

KICKER
KICKER 51KSS6904 6x9 2 Way
Component Speaker System



KICKER 51KSS6904 6x9 2 Way Component Speaker System Owner's Manual

[Home](#) » [KICKER](#) » KICKER 51KSS6904 6x9 2 Way Component Speaker System Owner's Manual 

Contents

- [1 KICKER 51KSS6904 6x9 2 Way Component Speaker System](#)
- [2 Overview](#)
- [3 Specifications](#)
- [4 Installation](#)
- [5 Crossover & Wiring Configuration](#)
- [6 Crossover Wiring](#)
- [7 Crossover Mounting](#)
- [8 Speaker Mounting](#)
- [9 Tweeter Mounting](#)
- [10 Pod Mounting](#)
- [11 Warranty](#)
- [12 Documents / Resources](#)
 - [12.1 References](#)
- [13 Related Posts](#)



KICKER 51KSS6904 6x9 2 Way Component Speaker System



Owner's Manual

KS COMPONENTS

KS Komponenten-System

Overview

IMPORTANT SAFETY WARNING

PROLONGED CONTINUOUS OPERATION OF AN AMPLIFIER, SPEAKER, OR SUBWOOFER IN A DISTORTED, CLIPPED OR OVER-POWERED MANNER CAN CAUSE YOUR AUDIO SYSTEM TO OVERHEAT, POSSIBLY CATCHING FIRE AND RESULTING IN SERIOUS DAMAGE TO YOUR COMPONENTS AND/OR VEHICLE. AMPLIFIERS REQUIRE UP TO 4 INCHES (10CM) OPEN VENTILATION. SUBWOOFERS SHOULD BE MOUNTED WITH AT LEAST 1 INCH (2.5CM) CLEARANCE BETWEEN THE FRONT OF THE SPEAKER AND ANY SURFACE. 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.

The KICKER KS speakers offer an excellent upgrade to your vehicle's factory sound system, delivering great full-range sound at an amazing value! Whether dropping the KS speakers in a factory location or customizing your install, their high efficiency design means less power is needed to play your music, while our use of advanced materials and construction techniques ensures optimal performance for years to come. Designed for versatile applications without sacrificing sound quality or aesthetics, we hope you have the chance to combine these new, upgraded audiophile components with our all-new KEY Smart Amplifiers and a KICKER sub for an audio experience you won't forget!

Specifications

| <i>KS Component Speakers</i> | KSS50 | KSS650 | KSS670 |
|--|--------------|---------------|---------------|
| Woofer [in, mm] | 5-1/4, 130 | 6-1/2, 160 | 6-3/4, 165 |
| Tweeter [in, mm] | 1, 25 | 1, 25 | 1, 25 |
| Dome Material | Silk | Silk | Silk |
| Rated Impedance [Ω] | 4 | 4 | 4 |
| Peak Power Handling [Watts] | 200 | 250 | 250 |
| Recommended Amplifier Power [Watts RMS] | 15-100 | 15-125 | 15-125 |
| Sensitivity [1W, 1m] | 88 | 90 | 91 |
| Frequency Response [Hz] | 38-21k | 35-21k | 35-21k |
| Woofer Mounting Hole Diameter [in, mm] | 4-1/2, 115 | 4-13/16, 123 | 5-9/16, 141 |
| Woofer Top Mount Depth [in, mm] | 1-3/4, 45 | 1-13/16, 46 | 1-13/16, 46 |
| Flush Mount Tweeter Hole Diameter [in, mm] | 1-3/4, 44 | 1-3/4, 44 | 1-3/4, 44 |
| Flush Mount Tweeter Depth [in, mm] | 11/16, 17 | 11/16, 17 | 11/16, 17 |
| High Pass [dB], at Frequency [Hz] | 12, 4,000 | 12, 4,000 | 12, 4,000 |
| Low Pass [dB], at Frequency [Hz] | None | None | None |
| High Frequency Output Attenuation [dB] | 0, 4.5, 9 | 0, 4.5, 9 | 0, 4.5, 9 |

| KS Component Speakers | KSS680 | KSS690 |
|--|----------------------|---------------------------|
| Woofer [in, mm] | 6×8, 160×200 | 6×9, 160×230 |
| Tweeter [in, mm] | 1, 25 | 1, 25 |
| Dome Material | Silk | Silk |
| Rated Impedance [Ω] | 4 | 4 |
| Peak Power Handling [Watts] | 250 | 300 |
| Recommended Amplifier Power [Watts RMS] | 15-125 | 15-150 |
| Sensitivity [1W, 1m] | 91 | 92 |
| Frequency Response [Hz] | 35-21K | 30-21K |
| Woofer Mounting Hole Diameter [in, mm] | 5×7-3/16, 127×182 | 5-11/16×8-7/16 144×215 |
| Woofer Top Mount Depth [in, mm] | 2-1/4, 58 | 3-3/16, 81 |
| Flush Mount Tweeter Hole Diameter [in, mm] | 1-3/4, 44 | 1-3/4, 44 |
| Flush Mount Tweeter Depth [in, mm] | 11/16, 17 | 11/16, 17 |
| High Pass [dB], at Frequency [Hz] | 12, 4,000 | 12, 4,000 |
| Low Pass [dB], at Frequency [Hz] | None | None |
| High Frequency Output Attenuation [dB] | 0, 4.5, 9 | 0, 4.5, 9 |

Note: All specifications and performance figures are subject to change. Please visit 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. Please allow two weeks of break-in time for the speakers to reach optimum performance.

Installation

Before mounting and wiring the KSS component system, determine which configuration you will use for the speakers.

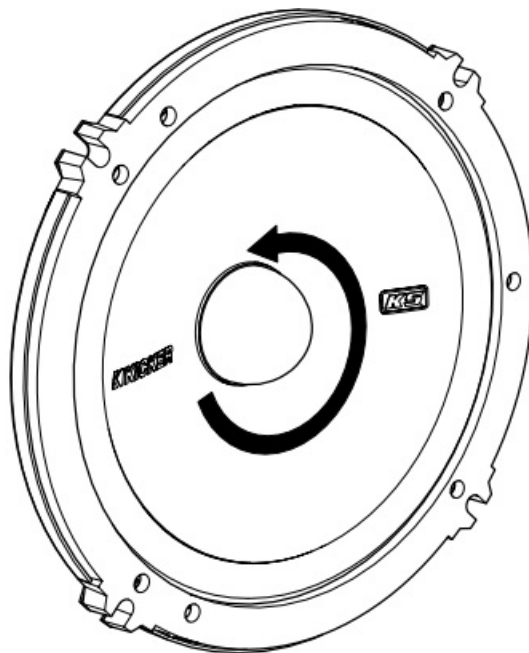
| KS Speaker Configurations | ADVANTAGES | CAVEATS |
|----------------------------------|--|--|
| Coaxial | great for space-limited applications or when separate as prominent tweeter output may need to be increased at possible | high frequencies may not be applications or when tweeter mounting is not may need to be in crossover |
| Components | optimal sound quality and improved sonic imaging (with proper tweeter mounting) | trickier install vehicle must have a good tweeter mounting location |

Coaxial Configuration

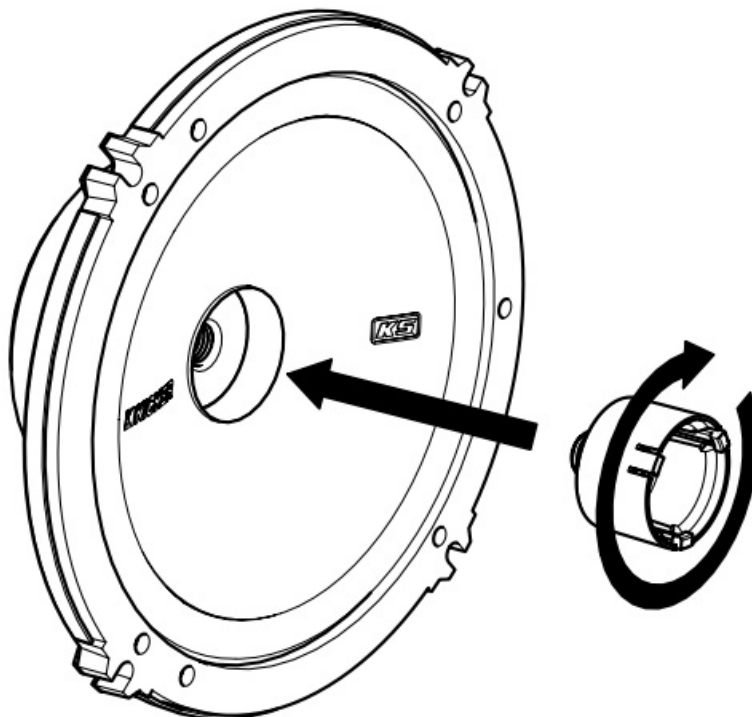
KICKER's latest KSS system allows for directional mounting of the KSS Tweeter in coaxial configuration up to 12 degrees. The KSS speakers come in a separates configuration. For coaxial operation, use the following steps to attach the tweeter.

- remove the phase plug

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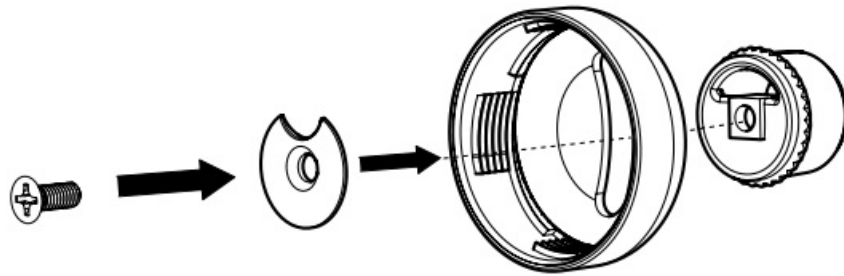


screw the lower tweeter post to the speaker

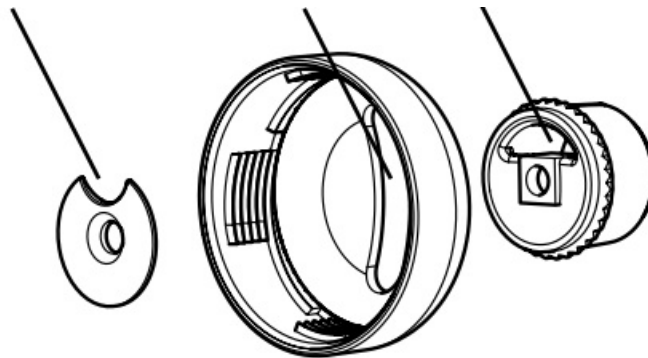


- Assemble the tweeter housing as shown, securing the tweeter cup to the upper tweeter post using the included screw and washer. Set the desired angle of the tweeter before tightening.

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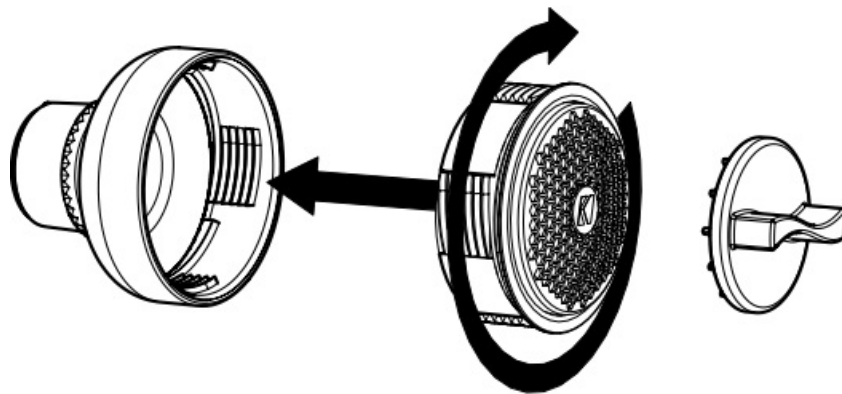


thread the tweeter wire through the washer, tweeter housing, and upper tweeter post

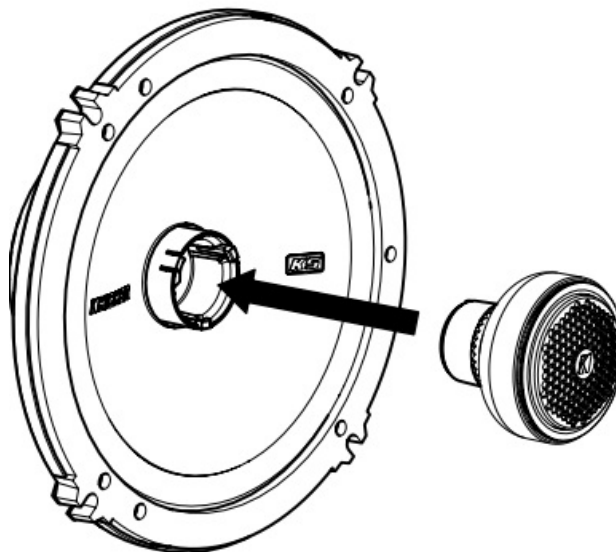


- Attach the tweeter to the tweeter housing using the included tweeter tool

•



Thread the tweeter wire through the lower tweeter post and insert the tweeter assembly to the tweeter post until it clicks into place



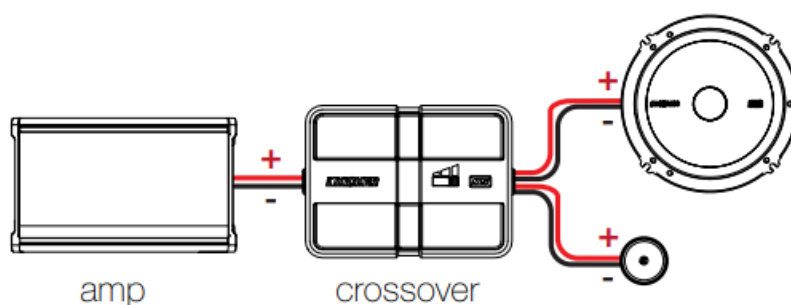
Crossover & Wiring Configuration

We recommend using 16 gauge (or larger) wire. The KS Speakers are rated at 4 ohms and work with any source unit or amplifier designed to operate at a 4 ohm load. Make sure your source unit or amplifier is rated for 4 ohm operation.

Use the tweeter attenuation switch to adjust the output level of the tweeter to 0 dB, +4.5 dB, or +9 dB. Higher switch settings will result in more volume from the tweeter.

Crossover Wiring

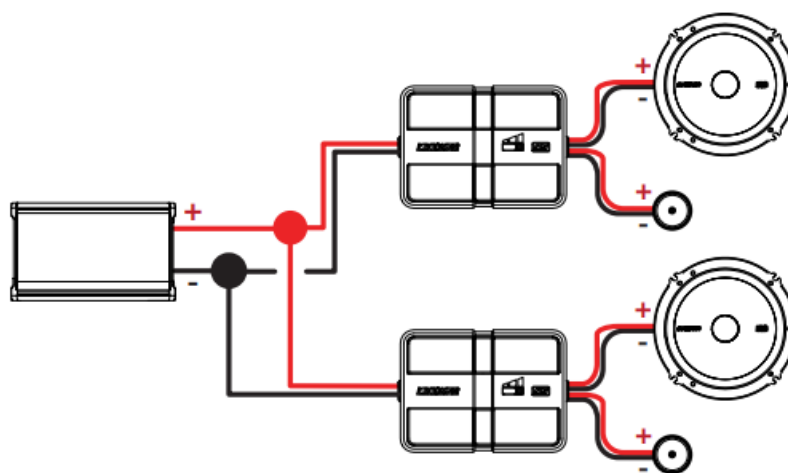
One component set per channel At least two amplifier channels are needed for stereo operation (only one channel is shown)



Pro Tip: You're a KICKER KX amplifier and a few cables away from a full system upgrade that will dominate any factory system! KICKER line of amplifiers make it easy to upgrade to solid bass with your existing or stock source unit. Also, ask your dealer about KICKER Subwoofer upgrades.

Crossover Wiring

Two component sets per channel At least two amplifier channels are needed for stereo operation (only one channel is shown)

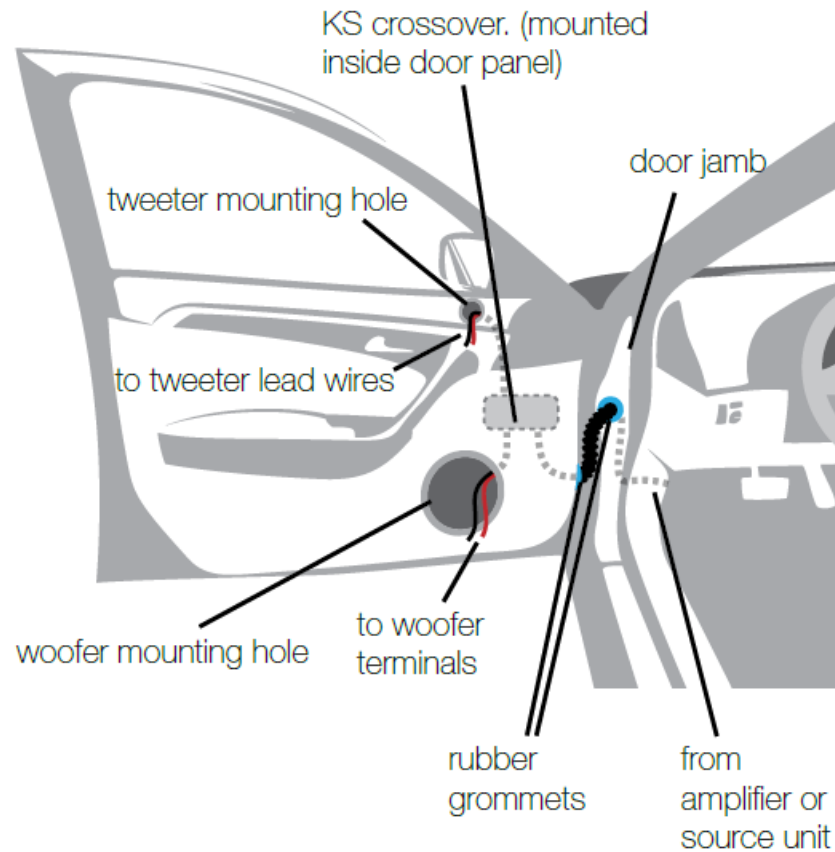


- Crossover Wiring
- Two component sets per channel
- At least two amplifier channels are needed for stereo operation (only one channel is shown)

Crossover Mounting

Mount the crossover in a location that is easy to access for wiring and tweeter output level adjustment. Make sure that the crossover will not be exposed to water. The bottom of the car door is not a good location. If you must

mount the crossover in the car door, exercise caution as water can accumulate in the bottom of the door. Keep the crossover high in the door and shielded from water.



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 jamb. Be careful not to drill into other wiring or existing 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.

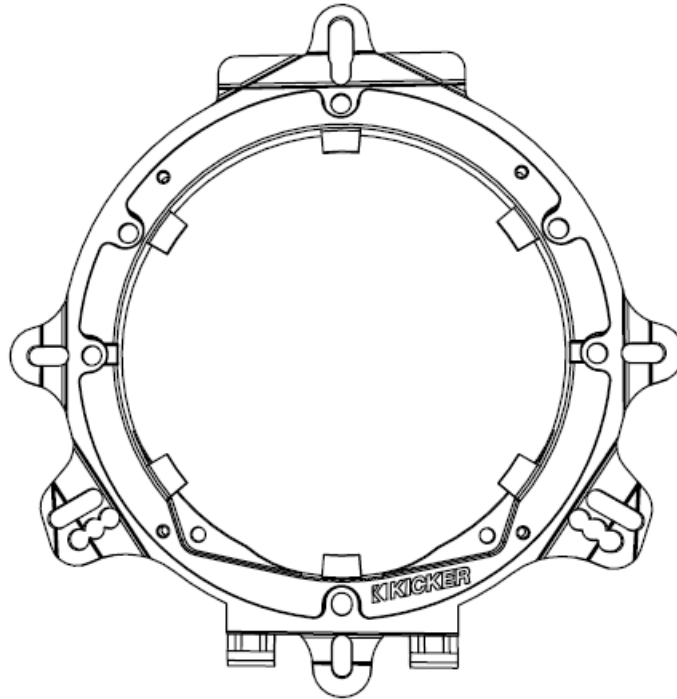
Speaker Mounting

- The KICKER KS Speakers are designed for free-air applications and do not require a sealed enclosure for optimum performance. It is important to isolate the sound coming from the front of the speaker from the sound radiating from the back of the speaker. This is most easily accomplished by mounting the speakers in a vehicle's factory locations or in a location with a semi-isolated rear chamber (like the rear deck of a car behind the rear seats).
- If you are replacing factory speakers in their original locations, you may need to use the included multi-purpose adapter, or modify it as such that it will fit your required screw patterns. You may also need 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. Make sure that the speaker will not interfere with trunk and door opening and closing mechanisms and that the enclosed screws will not puncture the fuel tank, puncture 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

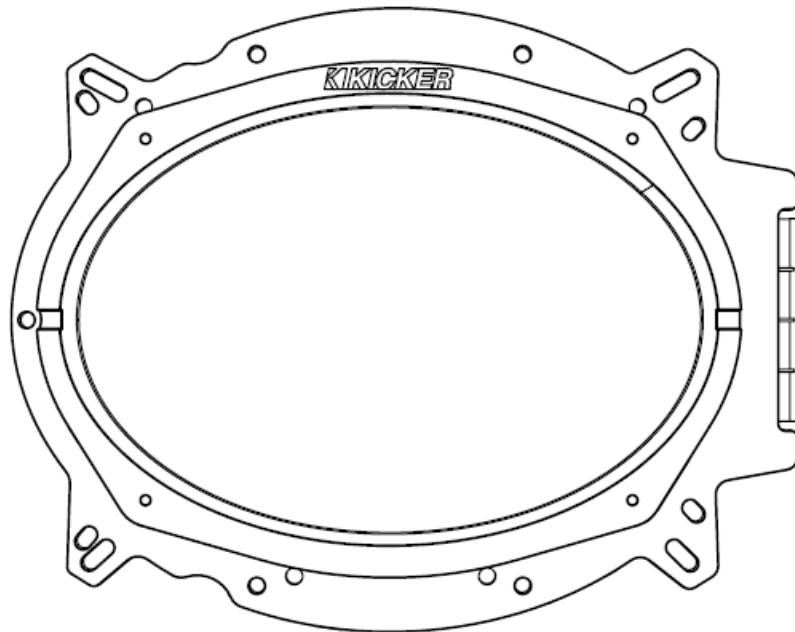
Density Fiberboard) may be fastened or adhered to the door body.

- The multi-bracket adapter will help accommodate the KSS speakers in factory or custom locations. You may need to cut off parts or otherwise modify these adapters to fit your vehicle or application.

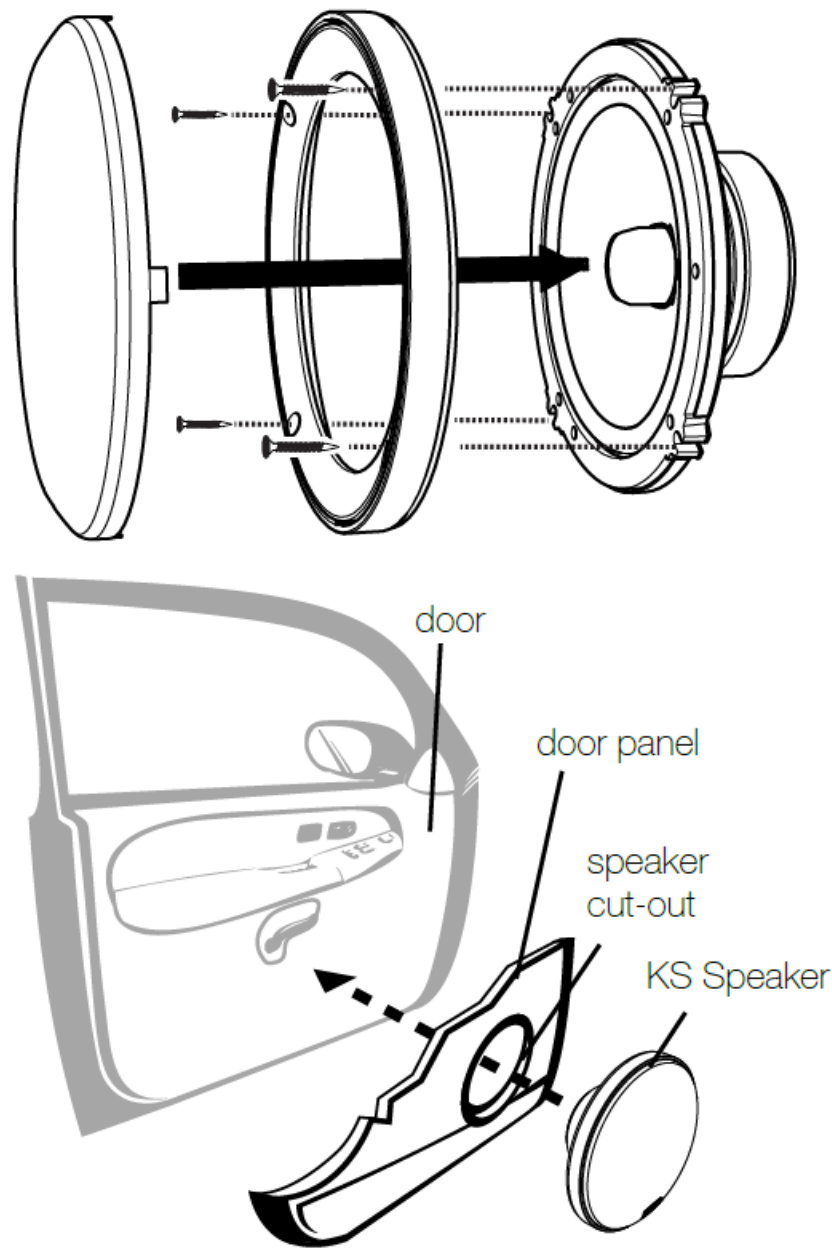
KS65/KS67 ADAPTER



KS69 ADAPTER



Secure speaker to desired location

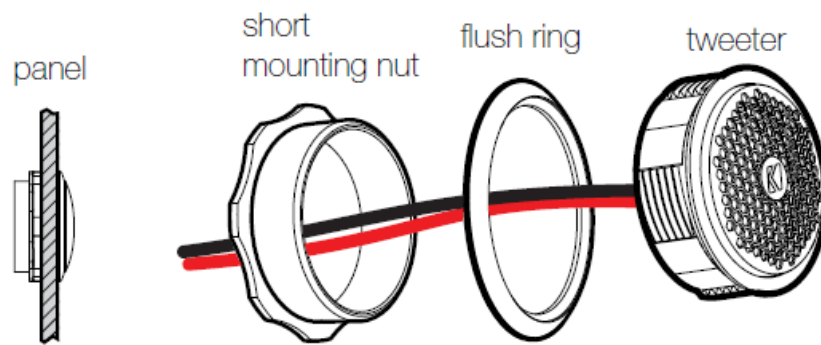


Tweeter Mounting

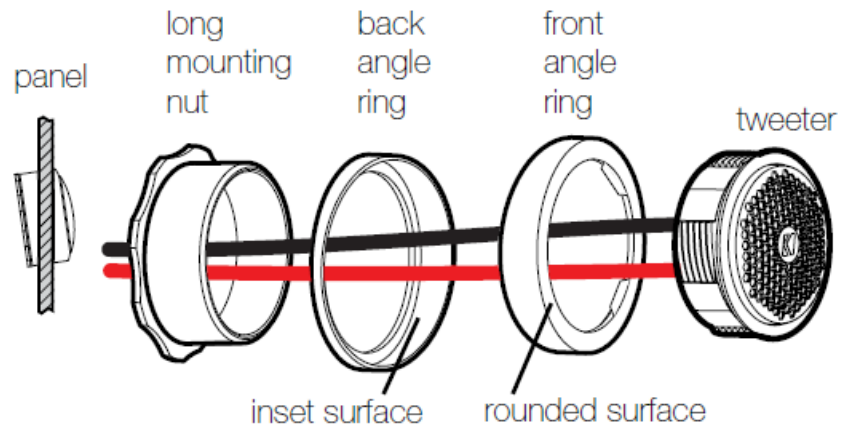
The tweeter can be separately mounted one of three ways: flush, angled and pod. For flush mounting applications, choose a flat location on the panel with space behind the panel to allow room for the short mounting nut, motor structure, and tweeter. After checking the clearances, cut a 1-3/4" (44mm) diameter mounting hole in the panel. Position the short mounting nut behind the panel. Feed the wire through the optional flush ring, the hole in the panel, and the mounting nut. Mount the tweeter by screwing the mounting nut onto the tweeter.

For angled mounting applications choose a flat location on the panel with space behind the panel to allow room for the long mounting nut, motor structure, tweeter post, and back angle ring. After checking the clearances, cut a 1-3/4" (44mm) diameter mounting hole in the panel. Place the front angle ring in front of the panel. Then place the wire and tweeter through the front angle ring and into the panel. Next, place the wire through the back angle ring, place the back angle ring over the rear of the tweeter, and line- up the narrow part of the front angle ring for the preferred angle of operation. Place the wire through the mounting nut and loosely tighten the mounting nut around the tweeter. Rotate all the parts in unison until the tweeter is angled in the desired direction. Secure the assembly by tightening the mounting nut.

Flush Mounting



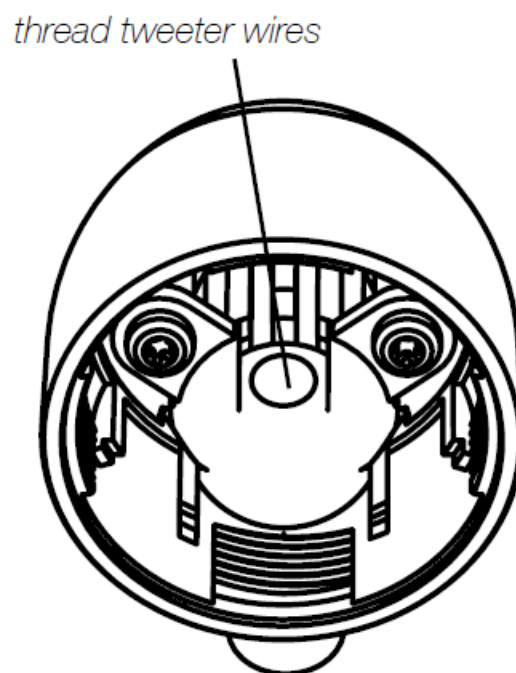
Angle Mounting

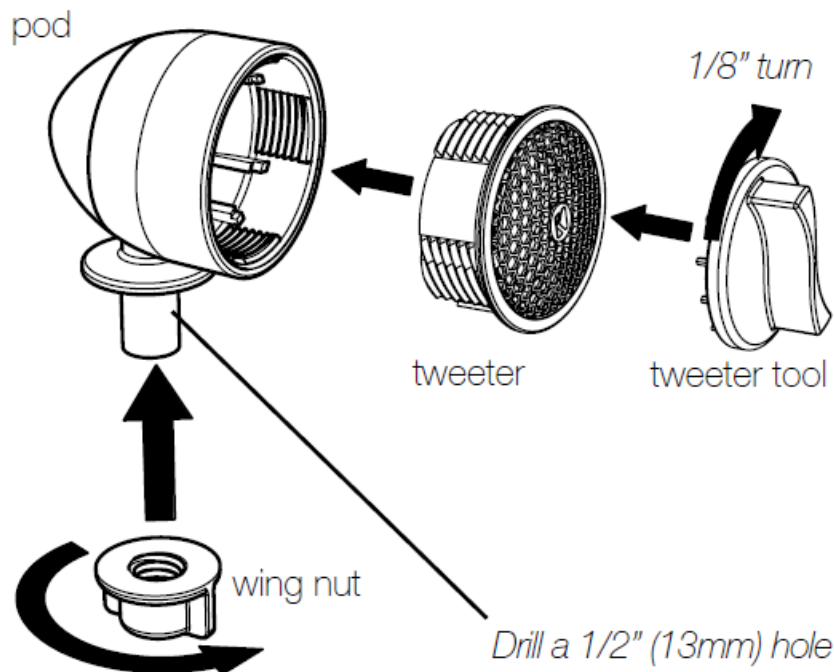


Use a 1/8 turn with tweeter tool to secure the tweeter to the mounting nut.

Pod Mounting

The tweeter pod not only allows you to mount the KSS tweeter in nearly any location or application, but can also rotate 360 degrees and be directionally aimed!





Warranty

When purchased from an Authorized KICKER Dealer, KICKER warrants this product to be free from defects in material and workmanship under normal use for a period of TWO (2) YEARS from date of original purchase with receipt. If this product is identified as "Refurbished" or "B Goods", the warranty is limited to a period of THREE (3) MONTHS from the date of original purchase. 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.

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](tel:405-624-8510) for a Return Merchandise Authorization (RMA) number. Package only the defective items in a package that will prevent shipping damage, and return to:

Stillwater Designs 3100 North Husband St 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. For example, if a subwoofer is defective, only return the defective subwoofer, not the entire enclosure. 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:

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


HOW LONG WILL IT TAKE?

KICKER strives to maintain a goal of one-week service for all acoustics (subwoofers, midrange 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](tel:405-624-8510). Contact your International KICKER dealer or distributor concerning specific procedures for your country's warranty policies.

Documents / Resources

| | |
|---|--|
|  | <p>KICKER 51KSS6904 6x9 2 Way Component Speaker System [pdf] Owner's Manual 51KSS6904, 20651KSS69, 51KSS6904 6x9 2 Way Component Speaker System, 51KSS6904, 6x9 2 Way Component Speaker System, Component Speaker System, Speaker System</p> |
|---|--|

References

-  [Car Audio, Home & Personal Audio | KICKER®](#)
- [User Manual](#)

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