

MAP WHS 3250 – A Path to Discovery



What does the migration behavior of Tanner Crab in the Bering Sea, Chinook Salmon and White Sturgeon in the Columbia River, Pallid Sturgeon in the Missouri River and Striped Bass from the Hudson River to the Gulf of Mexico have in common? Over the past decade, MAP acoustic telemetry systems have been assisting biologists and fisheries managers involved in this research, answer important questions regarding these fish behaviors.

Why MAP? For over 25 years, Lotek systems have been used to enable and advance fish and wildlife research. Our MAP acoustic systems support a variety of compatible receiver architectures and software tools that afford researchers considerable flexibility in designing a project that best meets budget, timeline and study objectives.

The CDMA¹ technology-platform upon which our MAP system is based, as well as our unique signal code transmission structure, represent key elements to the superior performance MAP systems can deliver in high noise, acoustically challenging environments. For researchers who have chosen MAP systems for their studies, these proven² technology characteristics translate to greater detection probability of transmitted signals from tagged fish than any other acoustic telemetry system available today. It's that simple.

¹ Code Division Multiple Access

² CDMA characteristics include high noise immunity and ability to support high traffic volume in close proximity and accordingly is a key technology applied in cellular telecommunication.

The WHS3250 is an acoustic telemetry receiver designed for sub-surface deployment in marine and freshwater environments, for the purpose of autonomous data collection of coded signals transmitted by appropriately tagged fish.

Development and introduction of the WHS 3250 to our MAP family of acoustic telemetry receivers was fostered through advancements in signal processing technologies and data compression techniques.

Overcoming critical power-budget issues associated with CDMA technology enabled significant reductions in receiver size and cost, with equally impressive extensions to mission time, prior to receiver battery exchange. The result is a highly practical and efficient new telemetry tool for use by the fisheries research community.

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Innovative solutions for a sustainable future.

- Receivers
- Dataloggers
- Radio transmitters

- Acoustic transmitters
- Archival tags
- GPS systems

- Hydrophones
- Wireless hydrophones
- 2D/3D Position systems

- Sensor transmitters
- Accessories
- Consulting

Our WHS 3250 is backward compatible with existing MAP receivers and supports presence /absence monitoring, mobile tracking, as well as sensor data collection. WHS3250 systems can also be deployed to collect 2D/3D position data with use of our ALPS software.

WHS 3250 receivers is user-programmable through our flexible software scheduler to further extend mission life. Our Windows-based Host receiver software scheduler also supports user-programmable beacon transmission, both to aid in recovery and to support positioning data collection.

WHS 3250 receivers are designed for use with our Multi-Mode (MM-series) acoustic and CART (combined acoustic and radio tag) transmitters. This affords researchers the opportunity to deploy multiple acoustic receiver nodes from various manufacturers to facilitate data collection from the same tagged population.

From monitoring reef fish behaviors in the Indian Ocean and around oil rigs in the Gulf of Mexico, to assessing the impacts of dams on fish migration in the Amazon River, researchers with leading Federal Agencies and Institutions world-wide have selected MAP acoustic systems to assist in elucidating these behaviors.

MAP acoustic systems have long represented an effective tool for informed researchers with challenging questions best answered through the use of biotelemetry. The MAP WHS 3250 now affords all researchers with a fish research and management mandate, even those working under tight budget constraints, an efficient and affordable acoustic system solution.

Call us to discover more about how MAP systems can provide a solution for your project.

Features

- Small, rugged form factor simplifies deployment and recovery
- Easy-access to primary battery pack for replacement
- Easy-access USB connection for data download
- Supports on-board pressure, temperature and tilt angle sensors to assist in qualifying environmental conditions and data
- Relative Signal Strength Indicator and Code Filter software to assist in qualifying logged detections when post-processing data
- Supports mobile tracking for real-time data collection
- Remote receiver status monitoring via Bluetooth

Specifications

Operating frequency	76 kHz
Length*	430 mm / 580 mm
Diameter	60 mm
Weight*	1.2 kg / 1.7 kg
Operational Life*	84 days / 165 days
Buoyancy	Negative
Depth Rating	200 m
Operating Temperature Range	0 - 50° C
Data Storage / Capacity	2 Gb Removable SD Card
Power	2 (D) or 4 (L) lithium primary D-cells

* WHS 3250D / WHS 3250L based on two/four battery deployment. Operational life may vary slightly based on beacon schedule and ambient temperature.



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