

Formatting Guide

This manual describes typical formatting procedures for external hard drives. Note that not all hard drives support all of the operating systems or format types discussed.

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What is Formatting?

Formatting is an operation that enables a hard disk to be used on your computer. This product comes formatted with FAT32 and is plug and play for Windows, Mac OS 9, and Mac OS X 10.4 and later.

Format Types

There are several different format types, each compatible with different operating systems.

 **Some products may require formatting with a specific format type. Refer to the manual supplied with the product to select the most suitable format.**

NTFS file system

NTFS formatting is compatible with Windows 7, Vista, XP, 2000, and Server 2003. Mac OS X can read this format but not write to it. It can handle files larger than 4 GB.

FAT32 file system

FAT32 formatting works with many operating systems including Windows and Mac OS, but it cannot handle files larger than 4 GB.

Mac OS Extended format

This format is native to Mac OS X. It can handle files larger than 4 GB. It is not supported by Windows.

	NTFS file system	FAT32 file system	Mac OS Extended format
Windows 7/Vista/XP/2000/Server 2003	⊙	○	×
Windows Me/98SE/98	×	○	×
Mac OS X 10.5 and later	△	○	⊙
Mac OS X 10.4	△	○	⊙
Mac OS X 10.3	△	○	⊙
Mac OS X 10.2 and earlier	×	×	⊙
Mac OS 9	×	▲	⊙

⊙ : Both reading and writing are supported.

○ : Both reading and writing are supported (**cannot handle files larger than 4 GB**).

△ : Only reading is supported. Writing is not supported.

▲ : Reading and writing are supported only when File Exchange is enabled. Also, use of two-byte characters can cause the computer to stop or the file to fail to be copied normally.

× : Not supported.

Formatting Notes

● **Never reset or turn off the power switch of the computer during the formatting process.**

This could result in damage to the disk or other problems. Proper operation cannot be guaranteed if the format process was interrupted.

● **Formatting will erase all data on the hard disk. Before formatting, back up any important information on the hard disk.**

The user is responsible for any data lost due to formatting of the hard disk.

Don't format the wrong drive! Check the drive letter and partition name carefully. If you format the wrong drive, all data on it will be lost.

 **Next** **The formatting procedure varies depending on how the drive will be used. Refer to the pages below.**

- Formatting with NTFS P 4
- Formatting with FAT32 P 8
- Formatting with Mac OS Extended Format P 10

Formatting in NTFS

Follow the procedure below to format your drive with NTFS.

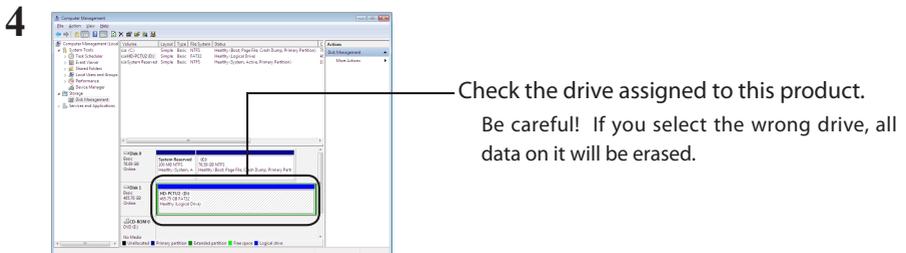
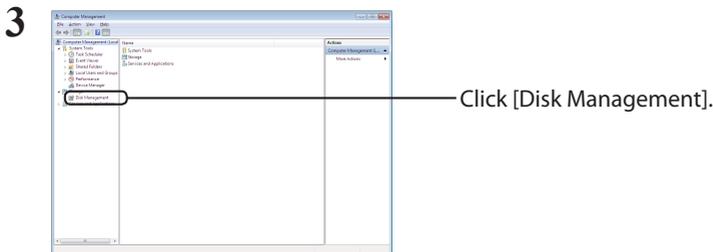
Caution • **Windows Me, 98SE, or 98, and Mac OS do not support NTFS. Use a different format such as FAT32 with these operating systems.**

- **This product cannot be upgraded to a dynamic disk.**
For details about dynamic disks, refer to Windows Help.
- **This describes the procedure for formatting with NTFS. To format with FAT32, use the Disk Formatter utility as described on page 8.**

- 1 Start the computer, and log on with a user having administrator privileges (such as the Administrator).**
- 2 Click [Start] → Right-click [Computer (My Computer)] (Right-click [My Computer] on the Desktop in Windows 2000), and click [Manage] in the pop-up menu.**

When using Windows 7, after "Do you want to allow the following program to make changes to this computer?" appears, click [Yes].

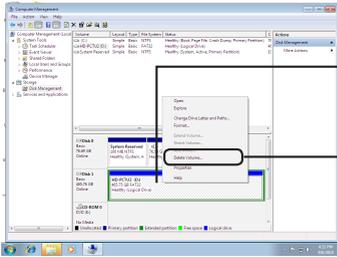
When using Windows Vista, after "Windows needs your permission to continue" appears, click [Continue].



Caution If the drive assigned to this product appears as "Unallocated", proceed to step 8.

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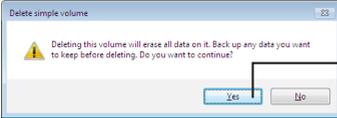
5



① Right-click the space assigned to this product.

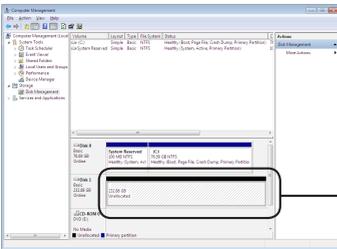
② Click [Delete Volume].

6



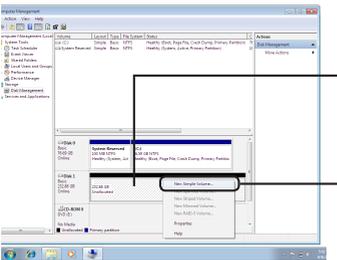
Click [Yes].

7



The unallocated space is displayed.

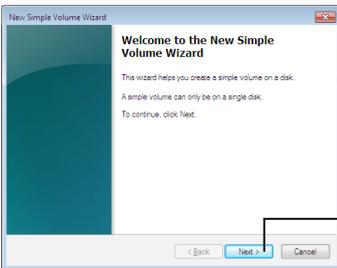
8



① Right-click the unallocated space.

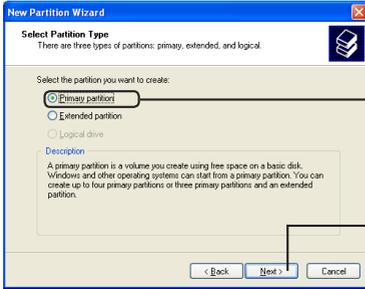
② Click [New Simple Volume] ([New Partition] in Windows XP and [Create Partition] in Windows 2000).

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Click [Next].

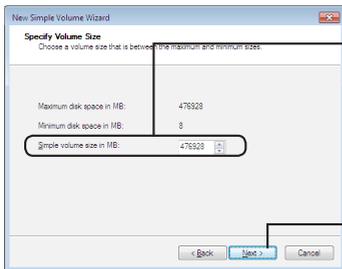
Procedure when the screens below are displayed



① Click to select [Primary Partition].

② Click [Next].

10

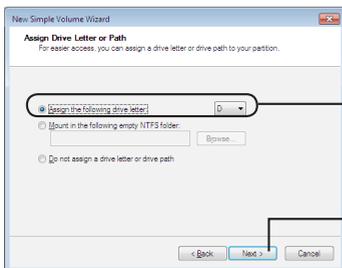


① Specify the size in [Simple volume size] ([Partition size] or [Amount of disk space to use]).

If the size does not need to be changed, the partition is created at the default setting (maximum size).

② Click [Next].

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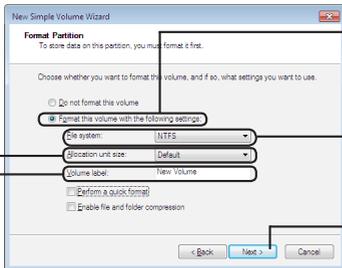


① Click [Assign the following drive letter], and specify the drive letter.

Unless you need to change to a specific setting, use the default setting.

② Click [Next].

12



① Click to select [Format the volume (partition) with the following settings].

② Select [NTFS].

③ After setting each option, click [Next].

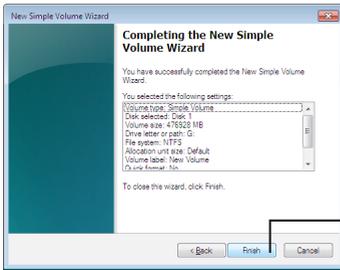
Enter information for [Volume label] if necessary.

Unless there is a particular problem with [Allocation unit size], use the default setting.

Caution If this product does not have any partitions, do not insert a check mark for [Perform a quick format]. If a check mark is inserted, the formatting process may not be completed normally.

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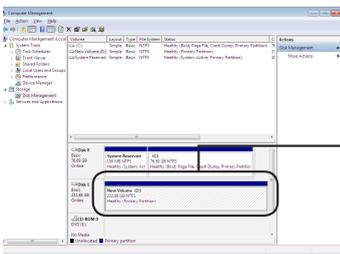


Click [Finish].

Formatting will begin. Progress is displayed as a percentage.

Memo To abort the format, right-click the partition and click [Cancel Format].

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If the formatting process was completed normally, [Healthy] is displayed in addition to the volume label and partition.

If the message “The request cannot be completed because the volume is open or in use” is displayed:

The partition was created, but the format didn't complete. Click [OK] to format the created partition as described below.

- 1 Right-click the created partition and select [Format].
- 2 If necessary, set the volume label and file system, and click [OK].

Note: If [Perform a quick format] is checked, the format will be completed much quicker.

- 3 After this, follow the on-screen messages.

This completes the formatting process.

Note: To divide the drive into multiple partitions, repeat steps 10-14 for each partition.

Formatting with FAT32

- Caution**
- For best results, format FAT32 partitions from a Windows computer with the included software.
 - The formatter built-in to Windows 7, Vista, XP, 2000, and Server 2003 is limited to partitions of 32 GB or smaller.
 - After formatting with FAT32, only files of 4 GB or smaller can be saved to the drive. This is a limitation of the FAT32 file system.

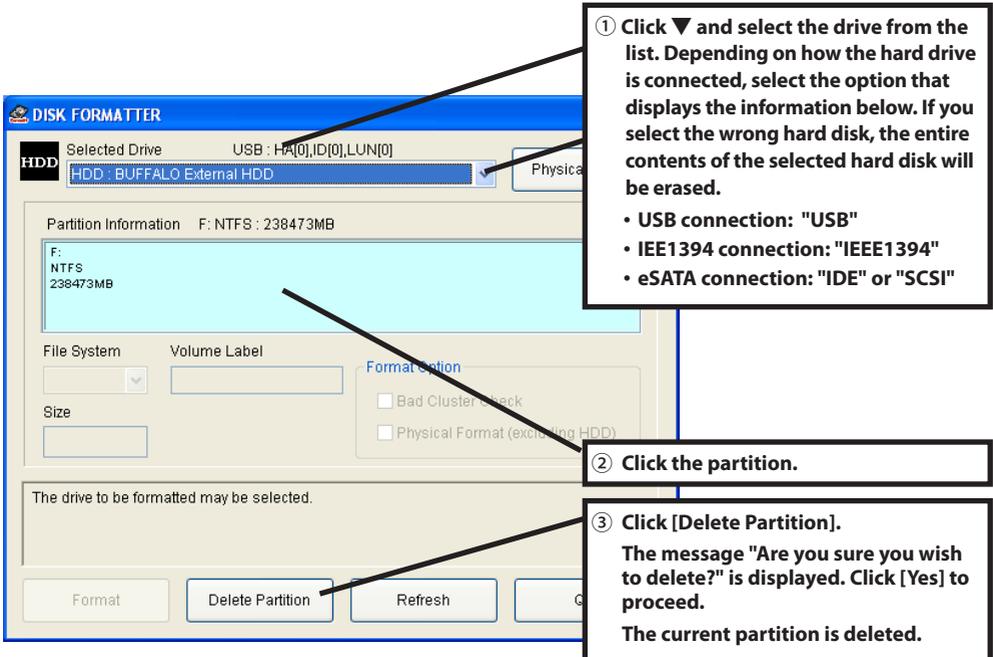
Follow the procedure below to format your drive with FAT32 using the supplied Disk Formatter utility from a Windows computer. In this example, the drive is reformatted from its default state.

Formatting

Start the Windows computer, and connect the product to the computer.

Select [Start] - [(All) Programs] - [BUFFALO] - [DISK FORMATTER] - [DISK FORMATTER] to start the Disk Formatter utility.

If the Disk Formatter utility is not installed, install it before performing the procedure below.



The screenshot shows the Disk Formatter utility window. At the top, it says "Selected Drive" and "USB : HA[0],ID[0],LUN[0]". Below that, a dropdown menu shows "HDD : BUFFALO External HDD". The "Partition Information" section shows "F: NTFS 238473MB". There are fields for "File System" (set to NTFS) and "Volume Label". Below these are "Size" and "Format Option" checkboxes for "Bad Cluster Check" and "Physical Format (excluding HDD)". At the bottom, there are buttons for "Format", "Delete Partition", "Refresh", and "Go".

① Click ▼ and select the drive from the list. Depending on how the hard drive is connected, select the option that displays the information below. If you select the wrong hard disk, the entire contents of the selected hard disk will be erased.

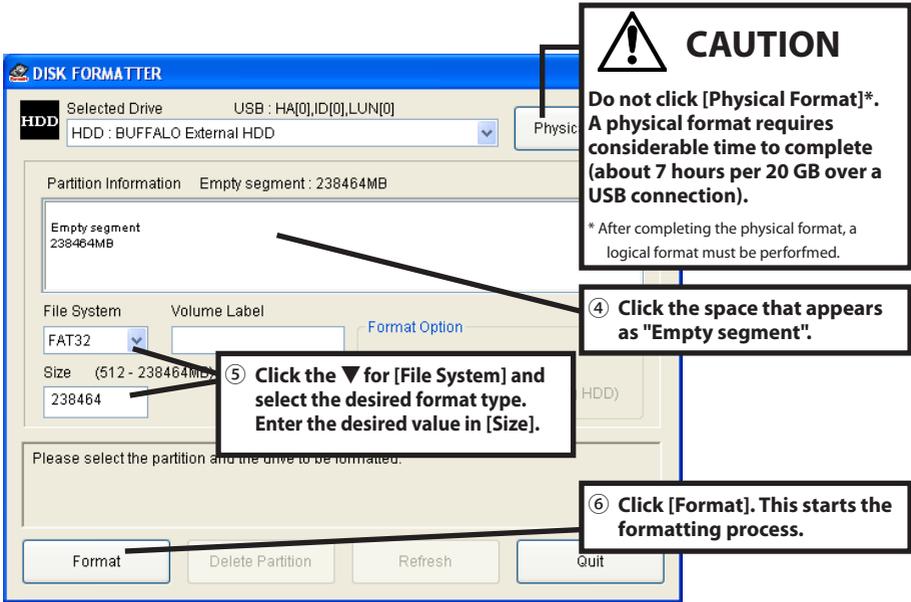
- USB connection: "USB"
- IEEE1394 connection: "IEEE1394"
- eSATA connection: "IDE" or "SCSI"

② Click the partition.

③ Click [Delete Partition].
The message "Are you sure you wish to delete?" is displayed. Click [Yes] to proceed.
The current partition is deleted.

Check that "Empty segment" is displayed in the partition information. Once "Empty Segment" is displayed, proceed to the next step.

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After "Format finished normally" is displayed, click [OK]. Dismount the drive and disconnect it from the computer. Reconnect the drive. It is now ready for use.

If "The drive is locked by the OS" is displayed:

Either restart the computer, or disconnect the drive and then reconnect it. The drive can then be formatted.

When using hard disks larger than 137 GB:

If using hard disks larger than 137 GB in Windows 98 or 98SE, an error occurs if Scandisk is executed. To use Scandisk with Windows 98 or 98SE, make each partition 130 GB or smaller.



Do not format the wrong drive.

- To convert from FAT16 to FAT32, reformat the drive with FAT32 from the Disk Formatter utility. Do not use the formatter built-in to your OS! Converting from FAT16 to FAT32 with utilities built-in to your OS may result in unexpected behavior.
- FAT16 doesn't support partitions larger than 2047 MB. For partitions larger than 2047 MB, don't use FAT16. Use FAT32 or some other filesystem.
- For details on the Disk Formatter utility, see the Disk Formatter Software Manual (PDF file).

Formatting with Mac OS Extended Format

This describes the procedure for formatting this product with the Mac OS Extended format. The procedure varies depending on the Mac OS version. Refer to the procedure for the version you are using.

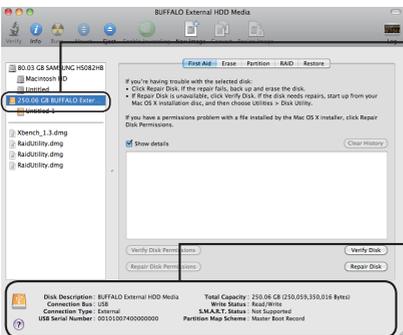
- **Windows computers don't support Mac OS Extended format. To use the drive with Windows computers, use a different format instead, such as NTFS or FAT32.**
- **Some drives don't support multiple partitions. If yours is one of them, use only a single partition on the drive.**
- **For more details on Mac OS Extended, consult your Mac OS Help.**

Mac OS X 10.5 and later

1 On the desktop, double-click the  icon for the volume to be formatted (such as "Macintosh HD").

2 In the Applications folder, open Utilities.

3  Double-click Disk Utility.

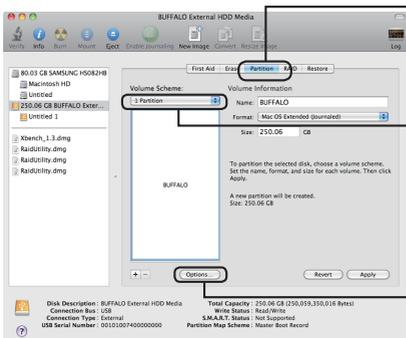
4  **①** Click the disk to be formatted.

② Check the disk description and information. Make sure that the drive that you are about to format is the right drive!

Disk Description: BUFFALO External HDD Media	Total Capacity: 250.06 GB (250,059,350,016 Bytes)
Connection Bus: USB	Write Status: Read/Write
Connection Type: External	S.M.A.R.T. Status: Not Supported
USB Serial Number: 0010100740000000	Partition Map Scheme: Master Boot Record

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① Click [Partition].

② Select [1 Partition].

Select the number of partitions that you want to create on the drive.

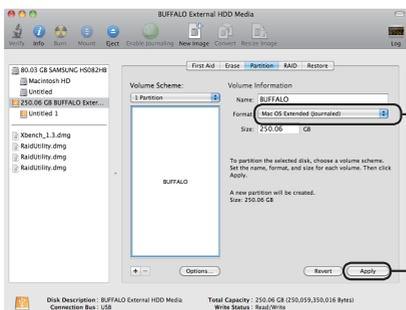
③ Click [Options].

6



Click [Apple Partition Map].

7



① Select [Mac OS Extended (Journaled)].

② Click [Apply].

8



Click [Partition].

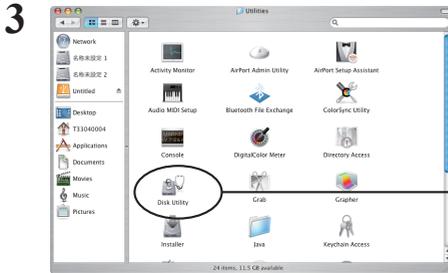
This completes the formatting process for this product. Exit the Disk Utility.

If "Do you want to use Volume_name to back up with Time Machine?" is displayed, you may click [Use as Backup Disk] and Time Machine will use the drive for backup. If you don't want to use it as a dedicated backup drive, click [Cancel].

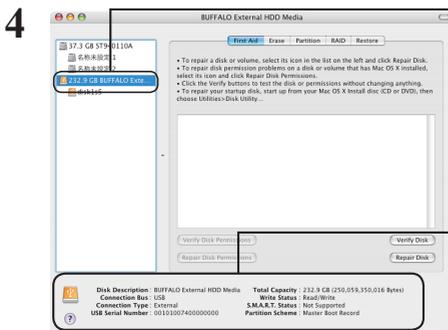
Mac OS X 10.3 to 10.4

1 On the desktop, double-click the  icon for the volume to be formatted (such as "Macintosh HD").

2 In the Applications folder, open Utilities.

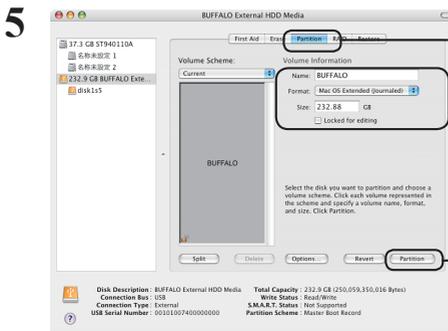


Double-click Disk Utility.



1 Click the disk to be formatted.

2 Check the information for the disk to be formatted. The disk information varies depending on the specific product.



1 Click [Partition].

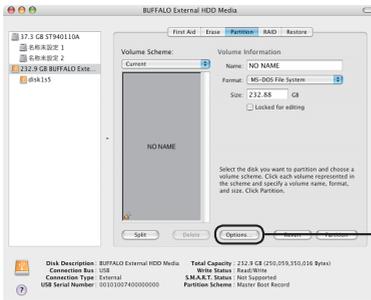
2 Set the volume information. Normally, select [Mac OS Extended (Journaled)] for the format.

3 Click [Create Partition].

When the volume information cannot be set (Mac OS X 10.4 and later only):

Use the procedure below to change the partition scheme to Apple Partition Map.

1



Click [Options].

2 Select [Apple Partition Map].



1 Select [Apple Partition Map].

2 Click [OK].

6



Click [Partition].

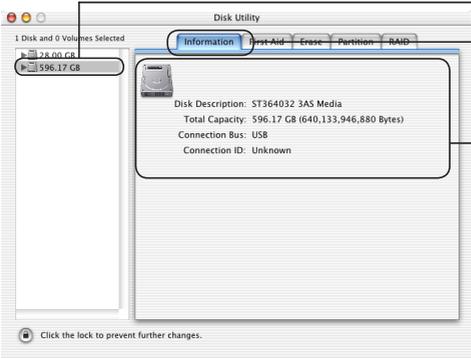
This completes the formatting process for this product. Exit the Disk Utility.

Mac OS X 10.0.4 to 10.2.8

Use the Disk Utility in Mac OS X to create a partition and format this product.

- 1 On the desktop, double-click the  icon for the volume to be formatted (such as “Macintosh HD”).**
- 2 In the Applications folder, open Utilities.**
- 3 Double-click Disk Utility.**

4



The screenshot shows the Disk Utility window with the 'Information' tab selected. The disk list on the left shows a disk with a capacity of 596.17 GB. The main pane displays the following information:

- Disk Description: ST364032 3AS Media
- Total Capacity: 596.17 GB (640,133,946,880 Bytes)
- Connection Bus: USB
- Connection ID: Unknown

Annotations with numbered circles point to the following elements:

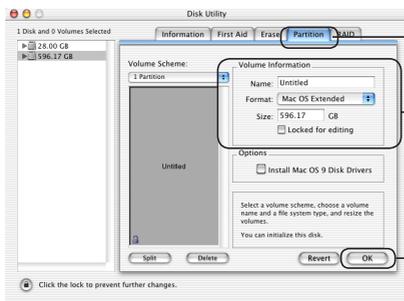
- ① Click the disk to be formatted.
- ② Click [Information].
- ③ Check the disk description and information. Make sure that the drive that you are about to format is the right drive!

At the bottom of the window, there is a lock icon and the text: "Click the lock to prevent further changes."

This screen example shows Mac OS X 10.2.

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5 Mac OS X 10.1 screen

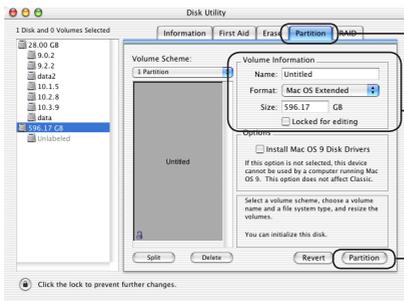


① Click [Partition].

② Set the partition information. Normally, select [Mac OS Extended] for the format.

③ Click [OK].

Mac OS X 10.2 and later screen



① Click [Partition].

② Set the partition information. Normally, select [Mac OS Extended] for the format.

③ Click [Partition].

All partitions are formatted in a single operation. For more information, see Mac OS Help.

6 If the message "...This operation cannot be undone. Are you sure you wish to execute this operation?" is displayed, click [Partition].

This completes the formatting process for this product. Exit the Disk Utility.