

What's Your Home Theater Goal?

Ask most audio oriented Home Theater buffs that question and you'll likely get a range of responses. Many will say "I'd like to duplicate the movie theater experience (sans the sticky floors)." Some will say "To reproduce the movie soundtrack as accurately as possible (you know, that ol' Hi-Fidelity thingie)."



The Incredible New SuperCinema 3D Array Soundbar System

We'd agree with those goals too. But after a whole bunch of years in this business we've observed an interesting phenomenon; the reality is many Home Theater buffs would be more than satisfied if they had three fundamental audio "elements":

1. The ability to play the system so loud that it prompts either of the two Official Home Theater Wife Responses, to wit; "Does it have to be that loud?" or "Turn that darn thing down!!"
2. So much bass output that when the Tyrannosaurus in Jurassic Park 1 shows up their pants legs flap mightily in the breeze (subwoofer levels set to at least "11 - MegaThud").
3. So much surround channel output that you hear and are constantly aware of the surround speakers every moment the system is playing ("Hey, I think this thing's broken! There was a second when I didn't hear the surround speakers.")

We understand and appreciate those guilty pleasures too. Bass that shakes the house and oodles of surround info are just plain fun. And if that's what puts a smile on your face, who are we to question it? But there really is a generally accepted goal for Home Theater that often times gets lost in the excitement of all that impressive bottom end and surround field info. Simply stated; the ultimate goal of Home Theater is to draw you into the action taking place on the screen, be it a movie, TV show or concert. We want you to get lost in the experience, and transport you from your den or great room into Jurassic Park, onto the Titanic, into Nemo's ocean, etc.

Most of us have had the experience of going to a movie theater and getting so caught up in a great flick that we forget where we are. Then suddenly someone coughs or sneezes near you and for a few seconds you're not sure exactly where you are! Without question creating that kind of totally involving experience is exactly the goal of the movie's director. And it's our goal too. To help you recreate such a realistic and well balanced sound field that you forget where you are and you get lost in the experience.

If you think this might be a fun goal (it is, trust us), it would be good for you to understand the role each speaker plays in the system and why you'd want to place them properly and set them to the correct volume, even if it means you won't move the house off the foundation with bass or you might not be aware of those surround speakers all the time (Sacrilege! Who would say such a thing? Off with his ears!!). Of course, as reality impinges on your plans you may have to make compromises in speaker placement, listening levels, and more in order to maintain Domestic Tranquility (not to mention having a bed rather than a couch to sleep on). But if you keep this goal in mind when you make those compromises you should end up with a more involving surround experience that can take you (and your significant other) on some exciting and emotional adventures.

The Front L/R speakers - These provide some of the special effects and help to expand the front sound field (so stuff that happens towards the left or right sides of the picture have corresponding sounds). They typically play the movie's music soundtrack and may also provide some dialogue, but that's usually pretty limited. Depending on the soundtrack, they can be very active, or not.

The all important Center Channel - Arguably the most important speaker in the system, the Center Channel delivers up to 80% of the dialogue and up to 65% of the special effects in films. That's a lot of information to deliver. Sure, you can use a "phantom" Center Channel by splitting the center signal in mono to the front L/R speakers (you can do this by simply setting the electronics' setup menu to "no center channel speaker"), but you need to have L/R speakers with excellent, smooth off-axis response. Not to be immodest, **GoldenEar** speakers excel in this regard. If you don't have adequate speakers and you're not precisely in the "sweet spot", centered right between the L/Rs, the center "image" will be pulled to whatever side you're closest to. And even excellent speakers like ours can benefit from the precise localization a dedicated Center Channel provides.

The Surrounds - Let's break surrounds down into the Primary and Secondary Surrounds. Primary Surrounds would be placed directly to the sides or a little behind the main listening area, two feet or more above seated ear level, in a 5, 6 or 7.1 channel system. Of necessity, the Primary Surrounds can be placed directly behind the listening area but when placed this way their ability to draw you into the experience is lessened. The Secondary Surrounds are those located in the rear of the room in a 6 or 7.1 channel system. These get the "Rear Surround" information from the receiver/processor.

The vast majority of information contained in all the surround channels from movies or TV shows is environmental. It's birds chirping, wind whistling through the trees, city street noises, office sounds, people eating in the restaurant sounds, etc. It's almost all background sound, not primary sound. The fact is, you shouldn't be consciously aware of the surround channels most of the time; they're there to help set the mood and draw you into the scene's location. Of course, occasionally the director WILL place primary sounds in the surround channels (like a airplane flying overhead from behind) but that usually happens only once or twice in a film.

Interestingly, in surround music tracks all bets are off as to what's put in these channels. The engineer may try to locate you in the audience (our preference) or place the musicians around you, like you're up on the stage (harder to get lost in the experience because you're watching like you're in the audience but the soundtrack is inconsistent with the visual). Sometimes they'll put primary sounds in the surround channels that are completely inconsistent with what you're seeing on the screen. Why do they do this? Your guess is as good as ours...

The Subwoofer - Thumpa - thumpa - thumpa. Yup, we all love to shake the walls. And it's OK to have a little too much sub output in order to satisfy that need. But the sub should integrate well with the rest of the system and not be overbearing. Try to keep the desire to knock plaster from the ceiling in check. The overall effect will be much more believable and involving. A few good gut pounding bass impacts are always fun, but they shouldn't be happening constantly, throughout the film, even if Arnold Schwarzenegger's in it.

You might also note that bass levels that seem fine for music CDs and DVDs almost never deliver enough punch for movie special effects. You'll find that raising the sub level a dB or two for movies and lowering it the same amount for music makes for a much more believable sonic balance.

Here's a link to Dolby's web site where you can find their speaker placement recommendations.

Dolby recommended speaker placement

Please note that based upon your room, equipment, domestic situation and more, you may need or want to modify these recommendations. We would strongly urge you to set the system up as closely as possible to the standards we've described and use it for a while before you make any judgments. In many cases, after someone's become acclimated to the sound of a properly balanced system, re-setting to the prior balance ends up sounding just plain bad.

Next issue: Speakers large or small? How do you set the channel levels correctly? And more...
