



AVI SOUND INTERNATIONAL LTD.
UNIT 170, 11120 BRIDGEPORT ROAD
RICHMOND, BC, CANADA V6X 1T2
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MODEL AVI EL-250, 250 mm (10") SUBWOOFER DRIVER

APPLICATIONS This is a subwoofer driver for high performance sound systems.
Suggested operating range is 33 to 600 Hz.

PERFORMANCE 26 to 1200 Hz at -10 dB points, in optimum enclosure.
33 to 600 Hz at -3 dB points, in optimum enclosure.
300 watts music program material.
150 watts AES pink noise rating.
129 dB typical, in vehicle, with rated power.
103 dB typical, at 1 watt, in vehicle.
93 dB average, at 1 watt and 1 meter, in half space.
4 ohm nominal, 3.2 ohm minimum.

FEATURES Cast aluminum frame with cavity vents, black finish.
Extended and vented pole piece with integrated bottom plate.
Both top and bottom plates with CNC and black absorbing finish.
Black paper cone with high linearity damped composite rubber edge.
Heavy duty gold plated brass terminals.
1662 g (58.6 oz) magnet.
50 mm (2") copper voice coil, OFC edge wound.

PHYSICAL 262 mm (10.3") overall diameter.
109 mm (4.3") overall depth.
229 mm (9") cut out hole diameter.
99 mm (3.9") mounting depth.
4.8 Kg (10.6 lbs) weight.

T/S DATA	Znom 4 Ω	Revc 3.2 Ω	Fo 36.3 Hz
	Sd 0.035 M ² (54.3 in ²)	Le 0.85 mH	SPL 93 dB
	Xmax 4 mm (0.16 in)	Qms 6.62	BL 12.2 TM
	Vas 63.2 L (2.23 ft ³)	Qes 0.26	Pnom 150 W
	Cms 363 μ m/N	Qts 0.25	Pmax 300 W



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AVI EL-250 APPLICATION NOTE

	NET VOLUME	TOTAL VOLUME	PORTS	DIA	LENGTH	FILL	F _b (Hz)	F ₋₃ (Hz)	F ₋₁₀ (Hz)	NOTES
CLOSED		22 L/0.8 ft³				10%		68	45	
	Soft knee. Tight bass. A larger box adds no more useful output.									
INF-BAFFLE		> 255 L/9 ft³						70	30	
	Free air is not recommended because of some risk of suspension damage at high power.									
MINI VENTED	20 L 0.7 ft³		1	75 mm 3"	255 mm 10"	10%	45	66	41	
MAXI VENTED	42 L 1.5 ft³		1	75 mm 3"	225 mm 8.8"	10%	33	102	29	
EBS-VENT	31 L 1.1 ft³		1	75 mm 3"	245 mm 9.6"	10%	37	90	33	
	Extended bass shelf alignment. Very smooth, with good bass extension.									
BANDPASS 4		22 L/0.8 ft³				10%		39	26	Closed
	10 L 0.35 ft³		1	75 mm 3"	240 mm 9.5"	10%	66	112	169	Vented
	Compact. Install EL-250 into the closed cavity, facing to the vented cavity.									
BANDPASS 6 A	44 L 1.55 ft³		1	76 mm 3"	215 mm 8.5"	10%	33	33	28	Vented
	15.5 L 0.55 ft³		1	75 mm 3"	120 mm 4.7"	10%	67	88	122	Vented
	Very high performance. Install EL-250 into the large vented cavity, facing to the small vented cavity. Both ports are vented to the outside.									
BANDPASS 6 B	37 L 1.3 ft³		1	75 mm 3"	265 mm 10.5"	10%	33	35	29	Vented
	15.5 L 0.55 ft³		1	76 mm 3"	120 mm 4.7"	10%	67	86	120	Vented

Install EL-250 into the large vented cavity, facing to the small vented cavity. Both ports are vented to the outside.

Note: The small enclosure sizes required for the EL-250 make compound isobaric designs very questionable.