Subject: Re: Smoothing in Frequency response graphs
Posted by Keith Larson on Wed, 05 Mar 2008 19:29:06 GMT
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I have built a pair of lines sources, so they are particularly interesting to me. You will however find that with a limited length response will change with distance. My configuration is a combination of active and passive crossovers. The active part (going to my amplifier) compensates for the HF rolloff while the passive part splits the woofer, mid-bass and tweeters in a traditional 3-way crossover. Not surprisingly it helped quite a bit being able to measure the system response. There are a couple of averaging methods to consider. One of the most common is smoothing the dB response using a line smoothing algorithm. This simply removes the squiggles, or as it was aptly put 'cuts the grass'. On the other hand if you take many responses true amplitude noise can be reduced producing the raw frequency response (with grass), that you can then 'line smooth'.Hope this helps,Keith Larson