

### Professional Series

### Application:

High power for critical sound reproduction in large format cinemas and studio production and post production applications.

### Key Features:

- ▶ High power four-way ScreenArray® design for maximum output, optimal coverage, and minimum distortion.
- ▶ 1400 watt midrange featuring four 8" Differential Drive® transducers
- ▶ Large format 4" neodymium, damped titanium diaphragm, high frequency compression driver.
- ▶ 1600 watt low frequency section with two 18" SVG low frequency drivers
- ▶ New molded Optimized Aperture Waveguide technology for ultra low distortion and extremely uniform frequency response.
- ▶ JBL Patented SSC™ Screen spreading Compensation
- ▶ Focused Coverage Technology
- ▶ Flat Front Wave Guide design for easy baffle wall installation
- ▶ Shallow 24" depth for minimum behind screen depth requirements.

Large format and 3D cinemas require perfect coverage in every seat of the auditorium, wide dynamic range and extended bandwidth, as well as inaudible levels of distortion. Digital soundtracks require sound systems for premier auditoriums that can accurately reproduce the sound exactly as recorded.

The 5742 High Power ScreenArray features true four-way design enhanced by advanced engineering. JBL's latest technical innovations are integrated into a system design that provides superior coverage, maximum power handling, and uniform acoustic power output, along with extremely low distortion. The ScreenArray design provides ideal power response and directivity control with seamless transitions between acoustic sections.

Manufactured and sold under US Patents: 6466680, 6513622, 7027605, 5748760 and 5042072



### Specifications:

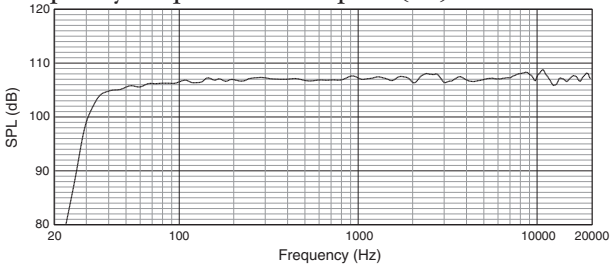
System:	
Frequency Range (-10 dB):	25 Hz - 20 kHz
Frequency Response (±3 dB):	30 Hz - 19 kHz
Sensitivity:	115 dB, 2.83V @ 1m (3.3 ft)
Maximum SPL:	136 dB SPL continuous @ 1m, 142 dB Peak
System Input Power Rating:	LF: 1600 W; MF: 1400 W; HF: 150 W
Hor. Coverage Angle (-6 dB):	90°
Vert. Coverage Angle (-6 dB):	20° up, 30° down
Directivity Factor (Q):	10.0
Directivity Index (dB):	10
Crossover Frequencies <sup>1</sup> :	220 Hz, 550 Hz, 1.3 kHz
Dimensions (H x W x D):	2763 mm x 762 mm x 610 mm (108.8 in x 30.0 in x 24.0 in)
Net Weight:	128.1 kg (282 lb)
Shipping Weight:	151.4 kg (333 lb)
Component Elements:	
<b>Model 5749 Low Frequency:</b>	Transducers: 2 x 2242HPL, 460 mm (18 in) dia. Super Vented Gap Cooled™ (SVG), 100 mm (4 in) dia. edgewound ribbon voice coils.
Nominal Impedance:	2 x 4 ohms
Input Power Rating:	1600 W (AES), 2000 to 4000 W recommended amplifier
Sensitivity:	104 dB SPL, 2.83V @ 1m (3.3 ft)
Input Connectors:	Push terminal binding posts
Dimensions (H x W x D):	1219 mm x 762 mm x 610 mm (48.0 in x 30.0 in x 24.0 in)
Net Weight:	95.3 kg (210 lb)
Shipping Weight:	106.3 kg (234 lb)
<b>Model 5742-M/HF:</b>	Mid Frequency: 4 x 2169H, 200 mm (8 in) dia. Differential Drive® Neodymium Magnet, 76 mm (3 in) dual coil edgewound ribbon voice coil.
High Frequency:	2452H-SL 38 mm (1.5 in) exit compression driver with 100 mm (4 in) diameter voice coil and Neodymium magnet.
Nominal Impedance:	MF: 2 x 4 ohms; HF: 8 ohms
Input Power Rating:	MF: 2 x 700 W; 1000 to 2000 W recommended amplifier HF: 150 W; 500 to 1000 W recommended amplifier
Sensitivity:	MF: 115 dB SPL, 2.83V @ 1m (3.3 ft) HF: 115 dB SPL, 2.83V @ 1m (3.3 ft)
Input Connectors:	Screw Terminal Barrier Strip
Dimensions (H x W x D):	1544 mm x 762 mm x 450 mm (60.8 in x 30.0 x 17.8 in)
Net Weight:	32.8 kg (72 lb)
Shipping Weight:	45.1 kg (99 lb)

<sup>1</sup>JBL factory-engineered four-channel Digital Signal Processing (DSP) is required for this product to achieve specified performance.

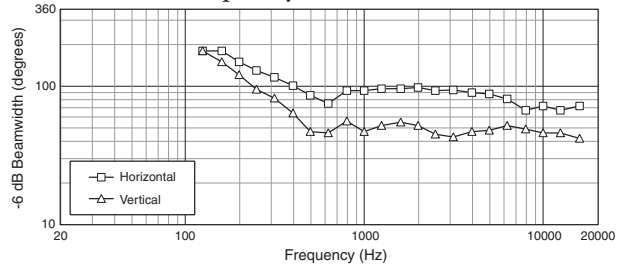
JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

# ▶ 5742 Four-Way, High Power, Quad Amplified ScreenArray® Cinema Loudspeaker System

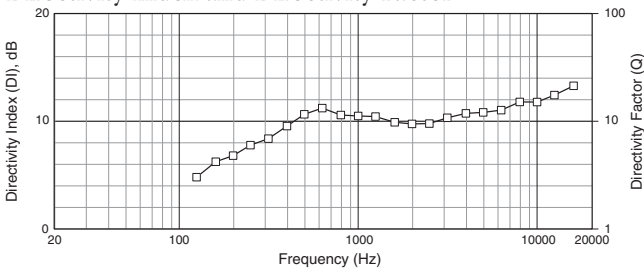
Frequency Response in half-space ( $2\pi$ )



Bandwidth vs. Frequency

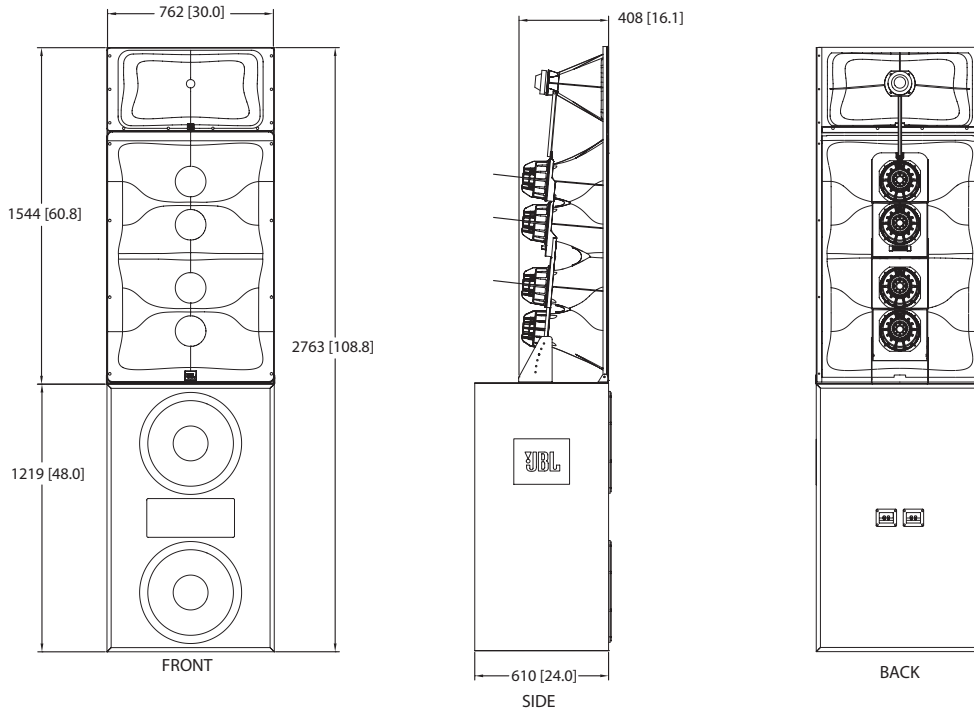


Directivity Index and Directivity Factor



## Dimensions

Dimensions in mm (in)



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