

A photograph of a boxing ring. In the center, three JBL speakers are arranged: a tall orange one in the middle, and two shorter black ones on either side. The speakers have a light wood-grain top. In the foreground, a pair of brown boxing gloves with yellow accents and the word 'EVERLAST' on the wristband lies on the blue mat. A blue robe is draped over the ropes in the background. The text 'THE FIGHT OF THE DECADE' is printed in white in the upper right.

**THE FIGHT  
OF THE DECADE**

## The Preliminaries

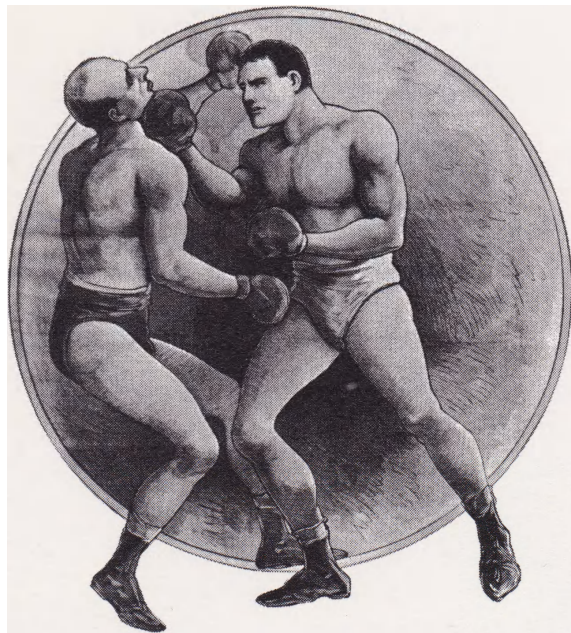
There's a new aggressiveness at JBL. We're tightening up our attack.

Not that we're concerned with staying on top. When our systems are measured and examined against comparable competitors' systems, JBL wins the final round. But for too long we've bypassed the preliminaries.

The buyer with a modest amount to spend has been settling for something less when he really wants and expects to later trade up to a JBL system.

So our new stance is for the field of lower priced loudspeakers. And the Decade series is our newly developed combination. No compromise of quality or sound, these loudspeaker systems show the class you expect from JBL.

It's like the champ fighting in the preliminaries. The decision is going to be obvious.



## THE WELTERWEIGHT 22-1/1 lbs.

“... little guy with a really BIG one-two punch!”

—Kid Novack

The solid one-two punch of the Decade L16 comes from a newly designed 8-inch low frequency loudspeaker and a 1.4-inch high frequency direct radiator. The 8-inch woofer with unusually smooth bass response is typical JBL quality with a heavy, cast aluminum frame; large diameter voice coil; and massive, Alnico V, low-loss, magnetic structure. All three Decades have the same tweeter found in our much respected Century L100 and its professional counterpart, the 4311 Studio Monitor. This 1.4-inch direct radiator is known for its clear, open highs which extend beyond the range of human hearing. As in all JBL systems, the L16 has bass reflex porting for increased efficiency.

Each component, and that includes the frequency dividing network and the oak enclosure, was created for optimum function within the total system. The 8-inch woofer was specifically designed in relation to the internal volume of the L16 for maximum efficiency despite small size.

The L16 not only has the advantage of compact dimensions; its efficiency offers full dynamic range and excellent transient response when used with a modestly priced, relatively low power amplifier.

Moderately sized and priced, the Decade L16 nonetheless packs a clean and solid wallop.

Power Capacity <sup>1</sup>	35 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequency	2500 Hz
Efficiency	1 Watt input produces 75 dB Sound Pressure Level at a distance of 15'
(Note: 75-80 dB is a comfortable listening level.)	
<b>Low Frequency Loudspeaker</b>	
Nominal Diameter	8 inches 20 cm
Voice Coil	2-inch (5 cm) copper
Magnetic Assembly Weight	2V2 pounds 1.1 kg
Flux Density	8500 gauss
Sensitivity <sup>2</sup>	39 dB
<b>High Frequency Direct Radiator</b>	
Nominal Diameter	1.4 inches 3.6 cm
Voice Coil	5/8-inch (1.6 cm) copper
Magnetic Assembly Weight	1% pounds 0.7 kg
Flux Density	15,000 gauss
Sensitivity <sup>3</sup>	41 dB
Finish	Natural Oak
Grille	Stretch fabric
Grille Color	Brown
Dimensions	10W" x 1914" x 10V4" deep 27 x 49 x 26 cm deep
Shipping Weight	28 lbs 13 kg

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

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

3. Averaged above 2 kHz.

RICHARD K. FOX,  
Editor and Proprietor.

NEW YORK, SATURDAY, OCTOBER 2, 1897.

VOLUME LXXI.—No. 1,050.  
Price 10 Cents.

# JACKSON AND MAHER READY TO FIGHT



**THE MIDDLEWEIGHT 34-1/1 lbs.**  
**. a ring record you wouldn't believe.**  
**Knocked me out'.**  
**— Cyclone Billy McGee**

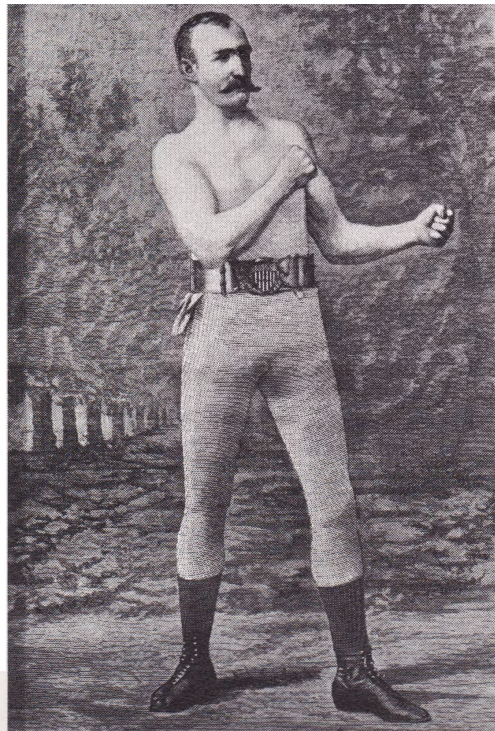
The original Decade, the L26, has quite a record: more than 100,000 purchased in its first year of contention. This first modestly priced speaker system to pass JBL's rigid standards for accurate reproduction has already established itself as a favorite. What has made the L26 such a crowd pleaser is the way its tweeter reproduces delicate overtones and harmonics and its woofer provides solid and well-defined bass fundamentals.

With its larger, 10-inch woofer and greater internal volume, the L26 has more extended bass response and greater efficiency than the L16.

Greater efficiency in a loudspeaker system allows the amplifier to operate at a lower power level leaving a power reserve for reproduction of those bursts of sonic energy called transients.

It is always ideal to pair JBL loudspeakers with the finest amplifier, but what makes all Decades such a bargain is the extraordinarily accurate response they produce from the signal of the more affordable amplifiers. The Decades don't force the amplifier to work as hard, and at medium output the amplifier's signal is cleaner.

All in all, the Decade L26 is a superior 2-way system with a crowd-pleasing price and performance that wins over the audiophile. It's got the lineage of a champion.



Power Capacity <sup>1</sup>	35Watts continuous program
Nominal Impedance	8ohms
Dispersion	90° horizontal and vertical
Crossover Frequency	2000Hz
Efficiency	1 Watt input produces 76 dB Sound Pressure Level at a distance of 15'

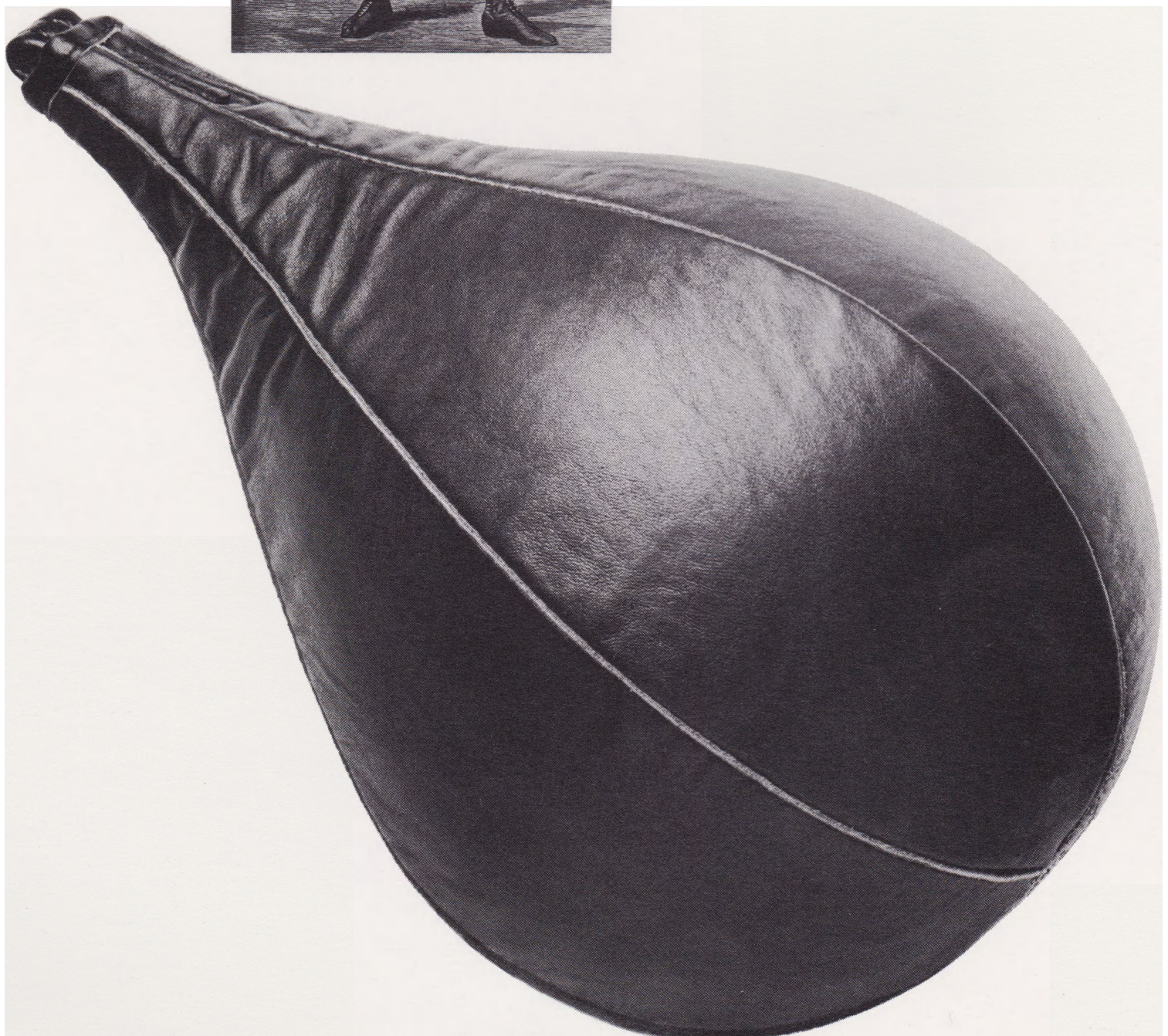
(Note: 75-80 dB is a comfortable listening level.)

<b>Low Frequency Loudspeaker</b>	
Nominal Diameter	10 inches      25cm
Voice Coil	2-inch (5 cm) copper
Magnetic Assembly Weight <sup>2/4</sup>	pounds LI kg
Flux Density	8500gauss
Sensitivity <sup>2</sup>	40dB
<b>High Frequency Direct Radiator</b>	
Nominal Diameter	1.4 inches      3.6cm
Voice Coil	5/8-inch (1.6 cm) copper
Magnetic Assembly Weight <sup>1/6</sup>	pounds 0.7 kg
Flux Density	15,000gauss
Sensitivity <sup>3</sup>	41dB
Finish	Natural Oak
Grille	Stretch fabric
Grille Color Options	Orange, Blue or Brown
Dimensions	12 <sup>3</sup> / <sub>4</sub> " x 24" x 13 <sup>1</sup> / <sub>4</sub> " deep 32 x 61 x 34 cm deep
Shipping Weight	42 lbs      19kg

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

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

3. Averaged above 2 kHz.





## THE HEAVYWEIGHT 18 lbs.

**“No stopping this guy in any round...  
throws everything at you!”  
— Battling Jack Bixbee**

The Decade L36 is the first JBL 3-way system ever designed to sell at a moderate price. It has the same 1.4-inch high frequency direct radiator as the L16 and the L26 and the same 10-inch low frequency loudspeaker as the L26. But the Decade L36 also has a 5-inch transducer to separately reproduce midrange program material

The 5-inch midrange has the cast aluminum frame, the large diameter voice coil and the high magnetic energy at the voice coil gap that are expected of JBL transducers. In addition, a remarkable, thin gauge, aluminum dome at its center smoothes out the upper midrange frequencies.

The midrange enhances the open, effortless performance of the L36 and contributes greatly to the system's dramatic presence range. Presence creates the feeling that a performance is taking place in front of the enclosure rather than coming from within it.

This top Decade has the class of the best JBL bookshelf speakers. For years other speaker manufacturers have been trying to produce a loudspeaker system that sounded like a JBL 3-way but cost less. It took JBL to do it.



## The Decade series: the Lean and Hungry Loudspeakers

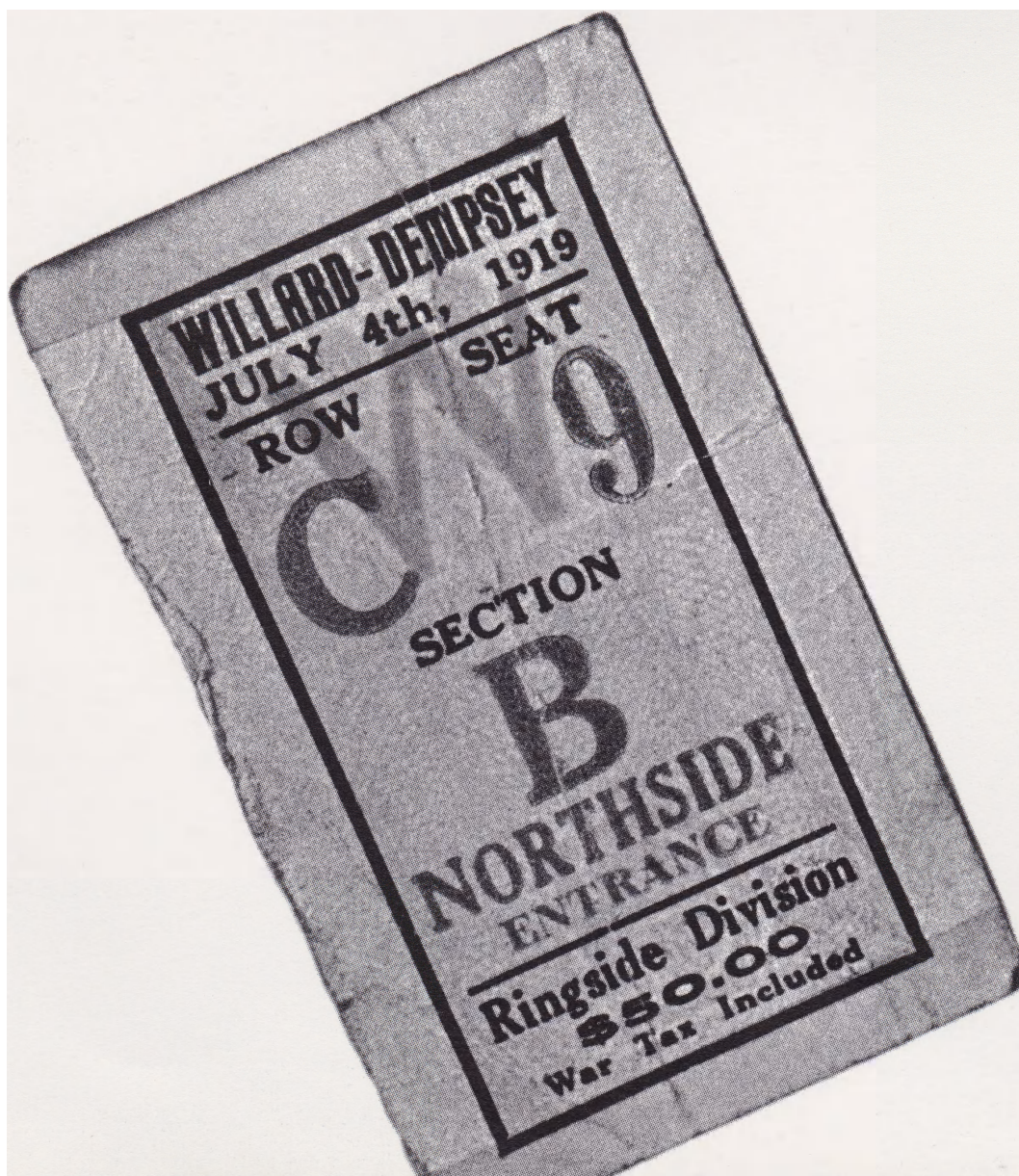
**“... give me a hungry fighter every time!”  
— Max Elefante, Mgr.**

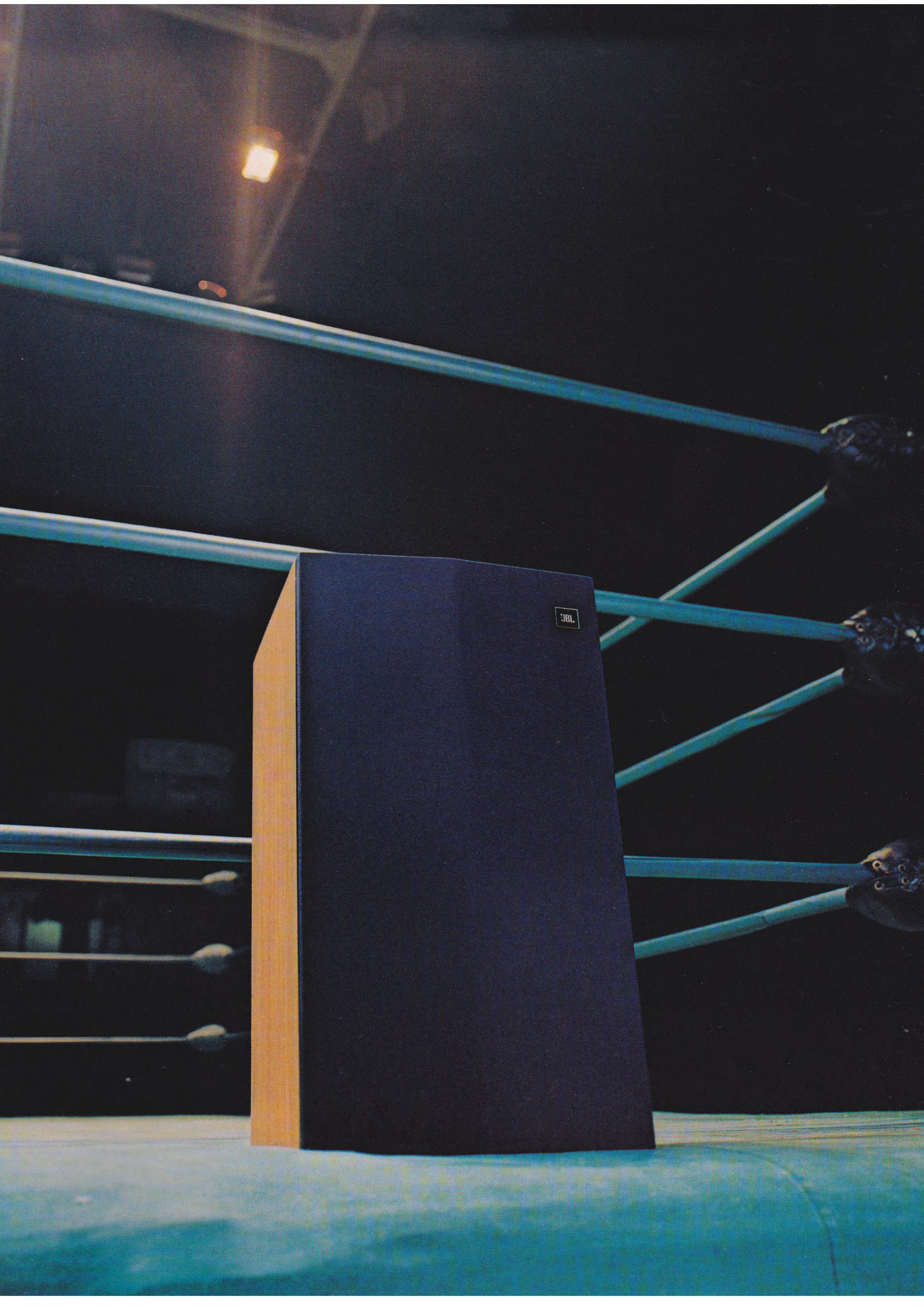
If you purchase the Decades, you buy much more than the JBL name at a low price. You buy what made the JBL name: quality craftsmanship and intelligent design for accurate reproduction.

Only the cost makes them lean and hungry: our most aggressive products to date. But in every respect they're JBL. They go the distance.

Power Capacity <sup>1</sup>	50 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequencies	1500 and 6000 Hz
Efficiency	1 Watt input produces 76 dB Sound Pressure Level at a distance of 15'
(Note: 75-80 dB is a comfortable listening level.)	
<b>Low Frequency Loudspeaker</b>	
Nominal Diameter	10 inches 25 cm
Voice Coil	2-inch (5 cm) copper
Magnetic Assembly Weight	2½ pounds 1.1 kg
Flux Density	8500 gauss
Sensitivity <sup>2</sup>	40 dB
<b>Midrange Transducer</b>	
Nominal Diameter	5 inches 13 cm
Voice Coil	7/8-inch (2.2 cm) copper
Magnetic Assembly Weight	1½ pounds 0.7 kg
Flux Density	15,000 gauss
Sensitivity <sup>3</sup>	45 dB
<b>High Frequency Direct Radiator</b>	
Nominal Diameter	1.4 inches 3.6 cm
Voice Coil	5/8-inch (1.6 cm) copper
Magnetic Assembly Weight	15/8 pounds 0.7 kg
Flux Density	15,000 gauss
Sensitivity <sup>4</sup>	41 dB
Finish	Natural Oak
Grille	Stretch fabric
Grille Color Options	Orange, Blue or Brown
Dimensions	13½" x 24" x 13½" deep 34x61x35 cm deep
Shipping Weight	45 lbs 20 kg

1. Based on a laboratory test signal. See Power Capacity section for amplifier power recommendation.
2. Since the major portion of the energy reproduced by the low frequency loudspeaker lies below 800 Hz, this specification has been developed using a test signal warbled from 100 to 500 Hz, rather than the conventional 1-kHz sine wave test signal on which the conventional EIA sensitivity is based.
3. Averaged 1-3 kHz.
4. Averaged above 2 kHz.





## TECHNICAL INFORMATION

**Low Frequency**—Solid, well-defined reproduction is provided by a 10-inch, long excursion loudspeaker in the L26 and L36. The L16 has a newly designed, 8-inch long excursion loudspeaker with flat response. A massive Alnico V low-loss magnetic assembly concentrates all the magnetic energy where it should be: the voice coil gap.

A sturdy die cast aluminum frame maintains the precise alignment of the voice coil within the gap to a tolerance of one thousandth of an inch. The copper voice coil, two inches in diameter in both 10-inch and 8-inch loudspeakers, 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 give 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 common to all three Decades reproduces with great accuracy the delicate overtones and harmonics extending beyond the range of human hearing. As in the low frequency loudspeaker, the high frequency direct radiator combines a large voice coil interaction with a powerful magnetic potential for efficiency and transient reproduction with definition and accuracy. The small diameter of the cone and center dome disperses sound in a wide pattern, assuring that each listener hears the same tonal balance and blend of direct and reflected sound over a wide listening area. The entire dynamic assembly is surrounded by a ring of dense foam damping material to absorb unwanted radiation and reflections.

**Midrange**—In the L16 and L26 Decade, midrange program material is divided between the low frequency loudspeaker and the high frequency direct radiator.

The Decade L36 uses a separate transducer for the reproduction of midrange material which includes vocal overtones and strings. This 5-inch cone driver is noted for its sensitivity and power handling capacity. Its cone, driven by a  $\frac{1}{2}$ -inch copper voice coil and energized by a 1 $\frac{1}{2}$ -pound magnetic assembly, provides peak-free, uniform sound distribution both on- and off-axis. The light, rigid, moving assembly, combined with a voice coil that is large in relation to cone diameter, is responsible for the outstanding transient response of the device and allows greater undistorted acoustic output. A thin gauge aluminum dome is designed to smooth out the upper midrange frequencies which the 5-inch transducer must reproduce.

**Dividing Network**—The function of a properly designed frequency dividing network is much more complex than simply directing low, mid or high frequency information to the appropriate reproducer. Vital to the sound of the 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. All networks used in the Decade series have continuously variable controls to adjust the relative loudness of the high frequency or midrange reproducers in response to individual preferences and the acoustic properties of the listening room.

**Power Capacity**—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 demonstrated by the remarkable transient response of JBL loudspeaker system components. The Decade loudspeaker systems 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 repro-

duction of the full dynamic range of contemporary recordings at high volume, the Decade 16 and Decade 26 can be driven by a quality amplifier delivering up to 60 Watts RMS per channel for optimum performance; and the Decade 36 can be driven by an amplifier delivering as much as 100 Watts RMS per channel. Such amplifiers have 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.

**The Decade Enclosures**—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.

The enclosure 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  $\frac{3}{4}$ -inch stock, side and back panels are lined with acoustic padding, and all joints are hand-fitted, lock-mitered and wood-welded.

◆**Specifications**—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.

**JBL**

James B. Lansing Sound, Inc., 3249 Casitas Avenue, Los Angeles, California 90039.



Loud and Proud

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JBL

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MUSIC

**WELCOME**

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SERVICE

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OF OUR TEAM WILL BE WITH  
YOU SHORTLY.

Or press finger HERE