

JBL Cabaret® Series

Take Some Work Out of Being A Working Musician

As a musician you know that your stage show requires quality, high-performance sound products. Products that let your audience feel, as well as hear, every note. Unfortunately, this kind of professional performance has traditionally meant putting up with massive, complex arrays of equipment that could require hours of extra work to set up and tear down.

At JBL we have the alternative for you. We call it our Cabaret® Series. And it includes the most advanced compact musical sound systems ever offered by JBL.

Designed for Performance

We've developed each Cabaret® system around JBL musical instrument loudspeakers. Speakers that are known by musicians around the world for their remarkable efficiency, reliability, and power capacity. Next we matched those components with optimally tuned enclosures that were engineered specifically for each intended application. Finally, we equalized each system to match the sound characteristics of the instrument it will reproduce. The result is a series of systems that require very little power to operate yet can handle high levels of program material effortlessly. Systems that provide an ideal balance between high performance and practical size.

Designed for Durability

Of course even the best sounding speaker systems can be a problem if they can't take the wear and tear of the road. So each Cabaret® Series enclosure is crafted from architecturally braced, 18 mm (¾ in), multi-laminate, cross-grain void-free hardwood, which is far superior to either particle board or standard plywood.

Tongue-and-groove fabrication techniques and internal bracing ensure maximum strength. Added protection is provided by specially designed polycarbonate corner guards (except on 4602 floor mon-



Polycarbonate Corner Protectors. Rugged, resistant to impact and temperature.

itor). These guards are also engineered to permit secure vertical stacking. Each system features flush-mounted professional road handles that lock in place to prevent unwanted vibration and noise during a performance.



Professional Road Handles. Large rubber grips ease handling.

Additionally, the recessed input and external output jacks are protected by spring-loaded covers. Optional flush-fitting transport covers are available, which allows the enclosure to function as its own road case. The finish is a durable black polyurethane paint that can withstand drops, kicks, and wear.



Recessed Input Connectors. Input and external output phone jacks are protected by spring-loaded covers to maintain acoustic integrity of enclosure. High current capacity telephone-type jacks provide positive high power connection.

You Decide

Naturally, the only way you'll really know if the Cabaret® Series systems are right for you is to hear them for yourself. So ask your local JBL dealer for a demonstration. We think you're going to find that they'll let you spend a lot less time working on your equipment and a lot more time working on your music.

4602B Stage Monitor

Smooth, wide frequency response (50 Hz-15 kHz), uncolored reproduction, and high directivity make the 4602B an ideal stage monitor, acoustic instrument system, or small general purpose vocal reinforcement



system. The system utilizes an E120 300 mm (12 in) loudspeaker, a 2402H high frequency ring radiator, and a 3 kHz high-pass network with continuously variable level control.

4604B Stage Monitor

Designed for wide-angle coverage with full 40 Hz to 20 kHz frequency range at high sound pressure levels, the 4604B com-



Feet allow secure vertical and horizontal stacking of enclosures both on stage and in transit.



bines the same loudspeaker components as the 4691B in a 45-degree wedge type monitor. The 2370A Flat-Front Bi-Radial™ horn and 2425J titanium diaphragm high frequency compression driver provide even side-to-side coverage for larger monitor areas on stage. A rear terminal panel provides a continuously variable horn level control and self-switching bi-amplification inputs. The 4604B has heavy duty carrying handles placed at the unit's center of gravity, and accepts the 4620CVR optional hard transport cover.

4612B Compact Sound Reinforcement

The most compact of our full range Cabaret® Series systems, the 4612B offers wide, tightly controlled dispersion, extended frequency response (60 Hz-21.5 kHz), exceptionally high power capacity, and high efficiency. The system utilizes two 200 mm (8 in) low frequency loudspeakers, a unique Bi-Radial* horn which provides constant coverage from its crossover point of 3 kHz to beyond 20 kHz, a constant area phasing plug, and an annular-ring diaphragm ferrite motor structure. The 4612B mini P.A. system is ideal for any sound reinforcement application that requires a blend of outstanding performance and maximum portability.

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

4625B Bass Guitar

Pure, punchy bass at any sound pressure level: the product of a 380 mm (15 in) E140 low frequency loudspeaker performing in a carefully designed enclosure. The combination of high efficiency and high power handling capacity allows the system to handle up to 200 watts continuous pink noise power.

4628B Keyboard/Reinforcement

Specially designed for organ, piano, and synthesizer, with a superb bottom end for clean pedal tones, the 4628B is characterized by extremely low distortion and a wide

frequency range. This three-way cone mid-range system incorporates an improved E145 380 mm (15 in) loudspeaker, a 2118H 200 mm (8 in) midrange driver, and a 2404H high frequency speaker. The 4628B also features a crossover network with switchable biamplication inputs and a continuously variable level control.

4691B High-Level Playback/Reinforcement

Specifically engineered for high level, full range music playback, the 4691B is a compact, two-way loudspeaker system that combines high efficiency, controlled dispersion, wide frequency response (40 Hz-20 kHz), and extremely low distortion. The 4691B utilizes an E140 380 mm (15 in) low frequency transducer, a 2370 flat-front Bi-Radial horn*, a 2425J titanium diaphragm high frequency compression driver, and a 1.5 kHz high pass network. A rear terminal panel features switchable biamplication inputs. The 4691B may be used alone or in conjunction with 4695B subwoofers. The most rugged and versatile of the Cabaret® systems, it is ideal for installation in night clubs, discotheques, theaters, or any application requiring high acoustic output and uncompromising sound quality.

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

4695B-4 Bass Guitar/Subwoofer Designed to deliver maximum levels of

clean bass, the 4695B features JBL's massive new E155-4 460 mm (18 in) loudspeaker housed in an optimally tuned, reflex enclosure. An outstanding full-range bass guitar system, the 4695B projects bass notes with incredible punch and clear, crisp overtones. The system's high efficiency, accuracy, and ability to handle full power down to 30 Hz also make it an ideal choice for subwoofer applications. It is also fitted for the CP4690 caster pack.

4698B Keyboard/Electronic Drum/Reinforcement System

Designed for high level production of synthesizer, electronic drum and full frequency-range electronic instruments, the 4698B incorporates the E155 460 mm (18 in) low frequency transducer, an E110 250 mm (10 in) transducer, and 2404H high frequency speaker. The 4698B is housed in an optimally tuned reflex enclosure enabling full power handling down to 35 Hz for incredible punch and deep bass clarity with exceptionally low distortion and wide frequency range (35 Hz to 21.5 kHz). The 4698B features a rear terminal panel with continuously variable tweeter level control and self-switching biamplication inputs. The 4 ohm system impedance of the 4698B makes maximum use of the power transfer characteristics of most solid state amplifiers, drawing twice the power of 8-ohm systems, making ideal use of stereo power amplifier channels. The 4698B ac-

cepts the 4695CVR optional hard transport cover, and is fitted for the optional CP4690 caster pack.

4699B Full Range Playback/Reinforcement System

The largest of the Cabaret® Series systems, the 4699B incorporates the E155 460 mm (18 in) low frequency transducer, the E110 250 mm (10 in) transducer and the 2370A Flat-Front Bi-Radial™ horn and 2425H titanium diaphragm high frequency compression driver into a full-range 3-way, triamplication-ready sound system. It is capable of any type music or sound reproduction at extremely high sound pressure levels, with very low distortion, wide frequency response, (35 Hz to 20 kHz), and wide, even dispersion typical of the best large systems. The 4699B delivers crisp, detailed sound with smooth uncolored tonal balance, even at thunderous levels, enabling a single pair of systems to fill moderate sized halls and auditoriums with full, rich sound from the lowest kick drum pitches to the highest sibilant harmonics of vocals or strings. The optimally tuned enclosure accepts the 4695CVR optional hard transport cover, and the rear terminal panel has a continuously variable horn level control and self-switching triamplication inputs. The enclosure is also fitted for the optional CP4690 caster pack.



Components and Component Systems

JBL components are used in several complete JBL systems. They are also available separately so that you can custom assemble a sound reinforcement system. These versatile models are among our most popular components; their flexibility makes them ideally suited for a wide range of sound reinforcement applications.

2370A Flat-Front Bi-Radial Horn

This compact flat-front Bi-Radial¹ horn is designed to provide excellent on and off-axis frequency response in the horizontal plane. It has a 90° horizontal x 40° vertical nominal coverage pattern, with uniform on and off-axis frequency response in the horizontal plane from 630 kHz to beyond 16 kHz. The horn's small vertical mouth dimension was chosen to allow a gradual narrowing of the vertical coverage pattern with increasing frequency. This provides acoustic equalization of the frequency response of the horn in the horizontal plane and compensates for the falling off power response of all compression drivers. An integral throat will accept any JBL compression driver having a 25 mm (1 in) throat diameter; the flat front design of the horn allows flush mounting on enclosure baffles.

2425H/J Wide Range Compression Driver

The 2425H/J features a JBL patented² diamond-pattern surround for smooth, extended high frequency response. A unique titanium diaphragm structure combines the ruggedness of phenolic and composite type diaphragms with the outstanding frequency response of the fragile aluminum and exotic metal diaphragms.

Nontoxic titanium has no fatigue limit; it can last virtually forever if not overdriven. The 2425H/J is ideally suited for critical playback systems or reinforcement systems of the highest quality. Its high efficiency and power capacity permit excellent dynamic range.

3120A Frequency Dividing Network

JBL professional frequency dividing networks are passive, high level devices designed to optimally blend JBL low and high frequency drivers. 12 dB/octave Butterworth filter shapes are assured by extensive use of impedance correcting conjugates and proper component values. Highest quality electronic components are used throughout—non-inductive, non-polarized capacitors having high AC current capacity built expressly for use in dividing networks, individually calibrated low-loss inductors, and oversize switches and resistors. High frequency shelving of networks crossing over below 7 kHz is accomplished with tapped autotransformers rather than through resistive losses.

In addition to switchable high frequency attenuation, the 3120A includes a unique three-position high frequency equalization control that allows the user to adjust the response contour as well as optimize the crossover response for the new generation of constant directivity horns.

MA15 Loudspeaker Mounting Kit

The MA15 simplifies front mounting of JBL 380 mm (15 in) loudspeakers and permits a degree of latitude in the diameter of the mounting cutout. The kit consists of sealing gaskets, four cast clamps and four mounting screws with T-nuts. The clamps

and mounting hardware can also be used for JBL 300 mm (12 in) and 460 mm (18 in) loudspeakers, but it will be necessary to adjust the sealing gaskets specifically for such applications. Two MA15 kits should be used to mount the 460 mm (18 in) loudspeakers, due to the additional mass of the units. The MA15, however, cannot be used to mount an E145 380 mm (15 in) loudspeaker since the clamps will not fit the unit's frame.

Component Systems

Compact, powerful reinforcement systems, the 4662A and 4663A offer high efficiency, vivid, natural sound (even at very high levels), and a controlled dispersion pattern for indoor or outdoor reinforcement applications. These systems are capable of high acoustic output, can handle large amounts of power, and are designed for reliability and durability.

Outdoors, with no support from room acoustics, either system will continuously produce an impressive 117 dB at 3 m (10 ft) when driven at its rated power of 150 watts continuous pink noise.

Where higher sound pressure levels are desired, systems may be paired to produce up to 6 dB more SPL than a single unit, with consequent improvement in peak power capability.

The 4662A two-way system delivers outstanding performance from 45 Hz to 20 kHz. The 4663A three-way system extends the top end performance to 21.5 kHz with improved high frequency power capacity.

¹U.S. Patent #4,308,932. Foreign patents pending.

²U.S. Patent #4,324,312. Foreign patents pending.



System Specifications

Cabaret® Systems Specifications

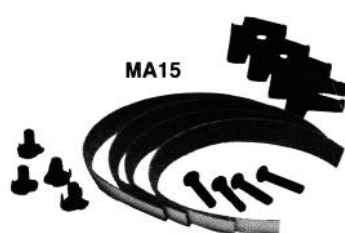
Model	Frequency Range (-10 dB)	Power Capacity (Continuous Pink Noise)		Nominal Impedance	Sensitivity 1 W, 1 m (3.3 ft)	Nominal Dispersion	Crossover Frequency	Enclosure Volume	Exterior Dimensions (Height x Width x Depth)	Net Weight	Optional Transport Cover
4602B	50 Hz - 15 kHz	150 W	300 W	8 Ω	103 dB SPL	40° conical	3 kHz	42 liters 1.5 ft ³	508 mm x 406 mm x 374 mm 20 in x 16 in x 14 ¹¹ / ₁₆ in	25.9 kg 57 ¹ / ₄ lb	4602CVR
4604B	40 Hz - 20 kHz	200 W	400 W	8 Ω	103 dB SPL	90° horizontal 40° vertical	1.5 kHz	127 liters 4.5 ft ³	767 mm x 512 mm x 478 mm 30 ³ / ₁₆ in x 20 ¹ / ₈ in x 18 ¹³ / ₁₆ in	47.6 kg 105 lb	4620CVR
4612B	60 Hz - 21.5 kHz	200 W	400 W	8 Ω	97 dB SPL	100° horizontal 100° vertical	3 kHz	28 liters 1 ft ³	470 mm x 546 mm x 260 mm 18 ¹ / ₂ in x 21 ¹ / ₂ in x 10 ¹ / ₄ in	20.4 kg 45 lb	4612CVR
4625B	40 Hz - 2.5 kHz	200 W	400 W	8 Ω	100 dB SPL	N/A	N/A	127 liters 4.5 ft ³	767 mm x 512 mm x 478 mm 30 ³ / ₁₆ in x 20 ¹ / ₈ in x 18 ¹³ / ₁₆ in	40.5 kg 89 ¹ / ₂ lb	4620CVR
4628B	35 Hz - 21.5 kHz	200 W	400 W	8 Ω	98 dB SPL	100° horizontal 100° vertical	800 Hz 3 kHz	127 liters 4.5 ft ³	767 mm x 512 mm x 478 mm 30 ³ / ₁₆ in x 20 ¹ / ₈ in x 18 ¹³ / ₁₆ in	49.2 kg 108 ¹ / ₂ lb	4620CVR
4691B	40 Hz - 20 kHz	200 W	400 W	8 Ω	103 dB SPL	90° horizontal 40° vertical	1.5 kHz	127 liters 4.5 ft ³	767 mm x 512 mm x 478 mm 30 ³ / ₁₆ in x 20 ¹ / ₈ in x 18 ¹³ / ₁₆ in	49.4 kg 109 lb	4620CVR
4695B	30 Hz - 20 kHz	300 W	600 W	4 Ω	100 dB SPL	N/A	N/A	283 liters 10 ft ³	1021 mm x 751 mm x 478 mm 40 ³ / ₁₆ in x 29 ⁹ / ₁₆ in x 18 ¹³ / ₁₆ in	64.5 kg 142 lb	4695CVR
4698B	35 Hz - 21.5 kHz	400 W	800 W	4 Ω	103 dB SPL	100° horizontal 100° vertical	500 Hz 3 kHz	283 liters 10 ft ³	1021 mm x 751 mm x 478 mm 40 ³ / ₁₆ in x 29 ⁹ / ₁₆ in x 18 ¹³ / ₁₆ in	76.7 kg 169 lb	4695CVR
4699B	35 Hz - 20 kHz	400 W	800 W	4 Ω	103 dB SPL	90° horizontal 40° vertical	500 Hz 2 kHz	283 liters 10 ft ³	1021 mm x 751 mm x 478 mm 40 ³ / ₁₆ in x 29 ⁹ / ₁₆ in x 18 ¹³ / ₁₆ in	83.9 kg 185 lb	4695CVR

Component Systems Specifications

Model		Maximum Output	Nominal Impedance	Frequency Range	Sensitivity	Crossover Frequencies	Finish	Enclosure Dimensions (Height x Width x Depth)	Net Weight Assembled Systems
4662A ¹	150 w continuous pink noise 300 W continuous program	Full power @ 1 m (3.3 ft) 127 dB Full power @ 10 m (33 ft) 107 dB	8 Ω	45 Hz-20 kHz	105 dB SPL, 1W, 1m (3.3 ft)	800 Hz	Black	914 mm x 762 mm x 606 mm 36 in x 30 in x 23 ⁷ / ₈ in	63 kg 139 lb
4663A ¹	150 W continuous pink noise 300 W continuous program	Full power @ 1 m (3.3 ft) 127 dB Full power @ 10 m (33 ft) 107 dB	8 Ω	45 Hz-21.5 kHz	105 dB SPL, 1W, 1m (3.3 ft)	800 Hz 7 kHz	Black	914 mm x 762 mm x 606 mm 36 in x 30 in x 23 ⁷ / ₈ in	67 kg 147 lbs

¹Dealer assembly required.

Model	Enclosure	Low Frequency Transducer	Ultra-High Frequency Transducer	UHF Tweeter Mounting Bracket	Flat-Front Bi-Radial Horn	Titanium Diaphragm Compression Driver	Crossover Network
4662A	4560BKA	E140-8	—	—	2370A	2425J	3110A
4663A	4560BKA	E140-8	2405H	2504	2370A	2425J	3110A 3105



3120A



2425H/J



2370A

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 will always equal or exceed the original design specifications unless otherwise stated.

