

USB 1.44 MB External Diskette Drive

Installation and Using Guide

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Note

Before you install this product and use this information, be sure to read the product warranties and notices information included with the system unit into which you are installing the product.

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Before using this information and the product it supports, read the information in “Safety Information” on page v and Appendix B, “Notices,” on page 13.

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Safety Information

DANGER

An electrical outlet that is not correctly wired could place hazardous voltage on metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock.

Before installing or removing signal cables, ensure that the power cables for the system unit and all attached devices are unplugged.

When adding or removing any additional devices to or from the system, ensure that the power cables for those devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.

Use one hand, when possible, to connect or disconnect signal cables to prevent a possible shock from touching two surfaces with different electrical potentials.

During an electrical storm, do not connect cables for display stations, printers, telephones, or station protectors for communications lines.

D05

Handling Static-Sensitive Devices

Attention: Static electricity can damage the device and your system unit. To avoid damage, keep this device in its anti-static protective bag until you are ready to install it. To reduce the possibility of electrostatic discharge, follow the precautions listed below:

- Limit your movement. Movement can cause static electricity to build up around you.
- Handle the device carefully, holding it by its edges or its frame.
- Do not touch solder joints, pins, or exposed printed circuitry.
- Do not leave the device where others can handle and possibly damage the device.
- While the drive is still in its anti-static package, touch it to an unpainted metal part of the system unit for at least two seconds. (This drains static electricity from the package and from your body.)
- Take additional care when handling devices during cold weather, as heating reduces indoor humidity and increases static electricity.

About This Book

This book provides information about the USB 1.44 MB External Diskette Drive, including how to properly install the diskette drive and its AIX drivers. Use this book along with your specific system unit and operating system documentation.

ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

Highlighting

The following highlighting conventions are used in this book:

Bold	Identifies commands, subroutines, keywords, files, structures, directories, and other items whose names are predefined by the system. Also identifies graphical objects such as buttons, labels, and icons that the user selects.
<i>Italics</i>	Identifies parameters whose actual names or values are to be supplied by the user.
Monospace	Identifies examples of specific data values, examples of text similar to what you might see displayed, examples of portions of program code similar to what you might write as a programmer, messages from the system, or information you should actually type.

References to AIX Operating System

This document may contain references to the AIX operating system. If you are using another operating system, consult the appropriate documentation for that operating system.

This document may describe hardware features and functions. While the hardware supports them, the realization of these features and functions depends upon support from the operating system. AIX provides this support. If you are using another operating system, consult the appropriate documentation for that operating system regarding support for those features and functions.

Related Publications

The following publications contain related information:

- System unit documentation for information specific to your hardware configuration
- AIX operating system documentation for information specific to your software configuration

The AIX documentation library is available at the IBM @server pSeries and AIX Information Center at <http://publib16.boulder.ibm.com/pseries/index.htm>. Click **AIX documentation**. AIX documentation is also contained on the AIX Documentation CD that was shipped with your AIX operating system.

Trademarks

The following term is a trademark of International Business Machines Corporation in the United States, other countries, or both:

- AIX
- IBM
- @server
- pSeries

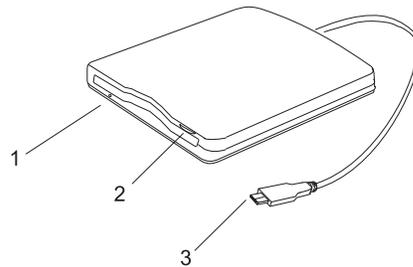
Other company, product, and service names may be trademarks or service marks of others.

Chapter 1. Overview

This chapter describes the features of the USB 1.44 MB External Diskette Drive and provides instructions for handling and installing the drive. The drive is a 3.5-inch, double-sided, micro floppy disk drive with the following features:

- Full-speed data transfer rate of 12 Mb per second
- 300 rpm disk rotational speed
- Fully hot-pluggable
- Track density of 5.3 per mm (135 tpi)
- Supports the following modes:
 - Format/read/write in 1.44 MB mode on 2 MB High-Density (2HD) diskettes
 - Format/read/write in 720 KB mode on 1 MB Double-Density (DD) diskettes

Front View



- 1 Activity LED
- 2 Eject Button
- 3 USB Connector

Other Handling Considerations

Be sure to take the following additional precautions when you use the diskette drive:

- Remove diskettes before moving the drive.
- Do not place the drive where any of the following conditions exist:
 - High temperature
 - High humidity
 - Excessive dust
 - Excessive vibration or sudden shock
 - Direct sunlight
- When in use, keep the diskette drive in a horizontal position. Do not install the drive vertically or invert the drive while it is running.
- Do not insert foreign objects into the drive.
- Do not stack objects on the drive.
- Do not remove the drive covers or attempt to service the drive yourself.

Handling Diskettes

Diskettes are high-density media that must be handled with care to ensure that they remain readable. Use the following precautions to ensure reliability:

- Hold the diskette by its edges.
- Do not touch the media inside of the diskette case or attempt to open the case.
- Do not store or place the diskette in direct sunlight.
- Do not bend the diskette.

Loading a Diskette

To load a diskette into the drive, do the following:

1. Position the diskette with the media spindle facing down.
2. Insert the diskette into the drive until it snaps into place. When the diskette is fully seated, the Eject button will extend outward from the front of the drive.

Ejecting the Diskette

To eject a diskette, do the following:

1. Press the Eject button above the diskette slot. The diskette will partially eject from the drive slot.
2. Gently remove the diskette from the drive and place it in a secure area.

Chapter 2. Preparing to Install the USB 1.44 MB External Diskette Drive

This chapter describes how to prepare to install your USB 1.44 MB External Diskette Drive. Preparing to install the diskette drive involves the following tasks:

- Verifying your hardware and software requirements
- Making sure your package is complete
- Gathering tools and documentation

Verifying Your Hardware and Software Requirements

To install the USB 1.44 MB External Diskette Drive, you must have a USB Type A port on your system. A USB Type A port looks similar to the following:



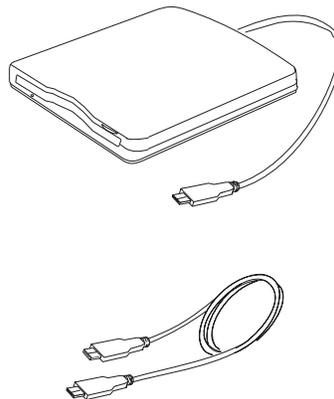
The following limitations also apply:

- Do not connect the diskette drive to an external USB hub, either powered or nonpowered.
- No more than one external diskette drive may be attached per adapter.

The USB 1.44 MB External Diskette Drive is supported on AIX 5.2 and later. Ensure that your operating system supports this diskette drive before proceeding. Contact your service representative for assistance.

Checking Your Package

Check that your package contains the following items:



- Diskette Drive
- USB Extension Cable

If an item is missing or damaged, contact the place of purchase. Be sure to retain your proof of purchase, as it might be required to receive warranty service.

Gathering Tools and Documentation

No special tools are needed to install this diskette drive. However, you might need the following items:

- System unit installation documentation
- Operating system documentation

Chapter 3. Installing the USB 1.44 MB External Diskette Drive

This chapter takes you through the steps of installing your USB 1.44 MB External Diskette Drive.

Handling Recommendations

For optimum performance, always follow these recommendations:

- Handle the drive carefully and by its external chassis. Keep your hands away from any printed circuit boards, components, and printed circuit (flex) cables.
- If possible, work on a cushioned surface, and do not drop the drive onto the work surface.
- If you move the drive to an environment that is colder or warmer than its previous environment, keep the drive in its package and allow the package to reach the current room temperature. Allow one hour of acclimation for each 10 degrees C (18 degrees F) difference between the ship or storage temperature and the room temperature.

Attention: Your diskette drive requires high-quality media and must be installed in the cleanest possible environment. Improper use, storage, or handling of the diskette drive or media may void your warranty or service agreement. Additionally, your system supplier may only support media they sell. If your service representative determines that a problem is related to use of inferior-quality media, replacing the media will be the responsibility of the customer.

Installing and Connecting the USB 1.44 MB External Diskette Drive

The USB 1.44 MB External Diskette Drive must be connected directly to your system adapter through a Type A USB port. Do not connect the diskette drive to an external USB hub, either powered or nonpowered.

No power cable or additional power outlet is necessary because the drive draws its power directly from the USB port on your system adapter.

To install and connect the drive, do the following:

1. Place the diskette drive in a secure position where it can lie flat and be easily accessible.
2. Plug the USB connector cable on the drive either directly into the USB port on the adapter or the USB extension cable that was provided with the drive. If using the extension cable, then plug the connector on that cable directly into the USB port on your system adapter.
3. Route any loose cable away from potentially high-traffic areas and secure it with cable ties, if necessary.

Note: The diskette drive is supported as a hot-pluggable device. However, before using the drive, proceed to the next section for information about how to enable the device on an AIX system.

Chapter 4. Using the Diskette Drive

USB device driver software is provided within AIX and other operating systems. In most cases, you need only to run the `cfgmgr` command to enable the diskette drive on your system.

To determine whether the correct AIX device driver is installed, run `lsdev -P -t 080400` at the system prompt. If the driver is installed, output similar to the following is displayed:

```
diskette 080400 usbif USB Diskette Drive
```

If the driver is not shown, you must install it from your disc media. Follow the procedure outlined in *Installing Device Drivers on an AIX System*.

Using Configuration Manager to Enable the Diskette Drive

To configure the diskette drive on an AIX system containing the supporting USB device drivers, do the following:

1. Log in as root user.
2. At the system prompt, type `cfgmgr -v` and press Enter.

If the drive does not function correctly, run diagnostics to determine the reason for the error and repeat this step.

Installing Device Drivers on an AIX System

If you must install non-AIX resident device drivers on your system, do the following:

1. At the system prompt, log in as root user.
2. Insert the device driver media into the appropriate media device.
3. To start SMIT, type `smit devinst` at the prompt, then press Enter. The Install Additional Device Software panel displays. The INPUT device/directory for software option is highlighted for selection.
4. Press F4 to display a list of input devices from which you can select. The cursor is already positioned on the input device entry field.
5. Either type the name of the input device in the entry field or select the appropriate device, then press Enter. The Install Additional Device Software panel displays the device you selected in the INPUT device/directory for software field. The SOFTWARE to install option is highlighted.
6. Press F4 to display a list of the device packages you can install.
7. To display a Find dialog box, type `/` in the field where the cursor is positioned.
8. Select the following device package name: `devices.usbif.080400` and then press Enter.
9. Press F7 to select the device package name, then press Enter. The Install Additional Device Software panel displays the completed required fields.
10. Press Enter. The ARE YOU SURE list displays.
11. Press Enter. The COMMAND STATUS panel displays. The term RUNNING is highlighted, indicating that the software is being installed and configured.
12. When RUNNING changes to OK, scroll to the bottom of the panel and locate the Installation Summary. If the installation was successful, SUCCESS displays at the bottom of the panel in the Result column of the Installation Summary.
13. Remove the device driver software media from the media device.
14. Press F10 to exit SMIT.

15. Either shut down and restart your system using the shutdown -Fr command, or use the cfmgr command to enable the diskette drive.
16. To check whether the driver installation was successful, type smitty at the system prompt.
17. Select **Select Devices** → **Diskette Drive** → **List all Defined Diskette Drivers**.
18. Verify that the diskette drive is Available.

Appendix A. Communications Statements

The following statement applies to this product. The statement for other products intended for use with this product appears in their accompanying documentation.

Federal Communications Commission (FCC) Statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from authorized dealers. Neither the provider nor the manufacturer are responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:

- International Business Machines Corporation
- New Orchard Road
- Armonk, New York 10504
- Telephone: (919) 543-2193



FOR HOME OR OFFICE USE

European Union (EU) Statement

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. The manufacturer cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of option cards supplied by third parties. Consult with your dealer or sales representative for details on your specific hardware.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

International Electrotechnical Commission (IEC) Statement

This product has been designed and built to comply with IEC Standard 950.

United Kingdom Telecommunications Safety Requirements

This equipment is manufactured to the International Safety Standard EN60950 and as such is approved in the UK under the General Approval Number NS/G/1234/J/100003 for indirect connection to the public telecommunication network.

The network adapter interfaces housed within this equipment are approved separately, each one having its own independent approval number. These interface adapters, supplied by the manufacturer, do not use or contain excessive voltages. An excessive voltage is one which exceeds 70.7 V peak ac or 120 V dc. They interface with this equipment using Safe Extra Low Voltages only. In order to maintain the separate (independent) approval of the manufacturer's adapters, it is essential that other optional cards, not supplied by the manufacturer, do not use main voltages or any other excessive voltages. Seek advice from a competent engineer before installing other adapters not supplied by the manufacturer.

Avis de conformité aux normes du ministère des Communications du Canada

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Canadian Department of Communications Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

VCCI Statement

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

The following is a summary of the VCCI Japanese statement in the box above.

This product is a Class B Information Technology Equipment and conforms to the standards set by the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). This product is aimed to be used in a domestic environment. When used near a radio or TV receiver, it may become the cause of radio interference. Read the instructions for correct handling.

Radio Protection for Germany

Dieses Gerät ist berechtigt in Übereinstimmung mit dem deutschen EMVG vom 9.Nov.92 das EG-Konformitätszeichen zu führen.

Der Aussteller der Konformitätserklärung ist die IBM Germany.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse B.

Appendix B. Notices

This information was developed for products and services offered in the U.S.A.

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