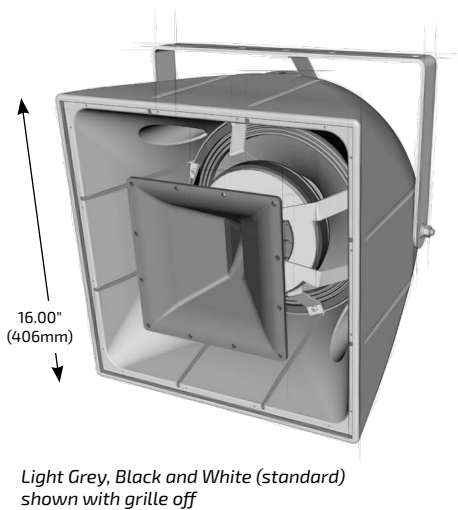


**R SERIES**

Premium Music

# R.5-96MAX

 HIGH OUTPUT FULL-RANGE 90° x 60°  
 WEATHER-RESISTANT LOUDSPEAKER

**APPLICATIONS**

MAIN PA ELEMENT (Small to Large Size Venues)  
 Arenas · Stadiums · Racetracks · Theme Parks  
 Amusement Parks · Outdoor Entertainment Centers  
 Convention Centers · Fairgrounds · Air Shows  
 Rodeos · Multipurpose Outdoor and Indoor Venues  
 Portable Sound Systems

**DESCRIPTION**

The R.5-96MAX 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 high output performance.

The R.5-96MAX has a 1.4-inch (36 mm) exit HF compression driver and a 12-inch (305 mm) cone 600W neodymium LF driver. The HF assembly is coaxially mounted with the LF driver allowing 90° x 60° coverage with low distortion. The system has been designed to provide a flat response with slightly rising HF.

The R.5-96MAX can act as both a musical entertainment loudspeaker and a voice PA loudspeaker simultaneously. Each system is backed by Community's five-year product warranty and fifteen-year enclosure warranty.

**FEATURES**

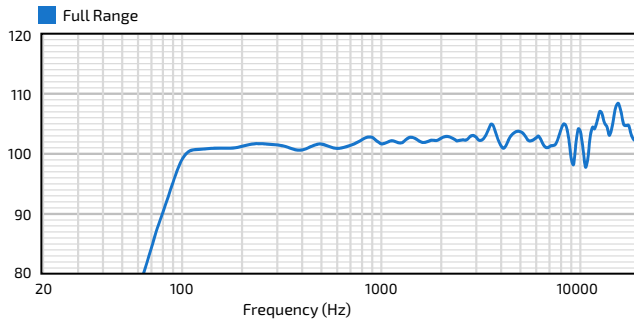
- Low distortion, high quality musicality, excellent speech intelligibility in a compact enclosure
- High sensitivity, high output (130 dB max)
- Weather-resistant, rotomolded UV resistant enclosure
- Weather-resistant grille and drivers, and moisture-sealed crossover
- Five-year product warranty / Fifteen-year enclosure warranty

**TECHNICAL SPECIFICATIONS<sup>1</sup>**

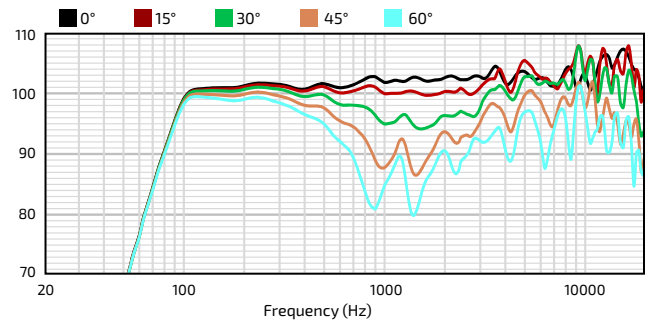
<b>Operating Mode</b>	Passive with DSP		
<b>Operating Environment</b>	Indoor / Continuous outdoor direct exposure		
<b>Operating Range<sup>2</sup></b>	85 Hz to 21.8 kHz		
<b>Nominal Beamwidth (H x V)</b>	90° x 60°		
<b>Transducers</b>	LF 1 x 12" (305mm) inherently weather-resistant cone with 3" voice coil, neodymium motor and aluminum demodulation ring HF 1 x 1.4" exit compression, 2.87" voice coil, copper shorting ring, titanium diaphragm with mylar surround		
<b>Continuous Power Handling<sup>3</sup> @ Nominal Impedance</b>	Passive*	69V	600W @ 8 ohms (2400W peak)
<b>Nominal Sensitivity<sup>4</sup></b>	Passive	@ 1W 102 dB	@ 2.83V 102 dB
<b>Nominal Maximum SPL<sup>5</sup> (Whole Space)</b>	Passive	Peak 136 dB	Continuous 130 dB
<b>Equalized Sensitivity<sup>6</sup></b>	System	@ 1W 102 dB	@ 2.83V 102 dB
<b>Equalized Maximum SPL<sup>7</sup></b>	System	Peak 136 dB	Continuous 130 dB
<b>Recommended Amplifiers</b>	Passive	600W - 1200W @ 8 ohms, (69V - 98V)	
<b>PHYSICAL</b>			
<b>Input Connection</b>	12' (3.6m) SJOW #16 cable		
<b>Mounting Points</b>	(5) 3/8"-16 threaded rigging points, Steel zinc-rich epoxy dual-layer powder-coated bracket; Aluminum aiming strap to secure angle		
<b>Environmental</b>	IP55 per IEC 60529, conforms with MIL-STD-810G		
<b>Dimensions H x W x D</b>	16.00" x 16.00" x 16.19" (406 x 406 x 411 mm)		
<b>Weight</b>	47 lbs (21.3 kg) loudspeaker and yoke		
<b>Finish</b>	Refer to the Technical Drawing (page 4)		
<b>OPTIONS</b>			
<b>Accessories</b>	Pole Mount Bracket: PMB-1RR or PMB-2RR External 400W Transformer (70V/100V): 70V - 400W / 200W / 100W; 100V - 400W / 200W		
<b>Configure-to-Order (CTO)</b>	Custom color: Exterior grade paint finish, customer defined RAL# Custom cable length and gauge		

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

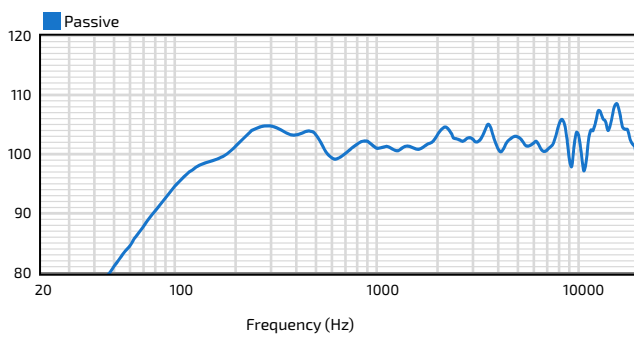
**AXIAL PROCESSED RESPONSE (dB)<sup>8</sup>**



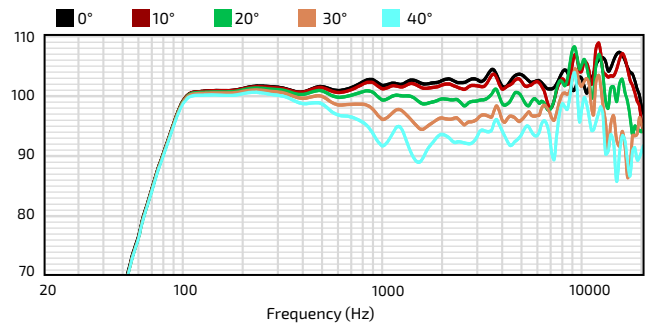
**HORIZONTAL OFF-AXIS RESPONSE (dB)<sup>10</sup>**



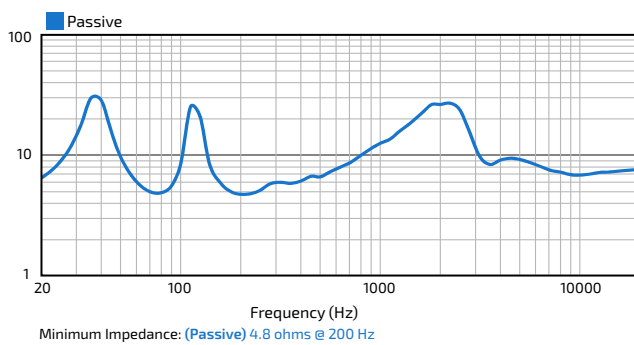
**AXIAL SENSITIVITY (dB SPL)<sup>9</sup>**



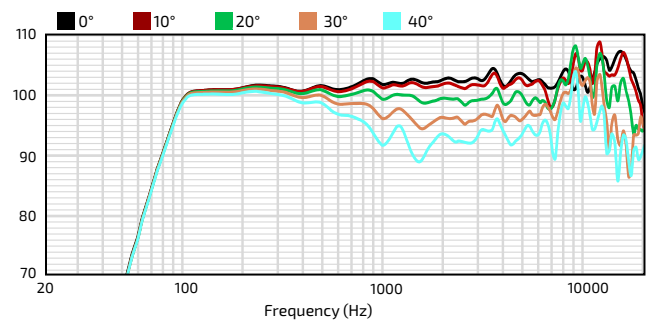
**VERTICAL OFF-AXIS UP RESPONSE (dB)<sup>10</sup>**



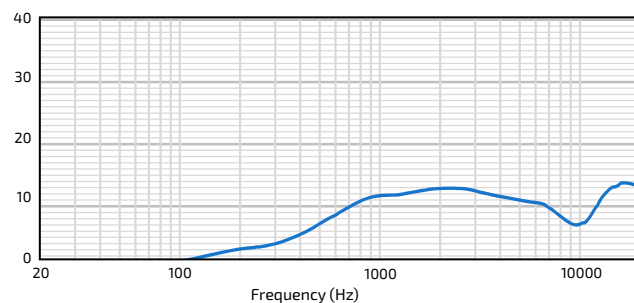
**IMPEDANCE (Ohms)**



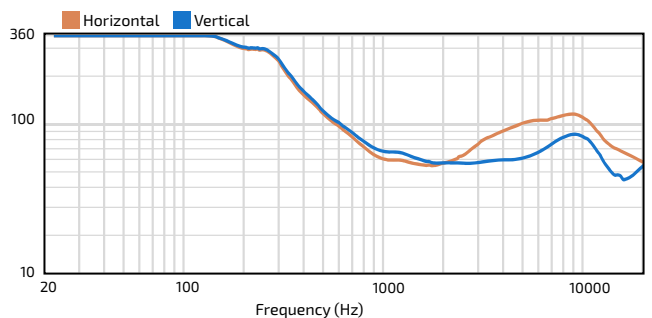
**VERTICAL OFF-AXIS DOWN RESPONSE (dB)<sup>10</sup>**



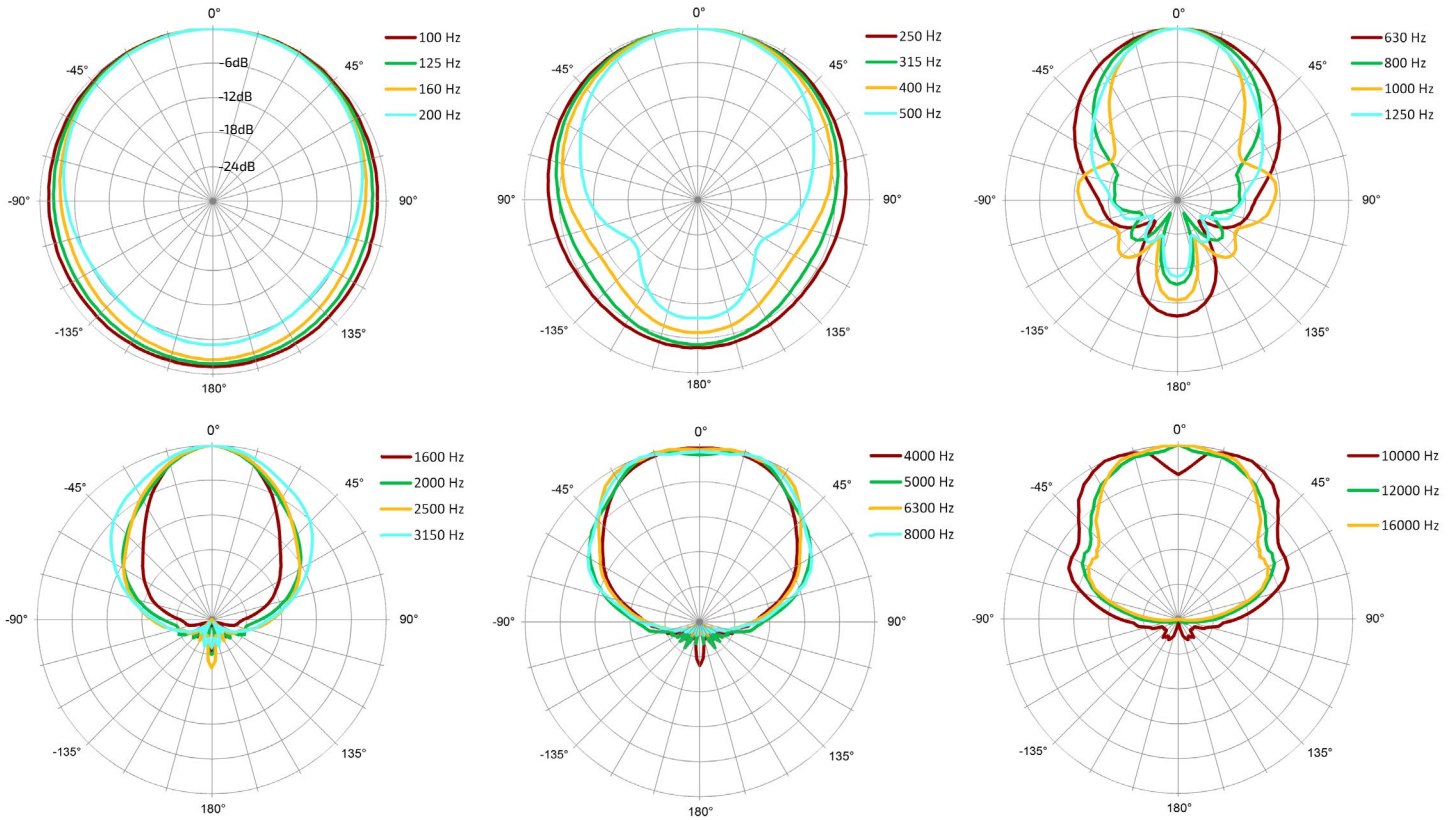
**DIRECTIVITY INDEX (dB)<sup>11</sup>**



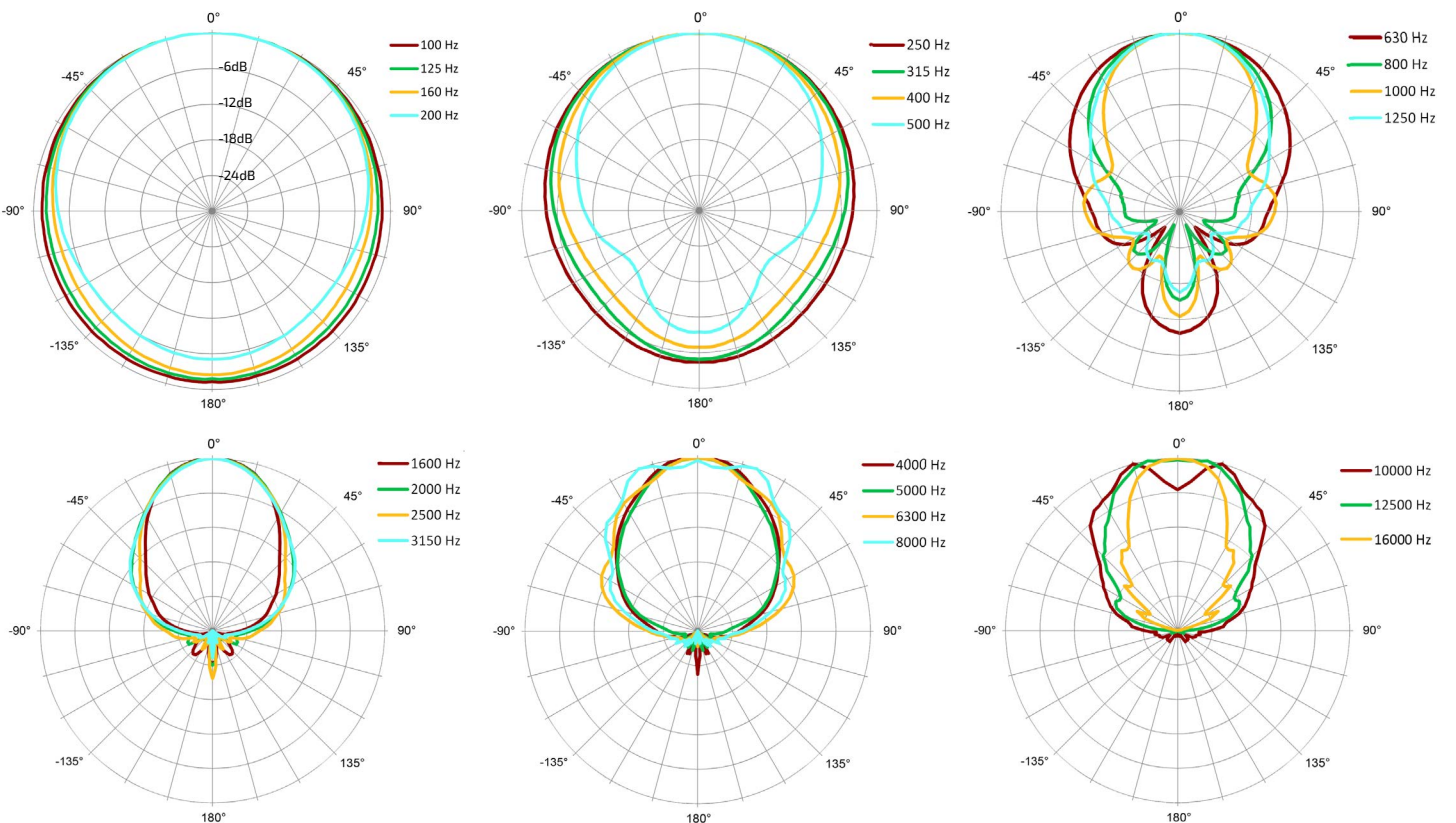
**BEAMWIDTH (Degrees)<sup>12</sup>**



## HORIZONTAL POLAR DATA (30dB Scale, 6dB per major division)



## VERTICAL POLAR DATA (30dB Scale, 6dB per major division)



## TECHNICAL DRAWING / DIMENSIONS / FINISH

**H x W x D**

16.00" x 16.00" x 16.19"  
(406 x 406 x 411 mm)

**Unit Weight**

47 lbs (21.3 kg) loudspeaker and yoke

**Shipping Weight**

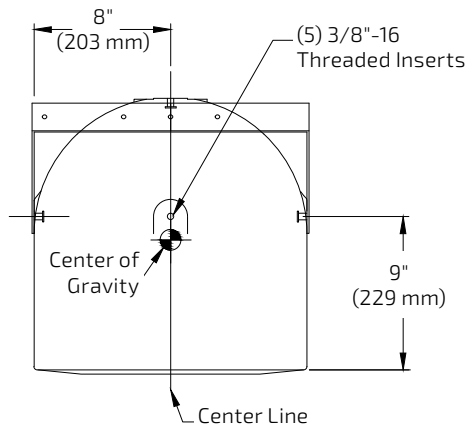
51 lbs (23.1 kg)

**Grille:**

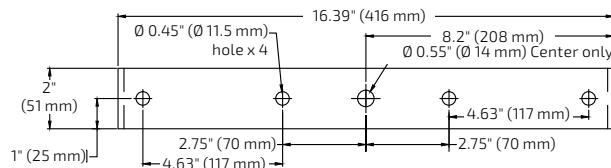
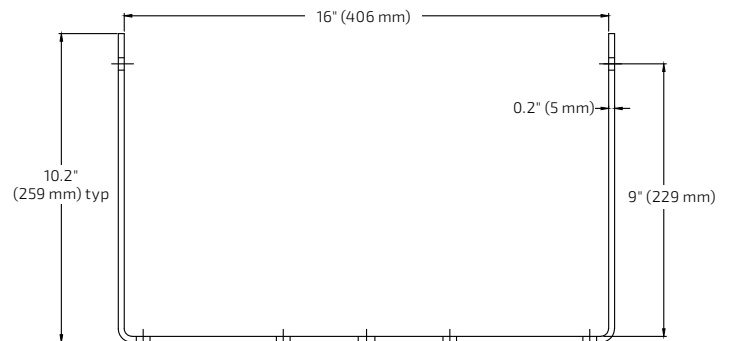
3-layer Weather-Stop™ with polyester mesh, foam, zinc-rich epoxy dual-layer powder-coated perforated steel color-matched to enclosure

**Enclosure / Finish**

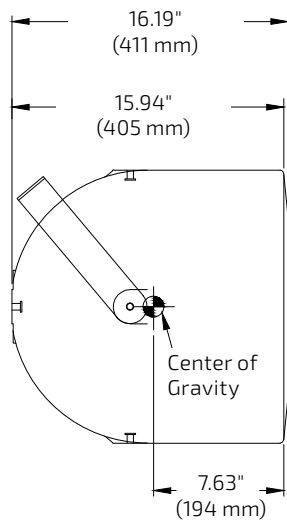
Rotomolded LLDPE plastic, in Black, White or Light Grey (RAL# 9004, 9003, and 7038)



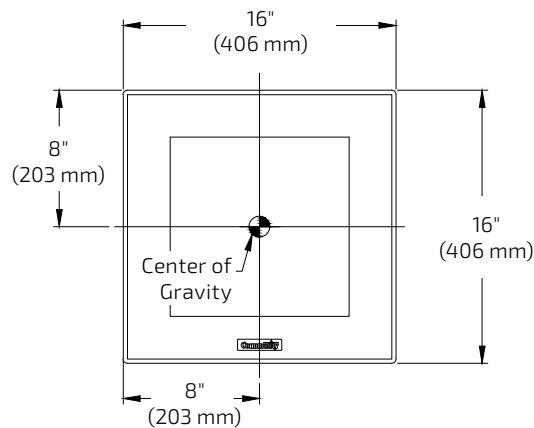
Top



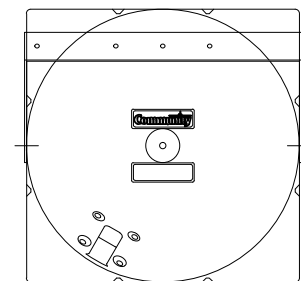
Yoke Dimensions



Sides



Front



Rear

## ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way, full-range design with one 12-inch (305 mm) high-output LF driver and one 1.4-inch (36 mm) exit HF driver coaxially mounted to a 90° x 60° molded ABS horn. Drivers shall be connected to an integral crossover with a crossover frequency of 900 Hz. The input connection shall be one 12' (3.6 m) SJOW #16-gauge cable with stripped ends. The loudspeaker enclosure shall be matte finish rotomolded linear low density polyethylene providing weather and UV resistance with a 1 mm perforated stainless steel grille backed by water-resistant treated polyester mesh and open cell foam. The steel grille shall be powder-coated with a proprietary zinc-rich epoxy dual-layer powder-coating process color-matched to the enclosure. The enclosure shall incorporate five 3/8"-16 rigging points for multiple mounting options. The system shall have an IEC 60529 IP rating of IP55W with a minimum 5-degree downward aiming angle. The system shall have a operating range of 85 Hz to 21.8 kHz (-10 dB), an input capability of 69V, and a sensitivity of 102 dB at 1W/1m with a nominal impedance of 8 ohms. The nominal dispersion shall be 90°H x 60°V. The loudspeaker shall be 16 in. (406 mm) H x 16 in. (406 mm) W x 16.19 in. (411 mm) D and weigh 44 lbs (20 kg). A steel yoke that is powder-coated with the same proprietary process, and color-matched, shall be included with the system.

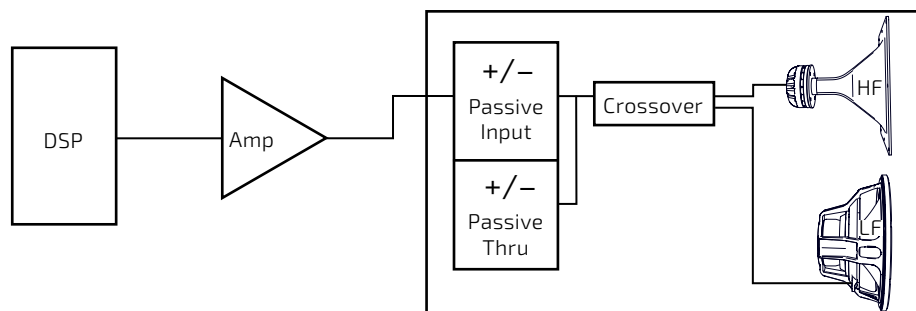
## R SERIES

Premium Music

# R.5-96MAX

HIGH OUTPUT FULL-RANGE 90° x 60°  
WEATHER-RESISTANT LOUDSPEAKER

## CONNECTION DIAGRAM



Two-way single amp

## NOTES

- PERFORMANCE SPECIFICATIONS** All measurements are taken indoor 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 model. 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](http://communitypro.com)