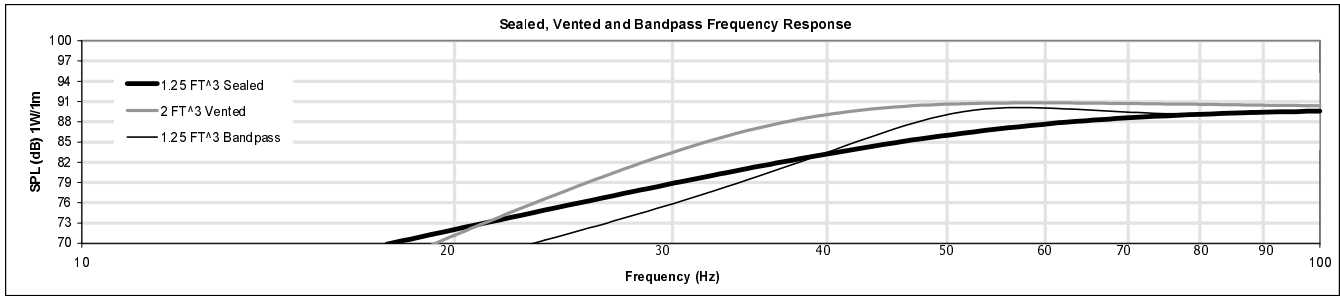




12RS Technical Data Report

Coustic 12" 4 Ohm Subwoofer



Sealed Enclosures

	1.25 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)
Enclosure Volume	.75 Ft ³	1.00 Ft ³	1.25 Ft ³	1.50 Ft ³	1.75 Ft ³
F3	59 Hz	55 Hz	51 Hz	50 Hz	49 Hz
Ripple	.00dB	.00dB	.00dB	.00dB	.00dB
Qtc	.86	.77	.71	.67	.63
Net Volume	.69 Ft ³ (19.5 l)	.94 Ft ³ (26.6 l)	1.19 Ft ³ (33.7 l)	1.44 Ft ³ (40.8 l)	1.69 Ft ³ (47.9 l)
Driver Volume	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)
Excursion Limited SPL	114dB	113dB	113dB	113dB	112dB
Excursion Limited Power	250 Watts	250 Watts	250 Watts	250 Watts	250 Watts

Vented Enclosures

	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)
Enclosure Volume	1.50 Ft ³	1.75 Ft ³	2.00 Ft ³	2.25 Ft ³	2.50 Ft ³
Vent Dimensions	4"x13.5"	4"x12.5"	4"x11.75"	4"x11"	4"x10.5"
F3	42 Hz	37 Hz	34 Hz	32 Hz	30 Hz
Tuning Frequency	39 Hz	37 Hz	35 Hz	34 Hz	33 Hz
Ripple	.63dB	.55dB	.43dB	.33dB	.20dB
Net Volume	1.34 Ft ³ (37.8 l)	1.59 Ft ³ (45.1 l)	1.85 Ft ³ (52.4 l)	2.11 Ft ³ (59.6 l)	2.36 Ft ³ (66.8 l)
Driver Volume	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)
Vent Volume	.10 Ft ³ (3.0 l)	.10 Ft ³ (2.7 l)	.09 Ft ³ (2.6 l)	.08 Ft ³ (2.4 l)	.08 Ft ³ (2.3 l)
Excursion Limited SPL	115dB	114dB	114dB	114dB	113dB
Excursion Limited Power	250 Watts	250 Watts	250 Watts	250 Watts	250 Watts

Single Reflex Bandpass Enclosures

s=0.5

	1.03 Ft ³ (29.2 l)	1.12 Ft ³ (31.7 l)	1.25 Ft ³ (35.4 l)	1.41 Ft ³ (39.9 l)	1.64 Ft ³ (46.4 l)
Enclosure Volume	1.03 Ft ³	1.12 Ft ³	1.25 Ft ³	1.41 Ft ³	1.64 Ft ³
Bandpass	52 - 159	47 - 154	42 - 149	39 - 144	34 - 138
Bandpass Gain	1.5dB	.4dB	-.7dB	-2.0dB	-3.4dB
Vent Dimensions	(2)4"x16"	(2)4"x18.75"	(2)4"x22.25"	(2)4"x26.75"	(2)4"x32.5"
Tuning Frequency	93 Hz	87 Hz	81 Hz	75 Hz	69 Hz
Ripple	.92dB	.95dB	.97dB	1.00dB	1.03dB
Sealed Volume	.32 Ft ³ (9.2 l)	.38 Ft ³ (10.7 l)	.44 Ft ³ (12.6 l)	.54 Ft ³ (15.2 l)	.67 Ft ³ (18.9 l)
Vented Volume	.39 Ft ³ (11.1 l)	.39 Ft ³ (11.1 l)	.39 Ft ³ (11.1 l)	.39 Ft ³ (11.1 l)	.39 Ft ³ (11.1 l)
Driver Volume	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)
Vent Volume	.25 Ft ³ (7.1 l)	.30 Ft ³ (8.4 l)	.35 Ft ³ (10.0 l)	.43 Ft ³ (12.1 l)	.52 Ft ³ (14.8 l)
Excursion Limited SPL	116dB	114dB	113dB	112dB	111dB
Excursion Limited Power	250 Watts	250 Watts	250 Watts	250 Watts	250 Watts

Single Reflex Bandpass Enclosures

s=0.6

	1.49 Ft ³ (42.2 l)	1.65 Ft ³ (46.7 l)	1.85 Ft ³ (52.4 l)	2.13 Ft ³ (60.3 l)	2.51 Ft ³ (71.1 l)
Enclosure Volume	1.49 Ft ³	1.65 Ft ³	1.85 Ft ³	2.13 Ft ³	2.51 Ft ³
Bandpass	53 - 135	48 - 130	42 - 125	37 - 119	32 - 114
Bandpass Gain	2.7dB	1.7dB	.5dB	-.8dB	-2.3dB
Vent Dimensions	(3)4"x19.75"	(3)4"x23.5"	(3)4"x28"	(3)4"x34"	(3)4"x41.75"
Tuning Frequency	85 Hz	79 Hz	74 Hz	68 Hz	62 Hz
Ripple	.27dB	.28dB	.29dB	.30dB	.31dB
Sealed Volume	.40 Ft ³ (11.2 l)	.47 Ft ³ (13.2 l)	.56 Ft ³ (15.8 l)	.69 Ft ³ (19.4 l)	.87 Ft ³ (24.7 l)
Vented Volume	.56 Ft ³ (16.0 l)	.56 Ft ³ (16.0 l)	.56 Ft ³ (16.0 l)	.56 Ft ³ (16.0 l)	.56 Ft ³ (16.0 l)
Driver Volume	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)	.06 Ft ³ (1.7 l)
Vent Volume	.47 Ft ³ (13.3 l)	.56 Ft ³ (15.9 l)	.67 Ft ³ (19.0 l)	.82 Ft ³ (23.2 l)	1.01 Ft ³ (28.6 l)
Excursion Limited SPL	116dB	115dB	114dB	113dB	111dB
Excursion Limited Power	250 Watts	250 Watts	250 Watts	250 Watts	250 Watts

Limited Warranty

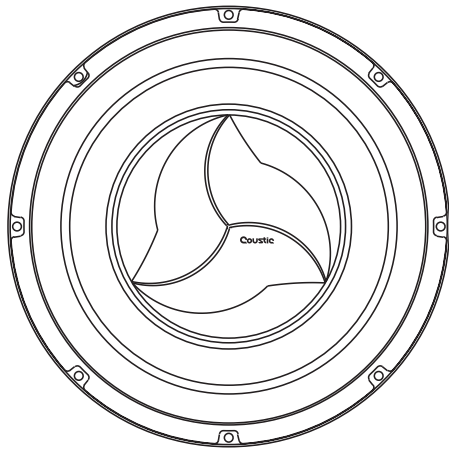
Coustic subwoofers purchased from an authorized dealer are guaranteed against defects in parts and workmanship for a period of one (1) year from the date of purchase. (Two years if installed by an authorized Coustic dealer). Speakers found defective during that period will be repaired by Coustic without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

- 2" 4-Layer voice coil
- Kapton voice coil former
- Polylaminate cone
- Rubber magnet cover
- High energy strontium ferrite magnet
- Santoprene rubber surround
- Flat Progressive Spider
- Extended Vented Pole Piece

Specifications*

Free Air Resonance	Fs	32.6 Hz	
Volume Acoustic Suspension	Vas	2.29 Ft ³	(64.9 l)
Total Q	Qts	.41	
Electrical Q	Qes	.43	
Mechanical Q	Qms	13.88	
DC Resistance	Re	3.39 Ohm	
Linear Excursion (One Way)	Xmax	.37"	(9.5 mm)
Effective Piston Diameter	D	10.250"	(.2604 m)
RMS Power Handling	RMS	250 Watts	
Total Power Handling	Total	500 Watts	
Sensitivity 1W/1m	SPLo	89.7 dB	
Reference Efficiency	No	0.50%	
Frequency Response		32 - 150Hz	
Voice Coil Inductance	Le	2.7 mH	
Gap Height		.312"	(7.9 mm)
Voice Coil Height		.961"	(24.4 mm)
Voice Coil Diameter		2.0"	(50.8 mm)
Magnet Weight		50 oz	(1417 g)
Motor Force	BL	15.44 Tm	
Compliance	Cms	.163 mm/N	
Total Moving Mass	Mms	146.3 g	
Moving Mass of Driver	Mmd	139.2 g	
Suspension Losses	Rms	2.16	
Effective Surface Area	Sd	82.5 in ²	(.0532m ²)
Mounting Diameter		11 "	(279.4 mm)
Overall Diameter		12 1/4 "	(311.2 mm)
Mounting Depth		5 7/8 "	(149.2 mm)
Overall Depth		6 5/16"	(160.3 mm)
Speaker Displacement (Inside Box)		162in ²	(2.7 l)
Speaker Displacement (Outside Box)		103in ²	(1.7 l)

* Dual Voice Coil models measured with coils in parallel.