## Subject: Re: Comparing 4 PI's Posted by Colin Fritzke on Fri, 16 Nov 2001 18:45:51 GMT View Forum Message <> Reply to Message

Garland, Well... that's allot of questions, but I'll try to explain as briefly as possible. (That's the Kappa 15LFA above, in case you were wondering). I think I have pretty much the same goals in mind with my speakers as you do... extrememly dynamic sound yet in a package that my wife will allow in our living room. I've read everything I can find in the archives of this forum about people who have built Four Pi's, and they generally LOVE them. I could build the Theatre Three Pi, as it requires a considerably smaller cabinet than the Four and according to Wayne, sounds virtually the same. But I wanted MAXIMUM dynamics, so I really wanted to go with a Four Pi, even though I'll be pushing them with 45W/ch of quality solid state power. Problem is.... I don't have the space for 7 cubic foot cabinets that the Theatre Four Pi's require (see how big Mr. Till E.'s are?). Also, the price for the Omega woofers in the Stage 4 Pi's each cost approximately \$130 Canadian more at my local supplier than the Delta 15's do, and the JBL2226's are double that, which would make this project just a bit too expensive for me. After looking at those options, I analysed a few other drivers in the Eminence line, and it appears the Kappa 15LFA's (see picture above) were the best compromise in terms of price/performance ratio. They require a much smaller box than the Delta 15 (Mine will be just under 4 cubic feet, tuned to 40 Hz) while offering the virtually the same performance of the Omega in the same cabinet volume, only with slightly less power handling ability. I've corresponded with other people who have used the the Kappa15LFA in different projects and have been really successful, so I'm hoping they'll work well in my application. I guess a safer bet might have been to go with a proven design like the Theatre Three Pi (using the Delta 12LFA), but like I said, I wanted maximum dynamic ability. The Kappa 15LFA's are rated like the Delta with response curve similar enough that I'm confident that the Theater Four Pi crossover will work just fine. The Stage/Pro cabinets are listed as being 26"x18"x14" (I think), which yeild a cabinet volume somewhere around 3 cubic feet. Mine will be a little taller...about 34"x18"x14" for a volume of approximately 3.8 cubic feet (based on internal dimensions). That is about as big of a speaker cabinet as I can get away with in my living room, and I suspect my wife won't object as much to them if I put a nice veneer on them. I should be able to get sufficient bass extension, with a -3dB point around 45 Hz and gradually fading from there. They will be placed in corners, so I'm counting on a little bit of help from the room acoustics for deep bass. Based on Boxplot graphs, the Theater Three Pi will play deeper than my proposed design, but the tradeoff is it isn't quite as efficient. Tweeter is still going to be the Eminence PSD2002 8-ohm compression tweeter with Eminence H290 horn as called for in the Theatre Four Pi Design. To summarize, if size is a serious issue, go with the Theater Three Pi's. If you have the budget, go with the Profesisonal four Pi's. If you're like me, on a moderate budget and with size constraints, the Stage four Pi might be best or a modified version like I've done. If size no problem, go with the Theater four Pi's.Regards,Colin