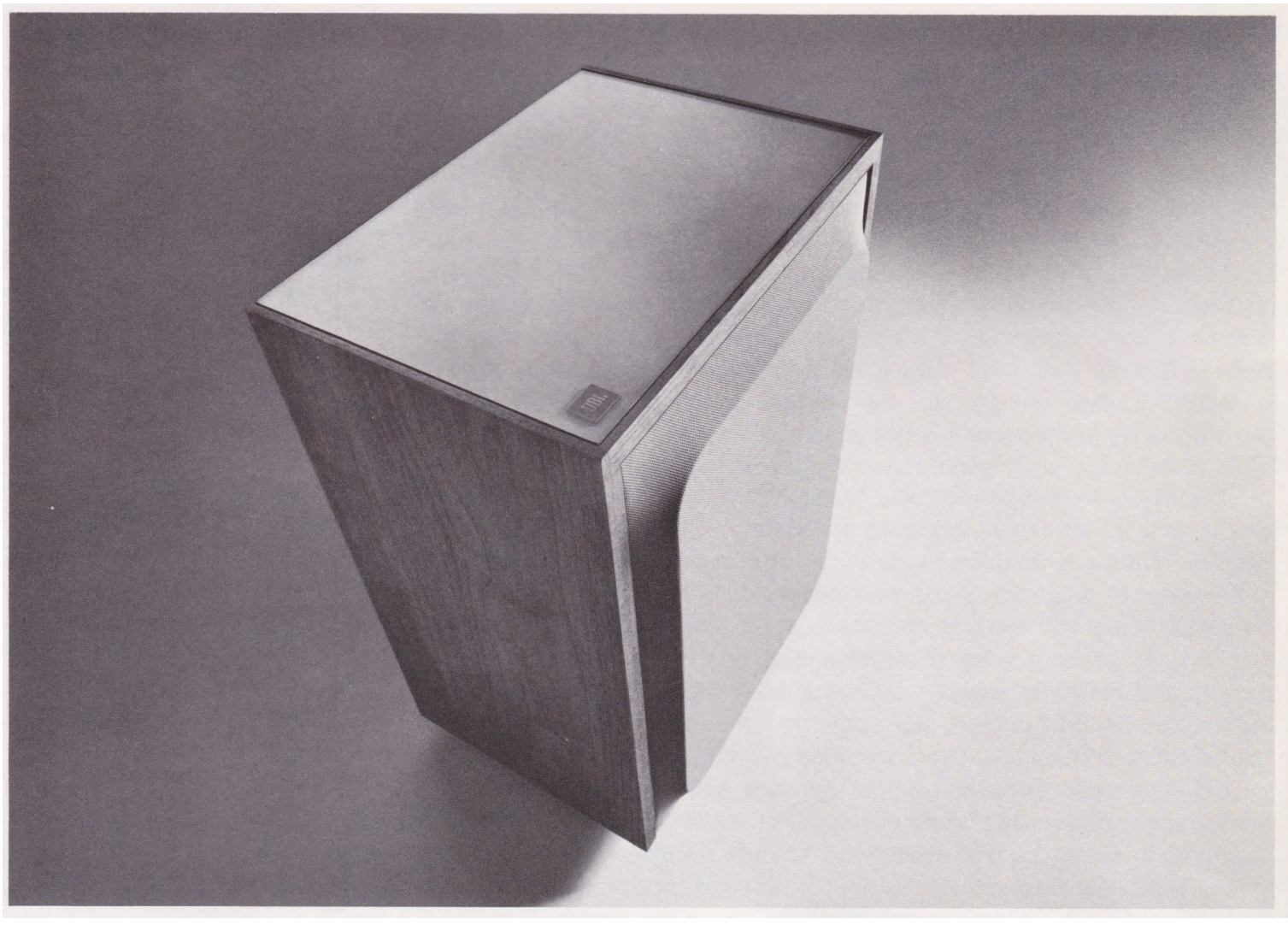
L55 Lancer 55

14-inch Low Frequency Loudspeaker
2-inch High Frequency Direct Radiator
Matched Frequency Dividing Network



A classical viewpoint expressed in vivid contemporary terms: a unique three-dimensional grille, available in Coffee, Mandarin or Indigo, is suspended between oiled walnut side panels and topped by smoked glass.

A contemporary enclosure that will be an attractive addition to any listening room, the JBL Lancer 55 provides accurate, full-bodied sound reproduction at background levels or concert hall volume.

The result of imaginative engineering and attention to detail can be readily appreciated in the elegant appearance and distinctive, dramatic sound of the Lancer 55. Component loudspeakers, network and enclosure are painstakingly crafted of highest quality raw materials utilizing special manufacturing and quality assurance techniques found only at JBL.

Performance Characteristics

JBL's dedication to realism is immediately apparent in the natural and unrestricted sound of the L55. Low frequency response is solid, clean and well defined; high frequency reproduction is characterized by unwavering smoothness, clarity and freedom from coloration and "breakup."

The powerful low frequency loudspeaker is capable of recreating the most elusive and complex bass waveforms. Bass reproduction is not only solid, it has the open, spacious quality characteristic of a live performance. The high frequency direct radiator precisely articulates treble waveforms and the intricate harmonics and overtones that lie above musical fundamentals, adding essential timbre and sparkle to final reproduction.

To accurately test the L55, a set of evaluation parameters was developed, and specifications defined from measurements made under standard laboratory test conditions. The system was mounted in the measured center of a large, flat baffle in a reverberation-free environment. A calibrated condenser microphone was suspended at a specified distance from the sound source. All electronic equipment was checked and calibrated before tests were run.

Due to the wide-angle sound dispersion characteristic of the loudspeaker system used in the L55, frequency response measured up to 40° off-axis, horizontally or vertically, does not deviate more than 6 dB from on-axis response.

System Components

The components used in everyJBLproduct are designed and produced by JBL personnel to exacting standards. JBL loudspeaker frames are massive aluminum castings. Magnetic structures are precisely machined of low-reluctance iron, energized by high grade Alnico V magnets. Voice coils are fabricated of wire milled to a flat ribbon, wound on the ribbon's edge by hand. Stamped frames, punched ceramic magnetic structures and mass-produced voice coils would be less expensive; however, the resultant loss of structural integrity, magnetic force and acoustic efficiency would tend to degrade low-distortion performance and transient response —qualities that have become JBL hallmarks.

Low Frequency —The 14-inch low frequency transducer incorporates an exceptionally large cone, massive low-loss magnetic assembly and 4-inch edgewound copper ribbon voice coil, providing effortless bass performance that is clean, crisp, inherently linear and distortion-free. The 4-inch voice coil, the largest coil used in any high fidelity loudspeaker, is precisely centered in an intense magnetic field allowing precision control of the specially coated and damped cone. All of the essential magnetomotive energy provided by the powerful Alnico V magnet is concentrated in the one place where it contributes most to loudspeaker performance —the voice coil gap. Stray magnetic fields, indicating wasted energy, are non-existent. Equally important is the low frequency transducer's smoothness of response near the upper limits of its range, as it approaches the crossover frequency.

The specially suspended low frequency cone is damped with the exclusive JBL Lansaplas damping compound. The highly flexible suspension effectively absorbs mechanical vibrations traveling through the cone material and allows extreme excursion with perfect linearity. A precisely measured amount of Lansaplas is applied to the surface of the cone to prevent stray resonance and provide optimum stiffness, density and mass för smooth performance through the vital midrange region. The material is inert, self-damping and impervious to changes in temperature or humidity. The Lansaplas gives the cone its white color.

Extreme linear excursion, large radiating area, optimum cone stiffness, density and mass and edgewinding of the voice coil are important engineering advances that enable the 14-inch transducer to reproduce clean, solid low frequencies without audible distortion, even at very high power levels. Efficiency and dynamic range are further increased by the use of an enclosure having a ducted port, carefully tuned for optimum bass performance.

High Frequency—Information above the crossover frequency is reproduced by the 2-inch high frequency direct radiator. A IV$_2$-pound magnetic assembly concentrates an intense magnetic field at the voice coil gap, exciting the voice coil and the 2-inch specially designed cone to achieve verbatim reproduction of delicate treble frequencies. The shallow cone, made of specially compounded material incorporating optimum mass, density and stiffness, is damped at three carefully controlled points to prevent stray resonance, even at peak loudness levels. The result is pure, silky, transparent, distortion-free high freauency reproduction extending beyond the range of human audibility. Its utter clarity and precise delineation of even the most complicated treble waveforms duplicates the natural sparkle of a live performance.

Dividing Network —Smooth, imperceptible transition between loudspeaker components is controlled by a frequency dividing network carefully designed and tested to complement the specific audio and electronic characteristics of the system components. The function of a precision dividing network is considerably more complex than merely feeding low frequencies and high frequencies to their respective transducers. Vitally important to the total sound of a JBL loudspeaker system is the way the network distributes electrical energy for optimum control of the loudspeakers through the transition frequencies. The L55 network has a three-step attenuation control, located on the front of the enclosure, behind the removable grille, permitting adjustment of the high frequency transducer to accommodate individual preferences and the acoustic properties of the listening room.

Power Capacity

The Lancer 55 will reproduce clean sound at comfortable listening levels when driven by an amplifier having an output of as little as 10 Watts RMS per channel. However, for reproduction of the full dynamic range of contemporary recordings at high volume, a quality amplifier delivering up to 75 Watts RMS per channel will provide optimum performance. Such an amplifier has the reserve power necessary for accurate reproduction of transients which can reach momentary peaks equivalent to ten times the rated power handling capacity of the loudspeaker system. In almost all cases, the volume level generated by a JBL loudspeaker system will become noticeably discomforting before it can be damaged by excessive power from the amplifier.

The Lancer 55 Enclosure

JBL cabinetry represents the finest quality available in the high fidelity industry, uniquely styled and solidly constructed to last a lifetime. Designed to complement the characteristics of the loudspeaker components installed in them, each cabinet features tight, wood-welded, hand-fitted joints eliminating undesirable panel resonance and warpage. Only the very best compressed woods, furniture hardwoods and hardwood veneers are used—carefully selected, skillfully prepared, and hand-rubbed to a rich, lustrous finish to enhance the natural beauty of individual grain structure and color.

The JBL tradition of outstanding visual design has been expressed perfectly in the Lancer 55. The delicate interplay of highlight and shadow across the face of the three-dimensional grille creates subtle changes of form as the lighting is varied. The smoked glass top adds a note of sparkling elegance while providing a durable, easily maintained surface.

Moderate size, exquisite proportions, and wide selection of grille color options contribute to the versatility of the Lancer 55, permitting its use with almost any decor.

Specifications

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

Power Capacity	**35 Watts continuous program**
Nominal Impedance	**8 ohms**
Dispersion	**80° horizontal and vertical**
Crossover Frequency	**2000 Hz**
Efficiency	**1 Watt input produces 80 dB Sound Pressure Level at a distance of 15'. (Note: 75-80 dB is a comfortable listening level.)**
Finish	**Oiled Walnut**
Grille	**Three-dimensional stretch fabric**
Grille Color Options	**Coffee, Mandarin or Indigo Additional colors to be announced.**
Dimensions	**24⅝" x 17⅝" x 12⅝" deep 62 x 44 x 31 cm deep**
Shipping Weight	**65 pounds 29 kg**

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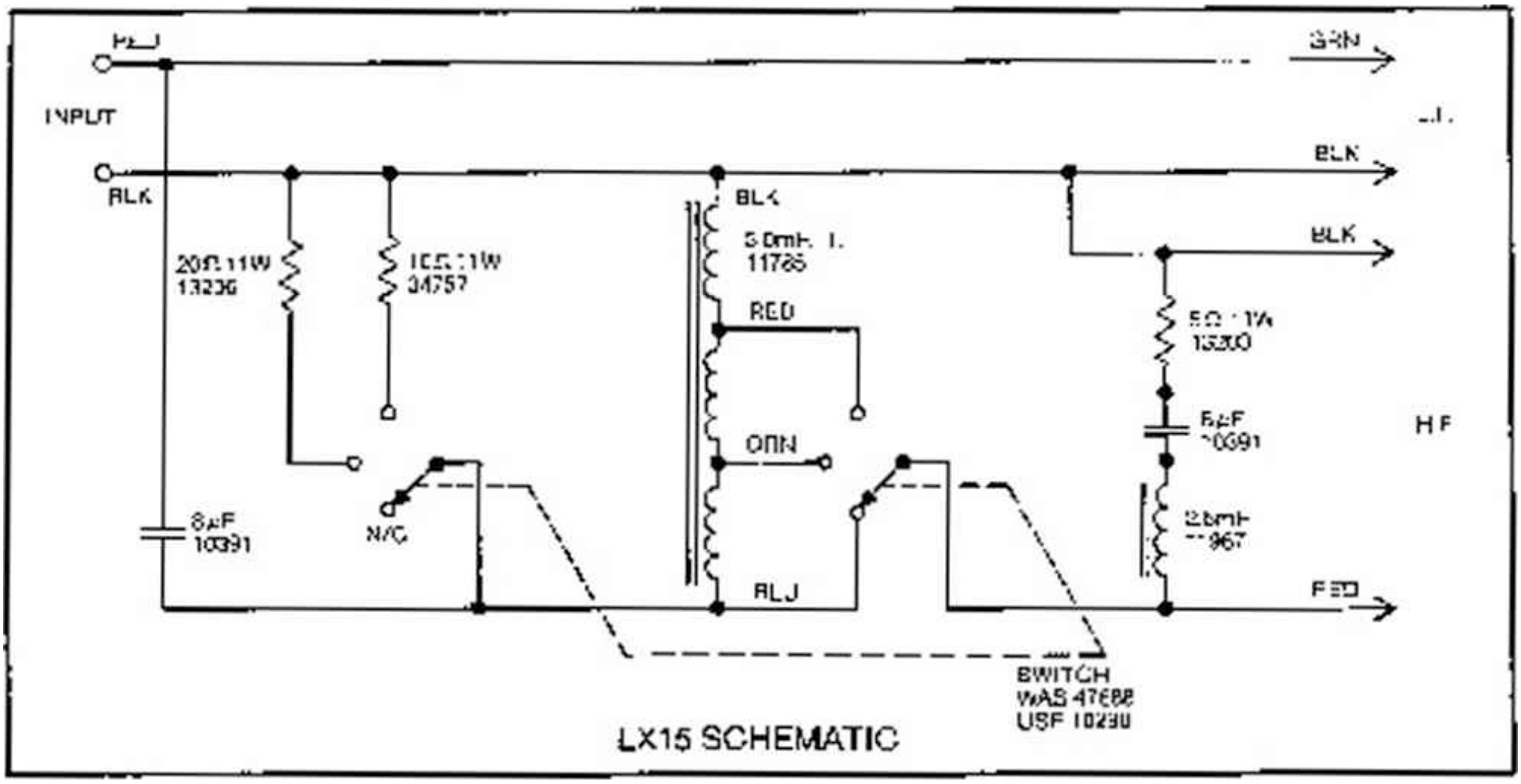
SB 55 9/ 72 Printed in U.S.A.

Technical Manual

L55 Lancer



LX15 SCHEMATIC

SYSTEM COMPONENTS:

LOW FREQUENCY DRIVER:	LE14A
Cone Kit:	C3RLE14A
Nom. Impedance:	8 Ohrn
Dynamic Teal Inpol V:	B
Sweep Frequency Hz:	30-12OO
D C. Resistance Ohms	5.9 minimum 7.1 maximum
Gap Gauge;	.057"
Notes:	Aquplas On Front And Back Of Cone
If Not Serviceable.	
Replace With:	LE14H-1
Visual Change:	Yes
Baffle Modification:	No
Exact Acoustic Replacement No.	Sligntry different Retrace boih units in a stereo pair.
Additional Parts Currently Available*;	
Dome:	50201
Mounting Gsskel:	20253
Trim Gasfcet;	21811
HIGH FFEÛUENCY DRIVER:	LE20-1
Diaphragm KiL	D8RLE20
Norn. Impedance:	8 Ohm
Dynamic Test Inpui V:	6

HIGH FREQUENCY DRIVER (Confc)

Sweep Frequency Hz:	1000-80DC
D C. Recistance Ohms:	3.7 minimum 4.2 maximum
Gap Gauge	.029”
Notes:	Test With Network
If Not Serviceable.	
Replace With:	035TiA
Visual Change:	Yes
Baffle Modification:	No
Exact Acoustic Replacement No.	Use as a last resort. Replace both urlts In a stereo pair.
Additional Parts Currently Available':	
Trim Ring:	21600

SYSTEM SPECIFICATIONS:

Nominal Impedance:	8Ohm
Power Capacity:	35Watts Continuous Program
Crossover Frequency:	2000 Hz
Sensitivity:	80dB (1 Wall @15 Feet)
Enclosure Dim:	24-5/8” x17-1/2” x12-7/8" D 62cm x 44çm X 33cm
Snipping Weight:	88 lbs -31 kg.
Additional Parte Currently Available*:	
Binding Posts: Red:	10243
Black:	10244

'Other parts may also be available. Check wilh JBL for details

JBL L55 Lancer 144,000ycn(onc-sct, around the 1975 time)

Description

The floor type speaker system which the smoked glass attached to the top plate.

The colour of a front grille had a pattern of three colors of coffee, Mandarin, and indigo.

The 35.5cm Woofer which uses a lOemphi voice coil for low-pass was used for the unit, and it has adopted a 5cm direct radiator as a high region of 2000Hz or more.

Rating of a mode

Scheme	2 ways and 2 loudspeaker floor type
Unit etc.	For low-pass: 35.5cm cone type (LE14A) For high regions: Direct radiator (LE20-1) Network: Exclusive 2 way network
Impedance	8ohms
Allowable input	35W (succession special NetWare program)
Dimensions	Width 440x height 620x depth of 330mm
Weight	29kg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JBL
WANT TO RELAX TO BEAUTIFUL MUSIC
WELCOME
WE HAVE GOOD HIFI AT YOUR SERVICE
PLEASE WAIT HERE & A MEMBER OF OUR TEAM WILL BE WITH YOU SHORTLY.
Or press finger HERE