

Signal to Noise (FFT) and audio signal performance

The test was conducted using Sound Technologies Spectra Plus (Fast Fourier Transform Spectral Measurement software system.)

Reference - 4,096 FFT plot points

Accuracy of plots - 0.02

Analog to digital converter - 44.1 KHz sampling rate

Sound card - 16 bit sampling

Computer - PC 486

CD Player - Optimus 7200 (left channel)

Sound check - Mobil Fidelity CD (acoustic flute)

Sample duration 1.33 seconds

The sound testing equipment measured the output of the CD player.

The test was repeated two times: once with the flute with UTMC's prototype disconnected. Then once with the flute with the UTMC prototype connected inline between the audio source and the test equipment.

When the UTMC prototype unit was connected the results indicate:

- a significant increase in signal to noise ratio in the time domain of the envelope of the audio signal.
- more detailed information,
- greater dynamic range,
- the audio signal stays within the audible range.
- signal shows more; clarity, intelligibility, and fullness of sound.