
Subject: Re: Constant directivity, compression drivers and crossovers

Posted by [Russellc](#) on Sun, 02 Aug 2009 17:42:58 GMT

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Wayne, all of this is very informative and I've been studying the links to the various documents you've included. In terms of the "core splitter" and setting the damping and so forth, I have a question. Looking at the differences in the 3 PI filter (in some of the links you included) and the 4 PI filter, specifically the resistor (R2) that sets this "damping" is different in the two, while the other compensation components are the same.

I understand that the 3 PI is a 12 inch model and the 4 PI is a 15 inch model. Does the difference in the size of the two drivers, and there differing responses at the crossover point because of the size have anything to do with the value of R2? I wish I could put this question better, but I think the answer to this (what sets the size of the R2 resistor, or differently. what difference to a given response will raising/lowering R2 have?) will help me see this a little more clearly.

I am trying to down load the video!

"In essence, you balance R1/R2 to cause the reactive components in the core splitter filter to double as a peaking coil or notch filter, whichever is needed". I think this is the portion I am refering to, Wayne perhaps I just dont understand about over dampened and under dampened and what effect each would have on response.

russellc
