Subject: Re: Speaker Search

Posted by JLM on Sat, 26 Feb 2005 23:05:24 GMT

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Nick, Moderate volumes of jazz in a 12 x 20 room is perfect for single driver speakers. Jazz doesn't have as much bass in it as most other musical genres. I'd grab a sound pressure level meter and test tone CDs to confirm what you listen to and how loud, so you can relate to speaker specifications. Keep in mind that horns are more "in your face" (forward presentation), efficient, and need to get huge (at least the size of a refrigerator) in order to produce deep bass. So horns add efficiency and complexity versus bass reflex. The real question isn't horn versus bass reflex as much as matching drivers to enclosure type. Horns with low Qts drivers (about 0.2) and bass reflex with higher Qts drivers (about 0.4). Omega is a good choice for standmounted bass reflex single driver speakers. Louis there is very pleasant. The 3 series speakers seem "faster" and mate better to a sub while the larger driver speakers are warmer. Mass loaded transmission lines (Martin King/Bob Brines to drop a couple of names) provide very tuneful/musical/deep bass compared to horns or bass reflex and are easier to drive than the raw numbers would suggest. I'd avoid tapered quarter wave pipes (TQWP) as poor alternates to mass loaded transmission lines. As I mentioned before the other alternative would be open baffles (very dynamic and lack bass like horns, but very simple to build). Many folks use 31" x 39" baffles or larger. Some use continuous hinges to make a three sides semi enclosure to increase effective baffle size (and therefore improve bass response). If you are willing to give up some imaging, the ultimate baffle design (best bass response) is infinite baffles (imagine wall mounted drivers with a large cavity behind). Infinite baffles work best for subs, where large spaces (crawl spaces, attics, spare closets/rooms, or garages are used. Care must be taken regarding temperature extremes, neighbors, and not slaming doors into those spaces (and blowing the drivers out). Drivers with Qts of 0.6 or higher are recommended for the best bass response. One of the nice things about single driver speakers is that you can better afford expensive/high quality drivers, especially if you go with open baffles.