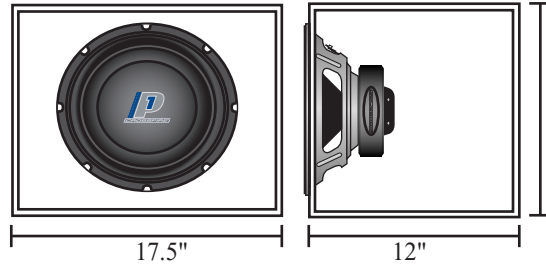


Enclosure Recommendations

Optimum Sealed Volume

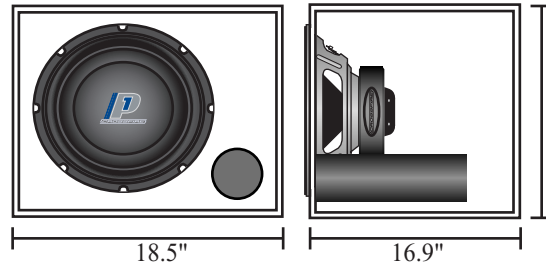
Internal volume: 1.2ft³ / 33.98L
 Enclosure "Q": 0.90
 -3dB response: 38Hz
 Efficiency: 87.6dB
 Maximum power handling: 400 watts



Cu. feet/liters	"Q"	-3dB	Efficiency	PE
small sealed volume: .85/24.07	1.01	41Hz	88.4dB	400 watts
large sealed volume: 1.65/46.72	.81	37Hz	87.1dB	400 watts

Optimum Vented Volume

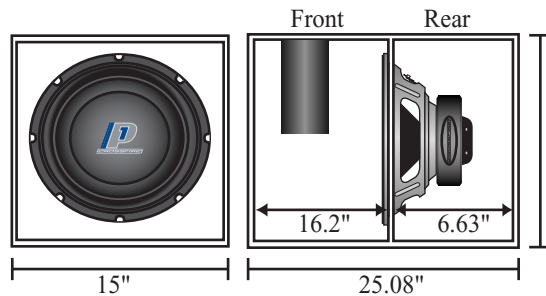
Internal volume: 1.9ft³ / 53.8L
 Tuning frequency: 30Hz
 Port (D x L): 4" x 16.4"
 -3dB response: 31Hz
 Efficiency: 90.1dB
 Maximum power handling: 300watts



Cu. feet/liters	Tune to	Port	-3dB	Efficiency	PE
small vented volume: 1.6/45.3	33Hz	4" x 16"	35Hz	90.9dB	300watts
large vented volume: 2.3/65.13	28Hz	4" x 16.4"	29Hz	89.5dB	350watts

Optimum Bandpass Volume

Front volume: 1.7ft³ / 48.14L
 Rear volume: .7ft³ / 19.82L
 Tuning frequency: 65Hz
 Port (D x L): 6" x 5.5"
 -3dB response: 43 - 91Hz
 Efficiency: 95dB
 Maximum power handling: 400w



Front cu. ft/liters	Rear cu.ft/liters	Tune to	Port	-3dB	Efficiency	PE
1.5 / 42.48	.6 / 16.99	69Hz	6" x 5.6"	45 - 100Hz	95.2dB	400watts
1.9 / 53.8	.8 / 22.65	59Hz	6" x 1.75"	40 - 86Hz	94.3dB	400watts

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

**Be sure to add in .068ft³ / 1.93L for driver displacement in all "Other"

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.

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

Specifications

Model	P112D
Driver description	12" Subwoofer, Dual Voice Coil
Mounting depth, in./mm	5.95/151
Cutout dimensions, in./mm	10.9/277
Impedance	4 ohms per coil
Nominal power handling	200 watts
Maximum power handling (PE)	400 watts
Dynamic power handling	800 watts
Voice coil - size	2.25", 4 layer
Magnet weight	60 oz.
Frequency response	20Hz to 250Hz
Resonance frequency (fs)	21.7Hz
QTS	.423
QMS	6.288
QES	.454
VAS, ft./liter	4.5/127.37
X-max, in./mm	.43/11
Peak to peak, in./mm	1.4/35.6
Efficiency (2.83V/1M)	87dB

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.