4850 LOUDSPEAKER SYSTEM FAMILY



FEATURES:

Concert-proven componentry and design configurations

Rugged fiberglass-reinforced construction for touring sound reinforcement applications

45 degree wedge frustum shape for coherent wide angle coverage

8 certified aircraft-type hanging points

60 and 90 degree horizontal coverage versions in two-way and three-way configurations

The 4850 family of modular high-power loudspeaker systems provides quality reinforcement and reproduction for a broad range of applications. Two-way models (4850, 4852) are designed for external biamplification and consist of dual 12 inch direct radiator loudspeakers and a 4 inch diaphragm compression driver mounted to a Bi-Radial[™] Flat-Front horn in a vented enclosure. Three-way models (4851, 4853) employ external triamplification and incorporate dual Bi-Radial[™] Constant-Coverage compression VHF transducers in addition to the LF and HF devices. Both types are available in either 90 degree (4850, 4851) or 60 degree (4852, 4853) horizontal coverage versions.

Cabinetry is crafted from void-free birch plywood, coated with virtually indestructible fiberglass reinforced plastic, fitted with handles and 8 steel reinforced aircraft style pan fittings for hanging. The enclosure is tapered from front to back, forming a 45 degree wedge frustum to enable tight cluster grouping for coherent wide angle coverage.

The ported enclosure, tuned to 50 Hz, mounts two



4850 FAMILY

JBL 2204H loudspeakers. Large ducts allow complete freedom from vent compression over the entire dynamic operating range of the systems. JBL's exclusive Bi-Radial[™] HF and VHF horns assure smooth and uniform coverage to the highest audible frequencies.

SPECIFICATIONS:

Models 4850/4852	
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Components:	2-JBL 2204H low frequency transducers I-JBL 2380 Flat-Front Bi-Radial [™] horn (4850) I-JBL 2385 Flat-Front Bi-Radial [™] horn (4852) I-JBL 2445J compression driver
Frequency range (-10 dB):	40 Hz to 20 kHz
Frequency response (±3 dB):	50 Hz to 16 kHz
Pressure sensitivity:	LF: 98 dB, I w, I m HF: 112 dB, I w, I m (4850) HF: 114 dB, I w, I m (4852)
Power Capacity ¹ :	LF: 600 watts continuous program HF: 150 watts continuous program
Coverage angles (-6 dB points, nom.):	90 degrees horizontal (4850) 60 degrees horizontal (4852) 40 degrees vertical
Maximum SPL (1m, continuous pgm.):	130 dB (4850) 132 dB (4852)
Nominal impedance:	LF: 4 ohms HF: 16 ohms
Models 4851/4853	
Components:	2-IBL 2204H low frequency transducers 1-IBL 2380 Flat-Front Bi-Radial [™] horn (4851) 1-IBL 2385 Flat-Front Bi-Radial [™] horn (4853) 1-IBL 2445J compression driver 2-IBL 2404H Constant-Coverage Bi-Radial [™] high frequency transducers
Frequency range (-10 dB):	40 Hz to 21.5 kHz
Frequency response (±3 dB):	50 Hz to 19 kHz
Pressure sensitivity:	LF: 98 dB, 1 w, 1 m HF: 112 dB, 1 w, 1 m (4851) HF: 114 dB, 1 w, 1 m (4853) VHF: 108 dB, 1 w, 1 m
Power capacity ¹ :	LF: 600 watts continuous program HF: 150 watts continuous program VHF: 80 watts continuous program
Coverage angles (-6 dB points, nom.):	90 degrees horizontal (4851) 60 degrees horizontal (4853) 40 degrees vertical
Maximum SPL (1 m, continuous pgm.):	130 dB (4851) 132 dB (4853)
Nominal impedance:	LF: 4 ohms HF: 16 ohms VHF: 16 ohms
All	
Connectors:	ITT Cannon EP-8 type, one each male and female
Dimensions:	99 cm (39 in) H 62 cm (24½ in) W 44 cm (17¼ in) D
Weights	4850, 4852: 61 kg (134 lbs) 4851, 4853: 65 kg (144 lbs)
Finish:	Dark gray impregnated fiberglass-reinforced plastic, black nylon protective grill

¹ Continuous program power is defined as 3 dB greater than continuous sine wave power and is a conservative expression of the transducer's ability to handle typical speech and music program material.

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Systems are energized through one EP-8 input connector. Two connectors (one each male and female) are installed to enable loop-through wiring for use with 4842 and 4845 VLF systems. An accessory dolly, model 4850DL, is available to facilitate handling and cartage.

ARCHITECTURAL SPECIFICATIONS:

4850/4852

The loudspeaker system shall be of the two-way type, incorporating two 12-inch low frequency loudspeakers in a vented direct radiator enclosure, and a compression driver mounted to a constant coverage high frequency horn. The LF drivers shall be capable of 7mm peak linear displacement, and the cabinet shall incorporate a tuning frequency of 50 Hz with a total duct surface area of not less than 25 square inches.

4850

The system shall meet the following performance criteria: Frequency range: 40 Hz to 20 kHz. Pressure sensitivity: 98 dB/1w/1m (LF), 112 dB/1w/1m (HF). Power capacity: 300 watts continuous sine wave above 50 Hz (LF), 75 watts continuous sine wave above 800 Hz (HF). Horizontal coverage: 90 degrees between -6 dB points. Vertical coverage 40 degrees between -6 dB points. **4852**

The system shall meet the following performance criteria: Frequency range: 40 Hz to 20 kHz. Pressure sensitivity: 98 dB/1w/1m (LF), 114 dB/1w/1m (HF). Power capacity: 300 watts continuous sine wave above 50 Hz (LF), 75 watts continuous sine wave above 800 Hz (HF). Horizontal coverage: 00 degrees between -6 dB points. Vertical coverage 40 degrees between -6 dB points. **4851/4853**

The loudspeaker system shall be of the three-way type, incorporating two 12-inch low frequency loudspeakers in a vented direct radiator enclosure, a compression driver mounted to a constant coverage high frequency horn and two constant coverage VHF transducers. The LF drivers shall be capable of 7mm peak linear displacement, and the cabinet shall incorporate a tuning frequency of 50 Hz, with a total duct surface area of not less than 25 square inches. **4851**

The system shall meet the following performance criteria: Frequency range: 40 Hz to 21.5 kHz. Pressure sensitivity: 98 dB/1w/1m (LF), 112 dB/1w/1m (HF), 108 dB/1w/1m (VHF). Power capacity: 300 watts continuous sine wave above 50 Hz (LF), 75 watts continuous sine wave above 60 Hz (LF), 40 watts continuous sine wave above 7 kHz (VHF). Horizontal coverage: 90 degrees between -6 dB points. Vertical coverage: 40 degrees between -6 dB points.

The system shall meet the following performance criteria: Frequency range: 40 Hz to 21.5 kHz. Pressure sensitivity: 98 dB/1w/1m (LF), 114 dB/1w/1m (HF), 108 dB/1w/1m (HF). Power capacity: 300 watts continuous sine wave above 40 Hz (LF), 75 watts continuous sine wave above 800 Hz (HF), 40 watts continuous sine wave above 7 kHz (HF). Horizontal coverage: 60 degrees between -6 dB points. Vertical coverage: 40 degrees between -6 dB points.

All

The cabinet shall be constructed of void-free birch plywood, stiffened internally and coated with fiberglass reinforced plastic. All exposed corners shall be rounded for damage resistance. Aircraft-type hanging fixture attachment points shall be installed through the cabinet to internal steel reinforcement plates. Eight hanging points shall be provided. Each hanging point shall have a load rating of 2000 lbs. at 90 degrees to the fitting. Cabinet width shall taper front-to-back, forming a 45 degree wedge frustum.

The loudspeaker system shall be the JBL Concert Series model ([select] 4850/4851/4852/4853).



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