

JBL

J216

J320

J325

J350



The Company

If one word were to summarize JBL and its loudspeaker products, that word would be "quality." From its founding, over 35 years ago, JBL has been uniquely capable of designing and manufacturing the highest quality loudspeakers for home and professional use. This capability has made JBL the number one choice of audio professionals, people who depend on their loudspeakers and demand both great performance and absolute reliability. That's why you'll hear JBL speakers at concerts, why you'll find JBL speakers in the top recording studios.

Because we help produce the music, we know more about reproducing it. When you buy a JBL loudspeaker for your home, you know that you'll hear the music the way the artist intended it to be heard. And all of our loudspeakers—professional, home, and automotive—are manufactured side by side, to the same exacting standards.

DESIGN AND PERFORMANCE

In designing loudspeakers, our goal is accuracy. We want JBL speakers to re-create the original musical performance as closely as possible—not only the notes, but the complete musical experience.

We had an additional goal in designing the J216, J320, J325, and J350: to make these four models the best possible values, loudspeakers that would offer better performance than anything else in their general price ranges.

These goals are not unique to JBL, but our approach is. And our success in meeting them is unprecedented. Creative engineering and innovative manufacturing make the J216, J320, J325, and J350 the best values in high quality sound reproduction.

WHY JBL LOUDSPEAKERS SOUND BETTER

In most loudspeaker designs, accuracy begins and ends with flat frequency response. While that is important, it is not the only factor in building an accurate speaker system. Accuracy also requires low distortion, wide dynamic capabilities, and three-dimensional stereo imaging. JBL has put considerable engineering effort into developing loudspeakers that excel in all these areas, and the results are clearly audible.

Many of our design features are unique and represent significant advances in sound reproduction. And while each makes its own contribution to the sound, each also complements the others.

Flat-Wire Voice Coils. The voice coil in a speaker converts the audio signal into a varying magnetic field that interacts with a permanent magnetic field to create motion. The coil moves the cone to produce sound.

To improve this energy transfer, JBL low frequency and midrange drivers use flat wire, which can be wound more tightly than the more common round wire. This puts 24% more conductor in the voice coil gap. The drivers use amplifier power more efficiently, handle more power, and react more accurately to the audio signal.

Symmetrical Magnetic Field. Another factor in the performance of the low frequency loudspeaker is the shape of the magnetic field created by the permanent magnet. JBL engineers developed a magnetic structure that produces a symmetrical field, so that the coil responds equally in both directions of its travel. Because the design significantly reduces distortion (compared to conventional designs), bass is tighter, better defined, and simply sounds more real.

Computer-Aided Design. The interaction of the low frequency loudspeaker and the enclosure is a key aspect of system design. JBL used a computer to match such characteristics as enclosure volume, ducted port dimensions, cone mass, and suspension flexibility, in order to produce the desired combination of smooth bass response, low distortion, and high efficiency. The bass driver and enclosure are literally made for each other—an optimum match possible because JBL builds both from scratch.

Multi-Element Dividing Network. When the signal from the amplifier reaches the speaker, the dividing network splits it and sends the appropriate frequencies to each driver. JBL carefully engineers dividing networks specifically for each model. The JBL network controls each driver over its full operating range to provide the smoothest possible blending. Additionally, special



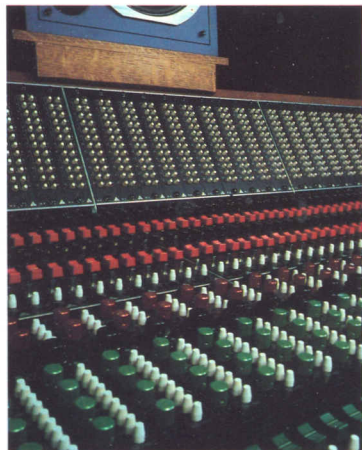
Moviegoers get the full impact of today's dramatic sound tracks when the theater has a JBL sound system.



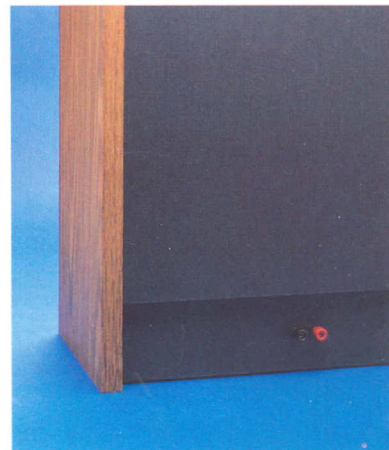
JBL broadcast monitors help top radio stations maintain their high quality signals.



JBL Bi-Radial[®] horns and JBL compression drivers ensure that the huge crowds at Tennessee football games hear every announcement.



As recording technology improves, recording studios choose JBL monitors to aid in making better-sounding records.



Even the rear panel of a JBL loudspeaker is finished, making it visually suited to placement away from a wall. (This is usually the best acoustic placement as well.) The five-way binding posts make speaker hookup easy.





J216



J320



J325



J350

The Systems

"bypass" capacitors improve transient response, preserving the full clarity of the music.

In-Line Driver Array. Part of accurate sound reproduction is a three-dimensional stereo image, the re-creation of the spatial properties of the original performance. The control of the dividing network also contributes here, and so does the placement of the drivers on the baffle surface. The in-line array is the ideal configuration to center the stereo image and keep it stable.

Dome High Frequency Radiator. A newly developed dome high frequency loudspeaker delivers smooth, distortion-free response and wide dispersion. This helps the stereo image and widens the listening area in which the best image will be perceived.

Solid Enclosure Construction. Enclosure construction is critical to the performance of a loudspeaker. These JBL enclosures are fabricated from 3/4-inch (19 mm) particle board, a dense material that is acoustically superior to solid wood. The sturdy JBL enclosures are also lined with damping material to further absorb unwanted internal reflections.

OTHER AUDIBLE PERFORMANCE BENEFITS

Wide Dynamic Capabilities. The dynamic capability of a loudspeaker is the difference between the softest and the loudest sounds that it can reproduce. To handle the full

dynamic range of today's best recordings, a loudspeaker must be both highly efficient (not require much power to produce sound) and capable of handling large amounts of power (to reproduce musical peaks accurately). JBL loudspeakers are unique in combining these attributes. Good recordings sound very natural; soft passages come through clearly, and peaks are reproduced without strain.

Power-Flat Frequency Response. JBL loudspeakers deliver flat frequency response both on-axis (directly in front of the speaker) and off-axis. This smooth power response offers some very audible benefits. JBL speakers will deliver optimum performance and imaging over a wider area of the room, making the choice of a listening position less critical. In addition, the image itself is more natural.

J216 Two-way, with a 6½-inch (165 mm) low frequency driver. Ideally suited for placement on a shelf or stand.

J320 Three-way, with an 8-inch (200 mm) low frequency driver. Better suited to larger rooms and higher volume levels. The three-way design improves both power handling and efficiency.

J325 Three-way, with a 10-inch (250 mm) low frequency driver. For large rooms, high volume levels, very deep bass—or all three. A very desirable alternative to the sound of the loudspeakers included with most of the prematched rack systems.

J350 Three-way, with a 10-inch (250 mm) low frequency driver and 10-inch (250 mm) passive radiator. The J350 reaches into

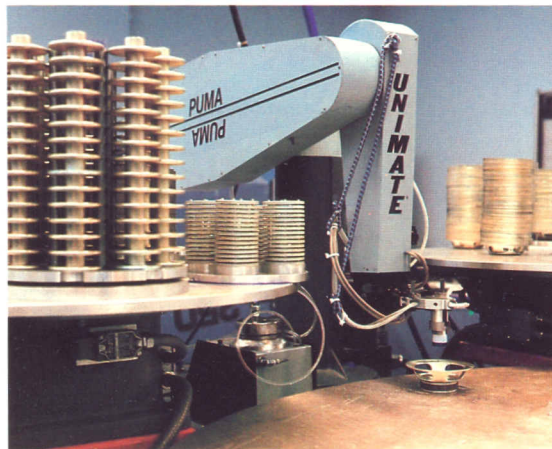
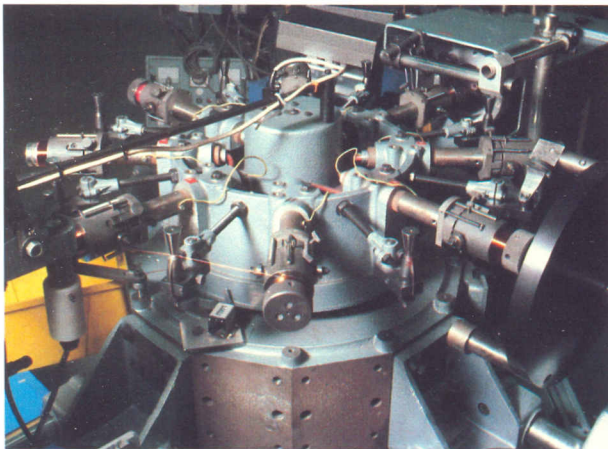
the lowest frequencies to bring back bass guitar and drums with startling clarity and impact. This floor-standing system can handle plenty of power, yet is efficient enough to be used with moderately powered receivers or amplifiers.

ACCESSORY:

JR100 Audio Rack. Designed to match the loudspeakers, the JR100 offers convenient and stylish housing for your stereo components. The three middle shelves are fully adjustable, and hidden casters make moving easy. Construction is of typical JBL quality—the equal of the finest furniture made anywhere.



JBL MANUFACTURING

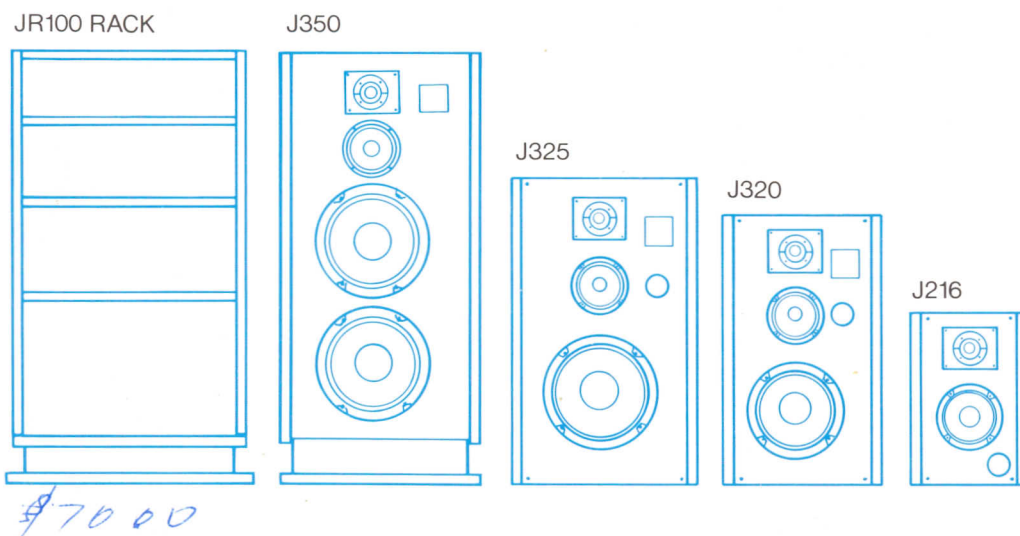


Creative design is only part of a great loudspeaker. Manufacturing is equally important, and JBL is a leader and innovator in manufacturing methods, including the latest techniques in automation and robotics. We control every step of the manufacturing process, so we can be sure everything measures up to our standards. Our quality assurance starts with receiving inspection and continues at every manufacturing step. The computer shown here (right) tests a finished driver in 20 seconds, performing many tests that cannot be done by ear. It also compiles the data from every single speaker tested, data that helps make certain that each finished product meets our exacting specifications.

Specifications

	J216	J320	J325	J350
Recommended Amplifier Power Range	10-60 watts per channel	10-100 watts per channel	10-125 watts per channel	10-125 watts per channel
Nominal Impedance	8 ohms	8 ohms	8 ohms	8 ohms
Sensitivity ¹	87 dB SPL	89 dB SPL	89 dB SPL	89 dB SPL
Crossover Frequencies	4 kHz	1 kHz; 6 kHz	1 kHz; 6 kHz	1 kHz; 6 kHz
Low Frequency Loudspeaker	6½ inches (165 mm) diameter	8 inches (200 mm) diameter	10 inches (250 mm) diameter	10 inches (250 mm) diameter
Passive Radiator	—	—	—	10 inches (250 mm) diameter
Midrange Loudspeaker	—	5 inches (130 mm) diameter	5 inches (130 mm) diameter	5 inches (130 mm) diameter
High Frequency Loudspeaker	1-inch (25 mm) dome	1-inch (25 mm) dome	1-inch (25 mm) dome	1-inch (25 mm) dome
Enclosure Finish	Oak-grained and black vinyl	Oak-grained and black vinyl	Oak-grained and black vinyl	Oak-grained and black vinyl
Grille Color	Black	Black	Black	Black
Dimensions	14¾ in H x 10 in W x 9¼ in D 375 mm x 254 mm x 235 mm	23 in H x 12¾ in W x 9¼ in D 584 mm x 324 mm x 235 mm	26 in H x 15¾ in W x 9¼ in D 660 mm x 400 mm x 235 mm	38¾ in H x 18½ in W x 12½ in D 987 mm x 470 mm x 318 mm
Shipping Weight	39 lb (17.7 kg) ²	36 lb (16.4 kg)	42 lb (19.1 kg)	65 lb (143 kg)

1. Sensitivity measured with a 2.83 V input at a distance of 1 meter. 2.83 V is equivalent to 1 watt into an 8-ohm load.
2. The J216 is packed in pairs.



JBL continually engages in research related to product improvement. New materials, production methods, and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.



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