



DIAMOND

HEX[™] Product Owners Manual
COMPONENTS

Serial Number _____

Date Of Purchase _____

SPECIAL THANKS

Dear Valued Customer,

Congratulations on your purchase of a Diamond Audio Technologies HEX Series speaker system. Your new HEX series system is comprised of loudspeakers and crossovers that have been precision engineered to produce the highest sound quality possible.

For more than a decade, Diamond Audio has been dedicated to excellence in sound reproduction technology. Our products represent the latest advances in loudspeaker technology. Only the very best materials find their way into Diamond products.

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.

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. Please exercise restraint in its operation in order to preserve your ability to enjoy its fidelity for years to come.

Sincerely,
The Diamond Audio Team

FEATURES

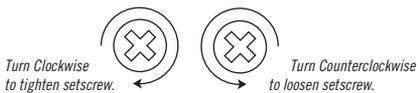
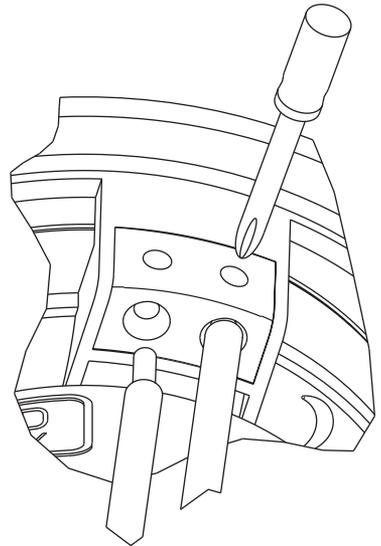
- Proprietary Composite HEX Cone Technology
- Butyl Rubber Surrounds
- Die-Cast Aluminum Frames
- Flat Progressive Spider
- Integrated Lead Wires
- Ferro Fluid Cooled Neodymium Tweeters
- Model Specific, Competition Grade Crossovers w/ RAF Output

Parts List - S400, S500, & S600

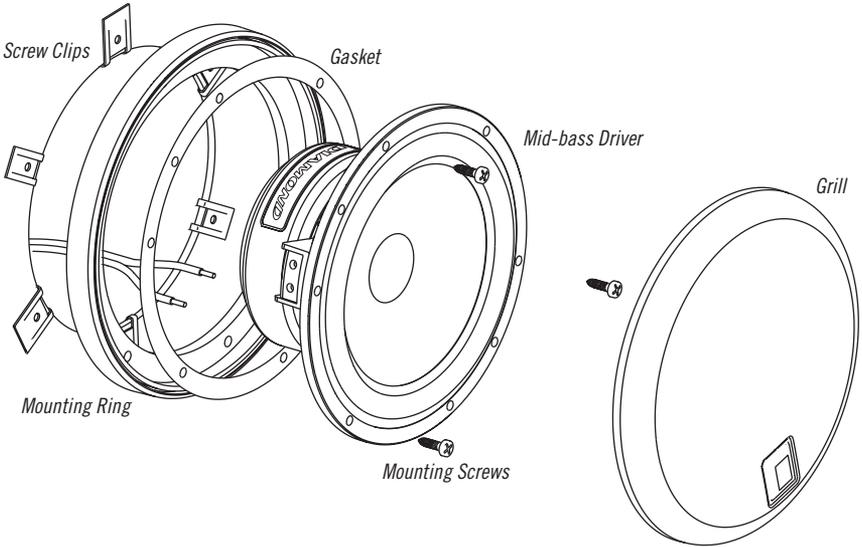
- (2) Hex Mid-Bass Speakers
- (2) Hex Grills w/ Mounting Ring
- (2) Mounting Gaskets
- (2) Hex Crossovers
- (2) Hex Tweeters in Flush Mount Cups
- (2) Hex Tweeter Surface Mounting Cups
- (1) Mid-Bass Mounting Hardware Kit
- (1) Tweeter Mounting Hardware Kit

MID-BASS SPEAKER CONNECTION

The terminals on the HEX component mid-bass 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 Philips 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.



MOUNTING

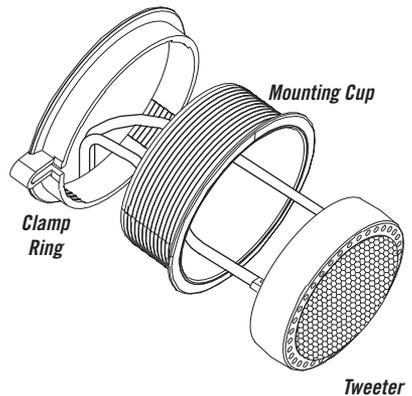


Mid-Bass Mounting

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.



CROSSOVERS

Tweeter

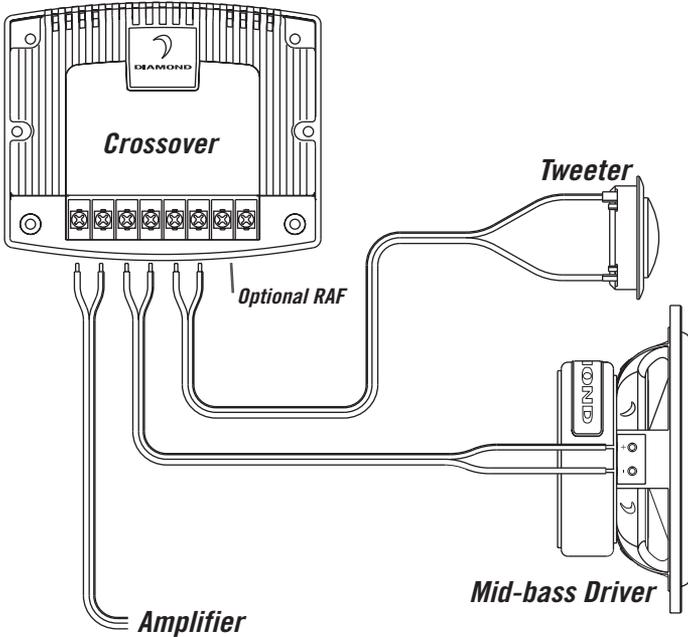
Each HEX component system comes with a pair of model specific adjustable crossovers. Under the cover there are a pair of jumpers that control tweeter and RAF levels. These jumpers are designated “TWEETER” and “REAR”. The tweeter adjustment has settings for -2dB of attenuation, +2dB of gain or 0dB which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

RAF

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 effecting 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.

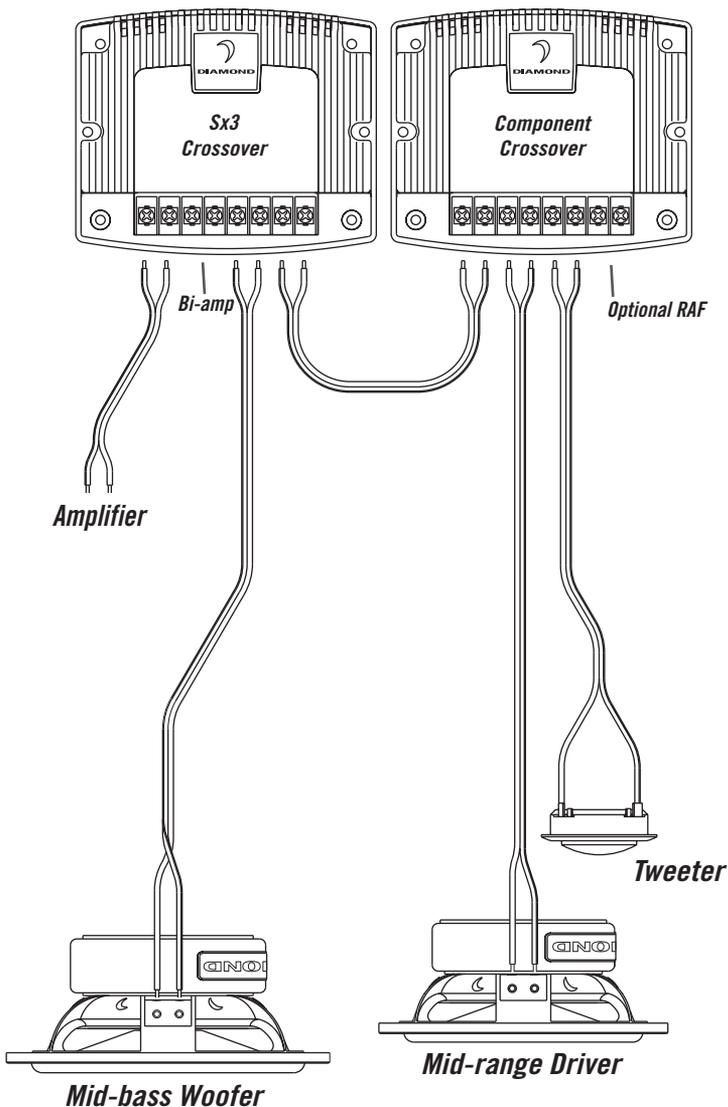
COMPONENT SYSTEM CONNECTION

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



3-WAY SYSTEM CONNECTION

HEX speaker systems offer the ability to run a true 3-way component system by just using a special add-on kit, model number S6.0mx3. This add-on kit is compatible with all HEX component systems and is fully programmable for high pass frequency and attenuation. The add-on crossover also is bi-amp ready (be sure to flip the bi-amp switches). See illustration below for wiring instructions.

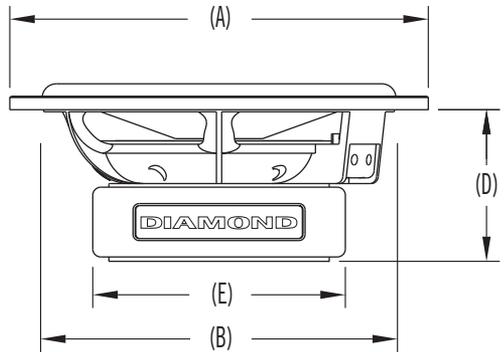
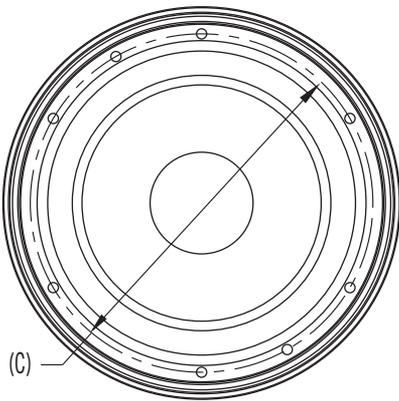


THIELE/SMALL PARAMETERS

Parameter (unit)	S400	S500	S600/6.0mx3	S.0ta	S.0ts
Sensitivity - 2.83V@1m (dB)	90	91	91	92	91
Qts	0.35	0.37	0.49	0.54	0.65
Fs (Hz)	70	60	51	1650	1520
Vas (L)	8	8.5	25.3	n/a	n/a
Re (ohm)	3.3	3.2	3.4	7	6.5
Xmax (mm/N)	3.5	3.5	3.5	n/a	n/a
Impedance (ohm)	4	4	4	8	8
RMS Power (watts)	100	150	170	100	90

PHYSICAL DIMENSIONS

Model (inches)	S400	S500	S600	S6.0mx3	S.0ta/s
Total Diameter (A)	5	5.5	6.3	6.3	2.3
Mounting Diameter (B)	4.2	5	5.4	5.4	2
Screw Hole Diameter (C)	4.5	5.2	5.9	5.9	n/a
Mounting Depth (D)	1.8	2.1	2.4	2.4	0.8
Magnet Diameter (E)	3	3.5	3.8	3.8	n/a



Warranty

Diamond Audio warrants this product to be free from defects in material and workmanship under normal use for a period of one (1) year from date of original purchase. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Diamond Audio will replace or repair (at our discretion) the defective merchandise at no charge.

This warranty is valid only to the original purchaser and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether expressed or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties; therefore these exclusions may not apply to you.

This warranty gives you specific legal rights; however you may have other rights that vary from state to state. If your Diamond Audio speakers need service, defective merchandise must be returned to your local Authorized Diamond Audio dealer for warranty. Return only the defective component. Non-defective items received will be returned freight collect. Freight damage and return shipping is not covered under warranty. Include proof-of-purchase with the returned items. Warranty expiration on items returned without proof-of-purchase will be determined from the manufacturing date code. You can confirm that a dealer is authorized for service by the display of a current authorized dealer window decal. Any questions can be directed to the Warranty Department at (480) 813-6200. This warranty is valid only if the product is used for the purpose for which it was designed. It does not cover:

- The cost of shipping this product to Diamond Audio's Service Department
- Damage through negligence, misuse, abuse or accident
- Damage caused by exposure to water and/or excessive heat
- Items ripped, torn, or physically damaged due to abuse
- Speakers with silicone or caulk used for gasket material
- Return shipping if defective drivers are returned with any kind of enclosure
- Items returned from unauthorized individuals or dealers
- Items previously repaired by any unauthorized repair facility

International customers: please contact your International Diamond Audio dealer or distributor concerning specific procedures for your country's warranty policies. If you are not able to locate your local distributor, please contact Diamond Audio at (480) 813-6200 for assistance in contacting the distributor servicing your country.



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