



DIAMOND

D1

SPEAKER INSTALLATION MANUAL

D161.5

D151i | D161.5i | D171i | D191i

SPECIAL THANKS

Dear Valued Customer,

Thank you for choosing Diamond Audio D1 speakers. 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 the best performance from your Diamond Audio speakers.

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!

The Diamond Audio Team

FEATURES

- Brushed Copolymer Cones
- Rubber Surrounds
- Flat Progressive Spider
- Extended Pole Motor Design
- Rubber Boot Magnet Protector
- Aluminum Dome Tweeters with Ferro Fluid Cooling
- Model Specific Crossovers
- Shallow Mount

On-board Crossovers

Each D1 coaxial features an on-board 12 dB/octave crossover and tweeter protection to ensure absolute fidelity and protection during audio reproduction.

Standard Connection

D1 integrated systems are shipped configured for a single channel per speaker. Simply connect the speaker wire from the source to the exposed positive and negative terminals on the speaker.

PARTS LIST

D151i, D161i, D161.5i, D171i, D191i

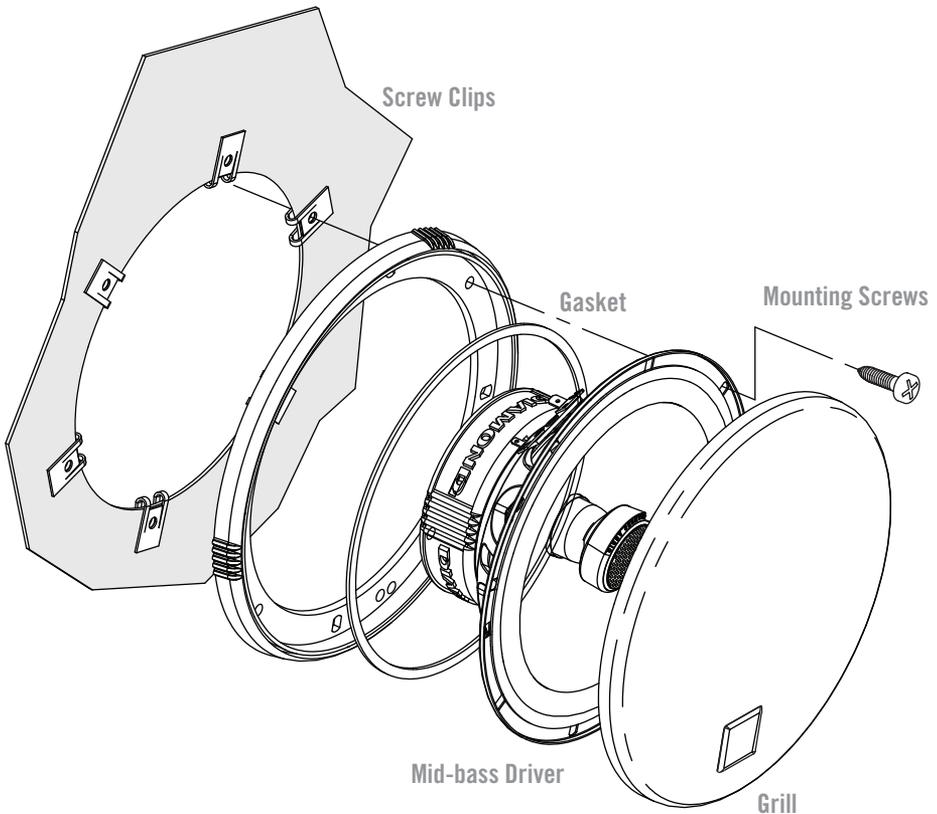
- (2) D1 Coaxial Speakers
- (2) D1 Grills w/ Mounting Ring (except D171i)
- (2) Mounting Gaskets
- (1) Mounting Hardware Kit

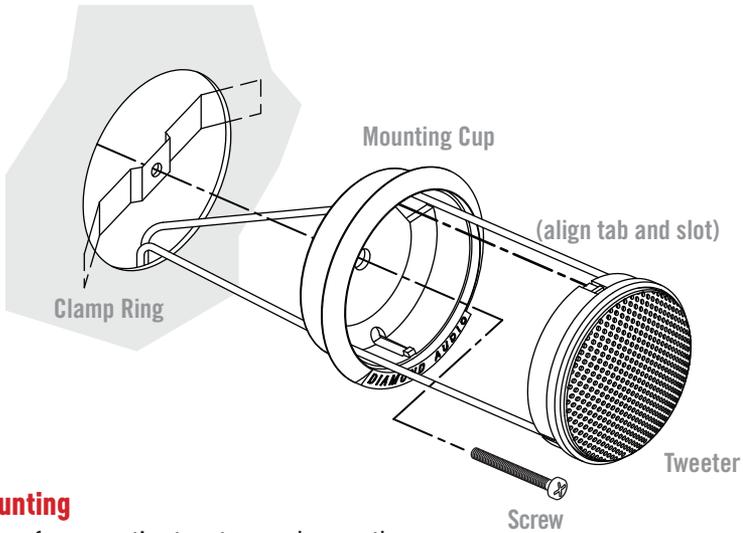
D161.5

- (2) D1 Component Midbass Speakers
- (2) D1 Component Tweeters
- (2) D1 Model Specific Crossovers
- (2) D1 Grills w/ Mounting Ring
- (2) Mounting Gaskets
- (1) Mounting Hardware Kit

MID-BASS SPEAKER MOUNTING

The illustration below shows the parts included and correct mounting assembly of the D1 integrated and component mid-bass drivers. Mounting ring and grill are optional.





Tweeter Mounting

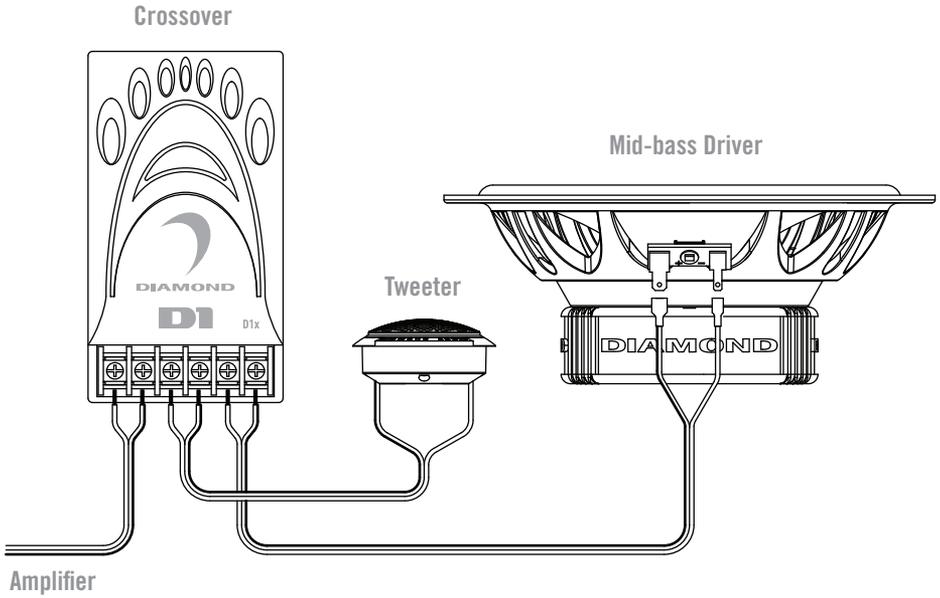
When flush or surface mounting tweeters, make sure the desired location can accommodate the hole size and depth required. Mount the cup using provided hardware (flush mount illustration shown on right.) Mount surface cup at desired angle with provided screws in tweeter mounting kit. Snake speaker wires through tweeter cup, connect tweeter to wires, and snap tweeter into cup by aligning the notches. Be careful not to push on the center of the tweeter grill.

Crossover Programming

Each D1 component set comes with a pair of model specific programmable crossovers. Under the cover there is a jumper marked "TWT REFERENCE" or "- 2dB". Tweeter attenuation can be achieved by moving the jumper to the appropriate position. The REFERENCE position has no attenuation effect on the tweeter.

COMPONENT SYSTEM CONNECTION

The illustration below shows how to connect one channel of the D1 component system.

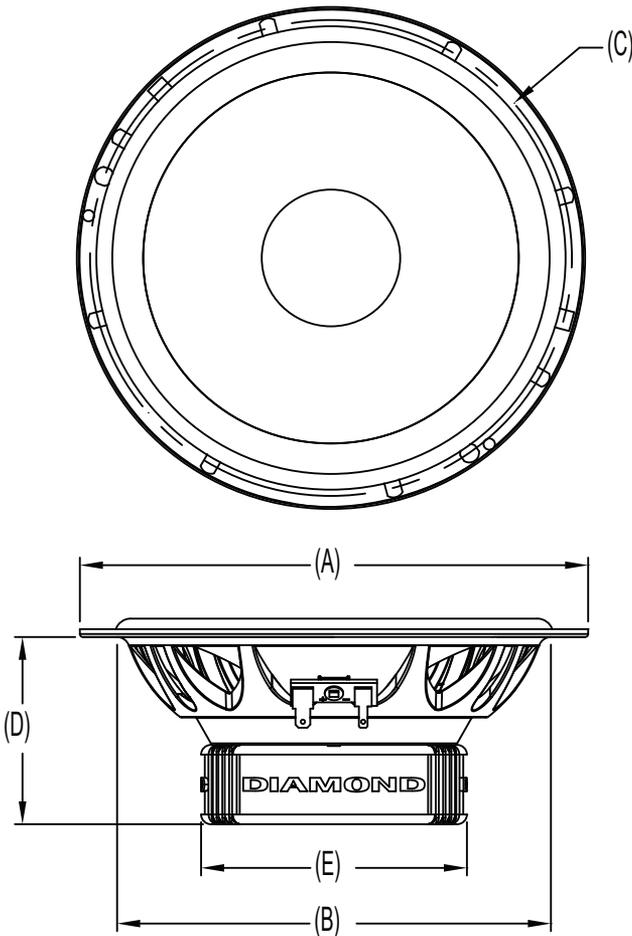


THIELE/SMALL PARAMETERS

Parameter (unit)	D151i	D161.5i	D171i	D191i	D161.5
Sensitivity	86.0	86.0	85.0	83.0	85.0
Qts	0.84	1.0	1.3	1.4	1.0
Fs (Hz)	77	67	76	58	62
Vas (L)	5.2	10.6	9.3	16.0	11.7
Re (ohm)	3.6	3.6	3.5	3.6	3.6
Xmax (mm/N)	1.5	1.5	2.0	1.5	1.5
Impedance (ohm)	4	4	4	4	4
Power Nom/Max (Watts)	40/80	50/100	50/100	70/140	50/100

PHYSICAL DIMENSIONS

Dimension	Unit	D151i	D161.5/D161.5i	D171i	D191i	D1TAK
Total Diameter (A)	in. mm	5.59 142.0	6.51 165.5	5.53 x 8.66 140.6 x 220.0	9.21 x 6.40 234.0 x 162.8	1.73 43.94
Mounting Diameter (B)	in. mm	4.61 117.3	5.35 136.0	7.1 x 4.96 179.0 x 126.1	8.38 x 5.77 212.8 x 146.6	1.62 41.15
Screw Hole Diameter (C)	in. mm	5.23 133.0	6.14 156.0	8.03 x 4.98 204.0 x 126.7	6.58 x 4.71 167.2 x 119.7	N/A
Mounting Depth (D)	in. mm	2.32 59.0	2.42 61.5	2.49 63.3	2.94 74.8	0.5 12.7
Magnet Diameter (E)	in. mm	3.07 78.0	3.40 86.4	3.07 78.0	4.18 106.4	N/A



LIMITED SPEAKER WARRANTY STATEMENT

Diamond Audio Technologies (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.

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