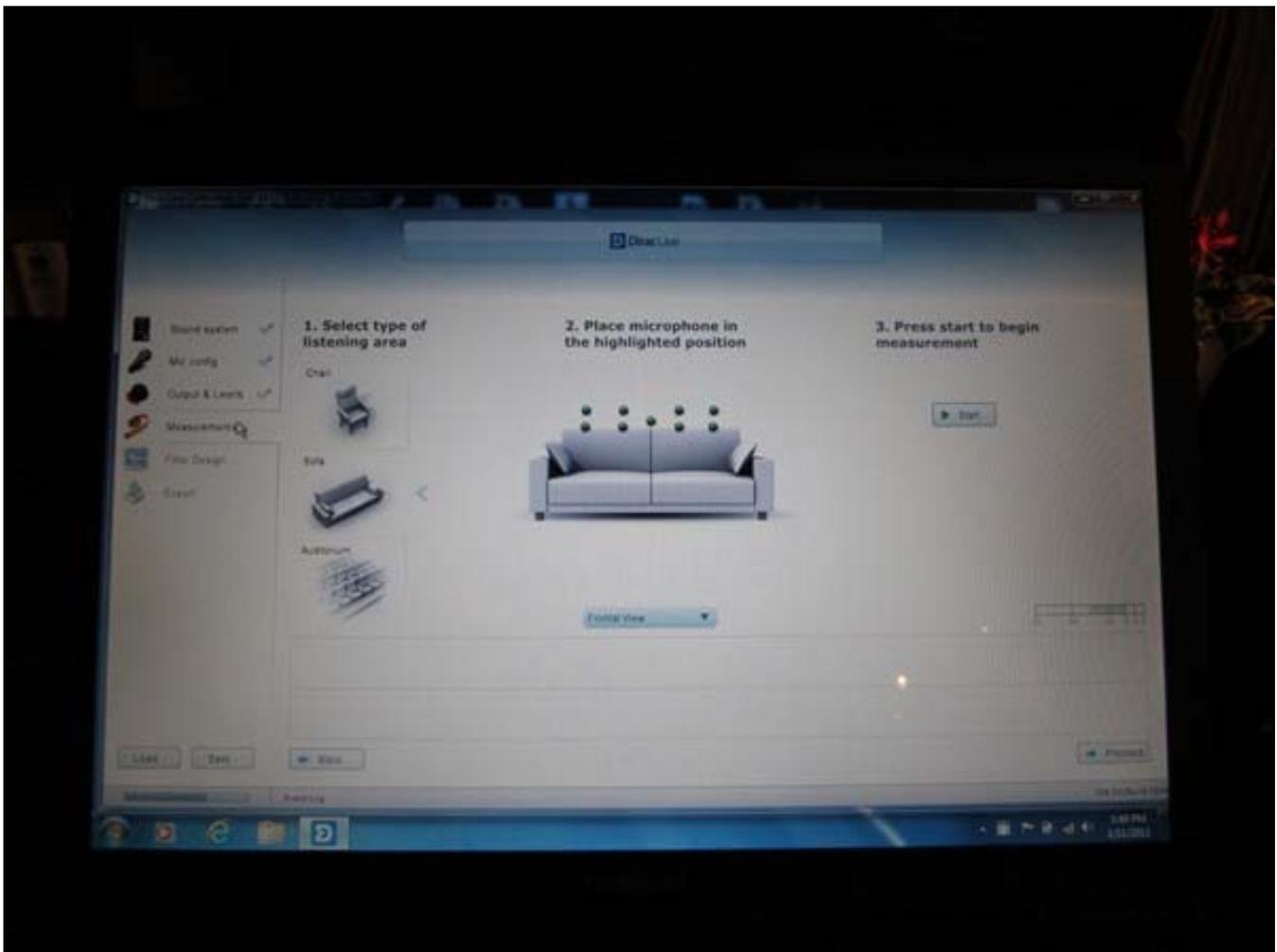


# SECRETS of Home Theater High Fidelity®

By Robert Kozell

I stopped by Amplifier Technologies, Inc. and spoke with Jeff Hipps about the new Dirac Live Digital Room Correction system. ATI has entered into a licensing agreement with Dirac Research AB which is located in Uppsala, Sweden. The Dirac Live system reduces the effects of early room reflections and improves the clarity and bass response in the listening room. Jeff shared some of the Dirac user interface and he did a basic demo of the Dirac Live system. The user interface seemed very intuitive and was running on a Windows 7 laptop. Here's a shot of the measurements screen which provides a simple graphical choice for the listening area and then shows where to take measurements. In this case, nine measurements are recommended for the sofa.



# SECRETS of Home Theater High Fidelity®

The interface actually shows you the impulse response in the time domain. In this picture, the graph from 10 to 27 ms is the response before Dirac and the graph from 27 to 39 ms is the response after Dirac processing.



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In spectrum view, the interface shows the average spectrum before and after Dirac processing. The interface allowed for user control of the response curve and even allowed Jeff to select where he wanted various target points to be placed. He even demonstrated the ability to create a notch-filter to eliminate a troublesome frequency that might make an item in the listening room rattle. In this example, the notch filter is at 300 Hz. This was easily the nicest user interface that I've seen for a room correction system.



Jeff ran a small demo of the Dirac system and playback clarity was definitely improved. The Dirac implementation shown at CES was making use of an outboard Dirac system so the processing was going through extra A/D and D/A conversions. When finalized, the Dirac Live system will operate entirely in the digital domain and will be available as an upgrade to the Casablanca III HD in June of 2012. The upgrade will also extend the bandwidth of the Casablanca III HD to 192 kHz and add 12 channels of post-processing.