

**cerwin  
vega**  
mobile



# **HED SHALLOW**

## **SUBWOOFER**



**HS102D/HS104D**  
**HS122D/HS124D**

# **USER MANUAL**

**MAKING IT LOUD SINCE 1954!**

## Cerwin Vega Mobile Speakers

Congratulations for purchasing Cerwin Vega Mobile speakers for your car audio system. You have chosen Cerwin Vega Mobile because you deserve the best!

Cerwin Vega Mobile speakers are designed and engineered to reproduce great sound quality for many years of listening enjoyment in your vehicle! We highly recommend that your new speakers be installed by an authorized Cerwin Vega Mobile dealer. Your authorized dealer can professionally assemble/disassemble the interior of your vehicle and set the proper speaker placement for ideal sound quality.

If you decide to install the speakers by yourself, please thoroughly read through this manual before getting started. This manual will help familiarize yourself with these speakers and guide you through the installation process and procedures.

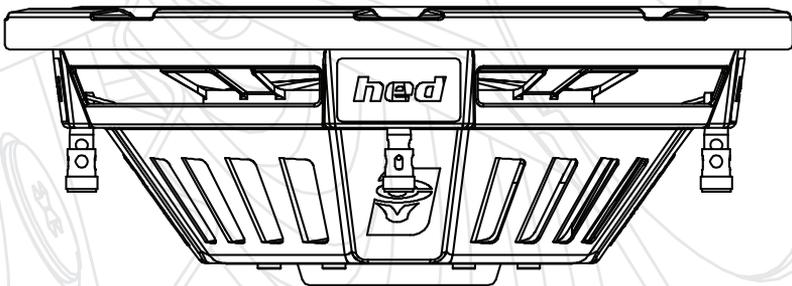
Please contact your local authorized Cerwin Vega Mobile dealer if you have any questions regarding the instructions in this manual. If you require additional assistance, please contact the Cerwin Vega Mobile Technical Support Department during business hours at 213-261-4161.

## HS122D / HS124D - 12 INCH SUBWOOFER

- 12" Dual 2-ohm/4-ohm Shallow Subwoofer
- 1200W MAX / 250W RMS Power Handling
- Stamped Steel Slim-Mount Frame With Encapsulated Motor
- Vented Motor Structure For Optimal Thermal Heat Dissipation
- Poly-Cotton Spider With Spaced Woven In Tinsel Wires
- Oversized Parabolic Dustcap For Extreme Rigidity
- Unimount Gasket Surround

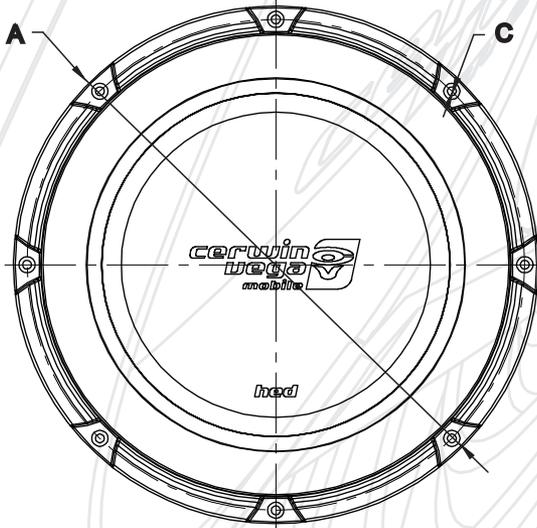
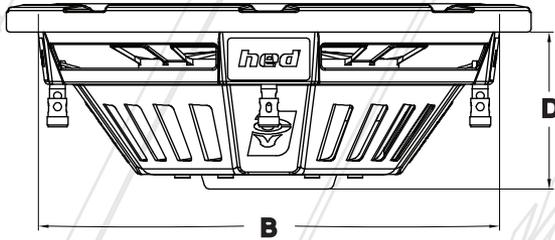
## HS102D / HS104D - 10 INCH SUBWOOFER

- 10" Dual 2-ohm/4-ohm Shallow Subwoofer
- 800W MAX / 200W RMS Power Handling
- Stamped Steel Slim-Mount Frame With Encapsulated Motor
- Vented Motor Structure For Optimal Thermal Heat Dissipation
- Poly-Cotton Spider With Spaced Woven In Tinsel Wires
- Oversized Parabolic Dustcap For Extreme Rigidity
- Unimount Gasket Surround



# Specifications

Dimension	Unit	HS102D/HS104D	HS122D/HS124D
Total Diameter (A)	in. (mm)	10.54" (267.9mm)	12.57" (319.4mm)
Mounting Diameter (B)	in. (mm)	9.23" (234.4mm)	11.14" (283mm)
Screw Hole Dia. (C)	in. (mm)	0.216" (5.5mm)	0.216" (5.5mm)
Mounting Depth. (D)	in. (mm)	3.54" (90mm)	3.81" (97mm)
Displacement (ft <sup>3</sup> /L)	in. (mm)	0.032 ft <sup>3</sup> (0.92L)	0.035 ft <sup>3</sup> (1.05L)



## Thiele/Small Parameters

Parameter (unit)	HS102D	HS104D	HS122D	HS124D
SPL (dB)	83.1	82.7	85.0	85.0
Re ( $\Omega$ ) [series]	1.5/1.5	3.0/3.0	1.5/1.5	3.0/3.0
Qms	5.0	5.5	5.5	5.0
Qes	0.95	1.10	1.05	1.13
Qts	0.80	0.92	0.88	0.92
Fs (Hz)	34.0	35.2	30.0	31.0
Vas (L)	23.0	23.0	50.9	50.9
Cms (mm/N)	0.141	0.140	0.13	0.13
Mms (g)	155.0	145	220	205
Sd (m <sup>2</sup> )	0.034	0.034	0.053	0.053
BL (T*M)	10.2	13.2	10.9	14.6
Xmax (mm)	7.4	7.4	8.9	8.3
Pwr (W) NOM/MAX	200/800	200/800	250/1200	250/1200

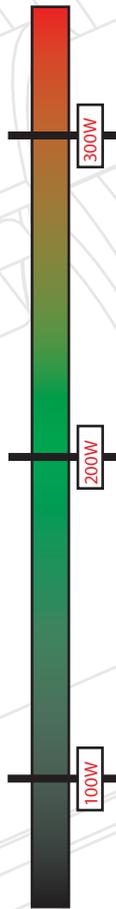
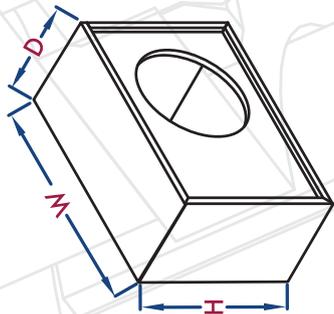
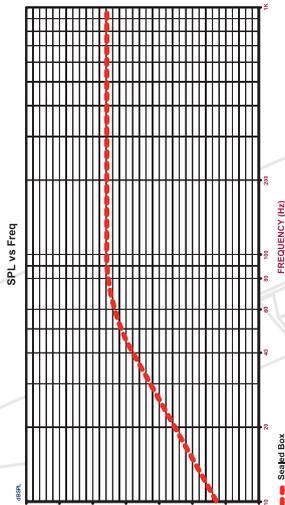
## IMPORTANT NOTE - WOOFER BREAK IN

After you complete the wiring, break in your subwoofer properly. Play the sub at low to medium volume with music that has good low frequency information for approximately 20 hours to condition it before you turn up the volume.

This will improve the sub's performance and lifespan.

## RECOMMENDED ENCLOSURES

SUBWOOFER SIZE (All measurements are calculated (Using 3/4" MDF)	SEALED ENCLOSURE		PORTED ENCLOSURE			
	Volume (net int.)	External Dimensions W <sub>width</sub> x H <sub>height</sub> x D <sub>depth</sub>	Volume (net int.)	Endcuse External Dimensions W <sub>width</sub> x H <sub>height</sub> x D <sub>depth</sub>	Slot Port Internal Dimensions P <sub>port</sub> W <sub>width</sub> x P <sub>port</sub> H <sub>height</sub> x P <sub>port</sub> Length	Port Extension Length "PE"
HS102/4D	0.65 ft <sup>3</sup> 18.2 litres	22" x 12" x 6.75" 406mm x 305mm x 162mm	N/A	N/A	N/A	N/A
HS122/4D	0.85 ft <sup>3</sup> 23.8 litres	22" x 14.75" x 7" 508mm x 381mm x 175mm	N/A	N/A	N/A	N/A



**MINIMUM RMS POWER (100W BLACK AREA)** RECOMMENDED RMS POWER (200W GREEN AREA) MAXIMUM RMS POWER (300W RED AREA)

This lower amount of power will increase the longevity of the woofer, but will decrease the amount of output volume.

This is the optimum amount of power to provide the perfect balance output volume and woofer longevity.

This is the maximum amount of power the woofer is designed to operate safely under. Only a moderate volume increase is gained (<1 7dB) at this higher power level. Operating Beyond this power level will void your warranty.

# Warranty

Thank you for purchasing a Cerwin Vega Mobile product and we hope to provide you with countless hours of listening enjoyment.

Please take a brief moment to register your new product. By registering your new product, you will receive benefits such as:

- Important product notifications that may pertain to your purchase.
- Confirmation and record of ownership in case of loss or theft.
- Knowledgeable customer service and technical assistance pertaining to your product.

Register your new product by completely filling out this Product and Warranty Registration card or register online at [www.cerwinvegamobile.com](http://www.cerwinvegamobile.com).

Registration is voluntary and failure to register will not diminish your limited warranty rights.

## Limited Warranty (U.S.A.)

Cerwin Vega Mobile warrants all of our amplifiers and speakers to be free of defects in materials and workmanship for a period of one (1) year.

This warranty is non-transferable and applies only to the original purchaser from an authorized Cerwin Vega Mobile dealer. If service is required and necessary under this warranty due to manufacturing defect or malfunction, then Cerwin Vega Mobile will repair and/or replace defective product with either new or remanufactured like product at no charge at our discretion.

Damage to product caused by the following will not be covered under this warranty: abuse, accident, misuse, neglect, modifications, repairing attempts, seller/installer misrepresentation.

This warranty does not cover any incidental, consequential, or cosmetic damage due to accidents or normal wear and tear, nor does it cover the cost of removing or reinstallation of the product.

Warranty is void if the product's serial number has been removed, defaced, and/or tampered with.

## Warranty Procedure:

We recommend that you contact your Cerwin Vega Mobile authorized dealer where your original purchase was made to initiate all warranty claims. Our authorized dealers can guide you through the warranty procedure to ensure that your claim will be processed in a timely manner. All warranty returns must be accompanied with a proof of purchase (a copy of the original sales receipt) and be shipped freight prepaid to our facility with an RA (Return Authorization) number clearly marked on the outside of the package. Direct returns from consumers or non-authorized dealers will be refused if shipped without a valid RA number authorized by Cerwin Vega Mobile beforehand.

## INTERNATIONAL

Products purchased outside of the U.S.A. are covered only by that country's distributor and not by Cerwin Vega Mobile U.S.A.

Please Ship All Warranty Claims With Pre-Authorized RA Number To:

CV&DA Holdings, Inc.

ATTN: Customer Service Department

1225 E. 7th St.

Los Angeles, CA 90021 USA

Please Contact Customer Service for Further Warranty Information:

U.S.A.

Tel: 213-261-4161 / Fax: 213-947-4767



1225 E. 7<sup>th</sup> St. • Los Angeles, CA 90021 USA

P 213-261-4161 • F 213-947-4767

[WWW.CERWINVEGAMOBILE.COM](http://WWW.CERWINVEGAMOBILE.COM)

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