



Marine Subwoofers



Wet Sounds Inc. 1-877-938-7757 www.wetsounds.com info@wetsounds.com

Owner's Manual

323099/253 01.08.12

Thank You for purchasing this Wet Sounds product !

Wet Sounds professional marine audio products represent the ultimate in high performance marine audio. Wet Sounds speakers are specifically engineered to withstand the rigorous marine environment. The Wet Sounds subwoofers were designed to provide amazing output combined with a cutting edge style. Utilizing state of the art acoustic engineering and three dimensional computer aided design, the subwoofers represent the most advanced marine speakers in the world. Please take a moment to read the instruction manual before starting your installation. If you have any questions or concerns, please contact you certified Wet Sounds dealer or Wet Sounds at 877-938-7757.

TECHNICAL SPECIFICATIONS

SS-10B S4	XS-10FA S4/ SW-10FA S4	XS-12 S4	XS-XXX V2
10 inch marine subwoofer	10 inch marine subwoofer	12 inch marine subwoofer	12 inch marine subwoofer
Impedance = Single 4 ohms	Impedance = Single 4 ohms	Impedance = Single 4 ohms	Impedance = Dual 2+2 ohms
Resistance = 3.9 ohms	Resistance = 3.9 ohms	Resistance = 3.8 ohms	Resistance = 0.97 ohm
Sd = 0.0363 m2	Sd = 0.0384 m2	Sd = 0.0511 m2	Sd = 0.0531 m2
Xmax = 7.0 mm	Xmax = 11.5 mm	Xmax = 11.5 mm	Xmax = 12.3 mm
Mms (g) = 117	Mms (g) = 142	Mms (g) = 207	Mms (g) = 254
Cms (uM/N) = 167	Cms (uM/N) = 120	Cms (uM/N) = 134	Cms (uM/N) = 100
Fs = 36 Hz	Fs = 38 Hz	Fs = 30 Hz	Fs = 32 Hz
Vas = 31 liters	Vas = 25 liters	Vas = 50 liters	Vas = 40 liters
Qms = 5.68	Qms = 4.44	Qms = 3.99	Qms = 5.19
Qes = 0.49	Qes = 0.69	Qes = 0.49	Qes = 0.48
Qts = 0.45	Qts = 0.60	Qts = 0.43	Qts = 0.44
BI (T*m) = 14.5	BI (T*m) = 14	BI (T*m) = 17.5	BI (T*m) = 10.1
Le = 1.1 mH	Le = 1.3 mH	Le = 1.7 mH	Le = 0.5 mH
SPL = 88 dB	SPL = 88 dB	SPL = 88 dB	SPL = 90 dB
RMS Power = 250 watts	RMS Power = 300 watts	RMS Power = 500 watts	RMS Power = 1000 watts
Peak Power = 500 watts	Peak Power = 600 watts	Peak Power = 1000 watts	Peak Power = 2000 watts
Sub Volume (ft ³)* = 0.056	Sub Volume (ft ³)* = 0.063	Sub Volume (ft ³)* = 0.078	Sub Volume (ft ³)* = 0.159

* Speaker volume already included in the box net volume

Limited Warranty

What This Warranty Covers

This is a "Limited" warranty. This warranty covers any defects in materials and workmanship and this warranty only applies to original purchaser and is not transferable. This warranty is also only valid if the original purchase was made at an authorized Wet Sounds™ dealer.

How Long Coverage Last

This warranty runs for 2 years from the date of the purchase. It is recommended to REGISTER your warranty online within 45 days of your purchase at www.wetsounds.com - click on "warranty registration".

What Is Not Covered

This warranty does not cover fading or discoloration caused by exposure to sunlight or chemicals such as ammonia, household bleach, or any cleaning material that contains abrasive substances. Wet Sounds, Inc. does not cover the cost for removal and reinstallation. Additionally, shipping **TO** Wet Sounds, Inc. is covered by the purchaser. This warranty is void and inapplicable if Wet Sounds™ deems that the product was abused or misused; including but not limited to damage caused by accident, mishandling, improper installation, negligence, normal wear and tear, excessive water or heat damage, freight damage or speakers that have been disassembled by anyone other than Wet Sounds™ technical staff. Wet Sounds™ shall not be responsible for any incidental or consequential damages, except to the extent provided (or prohibited) by applicable law. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

What Wet Sounds, Inc.

Wet Sounds, Inc will repair any part of your product that proves to be defective in materials or workmanship. In the event repair is not possible, Wet Sounds, Inc will replace the product in question. If it is deemed necessary Wet Sounds, Inc, will either replace the entire product with a refurbished unit or it will be replaced with a model that is similar in price if that model is no longer available. Labor cost and materials needed to complete this service will be at no charace to the purchaser. Additionally, the cost of shipping to the consumer is also covered under this warranty.

How To Get Service

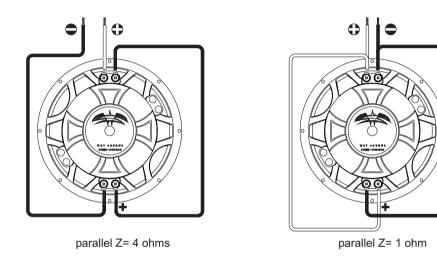
Contact Wet Sounds, Inc. either by phone at 877-938-7757 or by email at warranty@wetsounds.com. A service representative will assist you in the necessary actions to concur that the problem that you are experiencing is covered under warranty and what to do if it needs to be shipped to Wet Sounds, Inc.

Internet Warning

Wet Sounds, Inc. Produts sold on any non authorized web site or internet auction site are void of any and all manufacturer's warranty. Please contact Wet Sounds™ at 877 - 938-7757 or visit our web site at www.wetsounds.com to search for an authorized site and/or an authorized retailer near you.

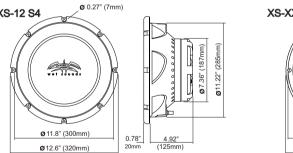
WIRING

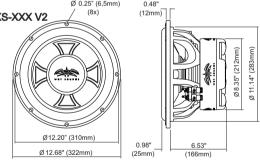
WET SOUNDS Marine subwoofer XS-XXX V2 is offered in Dual Voice Coil configuration 2+2 ohms. Voice coils can be wired in parallel (Z = 1 ohm) or in series (Z = 4 ohms), allowing the user to properly match the driver to the amplifier.



The Wet Sounds subwoofers are a line of advanced low frequency transducers. These subwoofers use advanced materials throughout such as our exclusive rubber spider, composite cones and thermoformed rubber surrounds. Wet Sounds has developed an exclusive rubber spider for our subwoofers which is used for the spider as most marine speakers use cloth that will deteriorate over time. These subwoofers are built to last in the harshest environments. The XS subwoofers utilize a cast aluminum frame that is powder coated to provide a solid non flexing mount. Advanced acoustical technologies like perimeter venting, high temperature voice coils also help to make these the most advanced marine subwoofers on the market.

Ø 0.21" (5.5mm) SS-10B S4 **XS-10FA S4** Ø 0.21" SW-10FA S4 (5.5mm) Ø6.30" (160r Ø 9.21" (234 Ø 10.07" (256mm) Ø 10.07" (256mm) Ø 9.68" (246mm) 1.4<u>2"</u> 36mm 4.72" 0.24" 5.27" Ø11.02" (280mm) Ø 11.02" (280mm) (120mm) (134mm) Ø10.12" (257mm) 6mm Ø 0.25" (6.5mm) 0.48" Ø 0.27" (7mm) (8x) (12mm) XS-12 S4 XS-XXX V2





DIMENSIONS (")mm

INSTALLATION

Wet Sounds marine subwoofers have been specifically engineered to produce outstanding results in both small sealed enclosures and vented enclosures for models XS-12, SS-10 and XS-XXX V2. The XS-10FA and SW-10FA are optimized for use in infinite baffle (commonly called free air) installations, however also work well in a sealed enclosure.

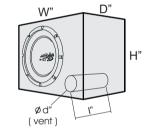
As a rule, sealed enclosures provide better transient bass response than their vented counterparts, although the vented enclosures generally provide more deep bass. However, both enclosure types will work in any situation. Free Air works great in applications where it is difficult to install an enclosure.

FREE AIR

XS-10FA and SW-10FA are the only subwoofers optimized for free air use. Please do not install any of the other woofers in free air. Free Air installations do not need a dedicated enclosure. However the front and the back of the woofer must still be isolated from one another. If your boat has a solid panel under the drivers foot well with a large cavity behind it, this panel is a good location for a XS-10FA. However, if this panel is a half wall and will not create a solid separation from front to rear, this will not be a good location for a free air woofer. When looking for a location for a free air woofer, make sure to consider that the area behind the woofer becomes the "box". Free Air woofers like a larger sealed area, so the larger this cavity is, the better the results.

VENTED ENCLOSURES

Vented enclosures are not air-tight and incorporate an additional opening known as a port or vent, which is generally fabricated from either plastic or cardboard tubing. The port augments the sound coming out of the woofer and is in most cases capable of going lower in frequency than the same woofer in a sealed box. Even though vented enclosures are not air-tight, you should follow the same procedure as with sealed boxes and glue and screw together all joints. Bellow you will find drawings for enclosures specifically designed for **WET SOUNDS** Marine subwoofer . The dimensions shown in drawings (already taking in account the volume occupied by the subwoofer) are intended as a guideline and specific dimensions (HxWxD) may be used provided the internal volume of the enclosure is maintained. In the special case of SEALED enclosures, volumes greater or smaller than specified in the table can be chosen, with different results. Smaller enclosures lead to a more enhanced response and higher power handling whereas larger ones exhibit better transient and more extended response.

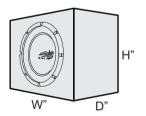


	Fb (Hz)	ft ³	Н	W	D	d	I
SS-10B S4	40	1.3	14	15	11	3	7
XS-12 S4	41	1.7	15	16	12.5	4	10
XS- XXX V2	41	1.8	15	16	13	4	10

Internal dimensions (inch)

SEALED ENCLOSURES

This enclosure is made up of a totally closed, air-tight box. This type of enclosure gives excellent, tight bass response, as well as providing an effective control of loudspeaker excursion, maintaining it within reasonable limits and generally providing lower distortion and very high volume levels. If you build your own enclosure, WET SOUNDS recommends that you glue and screw all joints using enough adhesive to ensure that all joints are air-tight.



	ft ³	Н	W	D
SS-10B S4	0.8	12	13	9.5
XS-10FA S4 SW-10FA S4	1.3	14	15	11
XS-12 S4	1.1	13	14	11
XS- XXX V2	1.2	13.5	14	11

Internal dimensions (inch)

ENCLOSURE CONSTRUCTION

For best performance the walls of the enclosure should be rigid and not vibrate as a result of the internal pressures generated by the loudspeakers. WET SOUNDS recommends constructing enclosures from a marine grade plywood like Birch with a minimum thickness of 3/4". In larger enclosures over 1 cubic foot, internal bracing that joins opposite walls can be incorporated and the final enclosure should be as rigid as possible. All joints should be glued and fastened with screws. Additionally, internal joints can be covered with a small bead of silicone adhesive to ensure that the enclosure is completely air-tight. Drivers should be fastened to the enclosure with self-threading screws with adequate length and diameter, utilizing all the mounting holes in the frame. To avoid air leakage, a foam rubber gasket or similar sealing method should be applied between the loudspeaker and the enclosure. The external surface of the enclosure with in the boat, without compromising stereo imaging. However, different placement locations of subwoofer enclosures can sometimes influence the overall quality of bass/midbass response, so you may wish to experiment with various mounting locations before permanently mounting the woofer.