Subject: Pi center channel speaker
Posted by LAL on Sat, 02 Oct 2004 13:30:01 GMT
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Wayne,Have you ever or would you consider designing and selling a Pi center channel speaker, perhaps something along the lines of a JBL4702X? I would think there would be a market for a speaker specifically design to sit horizonally below a TV for home theater. With coming of many new TV designs featuring thin light TV's most owners will placing a center channel underneath the TV a more viable option than a speaker on top as is now frequently done. I would think this would open the door for use of a 8",10' or even 12"woofer in a center channel instead of the 4"-6" MTM designs that seem to dominate the market today. A center channel adept at voice reproduction with the efficiency and dynamic capabilities of Pi speakers would be a big step forward in home theater. I tried one of my Stage 4"s as temporary center channel speaker and it was as close to sound of movie theater as I believe you are going to get. Using a pair of Stage 4's as right and left speakers with a simulated center channel is not same(at least with my processor) as having the dedicated center channel speaker(the dynamic impact of the sound is greatly reduced).Larry

Subject: Re: Pi center channel speaker
Posted by Wayne Parham on Sat, 02 Oct 2004 14:44:48 GMT
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That's not a bad idea, but I've never drawn up plans for a speaker specifically designed for use as a center channel. One thing that should definitely be avoided is stacking lining up the drivers horizontally because that creates nulls along the horizontal axis. You definitely don't want that. Another problem for some people is the powerful unshielded magnets. If I get some of these drivers within a couple feet of some televisons, the screen distorts and has to be degaussed. But this isn't the case with all monitors or all speaker drivers.On the other hand, there have been several people here that have used a center channel same as their left and right speakers without any problems. That's an ideal situation. Some modify cabinet dimensions to fit nicely as a dialog speaker and used drivers that didn't have such long magnetic reach. Sometimes, the cabinet is made short and wide or vice versa, keeping the driver position relationships the same or close to it. Provided that is done and cabinet volume and tuning are right, it usually works pretty well.The main thing is to maintain a uniform horizontal pattern that is reasonably wide, not to use a speaker with side by side drivers. Nothing kills sound quality worse than that, because nulls form smack dab in the middle of the listening area. It is also important that the center channel match the left and right channels in tonal character and volume, so that side to side panning sounds natural. One of the hardest things to do is to position the speakers so the sound comes from the same place as the images, not too far above or below the screen. It's usually best to put the center speaker directly above or below the screen, and the left and right channels just to each side and at about the same height as the center speaker. It can be tough setting everything up that way, and sometimes you have to make tradeoffs.

Subject: Re: Pi center channel speaker
Posted by Chris R on Sat, 02 Oct 2004 16:34:50 GMT
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Here's what I did. Not the same as a big Pi, but it worksgreat all the same. Its matched with 2-Pi's for front L/R,and pseudo 1-Pi's for the surrounds.Chrishttp://cerchaos.homeip.net:1280/woodworking5.htmlhttp://cerchaos.homeip.net:1280/woodworking6.html

Subject: Re: Pi center channel speaker
Posted by LAL on Sat, 02 Oct 2004 18:14:10 GMT
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Wayne,I am not positive about this but I believe the new thin screened plasma, LCD and DLP sets are not affected by speaker magnets like the older CRT TV's so the use of unshielded drivers is not a problem. You might check it out or perhaps someone on this forum could address this issue. If I am right you might have a niche for a new product.Larry

Subject: Re: Pi center channel speaker
Posted by LAL on Sat, 02 Oct 2004 18:24:53 GMT
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Chris,Very nice work. I have been thinking about making some rear channel speakers in cabinets like your sub to sit back in the room corners with drivers facing the room.Larry

Subject: Re: Pi center channel speaker
Posted by Wayne Parham on Sun, 03 Oct 2004 07:23:47 GMT
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You're right that some of the newer monitor technologies are unaffected by magnets. You can get away with a lot more speaker near those!

Subject: Re: Pi center channel speaker
Posted by Wayne Parham on Sun, 03 Oct 2004 07:26:01 GMT

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Those are sure good looking speakers! I had forgotten that you built those small corner speakers - Those are cool!

Subject: Hey : don't forget my Premium 4 Pi Centre channel!
Posted by drguayo on Mon, 04 Oct 2004 18:08:13 GMT
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I built a centre channel to match my 4 Pi Left-Rights.It is sitting under my HT screen. I believe I made it 18x18x36.Have a look. I built it so the horn should be centered under the screen so actually placement puts it a bit left of centre.
Picture of front of HT

Subject: Re: Pi center channel speaker
Posted by Yury on Tue, 12 Oct 2004 12:09:19 GMT
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hello all!I think center channel is not easy for produced.couse it's for voice at first. our ears more sensible for human voice. it's difficult seduce. so, it should be very high quality product
marble world