

# FNM-420V-A-RD/WH Voice Sounder Indoor

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Invented for life



- ▶ Uninterruptible alarm signaling, even in LSN stub
- ▶ 32 tone types, 7 languages
- ▶ Synchronization of sounders
- ▶ Individually programmable with configuration software

This device, if operated with an industrial, high-performance power source for bypassing the power supply ensures uninterrupted alarm signaling in line with VdS 3536, even if a stub line is broken or the bus system is permanently damaged (e.g. by fire). The power source is laser-welded, making it leak proof. The gold contacts allow the devices to be used in adverse environmental conditions. The control panel enables continuous and reliable monitoring of the power source.

## Functions

This sounder comes with 28 preprogrammed signals. Each signal is a sequence of a tone, a voice message, a tone, a voice message. There are 4 different voice messages in 7 languages and 32 different tones available (including DIN tone 33404, part 3). Sounders with the same signal offer synchronization within a loop.

The 28 preprogrammed signals can be selected in the FSP-5000-RPS programming software.

## Certifications and approvals

Region	Regulatory compliance/quality marks	
Germany	VdS	G 213029 FNM-420V-A-WH/-RD
	VdS	G213029 MLAR-Besteatigung FNM-420V-A-WH/-RD
Europe	CE	FNM-420V-A-RD, FNM-420V-A-WH
	CPD	0786-CPD-21249 FNM-420V-A-WH, FNM-420V-RD
Poland	CNBOP	3615/2019 FNM-420V

## Installation/configuration notes

- The battery is not included in delivery and must be ordered separately.
- This device can only be used with a panel controller of the type B or higher or with the FPA-1200-MPC Panel Controller. The type A panel controller cannot be used.
- The current consumption of the device is defined by the signal with the maximum current consumption.

- 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.

### Tone types

No.	Tone type	Frequency/modulation	Volume (dB/A)
1	Decreasing = DIN tone	1200-500 Hz at 1 Hz, pause 10 ms	94.1
2	Increasing	2400-2900 Hz at 50 Hz	94.5
3	Increasing	2400-2900 Hz at 7 Hz	93.9
4	Increasing	800/1000 Hz at 7 Hz	93.6
5	Pulse tone	1000 Hz at 1 Hz	93.5
6*	Pulse tone	1000 Hz/0.25 s on, 1 s off	93.0
7	Variable tone	800/1000 Hz at 1 Hz	93.6
8	Continuous tone	970 Hz	93.5
9	Variable tone	800/1000 Hz at 2 Hz	93.5
10	Pulse tone	970 Hz/0.5 s on/off, 3 tones in 4 cycles	93.4
11	Pulse tone	2900 Hz/0.5 s on/off	93.9
12	Pulse tone	1000 Hz/0.5 s on/off	93.7
13	Increasing	800/1000 Hz at 1 Hz	93.7
14	Variable tone	510 Hz/610 Hz/0.5 s on/off	91.5
15	Pulse tone	510 Hz/1 s on/off	91.2
16	Pulse tone	2900 Hz at 1 Hz	93.8
17	Variable tone	2400/2900 Hz at 2 Hz	94.0
18	Increasing	2400–2900 Hz at 1 Hz	93.1
19	Increasing/decreasing tone	1400-2000 Hz at 10 Hz	93.8
20	Slowly increasing/decreasing	500–1200 Hz/0.5 s	93.7
21	Continuous tone	2900 Hz	93.9
22	Increasing	800/1000 Hz at 50 Hz	94.0
23	Pulse tone	554 Hz/100 ms + 440 Hz/400 ms	91.4
24	Slowly increasing	500–1200 Hz in 3.5 s, pause 0.5 s	95.4
25	Pulse tone	2900 Hz/150 ms on, 100 ms off	93.6
26	Continuous tone	660 Hz	92.9
27	Pulse tone	660 Hz/1.8 s on/off	92.9
28	Pulse tone	660 Hz/150 ms on/off	92.0
29	USA temporal 3 tone ISO 8201	610 Hz	91.7
30	US temporal pattern LF	950 Hz/0.5 s on/off x 3 then pause 1.5 s	92.6
31	3. Hi/Lo	1000/800 Hz (0.25 s on/alternating)	93.6
32	Thyssen Krupp tone	450/650 Hz at 2 Hz	92.4

Sound pressure level specified with a tolerance of  $\pm 3$  dB(A), measured at a distance of 1 m.

\* Language independent fallback tone

### Signals

The preprogrammed signals S1 ... S28 use the tone types 1, 13, 21, 24 as defined in the table.

The sound level of the voice message is, in line with EN 54-3, not more than 6 dB below the sound level of the tone signal.

### Signals in German

S1	1	Achtung, Feueralarm! Bitte verlassen Sie umgehend das Gebäude durch den nächstgelegenen Ausgang.	1	Achtung, Feueralarm! Bitte verlassen Sie umgehend das Gebäude durch den nächstgelegenen Ausgang.
S2	1	Achtung, aufgrund einer Gefahrensituation bitten wir Sie, das Gebäude umgehend durch den nächstgelegenen Ausgang zu verlassen.	1	Achtung, aufgrund einer Gefahrensituation bitten wir Sie, das Gebäude umgehend durch den nächstgelegenen Ausgang zu verlassen.
S3	1	Achtung, Achtung! Dies ist eine Gefahrenmeldung. Bitte warten Sie auf weitere Anweisungen.	1	Achtung, Achtung! Dies ist eine Gefahrenmeldung. Bitte warten Sie auf weitere Anweisungen.
S4	1	Die Gefahrensituation ist jetzt behoben. Bitte entschuldigen Sie die Unannehmlichkeiten.	1	Die Gefahrensituation ist jetzt behoben. Bitte entschuldigen Sie die Unannehmlichkeiten.

### Signals in English

S5	1	Attention, fire warning! Please evacuate the building immediately using the nearest exit.	1	Attention, fire warning! Please evacuate the building immediately using the nearest exit.
S6	1	Attention, due to an emergency it is necessary to evacuate the building immediately using the nearest exit.	1	Attention, due to an emergency it is necessary to evacuate the building immediately using the nearest exit.
S7	1	Attention, attention. An incident has been reported in the building, please await further instructions.	1	Attention, attention. An incident has been reported in the building, please await further instructions.
S8	1	The emergency is now cleared. We apologise for any inconvenience.	1	The emergency is now cleared. We apologise for any inconvenience.

### Signals in French

S9	1	Attention, alarme incendie! Évacuez le bâtiment immédiatement en utilisant la sortie la plus proche.	1	Attention, alarme incendie! Évacuez le bâtiment immédiatement en utilisant la sortie la plus proche.
S10	1	Ceci est un test du système d'évacuation. Vous ne devez pas réagir.	1	Ceci est un test du système d'évacuation. Vous ne devez pas réagir.
S11	1	Attention, les membres de l'assistance sont invités à aller au central incendie.	1	Attention, les membres de l'assistance sont invités à aller au central incendie.
S12	1	L'urgence est levée. Veuillez nous excuser pour le désagrément.	1	L'urgence est levée. Veuillez nous excuser pour le désagrément.

### Signals in Spanish

S13	1	¡Atención, esto es un aviso de incendio! Salgan del edificio urgentemente por la salida más próxima. Gracias.	1	¡Atención, esto es un aviso de incendio! Salgan del edificio urgentemente por la salida más próxima. Gracias.
S14	1	Atención, hay que salir del edificio urgentemente por la salida más próxima debido a una emergencia.	1	Atención, hay que salir del edificio urgentemente por la salida más próxima debido a una emergencia.
S15	1	Atención, atención. Se ha producido un incidente en el edificio, esperen más instrucciones. Gracias.	1	Atención, atención. Se ha producido un incidente en el edificio, esperen más instrucciones. Gracias.
S16	1	Se ha resuelto la emergencia. Rogamos disculpen cualquier molestia causada.	1	Se ha resuelto la emergencia. Rogamos disculpen cualquier molestia causada.

**Signals in Dutch**

S17	24	Attentie, brandalarm! Wij verzoeken u het gebouw onmiddellijk te verlaten via de dichtstbijzijnde uitgang.	24	Attentie, brandalarm! Wij verzoeken u het gebouw onmiddellijk te verlaten via de dichtstbijzijnde uitgang.
S18	24	Dit is een test van het evacuatiesysteem. U hoeft hierop niet te reageren.	24	Dit is een test van het evacuatiesysteem. U hoeft hierop niet te reageren.
S19	24	Attentie, de leden van de hulpverlening wordt gevraagd zich naar de brandcentrale te begeven.	24	Attentie, de leden van de hulpverlening wordt gevraagd zich naar de brandcentrale te begeven.
S20	24	De noodsituatie is opgeheven. Onze excuses voor het ongemak.	24	De noodsituatie is opgeheven. Onze excuses voor het ongemak.

**Signals in Polish**

S21	21	Uwaga, uwaga! W obiekcie wystąpiło zagrożenie pożarowe. Prosimy udać się do najbliższego wyjścia ewakuacyjnego!	21	Uwaga, uwaga! W obiekcie wystąpiło zagrożenie pożarowe. Prosimy udać się do najbliższego wyjścia ewakuacyjnego!
S22	21	Uwaga, uwaga! W budynku wykryto zagrożenie. Prosimy o natychmiastowe opuszczenie budynku najbliższym wyjściem ewakuacyjnym.	21	Uwaga, uwaga! W budynku wykryto zagrożenie. Prosimy o natychmiastowe opuszczenie budynku najbliższym wyjściem ewakuacyjnym.
S23	21	Uwaga, uwaga! W obiekcie wykryto zagrożenie. Prosimy oczekiwać na dalsze instrukcje.	21	Uwaga, uwaga! W obiekcie wykryto zagrożenie. Prosimy oczekiwać na dalsze instrukcje.
S24	21	Zagrożenie zostało wyeliminowane. Przepraszamy za wszelkie niedogodności.	21	Zagrożenie zostało wyeliminowane. Przepraszamy za wszelkie niedogodności.

**Signals in Portuguese**

S25	13	Atenção, alerta de incêndio! Abandone imediatamente o edifício utilizando a saída mais próxima.	13	Atenção, alerta de incêndio! Abandone imediatamente o edifício utilizando a saída mais próxima.
S26	13	Atenção, devido a uma emergência é necessário abandonar imediatamente o edifício utilizando a saída mais próxima.	13	Atenção, devido a uma emergência é necessário abandonar imediatamente o edifício utilizando a saída mais próxima.
S27	13	Atenção, atenção. Foi comunicada a ocorrência de um incidente no edifício. Aguarde por favor, a indicação de mais informações.	13	Atenção, atenção. Foi comunicada a ocorrência de um incidente no edifício. Aguarde por favor, a indicação de mais informações.
S28	13	A emergência foi resolvida. Pedimos desculpa pelo incômodo.	13	A emergência foi resolvida. Pedimos desculpa pelo incômodo.

**Further signals**

S29	
S30	
S31	
S32	BMW tone*

\* Volume 97 dB(A) on average, measured at a distance of 1 m

**Technical specifications****Electrics**

Operating voltage	15 V DC to 33 V DC
Current consumption	
• Standby	< 2.3 mA
• Alarm	≤ 15mA

**Mechanics**

Connections (inputs/outputs)	0.6 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Dimensions (H x W x D)	105 x 105 x 95 mm

Housing material	Plastic, ABS
Housing color	Red, similar to RAL 3001
	White, RAL 9003
Weight	Approx. 295 g

**Environmental conditions**

Permissible operating temperature	-10°C to +55°C
Permissible storage temperature	-25°C to +85°C

Relative humidity	Max. 95%
Protection category (EN60529)	IP42

### Special features

Max. sound pressure level at a distance of 1 m	95.4 dB(A)
Frequency range	440 Hz to 2.90 kHz

### Ordering information

**FNM-420V-A-RD Voice sounder, addressable, red**  
uninterruptible analog addressable voice sounder for indoor use, red  
Order number **FNM-420V-A-RD**

**FNM-420V-A-WH Voice sounder, addressable, white**  
uninterruptible analog addressable voice sounder for indoor use, white  
Order number **FNM-420V-A-WH**

### Accessories

**FNM-BATTERIES Batteries for uninterruptible sounders**  
1 order unit = 20 batteries  
Order number **FNM-BATTERIES**

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