SPECS

PEAVEY ELECTRONICS

Sheffield® Pro Series

Sheffield® Pro 1200+ - 00577900

Sheffield® Pro 1500+ - 00577910

The Pro 1200+ and Pro 1500+ drivers are high quality, high efficieny woofers. They are an excellent choice for medium power subwoofer and full range enclosure applications up to 400 watts program.

PERFORMANCE

The Pro 1200+ is an exceptional performer as the low end of a two way enclosure or a very compact, moderate output subwoofer. Very smooth frequency response is combined with amazing bass response for its size, all with good efficiency and high sound quality.

The Pro 1500+ has surprisingly smooth and extended frequency response, along with high efficiency and very strong bass performance. The Pro 1500+ delivers a solid bottom end in a variety of enclosure designs. It is an exceptional performer in bass guitar and subwoofer applications.

APPLICATIONS

The Pro 1200+ and Pro 1500+ drivers are excellent choices for a wide range of sound reinforcement, high level playback, musical instrument, subwoofer, and monitor applications.

Both woofers are also great choices as replacement drivers. You can restore top performance to your aging instrument amps and speaker systems with these new, high quality loudspeakers.

The 15” driver can produce high sound pressure levels down to 40 Hz, while the 12” can be crossed over as high as 4kHz. Both drivers are strong performers in multi-way systems.

ENCLOSURES

To assist with the growing interest in home built enclosure designs, Peavey provides complete parameter data on these drivers, as well as several recommended enclosures for each model. This information and much more can be found at www.peavey.com

The strength of the completed enclosure has a great effect on the bass performance of the finished system. Box panels that aren’t stiff enough will vibrate, canceling bass produced by the woofer and creating undesired sounds of their own. If your box vibrates or you don’t think the box panels are stiff enough, add more bracing.

Vents used in the examples require standard Schedule 40 PVC pipe for

vent construction. The pipe should be dadoed tightly into the back of the baffle and glued firmly in place with high quality epoxy or high strength, industrial grade hot glue. Rough up the outside of the pipe to improve the glue bond.

Be sure to account for the displacement of the vent, bracing, horn (if used) and woofer or your enclosure before building it or it will be smaller than its intended volume. This can reduce bass output and mis-tune the enclosure.

Line the inside of the enclosure with polyester fiber batting such as quilt stuffing. The batting material should conform to California bedding fire codes. Attach the batting with spray adhesive or staples and keep material away from the end of the vent tube where it can be pulled in by air flow.

When building a bandpass enclosure, design a panel or door to be removable for access to the woofer. Use foam weather-strips to seal the panel along with enough screws and bracing to prevent leaks and buzzes. Fill the sealed volume loosely with polyester fiber, but leave the vented volume empty. Place the magnet of the woofer in the vented side for improved cooling.

Handles, protective corners, cabinet covering, grille materials and crossovers are available through Peavey Accessories.

Peavey does not supply hardware required for the manufacturing of flying systems, and recommends that builders should not suspend or fly any enclosure not certified for such applications.

These instructions are a general guideline for design. Proper construction techniques, good planning and common sense will result in a reliable, high quality, high performance system.

Peavey in on way accepts liability for any damage, accidents or injury that may result from construction or use of enclosure using this information.

PARAMETERS

Thiele-Small parameters for Sheffield® Pro™ 1200+ and Sheffield Pro 1500+ drivers follow. This data is for use in designing enclosures. Numerous software packages are available that use this data to simulate the response of the driver and enclosure together for optimum performance in any application.

PARAMETER DEFINITIONS

Znom: The nominal impedance of the driver in Ohms.

Revc: DC resistance of the driver in ohms, also known as Re.

Sd: The functional radiating surface area of the cone assembly in meters 2.

BL: Efficiency of the voice coil and magnet system in Tesla meters.

Fo: Free air resonance. Also known as Fs.

Vas: Volume of air having the same compliance (springiness) as the driver's suspension.

Cms: Restorative force of the driver's suspension in micrometers/Newton.

Mms: The total mass of the moving parts of the loudspeaker, including the air load, in grams.

Qms: Resonance characteristics of the mechanical factors of the loudspeaker.

Qes: Resonance characteristics of electrical factors of the loudspeaker.

Qts: Resonance characteristics of the electrical and mechanical factors combined together.

Xmax: Distance the cone can move in one direction before the coil begins to leave the magnetic gap.

Le: Inductance of the voice coil in millihenries.

SPL: Typical sound pressure level at 1 watt, 1 meter.

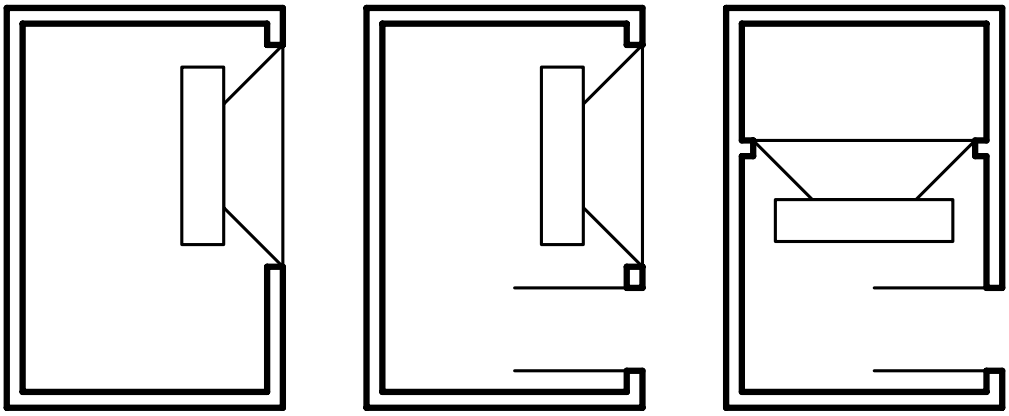
no: Electrical to acoustical conversion efficiency in percent.

Vd: Air displacement of the driver from negative Xmax to positive Xmax.

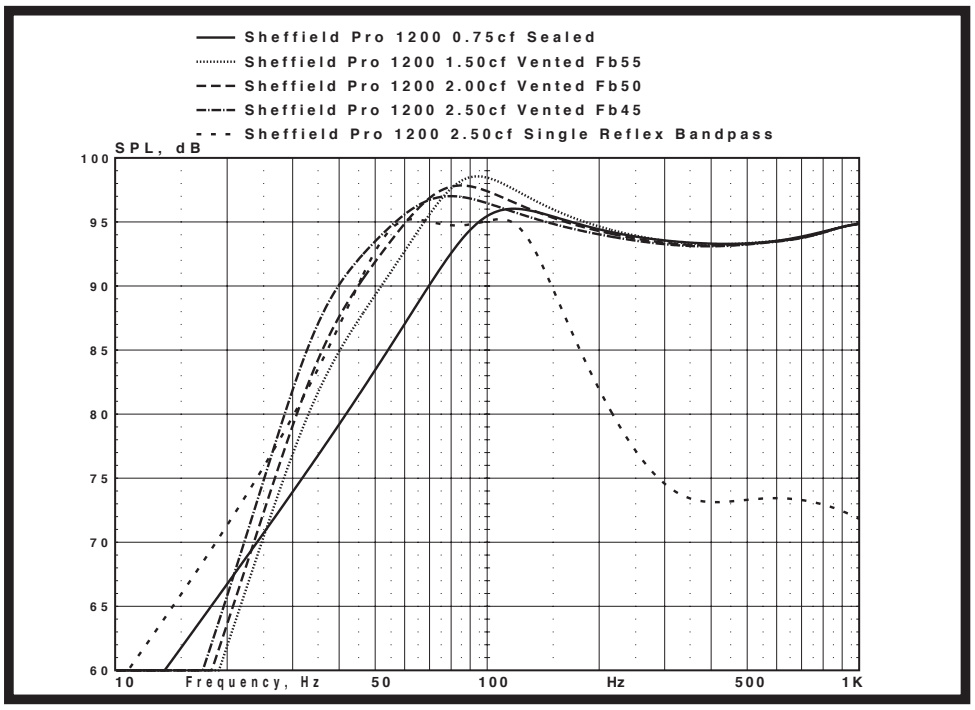
Pmax: Maximum continuous program power in watts.

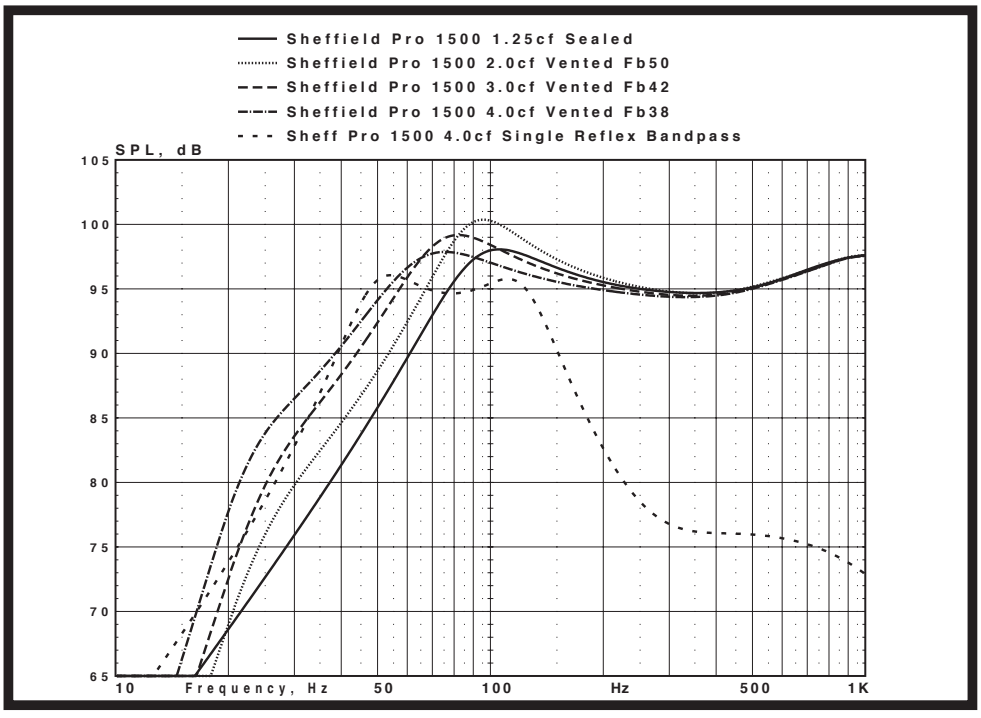
Disp: Volume displaced by the driver inside the cabinet when mounted on its rear flange

SPECIFICATIONS	Sheffield® Pro 1200+	Sheffield® Pro 1500+
Part #	00577900	00577910
Size:	12”	15”
Impedance:	8 Ohms	8 Ohms
Power Capacity:	1000 Watts peak	1000 Watts peak
	500 Watts program	500 Watts program
	250 Watts continuous	250 Watts continuous
Sensitivity:	96.3 dB / 1 W 1m	98.0 dB / 1 W 1 m
Usable frequency range:	50 Hz -4 kHz	40 Hz -3 kHz
Cone:	Impregnated cellulose	Impregnated cellulose
Voice coil diameter:	2.5” / 63.5 mm	2.5” / 63 mm
Voice coil material:	Two layers, thermally bonded Copper wire Kapton® former Nomex® stiffener	Two layers, thermally bonded Copper wire Kapton former Nomex stiffener
Net weight: lb./kg	11 / 5.0 kg	12.5 / 5.7 kg
Znom (ohms)	8	8
Revc (ohms)	5.21	5.12
Sd (Square Meters)	0.052	0.089
BL (T/M)	13.89	14.18
Fo (Hz)	53.2	42.7
Vas (liters)	70.0	212.5
Cms (uM/N)	179.2	190.2
Mms (gm)	49.96	73.21
Qms	6.75	6.69
Qes	0.451	0.500
Qts	0.423	0.465
Xmax (mm)	3.6	3.6
Le (mH)	0.33	0.33
SPL (1 W 1m)	96.3	98.0
no (%)	2.25	3.20
Vd (cubic inches/milliliters)	22.3 / 365	36.2 / 593.3
Pmax (Watts pgm.)	500	500
Disp (inches3 / milliliters)	121 / 1983	196 / 3212



Sealed **Vented** **Single Reflex Bandpass**





SUGGESTED ENCLOSURES

For those who want to build their own enclosures but don't want to go through the design process using driver parameters, Peavey provides the following optimized designs:

For Sheffield® Pro 1200+

ENCLOSURE	NET VOLUME feet/liters	VENT DIAMETER (qty)inches/mm	VENT LENGHT inches/mm	Vb BOX TUNING frequency in Hz	F3, -3 Db point in Hz
Small Sealed Box	0.75 / 21.2	n/a	n/a	97 (resonance)	82
Small Vented Box	1.5 / 42.5	(2) 3" / 76	5.25 / 133	55	53
Medium Vented Box	2.0 / 56.6	(2) 3" / 76	4.5 / 114	50	47
Large Vented Box	2.5 / 70.8	(2) 3" / 76	4.5 / 114	45	41
Single-Reflex Bandpass	Sealed 1.4 / 39.6 Vented: 1.0 / 28.3	(1) 6" / 152	4.5 / 114	89	56 - 147

1. Small Sealed Box

Incredibly small. Great choice for use in a super compact stage monitor or as a mid range enclosure.

2. Small Vented Box

Amazing portability, with high sound quality and maximum power handling. Adequate bass performance – a great choice for the vocal range.

3. Medium Vented Box

Popular size for a 12" system, with an excellent mix of power handling and bass quality.

4. Large Vented Box

Maximum bass performance from this 12" speaker. Power handling is reduced by about 15% due to enclosure size.

5. Single Reflex Bandpass

Special enclosure design that uses the enclosure as an acoustic filter for shaped response. Great choice for a compact subwoofer system.

For Sheffield® Pro 1500+

ENCLOSURE	NET VOLUME feet/liters	VENT DIAMETER (qty)inches/mm	VENT LENGHT inches/mm	Vb BOX TUNING frequency in Hz	F3, -3 Db point in Hz
Small Sealed Box	1.25 / 35.4	n/a	n/a	89 (resonance)	75
Small Vented Box	2.0 / 56.6	(2) 3" / 76	5.438 / 138	47	62
Medium Vented Box	3.0 / 85.0	(2) 3" / 76	4.125 / 105	42	52
Large Vented Box	4.0 / 113.3	(2) 3" / 76	3.563 / 90	38	40
Single-Reflex Bandpass	Sealed: 2.3 / 65.1 Vented: 1.7 / 48.1	(2) 6" / 152	5.25 / 133	92	48 - 151

1. Small Sealed Box

Tiny 15" enclosure – makes a terrific stage monitor.

2. Small Vented Box

Very small enclosure with strong performance and surprising bass for its size.

3. Medium Vented Box

An excellent blend of power handling and bass performance that works very well for general PA and bass guitar enclosures

4. Large Vented Box

Strong, extended bottom end with usable response to a solid 40 Hz. Power handling is reduced by about 15% due to the enclosure size.

5. Single Reflex Bandpass

Special enclosure design that using the enclosure as an acoustic filter for shaped response Great for a subwoofer system.

ONE YEAR LIMITED WARRANTY

NOTE: For details, refer to the warranty statement. Copies of this statement may be obtained online at www.peavey.com.

Logo referenced in Directive 2002/96/EC Annex IV (OJ(L)37/38,13.02.03 and defined in EN 50419: 2005

The bar is the symbol for marking of new waste and is applied only to equipment manufactured after 13 August 2005

Features and specifications subject to change without notice.

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