
Subject: Any good suggestions for subwoofers with full ranges?

Posted by [akhilesh](#) on Fri, 19 Dec 2003 20:22:48 GMT

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Hi Gang, Any one have experience with good subwoofers that would go with a full range single driver? I am talking in the sub \$800 range. Not that i want one, but i was just curious, if i buy one for my home theater later, it may as well be one that i could play around with with my single drivers!-akhilesh

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [JLM](#) on Sat, 20 Dec 2003 00:57:46 GMT

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Kevin from Solar HiFi (<http://www.solarhifi.com/>) produces single driver speakers using the Jordan 92S with transmission line loading and recommends Adire subs (Rava, \$400, for music and the Daeva, \$600 with the 15 inch Tempest driver and digital amp, for HT). Don't know where you are on your audio journey, but I've looked into infinite baffle subs (inflexible), rear loaded horn subs (too BIG), transmission line subs (too complex), ported subs (don't control woofer excursion or match room gain), and for now have decided to just stay with simple sealed powered subs like the Adires.

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [akhilesh](#) on Sat, 20 Dec 2003 15:07:41 GMT

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Thanx Jim. I have been into single driver stuff for about 18 months now, and have built a pair of homemade speakers using a vintage pair of drivers that are extremely satisfying to me (and to some others who have listened). Your response is important because it allows people like me to BYPASS all the other stuff you have tried, and learn from your experience. I was thinking powered sub too, since i use really low powered amps. BTW, anyone here ever try the Hsu sub?-akhilesh

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [hurdy_gurdyman](#) on Sat, 20 Dec 2003 15:59:29 GMT

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Have you thought about open baffle subwoofers? They are some of the fastest, cleanest bass

outside of a bass horn. Check them out.Dave

:^)http://www.euronet.nl/users/temagm/audio/dipolesub.htmhttp://babelfish.altavista.com/babelfish/
/urltrurl?url=http%3A%2F%2Fmitglied.lycos.de%2FMundU%2Faudio%2Fdipolsubwoofer.htm&lp=
de_en&tt=urlhttp://www.linkwitzlab.com/woofer.htmhttp://www.adireaudio.com/diy_audio/drivers/a
dire/dpl12.htmhttp://www.diysubwoofers.org/dipole/

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Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [JLM](#) on Sun, 21 Dec 2003 14:06:12 GMT

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I have owned the Hsu VTF-2 for 20 some months, but only use it in my (low priority) 2.1 HT system. I have no strong opinions about it one way or the other (I'm a fan of transmission lines, but they can produce too much of a good thing if you don't bi-amp).BTW I've heard Hurdy Gurdy Dave's O.B. system (above) and it does many things very well, but as a single driver/simplier the better slanted kind of guy I'm "philosophically opposed" to the equalizer, bi-amping, and 4 woofers per side he's using to provide good bass from moderately sized open baffles.

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [hurdy_gurdyman](#) on Sun, 21 Dec 2003 16:30:56 GMT

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The eq biamped part is only below 60 Hz. The main speakers are run without a crossover from my tube amp, thus have nothing interfering with the signal clarity. The OB sub still produces better quality of bass than any of the sealed, ported and bandpass subs I've owned. One really needs to seriously audition OB subs to hear what they can do. It's about as close as you can get to a horn bass in clean sounding bass as it gets. The only real drawbacks are that for it to work well, more than one driver should be used, and it's rather inefficient. I use a 200 watt per channel ss amp to run the subs and it's pretty well matched to my 20 watt tube amp. I use my eq unit as part of the crossover to make a steeper roll-off. I don't really need any eq, as the speakers are pretty flat without it, but the eq zeros it in just a bit better, so I have almost a flat line when measuring in room response. One things for sure, it really sounds great. I notice on the DIY by Bulletin Forum that OB subs are getting more popular every day as more people try them. Must be a good reason for that somewhere.Dave

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [akhilesh](#) on Mon, 22 Dec 2003 14:55:46 GMT

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Hi Dave,I spent some time thinking about the problem of bass below 50Hz, since that is about all you can expect from a single driver. I came up with the following options:1. an active sub, like the Hsu, that takes output from the low powered tube amp used to drive the full range drivers, and then steps it down and amplifies it again. 2. A LARGE box (bass reflex) with very efficient drivers like electrovoice EVforce 15s (i actually have a pair lying around) that will generate down to 25 HZ in a box of 20 cubic feet. These would be driven directly by the tube amp, in parallel with the full range drivers. Since i don't have a LARGE studio at my disposal, and because of building costs for a large box, i think a powered sub would be the way to go, esp. if it is crossed at low frequencies. I am not sure if it will smear across the sound, if it is crossed low enough I do not think it will. Also, i don't think the signal delay due to attenuation & reamplification will be at all audible to human ears. I read a lot about the Hsu sub, and i don't see too many on sale used, so i thought they might be good. The open baffle solution you use seems a high cost/size solution to me kind of like option 1. I am sure the results are great though. If you live anywhere near Tulsa, I would love to come by and hear the setup. I am not sure about room modes not interacting just because the bass is directed in an Open baffle. I mean aren't the room modes because of the wave length? Does the directionality of the bass have anything to do with this?One more thought: what kind of drivers do you use for the open baffle. Do they support a lot of travel? Most drivers would get damaged in open baffle, right?thanx-akhilesh

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [hurdy_gurdyman](#) on Mon, 22 Dec 2003 15:53:53 GMT

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akhilesh,In a typical box subwoofer the radiation pattern is omni-directional, thus equal amount of energy is aimed at the sidewalls as to the front and back. With open baffle, energy is directed only toward the front and back. Energy to the sides is cancelled out. If you walked around an open baffle subwoofer, you would hear the sound almost cancel out off to the sides. Because of this, far less energy is bounced around the room energizing room nodes. The extra expense of an open baffle subwoofer is mostly just a couple extra drivers. With any kind of sub, it is best if you use a separate amp (like a plate amp) and either a passive line level crossover or an active crossover. IMHO, OB subs are almost horn-like in sound quality and hard to beat.Dave :^)

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [akhilesh](#) on Mon, 22 Dec 2003 17:35:25 GMT

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Hi Dave,Makes sense. Can you share with us what drivers you are using for the sub, their sensitivity, and the drivers in your full range setup? Also, what is the crossover? thanx!-akhilesh

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [hurdy_gurdyman](#) on Mon, 22 Dec 2003 22:09:02 GMT

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My fullrange driver in the OB's are EV LS-12's with modded piezo tweeter horns. The woofers for the subs are just drivers I had laying around until I can buy better ones. They still sound great, though. A pair of the 12" woofers came out of some late 70's or early 80's 4-way "Omega" speakers (bass reflex). Not sure where the other two 12's came from, but they seem to be similar. I've unhooked the 10" drivers I was using with them due to surround rot on one pair. The OB's sound just fine with 2-12"s per baffle. I have measured a very flat response, in room, down to 30 Hz (+1 dB), about 8 dB down at 25 Hz. I plan on getting some 12 or 15 inch drivers for OB, maybe in the spring. I've been switching back and forth between using my EV's and a pair of modded Klipsch Heresy's. They both sound good, with the EV's being more efficient and the Klipsch sounding a bit faster and more dynamic. The EV's in the OB have a bigger soundstage. I could live with either, but I tend to prefer the Heresy's for the fantastic way they do midrange. Vocals are fantastic!Dave

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Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [JLM](#) on Tue, 23 Dec 2003 23:58:08 GMT

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One possible low cost option for a open baffle sub is to use a corner of the room and mount a tall board sealed to the corner of the corner of the room. The width of the baffle board must be wide enough to fit the woofer. This would provide an open baffle of very large proportions plus additional reinforcement of the corner loading.If the baffle were sealed to the floor and ceiling and at least 4 x Vas of the driver in internal volume provided you'd have an infinite baffle design with the same corner loading.Either of these designs could be duplicated on both front wall corners or multiple drivers could be mounted on the same baffle.

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [hurdy_gurdyman](#) on Wed, 24 Dec 2003 03:51:39 GMT

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Jeff, I placed my OB subs in the corner about a week ago. Bass is even better now then it was. Needs almost no eq at all.Dave

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [Seeker](#) on Wed, 24 Dec 2003 18:06:34 GMT

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A high efficiency single driver speaker system combined with a good active cross-over (to your subwoofer), will always result in less amplifier distortion in the over-all sound. Amplifiers often struggle with low frequencies, so helping out the amps makes sense. I've had great results in my system by using a cross over/bass equalizer - Audio Control Richter Scale X-over/Bass Equalizer.

Subject: I have a pair.

Posted by [GTFsr](#) on Fri, 26 Dec 2003 19:24:20 GMT

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I have a pair of Caroline Audio JTM's and use a pair of transmission line subs with them. They are large and unfinished using Peerless 850146 CSX drivers and a simple crossover. This combination sounds wonderful. Because they are unfinished the wife doesn't like them so I ordered a pair of Ronnie's 7" Jordan transmission line subs. Too bad they are so heavy or I would sell them cheaply. GTF

Subject: Re: What about closing up the port?

Posted by [BillEpstein](#) on Sat, 27 Dec 2003 23:12:42 GMT

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I've got the Titanic 12 in a 4 cu ft vented box which is great for HT and sometimes good and other times not so good on music. I really believe the recording is more crucial than the box but want to try sealed. What is the best way to close the port temporarily? And what causes those below 40 Hz booms and thuds that obviously aren't a part of the music. Receiver? Plate amp? Stupid recording engineer?

Subject: Re: Any good suggestions for subwoofers with full ranges?

Posted by [akhilesh](#) on Wed, 07 Jan 2004 18:21:48 GMT

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I have 2 questions seeker: 1. Do you think the active crossover may have some phase effects, which presumably taking all output (incl bass) from one amp and then attenuating it and reamplifying won't, 2. Could you give us the website of the x0ver/bass equalizer and give us some more detail on what you did (in terms of steps, etc). thanx! -akhilesh

Subject: What I'm doing...

Posted by [artsybrute](#) on Wed, 14 Jan 2004 17:21:53 GMT

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For the home theatre room, I'm running a McCormack DNA-1 amp and, because of the small footprint required, a pair of Definitive Technology BP-2000's. That's really set up for the grandchildren. But in *my* music room, I run SET's and have a pair of Lowther PM6A's with 40" front horns. I like the clarity of the Lowthers and the bass is, as a friend put it, credible. But I have found that many people overlook the quality of the bass in an audiophile system and just go for a sub with quality something like the BP's, which I think messes up a high-end system. So I'm building a pair of Pi Seven cornerhorns without tweeters as the bass boxes. My personal taste at this point in time is SET, and I don't like anything between the amp and the driver. So I am putting together a biamped system. One amp to the Lowthers, the other amp to the bass box. Such a setup requires lots of real estate, as the Pi's are huge and are too tall to act as bases for the 40" horns. The horns are on tripods (speaker stands), and thus can be moved for best sound. Hope this helps. Len

Subject: Re: What I'm doing...

Posted by [Phil Wilson](#) on Thu, 26 Feb 2004 03:20:04 GMT

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This sounds super-cool. Any pictures?
