

SPECIFICATIONS (EN54-24 Compliant)

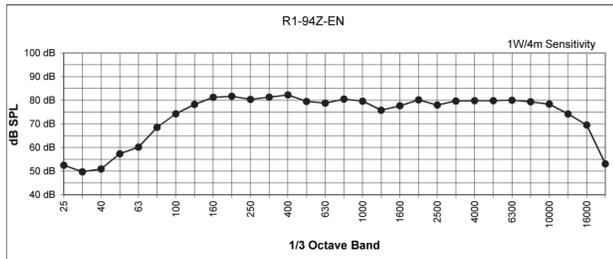
	Specifications to meet EN54-24 requirements	Standard Specifications
Loudspeaker Type:	2-way horn-loaded coaxial, weather-resistant	2-way horn-loaded coaxial, weather-resistant
Operating Range (-10dB):	100 Hz to 10 kHz	90 Hz to 16 kHz
Rated Noise Power:	100W continuous, 24.5 volts RMS (EN54-24 100 hr. test, 6dB crest factor)	200W continuous, 800W peak, 40 volts RMS (2 hr., 6dB crest factor pink noise), 89 volts momentary peak
Broadband Sensitivity (1W/1m):	100.0 dB SPL (100Hz to 10 kHz 1/3 octave bands, EN54-24 frequency response requirements applied, EN54-24 impedance)	104dB SPL (100Hz to 16kHz 1/3 octave bands, no EQ applied, nominal average impedance) 105dB SPL (250Hz to 4kHz speech range)
(1W/4m):	87.9 dB SPL (100Hz to 10 kHz 1/3 octave bands, EN54-24 frequency response requirements applied, EN54-24 impedance)	Not Applicable
Maximum Average Output (1m):	120.0 dB (EN54-24 frequency response requirements, 100 hr. rated noise power applied, EN54-24 Broadband Sensitivity)	127dB SPL (no EQ, 2 hr. rated noise power applied, Standard Broadband Sensitivity)
(4m):	107.9 dB (EN54-24 frequency response requirements, 100 hr. rated noise power applied, EN54-24 Broadband Sensitivity)	Not Applicable
Maximum Peak Output (1m):	126.0 dB (EN54-24 frequency response requirements, 100 hr. rated noise power applied, EN54-24 Broadband Sensitivity, 6dB crest factor momentary peak)	133dB SPL (no EQ applied, 2 hr. rated momentary peak noise power applied, Standard Broadband Sensitivity)
Nominal Impedance:	6 ohms (to satisfy EN54-24 criteria)	8 Ohms (nominal average impedance)
Minimum Impedance:	5.2 ohms @ 240 Hz	5.2 ohms @ 240 Hz
Crossover Frequency:	1.2 kHz	1.2 kHz
Drivers:	LF 1 x 12" weather-treated, Ferrofluid-cooled HF 1 x 1" exit, titanium diaphragm	LF 1 x 12" weather-treated, Ferrofluid-cooled HF 1 x 1" exit, titanium diaphragm
Driver Protection:	DYNA-TECH protection circuitry	DYNA-TECH protection circuitry
Input Connection:	12 foot (4 m) SJOW #16 gauge	12 foot (4 m) SJOW #16 gauge
Controls:	None	None
Enclosure:	Hand-laminated fiberglass, light grey gelcoat	Hand-laminated fiberglass, light grey gelcoat
Mounting/Rigging Provisions:	(5) 1/2-13 rigging points	(5) 1/2-13 rigging points
Grille:	3-layer WeatherStop™, light grey (Zinc-rich epoxy dual-layer powder coated perforated steel grille, foam, woven poly mesh)	3-layer WeatherStop™, light grey (Zinc-rich epoxy dual-layer powder coated perforated steel grille, foam, woven poly mesh)
Environmental Performance:	IEC529 IP55W rating with a minimum 5-degree downward aiming angle	IEC529 IP55W rating with a minimum 5-degree downward aiming angle
Required Accessories:	90 Hz high pass filter*, Equalization curve as specified on this spec sheet	90 Hz high pass filter
Supplied Accessories:	Weather-resistant mounting yoke, light grey	Weather-resistant mounting yoke, light grey
Optional Accessories:	No optional accessories are available with products intended for EN54-24 installations	TRC400 400-watt 70/100/140-volt transformer
Dimensions—Height:	24.75 inches (629 mm)	24.75 inches (629 mm)
Width:	24.75 inches (629 mm)	24.75 inches (629 mm)
Depth:	29.75 inches (756 mm)	29.75 inches (756 mm)
Weight (with yoke):	55.5 lbs (25.2 kg)	55.5 lbs (25.2 kg)
Shipping Weight:	75 lbs (34 kg)	75 lbs (34 kg)

NOTES:

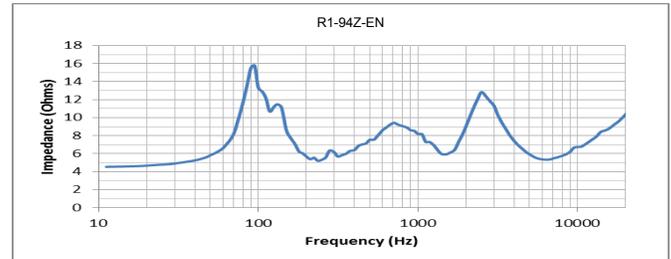
- All measurements made in outdoor half-space free-field conditions.
- Watts: All wattage figures are calculated using the rated nominal impedance.

* Not required to meet EN54-24 requirements. Required to control the low frequency excursion limits of the loudspeaker system.

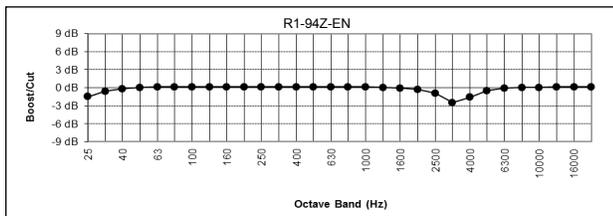
FREQUENCY RESPONSE (See Figure 5 in manual)



IMPEDANCE



EQUALIZATION CURVE



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

BEAMWIDTH

Frequency	Beamwidth (Degrees)	
	Horizontal	Vertical
500 Hz	76	78
1000 Hz	42	38
2000 Hz	43	32
4000 Hz	73	31



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.

ARCHITECTURAL SPECIFICATIONS (for EN54-24 applications)

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 16-2 12-foot (4m) SJOW cable with stripped ends. The loudspeaker enclosure shall be an integral double-wall weather-sealed light grey fiberglass bell with a three-layer weather-resistant grille. The steel grille shall be powder coated with a proprietary zinc-rich epoxy dual-layer powder coating process in light grey to color match the enclosure. The system shall have an IEC529 IP rating of IP55W with a minimum 5-degree downward aiming angle. There shall be five 1/2 - 13 threaded mounting points. The system shall have a 100 Hz to 10 kHz amplitude response that complies with the frequency response limitations specified in EN54-24, section 4.2. For EN54-24 system applications, the input capability shall be 24.5V RMS, 87.9 dB sensitivity at four meters, 100.0 dB sensitivity at one meter and 6 ohms nominal impedance. The rated dispersion shall be 76°H x 78°V @ 500Hz, 42°H x 38°V @ 1000Hz, 43°H x 32°V @ 2000Hz and 73°H x 31°V @ 4000Hz. The loudspeaker shall be 24.75 in. (629 mm) H x 24.75 in. (629 mm) W x 29.75 in. (756 mm) D and weigh 47.5 lbs. (21.5 kg).

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