

MODEL 865 A
DEEP SEA ACOUSTIC RELEASE



The Deep Sea Acoustic Release is a compact and rugged unit contained in a stainless steel housing proven for use at ultimate ocean depths. Transducer and electronic components are selected for reliability and long-life operation.

The release is capable of supporting and releasing 4,540 kg (10,000 pounds). Lifetime is one year and a minimum of 250,000 transponds with standard units. Slant range capability is 10 km when used with the Benthos DS 7000 Range Indicating Deck Unit.

The release features an external on/off/test switch for quick reset and deployment. Opening the case between short-term deployments or tests is not necessary. At sea turnarounds typically take less than 20 minutes including battery replacement. The housing has top and side pad eyes for optional mounting.

Each release is operated at Benthos under load and hydrostatic pressure simulating deep sea use before shipment.



Optional DS 7000 Deck Unit

► **FEATURES**

- Transponds for relocation
- Externally recockable
- 4,540 kg (10,000 pounds capacity)
- Lifetime one year minimum with 250,000 or more transponds, optional two year version
- 10 km slant range with companion deck unit
- Secure FSK codes
- Confirmation of release
- Compact, rugged, all stainless steel
- Tested to 12,000 meters depth

► **APPLICATIONS**

The Benthos Deep Sea Acoustic Release has been designed for long-range, heavy duty, deep water application. The release is used with moored instrument arrays where reliability, lifetime, and ease of deployment are critical factors.

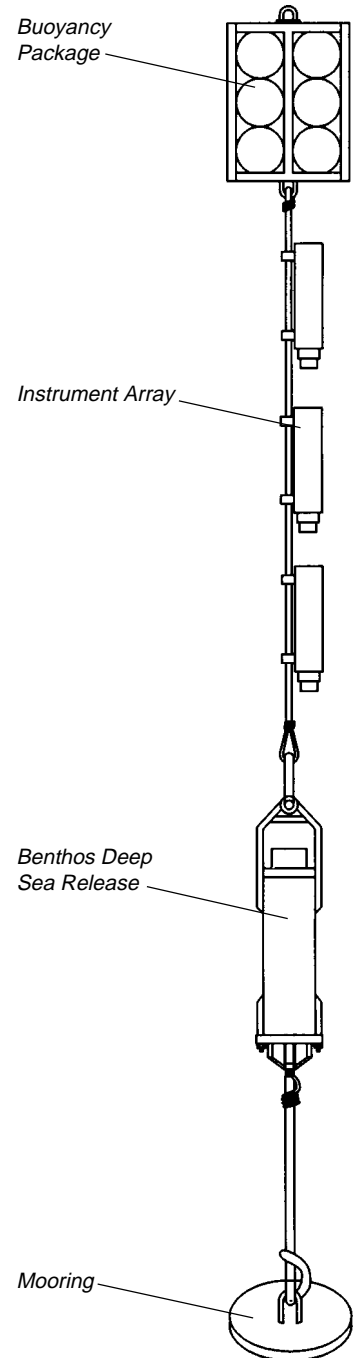


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► SPECIFICATIONS

Load Capacity:	4,540 kg (10,000 pounds) Conservatively rated
Depth Rating:	12,000 meters. All units hydrostatically tested to rated pressure.
Operating Range:	10 km slant range with Benthos Deck Unit DS-7000. (See Data Sheet DS-7000.)
Transducer Pattern:	Essentially omnidirectional in the upper hemisphere.
Transmitter Frequency:	12 kHz. 10 msec burst standard. (Other frequencies user selectable: 7.5-17 kHz in 500 Hz increments.)
Receive Frequency:	Factory set to one of the following: 7.0-15.0 kHz in 250 Hz increments.
Release Codes:	Secure digital frequency shift keying (FSK codes) permits reliable operation even in the presence of severe multi-path conditions. A total of 256 non-interfering codes are possible, any one of which can be used as a release command.
Release method:	Motor driven actuator retracts pin upon receiving the correct command.
Release indicator:	Single transpond reply until released; 4 pings upon completion of release, then 5 ping transpond reply until manually reset upon recovery. Audio and visual indication is provided at the Benthos Deck Unit DS-7000.
Power Source:	18 alkaline D-cells standard single battery. Optional double battery available.
Operating Life:	Release after 12 months and 250,000 transponds. Optional: 2 years and 300,000 transponds.
Weight in Air:	32 kg (70 pounds), 1 year version 48 kg (105 pounds), 2 year version
Weight in Seawater:	25 kg (55 pounds), 1 year version 36 kg (79 pounds), 2 year version
Dimensions:	96.5 cm (38 inches) long, 1 year version 116 cm (45 5/8 inches) long, 2 year version 17.8 cm (7 inches) diameter, including handles and pads.
Accessories:	Model 865-SL Spare Bottom Link Model 865-SB-13 Spare Battery Model 865-SA-K1 Spare Anode Kit Model 865-A-SPK Spare Parts Kit



Specifications subject to change without notice.
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