

Title:
Control Systems

Assignment:

White Paper for the reader to learn about the basics of control for complex home theater systems and introduce Crestron as a brand and a control solution that makes the complex - simple.

Context:

Content was on the website of an audio/video custom installation & design firm. Article was written as an introduction to many desirable options for the residential customer and introduce upscale brands while setting the stage for sales development by in-house sales consultants.

There was a need to diminish the perceptions of many buyers - that remote control systems should be low in cost. The white paper really doesn't try to sell Crestron as a brand, it elevates the need for a quality upscale control solution.

Control

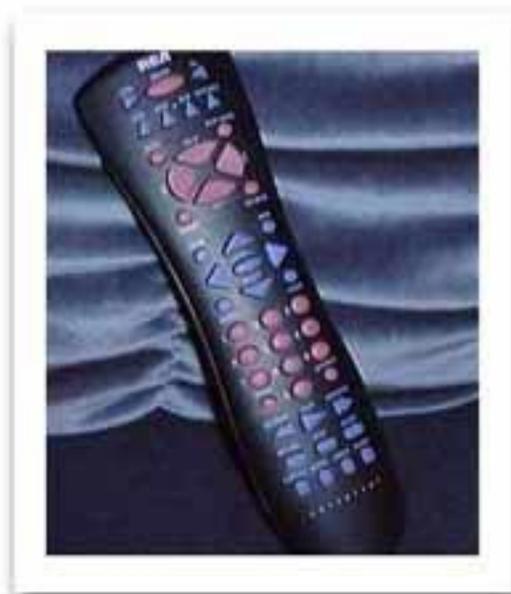
Control is the most overlooked component in the majority of home theater systems. Unfortunately control still receives back-seat treatment from the magazines and consumers. It's an understandable mind-set. Remote control systems aren't glamorous - but they are essential.

When it's done properly, control is simple, intuitive and as easy to use as an automatic transmission in your car.

When it's done poorly, it's frustrating, maddening and the single biggest source for problems in home theater systems. Control solutions won't receive the same press as a new 200 watt per channel amplifier, or the latest flatscreen technology. That's unfortunate, as control is the most critical component in achieving the most important issue... long-term customer satisfaction.

Think about that. What's really important is not the killer amp, but perhaps, the killer app!

Part of the problem is the mindset that has carried over from the nineties. If we have a remote control, it will run the equipment. But it's not that simple anymore. We have five resolution settings with seven aspect ratio's, nine sources, dozens of inputs, twenty three surround modes, and hundreds of TV channels. The list gets longer and longer every day.



What people want is an inexpensive remote: confusing, complicated and unreliable. What more could you want?



Crestron CT-1000

What people need is a system integrator, and an intuitive touch pad. It's easy to use, simple, and reliable.

What were you looking for?

Our needs have changed. What people want is an inexpensive remote control. What they need is a system integrator, which is often expensive. Customers will be the first to say; "I don't need that level of sophistication in control". What they are really saying is, "I don't want to spend that amount of money on control."

But while they are trying to save money, or allocate more money to more glamorous products, they discover that they can't operate the system, and in the long term are frustrated with the entire installation.

Let's discuss why some remote controls are ineffective. Inexpensive remote controls are infrared. Customers expect infrared to work all the time, but in reality it doesn't, and here's why. Infrared is a beam of light. Technically it is called infrared, because it is below the red spectrum. Although infrared can't be seen - it's essential that the invisible beam of light is beamed accurately and transmitted properly - each and every time.

MISSED AGAIN!

The stumbling block with infrared controls is that you have to realize that you're sending a beam of light with a "string" of commands, and the infrared receiver has to see the entire "string" of commands. When you press a button on an infrared control remote, it's essential the remote control buttons were pressed in the correct sequence and the beam is on target - so you better be a good shot!

If the receiver “sees” only part of the string, then you’ve got a problem. Only some of the components have been activated, and you have some components set to the wrong inputs. The result: “I’ve got picture, but no sound”. But it gets worse. With infrared remote controls, the system doesn’t know if a component is on or off. If you turn the system off, those components that were previously “off” are now turned “on”. Your entire system is now out of sequence, and it can get very confusing - very quickly.



Crestron TPS-6000

Larger screen and sophisticated programming makes even the most complex system - simple.

Its an automatic!

One of the great inventions of this century could be the automatic transmission. Whether you’re looking for a parking space or driving at highway speeds, the transmission determines engine speed and automatically selects the correct gear. Just put it in Drive and go. It’s an automatic!

Quality remote controls are the same. It knows if the component is on, off, and determines what mode to set it to. If you want to watch a DVD movie, it selects the correct input, resolution, and aspect ratio. This intelligence in sophisticated remote solutions is what sets them apart from their less intelligent and more troublesome infrared rivals.

We’re living in the twenty-first century. The infrared remote controls of the nineties are simply inadequate and a relic from a clumsier past. Remote control should be intuitive, simple and reliable. Just push play and go, it’s an automatic!