

Designing Integrated Future Ready Homes



Future Lifestyles - Convenience

The past decade has seen the rapid growth of the internet and email. The use of mobile phones, computer games and the like, have changed the lifestyles of us all. Add to this high definition flatscreens and improving internet connection speeds, people are spending more time at home, many are even working from home.

Security is increasingly important as people invest more in their homes. Increased control over their domestic environment whether it be lighting, heating or air conditioning also becomes a challenge.



Integrated Home – Networking Media

It's time to get rid of the "wall acne." Off with the numerous ugly plastic switchplates, thermostats and other controls and replace them with something more elegant. Integrating different subsystems; lighting, heating, ventilation and air conditioning, audio/video, security, telephone and data can make things more functional and useful.

Our homes now can be controlled by touchscreens or via the web, allowing simple interfaces to be designed to the user's needs – in some cases using a single button.



Imagine..... starting a movie on DVD by drawing the curtains, dimming the lights, dropping the projector screen/turning on the TV and DVD player while activating the surround sound system as the disc starts to play.....

all from the touch of a button.



Economic Home – Energy Efficiency

What if you could increase the quality of your home while saving energy? Home automation allows for better control of the energy used in your home; providing simple to use functions and a more “green” lifestyle. By using dimmers, timers and occupancy sensors it is far easier to reduce energy wastage.

There is no need to have lights working at their full capacity as in standard switch installations. By reducing a bulb’s output by a fraction from its normal load, the bulbs lifespan doubles and electricity bills are greatly reduced.

Today, as utility companies around the world begin to install smart metres, it is becoming easier to manage homes energy use. With the installation of a home automation system homeowners can reduce their energy use and costs by controlling how and when specific devices in the home use power. With companies like Google getting behind this initiative we can all do our bit to help save the planet.



Most importantly, we all need to work hard to help safeguard the worlds’ resources.

Home automation can offer many benefits and free the users from the burden of having to gauge themselves that energy is being used rationally, the required savings are taking place or if waste is being avoided correctly with whole home monitoring. Heating and cooling is, typically, one of the areas with the highest impact in energy consumption and home control systems can perform intelligently taking into account the required comfort levels for different areas, which rooms are occupied and vacant, the outside weather conditions and the hour of the day. It can even sense if a door or window has been left opened.

With some of the largest companies in the world behind this initiative we can all do our bit to help save on energy consumption.

50% of all CO2 emissions come from buildings alone so there are “green” reasons to plan for this intelligence too.



Work from Home – Communication

The wide availability of a broadband (meaning that's fast and always on) internet service allows residential customers a lot of flexibility. These days you can "be" at the office without going to the office.

Modern telephone and IT systems allow people to work just as effectively from home and suits peoples' lifestyles all the better. The ability to access company networks remotely means receiving emails, printing, browsing the server etc.. is no longer a restriction.

A simple home telephone system can now provide the user with enough access to multiple rooms to accommodate the use of entryphones, cordless phones, conference calling, internal intercom facilities plus, paging and voicemail just as in an office.

Add to this the increased ability of the ever improving speed of the wireless function, allowing all rooms and outdoor areas to access the internet with the right supporting technology.

This has brought in the next new media "must have" technology, the home (media) server. It will send TV, DVD and data signals around the house to next generation wireless devices..... Let's stream...!!



Audio Home – Fun Loving

Systems now allow owners to "pipe" audio into more than one room from a central system, hidden away in a cupboard (multi room audio). Each room can be controlled in its own zone from the central source i.e., MP3, CD or DVD libraries can all be accessed from different rooms simultaneously via a music server and via a tuner, radio can be accessed.

There are also many excellent flush mounted speakers available to hide discreetly within the décor of the rest of the house with either "in-wall" or "in-ceiling" designs. By integrating the system, the clutter and wires of multiple stack systems are lost. For the outdoors there are those which are waterproof and look like rocks....



Video Home – Visual Entertainment

It is generally the case that one room will be chosen as a family entertainment area or sometimes a designated cinema. Various technologies are available for displaying video; front and rear projectors as well as all types of flatscreens; Plasma and LCD. True home cinema will require surround sound dedicated equipment, commonly 5 full range loudspeakers and a subwoofer. Calibration of such a system is also recommended for the best audiovisual experience.

Again, if the system is planned in at the early stages, much of the equipment can be built in to leave a tidy, uncluttered finish.

With properly installed TV systems, it is possible to watch one thing playing in more than one room as easy as playing different media in many rooms.

Now we have interactive TV, digital TV and DVD, high definition TVs and broadcasts, plus there's "video on demand" available through the internet via video streaming. This will enable you to watch whatever you want when you want, just use your imagination.... As the broadband gets wider and all that comes with it quicker, "video on demand" will become much more widespread and eventually take over from satellite systems such as SKY+ and SKY HD.

Learn at Home - Education

Some clients spread "the guilt of the purchase" by thinking that their big screen and entertainment system is a purchase to help little Johnny watch Disney films the way it's meant to be viewed, like the cinema. It can also work as an easier to view monitor if he then decides to study online or use supplementary PC learning software. Just don't let him know how much better his computer games are going to look and sound on it too!

