





# Solo-Baric L5 Subwoofer Enclosure Manual

Models: VS12L5 / VS10L5 / TS10L5

## 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 technically advanced subwoofers systems in car audio. The Solo-Baric L5 Enclosure was 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 low bass output, durability and outrageous SPL.

This is your "fuel for Livin' Loud™"!

Authorized Kicker Dealer:	
Purchase Date:	
Enclosure Model Number:	

## Features

- SoloKön™ is an ultra high performance composite, which remains rigid, minimizes cone flex and lowers harmonic distortion. The SoloKön™ consists of a unique one-piece, aluminum vapor-deposit material that moves as a light weight piston, exhibiting power and control.
- Rear Cone Brace integrates into the SoloKön<sup>™</sup> with a continuous contact perimeter weld, which offers unmatched strength and resistance to deformation under pressure.
- Increased Santoprene™ Surround Radius allows
   extended cone excursion for additional bass output and higher
   SPL. Santoprene™ is the next generation of surround material.
   It offers unmatched UV protection and gives the SoloKön™
   maximum EXmax™ (effective excursion) potential.
- **Stitched Surround** adds a mechanical fastener to the chemical adhesives. This duo prevents the cone and surround from separating in the harshest conditions.
- New Enhanced BAM (Basket and Motor) Assembly
  utilizes a high strength steel basket, features a low-profile open
  design, and provides a solid foundation for the precisionaligned motor assembly.
- Perimeter Venting in the BAM relieves pressure from under the spider, supports a linear excursion, and helps dissipate heat from the voice coil and motor structure.

- **Dual Ultra-Length Voice Coils** sustain enormous cone excursion and provide flexible impedance matching options.
- High-Temp Polyimide Film Voice Coil Former improves sonic and conductive properties, and prevents thermal-electrical meltdown.
- One-Piece Uniplate™ with Vented Hyper-Extended Pole Piece and Backplate
  - Optimizes heat transfer efficiency for cooler operation and maximum power handling ability.
  - 2. Eliminates erratic magnetic flux from the voice-coil gap.
  - 3. Releases pressure under the suspension for uniform cone movement and responsive low bass.
  - 4. Prevents the voice-coil from bottoming out and corresponding damage.
- Sleeved High-Power Tinsel Lead Wires eliminate broken leads and power loss, due to the common use of "insufficient-gauge" lead wires. The lead wires are terminated with multiple polymer-based strain-relieving mechanical fasteners.
- Human Fine-Tuned Enclosures and computer-modeling allow Kicker's award winning Solo-Baric subwoofers to offer bass performance that surpasses most custom made boxes.

## Performance

Model:	VS10L5	VS12L5	TS10L5
Nominal Impedance [Zn], ohm [per enclosure]	2 or 4	2 or 4	2 or 4
Resonance Frequency [fb or fo], Hz	36.1	38	42
Sensitivity [SPLo], dB @ 1W, 1m	86.4	92.8	89.8
Effective Piston Area [Sd], in <sup>2</sup> (m <sup>2</sup> )	68.05 (.0439)	99.98 (.0645)	68.05 (.0439)
Power Handling* Watts, Peak (RMS)	900 (450)	1100 (550)	900 (450)
Effective Excursion [EXmax™], in (mm)	.51 (12.9)	.51 (12.9)	.51 (12.9)
DC Resistance [Re], ohm [coils in series]	3.69	3.59	3.69
Voice Coil Inductance [Le], mH	3.80	3.90	3.80
Voice Coil Diameter [d], in (mm)	2 (50.8)	2 (50.8)	2 (50.8)
Voice Coil Length [h], in (mm)	1.36 (34.5)	1.36 (34.5)	1.36 (34.5)
Mechanical Q-Factor [Qms]	10.461	11.35	10.461
Electrical Q-Factor [Qes]	.420	.519	.420
Total Q-Factor [Qts]	.403	.496	.403
Force Factor [BL], Tm	16.87	17.11	16.87
Equivalent Volume [Vas], ft <sup>3</sup> (L)	1.51 (42.86)	2.43 (68.75)	1.51 (42.86)
Moving Mass [Mms], oz (g)	5.78 (163.9)	7.34 (208.1)	5.78 (163.9)
Magnet Weight, oz (kg)	77.25 (2.19)	77.25 (2.19)	77.25 (2.19)
Enclosure Top Surface Depth, in (cm)	14-1/4 (36.2)	15-1/8 (38.4)	6-1/8 (15.6)
Enclosure Bottom Surface Depth, in (cm)	16-5/8 (42.2)	18-1/4 (46.4)	9-1/4 (23.5)
Enclosure Height, in (cm)	12-1/2 (31.7)	14-5/8 (37.1)	14-1/2 (36.8)
Enclosure Width, in (cm)	27-3/4 (70.4)	29 (73.6)	17-1/2 (44.4)

Measurements are based on the 4 ohm enclosures. **Note:** The use of a subsonic filter will significantly increase the power handling. The power handling specifications in this chart are calculated using a 25 Hz, 24 dB per octave subsonic filter. \*Power Handling Watts RMS without subsonic filter: VS10L5-150, VS12L5-150, TS10L5-450

# Vented Enclosures

VS Series vented enclosures combine KICKER's award winning Solo-Baric subwoofers with computer-modeled and human fine-tuned enclosures to offer a level of bass performance never before thought possible from a commercially available, ready-to-install subwoofer system. The VS Series enclosures are available with a pre-loaded 10 or 12 inch Solo-Baric L5.

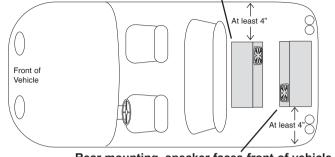
To get all the amazing performance potential from your new enclosure, you need to follow some basic rules. Please read these instructions carefully. Then, you will be ready to install the subwoofer enclosure and be on the road and "Livin' Loud™".

The location and orientation of your VS enclosure will affect the quality and quantity of the bass. Designed for use in SUVs and sedan type vehicles, the VS enclosure offers you several mounting options.

The vent opening in these enclosures can not be obstructed. At some frequencies most of the bass will come out of the vent. Therefore we recommend you leave at least four inches (10 cm) of clear space around the vent.

If the enclosure is to be mounted all the way in the back of the vehicle, it works best to point the woofer toward the front of the vehicle. Conversely, if the enclosure is going to be mounted closer to the back seat, pointing the woofer toward the rear of the vehicle will give you the best results. These guidelines pertain to enclosures mounted in the vehicle as outlined in Figure A.

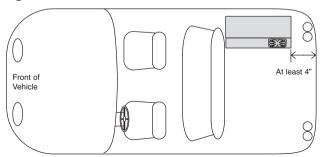
Figure A Front mounting, speaker faces rear of vehicle



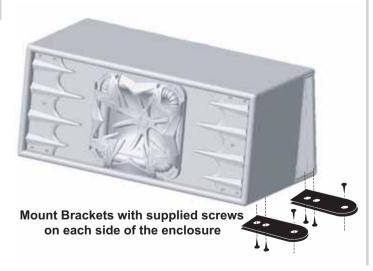
Rear mounting, speaker faces front of vehicle

When it is more convenient to mount the enclosure along a side wall, put the enclosure on the right side of the vehicle as outlined in Figure B. This orientation will make the vent point toward the rear of the vehicle and will produce the most low bass output. Remember to leave at least four inches (10 cm) of room between the enclosure and the back of the vehicle.

# Figure B



After determining the best mounting position, carefully check the areas where the mounting brackets will be placed. Make sure the mounting screws will not puncture the gas tank, brake lines, wiring, or interfere with any mechanical parts on the underside of the mounting surface. Turn the enclosure upside-down, pre-drill the holes using a 7/64" (2.5 mm) bit and attach the four mounting brackets to the bottom of the enclosure using the supplied smaller screws. Each bracket must be positioned so the rounded end protrudes approximately 3/4" (2 cm) from under the cabinet to allow a screw to easily pass through the bracket, securing the enclosure to the vehicle.



Plug your subwoofer speaker wire into the terminals, using the red connector as positive and the black connector as negative. Hook the other end of the wire to your subwoofer amplifier in accordance with its owner's manual.

**CAUTION:** This enclosure is internally wired for a 2 or 4 ohm load at the speaker-wire connection terminal. Please refer to the terminal or the box packaging for your enclosure's specific impedance. Make sure your amplfilier can drive this load.

With the enclosure right side up, securely attach it to the vehicle with the supplied larger screws.

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

WARNING: To avoid potential injury, or possible death, from forward movement of the enclosure during abrupt stops or accidents, the enclosure must be properly installed and securely fastened to your vehicle.

# Sealed Enclosures

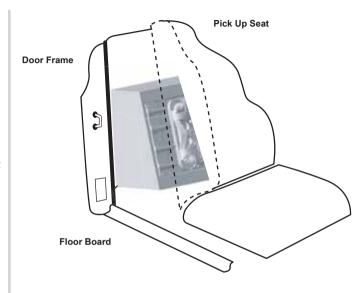
TS Series sealed enclosures combine KICKER's award winning Solo-Baric subwoofers with computer-modeled and human fine-tuned enclosures to offer a level of bass performance never before thought possible from a commercially available, ready-to-install subwoofer system. The TS Series enclosures are available with a pre-loaded 10 inch Solo-Baric L5.

To get all the amazing performance potential from your new enclosure, you need to follow some basic rules. Please read these instructions carefully. Then, you will be ready to install the subwoofer enclosure and be on the road and "Livin' Loud™".

Kicker TS Series enclosures are designed to fit behind the seat of a pickup truck. They are engineered to provide the best bass response when firing into the back of the truck seat.

Plug your subwoofer speaker wires into the terminals. The red connectors are positive and the black connectors negative. Hook the other end of these wires to your subwoofer amplifier in accordance with the amplifier's manual.

**CAUTION:** This enclosure is internally wired for a 2 or 4 ohm load at the speaker-wire connection terminal. Please refer to the terminal or the box packaging for your enclosure's specific impedance. Make sure your amplfilier can drive this load.



**Note:** To get the best performance from your Solo-Baric L5 subwoofer enclosure, we recommend using *genuine* Kicker Accessories and Wiring.

## 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 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 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** (subwoofer, speaker-wire connector, etc.). Return of the entire enclosure cabinet 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-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.





P.O. Box 459 • Stillwater, Oklahoma 74076 • U.S.A. • (405) 624-8510



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!





Notes

Tech Lines









