

PROFESSIONAL PRODUCTS

When you see "JBL" on a speaker, sound system or our UREI Electronic Products, you're looking at a great deal more than a company logo. You're looking at a philosophy. The JBL philosophy.

We design and build the entire system ourselves...from the initial conception to the finished, packed product. We control all the variables, so we don't have to

compromise design goals.

The JBL philosophy goes back to 1929, when the young James B. Lansing began building small loudspeakers for radios

and phonographs.

Lansing perfected techniques for milling flat wire and winding it on edge for superior voice coils. He also made vital contributions to compression driver technology, and many of his designs were direct forerunners of today's production models; models that bring new clarity, richness and authority to sound.

JBL research has produced the first perfected use of pure titanium in the compression driver diaphragm. And our patented "diamond surround" diaphragm has dramatically extended

high frequency response.

We've harnessed computer science to make major advances in the design of JBL transducers and UREI audio electronics. With our unique Bi-Radial™ horn technology and Time Align® Monitor Systems we've perfected the precise control of low and high frequency sounds.

But more important than any single advancement in technology, Jim Lansing established an approach: uncompromised engineering and manufacturing as an integrated and controlled process. This remains the guiding philosophy of JBL today.

JBL POWER AMPLIFIERS

JBL 6200 Series

Active, balanced bridging input circuitry. Full complementary driver and output circuitry. Rugged, roadworthy construction. XL-type, phone jack, and barrier strip input connectors.



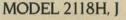
MODEL	6215	6230	6260	6290	
OUTPUT POWE	R: Rate	d Power	20 Hz-20	kHz PEP	CHANNEL
8 ohm stereo	35 W	75 W	150 W	300 W	(0.1% THD)
4 ohm stereo			300 W	600 W	(0.2% THD)
16 ohm bridge	45 W	150 W	300 W	600 W	(0.1% THD)
8 ohm bridge			600 W	1200 W	(0.2% THD)

CONE TRANSDUCERS



MODEL LE8T-H Primary Application: Full Range, Extended Bass.

Nominal Diameter: 200mm (8 in.) Power Capacity (Continuous Program): 50 W. Sensitivity (TW Im): 89 dB SPL. Voice Coil Diameter: 50m 3 in.)



Primary Application: High Power, Midrange/ Low Frequency.

Nominal Diameter: 200mm (8 in.). Power Capacity (Continuous Program): 200 W. Sensitivity (IW. Im): 97 dB SPL Voice Coll Diameter. 50mm (2 in.)



MODEL 2202H Primary Application: High Power, Midrange/ Low Frequency.

Nominal Diameter: 300mm (12 in.) Power Capacity (Continuous Program): W Sensitivity (I.W.lm): 99 dB SPL Voice Coll Diameter: 100mm (4 in.)



MODEL 2123H Primary Application: Low-Distortion, Midrange Frequency

Nominal Diameter: 250 mm (10 in.)
Power Capacity (Continous Program): 250 W.
Sensitivity (I W. 1 m): 101 dB SPL
Voice Coll Diameter: 76 mm (3 in.)





MODEL 2204H Primary Application: Low Frequency

Nominal Diameter: 300 mm (12 in.) Power Capacity (Continous Program): 350 W. Sensitivity (1 W. 1 m): 95 dB SPL Voice Coll Diameter: 100 mm (4 in.)



MODEL 2220H, J Primary Application: High Efficiency, Low Frequency.

Nominal Diameter: 380mm (15 in.). Power Capacity (Continuous Program): 200 W. Sensitivity (IW. Im): 101 dB SPL. Voice Coil Diameter: 100mm (4 in.).



MODEL 2225H, J Primary Application: High Power, Low Frequency.

Nominal Diameter: 380mm (15 in.). Power Capacity (Continuous Program): 400 W. Sensitivity (IW. Im): 97 dB SPL. Voice Coil Diameter: 100mm (4 in.).



MODEL 2235H Primary Application: Medium Efficiency, Extended Bass.

Nominal Diameter: 380mm (15 in.). Power Capacity (Continuous Program): 300 W. Sensitivity (1W. Im): 93 dB SPL. Voice Coil Diameter: 100mm (4 in.).



MODEL 2240H Primary Application: High Power, Low Frequency.

Nominal Diameter: 460mm (18 in.). Power Capacity (Continuous Program); 600 W. Sensitivity (1W. Im): 98 dB SPL. Voice Coil Diameter: 100mm (4 in.).



MODEL 2245H Primary Application: Medium Efficiency, Extended Bass.

Nominal Diameter: 460mm (18 in.). Power Capacity (Continuous Program): 600 W. Sensitivity (TW, Im): 95 dB SPL. Voice Coil Diameter: 100mm (4 in.).

BI-RADIAL™ HORNS

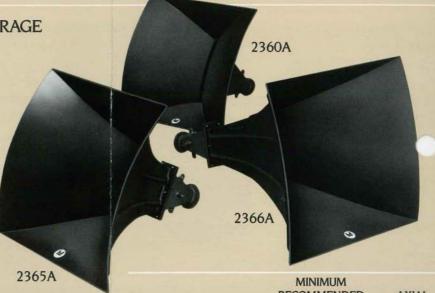
BI-RADIAL™ CONSTANT COVERAGE HORNS

MODELS 2360A, 2365A, 2366A

JBL Bi-Radial™ horns* are designed to provide uniform on- and off-axis frequency response from below 50 z to beyond 16 kHz. The horns' unique geometry and relatively tall vertical mouth dimensions ensure precise vertical, as well as horizontal, beamwidth control throughout the rated frequency band.

*U.S. Patent #4,308,932. Foreign patents pending





AXIAL RECOMMENDED **HORN** NOMINAL CROSSOVER SENSITIVITY MODEL COVERAGE FREQUENCY (1 W. 1 m) 2360A 90° H x 40° V 350 Hz 113 dB SPL 2365A 60° H x 40° V 350 Hz 115 dB SPL 40° H x 20° V 300 Hz 118 dB SPL 2366A

MODEL 2327 Horn Adaptor

Tapered for 49 mm (2 in.) horn entry to 25 mm (1 in.) driver. Length: 105 mm (4-1/8 in.).

FLAT-FRONT BI-RADIAL HORNS

JF* compact Flat-Front Bi-Radial™ horns* are desented to provide excellent on- and off-axis frequency response in the horizontal plane.



2380 Series with 49 mm (2 in.) throats.

MAINIMALIMA

HORN MODEL	NOMINAL COVERAGE	RECOMMENDED CROSSOVER FREQUENCY	AXIAL SENSITIVITY (I W, I m)
2380A	90° H x 40° V	500 Hz	112 dB SPL
2382A	120° H x 40° V	500 Hz	110 dB SPL
2385A	60° H x 40° V	500 Hz	114 dB SPL
2386	40° H x 20° V	400 Hz	116 dB SPL

The horns are designed for flush cabinet-mountil or compact cluster application.



HORN MODEL 2370A

Nominal Coverage: 90° H x 40° V. Min. Rec. Crossover Freq.: 630 Hz. Axial Sensitivity (1 W. 1 m): 110 dB SPL. Throat Size: 25 mm (1 in.).

HIGH FREQUENCY DRIVERS



MODEL	HORN MOUTH DIMENSIONS OR THROAT DIAMETER	NOMINAL IMPEDANCE	POWER CAPACITY (CONT. PROGRAM)	SENSITIVITY ON HORN (1 W, 1 m)	LOWEST RECOMMENDED CROSSOVER
2402H	79 mm (31/s in.)	8	40 W	110 dB SPL	2.5 kHz
2404H	130 mm x 130 mm (51/s x 51/s)	8	40 W	105 dB SPL	3 kHz
2405H	79 mm x 18 mm (35/32 X ^{23/} 32)	8	40 W	105 dB SPL	7 kHz
5H.J	25 mm (1 in.)	8 (H) 16 (J)	70 W above 800 Hz 100 W above 1.2 kHz	110 dB SPL	800 Hz
2445]	49 mm (2 in.)	16	100 W above 500 Hz 150 W above 1 kHz	111 dB SPL	500 Hz
2485]	49 mm (2 in.)	16	120 W	111 dB SPL	300 Hz

JBL CABARET® SERIES

Each Cabaret* Series enclosure is crafted from architecturally braced, 18 mm (¾ in.) multi-laminate, cross-grain void-free hardwood.

Radiused edges and protective skids allow for ease of handling; optional flush-fitting transport covers with built-in handles and snap locks.



MUSICAL INSTRUMENT/SOUND REINFORCEMENT LOUDSPEAKERS



MODEL E110-8 Primary Application: Lead or rhythm guitar, piano, vocals, and line array.

Nominal Diameter; 250 mm (IO in.) Sensitivity: 98 dB SPL. Power Capacity (Continuous Program): 150 W. Voice Coll Diameter: 76 mm (3 in.).



MODEL E140-8 Primary Application: Electric bass, organ low frequency reinforcement.

Nominal Diameter: 380 mm (15 in.) Sensitivity: 100 dB SPL. Power Capacity (Continuous Program): 400 W Voice Coll Diameter: 102 mm (4 in.).

E SERIES LOUDSPEAKERS Classic JBL Sound



MODEL E120-8 (-16) Primary Application: Lead or rhythm guitar, electric piano, organ and vocals.

Nominal Diameter: 300 mm (12 in.) Sensitivity: 103 dB SPL. Power Capacity (Continuous Program): 300 W Voice Coll Diameter: 102 mm (4 in.).



MODEL E145-8 Primary Application: Organ, synthesizer, low frequency reinforcement.

Nominal Diameter: 380 mm (15 in.) Sensitivity: 98 dB SPL. Power Capacity (Continuous Program): 300 W. Voice Coil Diameter: 102 mm (4 in.)



MODEL E130-8 Primary Application: Lead

or rhythm guitar, electric piano, organ and vocals.

Nominal Diameter: 380 mm (15 in.) Sensitivity: 105 dB SPL. Power Capacity (Continuous Program): 300 W. Voice Coll Diameter:



MODEL E155-8 Primary Application:

Electric bass, subwoofer, low frequency reinforcement.

Nominal Diameter: 460 mm (18 in.) Sensitivity: 100 dB SPL. Power Capacity (Continuous Program): 600 W Voice Coil Diameter: 102 mm (4 in.).

G SERIES LOUDSPEAKERS Featuring Overdrive Sound Character

MODEL G125-8 Primary Application: Lead guitar loudspeaker

Nominal Diameter: 380 mm (15 in.)
Sensitivity: 102 dB SPL
Power Capacity (AES shaped noise): 200 W
Voice Coll Diameter: 76 mm (3 in.)



MODEL G135-8 Primary Application: Electric bass, lead guitar, or keyboard loudspeaker

Nominal Diameter: 300 mm (12 in. Sensitivity: 104 dB SPL Power Capacity (AES shaped noise): 200 W. Voice Coll Diameter: 76 mm (3 in.)

MI SERIES LOUDSPEAKERS

MODEL MI-10

Nominal Diameter: 250 mm (10 in.). Power Capacity AES or EIA. Shaped Noise: 150 W Sensitivity (I W. I m): 98 dB SPL. Voice Coll Diameter: 51 mm (2 in.).



MODEL MI-12

Nominal Diameter: 380 mm (12 in.). Power Capacity AES or EIA. Shaped Noise: 150 W. Sensitivity (I W. I m): 100 dB SPL. Voice Coil Diameter: 51 mm (7 in.).



MODEL MI-15

Nominal Diameter: 380 mm (12 in.). Power Capacity AES or EIA. Shaped Noise: 150 W. Sensitivity (1 W.1 m): 102 dB SPL. Voice Coll Diameter: 51 mm (2 in.).



MI SERIES SYSTEMS



MODEL MI-291
Power Pack
Provides the MI horn, driver and network for custom enclosure mounting.



MODEL MI-631 Stage Monitor

Power Capacity (Continuous Program): 300 W. Sensitivity (I W. I m): 100 dB SPL.

MODEL MI-632 Sound System

Power Capacity (Continuous Program): 300 W. Sensitivity (I W. I m): 102 dB SPL.

MODEL MI-630 Vocal Reinforcement System

Greater midrange punch; extended bass response with lower distortion.

Power Capacity (Continuous Program): 300 W.

Sensitivity (1 W., 1 m): 100 dB SPL. Nominal Dispersion: 90° Horizontal x

40° Vertical

Crossover Frequency: 2.0 kHz



MODEL MI-634 Direct Radiator Sound System

Vented enclosure system, ideal for vocal and acoustical instrument reinforcement.

Power Capacity (Continuous Program): 300 W.

Sensitivity (1 W., 1 m): 102 dB SPL Nominal Dispersion: 90° Horizontal x 40° Vertical

Crossover Frequency: 1.5 kHz

JBL STUDIO MONITORS

MODEL 4406 Studio Monitor, 2-Way Ideal for use as a main monitor in applications where space is at a premium.

165 mm (6½ in.) low frequency driver. m (1 in.) high frequency pure titanium dome. putional IBL MC4401 cradle mount.

Power capacity: 75 W.

Sensitivity (1 W. 1 m): 87 dB SPL.



MODEL 4408 Studio Monitor, 2-Way Designed for the broadcast control room and edit booth.

200 mm (8 in.) low frequency felted cone 25 mm (1 in.) high frequency pure titanium dome. Power capacity: 100 W. Sensitivity (1 W. 1 m): 89 dB SPL

MODELS 4430 AND 4435 Bi-Radial™ Studio Monitors

The incorporation of the unique JBL Bi-Radial™ horn* in a monitor loudspeaker provides constant ical and horizontal polar coverage, control of the reverberant field, flat power response,

image stability and coherent sound.

*U.S. Patent #4,308,932 Foreign Patents Pending.

MODEL 4430

Power Capacity: 300 W. Sensitivity (1 W, 1 m): 93 dB SPL.



MODEL 4412 Studio Monitor, 3-Way

Mirror-imaging. 300 mm (12 in.) low frequency loudspeaker. 130 mm (5 in.) midrange loudspeaker.

25 mm (1 in.) high frequency dome radiator. Power Capacity: 150 W.

Sensitivity (1 W. 1 m): 90 dB SPL.



MODEL 4410 Studio Monitor, 3-Way Mirror-Imaging

250 mm (10 in.) low frequency laminate cone. 125 mm (5 in.) midrange cone. 25 mm (1 in.) high frequency pure titanium dome. Power capacity: 125 W. Sensitivity (1 W. 1 m): 91 dB SPL



MODEL 4425

Power capacity: 200 W. Sensitivity (1 W. 1 m): 91 dB SPL

Power Capacity: 375 W. Sensitivity (1 W, 1 m): 96 dB SPL.

JBL CONTROL MONITORS

UREI STUDIO MONITORS

CONTROL 1 Miniature

Loudspeaker System

Performs equally well in recording studios, mobile audio/video control rooms and broadcast studios.

135 mm (5 in.) low frequency Judspeaker 19 mm (¼ in.) high frequency

polycarbonate dome. Power capacity: 150 W. Sensitivity (1 W. 1 m): 90 dB SPL Optional mounting hardware.



MODEL 4312A Control Monitor, 3-Way

Mirror-imaging.
High resolution dividing network.
300 mm (12 in.) low frequency. 130 mm (5 in.) midrange, and 25 mm (1 in.) high frequency loudspeaker.
Power Capacity: 100 W.
Sensitivity (1 W. 1 m): 91 dB SPL.

UREI MODELS 809A, 811C, 813C, 815C *Time-Align* Studio Monitors

Time-Align* design achieves accurate time domain response, minimizing fatigue while listening at high sound pressure levels. One-point sound source.

*Time-Align and its derivatives are trademarks of E.M. Long Assoc., Oakland, CA.

	SITIVITY W, Im)	FREQUENCY RESPONSE (± 3dB)		
809A	93 dB SPL	50 Hz-17.5 kHz		
811C	99 dB SPL	80 Hz-17.5 kHz		
813C	101 dB SPL	40 Hz-17.5 kHz		
815C	103 dB SPL	40 Hz-17.5 kHz		



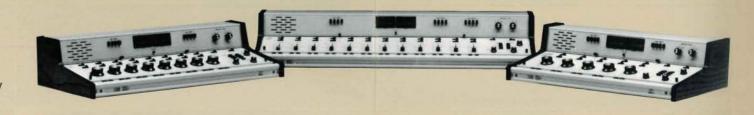
U. ZI POWER AMPLIFIER



Active, balance input circuitry. Fully complementary output sections. Individual power supplies for each channel. Conductor-Compensation™ for use with UREI Time-Align® Monitors.

UREI BROADCAST CONSOLES

UREI MODEL 1650, 1680 AND 1690 SERIES Stereo Broadcast Consoles Choice of 5-Mixer, 8-Mixer, or 12-Mixer units. Choice of Penny & Giles, Shallco or conductive plastic attenuators. Built-in Monitor, headphone and cue amplifiers and cue loudspeaker.



EQUALIZERS AND FILTERS



JBL/UREI MODEL 5547A

1/3 Octave Graphic Equalizer

30 boost-cut bands, active-hybrid circuitry.

JBL/UREI 5549A

1/3 Octave Room Equalizer
30 cut-only bands, active-hybrid circuitry.



JBL/UREI MODEL 5235
Dual Channel Electronic Frequency
Dividing Network
Card programmable.



UREI MODEL 525
Electronic Crossover
Up to 5 crossover points with 18 dB per octave slopes.



UREI MODELS 533 AND 535 Single and Dual Octave Graphic Equalizers



UREI MODEL 537
1/3 Octave Graphic Equalizer
12 dB boost or cut.

UREI MODEL 539
Room Equalization Filter Set
Separate tunable high/low pass filters-cut only.



UREI MODEL 546
Dual Parametric Equalizer
4 sections per channel, variable in bandwidth, frequency, boost and cut.



UREI MODEL 562 Feedback Suppressor 5 independently adjustable notch filters.



UREI MODEL 567
P.A. Processing System
Graphic equalizer with four band feedback suppressor and electronic crossover.



UREI MODEL 1176LN
Peak Limiter
Variable attack and release time.



UREI MODEL LA-4 Compressor/Limiter RMS action, selectable compression ratios.

UREI MODEL 1178
Dual Peak Limiter
Provides perfect tracking in stereo mode.

SPECIAL PURPOSE ELECTRONICS



JBL/UREI MODEL 7922
Digital Audio Delay
10 microsecond resolution; linear phase filters for sharp imaging.



UREI MODEL 950
Ambient Noise Controlled Amplifier
Adjusts sound system level to track room noise.

DIRECT RADIATOR SYSTEMS

DIRECT-RADIATOR LOW FREQUENCY SYSTEMS

Systems with direct radiator low frequency sections provide the flattest possible response to the lowest usable octave. These systems, while less efficient than the traditional horn-loaded low frequency designs, will require less equalization ar. /ill provide the smoothest response throughout the entire listening environment.



MODEL 4675A

Power Capacity (Continuous Program): 600 W. Sensitivity (1 W. 1 m): 100 dB SPL. Crossover Frequency: 500 Hz. (4508, Unloaded enclosure)

MODEL 4673

Power Capacity (Continuous Program): 300 W. Sensitivity (1 W, 1 m): 97 dB SPL. Crossover Frequency: 500 Hz.



MODEL 4645 Sub-Woofer Syst

Usable response to below 30 Hz. Sensitivity (1 W. 1 m): 95 dB SPL. 460 mm (18 in.) low frequency transducer. Direct radiator bass-reflex enclosure. (4518, Unloaded enclosure)

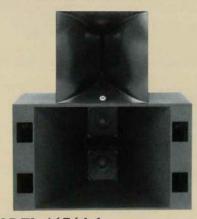
HORN LOADED SYSTEMS

Systems with horn-loaded low frequency sections provide maximum midrange efficiency through the use of short front-loaded horns. Usable bass output is also extended through the use of a vented rear chamber.



MODEL 4672A

Power Capacity (Continuous Program): 300 W. Sensitivity (1 W. I-m): 103 dB SPL. Crossover Frequency: 800 Hz. (4560 BKA, Unloaded enclosure)



MODEL 4676A-1

Power Capacity (Continuous Program): 600 W. Sensitivity (I W. I m): 106 dB SPL. Crossover Frequency: 500 Hz. (4550 BKA, Unloaded enclosure)

ENCLOSED UTILITY SYSTEMS

COMPLETE SOUND SYSTEMS



A complete two-channel, three-way loudspeaker and amplification system—prewired, tested and ready for immediate use, with certified hanging and rigging hardware.

Component categories: Loudspeaker systems, power amplifiers, electronic crossover and loudspeaker signal processing equipment, rack cabinetry and loudspeaker system connecting cables.

LOUDSPEAKER SYSTEMS



MODEL 4861 HF/VHF Speaker Module

> Components: 2380A Bi-Radial™ Horn 2445] Driver Two 2404H VHF Transducers



MODEL 4825 Compact Speaker System

> Components: 2344 Bi-Radial™ Horn 2425] Driver 2204H Low-Frequency



MODEL 46710K Compact Sound Reinforcement System

35 Hz to 20 kHz frequency range Sensitivity (I W. I m): 97 dB SPL 380 mm (15 in.) low frequency transducer. Flat-Front Bi-Radial horn design.

Oak-Grain vinyl enclosure.



MODEL 4660 Defined Coverage Loudspeaker System

Skewed coverage (110° front—38° back) for ideal performance in rectangular rooms.

Unique Bi-Radial[™] horn design. 380 mm (15 in.) low frequency transducer. Sensitivity (1 W. Im): 99 dB SPL.



MODEL 4646 Low Frequency System Usable response to 50 Hz.

Sensitivity (1 W., 1 m): 96 dB SPL 305 mm (12 in.) low frequency transducers. Direct radiating ported enclosure.



MODEL SLT-I Miniature Loudspeaker System

100 Hz to 18 kHz (±3 dB) frequency range. Sensitivity (1W, Im): 87 dB SPL. Components: 135 mm (5 ¼ in.) low frequency loudspeaker, 25 mm (1 in.) high frequency dome radiator.

Die-cast aluminum enclosure

MODEL 8216A/AT Foreground Music System

40 Hz to 20 kHz frequency range, Sensitivity (I W. Im): 87 dB SPL. Components: 165 mm (6½ in.) low frequency loudspeaker, 25 mm (I in.) high frequency dome radiator, AT version has internal 70 V line transformer.





MODEL 4612 OK Compact Sound Reinforcement System

Sensitivity (1W, 1m): 97 dB SPL.
60 Hz to 21,5 kHz frequency range.
Bi-Radial™ constant coverage horn design.
Consistent 100° x 100° dispersion from 3 kHz to 20 kHz.
Dual high-power 200 mm (8 in.) transducers.
Oak-grain vinyl enclosure.

INDUSTRIAL SERIES SPEAKERS



JBL/UREI MODEL 5330 VCA Controlled Microphone Mixer



JBL MODEL 7510A
Automatic Microphone Mixer
Expandable by groups of four up to 24 inputs.



UREI MODEL 1620
Music Mixer
Stereo outputs; flexible switching matrix.



JBL Industrial Series loudspeakers are designed for a variety of distributed sound applications including noise masking, paging, and music reproduction. The speakers offer wide dispersion, excellent power capacity, and unmatched intelligibility. Additionally, the speakers may be ordered in a wide range of configurations to match the requirements of virtually any installation.

VIDEO PRODUCTS



MODEL 6810 Video Projector Provides front and rear projection (5 to 15 feet diagonally) on all types of screens. Features built-in stereo amplifier and 178-channel cable-ready stereo tuner.

35-button, 40-function remote control unit. RGB input, three RF inputs and two sets of direct video and stereo inputs. Floor or ceiling mount.