



Thank you for purchasing the R.25 loudspeaker. Although simple to use, please refer to the following information to obtain maximum performance and reliability for your R.25. Included with the R.25 loudspeaker are the mounting bracket and related hardware.

DESCRIPTION

The R.25 is a two-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.

The R.25 has a horn loaded 8-inch (203 mm) cone LF driver and a 3/4-inch (20 mm) exit HF compression driver with a weather resistant diaphragm. Ferrofluid is used in the LF voice coil gap to prevent corrosion, to improve thermal power handling, and to reduce power compression. The HF driver is coupled to a nominal 90° x 40° horn. The HF assembly is coaxially mounted to the LF driver. The enclosure and HF horn are molded of UV resistant gray polyethylene. All exposed hardware is stainless steel or aluminum.

The Weather-Stop™ grille assembly, retained by stainless steel screws to the front of the enclosure, consists of three layers. An exterior perforated stainless steel layer is backed by a layer of open cell foam. These two layers are backed by a third layer of 100 x 100 wires per square inch stainless steel mesh which prevents direct water intrusion while providing acoustic transparency.

INSTALLATION

ELECTRICAL: The input is via a type SJOW cable rated for outdoor use. It is approximately 12 feet (4 m) in length. The white jacketed conductor is the positive or + signal wire and the black is the negative or – signal wire. Ensure the connection you make to this cable is suitably weather-sealed. The gland nut that attaches the cable to the lower rear of the enclosure is sealed at the factory and should not be removed as this can compromise the weather integrity of the enclosure.

The recommended amplifier power is from 400W to 600W at 8 Ohms for maximum performance. For the transformer versions ("TX" suffix), a screwdriver slotted switch next to the input cable is provided to switch input taps. The switch is located behind the black nylon threaded plug. For 70V lines the input taps are 120W, 60W, 30W and 15W. For 100V lines use the taps labeled 60W for a 120W tap, 30W for 60W tap, and 15W for a 30W tap. (NOTE: For 100V lines the 120W tap position is not used.)

A 100 Hz high pass filter, minimum 12 dB / octave slope, should be used for all R.25 models to prevent over-exursion of the LF driver from lower frequencies that it is not designed to reproduce.

Any driver or crossover service required is done from the front of the enclosure by removing the grille. To remove the grille, remove the 12 screws around the edge of the grille (3 along each side) to expose the HF speaker assembly. The HF horn is mounted to the LF driver as an integral part of the coaxial speaker system. The crossover is located behind the HF/LF driver assembly. To access the crossover, carefully remove the screws around the circular edge of the LF speaker mounting plate. Then, carefully remove the entire one-piece coaxial speaker assembly.

MECHANICAL: Five integral M8 (8 mm) threaded mounting points on the four sides and the back of the enclosure mate with the included accessory yoke bracket or can be used for a custom fabricated mounting. As shipped, the unused holes have plugs that can be removed if these holes are needed for mounting. The plugs are purposely designed to "catch" on the mounting point threads and will be somewhat difficult to remove. Reinstall removed plugs into any unused holes.

The R.25 also has an integral standard 1-3/8" stand socket.

The factory yoke attachment uses studs and a nut / lockwasher / flatwasher combination rather than bolts. This allows removal of the yoke to attach it to its supporting structure while leaving the studs on the enclosure. This procedure will make it easier to reinstall the R.25 to the yoke without the need to both hold the R.25 and align bolts with the mounting points.

IMPORTANT NOTES: When tightening mounting hardware in the mounting points, do not use excessive force. The mounting point holes are approximately 7/16" (11 mm) deep. Any bolts used should not extend into the hole more than 3/8" (9.5 mm). If they do either you may not be able to tighten the bolt to the mounting or the threaded insert may dislodge in the effort to further tighten the bolt.

Ensure that the hardware used to attach the included yoke or other mounting to the supporting structure and that the supporting structure itself are load rated for the intended use and suitably weather resistant.

We recommend angling the R.25 loudspeaker at least 15 degrees downward so as to reduce the possibility of rain and other precipitation compromising the performance of the loudspeaker.

INPUT CONNECTION GUIDE

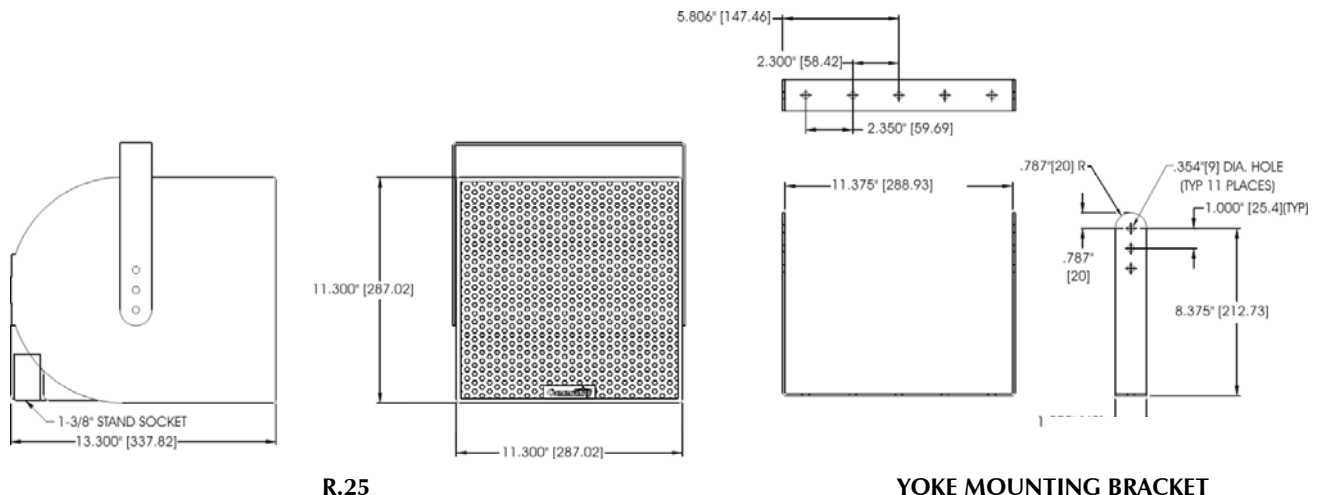
Version	Black	White
R.25-94X (8 Ohm)	Negative	Positive
R.25-94TX, 70V line	Negative	Positive
R.25-94TX, 100V line	Negative	Positive

SPECIFICATIONS

MODEL	R.25-94X	R.25-94TX
Type	2-way, full-range loudspeaker system	2-way, full-range loudspeaker system
Frequency Range	100Hz – 16 kHz (125Hz – 12.5 kHz +/- 4 dB)	100Hz – 16 kHz (125Hz – 12.5 kHz +/- 4 dB)
Maximum Input	200W RMS, 500W Program 40V RMS, 89V momentary peak	70V line: 120W, 60W, 30W, 15W taps 100V line: 120W, 60W, 30W taps
Recommended Amplifier Power	400W – 600W RMS @ 8 Ohms	70V/100V line (see above)
Sensitivity (1W/1m)	96 dB SPL (125 Hz – 12500 Hz 1/3 octave bands)	96 dB SPL (125 Hz – 12500 Hz 1/3 octave bands)
Maximum SPL	119 dB average, 126 dB peak	Dependent on tap selected
Nominal Dispersion	90° horizontal x 40° vertical	90° horizontal x 40° vertical
Nominal Impedance	8 Ohms (min 5.5 Ohms @ 9.7 Hz)	70V - 120W: 42 Ohms, 60W: 83 Ohms, 30W: 167 Ohms, 15W: 333 Ohms 100V - 120W: 83 Ohms, 60W: 167 Ohms, 30W: 333 Ohms
Crossover Frequency	2 kHz	2 kHz
Components	LF: One 8 in. (203 mm) driver, Ferrofluid-cooled HF: One ¾ in. (20 mm) exit compression driver	LF: One 8 in. (203 mm) driver, Ferrofluid-cooled HF: One ¾ in. (20 mm) exit compression driver
Driver Protection	Dyna-Tech	Dyna-Tech
Recommended Signal Processing	100 Hz high pass filter	100 Hz high pass filter
Input Connection	Approx. 12 ft / 4 m 16-2 SJOW cable (white = +, black = -)	Approx. 12 ft / 4 m 16-2 SJOW cable (white = +, black = -)
Enclosure Material	Roto-molded HDPE, light gray color	Roto-molded HDPE, light gray color
Grille	Weather resistant 3 layer: Perforated stainless steel mesh, open cell foam	Weather resistant 3 layer: Perforated stainless steel mesh, open cell foam
Mounting	Five M8 threaded inserts: one each top and bottom	Five M8 threaded inserts: one each top and bottom
Accessories (Included)	Stainless steel yoke bracket	Stainless steel yoke bracket
Dimensions	Height: 11.3 in. (287 mm) Width: 11.3 in. (287 mm) Depth: 13.3 in. (338 mm)	Height: 11.3 in. (287 mm) Width: 11.3 in. (287 mm) Depth: 13.3 in. (338 mm)
Weight	20 lbs (9.1 kg)	23 lbs (10.4 kg)

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

DIMENSIONS



R.25

YOKE MOUNTING BRACKET