

HIGH PERFORMANCE SUBWOOFERS

Mechanical Specifications

Model	CW-12AL
Power Handling RMS/ Max (Watts)	600/1200
Magnet Weight	(70 X 2)OZ
Mounting template diameter (mm)	302
Mounting Depth (mm)	163
Voice Coil Diameter	3"

Technical Parameters

Model	CW-12AL
Nominal Impedance (Ohms)	2+2Ohm
FS (Hz)	27.804
Qms	8.183
Qes	0.610
Qts	0.567
Vas(liters)	49.552
Cms (micro Newtons)	144.823
Xmax (mm)	17.5
Sensitivity (dB)	84
Mms (grams)	226.253
Voice Coil Diameter	3"
Voice Coil Length	3"
Voice Coil Layers	4

Recommended Enclosures (includes speaker and port displacement)

Model

CW-12AL

Sealed Enclosure - SPL (Liter)	9.09
Sealed Enclosure - Nominal (Liter)	15.01
Sealed Enclosure - SQ (Liter)	30.42
Ported Enclosure (Liter)	28.32
Port size	2"W X 7"H X 22"D
Port Tuned @	45

SEALED ENCLOSURE	PORTED ENCLOSURE
<p>Sealed Enclosure Notes:</p> <ol style="list-style-type: none"> 1. Allow a 1 - 2 week break in period on all CW series subwoofers. After 1 - 2 weeks, the CW series subwoofers will reach their best performance characteristics. 2. All sealed enclosures should be 40-50% filled with loose polyfill. 	<p>Ported Enclosure Notes:</p> <ol style="list-style-type: none"> 1. When building a slotted port, be sure to shave, smooth or bevel the inner edges to eliminate port noise.

CW-12AL

SUBWOOFER WIRING CONFIGURATIONS

SERIES WIRED SUBWOOFER

Voice coil 1 in series with voice coil 2.
 $2\text{ ohm} + 2\text{ ohm} = 4\text{ ohms}$. If you had two of these series wired subwoofers, you can put two in parallel with each other to get a 4 ohm mono load.

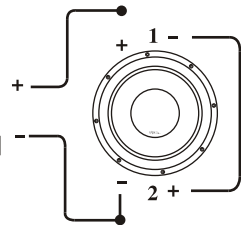


Figure A.

PARALLEL WIRED SUBWOOFER

Voice coil 1 in parallel with voice coil 2. Two 2 ohm loads in parallel results in a 1 ohm load.

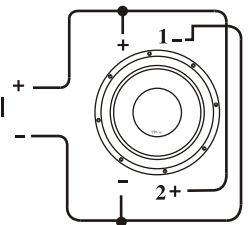


Figure D.

SERIES / PARALLEL COMBO

Each subwoofer is the same as Figure A, as shown above. When wiring two 4 ohm subwoofers in parallel, you receive a 2 ohm mono load.

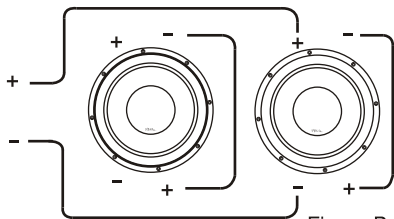


Figure B.

If you are powering two subwoofers with a 4 channel amplifiers rear channels, the 4 ohm mono Series/Parallel set up is perfect (Figure B).

SERIES / PARALLEL 3 SUBWOOFER COMBO

Each subwoofer's voice coils are in series (each subwoofer is now 4 ohms). After wiring all three subwoofers in parallel you get a 1.6667 ohm load. This particular set up can be used with any high current amplifier that is **1 ohm mono stable**.

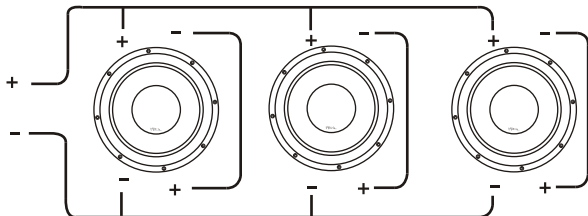


Figure C.

PARALLEL / PARALLEL COMBO

Each subwoofer's voice coils are in parallel. Each subwoofer is now 1 ohms. After putting the two 1 ohm subwoofers in parallel, you get a 0.5ohm mono load.

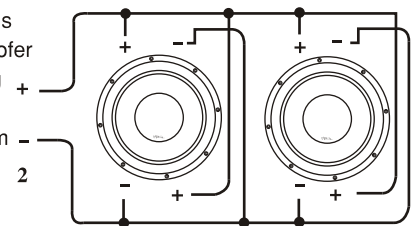


Figure E.

SERIES / PARALLEL 3 SUBWOOFER COMBO

Each subwoofer's voice coils are put in series (each subwoofer is now 4 ohms), exactly like figure F. After wiring three subwoofers in parallel you get a 1.6667 ohm load. This particular set up is not for just any amplifier. This set up is only recommended for the Digital Amplifier Series.

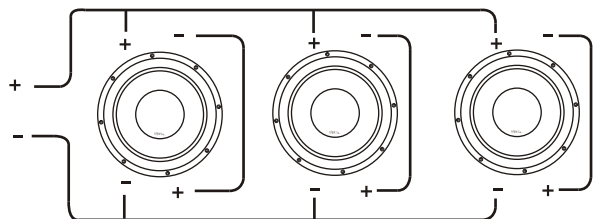
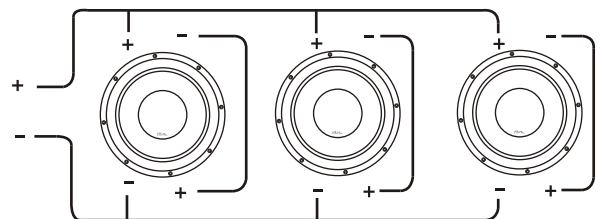


Figure F.

If you are using the Class - D monoblock, wire one set of three subwoofers to channel A and the other set three subwoofers to channel B. You will get a 1.3 ohm load.