

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 ($\frac{3}{4}$ 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. A fiberglass lining eliminates internal cabinet reflections. Radiused edges and protective skids allow for ease

of handling; flush-fitting covers with built-in handles and snap locks eliminate troublesome small hardware and allow 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 jacks are protected by spring-loaded covers to maintain acoustic integrity of the enclosure.

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.

4602A Stage Monitor

Smooth, wide frequency response (50 Hz-15 kHz), uncolored reproduction, and high directivity make the 4602A 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.

4612 Compact Sound Reinforcement

The most compact of our full range Cabaret Series systems, the 4612 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 cross-over point of 3 kHz to beyond 20 kHz, a constant area phasing plug, and an annular-ring diaphragm ferrite motor structure. The 4612 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.

4623 Acoustic Guitar/Vocal Reinforcement

2402H high frequency ring radiator, an E130 380 mm (15 in) low frequency loudspeaker, and a specially designed network create a system that is ideal for acoustic guitar or vocal reinforcement applications.

4625 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.

4628 Keyboard/Reinforcement

Specially designed for organ, piano, and synthesizer, with a superb bottom end for



clean pedal tones, the 4628 is characterized by extremely low distortion and a wide frequency range. This three-way cone midrange 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 4628 also features a crossover network with switchable biamplication inputs and a continuously variable level control.

4680 Line Array

JBL's remarkable 4682 line array housed in a Cabaret Series enclosure. Four 250 mm (10 in) E110 loudspeakers and a 2902A High Frequency Power Pack (two 2402Hs and a 3 kHz high pass network) deliver a very natural sound—clean, crisp, and clear—over a wide frequency range of 55 Hz to 15 kHz. The 4680 is ideal for

any application requiring high power capacity, maximum sound pressure level output, and uncompromising sound quality.

4691 High-Level Playback/Reinforcement

Specifically engineered for high level, full range music playback, the 4691 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 4691 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 4691 may be used alone or in conjunction with 4695 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.

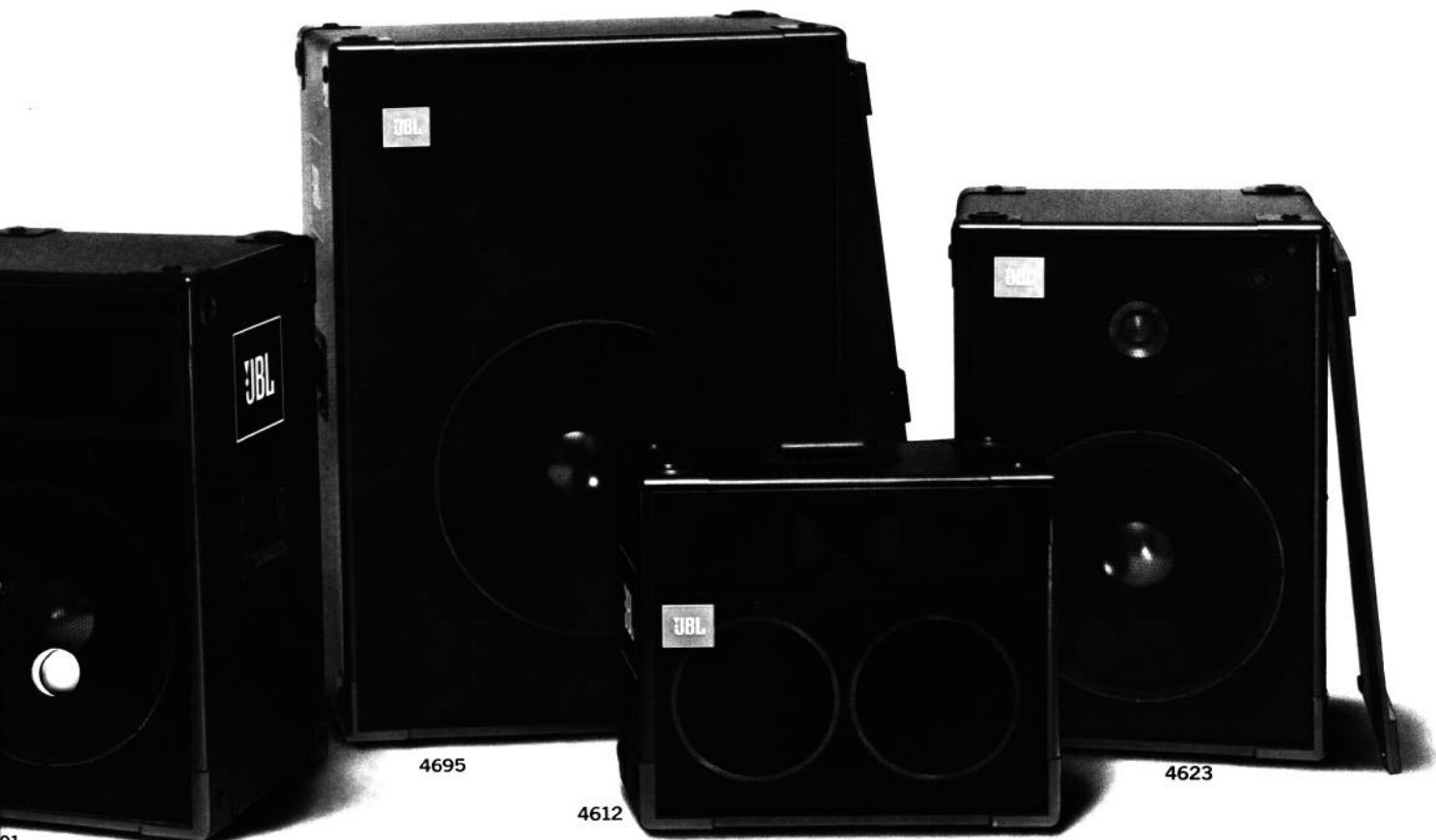
4695 Bass Guitar/Subwoofer

Designed to deliver maximum levels of clean bass, the 4695 features JBL's massive new E155 460 mm (18 in) loudspeaker housed in an optimally tuned, reflex enclosure. An outstanding full-range bass guitar system, the 4695 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.

Specifications

| Model | Frequency Range (-10 dB) | Power Capacity | | Nominal Impedance | Sensitivity ¹ 1 W, 1 m (3.3 ft) | Nominal Dispersion | Crossover Frequency | Enclosure Volume | Exterior Dimensions (Height x Width x Depth) | Net Weight |
|-------|-----------------------------|----------------------------|-------------------------|----------------------|---|----------------------------------|------------------------|-----------------------------------|---|---|
| | | (Continuous Pink Noise) | (Continuous Program) | | | | | | | |
| 4602A | 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 ¹ / ₁₆ in | 25.9 kg 57 ¹ / ₂ lb |
| 4612 | 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 |
| 4623 | 50 Hz-15 kHz | 150 W | 300 W | 8 Ω | 105 dB SPL | 40° conical | 3 kHz | 127 liters 4.5 ft ³ | 767 mm x 512 mm x 478 mm 30 ⁵ / ₁₆ in x 20 ¹ / ₂ in x 18 ³ / ₁₆ in | 43.5 kg 96 lb |
| 4625 | 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 ⁵ / ₁₆ in x 20 ¹ / ₂ in x 18 ³ / ₁₆ in | 40.5 kg 89 ¹ / ₂ lb |
| 4628 | 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 ⁵ / ₁₆ in x 20 ¹ / ₂ in x 18 ³ / ₁₆ in | 49.2 kg 108 ¹ / ₂ lb |
| 4680A | 55 Hz-15 kHz | 300 W | 600 W | 8 Ω | 105 dB SPL | 60° horizontal 40° vertical | 3 kHz | 142 liters 5 ft ³ | 1322 mm x 402 mm x 372 mm 52 ¹ / ₁₆ in x 16 ¹ / ₁₆ in x 14 ¹ / ₁₆ in | 62.1 kg 137 lb |
| 4691 | 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 ⁵ / ₁₆ in x 20 ¹ / ₂ in x 18 ³ / ₁₆ in | 49.4 kg 109 lb |
| 4695 | 30 Hz-2 kHz | 300 W | 600 W | 8 Ω | 100 dB SPL | N/A | N/A | 283 liters 10 ft ³ | 1021 mm x 751 mm x 478 mm 40 ⁵ / ₁₆ in x 29 ¹ / ₁₆ in x 18 ³ / ₁₆ in | 64.5 kg 142 lb |

¹Sensitivity measured with an input averaged from 500 Hz to 2.5 kHz.



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.

2370 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.

2901B High Frequency Power Pack

The 2901B High Frequency Power Pack can be added to the 4625 to extend high frequency response, giving exceptional clarity and definition. The 2901B consists of a 2425J titanium diaphragm compression driver and a 2301 perforated-plate horn-lens assembly that provides 90° conical dispersion. The 1.5 kHz high-pass network is equipped with a continuously variable level control that allows matching the output level to the bass speaker.

2902A High Frequency Power Pack

The 2902A can be installed in any sound reinforcement or acoustic musical instrument loudspeaker system having useful



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

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

response to 3 kHz (the crossover frequency of the 2902A). The 2902A will extend system response to beyond 15 kHz. It consists of a pair of 2402 ring radiators, a crossover network with an 18 dB/octave filter slope for driver protection, and a continuously variable level control. It can be connected to systems rated up to 300 watts at 4, 8, or 16 ohms.

2903A High Frequency Power Pack

The 2903A power pack consists of a 2402 ring radiator, 3 kHz high-pass network, and continuously variable level control. The 2903A will increase system high frequency output by as much as 10 dB,

giving program material exceptional presence, clarity, and definition. Its response extends to beyond 15 kHz with 40° conical nominal dispersion.

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.

Component Systems

| 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 3/8 in | 63 kg 139 lbs |
| 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, 8 kHz | Black | 914 mm x 762 mm x 606 mm 36 in x 30 in x 23 3/8 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 | — | — | 2370 | 2425J | 3110A |
| 4663A | 4560BKA | E140-8 | 2405 | — | 2370 | 2425J | 3110A 3105 |

