CleanAHull
Ultrasonic Antifouling System
Technical Specification Overview

Dimensions

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.1 x 12.1 cm</td>
<td>footprint</td>
</tr>
<tr>
<td>5.5 cm</td>
<td>height</td>
</tr>
<tr>
<td>6 cm</td>
<td>diameter</td>
</tr>
<tr>
<td>6 cm</td>
<td>height</td>
</tr>
<tr>
<td>120 g</td>
<td>weight</td>
</tr>
<tr>
<td>6 cm</td>
<td>diameter</td>
</tr>
<tr>
<td>5 mm</td>
<td>height</td>
</tr>
<tr>
<td>20 g</td>
<td>weight</td>
</tr>
</tbody>
</table>

Models

- CLHUQ
  Quad Transducer
- CLHUD
  Double Transducer
## Voltage & Consumption

**Input:** 12 or 24VDC Auto Selecting  
**Consumption:** Average ~920mAh @ 12VDC  
**Standby Consumption:** Average 15mA @ 12VDC  
Consumption at 24VDC are typically 50 – 70% that of 12VDC values.

**Input:** 12 or 24VDC Auto Selecting  
**Consumption:** Average ~460mAh @ 12VDC  
**Standby Consumption:** Average 15mA @ 12VDC

## Transducers

- **4 x Transducers + Footprints**
- **2 x Transducers + Footprints**

## Package Contents

- 1 x CLHUQ Control Module
- 4 x CleanAHull Transducers (Model CLH-T50) 10m of cable each.
- 4 x CleanAHull Transducer Footprints.
- 1 x JB Weld Epoxy Kit
- 1 x Loctite 515
- 1 x Instruction / Installation Manual

- 1 x CLHUQ Control Module
- 2 x CleanAHull Transducers (Model CLH-T50) 10m of cable each.
- 2 x CleanAHull Transducer Footprints.
- 1 x JB Weld Epoxy Kit
- 1 x Loctite 515
- 1 x Instruction / Installation Manual

## System Certification

![FC, CE certification logo]

## Transducer Output

- **4 Individually fused and protected transducer outputs. 50W peak output.**
- **2 Individually fused and protected transducer outputs. 50W peak output.**

## Safety Features

- Internal Temperature control system with active compensation ensures system never exceeds operating range, increased life of electronics and optimal protection
- Internal power monitoring
- Onboard Monitoring and Isolation Function
- Individual Fuses for each Transducer output
- Sealed Enclosure (IP65) Dust Proof & Water Resistant
- IP68 Transducers
- Low Voltage Input

## System Functions

- **Sleep Function:** 3 or 6 Hour Sleep modes. Button on front panel of module. Press once to enable 3 hours sleep – Press twice to enable 6 hours. The unit will then countdown the timer on the LCD panel. When Sleep is operating the Status LED will flash slowly Blue Only. Transducer operation will cease until the countdown expires.
- **Error Notifications:** Detailed Error status will be displayed using the LCD display. Buzzer will sound on Errors to attract attention to the problem.
- **Power Button:** Main Power On/Off control
- **Active Self Monitoring:** Internal Input and Output Current Monitoring, Temperature Monitoring and Active Output control ensures ultra long operating life and best possible Ultrasonic Protection.

Below is an outline of the core functions of the built in LCD display. Showing critical relevant information.

<table>
<thead>
<tr>
<th>System Status Screen</th>
<th>Transducer Fuses Status Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="CleanAHull 4CH System OK" /></td>
<td><img src="image" alt="Transducer Fuses T1, T2, T4" /></td>
</tr>
<tr>
<td>Battery / Average Current Screen</td>
<td>System Temperature Status Screen</td>
</tr>
<tr>
<td><img src="image" alt="Battery 25.8V Current: 790mA" /></td>
<td><img src="image" alt="PSU Temp 52°C Drive Temp 53°C" /></td>
</tr>
</tbody>
</table>