

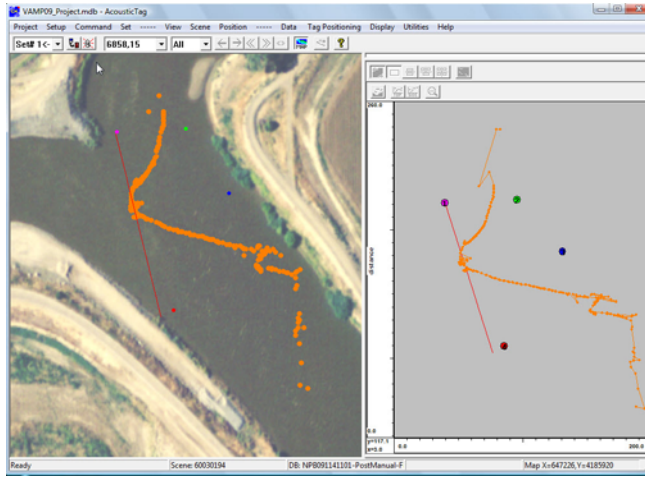
MODEL 290 ACOUSTIC TAG RECEIVER



HTI's *Model 290 Acoustic Tag Receiver* offers a cost-effective means of remotely tracking fish in three dimensions with sub-meter position resolution. HTI's *Model 795 Acoustic Tags* offer several advanced capabilities in the smallest, lightest acoustic tag commercially available. Each *Model 290 Acoustic Tag Receiver* supports up to 16 hydrophones, receiving and storing tag detections for each hydrophone. Resulting tag positions are plotted in three dimensions so the user can observe the movement of each tracked fish.

A Brief Overview:

- Much better resolution than radio tags, without common depth detectability limits (typically 10 m).
- Sub-meter, three-dimensional position resolution over time (e.g., once every second).
- Lightweight tag of 0.5 g in air (*Model 800 Micro Acoustic Tag*).
- Access data remotely and in real-time or in post processing.
- Individual tag identification, with up to 100,000 unique codes standard.
- Encoded signal for 11 dB increase in signal strength, improving detection range and resolution.
- Monitors up to 16 hydrophones simultaneously with each *Model 290 Acoustic Tag Receiver*.
- A compact, 12 VDC-powered *Model 291 Portable Acoustic Tag Receiver* is also available.
- Battery powered *Model 295 Acoustic Tag Data Logger* is available for time-stamped presence or absence detection.



MODEL 290 ACOUSTIC TAG RECEIVER

- Power Supply:** 120-220 VAC
- Operating Temperature:** 0-50°C (32-122°F)
- Power Consumption:** Approximately 100 watts w/o PC or hydrophones.
- Number of Hydrophones:** Each *Model 290 Acoustic Tag Receiver* can log data from up to 16 hydrophones simultaneously. Two *Model 290 Acoustic Tag Receivers* can be synced to log data from up to 30 hydrophones.
- Data Displays:** Using *AcousticTag* software, three-dimensional and two-dimensional displays of fish tracks can be viewed. The user can control view rotation and speed of playback for each tag track.
- System Synchronization:** Can be time synced with other *Model 290 Acoustic Tag Receivers*.
- Remote Operation:** Modem or satellite communication permits full remote operation and basic diagnostic/quality control review of the *Model 290/291 Portable Acoustic Tag Receiver* from virtually anywhere in the world.

MODEL 590 ACOUSTIC HYDROPHONE

- Dimensions:** 69 mm diameter x 140 mm length (2.7 x 5.5 inches) for 307 kHz, 330° hydrophone
- Beam Width:** 330° beam width standard. Optional 30°, 110°, and 160° beam widths available.
- Maximum Depth:** 1200 m (3936 ft)
- Hydrophone Cables:** *Model 690 Hydrophone Cables* are available in 3-610 m (10-2,000 ft) lengths standard.
- Armored Cables:** *Model 696 Armored Hydrophone Cables* are steel reinforced for strength and durability, and are available in 15-305 m (50-1000 ft) lengths standard.

MODEL 795 ACOUSTIC TAGS – See separate spec sheet.

NOTES

- Resolution:** Sub-meter three-dimensional resolution requires
- 1) Proper hydrophone geometry (minimum of four hydrophones, located in two planes),
 - 2) Known location of hydrophones, and
 - 3) Adequate signal-to-noise ratio.
- Computer Requirements:** Contact HTI for current minimum specs.
- Specifications:** All specifications subject to change without notice.
- Demo Disk:** Contact HTI for a demo CD of the *Model 290/291 Acoustic Tag System*.

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