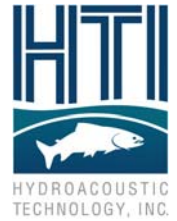


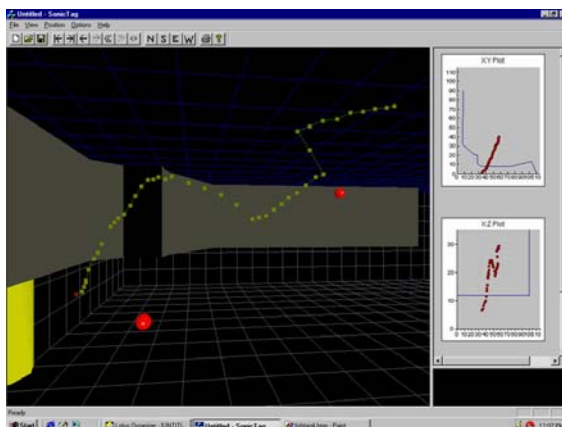
MODEL 291 PORTABLE ACOUSTIC TAG RECEIVER



The *Model 291 Portable Acoustic Tag Receiver* is a portable 12 VDC version of the desktop *Model 290 Acoustic Tag Receiver*. Designed specifically for tracking fish tagged with *Model 795 Acoustic Tags*, the portable *Model 291 System* provides virtually all of the functions of the *Model 290 Acoustic Tag Receiver* in a compact, economic, four-hydrophone package operating on 12 VDC.

Both the *Model 291* and the *Model 290 Acoustic Tag Receivers* remotely track fish in three dimensions with sub-meter position resolution. While the *Model 290 Acoustic Tag Receiver* supports up to 16 hydrophones, the *Model 291 Portable Acoustic Tag Receiver* accepts up to 4 hydrophones. Both enable the user to observe the movement of each tracked animal (e.g., fish, aquatic mammals) in three dimensions. The *Model 291 Portable Acoustic Tag Receiver* offers the following:

- Portable, compact unit powered by 12 VDC.
- Monitors up to four hydrophones simultaneously.
- Can be used for mobile tracking and presence or absence monitoring with one hydrophone.
- Sub-meter position resolution for three-dimensional positions (e.g., once every second) with four hydrophones.
- Much higher resolution positions than with radio tags, without common depth detectability limits (typically 10 m).
- Lightweight tag at 0.65 g (in air) for the *Model 795s Micro Acoustic Tag*.



MODEL 291 PORTABLE ACOUSTIC TAG RECEIVER

Power Supply:	12 VDC standard (optional 100, 120, 220, and 240 VAC converters available)
Dimensions:	432 mm length x 254 mm width x 109 mm height (17 x 10 x 4.3 inches) without PC or hydrophones
Weight:	7.7 kg (17 lb), without PC or hydrophones
Operating Frequency:	307 kHz standard (70 kHz optional)
Operating Temperature:	0-50°C (32-122°F)
Power Consumption:	25 watts without PC or hydrophones
Number of Hydrophones:	Each <i>Model 291 Portable Acoustic Tag Receiver</i> can log data from up to four hydrophones simultaneously.
Data Displays:	Using the tag track marking and display program <i>AcousticTag</i> , three-dimensional and two-dimensional displays of fish tracks over time 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 <i>Model 291 Portable Acoustic Tag Receivers</i> or <i>Model 290 Acoustic Tag Receivers</i> to sample up to 30 hydrophones.
Remote Operation:	Modem or satellite communication software permits full remote operation and basic diagnostic/quality control review of the <i>Model 291 Portable Acoustic Tag Receiver</i> from virtually anywhere in the world.

MODEL 590 ACOUSTIC HYDROPHONES

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:	<i>Model 690 Hydrophone Cables</i> are available in 3-305 m (10-1000 ft) lengths standard
Armored Cables:	<i>Model 696 Armored Hydrophone Cables</i> are steel reinforced for strength and durability, and are available in 15-305 m (50-100 ft) lengths.

MODEL 795 ACOUSTIC TAGS – See separate spec sheet.

NOTES

Resolution:	Sub-meter three-dimensional resolution requires <ol style="list-style-type: none"> 1) Proper hydrophone geometry, 2) Known location of hydrophones, and 3) Adequate signal-to-noise ratio.
Computer Req.:	Contact HTI for computer specs.
Specifications:	All specifications subject to change without notice.
Demo Disk:	Contact HTI for demo CD for the <i>Model 290/291 Acoustic Tag System</i> .