Apple SuperDrive: User Guide (Part 2 of 3)

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Apple SuperDrive: User Guide (Part 2 of 3)

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TOPIC ----------

This article, a continuation of "Apple SuperDrive: User Guide (Part 1 of 3)", contains suggestions for best use of the Apple SuperDrive (formerly Apple FDHD).

DISCUSSION ----------

(The Apple SuperDrive is a disk drive that can read and write in the standard Macintosh 400K and 800K formats, as well as the newer 1.4MB format. It also allows reading and writing 800K Apple II ProDOS, 720K MS-DOS, and 1.44MB MS-DOS formats.)

If you compare a 3.5-inch single- or double-sided disk to the 3.5-inch high-density disk, you will notice only small differences. There may be a difference in the disk labeling (whether it is silk-screened or ink-stamped), or the plastic jacket coloring, but the only two ways to spot the difference with certainty is that the high-density media have a "bonus hole" at the top of the disk and the letters "HD" on the front of the disk. The bonus hole is on the same end of the disk as the Write Enable/Write Protect tab, but on the opposite side. The letters "HD" are found around the shutter at the front face of the disk.

When you insert a 3.5-inch high-density disk into Macintosh computers without an Apple SuperDrive, which do not have the necessary mechanisms to detect the bonus hole, the computers presume that it is a "normal" single- or double-sided disk and try to operate with it as expected.

When the high-density disk is put into the SuperDrive-equipped Macintoshes, the SuperDrive senses the bonus hole and locks itself into the mode that allows the Macintosh to treat it as a 1.4MB disk. This is a hardware

function of the drive that cannot be overridden.

- If you insert and format a brand new double-sided disk into a SuperDrive-equipped Macintosh, the disk is formatted at a minimum of 400K or a maximum of 800K. The 400K format is interchangeable with all Macintoshes, and the 800K is interchangeable with all Macintoshes above the Macintosh 512K. So, going from the SuperDrive to the other Macintoshes, everything works just fine as long as you do not use the high-density disks.

- If you take a Macintosh Plus, insert a double-sided disk and format it, the best that you can hope for is 800K of storage on it. The Macintosh Plus then operates with the disk as expected (you insert the disk, the icon appears on the desktop. You can then open it, access applications and documents, and so on). If you take that same double-sided disk to the SuperDrive-equipped Macintosh and insert it into the SuperDrive, the SuperDrive does not sense the bonus hole, and therefore presumes that it is a 400K- or 800K-formatted disk. It reads the 400K/800K-formatted data off of the disk and all operates as expected -- just as on the Macintosh Plus.

  Now, if you take that same Macintosh Plus, insert and format a high-density disk, you get a maximum of an 800K-formatted disk. Take this high-density disk to the SuperDrive-equipped Macintosh and insert it into the SuperDrive. The SuperDrive now senses the bonus hole, and therefore presumes that it is a 1.4MB-formatted disk. It tries to read the information on the disk in the 1.4MB mode and sees nothing that it recognizes as 1.4MB type of information. It cannot read the 400K/800K format that the Macintosh Plus put on it in the 1.4MB mode, and therefore gives the user the dialog box stating that it is not a readable disk.

  The user sees a disk that works fine in another Macintosh, but does not work in the SuperDrive-equipped Macintosh, and assumes that it is a SuperDrive failure problem. Rather, it is because the SuperDrive has some intelligence, and processes the disk types differently.

A fix for this problem, as well as other information, can be found in the conclusion of this article, "Apple SuperDrive: User Guide (Part 3 of 3)"

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