

# LT 9400

## mid/high loudspeaker



### Key Features

- **90° x 40° coverage** for short- to medium-throw applications in auditoriums, worship facilities, performing arts centers, stadiums and arenas
- **Mid/high-frequency** loudspeaker designed for use in arrays with separate LF augmentation (Bose® MB12 or MB24 bass arrays) or voice-only applications
- **Bose V2 midrange manifold** sums output of 2 x 4.5" (114 mm) extended-range cone drivers for lower breakup distortion and improved transient response. Provides a smoother, more natural vocal range compared to single 8" to 12" woofers. The LT 9400 loudspeaker utilizes a single Bose V2 midrange manifold
- **Bose large-format waveguide** provides effective 90° x 40° pattern control to approximately 300 Hz (horizontal) and 1.5 kHz (vertical). Minimizes loudspeaker overlap in arrays to reduce comb-filter interference and improve intelligibility



TECHNICAL DATA SHEET

### Product Overview

The Bose® LT 9400 is a mid/high-frequency loudspeaker designed for downfill applications with LT Coherent Zone arrays in medium to large permanent installations, or as the primary reinforcement source along with MB low-frequency loudspeakers in smaller arrays and venues. The large-format 90° x 40° waveguide provides precise coverage and high intelligibility, serving as a cost-effective alternative to multiple-cabinet line arrays for many applications.

### Technical Specifications

System Performance	
Frequency Response (+/-3 dB) <sup>1</sup>	190 Hz - 16 kHz
Frequency Range (-10 dB) <sup>1</sup>	170 Hz - 18 kHz
Nominal Dispersion	90° H x 40° V
Sensitivity (SPL / 1 W @ 1 m) <sup>2</sup>	104 dB SPL
Maximum SPL @ 1 m <sup>3</sup>	124 dB SPL (130 dB SPL peak)
Crossover Type	Passive
Crossover Frequency	1.8 kHz
Recommended High-Pass Filter	170 Hz with 4th order filter (24 dB / octave)
Loudspeaker EQ	Required
Long-Term Power Handling <sup>4</sup>	100 W (400 W peak)
Nominal Impedance	8 Ω
Transducers	
Driver Complement	HF: 1.75" (44 mm) voice coil compression driver MF: Bose V2 midrange manifold with 2 x 4.5" (114 mm) cone drivers
Physical	
Enclosure	Baltic birch plywood, 11-ply, 13 mm
Finish	Polyurethane-based textured paint, black or white
Grille	16-gauge perforated steel grille with powder-coated finish
Environmental	Indoor use only
Connectors	Two (2) parallel-wired NL4 Neutrik® Speakon® connectors
Suspension / Mounting	Sixteen (16) points SAE 3/8" - 16 threaded inserts (4 each: top, bottom, sides), steel
Dimensions	25.2" H x 24.1" W x 22.6" D (640 mm x 612 mm x 574 mm)
Net Weight	82 lb (37.2 kg)
Shipping Weight	96 lb (43.4 kg)
Product Code	
Black	040186
White	040187 (Special Order Only)

**Footnotes:**

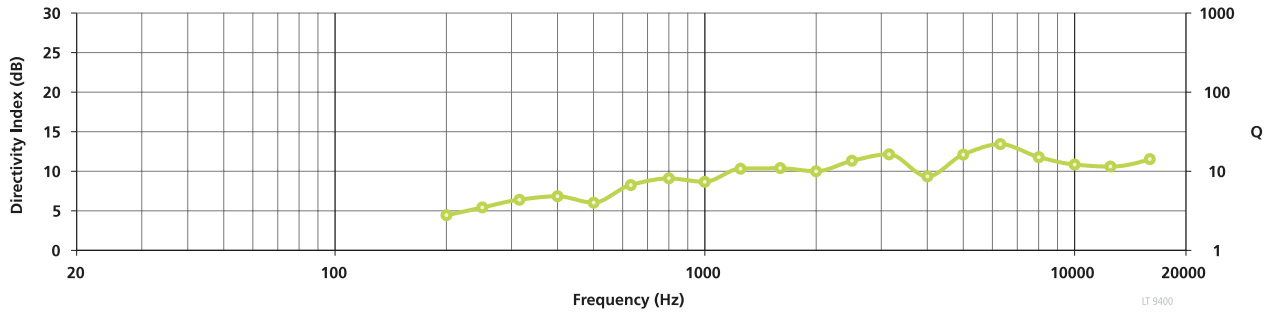
- <sup>1</sup> Frequency response and range measured on-axis with recommended active EQ in an anechoic environment.
- <sup>2</sup> Sensitivity measured in free field (no boundary-loading gain) with recommended active EQ, referenced to 1W/1m.
- <sup>3</sup> Maximum SPL calculated from sensitivity and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

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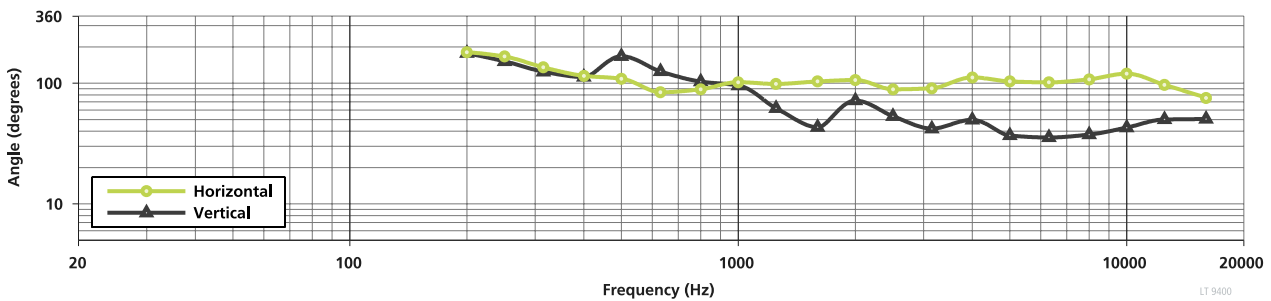
mid/high loudspeaker



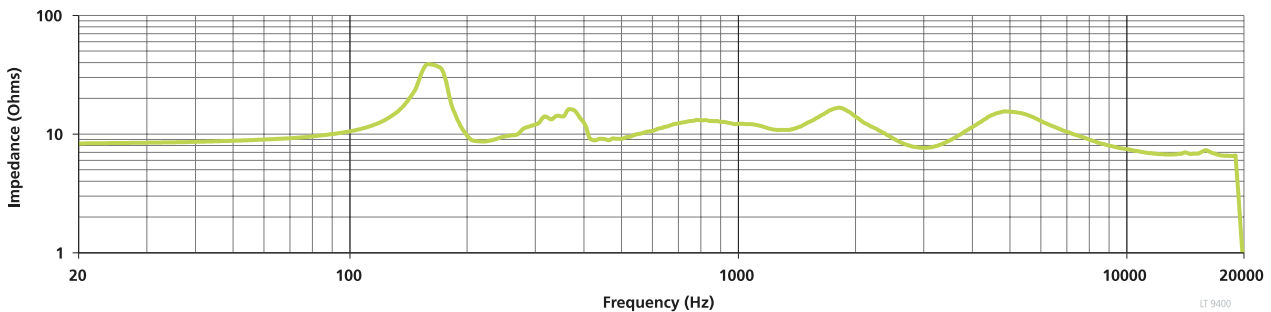
## Directivity Index and Q



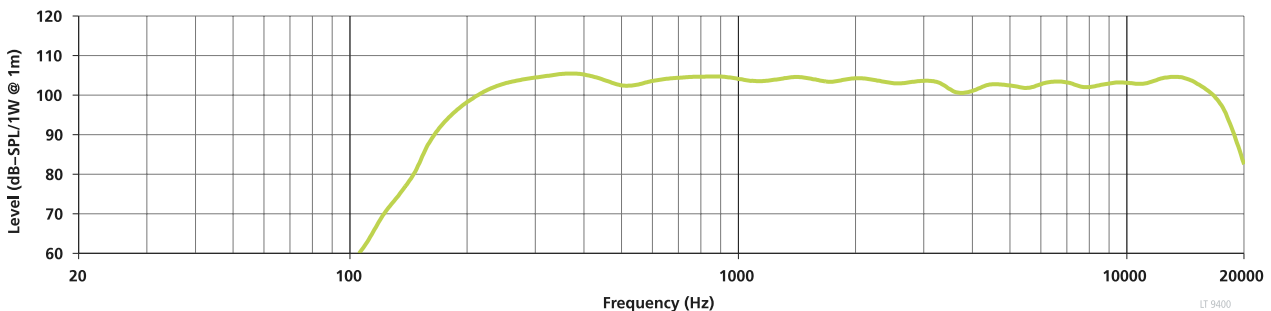
## Beamwidth



## Impedance



## On-Axis Response

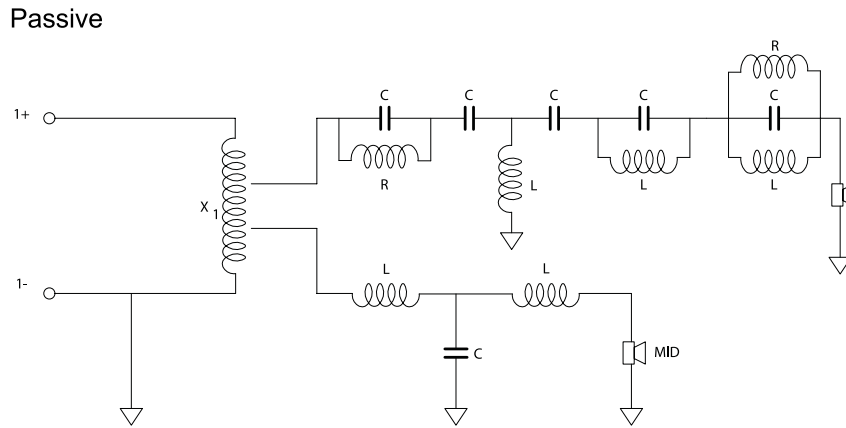


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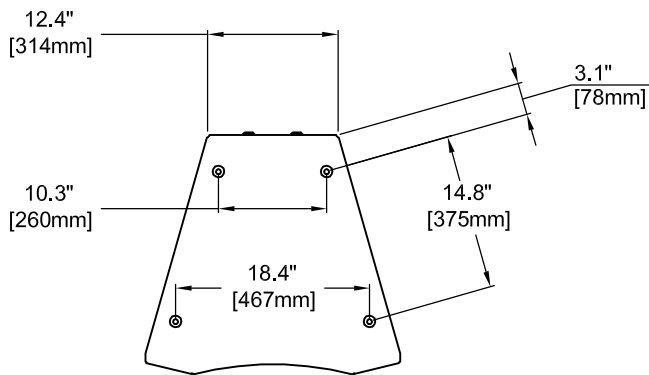
mid/high loudspeaker



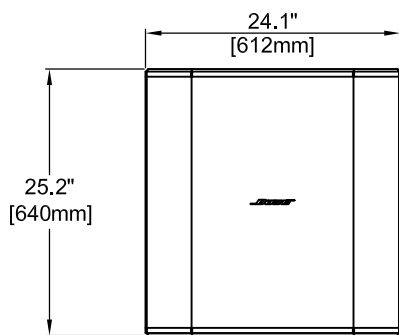
## Wiring Diagram



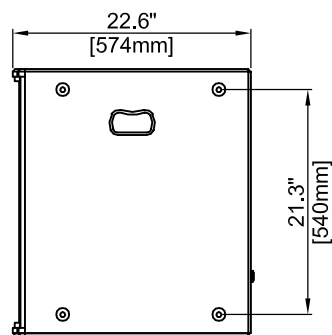
## Mechanical Diagrams



Top View



Front View



Right View

# LT 9400

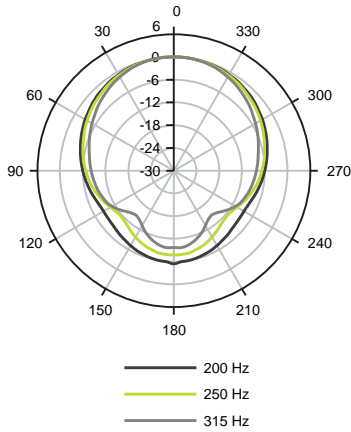
## mid/high loudspeaker



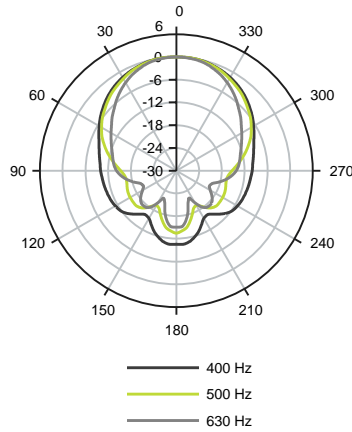
### Horizontal Plots

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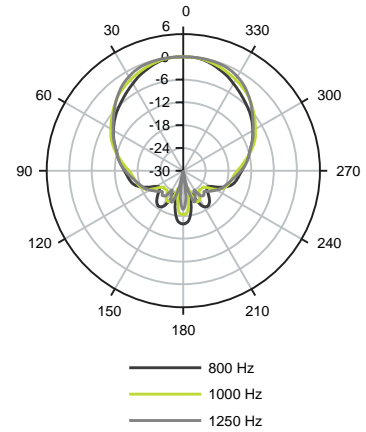
250 Hz Octave Band



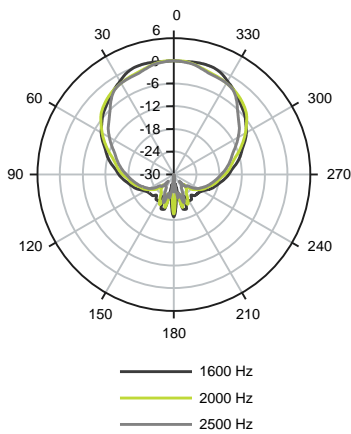
500 Hz Octave Band



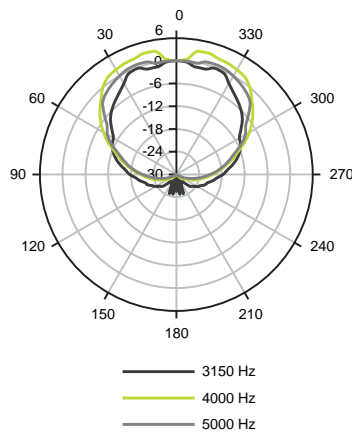
1000 Hz Octave Band



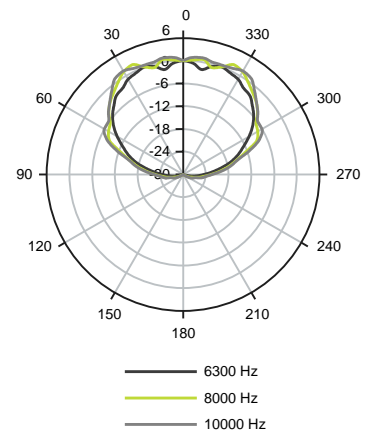
2000 Hz Octave Band



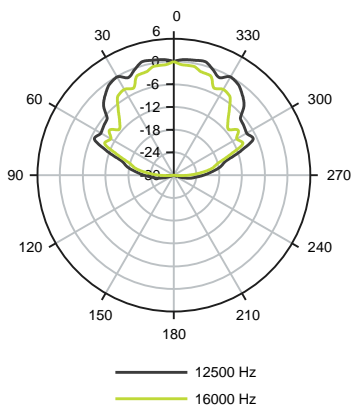
4000 Hz Octave Band



8000 Hz Octave Band



16000 Hz Octave Band



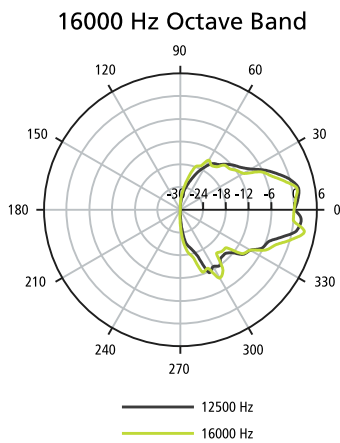
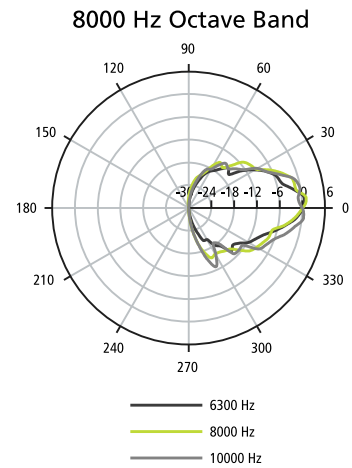
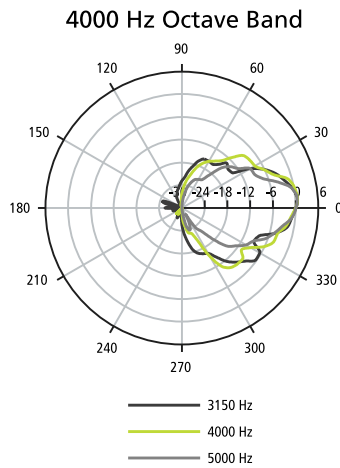
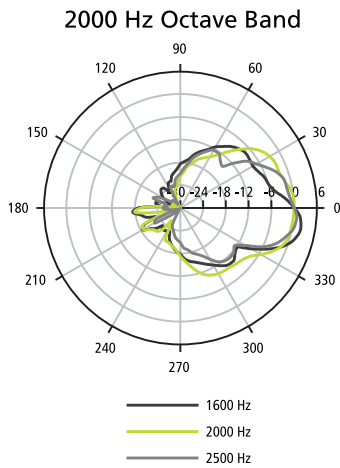
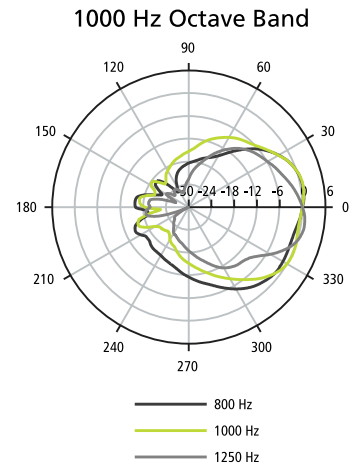
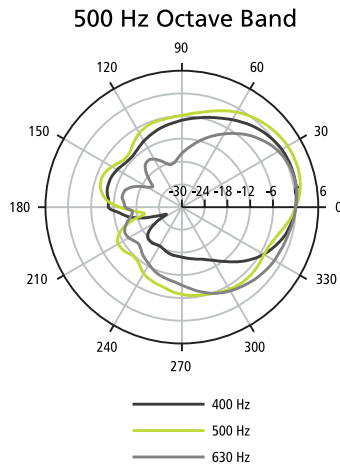
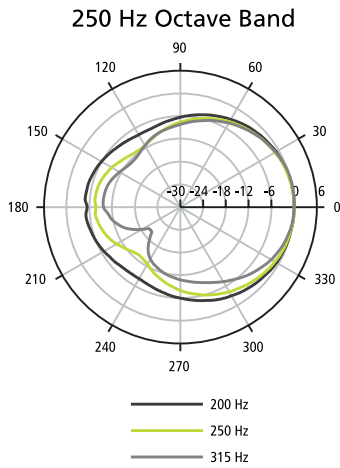
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## mid/high loudspeaker



### Vertical Plots



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### Architects' and Engineers' Specifications

The 2-way, mid/high-frequency loudspeaker shall contain a 1.75" (44 mm) diaphragm compression driver and a midrange manifold, which utilizes two (2) 4.5" (114 mm) cone drivers in a heat-sink/acoustic summation assembly. The transducers will exit into a large-format waveguide with 90° x 40° nominal beamwidth and effective pattern control to approximately 300 Hz (horizontal) and 1.5 kHz (vertical). An internal filter network with crossover of 1.8 kHz shall allow passive operation without external crossover processing.

On-axis system frequency response shall be 190 Hz to 16 kHz (+/- 3 dB) with recommended active equalization. The system sensitivity shall be 104 dB SPL with 1 watt input and be capable of producing peak output of 130 dB SPL on axis at 1 meter. The loudspeaker shall handle 100 watts of amplifier power (IEC 268-5 pink noise, 6 dB crest factor, for 100 hours) and the nominal input impedance shall be 8 ohms.

The trapezoidal enclosure shall be constructed of void-free, Baltic birch plywood with extensive internal bracing. The enclosure exterior shall be treated with a polyurethane-based paint that resists scuffing. The enclosure shall be covered by a 16-gauge perforated steel grille with powder-coated finish. The loudspeaker shall be rated for indoor use only. The enclosure shall have sixteen (16) steel threaded inserts (4 each: top, bottom, sides) that accept standard SAE 3/8"-16 rigging hardware. Inputs shall be two (2) NL4 Neutrik® Speakon® connectors. Loudspeaker dimensions shall be 25.2" x 24.1" x 22.6" (640 mm x 612 mm x 574 mm). Net weight shall be 82 lb (37.2 kg).

The 2-way, mid/high-frequency loudspeaker shall be the Bose® LT 9400 loudspeaker.