



ThinkPad[®]
CD-ReWritable
Ultrabay[™] 2000 Drive
User's Guide

OPTIONS
by IBM



ThinkPad[®]
CD-ReWritable
Ultrabay[™] 2000 Drive
User's Guide

CAUTION

Before installing this product, read the ThinkPad System *Safety Booklet*.

Note

Be sure to keep your proof of purchase, because it might be required for warranty services. (See "Appendix C. Warranty statements" on page 3-2.)

First Edition (February 2001)

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Product registration

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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.

About this book

This manual contains information on the IBM ThinkPad CD-RW Ultrabay 2000 Drive. It is divided into the following parts:

Part 1: Installation and user's guide

This section contains product and software descriptions, installation requirements, installation instructions, handling and operating information, and problem solving in the following languages:

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

Part 2: Appendixes

This section contains the product specifications, help and service information, the product warranties, and notices.

Note: The illustrations in this manual might be slightly different from your hardware.

Part 1. Installation and user's guide

This guide contains information on installing and using the drive. For problem-solving information, go to "Problem solving" on page 1-6.

Product description

The IBM ThinkPad CD-RW Ultrabay 2000 Drive can write to and read from CD-ReWritable (CD-RW) and CD-Recordable (CD-R) discs, and can read mass-produced, stamped CDs. The drive is compatible with Multi-Read (MR) CD-ROM and DVD-ROM drives that can read CD-RW discs and other media types, and with older non-MR CD-ROM drives that can read only CD-R and CD-ROM discs.

Note: To use the drive's CD-recording function, you must install the IBM CD-RW software (included) for Microsoft® Windows® 2000 Professional, Windows Millenium, Windows 98, Windows 95, or Windows NT® 4.0 Workstation. For more information on the IBM CD-RW software, see "Software description".

In addition to this book, the option kit includes:

- CD-ReWritable drive
- Carrying case
- *IBM CD-RW software CD*
- *Laser Safety Guide for CD-ROMs*

Note: Your option kit might also contain an update diskette for IBM CD-RW software.

Contact your place of purchase if an item is missing or damaged. Be sure to retain your proof of purchase. It might be required to receive warranty service. See "Appendix B. Help and service information" on page 3-1 for technical support information.

Software description

The IBM CD-RW software CD contains programs that work with Windows 2000, Windows Millenium, Windows 98, Windows 95, and Windows NT 4.0. You can use the programs with your CD-ReWritable drive to create audio and data CDs and to copy CDs. This manual provides basic instructions on using the software to create CDs. For more information on using the software, go to the online user's guide on the software CD.

Note: The software included in this option kit does **not** enable the drive's CD-recording capabilities with DOS, Windows 3.x, or OS/2 operating systems.

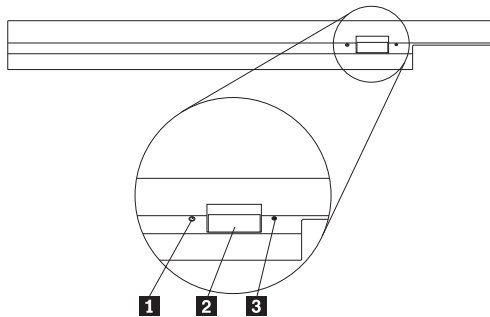
Installation requirements

To install the CD-ReWritable drive, your computer must meet the following minimum requirements:

- ThinkPad A or T series computer, ThinkPad Dock, ThinkPad UltraBase X2 media slice, or IBM Portable Drive Bay 2000
- 32 MB of Memory
- Windows 2000, Windows Millenium, Windows 98, Windows 95, or Windows NT 4.0 operating system

Locating the drive controls

The following diagram shows the location of the controls on the front of the drive.



1 Power light

This light is visible when drive is in use.

2 Eject button

Press this button to eject the CD when the drive is in use.

3 Manual eject hole

Use this emergency release to eject the CD when the Eject button does not work. For more information on manually ejecting a CD, go to "Manually ejecting a CD" on page 1-5.

Installing the drive

The ThinkPad CD-RW Ultrabay 2000 Drive works with any ThinkPad computer that has an Ultrabay 2000 drive bay.

Your ThinkPad computer includes an online user's guide that provides drive installation instructions specific to your computer. To correctly install the CD-RW Drive into the Ultrabay 2000 drive bay in your ThinkPad computer, be sure to use the instructions given in the online user's guide.

Using the drive

This section provides information on how to handle and care for CDs and your CD-RW drive, how to load CDs into your CD-RW drive, and how to get started using the IBM CD-RW software applications.

Before you begin

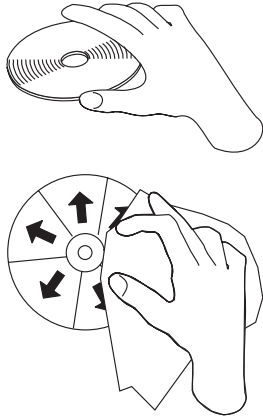
Review the following guidelines before using the drive:

- Movement of your ThinkPad while formatting or writing a disc may cause data errors. Also, minimize typing while formatting or writing to a disc, as this may also cause data errors.
- For best results:
 - Keep the ThinkPad on a flat surface when writing to a disc.
 - Use the CD-RW drive when the ThinkPad is plugged into an ac outlet. If the battery runs out while writing to a disc, the disc may be damaged.
 - Turn screensavers off. Using a screensaver may interrupt the formatting and writing process.
- The read and write results of the CD-RW 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.

Handling and caring for a CD

Carefully handle and clean CDs, especially writable media types such as CD-R and CD-RW discs, so that they remain readable. You can prolong the life of your CDs by using the following precautions.

Attention: Wiping a CD using a circular motion can cause loss of data.



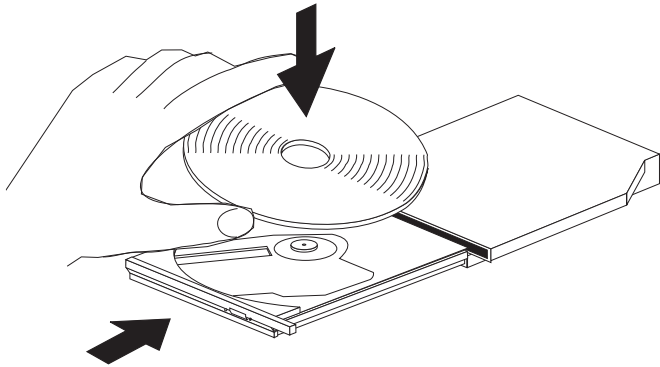
- Handle the CD by the edges or the center hole. Do not touch the surface of the CD.
- To remove dust or fingerprints, wipe the CD from the center to the edge with a soft, lint-free cloth.
- Do not write on the surface.
- Do not place the CD in direct sunlight.
- Do not use commercial cleaners to clean the CD.
- Do not bend the CD.

Caring for the CD-RW drive

To protect your CD-ReWritable drive during operation, observe the following precautions:

- Remove any CD from the drive before moving the drive.
- Do not insert foreign objects into the drive.
- Do not stack objects on the drive.
- Do not remove the drive cover or attempt to service the drive.
- Do not operate the drive under any of the following conditions:
 - High temperature, high humidity, or direct sunlight
 - Excessive vibration, sudden shock, or inclined surface
 - Excessive dust

Loading a CD

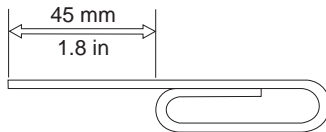


1. Press the Eject button. The tray slides out of the drive.
2. Place the CD in the tray with the label facing up.
3. Close the tray by gently pushing the tray in until it latches.

Attention: Do not use force or insert foreign objects to open the CD tray. If your tray does not open when you press the Eject button, see “Manually ejecting a CD” for more information.

Manually ejecting a CD

If you press the Eject button and the tray does not slide out, turn off the computer and straighten a large paper clip to form a tool, as shown in the illustration. The straightened end must extend at least 45 mm (1.8 in.). Insert the extended end into the manual-eject hole on the front of the drive. Push the paper clip until the tray opens. Gently pull out the tray until you can remove the CD.



Using CD-R and CD-RW discs

The CD-ReWritable drive can write to both CD-R and CD-RW discs. CD-R discs cannot be erased, but can be used with standard CD-ROM drives and CD players.

You can use CD-R discs to record audio tracks, store data, archive files, and copy files from another CD.

CD-RW discs can be erased and rewritten, but can be used only with newer MR- and CD-RW-compatible CD-ROM and DVD-ROM drives. You can use CD-RW discs to back up, store, and update files or to copy files from another CD.

Note: CD-R discs are playable on audio CD players. CD-RW discs are not playable on most audio CD players.

Backing up a CD

To copy a commercial CD, you must own the copyright or obtain permission from the copyright owner. If you do not own the copyright or do not obtain permission from the copyright owner, you might be violating copyright law and might be subject to payment of damages or other remedies. For more information on copyright law, consult your legal advisor.

Problem solving

Computer problems can be caused by hardware, software, or user error. You might be able to use the information in this section to solve problems yourself or to gather helpful information you can pass on to a service technician. You might also need to refer to your computer, operating-system, or sound-adapter publications.

Review the following list for any problem descriptions that might fit your situation.

You cannot create a multisession disc.

Be sure that there is enough space left on the disc for another session. Writing a session requires lead-in and lead-out space (about 15 MB) in addition to the data that is recorded.

You cannot successfully write to a CD-R or CD-RW disc.

Take the following actions:

1. Verify that the process is not being interrupted by a screen saver, an antivirus program, an Internet or e-mail program, or other software. Disable the functions that might interrupt the write operation.
2. Verify that the hard disk has been defragmented.
3. Consult the hard disk drive manufacturer or vendor if an older hard disk drive is conducting a thermal recalibration during a write operation.
4. Replace the CD if it is bad or scratched.
5. Try disabling the Windows Auto Insert Notify function on your CD-ROM and CD-RW drives.

You cannot eject a CD.

Take the following actions after ensuring that the drive is not in the process of writing to a disc:

1. Eject the CD through software.
2. Use the Eject button.
3. Turn off the computer. Wait 45 seconds; then turn on the computer and try using the Eject button again.
4. If other methods do not work, use the manual-eject hole, using instructions given in “Manually ejecting a CD” on page 1-5.

You cannot read from the CD after successfully writing to it.

Take the following actions:

1. If you can read the CD in another CD player or you can see previous sessions, the directory information might be damaged on the volume, making it unreadable. To get ideas for troubleshooting, check the documentation that comes with the software.
2. You might have a damaged CD-R or CD-RW disc. Try a new CD-R disc or CD-RW disc, or another brand of CD.
3. If you can read from a CD-RW disc in the writing drive, but not in another MR drive, be sure that a UDF Reader program is installed in the computer.
4. Avoid writing at the slower 1X speed unless required by your computer.

Manuel d'installation et guide de l'utilisateur

Le présent manuel contient des informations concernant l'installation et l'utilisation de l'unité. Pour la résolution des incidents, consultez la section «Résolution des incidents» à la page 2-6.

Attention

Avant d'installer le produit, lisez le *Manuel de sécurité* du ThinkPad.

Description du produit

L'unité de CD-RW Ultrabay 2000 pour ThinkPad IBM peut lire et écrire sur des CD-RW et des CD-R, et peut lire les CD du commerce. Cette unité est compatible avec les unités de CD-ROM et de DVD-ROM Multi-Read (MR) qui peuvent lire les CD-RW ainsi que d'autres types supports, ainsi qu'avec les unités de CD-ROM plus anciennes non MR, qui peuvent lire les CD-R et les CD-ROM uniquement.

Remarque : L'utilisation de la fonction d'enregistrement de CD de l'unité nécessite l'installation du logiciel IBM CD-RW (fourni) pour Microsoft® Windows® 2000 Professional, Windows Millennium, Windows 98, Windows 95, ou Windows NT® 4.0 Workstation. Pour de plus amples informations concernant le logiciel IBM CD-RW, reportez-vous à la section «Description des logiciels» à la page 2-2.

Outre ce manuel, la boîte de l'option contient :

- L'unité de CD-RW
- Un boîtier de transport
- *Le CD du logiciel IBM CD-RW*
- *Un manuel relatif aux précautions d'utilisation du laser des unités de CD-ROM*

Remarque : La boîte de l'option peut également contenir une disquette de mise à jour du logiciel IBM CD-RW.

Prenez contact avec votre revendeur si l'un de ces éléments manque ou est endommagé. Vous pouvez être amené à fournir la preuve d'achat. Sa présentation est habituellement nécessaire pour faire jouer la garantie. Vous trouverez des informations concernant le support technique à l'«Appendix B. Help and service information» à la page 3-1.

Description des logiciels

Le CD du logiciel IBM CD-RW contient des programmes qui fonctionnent sous Windows 2000, Windows Millenium, Windows 98, Windows 95, et Windows NT 4.0. Vous pouvez utiliser ces programmes avec l'unité de CD-RW pour créer des CD audio et de données, ou copier des CD. Le présent manuel contient les instruction de base permettant d'utiliser les logiciels afin de créer des CD. Pour de plus amples informations, consultez le guide de l'utilisateur en ligne présent sur le CD du logiciel.

Remarque : Le logiciel inclus dans cette option **ne permet pas** d'activer la fonction d'enregistrement de CD de l'unité sous les systèmes d'exploitation DOS, Windows 3.x, ou OS/2.

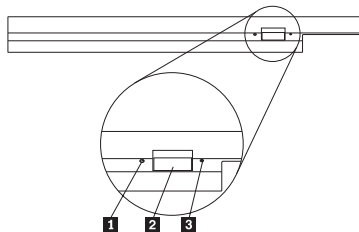
Conditions nécessaires à l'installation

L'installation de l'unité de CD-RW nécessite que votre ordinateur dispose des éléments suivants :

- ThinkPad série A ou T, ThinkPad Dock, ThinkPad UltraBase X2, ou IBM Portable Drive Bay 2000
- 32 Mo de mémoire
- Un système d'exploitation Windows 2000, Windows Millenium, Windows 98, Windows 95, ou Windows NT 4.0

Localisation des commandes de l'unité

L'illustration suivante montre l'emplacement des commandes sur l'avant de l'unité.



1 Voyant d'alimentation

Ce voyant est visible lors de l'utilisation de l'unité.

2 Bouton d'éjection

Appuyez sur ce bouton pour éjecter le CD quand l'unité est en cours d'utilisation.

3 Orifice pour l'éjection manuelle

Utilisez ce système d'éjection du CD quand le bouton d'éjection ne fonctionne

pas. Pour de plus amples informations concernant l'éjection manuelle d'un CD, consultez la section «Ejection manuelle d'un CD» à la page 2-5.

Installation de l'unité

L'unité de CD-RW Ultrabay 2000 pour ThinkPad fonctionne avec tout ThinkPad qui dispose d'une baie d'unité Ultrabay 2000.

Le ThinkPad comprend un guide de l'utilisateur en ligne qui fournit les instructions d'installation d'unité spécifiques à l'ordinateur. Assurez-vous de suivre correctement les instructions données par le guide de l'utilisateur en ligne pour installer correctement l'unité de CD-RW dans la baie d'unité Ultrabay 2000 de votre ThinkPad.

Utilisation de l'unité

La présente section fournit des informations concernant la manipulation et les précautions d'utilisation des CD et de l'unité de CD-RW, le chargement des CD dans l'unité de CD-RW, et les premiers pas avec le programme IBM CD-RW.

Avant de commencer

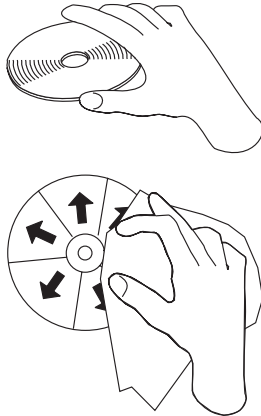
Prenez connaissance des instructions ci-après avant d'utiliser l'unité :

- Le ThinkPad doit rester immobile lors du formatage et de l'écriture d'un disque, tout mouvement pouvant causer des erreurs de données. Evitez également dans la mesure du possible de taper lors du formatage ou de l'écriture d'un disque, car cela peut entraîner des erreurs de données.
- Pour obtenir les meilleurs résultats possibles :
 - Posez le ThinkPad sur une surface plane lorsque vous écrivez sur un disque.
 - Utilisez l'unité de CD-RW quand le ThinkPad est branché à une prise de courant. Si la batterie vient à se vider pendant l'écriture d'un disque, ce dernier peut être endommagé.
 - Désactivez les économiseurs d'écran, leur utilisation peut interrompre le processus de formatage ou d'écriture.
- Les résultats de lecture et d'écriture de l'unité de CD-RW dépendent de la qualité et des caractéristiques du support CD-R ou CD-RW utilisé. Les CD-R et CD-RW de certains fabricants peuvent donner de mauvais résultats.

Manipulation et précautions d'utilisation des CD

Manipulez et nettoyez vos CD avec soin, particulièrement les supports inscriptibles, afin qu'il restent lisibles. Les précautions ci-après vous permettront de prolonger la durée de vie de vos CD.

Attention : nettoyer les CD en effectuant un mouvement circulaire risque d'entraîner une perte de données.



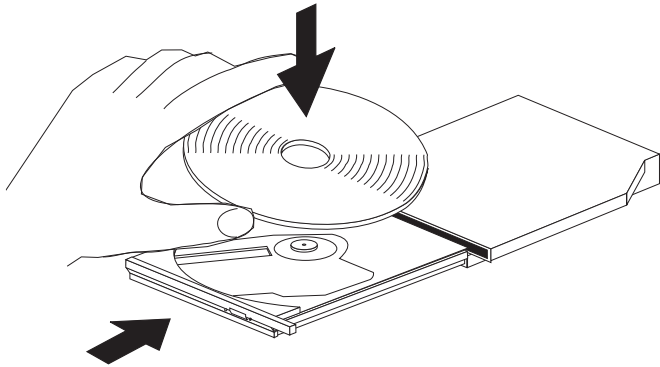
- Tenez les CD par le bord ou par leur trou central. Ne touchez pas leur surface.
- Pour retirer de la poussière ou des traces de doigts, nettoyez le CD à partir du centre en allant vers les bords avec un chiffon doux non pelucheux.
- N'écrivez pas sur la surface.
- Ne placez pas les CD sous la lumière directe du soleil.
- N'utilisez pas de produits du commerce pour nettoyer vos CD.
- Ne pliez pas les CD.

Précautions d'utilisation pour l'unité de CD-RW

Pour protéger votre unité de CD-RW lors du fonctionnement, observez les précautions suivantes :

- Retirez le CD présent dans l'unité avant de déplacer cette dernière.
- N'insérez pas d'objets étrangers dans l'unité.
- N'empilez pas d'objet sur l'unité.
- Ne retirez pas le couvercle et ne tentez pas de réparer vous-même l'unité.
- Ne faites pas fonctionner l'unité dans l'une des situations suivantes :
 - Température élevée, fort degré d'hygrométrie ou exposition directe aux rayons du soleil
 - Vibration excessive, choc violent ou surface inclinée
 - Environnement très poussiéreux

Chargement d'un CD

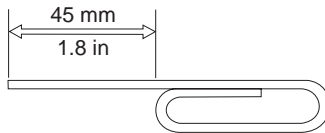


1. Appuyez sur le bouton d'éjection. Le plateau sort de l'unité.
2. Posez le CD sur le plateau de chargement en positionnant son étiquette vers le haut.
3. Fermez le plateau en le poussant doucement jusqu'à ce qu'il s'enclenche.

Attention : Ne forcez pas l'ouverture du plateau et n'introduisez pas d'objet pour l'ouvrir. Si le plateau ne s'ouvre pas quand vous appuyez sur le bouton d'éjection, consultez la section «Ejection manuelle d'un CD».

Ejection manuelle d'un CD

Si vous appuyez sur le bouton d'éjection et que le plateau ne sort pas, éteignez l'ordinateur et dépliez un grand trombone comme le montre l'illustration. L'extrémité dépliée doit s'étendre sur au moins 45 mm. Insérez l'extrémité dépliée dans l'encoche d'éjection manuelle située sur la face avant de l'unité. Poussez le trombone dans le trou jusqu'à ce que le plateau s'ouvre. Tirez doucement le plateau vers vous jusqu'à ce que vous puissiez retirer le CD.



Utilisation de disques CD-R et CD-RW

L'unité de CD-RW peut écrire sur des CD-R ou sur des CD-RW. Les CD-R ne peuvent pas être effacés, mais peuvent être utilisés dans des unités de CD-ROM standards et dans des lecteurs de CD.

Vous pouvez utiliser des CD-R pour enregistrer de la musique, stocker des données, archiver des fichiers, et copier des fichiers à partir d'un autre CD.

Les CD-RW peuvent être effacés puis réutilisés, mais ils nécessitent des unités de CD-ROM et de DVD-ROM compatibles CD-RW et MR. Vous pouvez utiliser les CD-RW pour sauvegarder, stocker et mettre à jour des fichiers, ou pour copier des fichiers à partir d'un autre CD.

Remarque : Les CD-R peuvent être joués sur des lecteurs de CD audio. La plupart des lecteurs de CD audio ne prennent pas en charge la lecture des CD-RW.

Sauvegarde d'un CD

Pour copier un CD du commerce, vous devez soit en posséder les droits de reproductions, soit obtenir une permission de la part du détenteur des droits de reproduction. Si vous ne disposez pas de l'une de ces autorisations, vous risquez d'entrer en violation avec les lois sur les droits de reproduction, et être amené à payer une amende ou des dommages. Pour de plus amples informations sur ces lois, consultez votre conseiller juridique.

Résolution des incidents

Les incidents informatiques peuvent avoir une cause matérielle, logicielle ou humaine. Les informations de la présente section peuvent vous permettre de soit résoudre l'incident vous-même, soit de collecter des informations utiles que vous transmettez à un technicien de maintenance. Vous devrez peut être également vous référer à la documentation de l'ordinateur, du système d'exploitation ou de la carte son.

Cherchez dans la liste ci-après si une description d'incident qui semble correspondre à votre situation.

Vous ne pouvez pas créer de disque multisession.

Assurez-vous que le disque comporte suffisamment de place pour une nouvelle session. L'écriture d'une session nécessite de l'espace en plus (environ 15 Mo) des données qui sont enregistrées.

Vous ne parvenez pas à écrire sur un CD-R ou sur un CD-RW.

Entreprenez une des actions ci-après :

1. Vérifiez que le processus n'est pas interrompu par un économiseur d'écran, un programme antivirus, un programme Internet ou de messagerie électronique, ou encore tout autre programme. Désactivez les fonctions qui peuvent interrompre l'opération d'écriture.
2. Assurez-vous que le disque dur a été défragementé.
3. Dans le cas d'une unité de disque dur ancienne, consultez le fabricant ou le fournisseur si une recalibration thermique a lieu lors d'une opération d'écriture.
4. Remplacez le CD s'il est mauvais ou rayé.
5. Essayez de désactiver la fonction de Windows de Notification d'insertion automatique de vos unités de CD-ROM et de CD-RW.

Vous ne parvenez pas à éjecter un CD.

Entreprenez les action ci-après une fois que vous vous êtes assuré que l'unité n'est pas en train d'écrire sur un disque :

1. Ejectez le CD via le logiciel.
2. Utilisez le bouton d'éjection.
3. Mettez l'ordinateur hors tension. Attendez 45 secondes, puis mettez l'ordinateur sous tension et essayez d'utiliser le bouton d'éjection à nouveau.
4. Si d'autres méthodes ne fonctionnent pas, utilisez l'orifice d'éjection manuelle en suivant les instructions données dans la section «Ejection manuelle d'un CD» à la page 2-5.

Vous ne parvenez pas à lire un CD sur lequel vous êtes parvenu à écrire..

Entreprenez une des actions ci-après :

1. Si vous parvenez à lire le CD dans un autre lecteur de CD ou si vous parvenez à voir des sessions précédentes, cela signifie que les informations de répertoires ont pu être endommagées, ce qui rend le CD illisible. Consultez la documentation du logiciel, vous y trouverez des idées pour la résolution des incidents.
2. Le CD-R ou le CD-RW est peut-être endommagé. Essayez un nouveau CD-R ou CD-RW, ou encore une autre marque de disque.
3. Si vous parvenez à lire des informations d'un CD-RW dans l'unité avec laquelle vous l'avez écrit, mais pas dans une unité non MR, assurez-vous que le programme UDF Reader est installé sur l'ordinateur.
4. Evitez d'écrire à la vitesse 1X sauf si l'ordinateur l'impose.

Enregistrement du produit

Merci d'avoir choisi une option IBM®. Veuillez consacrer quelques instants à l'enregistrement de votre produit, ce qui nous donnera les informations qui permettront à IBM de mieux vous servir à l'avenir. Les informations que vous nous donnez en retour nous sont importantes dans le développement de produits et de services qui sont importants pour vous, et dans le développement de meilleures façons de communiquer avec vous. Enregistrez votre option sur le site Web IBM à l'adresse :

www.ibm.com/pc/register

IBM vous fera parvenir des informations et des mises à jour concernant votre produit enregistré, sauf si vous indiquez sur le questionnaire du site Web que vous ne désirez pas recevoir de plus amples informations.

Informations de maintenance et de garantie du produit

Pour le support technique, les heures de support technique, et pour les termes et conditions de garantie, consultez les encarts ou contactez votre revendeur ou votre partenaire commercial IBM.

Guía del usuario y de instalación

Esta guía contiene información sobre la instalación y utilización de la unidad. Para obtener información relativa a la resolución de problemas, diríjase al apartado “Resolución de problemas” en la página 2-15.

Precaución

Antes de instalar el producto, consulte la *Información de seguridad* del ThinkPad.

Descripción del producto

La unidad de CD-Regrabable Ultrabay 2000 del IBM Thinkpad puede grabar y leer discos CD-Regrabables (CD-RW) y discos CD-Grabables (CD-R) así como realizar la lectura de los CD producidos en serie y etiquetados. Esta unidad es compatible con las unidades MR (lectura múltiple) de CD-ROM y DVD-ROM que pueden leer discos CD-RW y otros tipos de soporte; también es compatible con unidades de CD-ROM más antiguas que no son MR y que sólo pueden leer discos CD-R y CD-ROM.

Nota: Para utilizar la función de grabación de CD de la unidad, debe instalar el software de CD-RW de IBM (que se incluye) para Microsoft® Windows® 2000 Professional, Windows Millenium, Windows 98, Windows 95, o Windows NT® 4.0 Workstation. Para obtener más información sobre el software de CD-RW de IBM, consulte el apartado “Descripción del software” en la página 2-10.

Además de este manual, el kit de la opción incluye:

- Unidad de CD-RW (en que se puede grabar los CD)
- Caja de transporte
- CD con el software de CD-RW de IBM
- Guía de seguridad de productos láser para los CD-ROM

Nota: Es posible que el kit de la opción contenga también un disquete de actualización para el software de CD-RW de IBM.

Póngase en contacto con el establecimiento de compra si falta algún elemento o se observan defectos. Asegúrese de conservar la prueba de compra. Es posible que se le requiera presentarla a la hora de recibir el servicio de garantía. Para obtener información sobre el soporte técnico, consulte “Appendix B. Help and service information” en la página 3-1.

Descripción del software

El CD de software de CD-RW de IBM contiene programas que funcionan con Windows 2000, Windows Millenium, Windows 98, Windows 95 y Windows NT 4.0. Puede utilizar los programas con la unidad de CD-RW para crear un CD de audio y datos, y para copiar un CD. Este manual proporciona instrucciones básicas sobre la utilización del software para crear los CD. Para obtener más información acerca de la utilización del software, diríjase a la guía del usuario contenida en el CD de software.

Nota: El software incluido en el kit de esta opción **no** habilita las posibilidades de grabación de CD de la unidad con sistemas operativos DOS, Windows 3.x ni OS/2.

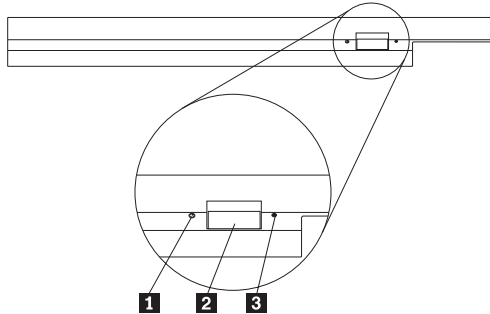
Requisitos de instalación

Para instalar la unidad de CD-RW, el sistema debe cumplir con los requisitos mínimos siguientes:

- Sistema ThinkPad series A o T, ThinkPad Dock, porción de soporte de almacenamiento ThinkPad UltraBase X2 o IBM Portable Drive Bay 2000
- 32 MB de memoria
- Sistema operativo Windows 2000, Windows Millenium, Windows 98, Windows 95 o Windows NT 4.0

Localización de los controles de la unidad

El diagrama siguiente muestra la ubicación de los controles de la parte frontal de la unidad.



1 Indicador de encendido

Este indicador es visible cuando se está utilizando la unidad.

2 Botón de expulsión

Pulse este botón para expulsar el CD cuando se esté utilizando la unidad.

3 Orificio de expulsión manual

Utilice este disparador de emergencia para expulsar el CD cuando el botón de expulsión no funcione. Para obtener más información sobre cómo expulsar un CD de forma manual, diríjase al apartado “Expulsión de un CD de forma manual” en la página 2-14.

Instalación de la unidad

La unidad ThinkPad CD-RW Ultrabay 2000 funciona con cualquier sistema ThinkPad que disponga de una bahía de unidad Ultrabay 2000.

El sistema ThinkPad incluye una guía del usuario en línea que proporciona instrucciones de instalación específicas de cada sistema. Para instalar correctamente la unidad de CD-RW en la bahía de unidad Ultrabay 2000 del sistema ThinkPad, asegúrese de seguir las instrucciones que se indican en la guía del usuario en línea.

Utilización de la unidad

Este apartado proporciona información sobre el manejo y cuidado de los CD y la unidad de CD-RW, sobre cómo cargar los CD en la unidad de CD-RW y sobre cómo empezar a utilizar los programas de software de CD-RW de IBM.

Antes de empezar

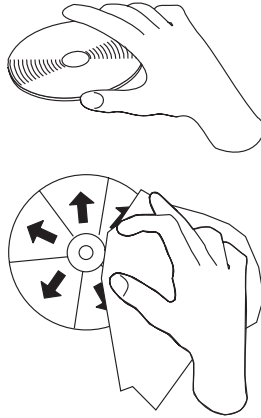
Antes de utilizar la unidad, revise las directrices siguientes:

- Si se mueve el ThinkPad mientras se formatea o se graba un disco, se pueden producir errores en los datos. Asimismo, intente no pulsar ninguna tecla mientras se realizan dichas operaciones ya que pueden producirse errores en los datos.
- Para obtener los mejores resultados:
 - Mantenga el ThinkPad sobre una superficie plana mientras grabe un disco.
 - Utilice la unidad de CD-RW cuando el ThinkPad esté enchufado a una toma de alimentación de CA. Si la batería se agota mientras graba un disco, se puede dañar el disco.
 - Apague los protectores de pantalla. El hecho de utilizar un protector de pantalla puede interrumpir el proceso de formateo y de grabación.
- Los resultados de lectura y grabación de la unidad de CD-RW dependen de la calidad y las características de los soportes de almacenamiento CD-R y CD-RW que se utilicen. Se pueden obtener resultados de baja calidad con algunos suministradores de CD-R y CD-RW.

Manejo y cuidado de un CD

Manipule y limpie con cuidado los CD, especialmente los soportes en los que se puede grabar, como por ejemplo los discos CD-R y CD-RW, de forma que sigan siendo legibles. Puede prolongar la vida de los CD tomando las precauciones siguientes:

<p>Atención: Si limpia un CD realizando un movimiento circular, puede ocasionar una pérdida de datos.</p>
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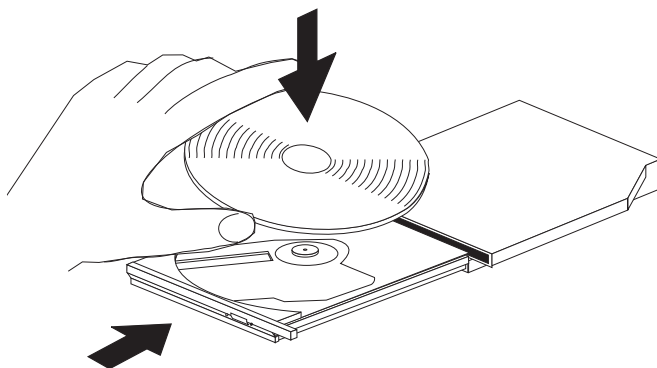
- Manipule el CD sujetándolo por los bordes o por el orificio central. No toque la superficie del CD.
- Para quitar el polvo o las huellas de los dedos, limpie el CD desde el centro hacia el borde con un paño suave sin hilos.
- No escriba en la superficie.
- No esponga el CD a la luz solar directa.
- No utilice ningún tipo de limpiador comercializado para limpiar el CD.
- No doble el CD.

Cuidado de la unidad de CD-RW

Para proteger la unidad de CD-RW durante el funcionamiento, tome las precauciones siguientes:

- Extraiga cualquier CD que haya en la unidad antes de trasladarla.
- No inserte objetos extraños en la unidad.
- No apile objetos sobre la unidad.
- No desmonte la cubierta de la unidad ni intente dar servicio a la unidad.
- No haga funcionar la unidad en ninguna de las condiciones siguientes:
 - Temperatura y humedad excesivas o luz solar directa
 - Vibración excesiva, sacudidas repentinas o superficie inclinada
 - Polvo excesivo

Carga de un CD

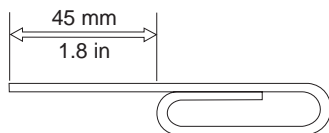


1. Pulse el botón de expulsión. La bandeja se desliza hacia fuera de la unidad.
2. Coloque el CD en la bandeja con la etiqueta cara arriba.
3. Cierre la bandeja empujándola suavemente hasta que encaje.

Atención: No fuerce ni utilice objetos extraños para abrir la bandeja del CD. Si no se abre la bandeja cuando pulsa el botón de expulsión, consulte la información en el apartado "Expulsión de un CD de forma manual".

Expulsión de un CD de forma manual

Si pulsa el botón de expulsión y la bandeja no se desliza hacia fuera, apague el sistema y estire un clip grande de papel para formar una herramienta, tal como se muestra en la ilustración. El extremo estirado debe tener una extensión mínima de 45 mm (1,8 pulgadas). Inserte el extremo desdoblado en el orificio de expulsión manual de la parte frontal de la unidad. Introduzca el clip de papel hasta que se abra la bandeja. Tire suavemente de la bandeja hacia fuera hasta que pueda extraer el CD.



Utilización de discos CD-R y CD-RW

La unidad de CD-RW puede grabar tanto discos CD-R como discos CD-RW. Los discos CD-R no se pueden borrar, pero se pueden utilizar con unidades estándares de CD-ROM y con reproductores de CD.

Puede utilizar discos CD-R para grabar pistas de audio, almacenar datos, archivar archivos y copiar archivos desde otro CD.

Los discos CD-RW se pueden borrar y regrabar, pero sólo se pueden utilizar con las más recientes unidades de CD-ROM y DVD-ROM compatibles con MR y CD-RW. Puede utilizar discos CD-RW para crear copias de seguridad, almacenar y actualizar archivos o para copiar archivos desde otro CD.

Nota: En los reproductores de CD de audio, pueden reproducirse discos CD-R. Los discos CD-RW no pueden reproducirse en la mayoría de los reproductores de CD de audio.

Creación de la copia de seguridad de un CD

Para copiar un CD comercializado, el usuario debe ser propietario del copyright o debe obtener permiso del propietario del copyright. Si no es propietario del copyright ni tiene permiso de copia del propietario del copyright, puede estar infringiendo la ley de copyright y puede encontrarse sujeto al pago de los perjuicios o a otro tipo de compensación. Conseguirá más información sobre la ley de copyright si consulta a su asesor jurídico.

Resolución de problemas

Los problemas de los sistemas pueden ser debidos al hardware, al software o a algún error del usuario. El usuario puede utilizar la información ofrecida en este apartado para resolver los problemas por sí solo o para recopilar información de utilidad que proporcionará a un técnico de servicio. También puede ser necesario consultar las publicaciones del sistema, sistema operativo o adaptador de sonido.

Repase la lista siguiente para buscar cualquier descripción de un problema que pueda aplicarse a su situación.

No es posible crear un disco multisesión.

Asegúrese de que haya suficiente espacio en el disco para otra sesión. La grabación de una sesión requiere un espacio adicional (unos 15 MB) además de los datos que se graban.

No es posible grabar satisfactoriamente en un disco CD-R o CD-RW.

Lleve a cabo las acciones siguientes:

1. Asegúrese de que ningún protector de pantalla, programa antivirus, programa de Internet, correo electrónico u otro tipo de software interrumpa el proceso. Inhabilite las funciones que puedan interrumpir la operación de grabación.
2. Verifique si la unidad de disco duro se ha desfragmentado.
3. Consulte al fabricante o proveedor de la unidad de disco duro si una unidad de disco duro más antigua está realizando una recalibración térmica durante una operación de grabación.
4. Sustituya el disco si está dañado o rayado.
5. Intente inhabilitar la función Notificación de inserción automática de Windows en las unidades de CD-ROM y de CD-RW.

No es posible expulsar un CD.

Lleve a cabo las acciones siguientes después de asegurarse de que la unidad no esté en proceso de grabación de un disco:

1. Expulse el CD mediante el software.
2. Utilice el botón de expulsión.
3. Apague el sistema. Espere 45 segundos. A continuación, encienda el sistema e intente utilizar de nuevo el botón de expulsión.
4. Si no funcionan los otros métodos, utilice el orificio de expulsión manual siguiendo las instrucciones facilitadas en el apartado “Expulsión de un CD de forma manual” en la página 2-14.

No es posible leer el CD después de grabarlo satisfactoriamente.

Lleve a cabo las acciones siguientes:

1. Si puede leer el CD en otro reproductor de CD o ver sesiones anteriores, es posible que la información de directorios esté dañada en el volumen, lo que hace que sea ilegible. Para obtener soluciones sobre estos problemas, vea la documentación que acompaña al software.
2. Puede que tenga un disco CD-R o CD-RW dañado. Pruebe con un nuevo disco CD-R o CD-RW o con otra marca de CD.
3. Si puede leer un disco CD-RW en la unidad de grabación pero no en otra unidad que sea MR, asegúrese de que tenga instalado un programa UDF Reader en el sistema.
4. Evite grabar a la velocidad 1X más lenta a no ser que el sistema así lo requiera.

Guida per l'installazione e per l'utente

Questa guida contiene le informazioni sull'installazione e l'utilizzo dell'unità. Per le informazioni sulla risoluzione dei problemi, consultare la sezione "Risoluzione dei problemi" a pagina 2-23.

Attenzione

Prima di installare il prodotto, leggere l'*Opuscolo di sicurezza* del sistema ThinkPad.

Descrizione del prodotto

L'unità IBM ThinkPad CD-RW Ultrabay 2000 è in grado di scrivere e leggere da dischi CD-RW (CD-ReWritable) e CD-R (CD-Recordable) e può leggere CD stampati e prodotti. L'unità è compatibile con unità DVD-ROM e CD-ROM MR (Multi-Read) che possono leggere dischi CD-RW ed altri tipi di strumento e con unità CD-ROM non MR che possono leggere solo dischi CD-R e CD-ROM.

Nota: Per utilizzare la funzione di registrazione CD dell'unità, è necessario installare il software IBM CD-RW (incluso) per Microsoft® Windows® 2000 Professional, Windows Millennium, Windows 98, Windows 95 or Windows NT® 4.0 Workstation. Per ulteriori informazioni sul software IBM CD-RW, consultare la sezione "Descrizione del software" a pagina 2-18.

Oltre a questo manuale, il kit di opzione include:

- Unità CD-RW (CD-ReWritable)
- Custodia per il trasporto
- *CD del software IBM CD-RW*
- *Guida sulla sicurezza relativa al laser per i CD-ROM*

Nota: Inoltre, il kit di opzione può contenere un minidisco di aggiornamento per il software IBM CD-RW.

Se un componente è mancante o danneggiato, contattare il punto di vendita. Conservare la ricevuta d'acquisto. E' possibile che venga richiesta assistenza tecnica. Per informazioni sul supporto tecnico, consultare la sezione "Appendice B. Informazioni sull'assistenza e sull'aiuto" a pagina 3-1.

Descrizione del software

Il CD del software IBM CD-RW contiene i programmi che funzionano con i sistemi operativi Windows 2000, Windows Millenium, Windows 98, Windows 95 e Windows NT 4.0. E' possibile utilizzare i programmi con l'unità CD-RW (CD-ReWritable) per creare CD dati e audio, per copiare i CD. Questo manuale fornisce le istruzioni di base sull'utilizzo del software per creare i CD. Per ulteriori informazioni sull'utilizzo del software, passare alla guida in linea per l'utente sul CD del software.

Nota: Il software incluso in questo kit di opzione **non** abilita le capacità di registrazione CD dell'unità con sistemi operativi DOS, Windows 3.x o OS/2.

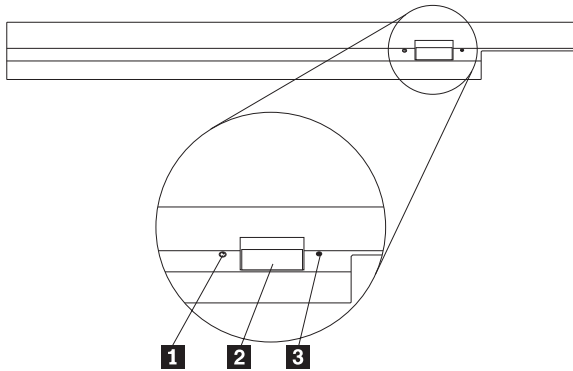
Requisiti di installazione

Per installare l'unità CD-RW (CD-ReWritable), l'elaboratore deve soddisfare i requisiti minimi, riportati di seguito:

- Elaboratore ThinkPad A o T series, ThinkPad Dock, ThinkPad UltraBase X2 partizione strumento o IBM Vano unità portatile 2000
- 32 MB di memoria
- Sistema operativo Windows 2000, Windows Millenium, Windows 98, Windows 95 o Windows NT 4.0

Ubicazione dei controlli dell'unità

Il seguente diagramma illustra l'ubicazione dei controlli, situati sulla parte anteriore dell'unità.



1 Indicatore di alimentazione

Questo indicatore è visibile quando l'unità è in uso.

2 Pulsante Espelli

Per espellere il Cd quando l'unità è in uso, premere questo pulsante.

3 Foro di espulsione manuale

Per espellere il CD quando il pulsante Espelli non funziona, utilizzare questo rilascio di emergenza. Per ulteriori informazioni sull'espulsione manuale di un CD, passare alla sezione "Espulsione manuale di un CD" a pagina 2-22.

Installazione dell'unità

L'unità CD-RW Ultrabay 2000 ThinkPad funziona con qualsiasi elaboratore ThinkPad, dotato di un vano unità Ultrabay 2000.

L'elaboratore ThinkPad include una guida in linea per l'utente che fornisce le istruzioni di installazione dell'unità, specifiche all'elaboratore. Per installare l'unità CD-RW nel vano unità Ultrabay 2000 correttamente nell'elaboratore ThinkPad, verificare di utilizzare le istruzioni fornite nella guida in linea per l'utente.

Utilizzo dell'unità

Questa sezione fornisce le informazioni sulla manutenzione dei CD e dell'unità CD-RW, sul caricamento dei CD nell'unità CD-RW e sull'avvio mediante gli applicativi software CD-RW IBM.

Prima di iniziare

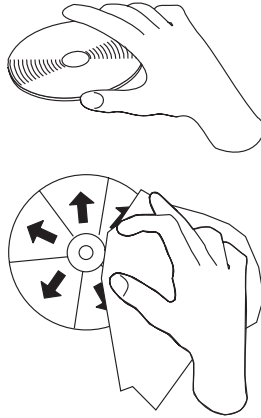
Visualizzare di nuovo le seguenti indicazioni prima di utilizzare l'unità:

- Durante la formattazione o la scrittura di un disco, il movimento dell'elaboratore ThinkPad può causare errori di dati. Inoltre, ridurre l'immissione durante la formattazione o la scrittura di un disco, in quanto questa operazione può causare errori di dati.
- Per risultati migliori:
 - Posizionare l'elaboratore ThinkPad su una superficie piatta durante la scrittura di un disco.
 - Quando l'elaboratore ThinkPad viene collegato ad una presa CA, utilizzare l'unità CD-RW. Se la batteria viene esaurita durante la scrittura su un disco, è possibile che il disco sia danneggiato.
 - Disattivare gli screensaver. L'utilizzo di uno screensaver potrebbe causare l'interruzione dei processi di formattazione e di scrittura.
- I risultati della scrittura e della lettura dell'unità CD-RW 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.

Manutenzione di un CD

Gestire e pulire i CD con attenzione, in particolare modo i tipi di strumenti scrivibili come i dischi CD-R e CD-RW, in modo tale che essi siano leggibili. E' possibile ottimizzare la durata dei CD utilizzando le precauzioni riportate di seguito.

Attenzione: Muovendo il CD in senso circolare, potrebbe verificarsi la perdita di dati.
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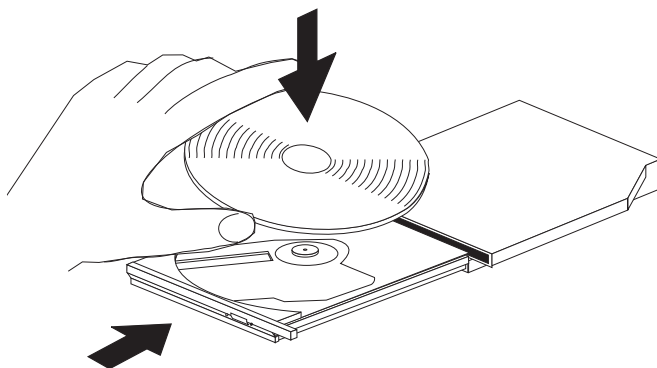
- gestire il CD dalle estremità o per il foro centrale. Non toccare la superficie del CD.
- Per rimuovere la polvere o le impronte, passare un panno morbido e pulito dall'interno verso l'esterno del CD.
- Non scrivere sulla superficie.
- Non collocare il CD alla luce diretta del sole.
- Per pulire il CD, non utilizzare prodotti per la pulizia.
- Non curvare il CD.

Manutenzione dell'unità CD-RW

Durante il funzionamento, per proteggere l'unità CD-RW (CD-ReWritable), osservare le seguenti precauzioni:

- Prima di spostare l'unità, rimuovere qualsiasi CD dall'unità.
- Non inserire oggetti esterni nell'unità.
- Non raccogliere oggetti sull'unità.
- Non rimuovere il coperchio dell'unità o tentare di effettuare assistenza sull'unità.
- Non operare con l'unità quando si presenta una delle condizioni riportate di seguito:
 - Temperatura ed umidità elevate o alla luce diretta del sole
 - Vibrazioni, urti improvvisi o superfici inclinate
 - Polvere

Caricamento di un CD

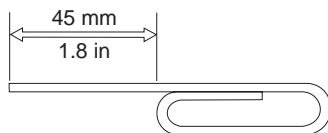


1. Premere il pulsante Espelli. Il vassoio viene estratto dall'unità.
2. Posizionare il CD nel vassoio con l'etichetta rivolta verso l'alto.
3. Chiudere il vassoio, esercitando una leggera pressione su di esso fino a quando viene riagganciato.

Attenzione: Non forzare i inserire oggetti estranei per aprire il vassoio del CD. Se il vassoio non viene aperto quando viene premuto il pulsante Espelli, per ulteriori informazioni, consultare la sezione "Espulsione manuale di un CD".

Espulsione manuale di un CD

Se viene premuto il pulsante Espelli ed il vassoio non viene estratto, spegnere l'elaboratore e inserire una graffetta nel foro per l'espulsione di emergenza, come illustrato nella figura riportata di seguito. L'estremità di una graffetta deve essere di almeno 45 mm. Inserire l'estremità estesa nel foro di espulsione manuale sulla parte anteriore dell'unità. Inserire un fermaglio fino a quando il vassoio viene aperto. Estrarre il vassoio fino alla rimozione del CD.



Utilizzo dei dischi CD-R e CD-RW

Il disco CD-RW (CD-ReWritable) può scrivere su dischi CD-R e CD-RW. Non è possibile cancellare i dischi CD-R, ma possono essere utilizzati con lettori Cd ed unità CD-ROM standard.

E' possibile utilizzare i dischi CD-R per registrare tracce audio, memorizzare dati, archiviare file e copiare i file da un altro CD.

I dischi CD-RW possono essere cancellati e riscritti, ma possono essere utilizzati solo con le nuove unità DVD-ROM e CD-ROM compatibili con MR e CD-RW. E' possibile utilizzare i dischi CD-RW per creare le copie di riserva, memorizzare ed aggiornare i file o per copiare i file da un altro CD.

Nota: I dischi CD-R sono leggibili tramite lettori CD audio. I dischi CD-RW non sono leggibili sulla maggior parte dei lettori CD audio.

Creazione di una copia di riserva di un CD

Per copiare un CD commerciale, è necessario ottenere il copyright o l'autorizzazione dal proprietario del copyright. Se non si dispone del copyright oppure non si dispone dell'autorizzazione della copia dal proprietario del copyright, è possibile che venga violata la legge del copyright e si è soggetti ad un pagamento per danni. Per ulteriori informazioni sulla legge del copyright, consultare un consulente legale.

Risoluzione dei problemi

I problemi dell'elaboratore possono essere causati dall'hardware, dal software o da un errore dell'utente. Per risolvere i problemi senza richiedere l'assistenza tecnica, è possibile utilizzare le informazioni contenute in questa sezione o raccogliere informazioni utili da riferire al tecnico dell'assistenza. E' anche possibile fare riferimento alle pubblicazioni relative all'adattatore di suono, al sistema operativo o all'elaboratore.

Per ottenere le descrizioni dei problemi, visualizzare nuovamente l'elenco riportato di seguito.

Impossibile creare un disco multi-sessione.

Verificare che sia presente spazio sufficiente a sinistra del disco per un'altra sessione. La scrittura di una sessione richiede uno spazio di immissione e di emissione (di circa 15 MB) oltre alla registrazione dei dati.

Impossibile scrivere su un disco CD-R o CD-RW.

Intraprendere le seguenti azioni:

1. Verificare che il processo non venga interrotto da uno screen saver, un programma antivirus, un programma e-mail o di Internet oppure da altro software. Disabilitare le funzioni che potrebbero interrompere la scrittura.
2. Verificare che l'unità disco fisso sia stata deframmentata.
3. Se una vecchia unità disco fisso conduce una calibratura termica durante la scrittura, contattare il venditore o la casa produttrice dell'unità disco fisso.
4. Sostituire il CD se risulta danneggiato oppure graffiato.
5. Provare a disabilitare la funzione Notifica di inserimento automatico di Windows sulle unità CD-ROM e CD-RW.

Impossibile espellere un CD.

Una volta verificato che l'unità non sia in fase di scrittura su un disco, intraprendere le seguenti azioni:

1. Espellere il CD mediante il software.
2. Utilizzare il pulsante Espelli.
3. Spegner l'elaboratore. Attendere 45 secondi; quindi riaccendere l'elaboratore ed utilizzare di nuovo il pulsante Espelli.
4. Se gli altri metodi non funzionano, utilizzare il foro di espulsione manuale, utilizzando le istruzioni fornite nella sezione "Espulsione manuale di un CD" a pagina 2-22.

Impossibile leggere dal CD dopo la corretta fase di scrittura.

Intraprendere le seguenti azioni:

1. Se è possibile leggere il CD in un altro lettore CD oppure è possibile visualizzare sessioni precedenti, le informazioni della directory potrebbero essere danneggiate sul volume, rendendolo illeggibile. Per risolvere i problemi, consultare la documentazione, fornita con il software.
2. E' possibile che si disponga di un disco CD-R o CD-RW danneggiato. Provare un nuovo disco CD-R o CD-RW oppure un'altra marca del CD.
3. Se è possibile leggere da un disco CD-RW nell'unità di scrittura, piuttosto che in un'altra unità MR, verificare che un programma del lettore UDF sia installato sull'elaboratore.
4. Evitare la scrittura a bassa velocità 1X a meno che non sia richiesta dall'elaboratore.

Guia de Instalação e do Usuário

Este guia contém informações sobre como instalar e utilizar a unidade. Para obter informações sobre resolução de problemas, vá para a seção “Resolução de Problemas” na página 2-31.

Cuidado

Antes de instalar o produto, leia o *Livreto de Segurança* do Sistema ThinkPad.

Descrição do Produto

A Unidade de CD-RW Ultrabay 2000 ThinkPad da IBM pode gravar e ler discos de CD-RW (CD-Gravável) e de CD-R (CD-Regravável), além de CDs etiquetados produzidos em massa. A unidade é compatível com unidades de CD-ROM e DVD-ROM de Multileitura (MR), que podem ler discos de CD-RW e outros tipos de mídia, e com unidades de CD-ROM não-MR mais antigas, que podem ler apenas discos de CD-R e de CD-ROM.

Nota: Para utilizar a função de gravação do CD da unidade, você deve instalar o software CD-RW da IBM (incluso) para Microsoft® Windows® 2000 Professional, Windows Millennium, Windows 98, Windows 95 ou Windows NT® 4.0 Workstation. Para obter mais informações sobre o software CD-RW da IBM, consulte “Descrição do Software” na página 2-26.

Além deste manual, o conjunto de opcionais inclui:

- Unidade de CD-Regravável
- Caixa de transporte
- *CD do software CD-RW da IBM*
- *Guia de Segurança de Laser para CD-ROMs*

Nota: O conjunto de opcionais também pode conter um disquete de atualização para o software CD-RW da IBM.

Entre em contato com o local de compra se algum item estiver ausente ou danificado. Certifique-se de guardar o comprovante de compra. Ele pode ser necessário para a solicitação do serviço de garantia. Consulte o “Apêndice B. Informações de Ajuda e Serviços” na página 3-1 para obter informações sobre suporte técnico.

Descrição do Software

O CD do software CD-RW da IBM contém programas que funcionam com o Windows 2000, Windows Millenium, Windows 98, Windows 95 e Windows NT 4.0. Você pode utilizar os programas com a unidade de CD-Regravável para criar CDs de áudio e de dados e copiar CDs. Este manual fornece instruções básicas sobre como utilizar o software para criar CDs. Para obter mais informações sobre como utilizar o software, consulte o guia online do usuário no CD do software.

Nota: O software incluído neste conjunto de opcionais **não** ativa os recursos de gravação do CD da unidade com DOS, Windows 3.x ou sistemas operacionais OS/2.

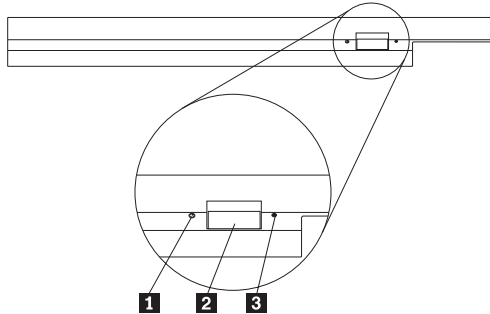
Requisitos de Instalação

Para instalar a unidade de CD-Regravável, o computador deve atender aos seguintes requisitos mínimos:

- Computador ThinkPad série A ou T, ThinkPad Dock, seção de mídia UltraBase X2 ThinkPad ou Compartimento de Unidade Portátil 2000 da IBM
- 32 MB de Memória
- Sistemas operacionais Windows 2000, Windows Millenium, Windows 98, Windows 95 ou Windows NT 4.0

Localizando os Controles da Unidade

O diagrama a seguir mostra a localização dos controles na parte frontal da unidade.



1 Indicador de energia

Este indicador é visível quando a unidade está em uso.

2 Botão de ejeção

Pressione esse botão para ejetar o CD quando a unidade estiver em uso.

3 Orifício de ejeção manual

Utilize essa liberação de emergência para ejetar o CD quando o botão de Ejeção não funcionar. Para obter mais informações sobre como ejetar um CD manualmente, consulte “Ejetando Manualmente um CD” na página 2-30.

Instalando a Unidade

A Unidade de CD-RW Ultrabay 2000 ThinkPad funciona com qualquer computador ThinkPad que tenha um compartimento de unidade Ultrabay 2000.

O computador ThinkPad inclui um guia online do usuário que fornece instruções específicas de instalação da unidade para o computador. Para instalar corretamente a Unidade de CD-RW no compartimento de unidade Ultrabay 2000 no computador ThinkPad, certifique-se de utilizar as instruções fornecidas no guia online do usuário.

Utilizando a Unidade

Esta seção fornece informações sobre como manusear e cuidar de CDs e da unidade de CD-RW, sobre como carregar CDs na unidade de CD-RW e sobre como iniciar utilizando os aplicativos do software CD-RW da IBM.

Antes de Começar

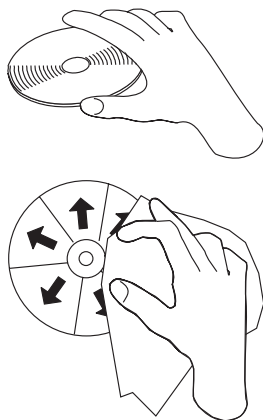
Antes de utilizar a unidade, releia as diretrizes a seguir:

- Movimentar a ThinkPad durante a formatação ou gravação de um disco pode causar erros de dados. Além disso, minimizar a digitação durante a formatação ou gravação de um disco como este também pode causar erros de dados.
- Para obter resultados melhores:
 - Mantenha a ThinkPad em uma superfície plana durante a gravação de um disco.
 - Utilize a unidade de CD-RW quando a ThinkPad estiver conectada a uma tomada CA. Se a bateria acabar durante a gravação de um disco, o disco pode ficar danificado.
 - Desligue os protetores de tela. O uso de um protetor de tela pode interromper o processo de formatação e gravação.
- Os resultados de leitura e gravação da unidade de CD-RW dependem da qualidade e das características da mídia de CD-R e CD-RW utilizadas. Pode-se obter resultados inferiores com alguns fornecedores de CD-R e CD-RW.

Manuseando e Cuidando de um CD

Manuseie e limpe CDs com cuidado, especialmente tipos de mídia graváveis, como discos de CD-R e CD-RW, para que eles permaneçam legíveis. Você pode prolongar a vida útil dos CDs, tomando as precauções a seguir.

Atenção: Esfregar um CD fazendo movimentos circulares pode causar perda de dados.
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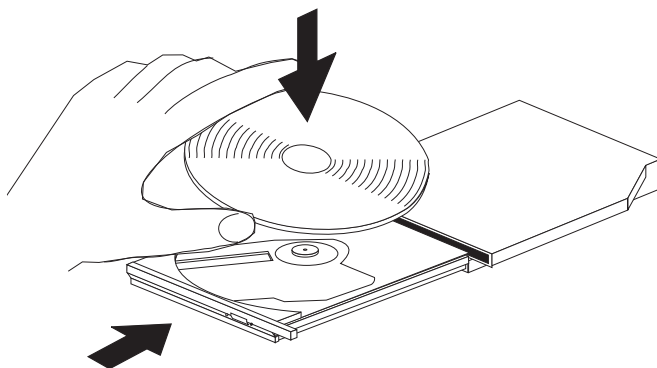
- Manuseie o CD pelas bordas ou pelo orifício central. Não toque na superfície do CD.
- Para remover poeira ou digitais, limpe o CD do centro para a borda com um pano macio e sem fiapos.
- Não escreva na superfície.
- Não exponha o CD à luz direta do sol.
- Não utilize produtos de limpeza comerciais para limpar o CD.
- Não entorte o CD.

Cuidando da Unidade de CD-RW

Para proteger a unidade de CD-Regravável durante a operação, tome os seguintes cuidados:

- Remova qualquer CD da unidade antes de movimentá-la.
- Não insira objetos estranhos na unidade.
- Não empilhe objetos sobre a unidade.
- Não remova a tampa da unidade ou tente fazer reparos nela.
- Não opere a unidade sob quaisquer uma das seguintes condições:
 - Temperatura alta, umidade alta ou luz direta do sol
 - Vibração excessiva, choque repentino ou superfície inclinada
 - Poeira excessiva

Carregando um CD

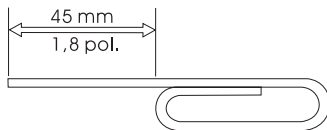


1. Pressione o botão de Ejeção. A bandeja desliza para fora da unidade.
2. Coloque o CD na bandeja com a etiqueta voltada para cima.
3. Feche a bandeja com cuidado, empurrando-a até travar.

Atenção: Não force ou insira objetos estranhos na bandeja de CD para abri-la. Se a bandeja não abrir ao pressionar o botão de Ejeção, consulte “Ejetando Manualmente um CD” para obter mais informações.

Ejetando Manualmente um CD

Se você pressionar o botão de Ejeção e a bandeja não deslizar, desligue o computador e endireite um clipe grande de papel para formar uma ferramenta, conforme mostrado na ilustração. A extremidade do clipe aberto deve estender-se a pelo menos 45 mm (1,8 pol.). Insira a extremidade estendida no orifício de ejeção manual na parte frontal da unidade. Empurre o clipe de papel até que a bandeja seja aberta. Puxe cuidadosamente a bandeja para fora até que o CD possa ser removido.



Utilizando Discos de CD-R e de CD-RW

A unidade de CD-Regravável pode gravar em discos de CD-R e em discos de CD-RW. Os discos de CD-R não podem ser apagados, mas podem ser utilizados com unidades de CD-ROM padrão e CD players.

Você pode utilizar discos de CD-R para gravar trilhas de áudio, armazenar dados, arquivar arquivos e copiar arquivos de um outro CD.

Os discos de CD-RW podem ser apagados e regravados, mas podem ser utilizados apenas com unidades de DVD-ROM e de CD-ROM compatíveis com CD-RW e MR mais novas. Você pode utilizar discos de CD-RW para fazer backup, armazenar e atualizar arquivos ou copiar arquivos de um outro CD.

Nota: Os discos de CD-R são reproduzidos em CD players de áudio. Os discos de CD-RW não são reproduzidos na maioria dos CD players de áudio.

Fazendo Backup de um CD

Para copiar um CD comercial, você deve possuir o copyright ou obter permissão do proprietário do copyright. Se você não possui os direitos autorais ou não obteve a permissão do proprietário dos direitos autorais, você deve estar violando a lei de direitos autorais e pode estar sujeito ao pagamento de danos ou outros reparos. Para obter mais informações sobre a lei de direitos autorais, consulte seu consultor legal.

Resolução de Problemas

Problemas no computador podem ser causados por erros no hardware, no software ou por erro do usuário. Você deve utilizar as informações nesta seção para resolver problemas sozinho ou para reunir informações de ajuda a serem transmitidas a um técnico de serviço. Talvez seja necessário consultar também as publicações do computador, do sistema operacional e da placa de som.

Releia a lista a seguir para obter descrições dos problemas que podem ocorrer com você.

Não é possível criar um disco de multissessão.

Certifique-se de que haja espaço suficiente no disco para uma outra sessão. Gravar uma sessão requer espaço de entrada e de saída (aproximadamente 15 MB), além de dados que serão gravados.

Não é possível gravar com sucesso em um disco de CD-R ou de CD-RW.

Execute as seguintes ações:

1. Verifique se o processo não está sendo interrompido por um protetor de tela, um programa antivírus, um programa da Internet ou de e-mail ou por outro software. Desative as funções que podem interromper a operação de gravação.
2. Verifique se o disco rígido foi desfragmentado.
3. Consulte o fabricante ou o fornecedor da unidade de disco rígido se uma unidade de disco rígido mais antiga estiver conduzindo recalibração térmica durante a operação de gravação.
4. Substitua o CD se ele estiver com defeito ou riscado.
5. Tente desativar a função Inserir Notificação Automática do Windows nas unidades de CD-ROM e de CD-RW.

Não é possível ejetar um CD.

Execute as seguintes ações, após assegurar-se de que a unidade não está em processo de gravação de um disco:

1. Eje o CD utilizando o software.
2. Utilize o botão de Ejeção.
3. Desligue o computador. Aguarde 45 segundos; em seguida, ligue o computador e tente utilizar o botão de Ejeção novamente.
4. Se outros métodos não funcionarem, use o orifício de ejeção manual, utilizando as instruções fornecidas em "Ejetando Manualmente um CD" na página 2-30.

Não é possível ler o CD após gravá-lo com sucesso.

Execute as seguintes ações:

1. Se você consegue ler o CD em um outro CD player ou consegue ver as sessões anteriores, as informações do diretório podem estar danificadas quanto ao volume, tornando-as ilegíveis. Para obter idéias sobre detecção de problemas, verifique a documentação que acompanha o software.
2. Talvez você tenha um disco de CD-R ou de CD-RW danificado. Tente um novo disco de CD-R ou de CD-RW, ou uma outra marca de CD.
3. Se você consegue ler um disco de CD-RW na unidade de gravação, mas não em uma outra unidade MR, certifique-se de que um programa da Leitora UDF esteja instalado no computador.
4. Evite gravar em uma velocidade 1X mais lenta, a menos que requerido pelo computador.

安裝及使用手冊

本手冊包含安裝及使用光碟機的資訊。有關問題解決的資訊，請跳至第2-39的『問題解決』。

注意

安裝產品之前，請先閱讀 ThinkPad 系統安全手冊。

產品說明

IBM ThinkPad CD-RW Ultrabay 2000 光碟機可以寫入和讀取 CD-ReWritable (CD-RW) 和 CD-Recordable (CD-R) 光碟，並且可以讀取大量製造的壓製 CD。本光碟機與可讀取 CD-RW 光碟和其它媒體類型的「多重讀取」(MR) CD-ROM 和 DVD 光碟機相容，也相容於只能讀取 CD-R 和 CD-ROM 光碟的舊型非 MR CD-ROM 光碟機。

註：如果要使用光碟機的 CD 燒錄功能，就必須安裝 Microsoft® Windows® 2000 Professional、Windows Millenium、Windows 98、Windows 95 或 Windows NT® 4.0 Workstation 所適用的 IBM CD-RW 軟體 (內含)。有關 IBM CD-RW 軟體的相關資訊，請參閱『軟體說明』。

除了本手冊以外，選用的配備如下：

- CD-ReWritable 光碟機
- 手提袋
- IBM CD-RW 軟體 CD
- CD-ROM 的雷射安全手冊

註：您的選用套件也可能包含 IBM CD-RW 軟體的更新磁片。

物品若有遺漏或損壞，請和原經銷商連絡。請務必保留您的購買證明，以便取得保證服務。請參閱第3-1頁的『附錄 B. Help and service information』，以取得技術支援資訊。

軟體說明

IBM CD-RW 軟體 CD 包含許多用於 Windows 2000、Windows Millenium、Windows 98、Windows 95 和 Windows NT 4.0 的程式。您可以使用 CD-ReWritable 光碟機所附的程式來製作音樂及資料 CD、或複製 CD。本手冊提供使用軟體來製作 CD 的基本說明。有關使用本軟體的相關資訊，請參閱軟體 CD 的線上使用手冊。

註：本選用套件所附的軟體並無法啓用 DOS、Windows 3.x 或 OS/2 作業系統下光碟機的光碟燒錄功能。

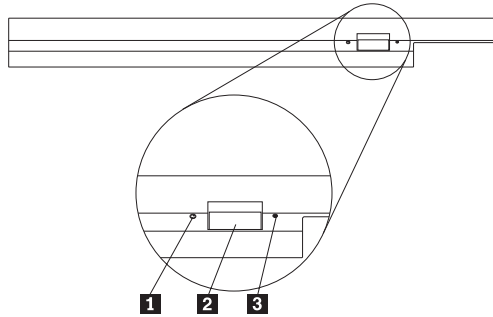
安裝需求

要安裝 CD-ReWritable 光碟機，電腦必須符合下列最小需求：

- ThinkPad A 或 T 系列的電腦、ThinkPad Dock、ThinkPad UltraBase X2 media slice 或 IBM Portable Drive Bay 2000
- 32 MB 的記憶體
- Windows 2000、Windows Millenium、Windows 98、Windows 95 或 Windows NT 4.0 作業系統

找出光碟機控制項

下列圖解顯示光碟機正面的控制項位置。



1 電源指示燈
使用光碟機時，這個燈號會亮起。

2 退出鈕
當光碟機正在使用時，按下這個按鈕可退出 CD。

3 手動退出孔
當退出鈕無法運作時，使用這個緊急釋放機制來退出 CD。有關手動退出 CD 的相關資訊，請參閱第2-38 頁的『手動退出 CD』。

安裝光碟機

ThinkPad CD-RW Ultrabay 2000 光碟機可用於任何具備 Ultrabay 2000 磁碟機機槽的 ThinkPad 電腦。

您的 ThinkPad 電腦包含一本線上使用手冊，其中提供了您的電腦所專用的光碟機安裝說明。若要以正確方式將 CD-RW 光碟機安裝到 ThinkPad 電腦的 Ultrabay 2000 磁碟機機槽中，請務必使用線上使用手冊所提供的說明。

使用光碟機

本節提供有關如何使用及維護光碟及 CD-RW 光碟機的資訊，並且告訴您如何將光碟載入 CD-RW 光碟機，以及如何開始使用 IBM CD-RW 軟體應用程式。

準備工作

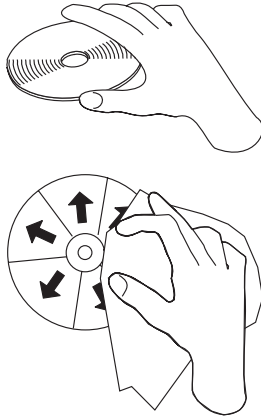
使用光碟機之前，請先檢閱下列準則：

- 在格式化或寫入光碟時移動 ThinkPad，可能會導致資料錯誤。在格式化或寫入光碟時，請避免打字，這也可能會導致資料錯誤。
- 爲了得到最佳效果：
 - 在寫入光碟時，請將 ThinkPad 置於平坦的表面。
 - 將 ThinkPad 插入電源插座時，才使用 CD-RW。如果電池在寫入光碟期間耗盡，光碟可能會損壞。
 - 關閉螢幕保護裝置。使用螢幕保護可能會中止格式化和寫入的程序。
- CD-RW 光碟機的讀取和寫入結果是根據所用的 CD-R 和 CD-RW 媒體的品質和特性而定。有些 CD-R 和 CD-RW 供應商的產品可能有不良的結果。

使用及維護 CD

請小心使用和清潔 CD，特別是 CD-R 和 CD-RW 光碟這類的可寫入媒體類型，這樣它們才能保持可讀取的狀態。以下是延長 CD 壽命的預防措施。

請注意： 以環形的方向擦拭 CD 可能會使資料遺失。



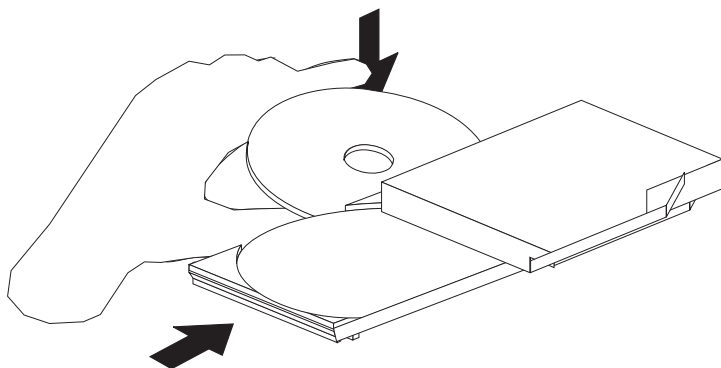
- 只接觸 CD 的邊緣或中心孔。請不要碰觸 CD 表面。
- 清除灰塵或指紋時，請使用無纖維的軟布，由中央向邊緣擦拭 CD。
- 不要在表面上寫字。
- 不要將 CD 直接放置在陽光下。
- 不要使用市售的清潔劑來清理 CD。
- 不要彎曲 CD。

CD-RW 光碟機的保養

為保護運作中的 CD-ReWritable 光碟機，請遵循下列預防措施：

- 在移動光碟機之前，請先取出光碟機中的任何 CD。
- 不要插入其他物件到光碟機
- 不要在光碟機上堆放物件
- 不要卸下光碟機外殼，也不要嘗試自行維修光碟機
- 不要在下列情況下操作光碟機：
 - 高溫、高濕度的環境，或直接暴露於陽光下
 - 震動頻繁、猛烈的搖動或傾斜的表面下
 - 過多灰塵

載入 CD

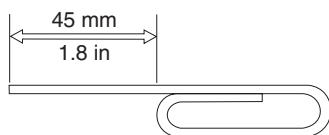


1. 按下「退出鈕」。托盤就會從光碟機中滑出。
2. 將 CD 置入托盤，標籤朝上。
3. 輕輕地將托盤推入，關閉托盤，直到卡住為止。

請注意：開啓 CD 托盤時，請勿用力過渡，也不要插入異物。如果按下「退出鈕」時托盤並未開啓，請參閱『手動退出 CD』以取得相關資訊。

手動退出 CD

如果按下「退出鈕」時托盤並未滑出，請關閉電腦。將一支大型別針拉直，使它變成類似圖例中的工具。拉直端的長度至少需有 45 公釐（1.8 英吋）。將延伸的一端插入光碟機正面的手動退出孔。請推入別針，直到托盤打開為止。輕輕地拉出托盤，直到可取出 CD 為止。



使用 CD-R 和 CD-RW 光碟

CD-ReWritable 可以同時寫入 CD-R 和 CD-RW 光碟。CD-R 光碟無法消除，但是可用於標準的光碟機和 CD 播放器。

您可以使用 CD-R 光碟來燒錄音軌、儲存資料、保存檔案，以及從另一張 CD 複製檔案。

CD-RW 光碟可以消除，並且可以重覆寫入，但只能用於新型的 MR 相容和 CD-RW 相容的 CD-ROM 和 DVD 光碟機。您可以使用 CD-RW 光碟來備份、儲存及更新檔案，或者從另一張 CD 複製檔案。

註：CD-R 光碟可以在音樂 CD 播放器上播放。CD-RW 光碟則不能在大部分的音樂 CD 播放器上播放。

備份 CD

若要複製有版權的 CD，您必須擁有著作權或是取得著作權擁有者的許可權。若是沒有著作權或著作權擁有者的許可權，就可能違反著作權法，並可能會被處以罰款或要求賠償。請詢問您的法律顧問關於著作權法的相關資訊。

問題解決

電腦的問題可能是由硬體、軟體或使用者錯誤所產生。您可以使用本節中的資訊來自行解決問題，或者搜尋有用的資訊，以提供給服務技師。您可能需要參閱電腦、作業系統或音效卡的出版品。

檢閱下列清單，看看是否有與您狀況相符的任何問題說明。

無法製作多重階段作業 CD。

請確定光碟上有足夠的空間來容納另一個階段作業。除了燒錄的資料之外，寫入階段作業還需要導入和導出空間（大約 15 MB）。

無法順利寫入 CD-R 或 CD-RW 光碟。

執行下列動作：

1. 確認處理程序並未被螢幕保護程式、防毒程式、網際網路或電子郵件程式，或是其它軟體所中斷。停用可能會中斷寫入作業的任何功能。
2. 驗證硬碟是否已經進行磁碟重組。
3. 詢問硬碟機製造商或供應商有關舊型的硬碟機是否會在寫入作業期間執行溫度校正。
4. 如果 CD 已損壞或刮傷，請更換 CD。
5. 試著停用 Windows 中有關 CD-ROM 和 CD-RW 光碟機的「自動安插通知」功能。

無法退出光碟。

在確定光碟機目前並沒有寫入光碟之後，採取下列動作：

1. 透過軟體來退出 CD。
2. 使用「退出鈕」。
3. 關閉電腦。等待 45 秒，然後開啓電腦，再試著使用「退出鈕」。
4. 如果其它方法都無法作用，請使用手動退出孔（請遵照第2-38頁的『手動退出 CD』中的說明）。

在順利寫入 CD 之後，無法讀取 CD。

執行下列動作：

1. 如果您可以在另一台 CD 播放器中讀取 CD，或者您可以看到 CD 前幾次的階段作業，則容體的目錄資訊可能已經損壞，因此無法讀取。如果需要疑難排解的資訊，請查閱軟體所附的說明文件。
 2. 您的 CD-R 或 CD-RW 光碟可能已經損壞。請嘗試新的 CD-R 光碟或 CD-RW 光碟，或使用另一種品牌的 CD。
 3. 如果您可以從寫入的光碟機中讀取 CD-RW 光碟，但是不能在另一台 MR 光碟機中讀取光碟，請確定電腦中是否已安裝 UDF Reader 程式。
 4. 除非電腦需要，否則請避免用較慢的 1 倍速來寫入光碟。
-

インストールと使用ガイド

本書は、本ドライブの取り付けと使用の方法を説明します。問題解決に関する説明は 2-47 ページの『問題解決』に記載されています。

注意

製品を取り付ける前に、ThinkPad System Safety Booklet をお読みください。

製品説明

IBM ThinkPad CD-RW ウルトラベイ 2000 ドライブは、CD-ReWritable (CD-RW) ディスクおよび CD-Recordable (CD-R) ディスクで読み書きができ、大量生産されたスタンプ CD を読み取ることができます。本ドライブは、CD-RW ディスクなどのメディア・タイプを読み取ることができる Multi-Read (MR) CD-ROM および DVD-ROM ドライブと互換性があり、CD-R と CD-ROM のディスクしか読み取ることができない非 MR CD-ROM ドライブとも互換性があります。

注: 本ドライブの CD レコーディング機能を使用するには、Microsoft® Windows® 2000 Professional、Windows Millenium、Windows 98、Windows 95、または Windows NT® 4.0 Workstation 用の IBM CD-RW ソフトウェア (付属) をインストールする必要があります。IBM CD-RW ソフトウェアの詳細については、2-42 ページの『ソフトウェアの説明』を参照してください。

本書の他に、本オプション・キットには次の品目が含まれています。

- CD-ReWritable ドライブ
- 携帯用ケース
- IBM CD-RW Software CD
- CD-ROM に関するレーザーの安全上の手引き (*Laser Safety Guide for CD-ROMs*)

注: 本オプション・キットには IBM CD-RW ソフトウェア用の更新ディスクセットも含まれている場合があります。

品目が不足、損傷している場合には、お買上げの販売店にご連絡ください。領収書またはクレジットの控えは必ず保管しておいてください。保証サービスを受けるために提示を求められる場合があります。技術サポート情報については、3-1 ページの『Appendix B. Help and service information』を参照してください。

ソフトウェアの説明

IBM CD-RW ソフトウェア CD には、Windows 2000、Windows Millenium、Windows 98、Windows 95、および Windows NT 4.0 で動作するプログラムが含まれています。このプログラムを本 CD-ReWritable ドライブで使用すると、オーディオ CD やデータ CD を作成したり、CD をコピーしたりできます。本書は、CD を作成する場合のこのソフトウェアの使用法について、基本的な説明をします。このソフトウェアの詳しい使用法については、この Software CD のオンライン・ユーザーズ・ガイドを参照してください。

注: このオプション・キットに含まれているソフトウェアでは、DOS、Windows 3.x、または OS/2 オペレーティング・システムで本ドライブの CD レコーディング機能を使用することはできません。

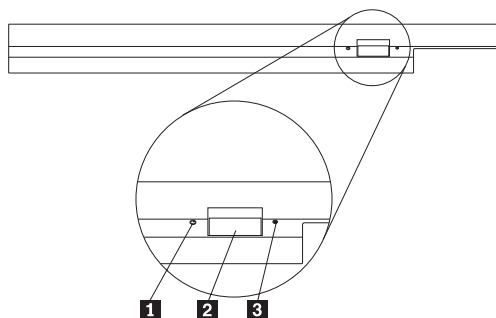
取り付け要件

CD-ReWritable ドライブを取り付ける場合、お使いの ThinkPad が次の要件を満たしている必要があります。

- ThinkPad ドック、ThinkPad ウルトラベース X2、または IBM ポータブル・デバイス・ベイ 2000 を装備した ThinkPad A または T シリーズ・コンピューター
- メモリー容量 32 MB 以上
- Windows 2000、Windows Millenium、Windows 98、Windows 95、または Windows NT 4.0 オペレーティング・システム

本ドライブのコントロールの位置確認

次の図は、本ドライブ前面のコントロールの位置を示しています。



1 電源ライト

このライトは、ドライブが使用中のときに点滅するようになっています。

2 イジェクト・ボタン

ドライブを使用中のときに、このボタンを押して CD を取り出します。

3 非常用 CD 取り出し穴

イジェクト・ボタンが働かない場合は、この非常用取り出し穴を使って CD を取り出します。手動で CD を取り出す場合の詳しい説明は、2-46ページの『非常時の手動 CD 取り出し』に記載してあります。

本ドライブの取り付け

ThinkPad CD-RW ウルトラベイ 2000 ドライブは、ウルトラベイ 2000 ドライブ・ベイを装備した ThinkPad に対応しています。

それぞれの ThinkPad には、その ThinkPad に関するドライブ取り付け説明が記載されているオンライン・ユーザズ・ガイドがインストールされています。ThinkPad の ウルトラベイ 2000 ドライブ・ベイに正しく CD-RW ドライブを取り付けるには、そのオンライン・ユーザズ・ガイドに記載している手順で行ってください。

本ドライブの使用

ここでは、CD と CD-RW ドライブの取り扱いと手入れ方法、CD を CD-RW ドライブにロードする方法、および IBM CD-RW ソフトウェア・アプリケーションの使用を開始する方法を示します。

始める前に

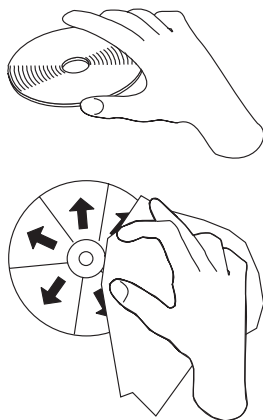
本ドライブをお使いになる前に、次のガイドラインをよくお読みください。

- ディスクのフォーマットや書き込みの最中に ThinkPad を動かすとデータ・エラーが起こる場合があります。また、ディスクのフォーマットや書き込みの最中の入力も最小限にしてください。これもデータ・エラーの原因となります。
- 次の取扱方法を守れば、ThinkPad を最高の状態でお使いいただけます。
 - ディスクへの書き込みを行っているときは、ThinkPad を平らな場所に置きます。
 - ThinkPad を AC コンセントに接続しているときに、CD-RW ドライブをお使いください。ディスクへの書き込み中にバッテリーがなくなると、ディスクが損傷する場合があります。
 - スクリーン・セーバーはオフにしておきます。スクリーン・セーバーを使うと、フォーマットや書き込みのプロセスが中断される場合があります。
- CD-RW ドライブの読み取りおよび書き込みの結果は、お使いになる CD-R と CD-RW メディアの品質と特性によって決まります。メーカーによっては、その CD-R や CD-RW の読み取りまたは書き込みが正しく行われない場合があります。

CD の取り扱いと手入れ

CD、特に CD-R や CD-RW ディスクなどの書き込み可能メディア・タイプは慎重に取り扱い、汚さないようにして、読み取り可能な状態に保てるようにします。次の注意事項を守れば、CD をより長くお使いいただけます。

重要: 円を描くように CD をふくと、データが失われる可能性があります。
--



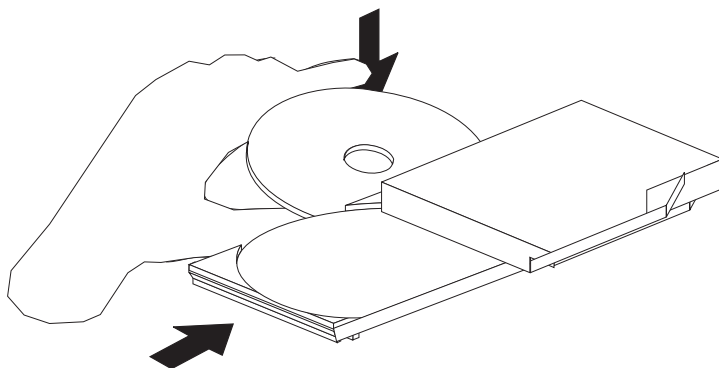
- CD の端または中央の穴を持ちます。CD の表面には触れないでください。
- ほこりや指紋を取り除くには、やわらかいけば立ちのない布を使用して中央から端に向かって CD をふきます。
- 表面に書き込まないでください。
- CD を直射日光に当てないでください。
- CD の清掃に市販のクリーナーを使用しないでください。
- CD を折り曲げないでください。

CD-RW ドライブのお手入れ

操作中に本 CD-ReWritable ドライブを保護するため、次の注意事項を守ってください。

- ドライブを取り外す前に、ドライブから CD を取り出してください。
- 異物をドライブに入れないでください。
- ドライブの上に物を載せないでください。
- ドライブのカバーを取り外したり、ドライブを保守しようとししないでください。
- 次の条件下でドライブを操作しないでください。
 - 高温、高湿度、または直射日光
 - 過剰な振動、突然の衝撃、または表面の傾斜
 - 過剰なほこり

CD のロード

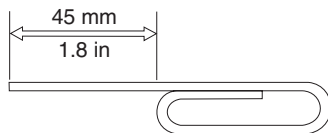


1. イジェクト・ボタンを押します。CD トレイがドライブから出てきます。
2. ラベルを上に向けて、CD を CD トレイに置きます。
3. トレイを軽く押すと、トレイが閉まり、「カチッ」と音がします。

重要: 力任せに CD トレイを開けようとしていたり、何らかの道具を使って CD トレイを無理にこじ開けようとしてはなりません。イジェクト・ボタンを押してもトレイが開かない場合は、『非常時の手動 CD 取り出し』を参照して、非常時の手動取り出し操作についての詳細をご覧ください。

非常時の手動 CD 取り出し

イジェクト・ボタンを押しても、トレイが出てこない場合、コンピューターの電源を切り、図に表示されているように大きなクリップを伸ばしてツールを作ります。伸ばした方の側が 45 mm (1.8 インチ) 以上でなければなりません。伸ばした方の側をドライブの正面にある非常用 CD 取り出し穴に差し込みます。トレイが開くまで、クリップを押し込みます。CD を取り出せる位置までトレイをそっと引っ張り出します。



CD-R ディスクと CD-RW ディスクの使用

本 CD-ReWritable は、CD-R と CD-RW の両方のディスクに書き込むことができます。CD-R ディスクは消去できませんが、標準 CD-ROM ドライブと CD プレーヤーで使用することができます。

CD-R ディスクを使用すると、オーディオ・トラックの録音、データの保管、ファイルのアーカイブ、および別の CD からのファイルのコピーを行うことができます。

CD-RW ディスクは消去と再書き込みが可能ですが、新しいタイプの MR および CD-RW 互換の CD-ROM ドライブと DVD-ROM ドライブでしか使用できません。CD-RW ディスクを使用すると、ファイルのバックアップ、保管、および更新を行ったり、別の CD からファイルのコピーを行うことができます。

注: CD-R ディスクは、オーディオ CD プレーヤーで再生可能です。CD-RW ディスクは、ほとんどのオーディオ CD プレイヤーで再生不能です。

CD のバックアップ

市販の CD をコピーする場合には、著作権を所有しているか、著作権所有者からの許可が必要です。著作権を所有せず、著作権所有者から許可も得ていない場合は、著作権法に違反し、損害賠償の支払いまたはその他の救済策を請求される可能性があります。著作権法の詳細については、法律の専門家にお問い合わせください。

問題解決

ThinkPad に関する問題は、ハードウェア、ソフトウェア、ユーザーのエラーが原因で起こります。ここに示す情報を参考にして、ユーザーご自身で問題を解決するか、関連の情報を収集してサービス技術員に渡して問題を解決してください。また、お使いの ThinkPad、オペレーティング・システム、またはサウンド・アダプターに付属の資料を参照しなければならない場合もあります。

次のリストで、お客様の状況に当てはまる問題についての記述をよく読んでください。

マルチセッション・ディスクが作成できない。

別のセッション用に十分なスペースがディスクに残っているか必ず確認してください。セッションの書き込みでは、記録するレコードの他に、リード・イン・スペースおよびリード・アウト・スペース (約 15 MB) が必要になります。

CD-R ディスクまたは CD-RW ディスクへの書き込みが正常に行えない。

次の処置をとってください。

1. そのプロセスが、スクリーン・セーバー、アンチウィルス・プログラム、インターネット・プログラムまたは E メール・プログラムなどのソフトウェアによって割り込まれていないか確認します。書き込み操作に割り込んだ可能性のある機能を使用不可にします。
2. ハードディスクがフラグメント解除されているか確認します。
3. ハードディスク・ドライブの製造元か販売店に問い合わせ、古いハードディスク・ドライブが、書き込み操作中に再温度校正を行っているか確認してください。
4. CD が不良品であったり、傷が付いている場合には交換します。
5. CD-ROM ドライブおよび CD-RW ドライブの Windows の挿入の自動通知機能を使用不可にしてみてください。

CD を取り出せない。

ドライブがディスクへの書き込みプロセス中でないか確認した後、次の処置をとってください。

1. ソフトウェアによって CD を取り出します。
2. イジェクト・ボタンを使用します。
3. ThinkPad をオフにします。45 秒待ってから、ThinkPad をオンにして、イジェクト・ボタンをもう一度押してみます。
4. 他の方法が効果を上げない場合、2-46ページの『非常時の手動 CD 取り出し』の説明に従って手動 CD-ROM 取り出し穴を使います。

CD への書き込みが正常に行われた後、その CD を読み取ることができない。

次の処置をとってください。

1. 別の CD プレーヤーでその CD の読み取りができる場合や、以前のセッションは見ることができている場合、ボリューム上のディレクトリー情報が損傷して、読み取り不能にしている可能性があります。問題判別についての知識を得るには、ソフトウェアに付属の資料を参照してください。
2. CD-R ディスクまたは CD-RW ディスクが損傷している可能性があります。新しい CD-R ディスクか CD-RW ディスクを使ってみるか、別のメーカーの CD を使ってみてください。
3. 書き込みドライブで CD-RW ディスクの読み取りができて、別の MR ドライブではできない場合、そのコンピューターに UDF Reader プログラムがインストールされているか確かめます。
4. 必要な場合を除き、遅い 1X 速度で書き込みを行うことは避けてください。

Product registration

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:

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.

Product service and warranty information

For technical support, support hours, and warranty terms and conditions, see the enclosed inserts, or contact your IBM reseller or IBM marketing representative.

Part2: Appendixes

This section contains information on product specifications, help and service, product warranties, and notices.

Appendix A. product specifications

The following table summarizes the CD format capabilities of the IBM CD-RW program. Refer to the IBM CD-RW software online user's guide for the most recent information on CD format capabilities.

Format
CD-DA (Red Book)
CD TEXT
CD-ROM (Yellow Book)
CD-ROM XA (Mode 2)
Video CD (White Book)
CD-R (Orange Book P II)
CD-RW (Orange Book P III)
CD Extra (Blue Book)
Photo CD (Multisession)

Appendix B. Help and service information

This section contains information on how to obtain online and telephone technical support.

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.

<i>Online technical support</i>	
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 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:

1. Option name
2. Option number
3. Proof of purchase
4. Computer manufacturer, model, serial number (if IBM), and manual
5. Exact wording of the error message (if any)
6. Description of the problem
7. 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 or to the enclosed technical support insert. Support phone numbers are also available by clicking **HelpCenter phone list** on the IBM support Web page at <http://www.ibm.com/pc/support>

If the number is not provided, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

<i>Support 24 hours a day, 7 days a week</i>	
Canada (Toronto only)	416-383-3344
Canada (all other)	1-800-565-3344
U.S.A./Puerto Rico	1-800-772-2227

Appendix C. Warranty statements

The warranty statements consist of two parts: Part 1 and Part 2. Part 1 varies by country. Part 2 is the same for both statements. Be sure to read both the Part 1 that applies to your country and Part 2.

- **United States, Puerto Rico and Canada (Z125-4753-05 11/97)**(Part 1 — General Terms on page 3-3)

- **Worldwide except Canada, Puerto Rico, Turkey and United States (Z125-5697-01 11/97)**(Part 1 — General Terms on page 3-7)
- **Worldwide Country-Unique Terms**(Part 2 — Country-Unique Terms on page 3-10)

IBM Statement of Limited Warranty for United States, Puerto Rico and Canada (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 may 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 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.

<p>Machine - IBM ThinkPad CD-RW Ultrabay 2000 Drive</p> <p>Warranty Period* - One year</p> <p><i>*Contact your place of purchase for warranty service information. Some IBM Machines are eligible for On-site warranty service depending on the country where service is performed.</i></p>

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. 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.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

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. The replacement may not be new, but will be in good working order.

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.

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

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 the Machine, contact your reseller or IBM. In the United States, call IBM at 1-800-772-2227. In Canada, call IBM at 1-800-565-3344. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, 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. IBM may repair the failing Machine or exchange it at its discretion.

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.

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. 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.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

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), 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 greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

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 (INCLUDING LOST PROFITS OR 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.

IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey and United States (Part 1- General Terms)

This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of 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 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.

Machine - IBM ThinkPad CD-RW Ultrabay 2000 Drive

Warranty Period* - One year

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

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. 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.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

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. The replacement may not be new, but will be in good working order.

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.

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

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 the Machine, contact your reseller or IBM. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, 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. IBM may repair the failing Machine or exchange it at its discretion.

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.

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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 fulfil 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.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

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), 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 greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

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 (INCLUDING LOST PROFITS OR 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.

Part 2 - Worldwide Country-Unique Terms

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 legislation and are only limited to the extent permitted by the applicable legislation.

Extent of Warranty: The following replaces the first and second sentences of this Section:

The warranty does not cover the repair or exchange of a Machine resulting

from misuse, accident, modification, unsuitable physical or operating environment, operation in other than the Specified Operating Environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible.

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, 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.

PEOPLE'S REPUBLIC OF CHINA: Governing Law: The following is added to this Statement:

The laws of the State of New York govern this Statement.

INDEA: 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 Warranty, IBM's liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

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.

EUROPE, MIDDLE EAST, AFRICA (EMEA)

The following terms apply to all EMEA countries.

The terms of this Statement of Warranty apply to Machines purchased from an IBM reseller. If you purchased this Machine from IBM, the terms and conditions of the applicable IBM agreement prevail over this warranty statement.

Warranty Service

If you purchased 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 purchased 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.

The applicable laws, country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided. However, the laws of Austria govern this Statement if the warranty service is provided in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Federal Republic of Yugoslavia, Georgia, Hungary, Kazakhstan, Kirghizia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, and Ukraine.

The following terms apply to the country specified:

EGYPT: Limitation of Liability: The following replaces item 2 in this Section: 2. 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.

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).

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 are 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.

Production Status: The following paragraph replaces this Section:
Each Machine is newly manufactured. It may incorporate in addition to new parts, re-used parts as well.

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

In item 2, replace "U.S. \$100,000" with "1.000.000 DM."

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

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 the greater of Irish Pounds 75,000 or 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: (item 1 unchanged) 2) as to any other actual damage arising in all situations involving non-performance 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 second 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.

TURKIYE: Production Status: The following replaces this Section:
IBM fulfils customer orders for IBM Machines as newly manufactured in accordance with IBM's production standards.

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 the greater of Pounds Sterling 150,000 or 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 will be limited to damages.

NORTH AMERICA

CANADA: Warranty Service: The following is added to this Section:
To obtain warranty service from IBM, call **1-800-565-3344**.

UNITED STATES OF AMERICA: Warranty Service: The following is added to this Section:
To obtain warranty service from IBM, call **1-800-772-2227**.

Appendix D. Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of the intellectual property rights of IBM may be used instead of the IBM product, program, or service. The evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the responsibility of the user.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the IBM Director of Licensing, IBM Corporation, North Castle Drive, Armonk NY 10504-1784, U.S.A.

Electronic emission notices

Federal Communications Commission (FCC) Statement IBM ThinkPad CD-RW Ultrabay 2000 Drive (08K9569)

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.

IBM is not responsible for any radio or television interference caused 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



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.

Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

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

Der Aussteller der Konformitätserklärung ist die IBM UK, Greenock.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse B.

European Union - emission directive

This product is in conformity with the protection requirements of EU Council Directive 89/366/ECC 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.

Union Européenne - Directive Conformité électromagnétique

Ce produit est conforme aux exigences de protection de la Directive 89/336/EEC du Conseil de l'UE sur le rapprochement des lois des États membres en matière de compatibilité électromagnétique.

IBM ne peut accepter aucune responsabilité pour le manquement aux exigences de protection résultant d'une modification non recommandée du produit, y compris l'installation de cartes autres que les cartes IBM.

Ce produit a été testé et il satisfait les conditions de l'équipement informatique de Classe B en vertu de CISPR22 / Standard européen EN 55022. Les conditions pour l'équipement de Classe B ont été définies en fonction d'un contexte résidentiel ordinaire afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

Unione Europea - Direttiva EMC (Conformità elettromagnetica)

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislación de los Estados Miembros sobre compatibilidad electromagnética se refiere.

IBM no puede aceptar responsabilidad alguna si este producto deja de satisfacer dichos requisitos de protección como resultado de una modificación no recomendada del producto, incluyendo el ajuste de tarjetas de opción que no sean IBM.

Este producto ha sido probado y satisface los límites para Equipos Informáticos Clase B de conformidad con el Estándar CISPR22 y el Estándar Europeo EN 55022. Los límites para los equipos de Clase B se han establecido para entornos residenciales típicos a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

Union Europea - Normativa EMC

Questo prodotto è conforme alle normative di protezione ai sensi della Direttiva del Consiglio dell'Unione Europea 89/336/CEE sull'armonizzazione legislativa degli stati membri in materia di compatibilità elettromagnetica.

IBM non accetta responsabilità alcuna per la mancata conformità alle normative di protezione dovuta a modifiche non consigliate al prodotto, compresa l'installazione di schede e componenti di marca diversa da IBM.

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le apparecchiature di informatica Classe B ai sensi del CISPR 22 / Norma Europea EN 55022. I limiti delle apparecchiature della Classe B sono stati stabiliti al fine di fornire ragionevole protezione da interferenze mediante dispositivi di comunicazione in concessione in ambienti residenziali tipici.

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