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Subject: Re: Sketchy about crossover points

Posted by [Wayne Parham](#) on Tue, 01 Jun 2004 04:29:42 GMT

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Vocal fundamentals are from about 100Hz to 1kHz. Middle C is 260Hz, and vocalists can sing much lower than that. An octave lower, C below middle C, is 130Hz and no trouble at all for any vocalist. Medium sized cone midrange drivers are generally up to the task. There are also large-format midrange compression drivers, such as the Community M4, which uses a fairly large diaphragm. It has an advantage of having a diaphragm that is shaped so that a phase plug is fitted nicely. The diaphragm is also very strong. Modern 1" and 2" throat compression drivers are not designed to cover the fundamental vocal range. They just aren't made for that. Small 1" and 2" throat compression drivers are really tweeters, and best suited for use at frequencies above the vocal fundamentals. Some can be crossed right at the top edge of this range, but they're really designed for the vocal overtones and above.

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