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Subject: Re: Why won't a single driver speaker do metal?

Posted by [Wayne Parham](#) on Tue, 26 Jul 2005 19:25:52 GMT

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I think the issue is related to displacement and bandwidth. Displacement sets the bass limit and bandwidth sets the amount of intermodulation. I think having a wide bandwidth driver has its advantages, and having more narrow bandwidth drivers has a different set of advantages. The advantage of single drivers is simplicity and uniformity of collapsing directivity, no big shifts. The advantage of multiple drivers is reduced bandwidth, allowing dedicated subsystem tuning and reduced IMD. Personally, I like a wide midrange band to cover the whole vocal range, better if covering the whole piano range. In practice, I tend to choose a driver that covers as much of that as possible, but all my systems are multi-way, so they have to crossover somewhere. Single driver systems don't have the crossover, but that means they have to choose between bass excursion and high frequency extension. The cone has to move enough to make some bass, be rigid enough to limit breakup mode peaks in the midrange, but flexible enough to have some controlled modes for top end extension.

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