

DATA SHEET
COMMUNITY R SERIES Point Source



R1-94Z-EN

**TWO-WAY HORN-LOADED TYPE B,
 LOUDSPEAKER WITH 90° x 40° 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)	90 Hz to 16 kHz (100 Hz - 10 kHz for EN54-24 applications)		
Nominal Beamwidth (H x V)	90° x 40°		
Coverage (-6dB) Horiz/Vert per EN54-24	500Hz: 76 / 78 1 kHz: 42 / 38	2 kHz: 43 / 32 4 kHz: 73 / 31	
Transducers	LF: 1 x 12" (305 mm) weather-treated, Ferrofluid-cooled HF: 1 x 1" exit, titanium diaphragm		
Rated Noise Power		100 hr test , 6 dB crest factor 100 W Cont, 24.5 V RMS	2 hr test , 6 dB crest factor 200 W Cont, 800 W peak 40 V RMS, 89 V momentary peak
Broadband Sensitivity (1/3 octave bands)	@ 1 m @ 4 m	EN54-24 100 Hz-10kHz 100.0 dB @ 6 Ω 87.9 dB @ 6 Ω	Standard 80 Hz-16 kHz 104 dB @ 8 Ω n/a
Maximum Average Output (Broadband Sensitivity)	@ 1 m @ 4 m	EN54-24 100 hr rated noise power 120.0 dB 107.9 dB	Standard 2 hr rated noise power 127 dB (No EQ) n/a
Maximum Peak Output (Broadband Sensitivity)	@ 1 m	EN54-24 100 hr rated noise power 126.0 dB (6dB crest factor momentary peak)	Standard 2 hr rated noise power 133 dB (No EQ)
Nominal Impedance		EN54-24 criteria 6 Ω	Standard 8 Ω
Minimum Impedance	5.2 Ω @ 240 Hz		
Crossover Frequency	1.2 kHz crossover, driver protection circuitry		
Required Accessory	90 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 R1-94Z-EN two-way full-range loudspeaker system is engineered to provide quality full-range sound projection in a variety of outdoor and indoor applications. Its wide range, smooth frequency response and high efficiency ensures both high fidelity music reproduction and superb projection of clear intelligible speech with very low distortion.

The R1-94Z-EN is an all horn-loaded coaxial design using precision waveguides manufactured by Community 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 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.

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 29.75" (629 x 629 x 756 mm)
Weight	47.5 lbs (21.5 kg) loudspeaker only, 55.5 lbs (25.2 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)

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

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

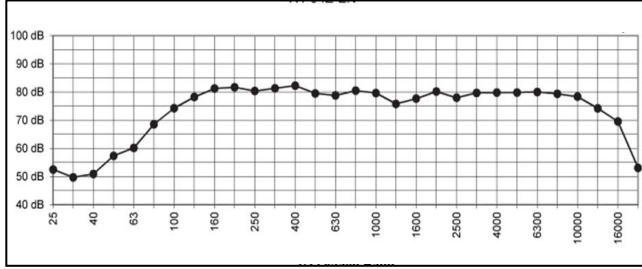


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R1-94Z-EN TWO-WAY HORN-LOADED TYPE B, LOUDSPEAKER WITH 90° x 40° COVERAGE

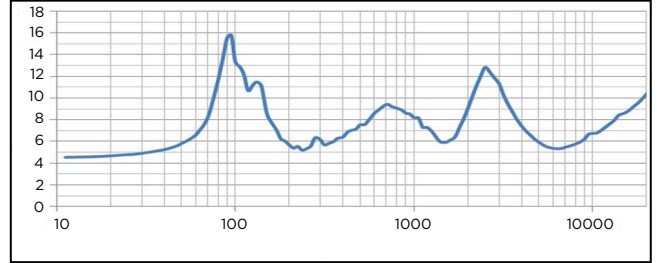
FREQUENCY RESPONSE (dB SPL)

■ 1 W / 4 m Sensitivity



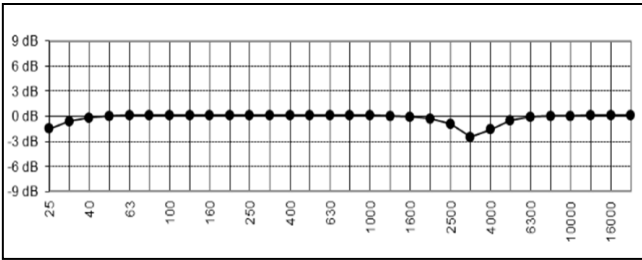
Frequency (Hz)

IMPEDANCE (Ω)



Frequency (Hz)

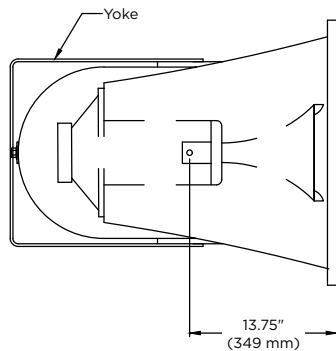
EQUALIZATION CURVE (dB SPL)



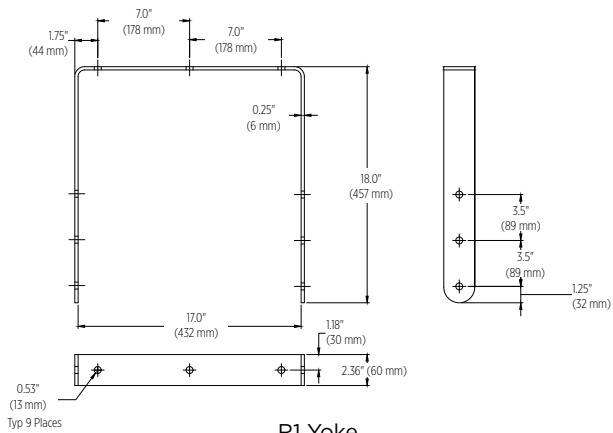
Frequency (Hz)

Settings: 3352 Hz -3 dB Q = 2.87, BW = 0.5 Oct

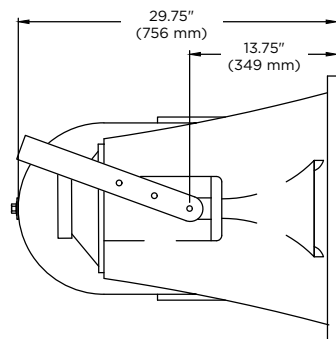
TECHNICAL DRAWING



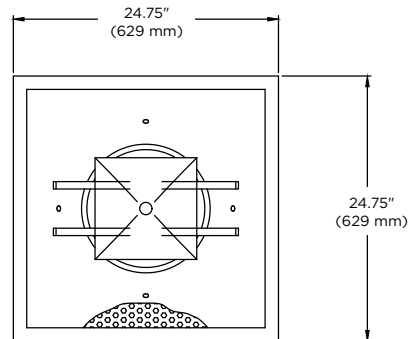
Top



R1 Yoke



Side



Front