
Subject: requesting opinions on fullrange array
Posted by [DanTheMan](#) on Tue, 24 May 2005 21:17:56 GMT
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I have a dual-fullrange driver system (2 identical jbl speakers on an open baffle stacked vertically).When I use both speakers, the sound is more dynamic and has more bass. However it is also less clear mostly due to (I believe) the time difference of each soundwave reaching my ear.When I just use one speaker, I have clarity but no bass and the sound is not as dynamic.How do I get the best comprimise?If I perform a whizzerectomy on the bottom speaker, will this help? I have three extras of the same speaker if I screw up.Could I use a crossover to effectively eliminate the problem? I do have the ability to bi-amp.What if I turned the bottom speaker so that it is facing the rear wall? A combination of any of the above suggestions, or should I just use one speaker (no array) and a bi-amped sub?I want sound that is as uniform across the listening area (at least as good as it can get)Any advise on how to get the best comprimise before I cut or spend any money is greatly appreciated! Please do not feel obligated to answer any of the questions I've asked, those were just ramblings in my head.

Subject: Re: requesting opinions on fullrange array
Posted by [Wayne Parham](#) on Tue, 24 May 2005 21:45:13 GMT
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You might consider using a crossover on the lower speaker to rolloff in the lower midrange. Install a 5-10mH coil in series with the bottom speaker and see if you like it.

Subject: Re: requesting opinions on fullrange array
Posted by [akhilesh](#) on Wed, 25 May 2005 13:43:44 GMT
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Here is something you can try & let us all know how it works out:1. Get a sub, and biamp with the dual array. 2. Take the dual array, and turn one driver facing 180 degrees away. Wire them out of phase. Make sure the open baffle is at least 2 feet from each wall. Try these two together, and do let us know how it works!-akhilesh

Subject: Re: requesting opinions on fullrange array
Posted by [DanTheMan](#) on Wed, 25 May 2005 17:59:36 GMT
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I need a good sounding sub. I have a 250 watt class AB plate amp from parts express. Does anyone have good-n-cheap recommendation?e.g. something under \$100. I'll try the speaker reversal tonight and post the results tomorrow.

Subject: Re: requesting opinions on fullrange array
Posted by [DanTheMan](#) on Wed, 25 May 2005 18:12:56 GMT
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I'll try Akhilesh's suggestion and then add yours to it. I only have a few coils laying around the basement and I can't remember their values--they've been there for years. I guess I'll start with the biggest on first and maybe even add on but I doubt it. I'll give a full report on my findings tomorrow. I'm a little concerned the just adding a coil will leave too much midrange going through, by maybe the phase shift will make them sound more coherent. You never really know until you try. I'll even try running them off my sub amp--in fact I'll try that first. Thanks for giving me the push to try.

Subject: Re: requesting opinions on fullrange array
Posted by [Wayne Parham](#) on Wed, 25 May 2005 18:35:00 GMT
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No reason not to do both ideas - What Akhilesh suggested is a push-pull arrangement and it will reduce distortion about 10-15dB, which is pretty significant. You can put a coil on the bottom one to limit it to bass, and that will prevent comb filtering at midrange frequencies. Turn it around in a push-pull arrangement and it will reduce even harmonics in the shared band. It might not be very pretty, but I'll bet it sounds good.

Subject: Cheap Sub
Posted by [akhilesh](#) on Thu, 26 May 2005 15:29:44 GMT
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[\\$299 new. May get one used for less. -akhilesh](http://www.hsustore.com/stf1.html)
Hsu Research STF1

Subject: Re: requesting opinions on fullrange array
Posted by [DanTheMan](#) on Tue, 31 May 2005 19:01:40 GMT

Sorry it took me so long to write--I had an emergency out of town. Anyway, Since I had extra speakers, I decided to put two extra ones on the bottom in an isobaric configuration and run it from my subwoofer amp (which has a variable crossover). Well, it sounds incredible!! There's just one problem, it hums like crazy!! If you play it loud enough for the neighbors to call the cops, you don't notice it (Damn noise ordinance!). Is there something I can do to kill the hum? I have the sub amp running off of the pre-amp output on the receiver, then looping that from the sub amp back into the receivers "amp in." The receiver only has a 2 prong plug which might be part of the problem, I don't know. Thanks in advance for any suggestions.

Subject: Re: Cheap Sub

Posted by [DanTheMan](#) on Tue, 31 May 2005 19:05:51 GMT

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Nice link! Too bad that doesn't come w/o the amp--I'd hate to have 2. Have you ever heard it? I don't think I could build one for less. If I'd seen that before I bought my amp, I'd have never bought it. Thanks!

Subject: Re: requesting opinions on fullrange array

Posted by [Wayne Parham](#) on Tue, 31 May 2005 19:32:34 GMT

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Try to isolate the problem. Here are a few questions that might shed some light on things: 1) Does the subwoofer amp hum with no input? 2) Does the receiver hum when the sub amp isn't connected? 3) When everything is connected, does the hum come from the sub, the receiver or both? 4) Why do you run a signal back from the sub to the receiver instead of just going one way? 5) Are you using an effects output like for an equalizer, that splits the preamp from the amp section of the receiver? 6) If so, have you tried leaving the straps in place, and using another preamp output instead, like perhaps a tape monitor output?

Subject: Re: requesting opinions on fullrange array

Posted by [DanTheMan](#) on Fri, 03 Jun 2005 19:54:46 GMT

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1) Does the subwoofer amp hum with no input? yes) Does the receiver hum when the sub amp isn't connected? no 3) When everything is connected, does the hum come from the sub, the

receiver or both? both4) Why do you run a signal back from the sub to the receiver instead of just going one way? I don't have any splitting cables. Should I get some to see if it will cure the problem?5) Are you using an effects output like for an equalizer, that splits the preamp from the amp section of the receiver? yes--I was thinking about changing it to running the speaker output to the high level input on the sub amp, but I was afraid that it would color the sound.) If so, have you tried leaving the straps in place, and using another preamp output instead, like perhaps a tape monitor output? Then you can't adjust the volume of the sub though--I want to set it at the right level so they sound even at any volume.Thanks a lot again.

Subject: Re: requesting opinions on fullrange array
Posted by [Wayne Parham](#) on Fri, 03 Jun 2005 20:11:12 GMT
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You could install a potentiometer after the preamp output, in the line to the sub amp.

Subject: Re: requesting opinions on fullrange array
Posted by [DanTheMan](#) on Mon, 06 Jun 2005 17:32:58 GMT
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Thanks! Unfortunately I don't know what one is, but I'll do some research.

Subject: Re: Cheap Sub
Posted by [akhilesh](#) on Mon, 06 Jun 2005 18:33:29 GMT
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Dr. Hsu has been doing nothing but engineering & making subs for the last 10+ years. He makes great products that would beat almost all home brews. Let me put it this way: I like to home build my own speakers, but I didn't even consider building my own sub, i just bought a Hsu vtf-2. Hope this answers your question!-akhilesh
Hsu's web site
