

## Benthos

**Acoustic Releases** 

Wireless Recovery of Subsea Devices



**SHALLOW** 

MID

DEEP

WIRELESS

PROVEN IN HARSH ENVIRONMENTS

HIGHLY RELIABLE







**Teledyne Benthos** manufactures a wide range of Acoustic Releases for shallow, mid and deep water operations. Acoustic releases have been used for decades as a safe and reliable means of deploying and recovering critical subsea instrumentation. A secure acoustic command is sent from the topside unit to the subsea unit to release up to 25 tons of in-line instrumentation to the surface for recovery.

All of Teledyne Benthos acoustic releases can be operated from our feature-rich UTS-9400 universal topside unit, which provides access to a wide spectrum of system capabilities and diagnostics to ensure ease of operation and successful instrumentation recovery. As an alternative, the R500 Series Acoustic Release can also operate with our value-priced Release it deck box, providing users with an ideal solution for shallow water applications.

With over 50 years of experience in undersea applications, Teledyne Benthos Acoustic Releases have become synonymous with quality and dependability, even in the harshest of environments.

Model R500 Shallow-Water **Acoustic Transponding Release** is our newest release rated to 500 meters depth and release loads of up to 455 kg (1,000 lbs). The R500 is compatible with our full-feature UTS-9400 or our

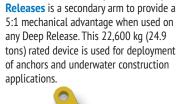
value-priced Releaseit Deck Unit.

**Model R2K Mid-Water Acoustic** Transponding Release is a full function acoustic release in a rugged and compact stainless steel housing for use in depths to 2,000 meters and loads up to 2,000 kg (4,400 lbs).

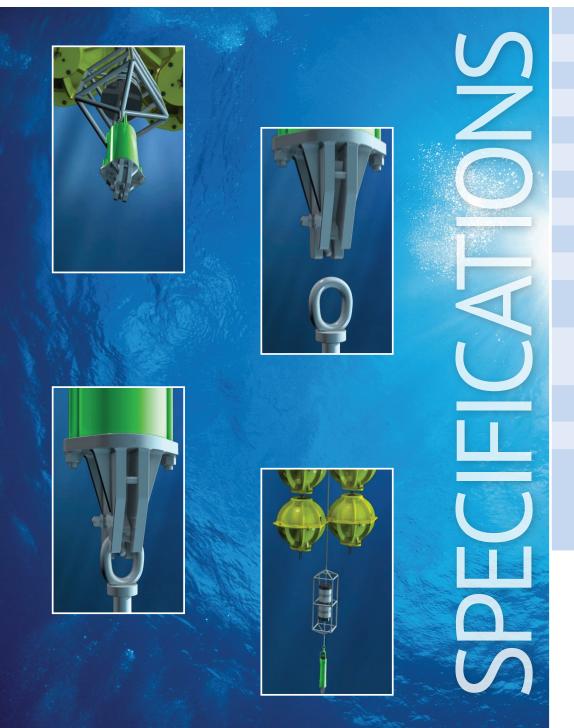
The R12K Deep Water Acoustic Transponding Release is designed for full ocean depth mooring recovery applications requiring a highly-reliable rugged stainless steel package and 4,540 kg (10,000 lbs) load handling.

Model HD Load Multiplier for Deep









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Rated Depth	500 m (1,640 ft)	2,000 m (6,562 ft.)	12,000 m (39,370 ft.)	12,000 m (39,370 ft.)
Release Load Rating	180 kg (396 lb) release	2,000 kg (4,400 lbs)	4,540 kg (10,000 lbs)	22,600 kg (24.9 tons)
Lift Load Rating	455 kg (1,000 lb)¹	2,000 kg (4,400 lbs) 1	4,540 kg (10,000 lbs) <sup>1</sup>	22,600 kg (24.9 tons) <sup>1</sup>
Release Actuation	High torque motor	High torque motor	High torque motor	-
Slant Range	Up to 2 km (1.2 miles)	Up to 12 km (7.5 miles)	Up to 12 km (7.5 miles)	-
Range Accuracy	0.3 m (1 ft)	0.3 m (1 ft)	0.3 m (1 ft)	-
Tilt Range	0-180° at 1° increments	0-180° at 1° increments	0-180° at 1° increments	-
Operating Life	Up to 18 months <sup>2</sup>	Up to 4 years <sup>2</sup>	Up to 4 years <sup>2</sup>	-
Frequency Band	9-14 kHz (LF)	9-14 kHz (LF)	9-14 kHz (LF)	-
Source Level (typical)	167 dB re 1uPa @ 1m	$185~\text{dB}$ ref $1~\mu\text{Pa}$ @ $1\text{m}$	185 dB ref 1 μPa @ 1m	-
Weight—In air In water	5.9 kg (13.1 lb) 2.1 kg (4.6 lb)	18 kg (40 lbs) 13 kg (29 lbs)	36 kg (80 lbs) 28 kg (62 lbs)	121 kg (268 lbs) 104 kg (230 lbs)
Dimensions	48 cm (18.9 in) length 11.4 cm (4.5 in) dia	66 cm (26 in) length 15 cm (6 in) dia.	93.7 cm (36.9) length 16.3 cm (6.4 in) dia.	119.5 cm (47.1 in) length 48.2 cm (19 in) width (Dim. are w/releases attached)
Housing Construction	PVC	Stainless steel (ferralium 255)	Stainless steel (17-4)	Stainless steel (17-4) high strength carbon steel
Topside Compability	UTS-9400 / Release it / Test it	UTS-9400 / Releaseit <sup>3</sup> / Test <i>it</i>	UTS-9400 / Release it 3 / Test it	-
Accessories	R500 Alkaline Battery (C-270-535) Drop Link - (0220-008) Anode Kit - (A-270-378)	R2K Alkaline Battery (C-270-388) Drop Link - (B-270-804) Bar Anode (A-855-139)	R12K Alkaline Battery (C-270-388) Drop Link - (B-855-186) Anode Kit - (A-855-82-1)	008847 Drop Link –

<sup>1</sup> Refer to manual for static and dynamic loading.

<sup>2</sup> Refer to manual for more detailed battery life conditions.

<sup>3</sup> Depth limited due to 3 km slant range.

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

## **Universal Top Side (UTS)**

The NEW UTS-9400 is a complete single-unit replacement for all previously offered Teledyne Benthos acoustic deck units.

This Universal Top Side is used to operate all standard acoustic releases and to control and communicate with Teledyne Benthos' full line of acoustic modems and positioning products.

The UTS is the result of a focused engineering effort to devise the ideal top side unit for any level of user. From the novice user to the seasoned pro, the UTS delivers a user-friendly interface, with powerful, intuitive communication, command and control features to ensure you remain in control of your operations at all times.

The full color, touch screen display and intuitive menus ensure the successful use by any level of user; while advanced features like ambient condition analysis and the logging of all sent and received commands provide power users with valuable, insightful tools and peace of mind.





New full-color touch screen display for novice to advanced users.



Teledyne Benthos new Releaseit Deck Unit and dunking transducer has been designed to serve our shallow water users with high expectations and limited budgets. Encompassing Teledyne Benthos' proven engineering and reliability, Releaseit is a value priced alternative deck unit created to operate with our R500 Shallow Water Acoustic Release, providing users with a lower cost turn-key system for shallow water applications up to 500M water depth. For those with basic, coastal operational needs, Releaseit is an attractive, value-priced alternative to our feature-rich UTS-9400.





Testit is a fully functioning "in air" predeployment acoustic tester. This battery operated (AA Alkaline), lightweight unit is capable of generating all commands needed to test your R-Series Release in the lab or on deck prior to deployment. The unit is splash proof and is designed to withstand exposure to marine environments. This unit allows you the opportunity to move freely around the lab or deck of a ship testing your Benthos Releases without the need to have your top side deck unit nearby.





## Teledyne Benthos

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