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Subject: DI matching

Posted by [Wayne Parham](#) on Mon, 28 Feb 2005 19:46:37 GMT

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This is called DI matching, and it is a good practice, in my opinion. You run the midwoofer up through the vocal range which does two things: It allows the voice fundamentals to be handled by a single driver and sets the crossover point in the overtone range, which is a natural sounding place to split, in my opinion. It also matches the directivity of the midwoofer to that of the horn tweeter. A 90x40 horn has DI of about 12, and that's what a 12" or 15" speaker has between 1kHz and 2kHz. It is collapsing past 10 approximately where wavelength equals diameter. See chapter 3 of Augspurger's JBL Sound System Design Manual for more information.

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