Subject: Wayne -- anyone? Dual ducted vents possible w/Pi Alignment?
Posted by Tinnitus on Tue, 15 Apr 2003 17:51:47 GMT
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If so, how does one calculate the lengths of the dual-ducts?In standard Bass Reflex design one uses 1/2 Vb to calculate each duct.I admit to being kicked-out of MENSA, so how do I proceed?Note: I want to build "Konus Audio Essence" style enclosures (only ones with sufficient WAF) for my EV 12TRXB's (3.8 ft^3 as per PiAlign) and think dual down-firing ducts will provide optimimum 'balance' -- not to mention looking way-better than one little duct positioned assymetrically on the front. (Severe WAF deduction.) ;)

Subject: Hate to talk to myself -- but, use 1/2 Vas and run program twice
Posted by Tinnitus on Tue, 15 Apr 2003 18:08:33 GMT
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to determibe vents/ducts then add calculated 1/2 Vb's for total Vb?Just musing -- and remembering how dumb I felt sitting on the lawn in front of the MENSA house... ;)

Subject: Mirror image speakers
Posted by Wayne Parham on Tue, 15 Apr 2003 21:24:52 GMT
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You might want to grab a copy of BoxPlot, which will calculate dual ports.

Subject: once he has his Pi specs
Posted by Sam P. on Wed, 16 Apr 2003 10:57:34 GMT
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boxplot will do the trick. Sam

Subject: Re: once he has his Pi specs
Posted by Wayne Parham on Wed, 16 Apr 2003 12:20:37 GMT
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Yep, that'll do it.

Subject: Dual Ducts for PiAligned 12TRXB Enclosures -- update...
Posted by Tinnitus on Wed, 23 Apr 2003 17:24:56 GMT
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Hello Wayne,By using the Fb formula at JL Audio, and running it twice -- once for each 1/2 Vb, I came-up with 2 X 2.0 in. ID X 5.25 in. long ducts -- still tunes 3.8 Ft^3 to ~ 28 Hz, as called for in PiAlign for a single EV 12TRXB.Q: Does doubling the Vent Area effect Damping Bandwidth? Real-World output?? Sound Quality???Respectfully,Stephen ;)

Fb formula at JL Audio

Subject: Vent area
Posted by Wayne Parham on Wed, 23 Apr 2003 22:33:24 GMT
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There are indeed a few things to consider here - One is the Helmholtz frequency and another is the Q of the resonator, which is determined by its ratio of reactance to resistance. There is also the issue of port airspeed, which matters if turbulance causes audible artifacts. So vent area is indeed one of the important factors to consider.