Subject: One PI Port Size
Posted by GarMan on Fri, 30 Jan 2004 19:38:20 GMT
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What to do? What to do?The specs for the OnePI calls for a port of 2.5" diametre. For appearance sake, I'd like to use a plastic port ring and tube, but 2.5" is very hard to find, while 2" and 3" tubes are everywhere.Increasing port diametre to 3" would mean a port length of approx. 5.5". Way too long for a front baffle port with cabinet depth of only 8". Not too keen on relocating the port opening to top of cabinet.Reduce port diametre to 2" would increase air speed out the port to about 0.18 of mach. Is this number too high?Any other options that I should consider?Thanks,gar.

Subject: Re: One PI Port Size
Posted by Wayne Parham on Fri, 30 Jan 2004 19:40:24 GMT
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I'd go with the 2" port.

Subject: Re: One PI Port Size
Posted by Adrian Mack on Sat, 31 Jan 2004 01:47:09 GMT
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I'm with Wayne, I'd go with the 2" port as well. 0.18mach is something like 19ms, that's a good number. Of course there isn't really any magic "boarder line" number. The issue is port noise, and port compression. Port compression makes changes to everything - freq response, impedance, excursion, group delay, etc and can do it to a significant degree if small diameter ports are used in high power applications. Port noise is chuffing and distortion, and you want to keep that low too, also by use of big ports and flared ports, being another option. Anyhow - 2" port will do fine for your application.