

R1-94X

TWO-WAY HORN-LOADED WEATHER-RESISTANT FULL-RANGE LOUDSPEAKER

AF CB CP CS CV HD HS 13 SL WE XE XL

SPECIFICATIONS (See notes 1 and 2)

Loudspeaker Type: 2-way, Horn-loaded co-axial, weather resistant

Operating Range: 90 Hz - 16 kHz

110 Hz - 10 kHz (+/-4dB)

Max Input Ratings: 200W continuous, 500 W program

40 volts RMS, 89 volts momentary peak

Recommended Power Amplifier:

420W to 600W @ 8 Ohms

Sensitivity 1W/1m:

104 dB SPL (100 Hz - 16 kHz 1/3 octave bands) 105 dB SPL (250 Hz - 4 kHz speech range)

Maximum Output: 127 dB SPL / 134 dB SPL (peak)

Nominal Impedance: 8 Ohms

Min Impedance: 5.7 Ohms @ 230 Hz

Nominal -6dB Beamwidth:

80° H (+0° / -49°, 1 kHz - 16 kHz) 35° V (+4° / -10°, 1 kHz - 16 kHz)

100° H x 100° V (400 Hz)

Axial Q / DI: 29.7 / 14.7, 1 kHz - 16 kHz

Crossover Frequency: 1.2 kHz **Recommended Signal Processing:**

90 Hz high pass filter

Drivers: LF (1) 12" weather-treated, Ferrofluid-cooled

HF (1) 1" exit, titanium diaphragm

Driver Protection: PowerSenseTM DDP

Input Connection: 4 foot (1.2m) SJOW #16 Gauge

Controls: None

Grille:

Enclosure: Hand-laminated fiberglass, gray gel-coat (see options)

Mounting / Rigging Provisions:

(5) 1/2-13 rigging points 3-layer Weather-StopTM

(Perforated steel, foam, stainless steel mesh)

Required Accessories:

90 Hz high pass filter

Supplied Accessories:

(5) 1/2-13 x 1" stainless steel bolts

(5 ea.) Stainless steel lock, flat, and rubber washers

Optional Accessories:

SSYR1: mounting yoke kit Digital speaker controller

TRC400: 400W 70/100/140 volt transformer

Dimensions:

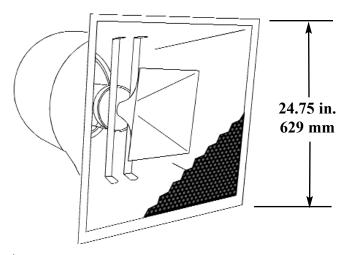
Height: 24.75 in. / 629 mm Width: 24.75 in. / 629 mm Depth: 29 in. / 737 mm 47.5 lb. / 21.5 kg

Weight: 47.5 lb. / 21.5 kg BNG 43.5 lb. / 19.7 kg

Shipping Weight: 77 lb. / 34.9 kg
BNG 73 lb. / 33.1 kg

1. Sensitivity: Free field pink noise measurement at 40 ft / 12.2 m at 25% power; extrapolated to 1 meter and an input of 2.83 volts RMS.

2. Watts: All wattage figures are calculated using the rated nominal impedance.



APPLICATIONS:

- Convention Centers, Ballrooms, Arenas, Malls
- Athletic Fields, Small Arenas, Athletic Field Houses
- Theme and Amusement Parks
- Fairgrounds, Rodeos, Air Shows
- Racing Tracks, Skating Rinks, Swimming Pools
- Electronic Carillons
- Cruise Ships
- Portable Sound Systems

FEATURES:

- Two Versions Depending on Weather-Resistance Needed
- All-fiberglass Enclosure
- Pattern Control to below 500 Hz
- · High Efficiency
- Integral Mounting Points
- High Power Passive Crossover
- High-Fidelity, Full-Range Reproduction of Music And Speech

DESCRIPTION

The R1-94X 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 loudspeakers are available in two versions. The standard version is weather-ready, with a WeatherStop™ grille and stainless steel exterior. The BNG version, with black exterior and no grille, is more suitable for indoor applications. Five year limited warranty.

OPTIONS:

R1-94BNG = Black gel-coat exterior and no grille (for indoor use)

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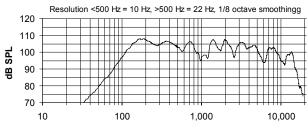


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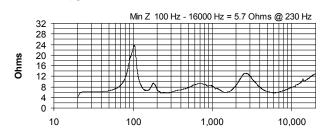
AF CB CP CS CV HD HS SL WE XE XL

FREQUENCY RESPONSE



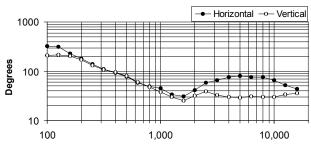
Frequency in Hertz

IMPEDANCE



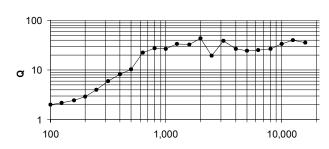
Frequency in Hertz

BEAMWIDTH



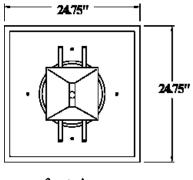
Frequency in Hertz

AXIAL Q

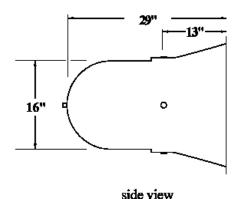


Frequency in Hertz

DIMENSIONS



front view



ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The loudspeaker system shall be a horn-loaded, two-way, full-range co-axial design with one 12" Ferrofluid-cooled woofer treated with moisture repellant on a bass horn and one 1" exit HF driver with a titanium diaphragm mounted on a fiberglass horn built within the bass horn. Drivers shall be connected to an integral crossover with a crossover frequency of 1200 Hz and integral over-current protection circuitry using high positive current coefficient resistors. The input connection shall be one 4' x 16-2 SJOW Cable with stripped ends. The loudspeaker enclosure shall be an integral double-wall weather-sealed gray [black] fiberglass bell with a 16 gauge perforated steel grille backed by open cell foam and a 100 x 100 wire sq. in. stainless steel mesh [no grille]. There shall be five 1/2 - 13 threaded mounting points. The system shall have an amplitude response of 110 Hz to 10 kHz (+/- 4 dB), input capability of 40V RMS, 105 dB sensitivity at one meter / 2.83 V and 8 ohms nominal impedance. The nominal dispersion shall be 80° H x 35° V from 1 kHz to 16 kHz. The loudspeaker shall be 24.75 in. (629 mm) H x 24.75 in. (629 mm) W x 29 in. (737 mm) D and weigh 47.5 lbs. (21.5 kg) [43.5 lbs (19.7 kg)].

Specifications subject to change without notice.

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