Subject: Re: Earl Geddes chapter on Measurements now online
Posted by Duke on Wed, 01 Feb 2006 21:37:23 GMT
View Forum Message <> Reply to Message

Hi Akhilesh,Earl focuses more on measurements as a means to get enough useful information about what a loudspeaker is really doing, but he does give some interesting psychoacoustic information along the way regarding audibilty of THD and group delay. Apparently loudness level plays a significant role in the ear's detection of distortion. But Earl doesn't talk about things like how the skewing the frequency response or power response this way or that is perceived. One of the concepts that was new to me is "Transfer Characteristic", or TC, which (if I understand) is basically all of the changes that a loudspeaker does to the input signal. It's very complicated and varies with both frequency and loudness level. Earl does talk about the relative audibility of distortions as they relate to the transfer characteristic. Apparently looking at (and understanding the psycohacoustic implications of) the transfer characteristic predicts that soft clipping is subjectively benign while hard clipping is quite objectionable, and that the very small glitch in Class A/B amplifier operation as the voltage swings through the zero point ("crossover distorton") is especially irritating.Duke