

# PRO-8D4

Congratulations on your choosing a SUONO subwoofer. For best results, we recommend using one of the acoustic enclosures described below. You can build your enclosure exactly as described or simply use the net volumes and ports specified, adapting them to your available external dimensions and/or shapes. Please note the volumes specified are Net Internal Volumes. You must add woofer displacement, port displacement and brace displacements to obtain the Gross Internal Volume. The enclosure dimensions shown are already taking all of this into account. The Sealed Box is the smallest and more natural box, but not as loud. The Ported Box is more dynamic but bigger.

## Characteristics

8" subwoofer, dual 4 ohms voice coils, die-cast aluminum basket, Kevlar fiber-reinforced non-pressed pulp cone, sewn-in extended range of motion foam cone suspension, exposed 2.5" four-ply copper high-temperature voice coil with aluminum former, dual poly-cotton spider, double magnet 50 ounces each. Specifications subject to change without notice.

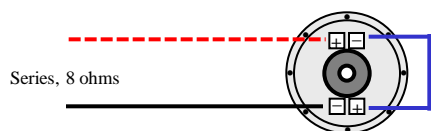
## Building an Acoustic Enclosure

As construction material, we suggest MDF or high-density chipboard at least 3/4 inches thick. Cuts should be made with a table-mounted circular saw or better. It is also convenient to include internal reinforcements to give the box greater solidity. Acoustic enclosures should also always include some fiberglass or dacron inside as an acoustic absorber, taking care that it does not come into contact with the loudspeaker or port. All enclosures should be securely bolted to the car so they don't become a projectile during a collision.

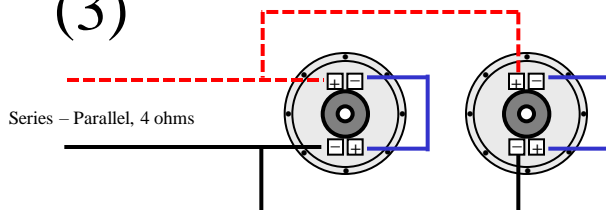
## Voice Coil connection

Even though this woofer has two 4-ohm terminals, both terminals form a single winding. Therefore, both coils should ALWAYS be connected. If they are connected in series the impedance goes up to 8 ohms (1), and if they are connected in parallel it goes down to 2 ohms (2). For two subwoofers it is possible to make a series-parallel configuration to get a final impedance of 4 ohms (3), or you can connect all coils in parallel to go down to 1 ohm (4). **Note:** In any parallel connection the length of each wire for each coil must be exactly the same.

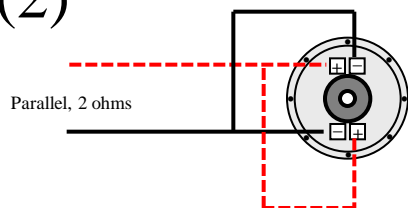
(1)



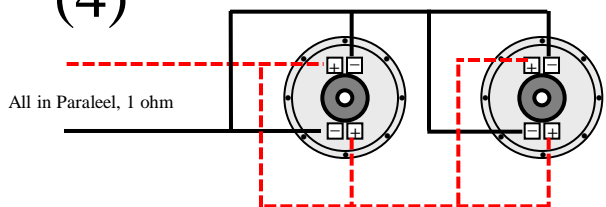
(3)



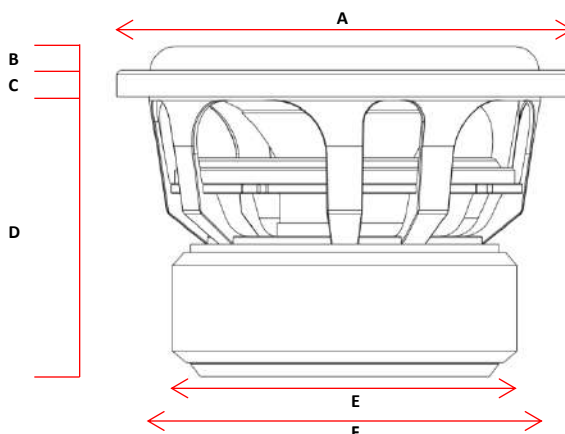
(2)



(4)



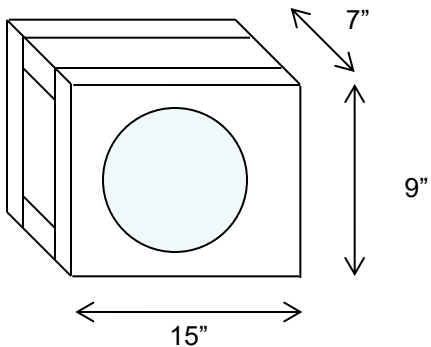
Thiele-Small Parameters:		Dimensions	
Fs:	41 Hertz	A	8.543" / 217 mm
Qes:	0.63	B	0.397" / 10 mm
Qms:	6	C	0.63" / 16 mm
Qts:	0.57	D	5.08" / 129 mm
Vas:	0.21 ft <sup>3</sup>	E	6.38" / 162 mm
Z nom:	4 + 4 ohms	F	7.283" / 185 mm
X max:	13 mm		
BL:	20.5 Tm		
P:	500 Watts RMS		
Re:	7.5 ohms		
Sensitivity	80 dB SPL @ 1W/1m		
Displacement	0.07 ft <sup>3</sup>		



**RECOMMENDED SPEAKER BOXES.** In the designs below the thickness of the wood is 3/4". The reinforcement can be the dividing wood of the double boxes or the one indicated in the individual ones. Add some fiberglass or dacron inside. The reinforcement can be the dividing wood of the double boxes or the one indicated in the individual ones.

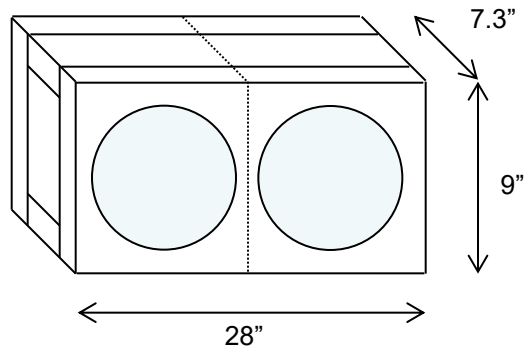
**Single Woofer, Sealed Box.** Net Internal Volume: 0.25 ft<sup>3</sup>  
**F3 = 53 Hertz, Qtc = 0.77**

To cut: 2 pieces 15" x 9"  
 2 pieces 15" x 5.5"  
 2 pieces 7.5" x 5.5"  
 1 piece 3" x 5.5" as reinforcement



**Two Woofers, Sealed Box.** Net Internal Volume: 0.25 ft<sup>3</sup> per side

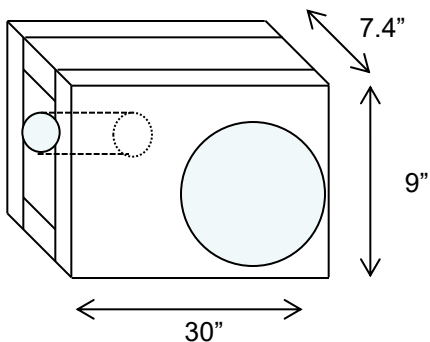
To cut: 2 pieces 28" x 9"  
 2 pieces 28" x 5.8"  
 3 pieces 7.5" x 5.8" (one is the division)



**Single Woofer, Ported Box.** Net Int. Volume: 0.6 ft<sup>3</sup>, **F3: 35 Hz, Fb 43 Hz**

To cut: 2 pieces 30" x 9"  
 2 pieces 30" x 5.9"  
 2 pieces 7.5" x 5.9"  
 1 piece 4" x 5.9" as reinforcement

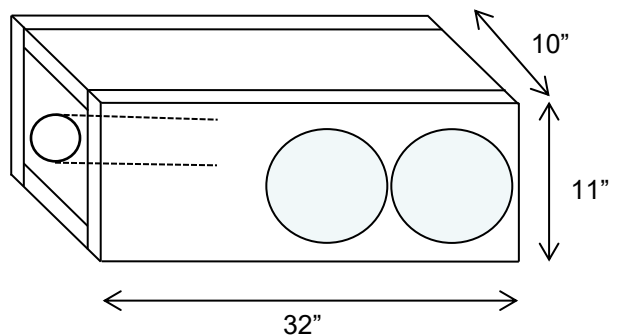
Tuned with a single **3" diameter port, 13" long**



**Two Woofers, Ported Box.** Net Internal Total Volume: 1.2 ft<sup>3</sup>

To cut: 2 pieces 32" x 11"  
 2 pieces 32" x 8.5"  
 2 pieces 9.5" x 8.5"  
 1 or 2 pieces 4" x 8.5" as reinforcements

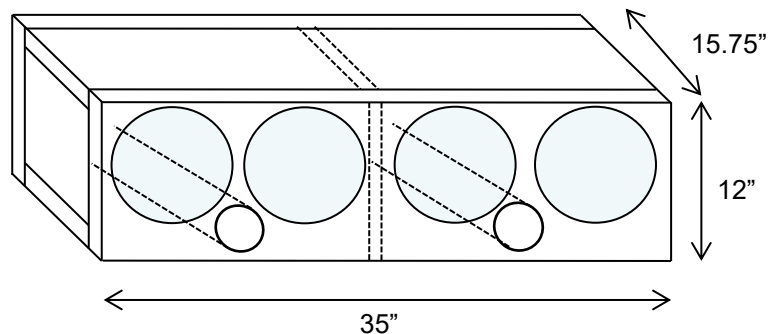
Tuned with a single **4" diameter port, 11" long.**



**Four Woofers, Ported Box, one division.** Net Internal Volume: 1.2 ft<sup>3</sup> per side. **F3: 35 Hz, Fb 43 Hz**

To cut: 2 pieces 35" x 12"  
 2 pieces 35" x 14.25"  
 3 pieces 10.5" x 14.25" (one is the division).

Tuned with **two Ports, each 4" in diameter, 11" long.**



**WARRANTY:**

SUONO products are guaranteed for one year for the original retail purchaser against defects in material and workmanship. Products found to be defective will be repaired or replaced (at SUONO's discretion) at no charge. Damage caused by misuse, abuse, product modification, accidents, improper installation, water, and unauthorized repair attempts is not covered. Cosmetic or finish damages are not covered. Products not purchased in the United States from an authorized dealer are not covered. Incidental or subsequent damages to other products are not covered. Any costs or expenses for removing and/or reinstalling the product are not covered. SUONO's total liability will not exceed the purchase price of the product. Some states do not allow limitations on implied warranties so this may not apply to you. You are responsible for the shipment of your product to SUONO. Please get in touch with SUONO first to get a Return Authorization Number.

**SUONO CAR AUDIO LLC**

1517 Pech Road, Houston, Texas 77055. USA

Phone : (832) 853 71 85    juan.castillo@suonocaraudio.com    www.suonocaraudio.com