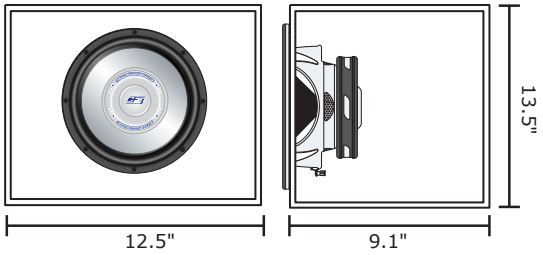
ENCLOSURE RECOMMENDATIONS

Optimum Sealed Volume

Internal volume: 1.2ft3/33.98L
Enclosure "Q": .98
-3dB response: 48Hz
Maximum power handling: 275 watts

Dimensions already include woofer displacement compensation.

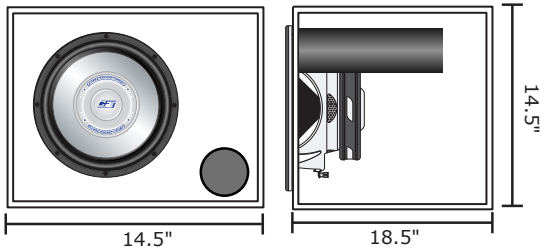


Cu. feet/liters	"Q"	-3dB	Max Power Handling (PE)
small sealed volume: .9/25.48	1.1	51Hz	250 watts
large sealed volume: 2.2/62.29	.77	44Hz	250 watts

Optimum Vented Volume

Internal volume: 1.6ft3/45.3L
Tuning frequency: 31Hz
Port (D x L): 3" X 9.75
-3dB response: 44Hz
Maximum power handling: 250 watts

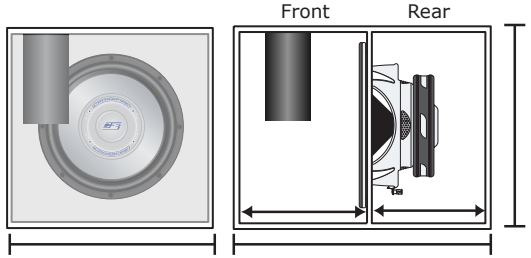
Dimensions already include woofer displacement compensation, but DO NOT include port displacement.



Cu. feet/liters	Tune to	Port	-3dB	Max Power Handling (PE)
small vented volume: 1.3/36.81	37Hz	3" x 8"	48Hz	250 watts
large vented volume: 2/56.63	29Hz	3" x 8.75"	40Hz	250 watts

Optimum Volume

Please contact Crossfire Tech Support for bandpass enclosure recommendations



Note: Dimensions for recommended enclosure are with consideration of using .75" (19mm) MDF board. Be sure to add .050ft3/1.42L for driver displacement as well as the volume of the port to all enclosures, except for the optimum recommendation as those dimensions already include woofer displacement but DO NOT include port displacement.

Crossfire Tech Support Contact Information
Phone: (562) 906-0800
E-mail: Tech@crossfirecaraudio.com
Techsp@crossfirecaraudio.com (asistencia en español)

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.

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

SPECIFICATIONS

Model	***CF312***
Driver description	12" Subwoofer, Single Voice Coil
Mounting depth, in/mm	5.5/146
Cutout diameter, in/mm	11/280
Woofer Outer Diameter, in/mm	12.625/318
Woofer Displacement, ft3/ltr	.07/1.98
Impedance	4 ohm
Nominal power handling (RMS)	200 watts
Maximum power handling (PE)	275 watts
Dynamic power handling	500 watts
Voice coil – size	2", 4 layer
Magnet weight	40 oz.
Frequency response	20 to 500Hz
Resonance frequency (fs)	25.625Hz
Qts	.414
Qms	6.316
Qes	.443
VAS, ft./liter	5.56/157.629
X-max, in./mm	.195/5
Efficiency (2.83V/1M)	89.6dB

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 or with consideration of the power you may already have.

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.