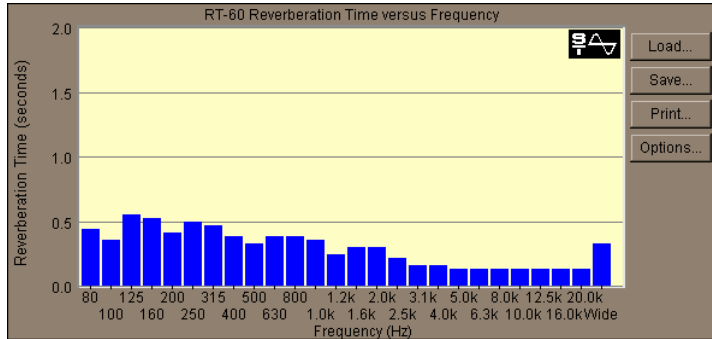




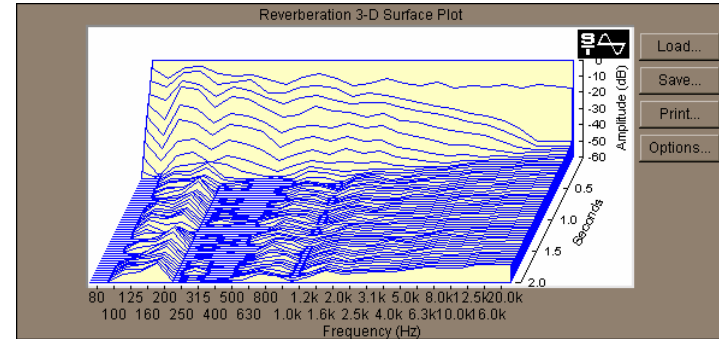
# TIME-ORIENTED ACOUSTIC DOMAIN ANALYSIS TOOLSET

ADDS AN ADVANCED TIME-ORIENTED UTILITY TO MEASURE REVERBERATION DECAY TIMES, PLOT ENERGY-TIME CURVES,  
AND ANALYZE COMPLEX SPECTRAL CHARACTERISTICS OF AN ACOUSTIC ENVIRONMENT.

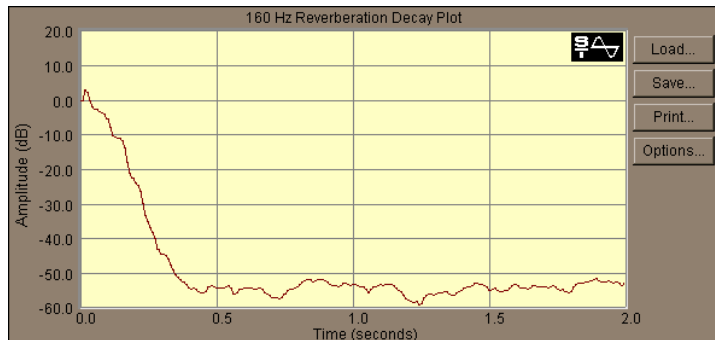
(AVAILABLE: RTA132 AND LAB432 SPECTRA SOFTWARE)



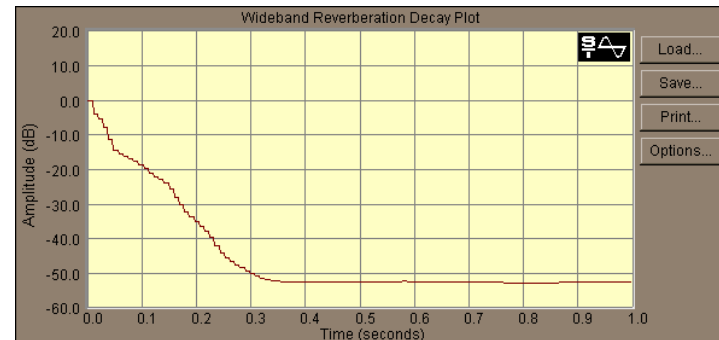
**REVERB TIME** — DISPLAYS A BAR GRAPH OF REVERBERATION TIME VERSUS FREQUENCY BAND. ONE-THIRD OCTAVE BANDS FROM 80 HZ TO 20 KHZ ARE AVAILABLE. IN ADDITION, A "WIDEBAND" OR BROADBAND VALUE IS ALSO SHOWN. THE ANALYZER DISPLAYS DECAY TIME FOR RT10...RT60. DOUBLE CLICKING ON ONE OF THE BARS WILL SHOW THE ENERGY-TIME CURVE FOR THE SELECTED OCTAVEBAND FILTER.



**3-D SURFACE** — ADDS WATERFALL PERSPECTIVES AND 3-D SURFACE PLOTS OF DECAY VERSUS TIME AND DISPLAYS THE REVERBERATION RESPONSE FOR ALL FREQUENCIES IN A SINGLE PLOT WITH SELECTABLE TIME EXTRAPOLATION AND SMOOTHING METHODS. DOUBLE CLICKING ON THE PLOT WILL DISPLAY THE RESPECTIVE ENERGY-TIME CURVE/DECAY PLOT FOR THAT PARTICULAR OCTAVEBAND FILTER. THE TIME LIMIT CAN ALSO BE ADJUSTED BY USING THE ASSOCIATED CONTROL ON THE TOOLBAR.



**ENERGY-TIME CURVES** — PLOT THE REVERBERATION DECAY VERSUS TIME FOR A SPECIFIC FREQUENCY BAND AND PINPOINTS REFLECTIONS IN A ROOM OR BUILDING. THE SELECTED FREQUENCY BAND AND TIME LIMIT CAN BE CHANGED USING THE ASSOCIATED CONTROL ON THE TOOLBAR. YOU CAN SELECT THE LENGTH OF TIME FOR THE GRAPH TO ALLOW ZOOM ANALYSIS TO VIEW EARLY REFLECTIONS AND DECAY TIMES.



**REVERB DECAY** — THIS IS A WIDEBAND GRAPH OF THE REVERBERATION DECAY VERSUS TIME FOR THE ENTIRE FREQUENCY SPAN IN THE ZOOM EXPANDED TIME DOMAIN. USING THE ASSOCIATED CONTROL ON THE TOOLBAR AND YOU CAN CHANGE THE DISPLAYED TIME LIMIT BY USING THE ASSOCIATED CONTROL ON THE TOOLBAR; THIS ALLOWS YOU TO ZOOM IN/OUT TO VIEW EARLY OR LATENT DECAY TIMES.