



rational acoustics

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SMAART BASICS

Smart TRAINING CLASS



The 2-day Smaart Basics class is designed to guide users through the essential tasks of configuring and running Smaart v.7 for Real-Time RTA, Spectrograph and Transfer-Function Measurements.

Shorter and more condensed than the 3-day Smaart Operator Fundamentals class, Smaart Basics provides only an overview of the Impulse Response mode functionality of Smaart and focuses less on system measurement theory and more on practical application and deployment of Smaart in everyday system engineering tasks.

Live measurements will be featured throughout the class to demonstrate how and why specific features function as they do, as well as how to interpret the data obtained to achieve reliable measurements. Hands-on practical application exercises using both Smaart v.7 and Smaart v.7 Di will demonstrate the techniques and processes used for essential system engineering tasks.

This class serves as a thorough, practical hands-on introduction to the Smaart platform for new users, or as a refresher course for existing users.

Class Schedule:

All Smaart training classes are posted on our web site as soon as the class is confirmed and open for registration. For the most up-to-date listing of confirmed classes, please see the Training Section of www.rationalacoustics.com

Announcements for each class are also e-mailed to our newsletter mailing list. To register for the Rational Acoustics mailing list go to the www.rationalacoustics.com homepage and click on the 'sign up for newsletter' button.

Registration:

Class registration is available either via the online class registration form in the Training Section of our web site or by contacting Rational Acoustics directly at +1-860-928-7828



“ Thank you for building such a great tool for the tech kit and for developing a very helpful and educational class to teach it ”

-Eric Matland, NYC Smaart Class Attendee

Class Pricing

Smaart Basics: \$450 USD

Two-Days: 9AM - 5PM

Class fees include all class materials as well as breakfast and lunch on all class days.

A \$50 non-refundable deposit is due at the time of registration, with balance due one week prior to the class start date. Class fees may be paid via credit card or check, or can be paid on-location via check or cash with prior arrangement.

Discounts for groups of 5+ people registering from the same company are available. Please see the training section of rationalacoustics.com for more information.

Class Software Discounts:

Attendees of Smaart Training Classes are eligible to receive discounts on Smaart software (both new licenses and upgrades). Please contact us directly for more information.

Smart Basics Class Curriculum

Format: Classroom Lecture and Presentation

Length: 2 Days (8 hrs / day)

Overview

The **Smart Basics** class curriculum covers the fundamentals of using Smart to make basic RTA, Spectrograph and Transfer Function measurements. This course focuses on providing the attendee with a functional knowledge of how Smart operates as a tool and demonstrates techniques and processes for utilizing both Smart v.7 and Smart v.7 Di in essential system engineering tasks. Both classroom lecture and lab formats are utilized as well as in-class measurements via a signal distribution system to distribute the instructor's stereo measurement signals to the entire class. Please note the "Attendee Equipment" section below.

Topics Covered Include (but not limited to):

Context: Why & How we use Smart:

What is sound and how do we analyze it? / Measurement Types (Single channel vs dual channel) / Measurement Domains (Frequency & Time) / Waveform, Transforms & FFT / Physical Measurement Configurations / I-O Devices / Measurement Microphones

Smart Software Overview:

Interface Overview/ Input Device Configuration / Measurement Configuration & Control / Data Capture / RTA Measurements / Spectrograph / SPL Calibration / Transfer Function Measurements / Smoothing & Coherence / Magnitude and Phase / Dual-Channel Measurement Issues / IR Mode overview

Measurement Exercises :

Long Term Response Analysis & Spotting Trends / Spotting Feedback / Determining Relative Level / Multi-position Averaging / Loudspeaker Equalization / Delay Systems / Subwoofer Alignment

Prerequisites:

The Smart Basics course is open to all interested persons. Prior system alignment experience is not required. This course assumes a working knowledge of professional sound system engineering practices and basic audio fundamentals. If you have any questions concerning course prerequisites, please do not hesitate to contact Rational Acoustics prior to registration.

Attendee Equipment:

Smart Basics class attendees are required to bring a laptop computer with both Smart v.7 and Smart v.7 Di measurement software installed (free, fully featured demo versions are available online) and a stereo line level input (either via a built-in sound card or an external preamp unit). The measurement signals used in the instruction of the Smart Basics class will be made available to the attendees via a stereo distribution system (normally via 35mm TRS and stereo RCA). Bringing complete measurement rigs (including mixers, mics, etc.) is not necessary.

If you have any questions concerning equipment requirements, please contact Rational Acoustics prior to registration.