

New Technical Notes

Macintosh

®

Developer Support

OV 7 - Large-Screen Display Compatibility Overview

Revised by:

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Written by: Bryan Stearns

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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 OV 3 - Compatibility Guidelines’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. Future versions of this note may recommend general guidelines for dealing with add-on large-screen displays.

Further Reference:

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- Technical Note OV 3 - Compatibility Guidelines