Subject: Re: Corner loading
Posted by Wayne Parham on Mon, 29 May 2006 04:04:24 GMT
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I have used various alignments and built tons of horns over the years. For corner loading, I prefer an overdamped vented alignment. A sealed box would work pretty well too, but I like the sound/efficiency/extension of a large-format high-efficiency woofer in a vented box. There is plenty of gain to be taken advantage of going with a corner-loaded arrangement, so I'm not sure a basshorn makes sense for home hifi unless you can build something very large, crossover very low and incorporate delay for the mains. The corner-loaded driver is an excellent alternative. It is efficient, capable of a fairly high crossover point and doesn't need delay to match the midrange.Basshorns are complex, with a labyrinthene set of passages of wood that can vibrate and resonate like a sounding board, particularly if you push them too high in frequency. If you brace well and crossover very low, a large basshorn works well but it is a lot of cabinet. You'll also need to concern yourself with summing, possibly using a delay because of the path length of the basshorn.I don't think it makes sense to go with a basshorn in a home hifi setting because they're just so large, even if designed for eighth-space. If you want extension, the horn has to be large or it's peaky. I wouldn't consider anything with 15dB peaks in the response curve, that's just not good enough for hifi. Barely good enough for PA, if you asked me. So if you are planning a basshorn, make sure you make it sufficiently large and don't push it too high in frequency. Use it like you would a bandpass sub but also pay attention to summing and delay.