
Subject: Re: Determining Compatibility between components
Posted by [Wayne Parham](#) on Sun, 01 Nov 2009 18:09:12 GMT
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To me, "economic compatibility", if I'm understanding you, is sort of a seat of the pants, common sense thing.

Now that's different than technical compatibility. There are a lot of technical reasons why some drivers are more compatible with others in a given system. Things like sensitivity, directivity and frequency range come to mind. For example, I'd never try to make a two-way speaker using a tweeter that craps out below 2kHz with a woofer that rolls off at 1kHz. That's obvious to most people. I'd also not match an 88dB tweeter with a 93dB woofer, although I might go the other way around (and definitely with horns). It's more appropriate to pad tweeters because electrical damping isn't usually terribly important for a tweeter. With a horn, padding allows passive compensation of mass rolloff too, always needed for CD horns. So technical compatibility is a given.

But economic compatibility probably means different things to different people. To me, I usually sort of try to keep the prices of the components in a sort of range. I'd never match a \$35 woofer with a \$500 tweeter, for example. I might match a \$300 woofer with a \$50 tweeter, because sometimes that makes sense (tweeters are sometimes cheaper, maybe because of their size). But more often than not, the woofer and tweeter are going to be pretty close in price, a \$300 woofer goes with a \$150 compression driver and \$50 horn. If I'm using a budget woofer, then I'm using a budget tweeter too because I'm making a budget system. To me, that's what economic compatibility means.