Speaker Installation Manual



H600a | H600s

About the Diamond Audio Experience.

Congratulations, you have purchased the finest audio product on the market. At Diamond Audio, our mobile audio products represent the latest advances in acoustic technology. Diamond Audio products are designed and engineered using innovative components and materials resulting in exceptional sound reproduction. Installed properly, Diamond Audio products will provide many years of the ultimate listening experience.

Please note that prolonged exposure to sound pressure levels in excess of 100dB can cause permanent hearing loss. Using Diamond Audio products can exceed that level so please exercise restraint in its operation in order to preserve your ability to enjoy its high fidelity in the future.

Diamond Audio recommends our products be professionally installed by an authorized Diamond Audio dealer to achieve the best listening possibilities. This will ensure a proper installation and extend your one year warranty to two years.

Go ahead, Hear The Music.

FEATURES

Proprietary Kevlar/Nomex HEX cone technology with butyl rubber surround

Option of 25mm silk or aluminum dome Ferrofluid cooled neodymium tweeters

O2 Cast aluminum alloy frame with integrated terminals

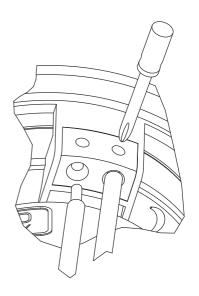
O2 Cast aluminum alloy audiophile grade versatile crossover with rear acoustic fill output

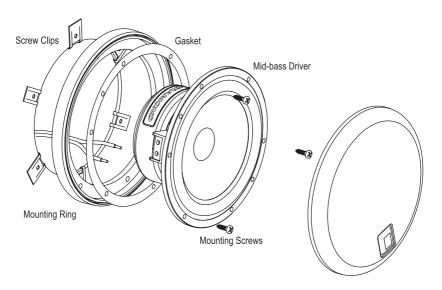
CONTENTS

- (2) HEX Mid-Bass Speakers
- (2) HEX Grills w/ Mounting Ring
- (2) Mounting Gaskets
- (2) HEX Crossovers
- (2) HEX Tweeters in Flush Mount Cups
- (2) HEX Tweeter Surface Mounting Cups
- (1) Mid-Bass Mounting Hardware Kit
- (1) Tweeter Mounting Hardware Kit

MID-BASS DRIVER CONNECTION

The terminals on the HEX component midbass drivers feature a recessed mechanism to allow direct connection of speaker wire up to 12 gauge. This allows for a very clean and secure connection without exposed terminals. Strip the end of the wire and insert into the terminal and gently tighten down the terminal screws with a small manual Phillips screwdriver. Power screw guns are not recommended as they can cause the terminal screws to strip. Do not solder or tin the wire before connection, it can lead to failure if terminal screws are tightened too much.



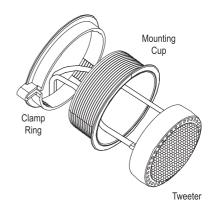


Mid-Bass Mounting

The illustration above shows the parts included and correct mounting assembly of the HEX component mid-bass drivers. Grill is optional. Be sure to check the available mounting depth before installation begins. Use of the foam gasket is recommended to ensure a proper seal between the speaker and mounting surface.

Tweeter Mounting

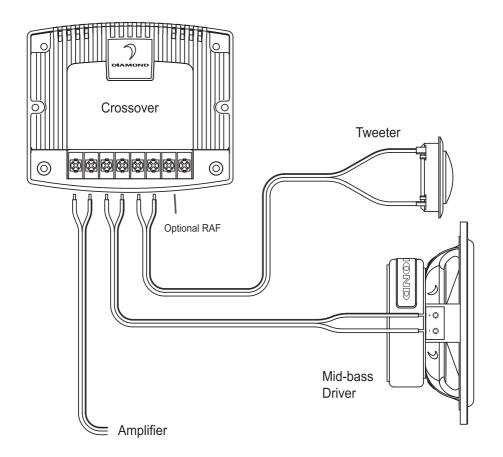
When flush or surface mounting tweeters, make sure desired location can accommodate the hole sizes and depth required. Mount cup using provided hardware, flush mount illustration shown on right. Mount surface cup with provided screws in tweeter mounting kit. Snake speaker wires through tweeter cup, connect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



Each HEX component system comes with a pair of model specific adjustable crossovers. Under the cover there are a pair of jumpers that control tweeter and RAF levels. These jumpers are designated "TWEETER" and "REAR". The tweeter adjustment has settings for -2dB of attenuation, +2dB of gain or 0dB which is flat.

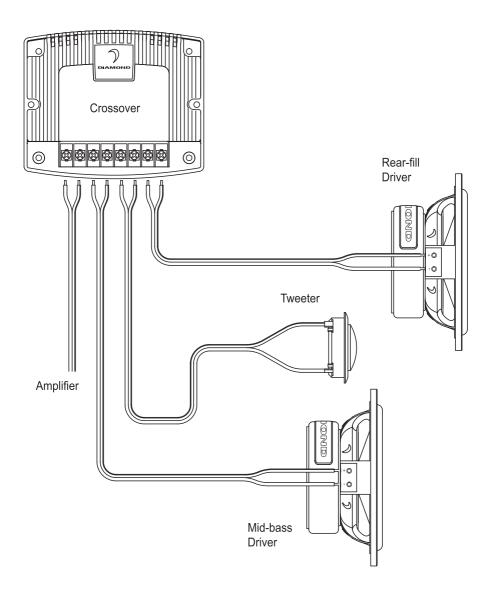
COMPONENT SYSTEM CONNECTION

The following illustration shows how to connect one channel of the HEX component system.



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Each HEX component crossover has a third set of outputs marked "RAF". This stands for Rear Acoustic Fill. This output can be used to power an additional speaker off the same channel without affecting the impedance load on the source unit. The level of this output is determined by the jumpers in the crossover marked "REAR". The jumper has settings for -10dB of attenuation, -5dB of attenuation or off. When off, the RAF outputs are flat, or have no attenuation.

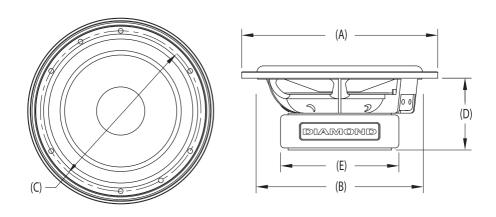


THIELE/SMALL PARAMETERS

Parameter (unit)	H600a/s
Sensitivity (dB)	87
$\operatorname{Re}\left(\Omega\right)$	3.7
Qts	0.60
Fs (Hz)	58
Vas (L)	12.7
Xmax (mm)	4.0
Pwr (W) NOM/MAX	85 / 170

PHYSICAL DIMENSIONS

Dimension	Unit	H600a/s
Total Diameter (A)	in. (mm)	6.3 (160.0)
Mounting Diameter (B)	in. (mm)	5.4 (137.2)
Hole Diameter (C)	in. (mm)	5.9 (149.9)
Mounting Depth (D)	in. (mm)	2.4 (61.0)
Magnet Diameter (E)	in. (mm)	3.8 (96.5)



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 two (2) 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.



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