

Cone Transducers & Compression Drivers



2226H/J

2241H

2206H



2426H/J



2451H/J



2447H/J



2446H/J



2450H/J

VGC™ SERIES CONE TRANSDUCERS MODELS: 2206H, 2226H/J, 2241H

These low-frequency transducers incorporate JBL's patented Vented Gap Cooling technology in an improved Symmetrical Field Geometry (SFG) magnet structure. JBL engineers optimized both magnet weight, flux density and field saturation resulting in a reduction of overall driver weight and a significant reduction in harmonic distortion.

SVG™ SERIES CONE TRANSDUCERS Low-frequency Maximum Output Transducers MODEL: 2242H

The 2242H low-frequency transducer incorporates JBL's patented Super Vented Gap™ technology for improvement in power handling capability while minimizing power compression.

25 mm - 1" EXIT COMPRESSION DRIVER (44 mm - 1 3/4" Diaphragm)

The **JBL 2426H/J** incorporates JBL's titanium diamond diaphragm for ruggedness and outstanding frequency response.

38 mm - 1 1/2" EXIT COMPRESSION DRIVERS (100 mm - 4" Diaphragm)

The 38 mm exits on the **2447H/J** and **2451H/J** compression drivers allow the Coherent Wave™ phasing plug to directly couple with Optimized Aperture™ Bi-Radial® horns for lower distortion and better coverage control. The large format 100 mm (4 in) diaphragm design includes JBL's exclusive three dimensional diamond pattern which increases the drivers' output in the 5 kHz to 20 kHz range when combined with the Coherent Wave phasing plug.

49 mm - 2" EXIT COMPRESSION DRIVERS (100 mm - 4" Diaphragm)

The **2446H/J** and **2450H/J** use the optimized configuration of the Coherent Wave phasing plug design, offering coherent summation of acoustical power up to much higher frequencies than previous designs.

The **2450H/J** incorporates a neodymium rare-earth magnet assembly that provides the equivalent electromechanical conversion efficiency at two-thirds the size and one-third the weight required by previous large format compression driver designs.

Note: H version is 8 ohms impedance and J version is 16 ohms impedance.



2242H

¹ AES standard (50 - 500 Hz)
² Based on a swept 100 to 500 Hz signal.
1 W is 2.83 V @ 8 ohms, 4.0V @ 16 ohms.
³ Based on standard IEC 268-1
⁴ Based on a swept 500 Hz to 2.5 kHz signal.

specifications

	2206H	2226H/J	2241H	2242H
NOMINAL DIAMETER	300 mm (12 in)	380 mm (15 in)	460 mm (18 in)	460 mm (18 in)
RATED IMPEDANCE	8 ohms	8 ohms (H); 16 ohms (J)	8 ohms	8 ohms
POWER CAPACITY	600 W ¹	600 W ¹	600 W ¹	800 W ¹
SENSITIVITY: 1 W, 1 m	95 dB SPL ²	97 dB SPL ²	98 dB SPL ²	99 dB SPL ²
FREQUENCY RANGE (-10 dB)	45 Hz - 3.5 kHz	30 Hz - 2.5 kHz	30 Hz - 3 kHz	25 Hz - 1.6 kHz
HIGHEST CROSSOVER	1500 Hz	1200 Hz	800 Hz	1.0 kHz
VOICE COIL DIAMETER	100 mm (4 in)	100 mm (4 in)	100 mm (4 in)	100 mm (4 in)
VOICE COIL MATERIAL	Edgewound aluminum ribbon	Edgewound aluminum ribbon	Edgewound aluminum ribbon	Edgewound aluminum ribbon
HALF SPACE REFERENCE EFFICIENCY	2.5%	3.3%	2.9%	4%
NET WEIGHT (each)	7.8 kg (17.1 lb)	8.7 kg (19.25 lb)	10.7 kg (23.5 lb)	13.2 kg (29 lb)

	2426H/J	2447H/J	2451H/J	2446H/J	2450H/J
NOMINAL IMPEDANCE	8 ohms (H) 16 ohms (J)	8 ohms (H) 16 ohms (J)	8 ohms (H) 16 ohms (J)	8 ohms (H) 16 ohms (J)	8 ohms (H) 16 ohms (J)
POWER CAPACITY ¹	70 W above 800 Hz 100 W above 1.2 kHz	100 W above 500 Hz 150 W above 1 kHz	100 W above 500 Hz 150 W above 1 kHz	100 W above 500 Hz 150 W above 1 kHz	100 W above 500 Hz 150 W above 1 kHz
SENSITIVITY, 1 W, 1 m (Averaged)	110 dB ² (1 kHz - 4 kHz)	111 dB ² (1 kHz - 4 kHz)	111 dB ² (500 Hz - 2.5 kHz)	111 dB ² (2 kHz octave band)	111 dB ² (2 kHz octave band)
FREQUENCY RANGE (-10 dB)	500 Hz - 20 kHz	500 Hz - 20 kHz	500 Hz - 20 kHz	500 Hz - 20 kHz	500 Hz - 20 kHz
RECOMMENDED CROSSOVER	800 Hz or higher	500 Hz or higher	500 Hz or higher	500 Hz or higher	500 Hz or higher
DIAPHRAGM: SIZE MATERIAL	44 mm (1 3/4 in) Pure titanium	44 mm (1 3/4 in) Pure titanium	100 mm (4 in) Pure titanium	100 mm (4 in) Pure titanium	100 mm (4 in) Pure titanium
VOICE COIL MATERIAL	Aluminum ribbon	Aluminum ribbon	Aluminum ribbon	Aluminum ribbon	Aluminum ribbon
FLUX DENSITY	1.8T (18,000 gauss)	1.85T (18,500 gauss)	1.9T (19,000 gauss)	1.9T (19,000 gauss)	1.9T (19,000 gauss)
DIMENSIONS: DIAMETER DEPTH	149 mm (5.875 in) 104 mm (4.125 in)	235 mm (9.25 in) 100 mm (4 in)	167 mm (6.6 in) 76 mm (3 in)	235 mm (9.25 in) 131 mm (5.2 in)	167 mm (6.6 in) 139 mm (5.5 in)
NET WEIGHT (each)	4.3 kg (9.5 lb)	10.7 kg (23.5 lb)	4.5 kg (10 lb)	13.8 kg (30.5 lb)	4.8 kg (10.5 lb)

¹ Continuous program power is defined as 3 dB greater than continuous pink noise and is a conservative expression of the transducer's ability to handle typical speech and music program material.
² Sensitivity measured on a horn with a Q of 6.3.

Horns



2370A

OPTIMIZED APERTURE™ MID-SIZE BI-RADIAL® HORNS
MODELS: 2352, 2353, 2354

The Optimized Aperture Mid-Size Bi-Radial Horns are designed to provide high sound pressure level at low distortion over the bandwidth of 630 Hz to beyond 18 kHz with very uniform horizontal and vertical coverage from an optimum size horn. Extensive modeling was used to optimize the coverage pattern, reducing both distortion and size.

Constant horizontal and vertical coverage patterns provide easily predictable performance at any frequency or orientation. Cluster design is simplified and typical problems such as lobing and size are greatly reduced.

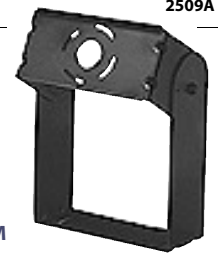


2382A

FLAT-FRONT BI-RADIAL® HORNS
MODELS: 2370A, 2380A, 2382A, 2385A, 2386A

The Flat-Front Bi-Radial Horns are designed for flush cabinet mounting or compact cluster applications. The horns provide uniform on and off axis frequency response at the rated frequencies.

The horn's small vertical mouth dimension (just slightly larger than the compression driver used to drive the horn) allows very compact single and multiple horn/driver systems to be put together. Should vertical pattern control be required below 2 kHz, two or more horns may be stacked vertically to restore full Bi-Radial™ performance.



2509A

HORN/DRIVER MOUNTING SYSTEM
MODELS: 2509A

The 2509 Professional Mounting Bracket is designed to facilitate easy installations and quick adjustability in a variety of applications. It is manufactured of rugged 1/8" steel and finished in black matte. The 2509 Professional Mounting Bracket is not intended for suspension applications.

The 2509A is a two piece system that allows aiming and rotation in three planes—vertical, horizontal and rotation around axis. The width of the mounting slots and an included adaptor gasket allow use with the 2350 Series and the 2380 Series.



2352, 2353 & 2354

	2352	2353	2354	2370A	2380A	2382A	2385A	2386A
THROAT SIZE	38 mm (1 1/2 in)	38 mm (1 1/2 in)	38 mm (1 1/2 in)	25 mm (1 in)	49 mm (2 in)	49 mm (2 in)	49 mm (2 in)	49 mm (2 in)
ACCEPTS JBL DRIVERS	2447H/J, 2451H/J	2447H/J, 2451H/J	2447H/J, 2451H/J	2426H/J	2446H/J, 2450H/J, 2485J	2446H/J, 2450H/J, 2485J	2446H/J, 2450H/J, 2485J	2446H/J, 2450H/J, 2485J
NOMINAL DISPERSION	90° H x 40° V	60° H x 40° V	40° H x 30° V	90° H x 40° V	90° H x 40° V	120° H x 40° V	60° H x 40° V	40° H x 20° V
DIRECTIVITY FACTOR (Q) (Averaged)	13 (630 Hz - 20 kHz)	16 (630 Hz - 20 kHz)	30 (800 Hz - 20 kHz)	12.2 (1 kHz - 16 kHz)	10.7 (1 kHz - 16 kHz)	9 (630 Hz - 20 kHz)	19 (1 kHz - 16 kHz)	44.9 (2 kHz - 16 kHz)
DIRECTIVITY INDEX (DI) (Averaged)	11 (630 Hz - 20 kHz)	12 (630 Hz - 20 kHz)	15 (800 Hz - 20 kHz)	10.9 (1 kHz - 16 kHz)	10.3 (1 kHz - 16 kHz)	7.9 (500 Hz - 16 kHz)	12.8 (1 kHz - 16 kHz)	16.5 (2 kHz - 16 kHz)
USABLE LOW FREQ. LIMIT	500 Hz	500 Hz	500 Hz	500 Hz	400 Hz	400 Hz	400 Hz	350 Hz
MIN. RECOMMENDED CROSSOVER	500 Hz @ 18 dB/oct. min.	500 Hz @ 18 dB/oct. min.	500 Hz @ 18 dB/oct. min.	630 Hz	500 Hz	500 Hz	500 Hz	400 Hz
AXIAL PRESSURE SENSITIVITY ¹	112 dB	112 dB	115 dB	110 dB	112 dB	110 dB	114 dB	116 dB
CONSTRUCTION	Fiberglass reinforced plastic	Fiberglass reinforced plastic	Fiberglass reinforced plastic	High density solid polyurethane	Molded structural foam	Molded structural foam	Molded structural foam	High density solid polyurethane
MOUTH: HEIGHT	457 mm (18 in)	457 mm (18 in)	457 mm (18 in)	173 mm (6.81 in)	279 mm (11 in)	279 mm (11 in)	279 mm (11 in)	279 mm (11 in)
WIDTH	559 mm (22 in)	559 mm (22 in)	559 mm (22 in)	445 mm (17.5 in)	445 mm (17.5 in)	445 mm (17.5 in)	445 mm (17.5 in)	445 mm (17.5 in)
LENGTH	254 mm (10 in)	305 mm (12 in)	432 mm (17 in)	174 mm (6.84 in)	236 mm (9.28 in)	236 mm (9.28 in)	236 mm (9.28 in)	359 mm (14.4 in)
NET WEIGHT (each)	2.2 kg (6 lb)	3.6 kg (8 lb)	4.0 kg (9 lb)	1.4 kg (3 lb)	2.2 kg (6 lb)	1.62 kg (3.5 lb)	2.2 kg (6 lb)	5.5 kg (12 lb)

¹ Measured on axis in the far field with 1 watt input and referred to 1 meter distance calculated by inverse square law. Listed sound pressure level represents an average from 1 kHz to 4 kHz.