# **ENCLOSURE RECOMMENDATIONS**

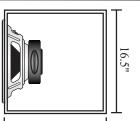
## **Optimum Sealed Volume**

Internal volume: 2.2ft3 /62.58L

Enclosure "Q": .95 -3dB response: 44.3Hz Efficiency: 92dB

Maximum power handling: 400 watts





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Cu. feet/liters	"Q"	-3dB	Efficiency	PE
small sealed volume: 1.5/42.48	1.01	49.6Hz	92.9dB	400 watts
large sealed volume: 3.37/95.43	.8	41Hz	91.3dB	400 watts

### **Optimum Vented Volume**

Internal volume: 3.35ft3 / 94.86L

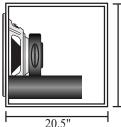
Tuning frequency: 32Hz

Port (D x L): (2)4" x 16.25"\*\*\* -3dB response: 37.4Hz

Efficiency: 94.1dB Maximum power handling: 400 watts



22.5"



Cu. feet/liters	Tune to	Port	-3dB	Efficiency	PE
small vented volume: 2.8/79.29	33Hz	(2)4" x 19.7"	40.3Hz	94.4dB	400 watts
large vented volume: 4.0/113.27	29Hz	(2)4" x 16.6"	34.1Hz	93.3dB	400 watts

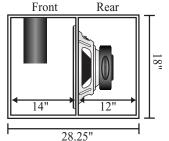
## **Optimum Bandpass Volume**

Front volume: 2.21ft3 / 62.58L Rear volume: 1.79ft3 / 50.69L Tuning frequency: 61.5Hz Port (D x L): (2)5" x 8.25" -3dB response: 39 - 96Hz Efficiency: 96.1dB

Maximum power handling: 400 watts



18"



Front cu. ft/liters	Rear cu.ft/liters	Tune to	Port	-3dB	Efficiency	PE
2.04/57.77	1.96/55.5	68.3Hz	(2)5"x 6.7"	38– 100Hz	97.2dB	400 watts
2.24/63.43	2.26/64	61.1Hz	(2)5"x 8.2"	34 – 89Hz	96.1dB	400 watts

<sup>\*</sup>Note: Dimensions given require the use of 0.75" (19mm) board.

# DAMPING MATERIAL

The most common damping materials used are Dacron and Polyfill. Reclaimed fiber underlay has been discovered to be an excellent substitute especially when glued directly to the walls of the enclosure. Fiberglass may be used, but please limit usage to sealed enclosures only. When used in vented/bandpass enclosures, fiberglass fibers escaping through the port may be hazardous to your health.

SEALED ENCLOSURE VENTED ENCLOSURE BANDPASS (sealed chamber) BANDPASS (vented chamber) DACRON/POLYFILL loosely fill the enclosure line 3-5 walls line 3 walls line 1 wall (optional) UNDERLAY line 5 walls line 1-3 wall line 1-3 wall line 1 wall (optional) FIBERGLASS
line 5 walls
Please limit the use of
fiberglass to sealed
enclosures only

## SPECIFICATIONS

Model	DBW15D			
Driver description	15" Subwoofer, Dual Voice Coil			
Mounting depth, in./mm	6.5/165.1			
Cutout dimensions, in./mm	13.85/13.85			
Impedance	4 ohms per coil			
Nominal power handling	250watts			
Maximum power handling (PE)	500 watts			
Dynamic power handling	1000 watts			
Voice coil – size	2", 4 layer			
Magnet weight	54 oz.			
Frequency response	18Hz to 500Hz			
Resonance frequency (fs)	24.1Hz			
QTS	.428			
QMS	9.479			
QES	.449			
VAS, ft./liter	9.537/269.77			
X-max, in./mm	.308/7.82			
Efficiency (2.83V/1M)	91.2dB			

## **POWER RATINGS**

Rating the power handling of subwoofers is not a difficult task. However, understanding power ratings is often confusing. Many times the Maximum Power Ratings are viewed as the RMS power handling of the driver, when in actuality Maximum is generally the break point of the driver. This has lead Crossfire to come up with a system to rating the power necessary to drive our subwoofers. Please read the following cautiously before choosing your amplifier.

#### Nominal power handling

-Nominal power handling is the power rating given by Crossfire at which the subwoofer will experience minimal mechanical degradation over time when using a recommended enclosure. In other words, this is the recommended power to be used per woofer to assure long life.

### Maximum power handling (PE)

-Maximum power handling is the power rating given by Crossfire at which the subwoofer could experience a high amount of mechanical degradation that may lead to possible failure over time when using a recommended enclosure. In other words, do not exceed this power level for extended periods of time.

### Dynamic power handling

-Dynamic power handling is the power rating given by Crossfire for peak transients and short bursts. Continuous playing at or above this level will cause mechanical failure and/or thermal failure. In other words, this power level should never be attained with the exceptions of approved SPL competition vehicles. This could possibly void your warranty.

<sup>\*\*</sup>Be sure to add in .109ft3 / 3.09L for driver displacement in all "Other" enclosures.

<sup>\*\*\*</sup>WARNING: Due to long port length, slot porting will most likely be needed. Tube ports are for illustration purposes only.