Sub218L

Dual 18 inch Direct-Radiating Subwoofer



Overview

The Sub218L is a low profile, dual 18 inch vented subwoofer that is designed to provide extended low frequency support in a wide variety of installations. Its premium, high power transducers are physically engaging, yet are musically articulate enough to reproduce the subtlety and harmonic nuance of an upright bass or the low strings of a piano.

The Sub218L requires digital signal processing, and many platforms are supported. The Sub218L is an excellent option any time a subwoofer with robust SPL capability is required to fit under a short stage or similar structure. This makes it the perfect choice for large houses of worship or theatres, live reinforcement or dance systems, high intensity DJ monitors, A/V screening rooms, and distributed low frequency reinforcement in nightclubs and theme parks.

Technologies

The two 18 inch woofers in the Sub218L have high power, 4 inch voice coils, and are capable of impressively large excursion. The enclosure is optimally tuned to provide maximum low frequency output.

Performance Specifications[1]

Operating Mode

Single or dual amplified w/ DSP*

** See page 3 for connection diagrams*

Operating Range [2]

24 Hz to 152 Hz

Nominal Beamwidth

Spherical within operating range

Transducers

LF: (2) 18.0" woofers, 4.0" voice coil; ceramic magnet

Power Handling @ Nominal Impedance [3]

98 V / 2400 W @ 4 Ω (2x 1200 W @ 8 Ω)

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

103 dB / 97 dB @ 2.00 V

Nominal Maximum Continuous SPL (half / whole space)

143dB / 137 dB peak
137 dB / 131 dB continuous

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

102 dB / 96 dB @ 2.00 V

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

141 dB / 135 dB peak
135 dB / 129 dB continuous

Recommended Power Amplifier

2400 W to 3600 W @ 4 Ω

Physical Specifications

Connections

(2) Neutrik NL4 Speakon
Pin 1+/-: LF 1
Pin 2+/-: LF 2

Mounting / Suspension Points

(12) M10 x 1.5 eye bolt angle points

Dimensions / Weight

See pages 4 & 5

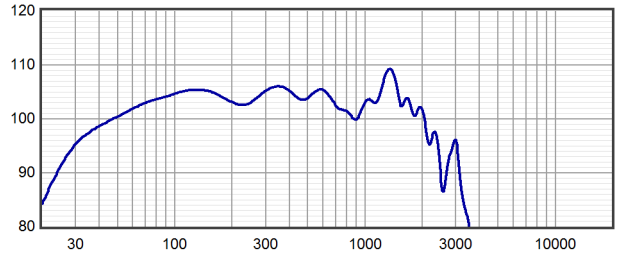
Finish

Black or white painted enclosure
White enclosure does not include handles

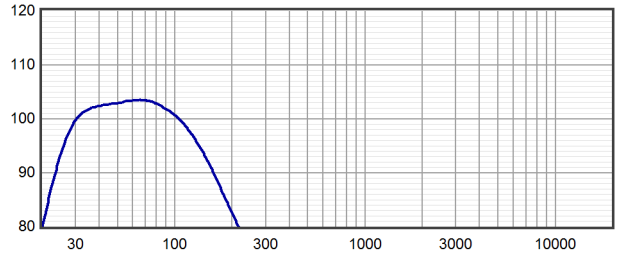
Options

Terminal strip input, Custom color finish,
Weather-resistant (WR) enclosure & hardware

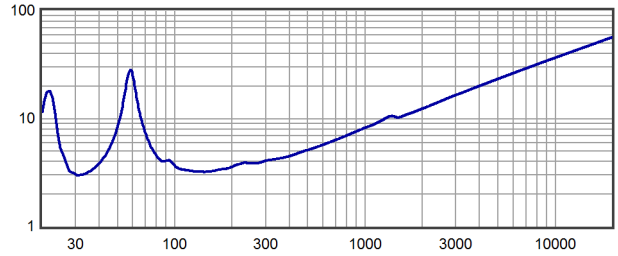
Axial Sensitivity (dB SPL, 2.00V @ 1 m, half space)[7, 8]



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

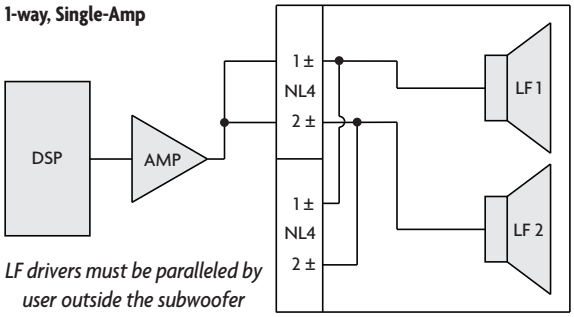


Impedance (ohms)



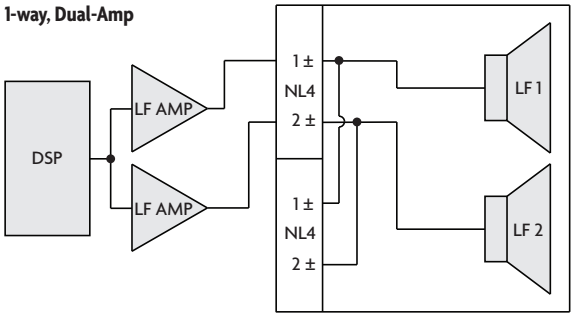
Connection Diagram

1-way, Single-Amp



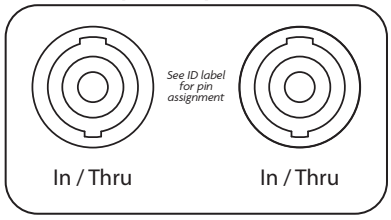
LF drivers must be paralleled by user outside the subwoofer

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.*

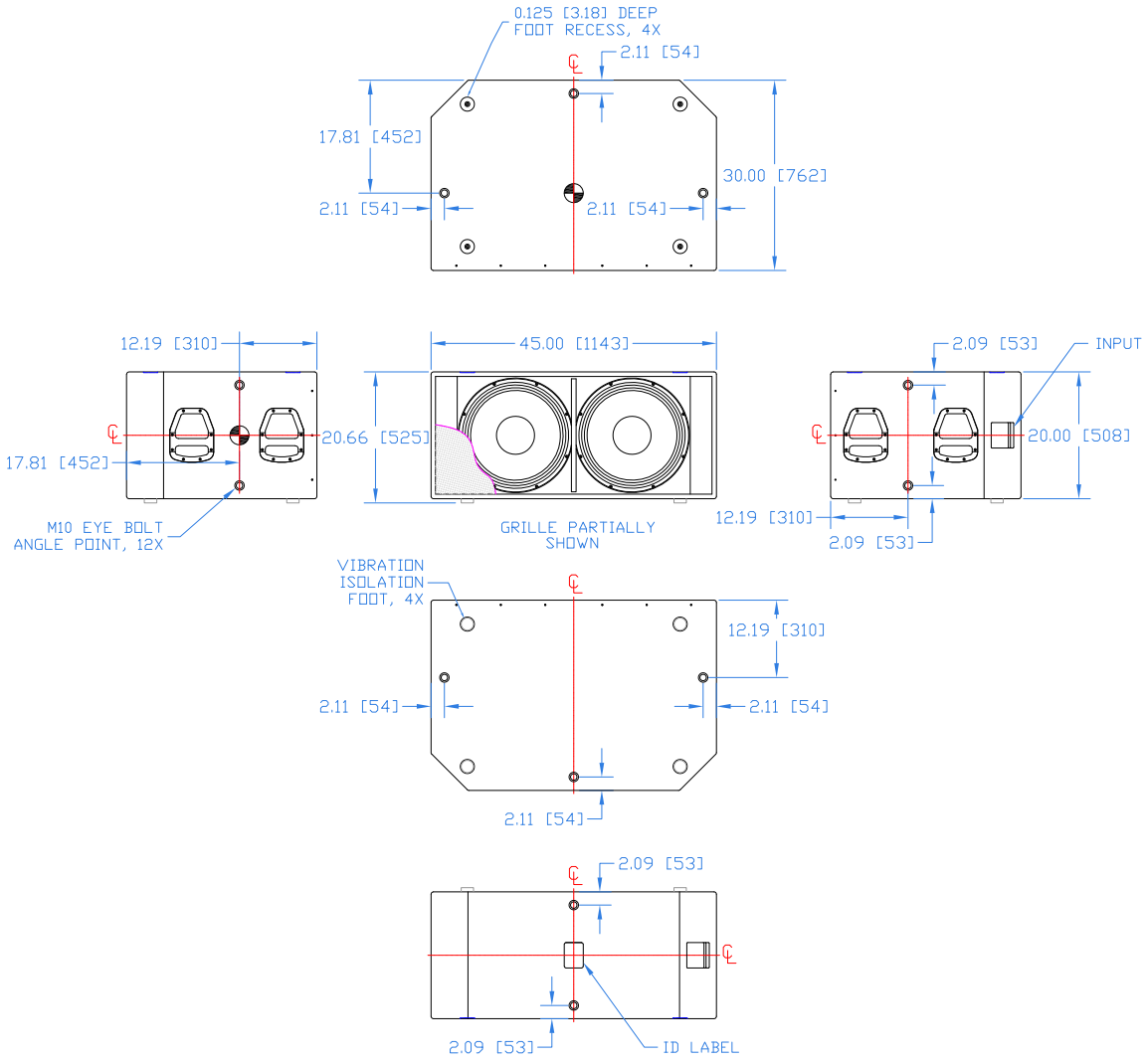
[7] *Resolution All response graphs are subjected to 1/6 octave cepstral smoothing with a gaussian weighting function.*

[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. 163.0 lb / 73.9 kg
2. Symbol ⊙ = M10 x 1.5 eye bolt angle point
3. Symbol ◉ = M10 x 1.5 foot mounting point; do NOT use for suspension
4. Symbol ◓ = CoG

REVISIONS		
REV	DESCRIPTION	APPR / DATE
1	RELEASED TO PRODUCTION	RAF 9/17/14
2	ADD M10 EYE BOLT ANGLE PTS	RAF 2/9/15
3	ADD HANDLES	RAF 6/26/19
4	MOVE PRIMARY SUSPENSION PTS	RAF 11/10/20
5	NOTE FOOT RECESS DEPTH	RAF 4/27/21
6	UPDATE NOTES	RAF 5/5/25



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
		APPROVALS / DATE	TITLE: Mechanical Spec, Sub218L
		DRAWN: RAF 9/17/14	
		CHECKED: DWG 9/17/14	
		DES ENG:	A SHEET 1 OF 1 SCALE: 1:24
		MFG ENG:	DWG. NO. 820-100-078 REV 6

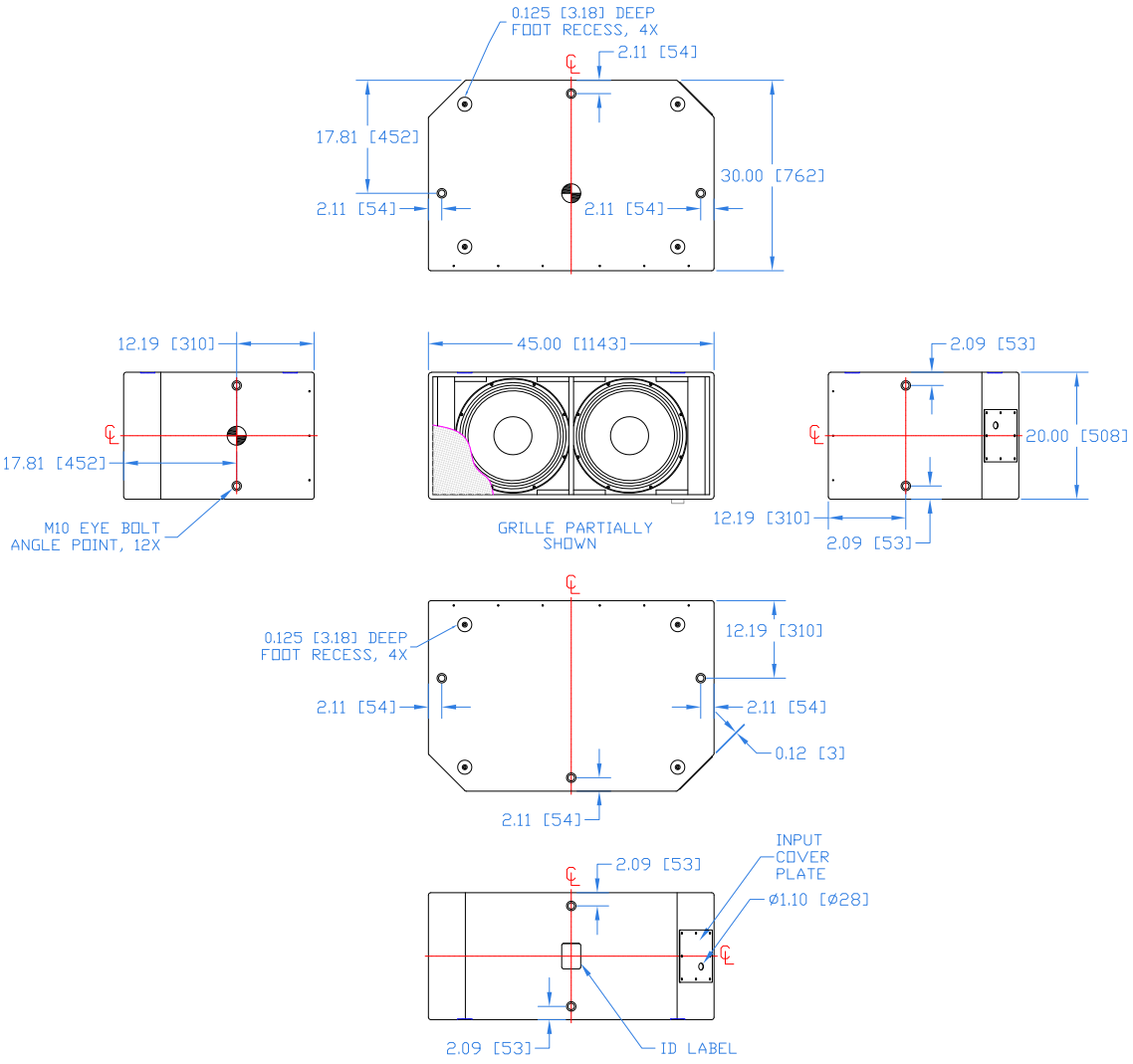
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Drawing is reduced. Do not scale.

Notes:
1. Net Weight <= Approx. 163.0 lb / 73.9 kg
2. Symbol ⊙ = M10 x 1.5 eye bolt angle point
3. Symbol ◉ = M10 x 1.5 foot mounting point; do NOT use for suspension
4. Symbol ⊕ = CoG
5. Enclosure construction:
   Fiberglass Reinforced Polyurethane

REVISIONS

REV	DESCRIPTION	APPR / DATE
1	NEW ISSUE	DEW 7/24/18
2	MOVE PRIMARY SUSPENSION POINTS; NOTE FOOT RECESS DEPTH	RAF 4/27/21
3	NEW ISSUE	RAF 2/5/24
4	UPDATE NOTES, INPUT COVER PLATE	RAF 5/5/25



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		DRAWN: DEW	7/24/18	
		CHECKED:		
		DES ENG:		A SHEET 1 OF 1 SCALE: 1:24
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