

Abhimanyu Gupta, Director, Actis Technologies Pvt Ltd throws light on the factors to consider while deciding on a home entertainment system.

Photographs: courtesy Actis Technologies Pvt Ltd

BE IT THE JOY OF listening to your favourite music, the thrill of watching a movie or the pleasure of entertaining guests, there are specific home entertainment set-ups that suit specific needs. Entertainment systems constantly evolve — technologically and aesthetically — to complement rapid changes in architecture, interior design and overall lifestyles. Here's a look at the basic components of a home entertainment system.

Flat Panel Display

There are two types of flat panel displays available — the Plasma Technology and the LCD Display Technology — both of which come in various sizes and resolutions. You can take your pick according to the space available and your preferences.

Flat panel displays encompass a growing number of technologies enabling video displays that are lighter and much thinner. Unlike traditional television and video displays, the units don't use cathode ray tubes and are usually less than 4 inches thick. With its slim body, a flat panel display can easily be mounted onto a wall and eliminates the need for a TV trolley or cabinet.

The main benefits of flat panel displays are their superior brightness, faster response time, greater colour spectrum, wider viewing angle, and the fact that it saves space.



Front Projection Screen with Projector

Those who want a bigger screen, or are on a tight budget, usually choose this type of setup. The greatest advantage of having a front
projection screen is that it can be motorized
and neatly rolled up into the ceiling when not in
use. A projector, too, is mounted on a lift, which
is tucked away into the ceiling when idle.

Any room with an area of 300 sq ft and above is ideal for such a set-up. Remember to have a home automation expert visit your home and suggest the size of a projector screen that's ideal for the room. Else, it will feel like watching a movie from the first row in a theatre.

This set-up is usually used in a formal home theatre where the lights can be dimmed down for movies. In such cases, a home theatre projector with 1,000 lumens is a suitable choice. If you intend using the screen to watch television with the lights switched on, you should go in for 2,000 lumens projectors.

Media Servers

New-age media servers can store ample movies and music, and will save you the trouble of changing discs every now and then. This will also get rid of all that shelf space required to store those CDs. All display and music systems can be connected to this single server. Thus, you will be able to access and play any movie or music in different rooms either simultaneously or in preferred combinations.

Media servers allow you easy access to your entire collection, which would have been hard to manage otherwise.

Factors to consider while deciding on a media server:

- Size of the hard disk
- Multiple application support like music and movie or either one
- Supporting formats like MP3 or the option of converting files to a format that's compatible with the media server
- .Whether it supports external storage devices
- Hard disc supporting RAID technology (Redundant Array of Independent Discs) for better data reliability
- User Interface; check if it has an inbuilt server?

Program Audio System

This comprises an amplifier and a set of speakers. Since speakers come in various shapes, sizes and finishes, they can be





selected to complement the interior decor of the room. For optimum space utilization, you can choose to have the speakers concealed within the walls, or mounted onto the ceiling or the wall.

The specs to be taken into consideration while selecting speakers are utility and space. For example, a home theatre set-up is not recommended if the sole purpose of the system is to listen to music. Here, a sound set-up, which gives you pinpoint clarity is best — an amplifier with a set of speakers might serve the purpose. However, if you are a movie buff, then a home theatre setup with surround sound is what you should go in for.

Space constraints play a significant role in deciding on a set of speakers. Depending on the size of your room, you can choose between stand-alone speakers with a power amplifier (which take up floor space) or a base boomer with cubes to be mounted from the ceiling for the surround effect. Ceiling

speakers or in-wall speakers are another solution for central background music; a room-wise solution is also possible.

Integrated Control Solutions

All of the mentioned technologies can be seamlessly integrated with the help of a control system. It integrates not only your Audio Visual Technology but your environmental controls (lighting/HVAC) as well.

A control system allows you to do away with remote controls and provides a user-friendly interface to access each audio-visual device individually, collectively or in any combination you choose. For example, the projection screen and wall-mounted projectors can be programmed to roll out from the ceiling, while the lighting control system adjusts to the video viewing mode — all at the touch of a button! Its intelligently programmed system scans the overall system for power overloading before switching on a device.





What's more, it also controls the temperature sensors in the diesel generating rrom/UPS room/equipment rack room. The system ensures that the perfect temperature is maintained at all times, failing which an alarm is triggered and the power is automatically shut off.

When the media server is integrated with the control system, it offers cool features such as the ability to browse through your entire music/movie collection via touch pads from anywhere in the house. An extensive search feature lets you track your favourite movie/song by genre, artist, album, etc.

Structured Wiring

One of the most important aspects of a home automation set-up, is that it combines all communications wiring in your home and treats it as one wiring system. Structured

wiring makes it possible for you to use all of the technology anywhere in your home.

If you are setting up a new home, make sure you plan all wiring at the start, with the help of an architect and system integrator. Ideally, there should be two to three points in the cabinet where you intend to house all equipment. Lastly, remember to 'future-proof' your house by providing wired LAN and wireless LAN (Ethernet) in every room. This will save you the trouble of rewiring and renovation. In case of a sound set-up for home theatre, the wiring from speaker and amplifier should be done in the home run configuration — here, all the cables are pulled from a central point, which makes it easy to change or add connections at a later stage, if necessary.

Now that you know what to consider, go ahead, and tailor-make a home entertainment system that's for you!