

The 24C loudspeaker



24C loudspeaker

The 24C is a passive 2-way column loudspeaker housing six 4" neodymium drivers and an HF array comprising six 1.1" dome tweeters.

The 4" drivers are arranged in a unique cardioid setup radiating through waveguide elements at the front and damped ports at the rear of the cabinet.

This design provides a constant directivity pattern of 90° in the horizontal plane with an average broadband attenuation to the rear of approx. 18 dB.

In the vertical plane, the beam produced by the low-mid drivers is tilted downwards by -5° and provides significant directivity down to 370 Hz.

The HF array has a nominal vertical dispersion of 20° and its main axis can be adjusted continuously between 0° and -14° (when using ArrayCalc, adjustment in 1° increments).

The loudspeaker cabinet is based on an extruded aluminum profile with a metal grill protecting the front of the loudspeaker.

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.

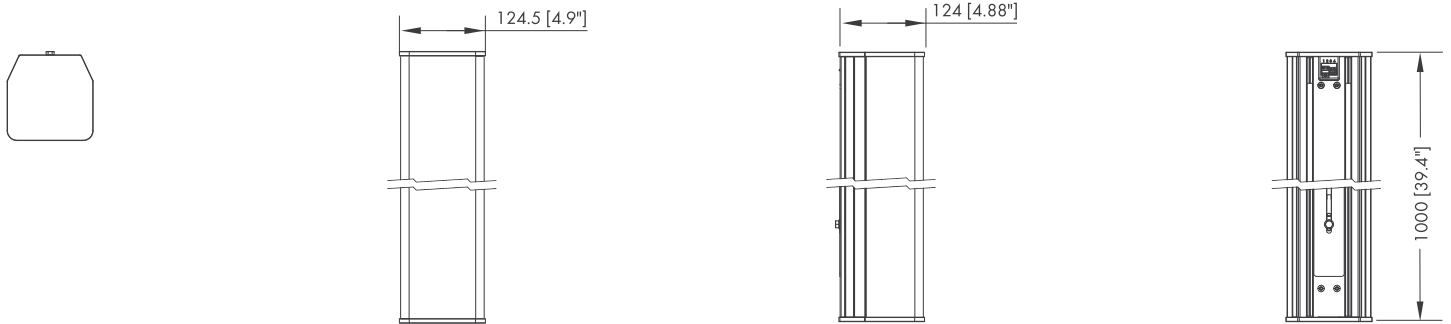
System data

Frequency response (-5 dB standard)	110 Hz - 17 kHz
Frequency response (-5 dB CUT mode)	150 Hz - 17 kHz
Max. sound pressure (1 m, free field)	
24C with 10D/30D/40D/D6/D12/D20/D40/D80	126 dB
..... (SPLmax peak, pink noise test signal with crest factor of 4)	

Loudspeaker data

Nominal impedance	12 ohms
Power handling capacity (RMS/peak 10 ms)	125/600 W
Nominal dispersion angle (h x v)	90° x 20°
Vertical aiming of low-mid beam	-5°
Vertical adjustment of HF array	0° to -14°
Components	6 x 4" driver with neodymium magnet
.....	6 x 1.1" dome tweeter mounted in vertical horn array
.....	Passive crossover network
Connections	4-pin Phoenix Euroblock and 1 x NL4 M
.....	Phoenix plug type: MSTB 2,5/ 2-ST-5,08
Pin assignment	Phoenix: 1: + / 2: - (3/4: n.c.)
.....	NL4 M: 1+/1-
Enclosure	Extruded aluminum, metal baffle and front grill
Weight	9 kg (19.8 lb)
Mounting	Dual-rail 8 mm T-slot profile at the rear

The 24C loudspeaker



24C cabinet dimensions in mm [inch]

Architectural specifications

The 2-way passive column loudspeaker shall consist of six 4" neodymium drivers and an HF array comprising six 1.1" dome tweeters.

In the vertical plane, the beam produced by the low-mid drivers shall be tilted downwards by -5° and shall provide directivity pattern control down to 370 Hz.

The loudspeaker shall be extendable by a dedicated extender unit to allow the vertical dispersion control to be extended downwards by another octave to 190 Hz.

The HF array shall have a nominal vertical dispersion of 20° and its main axis shall be adjustable continuously between 0° and -14° .

The 4" drivers shall be arranged in a unique cardioid setup radiating through waveguide elements at the front and damped ports at the rear of the cabinet and shall provide a constant directivity pattern of 90° in the horizontal plane with a broadband attenuation to the rear of the column of, on average, approx. 18 dB.

The loudspeaker cabinet shall be based on an extruded aluminum profile with a metal grill protecting the front of the loudspeaker.

Two continuous rails (8 mm T-slot profiles) shall be provided at the rear for attaching a wall mount bracket.

The connection panel on the back shall be recessed and fitted with a 4-pin Phoenix Euroblock terminal and shall allow a cross-section of up to 2.5 qmm / AWG 13.

In addition a NL4 M connector socket shall be provided.

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

The power handling capacity shall be 125 W RMS and 600 W peak (10 ms).

The frequency response (-5 dB) measured on axis shall be 110 Hz to 17 kHz with a maximum sound pressure of at least 126 dB.

The dimensions (W x H x D) shall not exceed 125 x 1000 x 124 mm (4.9" x 39.4" x 4.9") and the loudspeaker shall weigh no more than 9 kg (19.8 lb).

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