IBM

IBM USB 2.0 Portable CD-RW Drive

User's Guide

OPTIONS
by IBM

Note: Before using this information and the product it supports, read the information under the Appendixes.

Safety

Before installing this product, read the Safety Information.

مج، يجب قراءة دات السلامة

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).

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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」。

Contents

About this book

This manual contains instructions for installing and using the IBM ® USB 2.0 Portable CD-RW Drive. The manual is divided into the following parts:

Part 1: Installation and user's guide

This section provides installation and operating instructions in the following languages:
- English
- German
- French
- Spanish
- Italian
- Brazilian Portuguese
- Traditional Chinese
- Japanese
- Korean

Part 2: Appendixes

This section contains warranty and the IBM statement of limited warranty, notices, and product specification information.

Registering your option

Thank you for purchasing OPTIONS by IBM. Please 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.

Installation and user's guide

This manual contains instructions for installing and using the IBM ® USB 2.0 Portable CD-RW Drive.

Product description

This guide contains installation and usage information for the IBM USB 2.0 Portable CD-RW Drive.

The IBM USB 2.0 Portable CD-RW Drive is a slimline CD-R/RW drive that attaches quickly and conveniently to your IBM ThinkPad ®computer through one simple connection. The drive functions as a USB 1.1 device when connected to a USB 1.1 port and as a USB 2.0 device when connected to the USB 2.0 port. A maximum write speed of 4x to 6x is obtained through the USB 1.1 port. A maximum write speed of 8x is obtained through the USB 2.0 port.

In addition to this book, the option package includes:
- IBM USB 2.0 Portable CD-RW drive
- USB cable
- Audio cable
- Carrying case
- Power Adapter
- IBM USB CD-RW Drive option diskette (for Windows 98 only)
- CD-RW Application software
- Saftey Information Manual

Hardware and software requirements

You must have the following hardware installed on your ThinkPad computer in order to use this option:
- Diskette drive (for driver installation on Microsoft ® Windows 98 ® systems only)
- An available USB 1.1 or 2.0 port

Your computer must have one of the following operating systems installed to use this option:
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional

- Microsoft Windows XP

Software description

This section describes the read/write capabilities of the IBM USB 2.0 Portable CD-RW drive.

The IBM USB 2.0 Portable CD-RW drive can write to and read from CD-ReWritable (CD-RW) and CD-Recordable (CD-R) discs, and can read CD-ROM discs. To use the drive's CD-recording functions, you must install the included IBM CD-RW Application Software. This software allows you to create audio and data CDs and to copy CDs. For more information on using the software, please refer to the user's guide contained on the CD-RW Application software CD.

Using CD-R and CD-RW media

This section describes the types of media and write speeds used with your IBM USB 2.0 Portable CD-RW drive.

The drive can write to both CD-R and CD-RW discs. CD-R discs cannot be erased or overwritten but can be used with standard CD-ROM drives and audio CD players. CD-RW discs can be erased and rewritten, but can only be used with newer Multi-Read and CD-RW compatible CD-ROM and DVD-ROM drives.

The writing speed of the media is indicated on the package of the CD-R/RW media. When writing, write within the scope of the specified writing speed of the media used. Although higher speed media can be used, the maximum write speed is 8X when connected through the USB 2.0 port, and 4X-6X when connected through USB 1.1 port.

The read and write results of the drive depend upon the quality and characteristics of the CD-R and CD-RW media used. Poor results may be obtained with some CD-R and CD-RW suppliers.

Power management functions (Standby/Hibernate/Suspend/Resume)

This section describes the power management functions for the IBM USB 2.0 Portable CD-RW drive.

- For optimal results, do not use the suspend/standby function while the drive is in write operation. Data errors might occur.
- Do not connect or disconnect the drive while the computer is in the standby (suspend) mode. Your computer might become unstable.

Maintaining your drive

This section contains maintenance information for your IBM USB Portable 2.0 CD-RW Drive.

- Do not remove the ac adapter while the drive is in use
- Turn screensavers off - using a screensaver may interrupt the formatting and writing process of CDs.
- Place the drive in a stable place without any vibration or tilt - movement of the drive while formatting or writing a disc may cause data errors
- Handle the CD by the edges or the center hole - do not touch the surface of the CD
- To remove dust or fingerprints, wipe the CD from the center to the edge with a soft, lint-free cloth - do not wipe in a circular motion as this may cause data loss
- Do not use commercial cleaners to clean the CD
- Do not touch the internal lens of the CD-RW drive
- Remove any CD from the drive before transporting the drive
- Do not operate the drive under these conditions: high temperature, high humidity, direct sunlight, inclined surface, excessive vibration/shock, excessive dust, damp environment, or near liquids that may spill causing damage to the drive
- Do not stack objects on the drive

Details and functions

This section provides the details and functions of the IBM USB Portable 2.0 CD-RW Drive.
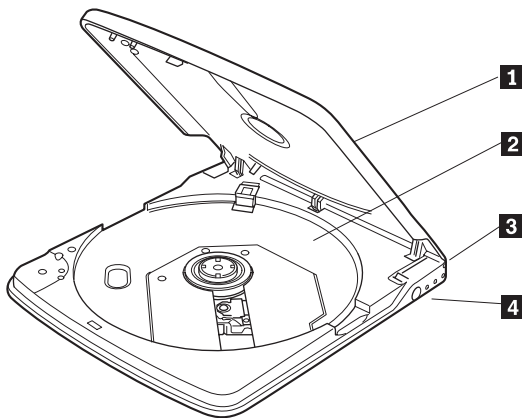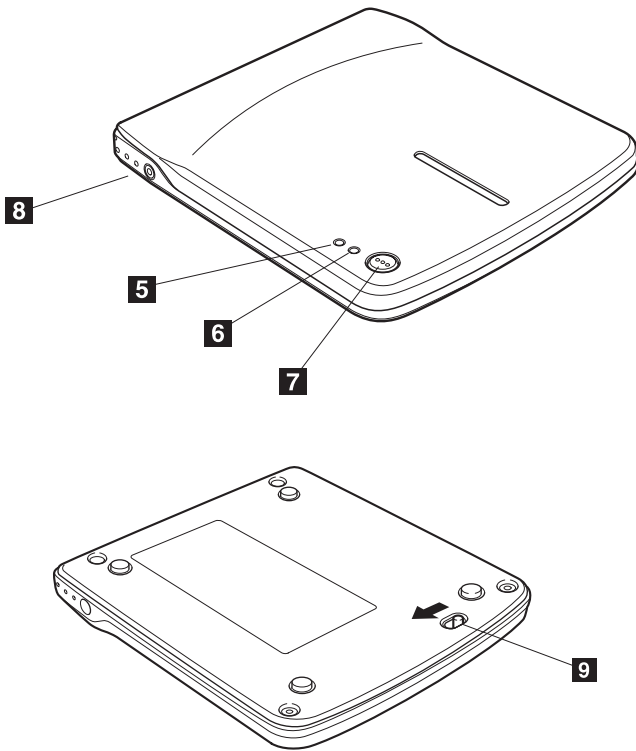
1 Top Cover

2 Disc tray

Set the media with the label face upward on this disc tray.

3 USB connector

Insert the plug of the provided dedicated USB cable.

4 DC-IN connector

Connect the provided dedicated ac adapter.

Be sure to connect the provided dedicated ac adapter to this connector. Never connect other ac adapters.

This drive cannot operate with only the bus power of the USB cable. Be sure to provide power by connecting the provided ac adapter.

5 Power/Busy indicator

The green LED indicates the power status and the operation states of the drive.

When the drive is connected to ac power and the USB port of your PC	Indicator light turns on
During data write	Indicator light turns on
During data read	Indicator blinks
When the drive is not connected to the USB port	Indicator light turns off

6 Write indicator

The amber light emitting-drive (LED) indicates the write state of the drive.

During data write	Indicator blinks
Modes other than the above	Indicator light turns off

7 Eject button

Press the eject button to open the top cover.

An electrical locking mechanism is used in this drive so that an erroneous operation does not open the top cover during write. Make sure that the power is on and the drive is not in operation before pressing the eject button to open the top cover.

If the top cover cannot be opened even when the eject button is pressed or if the top cover needs to be opened when power is not supplied form the ac adapter, use the emergency eject lever at the bottom of the drive.

8 Line output jack

Connect this jack to the line input signal of your computer (using the included audio cable) when outputting the audio signal from this drive.

In some operating systems the audio cable is not requred. Audio can be achieved by the following steps:

1. Double-click **My Computer**.

2. Select the **USB 2.0 Portable CD-RW drive**. (For example, select *e*, where e represents the drive letter of the CD-RW drive.

3. Click **Properties -> Hardware -> IBM CD-RW USB 2.0 USB Device**.

4. Click **Properites** and then select the **Properties** tab.

5. Select **Enable digital CD audio for this CD-ROM device**.

6. Click **OK**.

▉9 Emergency eject lever

When ejecting the media with the power off, insert a thin metal rod such as a paper clip into the emergency eject lever and slide it in the direction of the arrow shown.

Connecting the CD-RW drive to your computer

This section provides information to connect the IBM USB 2.0 Portable CD-RW Drive to your computer.

Follow these instructions to connect the CD-RW drive:

1. Locate the USB cable included with this option. One connector on the USB cable is smaller than the other and has two small buttons on each side.

2. Squeeze the two buttons on the smaller connector and attach that end of the USB cable to the USB connector on the back of the CD-RW drive.
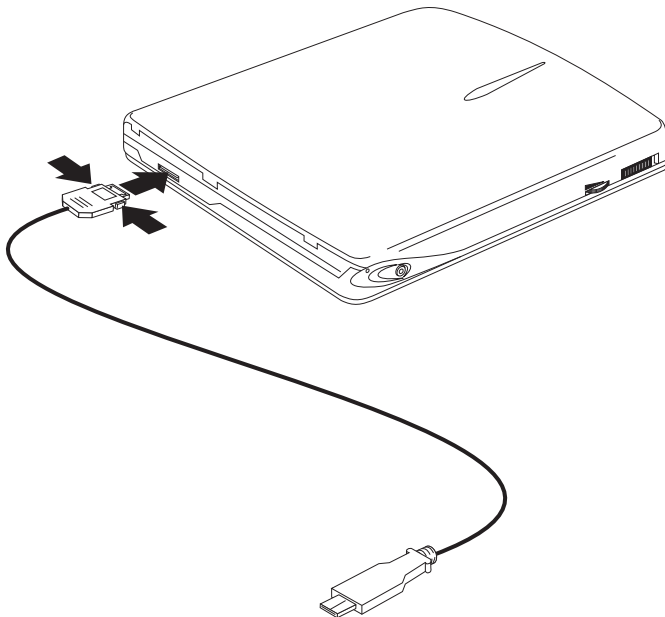
Make sure that the metal plate on the smaller connector is facing up when you plug it into the USB connector on the CD-RW drive.

3. Plug the larger end of the USB cable into the USB port on your computer.
4. Connect the power adapter to the drive and to the wall outlet.
5. Optional Power Sharing Device - used when the user would like to power the IBM USB 2.0 Portable CD-RW drive using the ThinkPad 56W, 72W ac, or 72 dc power adapters.

Installing the device drivers

This section provides information on installing device drivers to your computer.

To install the device driver, follow the instructions that correspond to your operating system.

Installing the device driver for Windows 98

1. After you have connected the CD-RW drive in your computer, turn on your computer if it is not already on. A popup window will open.
2. In the New Hardware wizard for IBM USB Portable CD-RW Drive window, click **Next**.
3. Select the **Search for the best driver for your device** check box.
4. Insert the *IBM USB Portable CD-RW Drive Option diskette* into your diskette drive.
5. Select the **diskette drive** check box.
6. Click **Next** twice.
7. Click **Finish** to complete the device driver installation.

You can now use the CD-RW drive with Windows 98.

Installing the device driver for Windows Me, Windows 2000, and Windows XP

The USB device driver is included in Windows Me, Windows 2000, and Windows XP operating systems. When this drive is connected, Windows will automatically install the appropriate device driver and the drive will be ready to be used. You do not have to perform any special installation or un-installation.

Disconnecting and reconnecting the CD-RW drive

This section provides information on disconnecting and reconnecting your IBM USB 2.0 Portable CD-RW Drive.

Hot plugging is supported on the connection between the USB cable and your computer. This means that the CD-RW drive USB cable can be disconnected from and reconnected to your computer without the need to restart the computer.

Follow these instructions to disconnect the drive:

1. Close the program that is using the drive.
2. Confirm that the WRITE and BUSY indicator of the drive are off.
3. Click the **Remove (Unplug or Eject Hardware)** icon . (By default this icon is located next to clock display in the taskbar).
4. Select the **USB 2.0 CD-RW drive** to remove.
5. The Remove Hardware confirmation message displays. Click **OK**.
6. Remove the plug of the USB cable from the USB port of the computer.
7. To reconnect, plug the USB cable into the USB port of the computer.

Attention

Do not disconnect and reconnect the USB cable in rapid succession or the CD-ROM drive might not load properly. After disconnecting the USB cable, wait at least 10 to 20 seconds, or until the hourglass icon stops displaying, before reconnecting the USB cable.

Installations- und Benutzerhandbuch

Das vorliegende Handbuch enthält Anweisungen zur Installation und Verwendung des tragbaren IBM ® USB 2.0 CD-RW-Laufwerks.

Produktbeschreibung

Das vorliegende Handbuch enthält Informationen zur Installation und Verwendung des tragbaren IBM USB 2.0 CD-RW-Laufwerks.

Beim tragbaren IBM USB 2.0 CD-RW-Laufwerk handelt es sich um ein flaches CD-R/RW-Laufwerk, das schnell und bequem über einen einfachen Anschluss an den IBM ThinkPad ® angeschlossen werden kann. Das Laufwerk wird beim Anschluss an einen USB 1.1-Anschluss als USB 1.1-Einheit eingesetzt und beim Anschluss an einen USB 2.0-Anschluss als USB 2.0-Einheit. Über den USB 1.1-Anschluss wird bei Schreibvorgängen eine maximale Übertragungsgeschwindigkeit von 4x bis 6x erreicht. Über den USB 2.0-Anschluss wird bei Schreibvorgängen eine maximale Übertragungsgeschwindigkeit von 8x erreicht.

Außer dem vorliegenden Handbuch ist im Lieferumfang Folgendes enthalten:
- Tragbares IBM USB 2.0 CD-RW-Laufwerk<
- USB-Kabel
- Audiokabel
- Transportbehälter
- Netzteil
- Zusatzdiskette für das IBM USB CD-RW-Laufwerk (nur für Windows 98)
- CD-RW-Anwendungssoftware
- Handbuch mit Sicherheitsinformationen

Hardware- und Softwarevoraussetzungen

Auf dem ThinkPad muss die folgende Hardware installiert sein, damit Sie diese Systemerweiterung verwenden können:
- Diskettenlaufwerk (nur bei Treiberinstallation unter Microsoft® Windows 98®)
- Ein verfügbarer USB 1.1- bzw. 2.0-Anschluss

Auf dem Computer muss eines der folgenden Betriebssysteme installiert sein, damit diese Systemerweiterung verwendet werden kann:
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (ME)
- Microsoft Windows 2000 Professional
- Microsoft Windows XP

Beschreibung der Software

Im folgenden Abschnitt werden die Funktionen bei den Lese-/Schreibvor-
gängen des tragbaren IBM USB 2.0 CD-RW-Laufwerks beschrieben.

Mit dem tragbaren IBM USB 2.0 CD-RW-Laufwerk können CD-RWs und
CD-Rs (CD-Recordable) beschrieben und gelesen und CD-ROMs gelesen wer-
den. Damit die CD-Aufzeichnungsfunktionen des Laufwerks verwendet wer-
den können, müssen Sie die beigefügte IBM CD-RW-Anwendungssoftware
installieren. Mit dieser Software können Sie Audio- und Daten-CDs erstellen
und CDs kopieren. Weitere Informationen zur Verwendung der Software fin-
den Sie im Benutzerhandbuch, das sich auf der CD mit der CD-RW-An-
wendungssoftware befindet.

CD-R- und CD-RW-Datenträger verwenden

In diesem Abschnitt werden die Arten von Datenträgern beschrieben, die in
Verbindung mit dem tragbaren IBM USB 2.0 CD-RW-Laufwerk verwendet wer-
den können, sowie die möglichen Übertragungsgeschwindigkeiten bei Schreib-
vorgängen.

Mit dem Laufwerk können sowohl CD-Rs als auch CD-RWs beschrieben wer-
den. CD-Rs können nicht gelöscht oder überschrieben, jedoch in Standard-CD-
ROM-Laufwerken und Audio-CD-Spielern verwendet werden. CD-RWs kön-
nen gelöscht und erneut beschrieben, jedoch nur in neueren MR- und CD-RW-
kompatiblen CD-ROM- und DVD-ROM-Laufwerken verwendet werden.

Die Übertragungsgeschwindigkeit bei Schreibvorgängen ist auf der Verpackung
des CD-R/RW-Datenträgers angegeben. Bei Schreibvorgängen sollte der
Bereich der angegebenen Übertragungsgeschwindigkeit für den verwendeten
Datenträger eingehalten werden. Es können zwar Datenträger mit höherer
Übertragungsgeschwindigkeit verwendet werden, die normale Übertragungs-
geschwindigkeit bei Schreibvorgängen beträgt jedoch 8x beim Anschluss über
den USB 2.0-Anschluss und 4x bis 6x beim Anschluss über den USB 1.1-An-
schluss.

Die Ergebnisse der Lese- und Schreibvorgänge des Laufwerks richten sich nach
der Qualität und den Merkmalen des verwendeten CD-R- und CD-RW-Daten-
trägers. Bei einigen CD-R- und CD-RW-Herstellern sind die erzielten Ergeb-
nisse möglicherweise schlecht.

Stromsparfunktionen (Standby/Hibernation/Aussetzen/Wiederaufnehmen)

Im folgenden Abschnitt werden die Stromsparfunktionen des tragbaren IBM USB 2.0 CD-RW-Laufwerks beschrieben.

- Verwenden Sie die Funktion ″Aussetzen″ bzw. ″Standby″ nicht, wenn auf dem Laufwerk ein Schreibvorgang läuft, da sonst die Ergebnisse nicht optimal sind. In diesem Fall können Datenfehler auftreten.
- Schließen Sie das Laufwerk nicht an bzw. trennen Sie es nicht, wenn sich der Computer im Standby-Modus (Aussetzmodus) befindet. Der Betrieb des Computers kann sonst instabil sein.

Laufwerk verwalten

Der folgende Abschnitt enthält Informationen zur Verwaltung des tragbaren IBM USB 2.0 CD-RW-Laufwerks.

- Entfernen Sie das Netzteil nicht, wenn das Laufwerk in Betrieb ist.
- Schalten Sie Bildschirmschoner aus, da sonst möglicherweise der Formatier- und Schreibprozess der CDs unterbrochen wird.
- Stellen Sie das Laufwerk auf eine stabile Unterlage, die keinen Erschütterungen ausgesetzt ist bzw. die keine Neigung aufweist, da jede Bewegung des Laufwerks während des Formatierens oder Beschreibens eines Datenträgers Datenfehler verursachen kann.
- Berühren Sie eine CD nur am Rand oder am Loch in der Mitte; berühren Sie nicht die Oberfläche der CD.
- Entfernen Sie Staub oder Fingerabdrücke von einer CD, indem Sie sie mit einem weichen, fusselfreien Tuch von innen nach außen abwischen; wischen Sie nicht in einer kreisenden Bewegung, da dabei Daten verloren gehen können.
- Reinigen Sie CDs nicht mit gewöhnlichen Reinigern.
- Vermeiden Sie es, die Linse im Innern des CD-RW-Laufwerks zu berühren.
- Entfernen Sie vor einem Transportieren des Laufwerks eventuell darin enthaltene CDs.
- Nehmen Sie das Laufwerk unter folgenden Bedingungen nicht in Betrieb: hohe Temperatur, hohe Luftfeuchtigkeit, direktes Sonnenlicht, geneigter Untergrund, übermäßige Erschütterungen/Stöße, übermäßiger Staub, feuchte Umgebung oder in der Nähe von Flüssigkeiten, die beim Verschütten das Laufwerk beschädigen können.
- Stellen Sie keine Gegenstände auf dem Laufwerk ab.

Details und Funktionen

Der folgende Abschnitt enthält die Details und Funktionen des tragbaren IBM USB 2.0 CD-RW-Laufwerks.
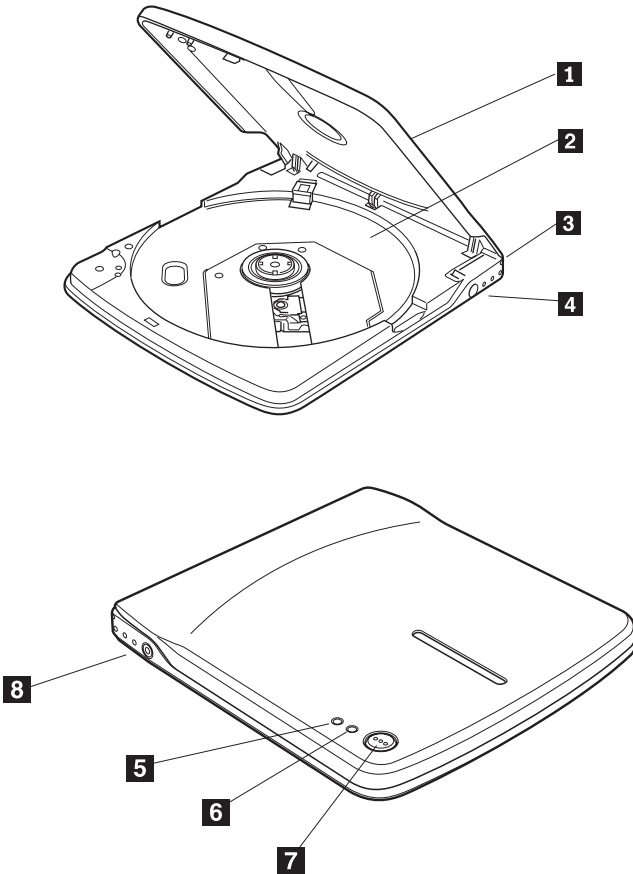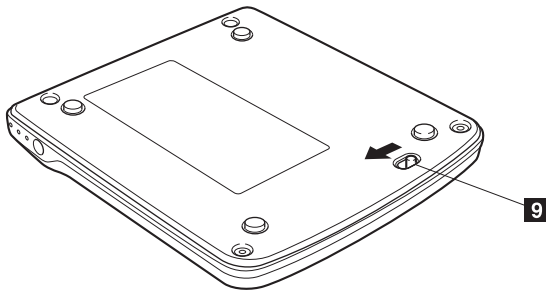
1 Obere Abdeckung

2 Laufwerkschlitten

Legen Sie den Datenträger mit dem Etikett nach oben in diesen Laufwerk-schlitten ein.

3 USB-Anschluss

Stecken Sie den Stecker des mitgelieferten dedizierten USB-Kabels ein.

4 Gleichstromeingangsanschluss

Schließen Sie das mitgelieferte dedizierte Netzteil an.

Schließen Sie das mitgelieferte dedizierte Netzteil an diesen Anschluss an. Schließen Sie keine anderen Netzteile an.

Der Betrieb des Laufwerks mit nur dem Busnetzstrom des USB-Kabels ist nicht möglich. Das Laufwerk wird über das mitgelieferte Netzteil an den Netzstrom angeschlossen.

5 Betriebsanzeige

Die gelbe LED zeigt den Status des Schreibvorgangs auf dem Laufwerk an.

Beim Schreiben von Daten	Anzeige blinkt
Anderer als der o.g. Modus	Anzeige erlischt

6 Anzeige für Schreibvorgang

Die grüne LED zeigt den Netzstatus und die Betriebsstatus des Laufwerks an.

Das Laufwerk ist an den Netzstrom und an den USB-Anschluss des PCs angeschlossen	Anzeige leuchtet
Beim Schreiben von Daten	Anzeige leuchtet
Beim Lesen von Daten	Anzeige blinkt
Das Laufwerk ist nicht an den USB-Anschluss angeschlossen	Anzeige erlischt

7 Entnahmetaste

Drücken Sie die Entnahmetaste, um die obere Abdeckung zu öffnen.

In diesem Laufwerk wird ein elektrischer Sperrmechanismus verwendet, so dass bei bei fehlerhaftem Betrieb die obere Abdeckung während eines Schreibvorgangs nicht geöffnet wird. Der Strom muss eingeschaltet sein, und das Laufwerk darf nicht in Betrieb sein, wenn die Entnahmetaste zum Öffnen der oberen Abdeckung gedrückt wird.

Wenn die obere Abdeckung durch Drücken der Entnahmetaste nicht geöffnet werden kann oder wenn die obere Abdeckung geöffnet werden muss, wenn kein Netzstrom über das Netzteil vorhanden ist, müssen Sie den Notentnahmehebel an der Unterseite des Laufwerks verwenden.

8 Ausgangsanschluss

Schließen Sie diesen Anschluss an das Eingangssignal des Computers (unter Verwendung des beigefügten Audiokabels) an, wenn das Tonsignal über den Ausgang des Laufwerks ausgegeben wird.

Bei einigen Betriebssystemen ist das Audiokabel nicht erforderlich. Führen Sie für die Audioausgabe die folgenden Schritte aus:

1. Klicken Sie doppelt auf **My Computer**.
2. Wählen Sie **USB 2.0 Portable CD-RW drive** aus. (Wählen Sie z. B. *e* aus, wobei "e" für den Laufwerkbuchstaben des CD-RW-Laufwerks steht.
3. Klicken Sie auf **Properties -> Hardware -> IBM CD-RW USB 2.0 USB Device**.
4. Klicken Sie auf **Properties** und wählen Sie anschließend das Register **Properties** aus.
5. Wählen Sie **Enable digital CD audio for this CD-ROM device** aus.
6. Klicken Sie auf **OK**.

9 Notentnahmehebel

Bei der Entnahme des Datenträgers bei ausgeschaltetem Netzstrom führen Sie eine dünne Metallklammer wie z. B. eine Büroklammer in den Notentnahmehebel ein und schieben Sie in Richtung des angegebenen Pfeils.

CD-RW-Laufwerk an den Computer anschließen

Der folgende Abschnitt enthält Informationen zum Anschließen des tragbaren IBM USB 2.0 CD-RW-Laufwerks an den Computer.

Führen Sie die folgenden Anweisungen aus, um das CD-RW-Laufwerk anzuschließen:

1. Legen Sie das USB-Kabel bereit, das mit dieser Systemerweiterung geliefert wurde. Ein Anschluss am USB-Kabel ist kleiner als der andere und verfügt über zwei kleine Knöpfe an jeder Seite.

2. Drücken Sie die beiden Knöpfe am kleineren Anschluss zusammen und schließen Sie dieses Ende des USB-Kabels an den USB-Anschluss an der Rückseite des CD-RW-Laufwerks an.
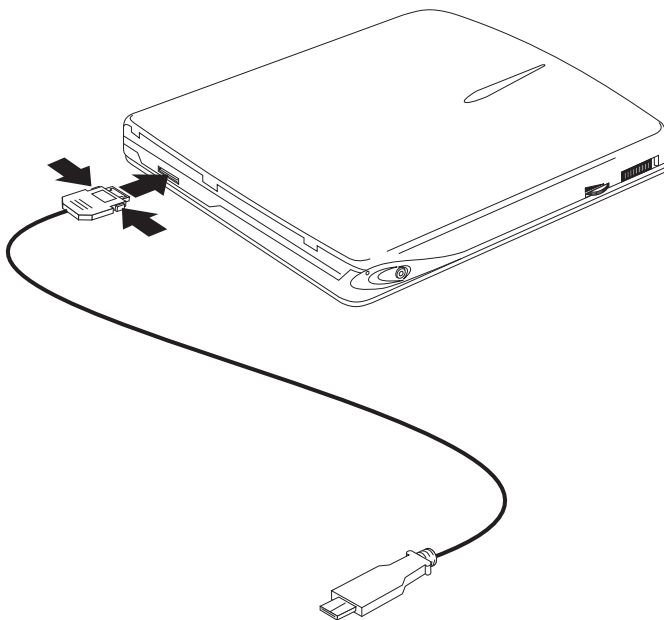
Das Metallplättchen an dem kleineren Anschluss muss nach vorne ausgerichtet sein, wenn der Anschluss in den USB-Anschluss am CD-RW-Laufwerk gesteckt wird.

3. Stecken Sie das größere Ende des USB-Kabels in den USB-Anschluss am Computer.

4. Schließen Sie das Netzteil an das Laufwerk und an die Wandsteckdose an.

5. Barrel-Adapter - Optionale Einheit für die gemeinsame Netzteilbenutzung - wird verwendet, wenn der Benutzer das tragbare IBM USB 2.0 CD-RW-Laufwerk unter Verwendung des ThinkPad mit einem 56 W- bzw. 72 W-Netzteil oder einem 72 DC-Netzteil betreiben möchte.

Einheitentreiber installieren

Der folgende Abschnitt enthält Informationen zum Installieren von Einheitentreibern für den Computer.

Befolgen Sie zur Installation des Einheitentreibers die Anweisungen für Ihr Betriebssystem.

Einheitentreiber für Windows 98 installieren

1. Nachdem Sie das CD-RW-Laufwerk an den Computer angeschlossen haben, schalten Sie den Computer ein, falls er noch nicht eingeschaltet ist. Ein Popup-Fenster wird geöffnet.

2. Klicken Sie im Fenster ″New Hardware wizard for IBM USB Portable CD-RW Drive″ auf **Next**.

3. Wählen Sie das Markierungsfeld **Search for the best driver for your device** aus.

4. Legen Sie die Diskette *IBM USB Portable CD-RW Drive Option* in das Diskettenlaufwerk ein.

5. Wählen Sie das Markierungsfeld **Diskette Drive** aus.

6. Klicken Sie doppelt auf **Next**.

7. Klicken Sie auf **Finish**, um die Installation des Einheitentreibers auszuführen.

Nun können Sie das CD-RW-Laufwerk unter Windows 98 verwenden.

Einheitentreiber für Windows Me, Windows 2000 und Windows XP installieren

Der USB-Einheitentreiber ist im Lieferumfang der Betriebssysteme Windows Me, Windows 2000 und Windows XP enthalten. Wenn das Laufwerk angeschlossen ist, installiert Windows automatisch den entsprechenden Einheitentreiber, und das Laufwerk kann verwendet werden. Eine besondere Installation oder Deinstallation ist nicht erforderlich.

CD-RW-Laufwerk trennen und wieder anschließen

Der folgende Abschnitt enthält Informationen zum Trennen und Wiederanschließen des tragbaren IBM USB 2.0 CD-RW-Laufwerks an den Computer.

Anschließen im laufenden Betrieb wird für die Verbindung zwischen dem USB-Kabel und dem Computer unterstützt. Das bedeutet, dass das USB-Kabel des CD-RW-Laufwerks vom Computer getrennt und wieder angeschlossen werden kann, ohne dass der Computer erneut gestartet werden muss.

Führen Sie die folgenden Schritte aus, um das Laufwerk zu trennen:

1. Schließen Sie das Programm, von dem das Laufwerk verwendet wird.
2. Stellen Sie sicher, dass die Anzeige für Schreibvorgang und die Betriebsanzeige des Laufwerks erloschen sind.
3. Klicken Sie auf das Symbol **Remove (Unplug or Eject Hardware)**. (Dieses Symbol befindet sich standardmäßig neben der Uhranzeige in der Taskleiste.)
4. Wählen Sie **USB 2.0 CD-RW drive** aus, um das Laufwerk zu trennen.
5. In einer Nachrichtenanzeige wird das Entfernen der Hardware bestätigt. Klicken Sie auf **OK**.
6. Ziehen Sie den Stecker des USB-Kabels aus dem USB-Anschluss des Computers.
7. Stecken Sie das USB-Kabel zum Wiederanschließen in den USB-Anschluss des Computers.

Achtung

Das USB-Kabel sollte nicht in schneller Folge nacheinander abgezogen und wieder angeschlossen werden, da das CD-ROM-Laufwerk dann möglicherweise nicht ordnungsgemäß funktioniert. Nach dem Abziehen des USB-Kabels sollten Sie mindestens 20 Sekunden oder so lange warten, bis die Sanduhr nicht mehr angezeigt wird, bevor Sie das USB-Kabel wieder anschließen.

Guide d'installation et d'utilisation

Le présent manuel contient les instructions d'installation et d'utilisation de l'unité de CD-RW portable USB 2.0 IBM.

Description du produit

Ce manuel comporte des informations relatives à l'installation et à l'utilisation de l'unité de CD-RW portable USB 2.0 IBM.

L'unité de CD-RW portable USB 2.0 IBM est une unité de CD-R/RW extra-plate que vous pouvez raccorder rapidement et aisément à votre ordinateur ThinkPad IBM par le biais d'une seule connexion. L'unité fonctionne comme un périphérique USB 1.1 lorsqu'elle est connectée au port USB 1.1 et comme un périphérique USB 2.0 lorsqu'elle est connectée au port USB 2.0. Vous pouvez atteindre une vitesse maximale d'écriture de 4x à 6x via le port USB 1.1 et une vitesse de 8x via le port USB 2.0.

Outre ce manuel, le coffret de l'option contient :
- l'unité de CD-RW portable USB 2.0 IBM,
- un câble USB,
- un câble audio,
- une sacoche de transport,
- un adaptateur d'alimentation,
- une disquette pour l'option d'unité de CD-RW USB IBM (pour Windows 98 uniquement),
- un logiciel d'application CD-RW,
- un manuel relatif aux consignes de sécurité.

Conditions matérielles et logicielles requises

Le matériel suivant doit être installé sur votre ordinateur ThinkPad pour que vous puissiez utiliser cette option :
- Unité de disquette (pour l'installation du pilote sur les systèmes Microsoft Windows 98 uniquement)
- Port USB 1.1 ou 2.0 disponible

Votre ordinateur doit être doté de l'un des systèmes d'exploitation suivants pour que vous puissiez utiliser cette option :

- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional
- Microsoft Windows XP

Description des logiciels

La présente section décrit les fonctions de lecture et d'écriture de l'unité de CD-RW portable USB 2.0 IBM.

L'unité de CD-RW portable USB 2.0 peut effectuer des opérations de lecture et d'écriture sur des CD réinscriptibles (CD-RW) et des CD enregistrables (CD-R) et des opérations de lecture à partir de CD-ROM. Pour utiliser les fonctions d'enregistrement de CD de l'unité, vous devez installer le logiciel d'application de CD-RW IBM. Ce logiciel vous permet de créer des CD audio et des CD de données et de copier des CD. Pour de plus amples informations sur l'utilisation de ce logiciel, reportez-vous au manuel d'utilisation inclus sur le CD de ce logiciel.

Utilisation des supports CD-R et CD-RW

La présente section décrit les types de support compatibles avec l'unité de CD-RW portable USB 2.0 IBM et les vitesses que vous pouvez atteindre.

L'unité peut écrire sur des disques CD-R et CD-RW. Les disques CD-R ne peuvent pas être effacés et les données ne peuvent pas être remplacées mais vous pouvez utiliser ces disques sur des unités de CD-ROM standard et des lecteurs de CD. Les disques CD-RW peuvent être effacés et des données réinscrites sur ces derniers et ils sont compatibles avec les unités de CD-ROM et de DVD-ROM Multi-Read et CD-RW.

La vitesse d'écriture des supports est indiquée sur l'emballage des supports de CD-R/RW. Lors de l'écriture, vous devez respecter les limites de vitesse indiquées sur le support utilisé. Bien que vous puissiez utiliser des vitesses plus élevées, la vitesse maximale en écriture est de 8X lorsque vous êtes connecté au port USB 2.0 et de 4X à 6X lorsque vous êtes connecté au port USB 1.1.

Les résultats de lecture et d'écriture de l'unité dépendent de la qualité et des caractéristiques du support CD-R et CD-RW utilisé. Vous obtiendrez des résultats médiocres avec certains fournisseurs de CD-R et de CD-RW.

Fonctions de gestion de l'alimentation (Veille/Hibernation/Pause/Reprise)

La présente section décrit les fonctions de gestion de l'alimentation pour les unités de CD-RW portables USB 2.0 IBM.

- Pour assurer les meilleurs résultats, n'utilisez pas la fonction de pause ou de mise en veille pendant que l'unité effectue des opérations d'écriture. Des erreurs de données peuvent se produire.
- Ne connectez ou ne déconnecter pas l'unité pendant que l'unité est en mode veille (pause). Votre ordinateur pourrait devenir instable.

Maintenance de l'unité

La présente section contient les informations relatives à la maintenance de votre unité de CD-RW portable USB 2.0 IBM.

- Ne retirez-pas le bloc d'alimentation lorsque l'unité est en cours d'utilisation
- Désactivez la fonction d'économiseur d'écran - l'utilisation d'un économiseur d'écran pourrait interrompre le processus de formatage des CD et les opérations d'écriture.
- Placez l'unité sur une surface stable, plane et à l'abri des vibrations - si l'unité bouge pendant le formatage d'un disque ou l'écriture sur celui-ci, des erreurs de données peuvent se produire.
- Pour manipuler le CD, prenez-le par les bords ou par l'orifice central - ne touchez pas la surface du CD.
- Pour ôter de la poussière ou des traces de doigts, nettoyez le CD à partir du centre en allant vers les bords avec un chiffon doux non pelucheux - votre mouvement ne doit pas être circulaire, vous risqueriez de perdre des données.
- N'utilisez pas de produits du commerce pour nettoyer les CD.
- Ne touchez pas la lentille interne de l'unité de CD-RW.
- Retirez tout CD de l'unité avant de déplacer celle-ci.
- Ne faites pas fonctionner l'unité dans les conditions suivantes : température élevée, humidité élevée, exposition directe aux rayons du soleil, surface inclinée, vibrations ou chocs excessifs, forte concentration de poussière, atmosphère moite ou exposition à des liquides qui pourraient se renverser et endommager l'unité.
- N'empilez pas d'objets sur l'unité.

Détails et fonctions

La présente section fournit des détails relatifs à l'unité de CD-RW portable USB 2.0 IBM et présente ses fonctions.
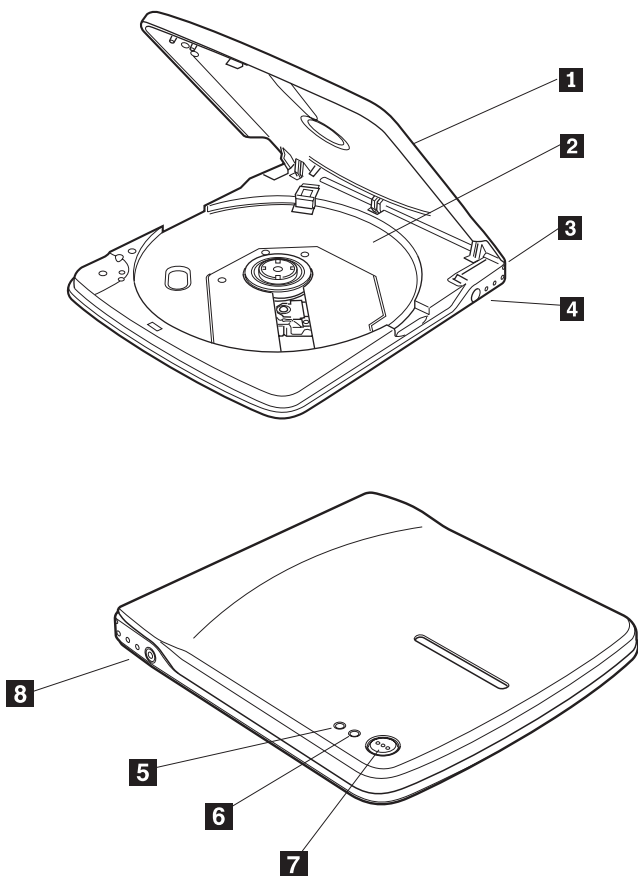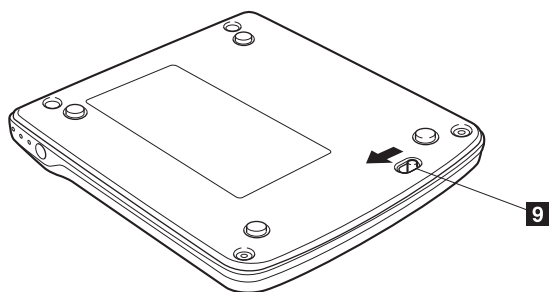
1 Panneau supérieur

2 Plateau à disque

Placez le support étiquette vers le haut sur le plateau à disque.

3 Port USB

Insérez la fiche du câble USB dédié fourni.

4 Connecteur c.c. en entrée

Connectez le bloc d'alimentation dédié fourni.

Seul le bloc fourni est compatible avec cette unité. Ne connectez jamais d'autres blocs d'alimentation.

Cette unité ne peut pas fonctionner seulement avec le courant du bus du câble USB. Veillez à assurer l'alimentation de l'unité en branchant le bloc d'alimentation.

5 Voyant d'alimentation/Voyant occupé

Le voyant vert indique l'état de l'alimentation de l'unité et les états de fonctionnement de l'unité.

Lorsque l'unité est connectée à l'alimentation électrique et au port USB de votre ordinateur	Le voyant s'allume.
Pendant l'écriture de données	Le voyant est allumé.
Pendant la lecture de données	Le voyant clignote.
Lorsque l'unité n'est pas connectée au port USB	Le voyant s'éteint.

6 Voyant d'écriture

Le voyant (ou diode électroluminescente) orange indique l'état d'écriture de l'unité.

Pendant l'écriture de données	Le voyant clignote.
Modes différents du mode décrit ci-dessus	Le voyant s'éteint.

7 Bouton d'éjection

Appuyez sur le bouton d'éjection pour ouvrir le panneau supérieur.

Un mécanisme électrique de verrouillage est présent sur cette unité afin d'éviter que le panneau ne soit ouvert par erreur lors d'opérations d'écriture. Vérifiez que l'unité est raccordée à l'alimentation électrique et qu'elle n'est pas en cours de fonctionnement avant d'appuyer sur le bouton d'éjection pour ouvrir le panneau.

Si le panneau ne s'ouvre pas même lorsque vous appuyez sur le bouton d'éjection, ou si vous devez ouvrir le panneau alors que l'unité n'est pas raccordée à l'alimentation électrique, utilisez le volet d'éjection d'urgence situé en dessous de l'unité.

8 Prise de sortie de ligne

Connectez cette prise au signal d'entrée de ligne de votre ordinateur (à l'aide du câble audio inclus) pour la sortie du signal audio de l'unité.

Pour certains systèmes d'exploitation, le câble audio n'est pas nécessaire. Pour mettre en oeuvre les fonctions audio, procédez comme suit :

1. Cliquez deux fois sur **Poste de travail**.
2. Sélectionnez l'**unité de CD-RW portable USB 2.0**. (Par exemple, sélectionnez *e*, où e représente l'indicatif d'unité de l'unité de CD-RW.
3. Cliquez sur **Propriétés -> Matériel -> Unité de CD-RW USB 2.0 IBM**.
4. Cliquez sur **Propriétés** et sélectionnez l'onglet **Propriétés**.
5. Sélectionnez **Activer la lecture numérique sur ce lecteur de CD-ROM** ou **Lecture numérique pour les CD audio sur ce lecteur CD-ROM**.
6. Cliquez sur **OK**.

9 Volet d'éjection d'urgence

Si vous devez éjecter un support alors que l'unité n'est pas alimentée en courant électrique, insérez une tige de métal fine, telle qu'un trombone, dans le volet d'éjection d'urgence et faites-la glisser dans le sens de la flèche représentée sur la figure.

Raccordement de l'unité de CD-RW à l'ordinateur

La présente section contient des informations relatives à la connexion de l'unité de CD-RW portable USB 2.0 IBM à votre ordinateur.

Suivez les instructions ci-après pour connecter l'unité de CD-RW.

1. Repérez le câble USB livré avec cette option. L'un des connecteurs du câble USB est plus petit que l'autre et est doté de deux petits boutons de chaque côté.

2. Pincez les deux boutons du connecteur le plus petit et enfoncez cette extrémité du câble USB dans le port USB situé à l'arrière de l'unité de CD-RW.
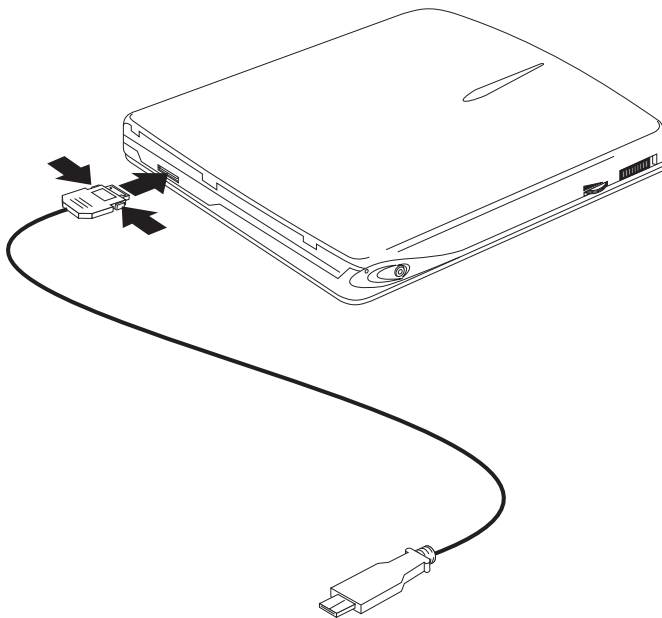
Lorsque vous branchez le connecteur le plus petit dans le port USB de l'unité, veillez à ce que la plaque métallique soit vers le haut.

3. Branchez l'extrémité la plus grande du câble USB dans le port USB de votre ordinateur.

4. Raccordez le bloc d'alimentation à l'unité et au socle de prise de courant.

5. Périphérique de partage d'alimentation en option - permet à l'utilisateur d'alimenter l'unité de CD-RW portable USB 2.0 IBM en courant électrique en utilisant les blocs d'alimentation 56 W, 72 W c.a. ou 72 W c.c. du ThinkPad.

Installation des pilotes de périphérique

La présente section explique comment installer des pilotes de périphérique sur l'ordinateur.

Pour installer le pilote de périphérique, suivez les instructions correspondant à votre système d'exploitation.

Installation du pilote de périphérique sous Windows 98

1. Après avoir connecté l'unité de CD-RW à votre ordinateur, mettez ce dernier sous tension si tel n'est pas déjà le cas. Une fenêtre en incrustation s'affiche.
2. Dans la fenêtre d'assistant d'ajout de nouveau matériel qui s'affiche pour l'unité de CD-RW portable USB IBM, cliquez sur **Suivant**.
3. Cochez la case **Rechercher le meilleur pilote pour votre périphérique**.
4. Insérez la *disquette de l'option d'unité de CD-RW portable USB IBM* dans l'unité de disquette.
5. Cochez la case **Lecteur de disquette**.
6. Cliquez deux fois sur **Suivant**.
7. Cliquez sur **Terminer** pour terminer l'installation du pilote de périphérique.

Vous pouvez à présent utiliser l'unité de CD-RW sous Windows 98.

Installation du pilote de périphérique sous Windows Me, Windows 2000 et Windows XP

Le pilote de périphérique USB est livré avec les systèmes d'exploitation Windows Me, Windows 2000 et Windows XP. Lorsque vous connectez l'unité, Windows installe automatiquement le pilote de périphérique approprié et l'unité est prête à être utilisée. Vous n'avez aucune opération d'installation ou de désinstallation à effectuer.

Déconnexion et reconnexion de l'unité de CD-RW

La présente section fournit des informations sur la déconnexion et la reconnexion de l'unité de CD-RW portable USB 2.0 IBM.

La connexion à chaud du câble USB sur l'ordinateur est prise en charge. Cela signifie que le câble USB de l'unité de CD-RW peut être déconnecté de l'ordinateur et reconnecté sans qu'il soit nécessaire de redémarrer l'ordinateur.

Suivez les instructions ci-après pour déconnecter l'unité de CD-RW.

1. Fermez le programme qui utilise l'unité.

2. Vérifiez que les voyants d'écriture et d'occupation de l'unité sont éteints.

3. Cliquez sur l'icône de **retrait (Déconnexion ou éjection de matériel)**. (Cette icône se trouve par défaut à côté de l'horloge dans la barre de tâches.)

4. Sélectionnez l'**unité de CD-RW USB 2.0** pour la retirer.

5. Le message de confirmation de suppression de matériel s'affiche. Cliquez sur **OK**.

6. Retirez le connecteur de câble USB du port USB de l'ordinateur.

7. Pour reconnecter l'unité, raccordez le câble USB au port USB de l'ordinateur.

Attention

N'effectuez pas de séquences de déconnexion/reconnexion rapide du câble USB : le chargement de l'unité de CD-ROM risquerait d'être incorrect. Après la déconnexion du câble USB, attendez au moins 10 à 20 secondes ou attendez que l'icône représentant un sablier disparaisse avant de reconnecter le câble.

Guía de instalación y del usuario

Este manual contiene instrucciones sobre cómo instalar y utilizar la Unidad portátil CD-RW USB 2.0 de IBM[®].

Descripción del producto

Esta guía contiene información sobre la instalación y la utilización de la Unidad portátil CD-RW USB 2.0 de IBM.

La Unidad portátil CD-RW USB 2.0 de IBM es una unidad CD-R/RW delgada que se conecta rápidamente y de manera conveniente al sistema ThinkPad[®] de IBM a través de una conexión sencilla. Esta unidad funciona como un dispositivo USB 1.1 cuando está conectado a un puerto USB 1.1 y como un dispositivo USB 2.0 cuando está conectado al puerto USB 2.0. Se obtiene una velocidad máxima de grabación de 4x a 6x con el puerto USB 1.1. Se obtiene una velocidad máxima de grabación de 8x con el puerto USB 2.0.

Además de este manual, el paquete de la opción incluye lo siguiente:
- Unidad portátil CD-RW USB 2.0 de IBM
- Cable USB
- Cable de audio
- Maleta de transporte
- Adaptador de alimentación
- Disquete de la opción Unidad CD-RW USB de IBM (sólo para Windows 98)
- Software de la aplicación CD-RW
- Manual de información de seguridad

Requisitos de hardware y software

Debe tener instalado el siguiente hardware en el sistema ThinkPad para poder utilizar esta opción:
- Unidad de disquetes (sólo para la instalación del controlador en sistemas Microsoft[®] Windows 98[®])
- Puerto USB 1.1 ó 2.0 disponible

El sistema debe tener instalado uno de los siguientes sistemas operativos para poder utilizar esta opción:
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional

* Microsoft Windows XP

Descripción del software

Esta sección describe las posibilidades de lectura/grabación de la Unidad portátil CD-RW USB 2.0 de IBM.

La Unidad portátil CD-RW USB 2.0 de IBM puede grabar en y leer discos CD regrabables (CD-RW) y discos CD grabables (CD-R) y puede leer discos CD-ROM. Para utilizar las funciones de grabación de CD de la unidad, debe instalar el Software de aplicación CD-RW de IBM. Este software le permite crear CD de audio y de datos y copiar CD. Para obtener más información sobre cómo utilizar este software, consulte la guía del usuario que se incluye en el CD del Software de aplicación CD-RW.

Cómo utilizar el soporte CD-R y CD-RW

Esta sección describe los tipos de soporte y las velocidades de grabación que utiliza la Unidad portátil CD-RW USB 2.0 de IBM.

La unidad puede grabar tanto en discos CD-R como en discos CD-RW. Los discos CD-R no se pueden borrar o sobregrabar pero se pueden utilizar con unidades CD-ROM estándares y con reproductores de CD de audio. Los discos CD-RW se pueden borrar o sobregrabar pero sólo se pueden utilizar con las unidades CD-ROM y DVD-ROM más nuevas compatibles con Multi-Read y CD-RW.

La velocidad de grabación del soporte está indicado en el paquete del soporte CD-R/RW. Al grabar, grabe dentro del alcance de la velocidad de grabación especificada del soporte que se está utilizando. Aunque se puede utilizar soporte de velocidad más alta, la velocidad máxima de grabación es 8X cuando está conectada a través de un puerto USB 2.0 y 4X-6X cuando está conectada a través de un puerto USB 1.1.

Los resultados de lectura y grabación de la unidad dependen de la calidad y características del soporte CD-R y CD-RW que se está utilizando. Es posible que se obtengan resultados pobres con algunos suministradores de CD-R y CD-RW.

Funciones de gestión de la alimentación (En espera/Hibernación/Suspensión/Reanudar)

Esta sección describe las funciones de gestión de la alimentación de la Unidad portátil CD-RW USB 2.0 de IBM.

* Para obtener resultados óptimos, no utilice la función suspensión/en espera mientras la unidad está grabando. Se pueden producir errores en los datos.

- No conecte o desconecte la unidad mientras el sistema está en modalidad de en espera (suspensión). Puede que el sistema pase a ser inestable.

Cómo mantener la unidad

Esta sección contiene información sobre el mantenimiento de la Unidad portátil CD-RW USB 2.0 de IBM.

- No extraiga el adaptador de CA mientras la unidad está en funcionamiento.
- Apague los salvapantallas ya que pueden interrumpir los procesos de formato y grabación de los CD.
- Coloque la unidad en un sitio estable sin ningún tipo de vibración o inclinación ya que si la unidad se mueve durante el formato o grabación de un disco, es posible que se produzcan errores en los datos.
- Maneje el CD por los bordes o por el agujero central. No toque la superficie del CD.
- Para eliminar el polvo o huellas dactilares, limpie el CD desde el centro hacia el borde con un trapo suave y sin pelusa. No lo limpie con un movimiento circular ya que se puede provocar una pérdida de datos.
- No utilice limpiadores comerciales para limpiar el CD.
- No toque la lente interna de la unidad CD-RW.
- Extraiga cualquier CD de la unidad antes de transportarla.
- No haga funcionar la unidad en estas condiciones: temperaturas altas, humedad elevada, luz solar directa, superficie inclinada, choques o vibraciones excesivas, polvo excesivo, entorno húmedo ni la ponga cerca de líquidos que se puedan derramar encima de la unidad, provocando daños en la misma.
- No apile objetos encima de la unidad.

Detalles y funciones

Esta sección proporciona los detalles y funciones de la Unidad portátil CD-RW USB 2.0 de IBM.
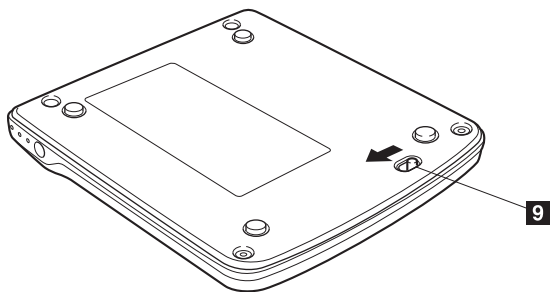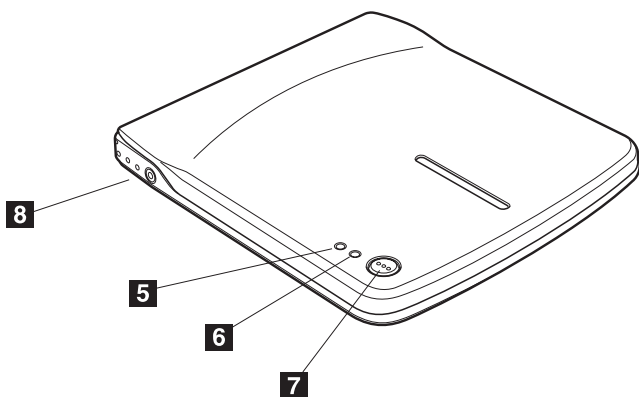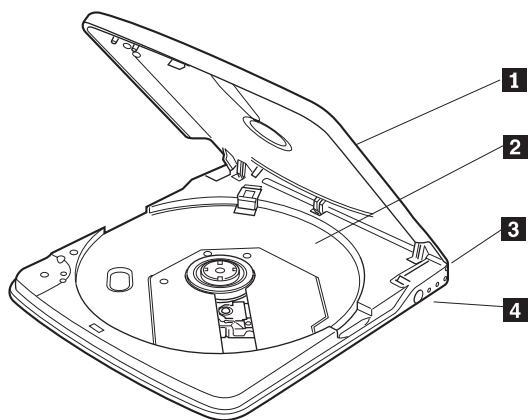
1 Cubierta superior

2 Bandeja de disco

Coloque en la bandeja de disco el soporte con la etiqueta mirando hacia arriba.

3 Conector USB

Inserte el enchufe del cable USB proporcionado.

4 Conector de entrada de CC

Conecte el adaptador de CA proporcionado.

Asegúrese de conectar el adaptador de CA proporcionado a este conector. Nunca conecte otros adaptadores de CA.

Esta unidad no puede funcionar con sólo la alimentación de bús del cable USB. Asegúrese de proporcionar alimentación conectando el adaptador de CA proporcionado.

5 Indicador de alimentación/ocupado

El LED verde indica el estado de alimentación y los estados de funcionamiento de la unidad.

Cuando la unidad está conectada a la alimentación de CA y al puerto USB del PC	Se enciende la luz del indicador
Durante la grabación de datos	Se enciende la luz del indicador
Durante la lectura de datos	El indicador parpadea
Cuando la unidad no está conectada al puerto USB	Se apaga la luz del indicador

6 Indicador de grabación

El LED naranja indica el estado de grabación de la unidad.

Durante la grabación de datos	El indicador parpadea
Otras modalidades distintas de las anteriores	Se apaga la luz del indicador

7 Botón de expulsión

Pulse el botón de expulsión para abrir la cubierta superior.

Se utiliza en esta unidad un mecanismo de bloqueo eléctrico para evitar que un funcionamiento erróneo abra la cubierta superior durante la grabación.

Asegúrese de que la alimentación esté encendida y que la unidad no esté en funcionamiento antes de pulsar el botón de expulsión para abrir la cubierta superior.

Si no se puede abrir la cubierta superior al pulsar el botón de expulsión o si es necesario abrir la cubierta superior cuando no haya alimentación suministrada por el adaptador de CA, utilice la palanca de expulsión de emergencia que se encuentra en la parte inferior de la unidad.

8 Conector de salida de línea

Conecte este conector al señal de entrada de línea del sistema (utilizando el cable de audio incluido) cuando se redirija la salida de la señal de audio desde esta unidad.

En algunos sistemas operativos no es necesario el cable de audio. Se puede conseguir sonido siguiendo los siguientes pasos:

1. Haga doble clic en **Mi PC**.

2. Seleccione la **Unidad portátil CD-RW USB 2.0**. (Por ejemplo, seleccione *e*, donde e representa la letra de unidad de la unidad CD-RW.

3. Haga clic en **Propiedades -> Hardware -> Dispositivo CD-RW USB 2.0 de IBM**.

4. Haga clic en **Propiedades** y, a continuación, seleccione la pestaña **Propiedades**.

5. Seleccione **Habilitar sonido de CD digital para este dispositivo CD-ROM**.

6. Haga clic en **Aceptar**.

9 Palanca de expulsión de emergencia

Al expulsar el soporte con la alimentación apagada, introduzca un extremo de un clip enderezado dentro de la palanca de expulsión de emergencia y deslícelo en la dirección que muestra la flecha.
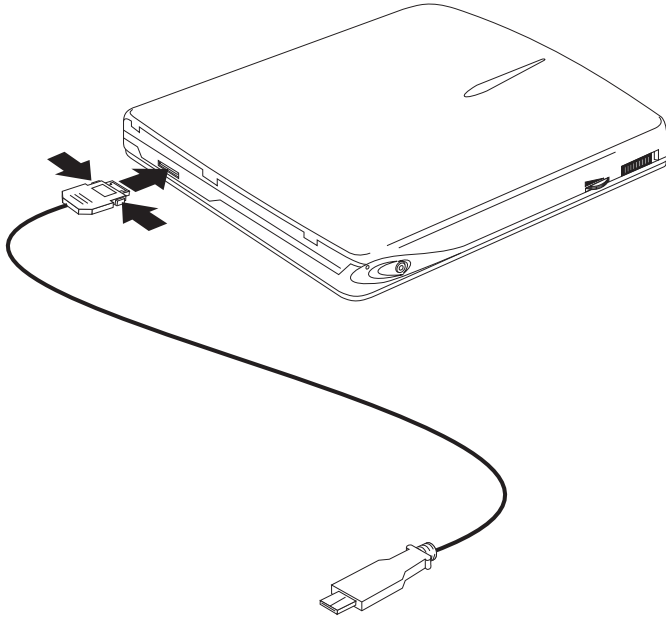
Cómo conectar la unidad CD-RW al sistema

Esta sección proporciona información sobre cómo conectar la Unidad portátil CD-RW USB 2.0 de IBM al sistema.

Siga estas instrucciones para conectar la unidad CD-RW:

1. Localice el cable USB incluido con esta opción. Un conector del cable USB es más pequeño que el otro y tiene dos botones pequeños a cada lado.

2. Apriete los dos botones del conector más pequeño y conecte dicho extremo del cable USB a la parte posterior de la unidad CD-RW.

Asegúrese de que la placa metálica del conector más pequeño esté boca arriba cuando lo conecte al conector USB de la unidad CD-RW.

3. Conecte el extremo más grande del cable USB al puerto USB del sistema.

4. Conecte el adaptador de alimentación a la unidad y a la toma de alimentación de pared.

5. Dispositivo opcional para compartir la alimentación - se utiliza cuando al usuario le gustaría alimentar la Unidad portátil CD-RW USB 2.0 de IBM utilizando los adaptadores de alimentación de 56W o de alimentación de CA de 72W o de CC de 72W de ThinkPad.

Cómo instalar los controladores de dispositivo

Esta sección proporciona información sobre cómo instalar controladores de dispositivo en el sistema.

Para instalar el controlador de dispositivo, siga las instrucciones que se correspondan con el sistema operativo que tenga.

Cómo instalar el controlador de dispositivo en Windows 98

1. Después de conectar la unidad CD-RW al sistema, encienda el sistema si es que todavía no está encendido. Se abrirá una ventana emergente.

2. En la ventana Asistente de hardware nuevo para la Unidad portátil CD-RW USB 2.0 de IBM, haga clic en **Siguiente**.

3. Seleccione el recuadro de selección **Buscar el mejor controlador para el dispositivo**.

4. Introduzca el disquete de la opción *Unidad portátil CD-RW USB 2.0 de IBM* en la unidad de disquetes.

5. Seleccione el recuadro de selección **Unidad de disquetes**.

6. Haga clic en **Siguiente** dos veces.

7. Haga clic en **Finalizar** para completar la instalación del controlador de dispositivo.

Ahora ya puede utilizar la unidad CD-RW en Windows 98.

Cómo instalar el controlador de dispositivo en Windows Me, Windows 2000 y Windows XP

El controlador de dispositivo USB está incluido en los sistemas operativos Windows Me, Windows 2000 y Windows XP. Cuando se conecta esta unidad, Windows instalará automáticamente el controlador de dispositivo adecuado y la unidad ya estará lista para ser utilizada. No es necesario que lleve a cabo ninguna instalación o desinstalación especial.

Cómo desconectar y volver a conectar la unidad CD-RW

Esta sección proporciona información sobre cómo desconectar y volver a conectar la Unidad portátil CD-RW USB 2.0 de IBM.

La conexión en caliente está soportada en la conexión entre el cable USB y el sistema. Esto significa que el cable USB de la unidad CD-RW se puede desconectar desde y volver a conectar al sistema sin que sea necesario volver a iniciar el sistema.

Siga estas instrucciones para desconectar la unidad:

1. Cierre el programa que esté utilizando la unidad.

2. Confirme que el indicador de grabación y el de ocupado de la unidad está apagados.

3. Haga clic en el icono **Extraer (Desconectar o Expulsar hardware)**. (Por omisión, este icono está ubicado al lado de la visualización de la hora en la barra de tareas).

4. Seleccione la **Unidad portátil CD-RW USB 2.0 de IBM** para extraerla.

5. Se visualizará el mensaje de confirmación de Extraer hardware. Haga clic en **Aceptar**.

6. Extraiga el enchufe del cable USB del puerto USB del sistema.

7. Para volver a conectarla, conecte el cable USB al puerto USB del sistema.

Atención

No desconecte y vuelva a conectar el cable USB de manera rápida ya que es posible que la unidad CD-ROM no se cargara adecuadamente. Después de desconectar el cable USB, espere, al menos, de 10 a 20 minutos o hasta que el icono del reloj de arena deje de visualizarse, antes de volver a conectar el cable USB.

Guida per l'utente e all'installazione

Questo manuale contiene le istruzioni per l'installazione e l'utilizzo dell'unità CD-RW esterna IBM ® USB 2.0.

Descrizione del prodotto

Questo manuale contiene informazioni sull'installazione e l'utilizzo dell'unità CD-RW esterna IBM USB 2.0.

L'unità CD-RW esterna IBM USB 2.0 è un'unità con linea slim che viene collegata in modo rapido e pratico al computer IBM ThinkPad ® attraverso una connessione semplice. L'unità funziona come unità USB 1.1 quando è collegata a una porta USB 1.1 e come unità USB 2.0 quando è collegata alla porta USB 2.0. La velocità di scrittura massima è compresa tra 4x e 6x e viene ottenuta con la porta USB 1.1. La velocità di scrittura massima di 8x è ottenuta attraverso la porta USB 2.0.

Oltre a questo manuale, il pacchetto di opzione include:
- Unità CD-RW esterna IBM USB 2.0
- Cavo USB
- Cavo audio
- Custodia per il trasporto
- Adattatore alimentazione
- Minidisco dell'opzione Unità CD-RW IBM USB (solo per Windows 98)
- Software CD-RW
- Manuale relativo alle informazioni sulla sicurezza

Requisiti hardware e software

Per utilizzare questa opzione è necessario disporre del seguente hardware installato sul computer ThinkPad:
- Unità minidisco (per l'installazione del driver solo su sistemi Microsoft ® Windows 98 ®)
- Una porta USB 1.1 o 2.0 disponibile

Per utilizzare questa opzione, è necessario che il computer disponga di uno dei seguenti sistemi operativi installati:
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional

- Microsoft Windows XP

Descrizione del software

Questa sezione descrive le funzioni di lettura/scrittura dell'unità CD-RW esterna IBM USB 2.0.

L'unità CD-RW esterna IBM USB 2.0 è in grado di scrivere e leggere da dischi CD-RW (CD-ReWritable) e CD-R (CD-Recordable) e può leggere CD-ROM. Per utilizzare le funzioni CD-R, è necessario installare il software IBM CD-RW incluso. Questo software consente di creare CD di dati e audio e copiare CD. Per ulteriori informazioni sull'utilizzo del software, fare riferimento alla guida in linea per l'utente disponibile sul CD del software.

Utilizzo dei supporti CD-R e CD-RW

Questa sezione descrive i tipi di supporto e le velocità di scrittura utilizzate con l'unità CD-RW esterna IBM USB 2.0.

L'unità può scrivere su entrambi i dischi CD-R e CD-RW. Non è possibile cancellare o sovrascrivere sui dischi CD-R, ma è possibile utilizzarli con i lettori CD audio e le unità CD-ROM standard. E' possibile cancellare e riscrivere i dischi CD-RW ed è possibile utilizzarli solo con le nuove unità DVD-ROM e CD-ROM compatibili con MultiRead e CD-RW.

La velocità di scrittura del supporto è indicata nel pacchetto del supporto CD-R/RW. Eseguire la scrittura a una velocità compresa nei limiti di velocità di scrittura specifici del supporto utilizzato. Sebbene sia possibile utilizzare il supporto alla velocità maggiore, la velocità di scrittura massima è di 8X con collegamento tramite la porta USB 2.0 e di 4X-6X con collegamento tramite la porta USB 1.1.

I risultati della scrittura e della lettura dell'unità dipendono dalla qualità e dalle caratteristiche delle unità CD-R e CD-RW utilizzate. E' possibile che si verifichino scarsi risultati con alcuni strumenti CD-R e CD-RW.

Funzioni di gestione alimentazione (Attesa/Ibernazione/Sospensione/Ripresa)

Questa sezione descrive le funzioni di gestione alimentazione dell'unità CD-RW esterna IBM USB 2.0.

- Per ottimizzare le prestazioni, non utilizzare la funzione di sospensione/attesa quando l'unità esegue un'operazione di scrittura. Potrebbero verificarsi errori.

- Non connettere o disconnettere l'unità quando il computer si trova in modalità attesa (sospensione). Il computer potrebbe risultare instabile.

Manutenzione dell'unità

Questa sezione contiene informazioni sulla manutenzione dell'unità CD-RW esterna IBM USB 2.0.

- Non rimuovere l'adattatore ca durante l'utilizzo dell'unità
- Disattivare gli screensaver - l'utilizzo di uno screensaver potrebbe causare l'interruzione dei processi di formattazione e di scrittura dei CD.
- Posizionare l'unità su un ripiano stabile e non provocare vibrazioni o inclinazioni dell'unità in quanto ciò potrebbe determinare il verificarsi di errori dei dati durante la formattazione o la scrittura su un CD
- Afferrare il CD dalle estremità o dal foro centrale - non toccare la superficie del CD
- Per rimuovere la polvere o le impronte, passare un panno morbido e pulito dall'interno verso l'esterno del CD - il movimento in senso circolare potrebbe causare la perdita di dati
- Per pulire il CD, non utilizzare prodotti per la pulizia
- Non toccare le lenti interne dell'unità CD-RW
- Prima di spostare l'unità, rimuovere qualsiasi CD dall'unità.
- Non utilizzare l'unità in ambienti che presentano le seguenti condizioni: temperatura ed umidità elevate, esposizione alla luce diretta del sole, superficie inclinata, vibrazioni o urti improvvisi, polvere o vicinanza di liquidi che potrebbero essere rovesciati e danneggiare l'unità.
- Non appoggiare oggetti sull'unità.

Dettagli e funzioni

Questa sezione fornisce i dettagli e le funzioni dell'unità CD-RW esterna IBM USB 2.0.
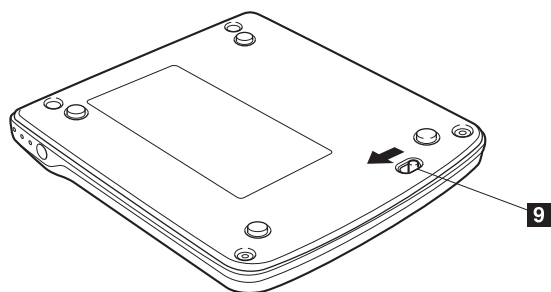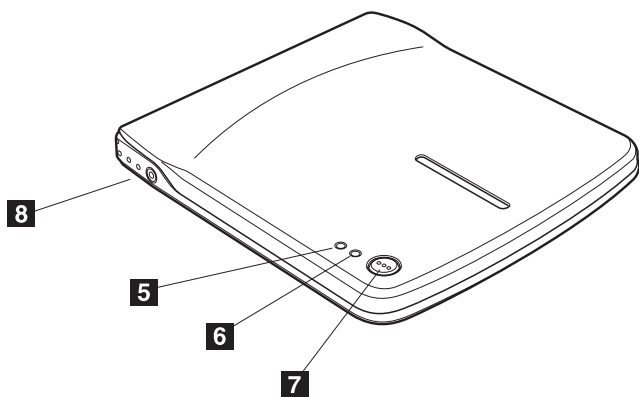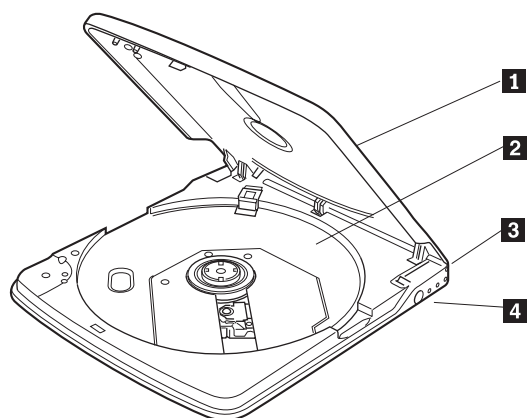
1 Coperchio superiore

2 Carrello

Installare il supporto, con l'etichetta rivolta verso l'alto, sul carrello.

3 Connettore USB

Inserire la spina del cavo USB.

4 Connettore DC-IN

Connettere l'adattatore ca fornito.

Accertarsi di connettere l'adattatore ca fornito a questo connettore. Non connettere adattatori ca diversi.

Questa unità non funziona solo con l'alimentatore bus del cavo USB. Accertarsi che l'alimentazione venga fornita attraverso l'adattatore ca fornito.

5 Indicatore di segnale Occupato/Alimentazione

L'indicatore luminoso di colore ambra indica lo stato di scrittura dell'unità.

| Durante la scrittura dei dati | L'indicatore luminoso lampeggia |
| Modi diversi da quelli riportati | L'indicatore luminoso è spento |

6 Indicatore di scrittura

L'indicatore luminoso di colore verde indica lo stato di alimentazione e gli stati relativi al funzionamento dell'unità.

Quando l'unità è collegata all'alimentatore ca e alla porta USB del PC	L'indicatore luminoso è acceso
Durante la scrittura dei dati	L'indicatore luminoso è acceso
Durante la lettura dei dati	L'indicatore luminoso lampeggia
Quando l'unità non è collegata alla porta USB	L'indicatore luminoso è spento

7 Pulsante di espulsione

Premere il pulsante di espulsione per aprire il coperchio superiore.

Su questa unità viene utilizzato un meccanismo di blocco elettrico in modo che in caso di operazione errata non si apra il coperchio superiore durante la scrittura. Prima di premere il pulsante di espulsione per aprire il coperchio superiore, accertarsi che l'unità sia collegata e che non sia in funzione.

Se non è possibile aprire il coperchio superiore, anche quando il pulsante di espulsione è premuto oppure se è necessario aprire il coperchio superiore quando l'alimentazione non viene fornita dall'adattatore ca, utilizzare la leva di espulsione di emergenza posta nella parte inferiore dell'unità.

8 jack di uscita linea

Collegare questo jack al segnale di linea di entrata del computer (utilizzando il cavo audio incluso) e il segnale audio viene emesso da questa unità.

In alcuni sistemi operativi il cavo audio non è necessario. E' possibile ottenere l'emissione audio effettuando le seguenti operazioni:

1. Fare doppio clic su **Risorse del computer**.
2. Selezionare l'**unità CD-RW esterna USB 2.0**. Ad esempio, selezionare *e*, dove e è la lettera identificativa dell'unità CD-RW.
3. Fare clic su **Proprietà -> Hardware -> IBM CD-RW USB 2.0 USB Device**.
4. Fare clic su **Proprietà** e quindi selezionare il separatore **Proprietà**.
5. Selezionare **Abilita riproduzione digitale su questa periferica CD-ROM**.
6. Fare clic su **OK**.

9 Leva di emissione di emergenza

Per estrarre il supporto con il sistema spento, inserire un oggetto metallico appuntito, ad esempio una graffetta, nella leva di espulsione di emergenza e farlo scorrere in direzione della freccia.

## Collegamento dell'unità CD-RW al computer

Questa sezione fornisce informazioni per collegarsi all'unità CD-RW esterna IBM USB 2.0 sul proprio computer.

Per connettersi all'unità CD-RW, seguire le istruzioni riportate di seguito:

1. Individuare il cavo USB incluso in questa opzione. Il connettore sul cavo USB è di dimensioni inferiori rispetto all'altro e presenta due pulsanti di piccole dimensioni sui lati.

2. Premere i due pulsanti del connettore più piccolo e collegare l'estremità del cavo USB sul connettore USB sul retro dell'unità CD-RW.
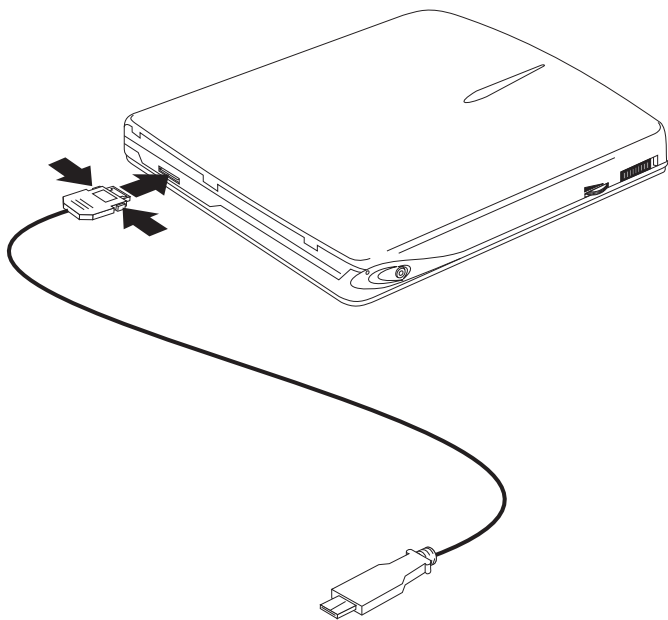
Accertarsi che la piastrina metallica del connettore più piccolo sia rivolta verso l'alto quando il connettore viene inserito nel connettore USB sull'unità CD-RW.

3. Collegare l'estremità più grande del cavo USB nella porta USB del computer.

4. Collegare l'adattatore di alimentazione all'unità e alla presa elettrica.

5. Barrel Adapter - Optional Power Sharing Device - utilizzato quando l'utente desidera collegare l'unità CD-RW esterna IBM USB 2.0 utilizzando adattatori di alimentazione ThinkPad 56W, 72W ca o 72 cc.

Installazione dei driver di periferica

Questa sezione fornisce informazioni sull'installazione dei driver di periferica.

Per installare il driver di periferica, seguire le istruzioni relative al sistema operativo di cui si dispone.

Installazione dei driver di periferica per Windows 98

1. Dopo aver collegato l'unità CD-RW al computer, accendere il computer, se non è già acceso. Verrà visualizzata una finestra a comparsa.

2. Nella finestra di dialogo relativa al rilevamento del nuovo componente hardware, fare clic su **Avanti**.

3. Selezionare **Cerca il miglior driver per la periferica**.

4. Inserire il *minidisco dell'unità CD-RW esterna IBM USB* nell'unità minidisco.

5. Selezionare la casella di spunta **diskette**.

6. Fare due volte clic su **Avanti**.

7. Fare clic su **Fine** per completare la procedura di installazione.

E' ora possibile utilizzare l'unità CD-RW con Windows 98.

Installazione del driver di periferica per Windows Me, Windows 2000 e Windows XP

Il driver di periferica USB è incluso nei sistemi operativi Windows Me, Windows 2000 e Windows XP. Una volta collegata l'unità, Windows automaticamente installerà il driver di periferica appropriato e sarà possibile utilizzare l'unità. Non è necessario eseguire alcuna installazione o disinstallazione particolare.

Scollegamento e ricollegamento dell'unità CD-RW

Questa sezione fornisce informazioni per scollegarsi e ricollegarsi all'unità CD-RW esterna IBM USB 2.0.

Il collegamento a sistema acceso è supportato in caso di collegamento tramite cavo USB. Tale tipo di collegamento consente lo scollegamento e il ricollegamento del cavo USB dell'unità CD-RW senza dover riavviare il computer.

Per scollegare l'unità, seguire le istruzioni riportate di seguito:

1. Chiudere il programma che utilizza l'unità.

2. Assicurarsi che l'indicatore di scrittura o di occupato sia spento.

3. Fare clic sull'icona **Rimuovi (Scollegamento o rimozione di una periferica hardware)**. Per impostazione predefinita questa icona è posizionata accanto all'orologio riportato sulla barra delle applicazioni.

4. Selezionare l'**Unità CD-RW di USB 2.0** da rimuovere.

5. Viene visualizzato il messaggio di conferma della rimozione dell'hardware. Fare clic su **OK**.

6. Scollegare il cavo USB dalla porta USB del computer.

7. Per ricollegarlo, inserire nuovamente il cavo USB nella porta USB del computer.

Attenzione

Non scollegare e ricollegare il cavo USB in rapida successione per non causare un caricamento dell'unità CD-ROM irregolare. Prima di ricollegare il cavo USB, dopo aver scollegato il cavo USB, attendere 10/20 secondi oppure che l'icona a forma di clessidra scompaia.

Guia do Usuário e Instalação

Este manual contém instruções para instalar e utilizar a Unidade de CD-RW
Portátil IBM ® USB 2.0.

Descrição do Produto

Este guia contém informações sobre instalação e uso da Unidade de CD-RW
Portátil IBM USB 2.0.

A Unidade de CD-RW Portátil IBM USB 2.0 é uma unidade de CD-R/RW fina
que é conectada de modo rápido e conveniente ao seu computador IBM
ThinkPad ® através de uma conexão simples. A unidade funciona como um
dispositivo USB 1.1 quando conectada a uma porta USB 1.1 e como um
dispositivo USB 2.0 quando conectada à porta USB 2.0. Uma velocidade
máxima de gravação de 4x a 6x é obtida através da porta USB 1.1. Uma
velocidade máxima de gravação de 8x é obtida através da porta USB 2.0.

Além deste manual, o pacote do opcional inclui:
- Unidade de CD-RW Portátil IBM USB 2.0
- Cabo USB
- Cabo de áudio
- Estojo de transporte
- Adaptador de Energia
- Disquete do opcional Unidade de CD-RW IBM USB (somente para Windows
  98)
- Software CD-RW Application
- Manual de Informações sobre Segurança

Requisitos de Hardware e Software

Você deve ter o seguinte hardware instalado em seu computador ThinkPad
para utilizar este opcional:
- Unidade de disquete (para instalação do driver apenas em sistemas
  Microsoft ® Windows 98 ®)
- Uma porta USB 1.1 ou 2.0 disponível

Seu computador deve ter um dos seguintes sistemas operacionais instalados
para utilizar este opcional:
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)

- Microsoft Windows 2000 Professional
- Microsoft Windows XP

Descrição do Software

Esta seção descreve os recursos de leitura/gravação da unidade de CD-RW Portátil IBM USB 2.0.

A unidade de CD-RW Portátil IBM USB 2.0 pode gravar e ler discos CD-RW (CD-ReWritable) e CD-R (CD-Recordable), e também pode ler discos CD-ROM. Para utilizar as funções de gravação de CD da unidade, você deve instalar o software IBM CD-RW Application. Esse software permite criar CDs de áudio e dados e copiar CDs. Para obter mais informações sobre como utilizar o software, consulte o guia do usuário contido no CD do software CD-RW Application.

Utilizando a Mídia de CD-R e CD-RW

Esta seção descreve os tipos de mídia e velocidades de gravação utilizados com a unidade de CD-RW Portátil IBM USB 2.0.

A unidade pode gravar em ambos os discos, CD-R e CD-RW. Os discos CD-R não podem ser apagados ou sobrescritos, mas podem ser utilizados com unidades de CD-ROM e CD players de áudio padrão. Os discos CD-RW podem ser apagados e regravados, mas só podem ser utilizados com unidades de CD-ROM e DVD-ROM mais recentes compatíveis com Multi-Read e CD-RW.

A velocidade de gravação da mídia é indicada no pacote da mídia de CD-R/RW. Ao gravar, siga o escopo da velocidade de gravação especificada na mídia utilizada. Embora seja possível utilizar uma mídia de velocidade superior, a velocidade máxima de gravação é 8X quando conectada através da porta USB 2.0 e 4X-6X quando conectada através da porta USB 1.1.

Os resultados de leitura e gravação da unidade dependem da qualidade e das características da mídia de CD-R e CD-RW utilizada. Resultados inferiores podem ser obtidos com alguns fornecedores de CD-R e CD-RW.

Funções de Gerenciamento de Energia (Espera/Hibernar/Suspender/Retomar)

Esta seção descreve as funções de gerenciamento de energia da unidade de CD-RW Portátil IBM USB 2.0.

- Para obter resultados melhores, não utilize a função suspender/espera enquanto a unidade estiver em operação de gravação. Podem ocorrer erros de dados.
- Não conecte ou desconecte a unidade enquanto o computador estiver no modo de espera (suspenso). Seu computador pode ficar instável.

Fazendo a Manutenção da Unidade

Esta seção contém informações de manutenção para sua Unidade de CD-RW Portátil IBM USB 2.0.

- Não remova o adaptador de CA enquanto a unidade estiver sendo utilizada
- Desative os protetores de tela - o uso de um protetor de tela pode interromper o processo de formatação e gravação de CDs.
- Coloque a unidade em um local firme, sem qualquer vibração ou inclinação - o movimento da unidade durante a formatação ou gravação de um disco pode causar erros de dados
- Segue o CD pelas bordas ou pelo orifício central - não toque na superfície do CD
- Para remover poeira ou digitais, limpe o CD do centro para a borda com um pano macio sem fiapos - não limpe em um movimento circular pois isso pode causar perda de dados
- Não utilize produtos de limpeza comerciais para limpar o CD
- Não toque nas lentes internas da unidade de CD-RW
- Remova qualquer CD da unidade antes de transportar a unidade
- Não opere a unidade sob estas condições: alta temperatura, alta umidade, luz solar direta, superfície inclinada, vibração/choque excessivo, poeira excessiva, ambiente de vapor ou líquidos próximos que possam espirrar causando danos à unidade
- Não empilhe objetos na unidade

Detalhes e Funções

Esta seção fornece os detalhes e as funções da Unidade de CD-RW Portátil IBM USB 2.0.
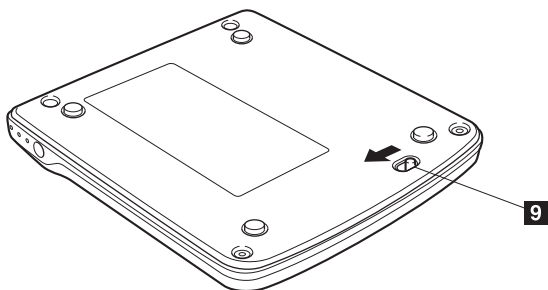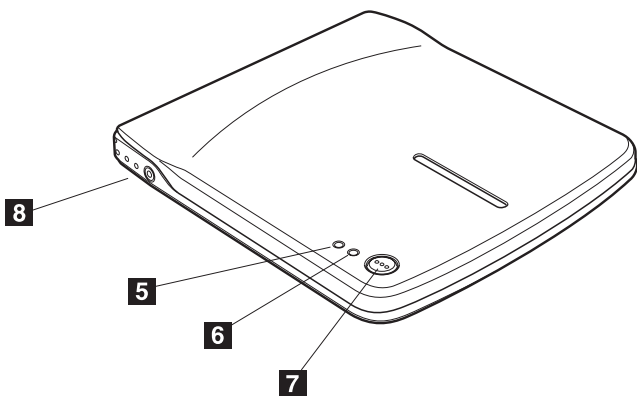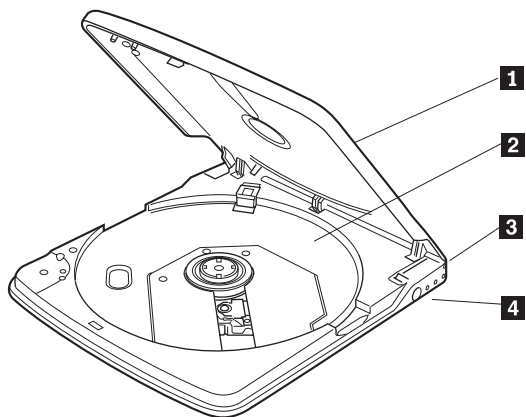
1 Tampa Superior

2 Bandeja do disco

Coloque a mídia com a etiqueta virada para cima nesta bandeja do disco.

3 Conector USB

Insira o plugue do cabo USB dedicado fornecido.

4 Conector CC-IN

Conecte o adaptador de CA dedicado fornecido.

Certifique-se de conectar o adaptador de CA dedicado fornecido a este conector. Nunca conecte outros adaptadores de CA.

Esta unidade não pode operar somente com a energia de barramento do cabo USB. Certifique-se de fornecer energia conectando o adaptador de CA fornecido.

5 Indicador de Energia/Ocupado

O LED verde indica o status da energia e os estados da operação da unidade.

Quando a unidade está conectada à energia CA e à porta USB do PC	A luz indicadora fica acesa
Durante a gravação dos dados	A luz indicadora fica acesa
Durante a leitura dos dados	O indicador fica cintilante
Quando a unidade não está conectada à porta USB	A luz indicadora fica apagada

6 Indicador de gravação

O LED (dispositivo emissor de luz) âmbar indica o estado de gravação da unidade.

Durante a gravação dos dados	O indicador fica cintilante
Modos diferentes dos mencionados acima	A luz indicadora fica apagada

7 Botão de ejeção

Pressione o botão de ejeção para abrir a tampa superior.

Um mecanismo de trava elétrica é utilizado nesta unidade para que uma operação errônea não abra a tampa superior durante a gravação. Certifique-se

de que a energia esteja ligada e a unidade não esteja em operação, antes de pressionar o botão de ejeção para abrir a tampa superior.

Se não for possível abrir a tampa superior mesmo quando o botão de ejeção é pressionado ou se a tampa superior precisar ser aberta quando a energia não é fornecida do adaptador de CA, utilize a alavanca de ejeção de emergência na parte inferior da unidade.

8 Tomada de saída de linha

Conecte esta tomada ao sinal de entrada de linha do computador (utilizando o cabo de áudio incluído) para saída do sinal de áudio desta unidade.

Em alguns sistemas operacionais, o cabo de áudio não é necessário. O áudio pode ser obtido executando as etapas a seguir:

1. Dê um clique duplo em **Meu Computador**.
2. Selecione a **Unidade de CD-RW Portátil USB 2.0**. (Por exemplo, selecione *e*, em que e representa a letra da unidade de CD-RW.
3. Clique em **Propriedades** -> **Hardware** -> **Dispositivo USB IBM CD-RW USB 2.0**.
4. Clique em **Propriedades** e, em seguida, selecione a guia **Propriedades**.
5. Selecione **Ativar áudio de CD digital para este dispositivo de CD-ROM**.
6. Clique em **OK**.

9 Alavanca de ejeção de emergência

Ao ejetar a mídia com a energia desligada, insira uma vareta de metal fina, como um clipe de papel, na alavanca de ejeção de emergência e deslize-a na direção da seta mostrada.
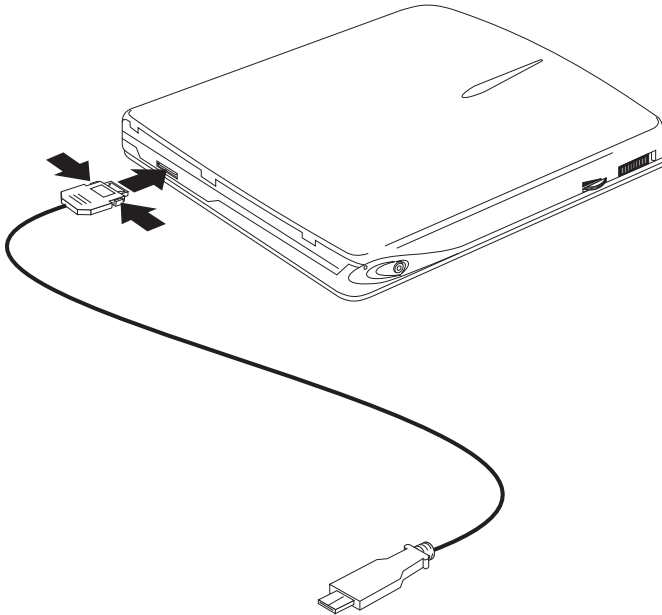
Conectando a Unidade de CD-RW ao Computador

Esta seção fornece informações para conectar a Unidade de CD-RW Portátil IBM USB 2.0 ao computador.

Siga as instruções para conectar a unidade de CD-RW:

1. Localize o cabo USB incluso com este opcional. Um conector no cabo USB é menor que o outro e possui dois botões pequenos de cada lado.

2. Aperte os dois botões no conector menor e conecte essa extremidade do cabo USB ao conector USB na parte posterior da unidade de CD-RW.

Certifique-se de que a placa de metal no conector menor esteja virada para cima quando for conectada ao conector USB na unidade de CD-RW.

3. Conecte a extremidade maior do cabo USB à porta USB do computador.
4. Conecte o adaptador de energia à unidade e à tomada.
5. Dispositivo de Compartilhamento de Energia Opcional - utilizado quando o usuário deseja acionar a unidade de CD-RW Portátil IBM USB 2.0 utilizando os adaptadores de energia de 56W, 72W CA ou 72 CC do ThinkPad.

Instalando os Drivers de Dispositivo

Esta seção fornece informações sobre como instalar os drivers de dispositivo no computador.

Para instalar o driver de dispositivo, siga as instruções que correspondem ao seu sistema operacional.

Instalando o Driver de Dispositivo para Windows 98

1. Após a conexão da unidade de CD-RW ao computador, ligue o computador, caso isso ainda não tenha sido feito. Uma janela popup será aberta.

2. No assistente de Novo Hardware da janela Unidade de CD-RW Portátil IBM USB, clique em **Avançar**.

3. Selecione a caixa de entrada **Procurar o melhor driver para o dispositivo**.

4. Insira o *disquete opcional da Unidade de CD-RW Portátil IBM USB* na unidade de disquete.

5. Selecione a caixa de entrada **unidade de disquete**.

6. Clique duas vezes em **Avançar**.

7. Clique em **Concluir** para concluir a instalação do driver de dispositivo.

Agora você pode utilizar a unidade de CD-RW com o Windows 98.

Instalando o Driver de Dispositivo para Windows Me, Windows 2000 e Windows XP

O driver de dispositivo do USB está incluído nos sistemas operacionais Windows Me, Windows 2000 e Windows XP. Quando esta unidade estiver conectada, o Windows instalará automaticamente o driver de dispositivo apropriado e a unidade estará pronta para ser utilizada. Não é necessário executar nenhuma instalação ou remoção de instalação especial.

Desconectando e Reconectando a Unidade de CD-RW

Esta seção fornece informações sobre como desconectar e reconectar a Unidade de CD-RW Portátil IBM USB 2.0.

A conexão a quente é suportada na conexão entre o cabo USB e o computador. Isso significa que o cabo USB da unidade de CD-RW pode ser desconectado do, e reconectado ao, computador sem a necessidade de iniciar novamente o computador.

Siga estas instruções para desconectar a unidade:

1. Feche o programa que está utilizando a unidade.

2. Confirme se os indicadores de GRAVAÇÃO e OCUPADO da unidade estão apagados.

3. Clique no ícone **Remover (Desconectar ou Ejetar Hardware)** . (Por padrão, esse ícone fica localizado próximo à exibição do relógio na barra de tarefas).

4. Selecione a **Unidade de CD-RW USB 2.0** a ser removida.

5. A mensagem de confirmação de Remoção do Hardware é exibida. Clique em **OK**.

6. Remova o plugue do cabo USB da porta USB do computador.

7. Para reconectar, conecte o cabo USB à porta USB do computador.

Atenção

Não desconecte e reconecte o cabo USB em sucessão rápida, caso contrário, a unidade de CD-ROM poderá não carregar adequadamente. Depois de desconectar o cabo USB, aguarde pelo menos de 10 a 20 segundos, ou até que pare a exibição do ícone de ampulheta, antes de reconectar o cabo USB.

安裝與使用手冊

本手冊含有 IBM $^®$ USB 2.0 攜帶型 CD-RW 光碟機的安裝與使用說明。

產品說明

本手冊含有 IBM USB 2.0 攜帶型 CD-RW 光碟機安裝與使用資訊。

IBM USB 2.0 攜帶型 CD-RW 光碟機是一款超薄型 CD-R/RW 光碟機，只要單一連接便可以快速輕鬆連到 IBM ThinkPad $^®$ 電腦，非常方便。光碟機連到 USB 1.1 連接埠時具有 USB 1.1 裝置的功能，連到 USB 2.0 連接埠時則具有 USB 2.0 裝置的功能。在 USB 1.1 連接埠，最大寫入速度可達 4x 到 6x。在 USB 2.0 連接埠，最大寫入速度可達 8x。

除了本手冊外，本選用設備包裝還包含：
- IBM USB 2.0 攜帶型 CD-RW 光碟機
- USB 接線
- 音訊線
- 背包
- 電源整流器
- IBM USB CD-RW 光碟機選用設備磁片（用於 Windows 98）
- CD-RW 應用程式軟體
- 安裝資訊手冊

軟硬體需求

您的 ThinkPad 電腦必須已安裝好下列硬體，才能夠安裝本選用設備：
- 軟碟機（在 Microsoft $^®$ Windows 98 $^®$ 系統安裝驅動程式時需要）
- 可用的 USB 1.1 或 2.0 連接埠

您的電腦必須已安裝好下列任一種作業系統，才可以使用本選用設備：
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional
- Microsoft Windows XP

軟體說明

本節說明 IBM USB 2.0 攜帶型 CD-RW 光碟機的讀/寫功能。

IBM 2.0 攜帶型 CD-RW 光碟機可讀寫 CD-RW 與 CD-R 光碟，以及讀取 CD-ROM 光碟。您必須安裝隨附的「IBM CD-RW 應用程式軟體」，才能夠使用光碟機 CD 燒錄功能。本軟體可用來建立音樂 CD 與資料 CD 以及複製 CD。關於本軟體的使用相關資訊，請參閱 CD-RW 感用程式軟體 CD 中所附的使用手冊。

使用 CD-R 與 CD-RW 媒體

本節說明 IBM 2.0 攜帶型 CD-RW 光碟機使用媒體類型以及寫入速度。

本光碟機可寫入 CD-R 與 CD-RW 兩種光碟。CD-R 光碟無法抹除或覆寫，但可用於標準 CD-ROM 光碟機以及音樂 CD 播放機。 CD-RW 光碟可抹除及重複寫入，但只可用於較新款的 Multi-Read 且具有與 CD-RW 相容的 CD-ROM 及 DVD-ROM 光碟機。

媒體接受的寫入速度標示在 CD-R/RW 媒體包裝上。寫入時，請在所使用之媒體的指示速度範圍內進行。雖然您可以使用較高的媒體速度，但連到 USB 2.0 連接埠時的最大速度是 8X，連到 USB 1.1 連接埠時的最大速度是 4X-6X。

光碟機的讀寫結果是依照所使用的 CD-R 與 CD-RW 媒體品質與特性而定。有些 CD-R 及 CD-RW 供應商的產品結果可能較不可靠。

電源管理功能（待機/休眠/暫停/繼續)

本節說明 IBM 2.0 攜帶型 CD-RW 光碟機的電源管理功能。

- 為取得最佳效果，在進行寫入作業時請勿使用暫停/待機功能。可能會造成資訊錯誤。
- 不要在電腦處於待機（暫停）模式時，連接光碟機或切斷光碟機連接。電腦可能會變成無法作業。

維護光碟機

本節含有 IBM USB 攜帶型 CD-RW 光碟機維護資訊。

- 不要在光碟機使用中拔除 AC 整流器
- 關閉螢幕保護裝置 - 使用螢幕保護可能會干擾 CD 的格式化與寫入程序。
- 將光碟機放置在沒有震動或傾斜的位置 - 格式化或寫入光碟期間移動光碟機可能導致資料錯誤
- 移動 CD 時只接觸邊緣或中央小孔 - 不可以觸摸 CD 表面
- 清除灰塵或指紋時，使用沒有線頭的軟布從中央向邊緣擦拭 - 請不要依圓心方向擦拭，這會導致資料遺失
- 不要使用市售清潔劑清潔 CD
- 不要觸摸 CD-RW 光碟機內部的讀寫頭
- 移動光碟機前先取出光碟機中的任何 CD

- 不要在下列條件下操作光碟機：高溫、高濕度、陽光直晒、傾斜表面、嚴重震動/衝擊、過量灰塵、潮濕環境、或太靠近液體，使光碟機因液體潑灑而損壞。
- 不要在光碟機上方推放物體

詳細資訊與功能

本節提供 IBM USB 攜帶型 2.0 CD-RW 光碟機的詳詳資訊與功能。
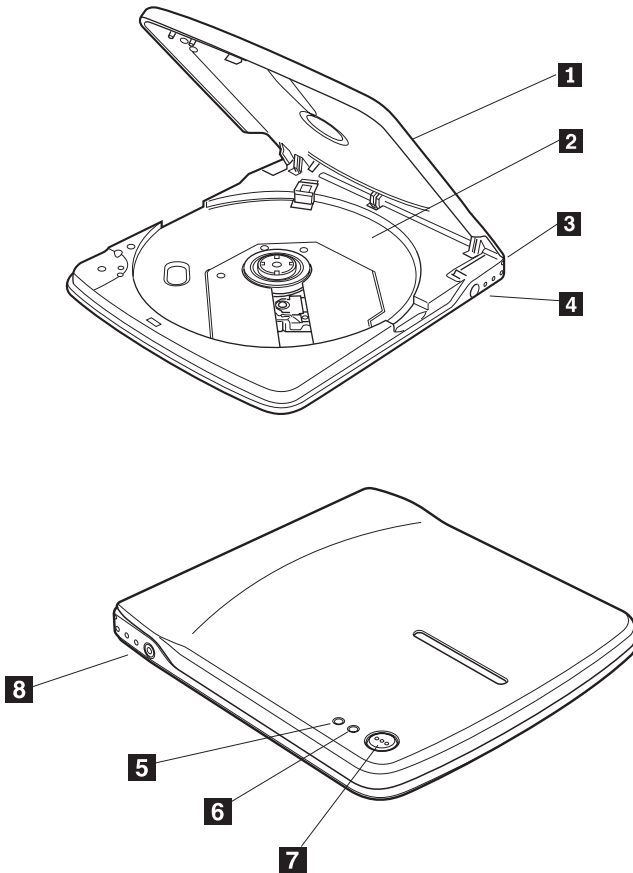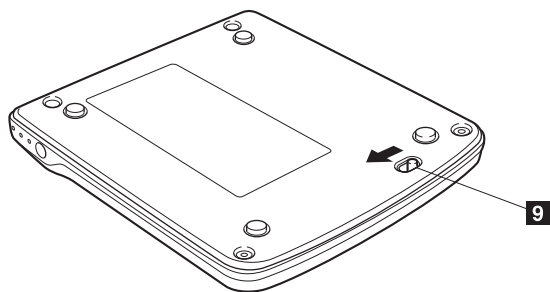
1 上蓋

2 光碟托盤

將媒體面朝上放入本光碟托盤。

3 USB 接頭

插入 USB 接頭專用的插頭。

4 DC-IN 連接器

連接專用的 AC 整流器

請務必將專用的 AC 整流器連接到這個連接器。不可以使用其他 AC 整流器。

本光碟機無法以 USB 接線的匯流排電源運作。請務必連接專用 AC 整流器來提供電源。

5 電源/忙碌指示燈

桔黃色發光二極體（LED）指示光碟機的寫入狀態。

資料寫入期間	指示燈閃爍
上述以外的模式	指示燈關閉

6 寫入指示燈

綠色 LED 指示光碟機的電源狀態以及作業狀態。

光碟機連接至 AC 電源以及 PC 的 USB 連接埠	指示燈亮起

資料寫入期間	指示燈亮起
資料讀取期間	指示燈閃爍
光碟機未連到 USB 連接埠	指示燈關閉

7 退出鈕

按退出鈕來打開上蓋。

本光碟機使用電鎖機制，寫入期間，錯誤操作無法打上蓋。請先確定電源已經打開
而且光碟機未運作，再按退出按鈕來打開上蓋。

如果按退出鈕無法打開上蓋，或者未從 AC 整流器提供電源但要打上蓋，請使用光
碟機底端的緊急退出桿。

8 輸出線插孔

如果要從本光碟機輸出音訊訊號，請將這個插孔連到電腦的訊號輸入線（使用所附
的音訊接線）。

有些作業系統不需要音訊線。可依下列步驟來設定音訊：

1. 連按兩下**我的電腦**。
2. 選取 **USB 2.0 攜帶型 CD-RW 光碟機**。（例如，選取 *e*，e 表示 CD-RW 光
   碟機的磁碟機代號。
3. 按一下**內容 -> 硬體 -> IBM CD-RW USB 2.0 USB 裝置**。
4. 按一下**內容**，接著選取**內容**索引標籤。
5. 選取**啟用這個 CD-ROM 光碟機的數位 CD 音訊**。
6. 按一下**確定**。

9 緊急退出桿

要在電源關閉的情況下退出媒體，請將細金屬棒如別針插入緊急彈出桿，然後依箭
頭方向推入。

連接 CD-RW 光碟機到電腦

本節提供如何連接 IBM 2.0 攜帶型 CD-RW 光碟機到電腦的資訊。

請遵循這些指示來連接 CD-RW 光碟機：

1. 找出本選用設備附隨的 USB 接線。USB 接線有一端的連接器較小，另一端的
   兩邊有兩個小按鈕。

2. 按住較小連接器上的兩個按鈕，將 USB 接頭的這一端連到 CD-RW 光碟機背部
   的 USB 連接頭。
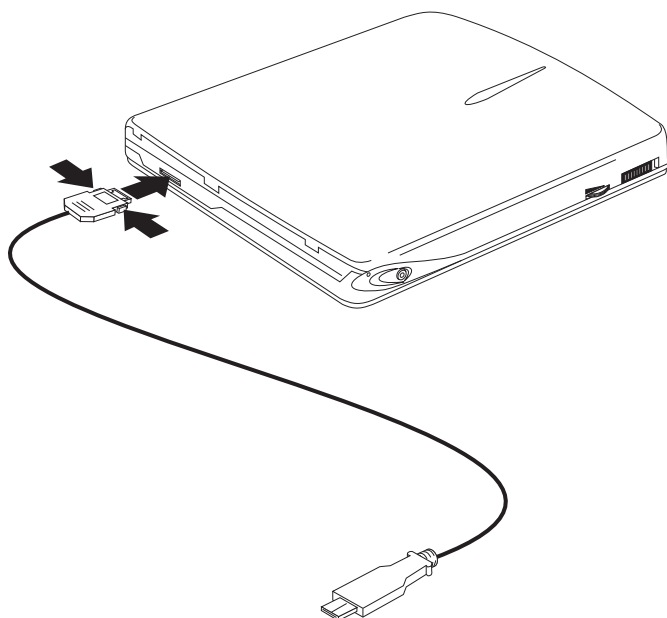
   插入至 CD-RW 光碟機的 USB 接頭時，請確定較小連接頭上的金屬板朝上。
3. 將 USB 接線較大的連接器插入電腦的 USB 連接埠。
4. 將電源整流器連到光碟機以及電源插座。
5. Barrel Adapter - 選用性電源共用裝置 - 您要在 IBM 2.0 攜帶型 CD-RW 光碟
   機使用 ThinkPad 56W、72W AC 或 72 DC 電源整流器時使用。

安裝裝置驅動程式

本節提供在電腦安裝裝置驅動程式的資訊。

要安裝裝置驅動程式，請遵循您作業系統適用的說明。

在 Windows 98 安裝裝置驅動程式
1. 將 CD-RW 光碟機連到電腦後，打開電腦電源（如果未打開的話）。會顯示蹦現
   視窗。
2. 在 IBM USB 攜帶型 CD-RW 光碟機視窗的「新硬體」精靈，按一下**下一步**。
3. 選取**搜尋裝置的最適用的驅動程式**核取方塊。
4. 將「*IBM USB 攜帶型 CD-RW 光碟機選用設備磁片*」插入軟碟機。
5. 選取**磁碟機**勾選框。
6. 按兩次**下一步**。

7. 按一下**完成**來完成裝置驅動程式安裝。

您現在可以在 Windows 98 使用 CD-RW 光碟機了。

在 **Windows Me**、**Windows 2000** 及 **Windows XP** 安裝裝置驅動程式

USB 裝置驅動程式附在 Windows Me、Windows 2000 和 Windows XP 作業系統中。連接本光碟機時，Windows 會自動安裝適當的裝置驅動程式，而且光碟機立即可以使用。您不需要執行任何特殊的安裝或解除安裝程序。

切斷與重新連接 CD-RW 光碟機

本節提供如何切斷以及重新連接 IBM 2.0 攜帶型 CD-RW 光碟機的相關資訊。

USB 接線與電腦之間的連接支援熱插入。這表示從電腦切斷或重新連接 CD-RW 光碟機 USB 接線到電腦時，不必重新啟動電腦。

遵循這些指示來切斷光碟機：
1. 關閉使用光碟機的程式。
2. 確定光碟機的 WRITE（寫入）與 BUSY（忙碌）指示燈都關閉。
3. 按一下**移除**（**取下或退出硬體**）圖示。（依預設，這個圖示位於工作列中的時鐘顯示器旁）。
4. 選取 **USB 2.0 CD-RW 光碟機**以移除。
5. 顯示「移除硬體確認」訊息。按一下**確定**。
6. 從電腦的 USB 連接埠取下 USB 接線的插頭。
7. 要重新連接，將 USB 接線插入電腦的 USB 連接埠即可。

請注意

請不要切斷 USB 接線後立即重新連接，否則 CD-ROM 光碟機可能無法正常載入。切斷 USB 接線後，請等候 10 至 20 秒或停止顯示砂漏圖示後再重新連接 USB 接線。

インストールとユーザーズ・ガイド

本書には、IBM® USB 2.0 ポータブル CD-RW ドライブのインストールおよび使用についての説明を記載しています。

製品説明

本書には、IBM USB 2.0 ポータブル CD-RW ドライブのインストールおよび使用法の情報を記載しています。

IBM USB 2.0 ポータブル CD-RW ドライブは、たった 1 回の接続で、 IBM ThinkPad® に素早く、そして簡単に接続できるスリムライン CD-R/RW ドライブです。このドライブは、USB 1.1 ポートに接続されたときは USB 1.1 装置として機能し、USB 2.0 ポートに接続されたときは USB 2.0 装置として機能します。USB 1.1 ポートに接続すると、最大 4 倍速 〜 6 倍速で書き込むことができます。USB 2.0 ポートに接続すると、最大 8 倍速で書き込むことができます。

オプション・パッケージには、本書の他に次の品目が含まれています。
- IBM USB 2.0 ポータブル CD-RW ドライブ
- USB ケーブル
- オーディオ・ケーブル
- 携帯用ケース
- 電源アダプター
- IBM USB CD-RW ドライブ・オプション・ディスケット (Windows 98 専用)
- CD-RW Application Software CD-ROM
- Saftey Information Manual

ハードウェア要件およびソフトウェア要件

本製品を使用するには、お使いの ThinkPad に次のハードウェアを取り付けておく必要があります。
- ディスケット・ドライブ (Microsoft® Windows 98® システムのみでのドライバーのインストール用)
- 使用可能な USB 1.1 または 2.0 ポート

本製品を使用するには、次のオペレーティング・システムのうちどれかをインストールしておく必要があります。
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional

- Microsoft Windows XP

ソフトウェアの説明

ここでは、IBM USB 2.0 ポータブル CD-RW ドライブの読み取り / 書き込み
機能について説明します。

IBM USB 2.0 ポータブル CD-RW ドライブは、 CD-ReWritable (CD-RW) およ
び CD-Recordable (CD-R) ディスクへの読み書き、および CD-ROM ディスクの
読み取りができます。ドライブの CD 記録機能を使用するには、組み込まれた
IBM CD-RW アプリケーション・ソフトウェアをインストールする必要があり
ます。このソフトウェアによってオーディオ CD およびデータ CD を作成した
り、 CD をコピーしたりできます。ソフトウェアの使用について詳しくは、
CD-RW Application Software CD に収められたユーザーズ・ガイドを参照して
ください。

CD-R および CD-RW メディアの使用

ここでは、IBM USB 2.0 ポータブル CD-RW ドライブとともに使用されるメデ
ィアのタイプおよび書き込み速度を説明します。

このドライブは、CD-R ディスクと CD-RW ディスクの両方に書き込むことが
できます。CD-R ディスクは消去または上書きすることはできませんが、標準の
CD-ROM ドライブおよびオーディオ CD プレイヤーで使用することができま
す。CD-RW ディスクは、消去および再書き込みができますが、新型の
Multi-Read および CD-RW 互換の CD-ROM および DVD-ROM ドライブでだ
け使用できます。

メディアの書き込み速度は、CD-R/RW メディアのパッケージに記載されていま
す。書き込むときは、使用されるメディアの指定された書き込み速度の範囲内で
書き込んでください。指定より速い速度のメディアを使用できるとはいえ、最大
速度は、USB 2.0 ポートに接続されたときは 8X で、 USB 1.1 ポートに接続
されたときは 4X ～ 6X です。

ドライブの読み取りおよび書き込みの結果は、使用された CD-R および
CD-RW メディアの品質および特性によって異なります。一部の CD-R および
CD-RW の供給業者では十分な結果が得られない場合があります。

省電力機能 (スタンバイ / 休止状態 / サスペンド / レジューム)

ここでは、IBM USB 2.0 ポータブル CD-RW ドライブの省電力機能について説
明します。
- 最適な結果を得るためには、ドライブが書き込み操作中はサスペンド / スタ
  ンバイ機能を使用しないでください。データ・エラーが発生する場合があり
  ます。

- ThinkPad がスタンバイ (サスペンド) モードにある間は、ドライブを接続したり、切り離したりしないでください。ThinkPad の動作が不安定になる場合があります。

ドライブの保守

ここには、 IBM USB ポータブル 2.0 CD-RW ドライブ用の保守情報が記載されています。

- ドライブの使用中は AC アダプターを取り外さないでください
- スクリーン・セーバーの電源をオフにします - スクリーン・セーバーを使用すると、CD のフォーマットや書き込み処理が中断されることがあります。
- ドライブを振動または傾斜がない安定した場所に置きます - ディスクのフォーマット中または書き込み中にドライブを移動すると、データ・エラーが生じる場合があります。
- CD は縁または中央の穴を持って扱います - CD の表面には触れないでください
- ほこりまたは指紋を取り除くには、けば立ちのない柔らかい布で CD を中央から縁に向かってふいてください - 円を描くようにはふかないでください。これによってデータが失われる場合があります
- 市販のクリーナーを使って、CD をふかないでください
- CD-RW ドライブの内部レンズに触れないでください
- ドライブを持ち運ぶ前にドライブから CD を取り出してください
- 次の条件のもとではドライブを操作しないでください。
  高温度、高湿度、直射日光、傾いた表面、過度の振動 / 衝撃、過度のほこり、湿気のある環境、またはこぼれてドライブを損傷する原因となる液体の近く
- ドライブの上に物を置かないでください

詳細および機能

ここでは、 IBM USB ポータブル 2.0 CD-RW ドライブの詳細と機能を説明します。
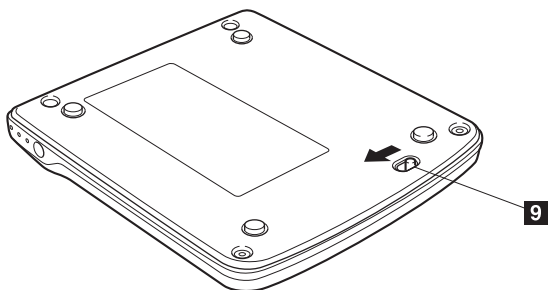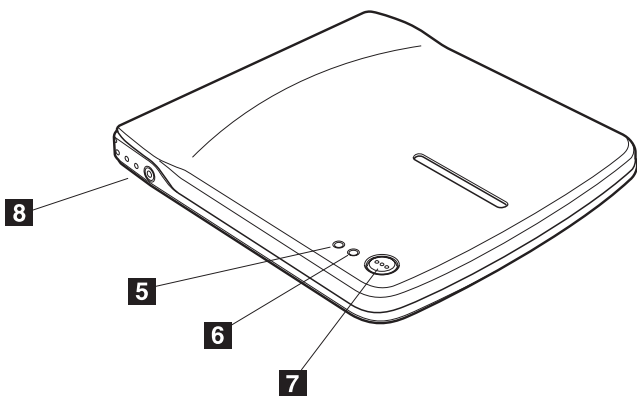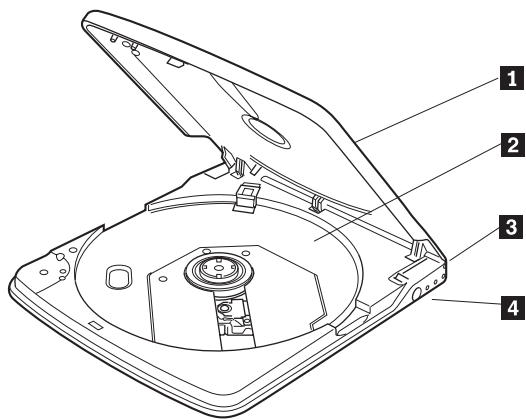
1 上部カバー

2 ディスク・トレイ

メディアをこのディスク・トレイ上にラベル面を上に向けてはめます。

3 USB コネクター

付属の専用 USB ケーブルのプラグを挿入します。

4 DC-IN コネクター

付属の専用 AC アダプターを接続します。

このコネクターには必ず、提供された AC アダプターを接続します。他の AC アダプターは決して接続しないでください。

このドライブは、USB ケーブルのバス・パワーのみでは作動できません。必ず、付属の AC アダプターを接続することによって電源を供給してください。

5 電源 / 使用中インディケーター

緑色の LED は、ドライブの電源状況および動作状態を示します。

ドライブが AC 電源および PC の USB ポートに接続されているとき	インディケーターのライトがオンになる
データ書き込み中	インディケーターのライトがオンになる
データ読み取り中	インディケーターが点滅する
ドライブが USB ポートに接続されていないとき	インディケーターのライトがオフになる

6 書き込みインディケーター

オレンジ色の発光ダイオード (LED) は、ドライブの書き込み状態を示します。

データ書き込み中	インディケーターが点滅する
上記以外のモードグ	インディケーターのライトがオフになる

7 イジェクト・ボタン

上部カバーを開くには、イジェクト・ボタンを押します。

このドライブでは電気ロック機構が使用されているので、書き込み中に間違った操作で上部カバーが開くことはありません。上部カバーを開くためにイジェクト・ボタンを押す前に、電源がオンになっており、ドライブが作動中でないことを確認します。

イジェクト・ボタンが押されているのに上部カバーが開かない場合、または電源が AC アダプターから供給されていないときに上部カバーを開く必要がある場合は、ドライブの下部にある緊急イジェクト・レバーを使用してください。

8 ライン出力ジャック

このドライブからオーディオ信号を出力しているときは (付属のオーディオ・ケーブルを使用して)、このジャックを ThinkPad のライン入力信号に接続します。

一部のオペレーティング・システムでは、オーディオ・ケーブルが必要ありません。オーディオは、以下のステップにより得られます。
1. 「マイ コンピュータ」をダブルクリックします。
2. 「**USB 2.0 Portable CD-RW drive**」をクリックして選択し、右クリックします。 (たとえば、*e* を選択します。ここで、e は、 CD-RW ドライブのドライブ名を表しています。)
3. 「プロパティ」→「ハードウェア」→「**IBM CD-RW USB 2.0 USB Device**」の順にクリックします。
4. 「プロパティ」をクリックしてから、「プロパティ」タブを選択します。
5. 「この **CD-ROM** デバイスでデジタル音楽 **CD** を使用可能にする」を選択します。
6. 「**OK**」をクリックします。

9 緊急イジェクト・レバー

電源オフ状態でメディアを排出するには、紙クリップなどの細い金属の棒を緊急イジェクト・レバーに挿入して、示されている矢印の方向にずらします。

CD-RW ドライブを ThinkPad に接続する

ここでは、IBM USB 2.0 ポータブル CD-RW ドライブを ThinkPad に接続するための情報を記載します。

CD-RW ドライブの接続は、次の手順で行います。
1. このオプションに付属している USB ケーブルを使用します。 USB ケーブルの片方のコネクターはもう一方のコネクターより小さく、両側に小さいボタンが 2 つ付いています。

2. 小さい方のコネクターの 2 つのボタンをつまんで、 USB ケーブルを
   CD-RW ドライブの背面の USB コネクターに接続します。
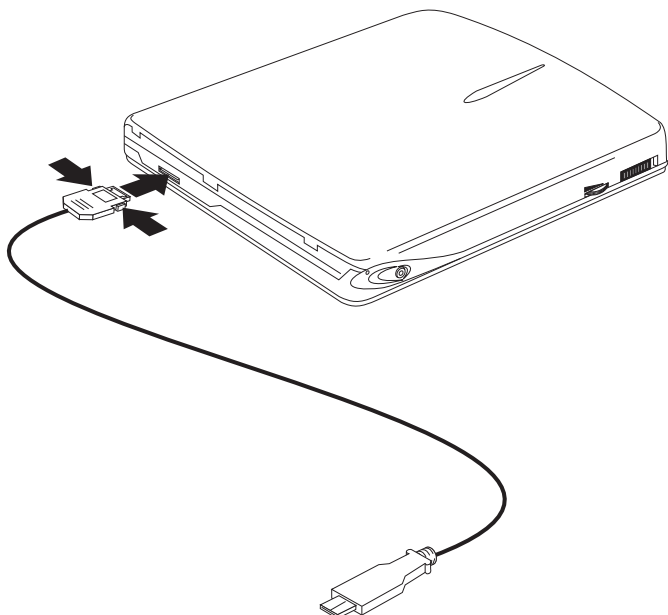
   CD-RW ドライブの USB コネクターに小さい方のコネクターを差し込むと
   きは、必ずそのコネクターの金属部分を上に向けて差し込んでください。
3. USB ケーブルの大きい方のコネクターを ThinkPad の USB ポートに差し込
   みます。
4. 電源アダプターをドライブおよび壁コンセントに接続します。
5. オプションの電源共用装置を使用することによって、ThinkPad 56W、72W
   AC、または 72 DC 電源アダプターを使用して IBM USB 2.0 ポータブル
   CD-RW ドライブに電源を供給することができます。

デバイス・ドライバーのインストール

ここでは、ThinkPad にデバイス・ドライバーのインストールについての情報を
記載します。

デバイス・ドライバーをインストールするには、お使いのオペレーティング・シ
ステムに対応する手順に従ってください。

Windows 98 用のデバイス・ドライバーのインストール

1. ThinkPad に CD-RW ドライブを接続した後、ThinkPad の電源がまだオンに
   なっていなければ、ここでオンにします。ポップアップ・ウィンドウが開き
   ます。

2. IBM USB ポータブル CD-RW ドライブの「新しいハードウェアの追加ウィザード」ウィンドウで、「**次へ**」をクリックします。

3. 「**使用中のデバイスに最適なドライバを検索する**」チェック・ボックスを選択します。

4. ディスケット・ドライブに *IBM USB ポータブル CD-RW ドライブ・オプション・ディスケット* を挿入します。

5. 「**フロッピー ディスク ドライブ**」チェック・ボックスを選択します。

6. 「**次へ**」を 2 回クリックします。

7. 「**完了**」をクリックします。

これで、Windows 98 で CD-RW ドライブが使えるようになります。

Windows Me、Windows 2000、および Windows XP 用のデバイス・ドライバーのインストール

USB デバイス・ドライバーは、Windows Me、Windows 2000、および Windows XP オペレーティング・システムに組み込まれています。このドライブが接続されると、Windows は適切なデバイス・ドライバーを自動的にインストールし、ドライブを使用できるようにします。特別なインストールまたはアンインストールを実行する必要はありません。

CD-RW ドライブの切り離しと再接続

ここでは、 IBM USB 2.0 ポータブル CD-RW ドライブの切り離しと再接続についての情報を記載します。

USB ケーブルと ThinkPad との間の接続には、ホット・プラグがサポートされています。これは、CD-RW ドライブの USB ケーブルは、ThinkPad を再起動する必要なしに、 ThinkPad から切り離したり再接続できる、ということです。

ドライブの切り離しは、次の手順で行います。

1. ドライブを使用しているプログラムを閉じます。

2. ドライブの書き込みおよび使用中インディケーターがオフになっていることを確認します。

3. 「**取り外し (ハードウェアの取り外しまたは取り出し)**」アイコンをクリックします。(デフォルトでは、このアイコンはタスクバーで時刻表示の隣にあります)。

4. 取り外す **USB 2.0 CD-RW ドライブ**を選択します。

5. 「ハードウェアの取り外し」確認メッセージが表示されます。「**OK**」をクリックします。

6. ThinkPad の USB ポートから USB ケーブルのプラグを取り外します。

7. 再接続するには、ThinkPad の USB ポートに USB ケーブルのプラグを差し込みます。

重要

USB ケーブルの切り離しと再接続は、短時間で続けて行なわないでください。
CD-ROM が正しく認識されなくなる可能性があります。 USB ケーブルを切り
離した後、少なくとも 10 〜 20 秒待つか、砂時計アイコンが表示されなくなる
まで待ってから、USB ケーブルを再接続します。

설치 및 사용자 안내서

이 매뉴얼에는 IBM USB 2.0 휴대용 CD-RW 드라이브 설치 및 사용에 관한 지시사항이
수록되어 있습니다.

제품 설명

이 안내서에는 IBM USB 2.0 휴대용 CD-RW 드라이브에 대한 설치 및 사용 정보가 수
록되어 있습니다.

IBM USB 2.0 휴대용 CD-RW 드라이브는 하나의 간단한 연결을 통해 IBM ThinkPad
컴퓨터를 빠르고 편리하게 접속시키는 얇은 CD-R/RW 드라이브입니다. USB 1.1 포트에
연결될 때에는 드라이브가 USB 1.1 장치로서 기능하며, USB 2.0 포트에 연결될 때에는
드라이브가 USB 2.0 장치로서 기능합니다. 4배속 내지 6배속의 최대 쓰기 속도가 USB 1.1
포트에서 확보됩니다. 8배속의 최대 쓰기 속도는 USB 2.0 포트에서 확보됩니다.

이 책 외에, 다음과 같은 항목이 옵션 패키지에 포함됩니다.
- IBM USB 2.0 휴대용 CD-RW 드라이브
- USB 케이블
- 오디오 케이블
- 운반 케이스
- 전원 어댑터
- IBM USB CD-RW 드라이브 옵션 디스켓(Windows 98 전용)
- CD-RW 응용프로그램 소프트웨어
- 안전 정보 매뉴얼

하드웨어 및 소프트웨어 요구사항

이 옵션을 사용하기 위해서는 ThinkPad 컴퓨터에 다음과 같은 하드웨어를 설치해야 합니
다.
- 플로피 디스크 드라이브(Microsoft Windows 98 시스템 설치 전용)
- 사용 가능한 USB 1.1 또는 2.0 포트

이 옵션을 사용하기 위해서는 컴퓨터에 다음 운영 체제 중 하나가 설치되어 있어야 합니다.
- Microsoft Windows 98
- Microsoft Windows Millennium Edition (Me)
- Microsoft Windows 2000 Professional
- Microsoft Windows XP

소프트웨어 설명

이 절에서는 IBM USB 2.0 휴대용 CD-RW 드라이브의 읽기/쓰기 기능에 대해 설명합니다.

IBM USB 2.0 휴대용 CD-RW 드라이브는 CD-RW(CD-ReWritable) 및 CD-R(CD-Recordable) 디스크에서 읽고 쓸 수 있으며, CD-ROM 디스크를 읽을 수 있습니다. 드라이브의 CD 기록 기능을 사용하려면 포함된 IBM CD-RW 응용프로그램 소프트웨어를 설치해야 합니다. 이 소프트웨어를 사용하여 오디오 및 데이터 CD를 작성하고 CD를 복사할 수 있습니다. 소프트웨어 사용에 관한 자세한 정보는 CD-RW 응용프로그램 소프트웨어 CD에 들어 있는 사용자 안내서를 참조하십시오.

CD-R 및 CD-RW 매체 사용

이 절에서는 IBM USB 2.0 휴대용 CD-RW 드라이브에 사용된 매체 유형 및 쓰기 속도에 대해 설명합니다.

드라이브는 CD-R 및 CD-RW 디스크 둘 다에 쓸 수 있습니다. CD-R 디스크는 지우거나 겹쳐쓸 수 없으나 표준 CD-ROM 드라이브 및 오디오 CD 재생기에 사용될 수 있습니다. CD-RW 디스크는 지우거나 다시 쓸 수 있으나 새로운 Multi-Read 및 CD-RW 호환 가능 CD-ROM 및 DVD-ROM 드라이브에만 사용될 수 있습니다.

매체의 쓰기 속도는 CD-R/RW 매체의 패키지에 표시되어 있습니다. 쓰기시, 사용되는 매체의 지정된 쓰기 속도 범위 내에서 쓰기 기능을 사용하십시오. 보다 높은 속도의 매체를 사용할 수도 있으나, USB 2.0 포트를 통해 연결될 때의 최대 쓰기 속도는 8배속이며 USB 1.1 포트를 통해 연결될 때의 최대 쓰기 속도는 4배속 내지 6배속입니다.

드라이브의 읽기 및 쓰기 결과는 사용되는 CD-R 및 CD-RW 매체의 품질 및 특성에 따라 다릅니다. 일부 CD-R 및 CD-RW 공급업체의 제품의 결과는 좋지 않을 수도 있습니다.

전원 관리 기능(대기/절전/일시 중지/다시 시작)

이 절에서는 IBM USB 2.0 휴대용 CD-RW 드라이브의 전원 관리 관리에 대해 설명합니다.

- 최적의 결과를 얻으려면 드라이브가 쓰기 조작 중인 동안에는 일시 중지/대기 기능을 사용하지 마십시오. 데이터 오류가 발생할 수도 있습니다.
- 컴퓨터가 대기(일시 중지) 모드에 있는 동안에는 드라이브를 연결하거나 연결을 끊지 마십시오. 컴퓨터가 불안정해질 수도 있습니다.

드라이브 유지보수

이 절에는 IBM USB 휴대용 2.0 CD-RW 드라이브에 대한 유지보수 정보가 수록되어 있습니다.

- 드라이브를 사용 중인 동안에는 AC 어댑터를 제거하지 마십시오.

- 화면 보호기를 끄십시오. 화면 보호기를 사용하면 CD의 형식화 및 쓰기 프로세스를 인터럽트할 수도 있습니다.
- 드라이브를 진동이나 경사가 없는 안전한 곳에 배치하십시오. 디스크를 포맷하거나 디스크에 쓰기 작동 중에 드라이브를 움직이면 데이터 오류가 발생할 수도 있습니다.
- CD를 다룰 때에는 가운데 구멍이나 가장자리를 잡으십시오. CD의 표면은 만지지 마십시오.
- 먼지나 손자국을 제거하려면 보풀없는 부드러운 천을 사용하여 가운데에서 가장자리를 향해 CD를 문지르십시오. 데이터가 손실될 수도 있으므로 원형을 그리면서 문지르지 마십시오.
- 상용 세제를 사용하여 CD를 닦지 마십시오.
- CD-RW 드라이브의 내부 렌즈를 만지지 마십시오.
- 드라이브를 이동시키기 전에 드라이브에서 CD를 제거하십시오.
- 고온, 다습, 직사광선, 경사진 표면, 과도한 진동/충격, 많은 먼지, 습한 환경 또는 엎지러져 드라이브를 손상시킬 수도 있는 액체 근처에서는 드라이브를 작동시키지 마십시오.
- 드라이브 위에 물체를 쌓지 마십시오.

세부사항 및 기능

이 절에서는 IBM USB 휴대용 2.0 CD-RW 드라이브의 세부사항 및 기능에 대해 설명합니다.
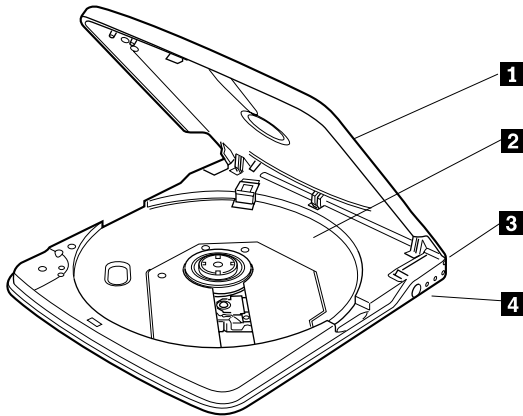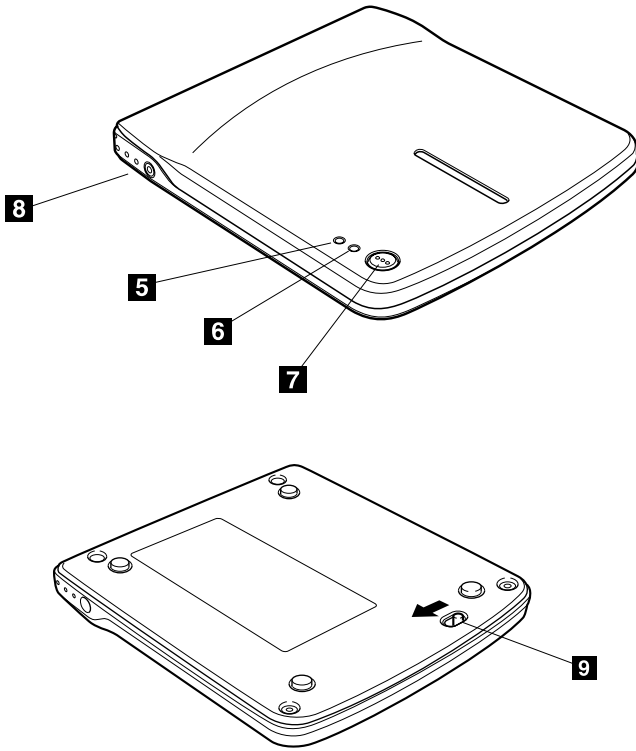
1 윗 덮개

2 디스크 트레이

레이블이 있는 면을 위로 향하게 하고 매체를 이 디스크 트레이에 놓으십시오.

3 USB 커넥터

제공된 전용 USB 케이블의 플러그를 꽂으십시오.

4 DC-IN 커넥터

제공된 전용 AC 어댑터를 연결하십시오.

반드시 제공된 전용 AC 어댑터를 이 커넥터에 연결하십시오. 다른 AC 어댑터를 연결해서는 안됩니다.

이 드라이브는 USB 케이블의 버스 전원만으로는 작동할 수 없습니다. 반드시 제공된 AC 어댑터를 연결하여 전원을 제공하십시오.

5 전원/사용 중 표시기

주황색 LED(light emitting-drive)는 드라이브의 쓰기 상태를 나타냅니다.

데이터 쓰기 작동 중	표시기가 깜박임
데이터 쓰기 작동 중 이외의 모드	표시기 불빛이 꺼짐

6 쓰기 표시기

녹색 LED는 드라이브의 전원 상태 및 작동 상태를 나타냅니다.

드라이브가 AC 전원 및 PC의 USB 포트에 연결되어 있을 때	표시기 불빛이 켜짐
데이터 쓰기 작동 중	표시기 불빛이 켜짐
데이터 읽기 작동 중	표시기가 깜박임
드라이브가 USB 포트에 연결되어 있지 않을 때	표시기 불빛이 꺼짐

7 방출 단추

방출 단추를 눌러 윗 덮개를 여십시오.

이 드라이브에는 잘못한 조작으로 인해 쓰기 작동 중에 윗 덮개가 열리지 않도록 전기적 잠금 메커니즘이 사용됩니다. 윗 덮개를 열기 위해 방출 단추를 누르기 전에 전원이 켜져 있는지와 드라이브가 조작 중은 아닌지 확인하십시오.

방출 단추를 눌렀는 데도 윗 덮개를 열 수 없거나 AC 어댑터에서 전원이 공급되지 않지만 윗 덮개를 열어야 하는 경우에는 드라이브 아래에 있는 비상 방출 레버를 사용하십시오.

8 라인 출력 잭

이 드라이브에서 오디오 신호를 내보낼 때 컴퓨터의 라인 입력 신호에 이 잭을 연결하십시오(포함된 오디오 케이블 사용).

일부 운영 체제에는 오디오 케이블이 필요없습니다. 다음과 같은 단계로 오디오를 얻을 수 있습니다.

1. 내 컴퓨터를 두 번 누르십시오.
2. **USB 2.0 휴대용 CD-RW 드라이브**를 선택하십시오. (예를 들어, *E*를 선택하십시오. 여기서 E는 CD-RW 드라이브의 드라이브 이름을 나타냅니다.)
3. **등록 정보 -> 하드웨어 -> IBM CD-RW USB 2.0 USB Device**를 누르십시오.

4. 등록 정보를 누른 후 등록 정보 탭을 선택하십시오.

5. 이 **CD-ROM** 장치에 디지털 **CD** 오디오 사용을 선택하십시오.

6. 확인을 누르십시오.

9 비상 방출 레버

전원이 꺼져 있을 때 매체를 꺼내려면 종이 두께의 얇은 금속 막대를 비상 방출 레버에 끼우고 표시된 화살표 방향으로 밀어 넣으십시오.

CD-RW 드라이브를 컴퓨터에 연결

이 절에서는 IBM USB 2.0 휴대용 CD-RW 드라이브를 컴퓨터에 연결하는데 대한 정보를 제공합니다.

다음 지시사항에 따라 CD-RW 드라이브를 연결하십시오.

1. 이 옵션에 들어 있는 USB 케이블을 찾으십시오. USB 케이블에는 두 개의 커넥터가 있는데 하나가 더 작으며 두 개 모두에 두 개의 작은 단추가 있습니다.

2. 작은 커넥터에 있는 두 개의 단추를 죄어 USB 케이블과 CD-RW 드라이브의 뒤에 있는 USB 커넥터를 연결하십시오.
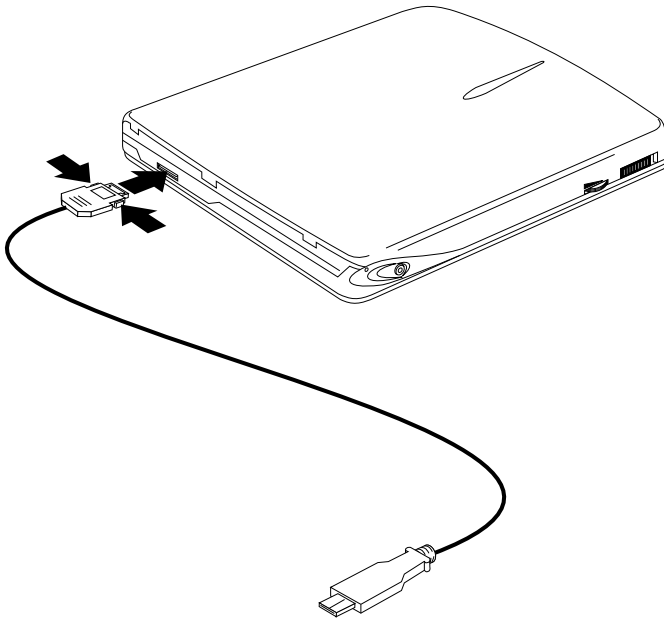
CD-RW의 USB 커넥터에 꽂을 때 작은 커넥터의 금속판이 위를 향하는지 확인하십시오.

3. USB 케이블의 큰 쪽을 컴퓨터의 USB 포트에 꽂으십시오.

4. 전원 어댑터를 드라이브와 벽 콘센트에 연결하십시오.

5. 배럴 어댑터 - 선택적 전원 공유 장치 - ThinkPad 56W, 72W AC 또는 72 DC 전원 어댑터를 사용하여 IBM USB 2.0 휴대용 CD-RW 드라이브에 전원을 공급하고 싶을 때에 사용합니다.

장치 드라이버 설치

이 절에서는 컴퓨터에 장치 드라이버를 설치하는데 대한 정보를 제공합니다.

장치 드라이버를 설치하려면 해당 운영 체제에 맞는 지시사항에 따르십시오.

Windows 98용 장치 드라이버 설치

1. 컴퓨터에 CD-RW 드라이브를 연결한 후 컴퓨터가 아직 켜져 있지 않으면 컴퓨터를 켜십시오. 팝업 창이 열립니다.
2. IBM USB 휴대용 CD-RW 드라이브에 대한 새 하드웨어 추가 마법사 창에서 **다음**을 누르십시오.
3. **사용자 장치에 대한 드라이버를 검색합니다(권장)** 선택란을 선택하십시오.
4. *IBM USB 휴대용 CD-RW 드라이브* 옵션 디스켓을 플로피 디스크 드라이브에 삽입하십시오.
5. **플로피 디스크 드라이브** 선택란을 선택하십시오.
6. **다음**을 두 번 누르십시오.
7. **완료**를 눌러 장치 드라이버 설치를 완료하십시오.

이제 Windows 98에서 CD-RW 드라이브를 사용할 수 있습니다.

Windows Me, Windows 2000 및 Windows XP용 장치 드라이버 설치

Windows Me, Windows 2000 및 Windows XP 운영 체제에는 USB 장치 드라이버가 포함되어 있습니다. 이 드라이브가 연결될 때, Windows가 자동으로 적절한 장치 드라이버를 설치하고 드라이버를 사용할 준비가 될 것입니다. 특별한 설치 또는 설치 제거를 수행할 필요가 없습니다.

CD-RW 드라이브 연결 끊기 및 다시 연결

이 절에서는 IBM USB 2.0 휴대용 CD-RW 드라이브의 연결 끊기 및 다시 연결에 대한 정보를 제공합니다.

USB 케이블과 컴퓨터 사이의 연결에 핫 플러깅이 지원됩니다. 이는 컴퓨터를 다시 시작할 필요없이 컴퓨터와 CD-RW 드라이브 USB 케이블의 연결을 끊고 다시 연결할 수 있음을 의미합니다.

다음 지시사항에 따라 드라이브의 연결을 끊으십시오.

1. 드라이브를 사용하고 있는 프로그램을 닫으십시오.
2. 드라이브의 쓰기 및 사용 중 표시기가 꺼져 있는지 확인하십시오.

3. **제거(하드웨어 언플러그 또는 방출)** 아이콘을 누르십시오(기본값으로 이 아이콘은 작업 표시줄의 시계 표시장치 옆에 있습니다).

4. 제거할 **USB 2.0 CD-RW** 드라이브를 선택하십시오.

5. 하드웨어 제거 확인 메시지가 표시됩니다. **확인**을 누르십시오.

6. 컴퓨터의 USB 포트에서 USB 케이블의 플러그를 빼내십시오.

7. 다시 연결하려면 컴퓨터의 USB 포트에 USB 케이블을 꽂으십시오.

주의

USB 케이블의 연결을 끊은 뒤 이를 너무 빨리 다시 연결하지 마십시오. CD-ROM 드라이브가 제대로 로드되지 않을 수도 있습니다. USB 케이블의 연결을 끊은 후 최소 10초 내지 20초, 혹은 모래 시계 아이콘이 사라질 때까지 기다렸다 USB 케이블을 다시 연결하십시오.

Appendix A. Warranty information

This section contains the warranty period for your product, information about obtaining warranty service and support, and the IBM Statement of Limited Warranty.

Warranty period

Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country or region where service is performed.

Machine - IBM USB 2.0 Portable CD-RW Drive
Warranty period - One year

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your IBM Statement of Limited Warranty for a full explanation of IBM warranty terms.

Service and support

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your IBM Statement of Limited Warranty for a full explanation of IBM warranty terms.

Warranty information on the World Wide Web

The IBM Machine Warranties Web site at http://www.ibm.com/servers/support/machine_warranties/ contains a worldwide overview of the IBM Limited Warranty for IBM Machines, a glossary of terms used in the Statement of Limited Warranty, Frequently Asked Questions (FAQ), and links to Product Support Web pages. The IBM Statement of Limited Warranty is available from this Web site in 29 languages in Portable Document Format (PDF).

Online technical support

Online technical support is available during the life of your product. Online assistance can be obtained through the Personal Computing Support Web site and the IBM Automated Fax System.

Online technical support

IBM Personal Computing Support Web site	http://www.ibm.com/pc/support/
IBM Automated Fax System	1-800-426-3395 (U.S. and Canada)

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

Telephone technical support

Installation and configuration support through the IBM HelpCenter® will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

To assist the technical support representative, have available as much of the following information as possible:

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number (if IBM), and manual
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

For the support telephone number and support hours by country, refer to the following table. If the number for your country or region is not listed, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

Support 24 hours a day, 7 days a week	
Canada (Toronto only)	416-383-3344
Canada (all other)	1-800-565-3344
U.S.A. and Puerto Rico	1-800-772-2227
All other countries and regions	Go to http://www.ibm.com/pc/support/, and click **Support Phone List**.

IBM Statement of Limited Warranty Z125-4753-06 8/2000

This warranty statement consists of two parts: Part 1 and Part 2. Be sure to read Part 1 and the country-unique terms in Part 2 that apply to your country or region.

Part 1 - General Terms

This Statement of Limited Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 replace or modify those of Part 1. The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Limited Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications ("Specifications"). The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded.

Extent of Warranty

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLacE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU

SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty

IBM does not warrant uninterrupted or error-free operation of a Machine.

Any technical or other support provided for a Machine under warranty, such as assistance via telephone with "how-to" questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

Warranty Service

To obtain warranty service for a Machine, contact IBM or your reseller. If you do not register your Machine with IBM, you may be required to present proof of purchase.

During the warranty period, IBM or your reseller, if approved by IBM to provide warranty service, provides without charge certain types of repair and exchange service to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. At its discretion, IBM or your reseller will 1) either repair or exchange the failing Machine and 2) provide the service either at your location or a service center. IBM or your reseller will also manage and install selected engineering changes that apply to the Machine.

Some parts of IBM Machines are designated as Customer Replaceable Units (called "CRUs"), e.g., keyboards, memory, or hard disk drives. IBM ships CRUs to you for replacement by you. You must return all defective CRUs to IBM within 30 days of your receipt of the replacement CRU. You are responsible for downloading designated Machine Code and Licensed Internal Code updates from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement

assumes the warranty service status of the replaced item. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to
1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided:
   a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides;
   b. secure all programs, data, and funds contained in a Machine;
   c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations; and
   d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except for any liability that cannot be waived or limited by applicable laws, IBM is liable for no more than
1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES, LOST PROFITS OR LOST SAVINGS, EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Governing Law

Both you and IBM consent to the application of the laws of the country in which you acquired the Machine to govern, interpret, and enforce all of your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

Part 2 - Country-unique Terms

AMERICAS

BRAZIL

Governing Law: *The following is added after the first sentence:*
Any litigation arising from this Agreement will be settled exclusively by the court of Rio de Janeiro.

NORTH AMERICA

Warranty Service: *The following is added to this Section:*
To obtain warranty service from IBM in Canada or the United States, call 1-800-IBM-SERV (426-7378).

CANADA

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*
laws in the Province of Ontario.

UNITED STATES

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*
laws of the State of New York.

ASIA PacIFIC

AUSTRALIA

The IBM Warranty for Machines: *The following paragraph is added to this Section:*
The warranties specified in this Section are in addition to any rights you may have under the Trade Practices act 1974 or other similar legislation and are only limited to the extent permitted by the applicable legislation.

Limitation of Liability: *The following is added to this Section:*
Where IBM is in breach of a condition or warranty implied by the Trade Practices act 1974 or other similar legislation, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*
laws of the State or Territory.

CAMBODIA, LAOS, AND VIETNAM

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*
laws of the State of New York.

The following is added to this Section:
Disputes and differences arising out of or in connection with this Agreement shall be finally settled by arbitration which shall be held in Singapore in accordance with the rules of the International Chamber of Commerce (ICC). The arbitrator or arbitrators designated in conformity with those rules shall have the power to rule on their own competence and on the validity of the Agreement to submit to arbitration. The arbitration award shall be final and binding for the parties without appeal and the arbitral award shall be in writing and set forth the findings of fact and the conclusions of law.

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator.

The two arbitrators appointed by the parties shall appoint a third arbitrator before proceeding upon the reference. The third arbitrator shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the ICC. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed.

The English language version of this Agreement prevails over any other language version.

HONG KONG AND MacAU

Governing Law: *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*
laws of Hong Kong Special Administrative Region.

INDIA

Limitation of Liability: *The following replaces items 1 and 2 of this Section:*
1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence;
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Limited Warranty, IBM's liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

JAPAN

Governing Law: *The following sentence is added to this Section:*
Any doubts concerning this Agreement will be initially resolved between us in good faith and in accordance with the principle of mutual trust.

NEW ZEALAND

The IBM Warranty for Machines: *The following paragraph is added to this Section:*
The warranties specified in this Section are in addition to any rights you may have under the Consumer Guarantees act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees act 1993 will not

apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that act.

Limitation of Liability: *The following is added to this Section:*
Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees act 1993, the limitations in this Section are subject to the limitations in that act.

PEOPLE'S REPUBLIC OF CHINA (PRC)

Governing Law: *The following replaces this Section:*
Both you and IBM consent to the application of the laws of the State of New York (except when local law requires otherwise) to govern, interpret, and enforce all your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

Any disputes arising from or in connection with this Agreement will first be resolved by friendly negotiations, failing which either of us has the right to submit the dispute to the China International Economic and Trade Arbitration Commission in Beijing, the PRC, for arbitration in accordance with its arbitration rules in force at the time. The arbitration tribunal will consist of three arbitrators. The language to be used therein will be English and Chinese. An arbitral award will be final and binding on all the parties, and will be enforceable under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958).

The arbitration fee will be borne by the losing party unless otherwise determined by the arbitral award.

During the course of arbitration, this Agreement will continue to be performed except for the part which the parties are disputing and which is undergoing arbitration.

EUROPE, MIDDLE EAST, AFRICA (EMEA)

THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:
The terms of this Statement of Limited Warranty apply to Machines purchased from IBM or an IBM reseller.

Warranty Service:

If you purchase an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of

those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM. If you purchase an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchase an IBM Machine in a Middle Eastern or African country, you may obtain warranty service for that Machine from the IBM entity within the country of purchase, if that IBM entity provides warranty service in that country, or from an IBM reseller, approved by IBM to perform warranty service on that Machine in that country. Warranty service in Africa is available within 50 kilometers of an IBM authorized service provider. You are responsible for transportation costs for Machines located outside 50 kilometers of an IBM authorized service provider.

Governing Law:

The applicable laws that govern, interpret and enforce rights, duties, and obligations of each of us arising from, or relating in any manner to, the subject matter of this Statement, without regard to conflict of laws principles, as well as Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided, except that in 1) Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Hungary, Former Yugoslav Republic of Macedonia, Romania, Slovakia, Slovenia, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan, the laws of Austria apply; 2) Estonia, Latvia, and Lithuania, the laws of Finland apply; 3) Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Djibouti, Democratic Republic of Congo, Equatorial Guinea, France, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Mali, Mauritania, Morocco, Niger, Senegal, Togo, and Tunisia, this Agreement will be construed and the legal relations between the parties will be determined in accordance with the French laws and all disputes arising out of this Agreement or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 4) Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe, this Agreement will be governed by English Law and disputes relating to it will be submitted to the exclusive jurisdiction of the English courts; and 5) in Greece, Israel, Italy, Portugal, and Spain any legal claim arising out of this Statement will be brought before, and finally settled by, the competent court of Athens, Tel Aviv, Milan, Lisbon, and Madrid, respectively.

THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:

AUSTRIA AND GERMANY

The IBM Warranty for Machines: *The following replaces the first sentence of the first paragraph of this Section:*
The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this Section:

The minimum warranty period for Machines is six months. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

Extent of Warranty: *The second paragraph does not apply.*

Warranty Service: *The following is added to this Section:*
During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

Limitation of Liability: *The following paragraph is added to this Section:*
The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

The following sentence is added to the end of item 2:
IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

EGYPT

Limitation of Liability: *The following replaces item 2 in this Section:*
as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code.

Applicability of suppliers and resellers (unchanged).

FRANCE

Limitation of Liability: *The following replaces the second sentence of the first paragraph of this Section:*

In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: *(items 1 and 2 unchanged).*

IRELAND

Extent of Warranty: *The following is added to this Section:*
Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods act 1893 or the Sale of Goods and Supply of Services act 1980 are hereby excluded.

Limitation of Liability: *The following replaces items one and two of the first paragraph of this Section:*
1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and
2. the amount of any other actual direct damages, up to 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

Applicability of suppliers and resellers (unchanged).

The following paragraph is added at the end of this Section:
IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

ITALY

Limitation of Liability: *The following replaces the second sentence in the first paragraph:*
In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than:
1. *(unchanged)*
2. as to any other actual damage arising in all situations involving nonperformance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.
Applicability of suppliers and resellers (unchanged).

The following replaces the third paragraph of this Section:
Unless otherwise provided by mandatory law, IBM and your reseller are not liable for any of the following: *(items 1 and 2 unchanged)* 3) indirect damages, even if IBM or your reseller is informed of their possibility.

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

Limitation of Liability: *The following is added to this Section:*
IBM's entire liability to you for actual damages arising in all situations
involving nonperformance by IBM in respect of the subject matter of this
Statement of Warranty will be limited to the charge paid by you for the
individual Machine that is the subject of your claim from IBM.

UNITED KINGDOM

Limitation of Liability: *The following replaces items 1 and 2 of the first paragraph
of this Section:*
1. death or personal injury or physical damage to your real property solely
   caused by IBM's negligence;
2. the amount of any other actual direct damages or loss, up to 125 percent of
   the charges (if recurring, the 12 months' charges apply) for the Machine
   that is the subject of the claim or which otherwise gives rise to the claim;

The following item is added to this paragraph:
3. breach of IBM's obligations implied by Section 12 of the Sale of Goods act
1979 or Section 2 of the Supply of Goods and Services act 1982.

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:
IBM's entire liability and your sole remedy, whether in contract or in tort, in
respect of any default shall be limited to damages.

Appendix B. Notices

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

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    HelpCenter

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

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 IBM 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 IBM authorized dealers. IBM is not 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, NY 10504
Telephone: 1-919-543-2193

FC Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

Industry Canada Class B emission compliance statement

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

Avis de conformité à la réglementation d'Industrie Canada

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

European Union EMC Directive conformance 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. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non recommended modification of the product, including the fitting of non-IBM option cards.

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.

이 기기는 가정용으로 전자파 적합등록을 기기로서

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取扱説明書に従って正しい取り扱いをして下さい。

高調波ガイドライン適合品

Appendix C. Product Specifications

This appendix includes the following information for the IBM USB 2.0 Portable CD-RW Drive:

Functional Specification

Applicable disc format	CD-DA, CD-ROM MODE 1 CD-ROM XA MODE2(FORM1, FORM2) Photo CD multi-session CD-1, Video CD, CD Extra(CD Plus) CD-TEXT
Applicable disc Type type size	Pressed CD (CD-ROM, CD-DA) CD-R, CD-RW 12cm, 8cm
Interface	USB1.1/USB2.0 (High Speed)
Data Transfer speed	USB1.1 : 1.5MB/s (12Mbit/s) USB2.0 : 60MB/s (480Mbit/s)
Read speed CD-ROM read	3,600 KB/s (maximum at 24X)
24 x (CAV)	CD-ROM (Mode-1) CD-ROM XA Mode-2 (Form-1)
8 x (CLV)	CD-ROM XA Mode-2 (Form-2) CD-DA (during digital audio extraction) CD-RW
Write speed	
CD-R/RW write	1,200KB/s (maximum at 8x)
CD-R	USB 2.0: 8x Max, USB 1.1 : 4x to 6x Max
CD-RW	USB 2.0: 8x Max, USB 1.1 : 4x to 6x Max
Write mode	Disc-at-once Session-at-once Track-at-once Multi-session Packet write
access time	110ms (average)
Data buffer	2MB
Line output	0.75Vrms±3dB (at load of 10kΩ) Ø3.5 mm stereo mini jack

IBM®

Part Number: 22P9066

(1P) P/N: 22P9066