

# LT 3202<sup>®</sup> WR

## high-output mid/high loudspeaker



### Key Features

- **30° x 20°** coverage for long-throw applications in stadiums and arenas. (This is the only mid/high loudspeaker currently available with 30° x 20° pattern.)
- **Mid/high-frequency** loudspeaker designed for use in arrays with separate LF augmentation (Bose<sup>®</sup> 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 3202 WR utilizes four Bose V2 midrange manifolds
- **Bose coherent zone waveguide** provides effective 30° x 20° pattern control to approximately 1 kHz. Minimizes loudspeaker overlap in arrays to reduce comb-filter interference and improve intelligibility



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### Product Overview

The Bose<sup>®</sup> LT 3202<sup>®</sup> WR is a high-output, mid/high-frequency loudspeaker designed for use with other LT loudspeakers to form Coherent Zone arrays in medium to large permanent installations requiring precise coverage and high intelligibility. The large-format waveguide and narrow 30° x 20° pattern provide a cost-effective alternative to multiple-cabinet line arrays for long-throw applications in many stadiums and arenas.

### Technical Specifications

| System Performance                         |   |                     |                   |                    |                    |                   |
|--|---|---------------------|-------------------|--------------------|--------------------|-------------------|
| Frequency Response (+/-3 dB) <sup>1</sup>  | 220 Hz - 16 kHz   |                     |                   |                    |                    |                   |
| Frequency Range (-10 dB) <sup>1</sup>      | 150 Hz - 18 kHz   |                     |                   |                    |                    |                   |
| Nominal Dispersion                         | 30° H x 20° V   |                     |                   |                    |                    |                   |
| Sensitivity (SPL / 1 W @ 1 m) <sup>2</sup> | 110 dB SPL  |                     |                   |                    |                    |                   |
| Maximum SPL @ 1 m <sup>3</sup>             | 134 dB SPL (140 dB SPL peak)  |                     |                   |                    |                    |                   |
| Crossover Type                             | Passive, Bi-Amp, Dual-Mid Bi-Amp, Switchable  |                     |                   |                    |                    |                   |
| Crossover Frequency                        | 1.6 kHz   |                     |                   |                    |                    |                   |
| Recommended High-Pass Filter               | 150 Hz with 4th order filter (24 dB / octave)   |                     |                   |                    |                    |                   |
| Loudspeaker EQ                             | Required  |                     |                   |                    |                    |                   |
|  | Passive   | Bi-Amp              |                   | Dual-Mid Bi-Amp    |                    |                   |
|  |   | Mid                 | High              | Mid 1              | Mid 2              | High              |
| Long-Term Power Handling <sup>4</sup>      | 280 W (1120 W peak)   | 280 W (1120 W peak) | 75 W (300 W peak) | 140 W (560 W peak) | 140 W (560 W peak) | 75 W (300 W peak) |
| Nominal Impedance                          | 16 Ω  | 16 Ω                | 8 Ω               | 8 Ω                | 8 Ω                | 8 Ω               |
| Transducers                                |   |                     |                   |                    |                    |                   |
| Driver Complement                          | HF: 3" (76 mm) voice coil compression driver<br>MF: Four (4) Bose V2 midrange manifolds, each with 2 x 4.5" (114 mm) cone drivers |                     |                   |                    |                    |                   |
| Physical                                   |   |                     |                   |                    |                    |                   |
| Enclosure                                  | Exterior-grade Baltic birch plywood, 11-ply, 15 mm  |                     |                   |                    |                    |                   |
| Finish                                     | Two part spray polyurethane coating, black  |                     |                   |                    |                    |                   |
| Grille                                     | 16-gauge perforated stainless steel grille with powder-coated finish and backed with an open-cell foam                            |                     |                   |                    |                    |                   |
| Environmental                              | Outdoor per IEC 529 IPX5 <sup>5</sup>   |                     |                   |                    |                    |                   |
| Connectors                                 | Two (2) parallel-wired NL8 Neutrik <sup>®</sup> Speakon <sup>®</sup> connectors   |                     |                   |                    |                    |                   |
| Suspension / Mounting                      | Sixteen (16) points SAE 3/8" - 16 threaded inserts (4 each: top, bottom, sides), stainless steel                                  |                     |                   |                    |                    |                   |
| Dimensions                                 | 42.2" H x 22.5" W x 39.2" D (1072 mm x 573 mm x 997 mm)   |                     |                   |                    |                    |                   |
| Net Weight                                 | 195 lb (88.4 kg)  |                     |                   |                    |                    |                   |
| Shipping Weight                            | 244 lb (110.5 kg)   |                     |                   |                    |                    |                   |
| Product Code                               |   |                     |                   |                    |                    |                   |
| Black                                      | 323102-0110 (Special Order Only)  |                     |                   |                    |                    |                   |

**Footnotes:**

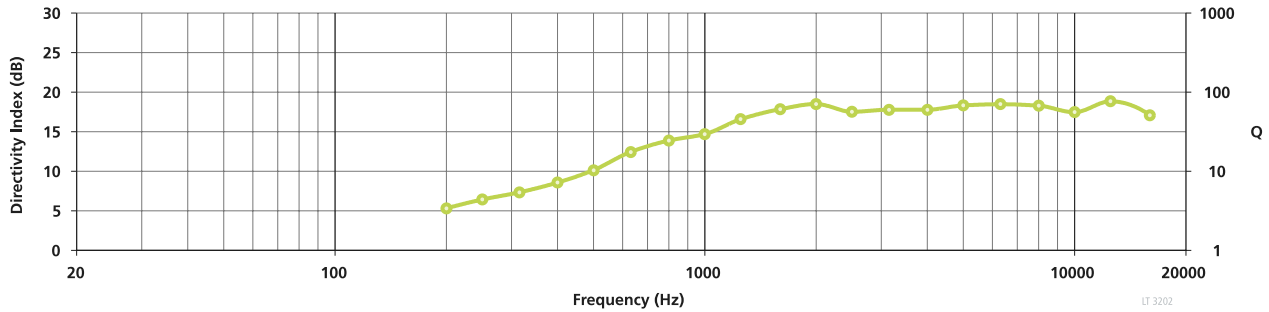
- 1 Frequency response and range measured on-axis with recommended active EQ in an anechoic environment.
- 2 Sensitivity measured in free field (no boundary-loading gain) with recommended active EQ, referenced to 1W/1m.
- 3 Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.
- 4 Power handling tested using pink noise filtered to meet IEC 268-5, 6 dB crest factor, 100 hours, with recommended EQ.
- 5 LT WR Loudspeaker must be mounted vertically for outdoor installations. Horizontal position (rotated 90 degrees) for indoor installations only.

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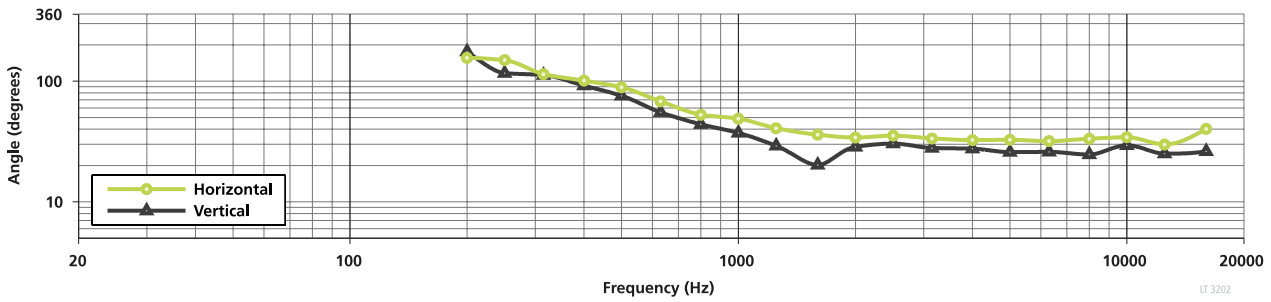
## high-output mid/high loudspeaker



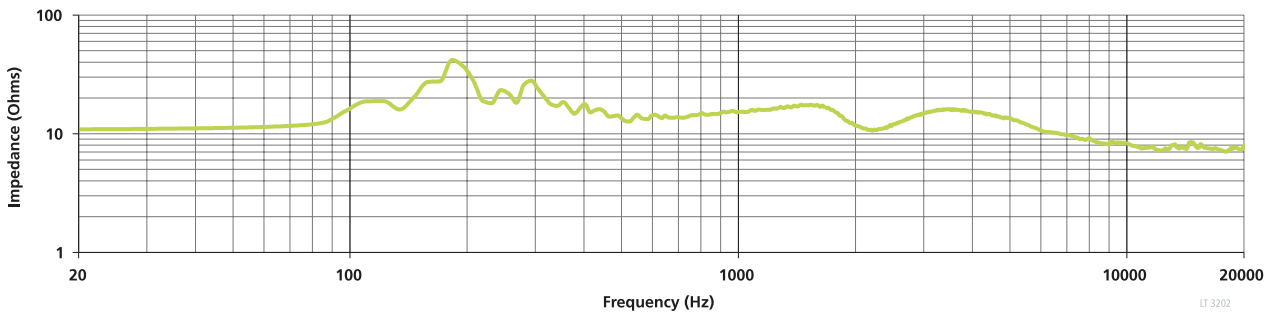
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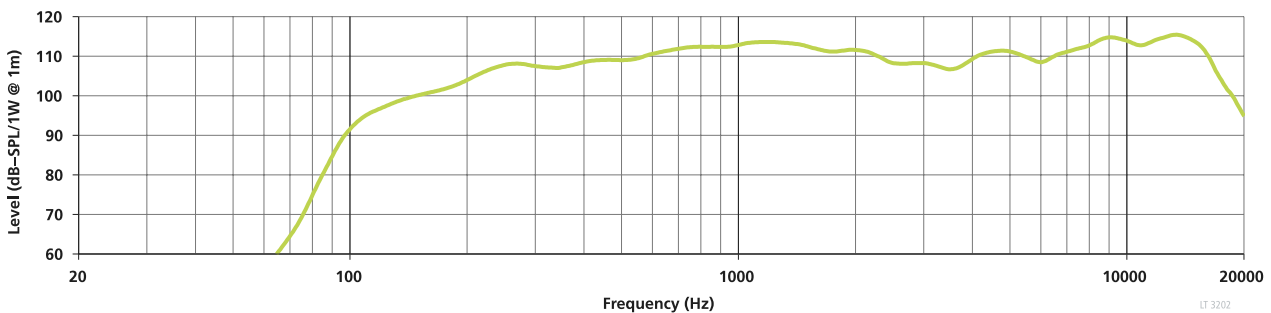
### Beamwidth



### Impedance



### On-Axis Response

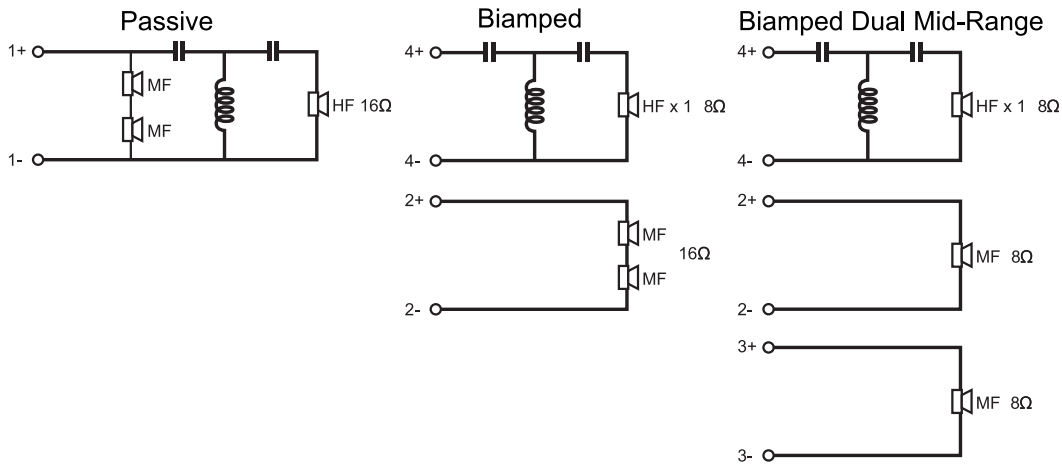


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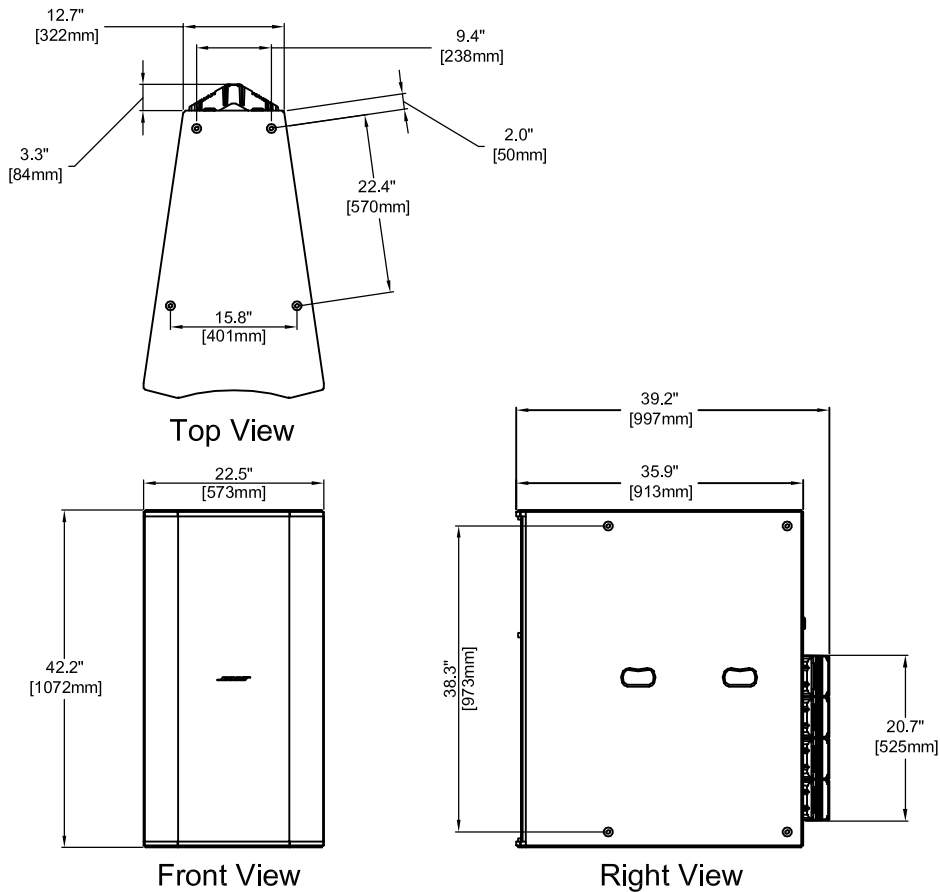
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## Wiring Diagram



## Mechanical Diagrams

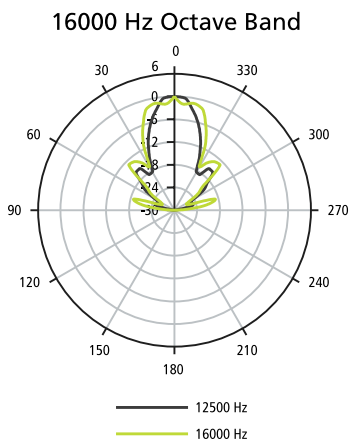
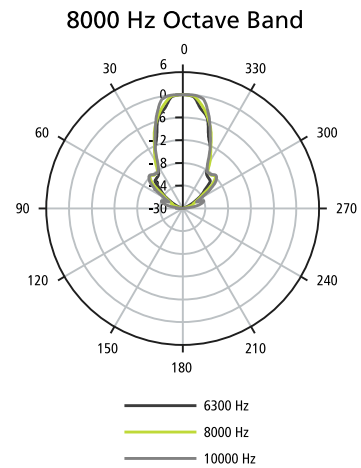
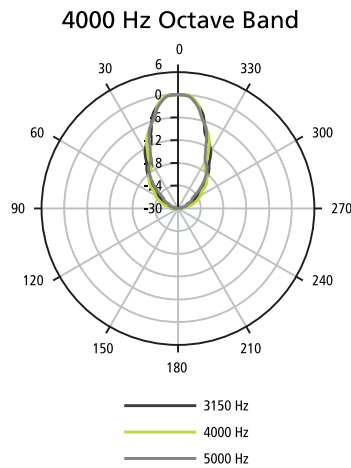
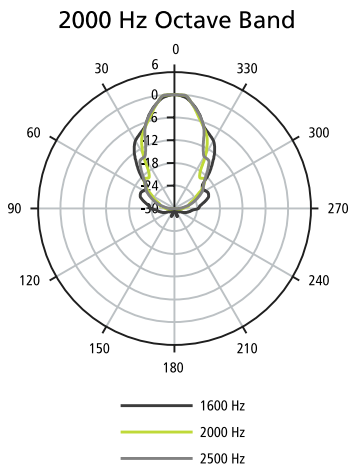
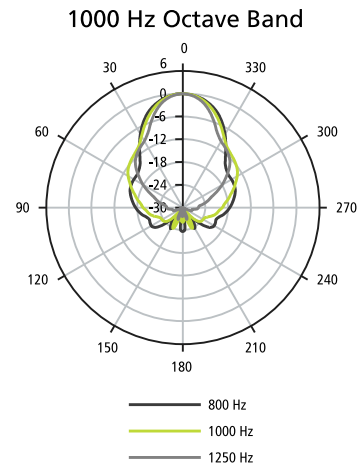
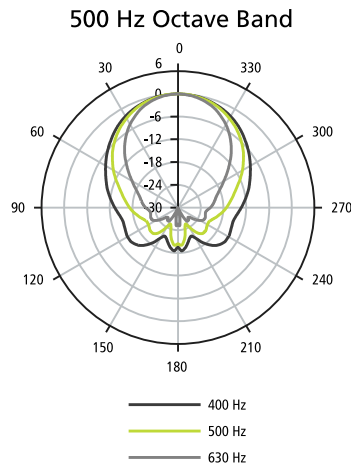
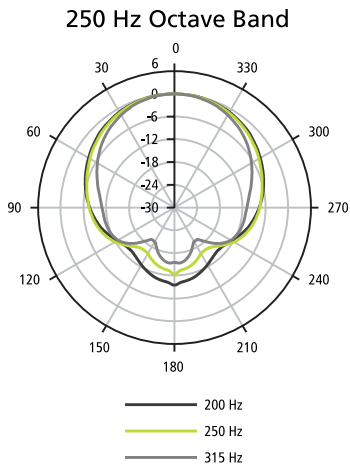


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### Horizontal Plots



LT 3202

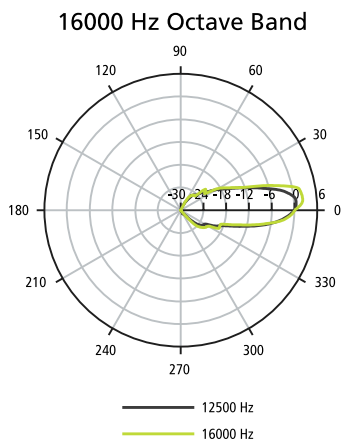
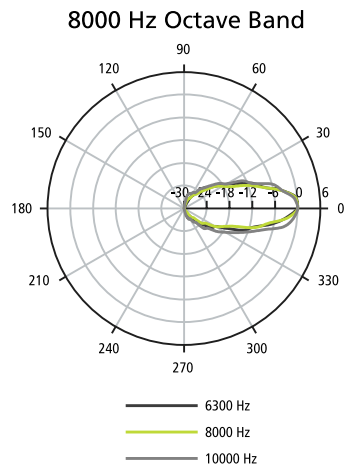
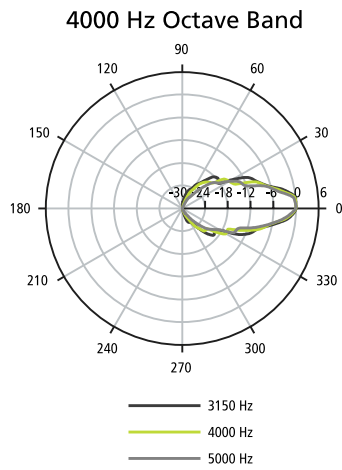
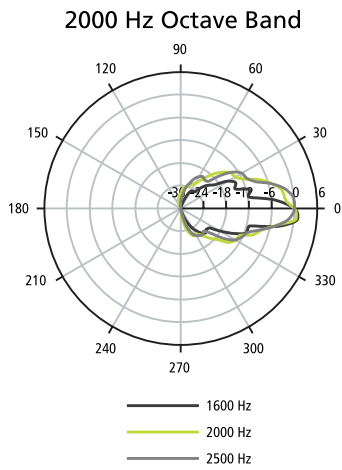
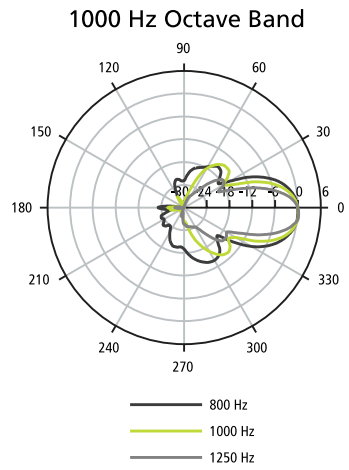
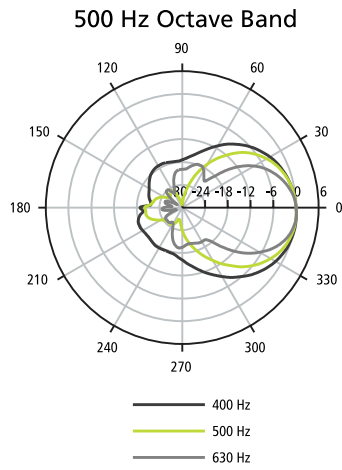
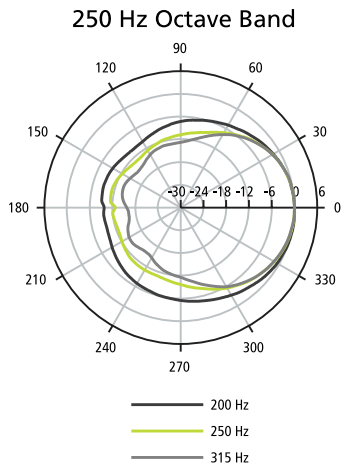
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### Vertical Plots

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### Architects' and Engineers' Specifications

The 2-way, mid/high-frequency loudspeaker shall contain a 3" (76 mm) diaphragm compression driver and four (4) midrange manifolds, each summing 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 30° x 20° nominal beamwidth and effective pattern control to approximately 1 kHz. An internal filter network with crossover of 1.6 kHz shall allow passive or bi-amp operation.

On-axis system frequency response shall be 220 Hz to 16 kHz (+/- 3 dB) with recommended crossover and active equalization. The system sensitivity shall be 110 dB SPL with 1 watt input and be capable of producing peak output of 140 dB SPL on axis at 1 meter. In passive mode, the system shall handle 280 watts of amplifier power (IEC 268-5 pink noise, 6 dB crest factor, for 100 hours) and have a nominal input impedance of 16 ohms. In bi-amp mode, the mid-frequency section shall handle 280 watts of amplifier power and have a nominal input impedance of 16 ohms (or two discrete 8 ohm loads, selectable). The high-frequency section shall handle 75 watts of amplifier power and have a nominal input impedance of 8 ohms.

The trapezoidal enclosure shall be constructed of void-free, exterior-grade Baltic birch plywood with extensive internal bracing. The enclosure interior shall be treated with wood sealer and the exterior finished with a two-part spray polyurethane coating (Chemthane 7030 or equivalent) to resist weather elements and scuffing. The enclosure shall be covered by a 16-gauge perforated stainless steel grille with powder-coated finish and backed with an open-cell foam. The loudspeaker shall survive water incursion consistent with the IEC 529 IPX5 rating. The enclosure shall have sixteen (16) stainless steel threaded inserts (4 each: top, bottom, sides) that accept standard SAE 3/8"-16 rigging hardware. Inputs shall be two (2) NL8 Neutrik<sup>®</sup> Speakon<sup>®</sup> connectors. Loudspeaker dimensions shall be 42.2" x 22.5" x 39.2" (1072 mm x 573 mm x 997 mm). Net weight shall be 195 lb (88.4 kg).

The 2-way, mid/high-frequency loudspeaker shall be the Bose<sup>®</sup> LT 3202<sup>®</sup> WR loudspeaker.