



DIAMOND

D1

SUBWOOFER INSTALLATION MANUAL

D110 | D112

Dear Valued Customer,

Thank you for choosing Diamond Audio D1 subwoofers. These speakers represent the latest advances in acoustic technology, and like all Diamond Audio products, are hand built and tested using the highest grade components and state of the art techniques. When installed properly, they will provide many years of accurate sound reproduction.

Please keep in mind that prolonged exposure to sound pressure levels in excess of 100 dB can cause permanent hearing loss. This high performance speaker system can exceed that level, so please exercise restraint in its operation in order to preserve your ability to enjoy its fidelity in the future.

Because of their flexible installation possibilities, please consider having your new speakers professionally installed by an authorized Diamond Audio dealer. This will assure a clean and efficient installation, and extend your one year warranty to three years.

At Diamond Audio, we strive to bring honest value and excellent quality to all of the products we build. By your purchase of this product, you have joined the growing family of discerning listeners who demand only the best. Welcome!



SUBWOOFER FEATURES

Titanium Finish IMPP Cone

Rubber Surround

Heavy Gauge Stamped Steel Basket

Long Throw Suspension

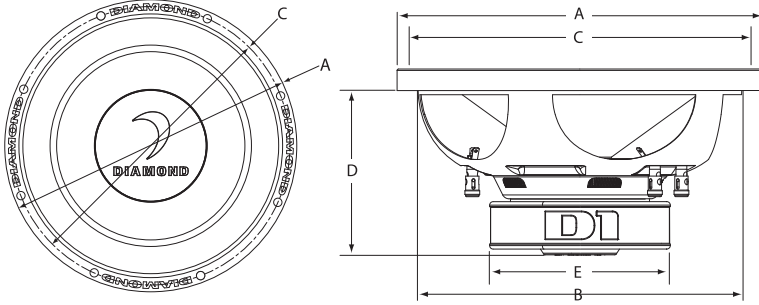
Vented Extended Pole Piece

Ferrite Magnet

2" Voice Coils

PHYSICAL DIMENSIONS

Dimension (in./mm)	D110	D112
Total Diameter (A)	10.35 in. (263.5 mm)	12.4 in. (315 mm)
Mounting Diameter (B)	9.2 in. (232.5 mm)	11 in. (280 mm)
Screw Hole Diameter (C)	9.83 in. (249.7 mm)	11.8 in. (300 mm)
Mounting Depth (D)	4.6 in. (118 mm)	6.29 in. (160 mm)
Magnet Diameter (E)	5.6 in. (142 mm)	6.14 in. (156 mm)
Displacement	0.05 ft ³ (1.4 liter)	0.07 ft ³ (2.0 liter)



THIELE/SMALL PARAMETERS

Parameter (unit)	D110D2	D110D4	D112D2	D112D4
SPL (dB)	85.9	85.7	86.0	86.3
Re (Ω) [series]	3.6	6.8	3.8	6.7
Qms	5.860	4.207	6.239	4.406
Qes	0.479	0.596	0.600	0.680
Qts	0.443	0.522	0.547	0.589
Fs (Hz)	31.452	33.948	28.046	31.452
Vas (L)	39.047	36.777	70.968	59.906
Cms (mm/N)	252.413	237.741	207.416	175.085
Mms (g)	101.448	92.448	155.253	146.253
Sd (m ²)	33.006	33.006	49.087	49.087
BL (T*M)	12.272	15.001	13.163	16.875
Xmax (mm)	11.5	11.5	11.8	11.8
Pwr (W) NOM/MAX	200/400	200/400	200/400	200/400

ENCLOSURE

The enclosures specified below are offered as a suggestion only. Assistance from an authorized Diamond Audio retailer is recommended for designing the correct system for your vehicle. All volumes below are shown as gross internal volumes, driver and vent displacement has been accounted for. The use of a 30Hz sub-sonic filter is recommended on most vented enclosures.

Sealed	D110	D112
Vb (ft ³)	0.75	1.2
F3 (Hz)/QTC	54/0.65	41/0.88
Pe (W)	250	300
Vented		
Vb (ft ³)	1.0	1.75
Fb/F3 (Hz)	40/32	36/27
Port (in.) [dia. x length]	3 x 10	4 x 12
Pe (W)	200	250

LIMITED SPEAKER WARRANTY STATEMENT

Diamond Audio Technologies, LLC (DAT) warrants this product to be free from defects in material and workmanship for a period of one (1) year from the original date of purchase provided it was purchased from an authorized DAT retailer within the United States. However, if this product was installed by the authorized DAT retailer, the warranty period will be extended to three (3) years.

THIS WARRANTY IS NOT TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL PURCHASER OF THIS PRODUCT IN ITS ORIGINAL INSTALLATION. Original purchaser must reside in the United States and be able to provide proof of purchase and installation with the sales receipt from the authorized DAT retailer that sold and installed the product.

Should a manufacturing defect occur during above said warranty period, DAT will replace or repair the defective product with a product of the same or equivalent value and performance.

Damage or failure caused by any of the following is not covered under this warranty policy: negligence, improper use, abuse, product modification, unauthorized repair attempts, accident, acts of God, misrepresentations by DAT retailers, and improper/inadequate packaging during return shipping.

Warranty is void if serial numbers have been removed, altered or defaced.

HOW TO OBTAIN WARRANTY SERVICE

In the event a DAT product should require service, you should visit the authorized DAT retailer you purchased the product from and they can expedite your claim. All claims must fall into the guidelines listed above and be accompanied by a copy of the original sales and installation receipt from that authorized DAT retailer.

Product returned for warranty service must be freight-prepaid, properly packaged and clearly marked with the Return Authorization (RA) number issued by DAT. Any product returned to DAT that is improperly packaged, does not have a RA number clearly marked on the package, or never received a RA number may be refused upon delivery. DAT does not assume responsibility for lost or misdirected product.

Repair or replacement under this warranty is the exclusive remedy of the consumer. DAT shall not be liable for any incidental or consequential damages for breach of any expressed or implied warranty on this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights that may vary from state to state.

Customers outside the United States should contact their local sales office to obtain information on pricing, exchange unit availability, instructions, service and warranty/non-warranty replacement or repair.



Diamond Audio Technologies

6915 West Frye Road
Chandler, AZ 85226 USA
Tel: 480.820.2075
Fax: 480.813.6210
Web: diamondaudio.com

Service/Tech Support:
480.820.2075

Tech Support Email
techsupport@diamondaudio.com