

Security System Essentials

Peace of mind has gone hi-tech.

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Security systems conjure unpleasant thoughts of burglary, vandalism and alarms blaring in the middle of the night. True, that's what security systems do, but they can also add a new dimension of convenience and comfort to a new home if you plan appropriately. Sure, you can still buy a basic burglar alarm for your home (it's an economical choice), and it can be installed in a couple of hours.

But thanks to new innovations, many security systems can do so much more. Systems can now control the temperature and lighting of a home, based on predefined security conditions. For example, when a security system is armed, it could also shut off certain lights and lower the thermostats. Of course, the more components that are controlled by a security system, the more carefully you'll need to design those features into your home.

PLANNING ISSUES

What You Need to Consider

Compatibility: In order for a security system to communicate with and control non-security components like lights and thermostats, it needs to be compatible with those components. In other words, every device needs to speak the same language. Many security systems, for example, utilize a communications technology called powerline carrier transmission (also known as X10) to speak with other X10-compliant devices.

24-Hour Monitoring: For around \$24 a month, you can have a trained professional dispatch the appropriate emergency services based on alerts he/she receives from your home's security system. Know how many sensors the subscription covers. You may have to pay extra, depending on how many sensors will be installed in your home.

Add-Ons

Security doesn't stop at a security system. Other technologies that function independently of a security system can add extra layers of protection.

Closed-circuit TV systems, for example, enable homeowners to visually inspect their homes and property as easily as tuning the TV to a special security channel. CCTV cameras, of which there are a wide variety of models (color, black-and-white, wireless, etc.), transmit images of the backyard, the patio, the front door, the living room, and anywhere else you aim one, to a modulator. The modulator assigns each camera to an unused channel of your home's cable TV system.

Get an even bigger bang for the buck by linking CCTV cameras to a remote monitoring system that feeds the pictures to a secure Web site.

Complement visual surveillance with an intercom system that lets you speak with the people you see at your front door.

INSTALLATION ISSUES

In order for a security system to be most effective, it should appear inconspicuous. This means blending it into the architecture and design of a home, a task that involves the expertise of both your homebuilder and the installer of the security system.

Each door and window on the first floor of the home should be rigged with a magnetic contact. If the door and window frames are wooden, these contacts can usually be drilled into the woodwork to render them invisible. Also consider securing all bedroom windows on the upper levels of the house.

Let your builder know what type of interior motion sensors you might be using. That way, he can select paint to match the sensor. Exterior motion sensors can be rendered less conspicuous through clever placement and design of the home's architectural details. A junction box that resembles an intercom, when recessed into the wall adjacent to the front door, for example, can house a small motion detector and/or camera.

The most common areas for surveillance cameras are the foyer, the front door, children's bedrooms, and the backyard. Make sure your builder and landscaper know where you plan to mount the cameras, as windows and trees can interfere with their picture-taking abilities.

There are basically three ways of procuring a security system for your new home: through your builder, through a professional security installer, or from a home systems installer.

Many builders offer security systems as either a standard feature or an optional upgrade. They usually package them with a number of sensors, keypads and possibly cameras, and have their low-voltage contractor install the system. Security installers specialize in the installation of security systems, while home systems installers are knowledgeable about all aspects of a home-security, lighting control, heating/cooling control, audio/video systems, etc. If you'd like your security system to interact with other electronic components of the house, a home systems installer is probably the best man for the job.

Environmental Sensors

For complete, full-range protection, a security system should watch for more than break-ins and fires. It should also monitor a home for flooding, extreme temperature fluctuations and long power outages. Like it or not, even a new furnace can fizzle out, and a backed-up toilet can flood the bathroom floor.

You can minimize the damage by having your security installer add a variety of environmental sensors to your new security system. Nearly all home security systems can be configured to react to conditions detected by water sensors, high/low temperature sensors and power outage sensors. If the security system is equipped with a dial-out feature (most are), it can relay an emergency message to your pager, your cell phone, a Web site, or a central monitoring station. Ideally, a security system should be able to describe in clear, alphanumeric language the exact nature of the problem. Knowing that the emergency is a water leak in the basement and not a broken furnace, for example, enables you to respond appropriately to the problem.

Also, be sure the sensors and the security system are “supervised.” Supervision ensures that the security system is receiving signals from the sensors. If a battery inside a sensor dies, for example, the security system knows it and is able to inform you of it.

Most environmental sensors sell for around \$40 apiece. Systems that report problems to your own private Web site usually come with a monthly subscription fee of between \$10 and \$40.

Remote Monitoring Systems

There’s no better peace of mind than knowing your home and property are okay while you’re away on a business trip or vacation. By installing a remote monitoring system into your new home, you can ensure just that.

One of the newest ways to receive emergency information about your home is through the Internet. You can easily use the Internet to review an updated status report and/or view scenes captured by video cameras via your laptop. In addition to broadband service, plan on spending between \$10 and \$40 a month for a subscription to an Internet-based monitoring service.

Most Internet-enabled monitoring systems require a dedicated connection to a computer at home. This computer must remain on to permit access to security updates.

For flexibility and easy installation, choose a video camera that’s wireless and might have its own built-in Web server and IP address. This means that the camera can shoot images to any Web-enabled device (cellphone, computer, pager), without the help of a computer.

5 THINGS TO CONSIDER—SECURITY

If you think your house is a safe place, here are 5 things to think about:

- Professional monitoring services
- Systems with display screens
- Fire/water damage detection
- Cameras inside and outside
- Remote monitoring via the Web

SECURITY FAQs

Q: Is a remote monitoring service my best source of security?

A: For some people. A big bonus to having a monitoring service is that they will keep their eyes on your property for you. You can have an audible alarm sound based on certain events, or some services may incorporate cameras. However, many people like to remain the master of their domain. For those, there are many ways you can keep your own tabs, including monitoring through the Internet and receiving pages, emails and more.

Q: What will a wireless system get me?

A: What exactly do you want? It really depends on what you are ready to spend. For under \$100, you can

get a bunch of door and window sensors that trigger lights in the event of a break-in. If you're willing to put a little more money into it, you can have a full fleet of security cameras with Web access and alerts.

Q: How can lighting be used as a deterrent?

A: Lighting can be your first step in a security system, and it's very easy to incorporate into any home, regardless of size or existing equipment. Timers can be plugged into outlets and lamps, and programmed to turn on and off at certain times of day. This is a great way to give your home a "lived in" look even when you're on vacation. You can also set up sensors around doors and windows so when someone comes into the area or even enters the house, your system will react and light up any designated areas.