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Subject: Two questions

Posted by [Pilkar](#) on Sun, 09 Feb 2003 14:58:20 GMT

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Hello!!I have two questions:First: can i mix two slopes for the midrange driver? for example, 18dB (3rd order) highpass and 6dB (1st order) lowpass.Second: PiAlign gives me a port that is 4.48" in diameter, lenght 6.2" and area 15. If make the port diameter 4", which would be the length?Thank you very much!

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Subject: Two answers

Posted by [Wayne Parham](#) on Sun, 09 Feb 2003 18:40:40 GMT

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First, the crossover. Sure, you can have two different slopes for the high-pass and low-pass filters on your midrange.Second, about box tuning. Use Helmholtz formula (shown below) to find the resonant frequency. You can find also this formula in the "Pi Alignment Theory" paper.

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Subject: Re: Two answers

Posted by [Pilkar](#) on Sun, 09 Feb 2003 20:40:49 GMT

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Thank you very much!!

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Subject: Re: Two answers

Posted by [Pilkar](#) on Mon, 10 Feb 2003 17:51:16 GMT

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Hello again!Well, i tried and tried, but i cannot find out the new value for Lc with a 4" port. I think i`m messing it up with the unit conversions. I hope you can help me, AGAIN.PiAlign gives me the following data:Encl Vol: 5 cu.ft.Encl Fr: 29HzEncl Q: 2.48Port Type: CylindricalLenght: 6.2"Area: 15 sq.in.Diameter: 4.48"I think thats all one needs to calculate the new port lenght. I want to make the port 4" in diameter. Which lenght would the port have then?Thats all. Sorry if i`m bothering you.Thank you for your help!Pilkar

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Subject: Make the port 4.5 inches long

Posted by [Wayne Parham](#) on Tue, 11 Feb 2003 09:49:49 GMT

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If you want a 5ft3 box to resonate at 29Hz with a 4" diameter port, then make it 4.5" long.

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