
Distributed Audio/Video Systems

INTRODUCTION

Owning multiple pieces of audio/video (AV) equipment can not only be costly but also can make entertainment systems difficult to operate and maintain. By consolidating AV equipment to a central location and then distributing the entertainment content to multiple locations in a home, Distributed AV systems can save significant money and time. Distributed AV systems also provide a simpler, feature rich entertainment experience.

HOW IT WORKS

In conventional arrangements, entertainment areas are self contained systems with multiple components (receivers, DVD players, Cable/Sat boxes, speakers, etc.) for each location. The problem arises from having different equipment at each location, different remotes and control systems and different capabilities for each set of equipment. This leads to confusion and additional expense when using and maintaining these independent systems.

Distributed AV systems simplify entertainment in the home by moving entertainment sources to a central location in a home and then allowing individuals in different entertainment areas to access them as needed. These sources can include cable boxes, digital video recorders (DVR's), DVD players, CD players, iPods, etc. Because the same equipment is being accessed from each location using the same control systems and remote, it is much easier to learn and maintain these systems. Not to mention less expensive. This continuity also leads to a predictable entertainment experience that is seamless and enjoyable.

Distributed AV systems rely on a separate audio and video switching equipment to allow multiple users to access the same bundle of equipment. For example, if a home has 3 cable/Sat digital video recorder boxes and a multi-disc DVD player at their central location, then at any of 4 different locations (6 different locations in some systems) an individual can be viewing and listening to different entertainment selections. The same scenario would require an AV receiver, DVD Player and Cable/Sat box at each location. The savings in equipment costs alone can be quite significant.

A keypad is located in each entertainment area for manual operation of the system but is not necessarily used on a regular basis. A remote is programmed to provide day to day operation for each location. This gives the user the experience of having the equipment locally available while operating it from the comfort and convenience of the entertainment area.

These systems don't just have to distribute movies and TV entertainment. These systems can also provide high quality audio to locations where visual entertainment isn't necessary or needed like patios or a game room. Since the controls are the same as in the other locations, operation is easy and familiar. FM radio can be added to these locations as an additional source for listening pleasure.

Speakers are a significant part of these systems to provide high quality audio for both movies/TV entertainment and straight audio sources. Installation is not confined to built-in in-wall or in-ceiling speakers. Traditional floor-standing or bookshelf speakers can also be used for flexibility although in-wall or in-ceiling speakers provide cleaner installations and are significantly less expensive in some cases.

CONCLUSION

In homes with multiple entertainment areas with similar needs, distributed AV systems can provide a cost effective, consistent and easy to use alternative to purchasing mountains of equipment. The wiring and system investment make for a valuable selling point when reselling a home and provide upgrade opportunities as new equipment and sources become available. Contact HCI Networking today to discuss the design and installation of a distributed AV system for your new home.