



Tel: +44 (0)1224 790100 · Fax: +44 (0)1224 790111 · [www.ac-cess.com](http://www.ac-cess.com)

## AC-ROV Positioning and Tracking

The market leading **AC-ROV** Underwater Inspection System is now available with an Ultra Short Base Line (USBL) underwater positioning and tracking system.

During ROV operations, there are many situations where you need to know the location of the vehicle with reference to you as the operator, or as a global position reference. Underwater positioning and tracking is fundamental to **high level survey and search applications**, allowing you to log where you need to go, where you have been and to enable target returns by you or others.

In line with the **AC-ROV** ethos of mobility, portability and robustness the solution is an integrated arrangement of the Tritech MicronNav USBL system. The outcome retains the clean, robust and snag free shape of the **AC-ROV**, whilst the topside hardware and interface is 100% Tritech standard.

The MicronNav system could not be easier to fit, with **no modifications** required to the **AC-ROV** system and **no specialist training** for integrating the transponder block to the vehicle. The MicronNav system can be configured to input survey and GPS strings giving survey level positioning data with a real world location.

- **Positions and Tracks to Maximum AC-ROV Depth & Excursion**
- **Real Time Global Positioning**
- **AC-ROV mobility, portability and robustness**
- **Simple 'no modification' retrofit**

The MicronNav USBL system calculates **vehicle position** by combining acoustic range and bearing data from the vehicle transponder with attitude and heading data from the surface transceiver. The USBL system comprises a subsea MicronNav unit **fully integrated** into an **AC-ROV** top buoyancy block, a surface USBL transceiver unit with integral magnetic compass and pitch/roll sensors, a surface MicronNav100 Interface module and operating software all under control of the customer host PC/Laptop. The system does not require any additional surface transceivers (SBL) or seabed transponders (LBL).

MicronNav uses the very latest **Spread Spectrum** acoustic technology. This provides robust through water communications between the surface transceiver and the vehicle transponder. The transceiver is designed to provide 180 degree hemispherical coverage, allowing accurate **vehicle tracking in very shallow water**. The design of the ROV transponder provides omni-directional coverage.

- **Spread Spectrum Acoustics for Robust & Reliable Communication in challenging environments**
- **Hemispherical Acoustic Coverage for Shallow Water Operations**
- **Integrated motion sensor in dunking transceiver**

