

DATA SHEET
COMMUNITY R SERIES Point Source



R2-52Z-EN

DEFINED COVERAGE, TYPE B, THREE-WAY
 LOUDSPEAKER SYSTEM WITH 50° x 20° COVERAGE



FEATURES

- High-fidelity, high efficiency, full-range reproduction of music and speech
- Application-specific coverage pattern
- 100% weather-resistant and corrosion-resistant construction
- Included weather-resistant mounting yoke
- EN54-24 Certified

TECHNICAL SPECIFICATIONS

| | | | |
|---|--|--|--|
| Operating Mode | Passive with DSP, Passive with low-impedance operation | | |
| Operating Environment | Indoor/Outdoor | | |
| Operating Range (-10dB) | 70 Hz to 16 kHz (100 Hz - 10 kHz for EN54-24 applications) | | |
| Nominal Beamwidth (H x V) | 75° x 75° | | |
| Coverage (-6dB) Horiz/Vert per EN54-24 | 500Hz: 95 / 76 1 kHz: 98 / 34 | 2 kHz: 61 / 18 4 kHz: 36 / 23 | |
| Transducers | LF 2 x 12" (305 mm) weather-treated, Ferrofluid-cooled MF 2 x M200 2" exit, non-metallic diaphragm, Ferrofluid-cooled HF - 1 x 1" exit, titanium diaphragm | | |
| Rated Noise Power | | 100 hr test , 6 dB crest factor 300 W Cont, 24.5 V RMS | 2 hr test , 6 dB crest factor 400 W Cont, 1600 W peak 89 V momentary peak |
| Broadband Sensitivity (1/3 octave bands) | @ 1 m @ 4 m | EN54-24 100 Hz-10kHz 99.1 dB @ 2 Ω 87.1 dB @ 2 Ω | Standard 80 Hz-16 kHz 107 dB @ 4 Ω n/a |
| Maximum Average Output (Broadband Sensitivity) | @ 1 m @ 4 m | EN54-24 100 hr rated noise power 123.9 dB 111.9 dB | Standard 2 hr rated noise power 133 dB (No EQ) n/a |
| Maximum Peak Output (Broadband Sensitivity) | @ 1 m | EN54-24 100 hr rated noise power 129.9 dB (6dB crest factor momentary peak) | Standard 2 hr rated noise power 139 dB (No EQ) |
| Nominal Impedance | | EN54-24 criteria 2 Ω | Standard 4 Ω |
| Minimum Impedance | 1.9 Ω @ 660 Hz | | |
| Crossover Frequency | 600 Hz / 3.5 kHz crossover, driver protection circuitry | | |
| Required Accessory | 70 Hz electronic high pass filter, EN54-24 installations should utilize EQ curve specified on next page | | |

APPLICATIONS

Athletic Fields · Arenas · Stadiums · Racetracks · Theme and Amusement Parks · Fairgrounds Convention Centers · Factories and Warehouses · Air Shows · Rodeos · Electronic Carillons · Multipurpose Outdoor and Indoor Venues

DESCRIPTION

The R2-52Z-EN full-range loudspeaker system is engineered to provide quality, long throw full-range sound projection in a variety of outdoor and indoor applications. Its wide, smooth frequency response and high efficiency ensures high-fidelity music reproduction along with superb projection of clear, intelligible speech at very low distortion.

The R2-52Z-EN is an all horn loaded triaxial design using precision waveguides manufactured by Biamp of hand-laminated fiberglass. The outer enclosure forms a double wall construction with the internal bass horn, providing a completely weather-sealed chamber for the LF drivers. The mid/high frequency horn assembly is mounted in the mouth of the bass horn. A high quality passive crossover with dynamic driver protection is included. The result is a loudspeaker system that is extremely strong, non-resonant, weather-resistant, and easy to install.

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.

PHYSICAL

| | |
|------------------------|---|
| Input Connection | 12 foot (4 m) SJOW #16 gauge |
| Controls | None |
| Mounting Provisions | (5) 1/2-13 rigging points |
| Operation Environment | IEC529 IP55W rating with a minimum 5-degree downward aiming angle |
| Dimensions W x D | 24.75" x 24.75" x 30.75" (629 x 629 x 781 mm) |
| Weight | 126 lbs (57.2 kg) loudspeaker and yoke |
| Grille | 3-layer Weather-Stop™ with polyester mesh, foam, zinc-rich epoxy dual-layer powder-coated perforated marine-grade aluminum color-matched to enclosure |
| Accessories (included) | Weather-resistant mounting yoke, light grey (RAL 7038) |

NOTES: All measurements made in outdoor half-space free-field conditions.
 Watts: All wattage figures are calculated using the rated nominal impedance.



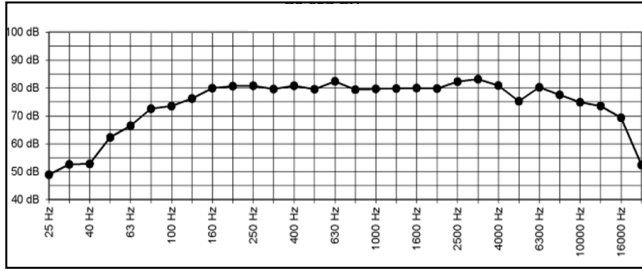
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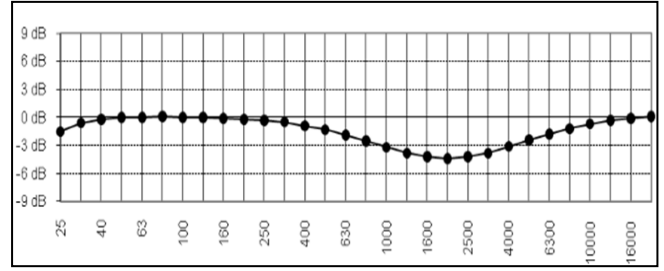
FREQUENCY RESPONSE (dB SPL)

■ 1 W / 4 m Sensitivity



Frequency (Hz)

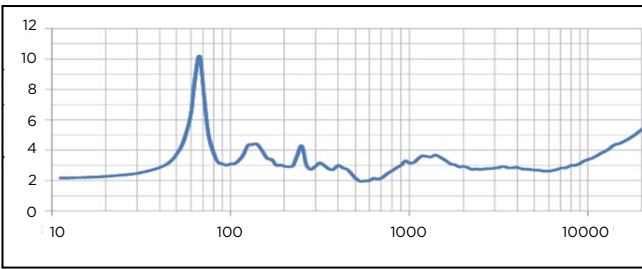
EQUALIZATION CURVE (dB SPL)



Frequency (Hz)

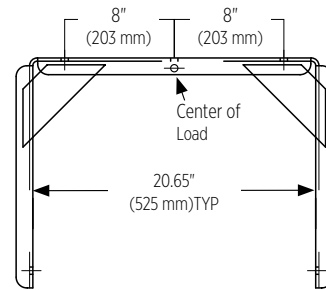
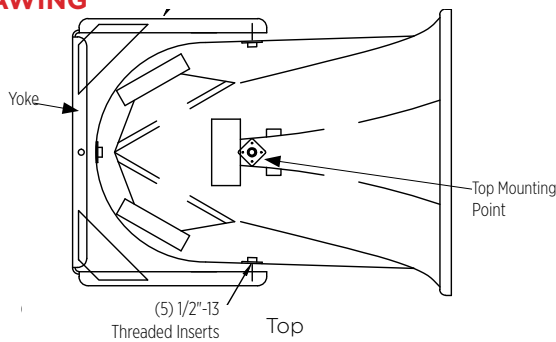
Settings: 2000Hz -4.5dB, Q = 0.51, BW = 2.5 Oct

IMPEDANCE (Ω)

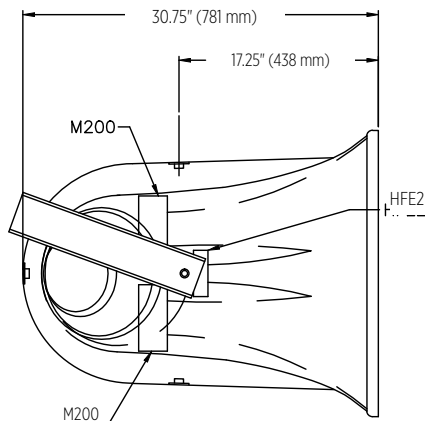


Frequency (Hz)

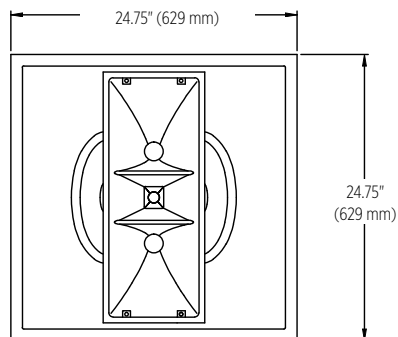
TECHNICAL DRAWING



Yoke



Sides



Front

Note: Cabinets are hand-laminated and measurements vary slightly due to the thickness of the fiberglass. Dimensions shown should not be used to fabricate hanging fixtures. Mounting points are approximate.