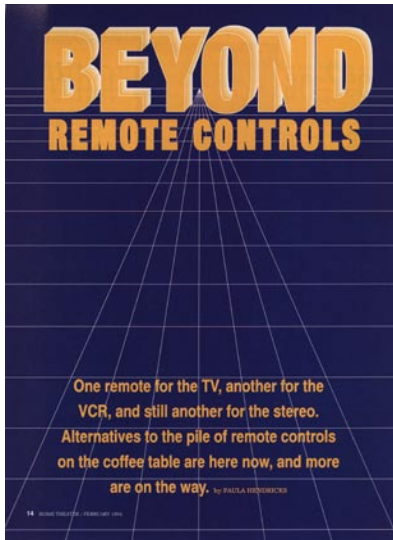


## Beyond Remote Controls



I hate remote controls! Especially if they aren't in my hands. But who has control over the remote, or who controls the TV set or the home theater won't be resolved by the new technology discussed here. However, other aspects of remote controls that make them annoying at best and enraging at worst can be handled with today's technology.

I only have three remote controls for my "home theater"—I don't dare capitalize it because what I have is not really a home theater.

I have one remote for my 26-inch direct view TV. I have a remote for my VCR, and I have one for my satellite dish. If I had cable I might or might not have one for that. But if I had a laser disc player and other home theater equipment, I could imagine having many more. I believe I have a remote for my stereo, but I don't know where it is.

A friend of mine has a drawerful of remotes.

In homes with drop-down screens and multi-option systems, a drawer of remotes is truly possible. If someone at home is into gadgets and the newest stuff, a drawer of remotes is a certainty.

When I want to change the color on the screen because the faces are too red, what do I do? Push "VIEW" or "CON" and then what? "VOL?" Is there any logic to this stuff at all? There are always buttons on these things that I have no idea what they mean. For example, CH RTN on my TV remote; DISP and SKEW on my satellite one; and I never know whether I have to hold down both red RECORD buttons or just one. Of course they are too far apart to hold down both with one finger. I also hate that they get dirty and I can't clean them. Sometimes they have this coating on them that makes them gather even more dirt. None are the same size. And none of mine have the same keys in the same locations, except the power on/off key in the upper right corner. Can't we have some standards here?

**One remote for the TV, another for the  
VCR, and still another for the stereo.  
Alternatives to the pile of remote controls  
on the coffee table are here now, and more  
are on the way.**

Well, things may be changing. And for people like me, for the better—because the future is going to be more complicated when it comes to TV and Home theater. In just a few years, millions of us will have

access to 500 channels of TV, from satellite or cable systems, maybe even through our telephone lines. Home theater could expand to include not only the TV set and pre-recorded tapes and laser discs, but over-the-air (or via fiber optic cables) rentals as well. One day, my drawer could look like my friend's, and it makes my hands go clammy with fear.

The good news is that technologies are merging. Voice activated artificial intelligence. Computer software, like Microsoft Windows, for my TV. Integrated home theater systems. On screen TV guides. Systems that can help integrate your whole house. And you will be able to choose the one you want, the one you are most comfortable using.



### MASTERVOICE

Mastervoice is a system of voice recognition, interactive artificial intelligence, invented and developed by Gus Searcy, a former professional magician. With a computer programmer, Searcy developed "Sydney," the first Butler-in-a-Box.

"When I said, 'Lamp on,' and Sydney turned off the air conditioner, I knew we were in business, said Searcy." The Butler-in-a-Box has won many awards, particularly for its uses as aids for disabled people, and one of them is now in the Smithsonian Institute as part of its permanent collection.

Mastervoice can manage all the systems in your house—pre-programmed, by situation, by touch, or the sound of your voice. You can even call it up and change your orders over the phone. For home theater, this means you can tell it what to do, and it will do it. You can come home and say "Show Time!" and the system will dim the lights, lower the drop-down screen, turn on the projector and the surround sound, and start the laser disc player. Voila! "Star Wars" will begin.

This system uses existing equipment and wiring. It recognizes foreign languages and up to four different voices. It can respond in a variety of languages, too. You can name the Butler—as Searcy did Sydney—and it can be programmed to respond in a correspondingly appropriate voice. The "base brain" ranges from \$1,795-4,000, and depending upon complexity and accessories can run upwards of \$60,000. So far, there are about 12,000 "Butlers" working worldwide.

An example of its situational "intelligence": The "Butler" can be programmed to not allow sports programs to come on during Thanksgiving dinner, or it can lock out undesirable programs during certain hours, so children have limited access. It knows to not water the lawn if it's been raining.

Given its versatility, based on touch, timers, situations, and voice, it can manage a home theater as easily as a home.



## NAVIGATORS

Virtually all of the new systems depend to some degree on what are being called navigators-on screen menus and/or data bases that can be used passively or interactively. They are called navigators because they help you navigate through the options in your system. These navigators allow a viewer to manage data whether it is lists of movies, or lists of TV programs, or multiple options for action, such as watching, recording, or switching from one mode of operating to another. These navigators have not only fixed databases, they have continuously updated data, and are services, often with monthly fees. Some will be like the weekly *TV Guide* or cable magazine, only they are on screen.

SuperGuide is just this kind of navigation system, currently available only to satellite dish users. In development are TV Guide On Screen, and StarSight, which will be basically the same kind of service. You manage SuperGuide with a remote control—but it can do more than change channels. Programs are arranged by categories and can be programmed into personal sub-categories as well. With the remote you can find the program you want, and push a button to watch it or hit the tape button to record it. If the show is not on right then, SuperGuide will work with the satellite dish and the VCR to position the dish at the right time and record the chosen program and turn the VCR off when the movie is over. SuperGuide could be used with cable systems and could also be integrated with voice activation capabilities.

Randy Ropp, General Manager of SuperGuide says that their sales have been limited to-date because many people do not want to use menu-type programs. They introduced SuperGuide in 1986 and their primary audience is satellite dish owners, who are mostly located in rural areas. But, given the potential for an explosion of information and entertainment, as well as interactive programs, something has to be done—beyond hundreds of remotes—so people can grasp their options and organize them so they are not overwhelmed by looking at a TV listing for Monday that shows hundreds and hundreds of programs. We must have a way of keeping things manageable.



Okay, so we have navigation systems and we can go the route of voice activation and artificial intelligence, but there are others ways, too. Computers. To say we all have computers is simply not true, but to say this is becoming, fast, a computer-literate society is true. My father, who is 80, just faxed me the first letter he had been able to produce off his computer. Granted, he had to cut it up because the margins weren't right, and he was using WordPerfect, which is much too much program for him. He's had the computer two or three years and he's finally learned how to turn it on, get into the program he wants and actually produce what he wanted—a letter to me. Then he faxed it to me. 1993. This is a man who doesn't write letters. But, with his fax machine, he writes to me all the time.

Okay, so back to home theater. What does this have to do with home theater? Everyone in my family has a computer. My brother, who has two kids, my sister, and I. And I already told you about my father. None of us are "techies." We all want it to do simple things. And, now, we are all familiar, to some extent, with computer language and icons. We have accepted and learned to interact with a computer, without a voice interface. Some software is more user friendly than others, and that will be key, along with standardiza-



tion, for future sales of integrated home theater systems. So, on to home theater computers.

## FROX

The FroxSystem™ is essentially a computer system that manages a home theater and becomes an information center. It not only interfaces with existing components so they will do what you want when you want, it enhances various aspects of their performance. This system will upgrade video images and audio signal processing. It will provide TV guide schedules, a database of compact disc information, and a movie database about films released worldwide since the early 1900s.

While all of this is terribly impressive, the focus here is on the User Interface aspect of their system. They provide a computer command center to organize and operate all existing components—VCRs, laser disc players, CD players, cable boxes, and the TV set itself. Most important, the FroxSystem has been designed to utilize familiar, easy-to-use on-screen icons (i.e. pictures or graphics representing functions).

With their continuously updated computer databases, via FroxNet™, you can scan the daily listings, get a list of all Clint Eastwood films that will be shown, and select what you want to watch. It will provide you with synopses of the movies or TV shows you choose, and via the fixed data base tell you all the movies Humphrey Bogart was in. These updated data base menu services run about \$20 per month.

This interactive information system works with audio as well as video. You can instantly play any of 100 CDs (at least any that are set in the 100-disc CD player) and you can find out if your collection is up-to-date. The way this system interacts with the viewer/listener is by use of their specially designed Frox-Wand™.

Many new systems, particularly those that are customized or personalized—like Butler-in-a-Box or the FroxSystem—require some learning/teaching time. Both you and the system must be trained to work with each other. But, once the investment of time is spent learning your system, you can sit back, relax, and enjoy the show.

The basic cost of the FroxSystem is \$15,500. While that seems a bit steep, it includes Dolby Pro Logic, Home THX audio system, databases for CDs and movies, and all the audio and video enhancement technologies, as well as the wand itself. The major costs are in the media processor and the video preprocessor (with hard drive and 105MB of memory.) These enhancement technologies are extremely complex, and at the moment costly, but the FroxSystem becomes a supercomputer in your home. This is truly state-of-the-art.

## AIRMOUSE®

Okay, you say, this sounds great. But, you don't have \$15,000 and to really make this investment worthwhile, you'd need a better TV, and a hi-fi VCR, and probably a laser disc player. The investment is too steep, and, for now, you don't really care about "state-of-the-art." You just want to upgrade what you have and make it easier to use. AirMouse might be the answer.

AirMouse was developed for the "presentation" market, for business and educational uses. It is a wireless remote that works with computers and audio/visual presentation equipment via menus. It is a point and pick system. It has no video or audio enhancement technology and does not include home theater "must haves" like Dolby Pro Logic or THX technology. But, it will be able to manage a complex system.



The professional AirMouse has two physical components—the base unit and the two-button remote mouse. Transferring this technology to home use has taken some time and some compromises. The company, AirMouse Remote Controls, has attempted to do one thing well. As Liz Rober, VP Finance and New Business Development, said “We wanted to keep it simple, simple, simple.” A compromise was made with the TV remote—it went from two to eight buttons so consumers could control instantly functions such as volume and mute.

They want AirMouse to become a standard for Home Theater like Dolby is for sound—someday every Home Theater and every TV set will have AirMouse. They want to be the standard. And they now have their start. In November they announced a partnership with Samsung, of Korea, to begin manufacturing AirMouse TV sets. They will ship this winter. The incremental cost of the silicon chip and additions to the remotes will be less than \$50. They are in the process of talking with other manufacturers about integrating AirMouse into their televisions. They are also working with other companies such as AT&T to integrate AirMouse into what is known as set top boxes, which involve the use of cable and/or telephone lines.

There are two aspects to current AirMouse technology—local control and services. Local control involves managing the system, the hardware; but, it can also manage outside subscriber services, such as those described above—like SuperGuide or TV Guide On Screen. These services could come into the home via satellite, cable, over-the-air, fiber optic or telephone lines. They are signals that include pictures as well as menus. Standardization might be desirable here, so the consumer will not have to deal with variety of formats (i.e. make the menus conform to a standard shell, like PC software does today with Windows.)

This new AirMouse will be able to handle all current products and potentially some not available yet. As most people buy new TVs every three years, according to studies cited by Liz Rober, they will be able to keep pace with an innovative marketplace. At this time, they are concentrating on new equipment, but there is no reason they could not develop a product to retro-fit older, existing systems—like mine.

The world is changing, getting more complicated, with more information available to us every day. If we don't find ways, personal ways, to manage this, it will drown us. But the products discussed here, and more on their way, are all contributing to easier management of vast amounts of choice. It is an exciting time to watch all this happen and as we do, the prices will go down and a system we are comfortable with will be available.

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