



#100: Compatibility with Large-Screen Displays

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A number of third-party developers have announced large-screen display peripherals for Macintosh. One of them, Radius Inc., has issued a set of guidelines for developers who wish to remain compatible with their Radius FPD; unfortunately, one of their recommendations can cause system crashes. This note suggests a more correct approach.

On the first page of the appendix to their guidelines, “How to be FPD Aware,” Radius recommends the following:

“First, to detect the presence of a Radius FPD, you should check address $\$C00008$...”

Unfortunately, this assumes that you’re running on a Macintosh or Macintosh Plus; this test will not work on Macintosh XL, nor on a Macintosh II. Since these displays weren’t designed to work with systems other than Macintosh and Macintosh Plus, you should make sure you’re running on one of these systems before addressing I/O locations (such as those for an add-on display).

Before testing for the presence of any large-screen display, you should first check the machine ID; it’s the byte located at $(ROMBASE) + 8$ (that is, take the long integer at the low-memory location $ROMBASE [\$2AE]$, and add 8 to get the address of the machine ID byte. On a Macintosh or Macintosh Plus, this address will work out to be $\$400008$; however, use the low-memory location, to be compatible with future systems that may have the ROM at a different address!).

The machine ID byte will be $\$00$ for all current Macintosh systems. If the value isn’t $\$00$, you can assume that no large-screen display is present, but don’t forget to follow Technical Note #2’s guidelines for screen size independence!

Note: If you are a developer of an add-on large-screen display, we’d be happy to review your guidelines for developers in advance of distribution; please send them to us at the address for comments in Technical Note #0. Future versions of this note may recommend general guidelines for dealing with add-on large-screen displays.

Further Reference:

- Technical Note #2—Macintosh Compatibility Guidelines