



DIAMOND
AUDIO

DES Series SPEAKERS

Owners Manual

DES525/DES652/DES682/DES692/DESTAK/DESK3/
DES65C/DES365C/DES65V/DES69C

ABOUT THE DIAMOND AUDIO EXPERIENCE

Congratulations, you have just purchased the finest mobile audio products on the market to date. At Diamond Audio, our products represent the latest advances in acoustic technology in sound reproduction for your vehicle. Diamond Audio products are designed, developed, and engineered using the latest innovative materials and components to provide the finest sound reproduction possible. Every Diamond Audio product has been Klippel verified and tested to ensure the best sounding and most reliable product on the market, if 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 sound for many years to come.

Diamond Audio recommends our products be professionally installed by an authorized Diamond Audio dealer to achieve the best possible system recommendation and installation. This will ensure a true Diamond Audio listening experience and sound you would expect from Diamond Audio products. In doing this you will extend your warranty from one year to two years.

Go ahead, Hear the Music

FEATURES

- Composite foam core carbon fiber cone
- (Aluminum cone on DES65V)
- 25mm aluminum dome tweeter with Ferro fluid cooling
- Composite ABS frame design
- External 18dB/octave SQ matched crossover with RAF (rear acoustic fill) output (used on DES65C,DES65V,DES69C)

PARTS LIST

DES525,DES652,DES682,DES692

- (2) DES Coaxial Speakers
- (2) Mounting Gaskets
- (1) Mounting Hardware Kit

DESTAK,DESK3,DES65C,DES365C,DES69C

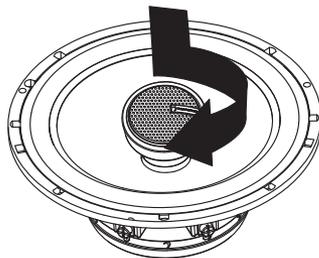
- (2) DES Component Speakers (except DESTAK)
- (2) DES Component Tweeters (except DESK3)
- (2) DES Model Specific Crossovers
- (2) Mounting Gaskets
- (1) Mounting Hardware Kit

DES65V

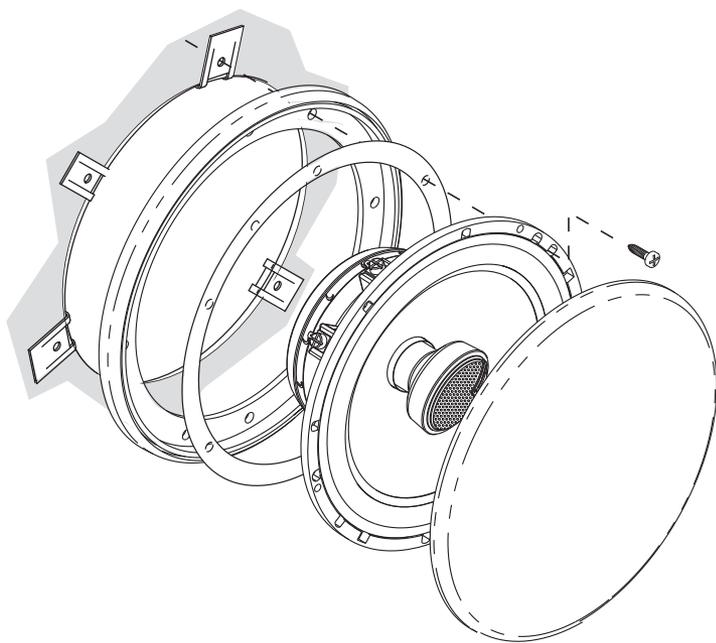
- (2) DESV Convertible Speakers
- (2) DESV Model Specific Crossovers
- (2) Mounting Gaskets
- (1) Mounting Hardware Kit
- (2) DES tweeters

TWEETER CONFIGURATION (OPTIONAL - FOR DES65V - ONLY!)

You have the option of configuring your speakers as a coaxial system (tweeter attached) or a component system (tweeter separate). If your choice is to use as a coax then you will need to attach the tweeter to the midrange. Locate the supplied tweeter post support and attach the tweeter as shown. Remove the rubber boot from the midrange, guide the tweeter wires down through the middle of the midrange. Guide the tweeter wires so that they lay in the groove of the inside of the rubber boot as it is replaced. Attach wires to the proper terminals.

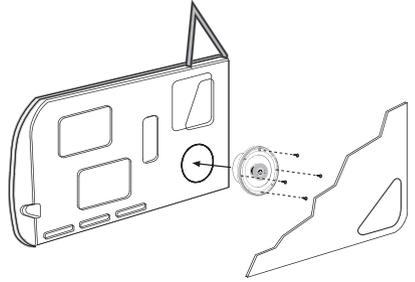


MID-BASS SPEAKER MOUNTING

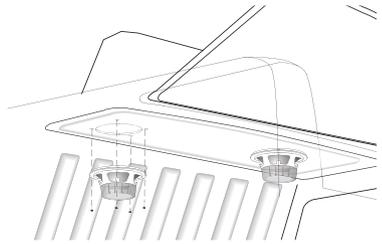


MIDRANGE MOUNTING

Determine a location in the door that will accept the size of your new speaker. Remove the door panel from the door and check for clearance in the intended speaker location while operating window all the way up and down. Avoid cutting any structural metal to mount the speakers or to accommodate additional depth. If depth or a flat surface mount are an issue, please seek the skills of a professional installation technician.



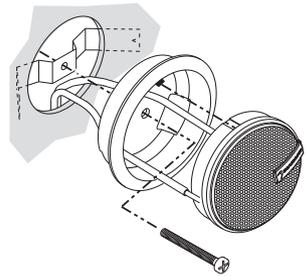
If you are mounting the speakers in the rear of the vehicle, there are often two options for achieving a good mount. Some speakers mount from the top side (from the interior) while other applications have the speakers mounted from the bottom side (from the trunk). In either case, a flat mounting surface and a good seal are still extremely important.



TWEETER MOUNTING

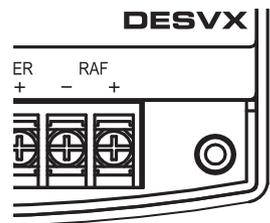
When flush mounting tweeters, make sure the desired location can accommodate the hole size and depth required. Mount the cup using provided hardware. Mount surface cup at desired angle with provided screws in tweeter mounting kit. Route speaker wires through tweeter cup, connect tweeter to wires, and snap tweeter into cup by aligning the notches.

Mounting Hole size: 1.73" (44mm) Dia.



RAF(REAR ACCOUTIC FILL -AND HOW TO USE IT)

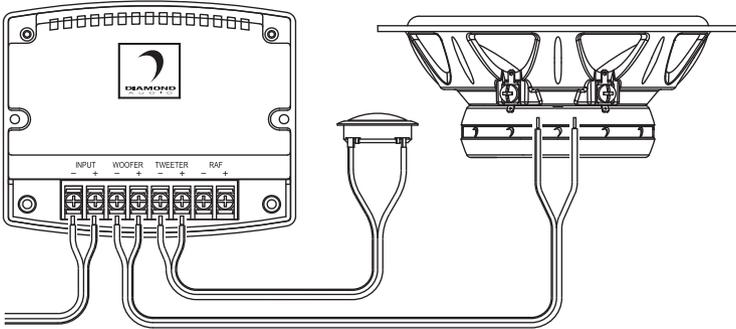
There is a special proprietary feature with Diamond Audio passive crossovers (2 ways only) Its called RAF (Rear Acoustic Fill) . It makes a car "image and stage" better than any front/ rear fader on a radio can do. You can bridge your 4 channel amplifier for triple the power (and way more dynamic range) to your front midbass drivers, then connect your rear speaker to our RAF circuit. This circuit automatically reduces the rear speaker level by -10dB.



SYSTEM CONNECTION

DES65C/DES69C/DES65V

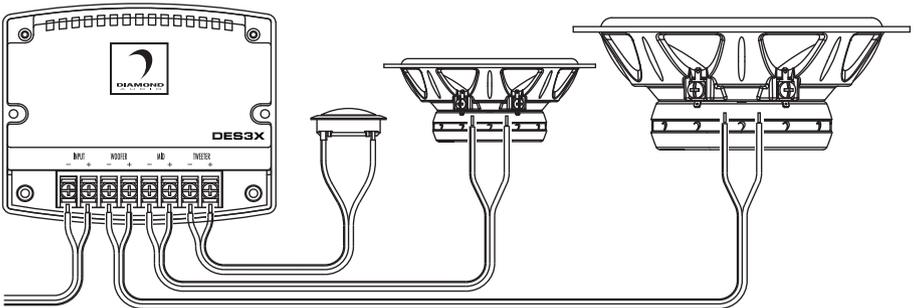
Each DES crossover has a tweeter attenuation jumper and a phase adjustment located under the removable cover. Choose “+2dB” or “0” or “-2dB”. If the tweeter is significantly closer to the listener than the midrange, this adjustment should improve the frequency level balance. Choose “0” or “180” by aligning the jumpers vertically or horizontally as shown inside the crossover. This adjustment may improve frequency response depending on the tweeter mounting location relative to the midrange.



DES365C

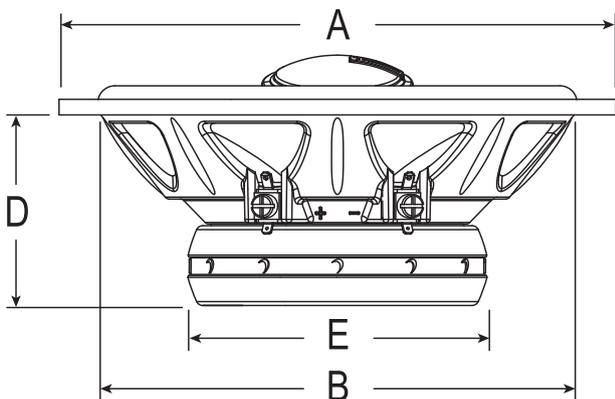
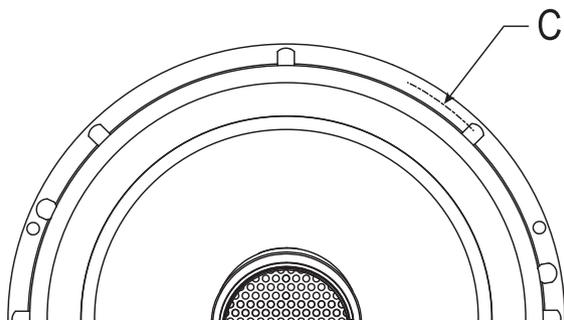
In addition to the tweeter/mid attenuation and phase adjustment function.

Each DES3X crossover has a tweeter phase switch located under the removable cover. Choose “0” or “180”. This adjustment may improve frequency response depending on the tweeter mounting location relative to the midrange.



PHYSICAL DIMENSIONS

Dimension	Unit	DES525	DES652	DES682	DES692/DES69C	DES65C	DES65V	DESK3	DES365C	
									6.5"	3.5"
Total Diameter (A)	in. mm	5.57 142.0	6.51 165.5	8.65 x 5.53 219.8 x 140.6	9.20 x 6.40 233.9 x 162.8	6.51 165.5	6.51 165.5	3.43 87.0	6.51 165.5	3.43 87.0
Mounting Diameter (B)	in. mm	4.62 117.3	5.53 140.6	6.92 x 4.95 176.0 x 125.8	8.46 x 5.79 215 x 147.1	5.53 140.6	5.53 140.6	2.81 71.3	5.53 140.6	2.81 71.3
Screw Hole Dia. (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	6.14 156.0	6.14 156.0	3.15 80.0	6.14 156.0	3.15 80.0
Mounting Depth (D)	in. mm	2.10 53.3	2.26 57.5	2.18 55.6	2.83 71.8	2.26 57.5	2.26 57.5	1.56 39.7	2.26 57.5	1.56 39.7
Magnet Diameter (E)	in. mm	3.11 79.0	3.50 87.0	3.11 79.0	4.21 106.4	3.50 87.0	3.50 87.0	2.58 65.5	3.50 87.0	2.58 65.5
Max Power	Watt	100	120	100	150	120	150	50	140	
Sensitivity	dB	85	87	86	84	87	88	83	87	
Freq. Response	Hz	70-20k	69-20k	75-20k	60-20k	69-20k	60-20k	130-8k	69-20k	



LIMITED SPEAKER WARRANTY STATEMENT

Diamond Audio Technologies, (CV & DA HOLDINGS INC.) 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. Product warranty period starts at date of purchase or one year past manufacture date whichever is first. However, upon purchase, completion of the online registration and installation by an authorized DAT dealer your warranty period will be extended to two (2) years. This warranty extension offer will only be recognized upon completion of the online registration of your product within 30 days of the date of purchase.

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 and completion of online registration 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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