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Subject: Pi Align question

Posted by [Anonymous](#) on Wed, 19 Mar 2003 15:28:00 GMT

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Hypothetical;Pi Align;If the software tells me that internal box volume is 4 ft<sup>3</sup>,port diameter is 4", port length is 12", then;1. Do I need to increase the box volume to offset the woofer displacement inside the box ?2. Do I need to increase the box volume to offset the port displacement inside the box ? if no,do I need to take into consideration the thickness of the port. Suppose the port is 4" I.D. and 8" O.D.,do I need to factor in the port thickness as occupying space inside my box?I'm looking for the technically correct answer on the theory.

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Subject: Re: Pi Align question

Posted by [Jeff Robinson](#) on Wed, 19 Mar 2003 15:37:39 GMT

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1: yes2: yesNo software can put in displacement adjustments without specific info on the items involved (and most don't include any adjustments at all). You also need to adjust the internal displacement for any bracing and any other speakers, horns etc. A popular rule of thumb is to build in at least a 15% fudge factor and add bracing until the box tuning is correct (involves measuring the system impedance curve to calculate the system H and Alpha values).Jeff Robinson

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Subject: thanx nt

Posted by [Anonymous](#) on Wed, 19 Mar 2003 17:32:09 GMT

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