

4671OK

ENCLOSED UTILITY SOUND REINFORCEMENT SYSTEM



FEATURES:

- 97 dB sensitivity, 1 W, 1 m (3.3 ft)
- 35 Hz to 20 kHz frequency range
- Flat-Front Bi-Radial™ horn design
- Consistent horizontal dispersion from 800 Hz to 16 kHz
- Titanium diaphragm compression driver with diamond surround
- High-power 380 mm (15 in) low frequency transducer
- Oak-grain vinyl enclosure

The 4671OK offers an unmatched combination of performance characteristics including wide, tightly controlled dispersion, extended frequency response, exceptionally high power capacity, and high efficiency. It is ideal for churches, boardrooms,

motion-picture theatre systems, and any sound reinforcement application that requires outstanding full-range performance.

One key to this performance lies in the unique geometry of the 4671OK's Bi-Radial¹ horn. Developed with the latest in computer design and analysis techniques, the 2370A horn provides consistent horizontal coverage from its crossover point of 800 Hz to beyond 16 kHz. The Bi-Radial compound flare configuration maintains precise control of the horn's 90° horizontal coverage angle. Coupled to the horn is a titanium diaphragm compression driver utilizing JBL's patented² diamond surround pattern for improved high-frequency response. To ensure

¹U.S. Patent #4,308,932. Foreign patents pending.

²U.S. Patent #4,324,312. Foreign patents pending.

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smooth response to the lowest usable octaves, extremely low distortion, and tight transient response, the 4671OK also incorporates a number of recent advances in low-frequency loudspeaker design. The system uses the 2225H 380 mm (15-inch) loudspeaker. The speaker's magnetic structure features JBL's unique Symmetrical Field Geometry (SFG) design to reduce a second harmonic distortion to inconsequential levels.

To blend the low and high frequency components, the 4671OK uses a specially designed passive frequency dividing network with a crossover point of 800 Hz. In combination with the system's full range components, the network eliminates the need for the external equalization often required with other sound reinforcement systems.

The enclosure is constructed of 19 mm (¾ inch) high density wood-resin compound with a highly resistant and serviceable oak-grain vinyl covering. A brown cloth grille fully covers the transducers on the baffle surface.

SPECIFICATIONS:

SYSTEM:	
Nominal Impedance:	8 ohms
Frequency Range (-10 dB):	35 Hz to 20 kHz
Frequency Response	40 Hz to 16 kHz
(± 4 dB):	
Power Capacity ¹ :	200 watts continuous pink noise
Sensitivity ² :	97 dB SPL, 1 W, 1 m (3.3 ft)
Directivity ² : Factor (Q):	10
Index (DI):	10 dB
Nominal Dispersion:	90° horizontal 40° vertical
Crossover Frequency:	800 Hz
Polarity:	Positive voltage to RED terminal causes outward low-frequency cone motion.
Enclosure Finish:	Oak-grain vinyl
Grille:	Brown fabric
Exterior Dimensions	775 mm x 546 mm x 448 mm
(Height x Width x Depth):	30½" in x 21½" in x 17½" in
Net Weight:	47 kg 103 lb

1. Rating based on test signal of filtered random noise conforming to international standard IEC 268-5 (pink noise with 12 dB/octave rolloff below 40 Hz and above 5000 Hz with a peak-to-average ratio of 6 dB), two hours duration.
2. Averaged from 500 to 2.5 kHz.

ARCHITECTURAL SPECIFICATIONS

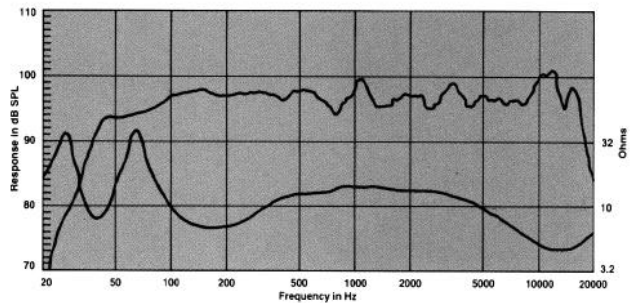
The loudspeaker system shall consist of a 380 mm (15 inch) low frequency loudspeaker, Bi-Radial horn, high-frequency driver, and frequency dividing network installed in a ported enclosure. The frame of the low frequency transducer shall be manufactured of cast aluminum, and its magnetic assembly shall utilize a ferrite magnet and produce a symmetrical magnetic field at the voice coil gap. In addition, an aluminum ring encircling the pole piece shall act to reduce flux modulation. The voice coil shall be 100 mm (4 inch) in diameter and shall be made of edge-wound copper ribbon operating in a magnetic field of not less than 1.2T (12,000 gauss).

The frequency dividing network shall have a crossover frequency of 800 Hz and shall be of the second-order L-C type. Polypropylene and/or polystyrene bypass capacitors shall be wired in parallel with the network's larger mylar or non-polarized electrolytic capacitors to reduce the hysteresis effects on the signal.

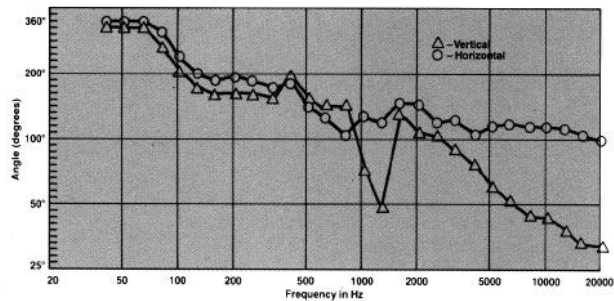
Performance specifications of a typical production unit shall be as follows: Measured sensitivity (SPL at 1 m (3.3 ft) on axis with 1 W input, swept 500 Hz-2.5 kHz) shall be at least 97 dB SPL. Usable frequency range shall extend from 35 Hz to 20 kHz. On-axis response, measured at a distance of 2 m (6.6 ft) or more under free-field conditions, shall be ± 4 dB from 40 Hz to 16 kHz. Nominal impedance shall be 8 ohms. Rated power capacity shall be at least 200 watts continuous pink noise, based on test signal of filtered random noise conforming to international standard IEC 268-5 (pink noise with 12 dB octave rolloff below 40 Hz and above 5000 Hz with a peak-to-average ratio of 6 dB), two hours duration.

The enclosure shall be solidly constructed of 19 mm (¾ inch) stock with all joints tightly fitted and glued. Overall dimensions shall be no greater than 775 mm (30½ inch) inches by 546 mm (21½ inch) inches wide by 448 mm (17½ inch) inches deep. Finish shall be oak-grain vinyl with brown fabric grille. The system shall be JBL Professional Model 4671OK.

Frequency Response at 1W, 1 meter; Impedance



Beamwidth (-6dB) vs. Frequency



Directivity vs. Frequency

