

HR3 High Residence Receiver

Track more fish in less time and with more accuracy than ever before

The feature rich HR3 High Residence Receiver is an excellent choice for tracking many fish with higher accuracy than ever before using our 307 kHz V3 Transmitter. The HR3 and HR telemetry system was designed specifically to allow researchers to monitor or position many tagged animals with sub-meter accuracy.

The HR3 is capable of decoding two different methods of transmitting IDs to satisfy different study design objectives: HR Mode (High Residency), and HTI Mode. HR represents a more aggressive transmission system that offers the ability to detect many more tagged animals at once than our traditional PPM coding. Each HR ID code is embedded in every short ping transmitted by the tag. The HTI coding structure provides researchers with high performance in noisy and reflective environments. To provide collaboration/equipment efficiencies, the HR3 receivers can detect tags transmitting our traditional HR signal, or transmissions from HTI 307kHz tags.



Use Cases

- » Conduct high residence studies of hundreds of tagged animals
- » Set up frequent and precise positioning studies of fish (i.e. sub meter accuracy every second depending on tag transmission rate)
- » Monitor survival during migration
- » Monitor predation events and predator-prey interactions
- » Used with the tiny, high frequency V3 tag to study very small fish

Benefits

- » Monitor or position many tagged animals with sub-meter accuracy
- » Detects two transmission systems (HR & HTI) to support high residence and/or high performance in noisy and reflective environments
- » Obtain receiver diagnostics remotely using a transponding hydrophone attached to an on-board surface VR100 deck box
- » Built-in transmitter can be used as a sync tag for receiver synchronization in 2D/3D fine-scale positioning studies
- » Real-time data access and precise positioning (standalone or cabled)

Pair With

The HR3-307 kHz receiver is used as a system with:

- » V3-307 kHz Coded Tag
- » V3D-307 kHz Predation Tag
- » VR100 Deckbox and VHTx-307 kHz Transponding Hydrophone for communication with deployed units
- » Fathom Software for data offload and analysis



PRODUCT SPECIFICATIONS



Frequency

307 kHz

Weight

2.93 kg (Lithium battery)

3.21 kg (Alkaline battery)

Dimensions

Length 40 cm (15.75 inches)

Diameter 10 cm (3.9 inches)

Power

Internal Lithium or Alkaline battery pack and optional external power supply: 10-30 VDC

Battery Life

Approximately 6 months (Lithium);
2 months (Alkaline)

Depth

300 m (440 psi)

Storage Capacity and Type

HR 160,000,000 detections

HTI 1000,000,000 detections

Diagnostics

Transmitted signal strength, receiver noise, tilt, temperature, battery capacity, etc.

Ready to Get Started? [Contact us](#) today.

About Innovasea

Innovasea designs the world's most technologically advanced aquatic solutions for fish tracking and builds them to withstand the toughest conditions. It's all driven by a commitment to make our ocean and freshwater ecosystems sustainable for future generations. Today. Tomorrow. For life.

