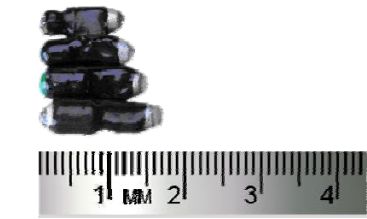


## MODEL 795-SERIES ACOUSTIC TAGS



Fish Species: Yearling Chinook  
Fish Length: 175mm

HTI's *Model 290/291 Acoustic Tag Tracking Systems* offer an efficient means of remotely tracking fish in three dimensions with sub-meter position resolution. *Model 795 Acoustic Tags* offer several advanced capabilities in the smallest acoustic tag commercially available.

### A Brief Overview:

- Sub-meter, three-dimensional resolution over time (e.g., once every second).
- Lightest acoustic tag available: 0.6 g in air (*Model 795Lm Acoustic Tag*).
- Smallest tag size: 6.7 mm dia x 16.4 mm long (*Model 795Lm Acoustic Tag*).
- Individual tag identification, with up to 100,000 unique codes.
- Much better resolution (sub-meter) than radio tags, without common depth detectability limits (typically 10 m) of radio tags.
- Detection ranges up to 1 km in freshwater.
- Tag life to over 3 years available (*Model 795Z Acoustic Tag*).
- Several tag sizes/tag life combinations available to choose from.
- Encoded signal for 11 dB increase in signal strength, improving detection range and resolution.

**HTI - HYDROACOUSTIC TECHNOLOGY, INC.**  
715 NE Northlake Way, Seattle, WA 98105 USA  
Tel. 206.633.3383 | 206.633.5912 Fax  
support@HTIsonar.com www.HTIsonar.com

## MODEL 795 ACOUSTIC TAGS

Acoustic Tag Model	Minimum Life	Average Life in Days	
	In Air grams	3 sec PRI	10 sec PRI
<i>new Model 800 Micro Acoustic Tag</i>	0.5 g	Available 2010	
<i>Model 795Lm Acoustic Tag</i>	0.65 g	38 d	66 d
<i>Model 795LD Micro Acoustic Tag</i>	1.0 g	80 d	120 d
<i>Model 795LE Acoustic Tag</i>	1.5 g	51 d	93 d
<i>Model 795G Acoustic Tag</i>	4.5 g	60 d	Est. 100 d
<i>Model 795X Acoustic Tag</i>	13.0 g	Est. 180 d	Est. 300 d
<i>Model 795Z Acoustic Tag</i>	24.0 g	Est. 3 yr	Est. 4 yr

Life can be extended by decreasing PW and/or increasing PRI. All tags operate at 307 kHz. Length, diameter, & weight may vary +/- 10%. Life quoted is based on operating parameters of 1 msec pulse width, single pulse, at 10°C.

- 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 0.5 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 up to 100,000 unique codes, standard
- Maximum Depth:** 300 m (984 ft)
- Tag Programmer:** *Model 490 Acoustic Tag Programmer* permits on-site programming of ping rate, pulse width, and tag ID. Destructive tag code "collisions" do not exist with *Model 795 Acoustic Tags*.

## MODEL 290/291 ACOUSTIC TAG RECEIVERS

- Dimensions:** 432 mm length x 254 mm width x 109 mm height (17 x 10 x 4.3 inches) for *Model 291 Portable Receiver*.
- Weight:** 7.7 kg (17 lb) for *Model 291 Portable Receiver*
- Power Supply:** 120-220 VAC (*Model 290 ATR*) 12 VDC (*Model 291 Portable ATR*)
- Operating Temperature:** 0-50°C (32-122°F)
- Power Consumption:** Approximately 100 watts (*Model 290 ATR*), or 25 watts (*Model 291 Portable ATR*) w/o PC.
- Number of Hydrophones:** *Model 291 Portable Acoustic Tag Receivers* log data from up to 4 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.

## MODEL 295-SERIES ACOUSTIC TAG DATA LOGGERS

- Dimensions:** Depends on model. Please see [http://www.htisonar.com/htisonar/data\\_logger.htm](http://www.htisonar.com/htisonar/data_logger.htm) for details.
- Power Supply:** 12 VDC
- Operating Temperature:** 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). Solar and wave power options are available.
- Maximum Depth:** 1200 m (3937 ft)
- Specifications:** All specifications subject to change without notice.
- Demo Disk:** Contact HTI for a demo CD for the *Model 290/291 Acoustic Tag Systems*.