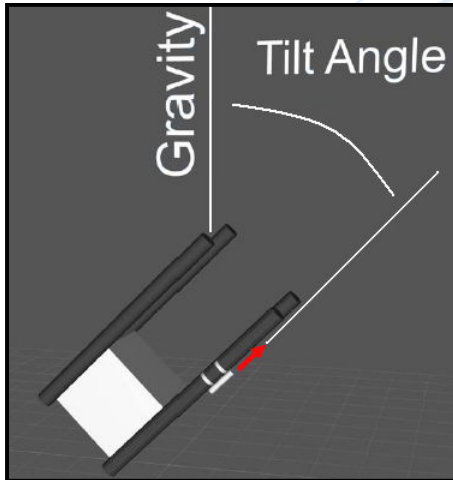


SONOTRONICS

EMT-AR Tilt Sensoring Pingers



As seen in the image to the left, the pinger changes its ping rate proportional to the tilt angle with respect to gravity. This allows the orientation of equipment being deployed to be monitored in real time, while the pinger continues to mark the site for later relocation.

Deployments can be monitored using the TiltPPC (right).



Understanding the System

EMT-AR pingers produce two separate sets of intervals (time between pings). One interval set is for unique identification of the pinger (fixed), and the other represents the angle of orientation to gravity (variable). The total time between successive angle measurements is approximately 30 seconds. The USR-96 and DH-4 hydrophone from a MANTRAK kit is used to receive data telemetered from the tilt monitoring EMT-ARs. The USR-96 displays the ACT ID of the pinger, and “% of full scale” on its integral LCD. The TILT-PPC connects to the MANTRAK receiver via 9 pin serial connector, then calculates the tilt angle and displays it on its graphic display. Tilt angle data has a 5° resolution, and a +/- 5° accuracy.



Model	Lifetime	Range	Depth rating	Length	Diameter	Weight
EMT-AR-1	48 months	1km+	2.5km+	99mm	19mm	39g
EMT-AR-2	18 months	3km+	2.5km+	99mm	19mm	39g
Other Model Numbers:						
TILT-PPC	HP Pocket PC (rx1955 or similar model) with hardened case, cables, Tilt Monitor software, and all proprietary HP software and cables.					
TILT-Tracker	Tilt Monitoring kit. Includes MANTRAK kit, and two angle reporting tilt pingers. The MANTRAK kit includes USR-96 ultrasonic receiver, DH-4 directional hydrophone, Pelican case, external speaker, headphones, and other accessories. Please see the MANTRAK data sheet for more details.					

SONOTRONICS

3169 S. Chrysler Ave. Tucson, AZ U.S.A. www.sonotronics.com
phone: (520) 746-3322 fax: (520) 294-2040 email: sales@sonotronics.com