User's Manual

12-INCH DUAL VOICE COIL SUBWOOFER

NX12FD

BOSS® marine

BOSS® AUDIO SYSTEMS

NX12FD
12-INCH DUAL VOICE COIL SUBWOOFER
02.2010

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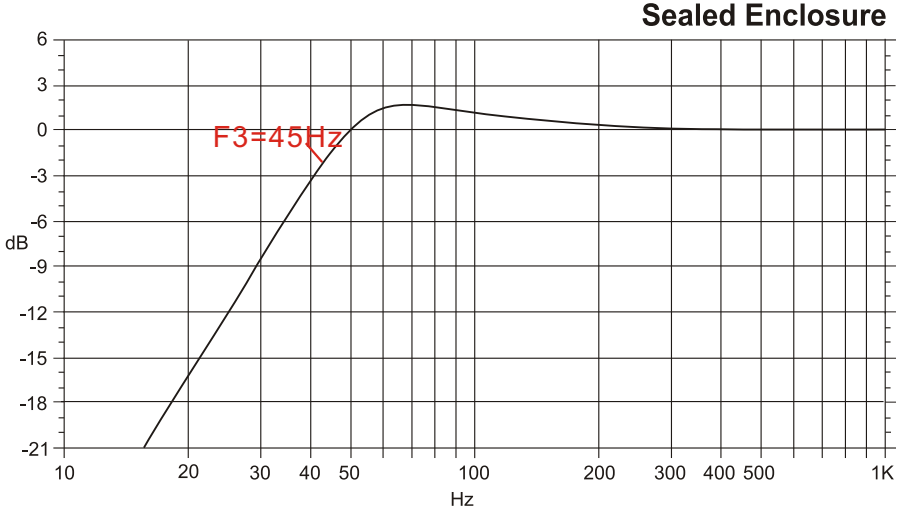
Recommended Enclosures

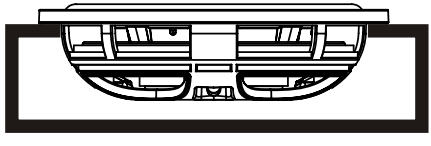
Please note : Our recommended box volumes are given for internal air requirements.

NX12FD Amplitude Response(dB/Hz)



Frequency

Sealed Enclosure

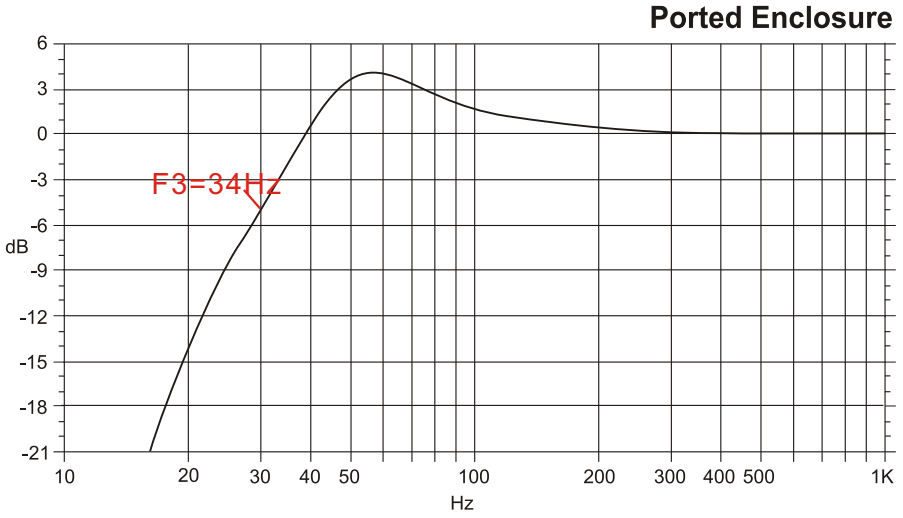


Box Volume: 0.63 Cu Ft

These woofers are recommended to be used with sealed enclosures

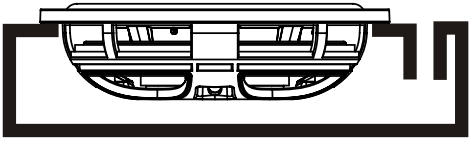
Box is given as internal air volume including driver displacement

NX12FD Amplitude Response(dB/Hz)



Frequency

Ported Enclosure



Box Volume: 0.92 Cu Ft

Box is given as internal air volume including driver displacement

Port Frequency	**:**	**39**	**Hz**
Port Diameter	**:**	**3**	**Inches**
Port Length	**:**	**9**	**Inches**

Product Specifications

Speaker Impedance	table	2 ohms	4 ohms	8 ohms
Free Air Resonance	(Fs)	39.5Hz	39.5Hz	39.5Hz
Total Q Driver @ FS including all resistance's	(Qts)	0.534	1.087	0.548
Q of the Driver @ FS including non electrical resistance only	(Qms)	7.213	7.242	7.254
Q of the Driver @ FS including electrical resistance only	(Qes)	0.642	1.279	0.635
The Driver's compliance expressed as an equivalent Volume of all (cubic Ft.)	(Vas)	1.426	1.507	1.562
The Driver's linear displacement (inches)	(Xmax)	0.32	0.32	0.32
The DC resistance of the driver's twin voice coils(ohms)	(Re)	1.8Ω	3.6Ω	7.2Ω
Thermal Power rating of Driver (R.M.S./Peak)	(Pe)	900w/1800w	900w/1800w	900w/1800w
The Driver's sensitivity (dB)	(Sens)	95dB	95dB	95dB

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"

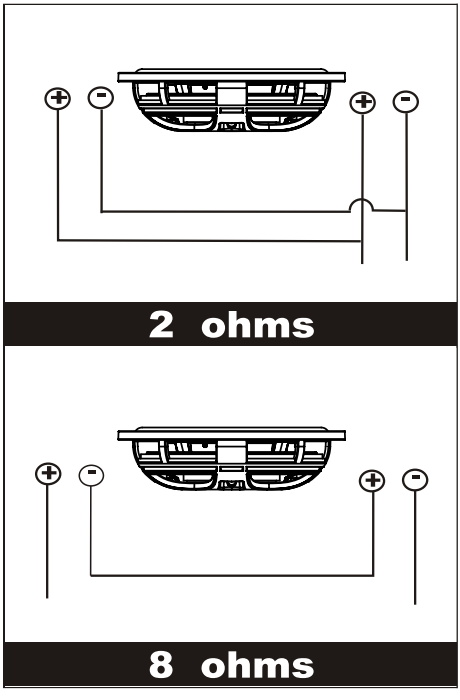
2) Next Subtract 1.5 from each of the outside measurements of the box.
Width 12-1.5=10.5 Height 14-1.5=12.5 Depth 9-1.5=7.5

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

for the correct impedance



12”(305mm) Marine Woofer

(900 Watts RMS Sealed Enclosure)

- **12”(305mm) CUSTOM TOOLED HIGH EFFICIENCY**
- **Polypropylene Cone**
- **BUTYL RUBBER SURROUND**
- **DUAL 2”(51mm) High Temperature Black Aluminum Voice Coil**
- **1800 watts peak/900 watts RMS**
- **FREQUENCY RESPONSE:28Hz-2KHz**
- **SENSITIVITY:95dB(1WATT/1METER)**
- **IMPEDANCE:DUAL 4 OHMS**
- **MOUNTING DEPTH:3”(76mm)**
- **MOUNTING DIAMETER:12.874”(327mm)**