Subject: A fiction
Posted by Earl Geddes on Wed, 21 Dec 2005 23:03:17 GMT
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Either I misunderstand you or what you are saying is not correct.The way that I make a two way is the ONLY way to get a matched DI through crossover. You seem to be implying that you can do this with a narrower vertical coverage which I don't believe is possible in a two driver system.Further you say"But in a system with a direct radiating midwoofer, you cannot control vertical directivity at all until the HF horn takes over"Untrue, with a 15" woofer I get substantial directivity above about 500 Hz, well below where the waveguide comes in at about 1000 Hz and the two are perfectly matched in coverage."I prefer to have the system match horizontal directivity or average DI while limiting vertical directivity."But I do both - matched DI in both Horizontal and Vertical AND matched directivity. You cannot do both with your approach. I can elliminate the floor and ceiling reflections with absorbers, which I do in my rooms, so this, which is your best point, is an easily resolved problem."It has no control of low frequency and midrange directivity."Nothing can control low frequency directivity except complex, large solutions that are totally impractical in small listening rooms so I don't see your point here. And as I said I do get substantial directivity out of a 15" at 500 Hz - a DI > 6 dB as measured, and shown on my web site. I've already covered midrange directivity."The ideal would be to have controlled relatively narrow directivity throughout the audio spectrum."I actually agree with this. BUT, there is a practical LF limit for which this can be done. I go as low as is practical given contraints on enclosure size. Give me a larger enclosure and I'll go lower with directivity control. You forgot the word "constant" applied to directivity though.We don't see eye to eye on this, but you seem to be saying things that just aren't true. Show me a system that you have built that has the kind of directivity matching and narrow coverage control that I achieve AND show and that will go a long ways towards convincing me that you have a good point."Show me the data."