



High movie theater ticket prices, rip-off snacks – and they still make you sit through commercials?

Time to invest in your own home theater!

Top considerations for your Home Theater or Home Audio system:

User Friendly

Too many remotes! Too many options! Too many features! Who cares.....I just want it to turn on!! You've seen this problem before. A fancy system, half a dozen remotes, and no sound. Whatever system you chose, it must be easy to use. HAV audio and video systems are always designed with ease of use in mind, and our training process ensures you are satisfied and at ease with the controls.

Architecturally pleasing

It is not enough to put the pieces together to get a sight and sound system. It must be pleasing to the eye as well. Speakers should look like they belong in their space, the electronics appropriately housed or hidden, TV monitors in cabinets, built in or on complementary stands, and most importantly all the wires neatly bundled and hidden.

Custom Design

Choosing the right system design will save the heartache of an inferior system, choosing the right system designer will save the headache of the endless choices. HAV's custom design services utilizes years of experience and industry standards, along with your goals and budget to develop the appropriate system.

Custom Installation

All those wires! The key to a clean installation is that it be a stealthy installation. Visible wires should be kept to a minimum, wire runs are neatly labeled, bundled, secured and hidden in a out-of-way space. Speakers complement the interior, and inwall speakers are sometimes painted. User interfaces (volume controls, keypads, etc) are in EZ to access locations, not at the back side of rooms. Home Audio-Video is experienced in producing “clean installations”.

Budget

Your goals and wishes need to be carefully understood to develop a reasonable budget for your audio or video system. The GalacticClub shopping mega stores all offer entry-level systems, while there is no limit to the hi-end systems. Your budget will fall in between somewhere. A family room surround sound system may start at \$5,000, while a dedicated home theater room may start at \$15,000. Whole house audio can run from \$2000, to \$12,000 for a sophisticated multi-source/multi-zone system. HAV can help you with financing options to get the system of your dreams.

Speaker systems

The distinguishing mark of hi-end home theater speaker systems is their remarkable open, crystal clear, yet warm inviting sound. Vocals and sound effects will seem to be just floating against a black background. Bass will be tautly defined and only present when material demands it. Such speaker systems will deliver all the dynamics of the most demanding action movie or music. However, for the consumer on a budget, who may be thinking that the only hope is a cheap stereo system, the big question is ‘Is it possible on my budget, hi-end sound at mid-fi prices?’ IMHO, the answer is a resounding, yes!!! HAV has an audio system to meet every lifestyle and budget. We can custom match systems to give you a complete package with matching main front, center, surround speaker and optional sub woofer from the same manufacturer. When every speaker in the system uses identical drivers you also find that multi-channel imaging is more precise and engaging making it easier for you to follow the onscreen action as it occurs. Matching is especially important between the front and center speakers since this is where most of the sounds in a home theater will emanate. Another important consideration is the design of the surround or rear speakers. Some manufacturers use a monopole design while others prefer dipole or bipole. Bipoles present a more enveloping soundstage and thus draw less attention to their location.

Speaker placement

To preface, let me say that an article on "correct" speaker placement may be impossible to write. That is because every situation requires a different approach to optimization. Also, the type of speaker (in wall, in ceiling, bookshelf, freestanding) chosen will have different characteristics. The type of music area (critical listening, focused, background music, home theater) has different design criteria. Further, one's personal preference may suggest departure from the norm. With most good quality music systems the room becomes the limiting factor in sonic performance. It is usually best to locate the listening position so the first information to arrive at the ears is from the speaker and the secondary reflections arrive much later and at a much lower volume. Fortunately, there are some helpful guidelines that we can use to aid us in our quest for perfect sound, and Home Audio-Video can guide you through the placement maze.

Freestanding speakers

Most speakers need to be a minimum of a foot or two away from the side and back walls to reduce early reflections (early reflections reach the listener out of step with the direct sounds, causing image degradation). Distance to reflective surfaces, speaker radiation pattern and toe-in all contribute to the amount and intensity of early reflections. In general, the further away from reflective surfaces, the better. Increasing the distance from the speaker to the wall behind will increase soundstage depth. However, pulling the speaker too far out may degrade focus. In most cases, room layout dictates a maximum distance the speakers will be allowed to intrude into the space. It is most important to insure that the distance to the back and side walls are unequal. Do not place the speaker, say, 20" from both back and side walls. Distance between the speakers will be determined by the distance to your listening position and the particular speaker you own. I generally prefer to start with an equilateral triangle, the apex of which is located at the listening position, with the two speakers forming the base line (here, speakers placed 6' apart would suggest a listening position 6' away), and experiment to produce the best soundstage. Bear in mind that the best location for creating a spacious soundstage, may not be the ideal location for bass. We are searching for a balance, a compromise of parameters that comes closest to our personal definition of ideal.

Bookshelf speakers

Bookshelf speakers also have some compromises, since they are generally housed in wall-unit shelving systems, though at times they may be placed on 24" tall speaker stands. Follow the rules of them as for freestanding speakers.

Inwall/Inceiling speakers

When designing for background music speakers, we determine the "sweet spot" of the room desired, and go backwards to determine speaker placement. This approach reduces hot spots and the "headphones" effect. Speakers should be equidistant from the listening area. Note that background music speakers in most audio zones will have several compromises, however with careful up front planning, the "sweet spot" can have very acceptable sound. Better flush mount speakers will have tunable and aimable tweeters, to further improve sound quality.

Surround Sound speakers

REARS: Unlike the front three speakers in a home theater that must produce sharply focused images, the job of surround channels is to envelop the audience in diffused sound known as "ambience." To excel at this job, rear speakers should not call attention to themselves as sources of sound. For these reasons, surround speakers work best when elevated at about two feet above the seated listeners' heads and mounted on the side walls in line with or slightly behind the audience. Bi-directional (bi- or di-pole) speakers are recommended, since they will produce the most diffuse effect. If you use front-firing speakers, do not aim them at the audience as one would a front speaker, but point them straight forward so the sound projects past the audience. Another option is to mount in-wall speakers in the ceiling, aiming them downward at the listening area.

CENTER: Since the main purpose of a center channel loudspeaker is to fix all sounds associated with on-screen action to the screen, this speaker needs to be as close as possible to your monitor or screen, either directly above or below it. Just like the stereo pair, the center channel sounds best when its tweeter is mounted at seated ear level; unfortunately, this position is normally occupied by the television itself. No problem: you can achieve proper treble balance by tilting the speaker up (if it's below the screen) or down (if it's above) to aim the tweeter directly at the audience.

SUBWOOFER: Low frequencies (below about 80 Hz) are non-directional, which means that, in theory, a subwoofer should sound the same whether it is located at the front, rear or sides of the audience. In reality, however, bass quantity and quality are influenced by subwoofer placement. As with the stereo pair, moving the speaker closer to room boundaries increases bass, while moving it into the room reduces output. For the greatest amount of bass output, place the sub in or near a corner of the room.

Calibration

An improperly tuned system can sound even worse than a "cheapie" system. This is because stereo systems are not pre-tuned out of the box, and also the environment places many variables on what should be tuned. Is the room large or small, bright or dead, what are the speaker types and their locations, etc. Every Home Audio-Video system goes through calibration and tuning prior to turnover.

Viewing Distance

A good rule of thumb for your seating location is to place yourself at a distance of no less than 2.5 times the height of the screen.

Remote controls

Too many remotes!! 5% of the buttons on a remote you use 99% of the time. How about a remote that only has those 5%? How about a remote that can control ANY device in your audio and video system, with only 5% of the buttons. Home Audio-Video has several remote control solutions.

Room Considerations

There is usually not much you can do with selecting a room for your home theater. You use what you have. However, some of you may have more than one room to choose. There are a few things you should keep in mind. To prevent acoustic anomalies such as standing waves, you should select a room that has dimensions (including ceiling height) that are not multiples of each other. Avoid locations where the floor plan is an open concept. Your speakers and subwoofer see these as one entire volume and may struggle to reach acceptable sound levels. Avoid archways for the same reason. Pick a room in which there are few windows to reduce ambient light and make sure any windows the room does have are easily covered with the ability to completely shut out ambient light. Finally, Select a location that is free of HVAC (heating , cooling and ventilation systems) equipment, appliance and exterior noises. Following those few simple guidelines will ensure that you have selected an environment that will allow your system to playback movies to it's full potential.

Appropriate display.

Direct view (tube) displays, Plasma and LCD displays, Projection displays. Buying the appropriate display for your home-theater requires many considerations. You need to be aware of the limitations or requirements of your home-theater space before you purchase any type of display. Budgetary considerations are often paramount in the real world. Deciding how much you can spend on a display should be a choice you make while you design your system. The cost effectiveness of a tube display might be offset by the need for a size larger than is available, or the display-size availability of a rear-projection unit might be offset by the overall size of the display and enclosure.

Home Audio-Video is your total solution provider for custom residential electronics. We meet the needs of discerning high-end clients who want performance, reliability and ease-of-use in their home entertainment system, and most importantly that all systems are unobtrusive and aesthetically pleasing.

Let us make your sight and sound dreams a reality.