



KICKER®
DS COAXIAL SPEAKER
AND 3-WAY SYSTEM

DS350, DS400, DS460, DS5250
DS600, DS650, DS680, DS6930



Models: DS350 / DS400 / DS460 / DS5250 / DS600 / DS650 / DS680 / DS6930

Congratulations on your KICKER purchase

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

Authorized Kicker Dealer: _____

Purchase Date: _____

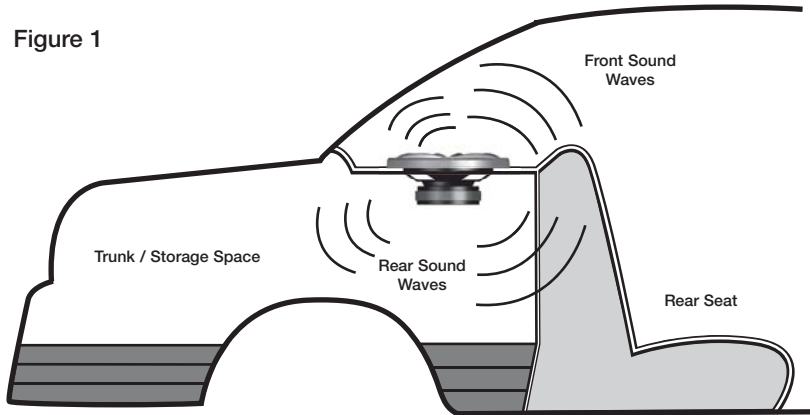
Speaker Model Number: _____

Your DS 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 DS 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.

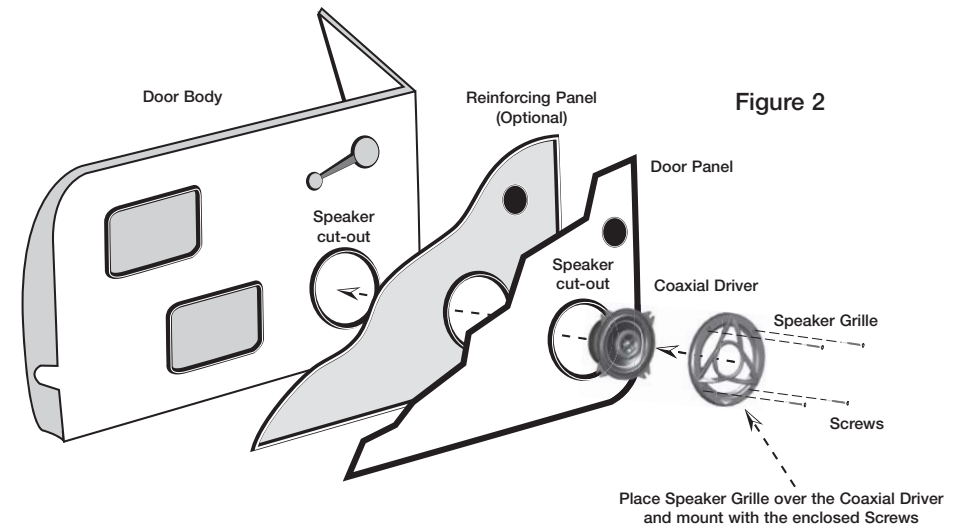
Figure 1



Location

The sound produced by the DS coaxials is directional. Find the best location for stereophonic sound. If necessary, add more DS 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.



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 panel (thin piece of wood or Medium Density Fiberboard) may be sandwiched between the panels. 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 the supplied 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 jamb. Be careful not to drill into other wiring or exiting 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.

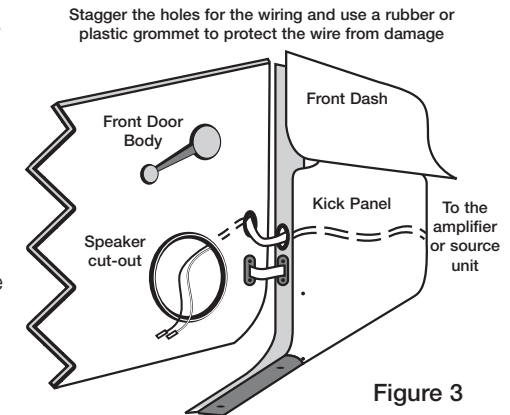
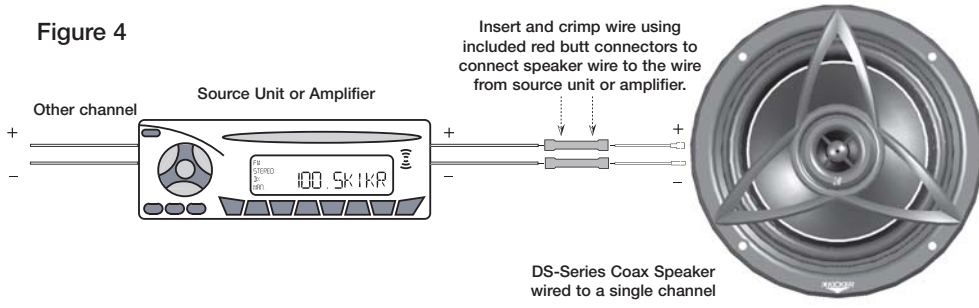


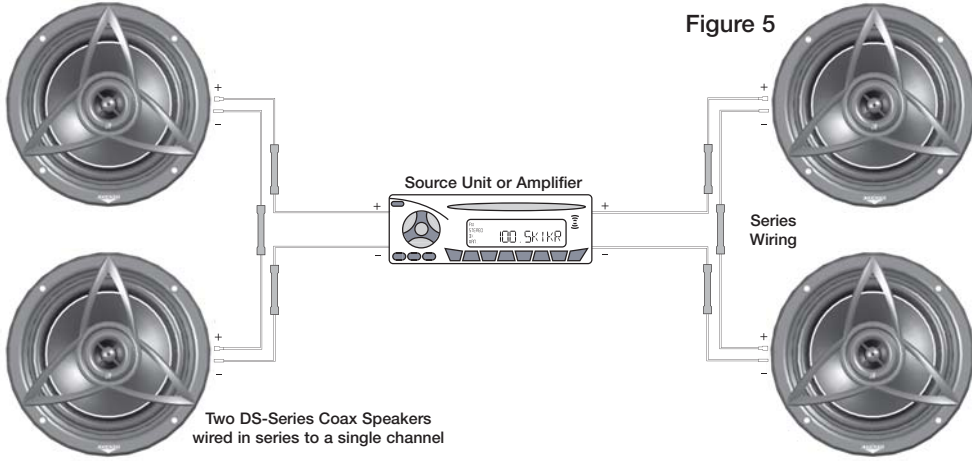
Figure 3

Figure 4



Wiring to a single channel

Hooking up the supplied wires to your Kicker DS-Series Coax Speakers is easy. The 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.



Wiring two DS-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 DS-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 DS-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:	DS350	DS400	DS460	DS5250	DS600	DS650	DS680	DS6930
Speaker Design	2 - Way	2 - Way	2 - Way	2 - Way	2 - Way	2 - Way	2 - Way	3 - Way
Woofer Size, in (mm)	3 1/2 (89)	4 (100)	4x6 (100x160)	5 1/4 (130)	6 (160)	6.5 (165)	6x8 (160x200)	6x9 (160x230)
Tweeter Size, in (mm)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)
Rated Impedance, ohm	4	4	4	4	4	4	4	4
DC Resistance, ohm	3	3	3	3	3	3	3	3
Power Range, Watts RMS	6-15	6-25	6-25	6-35	6-50	6-50	6-35	6-70
Peak Power Handling, Watts	30	50	50	70	100	100	70	140
Sensitivity [SPL ₀], dB @ 1W, 1m	88	88	88	90	90	90	90	92
Effective Frequency Range, Hz	80-20k	60-20k	50-20k	45-20k	43-20k	40-20k	45-20k	30-20k
Mounting Hole Diameter, in (mm)	3 1/16 (78)	3 3/4 (95)	4x6 (101x152)	4 1/2 (115)	4 13/16 (123)	5 1/2 (140)	5x7 3/16 (127x183)	5 15/16x8 3/4 (151x222)
Top Mount Depth, in (mm)	1 3/4 (44)	1 13/16 (46)	1 7/8 (47)	1 7/8 (48)	1 7/8 (48)	1 13/16 (46)	2 3/8 (60)	3 1/4 (83)
Bottom Mount Depth, in (mm)	2 (51)	2 (51)	2 (51)	2 1/8 (53)	2 3/16 (55)	2 (51)	2 3/4 (70)	3 3/4 (95)
Tweeter Protrusion, in (mm)	3/16 (5)	1/4 (6)	1/4 (6)	3/16 (5)	1/4 (6)	3/16 (5)	1/16 (1)	3/8 (10)
Bolt Thru Grilles	No	Yes	No	Yes	Yes	Yes	No	Yes

Specifications common to all models:

- Tweeter Magnet Material - Neodymium
 - Tweeter Dome Material - PEI
 - Tweeter Design - Balanced Dome
 - Woofer Cone Material - Polypropylene
 - Woofer Surround Material - Ribbed Polyfoam
- Pro Tip:** You are one Kicker Loaded-Subwoofer enclosure, one ZX Mono-Amplifier and a few cables away from a slam 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.

If you have any questions about the installation of your Kicker DS-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.

Contact your International Kicker dealer or distributor concerning specific procedures for your country's warranty policies.

WARNING: KICKER products are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing. Please use common sense when controlling volume.

GARANTÍA INTERNACIONAL *Versión Español*

Comuníquese con su concesionario o distribuidor Kicker internacional para obtener información sobre procedimientos específicos relacionados con las normas de garantía de su país.

ADVERTENCIA: Los excitadores Kicker son capaces de producir niveles de sonido que pueden dañar permanentemente el oído. Subir el volumen del sistema hasta un nivel que produzca distorsión es más dañino para el oído que escuchar un sistema sin distorsión al mismo volumen. El dolor es siempre una indicación de que el sonido es muy fuerte y que puede dañar permanentemente el oído. Sea precavido cuando controle el volumen.

La frase "combustible para vivir la vida Livin' Loud™ a todo volumen" se refiere al entusiasmo por la vida que la marca Kicker de estéreos de automóvil representa y a la recomendación a nuestros clientes de que vivan lo mejor posible ("a todo volumen") en todo sentido. La línea de altavoces y amplificadores Kicker es la mejor del mercado de audio de automóviles y por lo tanto representa el "combustible" para vivir a todo volumen en el área de "estéreos de automóvil" de la vida de nuestros clientes. Recomendamos a todos nuestros clientes que obedezcan todas las reglas y reglamentos locales sobre ruido en cuanto a los niveles legales y apropiados de audición fuera del vehículo.

INTERNATIONALE GARANTIE *Deutsche Version*

Nehmen Sie mit Ihren internationalen Kicker-Fachhändler oder Vertrieb Kontakt auf, um Details über die Garantieleistungen in Ihrem Land zu erfahren.

WARNUNG: KICKER-Treiber können einen Schallpegel erzeugen, der zu permanenten Gehörschäden führen kann! Wenn Sie ein System auf einen Pegel stellen, der hörbare Verzerrungen erzeugt, schadet das Ihren Ohren mehr, als ein nicht verzerrtes System auf dem gleichen Lautstärkepegel. Die Schmerzschwelle ist immer eine Anzeige dafür, dass der Schallpegel zu laut ist und zu permanenten Gehörschäden führen kann. Seien Sie bei der Lautstärkeeinstellung bitte vernünftig!

Der Slogan "Treibstoff für Livin' Loud" bezieht sich auf die mit den Kicker-Autostereosystemen assoziierte Lebensfreude und die Tatsache, dass wir unsere Kunden ermutigen, in allen Aspekten ihres Lebens nach dem Besten ("Livin' Loud") zu streben. Die Lautsprecher und Verstärker von Kicker sind auf dem Markt für Auto-Soundsysteme führend und stellen somit den "Treibstoff" für das Autostereoelebnis unserer Kunden dar. Wir empfehlen allen unseren Kunden, sich bezüglich der zugelassenen und passenden Lautstärkepegel außerhalb des Autos an die örtlichen Lärmvorschriften zu halten.

GARANTIE INTERNATIONALE *Versión Française*

Pour connaître les procédures propres à la politique de garantie de votre pays, contactez votre revendeur ou distributeur International Kicker.

AVERTISSEMENT: Les haut-parleurs Kicker ont la capacité de produire des niveaux sonores pouvant endommager l'ouïe de façon irréversible ! L'augmentation du volume d'un système jusqu'à un niveau présentant une distorsion audible endommage davantage l'ouïe que l'écoute d'un système sans distorsion au même volume. Le seuil de la douleur est toujours le signe que le niveau sonore est trop élevé et risque d'endommager l'ouïe de façon irréversible. Réglez le volume en faisant preuve de bon sens !

L'expression "carburant pour vivre plein pot" fait référence au dynamisme de la marque Kicker d'équipements audio pour véhicules et a pour but d'encourager nos clients à faire le maximum ("vivre plein pot") dans tous les aspects de leur vie. Les haut-parleurs et amplificateurs Kicker sont les meilleurs dans le domaine des équipements audio et représentent donc pour nos clients le "carburant pour vivre plein pot" dans l'aspect "installation audio de véhicule" de leur vie. Nous encourageons tous nos clients à respecter toutes les lois et réglementations locales relatives aux niveaux sonores acceptables à l'extérieur des véhicules.

