

HR2 High Residence Receiver

Monitor or position hundreds of tagged fish with sub-meter accuracy

The feature rich HR2 High Residence Receiver is an excellent choice for tracking many fish with very high accuracy using our family of 180 kHz transmitters. The HR2 and HR telemetry system was designed specifically to allow researchers to monitor or position many tagged animals with sub-meter accuracy.

The HR2 is capable of decoding two different methods of transmitting IDs to satisfy different study design objectives. To remain compatible with VR2W-180 kHz receivers, the HR2 can detect tags transmitting our traditional PPM (pulse position modulation) and the new HR transmissions at the same time.

You can use the HR2 with existing VR2W-180 receiver arrays in collaboration with other researchers in a large-scale monitoring network or you can use HR2s to set up small-scale positioning experiments.



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)
- » Use with existing VR2W-180 kHz receiver arrays in a large-scale monitoring network
- » Monitor survival during migration
- » Monitor predation events and predator-prey interactions
- » Understand non-native predator impacts on native fish

Benefits

- » Monitor or position many tagged animals with sub-meter accuracy
- » Detects two transmission systems - PPM to enable compatibility with VR2W-180 kHz receivers and HR for monitoring many tagged animals simultaneously and for 2D/3D precise positioning studies
- » Obtain receiver diagnostics remotely using a transponding hydrophone attached to an on-board surface VR100 deck box
- » Built-in sync tag for receiver synchronization in 2D/3D positioning studies
- » Real-time data access and precise positioning (standalone or cabled)

Pair With

The HR2-180 kHz receiver is used as a system with:

- » V5, V9 180 kHz Coded Tags
- » V7TP, V9TP 180 kHz Temperature/Depth Sensor Tags
- » V5D 180 kHz Predation Tag
- » VR100 Deckbox and VHTx-180 kHz Transponding Hydrophone for communication with deployed units
- » Fathom Connect for data offload and analysis



PRODUCT SPECIFICATIONS



Frequency

180 kHz

Weight

2.88 kg (Lithium battery)

3.16 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

PPM/HR 170,000,000 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.

