

Panaray® 402® Series IV

Installed Sound-Reinforcement Loudspeaker



Key Features

- Full-Range-Driver Array eliminates tweeters and crossovers for unsurpassed reliability in harsh environments and vocal clarity
- 4 x Bose 4.5-inch full-range drivers for legendary reliability
- 120° x 60° Articulated Array® design covers a very wide area, which can reduce the number of loudspeakers required
- 73 Hz - 15 kHz frequency range eliminates need for subwoofers for moderate full-range music levels
- 119 dB peak SPL for sound-reinforcement and foreground music
- Rugged, lightweight enclosure with threaded inserts for easy installations
- Weather-Rated design for indoor or outdoor installations
- Requires active equalization



TECHNICAL DATA SHEET

Product Overview

The Panaray® 402® Series IV installed sound-reinforcement loudspeaker features a full-range-driver array, eliminating the need for tweeters and crossovers, to provide unsurpassed reliability and vocal clarity. The Articulated Array® design, with wide 120° x 60° coverage, can reduce the number of required loudspeakers, while the 73-Hz low-frequency range can eliminate the need for subwoofers, providing a cost-effective solution for many indoor or outdoor installed sound-reinforcement applications.

Technical Specifications

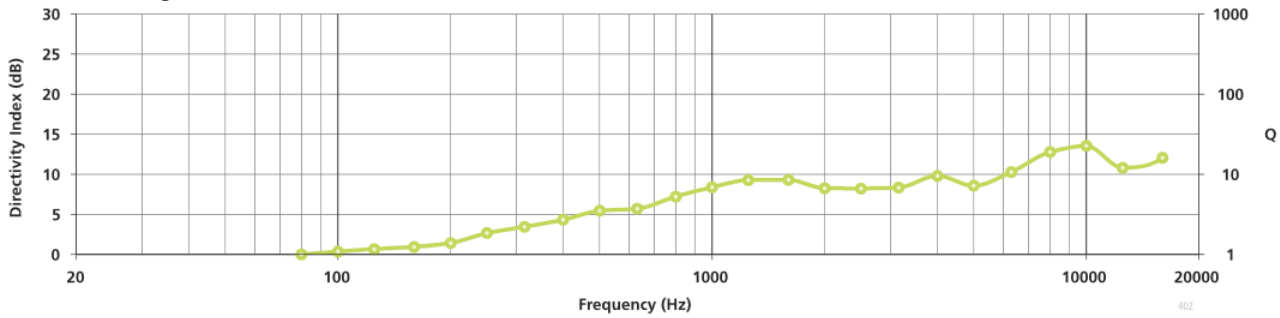
System Performance		
Frequency Range (-10 dB) ¹	73 Hz - 15 kHz	
Recommended High-Pass Protection Filter	75 Hz with minimum 12 dB / octave filter	
Nominal Coverage Pattern	120° H x 60° V	
Loudspeaker EQ	Active EQ required for optimal performance	
Overload Protection	Power limiting circuit (non-fused; automatic reset)	
	Bose extended-lifecycle test ²	AES component test ³
Power Handling, long-term continuous	120 W	150 W
Power Handling, peak	480 W	600 W
	Free field	Free field
Sensitivity (SPL/ 1W @ 1 m) ⁴	91 dB	91 dB
Calculated Maximum SPL @ 1 m ⁵	112 dB	113 dB
Calculated Maximum SPL @ 1 m, peak	118 dB	119 dB
Transducers		
Full-range drivers	4 x Bose 4.5" (114 mm) full-range cone transducers	
Nominal Impedance	8 ohms	
Physical		
Enclosure Material	Mineral-reinforced HDPE	
Grille	Powder-coated steel grille	
Environmental	Outdoor per IEC 529 IP55	
Connectors	2 x Neutrik® NL4 wired parallel	
Suspension / Mounting	7 x M8 threaded inserts (4 back, 2 bottom, 1 top)	
Dimensions (H x W x D)	592 mm x 206 mm x 202 mm (23.3" x 8.1" x 8.0")	
Net Weight	16 pounds (7.3 kg)	
Shipping Weight	20 pounds (9.1 kg)	
Product Code		
Black	739706-0110	
White	739706-0210	

Panaray® 402® Series IV

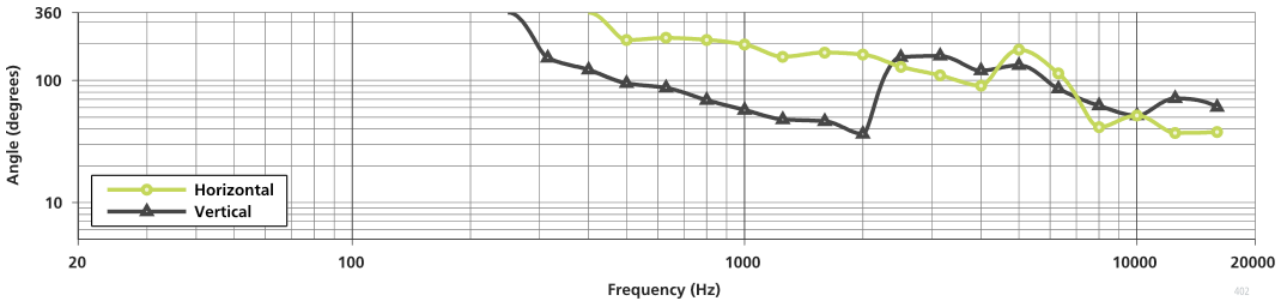
Installed Sound-Reinforcement Loudspeaker



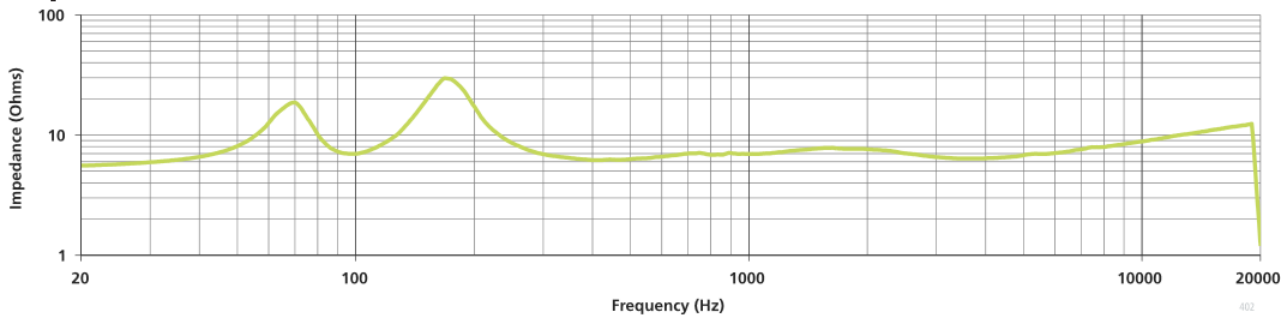
Directivity Index and Q



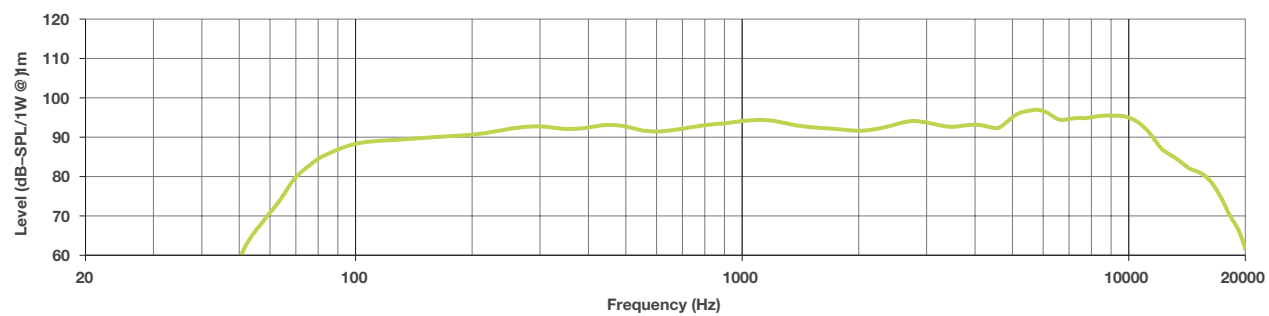
Beamwidth



Impedance



On-Axis Response



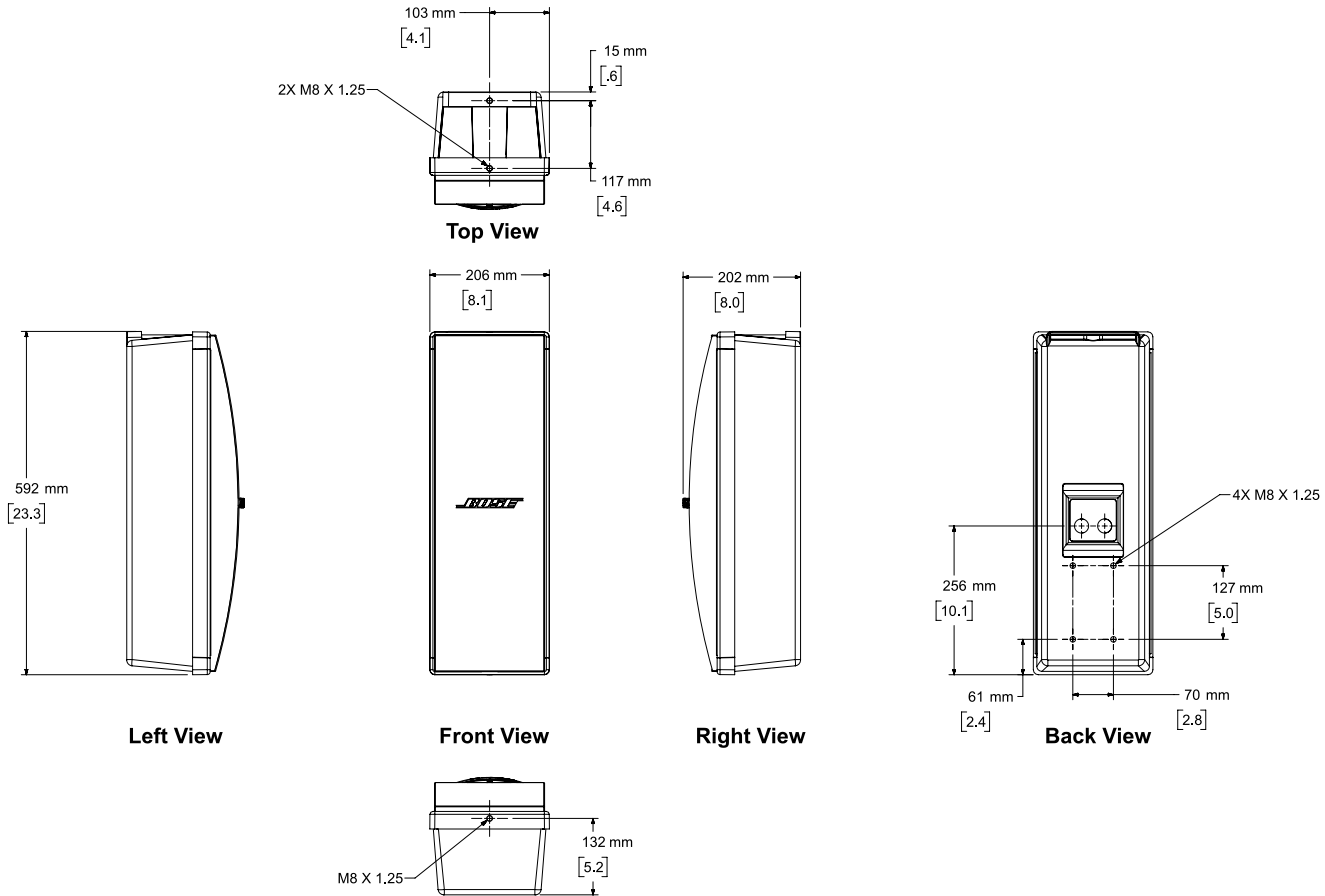
Panaray® 402® Series IV

Installed Sound-Reinforcement Loudspeaker



Mechanical Drawings

TECHNICAL DATA SHEET



Footnotes

1. Frequency range measured on-axis with recommended EQ in an anechoic environment.
2. Bose extended-lifecycle test: pink noise, IEC268-5 filtered, 6-dB crest factor, 100-hour duration, with recommended EQ.
3. AES component test: pink noise, IEC268-5 filtered, 6-dB crest factor, 2-hour duration, with recommended EQ.
4. Sensitivity measured in anechoic acoustic boundary conditions with recommended EQ, referenced to 1W/m.
5. Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.