8SW5 / 10SW5 / 12SW5 / 15SW5

The 8, 10, 12 and 15" Extreme subwoofers have two voice coils with 2 ohm each which can be configured for 4 ohm impedance (serial connection) or 1 ohm impedance (parallel connection). It has been developed reproduce the lowest frequencies in the audio spectrum - the sub-bass range - at high power in reduced volume boxes. It is the ideal subwoofer for sound competitions where best quality and power are required.

- Its advanced design cast frame is injected in aluminum with great mechanical and structural sturdiness.
- Its magnetic assembly has a bumped back plate and an extended center polar piece to allow long excurtion and low distortion in the sub-bass frequency range.
- Its sturdy gold-plated connection terminals are easy to handle and assure perfect contact in connections.
- Its cone, with exclusive Selenium QCF® (Quartz Composite Fiber) technology, is humidity-resistance and very sturdy, enabling it to withstant the tremendous accelerations it will be subject to whenever under high power.
- Its gasket, in SBR composite rubber, withstands high temperatures and ultra-violet radiation, commom in tropical climates.
- Its high compliance suspensio ring made of policloroprene rubber is appropriate to absorb stationary waves.
- Its double spider is made of Polyamide Fiber, which was especially developed for this purpose and provides the moving assembly with great linearity in excursion and high absorption in low frequencies.
- Its long voice coil produced in Kapton® (8, 10 and 12") and fiberglass (15") copper clad wire coated in polish withstands high temperatures.
- Its dust cap is produced in QCF® and features an embroidered with "Extreme" logo.

8SW5

10SV

12SW5

15SV

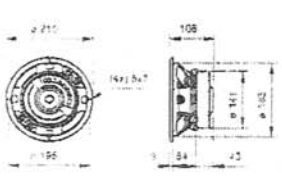
TECHNICAL SPECIFICATIONS	8SW5	10SW5	12SW5	15SW5
Nominal diameter ..... mm (in)	203 (8)	254 (10)	305 (12)	381 (15)
Nominal impedance ..... Ω	2 + 2	2 + 2	2 + 2	2 + 2
Power handling				
MAX[1] ..... W	400 (4Ω or 1Ω)	1,000 (4Ω or 1Ω)	1,300 (4Ω or 1Ω)	1,300 (4Ω or 1Ω)
RMS[2] ..... W	200 (4Ω or 1Ω)	500 (4Ω or 1Ω)	650 (4Ω or 1Ω)	650 (4Ω or 1Ω)
Sensitivity (1W@1m) ..... dB SPL	86	87	89	91
Frequency response @ -10 dB ..... Hz	45 to 1,700	30 to 3,000	30 to 3,000	35 to 3,000
Volume displaced by subwoofer ..... l (ft³)	0.9 (0.03)	2.0 (0.07)	3.2 (0.11)	5.9 (0.21)
Magnet weight ..... g (oz)	920 (32.45)	1,600 (56.44)	2,640 (93.12)	2,640 (93.12)
Voice coil diameter ..... mm (in)	55 (2.2)	75 (3.0)	100 (3.9)	100 (3.9)
Net weight ..... g (lb)	3,400 (7.50)	5,500 (12.13)	9,300 (20.50)	9,600 (21.16)

[1] Power handling specifications refer to normal speech and/or music program material, reproduced by an amplifier producing no more than 5% distortion. Power is calculated as true RMS volta squared divided by the nominal impedance of the loudspeaker.
[2] Brazilian Standard NBR 10.303, with pink noise during 2 hours uninterrupted.

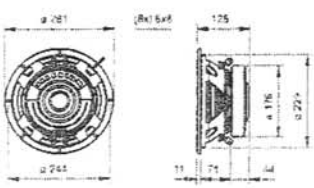
THIELE-SMALL PARAMETERS	8SW5	10SW5	12SW5	15SW5
Fs ..... Hz	31	31	31	23
Re ..... Ω	3.1	3.5	3.5	3.1
Qms	6.98	6.60	5.20	7.10
Qes	0.40	0.46	0.47	0.44
Qts	0.38	0.43	0.43	0.42
Vas ..... l (ft³)	24 (0.85)	46 (1.62)	61 (2.15)	238 (8.40)
Ref Eff ..... %	0.23	0.32	0.46	0.77
Sd ..... m² (in²)	0.0226 (35.03)	0.0350 (54.25)	0.0520 (80.60)	0.0845 (130.98)
Vd ..... cm³ (in³)	158.2 (9.65)	252.1 (15.38)	374.4 (22.85)	608.4 (37.13)
Xmax ..... mm (in)	7.0 (0.28)	7.2 (0.28)	7.2 (0.28)	7.2 (0.28)
βl ..... T.m	10.4	12.4	15.2	15.2

A variation of ± 15% is allowed.

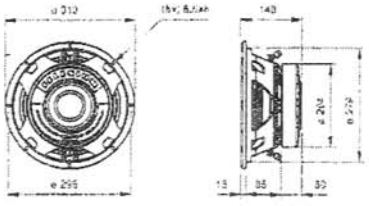
8SW5



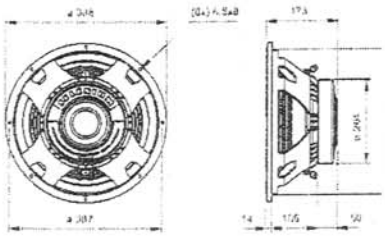
10SW5



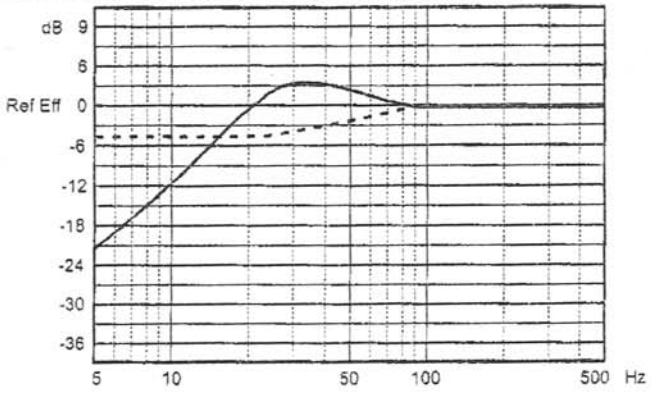
12SW5



15SW5

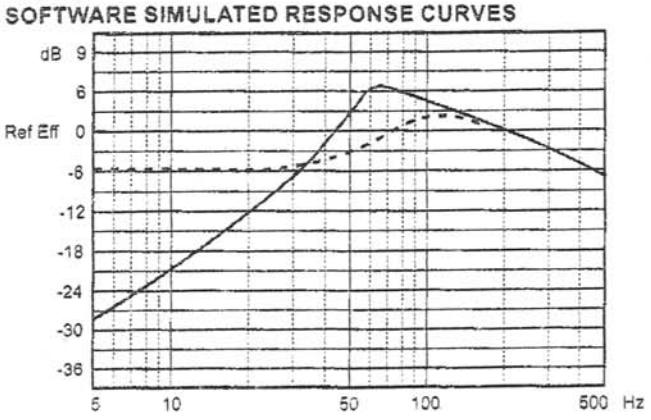


8SW5
SOFTWARE SIMULATED RESPONSE CURVES



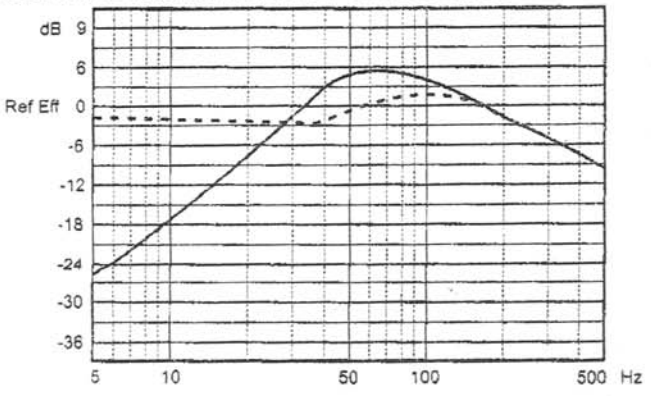
- - - Closed Box.
—— Vented Box.

10SW5
SOFTWARE SIMULATED RESPONSE CURVES



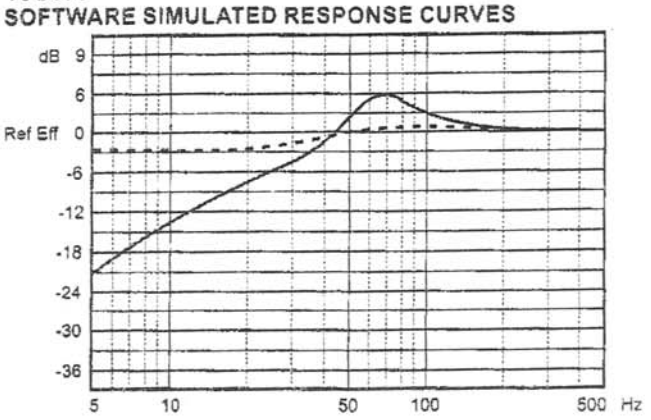
- - - Closed Box.
—— Vented Box.

12SW5
SOFTWARE SIMULATED RESPONSE CURVES



- - - Closed Box.
—— Vented Box.

15SW5
SOFTWARE SIMULATED RESPONSE CURVES



- - - Closed Box.
—— Vented Box.

SUGGESTED ENCLOSURES

MODELS	CLOSED BOX	VENTED BOX		
	Internal Volume (liters)	Internal Volume (liters)	Duct (s)	
			Qty	Diam. x Lenght (cm)
8SW5	10	20	1	5.0 x 30
10SW5	14	34	2	7.5 x 22
12SW5	30	46	2	7.5 x 25
15SW5	46	58	2	7.5 x 16

The suggested enclosure volumes are related to only one speaker including woofer and duct(s) displaced volume.

For enclosure with more than one speaker, it is necessary to multiply the suggested volume and duct(s) by the quantity os speakers and build them with separated chambers (internal division).

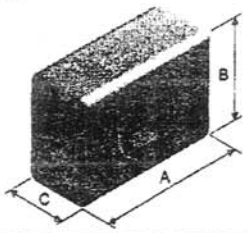
Box volumes considering the bass lift inside the car with closed apertures.

ENCLOSURES INTERNAL VOLUME CALCULATION INSTRUCTIONS

RECTANGULAR BOX

$$\text{Internal Volume} = \frac{A \times B \times C}{1000}$$

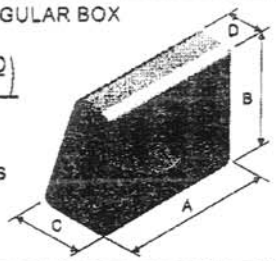
A, B and C are internal dimensions (in cm). The internal volume result is given in liters.



TRAPEZOID RECTANGULAR BOX

$$\text{Interno Volume} = \frac{A \times B \times \left(\frac{C+D}{2}\right)}{1000}$$

A, B, C and D are internal dimensions (in cm). The internal volume result is given in liters.



WARNING: BEFORE INSTALLING YOUR EXTREME PAY ATTENTION TO THE INSTRUCTIONS BELOW.
- Check terminals polarity and NEVER connect with the wrong polarity to avoid severe damage to the speaker and amplifier.
- Check impedance and power ratings of your amplifier. The Extreme outstands nominal power if wired to 1 ohms (the two bobins parallel connect to one channel amplifier output) or in 4 ohms mode (the bobins series connected to one channel amplifier). In the case of two separed power channel apply half the total power to each terminal pair. Be sure that both terminal pairs are equally and properly powered. NEVER apply power to a single terminal pair leaving the other floating. Use large diameter gauge wire.