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Subject: PiAlign terms

Posted by [Wayne Parham](#) on Wed, 24 Sep 2003 02:16:30 GMT

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The formulas used to calculate the cabinet from the speaker's electro-mechanical properties are the same whether you use T/S specs or the PiAlign equivalents. Specifically, the T/S compliance figure is  $V_{as}$  and equal to PiAlign's  $V_{ad}$ ,  $F_{ts}$  is the same as  $F_{rd}$  and  $Q_{ts} = 1/Q_d$ . You can also use the sealed box method or the added mass method to find these values. Measurements of the electro-mechanical properties of a speaker are much more likely to be reasonably accurate than measurements that involve the acoustic domain, because finding electro-mechanical parameters doesn't require any acoustic measurements. So these kinds of measurements can be obtained with probably something like 20% tolerance using equipment that is commonly available to DIY builders.