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Subject: I'm done the Altecs - how's the tube x-over coming?

Posted by [billfort](#) on Tue, 14 Jan 2003 13:23:27 GMT

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Finally finished my Altec 604 cabinet project and thought I'd share my progress - here's a link to a page with a few pictures. All I need now is a tube active crossover, 12db slopes at 1500Hz, maybe a horn compensation network? :-)

How's the crossover project coming along Wayne? Billfort

<http://www.wardsweb.org/Billfort/>

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Subject: Re: I'm done the Altecs - how's the tube x-over coming?

Posted by [wasteh202](#) on Tue, 14 Jan 2003 13:48:42 GMT

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Beautiful! I am on the way to the 300B also. I just cannot afford it yet. I will probably begin with a pair of 2A3's from Bottlehead (Paramours monoblocks), and when I can afford the jump up go for a pair of Consonance Billie's (monoblocks also). The Billies have more power and more bass. Your speakers are beautiful and I like the way you made them to fit the corner. Questions What are you using for the XO, is it the original? Is the box sealed or ported? thanks

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Subject: Re: I'm done the Altecs - how's the tube x-over coming?

Posted by [billfort](#) on Tue, 14 Jan 2003 14:01:14 GMT

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Thanks for the compliments. I heard the Billie last year in Lima - very nice - I'm about to start a scratch built 300B SET based on the WE91 circuit but if I was going to build a kit, the Billie would be it. Heard the Paramours a few times as well - they sounded great but they are only 2.5w - the right speakers are critical. XO is the stock Altec unit that came with these drivers. The boxes are vented (triangular cut-outs in the cabinet sides) - tuned to 40Hz. Billfort

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Subject: tube crossover specs

Posted by [Garland](#) on Tue, 14 Jan 2003 15:02:06 GMT

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Hi Bill, Wayne posted some suggestions for building up the PC boards for the 6DJ8 crossovers

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based on Steve Bench's design. The boards are available from Gary Kaufman. Hope this helps.

Wayne's component suggestions for 4 Pi tube X-over

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Subject: Re: I'm done the Altecs - how's the tube x-over coming?

Posted by [wasteh202](#) on Tue, 14 Jan 2003 15:12:11 GMT

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Thanks for the info

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Subject: BTW

Posted by [wasteh202](#) on Tue, 14 Jan 2003 15:51:55 GMT

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I will be using a min of 96db sen speakers with the Paramour's. The Paramours are rated at 3.5 wpc (not 2.5 wpc). I know that this is not a significant difference but it can be depending on the speakers.

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Subject: Spice model for 6DJ8 tube crossover

Posted by [Wayne Parham](#) on Tue, 14 Jan 2003 18:42:30 GMT

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Here's a link to the thread that contains the model of the crossover circuit, in case you're interested. You can download the model and simulate the circuit to see its response curves. I suggest that you model the circuit while modifying values for R15, R16, R17 and C10 so you can see their effects. I'd also highly recommend that you analyze the circuit as it is without these components. I think you'll find it very interesting.

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Subject: Re: Spice model for 6DJ8 tube crossover

Posted by [billfort](#) on Tue, 14 Jan 2003 18:52:13 GMT

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Is spice a free download Wayne? Thanks, Billfort

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Subject: Re: Dadoes for the bracing tell the story  
Posted by [BillEpstein](#) on Tue, 14 Jan 2003 20:00:33 GMT  
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Excellent craftsmanship! And truly architectural design solutions to both the vents and the baffles. Wow!

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Subject: Re: Spice model for 6DJ8 tube crossover  
Posted by [Wayne Parham](#) on Tue, 14 Jan 2003 22:01:07 GMT  
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There are evaluation versions that are free, and the links in the post above have this free software. The evaluation versions of Spice are limited only in the number of nodes, and these circuits are simple enough that the node limitation is higher than the parts count of the circuit. So for this case, the evaluation version(s) of Spice will do everything you need.

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Subject: Re: I'm done the Altecs - how's the tube x-over coming?  
Posted by [replay](#) on Tue, 14 Jan 2003 23:35:51 GMT  
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hi bill, let me guess, you walked into barry falcon's store? i'm in toronto too. i'd love to hear your altec's. i'd like you to hear my karlson's and pi's. hope to get together soon. cheers, george

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Subject: ok, folder w/ student version  
Posted by [Sam P.](#) on Tue, 14 Jan 2003 23:42:02 GMT  
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is sitting on my desktop. Do I download the pi files into the same folder? Yikes, there must be a gazillion pages in the documentation zip file. Sam

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Subject: Falcon Audio

Posted by [billfort](#) on Wed, 15 Jan 2003 00:10:51 GMT

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Yes, you got it George - it was Barry. Was peeling off the 20's to pay his wife and heard Billie Holiday singing live by his workbench. Very strange guy in a non-typical audio store, using what for me at the time, was a strange approach to audio. The music I heard that day completely changed me. I'd love to hear your Pi's/Karlson's and would like to get your opinion on the Altecs. We have to tip a few beers in Lima too. Billfort

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Subject: Re: Falcon Audio

Posted by [replay](#) on Wed, 15 Jan 2003 00:52:37 GMT

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hi bill, that's cool! barry is known for restoring old tube table top radio's to new condition. he's a craftsman who takes his skill seriously. pop by my store some time. i've always got a project underway and would love to meet you. the store is Replay Electronics located at 1120 the queensway, 2 lights west of islington. the phone number is 416-251-9096. cheers, george

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Subject: PSpice Setup

Posted by [Wayne Parham](#) on Wed, 15 Jan 2003 04:19:08 GMT

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You'll need to add the directory into your Spice library path. So in the "schematics" section, click "Analysis" and then "Library and Include Files." Add "Tube.lib" to allow Spice to find the 6DJ8 model template. Then just open the Active Crossover schematic in "Files - Open." To plot a response graph, you will click "Analysis - Simulate," which will open the simulation window and show your response graphs. You can change component values by clicking on one (which will show it as being highlighted in red) and then click "Edit - Attributes." Change the "Value" field to change component values. This will let you see the response graphs of this circuit with alternate components. You can do "what if" scenarios and pick the right components for your specific application.

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Subject: Re: ok, folder w/ student version

Posted by [billfort](#) on Wed, 15 Jan 2003 10:11:18 GMT

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Am I missing something here? Do I just start the "install" function of the "Pspice update" in the download section? I don't see anything about a beta version.

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Subject: tube is "missing"

Posted by [Sam P.](#) on Wed, 15 Jan 2003 12:13:32 GMT

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from the schematic:) Can't seem to find the 6DJ8 symbol? I'm thinking the several unzips went into different folders or paths? When I open the "library and include files" all I have is two entries (one is tube.lib). Sam

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Subject: Re: Dadoes for the bracing tell the story

Posted by [billfort](#) on Wed, 15 Jan 2003 12:56:55 GMT

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Thanks Till - After seeing you're work, I'll take this as quite a compliment. Actually, I think it was a past post of your's somewhere that I used as a guide to working with the Watco oil finish. See ya in Lima. Billfort

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Subject: ok now.

Posted by [Sam P.](#) on Wed, 15 Jan 2003 15:30:21 GMT

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but I sure wish I had not tweaked the schematic to death, then figured out it was "saving" the changes...anyway, seems to be functional, now the real learning curve starts :) Sam

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Subject: Re: Great speakers

Posted by [bmar](#) on Fri, 17 Jan 2003 00:24:49 GMT

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Fine job. Nice design and execution. These are cool looking. Are you happy with the way they sound for you Bill

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