
Subject: building 3 way system with jbl 4655
Posted by [replay](#) on Wed, 13 Feb 2002 11:48:01 GMT
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hi gang, thinking about building a 3 way speaker using components from one of the pairs of jbl 4655's acquired from the tent sale. the jbl 4655's (2 way 15" with 2416 compression horn have useable response down to about 80hz) would be used as the mids and highs. i'd like to implement a pair of 18" drivers to cover the lower 2 octaves, and build new cabinets for the 3 drivers. i don't see any eminence product which is tuned for the lower 2 octaves, any suggestions? any thoughts on how this would sound? i would then tri-amp this set-up using a 3-way x-over. i've seen other drivers suited for the lower bass but none which are still hi-efficiency. cheers, george

Subject: Re: building 3 way system with jbl 4655
Posted by [Robert Hamel](#) on Wed, 13 Feb 2002 12:17:14 GMT
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Well I am doing a similar thing right now. The exception is I run the 4655 full range and use LE-14a's in 4cu. Ft cabinets as stereo subs. I have used the roll off in my reciever to limit the bass into the 4655's but I think it sounds better with the 4655 full range and the subs blended in around 80hz or so. I considered 18 drivers from the tent sale but they need too big a box without some EQ. My 4655 sit right on top of my subs and this puts the horn right at the proper height. The Le14's are also driven by subwoofer plate amps so I can adjust level, phase, and crossover frequency. This gives me alot of flexibility and really lets you be able to dial them in to blend with the mains. This combination sounds very good in my room and gives me usable response to 25hz in my room. I personnaly chose this route because it cave me the most flexabillity and the ability to change my mains and still be able to blend the subs without trashing some rather large and expensive custom cabinets if I went with and all in one speaker with the 18's in the same cabinet. What ever you decide have fun!

Subject: I'm with Robert;
Posted by [mikebake](#) on Wed, 13 Feb 2002 13:24:10 GMT
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leave the 4655's in their cabinet and add subs; unless that takes the fun out of the project!!

Subject: Re: building 3 way system with jbl 4655
Posted by [replay](#) on Wed, 13 Feb 2002 14:18:15 GMT
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thanks, that sounds like a good way to go, maybe i'll just build nicer cabinets for the 4655's. who makes the LE14's and what size are they?cheers,george

Subject: Re: building 3 way system with jbl 4655
Posted by [Robert Hamel](#) on Wed, 13 Feb 2002 15:02:00 GMT
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Hi George They are old vintage alnico 14" JBL drivers. I choose them because I am a vintage JBL nut and I am a sucker for 4" edgewound voice coils! They also would give me good bass response in a smaller box. My original premise was an honest to god 30Hz. They are tuned with -3db @ 32Hz and -6@ 30HZ with no room gain or boost from the subwoofer amps. You can still get LE14H which would be better with lower fs and higher x-max as a closeout at Speakercity. They are less sensitive than the LE14A'S at 91 as opposed to 93 for the older driver. I was originally concerned with them keeping up with the 4655 because of the 100db 1 watt sensitivity. There was no problem at all at any tolerable listening levels. Just get a copy of Win ISD or download what Wayne has at the Pi website. He has Box Plot and Pi Align and lots of other great stuff if you have not been to his site. Just figure out how big a cabinet you can build and start trying the drivers in the preloaded driver libraries and go from there.

Subject: Re: I'm with Robert;
Posted by [Adam](#) on Wed, 13 Feb 2002 15:21:25 GMT
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I agree as well. You could build a pair and try a sub/satelite operation, but if you can't get the integration you can stack them as well. However, I'll reaffirm my stance that you won't get a two 'bottom two octave' subwoofer out of most any pro driver in a reasonably sized box for a house. I would consider a different type of woofer perhaps, despite the probably decrease in sensitivity. Adam

