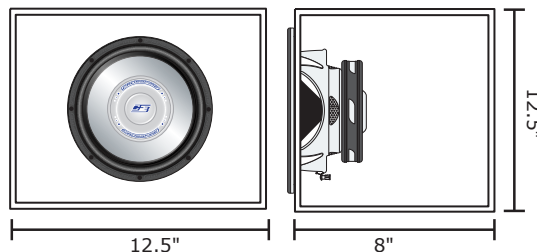


## ENCLOSURE RECOMMENDATIONS

### Optimum Sealed Volume

Internal volume: .4ft<sup>3</sup>/11.32L  
 Enclosure "Q": .82  
 -3dB response: 67Hz  
 Maximum power handling: 250 watts

Dimensions already include woofer displacement compensation.

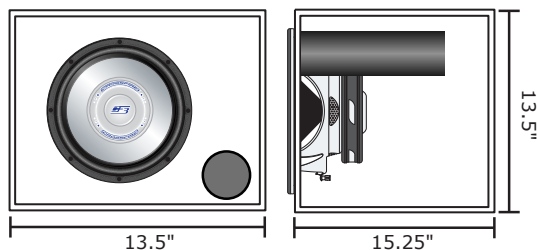


Cu. feet/liters	"Q"	-3dB	Max Power Handling (PE)
small sealed volume: .2/5.66	1.1	78Hz	250 watts
large sealed volume: .6/16.99	.7	66Hz	250 watts

### Optimum Vented Volume

Internal volume: 1.1ft<sup>3</sup>/31.14L  
 Tuning frequency: 38Hz  
 Port (D x L): 3" X 10"  
 -3dB response: 41Hz  
 Maximum power handling: 250 watts

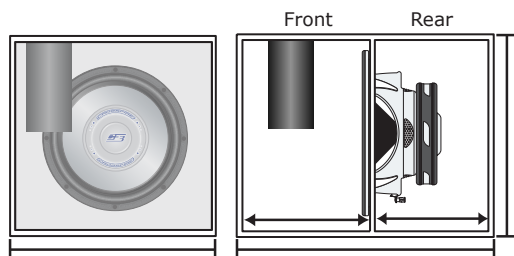
Dimensions already include woofer displacement compensation, but DO NOT include port displacement.



Cu. feet/liters	Tune to	Port	-3dB	PE
small vented volume: .8/22.65	41Hz	3" X 11.5"	47Hz	250 watts
large vented volume: 1.3/36.81	35Hz	3" x 9"	38Hz	250 watts

### Optimum Bandpass 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 .050ft<sup>3</sup>/1.42L for driver displacement as well as the volume for 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](mailto:Tech@crossfirecaraudio.com)

[Techsp@crossfirecaraudio.com](mailto: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.

SEALED ENCLOSURE	DACRON/POLYFILL	UNDERLAY	FIBERGLASS
loosely fill the 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 fiberglass to sealed enclosures only
BANDPASS (sealed chamber)	line 3 walls	line 1-3 wall	
BANDPASS (vented chamber)	line 1 wall (optional)	line 1 wall (optional)	

## SPECIFICATIONS

Model	CF310
Driver description	10" Subwoofer, Single Voice Coil
Mounting depth, in/mm	4.81/124
Cutout diameter, in/mm	9.25/235
Woofer Outer Diameter, in/mm	10.68/268
Woofer Displacement, ft <sup>3</sup> /ltr	.050/1.42
Impedance	4 ohm
Nominal power handling (RMS)	150 watts
Maximum power handling (PE)	250 watts
Dynamic power handling	450 watts
Voice coil - size	2", 4 layer
Magnet weight	40 oz.
Frequency response	25 to 500Hz
Resonance frequency (fs)	30.370Hz
Qts	.325
Qms	5.683
Qes	.345
VAS, ft./liter	2.19/62.122
X-max, in./mm	.195/5
Efficiency (2.83V/1M)	88.9dB

## 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.