

TBR 800 Release

The TBR 800 Release is a modular extension to the TBR 800 standalone receiver. The motor unit and the extended casing enable the active mechanical release mechanism. TBR 800 and TBR 800 Release heavily rely on the successful TBR 700 and add to it with new features.

The TBR 800 Release is a low-power, digital acoustic receiver with a battery life of up to 24 months. Data reception is maximized by monitoring and adapting to background noise levels. With the additional ~2 dB increased signal-to-noise ratio and upgraded signal processing capacity, the TBR 800 has an even greater detection range than the TBR 700. It operates on the 63-77 kHz frequency range, utilizing state-of-the-art digital signal processing technology. The default frequency is set to 69 kHz, making it compatible with other manufacturers' equipment. The TBR 800 has built-in multi-frequency reception, meaning that it can listen to up to three different frequencies simultaneously.

Received data is stored in internal memory, along with logged temperature data, noise conditions, inclination, power consumption, and battery status. Together with the DeckBox, the TBR 800 can transmit and send status updates with information regarding battery status and power consumption upon request. The distance-ranging function will make locating your TBR 800 Release easy and efficient.

RELEASE MECHANISM

The TBR 800 Release has a motor-driven, remote-operated release function. The release command is sent as acoustic signals from the TB DeckBox surface control unit. The TBR 800 Release uses a mechanical release system where a motor physically drives off a release lug. It is a robust and reliable mechanism that uses a rechargeable battery. The release battery recharges through the main battery, and as long as there is a primary battery present, the release battery will not need to be replaced. The mechanical push-off solution is especially suitable for coastal waters where heavy growth must be expected. The Thelma Biotel solution to the push-off lug mechanism includes a key pin that lets the user service and operate the TBR 800 Release without any tools or clamping devices.



SPECIFICATIONS

DIMENSIONS

Length:	450 mm
Diameter:	80 mm
Weight:	2850 g

BATTERY

Battery type:	SL 2790
Battery Life:	24 months

DEPTH

Maximum Depth:	500 m
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FREQUENCIES

Available frequencies:	63-77 kHz
Multi-frequency:	3 frequencies

DATA STORAGE

Memory:	32 MB
Number of detections:	3 million

MOORING RECOVERY SYSTEM

TBR 800 Release is available with a standardized Mooring Recovery System (MRS). The Thelma Biotel MRS is produced in cooperation with renowned Subsea equipment supplier Partnerplast at a reasonable cost.



TB MRS consists of a single spherical buoy that slips over the receiver and provides the buoyancy to let it rise efficiently to the surface once the release mechanism is triggered. The buoy is made of a rugged polyethylene shell filled with synthetic foam tailored to the required depth. The foam backing ensures the float will never puncture and lose its positive buoyancy, implode, or crumble from the sustained pressure. It will neither soak over time nor carry over-pressure to the surface, which can explode when brought back up on deck. It has a bright yellow color to make it easy to spot at sea.

The buoy rests over and functions as a lid to a rope drum/canister with a capacity of up to 150 m of 4 mm Dyneema rope (breaking strength of about 1800 kg). The rope drum is made from thick polypropylene plastic with a welded-in bottom plate, and an internal buoyancy device to keep it up right after the buoy has left.

The MRS allows the user to safely call up the TBR 800 Release without fear of pulling away with the current. The rope secures it to the mooring while on the surface, and the rope can then be used to winch up the mooring, clean up after deployment and recover all components. The single, spherical buoy over the tubular rope drum secures a minimum of current drag and minimizes possible entanglement points. The lowered risk of entanglement comes in handy when operating in areas where fishers deploy nets, loose kelp, and other debris carried over the bottom by a current. Two versions of the rope drum are available. The large unit has 150-200 m of rope capacity, and a smaller unit with a current drag profile and up to 100 m rope capacity.

