4312 E Studio Monitor



The JBL[®] 4312 E studio monitor is the direct descendent of the legendary Model 4310, the original JBL monitor that forever changed audio recording, introduced in 1968. As you would expect of a true JBL studio monitor, the 4312 E delivers crisp, powerful bass at all listening levels with a massive 300mm (12-inch) woofer driven by a Differential Drive[®] (U.S. patent no. 5,748,760 and other patents pending) dual 75mm (3-inch) voice-coil assembly. A 125mm (5-inch) pure-pulp cone and 25mm (1-inch) copper voice coil with Kapton[®] bobbin realistically reproduce the full dynamics of vocal performances with low distortion, even at the highest listening levels. A 25mm (1-inch) tweeter with a magnesium/ aluminium alloy dome extends HF response far beyond the audible range of the human ear. Built in mirror-image pairs to create the detailed, coherent stereo soundstage that studio monitors must, the JBL 4312 E exceeds the expectations of critical listeners and music professionals alike, providing a listening experience of such richness and subtlety that it cannot be compared to anything but a live performance.

Features

- The loudspeakers are configured in mirrorimage pairs to create a focused stereo soundstage ideal for monitor applications.
 Extremely rigid, heavily braced enclosures of 19mm (3/4-inch) PB with 19mm (3/4-inch)
 MDF baffles ensure that the transducers are held in precise alignment
- Front-mounted port provides optimal woofer tuning for extended bass response and permits speaker to be placed against a wall
- Continuously variable MF and HF attenuators let users tailor driver output to suit room acoustics or personal preference
- Five-way binding-post connectors permit the use of any type of wire and termination
- Pebble-texture black vinyl finish with silkscreened JBL logos

4312 E Studio Monitor

The next-generation JBL[®] monitor



2213Nd-2 Low-Frequency Transducer

A 300mm (12-inch) woofer cone with a Differential Drive dual 75mm (3-inch) voice-coil assembly delivers deep, crisp bass at all listening levels. Dual neodymium magnets in push-pull configuration maintain precise control over the cone's motion and dissipate heat more effectively than conventional magnetic assemblies for low-distortion, high-output performance. The voice coil utilizes patented Low TCR Alloy wire which reduces power compression and greatly enhancing dynamics and transient detail. The die-cast aluminium frame further dissipates heat, increasing power handling, and the shallow, Aquaplas-coated cone is optimally damped to reduce distortion.

105H-1 Midrange Transducer

A 125mm (5-inch) polymer-coated, pure-pulp cone with a 25mm (1-inch) copper voice coil with Kapton bobbin combine to produce flat response with low distortion and increased power handling for more dynamic performance at high listening levels. A die-cast frame minimizes back pressure for more linear motion, lower distortion and more natural-sounding reproduction of voices.

054ALMg-1 High-Frequency Transducer

A 25mm (1-inch) magnesium/aluminium alloy dome produces realistic dynamics far beyond the range of human hearing, with ultrasmooth response that is ideal for SACD[™] and other high-resolution audio formats. A shallow horn and phase plug ensure the HF sound is distributed evenly over a wide listening area.

Technical Specifications

- Low-frequency transducer: 300mm (12") neodymium Differential Drive cone driver with dual 75mm (3") voice coils utilizing patented Low TCR Alloy Edge-Wound wire, castaluminium frame and an Aquaplas-coated cone (2213Nd-2)
- Midrange transducer: 125mm (5") polymercoated, pure-pulp cone driver (105H-1)
- High-frequency transducer: 25mm (1") magnesium/aluminium alloy dome (054ALMg-1)
- Recommended amplifier power: 200 watts RMS
- ► Frequency response: 40Hz 40kHz (–6dB)
- ► Nominal impedance: 6 ohms
- ► Sensitivity: 93dB (2.83V/1m)
- ► Crossover frequencies: 2000Hz, 5000Hz
- ► Controls: Attenuators for MF and HF drivers
- Enclosure type: 19mm (3/4") particle board (PB) with 19mm (3/4") medium-density fibreboard (MDF) baffle, ported, shipped in mirror-image pairs
- Connector type: Five-way binding posts
- ► Finish: Pebble-texture black vinyl
- ► Grille colour: Black
- Dimensions (H x W x D): 597mm x 362mm x 300mm (23-1/2" x 14-1/4" x 12")
- Weight: 17.9kg (39.5 lb)



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