Subject: Lets try this again.....
Posted by Marlboro on Wed, 05 Sep 2007 18:48:28 GMT
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Let's try this again.The MciNSTOSH design has dome tweeters that are about center to center distance is 2.75 inches apart. This causes vertical comb filter distortion to start at roughly 5000hz, which for most people should be clearly audible. While I use dome tweeters too, mine are not 1 inchers, they are 3/4 inchers, and the flanges are cut so that the vertical comb filter distortion for me doesn't start until roughly 15,000hz.I have only one line of mid ranges so I don't have to worry about getting the close enough to avoid horizontal comb filter distortion. I can't tell from the McIntosh photo whether this is an issue since I don't know what the crossover to the tweeter is. But it may be an issue with the McIntosh models.My midranges are 3.5 inches but my center to center distance is 5 inches. This means that I need to cross my mids to the tweeters at at least 2671hz to avoid audible comb filter distortion. I cross them at 2400 using a 24 db octave electronic crossover, and I use 30 tweeters per side, so that each one carried only 3.3% of the total tweeter load.It looks like the McInstosh need to cross at less than 1600hz or so from the c-to-c distance vertically. If they had used ribbons or planars like you do, this wouldn't be a problem, but they've used some kind of dome, so this is a problem. I don't know any 1 inch domes that will cross at 1600hz adequately.MY SYSTEM WAS DESIGNED USING JIM GRIFFIN'S RESEARCH AND WITH HIS HELP, AND IS VERY DIFFERENT THAN THE MCINTOSH MODEL. BUT WE'VE HAD NUMEROUS DISCUSSIONS ABOUT THIS IN THE PAST AND YOU ALREADY KNOW THIS.Marlboro