

I've only actually measured the TD12S and done some light casual listening. They measure pretty good but I'll reserve judgement until I've lived with them a while.

I'll say this: The JBL 22xx series midwoofers are top-notch, no doubt, hard to beat, especially with the resources available to JBL to make them so. They do two things that most everyone else has a hard time even getting close in terms of performance. Their distortion performance is great, a result of the magnetic circuit. They are able to reduce flux modulation more than any other loudspeaker I've seen. That's where those deep R&D pockets bring rewards. Also, the upper end smoothness is nice, and that's something you have to have in the midwoofer of a good DI-matched two-way speaker. It's all about the magnetic circuit and the cone shape and material, and to a lesser extent about the surround, because those are the things that set the cone breakup. Here again, the performance of the JBL 22xx series drivers is excellent, I'd say best of industry. They sort of set the curve for me - They're the drivers I compare all others to.

As you can see, the AE woofers had some steep competition in my eyes. I'm not a person to ignore alternate possibilities though, and one thing I could see for sure is the AE woofers are nicely built, hand crafted parts. If nothing else, they are audio jewelry. I also agree with their position on thermal control - their drivers use pole piece wicking very much like I do with my cooling plugs. I wanted to at least try them, and if they measured poorly then I would quietly decide not to include them in any of my loudspeaker models. On the other hand, if they measured well, I'd have two top-of-the-line options for customers and hobbyists to consider - the four and seven would use JBL and the three and six would use AE. That's precisely what I have now in the line.

I was impressed by their upper end smoothness, much like the JBLs. They do a great job above 1kHz, and that's harder than the bass by a long shot. Kind of funny, I know, to evaluate a woofer based on its upper midrange. But in a DI-matched two-way, it's probably the most important region, at least the hardest to get right. This is a deal-breaker region. The AE woofers have two things going for them - their suspension and cone shape/materials keep the assembly free of breakup at high frequencies. Response is smooth and free of glitches. Another thing that's nice is the impedance doesn't rise by a significant amount, not even well above the crossover region, so these woofers don't even need a Zobel. That's weird, in a good way. Driving these speakers is almost like driving a test resistor. So the AE woofers were a joy to design with, and impressive to test. I expect listening to them will be just as enjoyable. First impressions are great, but like I said, I want to live with them for a while.

I've listened to JBL 22xx woofers in my loudspeakers since 1980. My first models used the JBL 2205, a truly excellent midwoofer. All the 22xx woofers have served me well, and made my speakers sound wonderful, at least in my opinion. Like a life-long friend, I know them in and out, I know their sound, how they act at extremes, how they sound after days and days of listening to them non-stop, how they sound brand-new, out of the box, how they sound ten years old and rode hard, how they age and what they'll do in pretty much any situation. I've lived with them for three decades. So to compare the AE woofers with them and get the same feel will take me some time.

