Subject: Conical HF Horn?
Posted by Cuppa Joe on Fri, 15 Jun 2007 02:46:12 GMT
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Opinions & Inputs, Please & Thank-you!I've noticed that very few designers bother with a conical horn for a 1" or 2" compression driver. I'm aware, though marginally, that a conical doesn't load well near its lower cutoff, so does this mean that a larger horn is needed to achieve the same cutoff as (for instance) a smaller CD-type horn?I've also observed two characteristics of the Danley-designed 1" conical horns (ignoring the tapped-horn components for now). One, is the fact that they're VERY big; two, is they all have fairly narrow coverage patterns (40-50 degrees). I know that the horn has to be large enough to house the other speakers, but how much of it is needed to load the 1" driver?And, if the coverage pattern were opened to 90 degrees, what might be expected for an off-axis response? Will it become beamy?Having failed to find a HF horn which meets my criteria for coaxially mounting in the mouth of a conical midbass horn, I had thought to design my own from plywood.Any experience in this area will be met with adulation!