Subject: Single driver/single ended/George Brienes/Martin King
Posted by Manualblock on Sat, 23 Oct 2004 20:59:06 GMT
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Hi All; Last night I had the opportunity to audition the two august gentlemen's collaboration on a single driver transmission line Fostex speaker. Driven by the top of the line Decware el-84 SE amps. This is a new speaker that uses the Fostex 6.5" driver full range in an acoustically dead cabinet of some size with a passive compensation network attached. I know very little about this aspect of the hobby so I have no particular opinions or bias's either way. I brought along some of the CD's I have on the player recently to use as source material. These consisted of the JVC XRCD version ofBlue Mitchell's "Blue Moods", re-master.Mosaics,Duke pearson's compilation.Wynton Marsallis's new,"The Magic Hour".Paquito D'Rivera,"The Clarinetist".Charlie Haden and Kenny Barron's live album,"Night in The City".The Frank Kimbrough Trio's"Lonely Woman', from Mapleshade.Tommy Flanagan,Red Mitchell,Elvin Jones"Super Session".Here's my story; We listened to cuts off each album; no intteruptions except for short break here and there. The sound was good, very smooth and plenty of good musical bass. On the re-masters the instruments were clearly defined, not a lot of highs on this material but enough to allow you to fill in the blanks. While the music sounded real, I thought it was lacking weight and body. And the impact you get with live music was minimised; but the sound was very pleasant and at some points delightfull.My hosts seemed perplexed slightly though. So after a hour of listening I asked would they like to put some of their music on, I would be interested in hearing it.They favor more pop jazz, the first piece was Dianna Krall "Live in Paris". This is a nice mix of pop/jazz riffs and some ballads. I happen to enjoy her voice but am not a huge fan of her playing. Well; the system came alive, huge difference in tonal quality. She appeared dead center and bigger than life, but very real and 3dimensional. We tried another cut from a guy I had never heard, Jonathan Butler, a guitarist in the mold of Earl Klugh; who sings on the album as well.The music spread out and deepened and just was huge! Much more energy and as the mastering guys say "HOT". Very high energy. Lots of sharp highs and crackling bass. Crisp and defined beyond anything I have ever heard in a live venue. The guitar had a personality; it lost that generic sound, the cymbals shimmered and changed in tone depending on where the stick hit them.Now I have never heard of either of these men who built this speaker. I turned to my friend and said, these speakers love this music. He was surprised to say the least. He asked why I said that. It seemed obvious to me. It turns out that there are forum's that follow this design and in fact that is the music they use to tune the system.I went home and put some of my music on just to see. The real thing was back, live and articulate but normal sounding without the pyrotechnic's. My CD's are primarily Jazz from people who are not associated with anything other than jazz, not pop or cross-over or fusion. And they are very well recorded. You can't fault JVC XRCD or ENJA, or the people who do Wynton. It's an older sound. My point: On the jazz albums the music was flatOn the pop albums it was dynamic and hot.On the SD Fostex my music sorta died ;On my Pi 4's they breathed. What do we have here. I would have liked to hear these cuts on my system and I will do that some time. My opinion as of now. These Tansmission line Fostex; If you like Dianna or Jonathan run and get them. They are 850$ delivered or you can get plans and build. They flatter that sound to an amazing degree. Could I live with them; I don't know. But I know that in this story there is some kind of lesson. My last system consisted of Spendor SP1's and the EAR SE EL-509. Spencer Hughe's, the man behind Spendor was also involved in mastering the London Philharmonic for the BBC and in fact they used his speakers for monitors and quality control. The SP-100's are still the best classical speakers in the world bar none. But they don't do the other stuff that well. JBL 300's

are still the best rock speaker ever. Where is the all-in-one speaker? Why do all speakers favor certain type's of music?

Subject: Use of apostrophe.
Posted by Poindexter on Sun, 24 Oct 2004 03:04:47 GMT
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Careful about that, Man. The apostrophe either indicates the possesive, or a contraction; that is, the elision of some letters. The content: I have been studying this for several years. Many of my reference recordings are in the 'commercial pop' category (Russ Freeman / Rippingtons, 'Curves Ahead', Weekend in Monaco'; Anita Baker, 'Rapture'; Andy Narell, 'De Long Time Band', and others you know about better than I), and these have the regular commercial pop mix; 3dB peaks at ~70Hz and 5KHz. There are lots of otherwise fab (see above) recordings that our rigs must reproduce without prejudice. Then there are the Mercury L P, Deutch G. , and so on (Jackie DuPre Elgar Concerto, Barbirolli Sebelius 2, John McLaughlin Bill Evans tribute, Lauridsen 'Lux

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Subject: Continuation;
Posted by Poindexter on Sun, 24 Oct 2004 03:15:30 GMT
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Due to reckless use of 'Post' button.So, how do we reconcile these discontinuous virtual realities in our rigs?Again, I've been working on this for a long time.Make your rig with the widest bandwidth, the lease phase shift (least number of reactive[capacitive or inductive] components), the lowest net impedence possible. I have just listed my reference recordings, and reference criterea baldly. I cannot tell you how many times I have been disappointed in the results. The sound does not have to improve for the experiment to be a success. Repeat this.Poinz

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Subject: Re: Continuation;
Posted by Mike.e on Sun, 24 Oct 2004 06:42:19 GMT
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Make your rig with the widest bandwidth, the lease phase shift (least number of reactive[capacitive or inductive] components), the lowest net impedence possible. What about resistive/reactive circuits that cause phase to be more linear?Simplest = Better musical experience?Cheers!Mike.e

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Subject: Re: Use of apostrophe.
Posted by Manualblock on Sun, 24 Oct 2004 13:12:01 GMT
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Of course; I stand corrected, the results of a mis-spent youth. You have a very good point concerning full bandwidth. I believe that is why I have grown to appreciate the Pi series as much as I have. Interesting music choices also, I listen to the Dupre on a regular basis on vinyll. But I am not familiar with Lux Eterna, must sample that. What is really bothering me as of now is it seems you really have to make a choice between vinyll and CD because the early CD's are horrible and most of the later ones are recorded as you say. The early vinyll is the most musical medium there is;(Blue NOte; DG, RCA Shaded's etc.) but they are becoming scarce. Once you use a good vinyll rig and play those early tube miked recordings everything else sounds phoney and contrived. So...now what? 78's?It is almost like the controversy over tube rectifiers vs. SS diodes. I really don't care what line anyone wants to sell me concerning that issue, I can hear the difference. So that brings us back to the central question, do we cut ourselves off from a vast musical library due to incompatability issues with the equipment.Do we build our systems to flatter only one type of music.Do we settle for inferior listening experiences?

Subject: Corrective reactive components.
Posted by Poindexter on Sun, 24 Oct 2004 18:02:20 GMT
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What about resistive/reactive circuits that cause phase to be more linear? Dunno; I haven't tried it. There are some very sharp guys who do this all the time. Remember also that simple (no feedback) audio circuits and speakers/crossovers are mostly phase-minimum situations, so the phase and amplitude responses are interdependent; correct one and you correct the other. Two of these corrective circuits that are getting a lot of discussion right now are the Baffle Step Compensation Circuit, and Sigfried Linkwitz' 'perceptual dip', a low-Q ~3dB dip centered at 2-3KHz. These may be implemented at the speaker, passively at line level, or as part of a preamp/amp circuit. I would much like to scare up enough time to try these out.My personal experience so far, however, is that when we use these circuits, we're playing the correction of the circuit against the degradation of the sound due to the insertion of passive components in the signal path. All components have a 'sound'; that is, they degrade the signal to some small extent. As an engineering sort, it drives me crazy that resistors have a sound. Technically, it's insupportable; any nice quiet, low TC metal film should be sonically indistinguishable from a good piece of wire. My 6V6 amp was the first piece I built without any grid-stop resistors and it sounded fab and displayed no overt signs of oscillation, but just to perform the experiment, I put a

things out of there fast enough! These are nice resistors, my fave so far, and I never would have thought that the difference would be so great.So, so far my opinion is that the circuit should be as absolutely simple as possible, with highest possible quality components, especially (in order) capacitors, resistors, connectors, wire. Oddly, inductors (including transformers) don't seem to have as much of a sonic signature; as long as they are good quality, and are operated well down out of saturation.JMO, YMMV, et dissing cetera; just one geek's experience.Poinz

Subject: Use of vinyl.
Posted by Poindexter on Sun, 24 Oct 2004 18:18:51 GMT
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I've heard good LP playback just a couple of times; there's no doubt in my tiny brain that it has greater sonic potential than 16/44 PCM, although the gap has narrowed considerably now that CDs are being mastered with more care. I do find vinyl to be a great deal more variable, as far as its tonal balance and noise are concerned, though; there are some truly wretched and utterly transcendent LPs. The problem for us down here is that our climate is very unkind to stored LPs. There are molds and stuff that grow on the surface and degrade the vinyl, making it noisy. As a result, we have nothing like the store of old records that you guys do in the mainland. Being an analoghead becomes an expensive pursuit, even not considering the equipment cost, which is already far greater than that for digital playback. Back to the original question, when I play pop-mixed recordings, yes, I hear the boom and sizzle; but because they are reproduced clearly and cleanly and not exacerbated by the gear, they are far less obtrusive than on mass-market dreck. Besides, it's an artistic statement, they do it on purpose; pop is supposed to sound like that!Peace,Poinz

Subject: Re: Corrective reactive components.
Posted by Mike.e on Mon, 25 Oct 2004 00:47:49 GMT
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I would never use passive components-Active seem to have too many advantages.I wouldnt bother with the 'perceptual dip'-it sounds like bad use of EQ -ie what everyone uses an EQ for- to unequalise I havent had the chance nor the quality components to test 'resistor sound' - my highest peice is a jbl2226 but my main speakers are regular sonys-For now!Your problem now-Is how do you measure 'quality' of components- because you can hear the difference- where as i cant/havent.Cheers!

Subject: Personal experimentation.
Posted by Poindexter on Mon, 25 Oct 2004 04:25:04 GMT
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You should go and read Sigfried's expo. In his view, he's not 'unequalizing', he's correcting for the difference in the way human ears and microphones 'hear' what's happening in the concert environment. Everybody (definitely including me) flaps their lips about this stuff; the only way for you to determine what is the actual TROOTH is to perform the experiment and post back your results.We await, Poinz

Subject: Fletcher-Munson curve
Posted by Wayne Parham on Mon, 25 Oct 2004 04:46:04 GMT
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I wouldn't argue with anyone's personal tastes, but I would agree that mildly reduced midrange between 250Hz and 4kHz sounds better to me, particularly at low and moderate listening levels. Setting it like the Fletcher-Munson curve is just about right.Ironically, compression drivers have power response that's just the opposite of this. Their output is greatest around 1kHz - 2kHz. That's why they sound absolutely terrible if their output isn't compensated with some form of equalization.

Subject: Trooth
Posted by Mike.e on Mon, 25 Oct 2004 06:54:20 GMT
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No truth involved in subjective experience-just one persons enjoyment of a system more than anothers enjoyment.My system,with cheap speakers in a room of regular acoustics wil exhibit such frequency response errors-i wont even bother adding active EQ such as this until i have a decent system making it worthwhileStepping stones.. . . .Cheers!Mike.e

Subject: What I can't get my head around is...
Posted by wunhuanglo on Mon, 25 Oct 2004 10:08:47 GMT
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doing anything other than making the power response as flat as possible.My instinct is that, in terms of reproduction, it's appropriate to present what's on the recording (high fidelity with respect to the input). Otherwise it's just tone control - if implemented in hardware (e.g. crossover design) then it's applied across the board to recordings good and bad, making both (again, with respect to fidelity to the source material) inaccurate.My assumption is that the recording already incorporates the tonal bias of the producer and engineer - am I way off base here?

Subject: Re: What I can't get my head around is...
Posted by Wayne Parham on Mon, 25 Oct 2004 10:21:28 GMT
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You're exactly right. I always make my speaker designs as flat as the components will allow, so I'm with you on that. But I'm also keen on the observation that the Fletcher-Munson curve makes

a pretty good basis for loudness contours, which are volume-sensitive tone controls. Many people prefer a little bit of this kind of EQ at moderate listening levels.

Subject: Re: What I can't get my head around is...
Posted by Manualblock on Mon, 25 Oct 2004 11:45:35 GMT
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So.. In the final analysis; is it good to design for the type of music or is it good to design flat and take the hit on pop records? That is my original question. People rave about certain designs and you find out they only sound good on certain types of music which was my surprisind experience. But they sound real good on that music; ... not so good on other stuff. I have not seen that issue addressed yet which was the reason for the post.

Subject: Re: What I can't get my head around is...
Posted by Wayne Parham on Mon, 25 Oct 2004 12:19:11 GMT
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As a speaker designer, I strive to make my loudspeakers as flat as possible. No response tailoring, only conjugate filters. And for amplifiers, preamps, whatever, the same rules apply. On a personal level, I also usually disable tone controls. I don't like to use them.But then again, I agree that our ears are more sensitive to midrange, especially at low levels. The Fletcher-Munson curves are equal loudness contours, and they essentially represent a response curve of our ears. It's a representation of what our hearing does at different frequencies and different volume levels. So preferences in voicing, EQ, etc. may be related to the frequency-energy distribution of whatever is being played and the volume level it is being played at.
 Loudness Compensation - Phon Curves

Subject: Re: What I can't get my head around is...
Posted by Manualblock on Mon, 25 Oct 2004 12:57:05 GMT
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Thats why I like your speakers and from whence the astounding realisation lies. The Pi's ,make my well recorded old Blue Note Jazz albums sound great. What I heard the otther night on those SD speakers that everyone is raving about was a dull, lacking in real musical life sound on those same albums. But on the pop jazz stuff those SD's came alive. That says to me they are designing those speakers for one type of recording and not only does that cause them to be unsuitable for many other types of recordings; it says to me that the whole industry is geared

towards creating a tailored sound designed to flatter the efforts of those players and mastering engineers. That says the people who are driving this type of sound are deliberately courting those specific groups who are responsible for this type of sound. Is that a conspiricy theory? Because those SD's do not work with Classical and Jazz music. Thats all.

Subject: Similar experience
Posted by hurdy_gurdyman on Mon, 25 Oct 2004 13:56:33 GMT
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This looks like a good place to relate my own experience here at home. I have a pair of old Klipsch Heresy's. I swear I've never hear a speaker that could be more real sounding on many old jazz and folk recordings I have. The presence and natural detail and dynamics are supurb. However, when I play modern recordings, especially pop/rock, they sound thin, almost shrill. Bad sounding harsh, hashy stuff comes out of those old Klipsch on rock music. I've often wondered how a speaker could sound so good with some types of music and be almost unlistenable with other types of music. The reason I went back to my EV open baffles was that they are more listenable with all types of music, even though they never quite come to life the way the Heresy's do on older music. At least they are listenable on all music. There seems to exist a large gap in what is considered good sounding recordings and what they should be played on between pop music and traditional (especially acoustic) music. At least, that's the way it seems with what I've heard hear at home and when listening informally to a few others systems.Dave

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Subject: Re: Similar experience
Posted by Manualblock on Mon, 25 Oct 2004 15:28:20 GMT
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Wheew! Thank you. It is a really interesting phenomena; how people arrange their listening bias's(I think I got that apostrophe right). It just seems hard to initiate a constructive dialogue that addresses that issue.

Subject: Re: Single driver/single ended/George Brienes/Martin King
Posted by akhilesh on Mon, 25 Oct 2004 17:45:35 GMT
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HI John,Great point! My experience is that single driver speakers offer a large midrange bump, and this exaggerates the "presence" of the vocalist who sings in that range as well as instruments that play in that range. I try to tone this down in the interests of fidelity with a Baffle step correction circuit, but i do prefer a little bit of exaggeration. It's all a matter of taste. Bottom line: if we want

total fidelity, then flat freq curve, lowest distortion. IF we don't care abou tfidelity as measured, (and obviously neither you nor I do, since we both like SETs!) then just go with whatever sounds good to you, and have fun with it. my 2 cents-akhilesh

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Subject: Re: Single driver/single ended/George Brienes/Martin King
Posted by Manualblock on Mon, 25 Oct 2004 19:40:13 GMT
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Good to hear from you! Long ago I decided to go with what I like in sound and forget about trying to please some abstract ideal. But I believe that we must explore all philosophies of sound if only to allow for an informed choice. And peoples opinions are interesting and valuable; worth seeking out and discussing. This thing with the SD speakers really floored me, I just could not believe they are so specific to the recording. And to be truthfull I am pissed off that the sound you get from older quality vynill is just unobtainable nowadays and I can't afford to pay rapacious prices for good examples of older recordings; so they are forever out of my reach! Until all the collectors die and no one wants that old stuff in the basement; but then I will be too old to even hear it. Thanks for the reply,J.R.

Subject: Re: Fletcher-Munson curve
Posted by Malcolm Lamb on Fri, 17 Dec 2004 11:35:03 GMT
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The curves shown here are the Robinson-Dadson curves (1956).Almost the same but more accuratly generated.
