

# Panaray® 802® Series III loudspeaker

# BOSE®

## Key Features

- **Articulated Array® design** provides 120° x 100° coverage to deliver wide-range reproduction over a broad dispersion area
- **Eight Bose® 4.5" (114 mm)** full-range drivers for unsurpassed natural sound quality. Eliminating tweeters and crossover provides lifelike vocal and instrument reinforcement
- **Frequency range down to 50 Hz** allows full-range speech and light music reinforcement without the need for subwoofers in many applications
- **Rugged, lightweight enclosure** featuring a metal grille and protective cover with carrying handle
- **Protective cover** doubles as a handle and monitor stand
- **Weather-resistant** design for indoor and outdoor applications
- **A full complement** of brackets and stands available
- **Requires active** equalization for best performance



TECHNICAL DATA SHEET

## Product Overview

The Bose® Panaray 802 Series III is a full-range loudspeaker designed for permanent installations and portable sound reinforcement, for both indoor and outdoor applications. The Articulated Array® speaker configuration provides a wide 120° x 100° pattern to effectively cover many smaller venues with a single loudspeaker. Natural sound quality, high output, versatility and durability make the 802 Series III one of our most flexible sound reinforcement loudspeakers.

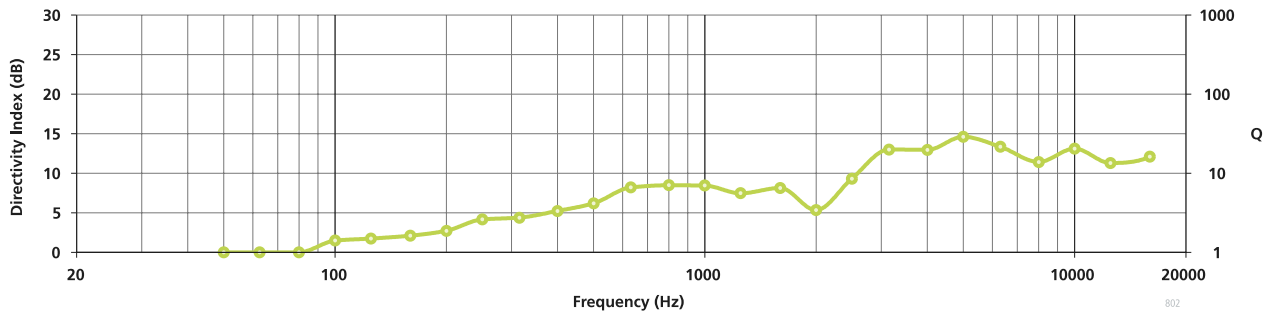
## Technical Specifications

System Performance	
Frequency Response (+/-3 dB) <sup>1</sup>	60 Hz - 15 kHz
Frequency Range (-10 dB) <sup>1</sup>	50 Hz - 16 kHz
Nominal Dispersion	120° H x 100° V
Loudspeaker EQ	Required
Overload Protection	PTC
Long-Term Power Handling <sup>2</sup>	240 W (960 W peak)
Sensitivity (SPL / 1 W @ 1 m) <sup>3</sup>	91 dB SPL
Maximum SPL @ 1 m <sup>4</sup>	116 dB SPL (122 dB SPL peak)
Nominal Impedance	8 Ω
Transducers	
Driver Complement	Eight (8) 4.5" (114 mm) full-range environmental drivers
Physical	
Enclosure	Mica-reinforced structural foam, textured
Grille	Powder-coated steel grille
Environmental	Outdoor per IEC 529 IP55
Connectors	Two (2) parallel-wired NL4 Neutrik® Speakon® connectors
Suspension / Mounting	Four (4) M8 x 1.25 inserts (2 back, 2 bottom)
Dimensions	13.1" H x 20.5" W x 12.9" D (334 mm x 520 mm x 327 mm)
Net Weight	37 lb (16.8 kg)
Shipping Weight	42 lb (19.1 kg)
Product Code	
Black	040092

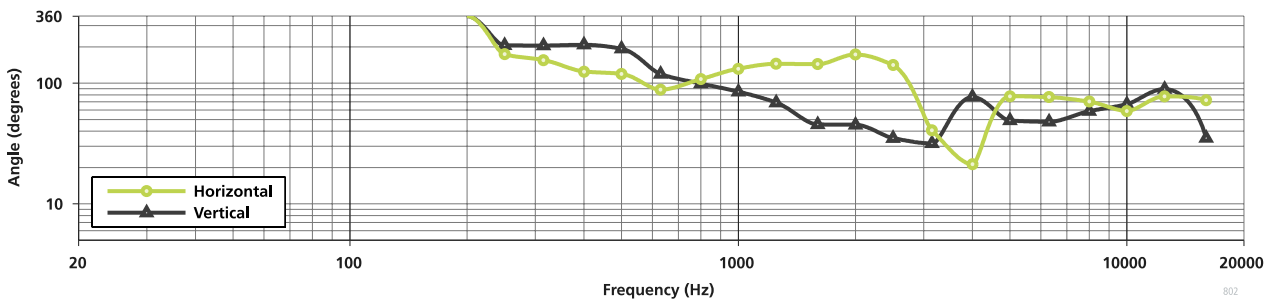
### Footnotes:

- <sup>1</sup> Frequency response and range measured on-axis with recommended active EQ in an anechoic environment.
- <sup>2</sup> Power handling tested using pink noise filtered to meet IEC 268-5, 6 dB crest factor, 100 hours, with recommended EQ.
- <sup>3</sup> Sensitivity measured in free field (no boundary-loading gain) with recommended active EQ, referenced to 1W/1m.
- <sup>4</sup> Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.

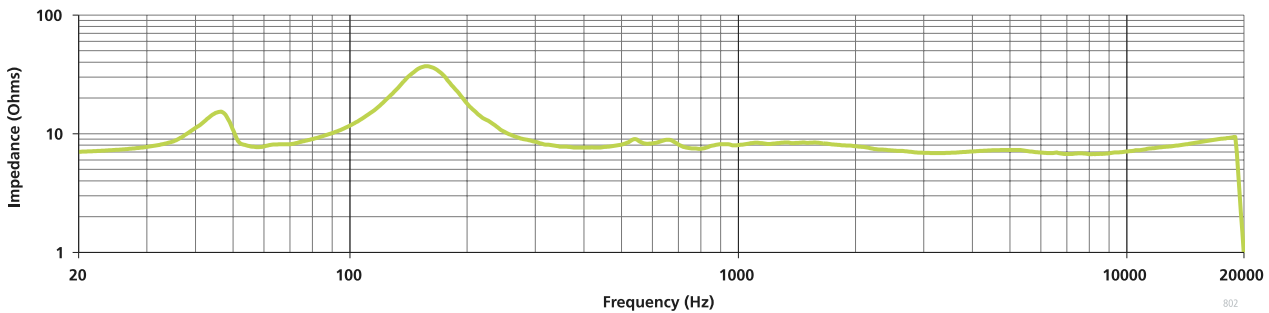
## Directivity Index and Q



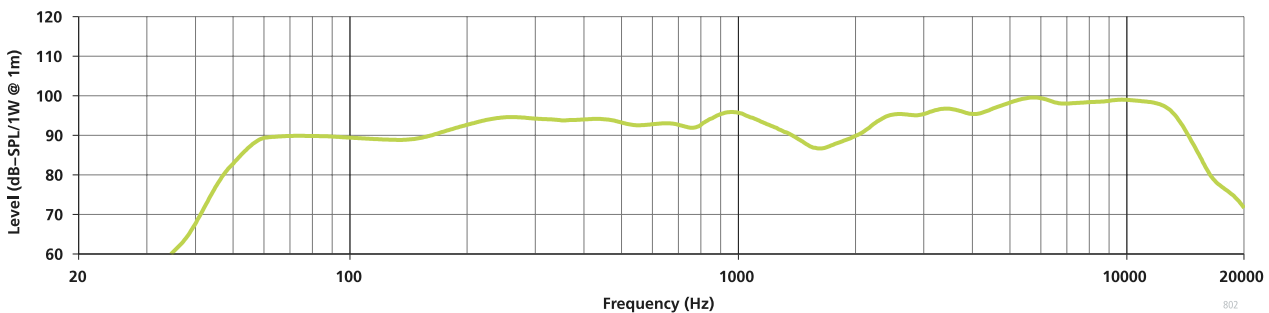
## Beamwidth



## Impedance



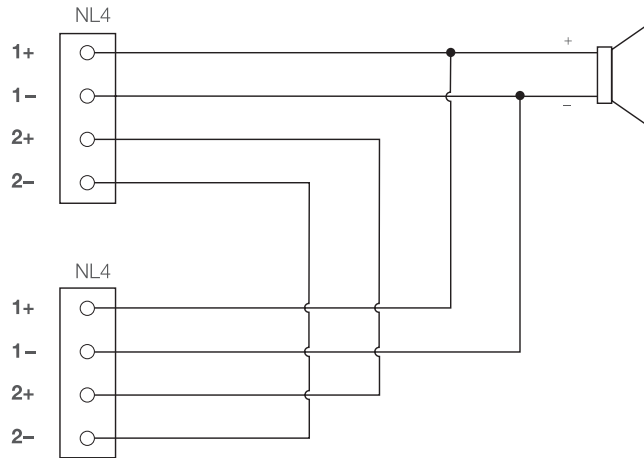
## On-Axis Response



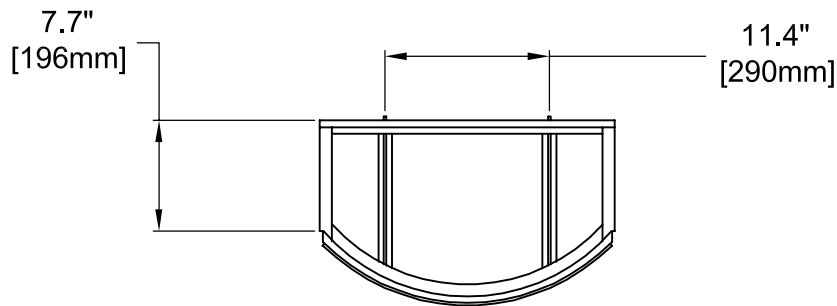
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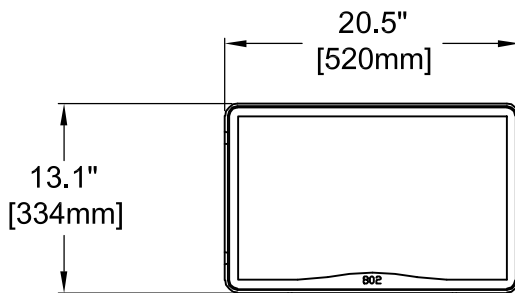
## Wiring Diagram



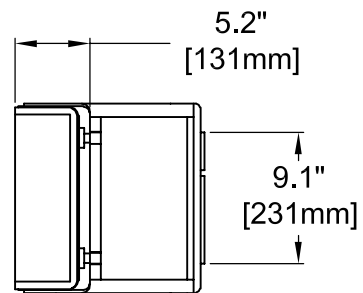
## Mechanical Diagrams



Top View



Front View

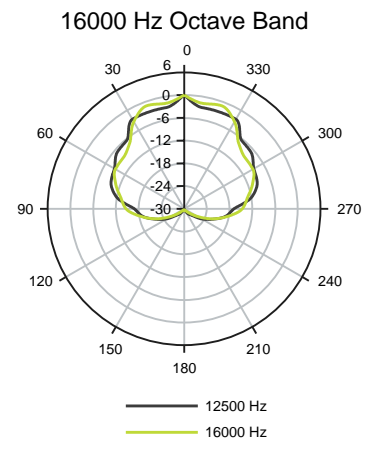
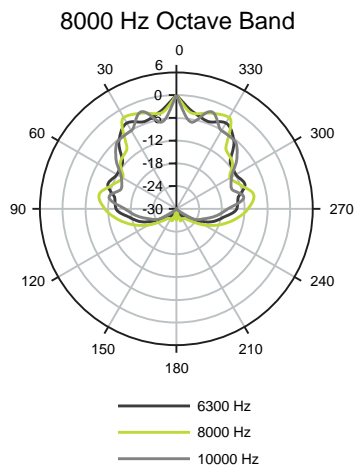
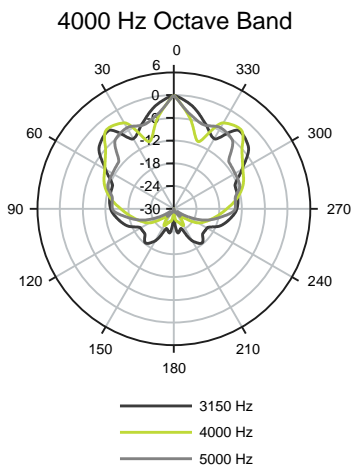
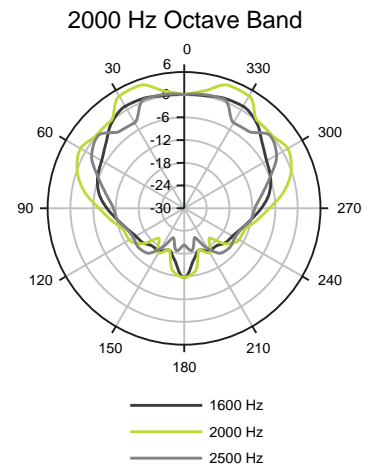
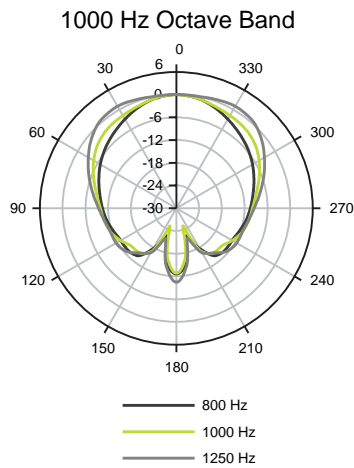
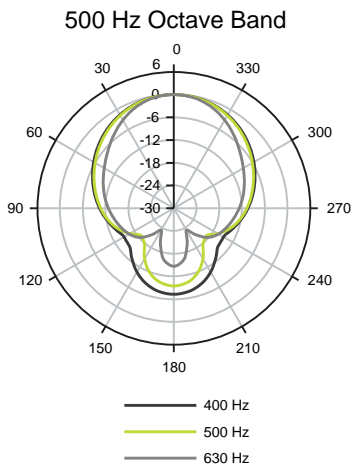
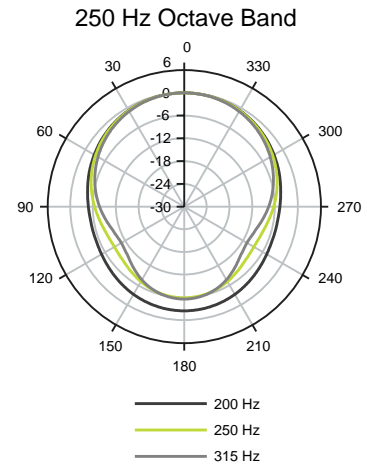
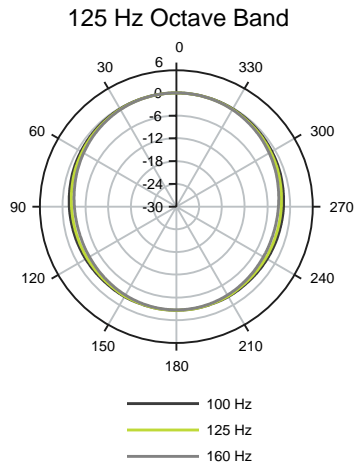
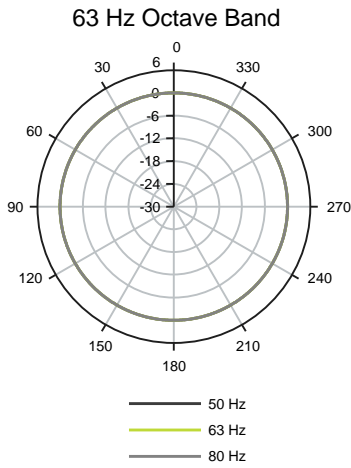


Right View

# Panaray® 802® Series III loudspeaker



## Horizontal Plots



802

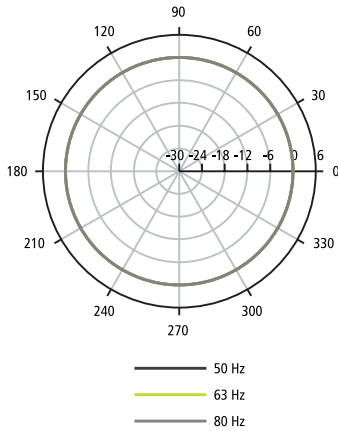
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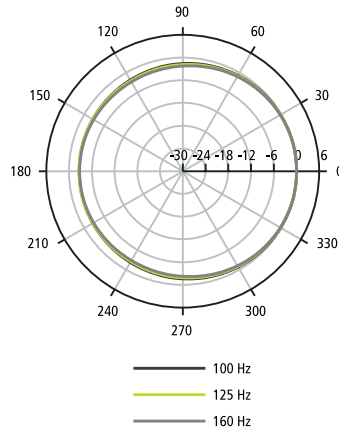
## Vertical Plots

TECHNICAL DATA SHEET

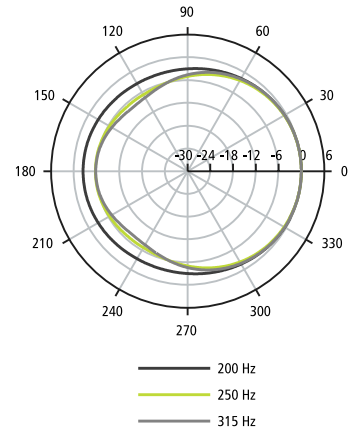
63 Hz Octave Band



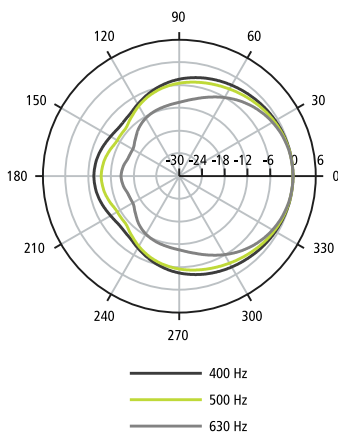
125 Hz Octave Band



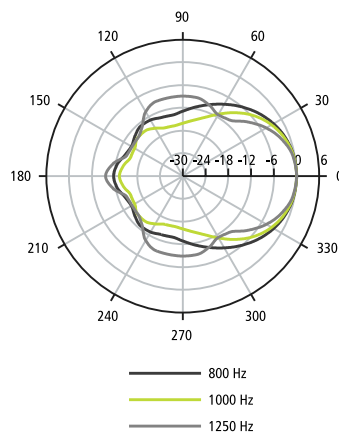
250 Hz Octave Band



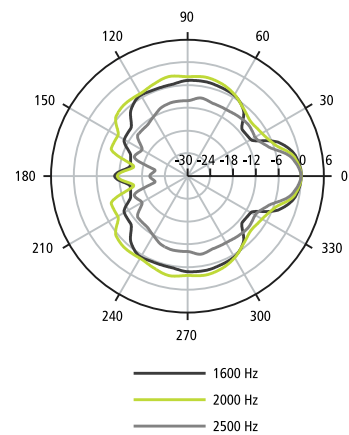
500 Hz Octave Band



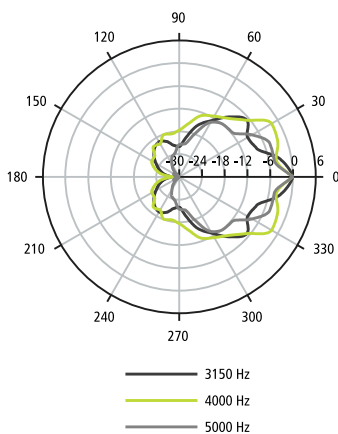
1000 Hz Octave Band



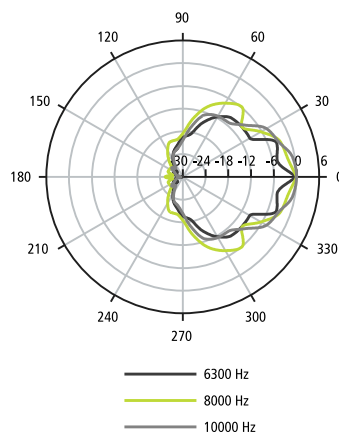
2000 Hz Octave Band



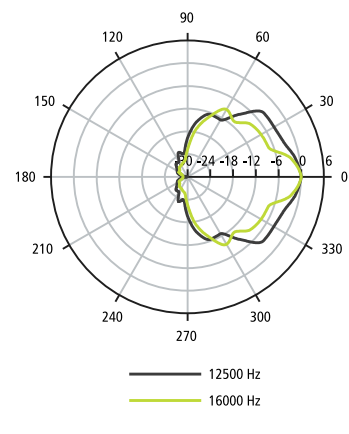
4000 Hz Octave Band



8000 Hz Octave Band



16000 Hz Octave Band



802

# Panaray® 802® Series III loudspeaker



## Architects' and Engineers' Specifications

The loudspeaker shall be a multiple driver, full-range system with matched active equalization as follows:

The transducer complement shall consist of eight (8) full-range environmental drivers of 4.5" (114 mm) diameter, mounted symmetrically in vertical pairs on a faceted, removable baffle assembly. Each driver shall have a rated impedance of 1 ohm and shall be wired in series, resulting in a composite nominal impedance of 8 ohms.

The system sensitivity shall be 99 dB SPL in the 300 Hz to 3 kHz range and 91 dB SPL in the 60 Hz to 15 kHz range with both measurements referenced to a 1 watt (2.83 V) pink noise input at 1 meter. The nominal horizontal beamwidth shall be 120 degrees, and the nominal vertical beamwidth shall be 100 degrees. The power handling capacity of the loudspeaker shall be 240 watts continuous pink noise, band-limited from 60 Hz to 15 kHz.

The loudspeaker shall be provided with a ducted vent system, tuned at 55 Hz. The input connectors of the 802 Series III loudspeaker shall consist of two (2) parallel-wired NL4 Neutrik® Speakon® connectors.

The enclosure of the 802 Series III loudspeaker shall be composed of mica-reinforced structural foam. Its outer dimensions shall be 13.1" x 20.5" x 12.9" (334 mm x 520 mm x 327 mm); its weight shall be 37 lb (16.8 kg).

The loudspeaker shall be the Bose® Panaray® 802® Series III loudspeaker.