

The 24S-D loudspeaker



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The 24S-D loudspeaker is a light-weight, high performance loudspeaker in a 2-way passive design using neodymium drivers. The loudspeaker is a single box solution employing two 12" driver in a bass-reflex enclosure and a HF section with a large horn for accurate pattern control providing rotatable dispersion characteristics of 110° x 45°. It is equipped with a 1.4" exit compression driver. The two 12" LF drivers are positioned in a dipolar arrangement providing exceptional vertical dispersion control even at lower frequencies.

Specially designed ports with optimized flow characteristics provide a considerably improved, efficient low frequency reproduction. With a frequency response extending from 55 Hz to above 18 kHz, the cabinets can be used as full range systems or supplemented by different subwoofers of the xS or xA-Series.

The enclosure is constructed from marine plywood with an impact resistant black paint finish. The front of the cabinet is protected by a rigid metal grill backed by an acoustically transparent foam and is Ball Impact Resistant according to DIN 18032-3.

d&b amplifiers

The d&b audiotechnik loudspeaker range is designed exclusively for operation with d&b amplifiers. These provide power as well as comprehensive control and protection functions tailored to achieve the performance, reliability and longevity associated with the d&b system approach.

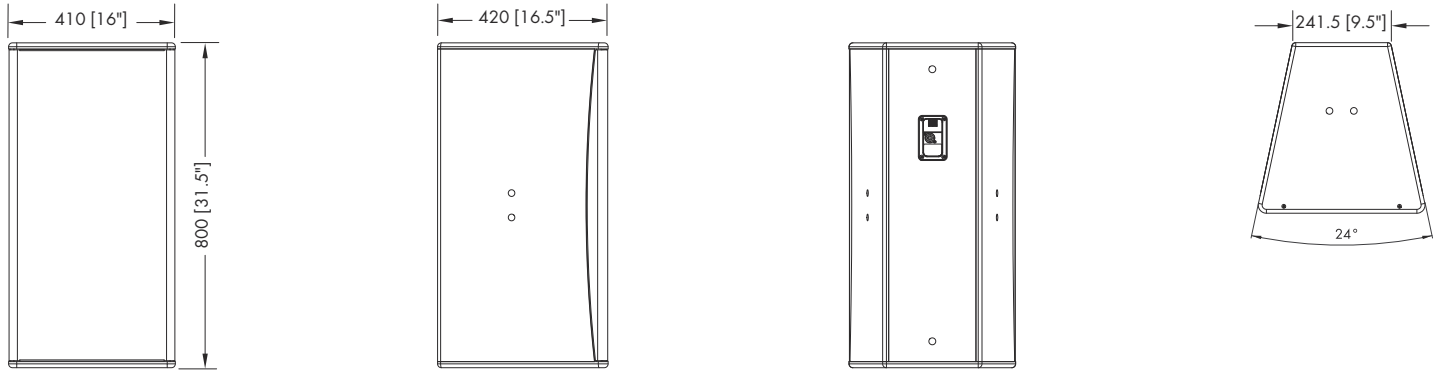
System data

Frequency response (-5 dB standard)	55 Hz - 18 kHz
Frequency response (-5 dB CUT mode)	90 Hz - 18 kHz
Max. sound pressure (1 m, free field)	
with 30D/40D/D20/D40/D80	137 dB
	(SPLmax peak, pink noise test signal with crest factor of 4)

Loudspeaker data

Nominal impedance	4 ohms
Power handling capacity (RMS/peak 10 ms)	500/2000 W
Nominal dispersion angle (horizontal)	110°
Nominal dispersion angle (vertical)	45°
Components	2 x 12" driver with neodymium magnet
	1.4" exit compression driver
	Passive crossover network
Connections	1 x NL4 M
	1 x screw terminal (ST - up to 4 mm ² /AWG 11)
	WR option: Faston type connector (2 x 6.3 mm)
Pin assignment	NL4 M: 1+/1-
	WR option: Brown: (+) / Blue: (-)
Weight	33 kg (73 lb)

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24S-D cabinet dimensions in mm [inch]

Features and benefits

- Installation specific high performance point source loudspeaker
- Compact and powerful performance in a single box
- 2-way passive design with 2 x 12" LF drivers and a 1.4" exit HF driver on a rotatable CD horn
- Extended LF performance from large cabinet volume
- Dipolar arrangement of the LF drivers provide increased constant directivity control down to lower frequencies in the same plane as the dipole
- Extended frequency response allows use as stand-alone, full range system
- Unobtrusive cabinet design ensures visual integration within any permanent installation

Applications

- Music and live program reinforcement for permanent installations
- Live performance venues
- Night clubs
- Houses of Worship
- Sporting venues
- Multipurpose suites

Architectural specifications

The 2-way dipolar, passive loudspeaker shall consist of two 12" low frequency drivers with a neodymium magnet assembly and one 1.4" exit neodymium compression driver mounted to a rotatable CD horn and a passive crossover network.

The loudspeaker shall only be operated by a dedicated, compatible controller amplifier.

The cabinet enclosure shall be made from marine plywood with an impact resistant black paint finish.

Special colours according to RAL table and a weather resistant option shall be available upon request.

The drivers shall be protected by a rigid metal grill backed by an acoustically transparent foam.

The cabinet shall be Ball Impact Resistant according to DIN 18032-3 for schools and sports halls.

The cabinet shall incorporate two M10 threaded inserts on the top, bottom, side and rear panels for the secure attachment of dedicated mounting brackets.

The connection panel on the back shall be recessed and fitted with one speakon NL4 M socket and a two pole screw terminal block. A cover plate for protection of the connection panel shall be included. The HF horn shall have a nominal dispersion of 110° x 45° (hor. x vert.).

The loudspeaker shall only be operated by a dedicated, compatible controller amplifier.

The power handling capacity shall be 500 W RMS and 2000 W peak (10 ms). The frequency response (-5 dB) measured on axis shall be 55 Hz to 18 kHz with a maximum sound pressure of at least 137 dB.

The dimensions (W x H x D) shall not exceed 410 x 800 x 420 mm (16" x 31.5" x 16.5") and shall weigh no more than 33 kg (73 lb).

The loudspeaker shall be the 24S-D by:
d&b audiotechnik GmbH & Co. KG.