

SonicShield

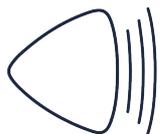


MARINE  
Sustainable Performance

## P20 - 100 - 12 Volt Installation guide

H2O Marine B.V.

Burg. Loeffplein 70E, Office 32, 5211 RX, 's-Hertogenbosch - The Netherlands - +31 (0)85 060 2837 - [www.h2o-marine.com](http://www.h2o-marine.com) - [info@h2o-marine.com](mailto:info@h2o-marine.com)



# SonicShield



MARINE  
Sustainable Performance

## Checklist content

- Control Unit
- 2 Transducers, incl. 10 meter cable
- Loctite 3090 Glue

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.

## Installation of the control unit

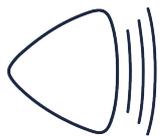
Position the control unit such that you have access to a 12 Volt DC power source and can route the transducer cables.

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.

Mount the control-unit using the 4 holes underneath the holes for the screws of the lid. Connect the control box to a 12 Volt DC power outlet. Watch polarity! On the big Techno connector the terminal number 1 is positive and the terminal number 3 is negative.

The electronics are designed for a maximum of 14,5 Volts, which occurs when the alternator or the shore power battery charger kicks in. Native operating power for the unit is 12 Volt DC.



# SonicShield



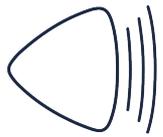
MARINE  
Sustainable Performance

## Installation of the transducers

Proper installation of the transducers is crucial for the effectiveness of the system. The transducers need to be placed at 1/3 and 2/3 of the length of the hull.

Identify a suitable location for the transducers:

- Direct to the inside the hull (not on insulation or other material)
  - 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 steel 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 Loctite 3090 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**  
Sustainable Performance



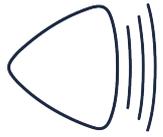
## Product overview outside

### Front exterior of P20-100-12 Volt

The red LED indicates 12 V DC power on the incoming cable.  
The green switch activates 12 V DC to the power boards.  
The blue signal lamps indicate the power circuit board (PCB) actuation.



## Transducers



SonicShield



MARINE  
Sustainable Performance

#### Contact

For any additional information  
contact:

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