

# **SWALE OCEANOGRAPHIC**

# **Underwater Location Beacons & Transponders**

RJE's cost effective acoustic beacons & transponders are available in a wide variety of options to meet any requirement. With different frequencies, activation methods, and battery life options and more, there are solutions for any marking and relocation situation. These acoustic pingers mark and relocate equipment and locations underwater, and our receivers & interrogators can be mounted on subsea vehicles, used from the surface, or operated by a diver.

RJE International specialises in customization, and can create a pinger/transponder or any specific task. If you need an emergency location beacon for your subsea vehicle or towfish, marking equipment moorings, or to track divers during training, RJE has the equipment you need.

## **ULB-350**

The **ULB-350** Underwater Beacon is a small, rugged and reliable acoustic signalling device used for marking equipment and underwater sites. Ideal for applications where size and weight are an issue, the **ULB-350** offers flexible features that allow you to tailor it to your requirement. (i.e. fewer pings to allows longer battery life).

By using the ULB350/PRG programmer, you can adjust the ULB-350's pulse width and rep-rate to meet your specific requirements. You can also programme a time delay before activation. An off-the-shelf 9 volt battery adds the advantage of cost effective maintenance. The ULB-350 continuously sends out an acoustic signal for up to 60 days.

## **ULB-362**

The **ULB-362B** is a compact, cost-effective, full ocean depth underwater locator beacon designed for applications where size is critical. Typical applications include use on ROVs, AUVs, ordnance and equipment recoveries. The ULB-362B can withstand very high levels of vibration, pressure, and temperature. It is powered by a battery with a 6 year shelf life which provides a minimum operating life of 30 days when activated.

The **ULB-362PL/B37** is an emergency locator beacon with activation by power loss through an external connector. Ideal for ROVs and AUVs, it automatically activates when a relay closes on the vehicle due to loss of power. A water-activated switch prevents the pinger from turning on at the surface when the vehicle is shut down. No other power loss pinger is smaller, more durable, and goes deeper.

#### **ULB-364**

The **ULB-364** Series Underwater Locator Beacon is a cost-effective acoustic relocation pinger designed for rigorous offshore use. Using off-the-shelf 9V alkaline or lithium batteries, the ULB-364 is ideal for marking underwater sites or equipment where cost is a factor.

Flexibility is a key factor in the design of the ULB-364 series beacon. The ULB-364 allows the operator to select the operating frequency from 27kHz to 35kHz and to extend the operational life by adjusting the repetition rate of the beacon. So much capability in a small and rugged, cost effective beacon.

## **ATT-400**

The **ATT-400** series transponders are small battery operated underwater acoustic devices that operate as a transponder or a pinger. When programmed as a transponder, the ATT-400 works with the DTI-300, STI-350 or VADR/SEEKER to mark and relocate targets underwater, in ranges up to 750 metres. A manual ON/OFF water switch activates the transponder where it can remain in receive mode for up to 18 months (based on model), waiting for signal from the DTI-300, STI-350 or VADR/SEEKER.

The ATT-400ST has a built-in strobe light that blinks when interrogated, making diver recovery easier in poor visibility. It can be programmed to operate as an acoustic pinger with eight user selectable frequencies from 27kHz to 34kHz. With a 2 watt output, and provides a range of up to 1,800 metres with a standard receiver like the PRS-275. Made of a non-corrosive material, the ATT-400 can be depth deployed to 6,000 metres.









# **Specifications**

	ULB350	ULB362B	ULB364	ATT400
Transmit Frequency kHz (+/- 1kHz)	27, 37 or 45	27, 37.5 or 45	27,29,32,34,37,39,42, 45 (user select)	27,28,29,30,31,32,33,34 (user select)
Receive Frequency kHz	n/a	n/a	n/a	26
Acoustic Output (re 1µPa @ 1m)	163dB	160.5dB	165dB	180dB (coded)
Range		1-2 km		750m (pinger mode) 1800m (Trans mode)
Pulse Repetition Rate	1 Pulse per second		1 or 2 Pulse/ Sec (user adjustable)	
Pulse Length	10 ms		5 ms	
Activation	Water switch	Water switch or Power Loss	Water switch	Water switch
Battery Type	9V alkaline or lithium	Bespoke	2 or 6x 9V alk or lithium	2 or 6x 9V alk or lithium
Battery Life - days (alk / Li)	30 days / 60 days	30 days (Lithium)	Alk: 1p/sec - 30 Alk: 1p/ 2 secs - 40 Li: 1p/sec - 90 Li: 1p/ 2 secs - 180	6 mths / 360,000 replies (Pinger Mode: 4 days)
EL version			Alk: 1p/sec - 90 Alk: 1p/ 2 secs - 120 Li: 1p/sec - 270 Li: 1p/ 2 secs - 540	18 mths / 1,000,000 replies (Pinger Mode: 12 days)
Operating Depth (m)	1216m	6096m	1000m	300 / 1000 / 6000m
Housing Material	HDPE	Aluminium	Aluminium	Delrin or Aluminium
Housing Dimensions	L 114mm x D 50mm	L 102mm x D 33mm	L 203mm x D 57mm	L <240mm x D 64mm
EL version			L 335mm x D 57mm	L 300mm x D 64mm
Weight	240g	168g / 198g (pl)	806g	0.34 – 1.75kg
EL version			907g	630g
Other notes and options	Alternative activation. Handheld programmer Time delay Selectable pulse & rep	Power loss option 6 year shelf life		ATT400ST has strobe light. Manual activation. 18mth sleep mode. 2 watt output







# **SWALE TECHNOLOGIES Ltd**

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