

Logic[®]

SOUNDLAB



User Manual for FX Series Subwoofers.

FX12DVC and FX15DVC included.

FX10DVC manual unavailable.

**For FX10DVC refer to common elements
with FX12DVC and FX15DVC.**



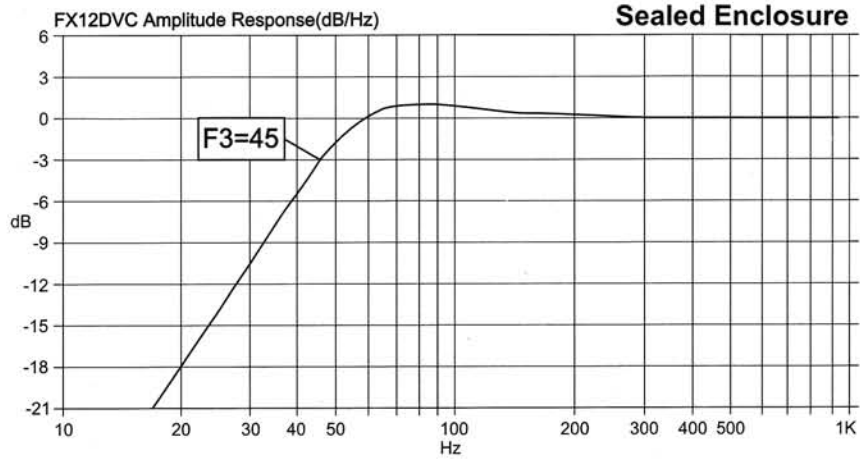
FX12DVC
12inch
SUBWOOFER



INSTALLATION MANUAL

Recommended Enclosures

Please Note : Our Suggested box Volumes are given as internal Air requirements.

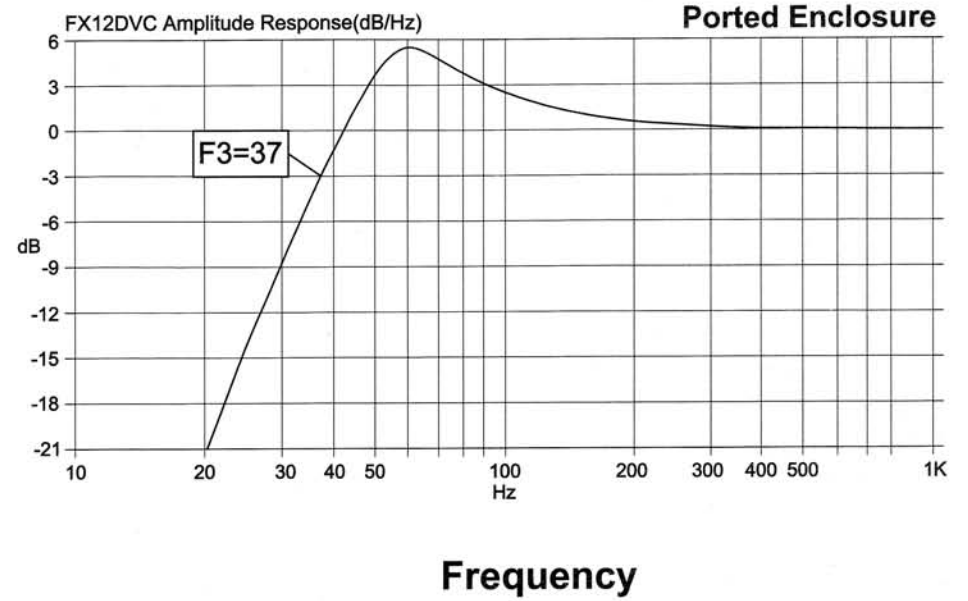
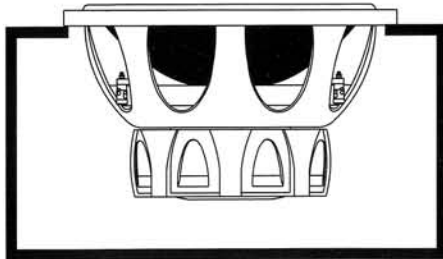


Frequency

Sealed Enclosure

Box Volume : 1.0 Cu Ft

Box is given as internal air volume including driver displacement



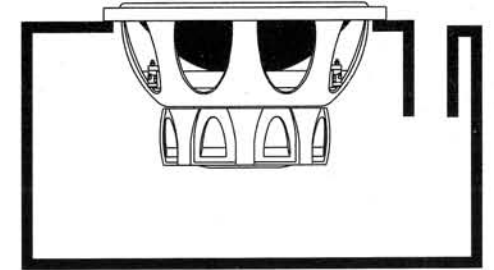
Frequency

Ported Enclosure

Box Volume : 1.5 Cu Ft

Box is given as internal air volume including driver displacement

Port Frequency : 45 Hz
 Port Diameter : 4 Inches
 Port Length : 8 Inches



Product Specifications

Speaker Impedance	table	2 ohms	4 ohms	8 ohms
Free Air Resonance	(Fs)	32	32	32
Total Q Driver @ FS including all resistance's	(Qts)	0.585	0.976	0.559
Q of the Driver @ FS including non electrical resistance only	(Qms)	5.909	5.456	5.456
Q of the Driver @ FS including electrical resistance only	(Qes)	0.649	1.189	0.6222
The Driver's compliance expressed as an equivalent volume of all (cubic Ft.)	(Vas)	1.847	1.847	1.847
The Driver's linear displacement (inches)	(Xmax)	0.315	0.315	0.315
The DC resistance of the driver's twin voice coils(ohms)	(Re)	1.8	3.6	7.2
Thermal Power rating of Driver (R.M.S./Peak)	(Pe)	500W/1000W	500W/1000W	500W/1000W
The Driver's voice coil inductance(millihenries)	(Le)	1.156	1.183	4.724
The Driver's sensitivity (dB)	(Sens)	92	92	92

Calculating Enclosures

It is difficult to give exact box dimensions that are universal for all cars and trucks. It is for this reason that you must be able to calculate the space in which you have available in order to achieve the proper air volume required.

It is recommended to build your enclosure from 3/4" thick MDF (medium density fiberboard). Make sure the enclosure is sealed air tight.

Calculating External Volume

1)To calculate box volume, measure the outside Width x Height x Depth of the enclosure. Example 12" x 14" x 9" = 1512"

2)Next you must convert cubic inches into cubic feet. To do this, You must divide the cubic inch total by 1728". Example 1512 ÷ 1728= .875 Cubic feet

Calculating Internal Volume

1)To calculate the internal (net) volume of the above box you must first multiply the thickness of the wood you are using by Two (2) Example; 3/4" x 2"=1.5"

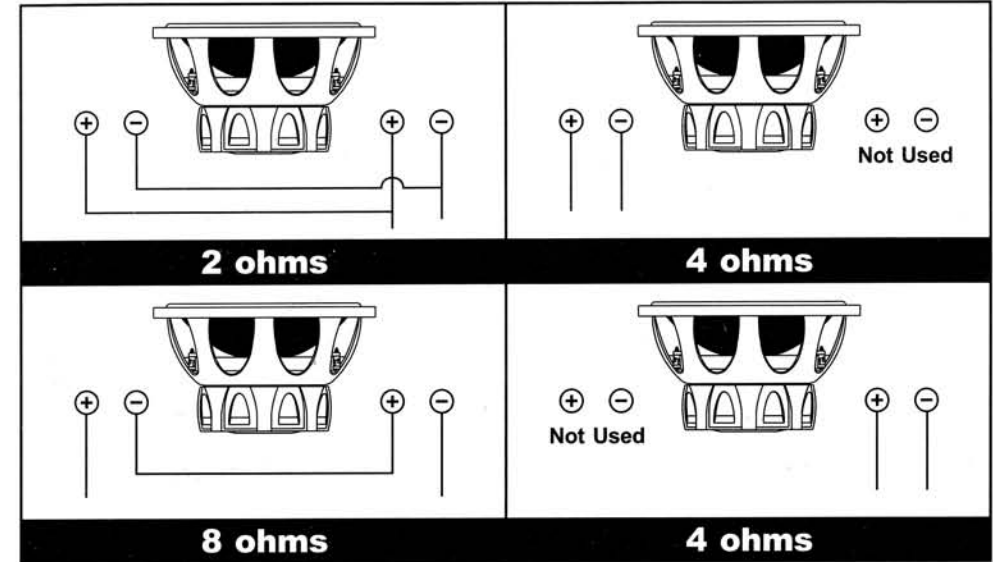
2)Next Subtract 1.5 from each of the outside measurements of the box.
Width 12-1.5=10.5 Height 14-1.5=12.5 Depth 9-1.5=7.5

3)Multiply the new totals (H x W x D) Example : 10.5 x 12.5 x 7.5=984.375

4)Next you must convert cubic inches into cubic feet.To do this,you must divide the cubic inch total by 1728" Example 984.375 ÷ 1728=. 5696 Cubic feet

Wiring

Please take every precaution to wire your DVC woofers for the correct impedance



12" Subwoofer

(500 Watts RMS Sealed Enclosure)

SPECIFICATIONS:

- 12" DUAL VOICE COIL DOUBLE STACKED MAGNET SUBWOOFER
- SILVER ELECTRO-PLATED INJECTION CONE
- BUTYL RUBBER SURROUND
- 2" HIGH TEMPERATURE KAPTON VOICE COIL
- 80 OZ MAGNET / 160 OZ MAGNET STRUCTURE
- PLASTIC MAGNET COVER
- 1000 WATTS MAX. / 500 WATTS RMS
- IMPEDANCE PER COIL: 4 OHM
- SENSITIVITY: 92 dB
- FREQUENCY RESPONSE: 28Hz-1.3KHz
- MOUNTING DEPTH: 6-1/2"



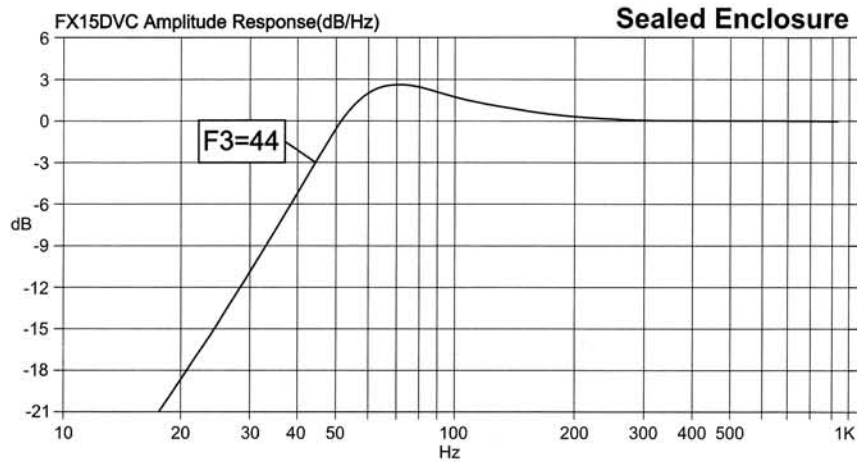
FX15DVC
15inch
SUBWOOFER



INSTALLATION MANUAL

Recommended Enclosures

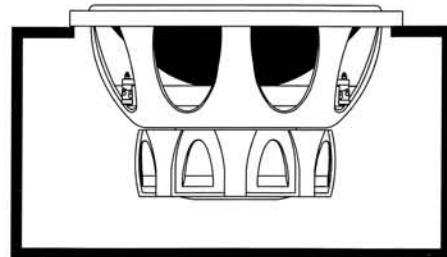
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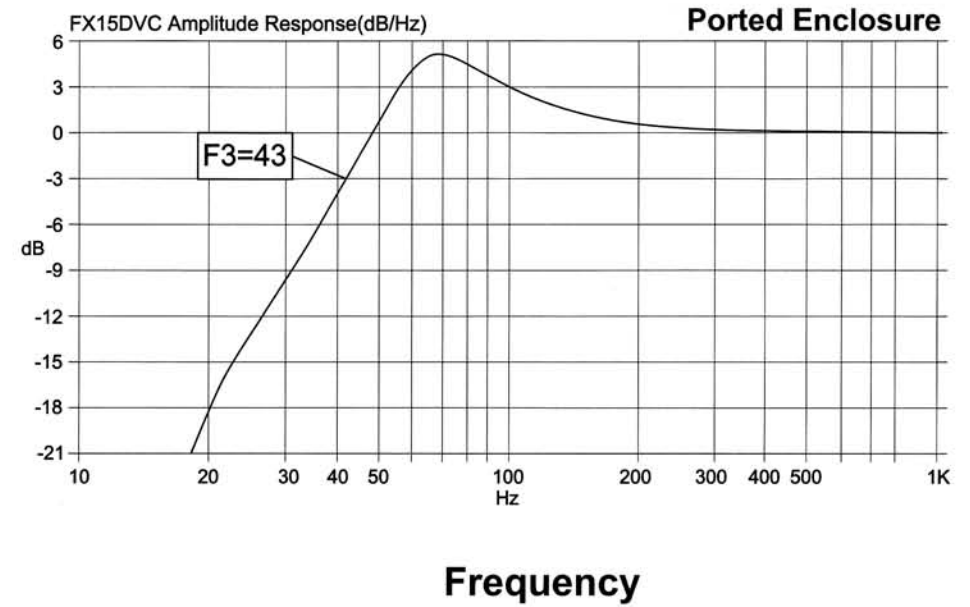
Frequency

Sealed Enclosure

Box Volume : 1.5 Cu Ft



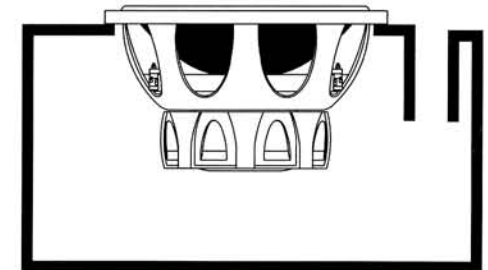
Box is given as internal air volume including driver displacement



Frequency

Ported Enclosure

Box Volume : 2.0 Cu Ft



Box is given as internal air volume including driver displacement

Port Frequency : 39 Hz
 Port Diameter : 4 Inches
 Port Length : 8 Inches

Product Specifications

Speaker Impedance	table	2 ohms	4 ohms	8 ohms
Free Air Resonance	(Fs)	28	28	28
Total Q Driver @ FS including all resistance's	(Qts)	0.629	1.033	0.645
Q of the Driver @ FS including non electrical resistance only	(Qms)	6.649	5.998	6.649
Q of the Driver @ FS including electrical resistance only	(Qes)	0.695	1.248	0.714
The Driver's compliance expressed as an equivalent volume of all (cubic Ft.)	(Vas)	4.525	4.525	4.525
The Driver's linear displacement (inches)	(Xmax)	0.295	0.295	0.295
The DC resistance of the driver's twin voice coils(ohms)	(Re)	1.8	3.6	7.2
Thermal Power rating of Driver (R.M.S./Peak)	(Pe)	600W/1200W	600W/1200W	600W/1200W
The Driver's voice coil inductance(millihenries)	(Le)	1.139	1.176	4.835
The Driver's sensitivity (dB)	(Sens)	94	94	94

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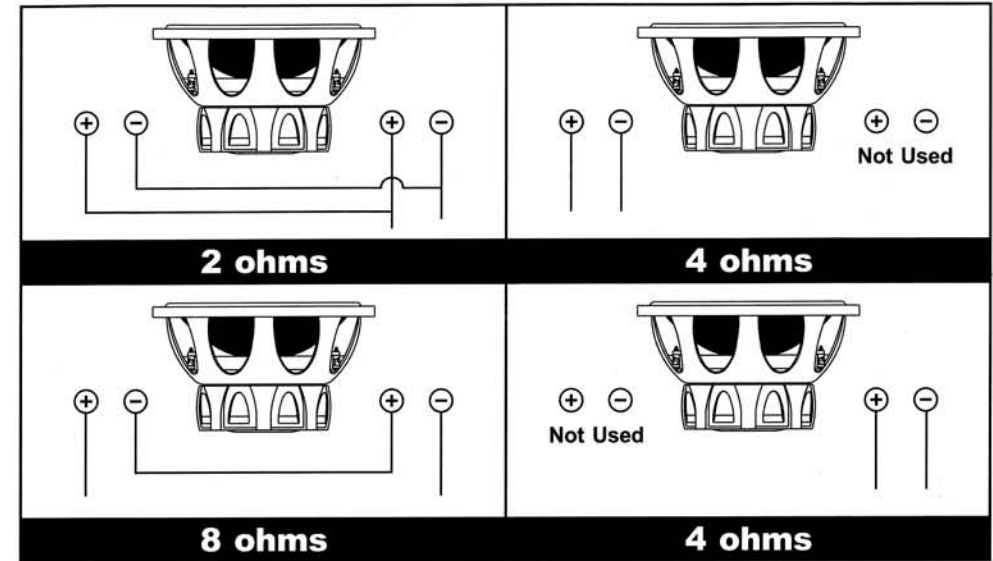
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4)Next you must convert cubic inches into cubic feet.To do this,you must divide the cubic inch total by 1728" Example 984.375 ÷ 1728= .5696 Cubic feet

Wiring

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15" Subwoofer

(600 Watts RMS Sealed Enclosure)

SPECIFICATIONS:

- 15" DUAL VOICE COIL DOUBLE STACKED MAGNET SUBWOOFER
- SILVER ELECTRO-PLATED INJECTION CONE
- BUTYL RUBBER SURROUND
- 2.5" HIGH TEMPERATURE KAPTON VOICE COIL
- 100 OZ MAGNET / 200 OZ MAGNET STRUCTURE
- PLASTIC MAGNET COVER
- 1200 WATTS MAX. / 600 WATTS RMS
- IMPEDANCE PER COIL: 4 OHM
- SENSITIVITY: 94 dB
- FREQUENCY RESPONSE: 24Hz-1.1KHz
- MOUNTING DEPTH: 7-7/8"