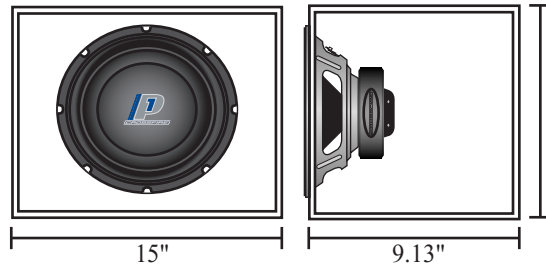


Enclosure Recommendations

Optimum Sealed Volume

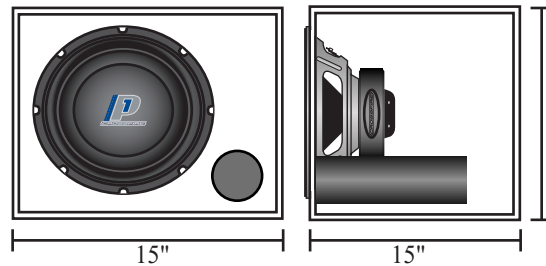
Internal volume: .6ft³ / 16.99L
 Enclosure "Q": 0.74
 -3dB response: 42Hz
 Efficiency: 85.6dB
 Maximum power handling: 350 watts



Cu. feet/liters	"Q"	-3dB	Efficiency	PE
small sealed volume: .38/10.76	.9	45Hz	86dB	350 watts
large sealed volume: .76/21.52	.68	41Hz	85.3dB	350 watts

Optimum Vented Volume

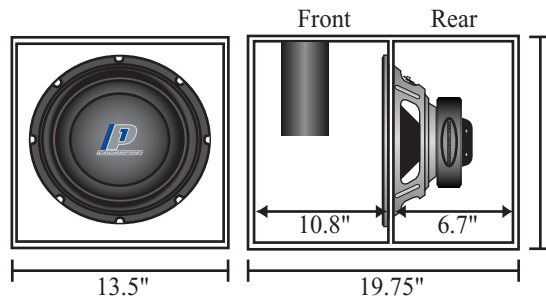
Internal volume: 1.1ft³ / 31.15L
 Tuning frequency: 30Hz
 Port (D x L): 3" x 16.9"
 -3dB response: 28Hz
 Efficiency: 87.1dB
 Maximum power handling: 275watts



Cu. feet/liters	Tune to	Port	-3dB	Efficiency	PE
small vented volume: .75/21.24	33Hz	3" x 21"	34Hz	88dB	275watts
large vented volume: 1.4/39.64	28Hz	3" x 14.8"	25Hz	86.6dB	300watts

Optimum Bandpass Volume

Front volume: .9ft³ / 25.49L
 Rear volume: .5ft³ / 14.16L
 Tuning frequency: 56Hz
 Port (D x L): 4" x 8.6"
 -3dB response: 38 - 75Hz
 Efficiency: 90.3dB
 Maximum power handling: 350w



Front cu. ft./liters	Rear cu.ft./liters	Tune to	Port	-3dB	Efficiency	PE
.75 / 21.24	.35 / 9.91	65Hz	4" x 7.5"	41 - 89Hz	91.2dB	350watts
.8 / 22.65	.65 / 18.41	55Hz	4" x 10.5"	37 - 72Hz	89.6dB	350watts

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

**Be sure to add in .056ft³ / 1.59L 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
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	P110
Driver description	10" Subwoofer, Single Voice Coil
Mounting depth, in./mm	5.31/135
Cutout dimensions, in./mm	9.02/229
Impedance	4 ohms
Nominal power handling	200 watts
Maximum power handling (PE)	350 watts
Dynamic power handling	800 watts
Voice coil - size	2.25", 4 layer
Magnet weight	48 oz.
Frequency response	22Hz to 250Hz
Resonance frequency (fs)	21.4Hz
QTS	.353
QMS	5.668
QES	.377
VAS, ft./liter	2.07/58.71
X-max, in./mm	.42/10.75
Peak to peak, in./mm	1.4/35.6
Efficiency (2.83V/1M)	86dB

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.