

KICKER CompVX-Series Subwoofers Owner's Manual

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KICKER CompVX-Series Subwoofers



Product Information

The CompVX-Series Subwoofers are designed to provide high-quality and powerful bass for your car audio system. The subwoofers come with dual 2 or 4 voice coils and are made of durable materials to withstand high power and long-term use. The subwoofers are available in different sizes to fit your specific audio needs.

Specifications

The specifications of the CompVX-Series Subwoofers include:

- Dual 2 or 4 voice coils
- Wiring configurations: 1 load wired in parallel or 4 load wired in series (Dual 2), 2 load wired in parallel or 8 load wired in series (Dual 4)
- Recommended amplifier power: 1000 watts RMS
- Frequency response: 18-500 Hz
- Sensitivity: 87.1 dB

Installation

To install the CompVX-Series Subwoofers, follow the steps below:

- 1. Choose the appropriate wiring configuration based on the number of voice coils and the desired load.
- 2. Make sure your source unit or amplifier is rated at the correct ohm load for operation.

- 3. Keep the speaker wire away from sharp edges and avoid the possibility of getting pinched by the trunk.
- 4. If a factory hole and grommet do not exist or are inaccessible, drill a hole through which to run the wire. Be careful not to drill into other wiring or existing mechanisms. Insert a rubber or plastic grommet to protect the wire from damage.
- 5. Use 3/4 (1.9cm) or thicker MDF (medium density fiberboard) to build the enclosure and seal the joints with silicone
- 6. Add triangular bracing between each of the larger unsupported panels for internal bracing.
- 7. For vented enclosures, calculate and add the displacement of the port to the internal volume of the final design. Use the outer dimensions of the port and multiply X x Y x Z, convert to cubic feet, then add this number to the internal volume of the enclosure.
- 8. Due to the necessary length of these ports, fold the port along the bottom and back walls. It will be impractical to use round ports for these designs.

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 CVX Subs are a case study in what makes KICKER subwoofers the absolute best in the business. They feature the highest-power handling possible and with dual-voice coils give you all the wiring options you could want. The aluminum basket reduces weight while achieving higher heat dissipation than steel. Perimeter-venting is present as usual, but KICKER-quality means we need our products to go above and beyond. KICKER has now introduced our latest innovation of Forced-Air Cooling, which uses the excursion of the woofer to force out hot air while drawing in cool air. This results in a 20% reduction in heat, increasing the already industry-leading reliability of our subs. Get ready for signature KICKER bass, and make sure you're using these subwoofers with KICKER accessories and amps to get the best results.

Specifications

| | CVX10 | CVX12 | CVX15 |
|---|----------------|---------------|---------------|
| Woofer [in, mm] | 10, 25 | 12, 30 | 15, 38 |
| Recommended Amplifier Power [Watts RMS] | 300–600 | 375–750 | 500–1000 |
| Peak Power Handling [Watts] | 1200 | 1500 | 2000 |
| Sensitivity [1W, 1m] | 85.7 | 87.1 | 91.6 |
| Rated Impedance [Ω] | 2 or 4 | 2 or 4 | 2 or 4 |
| Fs [Hz] | 35.4 | 28.5 | 23.7 |
| Xmax (Linear Excursion) [mm] | 16.25 | 16.25 | 19 |
| Re [Ω] | 3.4 | 3.7 | 4.2 |
| Qts | .403 | .381 | .216 |
| Qms | 10.754 | 10.098 | 7.521 |
| Qes | .419 | .396 | .222 |
| Vas [ft³, L] | .811, 22.99 | 2.04, 57.82 | 5.5, 156.71 |
| Outer Frame Dimension [in, cm] | 10-11/16, 27.1 | 12-9/16, 31.8 | 15-7/16, 39.2 |
| Mounting Cutout [in, cm] | 9-3/16, 23.3 | 11-1/16, 28 | 13-13/16, 35 |
| Mounting Depth [in, cm] | 5-15/16, 15.1 | 6-11/16, 16.9 | 8-1/2, 21.5 |
| Frequency Response [Hz] | 24–500 | 20–500 | 18–500 |

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.

Pro Tip: You're a KICKER 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 Speaker upgrades.

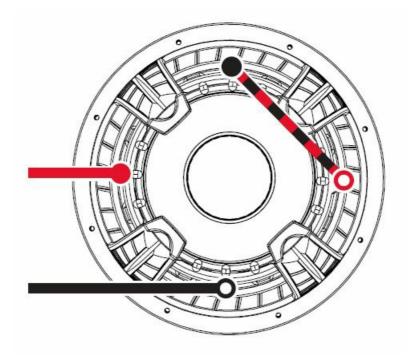
Installation

Wiring Configuration

CompVX-Series subwoofers are made with dual 2Ω or 4Ω voice coils. Both coils must be connected to a source of amplification. The Dual 2Ω will provide a 1Ω load wired in parallel or 4Ω load wired in series. The Dual 4Ω will provide a 2Ω load wired in parallel or 8Ω load wired in series. Make sure your source unit or amplifier is rated at the correct ohm load for operation.

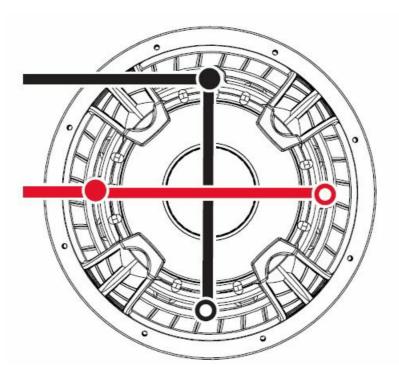
The speaker wire should be kept away from sharp edges and avoid the possibility of getting pinched by the trunk. If a factory hole and grommet do not exist or are inaccessible, you must drill a hole through which to run the wire. Be careful not to drill into other wiring or existing mechanisms. Any time a wire is run through a hole, it is necessary to insert a rubber or plastic grommet to protect the wire from damage.

Series Wiring



- Dual 2 Ω Voice Coils = 4Ω
- Load Dual 4Ω Voice Coils = 8Ω Load

Parallel Wiring



- Dual 2Ω Voice Coils = 1Ω
- Load Dual 4Ω Voice Coils = 2Ω Load

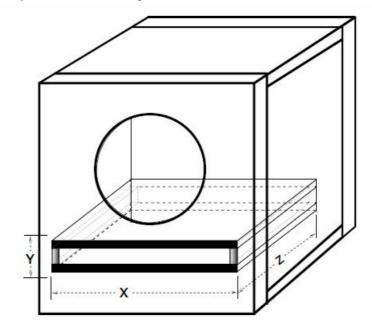
Box Building Notes

Use 3/4" (1.9cm) or thicker MDF (medium density fiberboard) and seal the joints with silicone. Use the "template" inside your CompVX subwoofer's shipping carton to mark the mounting hole, then cut directly on the line. These designs need internal bracing. Add triangular bracing between each of the larger unsupported panels. All the cubic feet (L) measurements in this manual include the displacement of the woofer. For the vented

enclosures the displacement of the port must be calculated and added to the internal volume of the final design. Use the outer dimensions of the port and multiply "X x Y x Z", convert to cubic feet, for example the CompVX12 Vented Minimum design's external port dimensions are, using 3/4" (1.9cm) MDF:

- (12.5" + 1.5" total MDF wall thickness) x
- (2.5" + 1.5" total MDF wall thickness) x
- (20") x (1 ft3 / 1728 in3) = .65 ft3

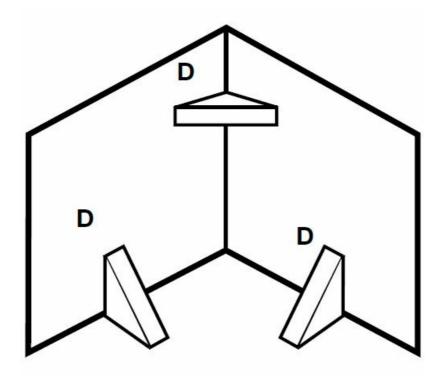
Then, add this number to the internal volume of the enclosure. 1.75 ft3 + .65 ft3 = 2.4 ft3Due to the necessary length of these ports, you may want to fold the port along the bottom and back walls. It will be impractical to use round ports for these designs.



Do not install a port opening against a solid surface, such as an internal brace, back-panel or trunk wall, seat or interior panel of your vehicle. The port opening must remain unobstructed. Use the smallest dimension of the rectangular port as the minimum amount of space between the port opening and any solid surface to insure unrestricted airflow.

You can loosely fill your enclosure with poly-fil stuffing. Ported designs will require covering the end of the port (located inside the box) with grill cloth, chicken wire, or expanded metal to prevent the poly-fil from exiting the port. The use of poly-fil will slightly decrease efficiency, but will deepen and extend the low frequency output by making your subwoofer think it's in a bigger box.

Add triangular bracing between each of the larger unsupported panels.



CVX12, CVX15: D = 3" x 3" (8cm x 8cm) CVX10: D = 2" x 2" (5cm x 5cm)

For more advice on box building, refer to your Authorized Kicker Dealer, or click on the Support tab on the Kicker homepage, www.kicker.com. Please e-mail support@kicker.com or call Technical **Support at** (405) 624-8583 for specific or unanswered questions.

Sealed Enclosures

- These sealed enclosure designs give the smoothest response with increased energy at the lowest frequencies,
 20 to 30Hz. These designs deliver massive amounts of highly-accurate bass and can be driven with punishing levels of amplifier power.
- The CompVX-Series high performance suspension system can operate in a larger sealed enclosure. This maximum enclosure volume application is ideal for SQ (ultra sound quality) installations.
- The Maximum enclosure generates a very flat response curve and extends the sub-bass response.

Minimum Sealed

| Model | Volume ft3 | (L) | Power Handling |
|-------|------------|-----|----------------|
| CVX10 | .8 (22.7) | | 600W RMS |
| CVX12 | 1 (28.3) | | 750W RMS |
| CVX15 | 1.8 (51) | | 1000W RMS |

Maximum Sealed

| Model | Volume ft ³ (L) | Power Handling |
|-------|----------------------------|----------------|
| CVX10 | 1.25 (35.4) | 300W RMS |
| CVX12 | 2 (56.64) | 300W RMS |
| CVX15 | 3 (85) | 500W RMS |

Panel Dimensions

Panel Dimensions for Minimum Sealed Enclosures using 3/4" (1.9cm) thick MDF:

| | CVX10 | CVX12 | CVX15 |
|------------------|-------------------------|-----------------------|-------------------------|
| Volume ft3 [L] | .8 [22.7] | 1 [28.3] | 1.8 [51] |
| Panel A in. [cm] | 13.5X13.5 [34.3X34.3] | 14.5X14.5 [36.8X36.8] | 17.25X17.25 [43.8X43.8] |
| Panel B in. [cm] | 13.5X10.125 [34.3X25.7] | 14.5X11 [36.8X27.9] | 17.25X13.5 [43.8X34.3] |
| Panel C in. [cm] | 12X10.125 [30.5X25.7] | 13X11 [33X27.9] | 15.75X13.5 [40X34.3] |

- CompVX-Series subwoofers perform well in any size sealed enclosure between the Minimum and Maximum volume recommendations. These systems will exhibit benefits of both designs. Overall, the system will sound more like the recommended enclosure design it is closest to in enclosure volume.
- These enclosure recommendations have been calculated with the airspace inside the enclosure and include
 the displacement of the woofer. All sealed-enclosure airspace should be filled to 50% loose poly-fil (polyester
 fiberfill) stuffing. Do not make the airspace greater than the SQ, maximum enclosure volume, recommendation.

Vented Enclosures

- These boxes are the enclosure of choice if space is not a problem and you want to get the most output and low
 frequency extension from your CompVX subwoofer. CompVX subwoofers will handle massive amounts of
 power in any of the recommended enclosures, minimum or maximum. The smaller enclosures are best for use
 in limited-space applications. The larger recommended enclosures will yield slightly more bass at the lowest
 frequencies.
- The Vented Minimum design increases bass efficiency and fits in many space-limited applications. Although it
 is the smallest recommended ported enclosure, the output from 30 to 80 Hz will be considerably higher than
 that of any sealed box. The Vented Maximum design has even more output in this frequency band. The
 Maximum is the largest and most efficient enclosure design.

| Vented Minimum | CVX10 | CVX12 | CVX15 |
|-----------------------------------|---------------------|---------------------|--------------------|
| Box Volume, ft3 [L] | 1.25 [35.4] | 1.75 [49.6] | 3 [85] |
| Port Opening, in. x in. [cm x cm] | 2X10.5 [5.1X26.7] | 2.5X12.5 [6.4X31.8] | 2.75X15.5 [7X39.4] |
| Port Length, in. [cm] | 20 [50.8] | 20 [50.8] | 25.75 [65.4] |
| Power Handling, RMS | 200 | 300 | 500 |
| | | | |
| Vented Maximum | CVX10 | CVX12 | CVX15 |
| Box Volume, ft3 [L] | 1.75 [49.6] | 2.25 [63.7] | 5 [142] |
| Port Opening, in. x in. [cm x cm] | 2.5X10.5 [6.4X26.7] | 3X12.5 [7.6X31.8] | 3X15.5 [7.6X39.4] |
| | | | |
| Port Length, in. [cm] | 20 [50.8] | 20.5 [52.1] | 22 [55.9] |

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 ONE (1) 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 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. Contact your International KICKER dealer or distributor concerning specific procedures for your country's warranty policies.

P.O. Box 459 Stillwater, Oklahoma 74076 USA (405) 624-8510

Documents / Resources



KICKER CompVX-Series Subwoofers [pdf] Owner's Manual CompVX-Series Subwoofers, CompVX-Series, Subwoofers

References

- Car Audio, Home & Personal Audio | KICKER®
- Car Audio, Home & Personal Audio | KICKER®

Manuals+,