COMPVR®
SUBWOOFERS
Owner's Manual

CVR10 | CVR12 | CVR15

Manual del Propietario | **Español** CompVR® ALTAVOZ PARA SONIDOS GRAVES

Benutzerhandbuch | **Deutsch** CompVR® TIEFTÖNFR

Manuel d'utilisation | **Française**CompVR® HAUT-PARLEUR D'EXTRÊMES GRAVES



CompVR Subwoofer Owner's Manual

Models:

CVR10 | CVR12 | CVR15

Authorized KICKER Dealer:	
Purchase Date:	
Speaker Model Number:	
Speaker Serial Number	

SPECIFICATIONS

Model	CVR10	CVR12	CVR15
Rated Impedance $[\Omega]$	2 or 4	2 or 4	2 or 4
Fs [Hz]	43.8	32.6	24.6
Continuous Power Handling [Watts RMS]	350	400	500
Sensitivity [1W, 1m]	83.6	86.9	89.2
Qts	.838	.648	.381
Qms	10.03	8.166	9.138
Qes	.914	.703	.398
$\operatorname{Re}\left[\Omega\right]$	3.7	3.5	3.7
Vas [ft³, L]	.570 [16.159]	2.3 [65.294]	5 [143.82]
Xmax (Linear Excursion) [mm]	14	14	15
Outer Frame Dimension [in, cm]	10-11/16 [27.1]	12-5/8 [32]	15-1/2 [39.3]
Mounting Depth [in, cm]	5-1/2 [14]	6-1/4 [15.9]	8-3/16 [20.7]
Mounting Cutout [in, cm]	9-3/16 [23.3]	11 [27.8]	13-11/16 [34.7]
Frequency Response [Hz]	30–500	25–500	25–500

WIRING

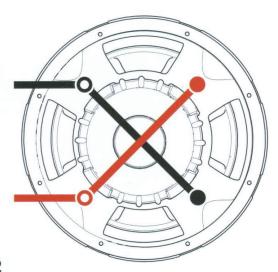
Parallel Wiring

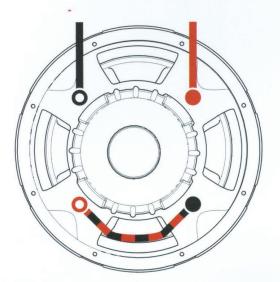
Dual 2Ω Voice Coils = 1Ω Load Dual 4Ω Voice Coils = 2Ω Load



Series Wiring

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





SEALED ENCLOSURE APPLICATIONS

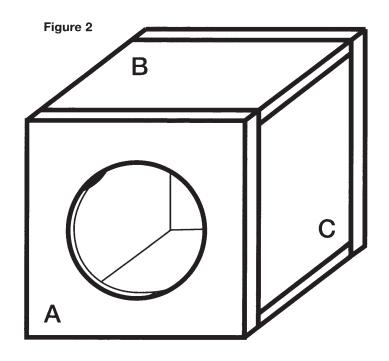
These sealed enclosure designs give the smoothest response with increased energy at the lowest frequencies, 20Hz-30Hz. These designs deliver highly-accurate bass and can be driven with large levels of amplifier power. This maximum enclosure volume application is ideal for ultra sound quality installations. The maximum enclosure generates a very flat response curve and superbly extends the sub-bass response.

CompVR woofers perform well in any size sealed enclosure between the minimum and maximum volume recommendations. These systems will exhibit benefits of both designs: Minimum produces high-impact bass, and maximum generates low bass frequency protraction. 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 maximum enclosure volume recommendation.

Sealed Minimum			Sealed Maximum		
Model	Volume ft ³ [L]	Power Handling	Model	Volume ft ³ [L]	Power Handling
CVR10	.8 [22.7]	350W RMS	CVR10	3 [85]	300W RMS
CVR12	1 [28.3]	400W RMS	CVR12	4.6 [130]	300W RMS
CVR15	1.8 [51]	500W RMS	CVR15	5.2 [147]	500W RMS

Panel Dimensions for Sealed Compact enclosures using 3/4" (1.9cm) thick MDF (See Figure 2)

Model	Volume ft ³ [L]	Panel A in. [cm]	Panel B in. [cm]	Panel C in. [cm]
CVR10	.8 [22.7]	13.5X13.5 [34.3X34.3]	13.5X10.125 [34.3X25.7]	12X10.125 [30.5X25.7]
CVR12	1 [28.32]	14.5X14.5 [36.8X36.8]	14.5X11 [36.8X27.9]	13X11 [33X27.9]
CVR15	1.8 [51]	17.25X17.25 [43.8X43.8]	17.25X13.5 [43.8X34.3]	15.75X13.5 [40X34.3]



VENTED ENCLOSURE APPLICATIONS

CompVR 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 vented enclosure, the output from 30Hz-80Hz will be considerably higher than that of a sealed box. The maximum vented design has even more output in this frequency band. The maximum vented enclosure is the largest and most efficient design.

Vented Minimum	CVR10	CVR12	CVR15
Box Volume, ft ³ [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	300	300	500

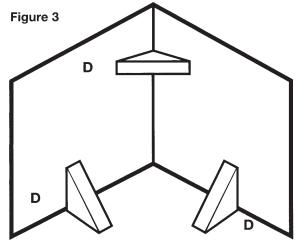
Vented Maximum	CVR10	CVR12	CVR15
Box Volume, ft ³ [L]	1.75 [49.6]	2.25 [63.7]	5 [142]
Port Opening, in x in [cm x cm]	2.5X10.5 [6.4X26.7]	3X12.5 [7.6X31.8]	3X15.5 [7.6X39.4]
Port Length, in [cm]	20 [50.8]	20.5 [52.1]	22 [55.9]
Power Handling, RMS	300	300	500

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 CompVR'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. See **Figure 3**.

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", then convert to cubic feet. For example, the *CVR12* Vented Compact design's external port dimensions are, using 3/4" (1.9cm) MDF:



D = 3" x 3" for CVR15, CVR12 D = 2" x 2" for CVR10

 $(12.5" + 1.5" \text{ total MDF wall thickness}) \mathbf{x} (2.5" + 1.5" \text{ total MDF wall thickness}) \mathbf{x} (20") \mathbf{x} (1 \text{ ft}^3 / 1728 \text{ in}^3) = .65 \text{ ft}^3$,

Then, add this number to the internal volume of the enclosure. 1.75 ft³ + .65 ft³ = 2.4 ft³. See **Figure 4**.

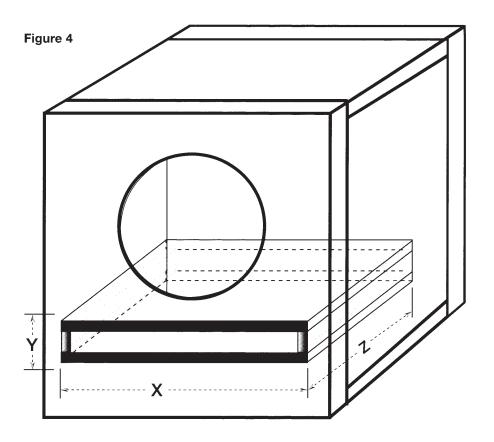
Due to the necessary length of these ports, you may want to fold the port along the bottom and back walls. It will be impractical to use round ports for these designs.

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.

If you prefer an ultra-smooth bass response, you should loosely fill your CompVR enclosure with poly-fil stuffing. Vented 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.

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.

Sound Check: Poor bass response? Check the system phasing by reversing the positive and negative speaker connections on the subwoofer. If the bass improves, then the subwoofer was out of phase in reference to the rest of the audio system.



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 Subwoofer, we recommend using genuine KICKER Accessories and Wiring. Please allow two weeks of break-in time for the subwoofer to reach optimum performance.

If mounting in trunk space or other compartments of the vehicle, pay attention to cable lines, trunk springs, hinges and seat mechanisms that could cause problems with the operation of the vehicle or stereo system. Carefully lay the stereo system cables; pay attention to seat fasteners and other items that could harm the cables.

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.

ACOUSTICS LIMITED 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) YEAR from date of original purchase. If this product is identified as "Refurbished" or "B Goods", the warranty is limited to a period of THREE (3) MONTHS from 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 component systems. The return of functioning items increases your return freight charges. Non-defective items will be returned freightcollect 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:

- 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 with tampered or missing serial numbers
- o Products returned without a Return Merchandise Authorization (RMA) number
- o Products purchased from an UNAUTHORIZED dealer
- o Freight Damage
- o The cost of shipping product to KICKER
- o Service performed by anyone other than KICKER

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

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.

INTERNATIONAL WARRANTY

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

Our goods come with guarantees that cannot be excluded under the **Australian Consumer Law**. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

GARANTÍA INTERNACIONAL Versión Español

Comuníquese con su concesionario o distribuidor KICKER internacional para obtener infor ación sobre procedimientos específicos relacionados con las normas de garantía de su país.

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.

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 Autostereoerlebnis 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 Version Française

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

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 client 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.

