

Initializing Hard Drive: Finder & Apple HD SC Setup (2/95)

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TOPIC -----

When I turn on my computer I get a blinking question mark. I insert the Disk Tools diskette and the computer starts up normally. Just before the hard drive mounts on the desktop a message appears saying the disk, meaning the hard drive, is unreadable and asks if I want to initialize it so I click the Cancel button.

The Disk Tools icon appears, but there's no hard drive icon visible. I run Disk First Aid, which reports a problem on the hard drive that can't be fixed. I then run Apple HD SC Setup, which reports it can't re-initialize the hard drive. I restart from Disk Tools again, and this time at the Disk is unreadable, do you want to initialize it? message, I go ahead and initialize it. Miraculously, the hard drive then mounts.

Why does the hard drive succeed in initializing from the Finder even though Apple HD SC Setup, which is the more specialized tool, fails?

DISCUSSION -----

Although both the Finder and Apple HD SC Setup say they are initializing the drive, they both use different methods. The Finder initialization just creates a new, empty directory structure on hard drives. The Finder only does a complete format on floppies. HD SC Setup does a low-level format of the drive, creates new partitions, installs the drivers for the drive, and creates the empty directory structure.

NOTE: When you initialize a hard drive, all data will be lost.

The Finder can initialize any drive, whether it is an Apple drive or not, but only if it is mounted on the desktop or the Finder is trying to mount the drive. When the Finder displays the "This disk is unreadable" message, it is because the Finder is trying to mount the drive but the directory structure has become corrupted. If you click the initialize button, the Finder replaces the corrupt directory with a new one.

HD SC Setup only works on Apple drives. It does a low-level format with verification. If either the format, or verification process fails, HD SC Setup says it can't format the drive. Failure could be caused by either mechanical problems or media problems with the drive.

Some third party formatting utilities, like SilverLining or Hard Disk Toolkit, can map out bad blocks on the disk so the disk can be formatted. One of these utilities might be able to reformat the drive.

Since the drive failed to mount and could be initialized by the Finder, that would suggest that the partition map and driver on the drive are not damaged. However, the fact that HD SC Setup could not initialize the drive suggests that the drive may be failing and should be replaced. We suggest you make frequent backups of the drive just in case it is failing.

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