Subject: Speaker Search
Posted by Nick Steffen on Tue, 22 Feb 2005 12:52:57 GMT
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I have been looking into single driver speakers and found things like Beauhorn and Brentworth Labs that are kind of out of my price range. There are also small speaker makers (don't know if that is the right term) like Common Sense (lowther and fostex based), Decware, Bob Brines (FT-1600, FT-2000) Ed's Horns in SC.I was wondering if any of you had thoughts about any of these products or some other ideas of speakers to look at. I think my main problem is that I am out here in Omaha, NE with no opportunity to audition speakers I would like to look at and the thought of buying something sight unheard is scary.Thanks for any ideas. Oh, I'm not an audiophile or anything so you may have to talk down to me. Thanks.

Subject: Re: Speaker Search
Posted by akhilesh on Tue, 22 Feb 2005 14:02:17 GMT
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I'm sure you'll get a lot of posts. I was very impressed with Jim Denton's Fostex 6.5 inch in a voigt pipe. I would recommend that driver in either a voigt pipe, or even a bass reflex, tuned high. FRom 100 HZ to about 5 khz, that would be a great driver. You can cross it with a super tweeter, and do the bottom with a sub, to get really good sound-akhilesh

Subject: Re: Speaker Search
Posted by Wayne Parham on Tue, 22 Feb 2005 15:29:02 GMT
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Every one of those that you mentioned are highly respected in the single driver community. I know it's a bit of a drive, but you might make a little vacation trip to Tulsa one weekend for the next Great Plains audio club meeting, which will probably be in a month or month and a half. Several of us here have various loudspeakers, and some of those are single driver speakers. You'd be able to hear Voigt pipes, Martin King quarter-wave pipes and a pair of David Dick's bass-reflex cabinets. Bob Brines is in Arkansas, so maybe we could talk him into coming. For that matter, we might be able to get David Dicks to come down from St. Louis too.Something to think about. Seems there are a lot of us within a days drive. Here are writeups of some of the previous meetings:February 12, 2005 Great Plains Audio ClubFebruary 5, 2005 Great Plains Audio ClubNovember 13, 2004 Great Plains Audio ClubSeptember 25, 2004 Great Plains Audio ClubJuly 10, 2004 Great Plains Audio ClubApril 3, 2004 Great Plains Audio ClubJanuary 10, 2004 Great Plains Audio ClubNovember 8, 2003 Great Plains Audio ClubSeptember 6, 2003 Great Plains Audio Club

Subject: Re: Speaker Search
Posted by Seeker on Wed, 23 Feb 2005 19:50:35 GMT
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You might want to look into Omega speakers; they have a no questions asked return policy.
http://www.omegaloudspeakers.com/index.html

Subject: Re: Speaker Search
Posted by lon on Thu, 24 Feb 2005 04:37:34 GMT
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Hellooo Down There, Are you wanting to do a hobbyist build or buy stuff? Like Wayne said, if you can get to a meet that would be great. Prob'ly the best kit that I've seen is the BK16 from Madisound,though Wayne may have some other suggestions. Up in the General Forum there's a few remarks about a bookcalled Speakerbuilding 201 just released from Old Colony andthe audioXpress mag. I have a thing for Voigt Pipes and would like to do thatbuild but for now, there's a smaller design called the MLTL(Mass Loaded Transmission Line) that I built from shelvingsold at the (put your Home Depot equivalent here.) It's the best build I've heard, but, well I've mostly only heard myown. MLTL is a ported design found at the Single Driver Websitewhere one of the regulars provided the specs for a build withthe Fostex FE127e. I'm still experimenting with the tuningfrom what was given by GM, the author. The MLTL has also been used with the Jordan JX92s which is thought of highlyin full range speaker circles.

Subject: Re: Speaker Search
Posted by GarMan on Thu, 24 Feb 2005 14:08:46 GMT
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Last April at the Montreal Audio show, the Omegas were one of the speakers that really impressed me. All the advantages of single-drivers without the colouration. Goes down pretty deep too, considering its size. Omega has a user forum at audiocircles.com and one of the hot discussion topics for them last year was the pairing up of Tripath amps with their speakers.Gar.

Subject: Re: Speaker Search
Posted by Nick Steffen on Thu, 24 Feb 2005 23:24:05 GMT
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lon,Thanks for your reply. Actually I'm just looking to buy. Not good with tools.NS

Subject: Re: Speaker Search
Posted by JLM on Sat, 26 Feb 2005 10:49:13 GMT
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Welcome Nick and thanks for the questions.Don't know you're musical tastes, room size, or what things you listen for. Single driver speakers provide a direct connection to the amp (they are "active" speakers by definition). They typically are easy to drive (and efficient, the advantages of high efficiency drivers cannot be understated.) Single driver speakers have no crossover distortion, no phasing issues between drivers, cheaper to build with resources going into the quality of driver. With multiple drivers you hear two or more sources for the same sound (especially nearfield). With woofer/tweeter arrangements you also hear two different sizes/types of drivers trying to reproduce the same signal at crossover frequencies. What extended range drivers do best is the heart of music, the 6 octaves from 80 - 5000 Hz. Much heartburn comes from trying to stretch into the last two octaves that marketing types tell you are so important.Single drivers have limitations: deep bass, narrow dispersion of higher frequencies (beaming), and lack of ultimate sound pressure levels. The Martin King/Bob Brines offerings pretty well address deep bass for nearly any musical type. Beaming can be made into an advantage to tune to a listening position and reduce first reflections (improve imaging). Until you've played around with a sound pressure level (spl) meter most overestimate how loud they listen, so they think spl is an issue, but in reality it's rarely a problem unless you're a young headbanger that'll soon suffer permanent hearing loss.Another easy/cheap avenue not mentioned so far is single driver open baffles. That's right, just take a sheet of plywood/whatever and mount a extended range driver in it. The bigger the sheet the deeper the bass. Dynamics are improved, imaging is life like. Open baffles work best with drivers that have a Qts of say 0.6 or higher. The Visaton B200 (about $150 each) has been a very popular candidate lately for high efficiency open baffles. Like most single driver speakers you may want to add a sub. Again, the Bob Brines speakers are about the only exception to this rule. See Bob's forum elsewhere here.Another place to check out is Decware. Steve Deckert lives fairly close to you in Peoria, IL. Decware offers high efficiency speakers, tube amps, cabling, even some player mods. It's a small shop that builds quality stuff for a good price and offers personal attention.

Subject: Re: Speaker Search
Posted by Nick Steffen on Sat, 26 Feb 2005 13:49:43 GMT
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JLM,Thanks for your reply. The people on this forum and the speakers makers I mentioned in my initial post have been really kind in trying to educate me.As far as my specifics; I have one end of a 20' x 12' basement room for a listening area. I listen to jazz (not much electronics), I don't listen too loud, and I've never thought that big booming base is very musical. In istening, I'm looking for the things that the blurbs and reviews of single drivers say that they do.Anyway, I've been enjoying the "hunt" and I do appreciate all of your comments.NS

Subject: Re: Speaker Search
Posted by JLM on Sat, 26 Feb 2005 23:05:24 GMT
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Nick,Moderate volumes of jazz in a 12 x 20 room is perfect for single driver speakers. Jazz doesn't have as much bass in it as most other musical genres. I'd grab a sound pressure level meter and test tone CDs to confirm what you listen to and how loud, so you can relate to speaker specifications.Keep in mind that horns are more "in your face" (forward presentation), efficient, and need to get huge (at least the size of a refrigerator) in order to produce deep bass. So horns add efficiency and complexity versus bass reflex. The real question isn't horn versus bass reflex as much as matching drivers to enclosure type. Horns with low Qts drivers (about 0.2) and bass reflex with higher Qts drivers (about 0.4). Omega is a good choice for standmounted bass reflex single driver speakers. Louis there is very pleasant. The 3 series speakers seem "faster" and mate better to a sub while the larger driver speakers are warmer.Mass loaded transmission lines (Martin King/Bob Brines to drop a couple of names) provide very tuneful/musical/deep bass compared to horns or bass reflex and are easier to drive than the raw numbers would suggest. I'd avoid tapered quarter wave pipes (TQWP) as poor alternates to mass loaded transmission lines. As I mentioned before the other alternative would be open baffles (very dynamic and lack bass like horns, but very simple to build). Many folks use 31" x 39" baffles or larger. Some use continuous hinges to make a three sides semi enclosure to increase effective baffle size (and therefore improve bass response). If you are willing to give up some imaging, the ultimate baffle design (best bass response) is infinite baffles (imagine wall mounted drivers with a large cavity behind). Infinite baffles work best for subs, where large spaces (crawl spaces, attics, spare closets/rooms, or garages are used. Care must be taken regarding temperature extremes, neighbors, and not slaming doors into those spaces (and blowing the drivers out). Drivers with Qts of 0.6 or higher are recommended for the best bass response.One of the nice things about single driver speakers is that you can better afford expensive/high quality drivers, especially if you go with open baffles.

Subject: Re: Speaker Search
Posted by Nick Steffen on Mon, 28 Feb 2005 17:20:02 GMT
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JLM,Again, thanks for the education. I hate being dumb but what is Qts?Also, is Cain & Cain Abby an example of TQWPs?NS

Subject: Re: Speaker Search
Posted by JLM on Mon, 28 Feb 2005 21:42:21 GMT
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Qts is a driver Thiele/Small (accepted) parameter that indicates how stiff/compliant the driver

is.Yes the Abby is an excellent example of a TQWP. Jazz, folk, and chamber music are examples of good uses for TQWP. OTOH can a speaker really be "good" if its only good for certain types of music? Workmanship on the Abby is beyond reproach, but it's expensive and is a hit or miss on the significant other acceptance issue. Omega Grande 6 (bass reflex) does as well in a very well made large standmount for about half the money. Bob Brines' FT-1600 (floorstanding mass loaded transmission line) does better/deeper bass for about half the price., and a good one for jazz