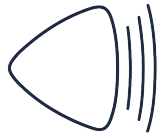


Installation Manual





SonicShield



MARINE

Content

1. Control Unit
2. 2 Transducers
3. 1x 8 meter cable
4. 1x 2 meter cable
5. Bison Fast Fix

Note if the box shows any damages, claim with freight carrier within 24 hours of delivery, keep the damaged shipping box until the carrier's representative has inspected it.

If necessary, contact H2O Marine for further assistance.

Dimensions

Control unit: LxWxH 300x190x70mm

Transducer: Diameter 89mm, Height 83mm, Weight 1100 Grams

Average power consumption: 13 Watts

Installation of the control unit

Position the control unit such that you have access to a 12 or 24 Volt DC power source and can route the transducer cables.

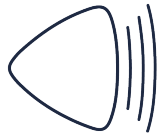
Identify a suitable location for the control-unit:

- Clean and dry
- Well ventilated
- Ambient temperature of -10° C (14° F) and 50° C (122° F)
- Protected from airborne particulate, moisture and dirt.

Connect the control box to a 12/24 Volt DC power outlet. Watch polarity!

Red - positive

Black - negative



SonicShield



MARINE

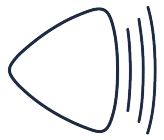
Installation of the transducers

Proper installation of the transducers is crucial for the effectiveness of the system.

[INSTRUCTION VIDEO](#)

Identify a suitable location for the transducers:

- Direct to the inside of the hull, in case of a soft-core or sandwich hull it needs to be placed on the outside shell!
 - Spot with min. diameter of 75 mm
 - Even surface
1. Use a sanding machine to remove all paint and make the spot as smooth/even as possible
 2. Clean the spot and the vibrating membrane of the transducer thoroughly with acetone or a similar cleaning product. Do not touch these surfaces after cleaning. If you accidentally did, clean again!
 3. Apply the glue generously on the transducer membrane, making sure that the entire surface is evenly covered. The film of glue should be sufficiently thick to absorb all possible unevenness of the spot you have prepared for the transducer. You do not need to cover the threaded hole in the transducer membrane. Make sure that no air bubbles can develop between the membrane of the transducer and the surface on which it is glued
 4. Place the transducer on the surface immediately after applying the glue (the glue hardens very quickly)
 5. Press the transducer slightly, making sure the glue has completely spread out, filling all possible air gaps and absorbing any unevenness of the surface on which the transducer is glued. You should see a little glue coming out from under the transducer all around
 6. Do not remove the glue that came out from under the transducer surface. The Bison Fast Fix hardens in 2 minutes. However, for the glue to completely cure allow 24 hours. Hence, **wait 24 hours before activating the transducer**
 7. If the transducer is installed in a location where it can be exposed to seawater, lubricants or cooling liquid, you can protect the glue with a marine kit. We recommend TEC 7. After installing the transducer, apply a seam of kit all around the juncture of the transducer, sealing off contact between the glue surface and any liquids.

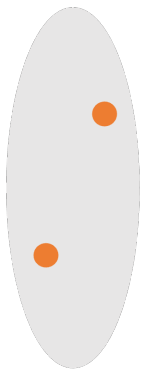


SonicShield



MARINE

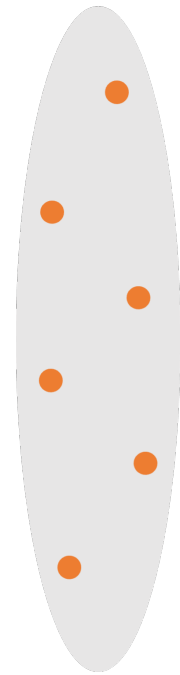
Location of the transducers



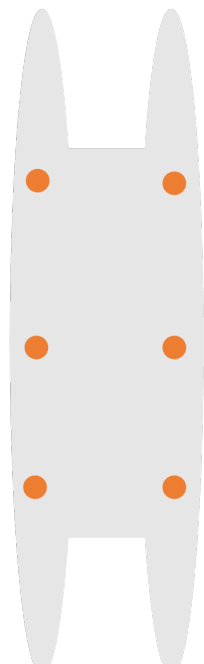
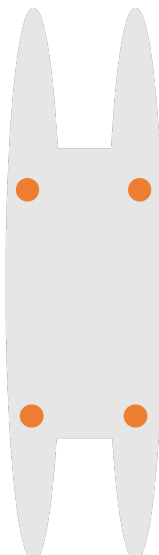
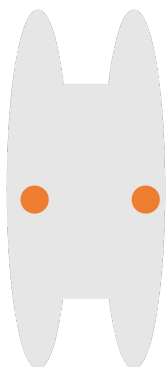
< 15m

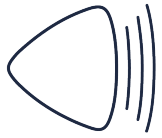


15 - 20m



21 - 30m

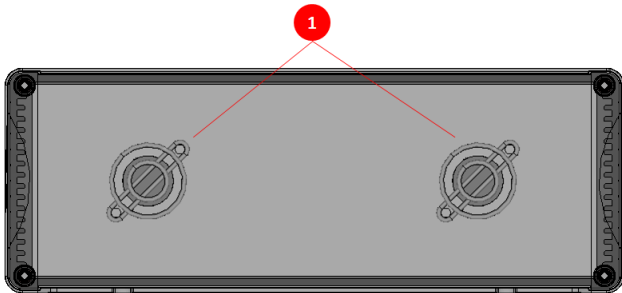




SonicShield

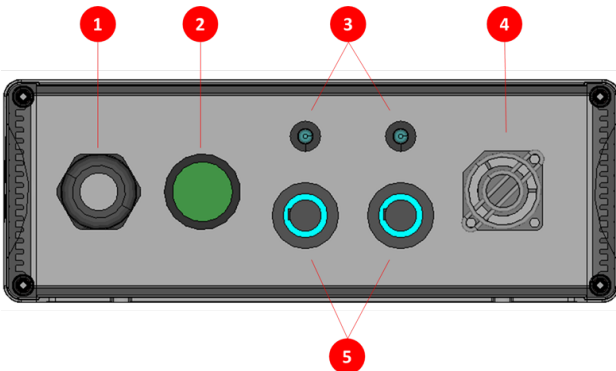


MARINE



Top View

1. Output Cooling Fan- Do not cover



Bottom View

1. Cable grand input Power Cable 12/24VDC
2. Power switch with indicator On/Off
 - a. Indicator Steady Green-> Power ON
 - b. Indicator Off-> Power Off
3. Transducer port indicator 1/2
 - a. Indicator blinking Blue -> Transducer port working normally
 - b. Indicator Off-> Transducer port Fault
4. Cooling Fan- Do not cover
5. Transducer port 1/2

CE certification

All our products are in conformity with the essential requirements of directives 2004/108/EC (Electromagnetic Compatibility) 2011/65/EC (RoHS Directive) and 2006/95/EC (Low Voltage Directive) and their subsequent amendments of the European Parliament and Council.

CE - test done in accordance with the company: "Globus Benelux Hatterm" The Netherlands:

CE - test ultrasonic anti fouling systems, under the following test norm:

NEN-EN IEC 61000-6

ELECTROMAGNETIC COMPATIBILITY (EMC)-PART 6-4

GENERIC STANDARDS – EMISSION STANDARDS FOR INDUSTRIAL ENVIRONMENTS:

(IEC610000-6-4:2006/A1;2010,IDT)



H2O Marine BV
Burgemeester Loeffplein 70E
5211 RX 's-Hertogenbosch
info@h2o-marine.com
+31 (0)85 060 2837