IBM

Portable Drive Bay 2000

User's Guide

> **Note:** Before using this information and the product it supports, be sure to read
> the information under Appendix B, "Product warranty and notices" on page 2-3.

First Edition (June 2000)

Contents

Before installing this product, read the Safety Information.

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Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 Safety Information
（安全信息）。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας
(safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Les sikkerhetsinformasjonen (Safety Information) før du installerer
dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się
z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по
технике безопасности.

Pred inštaláciou tohto zariadenia si pečítaje Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

About this book

This manual contains information on the Portable Drive Bay 2000. It is divided into the following parts:

Part 1:   Installation and user's guide, in the following languages:

- English
- German
- French
- Spanish
- Italian
- Brazilian Portuguese
- Japanese

Part 2:   Product specifications, problem solving, help and service information, warranty, and notices

> **Note:**   The illustrations in this publication might be slightly different from your hardware.

Part 1: Installation and user's guide

This guide provides the product description, installation instructions, and product use information.

Product description

You can use the IBM® Portable Drive Bay 2000 to install and use an Ultrabay™ 2000 drive with your computer. Any one of the following devices can be installed in the drive bay:

- ThinkPad® 24X-10X CD-ROM Ultrabay 2000 Drive
- ThinkPad 6X-2X DVD-ROM Ultrabay 2000 Drive
- ThinkPad 4X/4X/20X CD-RW Ultrabay 2000 Drive
- ThinkPad SuperDisk (LS-120) Ultrabay 2000 Drive
- ThinkPad 2nd HDD Adapter for the Ultrabay 2000 and a supported ThinkPad hard disk drive inside the adapter

In addition to this manual, this option package contains:

- Portable Drive Bay 2000
- PCMCIA IDE card with attached cable
- USB cable
- Power adapter
- Three AA batteries
- Audio cable (to use with CD-ROM drive)
- Drive-bay stand
- Option Diskette
- Safety information manual

Contact your reseller if any of these items are missing or damaged.

Registering your option

Thank you for purchasing OPTIONS by IBM. Take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at:

http://www.ibm.com/pc/register

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

Hardware and software requirements

In order to operate your Portable Drive Bay 2000, the following hardware and software requirements must be met.

PCMCIA connection

- Hardware requirements: IBM ThinkPad A Series, T Series, iSeries, 770, 600, 570, 560, 390, or 240 notebook computer with an available PCMCIA Type II or III slot

- Software requirements: Microsoft® Windows® 95, Windows 98, Windows 2000, or Windows NT® 4.0

Note: Windows NT 4.0 might require additional PCMCIA Card Management software (not included).

USB connection

- Hardware requirements:

    - A computer with an available USB port
    - A power adapter (included)

- Software requirements: Windows 98 or Windows 2000

Before you begin

For the best performance, use the included power adapter as your power source.

Satisfactory DVD movie playback using the DVD Ultrabay 2000 Drive inside the Portable Drive Bay 2000 requires the following:

- PCMCIA connectivity
- Windows 95, Windows 98, or Windows 2000
- Intel® Pentium® II 300 MHz or faster microprocessor
- Installation of DVD navigator software (included with the DVD Ultrabay 2000 Drive)

    Note for ThinkPad 390 users: If you are installing the ThinkPad 6X-2X DVD-ROM Ultrabay 2000 Drive into your Portable Drive Bay 2000, you must remove the internal drive of the ThinkPad 390 before installing the DVD navigator software through the Portable Drive Bay 2000. The ThinkPad 390 internal drive can be reinserted after you have installed the software.
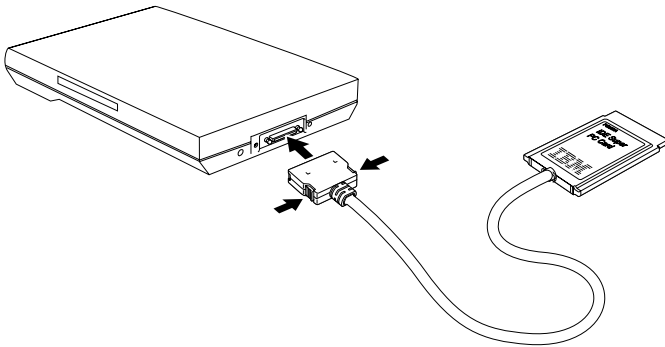
PCMCIA connection

To install the Portable Drive Bay 2000 using a PCMCIA connection, take the following actions:

1. Select a supported Ultrabay 2000 drive and insert it into the drive bay.

2. Lift the eject lever and push the drive firmly into the drive bay until the drive is secure inside the drive bay. Push the eject lever back down.

3. Insert the barrel connection at the end of the power adapter into the power adapter connector on the rear of the drive bay; then connect the other end of the cord to an electrical outlet.

   Note: For mobility, you can run the drive bay on three AA batteries (included) instead of using the power adapter. The low battery indicator light glows amber when the batteries need to be replaced.

4. If you plan to install a CD-ROM drive in the drive bay, and you plan to play audio CDs on your computer, connect one end of the included audio cable to the line-out jack on the back of the drive bay; then connect the other end of the audio cable to the line-in or microphone jack on your computer.

5. Locate the PC card and attached cable. Squeeze both sides of the connector on the cable and connect it to the interface connector on the drive bay.

6. Gently insert the PC card into the PCMCIA slot on your computer.
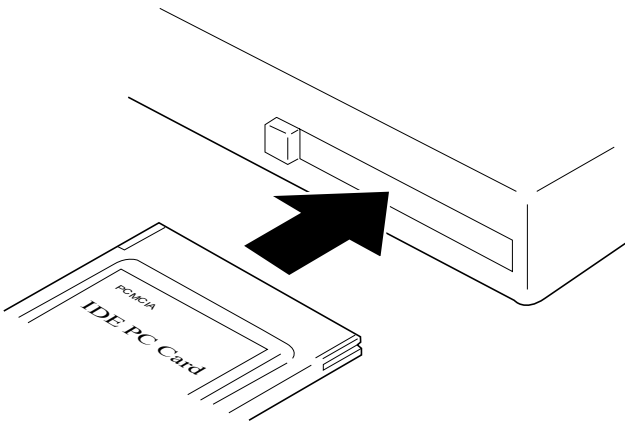
Attention: Be sure to insert and remove the cable connector and the PC card carefully. The connectors on the PC card cable are designed to be inserted in only one position. Using excessive force when you connect either the cable or the PC card might damage the PC card, the cable, or your computer.

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7. If your computer is turned off, turn it on and make sure your operating system has started correctly. When your computer detects the drive bay, the New Hardware Wizard/Device Driver Wizard opens.

Note: When using the power adapter, the drive bay power-on indicator light glows green. This indicates that the drive bay is ready. When using the batteries, the drive bay power-on indicator light glows amber for 20 to 25 seconds, then glows green. This indicates that the drive bay is ready.

Installing the PCMCIA device drivers

To install the PCMCIA device drivers, follow the instructions for your operating system.

Windows 95

1. Insert the Option Diskette into your diskette drive. A window opens.
2. Click **Next**.
3. Click **Other locations**.
4. Type `a:\pcmcia\win9x`; then click **OK**.
5. Follow the on-screen instructions to complete the installation.

Windows 98

1. Insert the Option Diskette into your diskette drive. A window opens.
2. Click **Search for the best driver for your device**; then click **Next**.
3. Click **Specify a location**.
4. Type a:\pcmcia\win9x; then click **Next**.
5. Follow the on-screen instructions to complete the installation.

Windows 2000

1. Insert the Option Diskette into your diskete drive. A window opens.
2. Click **Search for a suitable driver for my device**; then click **Next**.
3. Click **Specify a location**.
4. Type a:\pcmcia\win2000; then click **Next**.
5. Follow the on-screen instructions to complete the installation.
   Note: If a message that reads, Digital Signature Not Found is displayed, select **Yes** to continue installation. This does not affect the performance of the drive bay.

Windows NT 4.0

Note: If you are using an IBM ThinkPad 240, go to "Windows NT 4.0 installed in an IBM ThinkPad 240 computer."

1. Double-click **My Computer**.
2. Double-click **Control Panel**.
3. Double-click **SCSI Adapters**.
4. Click the **Drivers** tab; then click **Add**.
5. The Install Drivers window opens. Insert the Option Diskette into your diskette drive; then click **Have Disk**.
6. Type a:\pcmcia\winnt; then click **OK**.
7. Click **IBM Portable Drive Bay 2000**; then click **OK**.
8. Type a:\pcmcia\winnt; then click **Continue**.
9. After the device drivers are installed, you must restart your computer. A new drive icon is displayed in the My Computer window after your computer restarts.

Windows NT 4.0 installed in an IBM ThinkPad 240 computer

1. Double-click **My Computer**.
2. Double-click **Control Panel**.
3. Double-click **SCSI Adapters**.
4. Click the **Drivers** tab; then click **Add**.
5. The Install Drivers window opens. Insert the Option Diskette into your diskette drive; then click **Have Disk**.
6. Type a:\pcmcia\winnt_tp240; then click **OK**.
7. Click **IBM Portable Drive Bay 2000**; then click **OK**.
8. Type a:\pcmcia\winnt_tp240; then click **Continue**.
9. After the device drivers are installed, you must restart your computer. A new drive icon is displayed in the My Computer window after your computer restarts.

> **Attention:** Windows NT 4.0 does not support PCMCIA Plug and Play. The PC card must be plugged into a PCMCIA slot during the startup process. Removing the PC card during an active Windows NT session might cause your computer to stop responding.

To verify that the installation was completed correctly, double-click **My Computer**. The extra drive will display an icon if the installation was completed. If the installation was not completed, or if your computer does not recognize the drive bay at the beginning of the installation, verify that your computer is recognizing the PCMCIA slot by taking the following actions:

1. Double-click **My Computer**.
2. Double-click **Control Panel**.
3. If you see an icon labelled PC Card (PCMCIA), the PCMCIA slot was recognized during installation. If you do not see the icon, refer to the documentation that comes with your operating system for instructions on enabling PCMCIA support.

Information for computers with CardWizard

This section applies only to ThinkPad computers that use the CardWizard utility. Because CardWizard typically detects a PC card when it is inserted for the first time, follow these instructions to ensure that the drive bay functions properly.

1. When the PC card is first plugged in, CardWizard detects it and a window opens prompting you for the card support mode. From the menu provided, select **Use CardSoft Mode**.

2. The CardWizard Standard Socket Status window opens. The current status of the drive bay shows that it is unsupported. Using the right mouse button, click the slot of the drive bay; then click **Properties**.

3. Click the **Drivers** tab.

4. Click the box next to **Change Card Driver**. The Card Drive area above will become available.

5. Click the box next to **Use Plug and Play**; then click **OK**.

6. You are prompted to unplug the PC card and plug it back in. When you have done so, the Plug and Play setting is enabled.

Hot Swapping under the PCMCIA interface

Windows 95, Windows 98, and Windows 2000 support hot swapping, which means that you can plug and unplug your PC card while your computer is turned on. The drive bay also supports hot swapping, which means that you can replace drives in the drive bay while your computer is turned on, once the PC card is stopped properly.

> **Note:** Windows NT 4.0 does not support hot swapping. If you are using Windows NT 4.0, your computer must be turned off before drives can be swapped.

Hot swapping the PC card

Take the following actions to unplug your PC card:

1. Double-click **My Computer**.
2. Double-click **Control Panel**.
3. Double-click **PC Card (PCMCIA)**.
4. Select the PC card you want to unplug, then click **Stop**.
5. A window opens with the message `You may safely remove the drive`.
6. Push the card-eject button to pop out and remove the PC card; then click **OK**.

> **Attention:** Do not pull the PC card out of the PCMCIA slot by pulling on the cable. This might damage the PC card or your computer.

Hot swapping the drives inside the drive bay

Take the following actions to replace a drive in the drive bay.

1. Push the card-eject button to pop out and remove the PC card; then click **OK**.

> **Attention:** If you are using the power adapter, disconnect it from the drive bay before continuing.

2. Remove the old drive using instructions in "Removing a drive from the drive bay" on page 1-10. Insert the new drive into the drive bay and push firmly until the drive locks in the drive bay; then push the eject lever back down.

3. If you are using the power adapter, reconnect it.

4. Plug the PC card into the PCMCIA slot.

USB connection

To install the Portable Drive Bay 2000 using a USB connection, take the following actions:

1. Select a supported Ultrabay 2000 drive and insert it into the drive bay.

2. Lift the eject lever and push the drive firmly into the drive bay until the drive is secure inside the drive bay; then push the eject lever down.

3. Insert the barrel connection at the end of the power adapter into the power adapter connector on the rear of the drive bay; then connect the other end of the cord to an electrical outlet.

4. If you plan to install a CD-ROM drive in the drive bay, and you plan to play audio CDs on your computer, connect one end of the included audio cable to the line-out jack on the back of the drive bay; then connect the other end of the audio cable to the line-in or microphone jack on your computer.

5. Locate the USB cable. Squeeze both sides of the connector on the cable and connect it to the interface connector on the drive bay.
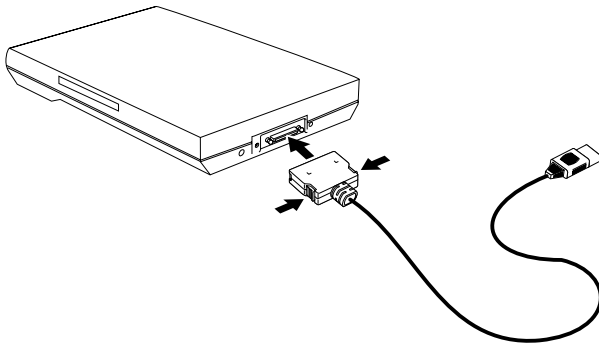
6. Plug the USB cable into the USB port of your computer.
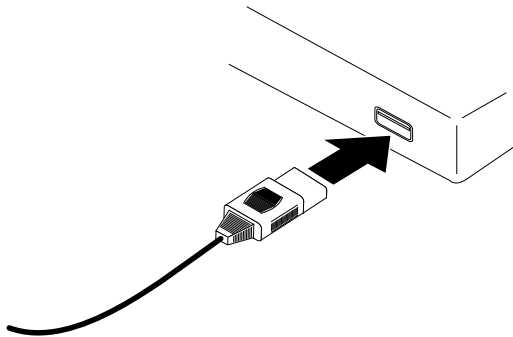
7. If your computer is turned off, turn it on and make sure your operating system has started correctly. When your computer detects the drive bay, the New Hardware Wizard/Device Driver Wizard opens.

8. When the power adapter is plugged in properly, the drive bay power-on indicator light glows green. This indicates that the drive bay is ready.

Installing the USB device drivers

To install the USB device drivers, follow the instructions for your operating system.

Windows 98

1. Insert the Option Diskette into your diskette drive. A window opens.
2. Click **Search for the best driver for your device**; then click **Next**.
3. Click **Specify a location**.
4. Type `a:\usb\win98`; then click **Next**.
   Note: A window with the message, `Unknown Device Found` is displayed.
   Repeat steps 2 to 4 to continue the installation.
5. Follow the on-screen instructions to complete the installation.

Windows 2000

1. Insert the Option Diskette into your diskette drive. A window opens.
2. Click **Search for a suitable driver for my device**; then click **Next**.
3. Click **Specify a location**.
4. Type `a:\usb\win2000`; then click **Next**.
5. Follow the on-screen instructions to complete the installation.
   Note: If a message that reads, `Digital Signature Not Found` is displayed,
   select **Yes** to continue installation. This does not affect the performance
   of the drive bay.

To verify that the installation was completed correctly, double-click **My Computer**.
The extra drive will display an icon if the installation was completed.

Hot Swapping under the USB interface

The USB connection supports hot swapping, which means that you can plug and
unplug your USB cable while your computer is turned on. The drive bay also supports
hot swapping, which means that you can replace drives in the drive bay while your
computer is turned on, after the USB cable is unplugged.

To unplug your USB cable and swap drives, take the following actions:

1. Unplug the USB cable from your computer.
   Note: If you are using Windows 2000, stop the USB device first.
2. Unplug the power adapter from the drive bay.
3. Remove the drive using the instructions in "Removing a drive from the drive bay"
   on page 1-10.
4. Insert the new drive into the drive bay and push firmly until the drive locks in the
   drive bay; then push the eject lever back down.
5. Plug the power adapter back into the drive bay.
6. Plug the USB cable back into the USB port of your computer.
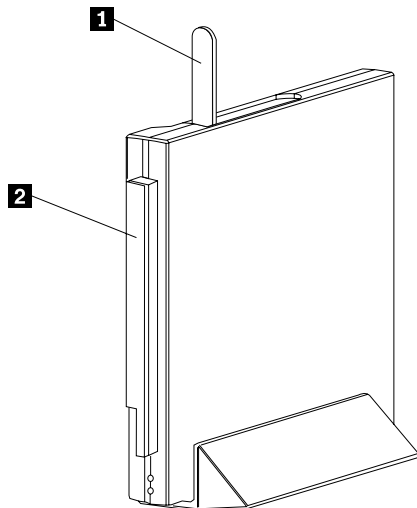
Removing a drive from the drive bay

To remove a drive from the drive bay:

1. Carefully lift the eject lever **1** to the unlocked postition.
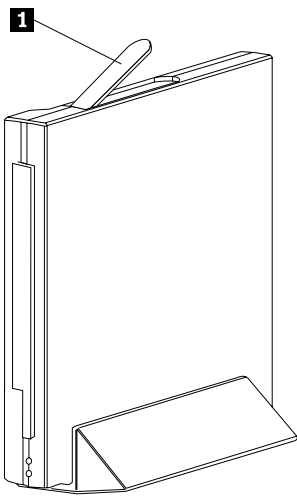
> **Note:** If resistance is felt and the device does not move, return the lever to the
> closed position and push the drive in completely to reseat it.

2. Pull the eject lever **1** to the full position to eject the drive **2**.

Attaching the drive-bay stand

If you want to conserve space, you can mount the IBM Portable Drive Bay 2000 onto the included drive-bay stand. All supported drives can be used when the drive bay is mounted in the drive-bay stand, except for the ThinkPad SuperDisk (LS-120) Ultrabay 2000 Drive.

Note: Mount the drive bay onto the stand so that the eject lever is facing up.