# **ENCLOSURE RECOMMENDATIONS**

### **Optimum Sealed Volume**

Internal volume: 2.1ft3 /59.47L Enclosure "Q": .95 -3dB response: 43.3Hz Efficiency: 92.1dB Maximum power handling: 400 watts



16.5

6

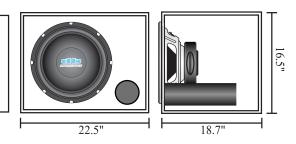
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18.5'

Cu. feet/liters	"Q"	-3dB	Efficiency	PE
small sealed volume: 1.49/42.19	1.1	47.2Hz	93dB	400 watts
large sealed volume: 3.2/90.61	.8	39.8Hz	91.4dB	400 watts

## **Optimum Vented Volume**

Internal volume: 3.3ft3 / 93.45L Tuning frequency: 32Hz Port (D x L): (2)4" x 16.5"\*\*\* -3dB response: 36.4Hz Efficiency: 94dB Maximum power handling: 400 watts



Cu. feet/liters	Tune to	Port	-3dB	Efficiency	PE
small vented volume: 2.7/76.46	35Hz	(2)4" x 17"	41Hz	94.7dB	400 watts
large vented volume: 4.0/113.27	28Hz	(2)4" x 18.1"	28Hz	92.8dB	400 watts

<b>Optimum Bandpass Volume</b>		Front	Rear	• —
Front volume: 1.43ft3 / 43.33L Rear volume: 1.8ft3 / 40.49L Tuning frequency: 67.73Hz Port (D x L): (2)5" x 10.7" -3dB response: 39 - 110Hz Efficiency: 97dB Maximum power handling: 400 watts	18"	9.7"	12.1"	

Front cu. ft/liters	Rear cu.ft/liters	Tune to	Port	-3dB	Efficiency	PE
1.43/40.49	2.07/58.62	67.56Hz	(2)5"x 11.8"	38–107Hz	97.3dB	400 watts
1.5/42.48	2.0/56.63	60.58Hz	(2)5"x 11"	33 – 91Hz	96.1dB	400 watts

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

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

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

# DAMPING MATERIAL

UNDERLAY

line 5 walls

line 1-3 wall

line 1-3 wall

line 1 wall (optional)

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) line 3-5 walls line 3 walls line 1 wall (optional)

DACRON/POLYFILL loosely fill the enclosure

FIBERGLASS line 5 walls Please limit the use of fiberglass to sealed enclosures only

SPFC IEICA1 'ONS

Model	DBW15		
Driver description	15" Subwoofer, Single Voice Coil		
Mounting depth, in./mm	6.5/165.1		
Cutout dimensions, in./mm	13.85/13.85		
Impedance	4 ohms		
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)	21.8Hz		
QTS	.377		
QMS	10.447		
QES	.523		
VAS, ft./liter	11.209/317.41		
X-max, in./mm	.308/7.82		
Efficiency (2.83V/1M)	80.6dB		

# **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.