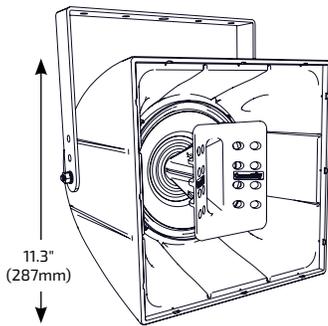


R SERIES
 Point Source

R.25-94Z/R.25-94TZ

 TWO-WAY COAXIAL HORN-LOADED 90° x 40°
 WEATHER-RESISTANT LOUDSPEAKER

shown with grille off
APPLICATIONS

 Theme and Amusement Parks · Malls
 Fairgrounds · Outdoor Entertainment Centers
 Convention Centers · Factories
 Background Music / Voice Paging Systems
 Fill for Stadiums, Race Tracks and Athletic Fields

DESCRIPTION

The R.25-94Z is a 2-way, full-range loudspeaker system designed to provide high quality voice and music reproduction in applications requiring extreme weather resistance. It is designed to withstand long-term exposure to tough, environmental conditions and to provide performance normally associated only with indoor loudspeakers. Both the R.25-94Z and R.25-94TZ have an 8-inch (203mm) cone LF driver and a ¾-inch (20 mm) exit HF compression driver with weather resistant diaphragms. The HF driver is coupled to a nominal 90° x 40° horn. The HF assembly is coaxially mounted with the LF driver. The R.25-94TZ has a built-in multi-tap 200W autotransformer for 70V /100V operation and a rotary switch for tap selection.

The R.25-94Z's high efficiency, modest power requirements and 8 Ohm impedance makes it easy to deploy large numbers of loudspeakers using only one amplifier, keeping the overall system costs to a minimum. The large 200W autotransformer in the R.25-94TZ allows the loudspeaker to maintain its full high output capability even when running on 70V/100V systems. Both models carry a 5 year product warranty and a 15 year enclosure warranty.

FEATURES

- High fidelity, high efficiency horn-loaded system with high power passive crossover
- Weather-treated drivers and crossovers
- Weather-resistant, rotomolded UV enclosure with Integral mounting points
- Corrosion-resistant dual-layer powder-coated low-profile steel yoke and aluminum grille
- Optional 200W, 70V autotransformer version available (model (R.25-94TZ))

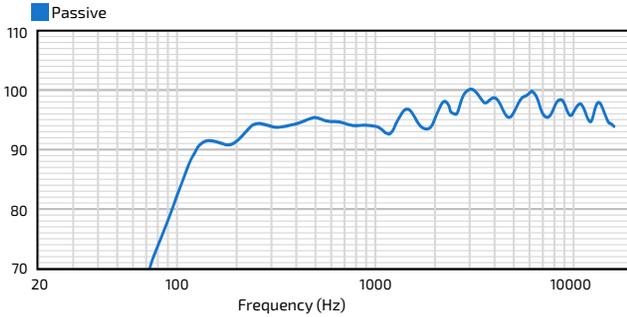
TECHNICAL SPECIFICATIONS¹

Operating Mode	Passive - Low Impedance or 70V/100V models		
Operating Environment	Indoor or Weather-Resistant Outdoor		
Operating Range²	100 Hz to 16 kHz		
Nominal Beamwidth (H x V)	90° x 40°		
Transducers	LF 1 x 8" (203mm) carbon ring, hydrophobic cone, 2.5" (64mm) HF 1 x ¾" (19mm) exit, non-metallic Ferrofluid-cooled comp driver DYNA-TECH protection circuitry for drivers		
Continuous Power Handling³ @ Nominal Impedance	Passive	40V	200W @ 8 Ohms (800W peak)
Autotransformer Taps R.25-94TZ	70V: 200W,100W, 50W, 25W		100V: 200W,100W, 50W
Nominal Sensitivity⁴	@ 1W/1m 97 dB	@ 2.83V 97 dB	
Nominal Maximum SPL⁵ (Whole Space)	Peak 126 dB	Continuous 120 dB	
Equalized Sensitivity⁶	@ 1W/1m 96 dB	@ 2.83V 96 dB	
Equalized Maximum SPL⁷	Peak 125 dB	Continuous 119 dB	
Required Accessories	High Pass Filter - 100 Hz, 24 dB /octave, Digital Signal Processor		
Recommended Amplifiers	R.25-94Z	200W - 400W @ 8 Ohms, (40V - 57V)	
PHYSICAL			
Input Connection	16-2 SJOW cable (12 ft / 4m), with stripped ends		
Controls	R.25-94Z: None R.25-94TZ: 4-position tap selection rotary switch (behind plug)		
Mounting Points	Five (5) M8 rigging points, 1-3/8" pole mount socket		
Included Accessories	Zinc-rich epoxy dual-layer powder-coated yoke		
Environmental	IP55W per IEC 529, designed to MIL-STD-810G		
Dimensions H x W x D	11.30" x 11.30" x 13.30" (287 x 287 x 338 mm)		
Weight	R.25-94Z: 20.0 lbs (9.1 kg) with included yoke R.25-94TZ: 23.0 lbs (10.4 kg) with included yoke		
Finish	Refer to the Technical Drawing (page 3)		
OPTIONS			
Accessories	PMB-1RR, PMB-2RR: Single or dual pole mount brackets		

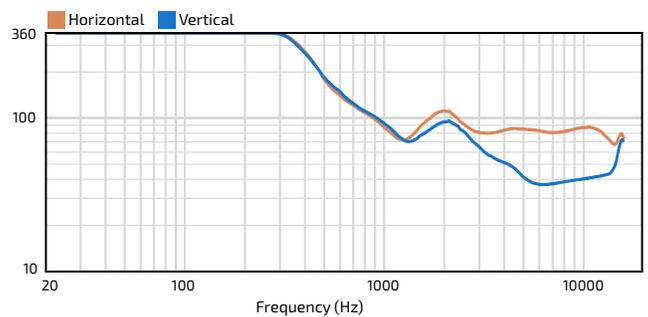
R.25-94Z
R.25-94TZ

TWO-WAY COAXIAL HORN-LOADED 90° x 40°
WEATHER-RESISTANT LOUDSPEAKER

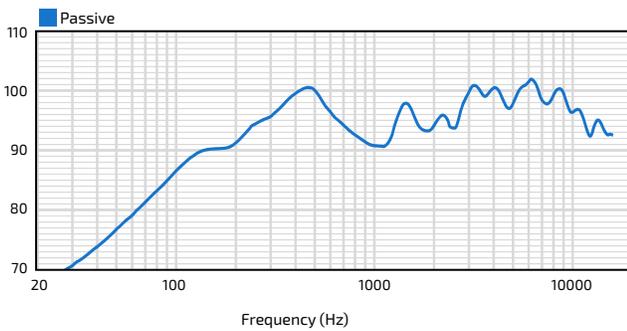
AXIAL PROCESSED RESPONSE (dB)⁸



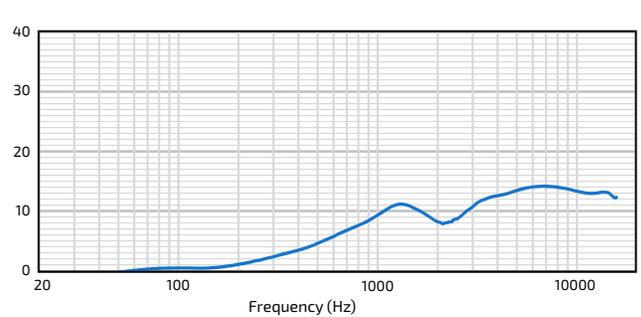
BEAMWIDTH (Degrees)¹²



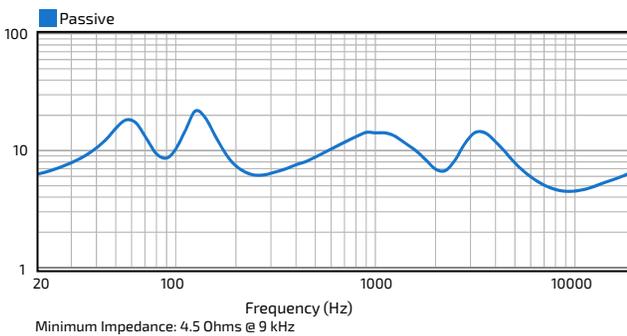
AXIAL SENSITIVITY (dB SPL)⁹



DIRECTIVITY INDEX (dB)¹¹



IMPEDANCE (Ohms)



ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way, full-range bass reflex design with a single cast 8" and one 3/4" exit HF driver coaxially mounted on a 90° x 40° horn. Drivers shall be connected to an integral crossover with a crossover frequency of 2 kHz with driver protection using DYNA-TECH active protection circuitry. The input connections shall be one 12' (4m) SJOW #16-gauge 2-conductor cable with stripped ends. The R.25-94Z system shall be equipped for low impedance (8 Ohm) operation. The R.25-94TZ system shall be equipped with a high performance 200W autoformer for use in 70V/100V distributed systems, with taps of 25W, 50W, 100W, and 200W for 70V operation (50W, 100W, and 200W for 100V distributed systems).

The enclosure shall be a rotomolded low linear density polyethylene enclosure providing weather and UV resistance with a three-layer weather-resistant 1mm perforated dual-layer powder-coated aluminum grille. The enclosure shall incorporate five M8 rigging points for multiple mounting options, and an included dual-layer zinc-rich epoxy powder-coated steel mounting yoke. Integrated ribbing and internal reinforcements provide added structural support. The system shall have an IEC529 IP rating of IP55W. The system shall have an operating range of 100 Hz to 16 kHz (-10 dB) and a low impedance (8 Ohm) input capability of 40V RMS. The nominal sensitivity on axis at one meter with a power input of 1 Watt shall be 97dB. The nominal dispersion shall be 90° H x 40° V. The loudspeaker shall be 11.3" (287mm) H (front) x 11.3" (287mm) W x 13.3" (338mm) D. The R.25-94Z shall weigh 20 lbs (9.1 kg) including the mounting yoke, and the R.25-94TZ shall weigh 23 lbs (10.4 kg) including the mounting yoke.

R.25-94Z
R.25-94TZ

TWO-WAY COAXIAL HORN-LOADED 90° x 40°
WEATHER-RESISTANT LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH

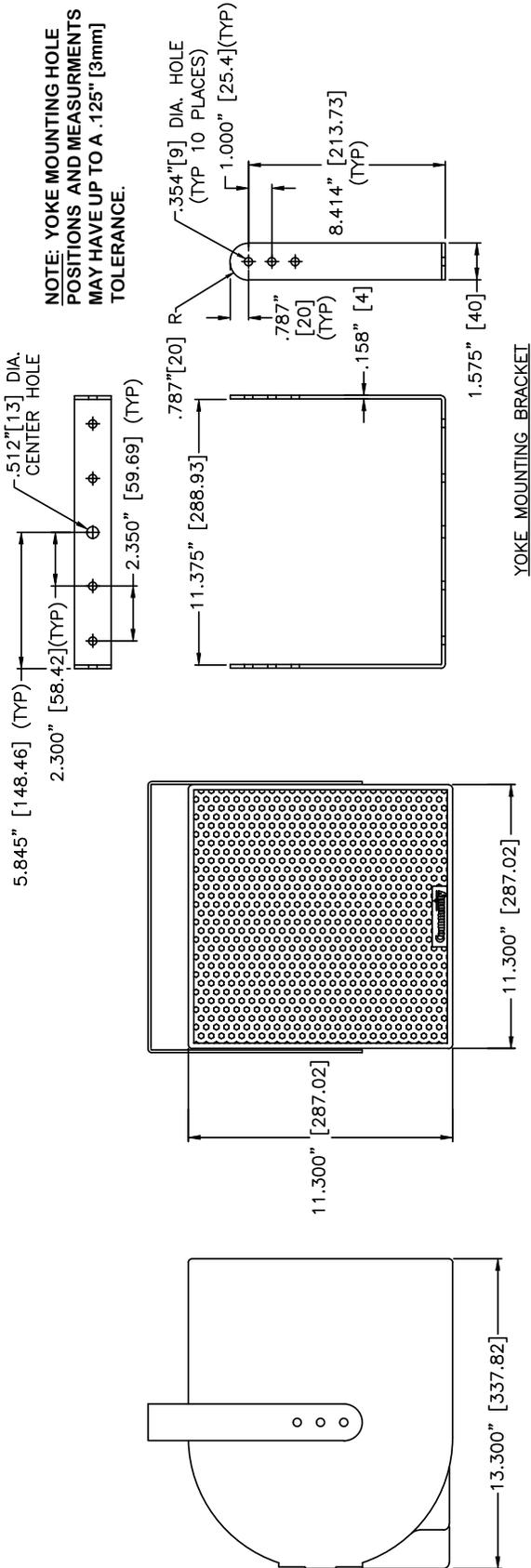
H x W x D
11.3" x 11.3" x 13.3"
(287 x 287 x 338 mm)

Unit Weight (includes yoke)
R.25-94Z: 20.0 lbs (9.1 kg)
R.25-94TZ: 23.0 lbs (10.4 kg)

Shipping Weight
R.25-94Z: 27 lbs (12.2 kg)
R.25-94TZ: 29.1 lbs (13.2 kg)

Grille:
3-layer WeatherStop™ powder-coated perforated marine-grade aluminum backed with woven poly mesh and foam backing. Grey (RAL#7038)

Enclosure / Finish
Color-matched grey rotomolded LLDPE



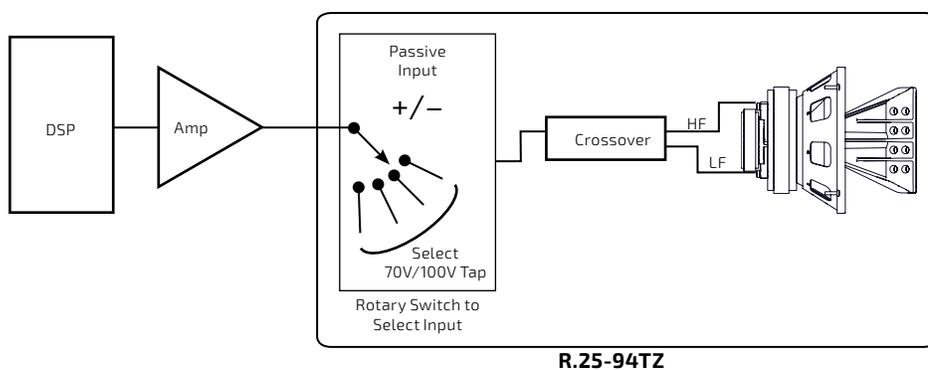
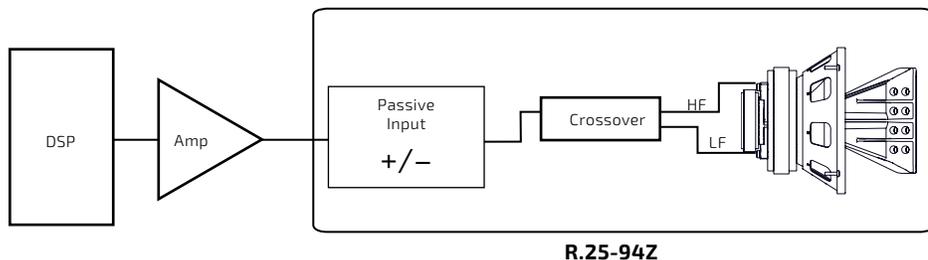
R.25

R SERIES Point Source

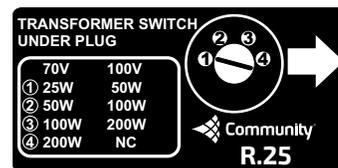
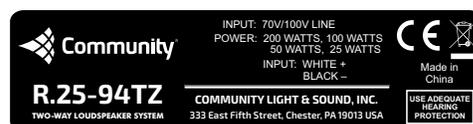
R.25-94Z/R.25-94TZ

TWO-WAY COAXIAL HORN-LOADED 90° x 40°
WEATHER-RESISTANT LOUDSPEAKER

CONNECTION DIAGRAM



R.25-94Z



R.25-94TZ

Input Labels

NOTES

- PERFORMANCE SPECIFICATIONS** All measurements are taken indoors using a time-windowed and processed signal to eliminate room effects, approximating an anechoic environment, a distance of 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP with settings provided by Community Professional Loudspeakers is required to achieve the specified performance; further performance gains can be realized using Community's dSPEC226 loudspeaker processor with FIR power response optimization.
- OPERATING RANGE** The frequency range in which the on-axis processed response remains within 10dB of the average SPL.
- CONTINUOUS POWER HANDLING** Maximum continuous input voltage (and the equivalent power rating, in watts, at the stated nominal impedance) that the system can withstand, without damage, for a period of 2 hours using an EIA-426-B defined spectrum; with recommended signal processing and protection filters.
- NOMINAL SENSITIVITY** Averaged SPL over the operating range with an input voltage that would produce 1 Watt at the nominal impedance and the averaged SPL over the operating range with a fixed input voltage of 2.83V, respectively; swept sine wave axial measurements with no external processing applied in whole space, except where indicated.
- NOMINAL MAXIMUM SPL** Calculated based on nominal / peak power handling, respectively, and nominal sensitivity; exclusive of power compression.
- EQUALIZED SENSITIVITY** The respective SPL levels produced when an EIA-426-B signal is applied to the equalized loudspeaker system at a level which produces a total power of 1 Watt, in sum, to the loudspeaker subsections and also at a level which produces a total voltage, in sum, of 2.83V to the loudspeaker subsections, respectively; each referenced to a distance of 1 meter.
- EQUALIZED MAXIMUM SPL** The SPL produced when an EIA-426-B signal is applied to the equalized loudspeaker system, at a level which drives at least one subsection to its rated continuous input voltage limit, referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6dB) crest factor of the EIA-426-B test signal.
- AXIAL PROCESSED RESPONSE** The on-axis variation in acoustic output level with frequency of the complete loudspeaker system with recommended signal processing applied. 1/6 octave Gaussian smoothing applied.
- AXIAL SENSITIVITY** The on-axis variation in acoustic output level with frequency for a 1 Watt swept sine wave, referenced to 1 meter with no signal processing. 1/6 octave Gaussian smoothing applied.
- HORIZONTAL / VERTICAL OFF-AXIS RESPONSES** The loudspeaker's magnitude response at various angles off-axis, with recommended signal processing applied in the operating mode which utilizes the largest number of individually amplified pass bands. 1/6 octave Gaussian smoothing applied.
- DIRECTIVITY INDEX** The ratio of the on-axis SPL squared to the mean squared SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. 1/6 octave Gaussian smoothing applied.
- BEAMWIDTH** The angle between the -6dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. 1/6 octave Gaussian smoothing applied.

Data presented on this spec sheet represents a selection of the basic performance specifications for the R.15COAX. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: communitypro.com