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# 1600 Series LF Acoustic Release Beacon

## Key features

- Positive drive-off mechanism
- Command and configured by 3510 PAM with 3191 LF Dunking transducer
- Reliable FSK acoustic command protocol
- SWL includes a 4x factor of safety
- Field adjustable internal frequency and release identities
- Long operational life

## Applications

- Oceanographic long term marking
- Equipment recovery/ deployment
- Long range operation

## LF Acoustic Release Beacon Overview

The 1600 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:**
**1669:** PVC housing with hard aluminium endcaps, stainless steel protection cage.

**1679:** Hard anodised aluminium endcap and tube, stainless steel cage and release mechanism, AliBronze release.

| Model | Beam Pattern | SPL | SWL* | Release Load | Survival Depth | Beacon Diameter | Overall length | Weight air/ water |
|---|---|---|---|---|---|---|---|---|
| 1669 | ±90° | 191dB | 125Kg | 125kg | 400m | 125mm | 730mm | 7Kg/3.2Kg |
| 1679 | ±90° | 191dB | 1000Kg | 1000Kg | 3000m | 181mm | 1128mm | 27Kg/12.5Kg |

*SWL includes a 4x factor of safety

# Electrical Specification

### BATTERY

| | |
|---|---|
| **Battery type** | Alkaline |
| **Listening life (At 2°C ambient)** | 5 years (At 2°C ambient) |
| **Releases** | 50 |

A combined battery pack is fitted to separately power the release motor, transmit and the receive/processor electronics. This extends overall battery life and facilitates field servicing using 1 replacement pack.

### TWO-WAY COMMUNICATION

| | |
|---|---|
| **Frequency** | LF, 10KHz to 17KHz |
| **Status Telemetry** | Range, Acknowledge arm, Acknowledge release, Battery |
| **Commands** | Arm, Release, Battery Status, ID Commands, Tilt |

### COMPATIBILITY AND CONFIGURATION

Internally configured

| | |
|---|---|
| **Command/control** | 3510 PAM c/w 3191 LF Dunking transducer. |
| **Navigation/ Tracking channels** | Legacy Systems:<br>aae - LF USBL<br>Kongsberg - HPR4 LF and HPR1507<br>ORE/ Edgetech - USBL |

## Optional Equipment

- Syntactic flotation to mark and recover seabed equipment

## Options

- Removal of release mechanism. Interchanged for rechargeable battery, positioning endcap. For operation as LF navigation beacon and LF pinger applications.
- Directional ±30° Transducer, increased output power to 199dB.

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Due to continual product improvement specification information may be subject to change without notice.
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