



SOUND POWER SERIES



JBL PROFESSIONAL SPEAKER CABLE

In the six decades since JBL founder James B. Lansing's cinema loudspeaker designs helped make talking pictures popular, sound systems have come a long way. The growth of home entertainment has made audiences more discerning and quality conscious, with higher expectations.

More sophisticated tastes demand better fidelity, more power, greater impact. Listeners have come to expect the same quality from a sound reinforcement system as they get at home. For them, third row center or the dance floor has to sound at least as good as their home listening rooms do. As expectations change, designers are faced with the challenge of building better sound reinforcement systems. JBL has met that challenge with the Sound Power Series.

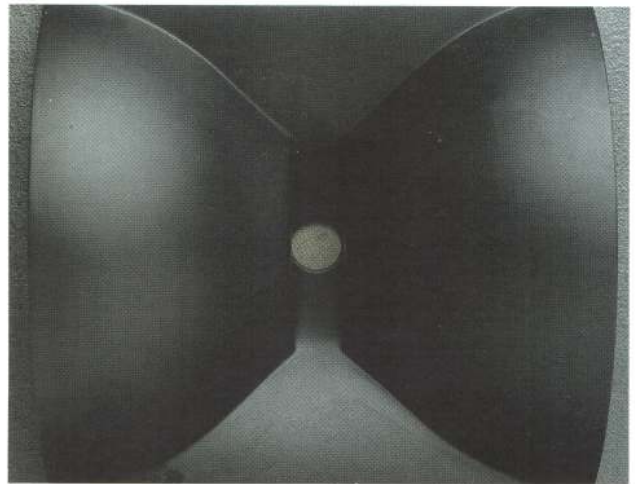
COMPLEX PROBLEMS, SIMPLE ANSWERS

At JBL, we believe simplicity is the key. Our answer to the problem of high quality sound without undue complexity is the Sound Power Series - a completely integrated range of speaker and electronics modules that plug together to create a reinforcement system tailored to your needs - even when your needs change. And all this flexibility is available from a system that's easier to connect than most home systems and can be driven by a single pre-wired rack of electronics.

THE HIDDEN TECHNOLOGY

What goes into a JBL Sound Power Series system? Top quality JBL components, for uncompromisingly true sound; well thought-out and simplified connectors and optional custom cabling, for ease of use from the first performance to the five hundredth; built-in reliability that comes from an understanding of the problems of sound reinforcement in every environment; and over 40 years of JBL experience as the leader in sound reproduction.

Deep inside every Sound Power system is some of the world's most advanced loudspeaker



technology: flat wire coils, Symmetrical Field Geometry, pure titanium diaphragms with diamond surrounds, and Bi-Radial™ horns technology that makes for better, more efficient, compact and reliable systems.

INSTANT SYSTEM

The mass of wires and connectors that has been the hallmark of sound reinforcement systems is a thing of the past. Two-way, three-way or four-way there is a Sound Power Series system pre-wired for most every eventuality, doing away with the problems of reversed phase, misrouted signal and intermittent connections.

THE DRIVING POWER

Power for a standard Sound Power Series system is supplied from a single rack of electronics. The Sound Power rack is loaded with all the JBL/UREI amplifiers and crossovers needed to drive your particular systems, pre-wired and tested. Even the most elaborate system can be up and running in minutes with no mistakes.

FULL RANGE AND UP

The fundamental building blocks of the JBL Sound Power line are two-way vocal and full-range loudspeakers. Progressing from smallest to largest in size, power handling, output SPL capacity and bass performance, all are superb performers. Use them singly, in pairs or in larger clusters - they can be configured in literally dozens of ways to adapt to most reinforcement needs. All are designed for maximum performance in minimum space. For the ultimate in high frequency performance, three-way versions

of the three more powerful cabinets (4750, 4755, 4770) are available using optional JBL ultra-high frequency drivers. Either way, the Sound Power Series requires no extra cabling or connections they're all built in.

FULL RANGE AND DOWN

For every full-range module there are complementary sub-bass units to deliver that extra "kick" bass that's felt as well as heard. With six sub-bass systems to choose from, there is an exact match for your needs and your budget. Just add the extra electronics into the rack and powerful low end is yours. Three modules (4742, 4745, 4748) are tried and true reflex designs, finely tuned to make the most of their 30, 38 or 46 cm (12, 15, or 18 in) high power JBL bass drivers. For the remaining three, JBL took 50-year-old Double Ported theory, added significant improvements made possible by modern transducer technology, and turned it into reality. A unique driver configuration minimizes distortion by cancellation of forces that would ordinarily be transmitted to the cabinet, and ports acting as acoustic filters reduce distortion even further. The result? The Triple Chamber Bandpass (TCB) sub-bass. Louder, deeper, cleaner bass from a smaller box the ultimate in sub-bass sound, to enhance the ultimate in full-range speakers.

DON'T FORGET THE BAND

We didn't want to leave the performers out of the picture, so our team included a stage monitor in the Sound Power line. Rugged and powerful, with a tapered box design that allows it to be used at any of three preferred angles.

DESIGNED FOR THE CONCERT HALL AND BUILT FOR THE ROAD

In keeping with our philosophy, the JBL Sound Power Series is elegantly simple to transport and install, and built to last. Compact angled cabinet design in most vocal and full-range systems means less space is required both in use and on the truck. High density Finnish plywood construction, with added internal bracing for extra rigidity and durability, are just a few

examples of our dedication to making the Sound Power Series capable of standing up to the rigors of use on the road.

Equipment handlers will be happy with the recessed cutout or cutaway carrying handles we've put on all cabinets, sturdy EP-8 and/or XLR-type connectors used for all inputs/outputs, and our comprehensive accessory line of covers and dollies. Installation is made doubly easy with optional integral mounting brackets and pole-mounting hardware. And the classic external grey finish will complement even the most refined venue.

But JBL hasn't stopped there. Our own optional cabling for the larger systems features EP-8 connectors on custom-designed cable with larger wire diameters for higher current devices, such as sub-bass units. Four pairs of conductors (for a total of eight) with increasing cross-sectional areas handle feeds to the ultra-high frequency, compression, bass and sub-bass drivers separately, for optimal performance from the top note to the bottom. The heavy duty PVC jacket is flexible and rejects dirt.

FROM BOARDROOM TO CONCERT HALL

From compact and portable systems for a simple commercial presentation, to multi-speaker clusters with sub-bass for the loudest concert, there is a JBL Sound Power system to suit most every application. And any configuration can be expanded by simply adding extra speakers and electronics. The existing wiring and connections are ready for additions from the day you fit the first speaker, so you never have worry about outgrowing your investment.



In designing the Sound Power Series, every aspect of sound reinforcement for every application was taken into consideration. Whatever your situation involves live classical music at the concert hall or pre-recorded rock'n' roll in a small disco; a speech in a convention hall or a presentation in a company meeting room; touring or permanent installation your needs have been addressed with a wide selection of loudspeakers, cabling, accessories and JBL's tradition of service and excellence.

4716: Our smallest Compact Bi-Radial two-way passive speaker system can be used for vocal reinforcement, house sound in discotheques (together with sub-bass units), or as a stage monitor in any size venue.

4726: Similar to the 4716, the 4726 has wider frequency response and a larger low frequency driver than the 4716, and is actively driven. For exhibitions, presentations, restaurants, discos and clubs, the small size and portability of this and the 4716 makes them ideal for high quality sound reproduction in smaller spaces.

4728: The JBL Sound Power dedicated stage monitor features the same components as the 4726 for exceptional frequency response that performers will appreciate, and a special tapered cabinet design that makes positioning in tight spaces simple. The 4728 may also be wall or stand mounted.

4750: The smallest of three high power full-range systems with tightly controlled dispersion and 2-way (optional 3-way) operation, the 4750 is perfect for large clubs and halls.

4755: The 4755, our mid-sized high power unit, has specifications similar to the 4750 and is available with an optional integral hanging system for use singly or as part of an array.

4770: Featuring the highest power handling, widest frequency response and highest output level capability of our full-range modules, the 4770 is intended for use in the largest concert halls and convention centers.

4742: This smallest of three direct radiating sub-bass units is designed for use with the 4716 system above; the larger 4745 and 4748 can be used with all Sound Power vocal and full-range systems.

4782: Our exclusive TCB design dual-driver sub-bass is intended for use with the 4716 in small clubs, discos and halls; the TCB designs feature lower distortion, higher output, greater efficiency and better frequency response with no tradeoffs.

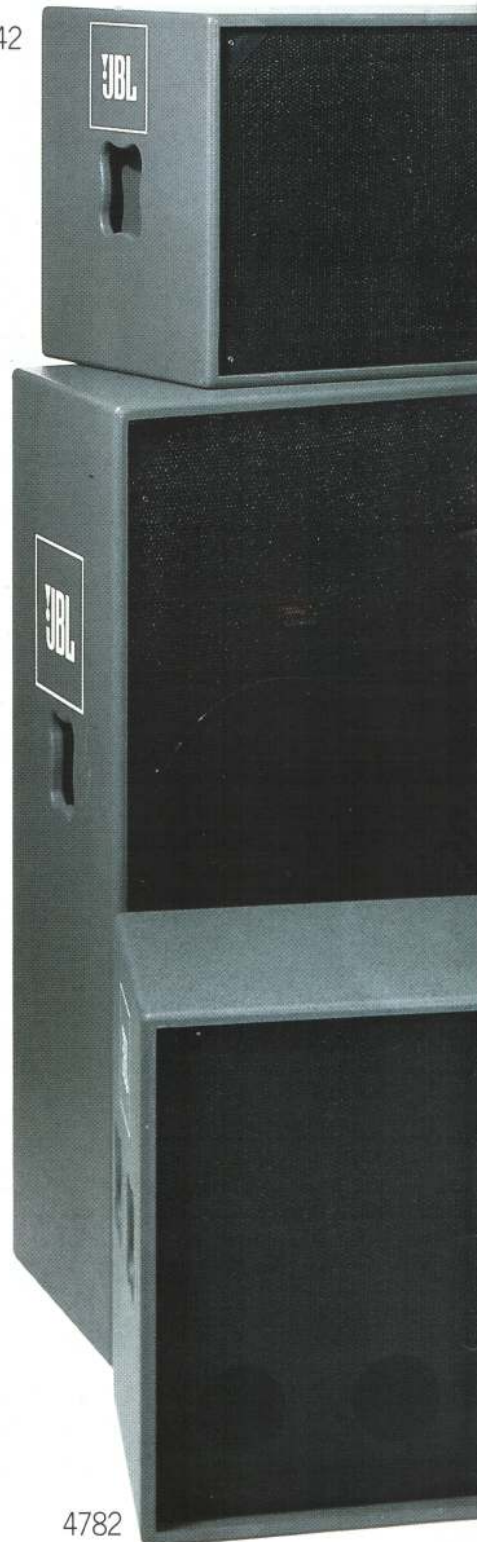
4785: A larger TCB sub-bass module designed for use in medium sized venues, the 4785 has specifications that surpass any comparably sized direct radiator sub-bass. It can be used with all Sound Power vocal and full-range units.

4788: The largest TCB design has the deepest bass response and highest output level and power handling of any of our Sound Power sub-bass systems.

4742

4770

4782





4726



4716



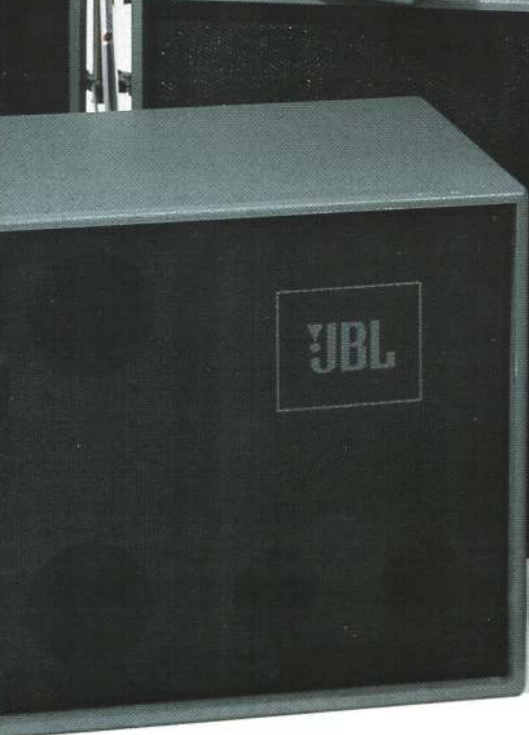
4755



4750



4785



4788



4728



4716 Compact Bi-Radial Speaker System:

The JBL 4716 has an internal passive crossover at 1200 Hz, 250 mm (10 in) low frequency driver, titanium compression high frequency driver, and 100° x 100° dispersion Bi-Radial horn for wide audience coverage in small clubs, discos, boardrooms, and restaurants. It can produce 114 dB of clean, controlled sound at 1 m. Frequency response is 100 Hz to 15 kHz. Three-pin XLR-type input/output connectors link it to additional 4716's and the electronics rack. Its compact size is the result of specially tapered sides. The 4716 can be mounted to walls or fixtures via an optional U-bracket that attaches to the top and bottom. Additionally, a pole-mount opening will accommodate any European standard tripod. The 4716 is ideally paired with the Sound Power 4742 or 4782 sub-bass modules. Cabinet dimensions are 512 mm H x 286 mm W x 280 mm D (20 5/32 x 11 1/4 x 11 in).



4726 Compact Bi-Radial Speakers System:

Only fractionally larger than the 4716, the 4726 has a broader frequency response specification (70 Hz to 17.5 kHz) and a 300 mm (12 in) low frequency driver, and can easily fill larger clubs and auditoriums. It shares the 4716's tapered cabinet design, is fitted with a 100° x 100° horn and titanium diaphragm high frequency compression driver, and will produce 117 dB at 1 m. Actively driven, with a passive network option, the 4726 uses the same multi-way EP-8 connectors common to most modules in the Sound Power Series. Mounting options are the same as for the 4716. For greater ultra-low frequency output, the Sound Power 4745 or 4785 sub-bass units are recommended. Cabinet dimensions are 646 mm H x 362 mm W x 356 D (25 3/8 x 14 1/4 x 14 in).



4728 Bi-Radial Stage Monitor Speaker System:

Utilizing the same 300 mm (12 in) bass driver and horn/compression driver combination as the 4726 and sharing the same specifications, the 4728 is designed specifically for stage foldback purposes. A uniquely shaped cabinet (646 mm H x 438 mm W x 302 mm D) (25 7/16 x 17 1/4 x 11 13/16 in) makes possible three different floor mounting angles 22.5, 45 and vertical. With the same wide band, dynamic performance of the 4726, the 4728 delivers a well controlled output pattern for maximum level with reduced risk of feedback. A stand mount adapter on the bottom plate makes the 4728 suitable for use as a side fill monitor, and the 4726's wall mount adapter may also be fitted.

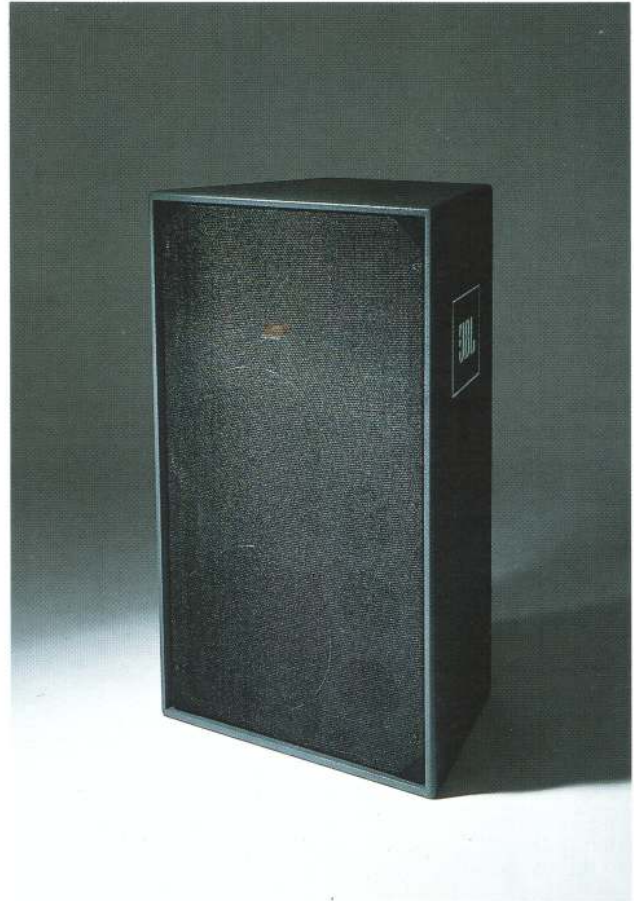


4755 High Power Two-Way Full-Range System:

With the same 300 mm (12 in) bass drivers, horn/compression driver combination, and specifications as the 4750, the 4755 adds the option of U-bracket mounting by integral hanging adapters located in the side panels. While the 4750's trapezoidal shape makes it appropriate for use on stage, the rectangular 4755, measuring 680 mm H x 850 mm W x 530 mm D (26 3/4 x 34 1/2 x 20 7/8 in) is designed for mounting in permanent installations. For this purpose, the 4755 has a safety fixture built into the back panel that will allow a steel cable to be looped through for extra support.

4750 High Power Two-Way Full-Range System:

The 4750 has the same dual bass driver and active two-way (optional three-way) configuration found in all three of the higher-powered Sound Power Series full-range modules. Its compact cabinet design, measuring only 996 mm H x 620 mm W x 440 mm D (38 11/16 x 24 7/16 x 17 5/16 in), and maximum output of 130 dB at 1 m make it ideal for arenas and large venues requiring high sound output in limited space. The 4750 is fitted with two high power 300 mm (12 in) cone transducers, a 100 mm (4 in) titanium diaphragm high frequency compression driver, a 90° x 40° Bi-Radial horn, and EP-8 connectors, and features frequency response of 50 Hz to 17 kHz. The 4750 may be used with Sound Power 4785, 4788, 4745 and 4748 sub-bass modules. Ultra-high frequency drivers, to increase frequency response to 20 kHz, and a passive dividing network are optional, along with a protective cover and combined cover/wheeled dolly.



4770 High Power Two-Way Full-Range System:

For the greatest output and power handling requirements, the 4770's dual 380 mm (15 in) bass drivers perform smoothly and reliably, filling even the largest venues with pure, undistorted sound. Specifications include 40 Hz to 16 kHz frequency response, 800 watt power handling capacity, 132 dB maximum output level at 1 m, 90° x 40° Bi-Radial horn, EP-8 connectors, and a 100 mm (4 in) titanium diaphragm high frequency compression driver. It is pre-wired for 3-way operation with optional ultra-high frequency drivers and frequency dividing network. The 4770 is ideally paired with the 4748 or 4788 sub-bass units. With cabinet sides tapered inward by 15°, several 4770's automatically form a wide dispersion cluster. A cover and a combined cover/dolly are optional. Cabinet size is 1250 mm H x 750 mm W x 533 mm D (49 3/16 x 29 1/2 x 23 in).





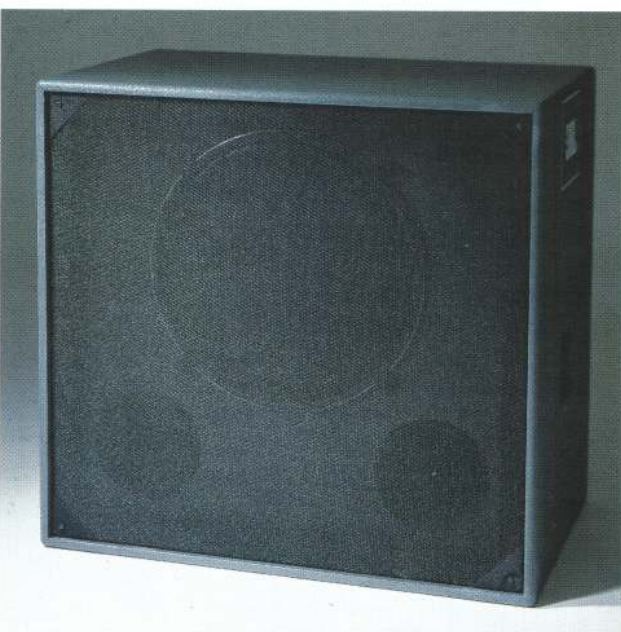
4742 Dual 300 mm (12 in) Direct Radiator Subwoofer System:

As a complement to the Sound Power 4716 and 4726, the 4742 will extend overall frequency response down to 35 Hz. The smallest of three direct radiator designs, its dual 300 mm (12 in) drivers will output 122 dB at 1 m. As sub-bass units, all three direct radiators should be operated in the recommended crossover frequency range between 80 and 250 Hz with a 30 Hz low cut, but response up to 800 Hz makes them perfect for enhancing the low midrange when used with a higher crossover frequency. XLR-type connectors are fitted. Cabinet dimensions are 500 mm H x 850 mm W x 530 mm D (19 11/16 x 33 1/2 x 20 7/8 in); power handling is 700 W.



4745 Dual 380 mm (15 in) Direct Radiator Sub-Bass System:

A mid-sized direct radiator sub-bass unit for use with the 4716 and 4726 Sound Power vocal and full-range units, the 4745 has dual 380 mm (15 in) drivers, maximum output level of 126 dB at 1 m, and power handling capacity of 800 W. It will accurately reproduce low frequencies down to 35 Hz. It features both EP-8 and XLR-type connectors and has compact cabinet dimensions of 800 mm H x 850 mm W x 530 mm D (19 11/16 x 33 1/2 x 20 7/8 in).



4748 460 mm (18 in) Direct Radiator Sub-Bass System:

The largest of the direct radiator sub-bass designs, the 4748 has a single 460 mm (18 in) driver that will cleanly reproduce bass frequencies down to 35 Hz with maximum output level of 125 dB at 1 m. It is intended for use with the 4750, 4755, and 4770 high power full-range modules. The 4748 is fitted with both EP-8 and XLR-type connectors, has a cabinet size of 800 mm H x 850 mm W x 530 mm D (31 1/2 x 33 1/4 x 20 7/8 in), power handling capacity of 600 W, and features an optimal wood cover and combination cover/dolly for driver protection and transportation ease.

4782 Dual 300 mm (12 in) Triple Chamber Band-pass Sub-Bass System:

Designed for use with the 4716 and 4726 vocal-range module, the 4782 is the smallest of three active Triple Chamber Bandpass (TCB) sub-bass designs in the Sound Power Series. All three offer up to twice the output - in the lowest octave - of a standard ported enclosure of equivalent volume, delivering more sound in less space. In the 4782, two 300 mm (12 in) drivers produce low frequencies down to 35 Hz with maximum output level of 126 dB at 1 m and power handling capacity of 600 watts. XLR-type connectors are fitted. Higher order harmonic distortion elements are acoustically filtered, preventing audible distortion. The recommended crossover frequencies of all TCB designs are in the range from 80 to 100 Hz. A heavy duty protective wooden cover and a combination cover/dolly are available as options. Cabinet dimensions are 620 mm H x 1050 mm W x 550 mm D (24 3/8 x 41 3/8 x 21 5/8 in).



4785 Dual 380 mm (15 in) Triple Chamber Band-pass Sub-Bass System:

Next up in size from the 4782, the 4785 features dual 380 mm (15 in) drivers, EP-8 and XLR-type connectors for compatibility with all Sound Power Series vocal and full-range systems, frequency response down to 30 Hz, maximum output of 130 dB at 1 m, and power handling capacity of 800 watts. Cabinet size is 750 mm H x 1200 mm W x 550 mm D (29 1/2 x 47 1/4 x 21 5/8 in); optional covers and combined cover/dollies round out the system.

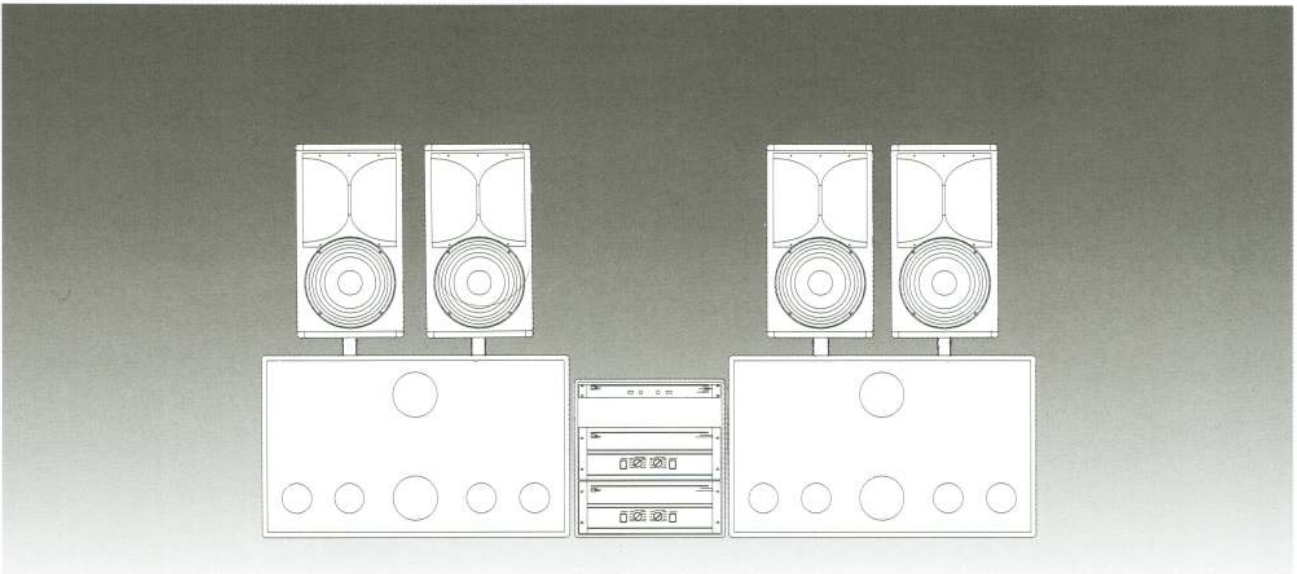


4788 Dual 460 mm (18 in) Triple Chamber Band-pass Sub-Bass System:

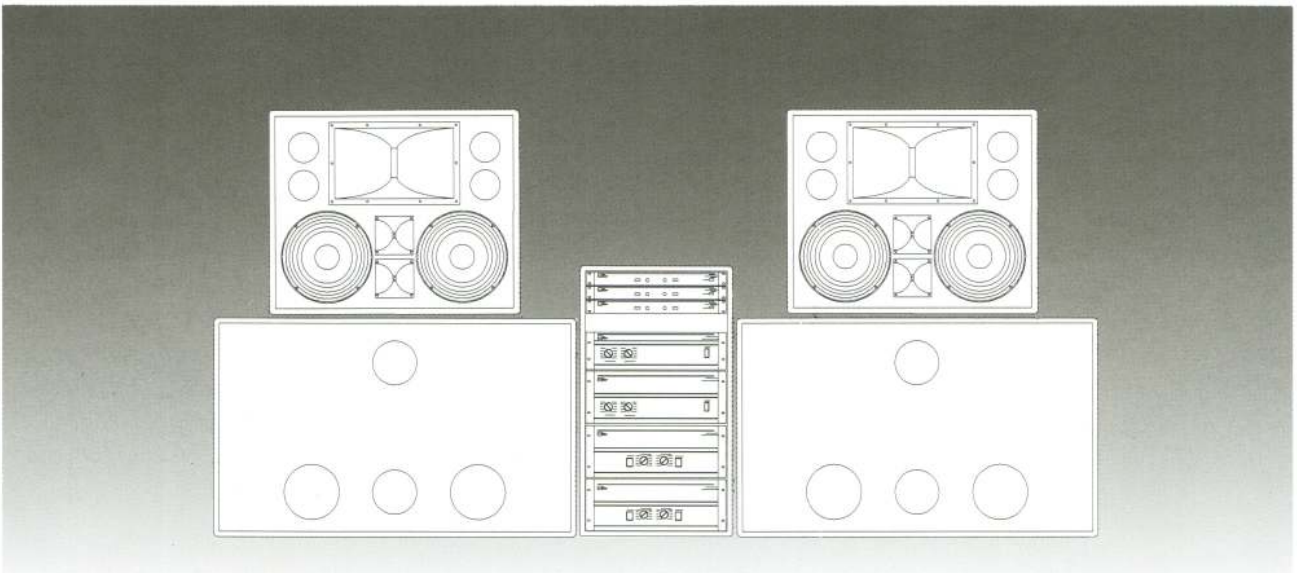
The largest of the TCB designs, with dimensions of 750 mm H x 1500 mm W x 800 mm D (29 1/2 x 59 x 31 1/2 in), the 4788 offers the most powerful specifications of any Sound Power Series sub-bass unit, with smooth power handling of up to 1200 watts, and maximum output of 131 dB at 1 m from two 460 mm (18 in) drivers. Frequency response down to 28 Hz. EP-8 and XLR-type connectors provide compatibility with all Sound Power vocal and full-range systems, and a choice of wooden protective cover or combination cover/dolly is available as an option.



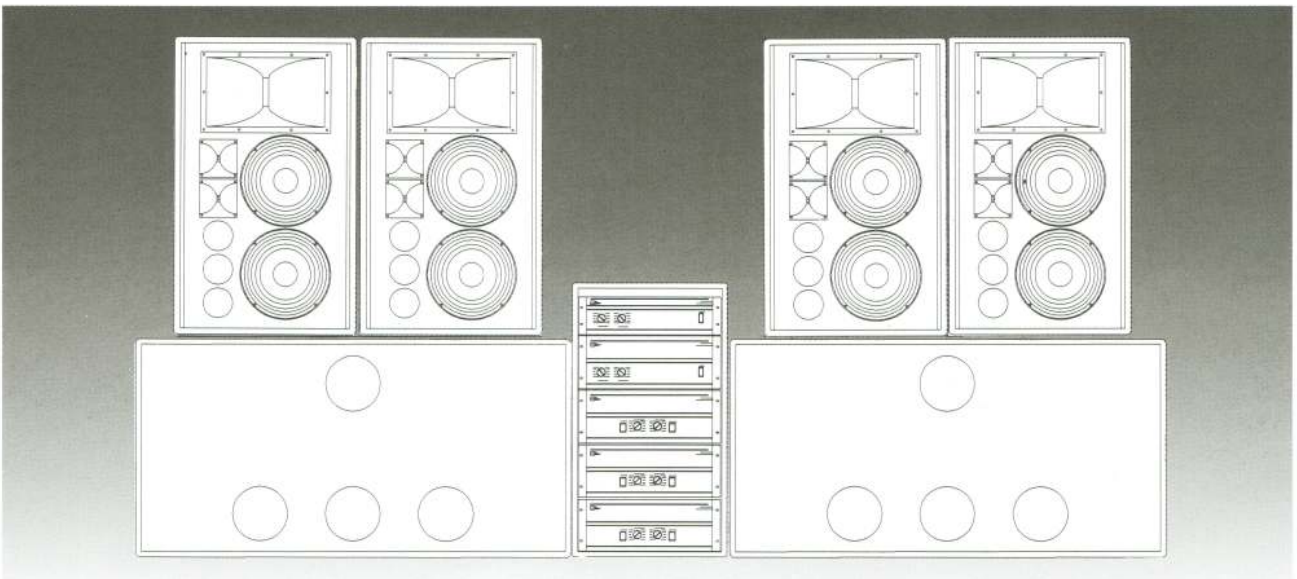
A major feature is the ability to combine the individual products into systems. This provides a number of solutions for different applications. Shown below are three examples of such solutions - many more are possible. Please contact your dealer or the JBL distributor for more information.



Suggested system for small touring PA or small fixed installation: 4 times 4726, 2 times 4782, 2 times 6290 amplifier, 1 5235 electronic crossover. Total amplifier power in 4 ohm is 2400 watt.



Suggested system for medium-sized fixed installation: 2 times 4755, 2 times 4785, 1 6230 amplifier, 1 6260 amplifier, 2 times 6290 amplifier, 3 times 5235 electronic crossover. Total amplifier power in 4 ohm is 3300 watt.



Suggested system for PA use: 4 times 4750, 2 times 4788, 1 6230 amplifier, 1 6260 amplifier, 3 times 6290 amplifier. Total amplifier power in 4 ohm is 4500 watt.

With the JBL Sound Power family, creating a reinforcement system of excellence is simplicity itself. The key building blocks are the vocal and full-range speakers. With six different JBL Sound Power modules to choose from, there is the flexibility to develop a system for every audience size and type. Within its output and bandwidth constraints, the smallest system sounds as good as the biggest, and when extra level and bass response is required, there is a broad line of sub-bass units that can be added. And you can be assured of a system that will continue to meet your needs for a long time: expandability is as easy as running a single cable and adding the necessary electronics to your rack.

Titanium diaphragm compression drivers, standard throughout, have a number of advantages over aluminium types, including improved high frequency response as well as greater reliability and longer lifetime, the result of lowered susceptibility to stress.

Each 100° x 100° system in the Sound Power line employs vents hidden behind its Bi-Radial horn to increase low frequency response, minimize system size and improve portability.

While the three JBL 4740 series direct radiator sub-bass designs produce the tightest, lowest bass ever from a conventionally ported enclosure, the design of our Triple Chamber Bandpass ultra-low frequency systems has its origin fifty years ago, when the theory for a new type of sub-bass enclosure was developed. The quality of the drivers available at that time didn't live up to the potential of the theory, and it was never successfully put into practice. The bandpass design requires drivers with large magnets and high motor strength which were not available. But now, JBL's driver design leadership and manufacturing skills have produced the high quality, high power low frequency transducers needed to make it work to its full potential.

JBL's double-tuned triple chamber design has higher efficiency, deeper response, and reduced driver- and cabinet-generated distortion. "Bandpass" refers to the acoustic filtering of the enclosure vents that result in this type of performance. Each of the three JBL Sound Power 4780 Series TCB systems generates deeper, louder and cleaner low frequencies than a comparably sized ported box.

Every actively driven full-range Sound Power Series system is internally fitted with bypass protection capacitors and two Cannon EP-8 connectors, one for input and the other to loop through to the next speaker in the chain. This multi-way system is pre-wired to carry all the signals, even for 4-way operation. Our custom 8-conductor cable assures maximum performance no matter which arrangement you choose.

Our wide selection of optional bracket- and pole-mounting hardware, as well as covers and stackable combination cover/dollies, anticipate the need of sound engineers to adapt a touring system to different venues night after night. Permanent installations and touring systems alike benefit from tapered cabinets that can easily be positioned in an array or used alone in tight spaces.

JBL quality is built into every Sound Power Series module. High density Finnish birch plywood construction, protective removeable grilles, special grey acid-hardened paint finish, recessed cutout or cutaway handles: all are elements of a system built to look good and work hard. The quality level of every aspect of Sound Power Series design transducers, enclosure, electronics, and cabling is unsurpassed by any competing product line.

For more than four decades, JBL has been at the forefront of loudspeaker design and manufacture, advancing the art of sound reproduction with top-of-the-line equipment for the most demanding applications in every listening environment. This tradition is proudly continued in the Sound Power Series. Visit your JBL dealer and see what over forty years of excellence can do for you.

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.



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