Subject: Re: Scoops
Posted by Bill Fitzmaurice on Sat, 04 Sep 2004 18:23:27 GMT
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The same as any horn: acoustic impedance matching between the driver and the air, and lowering of system resonance. Rear-loading is usually employed with high Fs high SPL low Qts drivers (which most MI drivers are, as are Fostex/Lowther style full-rangers) to get more bass from the driver rearwave. Most high SPL drivers in sealed or reflex boxes have F3s around 80-100 Hz; hornloading the rear wave can take that down to 40-60 Hz. That's good, but system SPL remains at the the raw direct radiating SPL of the driver, around 95-100dB/watt.Horn loading the front wave instead allows both lowering of F3 and raising of broadband SPL by 10 to 15dB on average. The downside to front-loaded horns is that to make them long enough to impact the bass they usually are folded, which can limit their high-frequency bandwidth, although that's not the case in my DR horns.