

KICKER®
KS COAXIAL SPEAKER
AND 3-WAY SYSTEM

KS6930, KS690, KS680, KS650, KS600
KS5250, KS4100, KS460, KS400, KS350



Models: KS6930 / KS690 / KS680 / KS650 / KS600
KS5250 / KS4100 / KS460 / KS400 / KS350

Authorized Kicker Dealer: _____

Purchase Date: _____

Speaker Model Number: _____

Congratulations on your KICKER purchase

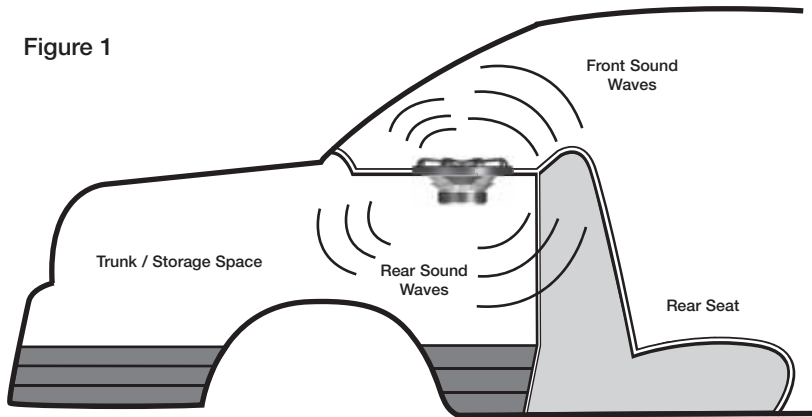
Please record your purchase information and keep your sales receipt for validation of warranty.

Your KS coaxials were specially designed for "Livin' Loud" out in the harsh automotive environment. They are made of advanced materials and construction techniques to maintain optimal performance for years to come.

Application

The Kicker KS coaxial speakers are specifically designed for mounting in free-air applications. The speakers do not require a sealed enclosure for optimum performance. It is important to isolate the sound coming off the front of the driver from the sound radiating from the back of the driver. This isolation is usually accomplished by using the driver in a factory speaker location, or in a location with a semi-isolated rear chamber. See Figure 1.

Figure 1



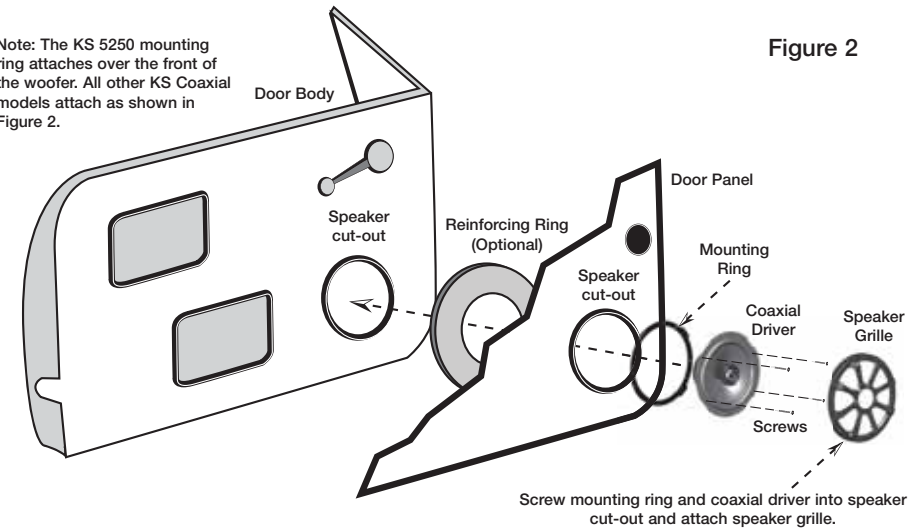
Location

The sound produced by the KS coaxials is directional. Find the best location for stereophonic sound. If necessary, add more KS coaxial speakers to the system to help distribute and balance the sound. After determining the best mounting locations, carefully check the areas where the mounting hardware will be placed. See Figure 2.

Please allow two weeks of break-in time for the speaker to reach optimum performance.

Note: The KS 5250 mounting ring attaches over the front of the woofer. All other KS Coaxial models attach as shown in Figure 2.

Figure 2



Mounting

If you are replacing factory speakers in their original locations, you may have to enlarge the speaker cut-outs and pre-drill new screw holes using a 7/64" (2.5mm) bit. Custom mounting locations will require more preparation and work. In either case, make sure the speaker will not interfere with the trunk and door opening and closing mechanisms, and the enclosed screws will not puncture the fuel tank, wiring, or interfere with any other mechanical parts on the underside of the mounting surface. Cycle the windows all the way down and up.

If the speaker cut-out locations require you to cut metal, avoid structural metal and braces. If the door body and panel cannot support the weight of the speaker, an optional reinforcing ring (thin piece of wood or Medium Density Fiberboard) may be fastened or adhered to the door body. Mount the speaker to the vehicle as outlined in Figure 2.

If factory speaker wiring is not available in your desired location, it may be necessary to run speaker wire through the door jamb. The speaker wire should be kept away from sharp edges and avoid the possibility of getting pinched by the door. An existing grommet in the door jamb is the ideal place to run the speaker wire. If the factory hole and grommet do not exist or are inaccessible, you must drill a hole to run the speaker wire through the door jam. Be careful not to drill into other wiring or door mechanisms. Any time a wire is run through a hole, it is necessary to insert a rubber or plastic grommet to protect the wire from damage as outlined in Figure 3.

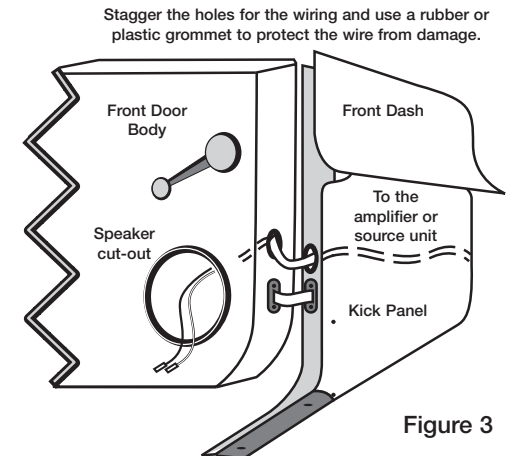
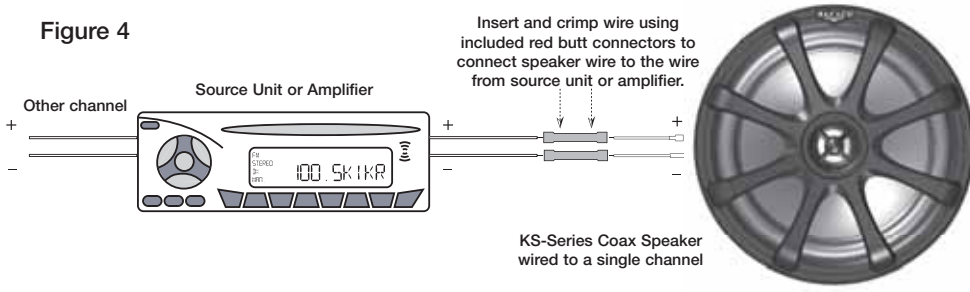


Figure 3

If the supplied hardware is not applicable to your installation, some other means of securely attaching the speakers to the vehicle must be used.

Figure 4



Wiring to a single channel

Hooking up the supplied wires to your Kicker KS-Series Coax Speakers is easy. One end of each wire is terminated with a large and a small connector. The larger connector is crimped to the gray wire and connects to the larger positive terminal of the speaker. The smaller connector is crimped to the black wire and connects to the smaller negative terminal of the speaker. The other end of these wires connects to your source unit or amplifier with the four (4) included red butt crimp-down style connectors. The gray wire connects to the positive output of the amplifier or source unit. The black wire connects to the negative output of the amplifier or source unit. These connections can also be made with solder and heat shrink or electrical tape to prevent electrical shorting of the speakers. See Figure 4.

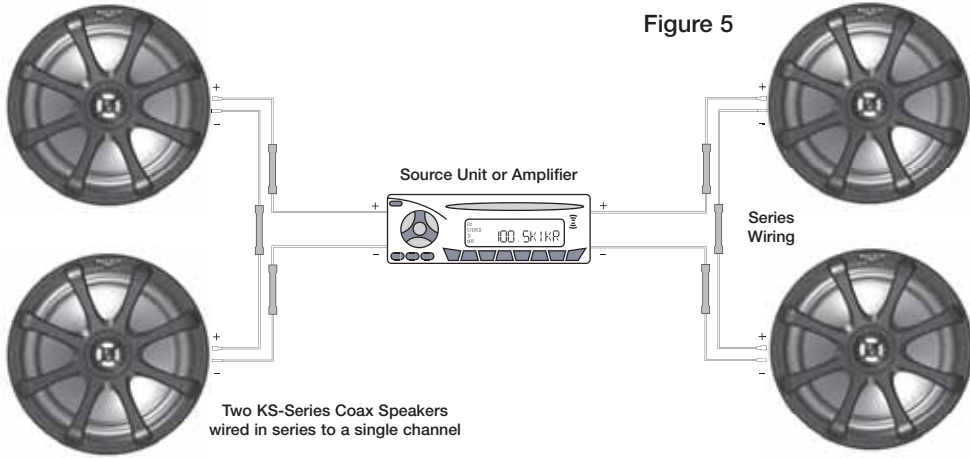


Figure 5

Wiring two KS-Series Coax Speakers to a single channel

Modern high performance coaxial speakers have a lower DC Resistance than what used to be available. The Kicker KS-Series Coax Speakers are rated at four ohms and work with any source unit or amplifier designed to operate at a four ohm load. If you want to use two KS-Series Coax Speakers on each channel of your source unit or amplifier wire the speakers in series, as shown above. This will improve the sound quality, lower the total harmonic distortion and lessen the thermal load at the source unit or amplifier. This may prevent an amplifier from shutting down, due to over-current protection circuitry.

Note: All specifications and performance figures are subject to change. Please visit the www.kicker.com for the most current information. To get the best performance from your new Kicker speakers, we recommend using genuine Kicker Accessories and Wiring.

Performance

Model:	KS350	KS400	KS460	KS4100	KS5250
Speaker Design	2 - Way	2 - Way	2 - Way	2 - Way	2 - Way
Woofer Size, in (mm)	3 1/2 (89)	4 (100)	4x6 (100x150)	4x10 (100x250)	5 1/4 (130)
Tweeter Size, in (mm)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	3/4 (20)
Rated Impedance, ohm	4	4	4	4	4
DC Resistance, ohm	3	3	3	3	3
Power Range, Watts RMS	6-20	6-30	6-30	6-35	6-45
Peak Power Handling, Watts	40	60	60	70	135
Sensitivity [SPL ₀], dB @ 1W, 1m	88	88	88	88	90
Effective Frequency Range, Hz	80-20k	60-20k	50-20k	45-20k	45-21k
Mounting Hole Diameter, in (mm)	3 3/16 (81)	3 11/16 (94)	5 3/4 x 3 1/2 (146x89)	3 7/8 x 9 5/16 (98x237)	4 9/16 (116)
Top Mount Depth, in (mm)	1 9/16 (40)	1 13/16 (46)	1 13/16(46)	2 7/16 (62)	2 (51)
Bottom Mount Depth, in (mm)	1 7/8 (48)	2 1/16 (52)	2 (51)	2 3/4 (70)	2 1/4 (57)
Tweeter Protrusion, in (mm)	1/4 (6.4)	1/8 (3.2)	1/16 (1.6)	0 (0)	1/16 (1.6)

Specifications common to all models:

- Tweeter Magnet Material - Neodymium
- Tweeter Dome Material - Kaledex
- Tweeter Design - Balanced Dome
- Woofer Cone Material - Polypropylene
- Woofer Surround Material - Santoprene

Pro Tip: You are one Kicker Loaded-Subwoofer enclosure, one ZX Mono-Amplifier and a few cables away from a slammin' system! The Kicker ZX line of mono-amplifiers make it easy to upgrade to solid bass with your existing or stock source unit. Please ask your dealer about the Kicker Comp and CompVR Subwoofer upgrades.

If you have any questions about the installation of your Kicker KS-Series Coax Speakers, see the Authorized Kicker Dealer where you made your purchase. For more advice on installation, click on the SUPPORT tab on the Kicker homepage, www.kicker.com. Choose the Technical Support tab, choose subject you are interested in, and then download or view the corresponding information. Please E-mail support@kicker.com or call Technical Services (405) 624-8583 for specific or unanswered questions.

Kicker warrants this product to be free from defects in material and workmanship under normal use for a period of THREE (3) MONTHS from date of original purchase with receipt. When purchased from an Authorized KICKER Dealer it is warranted for ONE (1) YEAR from date of original purchase with receipt. In all cases you must have the original receipt. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Kicker will repair or replace (at its discretion) the defective merchandise with equivalent merchandise at no charge. Warranty replacements may have cosmetic scratches and blemishes. Discontinued products may be replaced with more current equivalent products.

This warranty is valid only for 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 express 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.

WHAT TO DO IF YOU NEED WARRANTY OR SERVICE

Defective merchandise should be returned to your local Authorized Stillwater Designs (Kicker) Dealer for warranty service. Assistance in locating an Authorized Dealer can be found at www.kicker.com or by contacting Stillwater Designs directly. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to return defective merchandise directly to Stillwater Designs (Kicker), call the Kicker Customer Service Department at (405) 624-8510 for a Return Merchandise Authorization (RMA) number. Package all defective items in the original container or in a package that will prevent shipping damage, and return to:

Stillwater Designs, 5021 North Perkins Road, Stillwater, OK 74075

The RMA number must be clearly marked on the outside of the package. Please return only defective components. The return of functioning items increases your return freight charges. Non-defective items will be returned freight-collect to you.

Include a copy of the original receipt with the purchase date clearly visible, and a "proof-of-purchase" statement listing the Customer's name, Dealer's name and invoice number, and product purchased. Warranty expiration on items without proof-of-purchase will be determined from the type of sale and manufacturing date code. Freight must be prepaid; items sent freight-collect, or COD, will be refused.

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed. It does not cover:

- o Damage due to improper installation
- o Subsequent damage to other components
- o Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation
- o Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse
- o Any cost or expense related to the removal or reinstallation of product
- o Speakers damaged due to amplifier clipping or distortion
- o Items previously repaired or modified by any unauthorized repair facility
- o Return shipping on non-defective items
- o Products with tampered or missing barcode labels
- o Products returned without a Return Merchandise Authorization (RMA) number
- o Freight Damage
- o The cost of shipping product to Kicker
- o Service performed by anyone other than Kicker

HOW LONG WILL IT TAKE?

Kicker strives to maintain a goal of 24-hour service for all acoustics (subwoofers, midrange and coaxial drivers, tweeters, crossovers, etc) returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

Failure to follow these steps may void your warranty. Any questions can be directed to the Kicker Customer Service Department at (405) 624-8510.

P.O. Box 459 • Stillwater, Oklahoma 74076 • U.S.A. • (405) 624-8510 08312007-J+08KS



Performance

Model:	KS600	KS650	KS680	KS690	KS6930
Speaker Design	2 - Way	2 - Way	2 - Way	2 - Way	3 - Way
Woofer Size, in (mm)	6 (160)	6 1/2 (165)	6x8 (150x200)	6x9 (150x230)	6x9 (150x230)
Tweeter Size, in (mm)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25.4)	3/4 (20)
Rated Impedance, ohm	4	4	4	4	4
DC Resistance, ohm	3	3	3	3	3
Power Range, Watts RMS	6-65	6-65	6-60	6-90	6-100
Peak Power Handling, Watts	195	195	180	270	300
Sensitivity [SPL ₀], dB @ 1W, 1m	90	90	90	92	92
Effective Frequency Range, Hz	43-21k	40-21k	45-21k	30-21k	30-21k
Mounting Hole Diameter, in (mm)	5 (127)	5 5/8 (143)	5x7 (127x178)	6x8 9/16(152x217)	6x8 9/16(152x217)
Top Mount Depth, in (mm)	1 15/16 (49)	2 1/8 (54)	2 3/8 (60)	3 3/16 (81)	3 3/16 (81)
Bottom Mount Depth, in (mm)	2 1/4 (57.2)	2 3/8 (60)	2 3/4 (70)	3 5/8 (92)	3 5/8 (92)
Tweeter Protrusion, in (mm)	3/16 (4.8)	3/16 (4.8)	0 (0)	0 (0)	5/8 (15.9)

Specifications common to all models:

- Tweeter Magnet Material - Neodymium
- Tweeter Dome Material - Kaladex
- Tweeter Design - Balanced Dome
- Woofer Cone Material - Polypropylene
- Woofer Surround Material - Santoprene

Pro Tip: You are one Kicker Loaded-Subwoofer enclosure, one ZX Mono-Amplifier and a few cables away from a slammin' in system! The Kicker ZX line of mono-amplifiers make it easy to upgrade to solid bass with your existing or stock source unit. Please ask your dealer about the Kicker Comp and CompVR Subwoofer upgrades.

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