500 Series Acoustic Release Beacon

The **500 Series** release beacon provides the means by which scientific, survey or operational equipment can be deployed or reliably retrieved from its anchored seabed mooring.

Its positive drive-off mechanism ensures a reliable mechanical release in high bio-fouling environments.

### Key Features
- Positive drive-off mechanism
- Command and configured by 3510 PAM and Easytrak Nexus and Lite
- Reliable FSK acoustic command protocol
- SWL includes a 4x factor of safety
- Field adjustable internal frequency and release identities
- Also operates as standard acoustic positioning beacon with Easytrak Nexus and other standard industry systems

### Applications
- Oceanographic long term marking
- Equipment recovery
- Easytrak Nexus calibration

### Technical Specification

#### PHYSICAL SPECIFICATION

**Housing material; hard anodised aluminium**

<table>
<thead>
<tr>
<th>Model</th>
<th>Beam Pattern</th>
<th>SPL</th>
<th>SWL*</th>
<th>Release Load</th>
<th>Survival Depth</th>
<th>Beacon Diameter</th>
<th>Overall length</th>
<th>Weight air/water</th>
</tr>
</thead>
<tbody>
<tr>
<td>529P</td>
<td>± 90°</td>
<td>187dB</td>
<td>250kg</td>
<td>250kg</td>
<td>1000m</td>
<td>100mm</td>
<td>810mm</td>
<td>11.0/6.0kg</td>
</tr>
</tbody>
</table>

*SWL includes a 4x factor of safety*
ELECTRICAL SPECIFICATION

Battery

<table>
<thead>
<tr>
<th>Battery type</th>
<th>Alkaline</th>
</tr>
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<tbody>
<tr>
<td>Listening life</td>
<td>4 months</td>
</tr>
<tr>
<td>(At 2°C ambient)</td>
<td></td>
</tr>
<tr>
<td>Releases</td>
<td>70</td>
</tr>
</tbody>
</table>

Three battery packs are fitted to separately power the release motor, the receive/processor electronics and transmit electronics. This extends overall battery life and facilitates field servicing.

TWO-WAY COMMUNICATION

Frequency

MF, 17 to 32kHz

Status Telemetry

Acknowledge arm, Acknowledge release, Battery

Commands

Arm, Release, Battery Status, ID Commands, Tilt

COMPATIBILITY AND CONFIGURATION

Internally configured

Command /control

3510 PAM 16 Identities

Eaytrak Lite / Nexus 16 Identities

Navigation

EASYtrak Nexus, Easytrak Lite, V-Nav Positioning System, Kongsberg HPR4 and HPR3, ORE Edgetech, Sonadyne

OPTIONAL EQUIPMENT

Syntactic flotation to mark and recover seabed equipment

Ten tonne release frame

ACCESSORIES

Replacement alkaline battery pack

Model 529P, additional tether block