The RCA SystemLink 3 is a universal remote control which can be programmed to control a TV, VCR, and a Cable Box. Most buttons on this remote would be very familiar to anyone who has used a remote control before. The main problem with the interface on this remote is its code search capability which is designed to save the consumer time by automatically determining the code for your devices. I encountered a usability breakdown after the batteries died and the remote lost the code corresponding to my television set. I no longer had a copy of the manual describing the process of programming the remote but I figured that I shouldn’t need the manual to use the CODE SEARCH capability. After all, the whole purpose of this CODE SEARCH function was to save the consumer the time it would take to look up the right code from the manual right?

Description of Usability Breakdown
- Turned T.V. on.
- Pressed TV button.
- Red LED lit up indicating I had set the focus to that device.
- Pressed CODE SEARCH button.
- LED did not light up, no feedback after input.
- Waited then pressed Channel Up/Down, On/Off and other buttons with no response from the TV.
- Tried the same process but with different combinations such as CODE

Cause of Usability Breakdown

The main factors which contributed to the usability breakdown were a lack of feedback, and poor visibility which led to a conceptual model which was not the same as the manufacturers. First let me describe the intended use of the CODE SEARCH button:
- Turn the device off.
- Press and hold CODE SEARCH.
- Press and release the TV(or VCR, or CABLE) button
- Release CODE SEARCH button.
- Press OFF/ON repeatedly until device turns on.

Apparently the CODE SEARCH button acts more as a code browser than a code searcher. By labeling the button CODE SEARCH they imply to the user that it is an automatic process. Instead of automatically searching all codes at the press of a button the remote demands that the user press and hold one button while pressing another to select the desired device. This is unique to the code search button – there are no other buttons on a remote control which require the user to hold one button and press another at the same time. This is a constraint which is not logical for a casual user of a remote control.

Another contributer to the usability breakdown I experienced was a lack of feedback. When pressing all other buttons on the remote the LED lights up. This does not happen when pressing the CODE SEARCH button. This can lead to the user questioning whether this button is being used correctly or even if it works at all.

The functionality of the CODE SEARCH button does not take away the need for the user to have a copy of the manual containing all the codes. With the CODE SEARCH button the manufacturer did eliminate the need to have a copy of the manual for looking up the correct code. They did however create the need for the manual in order to find out how to use the CODE SEARCH function.