
JBL

JBL Precision Loudspeakers and Electronic Components

The products presented in this catalog are unquestionably the finest available. JBL transducers are carefully engineered instruments, painstakingly crafted and assembled to watchmaker's standards. JBL acoustical enclosures are elegant, solid, and flawlessly finished. JBL electronics components are remarkable examples of modern engineering, delivering the full promise of solid state circuitry. Together, they offer you the incomparable "JBL sound" and will provide year after year of pleasurable listening.

JBL has long enjoyed the reputation of "the musician's loudspeaker" and it is a fact that professional musicians overwhelmingly choose JBL... such artists as Harry Belafonte, Gregor Piatigorsky, Mel Torme, Frank Sinatra, Carmen Dragon, Andre Previn, Shelley Manne, Nelson Riddle, Judy Garland, George Shearing, Renata Tebaldi, Sammy Davis, Jr., Stan Kenton, Igor Stravinsky and others of equal renown. JBL professional sound reinforcement systems can be heard in concert and public appearances across the country by such popular artists as Johnny Mathis and Paul Revere and the Raiders.

JBL loudspeakers are the primary sound source for the Los Angeles Music Center, the Inglewood Forum, Purdue University Hall of Music, Emporia Kansas Civic Center, the Mormon Tabernacle, Dodger Stadium, Yankee Stadium, Phoenix Memorial Coliseum, Playboy Clubs, Independence and Heritage Halls at Knott's Berry Farm, and the Saratoga Springs Center for the Performing Arts.

And of course, JBL components are found in distinguished homes throughout the world, as well as the Presidential Palace, Mexico, D.F. and the Royal Palace in Bangkok, Thailand.



The Paragon

JBL Model D44000 Paragon integrated stereo loudspeaker system (Patented). The ultimate. Finest of stereophonic speaker systems, the Paragon was developed to provide a master monitor in perfecting stereophonic recordings.

Selected by the Pasadena Art Museum for showing in tri-annual industrial design exhibition.

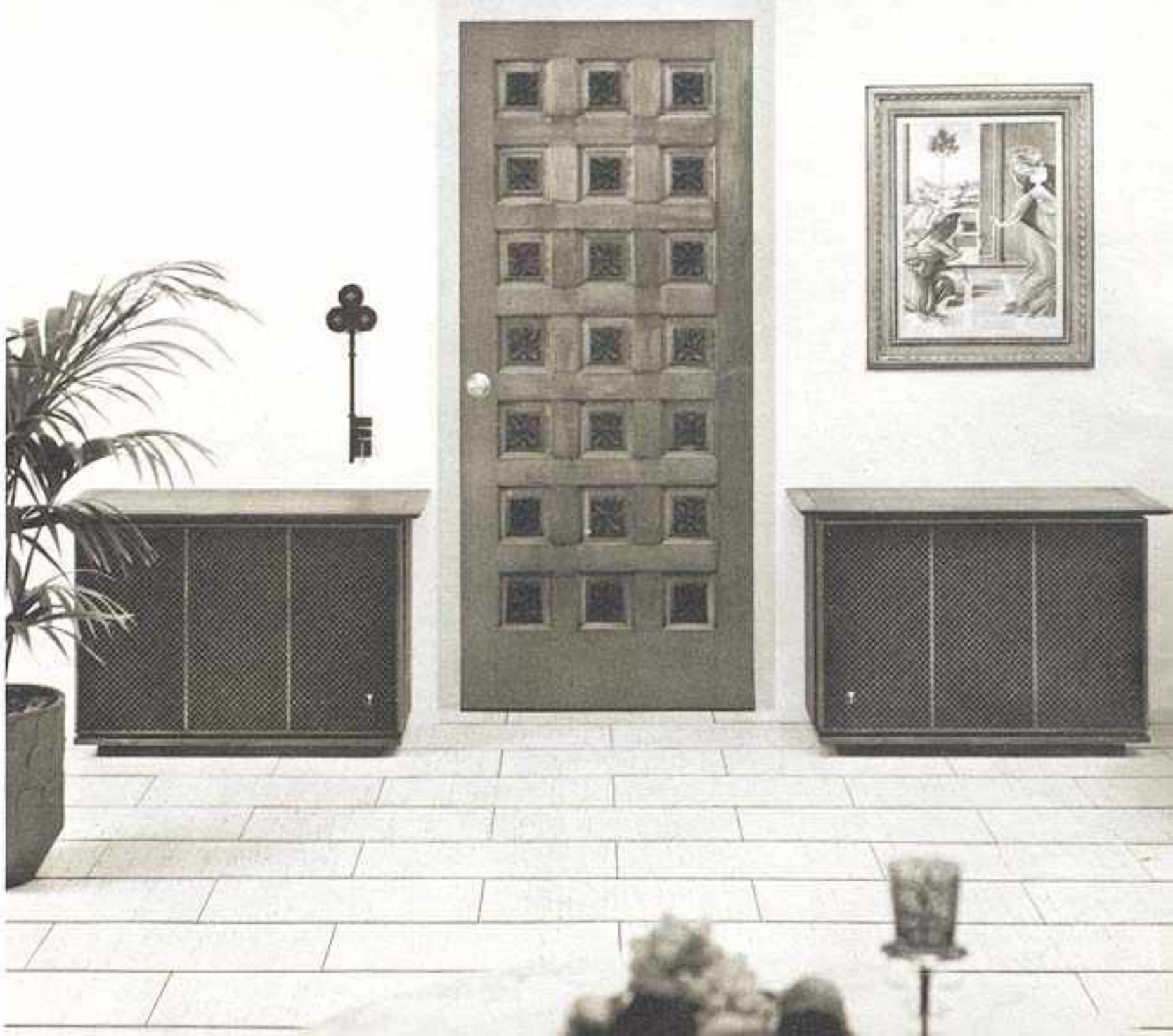
The exclusive curved acoustic refractor panel creates the startling realism of stereophonic sound for each listener in the room, regardless of seating position. There is no "hole in the middle," no "split soloist" to mar the illusion of a live performance.

The Paragon contains two LE15A low frequency transducers, two 375 high frequency drivers, two H5038P horns, two 075 ring radiators, two LX5 networks, and two N7000 networks. Furnished in Oiled Walnut or Tawny Walnut. 35½" x 103⅜" x 24$\frac{1}{16}$" deep.

JBL C50 Olympus

The Olympus exemplifies the perfect blending of advanced acoustical engineering and refined furniture and craftsmanship. The graceful, serene lines...the balance of shape, mass and texture are self-apparent. The handsome veneers, the delicate hand-carved Oriental fretwork, and the impeccable workmanship on these enclosures, make each one a potential heirloom.

With S7R or S8R system installed, performance can only be described as "flawless". The smooth, fantastically accurate response of both systems over a range exceeding nine octaves has prompted their use by major recording companies and radio/TV networks as well as famous recording artists, composers, executives and statesmen. Finished in Oiled Walnut or Tawny Walnut.
26½" x 40" x 20" deep.





JBL C58 Delphi equipment cabinet

Exquisitely crafted, the Delphi harmonizes perfectly with either the Olympus or Apollo enclosures. The Delphi houses all components of even the most complex home high fidelity systems with maximum flexibility and convenience.

Three separate counter-balanced lift lids give access to sections for a record player, tape deck or recorder, and vertically mounted electronic components. Two outside front panels open at a touch for additional storage of components, records or tapes. The top left panel accommodates either flush-mounted tape decks or portable recorders. Furnished in Oiled Walnut or Tawny Walnut. 26½" x 64⅝" x 20" deep.



JBL C51 Apollo

Styled after the Olympus, but more modestly proportioned. Hand carved wrap-around grille, and the rounded taper of its overhang, gives the Apollo a light and airy feeling. Its size provides optimum volume within its convenient dimensions for the JBL S1 speaker system. Oiled Walnut or Tawny Walnut. 26½" x 26½" x 18" deep.

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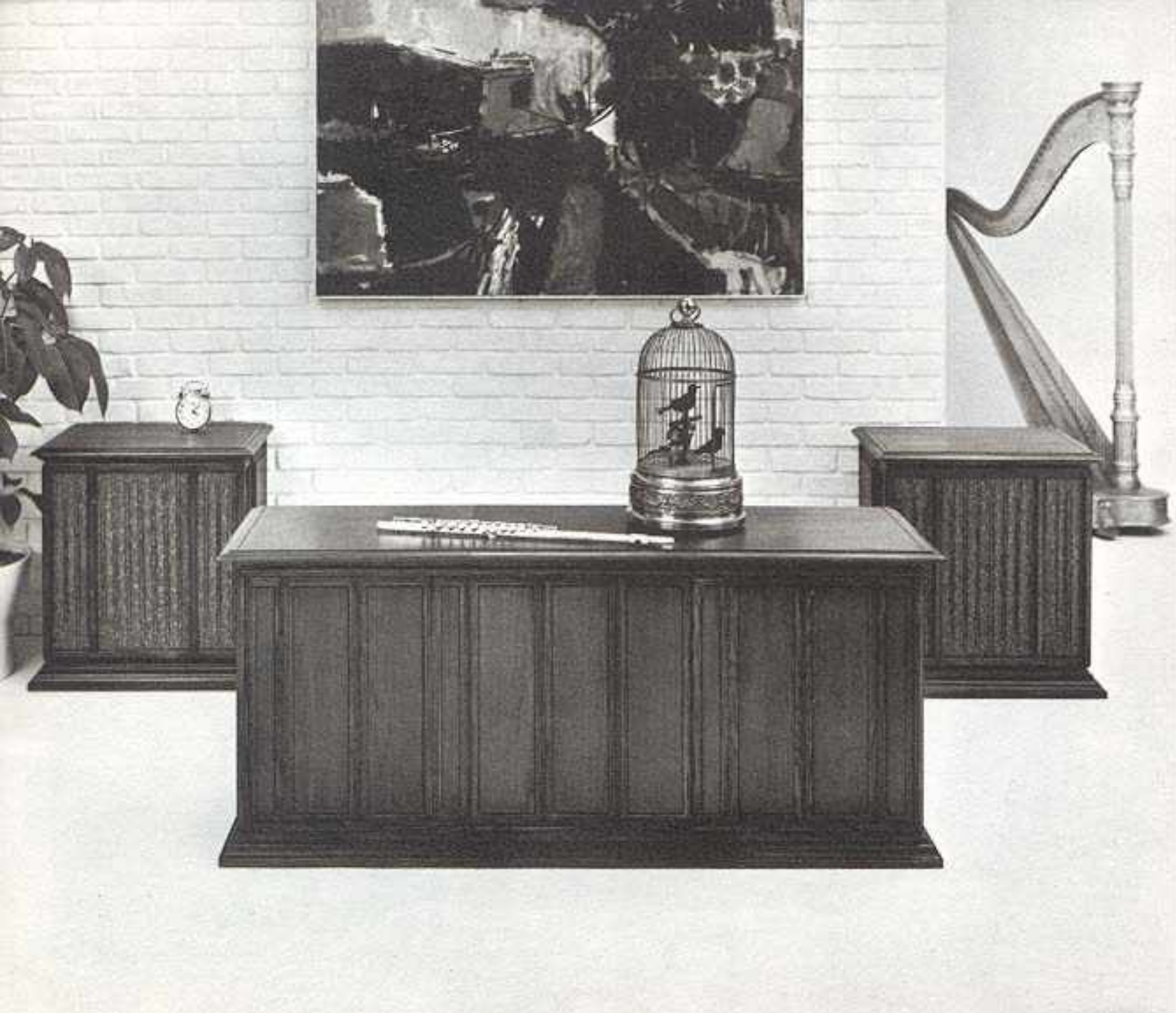


JBL C60 Sovereign I

The Sovereign Reigns Supreme. A traditionally styled loudspeaker enclosure identical internally to the famous JBL Olympus. The sculptured side panelling of the Sovereign I is complemented by its graceful decorator grille treatment and pedestal base, harmonizing unobtrusively with the very finest classical furniture. The enclosure is patiently crafted by JBL's own cabinetmakers and is finished in Country Oak or Golden Oak.

Like the Olympus, the C60 Sovereign I is designed to bring out the full potential of the JBL S7R or S8R loudspeaker system. From the threshold of feeling in the deepest bass, out to frequencies far beyond the range of human hearing, these systems offer crystal-clear, natural, free-breathing sound with a vast reservoir of potential power absolutely unequalled in the world of music.

26½" x 40" x 19½" deep.



JBL C61 Sovereign II

The JBL Sovereign II is a smaller version of the C60 Sovereign I, identical internally to the JBL Apollo. Available finished in Country Oak or Golden Oak. (Chart on pages 30 and 31 shows recommended loudspeakers.) 26½" x 26½" x 19½" deep.

JBL C68 Sovereign III

A beautifully crafted equipment cabinet styled to match the Sovereign I or Sovereign II. The JBL Sovereign III is identical in internal dimensions and functional features to the C58 Delphi. Finished in Country Oak or Golden Oak. 26½" x 64½" x 19½" deep.

Sovereign III is shown flanked by two Sovereign II enclosures.

Loudspeaker enclosures

JBL combines advanced engineering principles, elegant styling, and flawless furniture craftsmanship to create the finest acoustic enclosures available. ¾" panels are lock-mitre jointed and heavily braced to prevent unwanted vibration.

All JBL enclosures, unless otherwise indicated, are finished in Oiled Walnut. Surfaces are slowly and carefully sanded until mirror-smooth. Then, special oils are applied and allowed to penetrate the wood. Finally, the finish is hand-rubbed to a beautiful soft patina. This method of finishing brings out the natural color and grain structure of the hardwood.

The JBL furniture factory also can supply JBL enclosures specially finished to match your sample. The charge for such special finishes is determined on an individual basis. Many enclosures can be supplied unfinished. For professional applications, satin gray finish is available.

It is advisable to match your enclosure to the speaker system for optimum performance. See charts on pages 29, 30, 31.



JBL C38 Baron reflex enclosure

As with most fine furniture, Baron panels are made of thick, dense, rigid particle board covered with fine hardwood veneers then hand finished to perfection. The Baron is just the right size to derive optimum performance from the 032 maximum efficiency system or with the popular JBL S1 and S12 systems installed. 24⅜" x 22¾" x 15⅞" deep.

JBL C53 Libra reflex enclosure

A compact enclosure finished on all four sides for horizontal or vertical placement. Especially popular with the LE14C. The Libra enclosure is simple and low priced yet with as excellent acoustical construction as any JBL enclosure. It is handsome in its simplicity, its severity relieved by a thin black molding around the light fabric grille. 23½" x 14" x 11¾" deep.

JBL C40 Harkness rear-loading horn

Folded within moderate dimensions is a 6-foot exponentially tapered horn to bring you the lowest octave of music, accurately and smoothly. With the 001 two-way system installed the Harkness performs with superb fidelity. Available in right and left versions for matched stereo sets. 28¾" x 37⅞" x 20" deep.

JBL C36 Viscount reflex enclosure

The Viscount is clean, neat, concise and ideally suited for use with JBL maximum efficiency loudspeakers. Identical in performance to the C38 Baron. 28¾" x 19⅜" x 15⅞" deep.

JBL C56 Dorian reflex enclosure

A versatile enclosure distinctively styled for classic feeling and contemporary fitness. The top is of polished Adriatic marble; a floating fabric grille of rich chocolate suspended between bold walnut side panels completes the design. Especially popular with the 032 and S12 speaker systems. 24½" x 17½" x 12⅜" deep.

JBL



JBL S70 Alpha

The refreshing, unparalleled performance of a full-size JBL loudspeaker system available at modest price. A special 12-inch low frequency speaker is matched by a 12-inch passive radiator to provide powerful bass reproduction. Mid-range and high frequencies are delineated by a precision 5-inch transducer, which possesses peak-free uniform response.

This two-way system is further enhanced by the LE20-1, to articulate the very delicate upper musical overtones above 7000 cps. Separate adjustment for both brilliance and presence to suit any taste.

Finished in warm, hand-rubbed Russet Oak. 26½" x 35" x 17⅝" deep.

JBL C78 Alpha equipment cabinet

A matching equipment cabinet designed to accommodate the widest possible variety of high fidelity components without sacrificing appearance, accessibility and function. Matches nearly any decor and can be used in even the smallest of living areas. Finished in hand-rubbed Russet Oak. 26½" x 44½" x 17⅝" deep.



JBL S99 Athena

The most powerful bookshelf made by anyone; the only one with a 14-inch low frequency unit, the largest found in any make. With its hand-carved wood fretwork grille, it is also the most handsome. Performance is identical to the JBL S12 system. Oiled Walnut finish on all four sides. 14" x 23½" x 11¾".

JBL Lancer 99, self-energized stereo pair

...the ultimate bookshelf system. The Lancer 99 is a dramatic example of the incredible performance that results when a pair of fine loudspeakers are self-energized and engineered as a unit. In one S99 enclosure a JBL SE408S Transducer Energized is installed. It supplies an electrical signal precisely tailored to the transducers and to the acoustic loading imposed by the enclosures.



JBL SC99 Athena

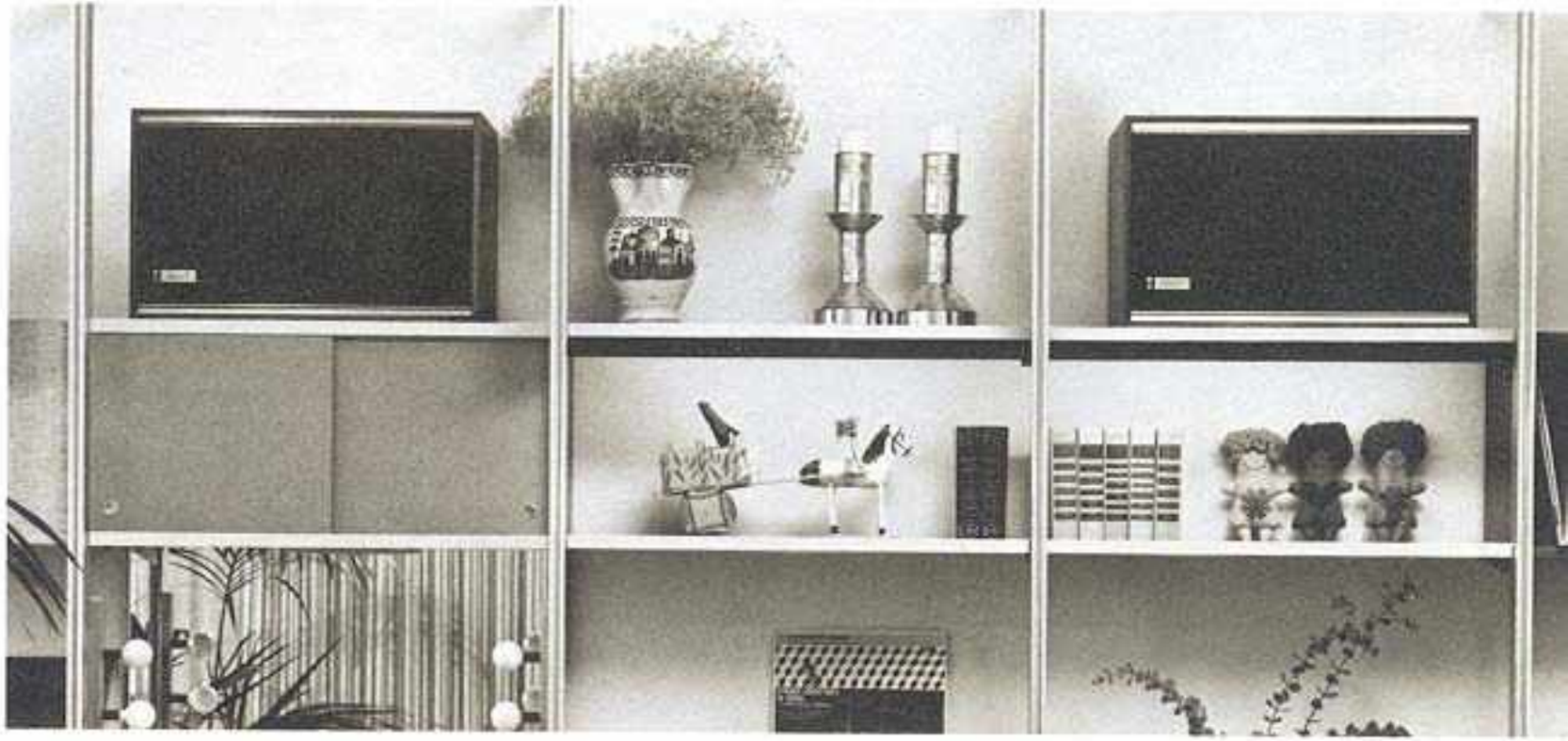
For those who desire the identical rich, clean performance and enclosure of the Athena S99, but prefer a fabric grille of nubby black. Oiled Walnut finish on all four sides.

JBL Lancer 77

A solid performer, the L77 delivers the full, spacious sound normally associated only with much larger systems. It houses a 2-inch direct radiator high frequency transducer and LE10A 10-inch Linear Efficiency bass loudspeaker. The PR10 passive radiator, driven by the acoustic energy within the enclosure enhances low bass response. 14" x 23½" x 11¾" deep. Furnished in Oiled Walnut.

JBL Lancer 44

The L44 is a true precision loudspeaker system utilizing the massive 8-inch full-range LE8T and the PR8 passive radiator. The LE8T delivers clean, incisive sound extending beyond the upper limit of human hearing, while the PR8 effectively doubles the size of the LE8T for more robust response through the full low frequency range. 12¾" x 23½" x 11¾" deep. Furnished in Oiled Walnut.







JBL L75 Minuet

An exciting loudspeaker system of modest dimensions, but with an incredible "big sound" achieved by the LE8T and PR8 combination. The smallest system that can deliver the complete brilliance of today's finest recordings.

Ideal where space is at a premium, the Minuet also has a distinctive appearance. Genuine hardwood veneers and hand crafted wood grillwork add a luxurious touch. Oiled Walnut on all four sides. 9" x 16½" x 7¾" deep.



JBL L54 Trimline

A new concept in the design of compact loudspeaker systems. The remarkable LE8T and PR8 passive radiator articulate the full musical range with exceptional life and brilliance. Equipped with wall hangers and finished on all four sides in Oiled Walnut. 23¾" x 20" x 4⅞" deep. Handsome brass legs (C54-150) are available as an accessory.



JBL Lancer 101

Uncommon sound from a distinctively styled enclosure of moderate size. The L101 features a marble top, a grille of imported hand-carved fretwork, and side panels finished in Oiled Walnut. It incorporates the JBL S1 system and delivers the rich, full sound obtainable only with massive driver/horn/lens high frequency assembly. 24½" x 17½" x 12⅜" deep.

JBL 88 Nova

New richness of design and transparent performance . . . the JBL 88 houses an advanced 12-inch low frequency loudspeaker with heavily-damped long-travel cone assembly, 3" edge-wound copper ribbon voice coil and 6 lb. magnetic assembly. High frequencies are precisely delineated by the JBL 2" piston-type direct radiator — the same unit used in the Lancer 77 and Lancer 99.

Walnut front panel contrasts with decorator fabric. Finished on four sides in Oiled Walnut. 14" x 23½" x 11¾" deep.

JBL 88-1 Cortina

The same remarkable alpine clear performance and components of the JBL Nova. Special full-size fabric grille of charcoal brown pattern. Otherwise identical to the Nova.



JBL L80 Caprice

The look and listening of tomorrow! Oiled Walnut or Rosewood—finished on five faces of each cube—contrasts richly with the gleaming spun aluminum grille panels. JBL's unique LE8T full-range transducer is coupled with the PR8 passive radiator to produce effortless total sound.
22" x 22" x 10" deep.
Furnished in Oiled Walnut.
Furnished in Rosewood.



JBL

Electronic components

JBL electronic components achieve levels of distortion lower than the residual distortion of the finest test equipment. JBL Energizers represent the ultimate fusion of power source and transducer, tailoring the electronic signal to the exact characteristics and performance demands of the loudspeaker systems.

All JBL solid-state amplifiers and Energizers feature the JBL T-Circuit, a basic contribution to the art of sound reproduction. The T-Circuit is an analog-computer-type operational DC amplifier. It is the most nearly perfect amplification circuit ever developed. Linearity is its very essence. It is stable, distortion-free, noise-free, hum-free, trouble-free. The T-Circuit easily meets and exceeds its conservatively stated specifications at any frequency at any power level within its rating.

Each and every JBL T-Circuit amplifier is completely tested not simply spot checked. Each unit is life cycled for 25 hours before being released for sale.





JBL SA660 solid state amplifier

The SA660 combines an advanced solid state preamplifier and superb 120-watt solid state stereo power amplifier into a unit which significantly advances the art of sound reproduction. The exclusive JBL T-Circuit (patent pending) maintains precise control over the associated loudspeaker systems all the way down to zero cycles!

60 watts continuous RMS power per channel with less than 0.2% harmonic distortion at any frequency from 20 to 20,000 cps, both channels operating. IM distortion less than 0.2% at 120 watts or any lower power level. Noise 85 db below rated output from high level inputs, 72 db from low level inputs.

Like all JBL electronic products, the SA660 is designed and manufactured by JBL personnel in JBL's own electronic facilities.

Special features of the SA660 include built-in JBL Aural Null stereo balancing system for simple, exact balancing of the stereo installation; three-position phono switch for best possible signal-to-noise ratio; concentric tone controls for separate bass and treble adjustments; precision-tracking volume controls operate two separate



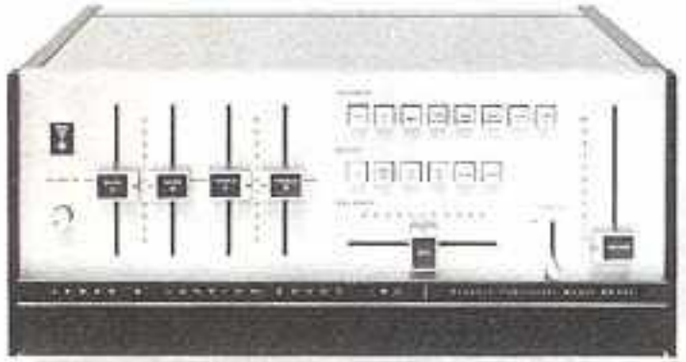
potentiometers—one for each channel for smooth, gradual variation from low to high gain; all controls have the firm, "velvet" golden touch of professional studio equipment; human factor engineering produced front panel controls that are easy to identify, and easy to use. All other inputs and output jacks are recessed into the bottom panel for neat, uncluttered installation.

37 silicon transistors plus 23 silicon diodes used throughout. Short circuit proof, open circuit proof, overload proof.

5 1/16" x 16 13/16" x 13 3/4".

Model SA660 (for built-in installation).

Model F26 walnut side panel kit.



JBL SG520 Graphic Controller

A completely new kind of preamplifier/stereo control center. Performance is flawless: flattest response, lowest distortion, and lowest noise level of all preamplifiers. Professional linear-actuated controls give instant visual recognition of exact settings. Illuminated computer-type pushbuttons control mode of operation and select program source. Seldom-used controls and supplementary signal jacks are concealed behind hinged front panel for easy access. Built-in 1000 cps test tone and F22 relay connections for exact balancing of entire stereo installation with the aural null balancing system. 15 5/16" x 6 1/8" x 11 1/2".

Model SG520 for built-in use .
Model SG520C with case .
Model F25 case separately .
Model F22 stereo balance and power control relay (no additional wires required) .



JBL SE400S Energizer

The JBL Energizer takes the place of a conventional stereo power amplifier. Unlike a conventional amplifier however, the Energizer's performance is precisely matched to the requirements of the loudspeaker systems with which it is used; a replaceable plug-in equalizer board sets exact damping for best transient reproduction and makes final frequency response correction for smoothest possible performance. With the board set for unequalized operation, the Energizer operates as a "flat" laboratory standard power amplifier.

Model SE400S incorporates the exclusive JBL T-Circuit (pat. pend.) and has silicon transistors throughout. IM distortion less than 0.15% at 80 watts or any lower power level, harmonic distortion less than 0.15% 20-20,000 cps at 80 watts or any lower power level. Equalizer boards to match JBL loudspeaker systems as well as systems made by other manufacturers. 4 5/8" x 15 1/4" x 7 3/4" .



JBL SE408S Transducer Energizer

JBL loudspeaker systems can be furnished self-Energized . . . no power amplifier needed. The Transducer Energizer is a stereo power component installed directly in one loudspeaker enclosure of a stereo pair. 4⅝" x 15¼" x 6¾". Model SE408S (performance identical to SE400S) .

JBL self-energized loudspeaker systems

Engineers have long recognized the intimate relationship between a loudspeaker and its associated amplifier. By providing a signal precisely tailored to the requirements of a particular loudspeaker system in a particular acoustical enclosure, it is possible to achieve a standard of perfection which can be realized in no other way. The JBL Transducer Energizer does exactly this.

Many JBL loudspeaker systems can be furnished with the Transducer Energizer installed directly in one enclosure of a stereo pair. These include the Paragon, Lancer 99, the Athena's, and L101 complete systems; and the C50, C50SM, C51, C56, C60 and C61 enclosures.

JBL electronic products not only have established a reputation for superior performance but have won numerous design awards. The JBL Energizer won the First Award for Excellence at the Los Angeles Industrial Fair and Congress, was selected for showing in the American Showcase Abroad, and was featured in the Tenth Annual Design Review. The JBL Graphic Controller received an Award of Excellence in the 1965 WESCON industrial design competition and has been shown in the tri-annual industrial design exhibition of the Pasadena Art Museum.

JBL loudspeaker systems have been singularly honored. The Caprice and Nova were shown at California Design Ten and the Nova was displayed at the Brooklyn Museum, 1968.

JBL

Extended Range Loudspeakers

JBL research and development is responsible for a number of highly significant contributions to sound reproduction. Among these are the four-inch voice coil, the acoustic lens, integrated stereo through radial refraction, the ring radiator, the silver impedance compensating ring and passive radiators.

For voice coils, JBL forms its own aluminum and copper ribbon wire, wound by hand on its narrow edge. The JBL voice coil is a marvel of ingenuity; it weighs but a fraction of an ounce, yet it must be absolutely round and remain dimensionally stable in all climates. JBL makes and uses the largest voice coils in the industry.

Other parts of the magnet assembly are individually machined to ten-thousand-inch tolerances. High efficiency is the result of these efforts, meaning clean, crisp, low-distortion sound reproduction.



JBL LE14C composite transducer

Although the LE14C has a radiating cone area equal to that of many 15" speakers, it may be installed in an enclosure which ordinarily would accept nothing larger than a 12" unit. The large 4" diameter copper ribbon voice coil of the bass transducer permits the concentric mounting of an independently driven high frequency radiator.

The two transducers are co-ordinated and properly phased by the LX2-1 crossover network. 8 ohms, 12⅛" rear-mounting hole, 5⅜" depth. Shipping weight 24 lbs.



JBL LE12C composite transducer

A complete two-way JBL loudspeaker system integrated into a single chassis. High frequency transducer is identical in performance to JBL LE20. 12" low frequency transducer has 3" edgewound copper ribbon voice coil and special controlled cone suspension to deliver crisp, smooth bass in almost any well-built enclosure designed to house a 12" loudspeaker.

A 3,000 cps dividing network is mounted directly on the cast aluminum frame. 8 ohms, 11 1/16" mounting hole, 4¼" depth. 16 lbs. shipping weight.





JBL D130 15-inch

Acknowledged to be the outstanding extended-range loudspeaker made! A maximum efficiency unit with a 4" edgewound aluminum ribbon voice coil and 11 lb. magnetic assembly. Balances perfectly with 075 or LE175DLH. Best performance is realized in fairly large horn-loaded or reflex enclosures. 8 ohms, 13½" rear mounting hole. 5⅝" depth. Shipping weight 22 lbs.



JBL D131 12-inch

Model D131 is identical to the larger D130 in every respect except its outer diameter. The only 12" speaker with a 4" edgewound aluminum ribbon voice coil. 11⅛" mounting hole. 4⅝" depth. Shipping weight 21 lbs..



JBL D123 12-inch

An outstanding speaker designed for compact enclosures of 2½ cubic feet or more. Shallow enough for in-wall installations. 3" ribbon voice coil, 8 ohms, 11⅛" mounting hole, 3⅞" depth. Shipping wt. 12 lbs.

Extended range loudspeakers

JBL LE8T 8-inch

Remarkably smooth, extended response never before realized in a unit only 8" in diameter. Performance in minimum-volume enclosures cannot be approached by any other single loudspeaker. Suitable for in-wall installation. 6½ lb. magnetic assembly, 8 ohms, 7 1/16" mounting hole, 3⅞" depth. Shipping wt. 11 lbs.



JBL D208 8-inch

This maximum efficiency loudspeaker is an 8-inch version of the famous D130. Bright, clear-midrange, used as an extension speaker and for general use. Two-inch aluminum ribbon voice coil, 3½ lb. magnetic assembly, 7 1/16" rear mounting hole, 3" depth, 8 ohms. Shipping weight 6 lbs.



JBL D280 8-inch

Designed for use in very small enclosures. Has water-resistant cone for protected outdoor applications. Used in Model L57 Carnival, 8 ohms, 7" mounting hole, 3" depth. Shipping weight 6 lbs.



Dividing networks

JBL dividing networks give an imperceptible transition from low to high frequencies, so that when listening to a JBL two-way loudspeaker system you are conscious only of a single source of sound. Highest quality electronic components are used throughout; paper foil capacitors (no electrolytic units), individually adjusted low-loss inductors, oversize switches and controls. Every unit is hand-wired and carefully tested in comparison with a laboratory prototype.

All JBL networks are engineered to match the exact characteristics of specific high frequency and low frequency transducers, as listed in the chart on the next page. All models can be installed in a 4¼" x 5½" cutout so that the attenuator control and spring-loaded terminal posts are readily accessible. A tubular plastic gasket on the network flange makes an air-tight seal to the mounting surface.



LX8 LX11



LX5 N1200



LX2 LX10
N2400 N7000

The chart at the right indicates the current recommended loudspeaker system combinations available with our low and high frequency transducers, and dividing networks. These combinations are the result of extensive testing and research, and are designed to deliver optimum performance for a wide variety of applications. Other combinations of JBL products can be used but are not recommended.

In addition, we do not recommend combining JBL loudspeaker components with crossovers, horns, or speaker components of another manufacturer because there is no way for us to predict what the performance of such systems might be. A truly high quality loudspeaker system is acoustically matched so that all components work together in the best possible relationship with each other.

Network selection chart

Network Model	Crossover Frequency	Low Frequency Transducer	High Frequency Transducer	High Frequency Control	Input Impedance (Ohms)	Shipping Weight (Lbs.)	Price
LX5	500*	LE15A	375, LE175, LE85	3-position switch	8	10	
N1200	1200	D130, D131, 130A	LE175	3-position switch	8	9	
LX10	1500	LE14A	LE175	Continuously variable	8	3	
LX8	2000	LE14A	LE20	3-position switch	8	3	
LX11	2500	LE10A	LE20	3-position switch	8	3	
LX2	2500	D123, D208	LE20	Continuously variable	8	3	
N2400	2500	D130, D131, D123	075	Continuously variable	8	4	
N7000	7000	D131, D130, 130A, LE15A LE14A/LE175	075**	Continuously variable	4 to 16	3	

*Special H.F. attenuation circuit matches 16-OHM 375 as well as 8-OHM LE175/LE85 without affecting crossover characteristics.

**Permits adding 075 for added brilliance in any JBL system utilizing the LE175, LE85 and 375.

Horns & Drivers

JBL high frequency units are instruments of incomparable quality and precision. All design elements that contribute to its performance —the energy in the magnet gap, the alignment of the voice coil, the configuration of the diaphragm, the geometry of the phasing plugs —have been engineered to exacting specifications.

JBL uses four methods of high frequency reproduction: 1. The duraluminum center dome in full-range units, 2. Compression drivers, 3. Direct radiators, 4. The ring radiator. JBL precision horns load the driver by providing a limited air mass for it to work into. The horn then delivers a wave front of optimum size and shape for projection through an acoustical lens.



JBL HL91

Cast aluminum exponential horn with slant-plate acoustic lens for use wtih LE175 or LE85 driver. Precise configuration of lens distributes all high frequencies over 120° horizontal angle, 65° vertical angle. 7¾" behind baffle. Lens 6⅛" x 10" x 2⅜". Shipping weight 6 lbs.



JBL HL93

Similar to HL91, with identical dispersion characteristics, but designed for use with 375 driver. Used in JBL S8 and S8R loudspeaker systems. 4⅝" behind baffle. Lens 6⅛" x 10" x 2⅜" Shipping weight 6 lbs.



JBL 1217-1290

Cast aluminum horn with acoustic lens for 90° high frequency dispersion in circular symmetry. Used with LE175 or LE85 driver where cabinet space does not permit installation of HL91 horn-lens. 5¼" dia., 7¾" depth. Shipping wt. 5 lbs.



JBL 375 driver

Acknowledged to be the ultimate for reproduction of midrange and highs. Steep wavefronts of explosive loudness are taken in stride by the powerful magnet and 4" diaphragm. 16 ohms, 2" horn throat. 7" dia., 5¼" depth. Shipping weight 32 lbs.

JBL LE85 driver

Truly linear high frequency performance from 500 cps to beyond the upper limits of audibility. Percussion and other high intensity transients are dramatically recreated with verbatim accuracy. 8 ohms, 1" horn throat. 5¾" dia., 3⅞" depth. Shipping wt. 15 lbs.

JBL LE175 driver

A high-quality compression driver similar to the LE85, but having a less massive magnetic assembly. Most often combined with the 1217-1290 horn-lens to make Model LE175DLH, but also can be used with other JBL high frequency horns. 8 ohms, 1" throat, 4½" diam., 3⅞" depth. 10 lbs. shipping wt.

JBL LE175DLH

A massive driver/horn/lens assembly consisting of the LE175 driver coupled to the 1217-1290 horn/lens. 8 ohms. 5¼" dia., 11⅝" depth. Shipping wt. 12 lbs.

JBL LE20

A wide range, husky unit of exceptional versatility. Extends the high frequency range and adds brilliance to extended range speakers such as D208 and D123. Balances perfectly with the LE14A and LE10A bass speakers. 8 ohms. 5" diam. 2 1/16" depth. Shipping wt. 3 lbs.

JBL 075 ring radiator

The 075 utilizes an exclusive annular diaphragm for flat, distortion-free response well above the limits of human hearing. It is remarkably efficient and can be used with any JBL extended range cone speaker (except the D208) from 2500 cps up. It can also be added to any JBL two-way system with the addition of the N7000 dividing network. 8 ohms, 3⅞" diam., 3½" depth. Shipping wt. 6 lbs.

Low frequency loudspeakers

JBL 130A 15-inch

Maximum efficiency low frequency loudspeaker designed primarily for use with the LE175DLH high frequency assembly in reflex or horn-loaded enclosures. 8 ohms. 13½" rear mounting hole. 5⅝" depth. Shipping weight 23 lbs.

JBL LE15A 15-inch

Effortlessly reproduces lowest musical fundamentals, even at very high power levels. For installation in 6-8 cu. ft. enclosed cabinets or ported enclosures as small as 3.5 cu. ft. Can be combined with the PR15 passive radiator, as in the JBL Olympus. 8 ohms, 13½" rear mounting hole. 5¾" depth. Shipping weight 27 lbs.

JBL LE14A 14-inch

A remarkable loudspeaker which delivers full, solid bass in enclosures as small as 1.5 cubic feet. Four-inch edgewound copper ribbon voice coil and massive magnetic assembly. 8 ohms, 12⅛" rear mounting hole. 5⅜" depth. Shipping weight 21 lbs.

JBL LE10A 10-inch

Generates powerful bass fundamentals in enclosures as small as one cubic foot. Three-inch edgewound copper ribbon voice coil. 8 ohms, 9" mounting hole. 4¼" depth. Shipping weight 15 lbs.



Passive radiators

In some instances, a passive radiator can be used in conjunction with a specific JBL loudspeaker to effectively double the size of the speaker for richer, more robust bass performance, greater dynamic range and smoother response well up into the mid-range.

Passive radiators are available in models PR8, PR10 and PR15... designed specifically for use with the LE8T, LE10A, and LE15A, respectively. They are not designed for use with other JBL speakers, or those of another manufacturer, and must be used in completely airtight cabinets.

Passive radiators are used in the JBL Lancer 44, L75 Minuet, L57, L59, L80, Lancer 77 and C50 or C60 S7R and S8R systems.



JBL PR15 passive radiator

The PR15 complements the performance of the LE15A in 5 to 8 cubic foot enclosures. Same mounting as the LE15A. 3⅜" depth.



JBL PR10 passive radiator

Used with the LE10A in 1.25 to 3 cubic foot enclosures. Same mounting as the LE10A. 1¾" depth.



JBL PR8 passive radiator

For use in conjunction with the LE8T in 0.75 to 2 cubic foot enclosures. Same mounting as the LE8T. 1¾" depth.

Musical instrument loudspeakers

First choice of every major electric instrument maker.

JBL D140F 15-inch bass speaker

The first speaker ever designed for the professional bass guitarist or organist. Rich, clear solid bass even at thunderous power levels. It's as if you had been given a completely new instrument. Replaces any standard 15 inch speaker. 8 ohms, 4" voice coil, 11 lb. magnetic assembly, 13½" mounting hole, 5⅝" depth. Shipping weight 22½ lbs.



JBL D130F 15-inch

Acknowledged to be the pace-setter! Used by the best artists and groups...Chet Atkins, The Rolling Stones, The Four Freshmen, etc. Replaces any standard 15-inch speaker. 8 ohms, 4" voice coil, 11 lb. magnetic assembly, 13½" mounting hole, 5⅝" depth. Shipping wt. 22½ lbs.



JBL D120F 12-inch

Identical to the famous D130F in every respect except the outside diameter. Replaces any standard 12" speaker. 4" edgewound aluminum ribbon voice coil. 11$\frac{1}{16}$" mounting hole, 4⅝" depth. Shipping weight 21 lbs.



JBL D110F 10-inch

Remarkable total sound. Rich bass and bright treble, even in small enclosures. Will directly replace any standard 10-inch speaker, 3" voice coil, 6 lbs. magnetic assembly, 8 ohms, 9" mounting hole, 4¼" depth. Shipping weight 15 lbs.



Detailed construction blueprints

For the experienced home craftsman, detailed construction drawings are available for the JBL enclosures listed below. Adaptor kits need not be purchased since drawings of any necessary adaptors are included. In addition, the baffle panel or speaker mounting board can be cut-out to accommodate whatever system is to be installed.

When building JBL enclosures, one MA15 mounting kit must be ordered separately to front-mount each JBL 15-inch loudspeaker or 15-inch passive radiator. MA15 kits can be ordered through your JBL Audio Specialist.

MA15 installation kit

For optimum performance, it is preferable to mount speakers from the front of the baffle board. The MA15 kit, consisting of cast clamps and gasket material, allows you to front-mount in custom-built enclosures. For the following loudspeakers: D130, 130A, D130F, D140F, LE15A, PR15.

Because of the intimate relationship between the low frequency loudspeaker and the speaker enclosure, the proper enclosure volume in cubic feet should be observed for optimum performance. The chart below indicates the minimum and optimum internal volume in cubic feet required for JBL low frequency loudspeakers and single, extended range loudspeakers. The larger enclosures will allow for smoother, firmer and more extended low frequency response.

Speaker	Internal Volume in Cubic Feet	
	Minimum	Optimum
D280 LE8T	0.75	3-4
D208	2.0	3-4
LE10A LE14A LE14C	1.5	3-4
LE12C	2.2	4-6
D131 D130 130A	2.5	4.5-6
D123	2.0	4.5-6
LE15A	3.5	5-8

JBL maintains a staff of technical experts who are available to answer any question you may have pertaining to music reproducing systems. Detailed technical information on all JBL products are available from this same source. Address your inquiry to the Technical Service Department, James B. Lansing Sound, Inc. Los Angeles, California 90039

Prices of loudspeaker systems installed in JBL enclosures *(See paragraph at right explaining adaptor kits)*

Prices of all JBL products are established through franchise fair trade agreements and are uniform throughout the United States.

System	System Price	Enclosure	C36, C38	C40	C50	C50SM	C51	C53	C56	C60	C61
		Internal Volume in Cubic Feet	2.5	HORN	6.0	5.5	3.5	1.5	2.0	6.0	3.5
		Components / Price									
LE12C		LE12C	• A37						• A39		
LE14C		LE14C LX2-1	• A33					•	•		
D123		D123							• A36		
D131		D131	• A30								
D130		D130	• A30								
001		130A LE1750LH N1200	•	•			• A29				• A29
030		D130 075 N2400	•				• A29				• A29
032		D123 LE20 LX2	• A33						• A36		

Adaptor kits—important: Because JBL enclosures accommodate more than one loudspeaker system, adaptor kits are needed to install certain components. Where such kits are required, model numbers are shown in the chart below, as A30, A36, etc. If no adaptor kit model is listed, no kit is required for that particular enclosure/loudspeaker combination. When ordering enclosures separately, be sure to order necessary adaptor kits for the components you want to install.

System	System Price	Enclosure	C36, C38	C40	C50	C50SM	C51	C53	C56	C60	C61
		Internal Volume in Cubic Feet	2.5	HORN	6.0	5.5	3.5	1.5	2.0	6.0	3.5
		Components / Price									
S1	•	LE14A LE175DLH LX10	• A33				• A7		•		• A7
S7	•	LE15A LE85 HL91 LX5				•	• A7				• A7
S7R	•	PR15 LE15A LE85 HL91 LX5			•					•	
S8	•	LE15A HL93 LX5 075 N7000 375				•					
S8R	•	PR15 LE15A HL93 LX5 375 075 N7000			•					•	
S11	•	LE10A LE20 LX11						•			
S12	•	LE14A LE20 LX8	• A33					•	•		

James B. Lansing Sound, Inc., Los Angeles, California



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The JBL Warranty

Every JBL product is covered by a two-year warranty. JBL will replace defective parts and make necessary repairs under this warranty if our examination reveals evidence of faulty original workmanship or material. Of course, the warranty does not cover damage caused by misuse, accident or neglect. JBL retains the exclusive right to make such determination on the basis of factory inspection.

Moreover, because we believe that a fine loudspeaker, like a fine musical instrument, should never wear out—we will, at our option, repair any JBL transducer, *free of charge* during its entire normal life if factory inspection discloses a manufacturing defect.

Should a JBL product ever require service, it should be returned to the JBL dealer from whom it was purchased. If it is impossible to contact your dealer, write to JBL describing the difficulty. Products returned to the factory must be shipped prepaid and will not be accepted unless written authorization has first been obtained.

The warranty on JBL products is recognized only when the unit is repaired by JBL or an authorized JBL Service Agency, and providing that the serial number on the unit has not been defaced and/or removed.