



Fusion 2 INS combines the world's most popular Long BaseLine (LBL) acoustic positioning system with our trusted INS architecture, thus removing the interfacing complexity of two separate systems. Fusion 2 also improves the efficiency of tracking a target by embedding sensor measurement updates into the ranging cycles. Simultaneous Localisation And Mapping (SLAM) is achieved by combining very precise relative inertial movement with acoustic ranges to determine the position, relative separation and orientation of a sparse array, or single transponder.

COURSE OBJECTIVES

This course provides the basic theoretical knowledge together with a thorough practical understanding of the operation of Sonardyne's Fusion 2 software utilising our 6G+ subsea acoustic positioning hardware. The course aims to teach the user the methodologies for operating and calibrating sparse arrays, in conjunction with hands-on scenarios using either simulators and/or in-water equipment operation (*).
(* Plymouth training centre only)

WHO SHOULD ATTEND?

- Hydrographic Surveyors
- Survey Engineers

COURSE SYLLABUS

Theory

- Introduction to Sonardyne & Acoustic positioning systems.
- Long Baseline Positioning Principles Recap
- SPRINT INS overview
- 6G+ Command Language updates
- Sparse LBL and Range aided INS
- Real-time SLAM calibration of Sparse arrays
- Post processed SLAM calibration

Practical

- Fusion 2 Hardware setup and Configuration (serial and acoustic testing)
- Fusion 2 Software configuration
- SLAM Calibration and QC of Calibration Data (2D and 3D)
- INS/Tracking Diagnostic Tools (travel times)
- Application of Geodesy, Convergence and Scale Factor
- SLAM Calibration scenarios
- Troubleshooting and Support procedures
- JANUS INS Processing Introduction

COURSE TEACHING MEDIUM

The course theory presentations and the accompanying written material are in English.

COURSE DURATION

The course is 2 days in duration.

NUMBER OF PARTICIPANTS

Courses are for up to 4 participants. This instructor to participant ratio ensures good one-to-one support, during the hands-on sessions.
If required bespoke courses can be run for more than 4, contact us to discuss details.

BOOKING AND CONFIRMATION

Details of course dates, training centre locations and current availability of places can be found at the Training Course section of Sonardyne's website:
www.sonardyne.com

To reserve a place on a course, please email:
training@sonardyne.com

TRAINING COURSE DELIVERABLES

- USB stick containing electronic course material and relevant product manuals
- Fusion 2 INS operator course certificate