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Pioneer 4400 Laserdisc Player & Power Macintosh 8500 (5/96)

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Security: Everyone

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TOPIC -----

My Power Macintosh 8500 computer crashes when using a videodisc controller HyperCard stack, Macromedia Authorware, or Director-based application . This software does not crash Macintosh computers other than the 8500.

Has something changed in PCI-based computers with system software or the serial controller that would cause a HyperCard XCMD, which has worked with 680x0- and PowerPC NuBus-based computers, to crash the 8500?

System Information

Power Macintosh 8500
System 7.5.2
Open Transport 1.0.8
SerialDMA patch installed
Serial Port Arbitrator not present

Here are the details

This computer's hard disk has been formatted using Apple formatting utilities, and I've installed new system software. No other third-party software is present on the hard disk except for the HyperCard stack.

When stack is launched and "initialize laserdisc" response is 'yes', the system crashes.

I have analyzed the code, and the following section is the part that calls the resource (in the stack resource fork) called "controlVideo" from HyperCard v2.3. Once the call is executed, the system crashes. This spot is marked with "--->> ", and I believe this is where the crash occurs. Do you concur?

Begin_Table

Start of HyperCard Script below line

```
-----  
on initializeThePlayer  
  global diskIsInitialized  
  
  show background button "Initializing--Please Wait"  
  
  put line 1 to 8 of the script of this stack into PLAYER_LIST  
  sort items of PLAYER_LIST  
  put ShowList(PLAYER_LIST,return,"Please Select Correct Model  
Player.",false,"Select,No Disc,Go Home")into RESP  
  if line 1 of RESP is "Select" then  
    put item 1 of line 2 of RESP into PLAYER_TYPE  
    if PLAYER_TYPE is "Pioneer 8000" then put "Pioneer 4200" into PLAYER_TYPE  
    setvideoplayer PLAYER_TYPE  
--->>  controlVideo init  
  put videoStatus() into areYouThere  
  if areYouThere = "noAnswer" then  
    answer "The Player Must be Connected and Turned On. Please check."  
    put false into diskIsInitialized  
-----
```

End of HyperCard Script above line

End_Table

Can you please tell me what is wrong.

DISCUSSION -----

Apple has discovered an issue with the way the serial laserdisc driver XCMDs access Open Transport 1.0.8 in System Software 7.5.2 with SerialDMA 2.0.2.

Fortunately, System 7.5 Update 2.0 fixes this crashing problem. You may have to rewrite the XCMD to talk to Open Transport 1.1 correctly. Voyager Corporation has an XCMD that is reported to work with a Power Macintosh 8500.

Check the Player

In troubleshooting this problem further, we discovered that a Pioneer 4400 player put out 7.5 volts on the RXD line to the Power Macintosh 8500 instead of the 5 volts as it should. We inserted a 1K ohm resistor in the RXD line of the Pioneer CC-04 cable and that fixed this issue.

We called Pioneer and we were informed Pioneer was aware that certain Pioneer 4400 players put out too much voltage. This was fixed in a revision to the player after 1994. The player Pioneer player we investigated was manufactured in August of 1992, its serial number starting with MH390.

We then tested a Power Macintosh 8500 with System 7.5 Update 2.0 installed, used HyperCard 2.3.5 with Voyager's Videodisc Toolkit version 2.3, and everything worked fine.

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