
Subject: Open Baffle EV's

Posted by [SteveBrown](#) on Sat, 23 Sep 2006 11:10:01 GMT

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I tried a fun experiment last night that I thought I'd post here for comments, and I've got a couple questions. Over the years I've accumulated a half dozen similar 12" Electro Voice vintage high efficiency speakers (TRXBs and SP-12's). These also have a fairly high Qt (around 0.65), so I keep thinking about them in an Open Baffle. I have tried just one SP-12 in a small OB with promising results - nice vocal tone, but lacking a bit in the mid bass (150 to 300hz). So last night I tried something new - I put two 12" EVs (TRXBs), in parallel, in an open back box to help extend the bass, then put a third EV (SP-12) on top, Open Baffle, running full range. It sounds really good. I crossed the lower two with a 0.7 mh coil so they don't interfere with the top end, but reinforce the bottom where everything falls off fast. If anything there is a bit too much around 200hz (about +4db). Maybe I could try a 1 mh or something to even it out? According to specs, these run around 97db. Measurements in room with my RS SPL last night gave me pretty darn flat to 40 hz, and down about 7db at 30. So I am open to ideas to enhance this even further. I'm also wondering about how this whole mess looks from a power distribution perspective, so help me out. The two TRXBs being used for bass are 8 ohm and the SP12 on the top is 16. I hooked the lower in parallel, making a combined 4 ohms, so do they take on 4x the energy of the SP12? Or would it be the other way around? I'm having to pad down the SP12 about 1/2 on an Lpad. So wondering if putting the two bottom speakers in series would even things out a bit. I guess that would alter my crossover coil too, making it 4x as large? I only have one channel built, tempted to knock out the second one today.

Subject: Re: Open Baffle EV's

Posted by [hurdy_gurdyman](#) on Mon, 25 Sep 2006 12:57:11 GMT

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Those old EV's do sound good. Are the SP-12's a model B or C, or just plain SP-12? The plain SP-12 has a much lower Q than the others. Dave

Subject: Re: Open Baffle EV's

Posted by [SteveBrown](#) on Mon, 25 Sep 2006 14:12:09 GMT

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The Sp-12s are the 16 ohm one, not sure if those are B or C.

Subject: Re: Open Baffle EV's

Posted by [hurdy_gurdyman](#) on Mon, 25 Sep 2006 15:50:21 GMT

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A plain SP-12 has a huge AlNiCo magnet. The SP-12B has a smaller AlNiCo magnet (but still good sized), usually 16 ohm, although I've heard tell of 8 ohm ones as well. The SP-12C has a 22 ounce ceramic magnet and is 8 ohms with a Qts around 0.45. I suspect you have SP-12B's, as the specs I have for them have a Qts of 0.7, about what yours have. They came in both cast frames and heavy pressed frames. The plain SP-12 is very suitable for horn use, while the SP-12B and C models had bass reflex in mind. The SP-12B should sound very good on OB with a big baffle. For a smaller baffle, a pair of very high Q LS-12's would be in order. They have a Qts of around 1.5 or so, but aren't quite as efficient. You might find more info here. <http://www.geocities.com/tadgesualdo/index.html> Dave
EV speakers
