Subject: Re: Your Experiences With Constand Directivety Horns
Posted by Duke on Thu, 09 Nov 2006 01:26:33 GMT
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I agree with everything Wayne said about the advantages of CD horns. I believe the sonic qualities that come from constant directivity to be audible and well worthwhile. In my experience, CD horns and waveguides can be hard to cross over. Wayne's paper on crossover networks is an excellent source of information. My attempts at crossing over horn-based systems were disastrous before I got hold of his paper.I have a friend who went from the big Altec sectoral horns (both the 511 and 811) to CD waveguides and he is happy with the results. Two of the speaker lines I sell use CD waveguides. What Wayne is doing in his designs - using CD horns and matching up the woofer and horn pattern (at least in the horizontal) in the crossover region is in my opinion very intelligent. I think Altec was the first to do this with the Model 19 and Model 14 years ago, but even today few designs really pay attention to the radiation pattern. Shortly after the Altec Model 19 and Model 14 came out, JBL took it one step further with the Model 4430 studio monitor. Below is a link to a paper JBL's top engineers wrote describing the theory behind the model 4430 (link hosted by Wayne at PiSpeakers - surprise, surprise!).Duke
landmark JBL paper on CD loudspeaker system