# IJBL

# 8305/8306<sup>2</sup>-Way Flush Mount Wall Loudspeaker Systems

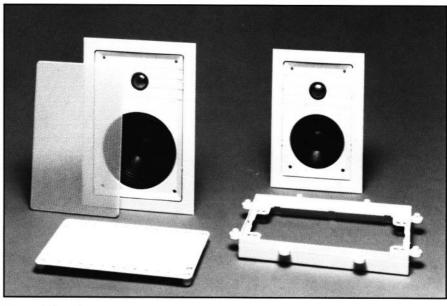
#### Industrial Series

### **Key Features:**

- 25 mm (1 in) Pure Titanium Diaphragm HF Dome Radiator
- Polymer Laminate LF Transducer: 8305: 135 mm (5.25 in) 8306: 165 mm (6.5 in)
- Power Capacity: 8305: 40 W IEC Pink Noise 8306: 50 W IEC Pink Noise
- Frame and Mounting Kit Materials are UL<sup>®</sup> 94V-0 Flame Class Rated

The JBL 8305 and 8306 Flush Mount Wall Loudspeakers were created in response to the rapidly growing demand for unobtrusive, high-fidelity sound sources. Each system features a wideband 25 mm (1 in) pure titanium high-frequency dome radiator, combined with a responsive 135 mm (5.25 in) polymer laminate low frequency transducer in the 8305 and a larger, 165 mm (6.5 in) polymer laminate transducer in the 8306.

To reflect the priorities of the contractor market, JBL engineers incorporated several design and packaging features. The baffle and installation frames are fabricated from G-E Cycolac® CKM-2 ABS, the state-of-theart in flame-retardant materials, which carries the UL® 94V-0 Flame Class rating. The mounting frames themselves are designed to accomodate several different wall thicknesses, horizontal or vertical mounting orientation, and new or existing construction. Guides are molded into the frame components to help facilitate correct installation. A painting guard is included to quickly mask off the speakers during installation. An acoustically-transparent foam panel is included to hide the Titanium HF Dome when architectural considerations dictate.



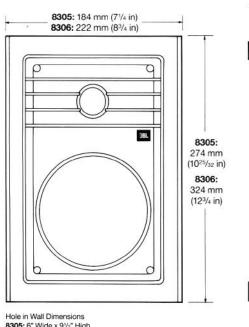
## Specifications:

	8305	8306
SYSTEM:		
Frequency Range (-10 dB):	55 Hz - 20 kHz	35 Hz - 20 kHz
Power Rating1:	40 watts	50 watts
Sensitivity <sup>2</sup> :	89.5 dB	90.5 dB
Nominal Impedance:	8 ohms	8 ohms
Crossover Frequency:	7 kHz	5 kHz
Recommended Wall Space Volume:	761(2.7 ft <sup>3</sup> )	761(2.7 ft <sup>3</sup> )
LOW FREQUENCY TRANSDUCER:		
Nominal Diameter:	135 mm (5.25 in) Polymer Laminate Cone	165 mm (6.5 in) Polymer Laminate Cone
Voice Coil:	25 mm (1 in)	25 mm (1 in)
Magnetic Assembly Weight:	0.27 kg (0.59 lb)	0.34 kg (0.74 lb)
Bl Factor:	4.3 N/A	5.4 N/A
Effective Moving Mass:	5.6 g	13 g
HIGH FREQUENCY:		
Nominal Diameter:	25 mm (1 in) pure titanium dome	25 mm (1 in) pure titanium dome
Voice Coil:	25 mm (1 in)	25 mm (1 in)
Magnetic Assembly Weight:	0.115 kg (0.25 lb)	0.115 kg (0.25 lb)
GENERAL:		12
Baffle/Installation Frames Material:	G-E Cycolac® CKM ABS	G-E Cycolac <sup>®</sup> CKM ABS
Frame and Grille Color:	Ivory	Ivory
Dimensions: Depth (from back of baffle):	274 mm (10 <sup>25</sup> / <sub>32</sub> in) H x 184 mm (7 <sup>1</sup> / <sub>4</sub> in) W 67 mm (2 <sup>5</sup> / <sub>8</sub> in)	324 mm (12 <sup>3</sup> / <sub>4</sub> in) H x 222 mm (8 <sup>3</sup> / <sub>4</sub> in) W 83 mm (3 <sup>1</sup> / <sub>4</sub> in)
Weight (pair):	6.36 kg (14 lbs)	7.26 (16 lbs)
Shipping Weight (3 pair):	19.98 kg (44 lbs)	22.7 kg (50 lbs)
Input Connectors:	Spring-loaded push-in terminals	Spring-loaded push-in terminals

 Rating based on test signal of filtered random noise conforming to the international standard IEC 268-1 (pink noise with 12 dB per octave rollof below 40 Hz and above 5000 Hz with a peak-to-average ratio of 6 dB), 2 hours duration.
1 W (2.83 V), 1m, averaged from 500 Hz 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. Contractors frequently pre-install speaker fittings in advance of final hookup. To meet this need, the JBL 8305 and 8306 are available in 3-pair cartons, with the speakergrille assemblies and mounting frame kits in separate sub-packs for easy removal and transport. Speaker-grille assemblies and mounting frame kits may also be ordered in separate master packs of 6 units.

THIELE/SMALL PARAMETERS:	8305	8306
f <sub>s</sub> :	89 Hz	50 Hz
R <sub>e</sub> :	4.0 ohms	4.5 ohms
Q <sub>ts</sub> :	0.516	0.516
Q <sub>ms</sub> :	2.2	2.5
Q <sub>es</sub> :	0.675	0.65
V <sub>as</sub> :	4.11(0.12 ft <sup>3</sup> )	28.7 l (0.81 ft <sup>3</sup> )
S <sub>D</sub> :	0.0069 m <sup>2</sup> (10.7 in <sup>2</sup> )	0.0140 m <sup>2</sup> (21.7 in <sup>2</sup> )
X <sub>max</sub> :	3.43 mm (0.135 in)	5.66 mm (0.223 in)
V <sub>D</sub> :	23.667 cm3 (1.44 in3)	79.24 cm3 (4.84 in3)
L <sub>e</sub> :	0.175 mH	0.60 mH
ηo (Half space):	0.40%	0.42%
Pe (Max):	40 watts	50 watts



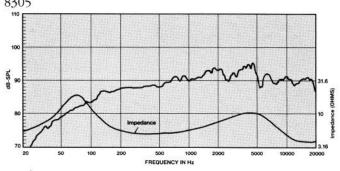
8305: 6" Wide x 9½" High 8306: 7½" Wide x 11½" High

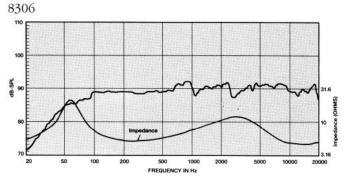
min) MOUNTING DEPTH 8305: 67 mm (2% in)

8306: 83 mm (31/4 in)

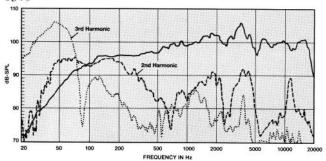
DRYWALL

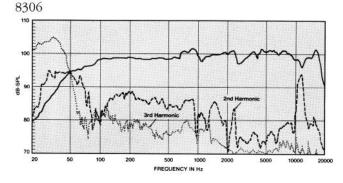
Frequency Response, 1 W at 1 m; impedance 8305





Distortion vs. Frequency, 10 W (distortion raised 20 dB) 8305





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