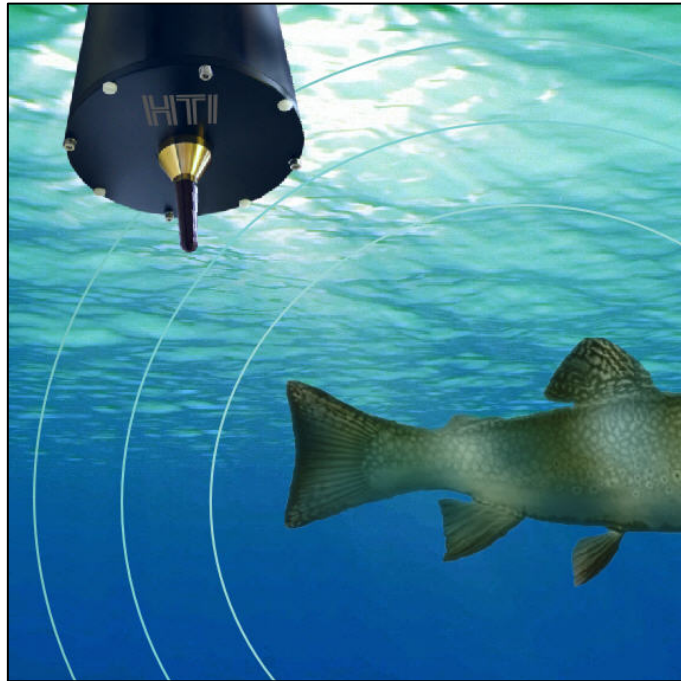


MODEL 295 ACOUSTIC TAG DATA LOGGER



HTI's *Model 295 Acoustic Tag Data Logger (ATDL)* offers a cost-effective means of remotely recording the time-stamped presence of fish tagged with *Model 795 Acoustic Tags*. Encapsulated in a rugged case, it operates at depths of up to 300 meters (984 ft). Two models are available:

Model 295-I Acoustic Tag Data Logger includes an internal hydrophone.

Model 295-X Acoustic Tag Data Logger accepts an external *Model 590-series Hydrophone* and *Model 690 Hydrophone Cable*.

- Compact, light, portable, battery powered.
- Detection ranges up to 1 km.
- Will operate in tandem with *Model 290/291 Acoustic Tag Tracking Receivers*.
- Lightweight tag of 0.69 g (in air) for the *Model 795s Micro Acoustic Tag*.
- Smallest size tag: 6.7 mm diameter x 16.4 mm long for the *Model 795s Micro Acoustic Tag*.
- Individual tag identification, with over 50,000 unique codes.
- Encoded signal for 11 dB increase in signal strength, improving detection range and resolution.

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MODEL 295 ACOUSTIC TAG DATA LOGGER

Dimensions:	167 mm dia x 324 mm height (6.6 x 12.8 inches), plus connectors on ends. In addition, the <i>Model 295-I ATDL</i> has a 25 mm dia x 112 mm long (1.0 x 4.4 inch) hydrophone tip on one end.
Weight:	6.0 kg (13.5 lb)
Power Supply:	12 VDC
Operating Temp.:	0-50°C (32-122°F)
Power Consumption:	Approximately 9 watts
Batteries:	Recommend deep cycle 12 VDC battery. Life = battery amp hours (e.g., 180 amp hour battery will last approximately 180 hours).
Maximum Depth:	300 m (984 ft)
Data Displays:	Using HTI <i>AcousticTag</i> software, real-time data can be viewed for in-field adjustments. HTI <i>MarkTags</i> software is used for post viewing and analysis.
Computer Req.:	Contact HTI for current minimum specs.
Frequency:	307 kHz standard
Ext. Box Connector Cable:	50 to 150 ft long

MODEL 590 ACOUSTIC HYDROPHONES (FOR MODEL 295-X ATDL)

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 (0-1,000 ft) lengths standard.

MODEL 690 HYDROPHONE CABLES (FOR MODEL 295-X ATDL)

Lengths Available:	10 ft (3.0 m)	50 ft (15.2 m)	500 ft (152 m)
	15 ft (4.6 m)	75 ft (23 m)	750 ft (229 m)
	20 ft (6.1 m)	100 ft (30 m)	1000 ft (305 m)
	25 ft (7.6 m)	250 ft (76 m)	
Cable Diameter:	Cable is 12.7 mm (0.5 inch) dia and connector is 38.1 mm (1.5 inches) dia		
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 standard.		

MODEL 795 ACOUSTIC TAGS – Also see separate spec sheet.

Tag Weight:	From 0.65 g to 24 g (in air), depending on model. See separate spec sheet.
Detection Range:	Up to 1 km (3,280 ft) in freshwater. For three-dimensional tracking ranges <300 m (984 ft) hydrophone separation recommended for freshwater. Noisy sites may reduce detection ranges.
Frequency:	307 kHz standard
Signal Encoding:	Proprietary encoded code-phase modulated signal improves signal-to-noise ratio by 11 dB. Can be used to extend detection range (e.g., typically by 100-350 m in freshwater), or increase resolution by reducing pulse width (e.g., from 5 msec to 0.4 msec), or some combination of both.
Pulse Repetition Rate:	Field programmable: 25 ping/sec to 1 ping every 16 sec
Pulse Width:	Field programmable: 0.5 msec to 5 msec
Individual ID:	Individual tag identification for over 50,000 unique codes, standard
Tag Programmer:	<i>Model 490 Acoustic Tag Programmer</i> permits on-site programming of ping rate, pulse width, and tag ID.

NOTES

Resolution:	Sub-meter three-dimensional resolution requires <ol style="list-style-type: none">1) Proper hydrophone geometry,2) Known location of hydrophones, and3) 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> .