

**STROKER
PRO**

**CERWIN-VEGA!
MOBILE AUDIO**

SUBWOOFER

CERWIN-VEGA!
MOBILE AUDIO

ATTENTION!

PLEASE READ ALL WARNINGS FOUND IN THIS MANUAL. THIS INFORMATION IS HIGHLIGHTED IN BOLD ITALIC TYPE AND IS INCLUDED TO INFORM YOU OF THE POTENTIAL FOR PERSONAL INJURY OR DAMAGE TO PROPERTY

HEARING DAMAGE

CONTINUOUS, EXCESSIVE EXPOSURE TO SOUND PRESSURE LEVELS IN EXCESS OF 85 dB CAN CAUSE A LOSS OF HEARING. CERWIN-VEGA! STROKER SUBWOOFERS ARE CAPABLE OF PRODUCING SOUND PRESSURE LEVELS GREATER THAN 130 dB..... "TURN IT DOWN"!

VOLUME AND DRIVER AWARENESS

THE USE OF STROKER SUBWOOFERS CAN IMPAIR YOUR ABILITY TO HEAR NECESSARY TRAFFIC SOUNDS AND MAY CONSTITUTE A HAZARD WHILE DRIVING. WE RECOMMEND USING LOW VOLUME LEVELS WHEN DRIVING YOUR VEHICLE.

CERWIN-VEGA! ACCEPTS NO LIABILITY AS A RESULT OF EXCESSIVE USE OR MISUSE OF THIS PRODUCT

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INTRODUCTION

Congratulations on your purchase of Cerwin-Vega!’s ultimate statement of ground pounding subwoofers, the new Stroker Pro. With its innovative DUAL GAP technology, adjustable bias and top spider, the new Stroker Pro defines how high power/high excursion subwoofers are designed and built. Integral to the design, is the innovative combination inductive shorting ring/heat sinking basket that transfers voice coil heat away and allows incredible power handling. Features include:

- Bias Adjustment - tunable for sound Q or SPL
- Dual Gap Technology - allowing greater linear excursion.
- Oversized ellipsoid surround and clamping system - creates larger piston area and field serviceability.
- Heat sinking frame - allows for higher power handling and lower distortion.
- Front Spider - stabilizes driver in extreme excursion
- Dual lower spiders - for optimum suspension linearity
- Field replaceable cone and coil assembly

ABOUT THIS MANUAL

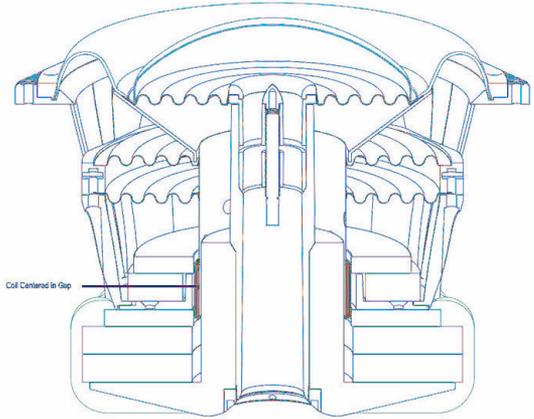
This manual covers application information for the Stroker PRO 12 and Stroker PRO 15 Dual voicecoil subwoofers. For installation options and techniques, including subwoofer box construction, please see your authorized Cerwin-Vega! mobile audio dealer.

WARRANTY INFO

Your Stroker Series subwoofer is covered by Cerwin-Vega’s limited one year warranty. Please see the warranty card for details.

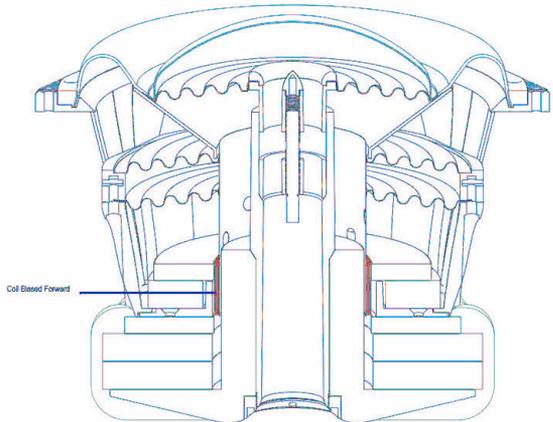
Stroker PRO Coil Bias Feature

Right out of the box, the Stroker Pro is set with the voice coil in the center of the magnetic gap, giving you a high power high-excursion woofer with the lowest possible distortion and maximum fidelity. By using the tool included with the woofer you can push, or bias, the coil's rest position forward in the gap. This creates asymmetrical system non linearities.



These non linearities create uneven magnetic force and compliance on the forward and backward stroke of the speaker. This allows the speaker to create higher amounts of even ordered distortion (2nd, 4th, etc.) which contributes to the overall output giving the dB competition users an added edge.

The even ordered distortion also enhances the psychoacoustic phenomena known as, "The Missing Fundamental" that enhances the perception of deep bass level.



Enclosure Information

We recommend using the following enclosure specifications (as listed on the next three pages) to attain optimum performance:

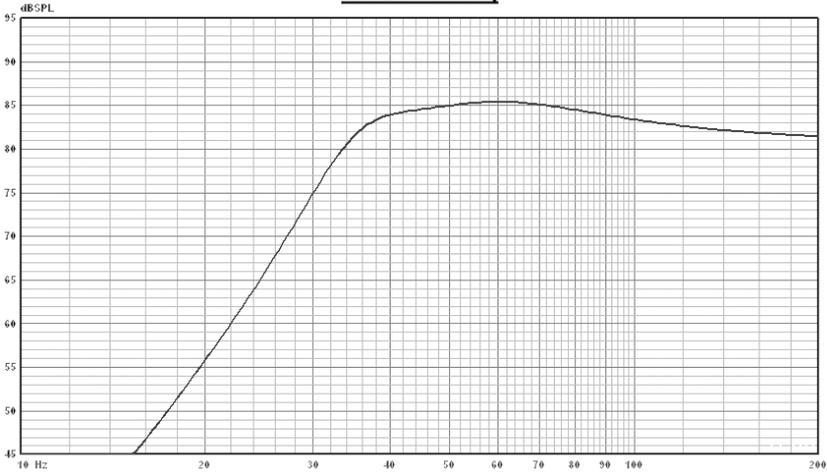
Stroker Pro 12 Optimum Enclosure *(Drivers Tested 1W/1m)*

Type: *Bass Reflex (ported)*

Box Volume: *1.2 cu ft.*

Stroker Pro 12 Frequency Response

SPL vs Freq



Stroker PRO 12 Port Specifications

Port Area: *25.3 sq. in / Two 4" I.D. Tubes*

Port Length: *11"*

Port Tuning: *49hz*

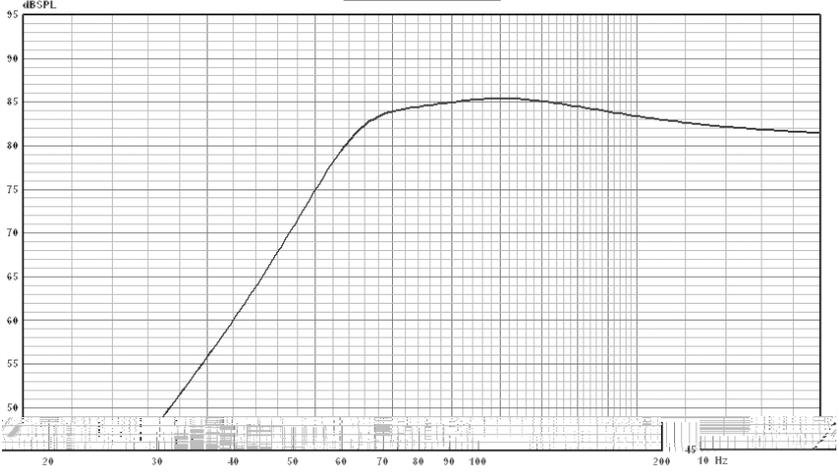
Stroker PRO 15 Optimum Enclosure (Drivers Tested 1W/1m)

Type: Bass Reflex (ported)

Box Volume: 3.0 cu ft.

Stroker 152 Frequency Response

SPL vs Freq



Stroker PRO 15 Port Specifications

Port Area: 25.12 sq. in / Two 4" I.D. Tubes

Port Length: 14"

Port Tuning: 36hz

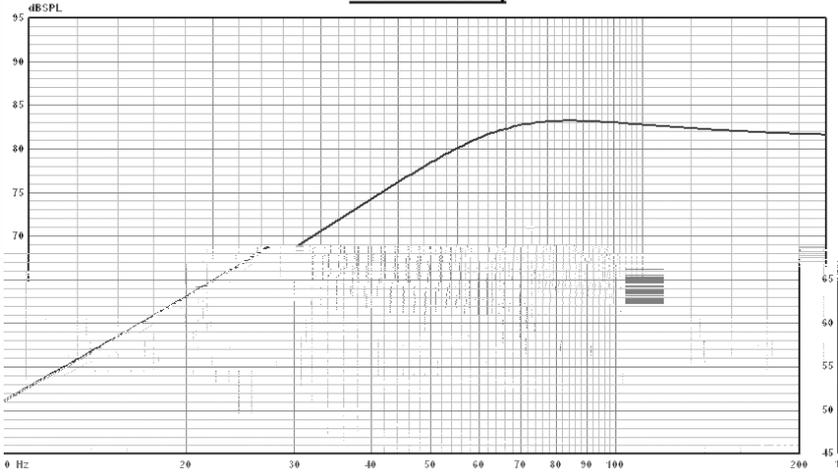
Stroker Pro 12/15 Optimum Enclosure (Drivers Tested 1W/1m)

Stroker PRO 12 Frequency Response

Type: Sealed Box

Box Volume: 0.7cu ft.

SPL vs Freq

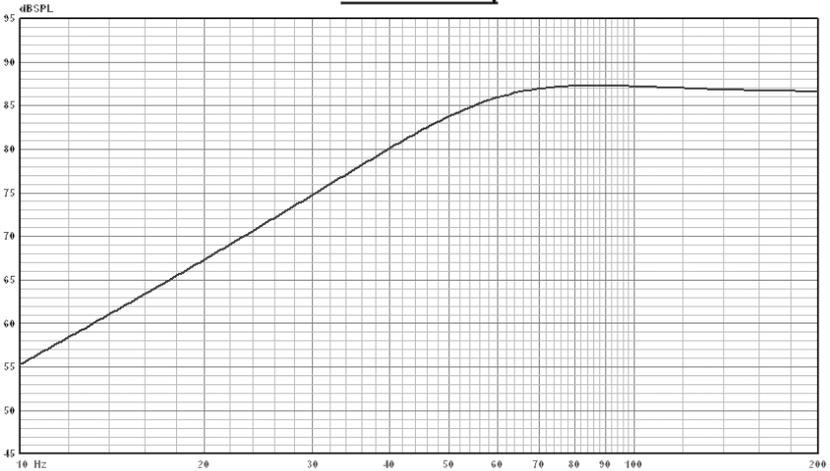


Stroker PRO 15 Frequency Response

Type: Sealed Box

Box Volume: 2.7 cu ft.

SPL vs Freq



Stroker PRO 12 Specifications

Diameter:	12"
No. of Voice Coils:	2
Power Handling: (cont. unclipped power per EIA RS-426B)	2500 Wrms (1250 Wrms per voice coil)
Frequency Response:	40~200 Hz
Voice Coil Diameter:	4.0"
Total Weight:	63 lbs, (14.96 kg)
Mounting Diameter:	13 ¹ / ₈ " (33.32 cm)
Mounting Depth:	8" (20.32 cm)

Stroker PRO 12 Thiele-Small Parameters

		12
Free-Air Resonance:	f_s	27 Hz
Total Q:	Q_{ts}	0.62
Mechanical Q:	Q_{ms}	8.87
Electrical Q:	Q_{es}	0.67
Comp.Vol.:	V_{as}	1.8 ft ³
Max. Excursion:	X_{max}	40 mm
Voice Coil DC Resistance:	R_{evc}	2 x 1.75 Ω
Vol. Displace.:		276 in ³ (0.16 ft ³)
Nominal Impedance:		2 x 2 Ω
Sensitivity:		84.0dB

Stroker PRO 15 Specifications

Diameter:	15"
No. of Voice Coils:	2
Power Handling: (cont. unclipped power per EIA RS-426B)	2500 Wrms (1250 Wrms per voice coil)
Frequency Response:	36~200 Hz
Voice Coil Diameter:	4.0"
Total Weight:	68.3 lbs, (15.4 kg)
Mounting Diameter:	16 ¹ / ₄ " (41.27 cm)
Through Hole	14" (35.56cm)
Mounting Depth:	9" (20.32 cm)

Stroker PRO 15 Thiele-Small Parameters

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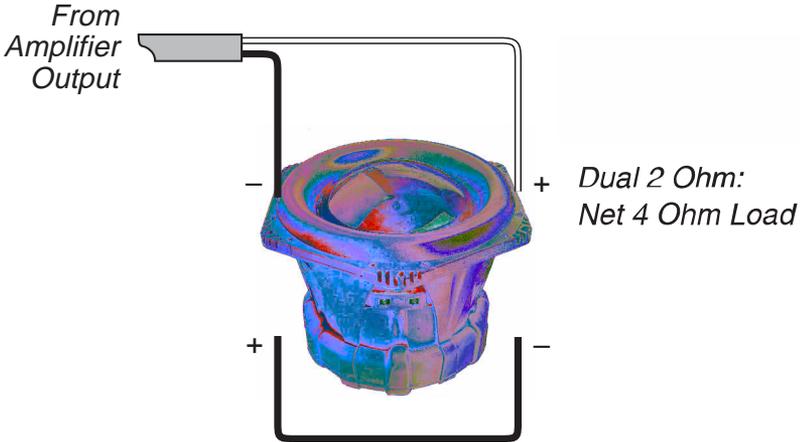
Free-Air Resonance:	f_s	26.4 Hz
Total Q:	Q_{ts}	0.72
Mechanical Q:	Q_{ms}	7.8
Electrical Q:	Q_{es}	0.79
Comp.Vol.:	V_{as}	3.6 ft ³
Max. Excursion:	X_{max}	40 mm
Voice Coil DC Resistance:	R_{evc}	2 x 1.80 Ω
Vol. Displace.:		285 in ³ (0.165 ft ³)
Nominal Impedance:		2 x 2 Ω
Sensitivity:		86.3dB

Stroker PRO Dual Voice Coil Subwoofers **(Stroker PRO 12 - Stroker PRO 15)**



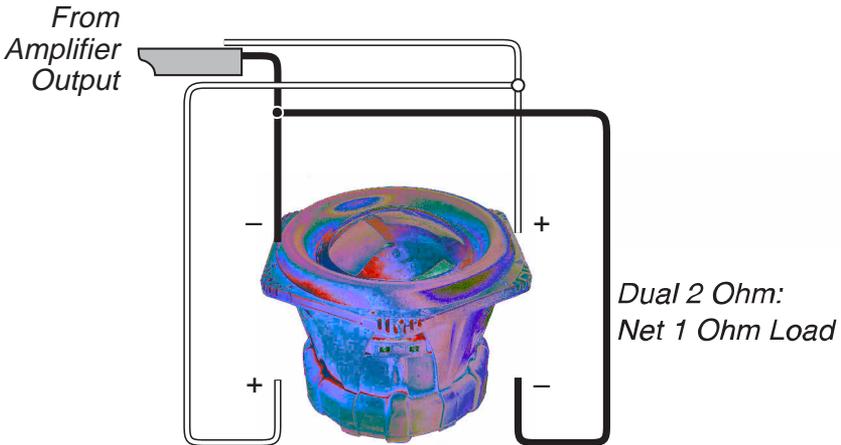
Stroker PRO Dual Voice Coil Subwoofers (Stroker PRO 12 - Stroker PRO 15)

Series Connection



Stroker PRO Dual Voice Coil Subwoofers (Stroker PRO 12 - Stroker PRO 15)

Parallel Connection





9340 De Soto Ave., Chatsworth, CA 91311

Phone: 1-818-534-1500 • Fax: 1-818-534-1590 • Email: info@cerwin-vega.com

WWW.CERWIN-VEGA.COM