

# Voice Alarm

## LEN-20 1. generation

Passive 100 V speaker, EN 54-24 certified, 2 × 4", 130° × 60°, approx. 130 × 230 × 120 mm, weatherproof



# Voice Alarm LEN-20 1. generation

The LEN-20 is a passive 100 volt speaker certified according to EN 54-24 Type B for use in voice alarm systems. Like all products in the Voice Alarm series, it is equipped with a weatherproof, steel-reinforced aluminum housing, making it equally suitable for indoor and outdoor use. The LEN loudspeakers guarantee excellent speech intelligibility and high ranges even in difficult acoustics environments.



## Main features

- 2 × coated 4" chassis
- Uniform directivity
- Suppression of unwanted side lobes thanks to Fohhn Source Division Waveguide
- Weatherproof without additional protection (degree of protection IP54 according to IEC 529 / EN 60529)
- 8 × M6 thread for safe installation
- Available in different colors (RAL Classic, Pantone, NCS) or with Fohhn Texture Design
- In order to ensure performance and operational safety, Fohhn system amplifiers including the correct speaker preset are required.



## Available with the following color options



Black



White

## Equipped with the following Fohhn technologies



Fohhn Texture Design



Fohhn Source Division Waveguide



100 V optional



Special colors optional



Weather-resistance possible

# Technical data

## Electroacoustic features

acoustic design	weatherproof passive line source speaker system, closed, suppression of side lobes by Source Division Waveguides
components	2 × 4" drivers with treated cones
sensitivity 1 W @ 4 m in accordance with EN 54-24	79 dB SPL
SPLmax 100 V @ 4 m in accordance with EN 54-24 (trafo S/M/L)	92 dB SPL
2-way design	no
transformer options, power handling in acc. with EN 54-24 100 V (trafo S/M/L)	50 W / - / -
transformer options, power handling in acc. with EN 54-24 70 V (trafo S/M/L)	24.5 W / - / -
impedance 100 % tap (trafo S/L/M)	200 ohm / - / -
impedance 50 % tap (trafo S/M/L)	400 ohm / - / -
impedance 25 % tap (trafo S/M/L)	800 ohm / - / -
nominal directivity (h × v) (–6 dB, average @ 1–4 kHz)	130° × 60°
directivity (h × v) (octave band) in acc. with EN-54-24 @ 500 Hz	360° × 360°
directivity (h × v) (octave band) in acc. with EN 54-24 @ 1000 Hz	190° × 120°
directivity (h × v) (octave band) in acc. with EN 54-24 @ 2000 Hz	120° × 60°
directivity (h × v) (octave band) in acc. with EN 54-24 @ 4000 Hz	95° × 30°

### Physical features

enclosure	weatherproof aluminium housing, powder coated, steel bracings
connectors	terminal connectors capable of receiving up to 4 mm <sup>2</sup> , two per pin, terminal cover with dual cable gland for up to 10 mm cable diameter
dimensions (w × h × d)	approx. 130 × 230 × 120 mm
weight (trafo S/M/L)	approx. 3 kg / - / -
standard colours	black (RAL 9005) or white (RAL 9016), powder-coated
certificates	EN 54-24 type B
EN 54-24	1
front design	ball impact resistant grille, galvanized and powder coated in housing colour backed by acoustically transparent foam
mounting points	4 × M6 screw threads

### Optional features

optional colours	RAL Classic / NCS / Pantone on request, Fohhn Texture Design
optional connectors	ceramic terminals capable of receiving up to 2.5 mm <sup>2</sup>
optional weather protection	as standard (protection class IP54, in accordance with IEC 529 / EN 90529)

### CAAD simulation data

simulation data	EASE, CLF, Ulysses, Fohhn Designer
-----------------	------------------------------------

weight: net weight without optional equipment

sensitivity 1 W / SPLmax 100 V @ 4 m in accordance with EN 54-24: measured in the far field of the speaker, count back to 4 m distance

impedance 100 / 50 / 25 % tap: measured at a voltage producing 1 W per speaker system

**Fohhn Audio AG**  
**Großer Forst 15**  
**72622 Nuertingen**  
**Germany**

**Phone +49 7022 93323-0**  
**Fax +49 7022 93324-0**  
**[www.fohhn.com](http://www.fohhn.com)**  
**[info@fohhn.com](mailto:info@fohhn.com)**

