Subject: fostex rear loaded horn design
Posted by jim denton on Fri, 17 Dec 2004 16:10:06 GMT
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Building the Fostex design for the 206---this plan calls for the T90 super tweeter---(cost $140 each) If I study the spec's to match as close possible could I not find a suitable tweeter as least expense-----these dang tweeters cost more than the drivers!!!! JD

Subject: Re: fostex rear loaded horn design
Posted by Jeremy on Fri, 17 Dec 2004 20:00:53 GMT
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I think they are trying to upsell you. I'd try them without first, then possibly consider adding a cheaper unit to get an idea of if you like it or not. The super tweeter and cap combo they recomend will have the tweeter producing noticable volume only in the upper half of the highest octive of music, and there really isn't much up there. I can't see justifying spending that kind of money on a expensive supertweeter that does little more than add some sparkle to the music, IMO. I don't see why you couldn't just supstitute the FT17H and mount it in the cab-way cheaper. Or if you want to keep it separate, why not stick it in a short peice of steel pipe on top?

Subject: Re: fostex rear loaded horn design
Posted by DanTheMan on Sat, 18 Dec 2004 04:30:07 GMT
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I`ve heard about 50 Fostex rear loaded horns in the last couple of days. The ones with horn tweeters added on the top definitely IMHO sounded better. I have know way of knowing the crossover frequency or rate though. The shop owners/ speaker designers didn`t want me to see the crossovers--sorry.

Subject: Re: fostex rear loaded horn design
Posted by robertG on Wed, 12 Jan 2005 16:12:26 GMT
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Most (all?) designs call for a simple cap, 6 dB/octave. With 2 or 3 caps, you can experience different Xover freq. Since the T90A is more sensitive than the 206 (or any other Fostex FR), you can cross it all the way up.For example, if crossed at 20KHz, you will still have a -6dB output at 10KHz (wich would be OK, given the difference in sensitivity). The idea of crossing the

supertweeter very very high is bypass any need for a resistor in the circuit.You will also notice that those BLH with super tweeters ar the larger one (8 inches and up), so if you have a smaller room, you might just go for a 6.5in. and do without the ($$$) tweeter.

Subject: Re: fostex rear loaded horn design
Posted by DanTheMan on Wed, 12 Jan 2005 16:26:31 GMT
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You're right, horn tweeters (when they were used) were always sitting on top of 208's. The best sounding ones though were not from Fostex, they were from a company called TAD and they were attached to carved wood horns--very$$$, but after hearing how good more expensive drivers are, I know I'm just waiting until I can afford them.I'm going to post pictures as soon as I get the internet in my house again. I cancelled all my extra bills since I was going to be in Japan so long. I never thought of crossing over that way before, seems like it would be difficult to get a flat response though. Thanks for the response.

Subject: Re: fostex rear loaded horn design
Posted by robertG on Thu, 13 Jan 2005 19:07:05 GMT
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TAD drivers are way too expensive for me! But I would love to compare these to some exotic Fostex drivers (T925).You are right about the fact that it's difficult to get a flat response with that kind of crossover. On the other hand, placement is the key to balanced sound. Both FR and ST are very directive and output drops quite a bit off-axis (almost 20DB @ 30 deg. @ 20 kHz for the ST), so with proper placement (or misplacement), it's still possible to get great sound without using resistors and/or radical Xover slopes. I mean, with the ST sitting on top, it's possible to have a slight toe-in for the ST and no toe-in for the FR driver.
