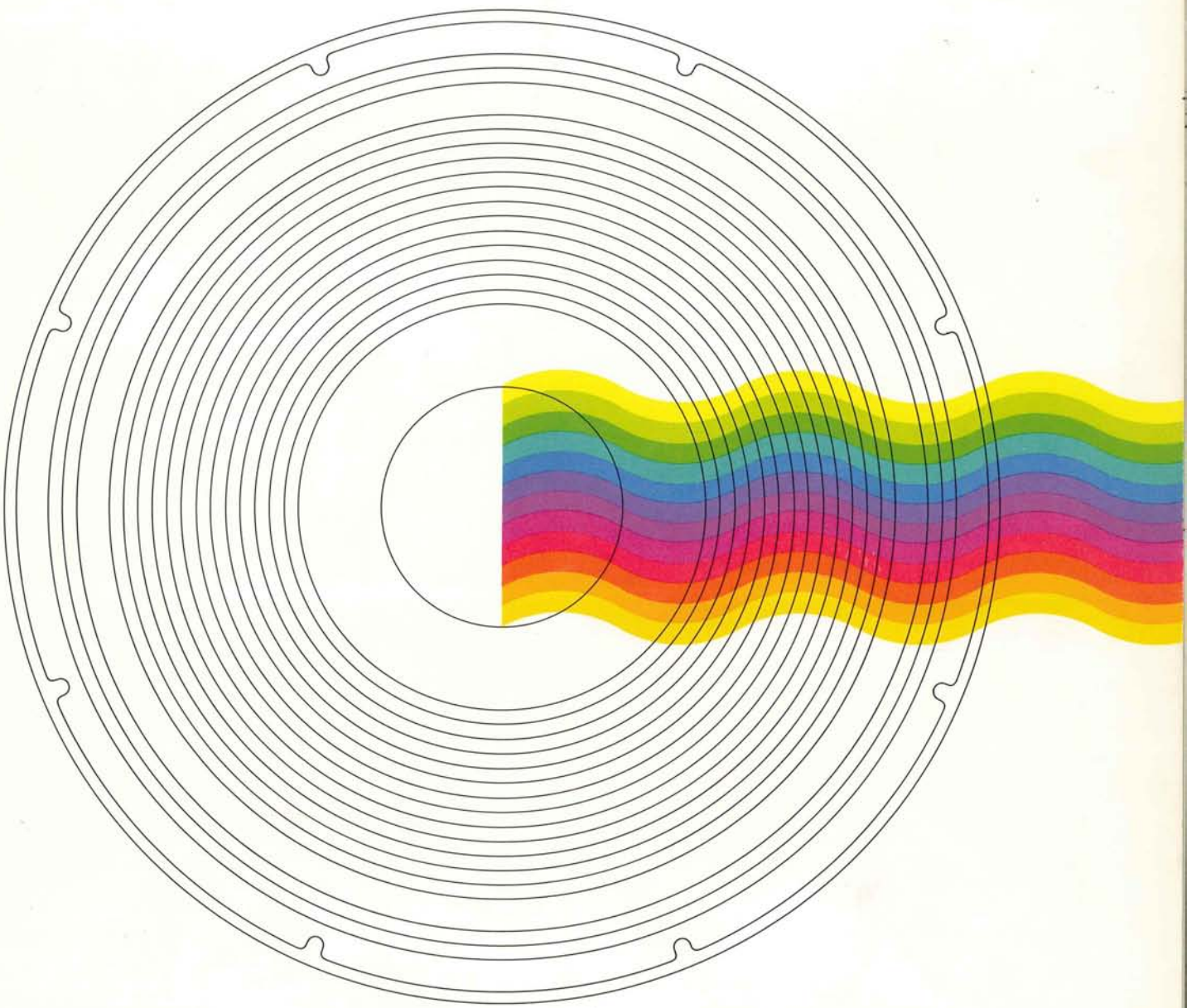
JBL



Excellence is an elusive quality. It's so easy to recognize yet so difficult to attain.

JBL craftsmen have been involved in the art of sound for more than a generation — signal and source, wood and fabric, transducers and acoustics — all of it. After all these years they seem to have developed a knack for excellence.

Today these craftsmen continue to perform to the most rigid standards any craftsmen can submit to: those they impose upon themselves.

The products presented in this catalog are the finest available. JBL components are carefully engineered instruments, painstakingly crafted and assembled to watchmakers' standards. JBL enclosures express the excitement of creative design; they are elegant, solid and flawlessly finished. Collectively, JBL loudspeakers and enclosures offer what has been characterized by devoted music listeners as the "incomparable JBL sound."

Professional Acceptance

JBL has long been regarded as the manufacturer of "the musician's loudspeaker," and it is a fact that professional musicians consistently choose JBL for their performing systems and for their homes. This worldwide reputation is based on JBL's unchanging commitment to quality. From concept to finished product, the objective has always remained the same: to build the best-sounding, most reliable audio reproducers that art and technology can devise.

The true measure of JBL's achievement can be found in the most critical and demanding installations — theaters, stadiums, arenas and recording studios — wherever exceptional performance is a professional requirement. With the new fusion of art and technology in the recording process, an ever-increasing number of major studios are converting to JBL monitor loudspeakers. The clarity and definition of the recordings they produce is a direct reflection of the sound of JBL monitors.

To hear the result in the home as it is intended to be heard — indeed, as it was heard during each step of the recording process — requires loudspeakers of the same professional caliber as those used in the most modern recording studios.

A Note on Specifications

Additional product literature is available to provide the technically-minded audiophile with detailed information on JBL systems.

When evaluating specifications, it is important to note that the specific test conditions used, plus the degree to which various factors can be legitimately altered, are extremely important — yet seldom stated. Even when using accepted methods of measurement, it is possible for two reputable laboratories to develop very different sets of specifications for the same loudspeaker. Quite often specifications confuse, rather than assist the critical listener in evaluating a loudspeaker system. The final analysis, therefore, should be made on the basis of careful listening comparisons using familiar material and high quality program sources.

A Note on Efficiency

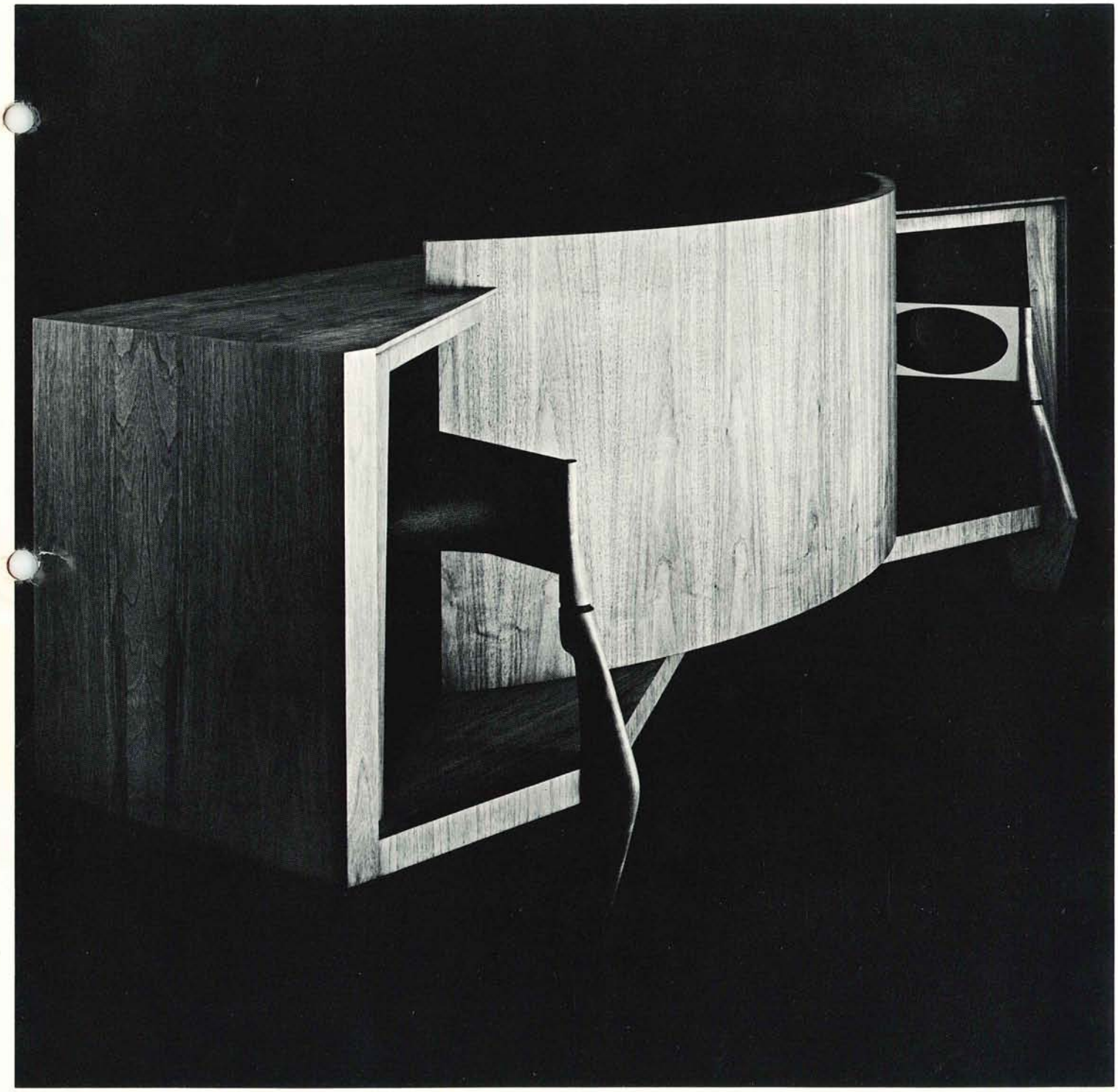
"Efficiency" ratings refer to the Sound Pressure Level produced by a 1-Watt input of white noise measured on-axis at 15′ (4.57 m) from the sound source. This specification is used throughout JBL literature and indicates that JBL loudspeaker systems and components generate substantial acoustic output from very little input power. Note that 75-80 dB is a comfortable listening level.

Your selections from these pages will assure years of pleasurable listening.

Paragon

The ultimate in acoustical perfection and artistic grandeur, the Paragon is a complete stereophonic loudspeaker system capable of providing sound reproduction equalled only by the live performance itself. Flawlessly finished in oiled walnut, it utilizes a unique dispersion principle to create an exceptionally wide stereo sound stage. The Paragon contains two 15″ low frequency loudspeakers, two massive high frequency compression drivers, two specially engineered elliptical horns, two ultra-high frequency radiators and four matched dividing networks.

Power Capacity	125 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	120°
Crossover Frequencies	500 and 7000 Hz
Efficiency	82 dB
System Components	(2) 15″ (38 cm) low frequency loudspeakers (2) high frequency compression drivers (2) ultra-high frequency ring radiators (4) frequency dividing networks
Dimensions	36″ x 104″ x 24″ deep (90 x 61 x 263 cm deep)
Shipping Weight	695 lbs (316 kg)

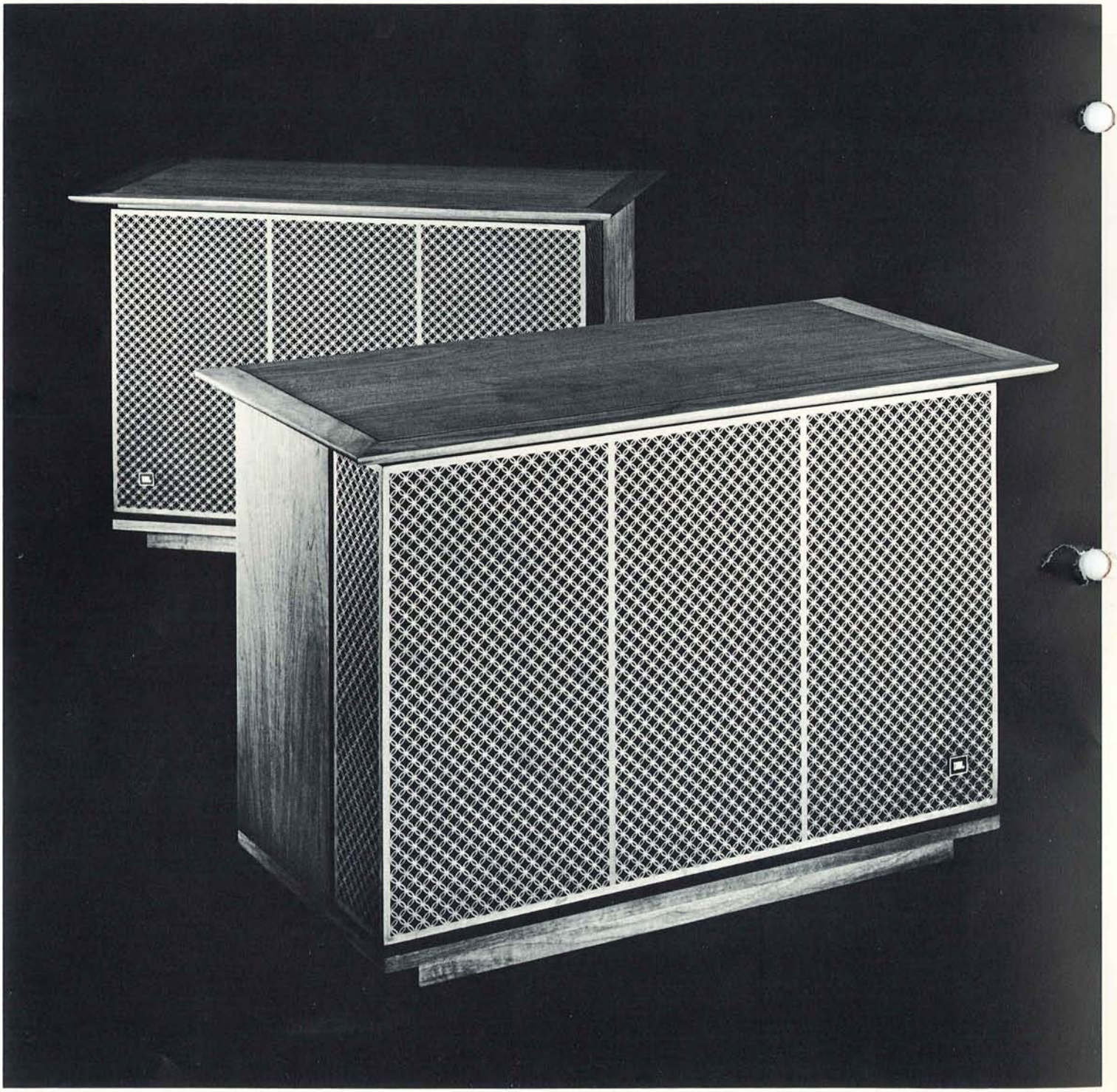


Olympus

Oiled walnut enclosure enhanced by delicate hand-carved fretwork, the Olympus will house either of two loudspeaker systems: the S7R, with a 15″ low frequency loudspeaker and 15″ passive radiator, plus a high frequency compression driver; or the S8R, utilizing the same low frequency units as the S7R, but incorporating a more massive compression driver and an ultra-high frequency ring radiator. Available but not shown: matching Delphi equipment cabinet.

Power Capacity	S7R	100 Watts continuous program
	S8R	125 Watts continuous program
Nominal Impedance		8 ohms
Dispersion		120° horizontal, 45° vertical
Crossover Frequency	S7R	500 Hz
	S8R	500 and 7000 Hz
Efficiency		82 dB
System Components	S7R	15″ (38 cm) low frequency loudspeaker
		15″ (38 cm) passive radiator
		high frequency compression driver
	S8R	15″ (38 cm) low frequency loudspeaker
		15″ (38 cm) passive radiator
		high frequency compression driver
		ultra-high frequency ring radiator

Dimensions	Delphi	27″ x 65″ x 20″ deep
	equipment cabinet	(67 x 164 x 51 cm deep)
	Olympus enclosure	27″ x 40″ x 20″ deep
		(67 x 102 x 51 cm deep)
Shipping Weight	Delphi	187 lbs (85 kg)
	Olympus W/S7R	163 lbs (74 kg)
	Olympus W/S8R	180 lbs (82 kg)

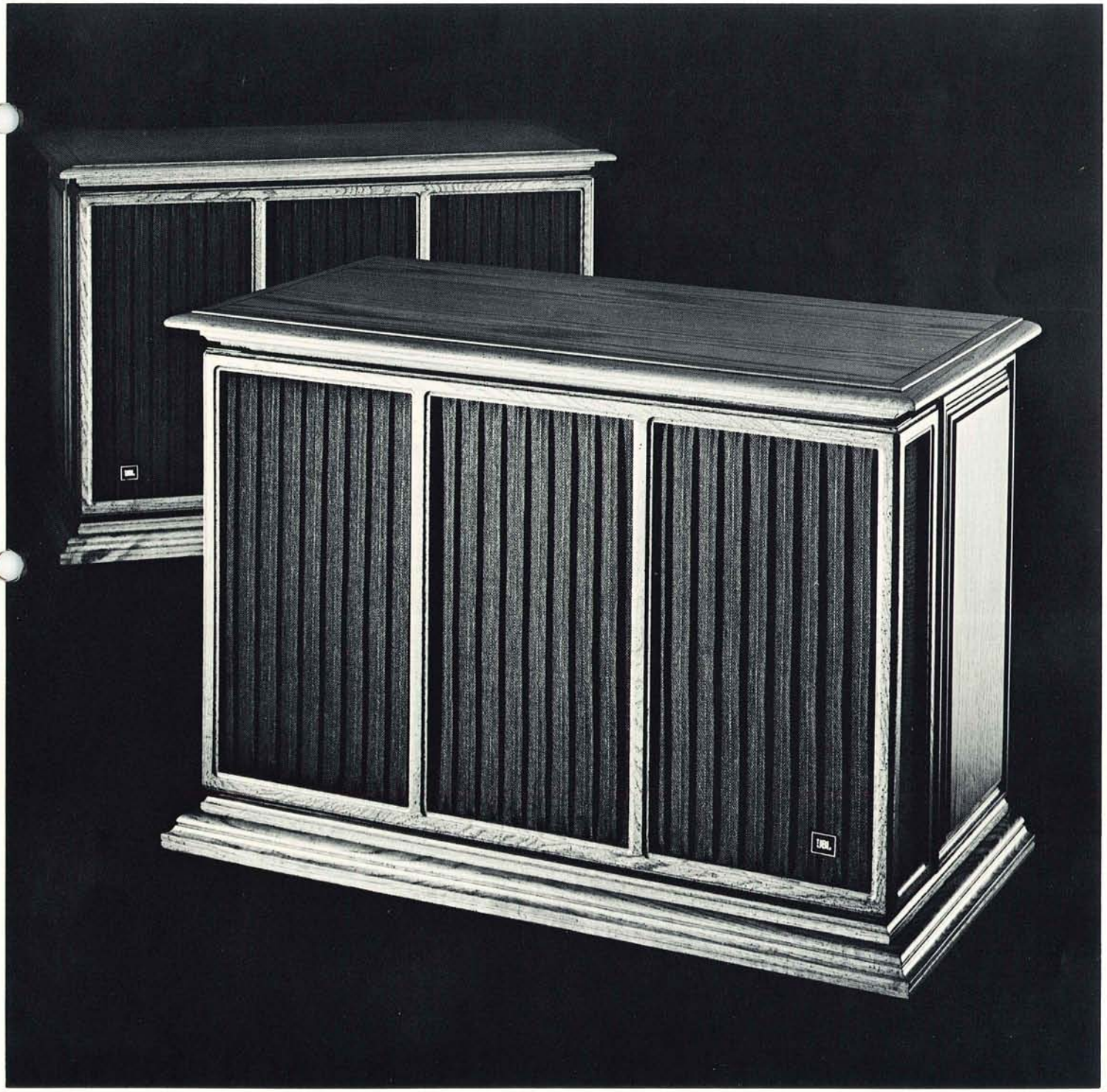


Sovereign

A gracious integration of select woods and pleated fabric. The Sovereign I enclosure is available in Country Oak or Golden Oak finishes. Loudspeaker systems are identical to those available in the Olympus. Not shown: matching Sovereign III equipment cabinet.

Power Capacity	S7R	100 Watts continuous program
	S8R	125 Watts continuous program
Nominal Impedance		8 ohms
Dispersion		120° horizontal, 45° vertical
Crossover Frequency	S7R	500 Hz
	S8R	500 and 7000 Hz
Efficiency		82 dB
System Components	S7R	15" (38 cm) low frequency loudspeaker
		15" (38 cm) passive radiator
		high frequency compression driver
	S8R	15" (38 cm) low frequency loudspeaker
		15" (38 cm) passive radiator
		high frequency compression driver
		ultra-high frequency ring radiator

Dimensions	Sovereign III equipment cabinet	27" x 63" x 20" deep (67 x 159 x 50 cm deep)
	Sovereign I enclosure	27" x 39" x 20" deep (67 x 98 x 50 cm deep)
Shipping Weight		
	Sovereign III	193 lbs (88 kg)
	Sovereign I W/S7R	176 lbs (90 kg)
	Sovereign I W/S8R	183 lbs (83 kg)

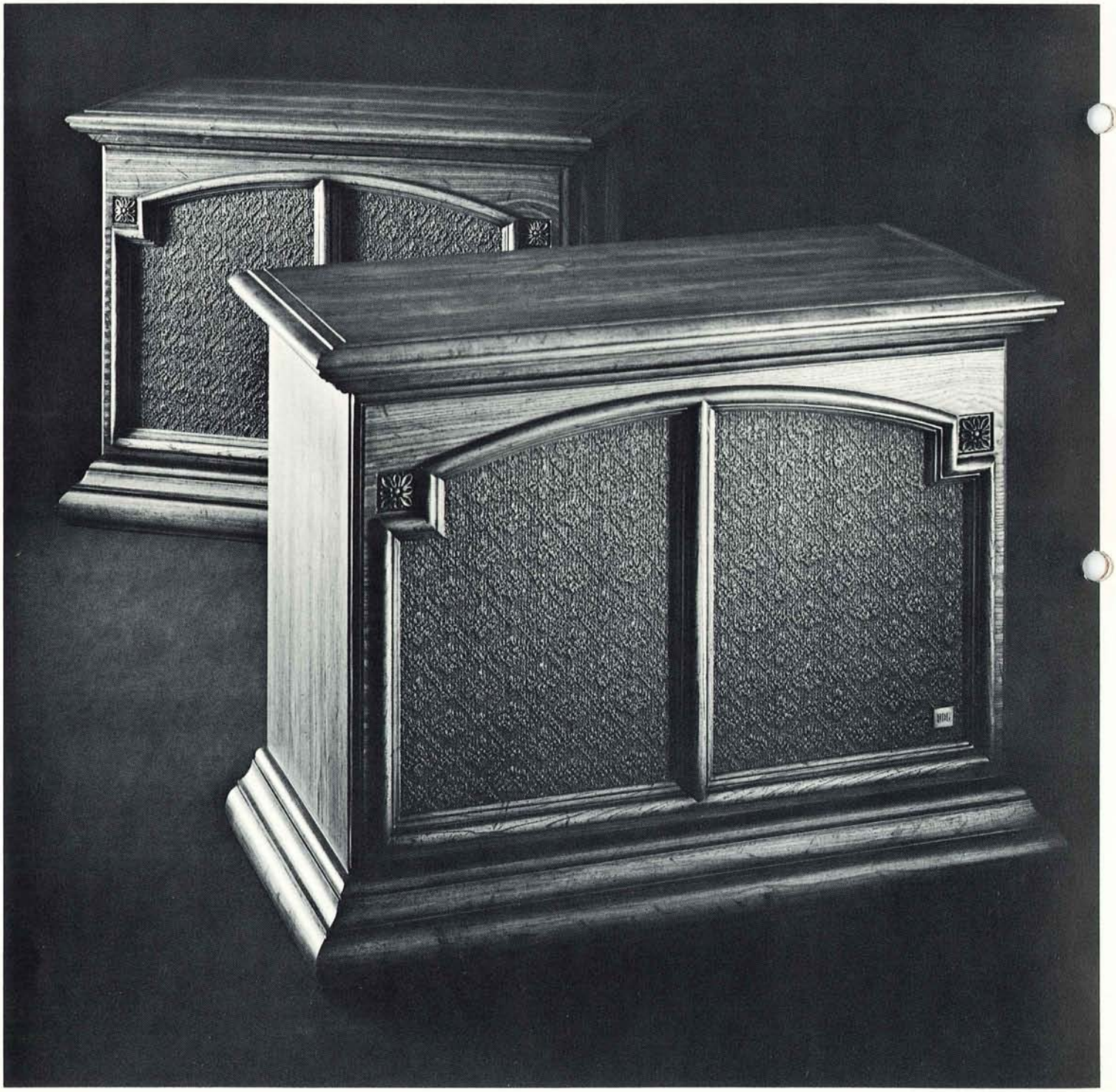


Verona L71

The timeless beauty of the Mediterranean: Verona. Finely detailed, handsomely finished, this traditional enclosure is fashioned of lustrous pecan accented by a rich brocaded grille fabric. Its robust sound will provide the realism of a concert hall. The standard loudspeaker system consists of a 15″ low frequency loudspeaker, 5″ midrange transducer and 1.4″ high frequency direct radiator. The Verona enclosure is also available separately to accept a number of alternate loudspeaker systems. These are described on pages 18 through 20 of this catalog.

Power Capacity	75 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequencies	1200 and 7500 Hz
Efficiency	80 dB

System Components	15″ (38 cm) low frequency loudspeaker 5″ (13 cm) midrange transducer 1.4″ (4 cm) high frequency direct radiator
Optional Systems	001, 030, S1, S12
Dimensions	28″ x 37″ x 18″ deep (70 x 93 x 45 cm deep)
Internal Volume	5.1 cu. ft. (144 liters)
Shipping Weight (standard system) (enclosure only)	 140 lbs (64 kg) 116 lbs (53 kg)



Studio Master L200

The Studio Master represents a visual refinement of the classic JBL Studio Monitor. Its gracefully tapered form, three-dimensional grille and rich oiled walnut enclosure create a striking contemporary design of quiet elegance. Powerful, accurate reproduction from a 15″ low frequency loudspeaker and high frequency compression driver. Crenelex pattern Sculptured Air grille available in Smoke, Raven, Aegean or Burgundy.

Power Capacity	100 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	120° horizontal, 40° vertical
Crossover Frequency	1200 Hz
Efficiency	84 dB
System Components	15″ (38 cm) low frequency loudspeaker high frequency compression driver
Dimensions	33″ x 24″ x 21″ deep (83 x 61 x 54 cm deep)
Shipping Weight	139 lbs (63 kg)

Flair L45

Contemporary in feeling, but deliberately understated to enhance any listening environment. The Flair presents a handsome silhouette when placed vertically or horizontally, and is furnished with a distinctive sculptured foam and fabric grille. The standard loudspeaker system is identical to that of the Verona. The Flair enclosure is also available separately for installation of the loudspeaker systems listed. These optional systems are described on pages 18 through 20 of this catalog.

Power Capacity	75 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequencies	1200 and 7500 Hz
Efficiency	80 dB
System Components	15" (38 cm) low frequency loudspeaker 5" (13 cm) midrange transducer 1.4" (4 cm) high frequency direct radiator
Optional Systems	001, 030, S1, S4, S12, S7, S8

Dimensions (without base) Base	22" x 30" x 18" deep (55 x 75 x 45 cm deep) 2" (6 cm) high
Internal Volume	4.2 cu. ft. (119 liters)
Shipping Weight (standard system) (enclosure only)	 108 lbs (49 kg) 74 lbs (34 kg)

Lancer 101

Distinctively styled. Oiled walnut side panels and imported Adriatic marble top are accented by a hand-carved wood fretwork grille. Full bodied sound from a 14″ low frequency loudspeaker and precision high frequency compression driver equipped with a horn/lens assembly.

Power Capacity	50 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° conical
Crossover Frequency	1500 Hz
Efficiency	80 dB
System Components	14" (36 cm) low frequency loudspeaker high frequency compression driver
Dimensions	25" x 18" x 12" deep (62 x 44 x 31 cm deep)
Shipping Weight	85 lbs (39 kg)

Century L100

Almost immediately after being offered as a consumer version of the JBL Professional Control Monitor, the Century established itself as a runaway best seller. Exciting performance and bold, imaginative visual design have brought the L100 to an unchallenged position as the leader in the bookshelf field. The oiled walnut enclosure houses a 12″ low frequency loudspeaker, 5″ midrange transducer and 1.4″ high frequency direct radiator. The unique Sculptured Air grille is furnished in the provocative Quadrex 2 pattern. Colors: Ultra Blue, Burnt Orange or Chocolate Brown.

Power Capacity	50 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequencies	1500 and 6000 Hz
Efficiency	76 dB
System Components	12" (30 cm) low frequency loudspeaker 5" (13 cm) midrange transducer 1.4" (4 cm) high frequency direct radiator
Dimensions	14" x 24" x 14" deep (36 x 60 x 35 cm deep)
Shipping Weight	55 lbs (25 kg)

88 Plus

Distinguished by its Novex grille, the 88 Plus offers crisp, transparent reproduction from a 12″ low frequency loudspeaker and 1.4″ high frequency direct radiator. The 88 Plus system and enclosure are designed to allow expansion to the three-element loudspeaker system of the L100 Century. The Novex design Sculptured Air grille is available in Flame Orange, Ultra Blue or Chocolate Brown.

M12 Expander Kit – Installs quickly and easily in the 88 Plus making it acoustically identical to the L100 Century. The M12 consists of a 5″ midrange transducer, frequency dividing network and presence control.

Power Capacity with M12	35 Watts continuous program 50 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequency with M12	2000 Hz 1500 and 6000 Hz
Efficiency	76 dB
System Components	12" (30 cm) low frequency loudspeaker 1.4" (4 cm) high frequency direct radiator
with M12	additional 5" (13 cm) midrange transducer
Dimensions	14" x 24" x 12" deep (36 x 60 x 30 cm deep)
Shipping Weight 88 Plus M12 Expander Kit	 45 lbs (20 kg) 5 lbs (2 kg)

Lancer 55

JBL's most economical floor system exquisitely scaled for today's smaller living spaces. Useful as an end table, the Lancer 55 offers a sparkling smoked glass top and unique three-dimensional grille available in Indigo, Mandarin and Coffee. Distinctive, dramatic sound from a 14″ low frequency loudspeaker and 2″ high frequency direct radiator.

Power Capacity	35 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	90° horizontal and vertical
Crossover Frequency	2000 Hz
Efficiency	80 dB
System Components	14" (36 cm) low frequency loudspeaker 2" (5 cm) high frequency direct radiator
Dimensions	25" x 18" x 13" deep (62 x 44 x 33 cm deep)
Shipping Weight	68 lbs (31 kg)

Aquarius 4

The clean, unencumbered styling and exciting performance of the Aquarius 4 make it an ideal choice for those who desire musical reproduction without compromise in a limited space and with maximum freedom of placement. Available in oiled walnut or satin white, the Aquarius 4 uses an 8″ low frequency loudspeaker and a 2″ high frequency driver to achieve its warm, spacious sound quality.

Power Capacity	35 Watts continuous program
Nominal Impedance	8 ohms
Dispersion	360° horizontal, 180° vertical
Crossover Frequency	6000 Hz
Efficiency	73 dB
System Components	8″ (20 cm) low frequency loudspeaker 2″ (5 cm) high frequency driver
Dimensions	40″ x 10″ x 10″ deep (102 x 25 x 25 cm deep)
Shipping Weight	57 lbs (26 kg)

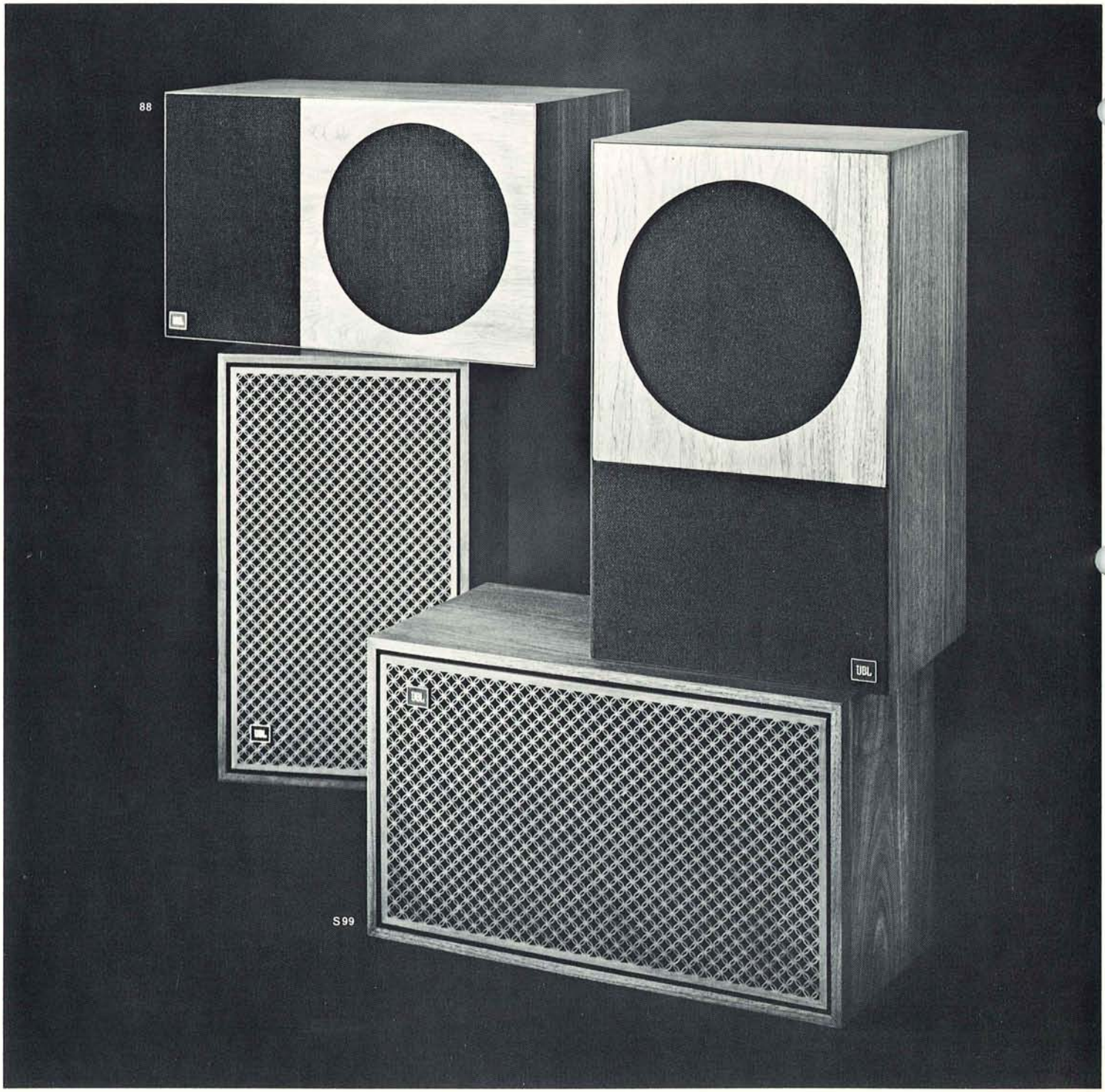
Nova 88

Acoustically impressive as its appearance, the Nova 88 offers a visually exciting grille of oiled walnut and charcoal brown decorator fabric. A 12″ low frequency loudspeaker and 1.4″ high frequency direct radiator are precisely balanced for dynamic overall sound quality.

Athena S99

The Athena S99 delivers accurate, well defined performance at background levels or concert hall volume. Combines a 14″ low frequency loudspeaker and a 2″ high frequency direct radiator. Finished in oiled walnut with a hand-carved wood fretwork grille for an added touch of luxury.

Power Capacity		35 watts continuous program
Nominal Impedance		8 ohms
Dispersion		90° horizontal and vertical
Crossover Frequency		2000 Hz
Efficiency	Nova 88 Athena S99	76 dB 80 dB
System Components	Nova 88	12″ (30 cm) low frequency loudspeaker 1.4″ (4 cm) high frequency direct radiator
	Athena S99	14″ (36 cm) low frequency loudspeaker 2″ (5 cm) high frequency direct radiator
Dimensions		14″ x 24″ x 12″ deep (36 x 60 x 30 cm deep)
Shipping weight	Nova 88 Athena S99	47 lbs (21 kg) 49 lbs (22 kg)



Components

JBL research and development is responsible for a number of highly significant contributions to sound reproduction. Among these are the 4-inch voice coil, the acoustic lens, integrated stereo through radial diffraction, the ring radiator, the silver impedance controlling ring and the use of the passive radiator.

With minor exceptions for special applications, JBL voice coils are formed from an aluminum or copper wire drawn to a ribbon and hand-wound on the 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 at all times. JBL makes and uses the largest voice coils in the industry.

Functional elements of the magnetic assembly are individually machined to tolerances within a thousandth of an inch. High efficiency and clean, crisp, low-distortion sound reproduction are the result.

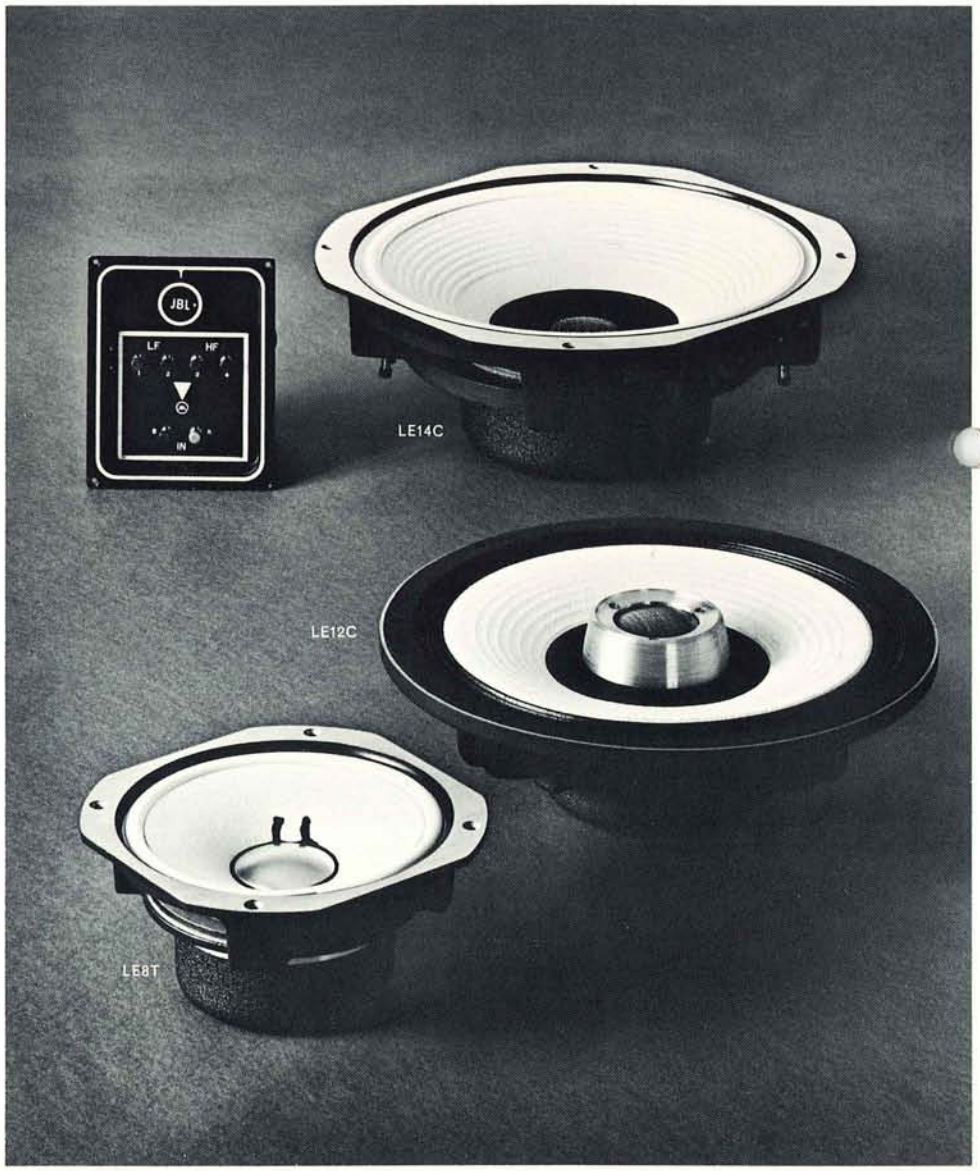
LE8T 8-inch Remarkably smooth, extended response never before realized in a unit only 8 inches in diameter. Performance in minimum volume enclosures cannot be approached by any other loudspeaker. Suitable for in-wall installation.

LE12C Composite Transducer
A complete two-way JBL loudspeaker system integrated within a single chassis. The high frequency unit is identical in performance to the JBL LE20. The 12-inch low frequency loudspeaker has a 3-inch edgewound copper ribbon voice coil and a specially controlled cone suspension. A 3000-Hz dividing network is mounted directly on the cast aluminum frame.

LE14C Composite Transducer
The LE14C has a radiating area equal to that of many 15-inch loudspeakers, yet may be installed in an enclosure which would ordinarily accept nothing larger than a 12-inch unit. The 4-inch edgewound copper ribbon voice coil of the bass loudspeaker permits concentric mounting of an independent high frequency radiator. The two transducers are coordinated and phased by the LX2-1 crossover network.

	LE8T	LE12C	LE14C
Diameter Low Frequency High Frequency	8" (20 cm)	12" (30 cm) 2" (5 cm)	14" (36 cm) 2" (5 cm)
Power Capacity (cont. program)	40 W	35 W	35 W
Nominal Impedance	8 ohms	8 ohms	8 ohms
Dispersion	90°	90°	90°
Crossover Freq.		3000 Hz	2000 Hz
Efficiency	76 dB	78 dB	80 dB
Voice Coil. Diam. Low Frequency High Frequency	2" (5 cm)	3" (7.6 cm) ⅝" (1.6 cm)	4" (10.2 cm) ⅝" (1.6 cm)
Magnetic Assy. Wt.	6½ lbs (3.0 kg)	8¼ lbs* (3.7 kg)	13 lbs (5.9 kg)
Flux Density (gauss) Low Frequency High Frequency	8500	10,400 12,000	11,000 12,000
EIA Sensitivity	40 dB	42 dB	44 dB
Depth	3⅞" (9.8 cm)	4¼" (10.8 cm)	5⅜" (13.7 cm)
Shipping Weight	9 lbs (4.1 kg)	13 lbs (5.9 kg)	22 lbs (10.0 kg)

*Total weight consists of low frequency and high frequency assemblies weighing 6¾ lbs (3.1 kg) and 1½ lbs (0.7 kg) respectively.



Extended Range Loudspeakers

D208 8-inch This maximum efficiency loudspeaker is an 8-inch version of the famous D130. The D208 can be used as an extension speaker and for mounting where space is at a premium.

D123 12-inch An outstanding speaker designed for compact enclosures of 2.0 cubic feet or more. Shallow enough for in-wall installations. 3-inch edgewound aluminum ribbon voice coil.

D131 12-inch 12-inch, maximum efficiency loudspeaker for use in reflex enclosures. A 4-inch edgewound aluminum ribbon voice coil improves response, accuracy and power handling capabilities.

D130 15-inch Maximum efficiency unit with 4-inch edgewound aluminum ribbon voice coil and 12-pound magnetic assembly. The D130 balances perfectly with the 075 or LE175DLH. Best performance realized in horn-loaded or reflex enclosures.

	D208	D123	D131	D130
Diameter	8" (20 cm)	12" (30 cm)	12" (30 cm)	15" (38 cm)
Power Capacity (continuous program)	30 W	50 W	60 W	60 W
Nominal Impedance	8 ohms	8 ohms	8 ohms	8 ohms
Dispersion	90°	90°	90°	90°
Efficiency	84 dB	85 dB	88 dB	90 dB
Voice Coil Diameter	2" (5.0 cm)	3" (7.6 cm)	4" (10.2 cm)	4" (10.2 cm)
Magnetic Assy. Wt.	3½ lbs (1.6 kg)	6¾ lbs (3.1 kg)	12 lbs (5.4 kg)	12 lbs (5.4 kg)
Flux Density (gauss)	8900	10,400	12,000	12,000
EIA Sensitivity	48 dB	49 dB	52 dB	54 dB
Depth	3" (7.6 cm)	3⅞" (9.8 cm)	4⅝" (11.7 cm)	5⅝" (14.3 cm)
Shipping Weight	5 lbs (2.3 kg)	11 lbs (5.0 kg)	16 lbs (7.3 kg)	19 lbs (8.6 kg)

Low Frequency Loudspeakers

LE10A 10-inch Generates powerful bass fundamentals in enclosures as small as one cubic foot. 3-inch edgewound copper ribbon voice coil.

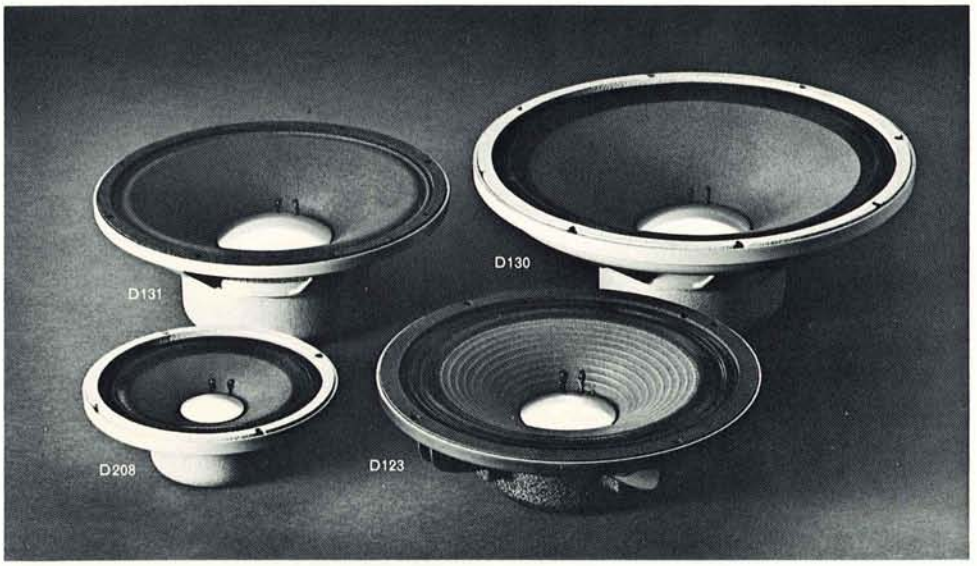
LE14A 14-inch A remarkable loudspeaker which delivers full, solid bass in enclosures as small as 1.5 cubic feet. 4-inch edgewound copper ribbon voice coil and massive magnetic assembly.

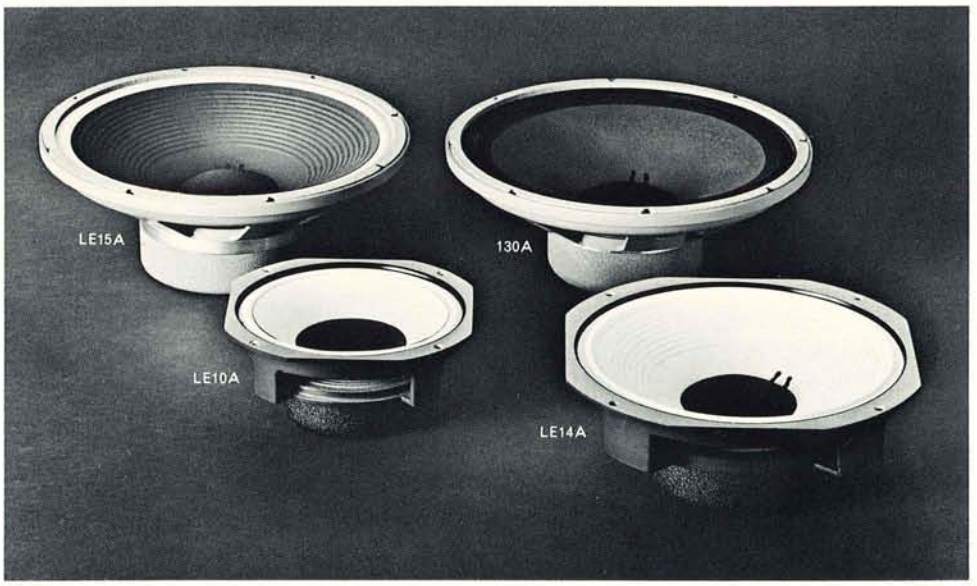
LE15A 15-inch Effortlessly reproduces lowest musical fundamentals, even at very high power levels. For installation in 4-8 cubic foot ported enclosures.

130A 15-inch Maximum efficiency low frequency loudspeaker designed primarily for use with the LE175DLH in large bass reflex or horn-loaded enclosures.

	LE10A	LE14A	LE15A	130A
Diameter	10" (25 cm)	14" (36 cm)	15" (38 cm)	15" (38 cm)
Power Capacity (continuous program)	60 W	70 W	120 W	60 W
Nominal Impedance	8 ohms	8 ohms	8 ohms	8 ohms
Efficiency	78 dB	80 dB	82 dB	88 dB
Voice Coil Diameter	3" (7.6 cm)	4" (10.2 cm)	4" (10.2 cm)	4" (10.2 cm)
Magnetic Assy. Wt.	6½ lbs (3.0 kg)	12 lbs (5.4 kg)	20 lbs (9.1 kg)	13 lbs (5.9 kg)
Flux Density (gauss)	10,000	11,000	11,000	12,000
Sensitivity*	42 dB	44 dB	46 dB	52 dB
Depth	4¼" (10.8 cm)	5⅜" (13.7 cm)	5⅞" (14.9 cm)	5⅝" (14.3 cm)
Shipping Weight	9 lbs (4.1 kg)	18 lbs (8.2 kg)	26 lbs (11.8 kg)	19 lbs (8.6 kg)

*Since the major portion of the energy reproduced by the low frequency loudspeakers 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.





Passive Radiators

A passive radiator can be used in conjunction with a specific JBL low frequency loudspeaker to effectively double its radiating area and enable it to reproduce richer, more robust bass tones, thus increasing the dynamic range and smoothing frequency response. Passive radiators are 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.

PR8 8-inch For use in conjunction with the LE8T.

PR10 10-inch Used with the LE10A.

PR15 15-inch The PR15 complements the performance of the LE15A.

	PR8	PR10	PR15
Diameter	8" (20 cm)	10" (25 cm)	15" (38 cm)
Complementary Driver	LE8T	LE10A	LE15A
Depth	1¾" (4.4 cm)	2⅛" (5.4 cm)	3⅜" (8.6 cm)
Shipping Weight	2 lbs (0.9 kg)	3 lbs (1.4 kg)	7 lbs (3.2 kg)

High Frequency Drivers

LE20 Direct Radiator A wide-range unit of exceptional versatility. Extends the high frequency range and adds brilliance to extended range loudspeakers. Balances perfectly with the LE14A and LE10A bass loudspeakers.

075 Ring Radiator The 075 utilizes an exclusive annular diaphragm for flat, distortion-free response extending well above the limits of human hearing. It can be used above 2500 Hz with any JBL extended range loudspeaker, or it can be added to any JBL two-way system when used with the N7000 dividing network.

LE175 Compression Driver Delivers smooth, accurate reproduction above 500 Hz at the intense volume levels required of larger loudspeaker systems. Should be used with an HL91 or 1217-1290 horn/lens assembly.

LE175DLH Driver/Horn/Lens High frequency assembly consisting of the LE175 compression driver and 1217-1290 horn/lens for 60° dispersion. Complete assembly, 10 5/8" (27.0 cm) deep.

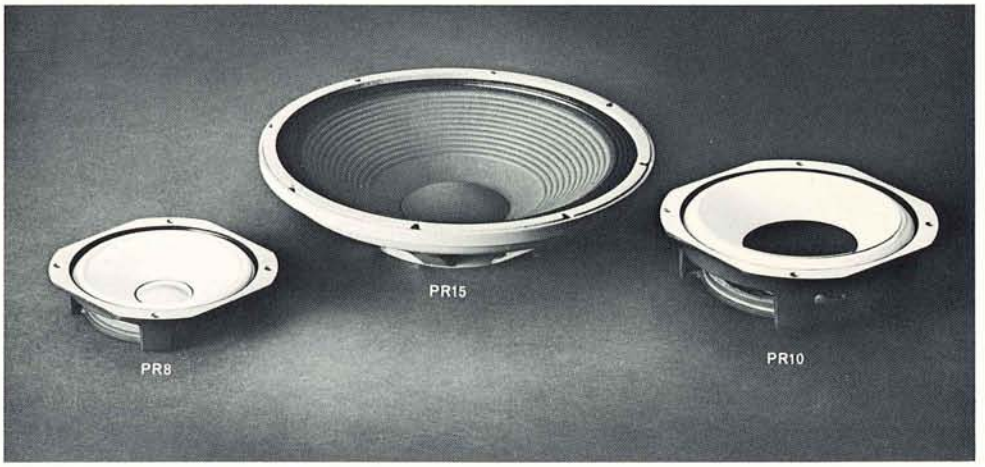
LE85 Compression Driver Linear high frequency performance from 500 Hz to beyond the upper limits of audibility. Similar to the LE175 with a more massive magnetic assembly for extended bandwidth.

375 Compression Driver The ultimate for midrange (500-10 kHz) reproduction. Steep waveforms of explosive loudness are effortlessly reproduced by the precision engineered 4-inch edge-wound ribbon voice coil and aluminum diaphragm.

	LE20	075
Radiating Diameter	2" (5 cm)	3.125" (7.9 cm)
Power Capacity (continuous program)	35 W above 2000 Hz	20 W above 2500 Hz
Nominal Impedance	8 ohms	8 ohms
Efficiency	80 dB	97 dB
Voice Coil Diameter	⅝" (1.6 cm)	1¾" (4.4 cm)
Magnetic Assembly Weight	1½ lbs (0.7 kg)	3¼ lbs (1.5 kg)
Flux Density (gauss)	12,000	16,500
Sensitivity	44 dB*	61 dB**
Maximum Diameter	5¾" (13.7 cm)	3⅞" (9.8 cm)
Depth	2 1/16" (5.2 cm)	3¾" (9.5 cm)
Shipping Weight	3 lbs (1.4 kg)	5 lbs (2.3 kg)

*Sensitivity measured above 2 kHz
**Sensitivity measured above 4 kHz

	LE175	LE85	375
Throat Diameter	1" (2.5 cm)	1" (2.5 cm)	2" (5 cm)
Power Capacity (cont. program)	30 W above 1 kHz	30 W above 1 kHz	60 W above 500 Hz
Nominal Impedance	8 ohms	8 ohms	16 ohms
Efficiency	95 dB	95 dB	95 dB
Voice Coil Diam.	1¾" (4.4 cm)	1¾" (4.4 cm)	4" (10.2 cm)
Magnetic Assy. Wt.	7½ lbs (3.4 kg)	10 lbs (4.5 kg)	23½ lbs (10.7 kg)
Flux Density (gauss)	16,000	19,000	20,500
EIA Sensitivity	59 dB	59 dB	59 dB
Diameter	5¾" (14.6 cm)	5¾" (14.6 cm)	7" (18 cm)
Depth	3⅞" (9.8 cm)	3⅞" (9.8 cm)	5¼" (13 cm)
Shipping Weight	9 lbs (4.1 kg)	12 lbs (5.4 kg)	26 lbs (11.8 kg)



High Frequency Horns and Lenses

JBL uses four principles in high frequency reproduction: 1) the aluminum center dome, 2) direct radiators, 3) ring radiators, 4) compression drivers. JBL horns load the diaphragm by providing the correctly required air mass. The horn then delivers a predictably-shaped wavefront for projection through an acoustic lens.

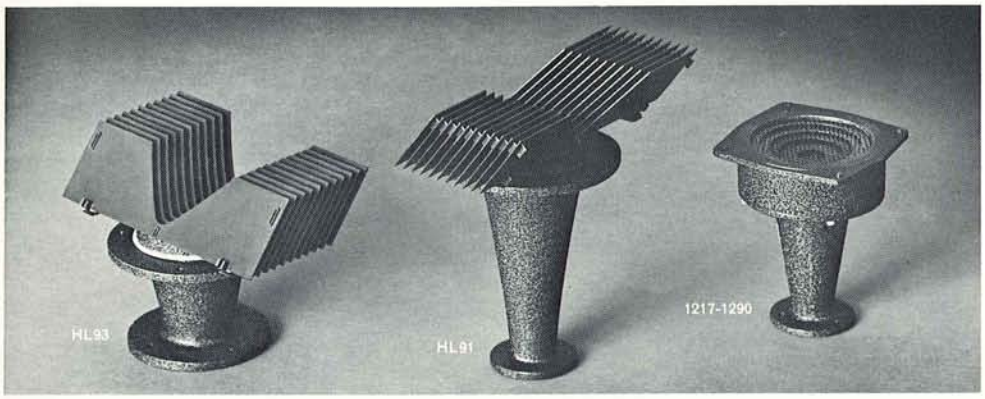
1217-1290 Horn/Lens Cast aluminum horn/lens for 60° dispersion in circular symmetry. For use with the LE175 or LE85 drivers. Front mounting.

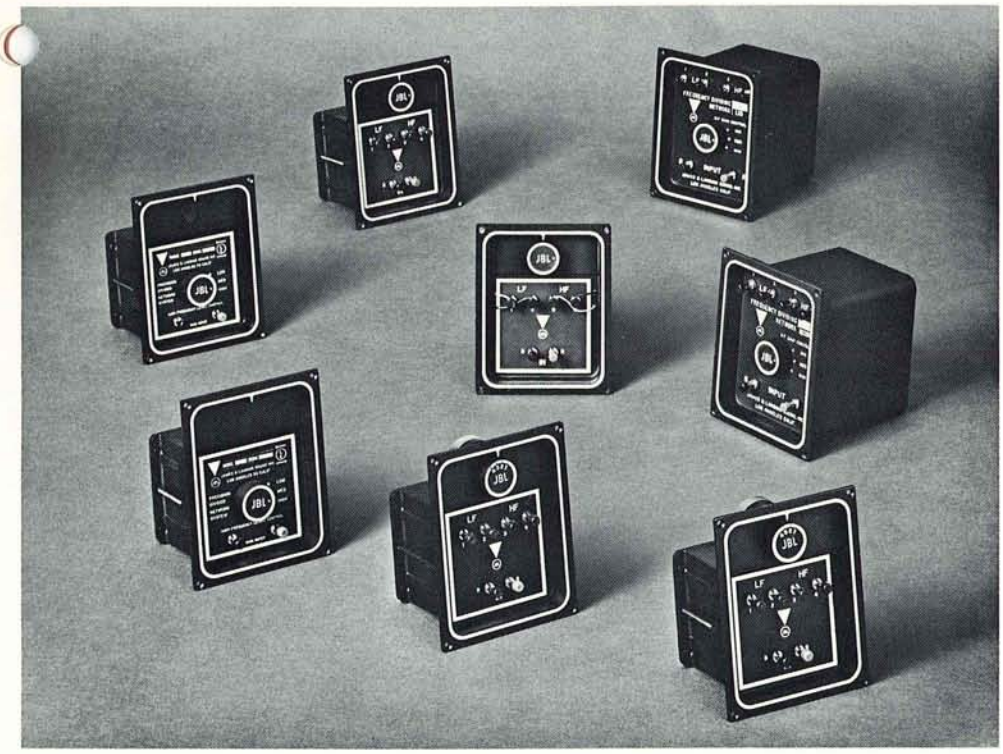
HL91 Horn/Lens Consists of the H91 horn and L91 lens for use with the LE85 and LE175 drivers.

HL93 Horn/Lens Combines the H93 ast aluminum exponential horn with the L91 slant-plate acoustic lens. 90° horizontal and 45° vertical dispersion. For use with a 375 driver.

	1217-1290	HL91	HL93
Dispersion Pattern	60° conical	90° hor. 45° vert.	90° hor. 45° vert.
Throat Diameter	1" (2.5 cm)	1" (2.5 cm)	2" (5 cm)
Use Above	800 Hz	800 Hz	800 Hz
Extension Behind Baffle	6¾"* (17.1 cm)	7¾" (20 cm)	4" (10.2 cm)
Type Lens	perforated-plate	slant-plate	slant-plate
Lens Dimensions	5¼" (13.3 cm) diameter	6¼ x 10 x 2½" dp. (15 x 25 x 6 cm deep)	6¼ x 10 x 2½" dp. (15 x 25 x 6 cm deep)
Total Depth	6¾" (17.1 cm)		
Shipping Weight	4 lbs (1.8 kg)	5 lbs (2.3 kg)	5 lbs (2.3 kg)

*Total length. Extension dependent on thickness of baffle panel.





Frequency Dividing Networks

JBL dividing networks provide an imperceptible distribution of the audio signal between low and high frequency reproducers. The finest electronic components are used throughout; non-inductive, non-polarized capacitors having high AC current capacity, individually adjusted low-loss inductors and high quality attenuator controls. Each unit is hand-wired and carefully tested, then compared with a laboratory prototype.

All JBL networks are engineered to match the exact characteristics of specific low frequency and high frequency transducers, as shown in the Network Selection Chart. We do not recommend combining JBL loudspeaker system components with those of other manufacturers due to the difficulty of predicting compatibility of such systems. Dividing networks mount in a 4 1/4" x 5 1/2" (10.8 x 14.0 cm) cutout.

Network Selection Chart				
Network Model	LX5	N1200	LX10	LX8
Crossover Frequency	500*	1200	1500	2000
Low Frequency Transducer	LE15A	D130, D131,130A	LE14A	LE14A
High Frequency Transducer	375, LE175, LE85	LE175, LE85	LE175, LE85	LE20
High Frequency Control	3-position switch	3-position switch	Continuously variable	3-position switch
Input Impedance (ohms)	8	8	8	8
Shipping Weight	6 lbs (2.7 kg)	4 lbs (1.8 kg)	2 lbs (0.9 kg)	2 lbs (0.9 kg)

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

Network Selection Chart				
Network Model	LX11	LX2	N2400	N7000
Crossover Frequency	2500	2500	2500	7000
Low Frequency Transducer	LE10A	D123, D208	D130, D131, D123	**
High Frequency Transducer	LE20	LE20	075	075
High Frequency Control	3-position switch	Continuously variable	Continuously variable	Continuously variable
Input Impedance (ohms)	8	8	8	4 to 16
Shipping Weight	2 lbs (0.9 kg)	2 lbs (0.9 kg)	2 lbs (0.9 kg)	2 lbs (0.9 kg)

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

Loudspeaker System Kits

JBL loudspeaker system kits afford the flexibility of installing a JBL system in custom designed cabinetry, behind wall paneling or into existing furniture. The components of JBL loudspeaker system kits are acoustically integrated to operate in the best possible relationship with each other. The individual components are described on the preceding pages.

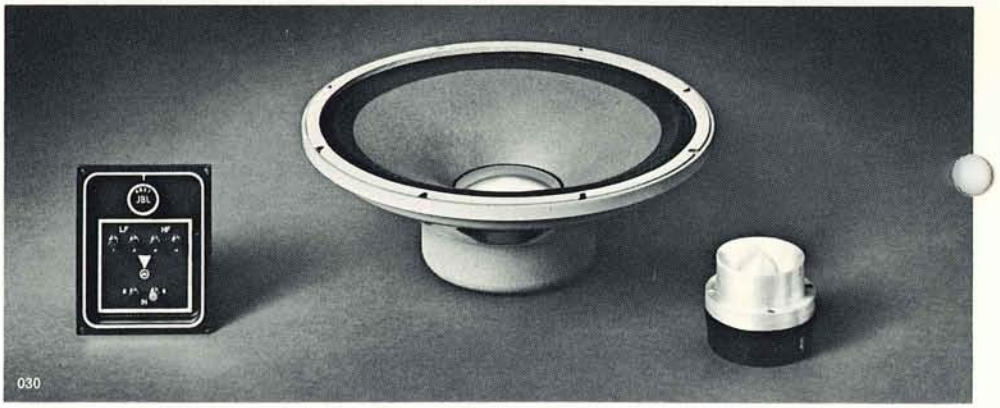
Additionally, the C45 Flair, C50 Olympus, C60 Sovereign 1 and the C71 Verona enclosures are available without components for use with loudspeaker system kits or with other combinations of JBL transducers.

	001	030	S1
Power Capacity (continuous program)	60 W	60 W	50 W
Nominal Impedance	8 ohms	8 ohms	8 ohms
Crossover Frequency	1200 Hz	2500 Hz	1500 Hz
Efficiency	88 dB	88 dB	78 dB
Recommended Enclosure Volume	4-12 cu. ft. (113-340 liters)	4-12 cu. ft. (113-340 liters)	1.5-5 cu. ft. (42-142 liters)
Shipping Weight	39 lbs (17.7 kg)	28 lbs (12.7 kg)	35 lbs (15.9 kg)

001 System Characterized by extreme high efficiency and crisp incisive reproduction of the entire audible frequency range. Recommended for bass reflex enclosures having an internal volume of 4-12 cubic feet. Consists of the 130A low frequency loudspeaker, LE175DLH driver/horn/lens assembly and N1200 dividing network. Can be installed in the Flair or Verona enclosure.

030 System Incorporates JBL's most efficient 15″ extended range loudspeaker augmented by the 075 ring radiator. Recommended for bass reflex enclosures having an internal volume of 4-12 cubic feet. Consists of the D130 extended range loudspeaker, 075 ring radiator and N2400 dividing network. The Flair and Verona enclosures will accept the 030 system.

S1 System "Theater Sound" from a relatively small enclosure. The S1 system can be housed in a bass reflex enclosure having an internal volume of 1.5-5 cubic feet. The LE14A low frequency loudspeaker, LE175DLH driver/horn/lens and LX10 dividing network make up this system. It can be installed in the Flair or Verona enclosure.



S7 System Used as a master monitor loudspeaker system by major studios. Performance is characterized by extended frequency response and extremely wide dynamic range. Recommended installation in bass reflex enclosures having from 4-12 cubic feet internal volume. The system is comprised of the LE15A low frequency loudspeaker, LE85 driver, HL91 horn/lens assembly and LX5 dividing network. The S7 can be installed in the Flair enclosure.

S7R System Add the PR15 passive radiator to the S7 system to create the S7R system. The S7R has achieved recognition from musicians, engineers and critical listeners throughout the world. Available in the Olympus or Sovereign I enclosure.

S8 System The ultimate JBL component system, the S8 was originally developed as a master monitor for use in perfecting stereo recordings. Powerful bass, impeccable transient response, and precise articulation of high frequencies. Consists of the LE15A low frequency loudspeaker, 375 driver with HL93 horn/lens, 075 ring radiator and the LX5 and N7000 dividing networks. Enclosure recommendation is the same as for the S7 system. The S8 can be housed in the Flair enclosure.

S8R System Identical to the S8 system with the addition of a second 15-inch cone assembly, the PR15 passive radiator, to effectively double low frequency sound radiating area below 100 Hz. Like the S7R, the S8R system is furnished in the Olympus or Sovereign I enclosure.

		S7/S7R	S8/S8R
Power Capacity (continuous program)		100 W	125 W
Nominal Impedance		8 ohms	8 ohms
Crossover Frequency		500 Hz	500 & 7000 Hz
Efficiency		82 dB	82 dB
Recommended Enclosure Volume*		4-12 cu. ft. (113-340 liters)	4-12 cu. ft. (113-340 liters)
Shipping Weight	S7	56 lbs (25.4 kg)	
	S7R	62 lbs (28.1 kg)	
	S8		75 lbs (34.0 kg)
	S8R		82 lbs (37.2 kg)

*Recommended enclosure volume applies to S7 and S8 only. For the S7R and S8R sytems the enclosure recommendation is 5-8 cu. ft. (142-227 liters).

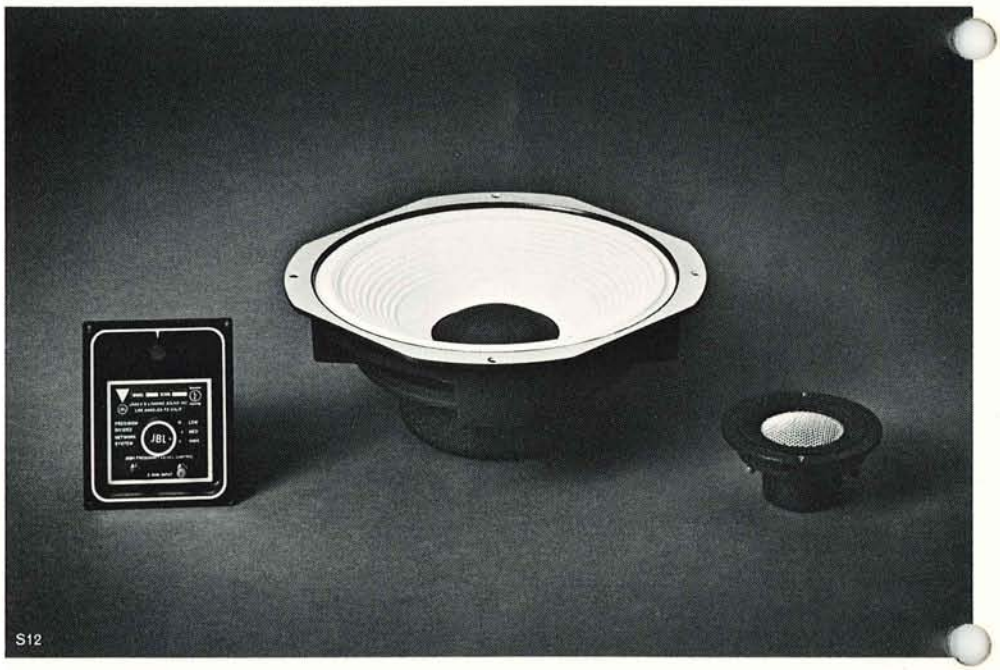
S8

Loudspeaker System Kits

S12 System Identical to the systems installed in the Lancer 55 and Athena enclosures, the S12 is characterized by solid, open bass performance and pure silky high frequency response with excellent brilliance and presence characteristics. The system is made up of the LE14A low frequency loudspeaker, LE20 high frequency direct radiator and LX8 dividing network. Performance will be optimized when installed in bass reflex enclosures having an internal volume of 1.5-5 cubic feet. The S12 system can be used in the C45 Flair and C71 Verona enclosures.

S4 System Providing solid, well defined bass performance and high frequency reproduction characterized by unwavering smoothness and clarity. The system consists of a 130A 15″ low frequency loudspeaker, LE175 driver with HL91 horn/lens and N1200 dividing network. Recommended for installation in enclosures having an internal volume from 4-12 cubic feet. The Flair enclosure can be ordered to house the S4 system.

	S12	S4
Power Capacity (continuous program)	35 W	60 W
Nominal Impedance	8 ohms	8 ohms
Crossover Frequency	2000 Hz	1200 Hz
Efficiency	80 dB	88 dB
Recommended Enclosure Volume	1.5-5 cu. ft. (42-142 liters)	4.12 cu. ft. (113-340 liters)
Shipping Weight	26 lbs (11.8 kg)	36 lbs (16.3 kg)


S12


S4

Craftsmanship

JBL craftsmanship: technology or art? In the field of high fidelity and professional sound, JBL is synonymous with superior performance, sophisticated design and engineering, exquisite workmanship and precise construction.

To maintain JBL's exacting standards, only the finest and most appropriate materials are chosen. No compromises are tolerated and no economies permitted that might in any way limit the performance or the service life of any JBL product. Special manufacturing processes, procedures, and equipment have been invented, evolved and perfected to properly execute the advanced features exclusive to JBL.

JBL craftsmanship: technology or art?
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For Additional Information

JBL maintains a technical staff to answer questions pertaining to JBL loudspeaker systems and components. Detailed product literature and a manual describing the basic methods for constructing enclosures for JBL components can be obtained by writing directly to the JBL Technical Information Department.

Warranty

Every JBL system or individual loudspeaker is guaranteed against defects in material and workmanship for a period of five years. JBL will replace defective parts and make necessary repairs under this warranty if examination reveals evidence of faulty workmanship or material. 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 repair any JBL transducer free of charge without time limitation if factory inspection discloses evidence of an original manufacturing defect.

If it is impractical to return the product to the factory, please write to JBL describing the difficulty or malfunction. JBL may, at its option, establish alternative repair procedures.

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 shall remain valid only if repairs are performed by JBL or under its authorized procedures, provided that the serial number on the unit has not been defaced or removed.

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.

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