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Subject: B&W midrange

Posted by [Duke](#) on Mon, 19 Dec 2005 06:25:51 GMT

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Not long ago I spent some time with a B&W speaker, I think it was the 801, with the kevlar midrange. After listening to the system at low, medium, medium-high, and high volume levels, I came to this conclusion (totally based on my subjective impression and not on measurements, unfortunately): The midrange driver seemed to have different power compression characteristics than the woofer and tweeter; specifically, it had less power compression. The midrange seemed to get loud faster than the other drivers as we cranked the volume up, and to get quiet faster as we turned the volume down. So at low volume levels the midrange was recessed, at medium to medium-high it was about right, and at high volume levels the midrange was forward and borderline shouty. To me, job #1 of a loudspeaker is to get the tonal balance right. If it's not right, I have a very hard time listening past that to focus on dynamics, imaging, clarity, whatever. I think it's well worthwhile to match up the power compression characteristics of the drivers. I've heard quite a few small two-way systems where it seemed like the tonal balance changed significantly with volume level, consistent with the tweeter (which was probably padded down) having less power compression than the woofer. High efficiency systems are usually very good in this respect, as voice coil heating (the primary power compression mechanism) isn't significant at normal home listening levels because of their low input wattage. To address the question of critical listening to loudspeakers, to me it involves music that I'm very familiar with and ideally a wide range of volume levels and two or three listening positions. It's done eyes closed, listening with my left brain instead of with my right brain. I don't particularly enjoy it, as it takes a fair amount of self-discipline. It's almost (but not quite) like doing long division in your head during sex.

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