

# Spinning Down Hard Disks

## Background

While there are numerous utilities to dim screens, there are few programs which spin down idle disk drives (aside from the driver-level capabilities of some disk formatters). The advantage of spinning down a disk is that it reduces the drive's power requirements and noise levels when you leave your Mac unused for extended periods of time.

Since a disk drive is a physical mechanism, you don't want to constantly spin it down and back up because this may actually increase wear on the drive. However, spinning a drive up and down with the same frequency with which most people shut down and restart their Macs won't do any harm.

## etup

To configure a disk to spin down, turn on the "Drive Sleep" check box in the Sleeper control panel, then check the boxes corresponding to the SCSI address numbers of your hard disk(s). If you do not know which ID corresponds to which disk on your system, a tool such as the freeware SCSI Probe control panel will report the disk manufacturer and SCSI ID of each disk. Note that Sleeper will only enable a the checkbox if there is a SCSI hard disk with that ID.

Enter the amount of time to wait after the last read or write operation before spinning down. 30 to 60 minutes is generally a good starting point.

Depending on your usage patterns, using the "Only if screen is dimmed" option may allow you to set a shorter sleep delay time without the disk going to sleep while you are working. With this option on, Sleeper will only spin down the disk after the sleep delay has expired and the screen has been dimmed (by Sleeper, After Dark, or any other screen saver that supports the 'SAVR' gestalt selector). So, if you're working with the mouse or keyboard, your screen dimmer will not activate, and therefore neither will Sleeper's disk sleep function.

For disk sleeping, "inactivity" is defined as the absence of read or write activity to any of the disks which Sleeper is monitoring. Note that if you have a screen saver like After Dark or another utility that periodically reads information from your hard disk, it may

prevent your disk from spinning down or may cause it to repeatedly go to sleep and wake up, depending on the delays you have set. See the "Monitoring Sleep/Wake Cycles" section for more details.

## SCSI Details

Some old SCSI disks do not respond to the SCSI Stop command which Sleeper uses to idle the disk, so there is a possibility that Sleeper won't work with your disk drive. The only way to find out is to try it. Sleeper writes any information in the disk cache to disk before it spins down the drive, so in the unlikely event that your drive does go to sleep and then refuses to awaken, turning off power to the machine should do no great harm.

Since the SCSI start and stop commands that Sleeper uses to spin down drives are not uniformly implemented across CD-ROM and tape devices, Sleeper will not let you configure one of those devices in the control panel. The checkbox will remain disabled.

Sleeper is SCSI Manager 4.3 savvy (if you're a Quadra or Power Mac user, you care about this) and does not use the SCSI Reset command to wake drives back up, since this can do strange things to scanners and tape drives. Sleeper will not spin down the internal drives of the PowerBook 150 and Quadra / Performa / LC 630, since they use IDE disks rather than SCSI disks.

## Monitoring Sleep/Wake Cycles

Sleeper keeps an internal log of its activity since the last restart, which can help you verify that it has or has not been working. Holding down the option key while clicking on the Sleeper icon in the control panel will bring up the activity log. If you feel that Sleeper is unnecessarily or inexplicably waking the disks, check the log to see what it's doing.