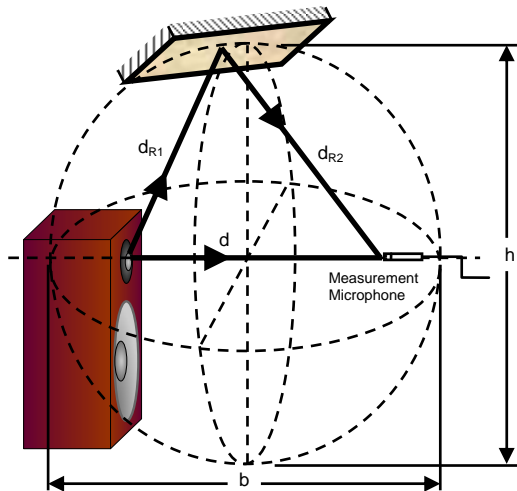


# Fundamentals Of Electroacoustic Measurements



This course focuses on measurements of electroacoustic transducers. The fundamentals of acoustics and electroacoustic measurements are presented, including instrumentation, data interpretation, and information on how to perform appropriate tests. Techniques for diagnosing problems in design and QC are shown. Practical demonstrations are provided throughout the course. This course is intended for technical persons who are responsible for the electroacoustical performance of loudspeakers, microphones, headphones, telephones, hearing aids, or transducer-equipped media devices, R&D, Q.C/Q.A., and Production related topics are covered. The level and content are appropriate for both novices and persons with test and measurement experience. This training will enable you to perform accurate measurements and provide you with the necessary tools to understand and correctly interpret the results.

## Date

8 November 2010

The classroom opens at 8:00 am. The class begins promptly at 8:30 am and runs until 5:00 pm with a one-hour break for lunch at 12:00 noon.

## Location

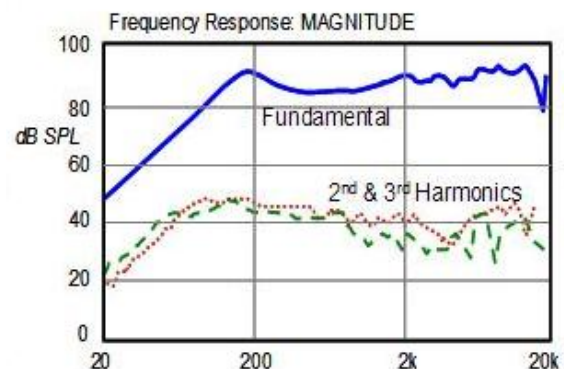
Grand Hyatt Hotel  
345 Stockton Street (at Sutter)  
San Francisco, CA 94108

Directions to the course will be sent out along with your confirmation two weeks prior to the course.

**Fee:** \$399-

## Course Outline

- Basic Acoustics and Measuring Sound
- Sound Sources, Sound Fields & Test Environments
- Psychoacoustics, The Ear & Hearing
- Measurement Microphones & Calibration
- Frequency Analysis, Filters, & FFT
- Linear System Analysis
- Simulated Free Field Techniques
- Directional Measurements and Polar Response
- Impedance and Small Signal Parameters
- Time-Frequency Analysis
- Distortion & Non-Linearity
- Harmonic, Intermodulation & Difference Frequency Distortion Tests
- Transducer Defect Detection
- Special Topics



## Instructor

Christopher J. Struck  
CEO & Chief Scientist – CJS Labs

## Registration

Space is limited. Email [cjs@cjs-labs.com](mailto:cjs@cjs-labs.com) or phone (415) 923-9535 today to reserve your place. Your space is not guaranteed until payment is received. The course fee includes beverages, lunch, and a printed set of the course notes. We reserve the right to cancel the course in the event of insufficient registration. Discounted parking and room rates may also be available.

<http://www.cjs-labs.com/>