Subject: Re: Speaker placement
Posted by Wayne Parham on Thu, 30 Mar 2006 16:14:35 GMT
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I certainly don't see you as an amateur. But you did mention using your subs up to 120Hz in this thread, and I've seen you suggest using them up to 150Hz or so in other threads. To me, that's a problem if the subs are far away but not if they're fairly close. That's my point. You can blend woofers nicely up to 150Hz or higher, as long as they're close. It's like a short line array, which smoothes the midbass in the same way distributed subs do. But I think we'd both agree distant subs should be crossed lower than that.The only other way I could interpret your comments is that you suggest blending subs only up to 100Hz, in which case modes above that point cannot benefit from smoothing via dense interference. In that case, I say the same thing. A couple of sound sources spaced a few feet away from one another and overlapped in the midbass, up to the Schroeder frequency, will help smooth the modes without any localization problems. They're far enough apart to provide smoothing but close enough together to sound like one acoustic source.What I visualize is a sort of purposely "unfocused" sound field in the modal region that gradually transitions to a focused uniformly directional point source around the Schroeder frequency. I'm using the word "unfocused" in only an illustrative sense, because what I really mean is distributed sound sources at low frequency that gradually become less distributed as frequency rises, becoming a point source at or about the Schroeder frequency. I think what I'm describing does this perfectly, because it addresses modal behavior at very low frequencies as well as higher up, where there are competing priorities of modal smoothing and preventing localization of the subs. The way this is done is by using relatively closely-spaced overlapping woofers to blend just under the Schroeder frequency and subs placed further away using lower crossover points.