500 Series Acoustic Release Beacon

Key features

- Positive drive-off mechanism
- Command and configured by 3510 PAM and Easytrak Nexus systems
- 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 Pyxis and Nexus, and other standard industry systems

Applications

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

Acoustic Release Beacon Overview

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.
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

Battery type          | Alkaline
Listening life        | 4 months (At 2°C ambient)
Releases              | 70

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
                       | Easytrak Nexus: 16 Identities
Navigation            | Easytrak Pyxis, Nexus, Easytrak Lite, V-Nav Positioning System, Kongsberg HPR4 and HPR3, ORE Edgetech, Sonardyne

Optional Equipment

- Syntactic flotation to mark and recover seabed equipment
- Ten tonne release frame

Accessories

- Lithium Battery Pack [REL-0529P-3002] Motor
- Release Block [REL-0529P-2002]