Subject: Update
Posted by Adrian Mack on Tue, 16 Dec 2003 01:10:48 GMT
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Was thinking about reflections screwing up my measurement graphs today, the area I had been testing in did not have any walls or fences etc around the front or back of the horn, however there was a wall and a fence pretty near on each side. I flipped the horn the other way to do the measurements to reduce reflections off these surfaces (by reducing the horizontal dispersion by flipping it). However today I thought to myself to go out and get some cable instead. I had to buy 20 meters of speaker cable and another 20 meters of RCA cable so I could do the measurements way out where theres no surrounding fences, walls, or anything else. The results I got changed for the better! I have two response graphs here, one is of the first conical horn I built which had a small throat of 27cm^2, and the second graph is of the second conical horn I built with 50cm^2 throat. Other than throat size differences both horns were the same length, mouth area, etc. Horn with 27cm^2 throat, ~1.5L back chamber with liningAnd here is the horn with larger throat, 50cm^2 with ~1.5L back chamber with lining. Concerning ~500Hz to 1.6KHz usage, which one would you say is more smooth/less amplitude deviation? I think that the one with large throat is better for a higher xover point say 2KHz (pretty obvious), however regarding the peaks/dips and shelves at the low end, am not sure which one to choose. Any comments/guidance on which graph is "better" is much appreciated. Adrian