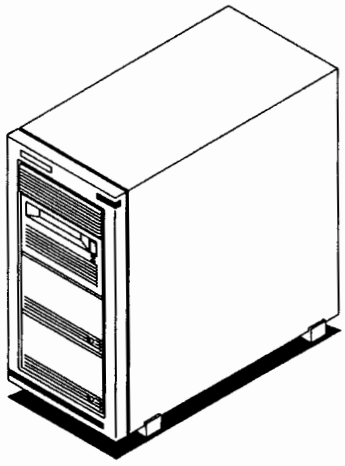
HP Series 6000
Mass Storage System
User's Manual



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Printing History

New editions incorporate all update material since the previous edition. Updating Supplements, which are issued between editions, contain additional and revised information to be incorporated into the manual by the user. The date on the title page changes only when a new edition is published.

Edition 1 July 1991

Safety Symbols and Conventions

The following conventions are used throughout this manual:

- **Bold** words in the text indicate a term defined in the Glossary included in this binder.
- *Italic* is used for emphasis or manual titles.

Note 

Notes contain important information set off from the text.

Caution 

Caution messages indicate procedures which, if not observed, could result in damage to equipment. Do not proceed beyond a CAUTION sign until the indicated conditions are fully understood and met.

Warning 

Warning messages indicate procedures or practices which, if not observed, could result in personal injury. Do not proceed beyond a WARNING sign until the indicated conditions are fully understood and met.

About This Manual

This manual contains information about your HP Series 6000 Mass Storage System. It is primarily intended for anyone involved in the day-to-day operation of the storage system.

How It Is Organized

- Chapter 1, Operating Your Storage System, contains the instructions on how to operate the storage system. This chapter takes you through the basic tasks involved in storage system operation, including tips on proper handling.
- Chapter 2, More Information About Your Storage System, provides additional useful information about the storage system. Once you have the storage system operating, read this chapter to learn more about the storage system.
- Appendix A, Technical Specifications, contains detailed technical specifications for your storage system.

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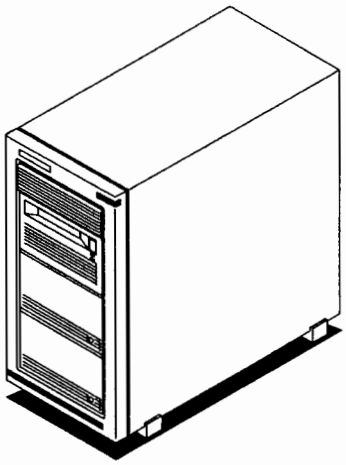
Operating Your Storage System

Introduction



This chapter contains instructions for operating your HP Series 6000 **Mass Storage System**. This information includes:

- Tips on handling and operating the storage system.
- Identifying the parts of the storage system.
- Switching power on and making sure the storage system is operating properly.

Operating Tips

Before operating the storage system, take a few minutes to read the following paragraphs. This information will help you avoid problems when handling or operating your storage system.

Handling the Storage System

- Once the mass storage devices have been installed, handle the storage system cabinet with care. Do not drop or bump the cabinet or you may damage the mass storage devices installed in it.
- If you must move a loaded storage system cabinet from one location to another, it should be repackaged for protection from mechanical shocks and bumps. Use the original packaging material if it is available, or other similar padded packaging if it is not.
- When fully loaded the storage system cabinet can weigh up to 27 kilograms (60 pounds). Use care when moving or lifting it, or get help if necessary.

Caution

A static charge of over 30,000 volts can be generated by simply walking across a carpeted floor. This is more than enough charge to damage the storage system.

- Always be aware of the dangers of static electricity. If the storage system is located in a carpeted room or any other area where static electricity is a problem, we recommend the use of anti-static mats and anti-static carpets. Hewlett-Packard offers a complete line of static control equipment, including anti-static mats and carpets. Contact your sales representative for information on ordering HP static control equipment.

Operating Environment

The proper operating environment is very important to the continued, trouble-free operation of your storage system. Make sure the operating site you have selected for the storage system does not exceed the environmental limits specified in Appendix A. Remember that you must also take into account the requirements for each device installed in the cabinet. The environmental requirements for each device are included in its *User's Manual.*

Power Cycling

The storage system power should remain on whenever the host system is operating. The mass storage devices are not harmed by continuous operation, so avoid cycling power on and off unnecessarily.

If you must turn off the storage system, wait until all devices are idle before switching off power. This avoids corrupting any data transfer that may be in progress between the host system and a mass storage device. The status lights on the front of each mass storage device act as activity indicators, flashing when the host is transferring data over the SCSI bus. If no lights are flashing, the bus is idle and it is safe to switch the power off.

Identifying Parts of the Storage System

The various parts of the storage system you should be familiar with are shown in Figure 1-1, and described on the following page. Before continuing, take a few moments to acquaint yourself with the parts of the storage system.

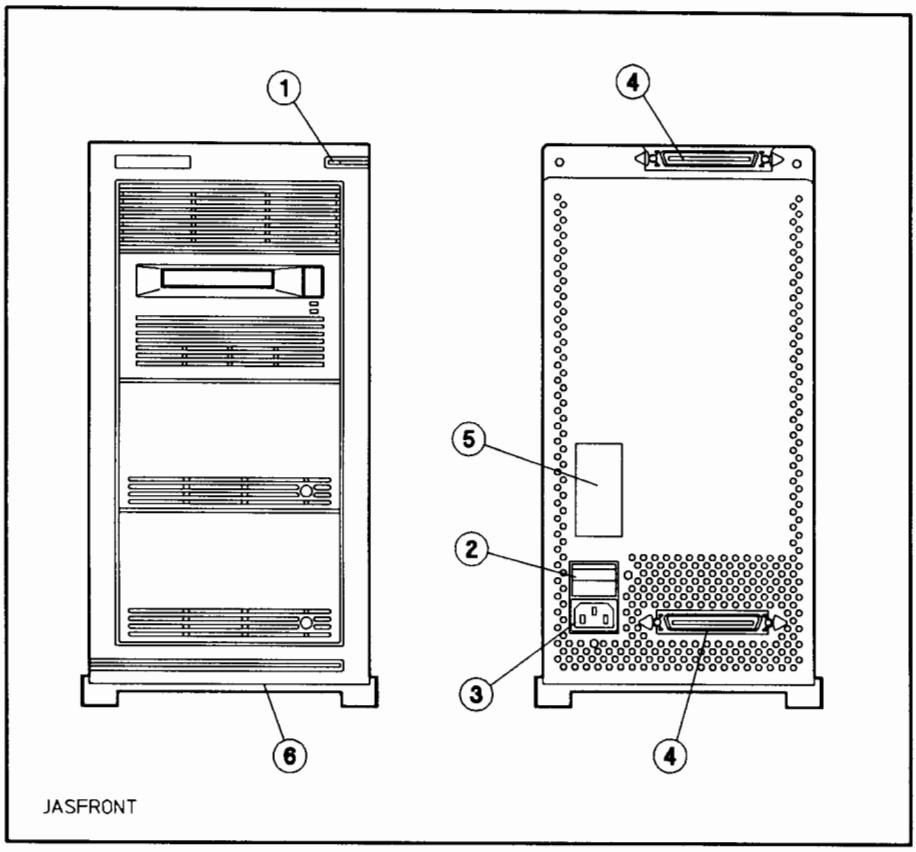


Figure 1-1. The Parts of Your Storage System

1. Power-On light	This green light indicates that power to the storage system is switched on.
2. LINE~ switch	Setting this switch to the 1 (ON) position switches the cabinet power on, and setting the switch to the 0 (OFF) position switches power off. This single switch controls power to all devices in the storage system cabinet.
3. Power cord connector	This connector provides the connection for the ac power cord.
4. SCSI connectors	These connectors provide the SCSI interface connection to the storage system cabinet.
5. Serial number	The serial number should be recorded on the pull-out configuration card and in the space below. This makes it handy if you must contact your sales representative concerning the storage system, or if it is ever lost or stolen. Serial Number: _____
6. Pull-out configuration card	All the configuration information about your storage system should be recorded on this card. This information is valuable when adding other devices or when trying to solve problems, so make sure it is correct.

Operating the Storage System

Caution 

If the storage system has been exposed to temperature extremes, allow two hours for it to stabilize at room temperature and humidity before operating it. Operating a storage system that is either very cold or very hot may damage the mass storage devices in it.

1. Switch on storage system power.
2. Let each mass storage device to complete its internal **self-test**. This takes less than 40 seconds. During that time the **status light** (or lights) on the front of each device will flash in various patterns.
3. Check the status lights to make sure each device passed self-test. In most cases, the status lights will be off if the device passed. If you suspect a device has failed self-test, or have other questions about the status lights, refer to the *User's Manual* included with the device for more information.

The storage system is now ready for use.

To switch the storage system off, set the LINE switch to the 0 (OFF) position. Make sure all the devices are idle before switching off power.

Operating the Mass Storage Devices

Operating instructions are contained in the *User's Manual* included with each device. Take the time to acquaint yourself with the operation of each device installed in your storage system.

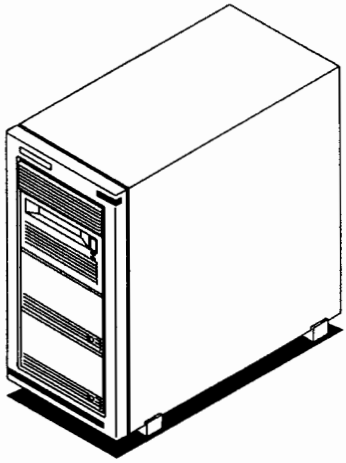
Learning More About Your Storage System

Once the storage system is operating properly, read through Chapter 2. This chapter provides additional useful information about your storage system.

2

More About Your Storage System

Introduction



This chapter contains additional information about your storage system. The topics discussed in this chapter include:

- A description of the product
- A list of available accessories
- A list of the documentation included with the product
- How to prepare the storage system for shipping
- Tips on maintenance and troubleshooting
- Service and warranty information

Product Description

The HP Series 6000 Mass Storage System provides a convenient solution to your mass storage problems. The storage system offers a variety of mass storage devices, all mounted in a single cabinet, and operating on the same **SCSI** interface.

Each storage system includes an upright cabinet and at least one mass storage device. The cabinet holds multiple devices, so you can add more mass storage devices as you need them.

The modular product design provides the flexibility you need to adapt the storage system to your mass storage requirements. It simplifies installation and makes it easy to add devices as your storage requirements change. And you will also be able to select new forms of mass storage as they become available.

A power supply and all necessary cabling are included in the cabinet. The cabinet connects to the host with a single SCSI interface cable.

Each storage system product is supported on specific Hewlett-Packard operating systems. Refer to the *Configuration Quick Reference Card* for a list of the operating systems support your storage system.

Mass Storage Devices

Each storage system product can be used with a variety of different mass storage devices. The *Configuration Quick Reference Card* included with your storage system lists the mass storage devices that are currently available.

The list of accessory mass storage devices available for storage system products will continue to grow as new forms of mass storage are developed. Check with your Hewlett-Packard sales representative for information on what additional types of accessory mass storage devices may currently be available.

Documentation

The following documentation is included as part of the Storage System Information Package:

- *HP Series 6000 Mass Storage System Hardware Installation Manual*, part number 5960-0886. This guide contains complete instructions on installing the storage system.
- *HP Series 6000 Mass Storage System User's Manual*, part number 5960-0887. This is the manual you are reading.
- *Configuration Quick Reference Card.* This card contains configuration information about the storage system, including a list of available mass storage devices, supported operating systems, supported PCs, and other information.

In addition to these documents, each mass storage device includes its own *User's Manual.*

Repacking Your Storage System for Shipping

Should it become necessary to ship or transport your storage system, use the original container and packaging material. If the original container is not available, contact your sales representative or Hewlett-Packard directly for information about obtaining replacement packaging material. The complete packaging kit can be ordered as part number C2260-60031.

Instructions for packing the storage system are printed on the shipping container.

The packaging material is designed to provide adequate protection for the cabinet even when it is fully loaded. Consequently, you do not need to remove the mass storage devices from the cabinet before repackaging it.

Note

Devices that use removable media should have the media removed before the device is repackaged. This avoids damaging the device.

If you are returning the storage system for service, the container should have an attached tag identifying your name and address and the service or repair needed. Include the equipment model number and full serial number. The serial number is located on the back of the storage system cabinet. If devices are installed in the cabinet, the tag should include the type of devices and their serial numbers.

Remove all external cables from the storage system cabinet before shipping. Seal the container securely with adhesive tape. Also, we recommend that all shipments be insured; damage that occurs during shipment is not covered under warranty.

Maintenance

The only storage system device requiring maintenance is the DDS-format DAT drive. If you have a DDS-format DAT drive installed in your storage system, you must clean the tape head periodically. Refer to the *DDS-Format DAT Drive User's Manual* for information on cleaning the tape head.

Troubleshooting

Your first indication of a problem with the storage system will probably be in the form of an error message displayed by the host computer. When a problem occurs, there are a few steps you can take to isolate and possibly solve the problem yourself.

1. Check the status lights on the front of each mass storage device for an indication of a problem or failure.
2. If the problem involves a device with removable media, determine if the problem is media related. Change the media and see if the problem disappears.

If you cannot solve the problem yourself, call for service. The following section provides tips on preparing for a service call.

Service

Like all Hewlett-Packard products, your storage system is designed for superior reliability. However, should your storage system require service, there are a few things you can do to help your service representative identify and solve the problem quickly.

1. Record any information about the problem. This includes any error messages displayed by your computer, the state of the device status lights, and details about the operation which was being performed when the problem occurred. For example, record the software application you were using when the trouble occurred.
2. Provide the information on the pull-out configuration card. Make sure the information reflects the current configuration of your storage system.
3. Now contact your Hewlett-Packard service representative and explain the problem. Your service representative should be able to provide the assistance you need to solve the problem.

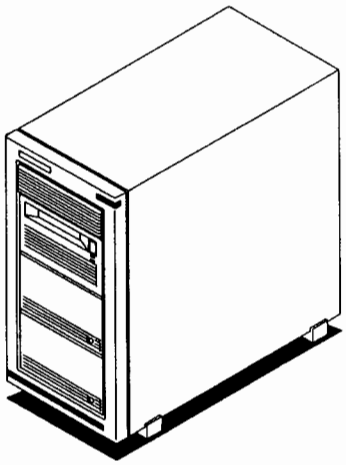
Warranty

Your HP Series 6000 Mass Storage System is covered by a standard Hewlett-Packard warranty. However, this warranty is void if any of the sealed devices, such as the head-disk assembly, has been opened or otherwise tampered with.

A

Technical Specifications

Introduction



This appendix contains detailed specifications and characteristics for the HP Series 6000 Mass Storage System. Detailed product regulatory statements are included at the end of this appendix.

The technical specification data is divided into three categories:

- Physical characteristics - includes information on size and weight.
- Operating characteristics - includes such product characteristics as power, heat dissipation, acoustic emissions, electromagnetic emissions, and compliance to safety standards.
- Environmental requirements - includes operating, nonoperating, and recommended environmental limits.

Establishing the Proper Operating Environment

To ensure trouble-free operation, it is essential your storage system has the proper operating environment. The environmental requirements of the storage system and its mass storage devices must be considered when selecting an operating site.

The environmental requirements vary for different types of mass storage devices. Consequently, the exact

requirements for your system will be determined by the types of devices you are using. Detailed specifications for the storage system are provided in the Environmental Requirements section of this chapter. Any environmental requirements specific to a mass storage device are contained in the *User's Manual* included with the device.

All aspects of the operating environment should be considered when preparing a site for your storage system. These include not only temperature and humidity, but other factors such as shock, vibration, and electromagnetic susceptibility.

For continued, trouble-free operation, the storage system should not be operated at its **maximum environmental limits** for extended periods of time. The **recommended operating range** provides a less stressful operating environment. Operating within the recommended operating range will ensure maximum reliability from your storage system.

If you would like additional information on environmental issues and how they affect the performance and reliability of mass storage products, the following publication is available from Hewlett-Packard: *Disk Product Specifications and Site Environmental Requirements*, part number 5955-3456.

Specifications

Note

These specifications apply when the storage system is operated with its supported accessory devices. To ensure the product meets its regulatory and safety specifications, the use of foreign SCSI devices is not recommended.

Physical Characteristics

DIMENSIONS

Height:	370 mm (14.6 in.)
Width:	191 mm (7.5 in.)
Depth:	387 mm (15.25 in.)

WEIGHT

Net:	
Cabinet only:	12.9 kg (28.5 lb)
Shipping:	
Cabinet package:	20 kg (44 lb)

The weight of each mass storage device is listed in the *User's Manual* included with the device.

Operating Characteristics

HEAT DISSIPATION

Maximum:
Cabinet only: 30 W (102 Btu/hr; 26 kcals/hr)

Typical:
Cabinet only: 30 W (102 Btu/hr; 26 kcals/hr)

The heat dissipation for each mass storage device is listed in the *User's Manual* included with the device.

ELECTROMAGNETIC EMISSIONS

Radiated and conducted interference:

- For U.S.A., this equipment has been type tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. See instructions if interference to radio reception is suspected.

- For Europe, designed to meet CISPR 22.

- For Germany, designed to meet EMI level FTZ 1046/84 and provides a Manufacturer's Declaration. Refer to your local sales representative for more information.

Magnetic interference:

Magnetic operating: <5 gauss on all surfaces
Magnetic nonoperating: <2 milligauss at 2 m (7 ft) on all surfaces

POWER CHARACTERISTICS

Note 

The power supply in your storage system has an automatic ranging power supply which adjusts itself to the input line voltage.

Voltages (true rms):	
120 V:	100 V, 115 V, 120 V, single phase
240 V:	220 V, 240 V, single phase
Inclusive Ranges:	88 V to 268 V
Frequency:	47.5 to 63 Hz (single phase)
Maximum Power:	
Cabinet only:	120 V; 30 W (120 V, 60 Hz) 240 V; 30 W (240 V, 50 Hz)
Typical Power:	
Cabinet only:	120 V; 30 W (120 V, 60 Hz) 240 V; 30 W (240 V, 50 Hz)
Maximum Current:	
Cabinet only:	120 V; 0.5 A (true rms at 120 V, 60 Hz) 240 V; 0.3 A (true rms at 240 V, 50 Hz)
Typical Current:	
Cabinet only:	120 V; 0.5 A (true rms at 120 V, 60 Hz) 240 V; 0.3 A (true rms at 240 V, 50 Hz)
Line Dropout:	No effect on performance; no operator intervention required for dropout equal to or less than 20 ms.

The power and current specifications for each mass storage device are listed in the *User's Manual* included with the device.

ACOUSTIC EMISSIONS

Typical sound power level (L_{wA}):	
With 1 hard disk drive	55 dB(A)
With 3 hard disk drives	57 dB(A)
Average sound pressure level (L_{pA}):	
With 3 hard disk drives and 1 CD-ROM	48.3 dB(A) seeking

SAFETY

- CSA certified to CSA 22.2 No. 950-M89.
- Meets all applicable safety standards of IEC 950 and EN 60950.
- UL listed to UL 1950, First edition.

Environmental Requirements

Note

The specifications included here are the general environmental requirements for the storage system. Some mass storage devices have environmental requirements that are more stringent than those listed here. Consequently, the exact environmental requirements will be determined by the devices you are using. For complete device specifications, refer to the *User's Manual* included with each mass storage device.

The environmental specifications listed herein apply when this product is not connected to a Hewlett-Packard (HP) system. When this product is connected with HP systems, the more stringent environmental and performance specifications listed for any single HP device within the HP system are applicable and supersede these specifications.

The following specifications were type-tested under controlled conditions. Hewlett-Packard maintains an active program of auditing production products to ensure these specifications remain true when products are again tested under the same conditions. The limits of these specifications do not represent the optimum for long, trouble-free operation and are specifically not recommended for maximum customer satisfaction. The recommended conditions are stated separately where appropriate.

TEMPERATURE

Recommended operating range:	**20°C to 25.5°C (68°F to 78°F)**
Operating range:	0°C to 50°C (32°F to 122°F)
Nonoperating range:	-40°C to 65°C (-40°F to 149°F)
Maximum rate of change:	20°C (36°F) per hour

HUMIDITY

Operating :	8% to 80% relative humidity, noncondensing
Nonoperating:	5% to 80% relative humidity, noncondensing

COOLING REQUIREMENTS

Allow a minimum of 50 mm (2 in.) in front and behind the cabinet for adequate air flow.

RANDOM VIBRATION

Operating:	Random vibration with power spectral density (PSD) of 0.0001 g^2/Hz from 5 to 350 Hz; -6 dB/octave from 350 to 500 Hz; PSD of 0.00005 g^2/Hz at 500 Hz at approximately 0.21 g rms.
Nonoperating:	Random vibration with power spectral density (PSD) of 0.015 g^2/Hz from 5 to 100 Hz; -6 dB/octave from 100 to 137 Hz; PSD of 0.008 g^2/Hz from 137 to 350 Hz; -6 dB/ octave from 350 to 500 Hz; PSD of 0.0039 g^2/Hz at 500 Hz at approximately 2.09 g rms swept sine from 5 to 500 Hz; 1 octave per minute, 5 minute dwell at 4 resonances per axis 0.5 g (0-peak).

SHOCK

Recommended operating range:	**<1 g**
Operating (no data loss):	3 g maximum at 11 ms, half sine waveform
Nonoperating:	24 g maximum at 11 ms, half sine waveform

ALTITUDE

Operating:	minimum -305 m (-1000 ft) maximum 3 048 m (10,000 ft)
Nonoperating:	minimum -305 m (-1000 ft) maximum 15 240 m (50,000 ft)
Maximum rate of change:	<1,524 m/minute (5000 ft/minute)

ELECTROMAGNETIC SUSCEPTIBILITY OPERATING RANGE

Radiated (14 kHz to 1 GHz):	
Recommended operating limit:	**0.5 V/m**
Operating limit:	3 V/m
Conducted (30 Hz to 50 kHz):	
Recommended operating limit:	**1 V rms**
Operating limit:	3 V rms
Conducted (50 kHz to 400 MHz):	
Recommended operating limit:	**0.5 V rms**
Operating limit:	1 V rms
Electrostatic Discharge:	
Recommended operating limit:	**5 kV**
Operating limit:	15 kV
Magnetic:	<4 gauss, 47.5 to 198 Hz
Power line transients (oscillatory wave and unidirectional wave tests per IEEE Standard P587.1/F):	
Oscillatory wave (100 kHz ringing wave):	
Recommended operating limit:	**500 V (open circuit voltage)**
Operating limit:	3.0 kV (open circuit voltage)
Unidirectional wave (one 50 μs wide pulse):	
Recommended operating limit:	**100 V (open circuit voltage)**
Operating limit:	250 V (open circuit voltage)
Fast rise time transients:	
Recommended operating limit:	**500 V (into 50 ohm load)**
Operating limit:	1 kV (into 50 ohm load)

POWER REQUIREMENTS

Voltages (true rms):	
120 V:	100 V, 115 V, 120 V, single phase
240 V:	220 V, 240 V, single phase
Inclusive Ranges:	88 V to 268 V
Frequency:	47.5 to 63 Hz (single phase)
Power:	For maximum and typical power values refer to the power characteristics included under Operating Characteristics.
Current:	For maximum and typical current values refer to the power characteristics included under Operating Characteristics.
Distortion:	<10% flat-topped harmonic distortion
Line Surge and Sag:	
Transparent surge:	120% nominal line voltage for 0.5 sec
Recoverable surge/sag:	120 V; 70% and 125% typical line voltage for 0.5 second (per MIL-T-28800)
Line Dropout:	Must not exceed 20 ms

TILT

The product shall meet all performance specifications when mounted in an upright orientation which maintains the horizontal plane of the device to within ±15 degrees of parallel to the horizon.

FCC Statement

FOR U.S.A. ONLY

The Federal Communications Commission (in 47 CFR 15.105) has specified that the following notice be brought to the attention of the users of this product.

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The end user of this product should be aware that any changes or modifications made to this equipment without the approval of Hewlett-Packard could result in the product not meeting the Class A limits, in which case the FCC could void the user's authority to operate the equipment.

FTZ Statements

FUNKENTSTÖRUNGSVORSCHRIFTEN FÜR DEUTSCHLAND HERSTELLERBESCHEINIGUNG

Hiermit wird bescheinigt, daß das Gerät in Übereinstimmung mit den Bestimmungen von Postverfügung 1046/84 funkentstört ist. Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Wird das Gerät innerhalb eines Systems betrieben, so muß bei Inanspruchnahme der Allgemeinen Genehmigung FTZ 1046/84 das gesamte System der oben genannten Genehmigung entsprechen. Wird das Gerät innerhalb eines Systems betrieben das mit einer FTZ-Serienprüfnummer gekennzeichnet ist, und für welches eine Betriebsgenehmigung vorliegt oder beantragt wird, so sind in der Regel keine weiteren Schritte notwendig.

ELECTROMAGNETIC INTERFERENCE REGULATIONS FOR GERMANY MANUFACTURER'S DECLARATION

This is to certify that the equipment is in accordance with the Radio Interference Requirements of Directive FTZ 1046/84. The German Bundespost was notified that this equipment was put into circulation and the right to check the series for compliance with the requirements was granted.

If this equipment is to be operated with a system, and if the General License is being claimed, the complete system must comply with the General Licensing requirements. If this equipment is to be operated with a system which has its own FTZ-Serial-License, and for which an operating license has been submitted or applied, usually no further steps are necessary.

VCCI Statements FOR JAPAN ONLY

この装置は，第二種情報装置（住宅地域又はその隣接した地域において使用されるべき情報装置）で住宅地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）基準に適合しております。

しかし，本装置をラジオ，テレビジョン受信機に近接してご使用になると，受信障害の原因となることがあります。

取扱説明書に従って正しい取り扱いをして下さい。

This apparatus is a class 2 ITE (information apparatus which may be used in residential and adjacent areas) which meets the VCCI standards to prevent radio interference in residential and adjacent areas. However, this apparatus may become a source of radio interference if used within close range of radio or television receivers. To ensure compliance, this apparatus must be operated according to instructions included with the product.

Communication Statement For Canada Only

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe A prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Laser Safety

The following warning applies to those products that support CD-ROM drives and rewritable optical disk drives.

Warning

- **Use of controls, adjustments, or performing procedures other than those specified in this manual may result in hazardous invisible laser radiation exposure. None of the devices within the storage system contain customer or field-replaceable parts.**
- **The CD-ROM drive becomes a Class 1 laser mechanism when disassembled. If the CD-ROM drive is disassembled, exposure to the invisible laser beam and hazardous invisible laser radiation could result in blindness. Do NOT disassemble the CD-ROM drive for any reason.**
- **The rewritable optical disk drive becomes a Class 3B laser mechanism when disassembled. If the rewritable optical disk drive is disassembled, exposure to the invisible laser beam and hazardous invisible laser radiation could result in blindness. Do NOT disassemble the rewritable optical disk drive for any reason.**
- **Please observe the following warning label, which is located on the top of the rewritable optical disk drive:**

  DANGER - Invisible laser radiation when open. Avoid direct exposure to beam.

Laser Safety Statement (For Finland Only)

TURVALLISUUSYHTEENVETO

LASERTURVALLISUUS

LUOKAN 1 LASERLAITE

KLASS 1 LASER APPARAT

HP Series 6000 Storage -muistiasemaan voidaan aliyksikköinä asentaa CD-ROM-yksikkö ja optinen levymuistiyksikkö, jotka ovat laserlaitteita. Tällöin myös itse muistiasema katsotaan laserlaitteeksi.

HP Series 6000 Storage -muistiasema on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä muistiaseman suojakotelo estää laserāteen pääsyn laitteen ulkopuolelle.

Muistiaseman on tyyppihyväksynyt Suomessa laserturvallisuuden osalta Työsuojeluhallitus, Työsuojeluhallituksen hyväksyntänumero TSH 222/6019/90. Laiteen turvallisuusluokka on määritetty valtioneuvoston päätöksen N:o 472/1985 ja standardin SFS-IEC 825 mukaisesti.

Varoitus 

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saatta altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

Varning 

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

Laser Safety Statement Continued (For Finland Only)

HUOLTO

Muistiaseman sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Muistiaseman sisälle mahdollisesti asennetun CD-ROM-yksikön tai optisen levymuistiyksikön koteloa ei tule avata huoltotoimenpiteiden yhteydessä.

Varo

Mikäli CD-ROM-yksikkö tai optinen levymuistiyksikkö avataan ja suojalukitus ohitetaan, olet alttiina näkymättömälle lasersäteilylle laitteen ollessa toimintatilassa. Älä katso säteeseen.

Varning

Om CD-ROM drivmodulen eller den optiska drivmodulen öppnas och spärren urkopplas då apparaten är i funktion, kan användaren utsättas för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävien laserdiodien säteilyominaisuuksista:

CD-ROM-yksikkö:	Aallonpituus	780 nm
	Teho	0,4 mW
	Luokan 1 laser	
Optinen levymuistiyksikkö:	Aallonpituus	785 nm
	Teho	11,5 mW
	Luokan 3B laser	

Noise Declaration (For Germany Only)

Acoustic Noise Emissions

LpA: 48.3 dB (seeking)

At bystander position per ISO 7779.

All data are the results from type tests of the product configuration having the highest acoustic emissions:

3 disk drives and 1 CD-ROM

All other configurations have lower emission levels.

Refer to the environmental specification section of the manual for details.

Geräuschemission

LpA: 48.3 dB (suchend)

Am fiktiven Arbeitsplatz nach DIN 45635 T. 19.

Die Daten sind die Ergebnisse von Typprüfungen an Gerätekonfigurationen mit den höchsten Geräuschemissionen:

3 Plattenlaufwerke und 1 CD-ROM

Alle andere Konfigurationen haben geringere Geräuschpegel.

Für weitere Angaben siehe unter Umgebungsbedingungen.

Glossary

maximum environmental limits
The maximum limits of temperature, humidity, vibration, shock, and altitude, which should not be exceeded during extended periods of operation of a storage system.

mass storage system
In this manual, mass storage system refers to a product that includes a power supply, internal SCSI mass storage devices, and internal cabling all mounted in a single cabinet. The mass storage system can be configured with a number of different mass storage devices offered as accessories.

recommended operating range
The range of temperature, humidity, vibration, shock, and altitude, recommended for extended periods of operation of a storage system.

SCSI
Small Computer System Interface. An industry-standard interface which defines mechanical, electrical, and functional requirements for connections and communication between small computers and mass storage devices and other peripherals.

self-test
An internal diagnostic test sequence that is performed whenever device power is switched on. The results of the self-test, pass or fail, is displayed using the status light(s) on the front panel of the mass storage device.

status light
A light (or lights) on the front panel of a mass storage device. The status light is used to indicate normal operating conditions and fault conditions of a mass storage device.

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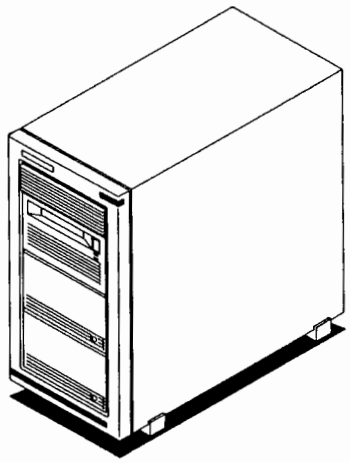
Quick Setup Guide



This guide provides the quickest path to installing your HP Series 6000 Mass Storage System. It is for those who feel they have the necessary experience to install the storage system without reading the details.

The installation is a simple three-step process:

Step 1. Connect power and perform a power-on checkout to make sure the storage system is working properly.

Step 2. Connect the storage system to the host.

Step 3. Configure the storage system into your operating system.

If you use the Quick Setup Guide and encounter trouble, do not worry -- each installation step is explained in greater detail in the accompanying *Hardware Installation Manual.*