Subject: Re: Single driver
Posted by Martin on Wed, 23 Feb 2005 21:02:09 GMT
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Yes and No.When I first became interested in single drivers the rage was the Radio Shack $5 - $10 drivers. The Single Driver Website and Forum was filled with discussions of these Radio Shack drivers. People trying to squeeze sonic perfection from a $5 driver. Sorry, made no sense to me. But something about the single driver concept caught my interest. At that point I had owned commercial speakers and been building multi way speaker systems for 25 years. Everything from Klipsch Hereseys to some large 2 and 3 way home made Focal systems. A high power SS amp amd preamp completed the system.So I bought a pair of Fostex FE-164 drivers for less then $100 and designed and built my ML TQWT enclosure. The mid range and high end were very good with a thin and weak bass that was OK but not really what I was looking for in a speaker system of that size. Adding a correction circuit a few months later eliminated this thin bass problem and produced a nicely balanced response. I played this system for a traditional full range guy (tube amp and Supravox TQWT) and his reaction was "I'm stunned!" which is his exact first words. I ended up liking the single driver speaker better then the multi way Focal system I was listening to at the time. I sold the Focal TL system.But my approach to single driver speakers is 180 degrees out of phase with the purist approach you will find dominating places like AA. I believe that the combination of a correction circuit and a high power SS amp is the best approach for full range drivers. A correction circuit can be used to shape the voltage input to the driver so that the typical full range rising response (think shouty and shrill sound with minimal bass impact) is rebalanced closer to flat. The key is the combination of a SS power and the correction circuit that still produces 90 - 95 dB for 1 watt input at 1 m, depending on the driver. My approach is definitely not a traditional approach and probably not the type of system you heard. With this combination, the lack of a crossover and the high efficiency to me produces a much more revealing, detailed, and accurate sound from the speakers.The down side of single driver speaker systems is definintely at the frequency extremes. You will not get the bass response of a 10" or 12" woofer. You will not get the flat to 20+ kHz response of a small metal dome tweeter. With my approach you can get 40 Hz to 15-18 kHz depending on the driver. House shaking hard rock .... not really. Clean and accurate acoustic jazz and classical .... very nicely done. I really like the compromises made with this approach.Back to the original question. Are single driver guys just cheap? I am cheap, but I will spend money on something if I think it is a good value and high performer. I don't waste money on cheap drivers that I know will not meet the performance goals I have in mind. I will spend money on exotic high performance drivers without batting an eye or having a second thought. I am currently listening to the cheap Teac digital amp powering my Lowther PM6C drivers (the cheapest ones). When I get tired of this combination I will reach behind the couch, select one of the other six pairs of Lowther drivers I own, make the swap, adjust the correction circuit, and enjoy the different strengths and weaknesses of that particular driver.One thing I have learned in audio, there are no absolutes. Try and make a blanket statement and somebody'e system or taste will contradict the conclusion. I am a single driver guy and I am cheap, just look at my new amp.Martin
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