

# 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.

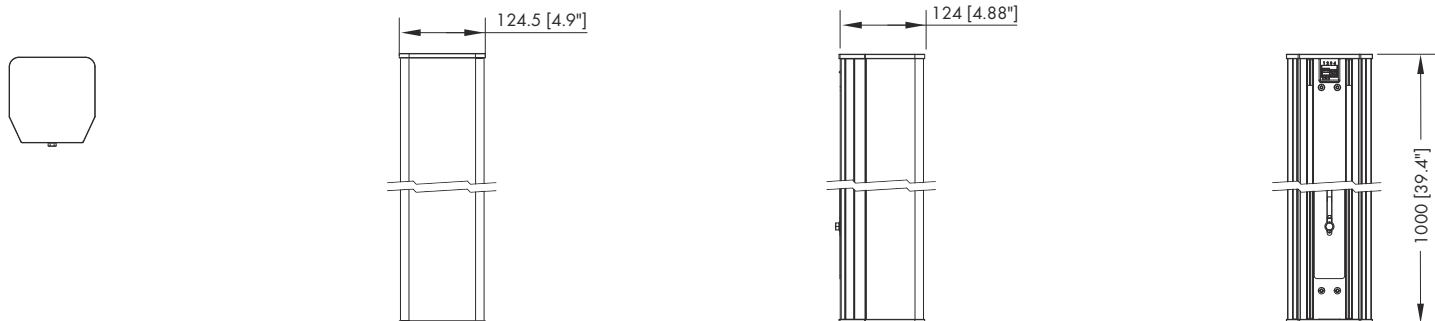
## System data

|   |  |
|---|--|
| 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  $-5^{\circ}$  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  $20^{\circ}$  and its main axis shall be adjustable continuously between  $0^{\circ}$  and  $-14^{\circ}$ .

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  $90^{\circ}$  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 4 qmm / AWG 11.

In addition a NL4 M connector socket shall be provided.

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

The frequency response ( -5dB) 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.

**SONORA**  
PROFESSIONAL  
SERVICES

Petit-Fleur 31 - Le Mont/Lausanne - 021 310 20 60 [www.sonora.ch](http://www.sonora.ch)

Audio-visuel médias technologie