Subject: Re: Active vs. Passive Crossovers
Posted by Wayne Parham on Fri, 23 Dec 2011 16:21:16 GMT
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I would NOT suggest using a crossover that relies on a single microphone measurement to "auto-correct". What sounds good in one spot will not necessarily sound good in another spot. A good crossover, in my opinion, is one that makes the speaker sound good over a wide coverage area. This requires the speaker to be designed for this approach too, of course, but the point remains that the design goal should include optimizing the whole listening area, which then requires several microphone measurement locations. They can be measured all at once with a microphone array, or by taking several measurements and moving the microphone each time. But no single measurement using a single microphone position is adequate, not even with the most powerful processor. There just isn't enough data.

This is where I see the biggest disconnnect. Some DIYers think the ultimate solution is to throw money at the problem and get an expensive active crossover or processor. This is the wrong approach. If you want the best, it takes some homework. I don't care if it's passive or active, analog or digital. There are some really great tools out there, and the digital filters make it easier to construct compex filters and change them quickly and easily. But that's what you have to do. You have to use the tools and optimize the crossover with them. Marketing hype notwithstanding, nothing out there will do a good job auto-aligning and optimizing itself using a single microphone.