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Subject: Re: Mangum 12 HO as a midrange

Posted by [Wayne Parham](#) on Tue, 19 Jul 2005 19:15:39 GMT

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Shorting rings are most effective at midbass and midrange frequencies. At very low frequencies, they aren't usually large enough and at very high frequencies, harmonics are ultrasonic and can't be heard. So shorting rings are best in woofers and midrange drivers. I can hear the difference right away. I always prefer a woofer with a shorting ring to a similar one without. If you like SET amps, you may like a midrange without a shorting ring but you'll probably still like a woofer that has one. I've heard some amps that I liked the mid to have a shorting ring and some amps that seemed to be better without one. But I always prefer the woofer to have a shorting ring, if I have a choice. Perhaps the reason is the distribution of harmonics - A woofer's harmonics would be smack dab in the vocals and a midrange's harmonics would be shifted up into the overtone range or above. As for comparison of the two specific woofers, Magnum 12HO and Delta 12LF, there's another thing you should consider too. The Delta 12LF and the Magnum 12HO are tuned differently. The Delta 12LF is tuned to use medium to large cabinets and is made so that it has low f3 in suitable cabinets. It's a great woofer for the price, and is suitable for a variety of applications. The Magnum 12HO cannot be made to work at very deep bass frequencies. You could align a cabinet to squeeze deep bass out of it, but it's not made for that purpose. It is made to be used in relatively small cabinets that aren't required to go very deep. The designer will probably incorporate it with a bass bin that goes lower. You could also use it for a small monitor but f3 isn't going to be all that low.

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