

# Panaray® 502® A

## Installed Sound-Reinforcement Loudspeaker



### Key Features

- Full-Range-Driver Array eliminates tweeters and crossovers for unsurpassed reliability in harsh environments and vocal clarity
- 5 x Bose 4.5-inch full-range drivers for legendary reliability
- 120° x 70° Articulated Array® design covers a very wide area, which can reduce the number of loudspeakers required
- 103 Hz - 15 kHz frequency range optimized for speech and vocal clarity
- 117 dB peak SPL for sound-reinforcement and foreground music
- Slim, elegant design for demanding aesthetic requirements
- Indoor installations only
- Optional 70V/100V transformer
- Requires active equalization



TECHNICAL DATA SHEET

### Product Overview

The Panaray® 502®A 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 70° coverage, can effectively cover small venues with a single loudspeaker, providing a cost-effective solution for many indoor installed voice-reinforcement applications. The Panaray 502 A can also be paired with optional Bose Pro subwoofers for use with full-range music program material.

### Technical Specifications

System Performance		
Frequency Range (-10 dB) <sup>1</sup>	103 Hz - 15 kHz	
Recommended High-Pass Protection Filter	110 Hz with minimum 12 dB / octave filter	
Nominal Coverage Pattern	120° H x 70° V	
Loudspeaker EQ	Active EQ required for optimal performance	
Overload Protection	Fused: 4-ampere AGC 4 (Buss) or 3AG (Littlefuse)	
	Bose extended-lifecycle test <sup>2</sup>	AES component test <sup>3</sup>
Power Handling, long-term continuous	150 W	200 W
Power Handling, peak	600 W	800 W
	Free field	Free field
Sensitivity (SPL/ 1W @ 1 m) <sup>4</sup>	88 dB	88 dB
Calculated Maximum SPL @ 1 m <sup>5</sup>	110 dB	111 dB
Calculated Maximum SPL @ 1 m, peak	116 dB	117 dB
Transducers		
Full-range drivers	5 x Bose 4.5" (114 mm) full-range cone transducers	
Nominal Impedance	8 ohms	
Physical		
Enclosure Material	Mineral-reinforced structural foam	
Grille	Powder-coated steel grille	
Environmental	Indoor use only	
Connectors	2 x Neutrik® NL4 and 2 x barrier strips, wired parallel	
Suspension / Mounting	4 x M8 threaded inserts (4 back)	
Dimensions (H x W x D)	603 mm x 146 mm x 179 mm (23.8" x 5.8" x 7.1")	
Net Weight	15 lbs (6.8 kg)	
Shipping Weight	18 lbs (8.3 kg)	
Product Code		
Black	040170	
White	040171	

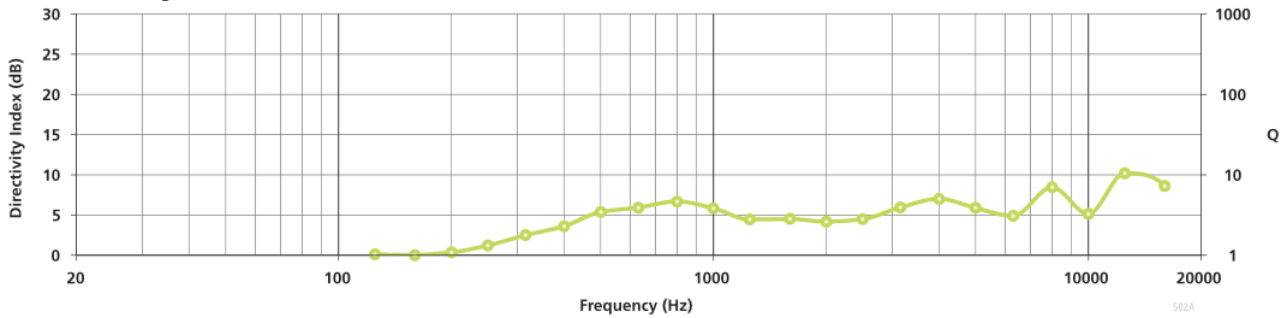
# Panaray® 502® A

Installed Sound-Reinforcement Loudspeaker

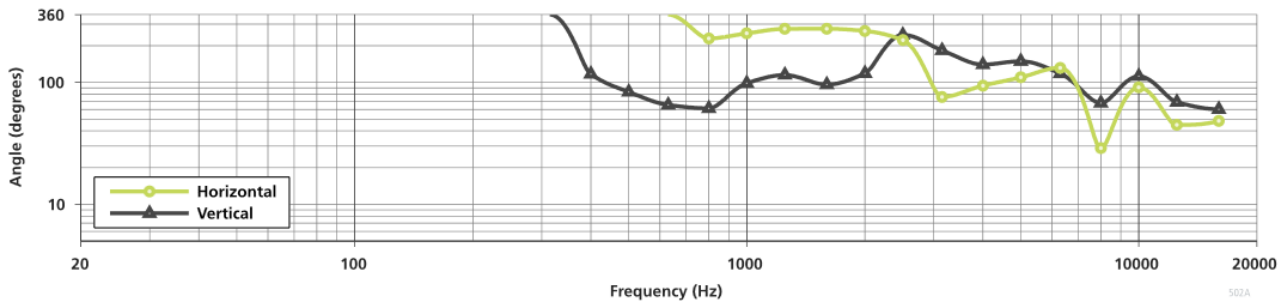


TECHNICAL DATA SHEET

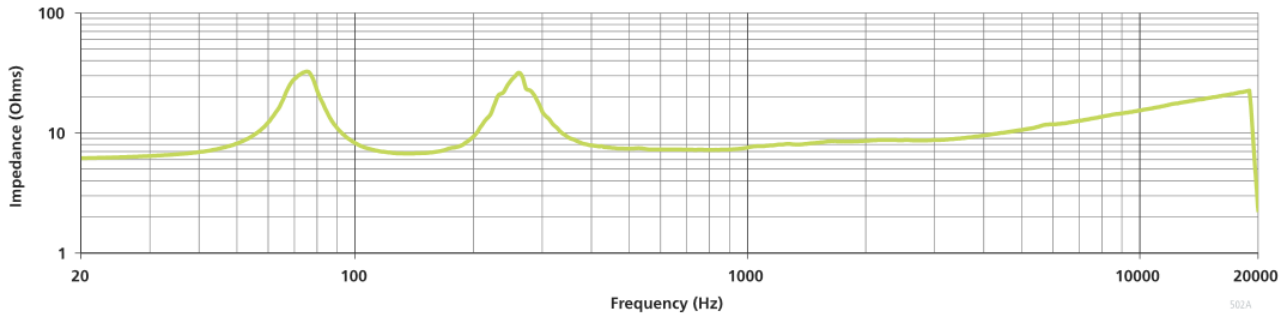
## Directivity Index and Q



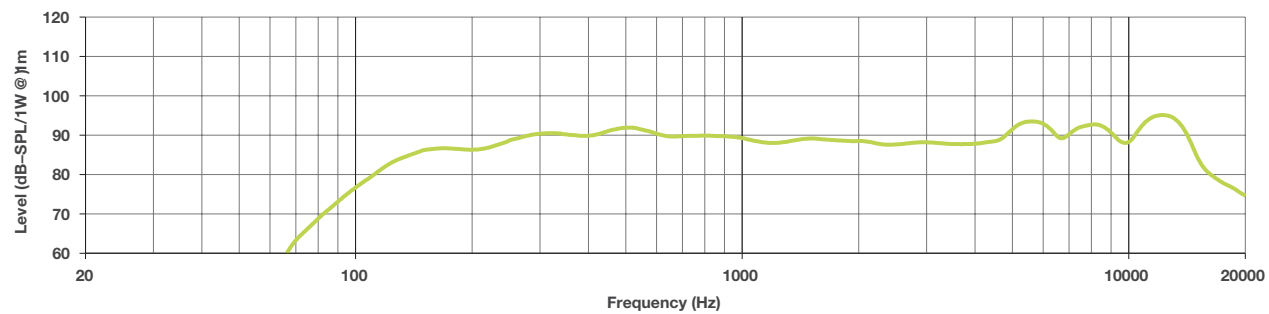
## Beamwidth



## Impedance



## On-Axis Response

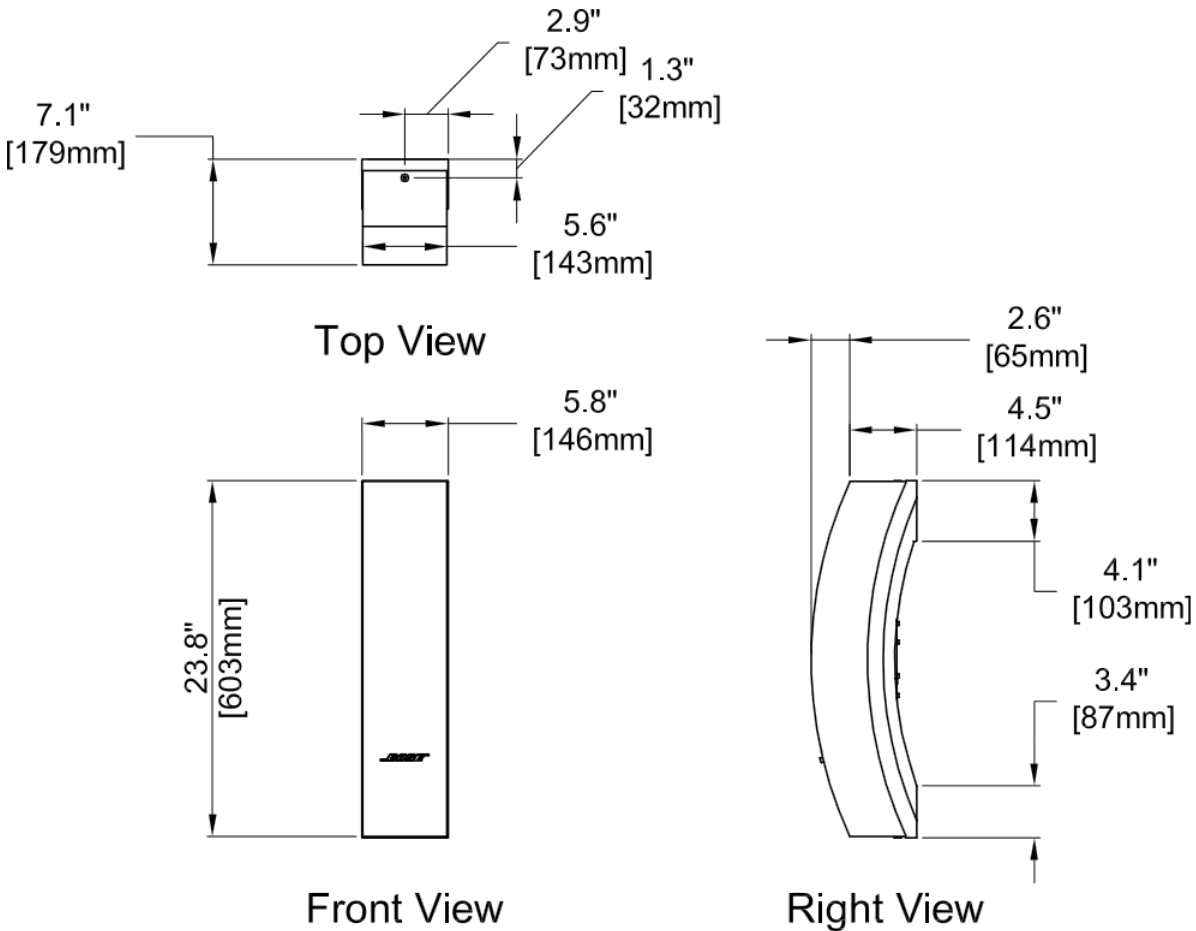


# Panaray® 502® A

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.

For additional specifications and application information, please visit [pro.bose.com](http://pro.bose.com). Specifications subject to change without notice.

# Panaray<sup>®</sup> 502<sup>®</sup> A

Installed Sound-Reinforcement Loudspeaker



TECHNICAL DATA SHEET