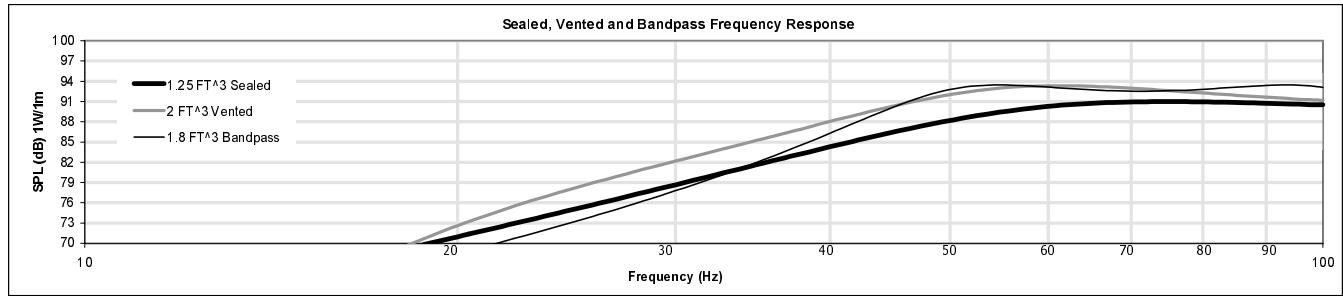




12FS Technical Data Report

Coustic 12" 4 Ohm Subwoofer



Sealed Enclosures

Enclosure Volume	.75 Ft ³ (21.2 l)	1.00 Ft ³ (28.3 l)	1.25 Ft ³ (35.4 l)	1.50 Ft ³ (42.5 l)	1.75 Ft ³ (49.6 l)
F3	59 Hz	52 Hz	46 Hz	45 Hz	43 Hz
Ripple	.46dB	.53dB	.47dB	.39dB	.31dB
Qtc	1.35	1.19	1.09	1.02	.97
Net Volume	.67 Ft ³ (19.1 l)	.92 Ft ³ (26.2 l)	1.17 Ft ³ (33.3 l)	1.42 Ft ³ (40.3 l)	1.67 Ft ³ (47.4 l)
Driver Volume	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)
Excursion Limited SPL	115dB	114dB	113dB	113dB	112dB
Excursion Limited Power	200 Watts	200 Watts	200 Watts	200 Watts	200 Watts

Vented Enclosures

Enclosure Volume	1.50 Ft ³ (42.5 l)	1.75 Ft ³ (49.6 l)	2.00 Ft ³ (56.6 l)	2.25 Ft ³ (63.7 l)	2.50 Ft ³ (70.8 l)
Vent Dimensions	4"x12.5"	4"x11.5"	4"x10.75"	4"x10.25"	4"x9.75"
F3	46 Hz	42 Hz	40 Hz	36 Hz	35 Hz
Tuning Frequency	41 Hz	38 Hz	37 Hz	35 Hz	34 Hz
Ripple	2.03dB	2.15dB	2.19dB	2.15dB	2.10dB
Net Volume	1.33 Ft ³ (37.6 l)	1.59 Ft ³ (44.9 l)	1.84 Ft ³ (52.2 l)	2.10 Ft ³ (59.4 l)	2.35 Ft ³ (66.6 l)
Driver Volume	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)
Vent Volume	.10 Ft ³ (2.7 l)	.09 Ft ³ (2.5 l)	.08 Ft ³ (2.3 l)	.08 Ft ³ (2.2 l)	.07 Ft ³ (2.1 l)
Excursion Limited SPL	116dB	116dB	116dB	115dB	115dB
Excursion Limited Power	200 Watts	200 Watts	200 Watts	200 Watts	200 Watts

Single Reflex Bandpass Enclosures

s=0.5

Enclosure Volume	1.59 Ft ³ (45.0 l)	1.67 Ft ³ (47.3 l)	1.80 Ft ³ (51.0 l)	1.96 Ft ³ (55.5 l)	2.21 Ft ³ (62.6 l)
Bandpass	52 - 126	47 - 121	44 - 116	39 - 111	34 - 106
Bandpass Gain	5.8dB	4.7dB	3.6dB	2.3dB	.8dB
Vent Dimensions	4"x2"	4"x2.5"	4"x3.5"	4"x4.75"	4"x6.25"
Tuning Frequency	82 Hz	77 Hz	72 Hz	66 Hz	60 Hz
Ripple	.85dB	.89dB	.92dB	.96dB	1.00dB
Sealed Volume	.49 Ft ³ (14.0 l)	.58 Ft ³ (16.4 l)	.69 Ft ³ (19.6 l)	.85 Ft ³ (24.0 l)	1.08 Ft ³ (30.6 l)
Vented Volume	1.01 Ft ³ (28.5 l)	1.01 Ft ³ (28.5 l)	1.01 Ft ³ (28.5 l)	1.01 Ft ³ (28.5 l)	1.01 Ft ³ (28.5 l)
Driver Volume	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)
Vent Volume	.01 Ft ³ (0.3 l)	.01 Ft ³ (0.4 l)	.02 Ft ³ (0.6 l)	.03 Ft ³ (0.9 l)	.05 Ft ³ (1.3 l)
Excursion Limited SPL	118dB	117dB	116dB	114dB	113dB
Excursion Limited Power	200 Watts	200 Watts	200 Watts	200 Watts	200 Watts

Single Reflex Bandpass Enclosures

s=0.6

Enclosure Volume	2.12 Ft ³ (60.0 l)	2.23 Ft ³ (63.2 l)	2.39 Ft ³ (67.7 l)	2.61 Ft ³ (73.9 l)	2.94 Ft ³ (83.3 l)
Bandpass	51 - 110	48 - 105	42 - 100	37 - 95	32 - 90
Bandpass Gain	7.2dB	6.1dB	4.9dB	3.5dB	2.0dB
Vent Dimensions	4"x1"	4"x1.5"	4"x2.25"	4"x3.25"	4"x4.75"
Tuning Frequency	76 Hz	71 Hz	66 Hz	61 Hz	55 Hz
Ripple	.25dB	.26dB	.28dB	.30dB	.31dB
Sealed Volume	.59 Ft ³ (16.8 l)	.70 Ft ³ (19.9 l)	.85 Ft ³ (24.1 l)	1.06 Ft ³ (30.1 l)	1.39 Ft ³ (39.3 l)
Vented Volume	1.45 Ft ³ (41.0 l)	1.45 Ft ³ (41.0 l)	1.45 Ft ³ (41.0 l)	1.45 Ft ³ (41.0 l)	1.45 Ft ³ (41.0 l)
Driver Volume	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)	.08 Ft ³ (2.1 l)
Vent Volume	.00 Ft ³ (0.1 l)	.01 Ft ³ (0.2 l)	.01 Ft ³ (0.3 l)	.02 Ft ³ (0.6 l)	.03 Ft ³ (0.9 l)
Excursion Limited SPL	119dB	117dB	116dB	115dB	113dB
Excursion Limited Power	200 Watts	200 Watts	200 Watts	200 Watts	200 Watts

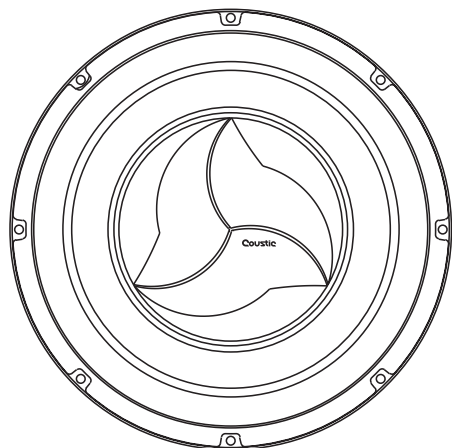
Limited Warranty

Coustic subwoofers purchased from an authorized dealer are guaranteed against defects in parts and workmanship for a period of one (1) year from the date of purchase. (Two years if installed by an authorized Coustic dealer). Speakers found defective during that period will be repaired by Coustic without charge for parts

This warranty is void if it is determined that unauthorized parties have attempted repairs or alterations of any nature. This warranty does not extend to cabinets or certain that all associated equipment is operating properly.

If a defect is present, your authorized Coustic dealer may be able to effect repairs. If not, you are responsible for providing transportation to the factory. Your Coustic dealer can recommend the safest method of transportation. Proof of purchase is required when requesting service, so please retain your sales slip.

Specifications subject to change without notice.



Features

- 1.5" High temperature voice coil
- Kapton voice coil former
- High energy strontium ferrite magnet
- Polyether foam surround
- Flat Progressive Spider
- Extended Vented Pole Piece

Specifications*

Free Air Resonance	Fs	30.8 Hz	
Volume Acoustic Suspension	Vas	3.04 Ft ³	(86.1 l)
Total Q	Qts	.58	
Electrical Q	Qes	.61	
Mechanical Q	Qms	11.71	
DC Resistance	Re	3.29 Ohm	
Linear Excursion (One Way)	Xmax	.36"	(9.1 mm)
Effective Piston Diameter	D	10.250"	(.2604 m)
RMS Power Handling	RMS	200 Watts	
Total Power Handling	Total	400 Watts	
Sensitivity 1W/1m	SPLo	88.8 dB	
Reference Efficiency	No	0.40%	
Frequency Response		30 - 150Hz	
Voice Coil Inductance	Le	1.9 mH	
Gap Height		.250"	(6.4 mm)
Voice Coil Height		.875"	(22.2 mm)
Voice Coil Diameter		1.5"	(38.1 mm)
Magnet Weight		28 oz	(794 g)
Motor Force	BL	11.40 Tm	
Compliance	Cms	.216 mm/N	
Total Moving Mass	Mms	123.5 g	
Moving Mass of Driver	Mmd	116.4 g	
Suspension Losses	Rms	2.04	
Effective Surface Area	Sd	82.5 in ²	(.0532m ²)
Mounting Diameter		11 "	(279.4 mm)
Overall Diameter		12 3/16"	(309.6 mm)
Mounting Depth		5 7/16"	(138.1 mm)
Overall Depth		5 7/8 "	(149.2 mm)
Speaker Displacement (Inside Box)		180in ²	(3.0 l)
Speaker Displacement (Outside Box)		130in ²	(2.1 l)

* Dual Voice Coil models measured with coils in parallel.