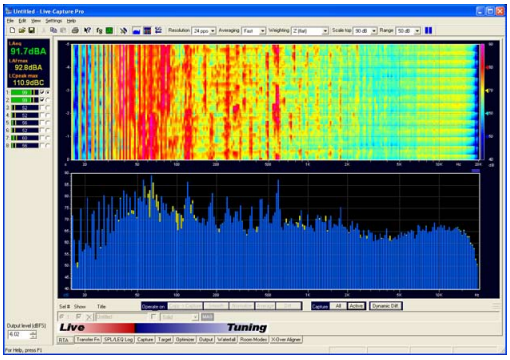
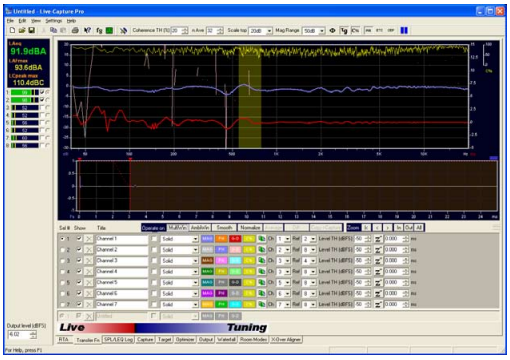
WaveCapture a Bävholm/ Grenander Mission





The WaveCapture team proudly introduces a new benchmark in acoustical measurement software:

Live-Capture Pro

– Everything you need for audio system tuning

Live-Capture Pro is a simple-to-use, PC-based software tool for real-time live sound measurements. Live-Capture Pro measures up to 8 channels of time domain and frequency domain simultaneously, and measurements can be made using the program material (music and speech) with the audience present. Live-Capture Pro also employs traditional MLS and Chirp measurements. The measured channels can be spatially averaged to compute a single transfer function in real time.

Live-Capture Pro is ideal for room tuning and sound reinforcement system optimisation with a range of unique analysis tools that provide fast and accurate tuning information. The full suite of capabilities includes room resonance detection in real time, delay finder with group delay and Cepstrum analysis, filter optimization, sound level logging, and display of reverberation time graphs.

Live-Capture Pro uses threaded computing to acquire impulse responses between 0.35 and 11 seconds, and then applies suitably large FFTs to display time domain and frequency domain data at a maximum 23.4 frames-per-second refresh rate. Advanced complex averaging is used in both domains, taking the coherence and phase stability in account. The default resolution is 96 points-per-octave with a resolution of up to192 points-per-octave available.

Live-Capture Pro also acquires complex frequency response by applying either a maximum-length sequence (MLS) stimulus, sweep tone (time-domain chirp), or dual FFT (using external WAV files) to the loudspeaker or sound reinforcement system under test. Additionally, Live-Capture offers a multi-channel Real Time Analyser with up to 1/48 octave resolution.

Sophisticated windowing functions allow the user to window out room reflections and focus on either equalizing the direct sound (while retaining low frequency resolution) or on spatial averaging of the room transfer function.

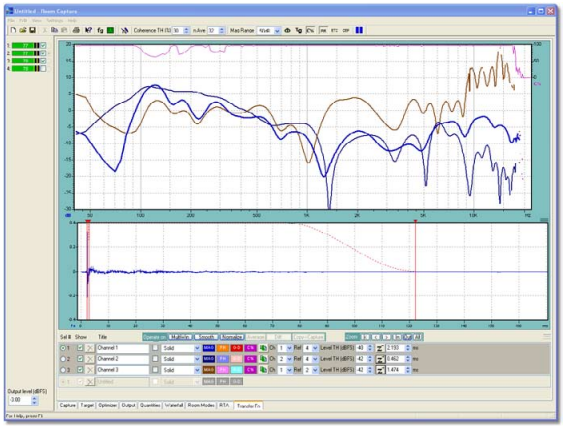
The novel Automatic Room Mode finder, with its automatic calculation of parametric equalization, remedies dominant room modes.

For room tuning and sound reinforcement system optimization, Live-Capture Pro supports spatial averaging. This allows the user to perform multiple measurements throughout the coverage pattern of the sound reinforcement system and base system equalisation on the weighted, spatially-averaged response.

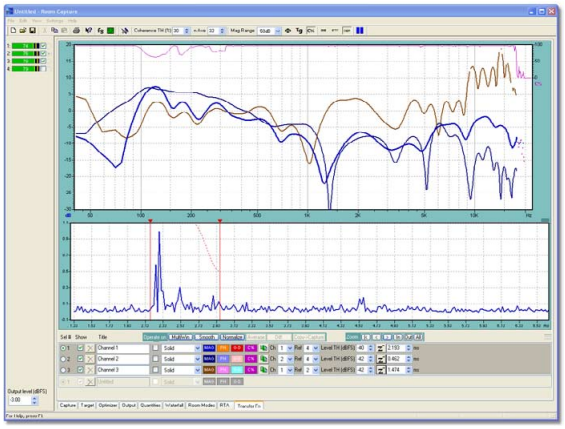
Any captured transfer functions can be run through an optimisation algorithm, which produces a list of parametric equalization parameters (frequency, Q and gain) to fit the curve. For further optimization, equalisation parameters can be manually fine-tuned using a convenient graphical user interface.

Features

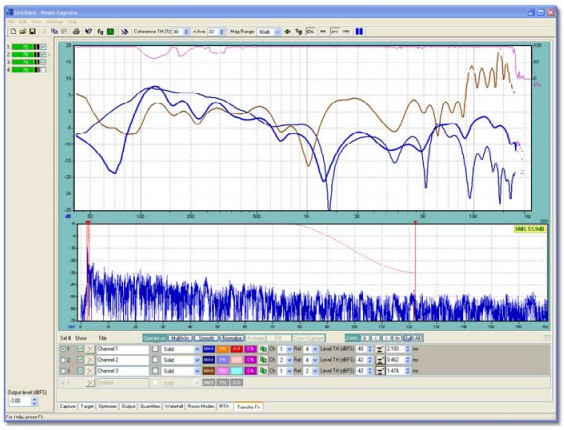
- Real time Magnitude, Phase, Group Delay, PIR, ETC and Cepstrum displays
- MLS (up to 4096k points), Log Sine Sweep (Chirp) and Dual FFT (with external WAV files)
- Up to 8 channels simultaneously
- Displays both frequency and time domain at high refresh rates in real time
- Complex coherence display including phase stability
- Multiple time windowing for effective room reflection suppression
- Analysis tools for room modes, delay finder, filter optimizer, LEQ log and reverberation time
- The Curve Manager can hold up to 16 captured measurements
- Noise, sine and multi-tone generator
- Spectrum and THD analyzer



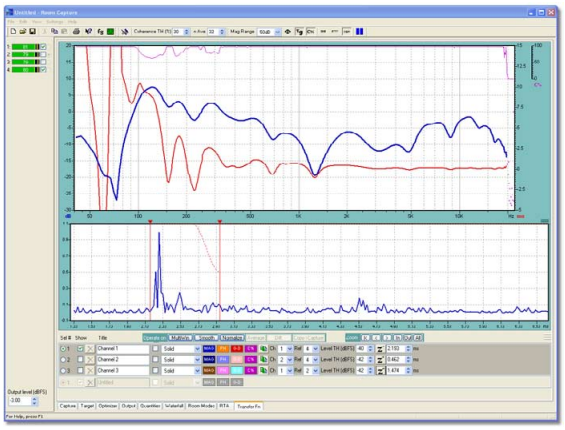
Three simultaneous transfer functions with two different reference channels. The time graph shows the impulse response with the propriety Multiwin (multiple time windowing) applied.



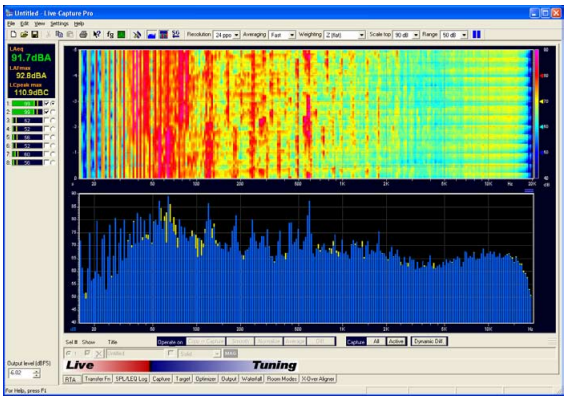
The time graph shows the Cepstrum. Time windowing feature functions in real time.



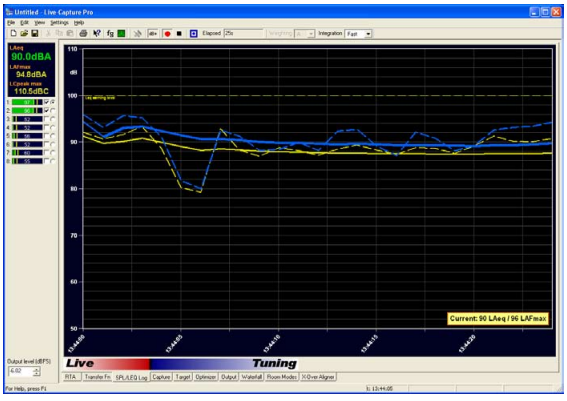
Three simultaneous transfer functions and a spatially averaged sum displayed in real time. Time graph shows the ETC and the Signal to Noise of the measurement.



Group Delay and wrapped or unwrapped phase can be shown in real time.



RTA displays with 1 to 48 points per octave. 2.5s to 10s Sonogram is shown simultaneously. Integration is Fast (125ms), Slow (1s) or Infinite. 1 to 256 averages.



Sound level logging according to IEC 61672 standard. Graph shows LAFmax, LCpeak and LAeq.

Benefits

- Room tuning and sound reinforcement system optimization
- Transfer function with up to 8 channels captured simultaneously
- Room mode detection
- Effective room reflection suppression
- Filter optimization
- SPL histogram with LEQ logging according to IEC 61672 standard

Requirements

- PC with Win 2000 SP4 or XP or Vista
- CPU: 1 GHz or faster Intel Pentium 4 or better. A multi core CPU is recommended for more than two channels in real time.
- RAM: 1 GB min, 2 GB or more recommended.
- Display: minimum 1024 x 768 pixels, 16 bit color
- Soundcard: Windows compatible (Wave/WDM or ASIO) with 2, 4, 6, or 8 inputs, 16-bit/44.1k to 24bit/96k sampling, with full duplex (simultaneous play and record) capability. 1024 samples is the minimum required buffer size.

WaveCapture a Bävholm/ Grenander Mission

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