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Subject: Re: Pictures

Posted by [Adrian Mack](#) on Thu, 22 Apr 2004 13:28:47 GMT

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Hi Grant Thanks for your comments! Actually, I haven't built any of the Pi Speaker models, so I can't compare to that. I started planning this project about a year ago and was deciding between one of the 4 Pi bass reflex models, or going ahead with my own 3-way design employing a midrange horn. I choose to go with a midrange horn for all the common reasons. Anyhow, the driver I used is the Eminence Alpha 6. I did a number of different conical prototypes and also a tractrix prototype. The horn I did is conical, 28.7cm long, 1083cm<sup>2</sup> mouth, 50cm<sup>2</sup> throat, 3L rear chamber. No extra front chamber volume. Dispersion is 60 by 40 deg. It's within +/- 2.5db from 300Hz to 2KHz. Getting the size very small but still covering the bandwidth required with high efficiency was the goal. > I've been playing with this idea the last few nights and am > thinking of putting the midrange in a separate cabinet on top of > the corner horn (Pi 7 model) instead of the middle. 2 cabinets > would keep size down and the top box shouldn't be too heavy. I > have the high frequency right at the top of the current box which > would keep the drivers physically close. So that would put the HF horn in the middle, yes? I suppose that could be done, if the HF horn is at ear level. Usually the HF horn would be on top, MF horn in middle and LF horn on bottom though, it generally would sound better that way (LF and MF combine with less interference, and less spread out in time). Picture of final midrange horn. Adrian

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