



AVI SOUND INTERNATIONAL LTD.
 UNIT 170, 11120 BRIDGEPORT ROAD
 RICHMOND, BC, CANADA V6X 1T2
 TEL: (604)-276-0099 FAX: (604)-276-0409
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MODEL AVI EL-300, 300 mm (12") SUBWOOFER DRIVER

APPLICATIONS This is a subwoofer driver for high performance sound systems.
 Suggested operating range is 26 to 500 Hz.

PERFORMANCE 21 to 11140 Hz at -10 dB points, in optimum enclosure.
 26 to 500 Hz at -3 dB points, in optimum enclosure.
 400 watts music program material.
 200 watts AES pink noise rating.
 128 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 312 mm (12.3") overall diameter.
 138 mm (5.4") overall depth.
 272 mm (10.7") cut out hole diameter.
 125 mm (4.9") mounting depth.
 5.2 Kg (11.5 lbs) weight.

T/S DATA	Znom	4 Ω	Revc	3.2 Ω	Fo	27.7 Hz
	Sd	0.053 M ² (82.2 in ²)	Le	0.97 mH	SPL	93 dB
	Xmax	4 mm (0.16 in)	Qms	6.43	BL	11.95 TM
	Vas	174 L (6.15 ft ³)	Qes	0.295	Pnom	200 W
	Cms	436 μm/N	Qts	0.282	Pmax	400 W



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AVI EL-300 APPLICATION NOTES

	NET VOLUME	TOTAL VOLUME	PORTS	DIA	LENGTH	FILL	F _b (Hz)	F ₃ (Hz)	F ₋₁₀ (Hz)	NOTES
S CLOSED		48 L 1.7 ft³				30%		50	30	Good performance in a small closed enclosure.
L CLOSED		102 L 3.6 ft³				30%		44	25	Not recommended – Vented enclosures have more useful output.
INF-BAFFLE		> 625 L > 22 ft³						75	28	Free air is not recommended because of some risk of suspension damage at high power.
MINI VENTED		54 L 1.9 ft³	1	75 mm 3"	150 mm 6"	20%	32	47	29	
MIDI VENTED		71 L 2.5 ft³	1	100 mm 4"	210 mm 8.3"	20%	32	40	27	
MAXI VENTED		110 L 3.9 ft³	2	75 mm 3"	220 mm 8.7"	20%	27	55	22	
ISO-VENT		54 L 1.9 ft³	1	76 mm 4"	150 mm 12"	20%	32	33	25	Isobaric (compound) system. Excellent sub-bass extension. Sensitivity 90.8 dB. Install two of EL-300 face to face.
BANDPASS 4		36.8 L 1.3 ft³				20%		35	25	Closed
		22.7 L 0.8 ft³	1	100 mm 4"	165 mm 6.5"	20%	62	106	147	Vented
Very compact system. Install EL-300 into the closed cavity, facing to the vented cavity.										

Continued Over



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BANDPASS 6 A		56.6 L 2 ft³	1	100 mm 4"	370 mm 14.5"	20%	29	35	27	Vented
		28.3 L 1 ft³	1	100 mm 4"	80 mm 3.1"	20%	66	95	127	Vented
Excellent bandpass enclosure. Install EL-300 into the large vented cavity, facing to the small vented cavity. Both ports are vented to the outside.										
BANDPASS 6 B		53.8 L 1.9 ft³	1	100 mm 4"	470 mm 18.5"	20%	27	23	19	Vented
		79.3 L 2.8 ft³	1	100 mm 4"	75 mm 3"	20%	40	65	92	Vented
Excellent sub-bass extension. Sensitivity is little bit lower than the bandpass 6 A type. Install EL-300 into the large vented cavity, facing to the small vented cavity. Both ports are vented to the outside.										
COMPOUND BP6 A		56.6 L 2 ft³	1	76 mm 3"	280 mm 11"	10%	26	27	32	Vented
		22.7 L 0.8 ft³	1	75 mm 3"	140 mm 5.5"	10%	53	70	96	Vented
Excellent sub-bass extension. Install two of EL-300 face to face, into the large vented cavity, facing to the small vented cavity. Both ports are vented to the outside.										
COMPOUND BP6 B		31.2 L 1.1 ft³	1	75 mm 3"	530 mm 20.8"	10%	27	22	19	Vented
		51 L 1.8 ft³	1	75 mm 3"	110 mm 4.3"	10%	38	61	85	Vented
Serial tuned enclosure. Install two of EL-300 drivers face to face. Excellent sub-bass extension. Sensitivity is a little bit lower than compound BP 6 A type.										