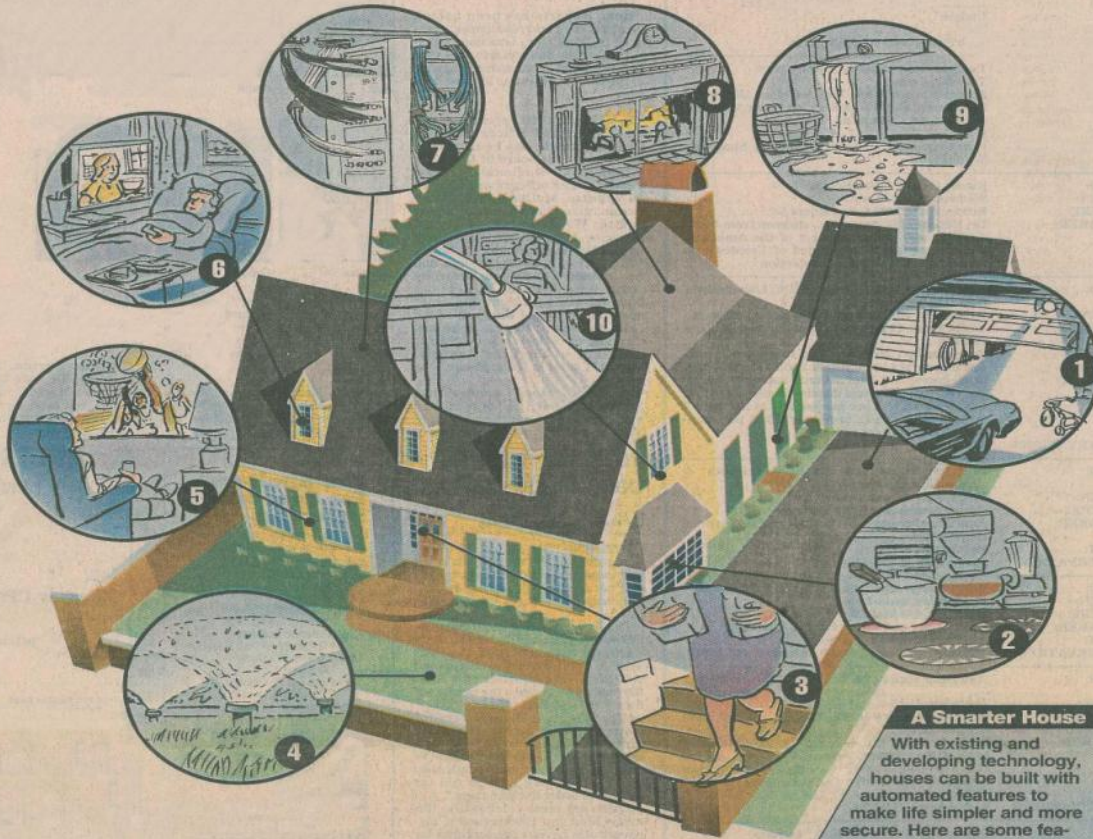


## A Smarter House



### A Smarter House

With existing and developing technology, houses can be built with automated features to make life simpler and more secure. Here are some features shown in the numbered sections of the house above:

1. Sensors can turn on a flood light and open the garage door, sending a signal inside to turn on lights and start any number of appliances or electronics chosen by the homeowner.
2. Kitchen appliances can be run on timers, with larger ones embedded with computer chips able to notify owners of potential problems before they even arise.
3. Lights can be controlled by timers, sensors or a voice-recognition program.
4. Sprinklers and security cameras can be connected to the system and accessed by a computer or laptop.
5. The home theater system can be personalized with settings and used to pull down a screen, turn on the sound system, dim the lights and pull the shades at the touch of a button.
6. Video screens can allow communication between people in different rooms.
7. Automated home wiring runs through a control panel, typically in a climate-controlled room in the attic or off the garage.
8. Voice commands or a single switch can be programmed with a "romance setting," which dims the lights, pulls the shades and starts the gas fireplace and stereo.
9. A laundry room can be fitted with sensors that tell the house to turn the water off in case of a flood.
10. Showers can be programmed to come on at a preset time or temperature.

## Area home buyers can look to high technology for more convenience

By CHAD CALDER  
Advocate business writer

The rise of personal computers, the Internet and a slew of electronic gadgets during the 1990s has made many Baton Rougeans technologically "smarter."

For the most part, though, their houses are still as dumb as bricks.

Not many homes are capable of supporting a network of computers. And while you can use your PC to buy gifts from a toy store in Boston or book a hotel room in Bangkok, you probably don't use it to program home lighting, turn on the shower in the morning or tell you when the refrigerator needs repairing.

However, many say this will change in the next decade, as homeowners begin to demand the performance they have come to expect at the office and the efficiency necessary to give them more free time.

And while home automation has made some inroads in Baton Rouge, a handful of businesses here are counting on the technology getting a lot more popular.

"There are a lot of people who are interested in it, but there aren't a lot of people doing it," said Chip Blair, who built an automated home in 1994 as part of a demonstration project for the local homebuilders association. Blair has done several others since.

"But there's just no way the market is not going to improve, it just hasn't taken off yet," he added.

Kevin Brian, president of Advanced Automations, a subsidiary of Saia Electric, has

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Thomas Marino looks over schematics and design printouts of an automated system he is installing in a house off Highland Road. The conduits surrounding him will lead wiring from all over the house to a main control panel.

Advocate staff photo by Patrick Dennis



### The wiring:

This is a piece of conduit, being used to wire some of today's high-tech homes. The conduit consists of five separately insulated cables, which can handle everything from analog and digital audio and video to computer networks, phone lines and other devices not yet in home use.



# House

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been custom wiring for various degrees of home automation since 1992.

Bryan has had three or four projects going at once in the last few years, and said business has been growing steadily, though slowly.

He said he expects the popularity of the Internet and telecommuting to fuel the drive to build houses with wiring better suited for computer networks.

Kurt Scherf, a home networking analyst with Parks Associates in Dallas, agreed home theaters and home offices have woken many up to the need to wire houses more appropriately.

Prospective home buyers, he said, "are going to start to ask questions about what the infrastructure is for the network in the home."

Though there are no local figures available, Scherf said about 6 percent of new homes built in the United States in 1999 contained specialized wiring, a number he predicted will grow to 45 percent within five years.

This wiring, called structured wiring, is actually several different wires bundled together — two coaxial cables for audio and video, two Category 5 computer wires and a fiber optic line.

There are kits sold at electronics stores that send a signal over conventional wires to control lighting, and security companies have begun offering packages that incorporate lights into the security system.

But structured wiring is the standard infrastructure for the newest generation of automated homes because it brings digital audio and video and broadband Internet connections into every room in the house.

Most important, primarily because of the fiber optic component, structured wiring makes the house capable of handling technological applications that have not even been fully developed.

Fiber optics are thin filaments of glass that transmit light beams capable of carrying enormous amounts of data. Fiber optic wiring is immune to electromagnetic interference and difficult to bug.

"No matter what technology comes down the line in the future, your house is ready for it," Brian said.

The cost of these systems varies widely, depending on the level of automation.

Blair said a device that sends

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signals over a home's existing wiring to up to nine lights can be bought for about \$900.

Brian said the most basic package Advanced Automation offers includes the installation of structured wiring, with lights, thermostats and security system tied into the system. It is operated with a control panel and can be accessed remotely by telephone.

The most elaborate systems the company offers can reach about \$25,000, he said.

Then there's Thomas Marino, an automation buff and licensed dealer of some of the wiring involved in home automation, who is installing what may be one of the most advanced systems in Baton Rouge in a home under construction on Highland Road near Interstate 10.

Marino said he plans to install a voice recognition system for the lights and other applications and video screens to allow face-to-face conversation from different rooms.

Every room has been fitted with a customized outlet with access to the structured wiring. The security, surveillance, irrigation and heating and cooling system will be automated and accessible by personal computer or laptop.

The house can be operated manually in emergency situations and it is protected from electrical surges and backed up by a generator and a UPS, or uninterruptible power source, for the split second between when the power does go out and the generator kicks in.

The owner of the house asked not to be named.

Marino, who has "been dreaming up home automation systems since 1985," said this system is the largest he has done to date and he hopes to see more of them in the years to come.

"This (project) allows me to break new ground and fulfill my wildest dreams in home automation," he said, pausing quickly. "Well, maybe not my wildest dreams ..."

Keith Cox, an investment adviser who owns the house Blair built five years ago as a homebuilders association demonstration, said he and his family enjoy the perks of living in an automated home.

Programmable light switches allow them to dim lights, turn on the gas fireplace and the stereo with the touch of a button. A button on a keypad near his bed turns on the shower at preselected 98 degrees.

Cox said he especially likes the lights that turn on automatically in the hallway if any of his three children get up in the night, and the video screens in the house that let him and his wife check on the children in their rooms.

A "vacation mode" setting can be used while the family is away to keep the house lit and secure and reduce monthly bills by running things like the air conditioner and heater on lower settings.

While Cox is limited to calling Advanced Automations if there are any problems, he said he hasn't found this limitation troubling. The house hasn't had many major problems anyway.

He said he can call the company, punch in a code and the computer will call the automation system back and run a diagnostic check to see if anything needs to be fixed.

Cox said that while automation brings a wide array of possibilities into a house, the realities of daily life help weed out the unnecessary ones.

"I could turn the coffee pot on from my car and stuff like that but ... I'm too busy raising three kids and running a business," he said.

Still, with a generation now being raised amid personal computers, the Internet and other technology, Cox said smarter houses should become more common.

"I really think it's the wave of the future," he said. "I can't imagine many homes in the future being built without some form of automation."