Subject: Can single driver speaker rock?
Posted by GarMan on Wed, 13 Jul 2005 01:16:51 GMT
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I've only had limited exposure to single driver speakers. The ones I've heard have that certain magic about them that draws you into the music, but only with "simple" music. Give it anything that rocks, and they become confused and congested. Very similar to Colin's comparison of SET to the reluctant virgin.Granted, I haven't them all. Are there any single driver speakers out there that can rock like a multi-way? Is the confusion I'm hearing due to intermodular distortion?

Subject: Re: Can single driver speaker rock?
Posted by roncla on Wed, 13 Jul 2005 01:47:08 GMT
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I really dont know what you mean by rock? If its SPL well sure. I have had my horns to 106 db and the sound was very stable and not congested , very detailed. And it only took around 8 watts. But! at that level for any amount of time and it can and will cause hearing loss. Besides i frequented many concerts in my wild youth and after one Dead concert i could not hear properly for about one week. Too much hearing has already been lost, i dont wish for more.ron

Subject: Re: Can single driver speaker rock?
Posted by Manualblock on Wed, 13 Jul 2005 12:09:05 GMT
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Who knows how much damage sitting twenty feet from those huge stage PA speakers at inummerable rock concerts did to our hearing. I can no longer be exposed to very loud music as it causes physical pain. I believe it is a direct result of playing in Rock bands for thirty years as well as concerts. Wish I would have wore those hearing protectors when I had the chance.As far as Rock levels with SD; I tried it and just noticed the sound took on a one note strained quality that wasn't pleasent. These were the Decwares, the better ones. I have heard Lowthers and would not want to push them with heavy rock duties.

Subject: Re: Can single driver speaker rock?
Posted by GarMan on Wed, 13 Jul 2005 13:05:00 GMT
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SPL would be part of it, but not the only thing. I've heard single driver speakers fill a large room

and sound great, but only with simple acoustic music. Toss in a full rock band in there with heavy bass line, electric guitar feedback and loud kick drum and the whole thing sounds like mud.That's another thing. Electric guitar feedback do not sound right in the single driver speakers I've listen to.

Subject: Re: Can single driver speaker rock?
Posted by roncla on Thu, 14 Jul 2005 00:22:07 GMT
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If you are really looking for that kind of slam then 15" woofers in a sealed cab (just my perference) with a FR in a sealed cab run FR and let the sealed cab take care of the LF rolloff with maybe a helper HF horn or ribbon if its needed. Yea its a 2-3way, but the FR will be doing most of the duties in the important mids. I hate crossovers in the 300 hz to 7-8 Khz, even active i can still hear it.ron

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Subject: Re: Can single driver speaker rock?
Posted by hurdy_gurdyman on Thu, 14 Jul 2005 02:06:51 GMT
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I guess it depends on what you call "rocks" and "single driver." I rocked a lot with my Electro-Voice LS-12's in open baffles. These are very efficient 12" fullrange drivers that played quite loud and with decent punch and clarity. However, they did need a sub below 80Hz and a horn tweeter of some kind above 10kHz, so "single driver" isn't quite right. I used a 20 watt tube amp and never felt the need for more complex speakers or a bigger amp. The big baffles took up a lot of space, though, so I went to a smaller two way design (EV Sx100 Pro speakers with CV sub.) It also "rocks", but not a single driver by any definition. The LS-12 OB's had a bigger and cooler soundstage, which I miss. The Pro EV's have a cleaner sound at high volumes, but not by a lot. The compromises one makes to keep one's spouse happier. Dave

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Subject: Re: Can single driver speaker rock?
Posted by akhilesh on Thu, 14 Jul 2005 11:09:46 GMT
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I've never heard a pure (or even passively eqed) single driver setup that could match a multi driver setup when many instruments & voices were involved. Of course, a single driver setup is very involving with simple arrangements. I personally prefer the wide band setup, where one driver does a lot of the work, but gets help in the bass and the highs. -akhilesh

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Subject: Re: Can single driver speaker rock?
Posted by Manualblock on Thu, 14 Jul 2005 12:37:25 GMT
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Oh I agree 100%. What I was trying to say is the SD's when pushed hard seem to my ears to become congested and shrill, actually just strained sounding is more accurate. I don't listen loud but the question asked how they sound when pushed hard so I offered my experience. My set-up is a Pair of Pi 4's in one roon and Altec Valencias in the other. Maybe you can help here; can you describe exactly what you hear in terms of the xover being audible? I would like to see if we agree on the sound of the xover. Thanks.

Subject: Re: Can single driver speaker rock?
Posted by roncla on Thu, 14 Jul 2005 20:17:14 GMT
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Well first off i like BLHs mainly due to the dynamics, a seperate woofer taking over the LF requirements is good and a simple build in a sealed cab, but i still enjoy the horn dynamics and pure slam. True the horn roll off is around 50 hz but rock seldom gets below that and i am not a fan of organ music. Those huge bass bins at a concert really dont get below 50 hz anyway. As to XO and sound, anything that spreads the sound from two locations in the human voice range (Barry White in the lows) just sounds very apparent to me in the XO range. Even active gives some phase change, so i just like a single driver to cover the 300-7,8 Khz range, even though my BLHs roll off at 340 (designed) hz i have found that the sloped final expansion gives a more coherent blend of the horn/baffle/driver handoff. I had to design the horn roll off higher due to the more narrow (slim) look of today which means a narrow baffle which means a higher XO. Do my horns have slam, well sure they do and huge dynamics as well as soundstage. Under normal listening conditions i seldom go beyond 1 watt at 2 watts its LOUD and around 4 watts its painful and there is no apparent distortion due to the loading of the driver.ron

Subject: Hey Dave, what made you pick the EV speakers?
Posted by wunhuanglo on Thu, 14 Jul 2005 22:37:51 GMT
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Just wondering why you chose a "PA" speaker over a similar "studio monitor"?Charlie

Subject: Re: Hey Dave, what made you pick the EV speakers?
Posted by hurdy_gurdyman on Thu, 14 Jul 2005 23:05:49 GMT
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I already had it. I've used it for several years as mains for my small folk/celtic band, as well as solo gigs. I guess it never occured to me to try it as a home stereo speaker before. I was pleasantly surprised at how well it works, and how flat it measures as well.Dave

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Subject: Re: Can single driver speaker rock?
Posted by Manualblock on Fri, 15 Jul 2005 00:15:44 GMT
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Sounds good; that would explain the desireability of those old JBL 300hz horns. Altec also. Do you get an honest 50hz out of the horns?

Subject: Re: Can single driver speaker rock?
Posted by roncla on Fri, 15 Jul 2005 10:44:48 GMT
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Sure do, but a horn responds differently to different rooms. Corner loading will bring the HF response down to a slightly lower frequency and give more LF response. Ok the best would be a FH/BH combo but in many cases a FH rolls off the HF response , so you add a tweet,ribbon (if it can keep up in SPL) or a HF horn. So lets step back and see what we have. Its more or less a 3 way system now that has high directive mids from the FH.ron

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Subject: Re: Can single driver speaker rock?
Posted by Manualblock on Fri, 15 Jul 2005 20:56:05 GMT
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Thats what I am curious about. Can you hear the xover points to the extent that it becomes obvious with this 3 way set-up?

Subject: Re: Can single driver speaker rock?
Posted by roncla on Sat, 16 Jul 2005 09:25:24 GMT
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All depends(in my case) where the XO points are. Still better to bi-tri amp IMHO and avoid

passive. I once heard a set of the big K horns tri amped and they were mind blowing.ron

Subject: Re: Can single driver speaker rock?
Posted by Kim Schultz on Sun, 17 Jul 2005 23:58:01 GMT
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I have rocked to my Coral Beta 8 in BLH plus subs and supertweeters, but true, they become a bit strained at high volumes.On the other hand Lowther PM2A´s in 200hz tractrix fronthorns with a 15" sealed woofer can really rock.This setup plays everything from Metallica to Ben Webster.I wonder if the muddying goes on in the lower midrange, which would explain why the fronthorns doesn´t sound strained, or if it´s just the great efficiency that´s the key.Right now I´m building the 7Pi´s, looking forward to big open dynamic sound from an all horn loaded speaker.And putting the fullrangers in another room for more delicate listening.

Subject: Re: Can single driver speaker rock?
Posted by rafalc on Thu, 21 Jul 2005 09:57:04 GMT
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Kim,I am also running Lowther/Coral Beta 8 in 200hz Azura horns.Could you please provide more information on the 15" sealed woofer you use in your setup. I am trying to find bass solution for my setup which will integrate well with the horn.Rafal

Subject: Re: Can single driver speaker rock?
Posted by Kim Schultz on Thu, 21 Jul 2005 16:13:02 GMT
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Hi Rafal.I used a cheap 15" woofer in a 85litre sealed cabinet, but I had to use a lot of eq to make it go down low.You can proberly find a 15" that would work a lot better and go lower in a reasonable size cabinet.I´m gonna build Wayne´s 7Pi and try to use that bass cabinet with the fronthorns.RegardsKim

Subject: Can't stand it any longer...
Posted by hurdy_gurdyman on Thu, 28 Jul 2005 17:07:39 GMT
View Forum Message <> Reply to Message

I went and dug out my EV LS-12 open-baffles and are listening to them again. Ahhh... :) Using a 12" Cerwin-Vega 124D driver in BR box for below 80 Hz, and a top firing piezo, I'm enjoying a big sound with a big sounstage. Very open, and yes, it ROCKS. Sounds good on small scale music as well. It's not to shabby for a late 50's speaker. Dave

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Subject: Re: Can't stand it any longer...
Posted by Wayne Parham on Thu, 28 Jul 2005 18:39:28 GMT
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Any chance you can make it to GPAF next year? With a long lead time, you could probably make travel arrangements pretty cheap. I'd really like to see you and those hurdy gurdies of yours, speakers too if you can bring 'em!

Subject: Re: Can't stand it any longer...
Posted by hurdy_gurdyman on Thu, 28 Jul 2005 19:54:54 GMT
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Wayne,Cheap travel arrangements are always prefered, but that's not the main problem. My arms and shoulders just aren't up to a drive like that. I'd have to find someone from this area who would be going that I could make arrangements with (someone with the space for instruments and large open-baffles.) Anyone from central Michigan going?Dave

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Subject: Re: Can't stand it any longer...
Posted by Wayne Parham on Thu, 28 Jul 2005 20:25:53 GMT
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Earl Geddes is in Michigan, so maybe you and he can come together. He drove down last time. As the time draws near for the 2006 show, be sure and ask around.

Subject: Re: Can't stand it any longer...
Posted by hurdy_gurdyman on Thu, 04 Aug 2005 12:18:27 GMT
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Made another revision to the open baffle. I replaced the LS-12's with a pair of LS-8's, using a round adaptor board. Just a bit more refined sound. I really get into the OB sound, so big and open. The high Q EV drivers are a natural for OB's, and can be found well under $100 a pair at places like epay. They do require use of a sub and tweeter above 10 kHz.I'm using home-made wooden phase plugs on the LS-8's. Smoothes things out nicely.Dave