

The Teledyne Benthos Universal Deck Box has been designed to work with all Benthos acoustic releases, transponders and modems, including the SMART products.

# UNIVERSAL DECK BOX

## UDB-9000

The Universal Deck Box is a complete single-unit replacement for all previously offered Teledyne Benthos acoustic deck units, including the DS-7000, DS-8000, and ATM-891. The Universal Deck Box can operate standard acoustic releases, communicate and control acoustic modems, and work with the Teledyne Benthos SMART line of products.

The Universal Deck Box, (UDB), provides two RS-232 serial ports for data/command line interaction, and a large grey-scale touch screen for simple graphical user control and enhanced sunlight readability.

### Features:

- Touch screen display to send and receive commands
- RS-232 ports for direct connection to a PC or laptop
- Speaker for listening to acoustic signals
- Auxiliary jack for optional headset
- AC/DC or internal battery power
- Low frequency (LF) dunking transducer and 25 meter cable (standard)
- Up to 200 m cable available for high-reliability deep water acoustic communications
- Deck box emulation to command other vendor's products

### Touch screen to easily input, receive and view information such as:

- Real time data from subsea instrument
- Tilt indication of the subsea acoustic release
- Range information from the subsea modem, transponder or acoustic release
- Release commands and release confirmation of acoustic release
- Power sense and battery level monitoring of surface and subsea equipment (when supported)
- Frequency inputs
- Variable power level (source level) selections easily changed by the user
- Variable bit rate selections to optimize data transfer speed and reliability



The DS-8750 Acoustic Deck Set is a low cost companion to the Benthos Acoustic Release Model 875 and 875-PUB. It is ideally suited for basic release operations requiring only command capability.

### Features:

- Operates in the 7-15 kHz range, in 500 Hz increments
- Capable of sending all Benthos FSK commands
- Lightweight and portable, splash proof case
- Internal, rechargeable battery operation
- Includes transducer with 10 meters (30 feet) of cable
- Speaker for predeployment testing provided

TU-1000 Hand Held Acoustic Tester is a full function "in air" predeployment acoustic tester for Benthos' full line of acoustic transponders and releases. This battery operated, lightweight unit is capable of generating all Benthos FSK commands and interrogation frequencies. Constructed of rugged, black molded plastic, this device is designed to withstand years of exposure to marine environments.



 **TELEDYNE BENTHOS**  
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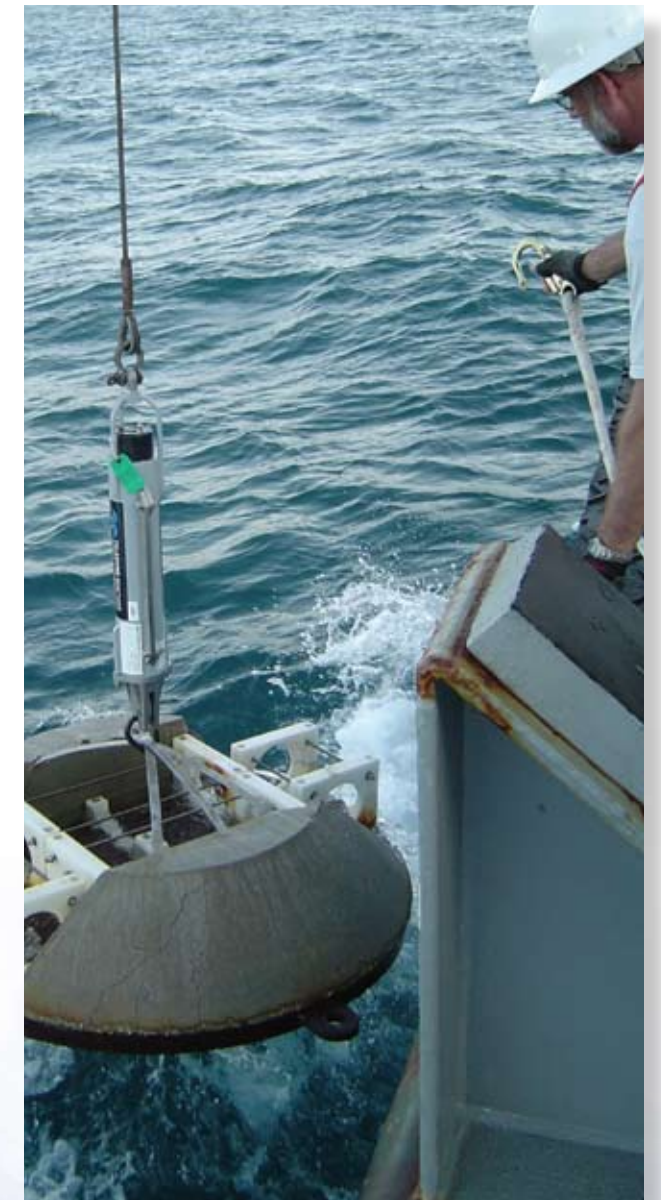
TELEDYNE BENTHOS ACOUSTICS 

# Acoustics

ACOUSTIC RELEASE PRODUCT LINE

## Wireless Recovery of Subsea Devices

Teledyne Benthos manufactures a wide range of Acoustic Releases for shallow water and deep sea equipment recovery. All of our releases can be operated from our Deck Boxes, giving users wireless topside control over their subsea devices. With over 30 years of experience in undersea applications, Teledyne Benthos Acoustic Releases deliver exceptional performance in harsh environments.



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INNOVATIVE UNDERSEA SYSTEMS TECHNOLOGY



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**Model 875-A Shallow Water Release** is a low cost, versatile acoustic release designed for recovery of underwater equipment in coastal and inland waters.



**Model 875-PUB Pop Up Buoy** is an 875-A release configured with a syntactic flotation collar and line canister to mark and recover seabed equipment. 75 m 1/4" spectra line standard 2995 kg (6,600 lbs), other line lengths and diameters available.



**Model 867-A Shallow Water Transponding Release** is a full function acoustic release providing range and tilt verification in addition to recovery of underwater moorings in coastal and inland waters.



**Model 866-A Transponding Release** is a full function acoustic release in a rugged and compact stainless steel housing for use in depths to 2000 meters and loads up to 2200 kg.



**Model 865-A Deep Sea Acoustic Transponding Release** is designed for full ocean depth mooring recovery applications requiring a rugged stainless steel package and 5000 kg load handling.



**Model 865-H Load Multiplier for 865-A Release** is a secondary arm to provide a 5:1 mechanical advantage when used on the 865-A Release. This 22,600 kg rated device is used for deployment of anchors and underwater construction.



SPECIFICATIONS

Depth Rating	305 m (1000 ft.)	305 m (1000 ft.)	305 m (1000 ft.)	2000 m (6,562 ft.)	12,000 m (39,370 ft.)	12,000 m (39,370 ft.)
Release Load Rating	180 kg (0.2 tons)	—	225 kg (0.25 tons)	2200 kg (2.43 tons)	5000 kg (5.5 tons)	22,600 kg (24.9 tons)
Lift Load Rating	455 kg (0.5 tons)	—	455 kg (0.50 tons)	2200 kg (2.43 tons)	5000 kg (5.5 tons)	22,600 kg (24.9 tons)
Actuation	High torque motor	High torque motor	High torque motor	High torque motor	High torque motor	High torque motor
Transponder Feature	—	—	5-10 km slant range	5-10 km slant range	5-10 km slant range	5-10 km slant range
Release Confirmation	—	—	Multiple ping reply	Multiple ping reply	Multiple ping reply	Multiple ping reply
Timed Disable Feature	—	—	2,4,8, or 16 hours	2,4,8, or 16 hours	2,4,8, or 16 hours	2,4,8, or 16 hours
Enable Feature	—	—	Enable command	Enable command	Enable command	Enable command
Disable Feature	—	—	Disable command	Disable command	Disable command	Disable command
Tilt Indication Feature	—	—	Vertical or horizontal (25° std.)	Vertical (25° std.)	Vertical (25° std.)	Vertical (25° std.)
Battery Life (receiver)	6 months (1 yr. w/lithium)	6 months (1 yr. w/lithium)	2 years	2 years (4 year option available)	2 years (4 year option available)	2 years (4 year option available)
Battery Life (transmissions)	—	—	25,000 pings	25,000 pings	25,000 pings	25,000 pings
Factory Set Receiver (freq.)	7-15 kHz	7-15 kHz	7-15 kHz	7-15 kHz	7-15 kHz	7-15 kHz
Selectable Transmit (freq.)	—	—	7-15 kHz	7-15 kHz	7-15 kHz	7-15 kHz
Source Level (nominal)	—	—	>192 db ref $\mu$ pa @ 1m	>192 db ref $\mu$ pa @ 1m	>192 db ref $\mu$ pa @ 1m	>192 db ref $\mu$ pa @ 1m
Weight—In air	4.3 kg (9.5 lbs.)	11.3 kg (25 lbs.)	9 kg (20 lbs.)	18 kg (40 lbs.)	33 kg (70 lbs.)	121 kg (268 lbs.)
In water	1.2 kg (2.7 lbs.)	4.5 kg (13.5 lbs.) positive	3.7 kg (8 lbs.)	13 kg (29 lbs.)	25 kg (55 lbs.)	104 kg (230 lbs.)
Dimensions	48 cm (19 in.) length	30 cm (12 in.) dia. collar	63 cm (25 in.) length	66 cm (25 in.) length	96 cm (38 in.) length	126 cm (50 in.) length
	10 cm (4 in.) dia. housing	50 cm (20 in.) length	13 cm (5 in.) dia. housing	15 cm (6 in.) dia. housing	15 cm (6 in.) dia. housing	46 cm (18 in.) width (Dim. are w/865-A attached)
Construction	PVC, Fiberglass Strongback	PVC, Syntactic Foam	PVC, Fiberglass Strongback	Stainless Steel (ferrarium 255)	Stainless Steel (17-4 PH)	High Strength Carbon Steel
Accessories	875-SB Alkaline Battery (B-855-147) 875-LI-SB Lithium Battery (B-855-157) 875-SL Drop Link (0220-008) Spare Magnet (B-855-152) 875-A-TR Tandem Release Mounting Kit (C-855-141) 875-A Spare Parts Kit (D-855-58-SPK)	875-SB Alkaline Battery (B-855-147) 875-LI-SB Lithium Battery (B-855-157) Spare Magnet (B-855-152)	Remote head version also available 875-SB Alkaline Battery (C-867-4) 875-SL Drop Link (0220-008)	865-SB-13 Alkaline Battery (C-855-60) 866-SL Drop Link (A-855-124) 866-BA Bar Anode (A-855-139) 866-A Tandem Release Mounting Kit (B-855-197) 866-A Spare Parts Kit (D-855-47-SPK) 866-ORING Kit (866-ORING-Kit)	865-SB-13 Alkaline Battery (C-855-60) 865-SL Drop Link (B-855-186) 865-SA-K1 Bar Anode (A-855-82-1) 865-A Spare Parts Kit (D-855-40-SPK) 865-ORING Kit (865-ORING-Kit)	865-SL-H Drop Link 865-SB-13 Alkaline Battery (C-855-60)

