Subject: De-ringing my Pi Seven cabinets
Posted by Tim Barnes on Mon, 09 Jul 2007 19:53:32 GMT
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Hi Wayne:I'm finally making progress with my Pi Sevens - the mid-horn cabinets are mostly done. I've been taking pictures, and I'll post some when I find the time...I do think the panels seem quite resonant (at least they are pretty loud when I knock them with a knuckle). I'm wondering if there's space inside for me to glue on some sound-absorbing panel material (1/2" thick, comes in 48x96 sheets)? Or is there a better way to make the structure really dead? The cabinets are being built out of 3/4" MDF.I expect to have the same question with the bass cabinets - how much can I reduce the internal volume with braces, sound deadening materials etc.?For the bass I imagine the goal is to push the resonances above the range that will be excited by the woofer, but I'm not sure, so any advice will be appreciated.Thanks for all your help,tim

Subject: Midhorn bracing
Posted by Wayne Parham on Tue, 10 Jul 2007 02:19:58 GMT
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Brace each panel with a wedge shaped brace. The top and bottom braces are the same shape, and the side braces are the same as each other. Brace each flare panel against the side wall of the external cabinet that surrounds the midhorn. Also, preload the back panel with a rubber ball as shown below. The back panel will vibrate and make the midhorn sound resonant without it.Rubber Ball Brace

Subject: Re: Midhorn bracing
Posted by Tim Barnes on Tue, 10 Jul 2007 04:37:42 GMT
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Thanks, Wayne. I have put in the braces on all four sides...I haven't stuffed it with fiberglass yet though, and I haven't mounted the back panels. I'll do as you suggest. It looks from your picture as though you stuff the angled areas around the horn pretty thoroughly?Also, do you use some kind of strip to seal the back panel to make the entire cabinet airtight? I couldn't see anything on the picture with the ball braces.tim

Subject: Re: Midhorn bracing
Posted by Wayne Parham on Tue, 10 Jul 2007 15:53:20 GMT
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Loosely pack the sides, top and bottom surrounding the flare with insulation:

Midhorn packed with insulation and rubber ball brace in place

The picture above doesn't show the gasket, but one is used to seal the access panel. A suitable material for this purpose is PVC sheet rubber, commonly used for shower pans. You can get it at most builder's supply houses and cut it to fit. Makes excellent gasket material.

Subject: Re: Midhorn bracing
Posted by Tim Barnes on Wed, 11 Jul 2007 02:38:56 GMT
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PVC sheet sounds good. I'll make a trip to Home Despot.Thanks again,tim

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