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.