

---

Subject: Re: Can you check the Beyma 18G40 woofer or 18G400?

Posted by [Adrian Mack](#) on Thu, 26 Feb 2004 09:58:05 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

When comparing the different brands, make sure that each are in correctly tuned enclosures, I prefer to tune for best transient response. A lot of the pro cab's are not tuned like this, which will affect ultimate sound quality. Just something I thought I would point out. The Beyma 18LX-60 is the one suited for deepest bass extension. It has the lowest Fs of them all at 27Hz. An SBB4 vented box alignment will work best for this woofer, 305L tuned at 27Hz. Anchoic F3 is roughly 33Hz and F6 is 28Hz. If corner loaded, expect F3 to drop to around 25Hz and F6 at 20Hz. This alignment works nicely. Don't run a subwoofer from a tube amp. SS or other high power style amplifiers are a must. Its "law" that drivers which hit subbass notes generate a lot of back EMF, so impedance at resonance is high and this is hard for a tube amp to drive. If you search this forum you can find out more on this. You can use a tube amp on the main's though, if their characteristics make them suited. > what is the difference between a 100 x 100 dispersion and a 100 x > 40 dispersion in a home environment, Dispersion angle doesn't change between environment. The difference between those is that one has 40 degrees of vertical coverage, and the other has 100 degrees of vertical coverage. > will the 100 x 40 be enough for hi-fi use in a tweeter? "Enough" is not really the term that should be used here. It depends on what your design goals are. If your trying to fill a mid or large sized area with just one or two speakers, then wide horizontal coverage would be wanted. On the other hand, very large area's would have arrayed horns in which each horn would require a very narrow dispersion angle, and CD horns are typically used. I like between 60 to 90 degrees horizontal coverage per speaker in a home environment when using two speakers. If your got a midrange horn and HF horn, then it's common that you would want the dispersion of each of them to be the same horizontally and vertically. Then comes the issue of matching DI at the crossover frequency which takes a lot of precision to get right. Vertical coverage on the other hand can be made a lot smaller than the horizontal coverage. It will minimize comb filtering and vertical lobing between drivers which is good. Technically there will still be gaps in the polar response around the crossover frequency, but it's still better to keep vertical coverage angle small to make it as best as possible. > if i use a tweeter, will it be better for me to use a 2" exit > driver to have more freq. range? and can also go down to 1khz? I think I've mentioned this before to you, although it may have been someone else. Look at the frequency response curve of the horn/compression driver combo that you want to use. It will tell you what the device is capable of. Generally speaking, the 2" device will be able to reach lower than a 1" device because their larger diaphragms let them have a lower resonance. Regarding HF extension, a smaller 1" exit throat provides impedance matching to a higher frequency than a 2" exit, so it's got the capability to reach higher. As I have mentioned in the past, I like to use 1" exit drivers and use compensation electronics on them to make them reach 16KHz. > we also compared 2" exit drivers of BEYMA CP800ti, CP650ti, JBL > 2450nd (old) and also an old EV, and I think the Beyma's are not > left behind in sound and still found the JBL2450's to be still a > little forward sounding for my taste. My other companions during > that comparisons all liked the EV better than the JBL's, but the > EV's are more than 3x the price of Beyma and a little more > expensive than the JBL2450's Interesting. Thanks for your thoughts on Beyma and EV!Adrian

---