

Tech Info Library

Hard Drive: 230MB Drive Thermal Recalibration (10/93)

Revised: 10/13/93 Security: Everyone

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TOPIC -----

Why does my 230MB drive access itself periodically when I'm not doing anything?

DISCUSSION -----

The head positioning servo in the 230 MB drive maintains the heads over the desired track during the read/write operations. Fine tuning the position of the heads to compensate for changes in the thermal environment of the drive is a "designed in feature" of the 230 MB disk assembly, and is called "thermal recalibration"

When thermal conditions in the drive change, the servo system compensates for thermally induced dimensional changes, and keeps the heads properly positioned. At power on and at other predetermined times, and whenever an internal thermistor senses temperature changes greater than a specified amount, servo position information pre-written on the inner (ID) and outer (OD) tracks of the drive is sampled and used to provide correction to the location of the read/write heads relative to the optical encoder; this ensures that they are properly positioned over the magnetic recording surface during data transfer operations. This capability enhances the drives ability to accurately read and write data over it's specified operating environment.

This information pertains to the Apple 230MB drive as well as the 3rd Party drives using the Quantum ProDrive LPS 230 mechanism.

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