

Sonar Measurement Course

One day course

Practical hands-on teaching

Maximum 6 delegates

In-house at Precision Acoustics lab

This one-day course aims to give basic competence in selecting and using hydrophones for making pressure measurements in the 30 kHz – 1 MHz frequency range.

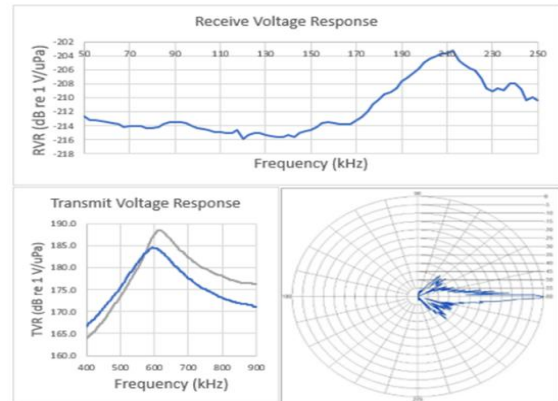
The emphasis is on practical skills and approximately 50% of the time will be spent in the measurement laboratory. The maximum number of delegates is six, giving plenty of opportunity to develop “hands-on” skills. Laboratory sessions will focus on using needle, planar, cylindrical, and spherical hydrophones in 2 measurement tanks (6000 and 500 litres). Lectures will include discussion transmitter appropriate for this frequency range.

Venue

Precision Acoustics Ltd, Hampton Farm Business Park, Higher Bockhampton, Dorchester, Dorset, DT2 8QH

Application form

Available on the Precision Acoustics website.



Course content includes:

Introduction

A brief introduction to Precision Acoustics, the tutors and the other delegates.

Hydrophone selection

The basic criteria governing selection of the most appropriate devices for a particular application will be presented, including sensitivity, element size, spatial averaging, frequency response and directivity.

Lab sessions

Opportunity to put some of the procedures into practice.

- Equipment requirements
- Set up and basic measurements
- Properties and sources and receivers

Source and receiver characterisation

Discussion of methods for characterizing various aspects of both sources and receivers.

To include frequency, voltage, and directional responses. Discussion of impedance measurement / correction and anechoic absorbers as key elements of good measurement practice.