

The Digital Home Lifestyle



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today

There was a time when televisions had dials and to change the channel, you got up and walked across the room. Remote controls were created in the 1950s but were not functional enough to gain widespread use until the 1980s. Today, you cannot operate most sets without the ubiquitous remote control.

Homes have evolved also. And remote control of your home is becoming more than a luxury. Digital home systems create a home that fits your lifestyle and preferences. Consider what is possible today, using today's technology.

Lighting

Since the electrification of the nation, light systems have been moving forward and are constantly being improved. A natural evolution was the light dimmer. Joel Spira, founder of Lutron Electronics, invented the first solid-state dimmer in 1961. Light dimmers can lengthen bulb life and save energy. A natural step is to allow the control of all the lights in the house from a central location.

Today, home lighting systems can sense if someone is in a room, know the time of day, can sense the ambient light levels, and adjust the lights accordingly. They can be combined with other home systems such as security or home theater to provide lighting appropriate for the activity taking place.

At the touch of a button, pre-programmed lighting levels and ambiance can be set for events such as an open house, a birthday party, or a cozy after dinner get together. They can be tied to arrivals or departures and become a part of the home security system.

Heating, Ventilation and Air Conditioning

As home heating and cooling costs rose, programmable thermostats became increasingly popular. Programmable thermostats automatically adjust your home's temperature settings, allowing you to save energy while you're away or sleeping. The typical programmable thermostat works on a fixed schedule. But not everyone has a fixed schedule.

Today, home heating and cooling can be programmed at a much more sophisticated level. Newer systems, such as the ViewStat Color Communicating



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Thermostat from AMX, can even provide the local five-day weather forecast via a web interface.

The new systems allow flexibility in setting and controlling multiple zones of heating and cooling, allowing more comfort where people are present and greater energy savings where people are not. You can set the guest room to a low level to conserve energy and at the push of a button, change the temperature to provide comfort.

And more than just the indoor temperature can be controlled. Driveway and roof melt systems can be “smart” enough to sense when they should be working.

Security

Home security systems can include a variety of devices. Intrusion detection, by monitoring doors and windows, is one of the most obvious. But a good system may also include detection of fire, gas leaks, or water escapes. Increasingly, medical alerts are being integrated into security systems.

When security systems are integrated in whole house control systems, keyless entries and other advanced

security features are available. For example, by using an RFID chip in a wallet, pocket, or on a keychain, the home’s entry can sense your presence, disable the alarm system, and open the front door as you approach. Or, you could provide a “guest” key that opens the front door, but not the door to the wine cellar.

When combined with a high-speed internet connection, a press of the doorbell can create the impression you are in the house. You can remotely monitor the door video, have a two-way conversation on the intercom, and even allow entry. Or, you could unobtrusively check on the child care from a mobile PC.

Audio/Video systems

Not surprisingly, these systems were among the first to be highly automated. Audio and video distribution systems allow the use of one or more source to be sent to one or more devices. You can be listening to light music in the kitchen at the same time as the kids are rocking out to the latest MTV video in the den.

Adding a media server to a distribution system allows the audio and video to converge to a single control system. A media server is a device that stores and shares media. In a

Domotics

Domotics is a term coming into use to describe home automation. Made from the words domus (Latin for house) and robotics (for automation).

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home setting, a media server acts as an aggregator of information: video, audio, photos, and books are the most common. These different types of media are stored on the media server's hard drive. When combined with a distribution system, access is then available from any location. It is also possible with high-speed internet to send and retrieve the media from a remote location.

Imagine that at a push of a single button, the lights dim, the shades close, and your home theater begins showing your favorite movie. All you need to do is pop some corn and pour a soda to complete the scene.

Other Systems

Other systems are becoming more and more integrated into the digital home. You can control the hot tub, garage door, sprinkler system, and driveway melt system from a central location in the home or from a remote location.

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Bringing it All Together

With all these disparate systems in the home, a means to bring it all together is needed. Enter the latest disguise for the personal computer. Systems can use one or more computers to provide access to, and control of, all the home's systems. The use of the computer creates the possibility to truly make your home fit like a digital glove.

Home control systems often take the form of a touch-screen computer set in a wall. Research shows the most common locations for this system is the kitchen. But smaller panels can be placed in any room of the house.

Remote controls are also popular. In the simple form, a remote control for home system might look similar to the familiar TV remote, but increasingly Windows based ultra-mobile PC remote controls are being used.

You can also monitor and control your home from the office, airport or another residence. This creates the situation where you can preset your home for energy savings while you are away, and "call home" to reset the systems pending your arrival.

New or Retrofit?

When a new home is built it is easy to include a structured wiring package that incorporates all the smart home capabilities the homeowner desires. As time goes by, the homeowner may wish to move some features to new locations, or the home is sold and new owner's life styles do not match the previous ones. Or, a home may never have had the feature in mind when originally built. New solutions such as the Lagotek Home Intelligence Platform make retrofits and feature movements possible without sacrificing the features you want.

The Digital Lifestyle

More and more these once futuristic ideas are coming to be expected in today's homes. As much of the population ages, we can expect more and more innovation in making our homes work in a personal way. Our homes act and react to our desires and needs. They are customized to fit each of us individually.

What's ahead? Expect voice control to become a more important feature (think Star Trek). Expect the ability to call your refrigerator on your way home to see if you need milk. These types of features are already in the planning and implementation phases. One thing is sure, computers and networks are changing the way we think of and use our homes, making them safer and more comfortable.



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