Subject: Newform R30 Scanspeak 18W/8545 array project
Posted by Stephen Narayan on Sat, 23 Dec 2006 06:23:47 GMT
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I recently had the good fortune to pick up a slightly used Newform R630 kit (2 30" ribbon, 2 18W/8545 woofers) that hasn't been put together yet. A friend and I are going to build a 4-6 woofer array using one or two NFR ribbons per channel. Plan right now is to have the overall height to 60" and incorporate 4 woofers, spaced 180mm ctc. The ribbons will be positioned to the side similar to Brad Virgils original R45 ribbons in the Excelarray. I've ordered 6 more 18W-8545 drivers (total 8) from Solen for this project. I may add 4 more woofers if necessary but would like to take a modular approach before adding the extra 2 per channel, is this feasible or would it be better to build the project from the start using 6 mids/channel. With 4 8545 and 1 R30 per side nominal impedance will be 8Ohms but there will be an efficiency mismatch from my calculations. 6 mids and a pair of R30's per channel give a lower nominal load and a 94dB sensitivity match if my calculations are right.I've been diligently reading Jim Griffin's white paper the last couple days and any help would be appreciated.

Subject: Re: Newform R30 Scanspeak 18W/8545 array project
Posted by Marlboro on Sat, 23 Dec 2006 12:30:38 GMT
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What kind of amplification and crossovers are you planning on using for these bad boys?

Subject: Re: Newform R30 Scanspeak 18W/8545 array project
Posted by Stephen Narayan on Sun, 24 Dec 2006 03:58:13 GMT
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Thanks for responding...Well initially amplifiers will be SS PS Audio Delta 100 stereo amps, 2x120W into 8 Ohm. I have 2 available so I could biamp them using my Behringer DCX2496, but I may eventually decide to build passive crossovers for them mounted on an external rear panel so I can just use one amp or possibly dual monoblocks, or a pair of Bryston Power Pac amps in the future. Not sure what the far future would hold for them but if I build them large enough the efficiency gain might lead me to use a valve amplifier. And then again there's also the possibility to go Class D or Tripath based amp down the road.Looking more into the design I believe the proper way to go right now is to go full hog and get another set of ribbons to stack alongside the array.

Subject: Re: Newform R30 Scanspeak 18W/8545 array project

Posted by Stephen Narayan on Sun, 24 Dec 2006 04:05:41 GMT
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Oh also...The NFR crossover point is recommended at 1100-1200 Hz to match the 8545 woofers which begin to roll off at about 1100 Hz. Looking at these drivers in a 60" array at this crossover point would give me a rather short near field response, making my current listening position in the far field region.

Subject: Re: Newform R30 Scanspeak 18W/8545 array project
Posted by Stephen Narayan on Wed, 07 Feb 2007 02:40:00 GMT
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Change in plans, I will be using a Cyrus III integrated amp and a Cyrus Power amp, this gives me 4 channels of 70Wrms into 4 Ohms which is what a 66"-72" 6 driver per side array with 2 R30's per side would give me...Any thoughts on this amplifier setup to go with my DCX2496?Also recently I've been having a hum issue with the Behringer which is feeding my Logans (biamp) and my subs. The sound only comes through the sub channels. I'm not quite sure if it's the XLR cable's at this point, the connectors or internal in the processor on those channels. Anyone ever come across this?I've been looking at other digital crossovers but I can't cost justify the expense of the DEQx yet. Though it looks lovely in black