

**JBL**

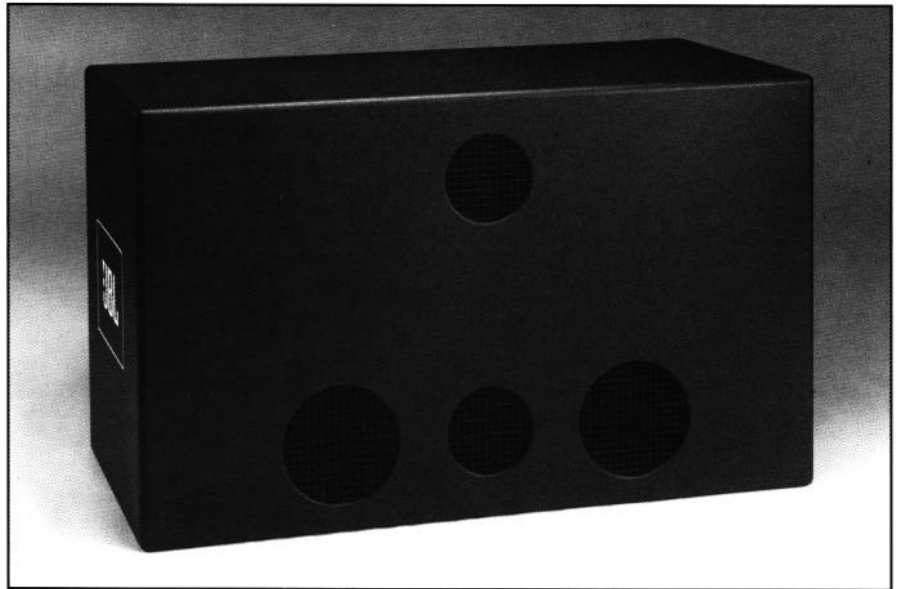
# 4685 TCB Subwoofer System

Professional Series

## Key Features:

- ▶ Frequency Range ( - 10 dB): 28 Hz - 500 Hz
- ▶ Frequency Response ( ± 3 dB): 36 Hz - 150 Hz
- ▶ Sensitivity: 97 dB SPL, 1 W, 1 m
- ▶ Power Capacity: 600 W continuous program power.
- ▶ Smooth bandpass response for seamless integration into complete system designs.
- ▶ Push-push dual driver design cancels non-linearities for reduced coloration.
- ▶ Direct inputs to each woofer for multiple wiring options and best amplifier-to-loudspeaker match.

The JBL 4685 subwoofer loudspeaker system employs JBL's exclusive Triple Chamber Bandpass™ (TCB) design to satisfy the most rigorous demands for high power, low frequency performance at exceptionally low distortion levels. The TCB enclosure delivers higher output, greater bass response and significantly lower distortion than a standard ported enclosure of equivalent volume. The large ports prevent compression effects and vent-induced air noise from interfering with the audible output. Mechanical stresses created by the dual opposing drivers actually cancel each other, resulting in reduced enclosure resonance distortion.



## Specifications:

COMPONENTS:	2 - JBL 2225H low frequency transducers
SYSTEM:	
Rated impedance:	8 ohms (at each woofer terminal) 4 ohms (woofer terminals in parallel)
Frequency range ( - 10 dB):	28 Hz to 500 Hz
Frequency response ( ± 3 dB):	36 Hz - 150 Hz
Power capacity <sup>1</sup> :	600 W continuous program
Sensitivity <sup>2</sup> :	97 dB, 1 W, 1 m (parallel wired)
Recommended crossover frequency:	80 to 100 Hz, low-pass
Input connectors:	Color coded push terminals
Polarity:	Positive voltage to black terminal gives forward cone motion
ENCLOSURE:	
Materials and finish:	19 mm (3/4 in) plywood, matte black finish
Enclosure tuning:	27 Hz, 78 Hz
Port grilles:	Expanded metal mesh
GENERAL:	
Net weight:	64.5 kg (142 lbs)
Net dimensions (H x W x D):	750 x 1245 x 508 mm (29.5 x 49 x 20 in)

<sup>1</sup> 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.

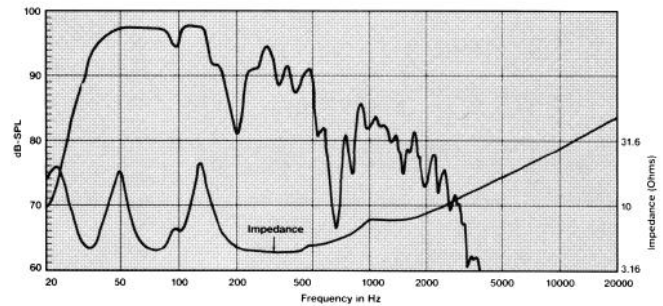
<sup>2</sup> Based on a swept 50 Hz to 150 Hz signal for an input of 2.83 V @ 8 ohms.

## ► 4685 TCB Subwoofer System

Designed to complement the low frequency performance of all JBL systems, the 4685 is intended for fixed installations where its dual JBL 2225H 380 mm (15 in) low frequency, low distortion cone transducers will consistently reproduce bass frequencies down to 28 Hz. Each woofer in the 4685 has direct input via dual terminal posts to allow multiple configurations and proper amplifier/load matching. The 4685 inputs can be paralleled for 4 ohm system impedance, or run independently at 8 ohms per transducer.

System efficiency and superior performance are assured by utilizing an external electronic dividing network and amplifier at a crossover frequency of 80 to 100 Hz. Adding a 4685 subwoofer loudspeaker to an existing full-range system increases available amplifier/transducer headroom in the main system chain by separating VLF signals with their high power demands.

The 4685 incorporates steel protective port grilles to make the system impervious to all hazards.



4685 system response in  $2\pi$  space, 1 watt 1 m on-axis; Impedance, woofers parallel wired.

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.



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