



*Fusion 2 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 utilises 6G+ and Wideband3® acoustic hardware and protocols and improves the efficiency of tracking a target by embedding sensor measurement updates into the ranging cycles. As well as improved conventional LBL calibration methods, Fusion 2 is also capable of indirect ranging or "Fast LBL", significantly improving position updates for mobile transponders as used on structures.*

## COURSE OBJECTIVES

This course is aimed at those already trained in Fusion 1 (6G) LBL software. It introduces Sonardyne's Fusion 2 LBL software utilising our 6G+ subsea acoustic positioning hardware. The course aims to teach the user the improved work flows for calibrating and processing acoustic LBL, and demonstrate the more efficient operating methods Fusion 2 offers, through hands-on scenarios using remote access online.

## COURSE TEACHING MEDIUM

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

## PREREQUISITE

Delegates must hold an in-date Fusion 1 (6G) LBL competency certificate.

## WHO SHOULD ATTEND?

- Hydrographic Surveyors
- Survey Engineers

## COURSE DURATION

The course will take 1 2.5Hr online session supported by some pre-learning material.

## NUMBER OF PARTICIPANTS

This is a 1-to-1 or 2-to-1 session with a trainer.

## 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/product/training/](http://www.sonardyne.com/product/training/)

To reserve a place on a course, please email:  
[training@sonardyne.com](mailto:training@sonardyne.com)

## Other info

Fusion 2 LBL competency certificate will be sent on completion of this course.

## COURSE SYLLABUS

### Theory

- Calibrations and Processing
- 6G+ Command Language & TS9 info

### Practical

- Fusion 2 Hardware setup and Configuration (serial and acoustic testing)
- Fusion 2 Software configuration (LBL)
- Baseline Calibration and Boxins (conduct & QC)
- LBL & Fast LBL Tracking
- Application of Sound Speed Profiles, Tidal Variation and Environmental Factors
- Tracking Diagnostic Tools (travel times)
- Application of Geodesy, Convergence and Scale Factor
- Troubleshooting and Support procedures