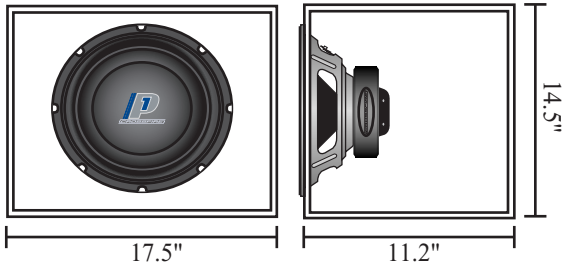
Enclosure Recommendations

Optimum Sealed Volume

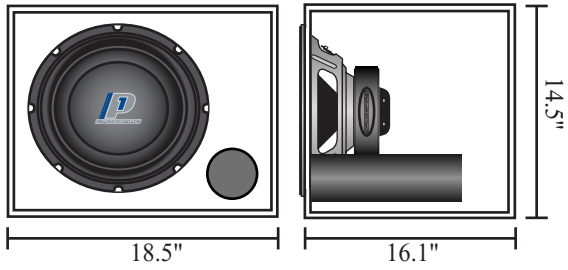
Internal volume: 1.1ft3 / 31.15L
Enclosure "Q": 0.95
-3dB response: 39Hz
Efficiency: 87.6dB
Maximum power handling: 400 watts



Cu. feet/liters	"Q"	-3dB	Efficiency	PE
small sealed volume: **.75/21.24**	**1.1**	**43Hz**	**88.6dB**	**400 watts**
large sealed volume: **1.48/41.91**	**.85**	**37Hz**	**87.1dB**	**400 watts**

Optimum Vented Volume

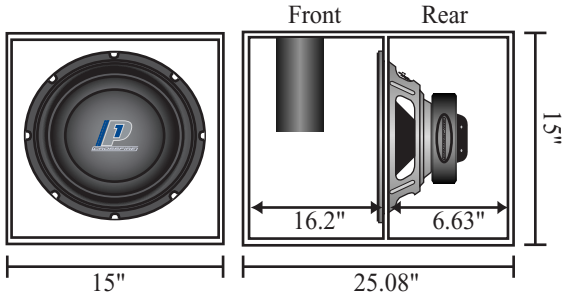
Internal volume: 1.8ft3 / 50.97L
Tuning frequency: 31Hz
Port (D x L): 4" x 16.15"
-3dB response: 32Hz
Efficiency: 90.2dB
Maximum power handling: 300watts



Cu. feet/liters	Tune to	Port	-3dB	Efficiency	PE
small vented volume: **1.5/42.48**	**33Hz**	**4" x 17.3"**	**35Hz**	**90.7dB**	**300watts**
large vented volume: **2.1/59.47**	**28Hz**	**4" x 17.1"**	**30Hz**	**89.3dB**	**350watts**

Optimum Bandpass Volume

Front volume: 1.7ft3 / 48.14L
Rear volume: .7ft3 / 19.82L
Tuning frequency: 63Hz
Port (D x L): 6" x 6.2"
-3dB response: 41 - 89Hz
Efficiency: 94.6dB
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**	**68Hz**	**6" x 5.9"**	**44 – 101Hz**	**94.1dB**	**400watts**
1.9 / 53.8	**.8 / 22.65**	**57Hz**	**6" x 2.1"**	**38 – 82Hz**	**93.6dB**	**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.

	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	P112
Driver description	12" Subwoofer, Single Voice Coil
Mounting depth, in./mm	5.95/151
Cutout dimensions, in./mm	10.9/277
Impedance	4 ohms
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)	19.8Hz
QTS	.404
QMS	6.795
QES	.382
VAS, ft./liter	5.01/141.76
X-max, in./mm	.42/10.75
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.