



KICKER®

K5-SERIES TWEETERS

WIN' LOUD

OWNER'S MANUAL
K525, K520, K513



KS-Series Tweeters Owner's Manual

Models: KS25 / KS20 / KS13

Attention:

Please record your purchase information in the area below. We recommend attaching the original sales receipt to this manual for future reference.

If you require service on this speaker during the warranty period, you will need to provide this information and a copy of the original sales receipt to Kicker for validation of warranty repairs.

ALWAYS KEEP YOUR RECEIPT!

Congratulations!

You have purchased one of the most advanced separate tweeter and outboard crossover systems in car audio. The KS-Series Tweeters were designed by the award-winning KICKER speaker design team, tested in the judging lanes of International Sound Competitions, and proven on the Street to deliver the ultimate in full-range frequency output, durability and outstandingly-clear SPL. This is your "fuel for Livin' Loud™"!

Authorized Kicker Dealer: _____

Purchase Date: _____

Speaker Model Number: _____

- **Newly Designed Passive Crossover Network** allows detailed imaging and pin-point sound staging of the critical high frequencies.
- **Aluminum Dome Tweeter with Neodymium Magnet** featured in the KS25 provides a smooth high frequency response with fast, detailed and spatially-correct imaging.
- **Titanium Dome Tweeter with Neodymium Magnet** featured in the KS20 provides a polished high frequency response with agile, meticulous and spatially-correct imaging.
- **PEN™ Dome Tweeter with Neodymium Magnet** featured in the KS13 provides a silky high frequency response with quick, precise and spatially-correct imaging. PEN is an acronym for the space age material “biaxially oriented polypropylene naphthalate film”--your parents’ tax dollars probably paid for its development, you might as well enjoy it.
- **High-Power Tinsel Lead Wires** eliminate broken leads and power loss, due to the common use of “insufficient-gauge” lead wires.
- **Felt Damping Plug behind the Tweeter’s Diaphragm** dissipates standing waves, quickens spectral decay and improves the transient response of the driver.
- **High-Temp Polyimide Film Voice Coil Former** improves sonic and conductive properties, and prevents thermal-electrical meltdown.
- **Ferro-Fluid™** cooled tweeter voice-coil extends the high frequency transducer’s life span.

Note: To get the best performance from your Kicker KS-Series System Components, we recommend using *genuine* Kicker Accessories and Wiring.

PERFORMANCE

| Model: | KS13 | KS20 | KS25 |
|--|----------------------------------|----------------------------------|----------------------------------|
| Speaker Design | High Frequency Transducer | High Frequency Transducer | High Frequency Transducer |
| Rated Impedance, ohm | 4 | 4 | 4 |
| DC Resistance, ohm | 3 | 3 | 3 |
| Sensitivity [SPLo], dB @ 1W, 1m | 92 | 92 | 94 |
| Resonance Frequency [fo], Hz | 2970 | 1770 | 1560 |
| Power Range, Watts RMS | 6-75 | 6-95 | 6-150 |
| Peak Power Handling, Watts | 150 | 190 | 300 |
| Effective Frequency Range, Hz | 4500-21k | 4500-21k | 3500-22k |
| Top-Mount Depth, in (cm) | 9/16 (1.4) | 9/16 (1.4) | 15/32 (1.2) |
| Mounting Hole Diameter, in (cm) | 1 9/16 (3.98) | 1 9/16 (3.98) | 1 15/16 (4.88) |
| Frame Diameter, in (cm) | 1 31/32 (5.0) | 1 31/32 (5.0) | 2 11/32 (5.9) |
| Overall Depth, in (cm) | 27/32 (2.15) | 27/32 (2.15) | 1 1/16 (2.65) |
| Tweeter Size, in (cm) | 1/2 (1.3) | 3/4 (2.0) | 1 (2.54) |
| Tweeter Design | Dome | Dome | Dome |
| Tweeter Diaphragm Material | PEN | Titanium | Aluminum |
| Tweeter Magnet Material | Neodymium | Neodymium | Neodymium |
| Outboard Crossover | Included | Included | Included |
| Speaker Wire | Included | Included | Included |
| High Pass, dB, at Frequency, Hz | 12, 4500 | 12, 4500 | 18, 4500 |
| Grills Included | Yes | Yes | Yes |

If you have any questions about the installation of your Kicker KS-Series Tweeters, 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.

Tweeter Mounting

If custom door mounting locations for the KS-Series Tweeters are desired, be careful to avoid interference from the window and door lock mechanisms. The first step is to find a location on the door panel that will accept the dimensions of the speaker. Then remove the door panel from the door, and check for operational clearance of the window. Cycle the window all the way down and up. If metal must be cut to mount the speakers, avoid structural metal and braces. An optional reinforcing panel (thin piece of wood or Medium Density Fiberboard) may be necessary if the door panel cannot support the mounting of the speaker. Mount the speaker to the door panel and door body as outlined in Figure 1.

If the factory door speaker wiring is not available, it will 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 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 as outlined in Figure 2.

Figure 1

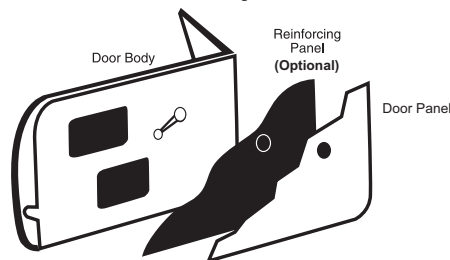
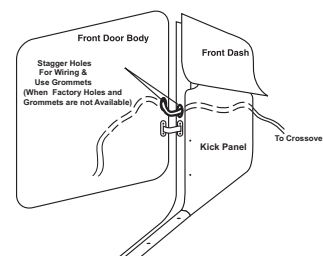


Figure 2



The tweeter can be mounted one of three ways: flush, surface and angled mounting. For flush mounting applications, please refer to the illustration in Figure 3 and 4. Mount the tweeter as high up on the door and as far forward as possible without interference from the dashboard. Choose a flat location on the door with space behind the panel to allow room for the mounting nut.

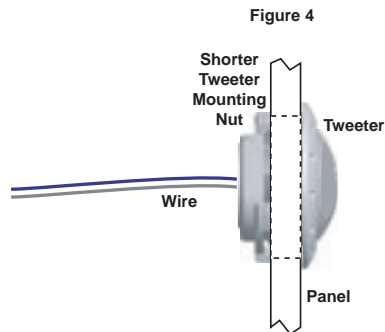
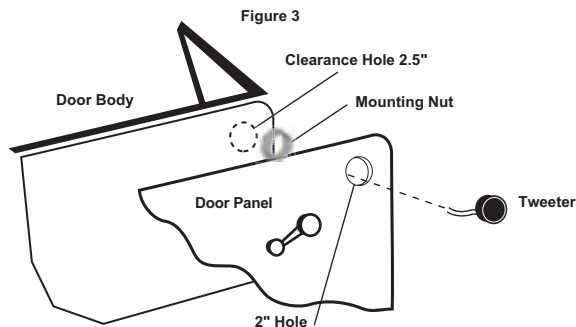
After checking the clearances, cut the appropriate mounting hole diameter in the door panel. Place the mounting nut behind the door panel. Feed the wire through the door and body panels. Mount the tweeter by screwing the tweeter onto the mounting nut.

For surface mounting applications, remove the tweeter face plate by screwing it off and install the supplied smaller face plate. Use the surface mount cup as a template and drill a 7/64" (2.8 mm) hole in the center for attaching the cup to the door and a 5/16" (7.9 mm) hole for the wires. A #8 flathead sheet metal screw is supplied to attach the surface mount cup to the door panel. Position the tweeter over the surface mount cup and press it into position.

For angled mounting applications use the back angle ring behind the panel and the front angle ring in front of the panel, and place the tweeter through the front angle ring and then into the panel. Next place the back angle ring over the tweeter and line up the narrow part of the front angle ring for proper operation. Attach the longer tweeter mounting nut but do not completely tighten. Rotate

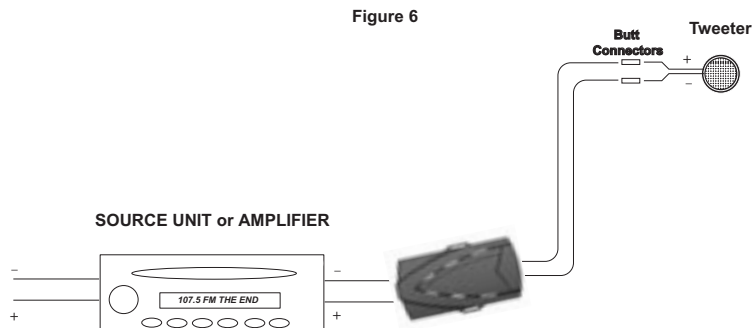
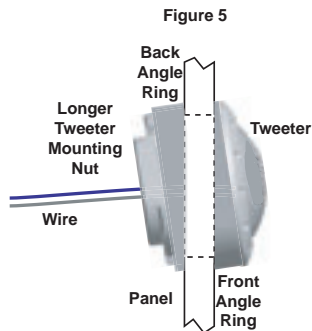
INSTALLATION

all the parts in unison until the tweeter is angled in the desired direction. Secure the assembly by tightening the longer tweeter mounting nut, as outlined in Figure 5.



Wiring

There are two lengths of wires attached to the Kicker KS-Series Tweeter Crossover. One set is labeled "INPUT" and is designed to connect to the source unit or amplifier. The other set is labeled "KSxx TWEETER" and is designed to connect to the tweeter's length of wires, using the supplied butt connectors. Please see Figure 6.



All specifications and performance figures are subject to change. Please visit kicker.com for the most current information.

ACOUSTICS LIMITED WARRANTY

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. Assistance in locating an Authorized Dealer can be obtained by writing, calling, or by visiting **kicker.com**. You can confirm that 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 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** (tweeter, crossover, plug, etc.). The return of functioning items increases your return freight charges. Non-defective items received will be returned freight collect.

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 type of sale and the manufacturing date code. Freight must be prepaid; items sent freight collect, or COD, will be refused.

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

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 bar code labels.
- Products returned without a Return Authorization (RMA) number.
- 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 24-hour service for all acoustics (subwoofers, midrange drivers, tweeters, crossovers, etc) returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

INTERNATIONAL WARRANTY

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



STILLWATER
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WARNING:

KICKER drivers 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!

