

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

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**BOSCH**  
Invented for life



- ▶ Uninterruptible alarm signaling – even in the 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 uninterruptible 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.

With the additional configuration software individual signals can be programmed.

## Certifications and approvals

Region	Certification	
Germany	VdS	G 213029 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

## 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

\* Language independent fallback tone

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

**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 Italian**

S21	21	Attenzione, allarme incendio. Evacuare immediatamente l'edificio utilizzando l'uscita più vicina.	21	Attenzione, allarme incendio. Evacuare immediatamente l'edificio utilizzando l'uscita più vicina.
S22	21	Attenzione, a causa di un'emergenza, è necessario evacuare immediatamente l'edificio utilizzando l'uscita più vicina.	21	Attenzione, a causa di un'emergenza, è necessario evacuare immediatamente l'edificio utilizzando l'uscita più vicina.
S23	21	Attenzione, attenzione. È stato segnalato un incidente all'interno dell'edificio, attendere ulteriori istruzioni.	21	Attenzione, attenzione. È stato segnalato un incidente all'interno dell'edificio, attendere ulteriori istruzioni.
S24	21	L'emergenza è stata risolta. Ci scusiamo per l'inconveniente.	21	L'emergenza è stata risolta. Ci scusiamo per l'inconveniente.

**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.

**Individual-programmed signals**

Use S29 ... S31 for individual-programmed signals or overwrite existing signals.

S29	
S30	
S31	
S32	BMW tone*

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

**Parts included**

Quantity	Component
1	Sounder for indoor areas, red or white
1	Key (for opening the housing)

**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 Indoor, uninterruptible, red**

Order number **FNM-420V-A-RD**

**FNM-420V-A-WH Voice Sounder Indoor, uninterruptible, white**

Order number **FNM-420V-A-WH**

## Accessories

**FNM-BATTERIES Power Sources**

1 order unit = 20 batteries

Order number **FNM-BATTERIES**

### Represented by:

#### Americas:

Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
security.sales@us.bosch.com  
www.boschsecurity.us

#### Europe, Middle East, Africa:

Bosch Security Systems B.V.  
P.O. Box 80002  
5617 BA Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

#### Asia-Pacific:

Robert Bosch (SEA) Pte Ltd, Security Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

#### China:

Bosch (Shanghai) Security Systems Ltd.  
201 Building, No. 333 Fuquan Road  
North IBP  
Changning District, Shanghai  
200335 China  
Phone +86 21 22181111  
Fax: +86 21 22182398  
www.boschsecurity.com.cn

#### America Latina:

Robert Bosch Ltda Security Systems Division  
Via Anhanguera, Km 98  
CEP 13065-900  
Campinas, Sao Paulo, Brazil  
Phone: +55 19 2103 2860  
Fax: +55 19 2103 2862  
al.securitysystems@bosch.com  
www.boschsecurity.com