ARC AUDIO

KAR SERIES

KAR Series
Subwoofers

KS 10D2 **KS 10D4**
KS 12D2 **KS 12D4**

Installation Manual

Specifications

Woofer Specifications									
		KS10D2		KS10D4		KS12D2		KS12D4	
Impedance		2X2 ohm		4X4ohm		2X2 ohm		4X4 ohm	
DC Resistance	Re	1 ohm	4 ohm	1.8 ohm	7.2 ohm	1 ohm	4 ohm	1.8 ohm	7.2 ohm
Free Air Resonance	Fs	32.1		29.5		27.1		28.2	
Q Electrical Resistance	Qes	.771	.658	.45	.48	.902	.908	.565	.58
Q non Electrical Resistance	Qms	4.87	4.68	5.07	4.91	5.06	5.28	4.99	5.18
Total Q	Qts	.666	.577	.413	.437	.766	.775	.508	.522
Compliance	Vas	41.6	37.9	51.5	52.7	84.8	94.6	86.5	85.6
Linear Excursion	Xmax	13 mm		13 mm		13 mm		13 mm	
Cone Area	Sd	360cm2		360cm2		523cm2		523cm2	
Sensitivity 1 w @ 1 meter	SPL	86db		86db		87db		87db	
Power Handling RMS		200 W		200 W		250 W		250 W	
Max Power Handling		400 W		400 W		500 W		500 W	

Enclosure Recommendations					
Sealed Enclosure					
Optimum Sealed		1.0 cuft	1.0 cuft	1.0 cuft	1.0 cuft
Small Sealed		0.5cuft	0.5 cuft	.65 cuft	.65 cuft
Ported Enclosure					
Volume		1.0 cuft	1.0cuft	1.5 cuft	1.5 cuft
Port Frequency		50 Hz	50 Hz	50 Hz	40 Hz
Port Area and Length		3”X5.4”	3” X5.4”	3” X5.7”	3”X5.7”

Calculating Enclosure Volume

It is difficult to give exact box dimensions that are universal for all cars and trucks. It is for this reason that you must be able to calculate the space in which you have available in order to achieve the proper air volume required.

It is recommended to build your enclosure from ¾" thick MDF (medium density fiberboard). Make sure the enclosure is sealed airtight.

Calculating External Volume

1) To calculate box volume, measure the outside Width x Height x Depth of the enclosure. Example 12" x 14"x 9" = 1512
2) Next you must convert cubic inches into cubic feet. To do this, you must divide the cubic inch total by 1728". Example 1512 ÷ 1728 = .875 Cubic feet.

Calculating Internal Volume

1) To calculate the internal (net) volume of the above box you must first multiply the thickness of the wood you are using by Two (2). Example: ¾" x2" = 1.5"
2) Next subtract 1.5" from each of the outside measurements of the box. Width 12" – 1.5" = 10.5". Height 14" – 1.5" = 12.5". Depth 9" – 1.5" = 7.5"
3) Multiply the new totals (H x W x D) Example: 10.5" x 12.5" x 7.5" = 984.375.
4) Next you must convert cubic inches into cubic feet. To do this, you must divide the cubic inch total by 1728". Example 984.375" ÷ 1728 = .5696 cubic feet.

LIMITED WARRANTY

Before shipping this product back for service call for a Return Authorization number. This number must be clearly marked on the outside of the box.

Terms & Conditions: ARC Audio warranties the unit to be free of any material defects or defects in workmanship for a period of one year and will repair this unit or any part thereof only if it proves to be defective as a result of normal use. In order to receive warranty service on this product, the owner must promptly register by filling in and mailing the Warranty Registration Card.

Our obligation under this warranty is limited to repairing only the defective components of the unit thereof when it is returned, shipping prepaid, to ARC Audio.

This warranty is to be considered void if the unit has been tampered with, connected contrary to the installation instructions in the owner's manual, altered, damaged by improper input voltages or polarity, defaced, or treated in a negligent manner.

All returns must be sent freight prepaid, along with $10.00 to cover return shipping and handling.

Out of warranty service is available after the warranty expires. Cost of repair is based on current repair labor rates, plus the cost of shipping and handling. When returning for repair, pack the unit securely and send prepaid and insured to the address below. ARC Audio is not responsible for damage incurred during shipping.

For warranty and non-warranty repairs, send to:

ARC Audio
4719 Green Leaf Cr. #4
Modesto CA, 95356

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ARC Audio Technical Support can be reached at 209-543-8706