	Pulse tone	2900 Hz at 1 Hz	100.7	
17	Variable tone	2400/2900 Hz at 2 Hz	100.6	
18	Increasing	2400-2900 Hz at 1 Hz	102.5	
19	Increasing/decreasing tone	1400-2000 Hz at 10 Hz	97.5	
20	Slowly increasing/decreasing	500-1200 Hz/0.5 s	98.8	
21	Continuous tone	2900 Hz	99.2	
22	Increasing	800/1000 Hz at 50 Hz	99.7	
23	Pulse tone	554 Hz/100 ms + 440 Hz/400 ms	96.3	
24	Slowly increasing	500-1200 Hz in 3.5 s, pause 0.5 s	100.1	96.0
25	Pulse tone	2900 Hz/150 ms on, 100 ms off	100.7	
26	Continuous tone	660 Hz	98.0	
27	Pulse tone	660 Hz/1.8 s on/off	98.0	
28	Pulse tone	660 Hz/150 ms on/off	96.7	
29	USA temporal 3 tone ISO 8201	610 Hz	97.4	
30	US temporal pattern LF	950 Hz/0.5 s on/off x 3 then pause 1.5 s	97.1	
31	3. Hi/Lo	1000/800 Hz (0.25 s on/alternating)	100.3	
32	Thyssen Krupp tone	450/650 Hz at 2 Hz	96.9	

\* 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  $\pm 3$  dB(A), measured at a distance of 1 m. Constant sound pressure level between 22 V and 33 V operating voltage.

### Parts included

Qty.	Components
1	Sounder Outdoor
4	Housing screws
1	Allen wrench

### Technical specifications

#### Electrical

Operating voltage	15 V DC to 33 V DC
Current consumption	
• Quiescent state	< 1 mA
• Alarm	< 4.05 mA

#### Mechanics

Connections (inputs/outputs)	0,28 mm <sup>2</sup> to 2,5 mm <sup>2</sup>
Dimensions (H x W x D)	110 x 110 x 95 mm
Housing	
• Material	Plastic, ABS
• Color	red, similar to RAL 3001
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 66 *

\* Manufacturer's declaration, not third party approved

#### Special features

Sound pressure level at a distance of 1 m	max. 102.5 dB(A)
Frequency range	440 Hz up to 2,90 kHz

### Ordering information

#### FNM-420-B-RD Sounder Outdoor, Red

analog addressable stand-alone sounder for outdoor use, red

Order number **FNM-420-B-RD**

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