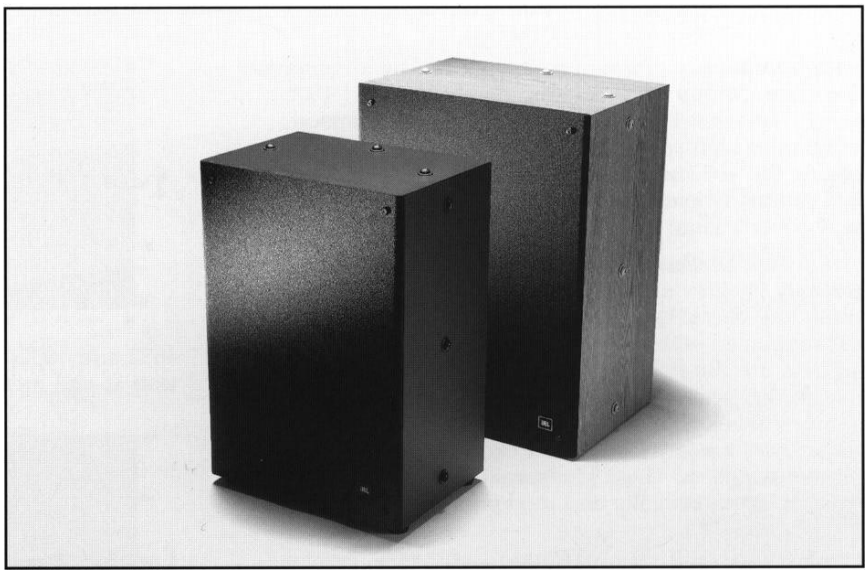
4652, 4652-BK Two-Way Utility Sound Reinforcement System

Professional Series



Key Features:

- 100 dB sensitivity, 1 W, 1 m (3.3 ft)
- 50 Hz to 20 kHz frequency range
- 100° x 80° Flat-Front Bi-Radial® horn design
- Titanium diaphragm compression driver with diamond surround
- High power 300 mm (12 in) low frequency SHG™ transducer
- Steel reinforced ¾ in 7-ply domestic birch enclosure with oak-grain (4652) or charcoal gray (4652-BK) vinyl finish
- 14 integral attachment points for secure installation

The model 4652 was developed in response to demand from the field for a high performance utility sound reinforcement loudspeaker system in a cost effective package. The 4652 has outstanding performance characteristics including wide dispersion, smooth frequency response, high power handling and efficiency, and low distortion. In addition, the enclosure has been designed with integral steel reinforcement to accept safety-rated attachment hardware. This combination of features make the 4652 ideal for installation in houses of worship, boardrooms, nightclubs, and other applications requiring reliable performance from a system that is visually appealing and unobtrusive.

Low frequency program is accurately reproduced by a 300 mm (12 in) transducer featuring a SHG™ (Selective Harmonic Geometry) magnet structure. Through the use of advanced computer modeling techniques, the SHG magnet structure has been designed to focus the magnetic field symmetrically across the entire length of the gap and voice coil. The result is virtual elimination of second harmonic distortion and control of third harmonic distortion for outstanding clarity and definition.

Specifications

SYSTEM:	
Frequency Range (-10 dB):	50 Hz to 20 kHz
Frequency Response:	70 Hz to 15 kHz (±3 dB)
Power Capacity[1]:	250 watts continuous pink noise
Sensitivity[2]:	100 dB, 1 W 1 m (3.3 ft)
Directivity Factor (Q)[2]:	5
Directivity Index (DI)[2]:	7 dB
Nominal Dispersion:	100° horizontal 80° vertical
Crossover Frequency:	2 kHz
Nominal Impedance:	8 ohms
Minimum Impedance:	6 ohms
System Polarity:	Positive voltage to "+" red terminal causes outward low frequency cone motion (IEC standard)
Enclosure Finish:	4652: Oak grain vinyl 4652-BK: Charcoal Gray
Grille:	Flame resistant polyester fabric
Dimensions (Height x Width x Depth):	572 mm x 401 mm x 267 mm (22½ in x 15¾ in x 10½ in) Note: Mounting bolts protrude an additional 5/16 inch on all surfaces except front. Grille extends 7/8 inch on front.
Net Weight:	22.7 kg (50 lb)
Shipping Weight:	25.8 kg (57 lb)
Mounting Attachment:	14 points; accepts 3/8 in - 24 x 1 ½ in forged shoulder steel eyebolts
Attachment Load Rating:	131 kg (290 lbs) capacity per minimum of two attachment points (10:1 safety factor straight pull)
TRANSDUCERS:	
Low Frequency:	2022H
High Frequency	2416H-1
Horn:	2373

[1]Rating based on test signal of IEC filtered random noise with a peak-to-average ratio of 6 dB, two hours duration.
[2]Averaged from 500 to 2500 Hz.

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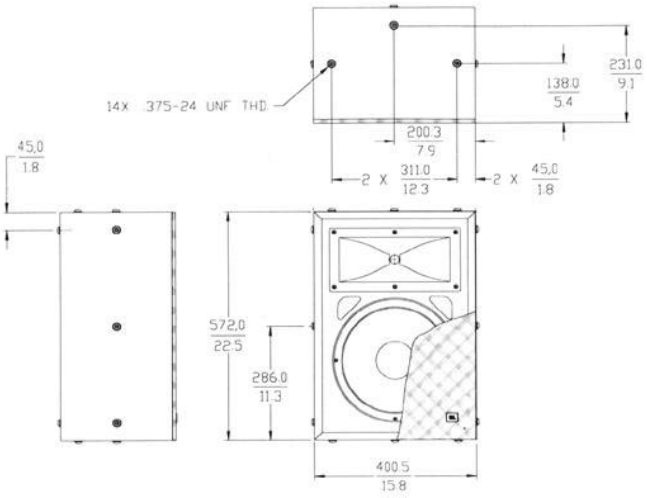
High frequency program is reproduced by a compression driver with a pure titanium diaphragm and 100° by 80° Flat-Front Bi-Radial® horn. Response is smooth, resulting in high speech intelligibility and articulation, making the 4652 an excellent choice for low budget applications where a minimum number of loudspeakers must cover a large area.

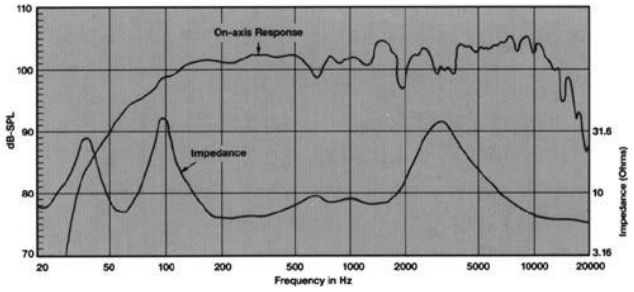
The vinyl laminated enclosure is designed for maximum structural integrity and visual appeal and can be painted to match any decor. Constructed of 19 mm (¾ in) plywood and reinforced with internal steel bracing, the 4652 and 4652-BK are the right choice for applications where the loudspeaker system must be suspended overhead. Fourteen attachment points provide several attachment options and a safety factor far in excess of minimum industry standards. These loudspeakers can be mounted vertically or horizontally and incorporate a rotatable logo.

Architectural Specifications:

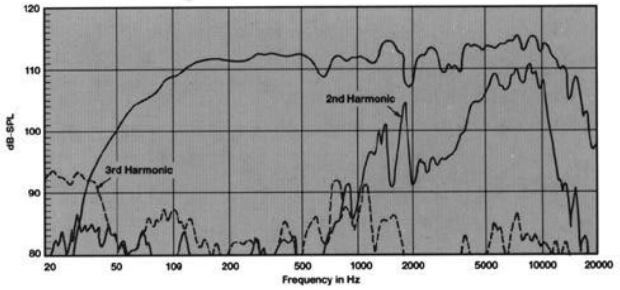
The loudspeaker system shall be of two-way design and consist of a 300 mm (12 in) low frequency transducer mounted in a rectangular ported enclosure. The magnetic structure shall consist of a ferrite magnet and be designed to minimize both second and third harmonic distortion. The transducer voice coil shall be at least 76 mm (3 in) in diameter. The high frequency portion of the system shall consist of a compression driver with a diaphragm of diameter no less than 44 mm (1¾ in) and made of pure titanium. The high frequency horn shall provide a nominal horizontal coverage angle (-6 dB response) of 100°, and the nominal vertical angle shall be 80°. The enclosure shall have internal steel bracing with no less than 14 external mounting points for secure attachment.

Performance specifications for a typical unit shall be as follows: Under half-space (2 π) mounting conditions, measured sensitivity shall be at least 100 dB at 1 W/1 m, and system response shall extend from 50 Hz to 20 kHz (-10 dB). Rated impedance shall be 8 ohms. Electrical power capacity shall be at least 250 watts continuous pink noise, based on a test signal of IEC filtered random noise with a peak-to-average ratio of 6 dB, 2 hours duration. The system shall be the JBL model 4652 [4652-BK]. Other loudspeaker systems will be considered as equivalent provided that submitted data from a recognized independent test laboratory verify that the above performance specifications are met.

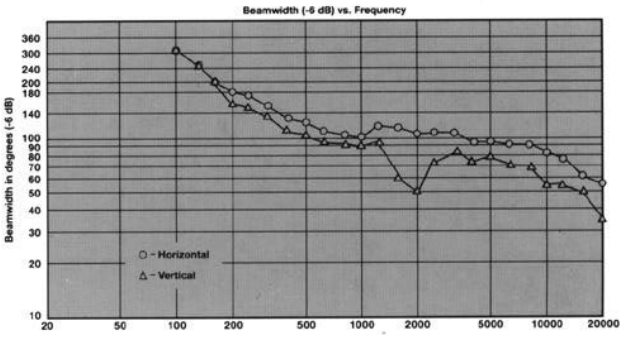




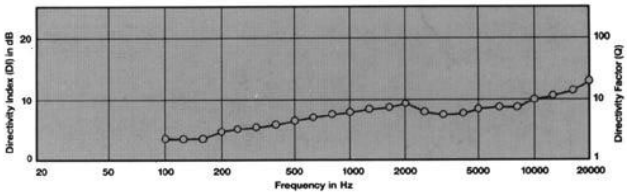
4652 and 4652-BK system half-space (2 π) response, one watt at one meter; impedance



4652 and 4652-BK system half-space (2 π) response, 10 watts at one meter on-axis, distortion raised 20 dB



Beamwidth (-6 dB) vs. Frequency



Directivity Index (DI) and Directivity Factor (Q), on-axis, half-space (2 π)

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