# Disk Sleep

## Background

While there are numerous utilities to dim screens, there are few programs that spin down disk drives when they are not being used. 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.

Note that Sleeper actually tracks disk activity, not keyboard or mouse usage. It will put a disk to sleep when no data has been read or written for a prescribed length of time, and will wake up a sleeping drive whenever any software requests data from the disk.

#### etup

To turn on Sleeper's disk sleep feature, click on the Disk Sleep tab in the Sleeper control panel, and turn on the Spin down disks when inactive checkbox. Use the Delay slider to indicate how long a disk must remain inactive before it spins down. We recommend a delay of 30 to 60 minutes to avoid having your disk spin up and down excessively. If you want to set a delay higher or lower than the slider allows, option-click on the slider control.

Below the Delay slider is a pop-up menu and 7 checkboxes. The pop-up menu shows the different disk drive buses on your machine. For most older Macs, there will be just one menu selection, SCSI Bus, since those machines only contain one SCSI disk controller. On newer Macs, this menu may contain additional SCSI buses, or an IDE Bus.

When you select a bus with the pop-up menu, Sleeper enables the checkboxes for any drives it finds on that bus. There is a checkbox for each possible drive, with its SCSI or IDE address number shown below it. You should turn on the checkboxes for any drives that you want Sleeper to put to sleep.

Generally, the internal drive on a Macintosh is at address zero, and external drives are at the address indicated by the switch on the back of each drive. When you put the mouse over one of the checkboxes, Sleeper will display the names of the disks that are on that drive. For SCSI disks, holding down the option key and placing the mouse over a checkbox will display the manufacturer and model number of the drive.

Spin down only when screen is dimmed: Depending on your usage patterns, the "Spin down only when 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 checkbox turned 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 saver will not activate, and therefore neither will Sleeper's disk sleep function.

Spin down all disks together and Wake up all disks together: These checkboxes allow you to tailor the way Sleeper works when you have multiple drives on your Macintosh. Usually, Sleeper does not put any disks to sleep until all of them have been idle for the delay time you have specified. Turning off the "Spin down all disks together" checkbox tells Sleeper to put each drive to sleep after it has been idle, ignoring what is happening to the other disks. This can be useful if you have a "spare" disk that is only rarely used.

Similarly, when the "Wake up all disks together" checkbox is on, all drives will spin up when any one of them is needed. Because Sleeper can wake all disks up at once, this takes much less time than waiting for them to spin up one after the other.

Wake up disks while powering up monitor: You can use this checkbox when Energy Star monitor power-off is enabled. It tells Sleeper to wake up the drives while you are waiting for your monitor to power back up from Energy Star sleep, eliminating the need to wait a second time for the disks to awaken when you start working.

Spin back down after wake up if Mac is idle: If this option is selected and something wakes a disk without causing mouse or keyboard activity, Sleeper will spin the disk down again 1-2 minutes after disk access stops. This is useful if fax, screen saver, automated email, or other software wakes the disk while you are away from your Mac, and the drive doesn't need to stay awake after the activity occurs.

### **Additional Notes**

• For disk sleep, "inactivity" is defined as the absence of read or write activity to any of the disks which Sleeper is monitoring, and has nothing to do with mouse or keyboard activity. 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 "Monitoring Sleep/Wake Cycles" below for more details.

- Sleeper will put your drives to sleep when you shut down or drag the disks to the trash. You can disable this by command-option clicking on the "Help" icon in the Sleeper control panel.
- A few 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. The behavior of Syquest disks is also inconsistent, so we do not recommend that you use Sleeper with Syquest drives. Some models may not wake back up after Sleeper spins them down.
- IDE disks must support the sleep mode commands of the ATA Manager in order for Sleeper to control them. Apple's Drive Setup formatter that ships with all IDE-equipped Macintoshes supports this.

# 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 "Help" icon in the Sleeper 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.