

L26 DECADE



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Our response to the need for a moderately priced, high quality loudspeaker system for the home.

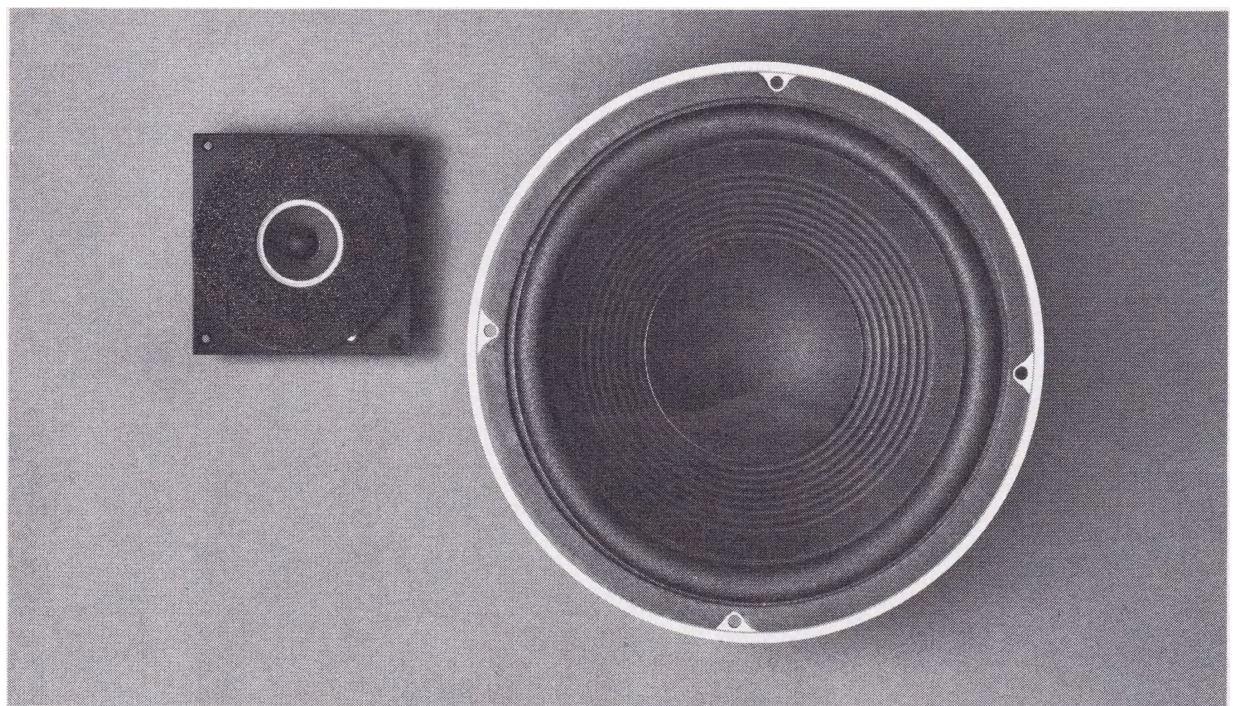
The L26 was developed through the technology that made JBL the leading manufacturer of loudspeaker systems for professional use. It meets the same stringent requirements as JBL studio monitors, providing clear, crisp reproduction, freedom from distortion and lack of coloration—all reasons most major recording groups insist on JBL professional loudspeakers for live performances as well as studio recording.

The L26 achieves the open, effortless performance that is characteristic of JBL loudspeaker systems. It even approaches, within just a few decibels, the thunderous volume levels required of JBL monitors in the recording studio. Each component of the L26—low frequency loudspeaker, high frequency direct radiator, frequency dividing network and enclosure—has been designed to function as part of the complete system, optimizing performance and efficiency without sacrificing definition or the ability to accurately reproduce the fleeting bursts of sonic energy, known as transients, so essential to realism.

Like all JBL loudspeaker systems, the L26 utilizes a ported enclosure to increase efficiency and dynamic range rather than a sealed "acoustic suspension" enclosure which achieves bass response at the expense of efficiency, dynamic range and transient reproduction. Efficiency is important for two reasons: it permits use of a relatively low power, moderately priced amplifier, and it allows the amplifier to operate at a lower power level, providing the reserve necessary to achieve full dynamic range and excellent transient reproduction. Efficiency and outstanding reproduction make the L26 ideal for the music listener wanting to combine superb performance with compact size.

TECHNICAL INFORMATION

Each component of every JBL loudspeaker system is designed and produced by JBL personnel to the most rigorous standards in the industry. JBL loudspeaker frames are massive cast structures, produced to exacting tolerances. Magnetic assemblies are precisely manufactured of low-reluctance iron, energized by large, high grade magnets. Voice coils are held to within one turn of design specifications. Stamped frames and mass-produced voice coils would be less expensive; however, the resultant loss of structural integrity, magnetic force and acoustic efficiency would tend to degrade low-distortion performance and transient response—qualities that have become JBL hallmarks.



The L26 Decade Loudspeaker System

1.4-inch High Frequency Direct Radiator

10-inch Low Frequency Loudspeaker

Low Frequency — Solid, well-defined reproduction is provided by a 10-inch, long excursion loudspeaker. Its massive Alnico V low-loss magnetic assembly concentrates all the magnetic energy where it contributes most to loudspeaker performance —the voice coil gap.

A massive die cast aluminum frame maintains the precise alignment of the voice coil within the gap to a tolerance of one thousandth of an inch. An ordinary stamped frame cannot insure the structural rigidity necessary for long term, low-distortion performance. The copper voice coil, two inches in diameter, drives an integrally stiffened cone. This large coil, interacting with the magnetic force, provides the physical drive necessary for instantaneous transient reproduction; the mass and stiffness of the cone have been carefully researched to provide optimum low frequency performance and definition. The cone is suspended at its outer edge by a highly flexible ring to absorb extraneous sound waves within the cone material and allow the long excursion necessary to achieve dynamic range and extend bass response through the lowest registers of the audio spectrum.

High Frequency—The 1.4-inch direct radiator contributes to the dramatic presence of the loudspeaker system and provides accurate reproduction of delicate overtones and harmonics extending beyond the range of human audibility. Presence creates the feeling that a performance is taking place in front of the enclosure, rather than coming from within it.

As in the low frequency loudspeaker, the high frequency direct radiator combines a large voice coil interacting with a powerful magnetic potential for efficiency and transient reproduction with definition and accuracy. The small diameter of the cone and center dome provides a wide sound distribution pattern, assuring that each listener hears the same tonal balance and blend of direct and reflected sound, regardless of position within the listening area. The entire dynamic assembly is surrounded by a ring of dense foam damping material to absorb unwanted radiation and reflections.

Dividing Network—The function of a properly designed frequency dividing network is much more complex than simply directing low and high frequency information to the appropriate reproducer. Vital to the sound of a loudspeaker system is precise control of the drivers through the transition frequencies. To accomplish this, the tolerances of JBL network components are much more stringent than normal industry practices. The network installed in the L26 has a continuously variable control permitting adjustment of the relative loudness of the high frequency direct radiator to satisfy individual preferences and the acoustic properties of the listening room.

The specified power capacity indicates the continuous program power level that can be accepted by a JBL loudspeaker system without damage. Its peak power capacity is considerably greater than the continuous rated value, as indicated by the remarkable transient response of JBL loudspeaker system components. The L26 will reproduce clean sound at comfortable listening levels when driven by an amplifier having an output of as little as 10 Watts RMS per channel. However, for reproduction of the full dynamic range of contemporary recordings at high volume, a quality amplifier delivering up to 60 Watts RMS per channel will provide optimum performance. Such an amplifier has the reserve power necessary for accurate reproduction of transients, which can reach momentary peaks equivalent to ten times the average power level. In almost all cases, the volume level generated by a JBL loudspeaker will become noticeably discomforting to the ear before the loudspeaker can be damaged by excessive power from the amplifier.

POWER CAPACITY

The L26 enclosure, embodying every concept of fine furniture design and construction that has made JBL leader of the industry, complements the acoustic characteristics of the loudspeaker system. It utilizes a ducted port extending through the baffle panel to provide the proper resistive load on the loudspeaker cone for improved efficiency and dynamic range. To achieve maximum strength and resistance to vibration, all panels are constructed of 3/4-inch stock, side and back panels are lined with acoustic padding, and all joints are hand-fitted, lock-mitered and wood-welded.

THE L26 ENCLOSURE

The search for a refreshing visual approach to loudspeaker enclosures led JBL to explore the use of new finishes, in this case natural oak. The beauty of its grain structure is brought out by a hand-rubbed oiled finish. The contrast of the contemporary grille and natural finish reflects the most recent decorator trends, permitting use of the L26 as an active design element in the listening room.

JBL attributes major importance to the validity of published information. Rather than repeat the ambiguity of most technical specifications, JBL has traditionally refrained from listing data for which no widely-accepted test procedure has been established. In the absence of such standards any well-equipped laboratory can legitimately produce a variety of frequency response curves for a loudspeaker, depending on the conditions selected. At JBL the final analyses are comprised of extensive listening sessions. Although laboratory data are an integral part of the process, the trained ear is the ultimate criterion. The success of this philosophy is reflected in the enthusiastic acceptance of JBL systems by recording studio engineers, producers and performers—professionals whose artistic achievements are closely related to the equipment they use. In every critical listening situation — wherever the sound of the loudspeaker must be depended upon — JBL is the overwhelming professional choice.

Power Capacity*	35 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequency	2000 Hz
Efficiency (Note: 75-80 dB is a comfortable listening level.)	1 Watt input produces 76 dB Sound Pressure Level at a distance of 15!
Low Frequency Loudspeaker	
Nominal Diameter	10 inches 25 cm
Voice Coil	2-inch (5 cm) copper
Magnetic Assembly Weight	2.5 pounds 1.1 kg
Flux Density	8500 gauss
Sensitivity**	40 dB
High Frequency Direct Radiator	
Nominal Diameter	1.4 inches 3.6 cm
Voice Coil	5/8-inch (1.6 cm) copper
Magnetic Assembly Weight	1.6 pounds 0.7 kg
Flux Density	15,000 gauss
Sensitivity***	47 dB
Finish	Natural Oak
Grille	Stretch fabric
Grille Color Options	Orange, Blue, White or Brown
Dimensions	12 3/4" x 24" x 13 1/4" deep 32 x 61 x 34 cm deep
Shipping Weight	41 lbs 19 kg

*Based on a laboratory test signal. See Power Capacity section for amplifier power recommendation.

**Since the major portion of the energy reproduced by the low frequency loudspeaker lies below 800 Hz, this specification has been developed by using a test signal warbled from 100-500 Hz, rather than the conventional 1-kHz sine wave test signal on which the EIA sensitivity rating is based.

***A_{verage} above 2 kHz.

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 is always warranted to equal or exceed the original design specifications unless otherwise stated.

Loud and Proud

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JBL

WANT TO RELAX TO BEAUTIFUL
MUSIC

WELCOME

WE HAVE GOOD HIFI AT YOUR
SERVICE

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OF OUR TEAM WILL BE WITH
YOU SHORTLY.

Or press finger HERE