

Professional Loudspeaker Systems, Electronic Racks and Complete Sound Systems.

Concert Series was born out of the singular idea to produce the best professional concert sound systems available. JBL envisioned a complete series of pre-wired, pre-tested, easy to install loudspeaker amplification systems. Having the finest sounding components is not enough. The system bas to be safe, durable, economical. It has to be easy to transport and install, while delivering the sonic quality demanded by today's more discerning audience.

JBL has designed a complete series of loudspeaker systems that relies on the versatility of building block components. Your expertise will allow you to configure Concert Series "off-the-shelf" components in a wide variety of ways, to meet virtually any requirement: from small clubs and churches to large arenas, concert halls and stadiums.

The trapezoidal cabinet structures facilitate cluster design and enhance coverage. For safe and easy setup, rigging fixtures are uniform throughout the line.

JBL designed Concert Series to be upgradable – able to incorporate new developments in technology. As new Concert Series products are designed, they will complement and expand the line, not replace it.

A critical issue with any concert system is safety. Hanging massive flying clusters has evolved rigging into a science. Concert Series' rigging system is not only the safest, but the easiest to install. Every cabinet has multiple SX rated fittings, each of which is able to withstand at least 900 kg (2,000 lbs) of pull in any direction.

The totally compatible rigging components are strong, yet simple to

operate, and connections are easy to fasten. Concert Series systems go up quickly and surpass all industry safety standards.

Durability is another area in which Concert Series exceeds convention. The finest materials and craftsmanship are used to create strong enclosures with virtually ideal acoustical properties. Seamless construction makes each cabinet one solid, rugged structure.

To become the ultimate touring sound system, Concert Series also had to be the easiest system to transport. The trapezoidal design allows the cabinets to travel on common dollies and be easily moved by fork lift. Specially designed handles enable the boxes to be lifted from any angle. The

cabinets stack on top of each other and nest together so truck space is efficiently used.

Concert Series is the product of vast experience developing and using fixed and touring sound systems for many years. Designed

for maximum effectiveness in both permanent and mobile environments. Every element, from the durable construction and specific JBL components chosen, make Concert Series the premiere choice of professional sound contractors.



The Inside Story.

Mounted inside the rugged exterior of every Concert Series enclosure lies over 40 years of professional audio experience. Every Concert Series transducer is pure JBL, and is manufactured at JBL's plant in Northridge, California.

Through years of transducer design, JBL engineers have developed reliable components, manufactured to surpass industry standards. Each element, thoroughly tested in both the laboratory and in the field, is complementary, ensuring complete compatibility among components.

2450J Compression Driver

The JBL 2450J incorporates a neodymium magnet assembly computer – designed to provide high output at two-thirds the size and one-third the weight formerly required. JBL's newly developed Coherent Wave[™] phasing plug design makes possible a perceivable increase in high-frequency clarity through in-phase combining of diaphragm output at the driver's exit. When combined with JBL's Coherent Wave design, the 100mm pure titanium dia-



phragm with embossed radial reinforcing ribs produces smooth response from 500 Hz to 20 kHz. Diaphragm assemblies are rim centered for instant interchangeability. Power handling and durability have been maximized through the use of high-temperature voice-coil former materials and adhesives.

2404H VHF Transducer

The 2404H is a very-high frequency driver which delivers an unmatched combination of wide, tightly controlled dispersion, extended frequency response, high power capacity, and high efficiency.

One key to this outstanding performance lies in the unique geometry of the driver's Bi-Radial™ horn. The horn provides constant coverage from its system crossover point of 7 kHz to beyond 20 kHz, maintaining precise control of the horn's wide 100° x 100° coverage angle. The horn's rapid flare rate dramatically reduces second harmonic distortion. Coupled to the horn is a constant area phasing plug and a unique annular ring

diaphragm ferrite motor structure.

2426H HF Transducer

The JBL 2426H incorporates a 44mm (1³4 inch) titanium diamond diaphragm. JBL's patented suspension, consisting of a threedimensional diamond pattern, reduces bending stresses in the diaphragm support structure. The resulting performance combines the ruggedness of phenolic and composite-type diaphragms with the outstanding frequency response and low distortion of more fragile aluminum and exotic metal diaphragms.

Like the 2404H, the 2426H compression driver utilizes a Bi-Radial horn, the 2344A. Horizontal coverage is maintained to 16 kHz, while vertical coverage is maintained to 12.5 kHz. The rapid flare rate of the horn results in relatively low distortion at high acoustical power output.

Flat-Front Bi-Radial[™] Horns

The 2380 Series Flat-Front Bi-Radial^{**} horns employed in Concert Series systems have a nominal coverage pattern of 60° horizontal x 40° vertical. The horns provide uniform on and off axis frequency response from 500 Hz to beyond 16 kHz in the horizontal plane, and 2 kHz to 16 kHz in the vertical plane (with constant directivity above 2 kHz).

Exceptionally consistent horizontal dispersion eliminates the midrange narrowing and high frequency beaming typically associated with conventional horn designs. This design and performance greatly simplifies cluster construction by minimizing over-

> lapping and virtually eliminating lobing and comb filter effects.

The horn contours were computer-designed to yield smooth response, low distortion, and even coverage. This design avoids the performance disadvantages of horns that utilize sharp flare transitions and flat sidewalls. The Bi-Radial compound flare configuration provides constant coverage over defined, solid angles. To ensure lightweight, superior strength, and freedom from resonances, the horn bell is constructed of molded structural foam.

2200 Series Low Frequency Loudspeakers

The JBL 2200 Series represents JBL's latest engineering advance in high power, low frequency driver design. The 2200 Series incorporates a direct voice coil-to-air heat dissipation method, called Vented Gap Cooling[™] (VGC), which markedly increases power handling and reduces power compression.



As a voice coil's temperature rises, so does its impedance, causing power compression. Every dB of increase impedance translates into one less dB of output. JBL's exclusive Vented Gap Cooling[™] pumps air through the gap and directly over the voice coil to provide immediate heat transfer and reduced operating temperatures, which in turn reduces power compression. VGC technology delivers twice the power handling and gives you greater output by controlling power compression.

Both magnet weight and flux density have been computeroptimized so that the 2200 Series achieves up to 20% weight reduction and significantly reduced distortion. Radically new cone design improves cone strength and stiffness-to-weight ratio while an improved physical topology allows greater linear excursion for matched displacement and power levels.

The low distortion, high power handling and ruggedness of the 2200 Series make them a natural for tour and fixed sound reinforcement use.



Cabinet Design & Construction.

Concert Series cabinets are designed with the same attention to detail as the components they house. From the sturdy inner core and rugged outer coating to specialized rigging fixtures, Concert Series materials exceed expectations. Selected for both its strength and acoustical integrity, JBL components are cradled in 9-ply void free American birch enclosures. Every cabinet is carefully crafted using uniframe construction, then the joints are glued and stapled to add even more strength to the inner structure.

Like the tough exoskeleton of many insects, Concert Series systems feature a protective outer shell. In a two stage process, a fiberglass coating is blown on and then rolled onto the system's exterior. The coating hardens to form a seamless shell, locking out moisture and eliminating weak seams.

Concert Series systems rely multiple aircraft style pan fittings for extra rigging safety. With steel bolts attached through the inner structure to internal steel reinforcement plates, each hanging point has a load rating of 900 kg (2,000 lbs) at 90° to the fitting. All Concert Series cabinets utilize common rigging fixtures and cables, ensuring total system compatibility. Four-way cutout, rattle-free handles allow the cabinets to be lifted from any direction, making installation and rigging quicker and easier. Like the rigging connectors, all handles are recessed, allowing you to design even tighter cluster alignments.



A nine-ply frame, fortified corners, two coats of fiberglass and reinforced aircraft fittings demonstrate the redundant construction that makes Concert Series systems unique in the industry.



All Concert Series Loudspeaker Systems are properly vented to ensure complete freedom from vent compression over each system's entire dynamic operating range. This ensures extended low frequency power response and very low distortion. Parallel input/output connectors are provided for system throughput.

4850A and 4870A Loudspeaker System Family

The 4850A family and 4870A family are highpower loudspeaker systems providing quality sound reinforcement and reproduction for a broad range of applications. Included in the 4850A family are the 4850A, 4851A, 4852A and the 4853A. The 4870A family consists of models 4870A, 4871A, 4872A and 4873A.

The 4850A and 4870A systems are designed for multi-amplification with low level active dividing networks. Their enclosures contain dual direct radiator loudspeakers and a neodymium 100 mm (4 inch) diaphragm compression driver mounted to a Flat Front

Bi-Radial horn. The 4850A family employs dual 30 cm (12 inch) woofers, while the 4870A family employs 38 cm (15 inch) woofers.

The 4851A, 4853A, 4871A and 4873A are 3-way systems employing external triamplification. In addition to LF

and HF devices, these three-way systems incorporate dual Constant-Coverage Bi-Radial compression VHF transducers. The two-way and three-way systems of both families are available in either 90° (4850A, 4851A,

4870A and 4871A) or 60° (4852A, 4853A, 4872A and 4873A) horizontal coverage versions.

Tuned to 40 Hz, the enclosure of the 4850A family contains two JBL 2206H loudspeakers. The 4870A family is tuned to 40 Hz and mounts dual JBL 2226H loudspeakers.

4842A VLF System

The 4842A is a dual direct radiator very low frequency (VLF) loudspeaker system, designed for a variety of PA and playback applications. The 4842A provides

uniform power response to 30 Hz. The 4842A

loudspeaker systems.

includes two 2241H 460 mm (18 in) woofers. An accessory dolly, model 4870DL, is available to facilitate handling and cartage. The 4870DL is

compatible to all but the

4850A series Concert Series

4845A VLF System

The 4845A provides uniform power response to 30 Hz. Cabinets are identical in size, shape and hanging points to the JBL 4870A family. The uniquely tapered cabinet



enables several 4845A's to be grouped in a tight cluster to take full advantage of mutual coupling effects. Mounted in the enclosure is a 2241H 460 mm (18 inch) woofer.







On the road with Neil Diamond



Sound technology experiences great advances almost daily. Technology that was out of the consumers reach yesterday is in their livingrooms and automobiles today. The result is a more sophisticated audience, demanding higher standards during every listening situation-from car audio to concert sound.

Designed as complete speaker and amplification systems, Concert Series can be purchased off-theshelf and installed in virtually any size venue. Each system incorporates the finest JBL speaker components and electronics into a durable enclosure that is rugged, safe and easy to transport and install.

Perhaps one of the more sophisticated Concert Series Sound Systems is on tour with Neil Diamond. Performing over 300 times per year, Diamond trusts Concert Series sound systems to deliver high performance night after night.

Stan Miller of Maryland Sound Industries, Inc., North Hollywood, California has been providing concert sound for Neil Diamond since 1968. However, it was in 1985 when Stan Miller first incorporated Concert Series loudspeakers into Diamond's sound system.

The Concert Series system Diamond used in 1985, with a few enhancements, is still on the road today. Recent expansion included Concert Series stage monitors and additional amplification systems. All Concert Series Loudspeaker Systems are properly vented to ensure complete freedom from vent compression over each system's entire dynamic operating range. This ensures extended low frequency power response and very low distortion. Parallel input/output connectors are provided for system throughput.

4850A and 4870A Loudspeaker System Family

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and HF devices, these three-way systems incorporate dual Constant-Coverage Bi-Radial compression VHF transducers. The two-way and three-way systems of both families are available in either 90° (4850A, 4851A,

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The 4842A is a dual direct radiator very low frequency (VLF) loudspeaker system, designed for a variety of PA and playback applications. The 4842A provides

uniform power response to 30 Hz. The 4842A

includes two 2241H 460 mm (18 in) woofers. An accessory dolly, model 4870DL, is available to facilitate handling and cartage. The 4870DL is compatible to all but the 4850A series Concert Series

loudspeaker systems.

4845A VLF System

The 4845A provides uniform power response to 30 Hz. Cabinets are identical in size, shape and hanging points to the JBL 4870A family. The uniquely



tapered cabinet enables several 4845A's to be grouped in a tight cluster to take full advantage of mutual coupling effects. Mounted in the enclosure is a 2241H 460 mm (18 inch) woofer.





JBL Concert Series relies on the versatility of building block components. These "off-the-shelf" Loudspeaker Systems can be utilized independently or configured in a wide variety of ways, to meet virtually any requirement: from small clubs and churches to large arenas, concert halls and stadiums.

4825A Compact Bi-Radial™ Speaker System

The JBL 4825A is an ultra-compact two-way loudspeaker system designed to operate as a stand-alone device or as part of a large modular array. Mounted in a



ported, direct radiating enclosure is a 2426J compression driver on a 2344A Bi-Radial[™] Constant-Coverage horn and 2206H 300mm (12 inch) loudspeaker.

The 4825A is ideal for situations requiring full-range reproduction from a compact system, including: music playback, stage monitoring and media presentations.

4828A Bi-Radial™ Stage Monitor

The JBL 4828A is a two-way monitor/loudspeaker system featuring exception-

ally wide and smooth horizontal and vertical coverage. A Model 2426J



compression driver on a 2344A Bi-Radial Constant-Coverage horn, along with a 2206H 300mm (12 inch) loudspeaker are housed in the 4828A's ported, direct-radiating enclosure.

The 4828A is an exceptional stage monitor. The dual-angle profile enables the baffle surface to be aligned at a 45° angle as a footlight monitor, or at a $67^{1/2^{\circ}}$ angle for side fill monitoring. In both mountings, the baffle surface extends to the floor, eliminating the cavity in front of the monitor, resulting in smoother response.

4802A and 4805A Diffraction Monitors

The 4802A is a high-power twoway monitor system employing two 2206H Vented Gap Cooling (VGC) 12 inch low frequency transducers. The 4805A, also a two-way system, contains a single 2226H VGC 15-inch transducer. Both systems rely on the 2450J neodymium compression driver coupled to a new 2396 Diffraction Horn. The wide 160° horizontal pattern of the 2396 horn allows excellent coverage and provides the artist freedom of movement on large stages where a high output monitor is likely to be used.

The 2450J/2396 combinanation produces superb high frequency detail and accuracy plus smooth extended

response – a must for foldback use. Both systems are housed in low profile birth enclosures and are finished with a tough fiberglass coating. The 4802A and 4805A can be angled at either 45° and 75° from the floor. JBL Concert Series Speaker Systems are not compromised by the electronics that drive them. Concert Series Rack Assemblies feature JBL/UREI's most versatile dividing networks and amplification systems. These complete rack systems are pre-wired and pre-tested to ensure the fastest and most efficient set-up.

5235 Electronic Frequency Dividing Network

The 5235 Frequency Dividing Network is integral to providing Concert Series with a cleaner signal from the power source directly to individual loudspeakers. The 5235 is a dual-channel unit. Multiple units are used to provide the individual custom transitions between

9922, 9942

The 9922 and 9942 electronic rack assemblies are two-channel, two-way amplification systems. The 9922 is the

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fundamental Concert Series rack assembly consisting of (1) 6260 high frequency amp-

lifier, (1) 6290 low frequency amplifier and (1) 5235 dual chan-

nel 800 Hz electronic crossover with high pass filters and power response correction. The 9942 is identical to the 9922 with an additional 6290 amplifier driving the very low frequency range.

By adding an additional crossover and a 6215 very high frequency amplifier, the two-way 9922 and 9942 racks are upgraded to three-way 9922T and 9942T amplification systems.

9923, 9943

The 9923 and 9943 electronic rack assemblies are two-channel, three-way amplification systems. Building on the standard 9922 rack the 9923 includes



an additional 6290 amplifier and 5235 80 Hz crossover. The configuration of the 9943 is identical to the 9923 with the addition of a 6290 amplifier (for a total of 3).

Four-way "T" versions (9923T and 9943T) are produced by adding a 7 kHz crossover and a 6215 very high frequency amplifier to the standard 9923 and 9943 systems.



transducer elements within a Concert Series system.

M. Hanner

The crossover frequency is determined by inserting a specially designed circuit card into each channel. Individual crossover cards are custom tailored for specific Concert Series components and systems. These cards provide specifically tailored crossover slopes, equalization and power response correction. The dividing network also provides high-pass protection filtering and equalization.

6200 Series Power Amplifiers

JBL 6200 Series Power Amplifiers are rugged and roadworthy, and can handle highly reactive loads with ease. They are conservatively rated (per channel) as follows: 6215 – 45 W; 6260 – 300 W and 6290 – 600 W. And that's full

band width, low distortion power all day long.

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Concord Pavilion - Concord, California

JBL components were instrumental in transforming the "bouse PA" from a dirty word into something that sounds great. JBL Concert Series systems and Concert Series components are installed around the world, from small clubs and theaters to major arenas, concert halls and stadiums. The Concord Pavilion, Concord, California, is a unique concert hall. The pavilion features five distinct seating areas, two reserved seating sections under the huge roof and three lawn seating areas outdoors.

The number of separate seating areas provided a unique challenge. Two reserved sections, which combine to surround the circular stage, are serviced by five Concert Series clusters suspended in a circular array. While the sound for each outdoor area is provided by two dedicated clusters per section.

The complete system is composed of (56) 4850 Loudspeaker Systems, (23) 4842 Low Frequency Systems and (23) 4825 Compact Bi-Radial[™] Speaker Systems. The system also includes a total of 74 JBL/UREI 6290 power amplifiers with a total maximum output of 88,800 watts. Equalization for the Pavilion's eight zones is covered by JBL/UREI 5549A Graphic Equalizers.

4925A, 4926A and 4927A Systems

The 4925A system consists of (2) 4825A loudspeaker systems, (1) 9922 electronics rack and (2) 3850 15m (50 ft.) loudspeaker connecting cables. The 4925A is an ideal live reinforcement system for small clubs and as a "starter" system with future expansion in mind.

The 4926A is identical to the 4925A, with two additional 4825A loudspeakers (4 total) and (2) 3805 loudspeaker cables. With more than 180° of nearly seamless horizontal coverage throughout the 4825A's wide frequency range, the 4926A configuration is ideally suited for wide coverage angle reinforcement applications. Narrowing the splay angle results in increased sound pressure levels along the axis of the array, which is useful in environments that are deeper than they are wide.

The 4927A employs (8) 4825A loudspeaker systems and the 9942 electronics rack. The 4825A loudspeakers may be stacked and splayed in many different array configurations adapting to a wide variety of applications, installation environments and audio production requirements. For reinforcement applications, four 4825A's may be stacked in groups of two on either side of the stage for narrowed vertical coverage, or splayed end-to-end for wide horizontal coverage. The 4927A includes (4) 15 m (50 ft.) model 3850 and (4) 1.5 m (5 ft.) model 3805 loudspeaker cables.

4945A and 4946A Systems

The 4945A includes (2) 4825A loudspeaker systems, (2) 4845A VLF loudspeaker systems, the 9923 electronics rack, (2) 3850 15 m (50 ft.) and (2) 3805 1.5 m (5 ft.) loudspeaker cables. The 4945A is ideal for sound reinforcement in small clubs with keyboard synthesizers and small to medium discos.

The 4946A combines (4) 4825A and (2) 4842A loudspeakers with the 9923 equipment rack to deliver a compact sound system of very high output capability and great versatility. Depending upon the application, the 4825A's can be arrayed for wide or narrow coverage. The 4842A's can be arrayed, as shown, for best coupling, or split to suit the installation environment.

Loudspeaker cables are included in every system: The 4945A includes (2) model 3850 15 m (50 ft.) and (2) model 3805 1.5 m (5 ft.) loudspeaker cables, the 4946A incorporates (4) model 3850 and (4) model 3805's. Optional accessories include the MT4612 tripod stands (shown) and the 9916RC road case/dolly for the electronics rack.





4921A and 4941A Systems

The 4921A is a basic two-way system, consisting of (2) 4850A (90°) or (2) 4852A (60°) main loudspeakers, (1) 9922 equipment rack and (2) 3850, 15 m (50 ft.) loudspeaker cables. Applications for the 4921A include reinforcement and music playback in medium-sized clubs, halls, churches and auditoriums.

The system is also ideal for front and side fill in large concert systems, and as a beginning investment toward the development of a full-scale touring concert system. An additional 312 mm (12¹/₄ inch) of rack space provide easy expansion of the 9922 equipment rack, and the system.

The 4941A expands upon the basic 4921A system to include four 4850A or 4852A two-way loudspeaker systems. The 4941A is powered by the 9942 electronics rack, which includes two channel signal processing and electronic crossover equipment, and 2700 watts of available power.

The 4921TA and 4941TA are three-way versions of the 4921A and 4941A. They incorporate two additional VHF transducers per loudspeaker, 2 channels of three-way signal-processing crossovers and an additional VHF power amplifier.

4924A and 4944A Systems

The 4924A adds a pair of 4845 VLF loudspeakers, an additional crossover-processor and power amplifier to the basic 4921A configuration. The result is a three-way system capable of extended low frequency response at high output levels for medium-sized venues. The 4924A comes equipped with (4) 3850 15 m (50 ft.) and (2) 3805 1.5 m (5 ft.) loud-speaker cables.

The 4924TA is a complete four-way sound system. It's identical to the 4924A with the addition of two JBL 2404H VHF transducers and additional two channel electronic crossover and power amplifier.

For medium and large venues, the 4944A consists of four main loudspeaker systems and two 4842A very low frequency loudspeakers. Like other 4850A systems, the 4944A system can be ordered with either 90° horizontal coverage main loudspeakers (4850A) or 60° horizontal coverage units (4852A).

The 9943 electronics rack includes two channel three-way crossovers and 3900 watts of amplifier power. The 4944A comes equipped with (4) 15 m (50 ft.) 3850 and (2) 1.5 m (5 ft.) 3805 loudspeaker connecting cables.

The four-way 4944TA is identical to the 4944A with the addition of (2) VHF transducers per loud-speaker and two more channels of 4-way crossover plus amplifiers. The system is ideal for reinforcement of wide-range programs including keyboard synthesizers, organs and drums. It is well-suited for a wide variety of venues, including large clubs, auditoriums, churches and medium-sized outdoor applications.









4922A and 4942A Systems

The JBL 4922A and 4942A are complete twochannel, two-way loudspeaker and amplification systems. With the addition of source and mixing equipment the 4922A and 4942A are ready to operate.

The 4922A loudspeaker/amplification system includes (2) JBL 4870A loudspeaker systems and (2) JBL 3850 15 m (50 ft.) loudspeaker cables. Signal processing consists of (1) JBL/UREI 6260 power amplifier (HF), (1) JBL/UREI 6290 power amplifier (LF) and (1) JBL/UREI 5235 dual channel electronic crossover with high-pass filtering, 800 Hz crossover points and power response correction.

The 4942A loudspeaker/amplification system includes (4) JBL 4870A loudspeaker systems and (4) JBL 3850 15 m (50 ft.) loudspeaker cables. Signal processing consists of (1) JBL/UREI 6260 power amplifier (HF), (2) JBL/UREI 6290 power amplifier (LF) and (1) JBL/UREI 5235 dual channel electronic crossover with high-pass filtering, 800 Hz crossover points and power response correction.

4923A and 4943A Systems

The JBL 4923A and 4943A are complete two-channel, three-way loudspeaker and amplification systems. The 4923A loudspeaker/amplification system includes (2) JBL 4870A and (2) JBL 4845A loudspeaker systems, (2) JBL 3850 15 m (50 ft.) and (2) 3805 1.5 m (5 ft.) loudspeaker cables. The electronics rack consists of (1) JBL/UREI 6260 power amplifier (HF), (2) JBL/UREI 6290 power amplifiers (one LF and one VLF) and (2) JBL/UREI 5235 dual channel electronic crossovers with high-pass filtering, 80 Hz and 800 Hz crossover points and power response correction.

The 4943A loudspeaker/amplification system includes (4) JBL 4870A and (4) JBL 4845A loudspeaker systems, (4) JBL 3850 15 m (50 ft.) and (4) 3805 1.5m (5 ft.) loudspeaker cables. The electronics rack consists of (1) JBL/UREI 6260 power amplifier (HF), (3) JBL/UREI 6290 power amplifiers (two LF and one VLF) and (2) JBL/UREI 5235 dual channel electronic crossovers with high-pass filtering, 80 Hz and 800 Hz crossover points and power response correction.

For each system there is an optional "T" version, 4922TA, 4942TA, 4923TA and 4843TA. With the addition of two VHF transducers per loudspeaker the 4922A and 4942A are upgraded from two-way to three-way systems. And the 4923A and 4943A are upgraded from three-way to four-way systems. In addition to its standard complement of signal processors, the electronics rack of the "T" versions features a two-channel 7 kHz crossover processor and a VHF power amplifier.

Concert Series systems are meticulously prewired, thoroughly tested and ready for immediate use. All Concert Series Loudspeaker systems are equipped with certified rigging hardware, and accessories such as road cases and dollies are available for touring applications.



| Speaker System | Frequency Response (±3 dB) | Power Capacity (1) | Maximum SPL (2) | Coverage Angles (-6 dB, Nom.) | Nominal Impedance | Dimensions H-W-D, cm (in) | Weight kg (lbs.) |
|-------------------|----------------------------------|-----------------------------------|-----------------------|-------------------------------------|-------------------------------|------------------------------------|---------------------|
| 4802A | 55 Hz - 17 kHz | LF: 1200W HF: 150W | 129 dB | 160°Hx40°V | LF: 4Ω HF: 16Ω | 45x82x59 (17.9x32.4x23.3) | 56 (123) |
| 4805A | 50 Hz - 17 kHz | LF: 600W HF: 150W | 127 dB | 160°Hx40°V | LF: 8Ω HF: 16Ω | 45x65x59 (17.9x255x23.3) | 43 (95) |
| 4825A | 70 Hz - 17.5 kHz | LF: 600W HF: 70W | 127 dB | 100°Hx100°V | LF: 8Ω HF: 16Ω | 64x36x46 (25.1x14.3x14) | 29.5 (65) |
| 4828A | 70 Hz - 17.5 kHz | LF: 600W HF: 70W | 127 dB | 100°Hx100°V | LF: 8Ω HF: 16Ω | 36.5x63.8x38.4 (14.4x25.1x15.1) | 29.5 (65) |
| 4842A | 25 Hz - 250 Hz | 1200W | 131 dB | - | 4Ω | 126x75x62 (49.5x29.5x24.5) | 124 (272) |
| 4845A | 25 Hz - 250 Hz | 600W | 125 dB | — | 8Ω | 126x75x50 (49.5x29.5x19.8) | 77 (170) |
| 4850A | 50 Hz - 17 kHz | LF: 1200W HF: 150W | 133 dB | 90°Hx40°V | LF: 4Ω HF: 16Ω | 99x62x44 (39x24.4x17.3) | 49 (108) |
| 4851A | 50 Hz - 19 kHz | LF: 1200W HF: 150W VHF: 80W | 133 dB | 90°Hx40°V | LF: 4Ω HF: 16Ω VHF: 16Ω | 99x62x44 (39x24.4x17.3) | 54 (118) |
| 4852A | 50 Hz - 17 kHz | LF: 1200W HF: 150W | 135 dB | 60°Hx40°V | LF: 4Ω HF: 16Ω | 99x62x44 (39x24.4x17.3) | 49 (108) |
| 4853A | 50 Hz - 19 kHz | LF: 1200W HF: 150W VHF: 80W | 135 dB | 60°Hx40°V | LF: 4Ω HF: 16Ω VHF: 16Ω | 99x62x44 (39x24.4x17.3) | 54 (118) |
| 4870A | 45 Hz - 17 kHz | LF: 1200W HF: 150W | 135 dB | 90°Hx40°V | LF: 4Ω HF: 16Ω | 126x75x50 (49.5x29.5x18.8) | 85 (188) |
| 4871A | 45 Hz - 19 kHz | LF: 1200W HF: 150W VHF: 80W | 135 dB | 90°Hx40°V | LF: 4Ω HF: 16Ω VHF: 16Ω | 126x75x50 (49.5x29.5x18.8) | 90 (198) |
| 4872A | 45 Hz - 17 kHz | LF: 1200W HF: 150W | 137 dB | 60°Hx40°V | LF: 4Ω HF: 16Ω | 126x75x50 (49.5x29.5x18.8) | 85 (188) |
| 4873A | 45 Hz - 19 kHz | LF: 1200W HF: 150W VHF: 80W | 137 dB | 60°Hx40°V | LF: 4Ω HF: 16Ω VHF: 16Ω | 126x75x50 (49.5x29.5x18.8) | 90 (198) |

(1) For low frequency (LF) devices, power capacity is continuous pink noise power (with 6 dB crest factor), per AES standard. For high frequency (HF) and very high frequency (VHF) devices, power capacity is for continuous program power, which is 3dB greater than continuous pink noise power (with 6 dB crest factor), per AES standard. Continuous pink noise power and continuous program power are conservative expressions of the transducer's ability to handle typical speech and music program material.

(2) Maximum SPL is for continuous program, translated to 1 meter equivalent.

| System | Main Loudspeakers | VLF Loudspeakers | Electronics Rack Assy. | Frequency Response (±3 dB) | Maximum SPL ⁽¹⁾ | Amplifier Power ⁽²⁾ |
|--------|----------------------|---------------------|---------------------------|-------------------------------|-------------------------------|-----------------------------------|
| 4925A | (2) 4825A | - | 9922 | 70 Hz to 17.5 kHz | 127 dB | 750 W |
| 4926A | (4) 4825A | - | 9922 | 65 Hz to 17.5 kHz | 132 dB | 1,500 W |
| 4927A | (8) 4825A | _ | 9942 | 60 Hz to 17.5 kHz | 137 dB | 3,000 W |
| 4945A | (2) 4825A | (2) 4845A | 9923 | 30 Hz to 17.5 kHz | 130 dB | 1,350 W |
| 4946A | (4) 4825A | (2) 4842A | 9923 | 25 Hz to 17.5 kHz | 135 dB | 2,700 W |

| System | Main Loudspeakers | VLF Loudspeakers | Electronics Rack Assy. | Frequency Response (±3 dB) | Maximum SPL ⁽¹⁾ | Amplifier Power ⁽²⁾ |
|--------|----------------------|---------------------|---------------------------|-------------------------------|-------------------------------|-----------------------------------|
| 4921A | (2) 4850A (4852A) | _ | 9922 | 50 Hz to 16 kHz | 133 dB (135 dB) | 1,350 W |
| 4921TA | (2) 4851A (4853A) | | 9922T | 50 Hz to 19 kHz | 133 dB (135 dB) | 1,450 W |
| 4941A | (4) 4850A (4852A) | = | 9942 | 45 Hz to 16 kHz | 138 dB (140 dB) | 2,700 W |
| 4941TA | (4) 4851A (4853A) | | 9942T | 45 Hz to 19 kHz | 138 dB (140 dB) | 2,800 W |
| 4924A | (2) 4850A (4852A) | (2) 4845A | 9923 | 30 Hz to 16 kHz | 133 dB (135 dB) | 1,950 W |
| 4924TA | (2) 4851A (4853A) | (2) 4845A | 9923T | 30 Hz to 19 kHz | 133 dB (135 dB) | 2,050 W |
| 4944A | (4) 4850A (4852A) | (2) 4842A | 9943 | 25 Hz to 16 kHz | 138 dB (140 dB) | 3,900 W |
| 4944TA | (4) 4851A (4853A) | (2) 4842A | 9943T | 25 Hz to 19 kHz | 138 dB (140 dB) | 4,000 W |

| System | Main Loudspeakers | VLF Loudspeakers | Electronics Rack Assy. | Frequency Response (±3 dB) | Maximum SPL ⁽¹⁾ | Amplifier Power ⁽²⁾ |
|--------|----------------------|---------------------|---------------------------|-------------------------------|-------------------------------|-----------------------------------|
| 4922A | (2) 4870A (4872A) | - | 9922 | 45 Hz to 16 kHz | 135 dB (137 dB) | 1,350 W |
| 4922TA | (2) 4871A (4873A) | · | 9922T | 45 Hz to 19 kHz | 135 dB (137 dB) | 1,450 W |
| 4923A | (2) 4870A (4872A) | (2) 4845A | 9923 | 30 Hz to 16 kHz | 135 dB (137 dB) | 1,950 W |
| 4923TA | (2) 4871A (4873A) | (2) 4845A | 9923T | 30 Hz to 19 kHz | 135 dB (137 dB) | 2,050 W |
| 4942A | (4) 4870A (4872A) | _ | 9942 | 40 Hz to 18 kHz | 140 dB (142 dB) | 2,700 W |
| 4942TA | (4) 4871A (4873A) | - | 9942T | 40 Hz to 19 kHz | 140 dB (142 dB) | 2,800 W |
| 4943A | (4) 4870A (4872A) | (4) 4845A | 9943 | 25 Hz to 16 kHz | 140 dB (142 dB) | 3,900 W |
| 4943TA | (4) 4871A (4873A) | (4) 4845A | 9943T | 25 Hz to 19 kHz | 140 dB (142 dB) | 4,000 W |

(1) Maximum SPL is from available amplifier power and calculated to 1m reference.(2) Amplifier power is continuous average sine wave power available into nominal system load impedances.

This chart has been prepared as a guide for selecting Concert Series systems. It indicates the Concert Series complete systems that are appropriate to provide sound coverage for different audience sizes. It is based upon continuous sound pressure levels of 95-100 dB with 10 dB head-room allowance, and is for 'average' acoustical conditions encountered in live performance environments. Actual performance will vary based upon program material, room conditions and loudspeaker placement.

| Complete System | Audience Size (Indoors) | Maximum SPL ⁽¹⁾ | Main Loudspeakers | VLF Loudspeakers |
|--------------------|----------------------------|-------------------------------|------------------------|-------------------------|
| 4921A 4921TA | 400 - 800 | 133 dB 133 dB | (2) 4850A (2) 4851A | - |
| 4922A 4922TA | 500 - 1000 | 135 dB 135 dB | (2) 4870A (2) 4871A | _ |
| 4923A 4923TA | 600 - 1200 | 135 dB 135 dB | (2) 4870A (2) 4871A | (2) 4845A (2) 4845A |
| 4924A 4924TA | 500 - 1000 | 133 dB 133 dB | (2) 4850A (2) 4851A | (2) 4845A (2) 4845A |
| 4925A | 100 - 200 | 127 dB | (2) 4825A | · |
| 4926A | 300 - 600 | 132 dB | (4) 4825A | а С тол о |
| 4927A | 1000 - 2000 | 137 dB | (8) 4825A | |
| 4941A 4941TA | 1000 - 2000 | 138 dB 138 dB | (4) 4850A (4) 4851A | _ |
| 4942A 4942TA | 1500 - 3000 | 140 dB 140 dB | (4) 4870A (4) 4871A | — |
| 4943A 4943TA | • 2000 - 4000 | 140 dB 140 dB | (4) 4870A (4) 4871A | (4) 4845A (4) 4845A |
| 4944A 4944TA | 1500 - 3000 | 138 dB 138 dB | (4) 4850A (4) 4851A | (2) 4842A (2) 4842A |
| 4945A | 200 - 400 | 130 dB | (2) 4825A | (2) 4845A |
| 4946A | 600 - 1200 | 135 dB | (4) 4825A | (2) 4842A |

(1) Maximum SPL is for continuous program input power, translated to 1m equivalent.

Very live spaces – rooms with long reverberation decay times – will require less overall acoustic power to achieve the desired average SPL goals. However, for acceptable intelligibility, substituting loudspeaker systems with greater directivity (ie: 4852-4853, for 4850-4851 or 4872-4873, for 4870-4871) will improve the ratio of direct-to-reverberant sound.

Very dead spaces – rooms with very short reverberation decay times – will need greater acoustic power to meet the SPL criteria.

For outdoor applications, average system SPL may be calculated directly from system performance criteria by inverse square law, after making appropriate headroom allowances. A very rough, but useful approximation is to use one-half of the indoor audience size listed for each system.

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JBL Professional 8500 Balboa Boulevard, Northridge, CA 91329

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