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Serpe-Iesm

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DATE : 13/10/04

INDICE : A

REF. : DOC04162

**PROVOR**

**OPERATOR'S MANUAL**

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Rédigé par		Vérifié par		Approuvé par		Version	



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## Disclaimer

Even though MARTEC has thoroughly reviewed this manual MARTEC makes no warranty or representation, either expressed or implied, with respect to it.

In no event shall MARTEC be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect in the documentation, even if advised of the possibility of such damages.

Modifications to improve the product and its implementation may arise at any time. The information in this manual may be changed without notice.

The manufacturer cannot be held responsible for technical or editorial omissions, nor for the accidental or consequential damage to the supply and use of this manual.

The names of products that appear in this document are mentioned for the purpose of identification and may be makes and/or trademarks of their respective companies.

## Confidentiality Statement

This document contains information that is proprietary to MARTEC. This information is presented so that it may be used solely for the purpose of operation and maintenance of the equipment described herein. No part of this document or information contained in it may be used for any other purpose. It may not be copied, quoted, reproduced, or otherwise divulged without the express prior written consent of MARTEC.

## Safety Notices

This product contains a lithium battery (approximately 130 g of lithium in each float).

→ **WARNING:** This product contains a battery that can leak or explode - possibly causing injury or death - if short-circuited, charged or otherwise mishandled. Follow all safe-handling instructions.

→ **WARNING:** Wear safety goggles when handling battery.

→ **WARNING:** Do not heat the equipment above 50°C.

→ **WARNING:** Do not incinerate the equipment.

→ **WARNING:** Do not take the battery apart.



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→ **WARNING:** Do not attempt to recharge the battery.

→ **WARNING:** Do not short-circuit the battery.

The user may be required by the carrier to follow special procedures to transport this product. This product is not suitable for transport in passenger airliners.

## 1. Handling Precautions

PROVOR is designed to withstand submersion at great depths for long periods of time (up to five years). This remarkable specification in oceanographic instrumentation is possible thanks to the protection of the casing by an anti-corrosion coating. This coating is sensitive to impact. Damage to the coating can accelerate the corrosion process.

**NOTE:** Take precautions to preserve the anti-corrosion coating during handling. Remove the float from its packing only when absolutely necessary.

**NOTE:** The plastic housing of PROVOR's test port can easily be broken. Be careful to protect it from impact.

**NOTE:** Regulations state that PROVOR must not be switched on during transport.

## 2. Acceptance tests

Immediately upon receipt of the PROVOR float, you should test it to confirm that it is complete, correctly configured and has not been damaged in shipment. If your PROVOR float fails any of the following tests, you should contact MARTEC.

### 2.1 Inventory

The following things should have arrived with your PROVOR float in the transport casing and should be equivalent to the bill of materials.

**NOTE:** Disassembly of the float voids the warranty.

Check that all of the above items are present. If any are missing, contact MARTEC.

### 2.2 Physical Inspection

Upon the opening of the transport casing, visually inspect the float's general condition:

Inspect the transport container for dents, damage, signs of impact or other signs that the float has been mishandled during shipping.

Inspect the sensor, antenna, hull, housing around the lower bladder, and the test port for dents or any other signs of damage (refer to the drawing below for the locations of these components).



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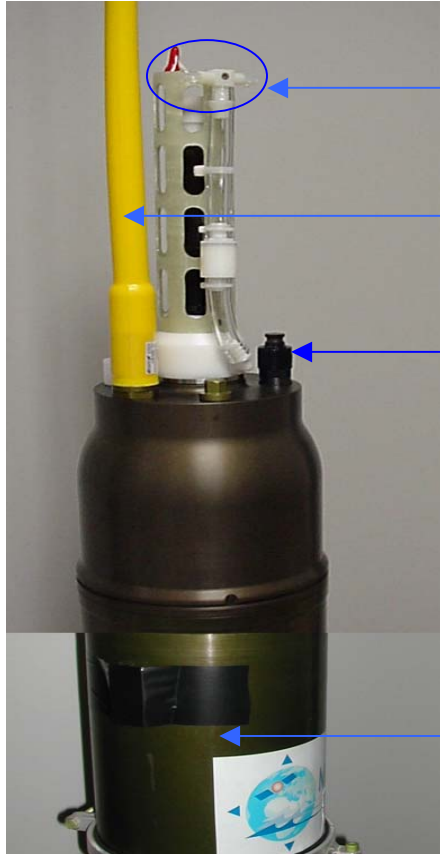
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CTD sensor Protective plugs

Antenna

Communication plug

Magnet

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**NOTE:** Ensure the magnet is in place against the hull. Removal of this magnet will begin the mission.

### 3. Launching

#### 3.1 Remove the Magnet

Remove the magnet located near the top of the float. Retain the magnet for future use in case the PROVOR float is recovered.

PROVOR is now ready for launch.

To confirm that the magnet has been removed and that the float is ready for launch, PROVOR gives **10 clicks** of its internal solenoid valve 11 minutes after magnet removal. The PROVOR may be horizontal during this stage of deployment.

**NOTE:** Once the magnet has been removed, the PROVOR float performs an initial test. This takes 11 minutes. Ensure that the valve clicks before placing the PROVOR in the water.



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If you do not hear the 10 clicks after 11 minutes, there is a problem. Replace the magnet, remove it and wait 11 minutes. If you do not still hear the 10 clicks, do not deploy the float.

### 3.2 Remove the protective plugs

The pump system of the CTD sensor is sealed by 3 protective plugs. Remove these plugs from the sensor before launching.

**NOTE:** The CTD sensor is protected by antifouling product. Limit the contact with the skin.

## 4. Launch the float

- Take a strong rope and place it into the hole from the damping disk. Do not fasten the rope to the float in order to get back the rope.
- Lift the float cautiously.
- Pull the float overboard and do not bump the float into the hull of the ship.
- Take off a tip of the rope and get it back.

