

# JBL 4309

6.5-inch (165mm) 2-way Studio Monitor Loudspeaker

JBL



Designed and engineered in JBL's world-famous acoustic engineering facility in Northridge, California, the 4309 Studio Monitor is a showcase of patented JBL acoustics technologies. This bookshelf loudspeaker features a 2-way design with patented High-Definition Imaging (HDI™) horn technology, the patented 2410H-2 1-inch (25mm) compression driver, and a 6.5-inch (165mm) cast-frame, Pure-pulp cone woofer for powerful dynamics and incredibly accurate sound reproduction. JBL's revolutionary High-Definition Imaging horn geometry is the result of intense research into the nuances of horn design. In search of exceptional high-frequency detail and uniform directivity for smooth in-room response, JBL engineers pioneered a design that delivers neutral frequency response both on- and off-axis and provides a seamless transition between the high and low frequency drivers.

The JBL 2410H-2 compression driver benefits from the advanced research and applications derived from JBL Professional's "D2" range of transducers. At the core of the 2410H-2 device is a lightweight polymer, annular diaphragm that improve high-frequency extension by reducing diaphragm mass. The V-shaped geometry of the annular diaphragm reduces breakup modes, eliminating time smear and reducing distortion. The result is incredible dynamics with accurate reproduction and a lack of power compression.

An Ultra High-frequency tonal adjuster is located on the front panel below the horn and allows the sound to be tailored to the specific environment and listener preference. This control works in conjunction with an advanced crossover network design that features air-core inductors, cast wire-wound resistors and low-ESR metallized film capacitors to optimize the performance of the 4309 drive components.

The 4309's powerful 6.5-inch (165mm) woofer takes advantage of core JBL engineering techniques to ensure very high output with low distortion. The long-throw voice coil in conjunction with the symmetrical field motor design, flux stabilization ring, and copper shorting ring guarantee maximum output with low distortion. A Pure-pulp cone provides a lightweight, rigid diaphragm and helps to eliminate breakup modes ensuring proper piston motion throughout the operating band.

The 4309 enclosure is heavily braced with 3/4-inch (18mm) thick walls to provide a solid acoustic foundation and incorporates a bass reflex design with dual front-firing, computer-optimized flared ports. The cabinet features a classic JBL studio monitor design with a blue baffle and is finished in a choice of Walnut or Black Walnut furniture-grade satin wood veneers. A blue (Walnut) or black (Black Walnut) cloth grille completes the elegant appearance. Dual sets of gold-plated binding posts provide a secure connection and offer a choice of single-ended or bi-wire/bi-amplified connections.

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## Highlights:

- Patented High-Definition Imaging (HDI™) horn
- Patented 2410H-2 1-inch (25mm) high-frequency compression driver
- 6.5-inch (165mm) cast frame, Pure-pulp cone woofer with 1.5-inch voice coil
- Classic Studio Monitor design with premium finishes including satin Walnut wood veneer with blue grille or satin Black Walnut wood veneer with black grille

## Specifications

- ▶ Type: 2-way bookshelf loudspeaker
- ▶ Low Frequency Driver: 6.5" (165mm) Pure Pulp cone woofer
- ▶ High Frequency Driver: 2410H-2 1-inch (25mm) annular ring, Teonex® diaphragm compression driver with advanced HDI™ geometry horn
- ▶ Recommended Amplifier Power: 25 – 150 WRMS
- ▶ Impedance: 4 Ohm
- ▶ Loudspeaker Sensitivity: 87dB/2.83V/1m
- ▶ Frequency Response: 42Hz – 30kHz (-6dB)
- ▶ Coverage Angle, -6dB: 100 Degrees Hor. x 80 Degrees Ver., from 2kHz to 17kHz
- ▶ Crossover Frequency: 1.6kHz
- ▶ Enclosure Type: V-braced front-ported bookshelf
- ▶ Grille Feature: Monitor style to match horn mating features, supplied in dark blue (with walnut cabinet) and black (with black cabinet)
- ▶ Dimensions with grille: 16.5" H x 10.25" W x 9" D (419mm H x 260mm W x 227mm D)
- ▶ Controls: UHF tone control
- ▶ Input Type: Dual sets of gold-plated binding posts with shorting straps
- ▶ Product Weight (Each): 24.2 lbs (10.98kg)
- ▶ Shipping Weight: 56.2 lbs (25.5kg)
- ▶ Shipping Units of Measure: Pair
- ▶ Warranty: 5 Years
- ▶ Recommended stand height: 24" (609mm)