



PTR

Portable Test Range

DESCRIPTION

The PTR is a mobile three-dimensional (3-D) underwater portable tracking range used for testing modern underwater weapons in different environmental conditions. It is able to track three underwater objects simultaneously (in real time) both in shallow and deep waters and is capable of offline analysis of the trajectories.

The PTR system consists of a minimum of 3 and a maximum of 20 retrievable surface buoys connected to underwater hydrophone hung beneath the buoys and providing simultaneous tracking of surface and underwater mobile targets including artificial targets. The buoys carry UHF transceivers and a GPS link to transmit data between the buoy and the parent surface

vessel. Each vehicle to be tracked has to be fitted with an acoustic transmitter.

The tracking range acoustic technology is based on a long baseline system with SFSK (Space Frequency Shift Keying) acoustic signalling suitable for high-speed vehicle tracking and for very shallow waters operation. Signalling is accomplished using 40-bit coded transmissions with up to eight operating frequencies available.

The mobile 3-D underwater tracking range can be arranged in different configurations to meet specific requirements and can be laid down in different water depths, from 25m up to 350m.. The PTR has an accuracy better than 5 m in the horizontal and 1 m in the vertical planes.

