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Subject: Re: Very puzzling

Posted by [GarMan](#) on Thu, 27 Jul 2006 00:35:47 GMT

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I think the odds of improving a crossover by swapping parts at random are next to zero. But most of the swaps I read about is just replacing stock components with higher quality, while maintaining the same values. Considering most stock crossovers are build on a price-point, can't be too hard to improve quality with better parts, provided values remain the same. Tweaking crossovers by changing values really requires you to understand what each component is doing and why. First order crossovers are the easiest. As poles increase, it becomes increasingly more complicated. Not only do you have shape of slope to worry about, but you have to contend with phase, baffle and relative positioning of drivers. Computer modelling programs are a big help in this area. I want to address your comment about established company spending a lot of money on XO design and whether or not it's really that easy. The short answer is yes, it is that easy. Considering that there are many in the DIY community armed with nothing more than a laptop, microphone, a corner in their basement, and several hundred dollars of software, that are able to design and build perfectly flat speakers, it's not really that difficult if you really want to do it. The big difference is that established companies have to design these things so that can be built consistently under price points. Gar.

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