



How to select a security system

When a Southern California store owner needed a new security system, the owner asked for advice from a neighboring store that had taken the plunge a year earlier. It turned out that the neighbor was very enthusiastic about his equipment, which seemed to operate without problems and had recently done a great job sounding the alarm when a vandal broke the front window.

Every store in every town has different security needs. Make sure you find the proper equipment for your store — and the proper company to install it.

❖ BY PHILLIP M. PERRY ❖

Presented with such a glowing endorsement, the store owner installed the same system, which consisted of microwave motion detection devices linked to a remote reporting station. Disaster followed. One false alarm after another summoned police. Adding injury to this insult were some steep monetary fines, thanks to a town ordinance that penalized false alarms.

What went wrong? The store owner's sensors were being set off by ceiling-mounted displays which started bouncing around when the building's ventila-

tion of doors and windows, the positioning of ventilation ducts and neighborhood crime statistics and patterns.

More store owners are studying these issues as security takes a higher profile. A downturn in the economy often causes an increase in burglary and robbery. And everyone has started thinking security since the tragic events of 9/11. "We are all going through an assessment phase," says David Saddler, associate executive director of the Security Industry Association in Alexandria, VA. "While we are all pretty confident that most of

camera pay off in terms of increased knowledge about customer response to advertising campaigns?" The answer is often "yes."

THREE LINES OF DEFENSE

Store owners design security systems at three levels of protection: perimeter, interior and dedicated. Let's consider each of these in turn.

The first line of defense for a store lies in perimeter security, which consists of a technology that has been around for decades: An electrical wire is

ets or stock rooms prior to closing time.

Of the available technologies that trap interior motion, says Guilbeau, the most popular are passive infrared and microwave. When the former detects body heat from a person who moves around a cooler room, an alarm is triggered. Microwave, in contrast, detects the motion of the burglar.

Unfortunately, both technologies can trigger costly false alarms. Passive infrared can be triggered by a building's heater coming on at night or by the front window heating up when struck by rays from the morning sun.

Microwave can be triggered by ceiling-hung decorations that are too close to air vents or by a passing cat or rodent.

You can avoid most false alarms, however, if the installation is planned properly. "One common way to reduce false alarms is to combine passive infrared for thermal with microwave for movement," says Guilbeau. Each system's detectors are carefully positioned to maximize the chances of detecting a burglar while reducing the risk of false readings. For example, microwave but not infrared detectors will be placed near heating

vents. Infrared but not microwave will cover the area where hanging ceiling displays bounce around.

SPECIAL DEVICES

Yet a third level of security is provided by dedicated devices. Here are some examples:

✦ **GLASS BREAK SENSORS.** These come in the form of audio sensors that are usually installed in the ceiling and activate only at the sound frequency of glass breaking. "We personally like these devices in retail applications because quite often glass will break without someone entering and rain and wind can come in and damage merchandise," says Guilbeau. "Also, it's nice to have an alarm go off before the burglar actually enters the premises

"We are all going through an assessment phase. While we are all pretty confident that most of us are not targets of terrorism, the events have caused people to ask, 'have we created environments as safe as they can be for ourselves, our employees and our customers?' People want to know they are coming to a secure environment."



tion system kicked in after hours. Faced with the prospect of removing attractive displays with lots of customer appeal, the store owner ended up replacing her microwave system with a motion-friendly infrared one.

KNOW YOUR STORE

Our opening story drives home an important point: A security system that's right for one store may be wrong for another. "Every store has different security needs," says Robert A. Gardner, a Ventura, CA-based security consultant who was called in to solve the store owner's problem. "When you buy a system, you have to consider a number of environmental factors," says Gardner. These include the types of merchandise and displays, the configu-

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To temper the expense required for a system, store owners are starting to strategize their security investments. For example, they are checking their insurance companies to see how better equipment may help reduce premiums. If planned well, security expenses can be partly offset by marketing gains. "Consider a camera positioned at the front of the store for security purposes, for example," says Saddler. "Then think of the data a store owner needs to make marketing decisions: Can customer counts gathered by the security

linked to magnetic contacts mounted on points of entry such as exterior doors, windows and skylights. "The perimeter security system is pretty standard today," says Merlin Guilbeau, vice president of the National Burglar and Fire Alarm Association and president of his own security firm, Browns Security Systems in Natchitoches, LA. "When a burglar breaks the circuit by entering through a protected door or window, an alarm sounds." (For a rundown on costs of such systems, see the sidebar on "How much does Security Cost?")

The second level of defense consists of a system of interior traps that detect motions made by burglars who move around the store at night. This system not only backs up the perimeter defense, but also helps catch burglars who manage to hide themselves in clos-

How much does security cost?

Good security is great to have, but store owners need to reach an accommodation between safety and cost. Just how expensive is it to keep burglars and robbers from stealing you blind?

"The cost of a system depends not so much on square footage as on configuration of doors and windows," says Merlin Guilbeau, vice president of the National Burglar and Fire Alarm Association and president of his own security firm, Browns Security Systems in Natchitoches, LA. At the simplest level, a store with magnetic contacts on a front and back door, a glass break sensor or two and a microwave motion detection sensor will typically pay from \$600-\$800 for an installation that includes a local alarm and a control panel. Adding a panic button for robbery will mean an additional \$75-\$95 investment. Smoke detectors wired into the system may cost another \$100. Finally, four black-and-white cameras with supporting integration software and control panel will cost \$2,500-\$3,500.

With your hardware and software installed, you will also pay between \$20 and \$30 monthly for the monitoring of your premises by a remote central station which maintains a connection to your security system over telephone lines. When they receive a signal from your store, the personnel at the monitoring company call the police.

You may also install a radio or cellular back-up system. This will activate if the burglar cuts the telephone lines in an attempt to keep the alarm from going through to the central monitoring station. This may cost an additional \$300-\$500 and \$15 monthly.

Consultants advise obtaining competitive bids from a number of reputable and knowledgeable local alarm companies. But comparing apples to apples can be a challenge. "Some companies will discount the installation costs and increase the monthly monitoring fee," says Guilbeau. "They want the recurring revenue for the seven to eight years that is the average life expectancy of a customer right now." Larger companies will most likely offer such deals; smaller local companies may require more upfront investment, but be more responsive to questions and more knowledgeable about local ordinances.

Also, leasing is a popular option because of the 100 percent tax write-off. You may be able to lease an alarm system over a five-year period for around \$50 a month. "Leasing is a great way to get what you need without breaking the bank," says Guilbeau, who cautions making sure you understand how to terminate the lease properly come renewal time to avoid getting stuck with another five-year lease on an old system.

and activates the interior sensors as it gives the police more time to respond.”

‡ PHOTOELECTRIC BEAM DEVICES can protect large stock room areas where microwave and passive infrared are not practical. They are also installed to broadcast beams along the inside of store walls that are thin and can be easily breached by a burglar with the right tools.

‡ PANIC BUTTONS, when pressed, send a signal to the police station or private reporting service and come in many forms. Some are mounted just under the counter. “Dollar bill traps” activate a signal when the last dollar bill is pulled out of the drawer. Or the store owner can use “wireless pendants” that send electronic signals to a central station. These can be worn anywhere, including parking lots where help can be summoned.

Confer with your local police before installing panic buttons, as some designs have caused too many false alarms. “Police don’t like sending in crews with guns drawn because a store owner made a mistake,” says Howard Levinson, president of Howard Services, Franklin, MA. “One solution is to install only devices that have protected triggers: for example, the store owner must press buttons on two sides of a box or reach down inside a box to reach a panic button.”

‡ “WATER BUGS” are small devices that are installed around boilers and other water sources and sound alarms if they detect water. “I’ve seen more damage from water than from fire in my career,” says Levinson.

‡ “ACCESS CONTROL” SYSTEMS restrict certain areas of your premises to designated individuals. To gain entrance through protected doors, the individual must use a device such as a proximity card, which is keyed with a code

on a magnetic strip or keypads that are only activated with the entry of a string of numbers. “These access control systems are very flexible,” says Guilbeau. “They can allow access to certain areas only during designated hours, for example. And different employees can have access to different areas. Finally, the systems also serve to keep customers from wandering into sensitive areas.”

Using traditional keys, when an individual left employment it was often necessary to re-key all of the locks. With access control systems, the manager need only log onto the controlling computer and limit the access of the departing card holder.

PUTTING IT TOGETHER

Over the past two years there has been a drive to integrate all of the devices in a security system into a single functioning network with the aid of closed circuit television (CCTV) cameras. With integrated systems, cameras are activated only when a sensor or panic button indicates that a break-in or other problem is occurring. “These cameras work well with access control systems,” says Saddler. “The camera can be programmed to come on when someone uses the system to access a restricted area. The image tells you who is trying to gain entrance. You call the police if it’s an outsider.” The cameras can also be programmed at checkout to activate when a cashier presses a special key.

“Today you can also view what your cameras see remotely,” says Saddler. “You give each camera an IP (Internet protocol) address, then call up that address on your Web browser from home or a laptop computer when you are traveling.” This is a great way to make sure every-

thing is all right at your store while you are attending trade shows.

PICK THE RIGHT COMPANY

Because you are revealing your retail operation’s hidden vulnerabilities, finding a reputable and knowledgeable security company is the most important battle in the security war. “Once you have decided on a reputable alarm company that you can trust to give you good advice and to provide good equipment, you are 99 percent there,” says Gardner. Find out if the company has the required state and local licenses such as an alarm company license, a contractor’s license to install electrical wiring and a local business license.

The firm must also be knowledgeable and in more areas than just the various technologies available. “Make sure the alarm company knows about your local ordinances,” says Gardner. Some towns now require permits to install an alarm system and many have instituted fines for false alarms. “Alarms in general are a wonderful thing, but a major headache for law enforcement,” says Gardner. “More than 90 percent of alarms are false. It can cost you a lot of money if you screw up.”

Lack of knowledge can be a particular problem, says Gardner, if you are located in a smaller suburb. An alarm company in a nearby big city may not be familiar with your local ordinances. “Call your local police department for advice,” says Gardner.

Both Gardner and Levinson advise conferring with a consultant who does not sell alarms. “An independent consultant has no interest in selling you a particular product,” says Levinson. “He just sells advice.”

Above all, remember that a successful security system needs to be tailored to the needs of your store. “There is not a cookie cutter solution for all store owners,” says Saddler. “What needs to be done is a process. Work with a professional who will talk about every aspect of your business and determine what technologies will secure your points of vulnerability.” ■

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Web resources

To find a local alarm company, go to the National Burglar and Fire Alarm Association online at www.alarm.org and click on “Member Directory.”

To find a consultant not affiliated with any equipment maker, visit the International Association of Professional Security Consultants at www.iapsc.org and click on “Referral Services” or “Directory of Experts.”