AVENAR all-in-one 4000



AVENAR all-in-one 4000 is a single-point solution made in Germany for applications requiring both visual alarm signaling and audible alarm signaling.

The device does not require any additional external power supply. In standby mode it is powered by the loop and in alarm mode additional power is available via the integrated battery. The patented battery concept ensures a high number of devices per loop.

System Description

If fire detection is also required, the device can be combined with any detector from the AVENAR detector 4000 series.



LSN

VdS

orEffective alarm: certification according to EN 54-3 and IN 54-23

orUninterrupted alarm signaling, even on a LSN branch

orSimple and cost-effective installation and replacement

orUp to 84 elements per loop, up to 127 if works without detector

orFor combination with any detector of the AVENAR series detector 4000

Functions

- The addressable device can be used in various applications where visual alarms are required in addition to audible alarms (e.g. public buildings, hotels, hospitals).
- Ceiling or wall installation.
- 32 different tone types, including DIN tone (DIN 33404, part 3).
- The sound pressure level ranges from 65 dB(A) for maintenance to a maximum of 97 dB(A).
- Synchronization is guaranteed for the visual alarm and audible alarm signaling of AVENAR all-in-one 4000 devices.
- With 12 LEDs and 360° visibility, the required illumination according to EN 54-23 is achieved. The 2 fixed flashing speeds as well as 3 different coverage volumes can be defined via FSP-5000-RPS.
- As long as the CDI has already activated the device, the high-performance power supply ensures uninterrupted alarm signalling in line with VdS 3536. Even if a branch line is interrupted or the LSN bus is permanently damaged.
- Affordable and easy installation and replacement (e.g. detachable terminals). Due to the modular configuration of the product, installation and replacement can be done in steps (e.g. pre-mounting and wiring the base).

Certifications and approvals

Region	Quality marks/regulatory compliance	
Morocco	CMIM	AVENAR all-in-one 4000
Europe	EC	AVENAR all-in-one 4000
	CPD	1438-CPR-0744 AVENAR all-in-one 4000
Poland	CNBOP	4205/2020 AVENAR all-in-one 4000

Setup/Installation Notes

- The device is designed for indoor use. Due to the integrated base seal it is IP42 certified.

- The device is certified to EN 54-23, category C (ceiling) and category W (wall).
- Possibility of surface and recessed wiring.
- For ceiling mount installation, the minimum distance from walls is 300 mm.
- 3 different intensity levels for sound and flashing are certified.
- Current consumption on the LSN bus is independent of the sound and blink settings.
- If necessary, the device can be used exclusively for audible alarm signaling or for visual alarm signaling.
- The device can be used with any detector of the AVENAR detector 4000 series. When used without detection function, it is necessary to use the cover.

- To ensure that unauthorised persons do not have access to the device, the locking clip can be mounted as an option. Please consult the building operator or the building construction planners whether the locking clip must be mounted.

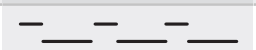
- Use Bosch Safety Systems Designer for a reliable design.

Sound pressure levels tested in accordance with EN 54-3

	Decreasing (DIN tone) dB(A)@1 m	Gradually increasing dB(A)@1 m
High	94.3	97.9
Half	86.9	88.2
Low	80.6	82.7

Tone table

Area	Pattern Sound	Type of tone	Frequency/modulation
1		Decreasing DIN tone (DIN 33404 section 3)	1200-500 Hz at 1 Hz, with 10 ms pause
2		Growing	2400-2900 Hz at 50 Hz
3		Growing	2400-2900 Hz at 7 Hz
4		Growing	800/1000 Hz to 7 Hz
5		Pulse tone	1000 Hz to 1 Hz
6		Pulse tone	1000 Hz/0.25 s on, 1 s off
7		Variable tone	800/1000 Hz to 1 Hz
8		Continuous tone	970 Hz
9		Variable tone	800/1000 Hz to 2 Hz
10		Pulse tone	970 Hz/0.5 s on/off, 3 tones in 4 cycles
11		Pulse tone	2900 Hz/0.5 s on/off, 3 tones in 4 cycles
12		Pulse tone	1000 Hz/0.5 s on/off, 3 tones in 4 cycles
13		Growing	800/1000 Hz to 1 Hz
14		Variable tone	510Hz/610Hz, 0.5s on/off
15		BMW Tone	800 Hz/60 s on, 10 s off, 3 cycles
16		Pulse tone	2900 Hz to 1 Hz
17		Variable tone	2400/2900 Hz to 2 Hz
18		Growing	2400-2900 Hz at 1 Hz
19		Growing	1400-2000 Hz at 10 Hz
20		Gradually increasing	500 -1200 Hz/0.5 s
21		Continuous tone	2900 Hz
22		Crescent, fast sweeping	800/1000 Hz to 50 Hz

Area	Pattern Sound	Type of tone	Frequency/modulation
23		Pulse tone	554 Hz/100 ms + 440 Hz/400 ms
24		Gradually increasing	500-1200 Hz in 3.5 s, with 0.5 s pause
25		Pulse tone	2900 Hz/150 ms on, 100 ms off
26		Continuous tone	660 Hz
27		Pulse tone	660Hz/1.8s on/off
28		Pulse tone	660 Hz/150 ms on/off
29		US Temporary Pattern	610 Hz/0.5 s on/off 3 times, then pause for 1.5 s
30		US Temporary Pattern	950 Hz/0.5 s on/off 3 times, then pause for 1.5 s
31		3 x HF/LF	1000/800 Hz (0.25 s on/alternate)
32		Thyssen Krupp tone	450/650 Hz to 2 Hz

Flashing white

	Ceiling	Wall
High	C-3-9.8	W-2.4-6.0
Half	C-3-7.5	W-2.4-4.2
Low	C-3-4.9	W-2.4-3.5

Flashing red

	Ceiling	Wall
High	C-3.0-5.6	W-2.4-3.0
Half	C-3.0-4.8	W-2.4-2.8
Low	C-3.0-3.2	W-2.4-2.3

Technical specifications

Dimensions

Ø x H, with cover	145 x 78 mm
Ø x H., with detector	145 x 111 mm

Electrical data

Operating voltage	From 15 to 33 V
Current consumption	max. 865 µA

Mechanical data

Cable section	From 0.14 to 1.5 mm²
Case material	Plastic, ABS
Case color	Red, similar to RAL 3001 White, similar to RAL 9010
Weight (without detector, with cover)	473 g

Environmental conditions

Operating temperature	From -10 to +55 °C
Storage temperature	From -30 to +75 °C
Protection category (EN 60529)	IP42

Power supply

Battery	1 lithium battery pack
Battery life cycle* (years)	10

* The typical battery life cycle depends on the application, operating temperature and ambient conditions. Improper handling leads to deviations. For more information about the typical battery life cycle, please contact the manufacturer. Only use the device with the Bosch FNX-425U-BAT battery pack. The battery status is displayed on the CDI.

Characteristics

Sound pressure level at a distance of 1 m	Max. 97 dB(A)
Frequency range	From 440 to 2900 Hz

Blinking frequency	0.5 or 1.0 Hz
Flashing color	white or red

Ordering Information

FNX-425U-WFWH White audible/visual alarm, white
Addressable analogue uninterruptible base combination with audible warning (EN 54-3) and visual alarm (EN 54-23) for indoor use, white housing, white flashing. Battery pack included in delivery. For use without detector, please order cover separately.

Order number**FNX-425U-WFWH | F.01U.359.432**

FNX-425U-RFWH Red, white audible/visual alarm
Addressable analogue uninterruptible base combination with audible warning (EN 54-3) and visual alarm (EN 54-23) for indoor use, white housing, red flashing. Battery pack included in delivery. For use without detector, please order cover separately.

Order number**FNX-425U-RFWH | F.01U.359.433**

FNX-425U-WFRD White audible/visual alarm, red Analogue addressable combination of base with audible warning (EN 54-3) and visual alarm (EN 54-23) for indoor use, red housing, white flashing. A red cover and a battery pack are included in the delivery.

Order number**FNX-425U-WFRD | F.01U.359.434**

FNX-425U-RFRD Red audible/visual alarm, red Analogue addressable combination of base with audible warning (EN 54-3) and visual alarm (EN 54-23) for indoor use, red housing, red flashing. Delivery includes a red cover and a battery pack.

Order number**FNX-425U-RFRD | F.01U.359.435**

Accessories

FNX-425U-BAT Battery for AVENAR all-in-one 4000
Battery pack for AVENAR all-in-one 4000, 30 battery packs per order unit.
Order number**FNX-425U-BAT | F.01U.359.438**

FNX-425U-COVWH AVENAR all-in-one 4000 white cover

white cover for AVENAR all-in-one 4000, 10 covers per order unit.
Order number**FNX-425U-COVWH | F.01U.359.436**

FNX-425U-COVRD AVENAR all-in-one 4000 red cover

Red cover for AVENAR all-in-one 4000, 10 covers per order unit.
Order number**FNX-425U-COVRD | F.01U.359.437**

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