Subject: Re: 4Pi stand height for home theater usage
Posted by Wayne Parham on Wed, 12 Sep 2012 19:29:19 GMT
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If the speaker is mounted high above the audience, it may be best to angle it down, turn it upside down or both. But that's unlikely in a home theater. It's more likely in dance halls, larger public theaters and venues like that.

I've hung speakers upside down in clubs, but I've never done it in home hifi or home theater setups. I'm sure there are probably situations where it makes sense, but I think it is uncommon. You want the left, right and center speakers pretty much at the same level as the screen.

Surrounds are usually a little higher than the mains, but in a home theater, we're still not generally talking about putting them high enough that the listeners would be outside the forward lobe.

The center of the forward lobe is between the center of the midwoofer and the tweeter. This point is actually in-line with the section of the midwoofer cone nearest the tweeter. But don't forget that the vertical section of the forward lobe is pretty tall, and it is clean throughout. As long as the listener is within the 40° vertical arc, they'll have good sound.

The 12" to 15" stand is perfect for speakers that are listened to when seated, but it can be twice that high and keep the listeners in the forward lobe. Once you're a few feet back, the listeners are in the lobe from floor to ceiling. It's basically the same angle as the wall angle of the tweeter, so if you can see the throat, you're in the lobe.