
Subject: for Jim Giffin

Posted by [Cliff s](#) on Sat, 07 Aug 2004 22:35:32 GMT

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Hi, I was reading on one of the forums that you have built the EROS. I'm now building the EROS and considering also building the Linus 2. I was hoping you could compare the two and the way they sound. I downloaded your white papers and spent hours or maybe days on the forums learning all I can about the LA. I've done an open baffle speaker using the EROS driver and crossover not yet named and no longer the EROS. Anyway they sound excellent, although they do need a sub. I got the idea concept from the Phoenix at <http://www.Linkwitzlab.com/frontiers.htm>. This was my first speaker project the EROS will be my next and the Linus 2 just because they look cool will be the third! Selah Audio Emailed me the plans. THANK YOU for all your hard work on line arrays. Will you be going to any of the DIY events if so is Linus going with you? THANKS again Cliff S

Subject: Re: for Jim Giffin

Posted by [Jim Griffin](#) on Sun, 08 Aug 2004 00:13:05 GMT

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Cliff, Thanks for the fine words. I'll try to live up to them. On the DIY front I will attend the Dayton (Parts Express sponsored) DIY speaker event on October 23rd in Springboro, Ohio and likely the Atlanta area DIY event (date not established as far as I know but this fall). I'll likely bring the Linus 2 array to Dayton and the Needles array to Atlanta. In Dayton I will give a workshop on line array design. For what it is worth Rick Craig of Selah Audio will be in Des Moines for the Iowa DIY speaker event (October 23rd) and will show off his Omegarray design (built by Jim Holtz) on the 22nd. I can not help you on the EROS design. I haven't built the EROS. Perhaps you confuse me with Jim Gutterman (Jim G on the Parts Express forum). I'm thinking of an open baffle line array but I haven't pulled the trigger yet. Dipole speakers have both their pluses and minuses so I'm still weighing what I can accomplish that would be different and better than past work. Let us hear about your projects as you progress. Jim

Subject: Re: for Jim Giffin

Posted by [Allan](#) on Sun, 08 Aug 2004 07:30:06 GMT

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hey Jim! just finished the baffles on my PE 69 cent mid and PT2 array. I went ahead and bought 16 of the PT2's - figured I'd take your advice:-) It's open baffle but it'll be so close to a wall, I don't expect much dipole effect. Here's a pic: I know the baffle looks a little odd but the array will be sitting right next to some very large bass boxes and the effective baffle will be another two feet to the side of the mids. Don't know how the extreme width of baffle will affect it but it won't hurt in

getting the most outta the lows. I'll start wiring tomorrow and hopefully get to fire them up before the day's out. Thanks for all your help.Allan

Subject: Re: for Jim Giffin
Posted by [lcholke](#) on Sun, 08 Aug 2004 16:01:30 GMT
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Allen,Very nice looking speaker.<http://www.tolvan.com/edge/> Will help predict the ob cutoff. I think it is about 344m/s /(baffle width-meters). 3' is about 340 hz.How will you do the x-over? Are the PT2s open back? Will you use a notch filter for the pt2 driver? ---Linc

Subject: Re: for Jim Giffin
Posted by [Allan](#) on Sun, 08 Aug 2004 17:23:34 GMT
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hey LincI just went with a width that fit into the space I have available. I never even bothered to calculate the LF cutoff because I'll get what I'll get anyway - I just made them as wide as possible:-)"How will you do the x-over? Are the PT2s open back? Will you use a notch filter for the pt2 driver?"I'm actively crossing them (3-way) triamped using an Outlaw 7.1 amp and an Ashly XR2001 XO. The whole affair is open back and the PT2's are sealead anyway. They're monopole so open baffle or sealed won't make any difference. I don't plan on any notch filters or BSC at this point. If anything, I'd consider a notch filter for the mid drivers. They have a nasty peak between 7-10Khz, but I'll probably end up leaving the XO point somewhere between 3-5khz. More than likely (hopefully) it'll be a non-issue.

Subject: Re: for Jim Giffin
Posted by [Jim Griffin](#) on Sun, 08 Aug 2004 23:26:52 GMT
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Allan,Thanks the photo of your project. I'm sure that you will enjoy your arrays. If you have to place them close to a wall, you might try to attenuate the backwave a bit (batts of fiberglass or layers of acoustic foam located behind the baffle are two ways) if you hear any sound blurring. Generally, dipoles want to have 3-4' spacing from the wall to excel. Let us hear about your results.Jim

Subject: I built both
Posted by [FredT](#) on Mon, 09 Aug 2004 01:12:05 GMT
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I built the Eros MKII, and then the Linus 2. The Eros is a very good speaker. It uses \$60 woofers and \$80 tweeters versus the Linus' \$20 woofers and \$25 tweeters. I know that more expensive drivers don't automatically equate to better sound, but in this case they do in the form of cleaner midrange and better treble resolution. Also, the Eros is a ported design with bass into the 40's while the Linus is a sealed design, intended for use with a subwoofer, with a 75hz F3 point. The Linus is quite a bit more efficient (95dB vs 91.5), it has a wider sweet spot, and it is quite a bit more dynamic, especially at high volume levels. The Linus will reproduce a full (105+dB at the listening position) orchestral crescendo (brass, tympani, etc) with great realism, while the Eros won't. I alternate both speakers in my system, but I have become addicted to line arrays, and the Linus spends more time in the system. Sometime back I posted a review of the Linus at <http://www.audiocircle.com/circles/viewtopic.php?t=8788&highlight=linus> Photos of both at <http://fredt300b.smugmug.com/gallery/132721/1/4831163>

Subject: Thanks FredT
Posted by [Cliff s](#) on Sat, 14 Aug 2004 01:22:11 GMT
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Thanks That helps alot!! Your link to audio circle is greatly appreciated. I did notice that you listen to classical music. I listen to mostly rock, classic rock, blues, swing, etc and I like it loud do you believe the Linus would be a good choice for rock and roll? The Eros seem to run out of steam on some recordings which is what got me into the line arrays.

Subject: For Really LOUD Rock Music
Posted by [FredT](#) on Sat, 14 Aug 2004 11:33:47 GMT
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The Linus would be a good choice for rock music if you use a subwoofer with it. It was designed as a sealed enclosure for simplicity of construction. This gives it a -3dB frequency in the mid 70's, but the rolloff characteristics of a sealed enclosure also make it easier to blend with a sub. I am using two Parts Express Titanic 1200 drivers with PE's 250 watt plate amps in 3.5' enclosures. Using two subs is an overkill; you only need one. With a good sub the power handling capacity is enormous, and its 95 dB efficiency will let it play very loud with as little as 10 watts driving it. I use a Consonance Ella amp in triode mode, which clips at about 25 watts, and have never felt the need for more power. I did try a 110 watt/ch Sonic Frontiers Power 2 amp but liked the Ella more. Building a Linus 2 with a good diy sub will set you back about \$1,400. Another line array you might want to consider if you can swing another \$600 is the GR Research Alpha LS. For very loud music I would choose the Alpha over the Linus. The Alpha does not need a sub, has even more

power handling capacity than the Linus, and can play as loud as 130+ dB; approaching the ear-damaging levels I once heard at an AD/DC concert (in my younger days). The Alpha LS parts kit is \$2,000. The enclosure is double walled 3/4" mdf, so building it is more work than the single walled Linus, and each enclosure weighs about twice as much, but it's as inert as as a lead coffin. I only heard the Alpha once driven by a high quality 30 watt solid state amp, but as I recall it will play quite a bit louder than the Linus without sounding strained. You can read about the Alpha LS on the Audio Circle GR Research forum. Either of these two will play louder than the Eros, but to my ears neither offers the "high end" delicacy.
