RMS22

Dual 12 inch Reference Subwoofer



Overview

The RMS22 is a dual 12 inch, direct radiating reference subwoofer that is designed to provide the precise transient response and extended low frequency response required of a studio subwoofer but with the power handling and output capability required in larger spaces. Its 4 inch voice coils, strong neodymium magnets, and innovative laminar flow ports permit low frequency extension to 22 Hz in an enclosure of the same size as the RM22 Dual 12 inch Coaxial Reference Monitor. The RMS22 is available both in the standard studio version, which includes four M6 mounting points for use with third-party isolation feet, and in an installation version which includes twelve M10 eye bolt points and two M10 yoke points.

The RMS22 is primarily intended for use as a mid-to-far-field subwoofer in recording studios and A/V production suites; but it is also an ideal choice for cinemas, museum exhibit spaces, multimedia presentation facilities, boardrooms, and high end home theaters: any environment in which pristine audio quality is desired and a protective grille is not necessary.

Technologies

The 12 inch woofers in the RMS22 have 4 inch voice coils, unusually strong neodymium magnet structures, and dual silicone impregnated spiders for high excursion and long term stability. This allows the pair of woofers to handle 2000 watts of long term power, while providing low frequency extension to 22 Hz.

Unique laminar flow ports allow the RMS22 to provide extremely high volume velocity with no audible turbulence. Due to this innovative port design, even very low frequency signals can be reproduced faithfully at high SPLs, with ultra-low distortion and exceptional linearity.

Performance Specifications[1]

Operating Mode

Single or dual amplified w/ DSP*

** See page 3 for connection diagrams*

Operating Range [2]

22 Hz to 135 Hz

Nominal Beamwidth

Spherical within operating range

Transducers

LF: (2) 12.0" woofers, 4.0" voice coil; neodymium magnet

Power Handling @ Nominal Impedance [3]

89 V / 2000 W @ 4 Ω (2x 1000 W @ 8 Ω)

Nominal Sensitivity @ Input Voltage [4] (half / whole space)

98 dB / 92 dB @ 2.00 V

Nominal Maximum SPL (half / whole space)

137 dB / 131 dB peak
131 dB / 125 dB continuous

Equalized Sensitivity @ Input Voltage [5] (half / whole space)

94 dB / 88 dB @ 2.00 V

Equalized Maximum SPL [6] (half / whole space)

133 dB / 127 dB peak
127 dB / 121 dB continuous

Physical Specifications

Mounting / Suspension Points

Studio Version:
(4) M6 x 1.0 mounting points for user-supplied isolation feet
Installation Version:
(12) M10 x 1.5 suspension points, (2) M10 x 1.5 yoke points

Dimensions / Weight

See pages 4 & 5

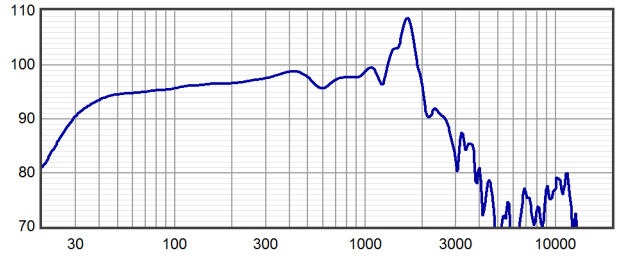
Finish

Black or white painted enclosure

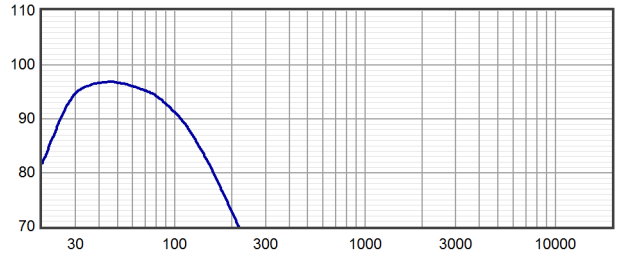
Options

Custom color finish

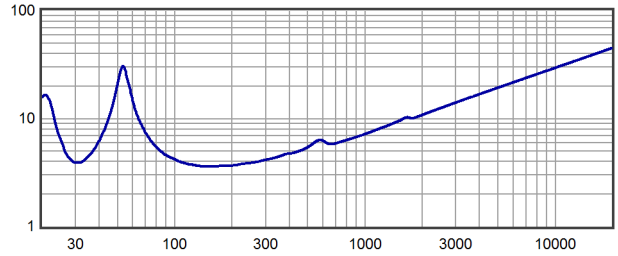
Axial Sensitivity (dB SPL, 2.00 V @ 1 m, half space)[7, 8]



Axial Processed Response (dB, half space)[7, 9]

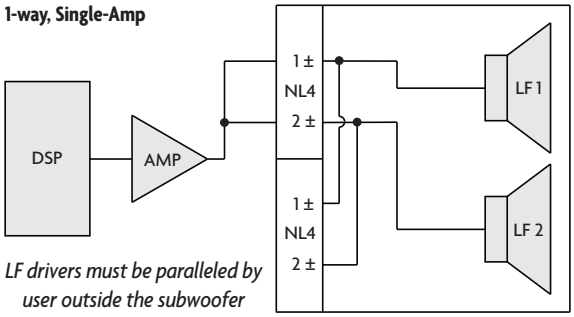


Impedance (ohms)



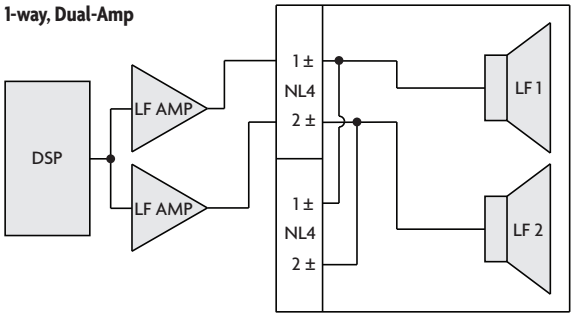
Connection Diagram

1-way, Single-Amp



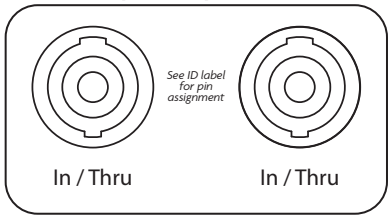
LF drivers must be paralleled by user outside the subwoofer

1-way, Dual-Amp



Connections

Neutrik NL4 Speakon Input



Mechanical Specification Drawings

2D and 3D DWG dimensional drawings are available for download at www.fulcrum-acoustic.com/resources

Notes

[1] **Performance Specifications** *All acoustic specifications rounded to nearest whole number. External DSP with Fulcrum Acoustic-provided settings is required to achieve the specified performance.*

[2] **Operating Range** *The frequency range within which the processed response is within 10 dB of the average.*

[3] **Power Handling** *Based on the AES power handling of the transducers.*

[4] **Nominal Sensitivity** *The 1-meter-referenced SPL produced by a 1 watt band limited pink noise signal, with no processing applied.*

[5] **Equalized Sensitivity** *The 1-meter-referenced SPL produced when an EIA-426-B signal is applied to an equalized loudspeaker system, at a level which produces a total power of 1 watt, in sum, to the loudspeaker subsections.*

[6] **Equalized Maximum SPL** *The 1-meter-referenced SPL produced when an EIA-426-B signal is applied to an equalized loudspeaker system, at a level which drives at least one subsection to its rated power.*

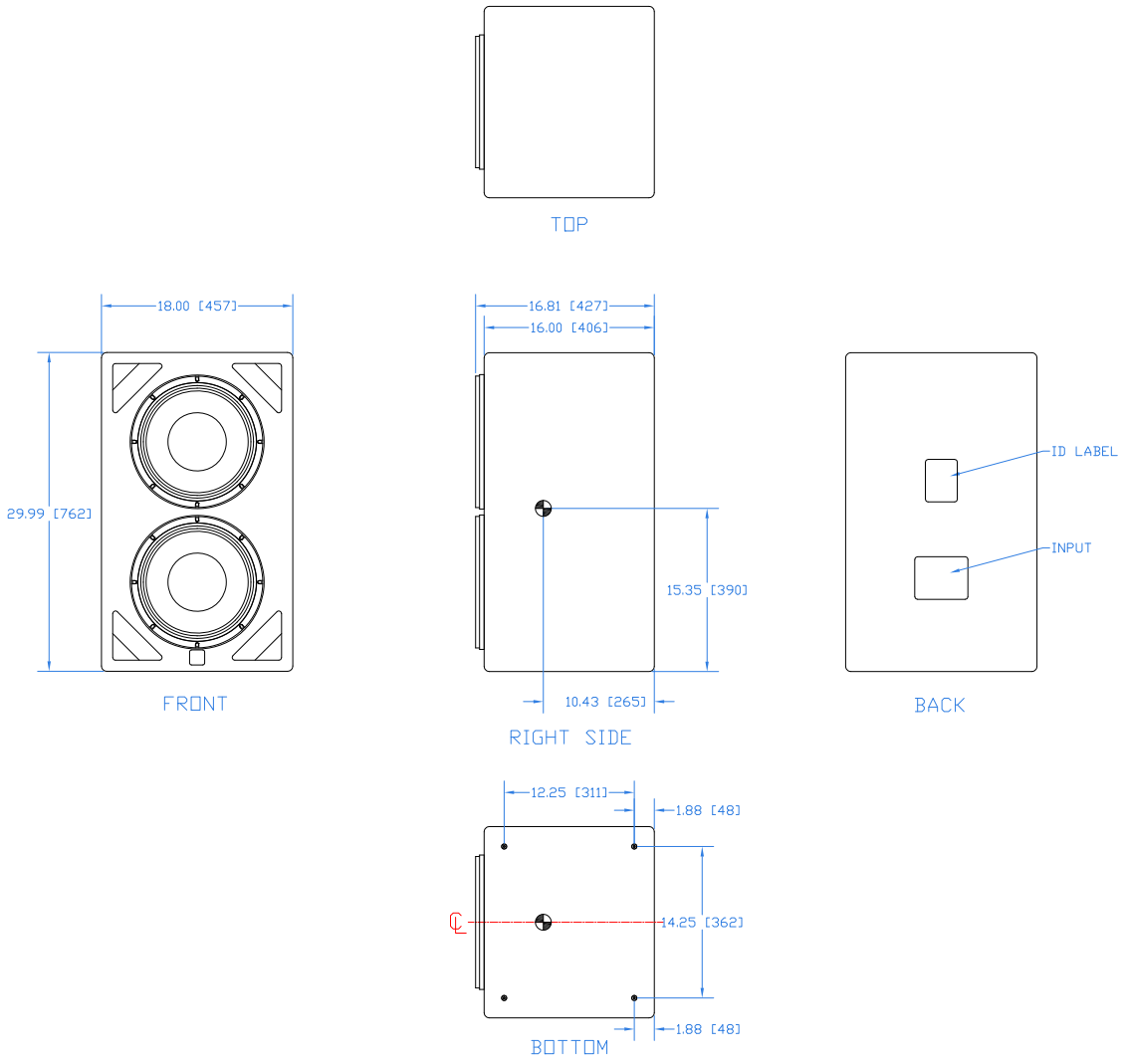
[7] **Resolution** *All response graphs are subjected to 1/6 octave cepstral smoothing with a gaussian weighting function.*

[8] **Axial Sensitivity** *The SPL plotted against frequency for a 1 watt swept sine wave, referenced to 1 m with no signal processing.*

[9] **Axial Processed Response** *The axial magnitude response with recommended signal processing applied.*

Notes:
1. Net Weight = Approx. 83.5 lb / 37.9 kg
2. Symbol ⊚ = M6 x 1.0 foot mounting point (foot user-supplied)
3. Symbol ⊕ = CoG

REVISIONS		
REV	DESCRIPTION	APPR / DATE
1	NEW ISSUE	DEW 02/22/18
2	UPDATE NOTES, PORTS	RAF 02/26/26

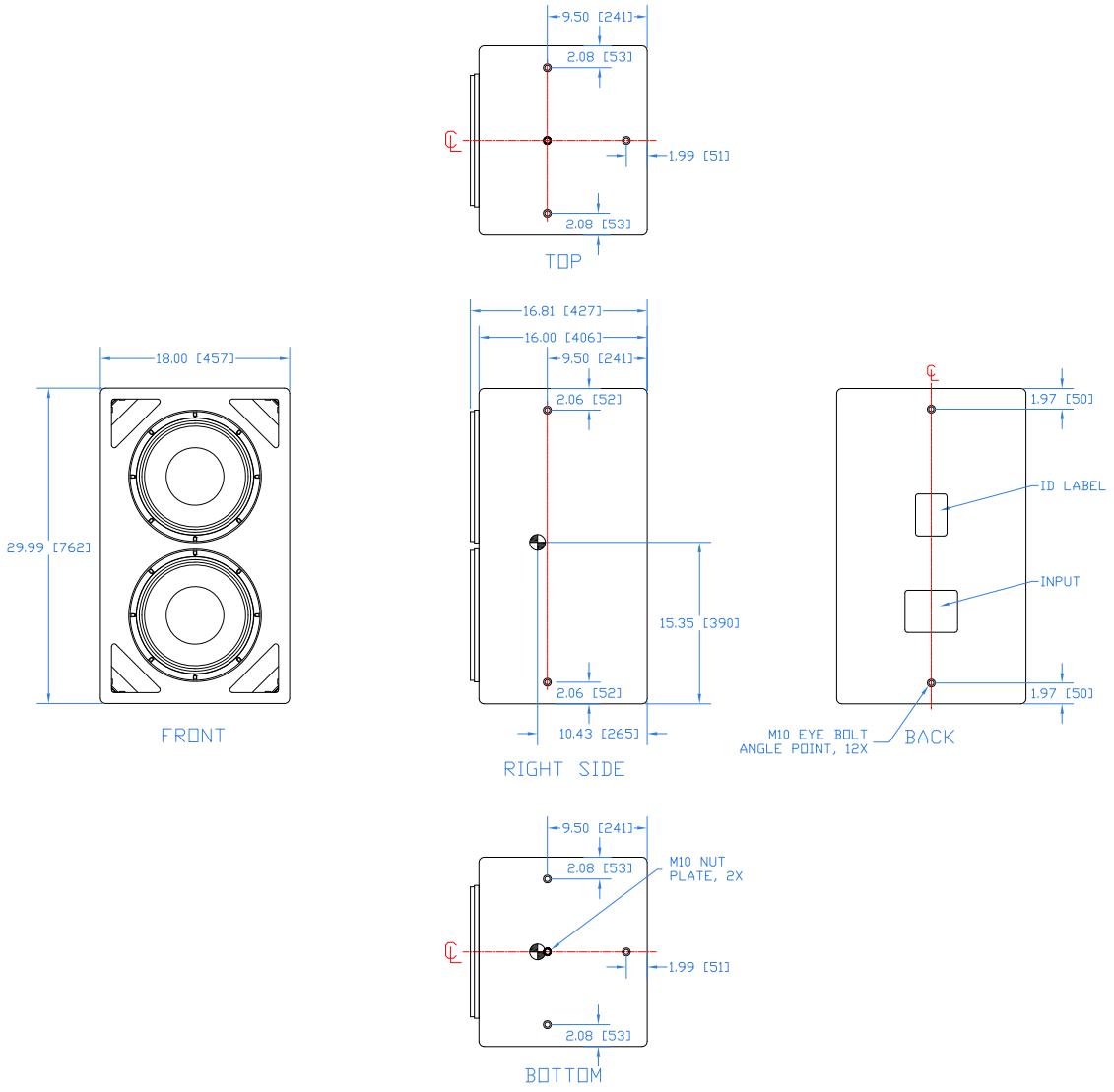


THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES TOLERANCE IN INCHES .X±.1 .XX±.015 .XXX±.005 FRACTIONS ±1/32 ANGLES ±1/2° (X.XX) = REF DIMS NO TOLERANCE IMPLIED TSC = THEORETICAL SHARP CORNER DIMENSIONS ACROSS CENTERLINES TO BE SYMETRICAL	STATUS RELEASED	FULCRUM ACOUSTIC, LLC 1 MAIN STREET, WHITINSVILLE, MA 01588 USA
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		DRAWN: DEW 02/22/18	TITLE: Mechanical Spec. RMS22 Studio
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REVISIONS		
REV	DESCRIPTION	APPR / DATE
1	NEW ISSUE	RAF 02/26/26

Notes:
1. Net Weight = Approx. 84.0 lb / 38.1 kg
2. Symbol ⊙ = M10 x 1.5 eye bolt angle point
3. Symbol ⊙ = M10 x 1.5 nut plate
4. Symbol ⊕ = CoG



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		APPROVALS / DATE	TITLE: Mechanical Spec. RMS22 Install
		DRAWN: RAF 02/26/26	
		CHECKED:	
		DES ENG:	B SHEET 1 OF 1 SCALE: 1:16
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