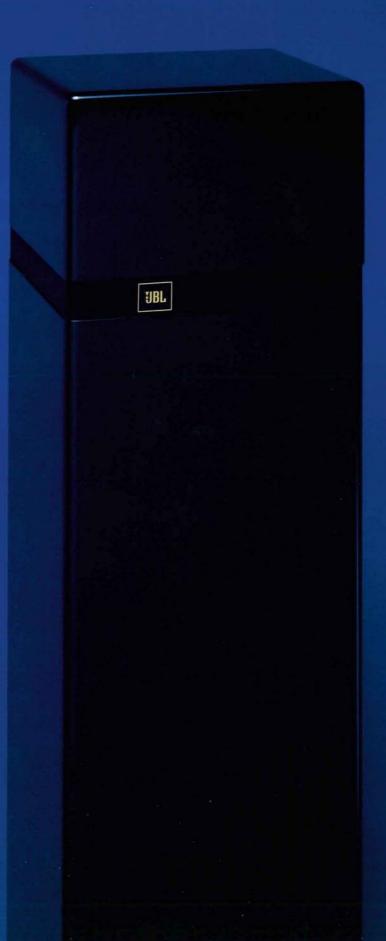
S119 LOUDSPEAKER SYSTEM





To audio professionals, the name JBL means loudspeakers that can be depended on to deliver the finest audio performance day in and day out. JBL is the first choice for recording studios, where loudspeakers are tools used to control the quality of the recordings you hear. JBL cinema loudspeakers help create the excitement of the latest motion pictures. In stadiums, theaters and concert halls around the world, top performers rely on JBL to back them up. While these are good reasons to bring the JBL professional sound into your

home, there is no reason to bring large, industrial looking loudspeakers in. JBL knows that what looks fine in the studio or on stage may not look so fine in your living room.

For over 40 years, JBL loudspeakers have expressed a careful blend of art and science. Products such as the Hartsfield, Paragon, Olympus and Project Everest have become classic examples of fine loudspeakers that double as fine furniture. While large loudspeakers may serve as a focal point in a room, it is sometimes important to be heard and not seen. Accordingly JBL presents the S119, elegant furniture containing serious loudspeaker components.

More Sound, Less Furniture

To create a visually unobtrusive high performance loudspeaker which permits a large degree of placement flexibility, JBL engineers first had to design a unique acoustic system. Most loudspeaker systems are designed to direct the sound they produce toward the listener within a fairly narrow angle or coverage pattern. This approach ensures that reflections from room surfaces are minimized and the stereo image and ambience contained in the recording are recreated

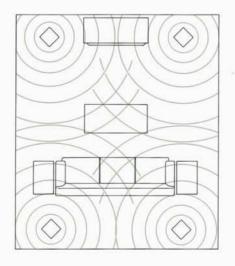




accurately in the listening room. This approach produces best results only when loudspeaker and listener locations can be dictated within narrow limits. If loudspeaker location must be sacrificed in favor of aesthetic considerations, or a larger listening area is desired, or both, loudspeakers that direct sound over a wider coverage angle are required. Loudspeakers that attempt to direct sound in all directions or randomly reflect sound off room surfaces are not acceptable since unpredictable reflections interfere with the stereo image information contained in the recording.

JBL's solution is called expanded coverage. The S119 provides full 360° coverage in the horizontal plane while limiting the vertical coverage angle to avoid unwanted reflections. This system approach allows freedom of placement while offering clear, stable multichannel images for listeners anywhere in the room. The expanded coverage system begins with a 200 mm (8 in) low frequency driver mounted horizontally near the top of a columnar enclosure. Sound from this driver exits the enclosure in a 360° pattern through a grille only 30 mm (1 in) high. Without special acoustic control however, redirecting the sound in this way would result in uneven frequency response and distortion. To

smooth frequency response and prevent resonances, a diffuser with a built-in acoustic filter was designed. (see cutaway). This device is precisely shaped and coated with aquaplas, a material used in the U.S. Space Shuttle to damp vibration. The diffuser also attenuates the high frequency response of the driver acoustically, eliminating the need for an electronic low pass filter. Four high frequency units, one at each enclosure corner, match the pattern of the low frequency driver and extend response



beyond audibility. A sophisticated dividing network coordinates the five drivers and provides protection from accidental electrical overload. A small reflex port located near the base on one enclosure side allows the low frequency driver to deliver solid, extended bass response. Additionally, the S119 is designed to minimize magnetic leakage, allowing placement near video monitors without affecting the picture.

A Sound Performance Everyone Can Live With

Making first-rate sound for the home liveable was the goal of the

S119 project. The creative acoustic design of the system afforded industrial designers a unique opportunity: to design a loudspeaker system free of the constraint of providing a large grille area for components. Designers adapted the acoustic system to a vertical column 254 mm (10 in) square and 1016 mm (40 in) in height, interrupted only by a 30 mm (1 in) grille opening near the top of the enclosure. The small low frequency port is near the floor on one side of the enclosure and the input terminals are located on the bottom panel. The result is a smooth, pleasing classic form that fits any decor, enhanced by a selection of striking finish options. For traditional interiors, the S119 is

available in flawless walnut veneer, hand rubbed to a lustrous finish. To expand your decorating possibilities, the S119 is also available in a range of hand polished high gloss finishes, the result of a six-step painting and polishing procedure performed in JBL's own world class furniture factory.

Whether providing low level background music or as part of a spectacular audio-visual experience, the S119 is proof that when the pro sound comes home, the work clothes are left in the studio.

- High Frequency Unit (One Of Four)
- ② Dividing Network With Overload Protection
- ③ Low Frequency Driver
- ④ Shielding Magnet And Enclosure
- ⑤ Acoustically Absorbent Foam Pad
- Aquaplas Damping Compound
 C
- ⑦ Diffuser With Acoustic Filter

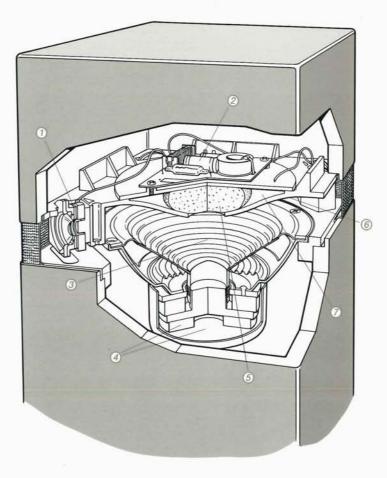
SPECIFICATIONS:

40 Hz to 20 kHz
100 W
86 dB SPL, 2.83 V,
1 m (3.3 ft)
8 ohms
3 kHz
1016 mm x 254 mm
x 254 mm deep
40 in x 10 in
x 10 in deep
9.1 kgs (20 lbs)

¹Rating based on test signal of filtered random noise conforming to international standard IEC 268-5 (pink noise with 12 dB/octave 5000 Hz with a peak-to-average ratio of 6 dB), two hours duration.

*Averaged from 500 to 2.5 kHz.

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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