

LaCie Silverlining Pro[®]
User's Guide
for Windows 98, 2000 and Mac OS

Silverlining Pro

Silverlining Pro

user's manual

includes RAID 0 striping

LACIE

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Introduction

Silverlining Pro software is a program that can be used to test, format, initialize and partition your LaCie drive. Silverlining Pro recognizes USB, FireWire, SCSI and IDE/ATAPI drives.

Software Installation

The CD-ROM provided with your LaCie drive contains both USB and FireWire drivers and Silverlining software for both Windows and Mac environments.

Windows 98 & 2000 – Silverlining 98

LaCie drives were developed for Windows 98 SE and Windows 2000. If your machine operates under a previous version of Windows, you will have to install a more recent version before continuing. An update improving performance for Windows 98 SE is available through the built-in Windows update selection on the Start-Settings menu.

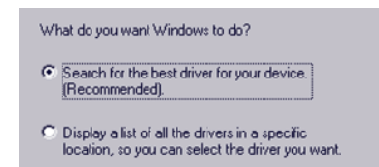
The first time you connect your drive to the computer, Windows will install and mount it automatically as a new peripheral, even if you have previously installed it on another port on the same bus.

USB Driver:

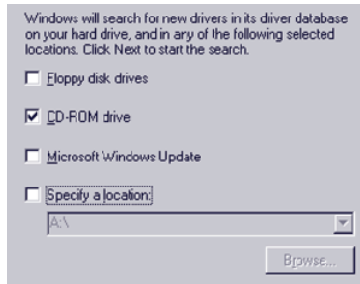
When connecting to a USB port the first time, you will be asked to confirm the installation of the USB driver.



Click on "Next". The following choice is offered:



Click on "Search". The following choice is offered:



Now insert the CD provided with your LaCie drive in your CD-ROM drive, and click on "CD-ROM drive". The following message appears:

"Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue."

Follow the instructions that appear and let Windows install the USB driver of your drive. A message will appear indicating that the operation is completed.

When installation is complete, a new icon corresponding to the peripheral connected to your computer's USB port (icon "E:" in the example below) appears within "My Computer".



Information regarding the newly installed peripheral will appear in "System Properties". To check it:

- 1) Click on "My Computer"
- 2) Click on the right-hand button of your mouse.
- 3) Select "Properties" then "Device Manager"
- 4) Double-click on the submenu "Disk drives", "USB bus controller", and "Storage device". Technical information on your drive will be displayed, confirming that it has been correctly installed.

FireWire/IEEE 1394 Driver:

When connecting to a FireWire/IEEE 1394 port the first time, the computer detects the drive and installs it like a new peripheral. Windows will automatically install the IEEE 1394 drivers of your LaCie drive.

When installation is complete, a new icon corresponding to the peripheral connected to your computer's IEEE 1394 port (icon "E:" in the example below) appears within "My Computer".



Information regarding the newly installed peripheral will appear in "System Properties". To check it:

- 1) Click on "My Computer"
- 2) Click on the right button of your mouse.
- 3) Select "Properties" then "Device Manager"
- 4) Double-click on the submenu "Disk drives", "1394 bus controller", and "Storage device". Technical information on your drive will be displayed, confirming that it has been correctly installed.

Silverlining 98 installation

Once the drive is connected to your computer and the drivers are installed, you can proceed to the installation of Silverlining 98 software as described below:

- 1) Insert the CD provided with your LaCie drive in the CD-ROM drive and start the SETUP.EXE program within the Disk1 folder.
- 2) After a few seconds, the Silverlining Setup screen will appear. Click "OK".
- 3) To begin installation using the default directory, click on the icon showing a computer. The software will install files in the "C:\Program Files\Silverlining98" directory and automatically update the necessary system files. If you prefer to install to a different directory, click on "Change Directory".
- 4) Follow the on-screen messages until installation is complete.

Using Silverlining 98:

Once installation has been completed, start Silverlining 98 from the task bar, using the command: "Start/Program/Silverlining 98". The following message will appear. Use this window to select the language (French or English) in which Silverlining 98 messages will be displayed.



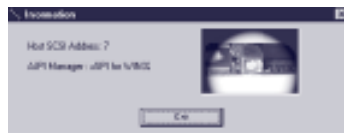
Click on the arrow to select the required language. Click on the LaCie logo to continue. The next screen shows the number of ASPI controllers installed in your system. In our example, a LaCie FireWire peripheral is installed:



Select the FireWire/1394 icon and click on the right mouse button. The following menu appears on screen:



Click on "Information". Information concerning the ASPI SCSI address and the name of the installed driver appears:



Close this window and double-click on the controller icons to show the peripherals connected to this controller. In our example, one 4GB ST34323A hard disk is attached to the LaCie 1394 controller.



Double-click on the icon of the disk connected to the Silver 1394 controller to display the number and size of each partition created on the disk. The space available on the disk is displayed below the partitions.



You may notice that "FAT 32" appears above the P1 volume icon. This means that the disk has been prepared with a format supporting large-sized partitions, contrary to FAT 16 used by Windows 95 which cannot handle more than 2GB per partition. Please note that only FAT 32 compliant computers (Windows 98 and Windows 2000) can read the information on this disk.

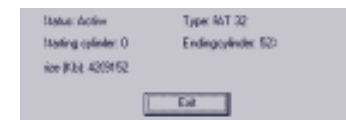
Click the "ID: 0 drive type" icon with the right mouse button.

When the menu appears, click on "Information". Information about SCSI IDs, device type, vendor and revision of the installed peripheral will appear:



When you click on "Verify Unit" from the menu, a screen appears showing operating test results. No error message should appear. When you select "Eject/Start/Stop" from the menu, "Eject" enables ejection of media for removable drives. "Start/Stop" allows stop and start-up of SCSI hard disks.

Double-click on the "P1: partitionize" icon (or select it and click on the right mouse button). Select the "Information" menu. The next screen shows the state and size of the partition:



Exit this window and select the "P1: partitionize" icon. Click on your right mouse button. Choose "Partition Creation and Modification" from the menu. Use this option to remove or create partitions. This option is only available for the last partition of a hard disk and for the unused part.

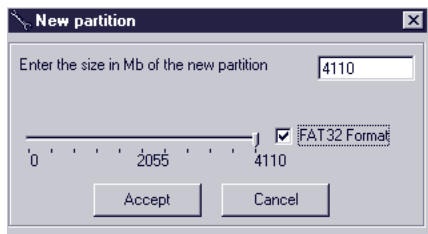
If you choose to delete a partition, the space used by this partition becomes available and the information it contained is immediately lost. The following screen appears:



To create one or several new partitions, highlight "Free Space size", click on the right mouse button and choose "Partition Creation and Modification/Create".



As you can see, the maximum size available in FAT 16 is 2GB. If you click the FAT 32 format box, the maximum size of your disk (4110 MB in our example) will be permitted.



Move the cursor to adjust the partition size to the required storage capacity:

- Click on the cursor with the left mouse button, and drag the cursor to the required amount (i.e., 1.028GB) or...
- Click once on the cursor with the left mouse button and move it using the "arrow" keys on your keyboard.

Click on "Accept" to begin formatting your first partition. Once your drive has been configured, click "Exit". The following screen will appear:



Click "OK" and the computer will automatically restart and reset the system to account for the new partitions. From that point and at each startup of your computer, the LaCie PocketDrive will be recognized in "plug & play" mode.

Uninstalling Silverlining 98 software:

If the installation has failed or when you need to update Silverlining 98, you will have to uninstall the application. From the Windows 98 task bar enter: "Start/Settings/Add_Remove a program". Delete the lines where the name Silverlining 98 appear, starting with the line highlighted below: Re-install Silverlining as described above.



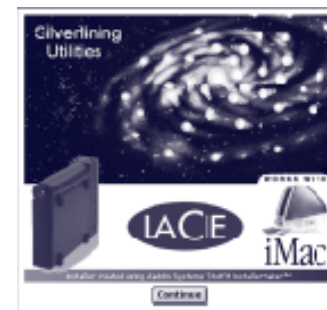
Mac OS – Silverlining Pro

When you connect your LaCie drive to your computer for the first time, the computer will automatically detect the drive.

Drivers and Silverlining Pro Installation

To install the USB and FireWire drivers and Silverlining Pro:

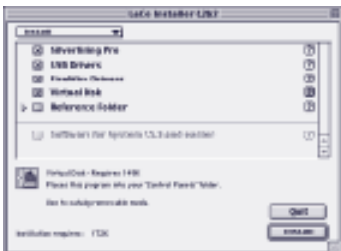
- 1) Insert the CD provided with your LaCie PocketDrive in the CD-ROM drive.
- 2) Double-click the CD icon then double-click on "LaCie installer". The following screen appears:



3) Click "Continue". The following message appears:



4) Click "Agree". The following message appears:



5) Select what you which driver you wish to install (USB or FireWire). If you wish to install Silverlining Pro, select it as well. Click "Install". A message will appear confirming successful installation.

6) Click "Restart" if you want to use your drive immediately. Click "OK" to make other installations.

Note: Be sure to install the latest Apple FireWire drivers, available from Apple at the www.apple.com/firewire website. The LaCie PocketDrive will not operate correctly with the drivers shipped with Mac OS 8.5.1 or 8.6. The driver version must be v2.1 or later.

Silverlining Pro

Silverlining Pro software is a program that can be used test, format, initialize and partition your LaCie drive. It can also be used to mount, unmount and password protect volumes, and create fast, high performance RAID volumes. Silverlining Pro recognizes USB, FireWire, SCSI and IDE/ATAPI drives.

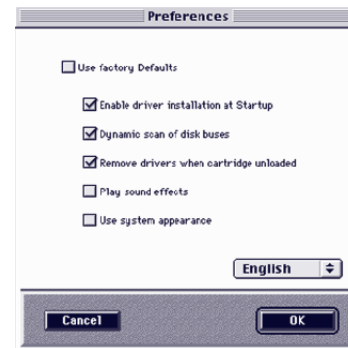
Getting Started

To open Silverlining Pro, choose it from the Control Panels menu in the Apple menu.

Language:

The first time you open Silverlining Pro, it checks the system language in use and automatically switches to this language unless not supported by the control panel. You can change the language shown in Silverlining Pro with the language pop-up menu .

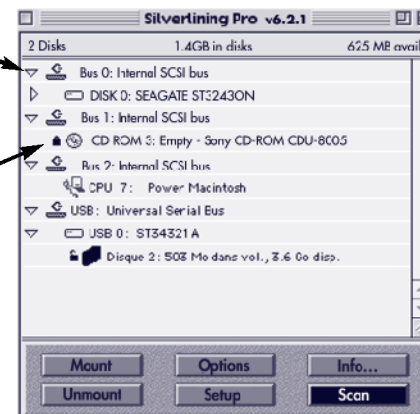
To change the language, go to the file menu and select "preferences". Using the language pop-up menu in the lower right corner, click on the arrows to select the desired language.



Control Panel:

Silverlining Pro is a control panel that has application-style pull down menus. Within the control panel, you will see a list of all available buses, devices, and volumes.

- If you click a **triangle** located at the left of a bus or device name, nested devices or volumes will be displayed.
- The **lock icon** indicates whether or not the volume is locked. Double-click the lock icon to change the lock status. If you hold down the option key and drag a locked volume to the trash, it will remount unlocked.
- When a lock icon is selected, use the **Lock/Unlock** buttons to quickly lock/unlock a volume or volumes. If the volume has a lock password, you will be prompted to enter the password when unlocking.
- The **Options** button is used to install drivers, mount volumes, assign passwords and select volume icons.

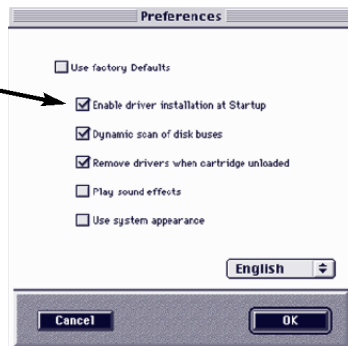


- The **Scan** button rescans the buses and displays all available drives and volumes.
- The **Info** button displays information about the selected drive's firmware, bus, drivers, and partitions.
- The **Setup** button gives you the option of formatting a drive, installing a file system, partitioning or testing a drive.

Preferences:

Silverlining Pro's preferences give you a number of options besides changing languages, they are:

- **Enable driver installation at startup** ... This operation will allow performing operations without loading Silverlining Pro at startup. You may wish to deselect this option for specific tests and when experiencing conflicts with SCSI devices.
- **Dynamic scan of disk buses** ... When this box is selected, Silverlining Pro automatically updates the list of devices found on buses while the control panel is open.
- **Remove drivers when cartridge unloaded** ... This option is useful if you use cartridges initialized with different utilities. You may want to deselect this option if all your cartridges are initialized with Silverlining Pro.
- **Play sound effect**... This will activate sound when a volume is locked or unlocked, when a device is mounted or unmounted, etc.
- **Use system appearance** ... When selected, this option will use Mac OS 8.x profiles. These settings can be modified from the "Appearance Control Panel".



View Menu:

Silverlining Pro's View menu is useful for configurations with multiple volumes or devices. Deselect the display of buses, devices or volumes to simplify the Silverlining Pro window. Selecting "All" will instantly display all information again. The control panel display is managed with the flip-down triangle and the view menu bar. For example, if you wanted to view only the partitions on a single



drive for frequent mounting and unmounting, turn down the arrow next to the device you wish to view and select volume from the view menu.

Mounting and Unmounting:

These buttons allow you to quickly mount and unmount volumes from the desktop. You can also mount or unmount a volume by double-clicking its name in the Silverlining Pro window.

- 1) Open Silverlining Pro.
- 2) Select a volume or drive. You cannot mount or unmount CPUs, tape drives and other devices that do not mount on the desktop.
- 3). Click "Mount" to mount the volume on the desktop. Click "Unmount" to unmount. Unmounted volumes appear dimmed in the Silverlining window.

Updating the Silverlining Driver

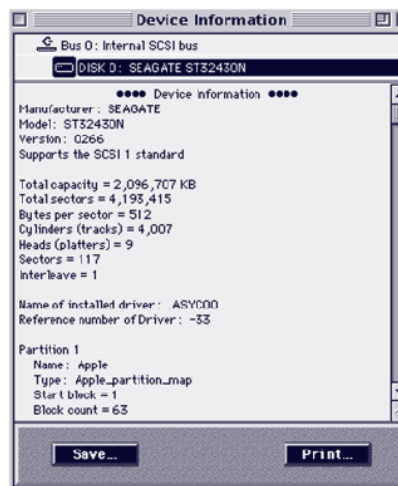
Should your driver become out of date or corrupted, you will want to follow these steps to update it:

- 1) Back up the data on the drive
- 2) Open Silverlining Pro.
- 3) Select the drive you wish to update.
- 4) Click "Setup".
- 5) Select the "Update Driver" box. Do not select any other boxes.
- 6) Click "Update".
- 7) Click "OK" to update the driver.
- 8) Restart your computer to use the new driver.

Drives

Drive Information:

To display information about a drive, select the drive and click the "Info" button. Information listed includes:

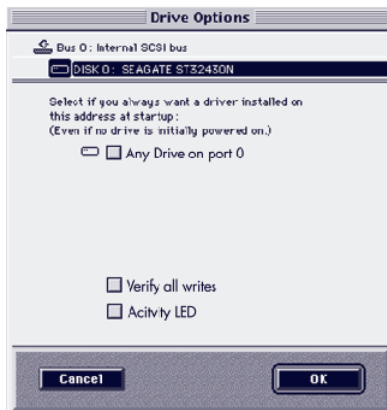


- **Manufacturer and Model**... as reported by the drive's firmware.
- **Version**... number of the drive's firmware.
- **Total Sectors**... the number of 512, 1024, 2048 or 4096-byte blocks available on the drive.
- **Bytes/Sector**... number of bytes in each sector.
- **Cylinders**... the positions that the heads can be placed. On multiple platters, all heads are positioned in the same cylinder.
- **Heads**... total number of read/write heads of the drive

- **Sectors** ... average number of sectors on each track
- **Interleave** ... number of revolutions required to read every sector on a track. Most hard drives use a 1:1 interleave factor.
- **Partition number** ... Silverlining Pro assigns numbers to partitions. The first partition is assigned the number 0, the second 1, and so on.
- **"Invisible" partitions**: A drive normally contains a handful of partitions that are used to store drivers, directory files, and free space. They are called "invisible" because they don't appear on the desktop. Examples are "Apple (partition_map)", "Macintosh_SL (driver)", and "Extra (free)."
- **Partition name** ... name that identifies the volume in Silverlining Pro and on the desktop (for mountable partitions).
- **Partition type** ... identifies the structure and purpose of the partition.
- **First Block**... identifies the address of the first block on the selected partition.
- **Block count** ... total number of blocks on the partition.

Drive Options:

To change drive options, select a drive and click the "Options" button.



- **Verify all writes** ... this option is intended primarily for removable media, especially magneto optical. It can be turned on for any hard drive that appears to be having occasional read/write errors, or data corruption problems.
- **Activity LED** ... this option will activate an indicator in the top left corner of the desktop when the drive is writing or reading.

Formatting a Drive:

Formatting is a time-consuming process and should only be done when absolutely necessary. Most drives come pre-formatted and should not require formatting for the life of the drive. Reformat only when the driver and directory files have been corrupted beyond repair, for formatting destroys the data on ALL volumes of the drive. Be sure to back up the data on all volumes before formatting. The information is erased and cannot be recovered.

Silverlining Pro will format drives that support 512, 1024, 2048, and 4096-byte sectors. When a drive is formatted, parameters known as "mode pages" can be adjusted to modify drive performance and capabilities. For most users there is no need to adjust page modes from the factory defaults. Whenever Silverlining Pro formats a drive, it will ensure that read and write caches are enabled along with automatic error correction. We added this feature because many programs used by advanced users will adjust page modes. However, once a drive has been customized, it can be difficult to determine what was changed. Silverlining Pro resets the drive to our recommended settings.

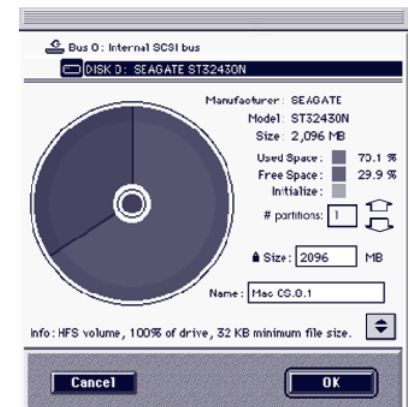
To format a drive:

- 1) Back up the data on all volumes of the drive.
- 2) Restart the computer from a disk or separate drive that contains Silverlining Pro.
- 3) Open Silverlining Pro.
- 4) Click the name of the device you wish to format.
- 5) Click "Setup".
- 6) Click the "Format entire drive" box.
- 7) If you wish to access the drive on a Macintosh, leave the "Create File System" box selected.
- 8) If you would like to format the drive with multiple partitions, click "Custom" and see the "Partitioning" section below. To create a single large HFS+ partition, continue with the next step.
- 9) Click "Format". A final warning will appear, indicating that all information on the selected volume will be destroyed.
- 10) Click "OK" to continue. Silverlining Pro will format the volume.

Partitioning a Drive:

When formatting a drive, use the "Custom" button to specify the number and size of partitions to create. Note that if you resize or add partitions with Silverlining Pro, all existing data on the drive is lost.

- **Drive information** ... displays the drive manufacturer, model and size as specified in the drive's firmware.



- **Partition line** ... drag this line (using your mouse) counter-clockwise to add a partition. Drag a partition divider clockwise into this line to delete it.
- **Partition divider** ... drag a partition divider clockwise or counter-clockwise to change the size of the partition.
- **Partition wedge** ... each wedge represents one partition. The darkened wedge indicates the selected partition. Click on a wedge to select it.
- **Partition info** ... indicates the type of partition (HFS or HFS+), the percentage of disk capacity occupied by the partition, and the allocation or minimum size a single file will occupy on the partition.
- **Name**... type a new name to rename the selected partition.
- **Size**... shows the size of the selected partition in Megabytes.
- **Partition type** ... click on the arrow box above the "OK" button to choose between types of formats (HFS, HFS+, etc.).
- **Number of partitions** ... to change the number of partitions, type a number or click on the arrows. The maximum is 32 partitions.

Striping Drives:

Silverlining Pro supports drive "striping", also known as "RAID 0". RAID (Redundant Array of Independent Disks) is a method of arranging data on multiple drives to achieve high performance for video configurations and multimedia applications that demand it. With a striped volume, two or more drives can act as one large, fast drive with exceptional sustained transfer rates. However, striping offers no data security... if one drive in an array fails, all data is lost.

Unlike some other striping products, Silverlining Pro can create striped volumes from drives of differing sizes, although the best performance will come from drives with similar transfer rates and sizes.

Note: Silverlining 6.2.x only supports RAID 0 striping with SCSI drives. Silverlining 6.3 will add support for FireWire drives. USB drives cannot be striped. ATA drives can only be striped when connected to independent controllers.

To create a striped array in Silverlining Pro:

- 1) Back up all your important files. All data is lost as drives are initialized to create a striped array.
- 2) Hold down the command key while selecting the disks you wish to group together. You can select SCSI, ATA, USB or FireWire drives, but all drives selected must be the same type, i.e. FireWire.

- 3) Click on "Setup". You will be asked to confirm that you want to create an array. Silverlining Pro and regular custom setup options are now available for the array. You can partition, choose HFS+ options, etc.

Testing Drive Hardware:

This is the fundamental test of a drive mechanism. If a drive fails this test, it is defective and should be replaced. We have refined these tests, so they only take a few minutes to run and give a thorough evaluation of the drive. The "Test Drive Hardware" selection is non-destructive, although it is always best to back up your data completely before testing any drive.

The time displayed for testing is an estimate. Once a portion of the test is enabled, we advise you to complete the test rather than interrupt it. A slight variance from the estimated time is not a cause for alarm or any indication of drive health.

Drive hardware tests are divided into four parts:

- 1) Drive Diagnostics Self-Test—time will vary on mechanisms and is preset at the factory. Silverlining Pro will issue the self-test command to the drive and supports SCSI, ATA & ATAPI signals. If upon query the drive does not indicate that it supports self-test, which is very rare, this test will be skipped.
- 2) Drive Cache Test—this test will use 25% of the total time remaining after the Self-Test. Silverlining Pro writes, reads, and compares random data to the drive cache multiple times. Note: a failure in this test may not indicate that the drive cache itself is bad. If there is excessive noise on the bus, poor termination, or poor connections, the test may fail.
- 3) Read Test—this test will use 50% of the total time remaining. It verifies that the drive's read/write heads can access all portions of the drive platters. Any allotted time remaining is used making random reads across the drive surface. Note: this test does not read every sector on the drive platter surface. For this detailed examination, see "Scan Media for Bad Sectors". If the Read Test fails, the Write Test will not run.
- 4) Write Test—this test uses 25% of the time remaining after the Self-Test. Silverlining Pro searches for unused area on the media for testing. It reads and stores the data from the block as a fail safe, writes, reads and compares test data. It then restores the originally read data to that area. The size of the test will vary depending on the amount of free space found in the various locations.

Scan Media for Bad Sectors:

This selection is destructive to data. It leaves the drive platters with a repeating pattern of random data written to each sector. The test sequentially writes, reads and verifies across the drive surface in 100k increments. On large drives, this procedure can take an hour or more. If verify fails, this condition is reported, yet there is no attempt to map out bad sectors. If a bad block is found, this means that the drive itself was unable to map out the bad sector. Use Silverlining Pro to format the entire drive. Then run the scan media test a second time. If the bad section is still apparent, then the drive is defective and should be replaced.

Volumes

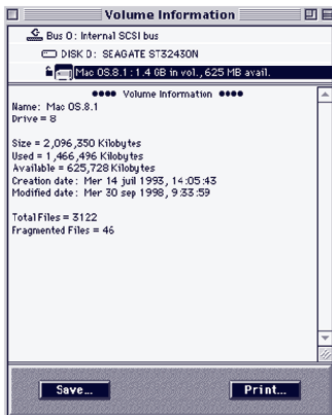
Volume Setup:

To initialize a volume, it must be unlocked.

- 1) Back up the data on the volume you wish to erase.
- 2) Restart from a separate volume that contains Silverlining Pro.
- 3) Open Silverlining Pro.
- 4) Click the name of the volume you wish to initialize.
- 5) Select the desired format: HFS, HFS+, DOS.
- 6) Click "Erase". A final warning will appear, indicating that all information on the selected volume will be destroyed.

Volume Information:

To display information about a volume, select the volume and click the "Info" button. The information listed includes:



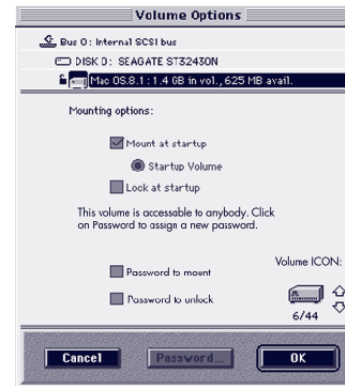
- **Name...** name of the volume.
- **Drive...** number assigned to the drive by Silverlining Pro.
- **Size...** total number of kilobytes of storage space on the volume.
- **Used...** number of kilobytes of storage space occupied on the volume.
- **Available...** number of kilobytes of storage available on the volume.
- **Allocation Block Size...** smallest amount of storage space occupied by a single file on the volume. This

is determined when a volume is initialized or resized with Silverlining.

- **Creation and modification dates** ... indicates when volume was created and last modified.
- **Total files** ... total number of files on the volume.

Volume Options:

To change volume options, select a volume and click "Options".



- **Mount at star tup...** select to have the volume mounted at startup. This option is available only if the device has the Silverlining driver installed.
- **Startup volume** ... select this option to make this volume the startup volume. This option is available only when the volume contains a valid Systems Folder.
- **Lock at star tup...** when selected, the volume will be automatically locked at startup, preventing the data from being modified.
- **Password to mount...** prevents users from mounting the volume without the correct password. Users must enter the password to mount the volume within Silverlining. (You must create password first, see next page.)
- **Password to lock...** prevents users from unlocking the volume without the correct password. Users must enter the password to unlock the volume within Silverlining or at the Finder. (You must create password first, see next page.)

Volume Security & Passwords:

Silverlining Pro offers two levels of volume security—mount passwords and lock passwords. For example, to restrict access of a particular volume to a single user, assign a Mounting password. Only the user with the password will be able to view or modify the volume. To make the volume available for read-only, assign a Lock password. All users will be able to view the volume, but they will not be able to make changes without a password.

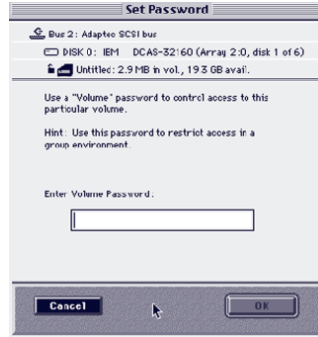
Memorize your password! If you forget the password and the Master Password, you must initialize the entire drive and all the stored data will be erased.

Note that any Silverlining Pro user can still reformat the drive without a password, and the data will be lost if the drive is formatted unless a backup of the information has been done.

To set a password:

- 1) Open Silverlining Pro.
- 2) Select a volume and click the "Options" button.
- 3) Click the "Password" button to assign a password. The password you assign will apply to both mounting and unlocking this volume.

- 4) Type in the password and click "OK". Passwords are case-sensitive: ROME and RoMe are different passwords. Silverlining Pro ignores the Option, Control and Command keys when typing passwords and does not allow the following keys from the 10-key pad to be used in volume passwords: = / + - . *
- 5) Retype the password and click "OK".
- 6) To prevent users from mounting the volume without the correct password, select the "Password to mount" box.
- 7) To prevent users from unlocking (writing to, or deleting files from) the volume without the correct password, select the "Password to unlock" box.
- 8) Click "OK". Passwords will be active the next time you start your Macintosh.



To remove a password, click on the "Password" button again, enter the current password and click the "Remove password" box. Confirm with "OK".

Master Passwords:

Silverlining Pro offers two types of passwords –individual volume passwords and a single master password– for all volumes on a drive. Once a Master Password is set, it can be used in place of any volume password on the selected drive. System Administrators find this feature useful as a backup in case a user forgets his or her password.



To set a master password:

- 1) Open Silverlining Pro.
- 2) Select any volume on the desired drive.
- 3) Hold down the Option key and click "Options".
- 4) Click "Password". If individual volume passwords have been set, you will be prompted to enter them. You must know the individual volume passwords to be able to assign a master password.
- 5) Type the Master Password and click "OK". Passwords are case-sensitive: ROME and RoMe are different. Silverlining Pro ignores the Option, Control and Command keys when typing passwords and

does not allow the following keys from the 10-key pad to be used in volume passwords: = / + - . *

- 6) Retype the password and click "OK". The Master Password can be used in place of any volume password on the selected drive.

Buses

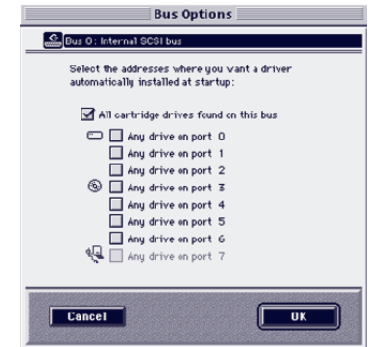
The bus information and options sections apply only to SCSI & ATA drives.

Bus Information:

To display information about a bus, select the bus and click the "Info" button. The information listed should be detailed in the documentation that came with your Macintosh.

Bus Options:

To change bus options, select a bus in the Silverlining Pro control panel and click "Options". Select a box to make Silverlining Pro load a driver for the removable drive at startup. Silverlining Pro polls this SCSI address for removable devices.



Silverlining Pro Troubleshooting

Hardware Remedies:

Unless a drive is dropped or subjected to extreme environmental conditions, rarely do its hardware components fail. You can quickly rule out hardware problems by trying these simple remedies and running the Test Drive Hardware in Silverlining Pro. Then you can focus on software troubleshooting.

- 1) Disconnect all SCSI, USB or FireWire cables and power cables and reconnect them. Loose connections are often difficult to detect from a visual inspection alone.
- 2) Disconnect all SCSI cables, reconnect the SCSI devices in a different order, and terminate the SCSI chain. SCSI signals can become unusable when the SCSI devices are chained in a particular order (for no apparent reason).

- 3) Reset the dip switches or push-buttonswitch for each SCSI device that has external switches. SCSI ID switches are often accidentally changed when a drive is bumped or transported.
- 4) Run the "Test Drive Hardware" test. This test checks the integrity of the drive's controller, the read/write heads, and overall operation. If this test passes, you can be assured that the drive is functioning properly.
- 5) Run the "Scan Media for Bad Sectors" test. This test checks the media and remaps any bad sectors. If the full test passes, you can be assured that the drive's media are functioning properly.
- 6) Run the "Format Entire Drive" command. This command will delete all information on the drive and restore the drive to the manufacturer's default drive settings. **WARNING:** This test will destroy all data on your hard drive.

Software Remedies:

Most of the problems that drive owners experience are software problems. The drivers, directory files, and file data can become corrupted at any time for a variety of reasons. This is why it is so important to back up your data frequently. Most software problems can be repaired without data loss. If you are still having trouble after trying these remedies, consider purchasing a data recovery program, such as Norton Utilities.

- 1) Restart from the Mac OS CD and run "Disk First Aid". Disk First Aid can repair a damaged master directory, which is a frequent problem.
- 2) Reinstall system software from the Apple installer disks or CD. System software can become corrupted at any time due to a systems error, power failure, media failure, or any number of reasons.
- 3) Use the Finder's "Find" command to search for two or more System Folders on the same volume. Throw away any extra System Folders. Although it is safe to keep on System Folder on each volume, multiple System files on the same volume can cause unpredictable startup problems.
- 4) Hold down the Shift key and restart. This causes the Macintosh to start up with extensions turned off. If this alone fixes the problem, you probably have an extension conflict.
- 5) Select the volume in Silverlining Pro and check to see that the "Mount at Startup" box is selected. The volume will not appear on the desktop unless this box is selected.

- 6) For a drive with multiple partitions, type a bullet(o) at the beginning of the volume name to have the partition loaded first at startup. At startup, Silverlining Pro loads partitions in alphabetical order. A bullet at the beginning of the volume name loads that partition first.

Problems and Solutions:

The following lists some typical problems that users have encountered when accessing volumes or running Silverlining Pro.

- **Volume icon does not appear on the desktop.**
Select the volume in Silverlining Pro and check to see that the "Mount at startup" box is selected.
- **Password doesn't work.**
Check to see whether the Caps Lock key is depressed. Volume passwords are case-sensitive.
- **I accidentally initialized a volume.**
If a recent backup is available, restore the data to the volume. If not, stop using the drive immediately and consider data recovery options such as Norton Utilities.
- **A drive does not appear in Silverlining Pro.**
See "Hardware Remedies".
- **Unable to get a cartridge icon to mount.**
The Macintosh automatically loads the driver for available SCSI devices at startup. To force the loading of a cartridge's driver, shut down the Macintosh, insert a cartridge, wait for the cartridge to spin up and then start up the Macintosh.

Glossary

ATA (Advanced Technology Attachment) Also known as IDE (Integrated Drive Electronics). The most widely used interface for hard disks. After its conception, it continued to evolve under various names, such as ATA-2 and its equivalent EIDE, Fast ATA, until the Ultra ATA or Ultra DMA which exploits a mode of faster transfer (DMA-33) to 33.3 MB/s. This range of names does not always correspond to validated standards. This is why the interface is more commonly listed under the name of IDE or ATA.

Backup Creating at least one additional copy of your data onto a different (and safe) storage device from where it can be retrieved at a later time if needed. A copy of a file, directory, or volume on a separate storage device from the original, for the purpose of retrieval in case the original is erased, damaged, or destroyed.

Block A very small section of the storage media comprised of one or more sectors. A block is the smallest amount of space allocated on a drive for data storage. By default, a sector of data consists of 512 Bytes.

Bus The path in your system for moving data from one part of a computer to another. Specifically, it is the part of a chip, circuit board or interface that is designed to send and receive data. This is not to be confused with "SCSI bus".

Cache, -ing This is an area of electronic storage (usually RAM) set aside to store frequently used data from electro-mechanical storage (hard drives, floppy disks, optical disks, tape disks, etc.). Therefore, storing frequently used data in RAM can enhance your system's overall response to disk-intensive operations significantly. For CD-ROMs, this type of memory is frequently used to store directory files.

CD-ROM Compact Disk (Read Only Memory) This is the disk which is inserted into a CD-ROM drive, commonly containing music, computer data, or a combination of the two.

CPU (Central Processing Unit) The part of the computer (a microprocessor chip or group of chips) that performs most of the data processing. The CPU and memory form the central part of a computer to which the peripherals are attached.

Controller Disk controller. The chip or integrated circuit that converts the computer data and commands into the required format for use by the hard drive.

Driver, Device Driver A software program that enables a computer to communicate with peripheral devices such as fixed disk drives and CD-ROM drives. Each kind of device requires a different driver. Device driver programs are stored on a computer's fixed disk and are loaded into memory at boot time.

External drive A drive mounted in an enclosure, separate from the computer system enclosure, with its own power supply and connected to the system by a cable.

File system Links the physical map of a disc to its logical structure. Thanks to the file system, users and computers can easily display path, directories and files recorded onto the disc.

FireWire The apple trademark for IEEE 1394. The Institute of Electrical and Electronics Engineers (IEEE) designation for an internationally developed interface offering easy, high-speed connections and transfer rates of up to 400Mbytes/sec. FireWire allows daisy-chaining of up to 63 peripherals. It allows peer-to-peer device communication to take place without using system memory or the CPU. It supports plug & play and hot-swapping with no SCSI ID or termination needed. Its 6-pin cable is not only more convenient than the SCSI cables, but it can supply up to 60 watts of power, allowing low-consumption devices to operate without a separate power cord. Sony has its own version of this interface called iLINK that is compatible with standard IEEE 1394 devices.

Firmware Permanent or semi-permanent instructions and data programmed directly into the circuitry of a programmable read-only memory or an electronically-erasable programmable read-only memory chip. Used for controlling the operation of the computer or tape drive. Distinct from the software, which is stored in random access memory and can be altered.

Format, -ting, -ted This is a process where a device is prepared to record data. In this process, the hard disk writes special information onto its own recording surfaces in order to divide the surfaces into areas (Blocks) that are ready to accept user data. Since this operation causes all current user data stored on the hard disk to be lost, this is an infrequent operation that usually only happens at the factory that created the hard disk. It is unusual for something to happen to a hard disk that requires the end-user to initially perform this operation.

GB This refers to 1000 MB (megabytes) although it is actually 1024 MB.

Hard Disk, Hard Drive, Hard Disk Drive Sometimes referred to as a drive, it is a device that is used to store data. It consists of a housing, a motor, a recording mechanism, and one or more recording surfaces. The data is stored magnetically on the recording surfaces which are at least one side of a rigid spinning disk (or fixed disk drive).

HFS, HFS+ (Hierarchical Storage Management) The file system used by the Macintosh Operating System to organize data on hard discs and floppy discs. It can also be used for CDs.

Hot plug The ability to plug in a cable or connector while the computer and peripheral are powered-on without danger of system errors.

IEEE 1394 IEEE is shorthand for "The Institute of Electrical and Electronic Engineers," the group that wrote the standard which defines a high performance serial bus. This just so happened to be the 1394th standard that they agreed upon. Called "FireWire" by Apple and iLINK by Sony.

Initialize, -ed, Initialization After a hard disk (or other storage device) is formatted and partitioned, some special data needs to be written to it that helps the Macintosh create files and save data. The process is called initialization. This process, like formatting, causes all user data on the storage device to be lost.

Interface

The protocol data transmitters, data receivers, logic and wiring that link one piece of computer equipment to another, such as a disk drive to an adapter or an adapter to a system bus. Protocol means a set of rules for operating the physical interface, such as: don't read or write before the drive is ready.

I/O (Input/Output) Refers to an operations, program, or device whose purpose is to enter data into or to extract data from a computer.

KB KiloByte. A unit of measure consisting of 1,024 Bytes.

MB One megabyte really is more than 1,000,000 bytes. It actually represents 1,024 kilobytes of disk space. A kilobyte is, you guessed it, 1,024 bytes so one megabyte really equals 1,048,576 bytes.

Media The material or device used to store information in a storage subsystem, such as a tape, CD or disk drive.

Overwrite To write data on top of existing data thus erasing the original data.

Partition, Partition Map After formatting, your hard disk is not yet ready to store files. It must be divided up into sections that will contain special information required for your Macintosh or PC to operate and other sections that will contain your files. This process of dividing up your hard disk is called partitioning. A partition is just one section of the hard disk that will contain either special data put there by Silverlining or your own files and data.

Performance A measure of the speed of the drive during normal operation. Factors affecting performance are seek times, transfer rate, and command overhead.

Peripheral A device added to a system as a complement to the basic CPU, such as a disk drive, tape drive, or printer.

Program, Computer Program

This is a series of instructions that tells your computer how to do a specific operation. These instructions are stored in a file (or other special area) on a floppy, hard disk, or CD-ROM.

RAID Redundant array of inexpensive disks. RAID is a concept in storage subsystems that can deliver higher levels of protection against downtime and data loss than conventional disk drives. RAID refers to the architecture designed to safeguard critical data through redundancy. It also offers other benefits: it can improve input/output performance, make servicing simpler and quicker, and allow users to fine-tune the drive system to match the needs of specific applications. The term was coined in 1987 by researchers at the University of California at Berkeley to describe a series of redundant architectures used in fault-tolerant disk arrays (RAID levels 1 through 5).

RAM Random Access Memory. What's generally called "memory" in a computer. An integrated circuit memory chip that allows information to be stored and retrieved by a microprocessor or controller. The information can be stored or accessed in any order, and all storage locations are equally accessible.

SCSI Small Computer System Interface. It is the description of the physical (hardware) implementation and the data protocol used by a computer (host) to communicate with peripheral (hard drives, scanners, tape drives, etc.). A standard for high-speed connections to peripherals.

SCSI Bus, -es The SCSI port in the back of your Macintosh or PC allows you to connect hard disks to your computer. The wires or cables that connect the hard disk to the computer allow data to flow between your computer and the hard disk(s) collectively. Those wires constitute the SCSI bus.

SCSI ID Identification numbers used to differentiate between the various devices on a SCSI bus. A unique SCSI number must be assigned to each and every SCSI device connected to your computer (hard disks, SCSI printers, and scanners may all use SCSI ID numbers).

Seek Time The amount of time (in thousandths of a second, or milliseconds) that it takes a hard disk drive's read/write head to move to a specific location on the disk. Average seek, then, is the average of a large number of random samplings all over the disk. Seek time is CPU independent, meaning that seek time is the same for a disk drive, whether it is attached to a computer or not.

Software The entire set of programs, procedures, and related documentation associated with a computer system; specifically: computer programs.

Striping Spreading data evenly over multiple disk drives to enhance performance. Data striping can be performed on a bit, byte or block basis for optimum application performance.

Termination A physical requirement of the SCSI bus. The first and last devices on the SCSI bus must have terminating resistors installed, and the devices in the middle of the bus must have terminating resistors removed.

Transfer rate The rate at which the drive sends and receives data from the controller. Transfer rates for reading data from the disk drive may not be the same as the transfer rate for writing data to the disk drive. Transfer rates are CPU dependent, meaning that regardless of how great a transfer rate your drive is capable of, the actual transfer rate can only be as fast as the slowest of your hard drive and computer. Buying a drive capable of an extremely high transfer rate for a computer with a lower capability is senseless, as is the opposite: saddling a computer with a drive whose transfer rate capability is less than the computer.

USB Universal Serial Bus. USB replaces all the different kinds of serial and parallel port connectors with one standardized plug and port combination. Thanks to hot-swapping it is not necessary to shut down and restart the PC to attach or remove a peripheral. The PC automatically detects the peripheral and configures the necessary software. USB allows the user to connect many peripherals at one time. Most USB PCs come with two USB ports. Special USB peripherals – called USB hubs – have additional ports that let you "daisychain" multiple devices together.

Volume A desktop mountable storage area, may be a partition of a hard disk or removable disk or cartridge. Typically measured in megabytes or gigabytes. For CDs, it is usually the whole disc. However, this term is also used for a session on a multi-session disc.

Contacting LaCie

Technical Support

If you have problems or questions regarding the installation or operation of your drive, technical support is available from your dealer or directly from LaCie. It's a good idea to write down notes before asking for help. The more details you can provide describing your problem, the more able we are to help you. If possible, write the details down while they are still fresh in your mind.

- When does the problem occur?
- Does it occur every time you use the drive, or just occasionally?
- What are the results from trying the troubleshooting hints?
- Does the problem repeat itself consistently?
- What is the system software version that you are running?
- On a Macintosh, what version of Silverlining Pro are you running?

Product Repairs

If it is determined that the product requires repair, contact LaCie. When you call, we will need your product serial number and proof of purchase (invoice) to validate your warranty. Proof of purchase is your responsibility. We reserve the right to void your warranty if you cannot provide proof of purchase.

If we determine that your drive needs to be returned for replacement or repair, we will give you a Returned-Material Authorization number (RMA number). Please use this number promptly as it is only valid for 30 days from issue. LaCie will not accept a returned drive without an RMA number. Send the drive with transportation charges prepaid to LaCie Limited. LaCie pays for return freight to U.S. addresses only. International customers are responsible for freight in both directions.

Ship the drive in the original LaCie shipping carton. If you don't have the proper box, call LaCie for packing instructions. LaCie may charge \$35 for repacking your product. Be sure to include a copy of your invoice in the box, and mark the RMA number prominently on the outside of the box in at least two places.

Protect Your Warranty

LaCie reserves the right to void your warranty if product seals on the case are broken or if any damage occurs during shipping to us. See your Warranty Certificate for complete warranty conditions.

LaCie, USA

22985 NW Evergreen Parkway
Hillsboro, OR 97124
USA

Sales: (503) 844 4502

Fax: (503) 844 4501

Technical Support: (503) 844 4503

Monday – Friday, 6 a.m. to 6 p.m. Pacific Standard Time.

Saturday, 8 a.m. to 12 noon Pacific Standard Time.

Have your original purchase invoice available to verify your warranty.

LaCie, Canada

235 Dufferin Street
Toronto, Ontario M6K1Z5
Canada

Sales: (416) 530 2545

Fax: (416) 530 2546

LaCie, Australia

458 Gardners Road
Alexandria, South Sydney NSW2015
Australia

Sales: (02) 9669 6900

Fax: (02) 9669 5005

On the Internet... for software updates, product information, and more.

Web: <http://www.lacie.com>

Sales e-mail: sales@lacie.com

Support e-mail: support@lacie.com

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Introduction

Silverlining Pro est un logiciel de type Tableau de Bord qui permet de gérer toutes les fonctions essentielles des disques et lecteurs amovibles pour Macintosh. Vous pouvez utiliser Silverlining Pro pour tester, formater et partitionner des disques ainsi que monter, démonter et protéger les volumes par mot de passe.

Compatibilité

- tous les modèles de Macintosh
- Mac OS 7.5.3 ou plus, Système 8.5 inclus

Support

- le SCSI Manager 4.3
- les disques durs SCSI et IDE
- les périphériques USB (à partir de la version 6.1)
- les lecteurs amovibles Magnéto Optiques, DVD-RAM, Jaz, Zip
- le système de fichier Terabyte
- HFS+
- les médias 512, 1024, 2048 et 4096 octets/secteur

Installation

1. Démarrez le Macintosh et insérez la disquette Silverlining.
2. Copiez le fichier Silverlining Pro dans le dossier système du disque de démarrage. Pour les utilisateurs du système 7, le fichier Silverlining Pro sera placé automatiquement dans le dossier Tableau de Bord.
3. Redémarrez le Macintosh.
4. Sélectionnez l'icône Silverlining Pro dans le tableau de bord (à partir du menu pomme).

Langue

Silverlining Pro est un logiciel multi-lingue. La première fois que vous le lancez, il vérifie la langue utilisée par le système et se met automatiquement dans cette langue si elle est supportée par le Tableau de Bord. Sinon, l'anglais sera utilisé par défaut. Dans le menu fichier, sélectionnez Préférences.... cliquez sur la barre de défilement et sélectionnez la langue voulue.

Préférences

Activer l'installation driver au démarrage

Cette option vous permet de réaliser des opérations sans charger Silverlining Pro au démarrage du système. Vous pouvez désélectionner cette option pour effectuer des tests spécifiques et quand vous rencontrez des conflits d'extensions.

Scan dynamique des bus

Lorsque cette option est sélectionnée, Silverlining Pro met à jour automatiquement la liste des lecteurs trouvés sur les bus.

Arrêt des drivers au démontage de la cartouche

Cette option est très utile si vous utilisez des cartouches (disques amovibles) formatées avec des utilitaires différents. Vous pouvez désélectionner cette option si toutes vos cartouches ont été initialisées avec Silverlining.

Activer le son

Cette option active le son quand un volume est verrouillé ou déverrouillé, ou un lecteur monté ou démonté, etc ...

Utiliser l'apparence du système

Lorsque cette option est sélectionnée, les profils MacOS 8.x sont activés. Ces dispositions peuvent être modifiées depuis le Tableau de Bord Apparence.

Menu Affichage

Ce menu est utile pour des configurations comprenant plusieurs lecteurs et volumes. Vous pouvez désélectionner l'affichage des bus, lecteurs ou volumes pour simplifier la fenêtre de Silverlining Pro. Sélectionnez Tout afficher pour réafficher l'ensemble des données. L'affichage peut être géré par les triangles pivotants parallèlement au Menu Affichage. Si par exemple vous souhaitez voir uniquement les partitions d'un disque afin de les monter et démonter fréquemment, faites pivoter le triangle sur ce disque et sélectionnez Volume dans le Menu Affichage.

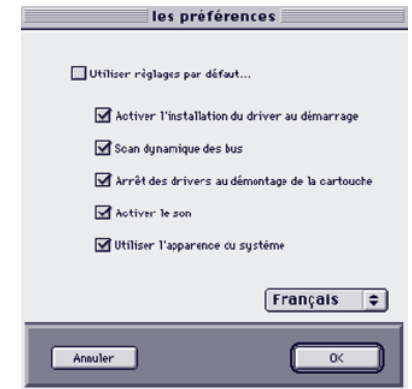


Tableau de bord

Bus, Lecteurs, et volumes

Liste tous les bus, lecteurs et volumes disponibles.

Triangle

Cliquez sur un triangle pour déployer les informations sur les lecteurs ou les volumes.

Verrou

Indique si le volume est verrouillé ou non. Double-cliquez sur le verrou pour modifier son état. Maintenez la touche Option et glissez le volume verrouillé vers la corbeille. Il remontera déverrouillé.

Options

Utilisez ce bouton pour installer les drivers, monter des volumes, assigner un mot de passe et sélectionner les icônes de volume.

Rech...

Le bouton Rechercher scanne le bus et affiche tous les volumes disponibles.

Monter / Démontez

Utilisez ces boutons pour rapidement monter ou démonter un volume ou tous les volumes d'un lecteur. Si le volume dispose d'un mot de passe, il vous sera demandé de l'entrer au montage du volume.

Info

Ce bouton affiche les informations sur le firmware, les drivers et les partitions du lecteur sélectionné.

Prép...

Le bouton Préparer sert à formater ou à effacer un volume.

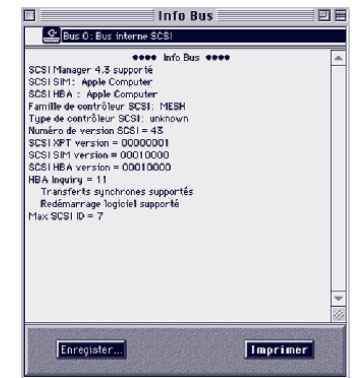
Silverlining Pro est un Tableau de Bord qui dispose de menus déroulants, comme une application habituelle.



Informations sur les bus, les lecteurs et les volumes

Afficher l'information sur un bus

Pour afficher les informations sur un bus sélectionnez ce bus dans le Tableau de Bord Silverlining Pro et cliquez sur Info. Pour plus de détails, reportez-vous à la documentation livrée avec votre Macintosh.



Afficher l'information sur un lecteur

Pour afficher les informations sur un lecteur, sélectionnez ce lecteur dans le Tableau de Bord Silverlining Pro et cliquez sur Info.

Fabricant et modèle: le fabricant et le modèle du lecteur, tels que décrits dans le firmware du lecteur.

Versión: le numéro de version du firmware du lecteur

Nombre total de secteurs : le nombre de blocs de 512, 1024, 2048 ou 4096 bytes disponibles sur l'unité.

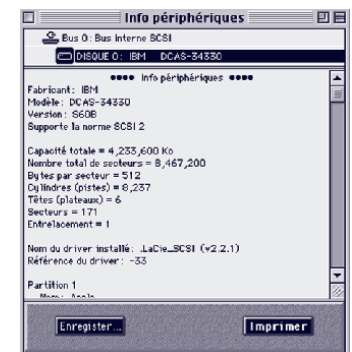
Bytes /secteur: le nombre de bytes par secteur.

Cylindres (pistes): les paires de pistes situées de chaque côté d'un plateau de disque. Si un disque contient plusieurs plateaux, un cylindre inclut les paires de pistes situées directement au dessus et en dessous les unes des autres sur chaque plateau. Sur un disque dur à quatre plateaux, chaque cylindre contient 8 pistes .

Têtes: le nombre de têtes d'écriture / lecture de l'unité.

Secteurs: le nombre moyen de secteurs sur chaque piste.

Interleave: Le nombre de révolutions nécessaires à la lecture de chaque secteur sur une piste. La plupart des disques récents utilisent un facteur d'interleave de 1/1.



Numéro de la partition: Silverlining affecte un numéro à chaque partition. Ce numéro sera 0 pour la première partition, 1 pour la seconde, etc...

Concernant les partitions "invisibles": un disque contient normalement quelques partitions destinées au stockage des gestionnaires, fichiers d'indexage et espace non utilisé. Elles sont appelées partitions "invisibles" car elles ne sont pas montées sur le bureau. Par exemple: "Apple (partition_map)", "Macintosh_SL (Driver)" et "Extra(Free)".

Nom de la partition: le nom identifiant le volume dans Silverlining Pro et sur le bureau (pour les partitions montables)

Type de partition: identifie la structure et le but de la partition. Ces descriptifs sont créés lors de la création de la partition par Silverlining. Voir "Configurer un volume" pour plus de détails. Pour les partitions Macintosh HFS, le type de partition est décrit comme "Apple_HFS"

Premier bloc: indique l'adresse du premier bloc sur la partition sélectionnée.

Nombre de blocs: le nombre total de blocs dans la partition.

Afficher l'information sur un volume

Pour afficher les informations sur un volume sélectionnez ce volume dans le Tableau de Bord Silverlining Pro et cliquez sur Info.

Nom: nom du volume.

Lecteur: numéro assigné par Silverlining au lecteur.

Capacité: nombre total de Kilo-octets d'espace sur le volume. Cette valeur est généralement légèrement inférieure ou supérieure à la capacité officielle du lecteur.

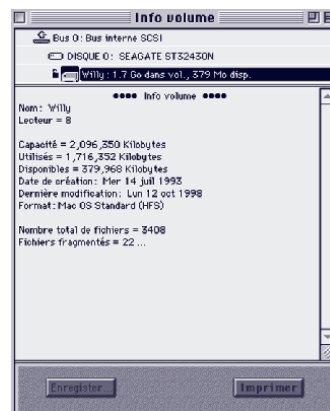
Utilisés: nombre de kilo-octets utilisés sur le volume.

Disponibles: nombre de kilo-octets disponibles sur le volume.

Dates de création et de modification: indique la date à laquelle le volume a été créé ou modifié.

Nombre total de fichiers: nombre total de fichiers sur le volume.

Fichiers fragmentés: nombre total de fichiers fragmentés sur le volume.

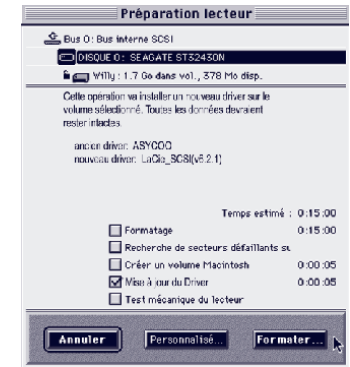


Préparation des lecteurs et volumes

Mise à jour du driver Silverlining

Un lecteur ou un disque doit avoir un driver Silverlining à jour pour fonctionner correctement. Vous pouvez avoir besoin de mettre à jour votre driver si ce dernier devient obsolète ou s'il est corrompu.

1. Sauvegardez les données de votre disque ou cartouche.
2. Lancez Silverlining Pro.
3. Sélectionnez le lecteur que vous souhaitez mettre à jour.
4. Cliquez sur Préparer.
5. Sélectionnez l'option Mise à jour du Driver et uniquement celle-ci.
6. Cliquez sur Préparer. Un message de confirmation apparaît, il indique que le driver sera mis à jour.
7. Cliquez sur OK pour mettre à jour le driver.
8. Redémarrez votre ordinateur pour utiliser le nouveau lecteur.



Préparer un volume

Le volume doit être déverrouillé pour accéder à cette fenêtre !

- Pour initialiser un volume :
1. Sauvegardez les données du volume que vous voulez effacer.
 2. Redémarrez à partir d'un autre volume qui comprend Silverlining Pro.
 3. Ouvrez Silverlining Pro.
 4. Cliquez sur le nom du volume que vous voulez initialiser.
 5. Cliquez sur Effacer. Un dernier message d'avertissement apparaît indiquant que toutes les informations contenues sur ce volume seront détruites.

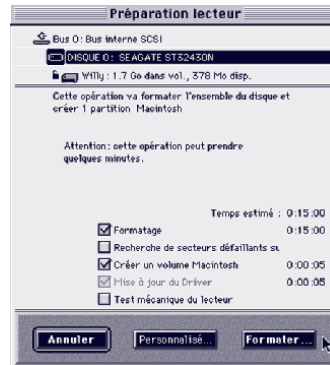


Formater un lecteur

Le formatage d'un disque est une opération longue qui ne doit être effectuée que lorsqu'elle est absolument nécessaire. La plupart des disques sont actuellement livrés pré-formatés et ne devraient pas nécessiter de reformatage durant toute leur période d'utilisation. Le reformatage est toutefois à considérer lorsque le driver et les fichiers d'indexage ne peuvent être reconnus ou ont été endommagés sans possibilité de les restaurer. Silverlining Pro supporte le formatage d'unités dont la sectorisation est de 512, 1024, 2048 ou 4096 bytes par secteur. Lorsqu'un disque est formaté, les paramètres connus sous le nom de "Page Mode" peuvent être ajustés afin de modifier les performances et certains paramètres du disque. Dans la plupart des configurations, il n'est pas nécessaire d'ajuster les Pages Modes par rapport à leurs réglages par défaut. Lorsque Silverlining Pro formate un disque, il vérifie que le cache lecture/écriture est activé ainsi que la correction automatique d'erreurs. Nous avons décidé d'ajouter cette fonctionnalité car de nombreux professionnels modifient les Pages Modes. Une fois ces paramètres modifiés, il est difficile de déterminer ce qui a été modifié. Silverlining Pro rétablit les réglages du disque à ceux spécifiés par le fabricant.

Le formatage détruit les données contenues sur TOUS les volumes d'un même disque. Toutes les données de tous les volumes du disque doivent être sauvegardées avant le formatage ou la réinitialisation d'un volume. Le formatage efface toutes les données contenues dans tous les volumes d'un disque. L'information est perdue et ne peut en aucun cas être restaurée après formatage, même par utilisation de programmes de récupération de données.

1. Sauvegardez toutes les données contenues sur tous les volumes de l'unité
2. Redémarrer à partir d'une autre unité contenant Silverlining Pro.
3. Ouvrez Silverlining Pro
4. Cliquez sur le nom de l'unité à formater
5. Cliquez sur formater
6. Cliquez sur le bouton Formatage
7. Si vous voulez accéder au lecteur à partir d'un Macintosh, laissez le bouton "Créer un volume Macintosh" sélectionné
8. Si vous souhaitez formater le lecteur avec plusieurs partitions, cliquez sur Personnalisé et reportez-vous à la page suivante. Pour créer une seule partition, continuez au point suivant



9. Cliquez sur Formater. Un dernier message de mise en garde apparaît, il indique que toutes les informations contenues sur ce volume seront détruites.
10. Cliquez sur OK pour lancer le formatage. Silverlining Pro formatera le volume.

Partitionner un lecteur

Lors du formatage d'un lecteur utilisez "Personnalisé" pour préciser le nombre et la taille des partitions. Attention, si vous modifiez la taille ou si vous ajoutez des partitions, toutes les données sur votre lecteur seront perdues.

Information lecteur: Affiche la référence du lecteur et sa taille tel que spécifié dans le firmware.

Ligne de séparation: Déplacez cette ligne dans le sens inverse des aiguilles d'une montre pour ajouter une partition. Déplacez-la dans l'autre sens pour en supprimer une.

Ligne de séparation: Déplacez la ligne de séparation pour modifier la taille de la partition.

Secteur de partition: Chaque secteur représente une partition.

Le secteur de couleur foncée indique la partition sélectionnée. Cliquez pour sélectionner un secteur.

Information Partition: Indique le type de partition (HFS ou IDE), le pourcentage de la capacité totale utilisé par la partition et la taille de bloc d'allocation (taille minimum qu'un fichier occupera sur la partition).

Nom: Entrez un nouveau nom pour renommer la partition sélectionnée.

Taille: Taille de la partition sélectionnée en Méga octets. Pour changer la taille, entrez une nouvelle valeur.

Nombre de partitions: Pour changer le nombre de partitions, taper un chiffre ou cliquer sur les flèches. 16 partitions maximum.

HFS/HFS+: Boutonde selection



Striping

Pour des applications qui nécessitent des performances élevées, Silverlining Pro peut configurer des disques en "striping" également connu sous le nom de RAID 0*. Avec un volume en striping, deux disques ou plus se comportent comme un seul grand volume aux taux de transfert exceptionnels. Les données sont écrites sur les disques en segments placés successivement sur des disques consécutifs. Ceci se traduit par des améliorations de performance conséquentes pour les configurations vidéo et pour d'autres applications multimédia. Si l'un des disques devait connaître une défaillance, toutes les données sur ce volume seraient détruites.

Contrairement à certains autres logiciels, Silverlining Pro peut créer des volumes en striping à partir de disques de différentes capacités. La meilleure performance sera néanmoins obtenue à partir de disques dont la capacité et le taux de transfert sont homogènes. En d'autres termes, un volume composé d'un disque 1 Go lent et d'un disque 9 Go rapide ne sera pas plus rapide qu'un disque 10 Go rapide. Par contre, deux disques 4 Go en striping seront largement plus performants qu'un disque 9 Go de la même famille.

*RAID (Redundant Array of Independent Disks) est une méthode d'organisation des données sur plusieurs disques afin d'atteindre une meilleure performance. Le Striping est considéré comme un type de RAID mais il ne protège pas les données d'une défaillance. Si un disque du système tombe en panne, toutes les données sont perdues.

Pour créer un volume en striping avec Silverlining Pro, maintenez la touche Commande lorsque vous sélectionnez les disques que vous désirez grouper. Cliquez sur Préparer et un message vous demandera si vous souhaitez créer un volume array. Toutes les options de Silverlining Pro peuvent être affectés à un volume en striping. Vous pouvez partitionner ce volume, choisir une partition de type HFS+, etc...

Nous vous rappelons que toutes les données sur les disques sélectionnés seront perdues lors de la création du volume array.

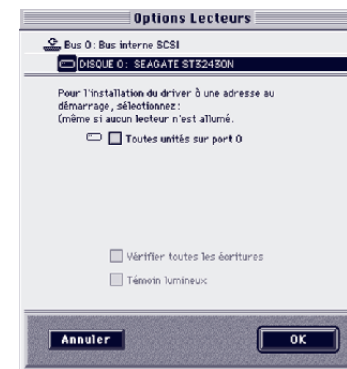
Options de bus, lecteurs et volumes

Options de bus

Pour modifier les options de bus, sélectionnez le bus concerné dans le tableau de bord de Silverlining Pro, et cliquez sur Options. Sélectionnez les adresses pour lesquelles vous souhaitez que Silverlining Pro installe au démarrage un driver. Silverlining choisit cette adresse SCSI pour des lecteurs amovibles.

Options de lecteurs

1. Vérifier toutes les écritures. L'option Vérifier a été conçue pour les médias amovibles, en particulier pour les magnétos-optiques. Elle peut aussi être utilisée pour les lecteurs lomega et Syquest. Elle peut être activée pour n'importe quel disque dur qui connaît des erreurs d'écriture, de lecture ou des problèmes de corruption de données.
2. Témoin lumineux. Cette option active un témoin lumineux sur le coin en haut à gauche du bureau quand le lecteur est en mode écriture ou lecture.
3. Bouton d'icônes. Sélectionnez une icône avec les flèches.



Options de volume

Pour modifier les réglages d'un volume, cliquez sur le volume dans le Tableau de Bord Silverlining et appuyez sur le bouton Options.

Monter au démarrage

Sélectionnez cette option si vous souhaitez que le volume soit monté automatiquement au démarrage. Cette option ne peut être activée que si le volume utilise le driver Silverlining.

Volume de démarrage

Définit le volume de démarrage. Cette option ne peut être mise en oeuvre que si le volume sélectionné contient un dossier système utilisable.

Verrouiller au démarrage

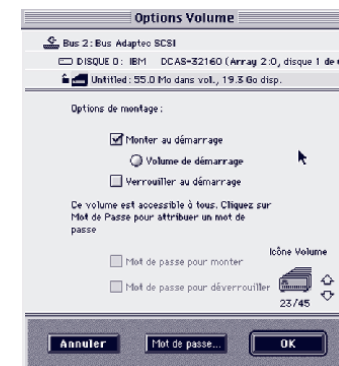
Verrouille le volume automatiquement dès le démarrage du Macintosh. Ceci empêche la modification des données conservées sur un volume particulier.

Mot de passe pour monter

Empêche les utilisateurs de monter le volume. Il sera automatiquement demandé aux utilisateurs d'entrer le mot de passe s'ils souhaitent monter le volume.

Mot de passe pour déverrouiller

Empêche les utilisateurs de déverrouiller le volume. Il sera automatiquement demandé aux utilisateurs d'entrer le mot de passe s'ils souhaitent déverrouiller le volume.



Securité des volumes et mots de passe

Silverlining Pro offre deux niveaux de sécurité : mot de passe pour monter et mot de passe pour verrouiller. Par exemple, pour restreindre l'accès à un volume à un seul utilisateur, vous attribuerez un mot de passe de montage et vous ne communiquerez ce mot de passe qu'à cet utilisateur. Les autres utilisateurs ne pourront y accéder. Pour rendre un volume accessible en lecture uniquement, attribuez un mot de passe de verrouillage. Tous les utilisateurs pourront voir le volume et accéder aux données mais ne pourront modifier le contenu sans le mot de passe de déverrouillage.

N'oubliez pas votre mot de passe! Si vous oubliez un mot de passe, vous devrez reformater le disque ou la cartouche entière et vous perdrez toutes les données.

1. Lancez Silverlining
2. Cliquez sur un volume
3. Cliquez sur Options
4. Cliquez sur Mot de passe. Le mot de passe que vous attribuez s'applique à la fois au montage et au verrouillage de ce volume.
5. Entrez le mot de passe et cliquez sur OK
Les mots de passe tiennent compte des lettres en capitales, ROME et Rome sont deux mots de passe différents. Silverlining n'accepte pas pour les mots de passe les caractères du pavé numérique suivants: = / + - , * . Silverlining ignore les touches Option, Contrôle, Commande pour les mots de passe.
6. Tapez à nouveau le mot de passe et cliquez sur OK
7. Pour empêcher les utilisateurs de monter un volume, sélectionnez la case « Mot de Passe pour monter ».
8. Pour empêcher les utilisateurs de dé-verrouiller un volume (écrire ou effacer des fichiers), sélectionnez la case « Mot de passe pour verrouiller ».
9. Cliquez sur OK.
10. Les mots de passe seront activés la prochaine fois que vous démarrez votre Macintosh.

Pour supprimer un mot de passe, cliquez à nouveau sur le bouton Mot de passe, entrez le mot de passe actuel et cliquez sur Retirer mot de passe. Confirmez en cliquant sur OK.

Mot de passe "principal"

Silverlining Pro Propose deux types de mots de passe : les mots de passe individuels pour un volume et un mot de passe unique pour tous les volumes sur un disque. Une fois qu'un mot de passe Principal est défini, il peut être utilisé

en lieu et place de tout mot de passe attribué à un volume sur l'unité sélectionnée. Cela permet aux responsables informatiques d'accéder à un volume même si l'utilisateur a oublié son mot de passe.

1. Lancez Silverlining
2. Sélectionnez un volume
3. Maintenez la touche option appuyée et cliquez sur Options
4. Cliquez sur Mot de passe principal
Nota: si des mots de passe ont déjà été définis pour des volumes individuels, vous devrez les entrer avant de pouvoir continuer.
5. Entrez le mot de passe "principal" et cliquez sur OK.

Les mots de passe tiennent compte des lettres en capitales, ROME et Rome sont deux mots de passe différents. Silverlining n'accepte pas pour les mots de passe les caractères du pavé numérique suivants: = / + - , * . Silverlining ignore les touches Option, Contrôle, Commande pour les mots de passe.

6. Tapez à nouveau le mot de passe et cliquez sur OK
Le mot de passe principal peut être utilisé en lieu et place de tout mot de passe attribué à un volume sur l'unité sélectionnée.



Monter & démonter

Ces boutons vous permettent de monter et démonter rapidement des volumes du bureau. Vous pouvez aussi monter et démonter un volume en double cliquant sur son nom dans la fenêtre Silverlining Pro.

1. Ouvrez la fenêtre Silverlining Pro.
2. Sélectionnez un volume ou un lecteur. Vous ne pouvez monter ou démonter des CPU, des lecteurs de bande ou d'autres lecteurs qui ne montent pas sur le bureau.
3. Cliquez sur Monter pour monter le volume sur le bureau. Cliquez sur Démonter pour démonter un volume. Les volumes démontés apparaissent en demi-teintes dans la fenêtre Silverlining.

L'icône de la cartouche ne veut pas monter ? Au démarrage, le Macintosh charge automatiquement le driver pour les lecteurs SCSI disponibles. Pour forcer le chargement du driver d'un disque, éteignez le Macintosh, insérez une cartouche, attendez qu'elle soit bien chargée puis redémarrez le Macintosh.

Tester des lecteurs et des médias

Test mécanique du lecteur

Il s'agit du test principal de la mécanique d'un lecteur. Si un disque échoue à ce test, il est défectueux et doit être remplacé. Nous avons amélioré ces tests afin qu'ils ne durent que quelques minutes et donnent une appréciation complète de l'état du disque. Le test mécanique du lecteur ne détruit pas les données. Il est cependant recommandé de sauvegarder le disque que vous souhaitez tester avant de démarrer le test.

Durée du test: le temps affiché est une estimation. Une fois qu'une partie du test est engagée, nous recommandons de terminer la procédure plutôt que de l'interrompre. Une légère différence du temps de test ne doit pas vous alarmer et ne reflète pas l'état du disque. Silverlining Pro vérifie le type de périphérique testé : s'il détecte un lecteur rapide (de type Winchester), il allouera 2 minutes au test. Pour un type de périphérique plus lent comme un Magnéto-Optique ou DVD-RAM, 4 minutes seront estimées.

La durée des tests mécaniques est divisée en 4 parties :

1• Diagnostic Autotest du disque : le temps varie en fonction de la mécanique et des réglages par défaut en usine. Pour effectuer ce test, Silverlining Pro lancera la commande Autotest du disque. Silverlining Pro supporte les signaux SCSI, ATA et ATAPI. Si au moment de la requête le disque indique qu'il ne supporte pas l'Autotest, ce qui est rare, ce test sera ignoré.

2• Test du cache disque : ce test utilisera 25% du temps restant après l'Autotest. Silverlining Pro écrit, lit et compare des données sur la mémoire cache du disque, aléatoirement et à plusieurs reprises.

Attention, un échec dans cette partie du test n'indique pas forcément que le cache du disque est défectueux. Comme c'est la première fois que Silverlining Pro envoie d'importantes quantités de données vers le disque, le test peut échouer en raison d'interférences sur le bus SCSI, de terminaisons incorrectes ou de mauvais câbles.

3• Test de lecture: ce test utilisera 50% du temps restant. Silverlining Pro lit des blocs de 100 Ko en 100 endroits différents sur le disque. Ceci a pour but de vérifier que les têtes de lecture/écriture peuvent accéder à toutes les parties des plateaux du disque. Le temps restant est utilisé pour effectuer des lectures en des endroits aléatoires de la surface du disque et sur des blocs de tailles variant de 25 à 100 Ko.

Ce test ne lit pas chaque secteur des plateaux du disque. Pour ce type d'examen détaillé, choisissez le test Recherche de secteurs défectueux.

4• Test d'écriture: ce test utilisera 25% du temps restant après l'Autotest. Silverlining Pro recherche des portions du disque qui ne sont pas utilisées pour effectuer ce test. Il lit et stocke les données d'un bloc, écrit, lit et compare les données du test. Il restitue ensuite les données à l'endroit initial. Le temps du test dépendra de l'espace libre : un minimum de 15 secteurs seront examinés et des blocs de 100 Ko maximum seront analysés.

En cas d'échec du test de lecture, le test d'écriture ne sera pas lancé.

Recherche de secteurs défectueux

Le test Recherche de secteurs défectueux détruit les données sur le disque sélectionné. Il crée sur le disque un motif répétitif de données aléatoires écrites sur chaque secteur. Le test écrit, lit et vérifie des blocs de 100 Ko de manière séquentielle sur la surface des plateaux. Sur des disques de capacité importante, cette procédure peut prendre des heures. Si la vérification échoue, cet état est enregistré. Silverlining Pro ne tentera pas d'écarter les mauvais secteurs. Sur les disques récents, la réallocation des mauvais blocs par le firmware du disque est automatique. Si un mauvais bloc est détecté, c'est une indication que le disque est en mauvais état. Nous conseillons dans ce cas de reformater le disque avec Silverlining Pro et de passer le test Recherche de secteurs défectueux une seconde fois. Si l'erreur est toujours présente, le disque est défectueux et devra être remplacé.

Support technique LaCie

Nous sommes là pour vous aider à résoudre vos problèmes. N'hésitez pas à nous contacter.

Que faire avant d'appeler

Prenez l'original de votre facture pour vérifier votre garantie. Il peut être bon également de prendre des notes avant d'appeler le Support Technique. Plus vous avez de détails à nous donner, mieux nous serons à même de vous aider. Si possible, notez ces détails pendant qu'ils sont encore frais dans votre esprit.

Pour nous permettre de vous assister le plus efficacement possible, merci de préparer vos réponses aux questions suivantes avant de nous appeler:

- Quel modèle de Macintosh utilisez-vous ?
- Quelle est la version du système ? Sélectionnez À propos de votre Macintosh dans le menu Pomme pour le savoir.
- Quels extensions, tableaux de bord, et autres logiciels Système particuliers sont installés sur votre Macintosh ?

- Quel type de matériel utilisez-vous, tels que cartes accélératrices, upgrades de mémoire, et autres lecteurs SCSI ?
- Quand le problème est-il arrivé ?
- Se produit-il à chaque fois que vous utilisez le lecteur ou seulement de temps en temps ?
- Le problème se répète-il constamment ?
- S'il ne suit aucune logique, essayez de déterminer quand le problème ne se produit pas.
- Y avait-il des messages d'erreurs ?
- A quel moment apparaissent-ils ?
- Pouvez-vous répéter le problème ?

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Saturday, 8 a.m. to 12 noon Pacific Standard Time.

Have your original purchase invoice available to verify your warranty.

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