



# **ThinkPad Multi-Burner Ultrabay Slim Drive**

## **User's Guide**





# **ThinkPad Multi-Burner Ultrabay Slim Drive**

## **User's Guide**

**ATTENTION**

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 第 19 页的附录 C, 『 IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002 』 .

# 目录

<b>Safety information</b>	<b>v</b>
---------------------------	----------

<b>General safety guidelines</b>	<b>vii</b>
----------------------------------	------------

Service	vii
Power cords and power adapters	vii
Extension cords and related devices	viii
Plugs and outlets	viii
Batteries	viii
Heat and product ventilation	ix
CD and DVD drive safety	ix

<b>Registering your option</b>	<b>xi</b>
--------------------------------	-----------

<b>第 1 章 关于多功能刻录机驱动器</b>	<b>1</b>
--------------------------	----------

产品描述	1
软件描述	2
安装需求	4
安装驱动器	4
定位驱动器控件	4

<b>第 2 章 使用多功能刻录机驱动器</b>	<b>5</b>
--------------------------	----------

开始之前	5
处理和保养光盘	5
保养多功能刻录机驱动器	6
装入光盘	6
使用驱动器	7
使用单面和双面 DVD-RAM 介质	7
从盒中取出光盘	7
将光盘放回盒中	7
处理的预防措施	8

在驱动器中使用 CD 和 DVD	8
在垂直安装的驱动器中固定光盘	8
手动弹出光盘	8
使用 DVD 播放器软件	8
使用 DVD 功能	8
启用 DMA 设置	9
使用 Intervideo WinDVD Creator Plus	9
安装 WinDVD 和观看 DVD 电影	10
启动 WinDVD	11
使用 Drive Letter Access (DLA)	11
使用 RecordNow 软件	12
使用 CD-R 和 CD-RW 功能	13
使用 DVD-R 和 DVD-RW 功能	13
备份 CD 或 DVD	13
问题解决	14

<b>附录 A. 产品规格</b>	<b>15</b>
-------------------	-----------

<b>附录 B. Service and Support</b>	<b>17</b>
----------------------------------	-----------

Online technical support	17
Telephone technical support	17

<b>附录 C. IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002</b>	<b>19</b>
-------------------------------------------------------------------------	-----------

<b>Part 2 - Country-unique Terms</b>	22
--------------------------------------	----

<b>Part 3 - Warranty Information</b>	34
--------------------------------------	----

<b>附录 D. Notices</b>	<b>37</b>
----------------------	-----------

Federal Communications Commission (FCC) statement	38
Trademarks	41



---

## Safety information

Before installing this product, read the Safety Information.

مج، يجب قراءة دات السلامة

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

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

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

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

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

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

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

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

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

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

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

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

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

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si prečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。



---

## General safety guidelines

Always observe the following precautions to reduce the risk of injury and property damage.

---

### Service

Do not attempt to service a product yourself unless instructed to do so by the IBM Support Center. Use only an IBM authorized service provider who is approved to repair your particular product.

**Note:** Some parts can be upgraded or replaced by the customer. These parts are referred to as Customer Replaceable Units, or CRUs. IBM expressly identifies CRUs as such, and provides documentation with instructions when it is appropriate for customers to replace those parts. You must closely follow all instructions when performing such replacements. Always make sure that the power is turned off and that the product is unplugged from any power source before you attempt the replacement. If you have any questions or concerns, contact the IBM Support Center.

---

### Power cords and power adapters

Use only the power cords and power adapters supplied by the product manufacturer.

Never wrap a power cord around the power adapter or other object. Doing so can stress the cord in ways that can cause the cord to fray, crack or crimp. This can present a safety hazard.

Always route power cords so that they will not be walked on, tripped over, or pinched by objects.

Protect the cord and power adapters from liquids. For instance, do not leave your cord or power adapter near sinks, tubs, toilets, or on floors that are cleaned with liquid cleansers. Liquids can cause a short circuit, particularly if the cord or power adapter has been stressed by misuse. Liquids can also cause gradual corrosion of the power cord terminals and/or the connector terminals on the adapter which can eventually result in overheating.

Always connect power cords and signal cables in the correct order and ensure that all power cord connectors are securely and completely plugged into receptacles.

Do not use any power adapter that shows corrosion at the ac input pins and/or shows signs of overheating (such as deformed plastic) at the ac input or anywhere on the power adapter.

Do not use any power cords where the electrical contacts on either end show signs of corrosion or overheating or where the power cord appears to have been damaged in any way.

---

## Extension cords and related devices

Ensure that extension cords, surge protectors, uninterruptible power supplies, and power strips that you use are rated to handle the electrical requirements of the product. Never overload these devices. If power strips are used, the load should not exceed the power strip input rating. Consult an electrician for more information if you have questions about power loads, power requirements, and input ratings.

---

## Plugs and outlets

If a receptacle (power outlet) that you intend to use with your computer equipment appears to be damaged or corroded, do not use the outlet until it is replaced by a qualified electrician.

Do not bend or modify the plug. If the plug is damaged, contact the manufacturer to obtain a replacement.

Some products are equipped with a three-pronged plug. This plug fits only into a grounded electrical outlet. This is a safety feature. Do not defeat this safety feature by trying to insert it into a non-grounded outlet. If you cannot insert the plug into the outlet, contact an electrician for an approved outlet adapter or to replace the outlet with one that enables this safety feature. Never overload an electrical outlet. The overall system load should not exceed 80 percent of the branch circuit rating. Consult an electrician for more information if you have questions about power loads and branch circuit ratings.

Be sure that the power outlet you are using is properly wired, easily accessible, and located close to the equipment. Do not fully extend power cords in a way that will stress the cords.

Connect and disconnect the equipment from the electrical outlet carefully

---

## Batteries

All IBM personal computers contain a non-rechargeable coin cell battery to provide power to the system clock. In addition many mobile products such as Thinkpad notebook PCs utilize a rechargeable battery pack to provide system power when in portable mode. Batteries supplied by IBM for use with your product have been tested for compatibility and should only be replaced with IBM approved parts.

Never attempt to open or service any battery. Do not crush, puncture, or incinerate batteries or short circuit the metal contacts. Do not expose the battery to water or other liquids. Only recharge the battery pack strictly according to instructions included in the product documentation.

Battery abuse or mishandling can cause the battery to overheat, which can cause gasses or flame to “vent” from the battery pack or coin cell. If your battery is damaged, or if you notice any discharge from your battery or the buildup of foreign materials on the battery leads, stop using the battery and obtain a replacement from the battery manufacturer.

Batteries can degrade when they are left unused for long periods of time. For some rechargeable batteries (particularly Lithium Ion batteries), leaving a battery unused in a discharged state could increase the risk of a battery short circuit, which could shorten the life of the battery and can also pose a safety hazard. Do not let rechargeable Lithium-Ion batteries completely discharge or store these batteries in a discharged state.

---

## Heat and product ventilation

Computers generate heat when turned on and when batteries are charging. Notebook PCs can generate a significant amount of heat due to their compact size. Always follow these basic precautions:

- Do not leave the base of your computer in contact with your lap or any part of your body for an extended period when the computer is functioning or when the battery is charging. Your computer produces some heat during normal operation. Extended contact with the body could cause discomfort or, potentially, a skin burn.
- Do not operate your computer or charge the battery near flammable materials or in explosive environments.
- Ventilation slots, fans and/or heat sinks are provided with the product for safety, comfort, and reliable operation. These features might inadvertently become blocked by placing the product on a bed, sofa, carpet, or other flexible surface. Never block, cover or disable these features.

---

## CD and DVD drive safety

CD and DVD drives spin discs at a high speed. If a CD or DVD is cracked or otherwise physically damaged, it is possible for the disc to break apart or even shatter when the CD drive is in use. To protect against possible injury due to this situation, and to reduce the risk of damage to your machine, do the following:

- Always store CD/DVD discs in their original packaging
- Always store CD/DVD discs out of direct sunlight and away from direct heat sources
- Remove CD/DVD discs from the computer when not in use
- Do not bend or flex CD/DVD discs, or force them into the computer or their packaging
- Check CD/DVD discs for cracks before each use. Do not use cracked or damaged discs



---

## Registering your option

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

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

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



---

## 第 1 章 关于多功能刻录机驱动器

本手册提供了有关注册、安装和使用 IBM® ThinkPad® 多功能刻录机 Ultrabay™ Slim 驱动器的信息，并以下列语言在软件 and 用户指南超级 CD 上提供：

- 巴西葡萄牙语
- 捷克斯洛伐克语
- 英语
- 法语
- 德语
- 意大利语
- 日语
- 简体中文
- 斯洛伐克语
- 西班牙语
- 繁体中文
- 土耳其语

本指南的附录包含保证信息和法律声明。

---

### 产品描述

该多功能刻录机与 DVD 多功能刻录机规范兼容，并且可以刻录和读取 DVD-RAM、DVD-RW 和 DVD-R（一般使用 650 nm）介质。该驱动器还可以刻录 CD-R、CD-RW 和高速 CD-RW 介质，并使用缓冲区欠载运行防护技术来进行可靠的 CD 刻录。该多功能刻录机可以读取许多其它格式的介质，包括 DVD+R、DVD+RW、DVD 视频、VCD、音频 CD 和多段、扩展体系结构（XA）CD 以及 Kodak Photo CD。（可能不兼容某些 DVD+R 和 DVD+RW 介质品牌。）此多功能刻录机设计为在 Ultrabay Slim 驱动器托架中安装。

介质类型	写速度
DVD-R	2X
DVD-RW	2X
DVD-RAM	最大 2X
DVD+R	只读
DVD+RW	只读
CD-R	最大 16X
CD-RW	4X
高速 CD-RW	最大 8X

除了本软件和用户指南超级 CD 以外，选件包包含以下物品：

- 多功能刻录机驱动器
- 便携盒
- 《快速参考指南》

- 《激光安全指南》

注：您的配件可能还包含一张软件更新软盘。

如有任何物品缺少或损坏，请与购买处联系。请务必保留购货凭证。可能需要它来获取保修服务。有关技术支持信息，请参阅第 19 页的附录 C，『IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002』。

## 软件描述

您的 IBM 多功能刻录机软件 and 用户指南超级 CD 包含以下软件：

- **Intervideo WinDVD Creator Plus**

计算机部件	最低	最佳
处理器	Intel Celeron 800Mhz	Intel Pentium® III 600Mhz  Direct DVD 支持需要 P4 1.6GHz 或更高版本以适应实时需要
RAM	64Mb	128Mb
操作系统	Microsoft® Windows® 2000 Professional 或 Windows XP	Windows 2000 或 Windows XP
声音	支持 48KHz 回放的兼容 Windows 的声卡	支持 48KHz 回放的兼容 Windows 的声卡（推荐使用 PCI）
视频	兼容 Windows 的 AGP 或 PCI 图形卡	兼容 Windows 的 AGP 或 PCI 图形卡（推荐支持覆盖层）
硬盘驱动器	<ul style="list-style-type: none"> <li>• 70 MB 用于安装</li> <li>• 620 MB 用于每小时 VCD 品质的 MPEG-1 视频</li> <li>• 2 GB 用于每小时 DVD 品质的 MPEG-2 视频</li> </ul>	<ul style="list-style-type: none"> <li>• 70 MB 用于安装</li> <li>• 620 MB 用于每小时 VCD 品质的 MPEG-1 视频</li> <li>• 2 GB 用于每小时 DVD 品质的 MPEG-2 视频</li> </ul>
其它		刻录 VCD 和 DVD 需要 CD 或 DVD 刻录机。需要相应的硬件从外部的信息源导入视频，如 DV 照相机和可携式摄像机

注：预装了 DivX codec 的情况下，WinDVD Creator Plus 可以导入和导出 DivX 内容。DivX 是 DivXNetworks, Inc. 的商标。

此软件使您能够将视频文件刻录到 DVD-RW 或 DVD-R 介质中，这些介质可以在大多数独立的 DVD 播放器中播放。您还可以在刻录之前使用此软件来编辑和修改自己的视频资料。

如果在您的计算机中装有模拟或 IEEE 1394 捕获设备，则可以使用此软件来刻录照相机中的视频。

- **IBM Drive Letter Access (DLA)**



此软件使您能够就像写入软盘一样，使用盘符来直接写入 CD-RW、CD-R 和 DVD-RAM、DVD-RW 以及 DVD-R 介质。所有光盘的格式类型都可由 DLA 进行格式化。通过 DLA，您可以拖放文件、创建新目录或从任何应用程序将文件直接保存到多功能刻录机。

- **UDF Reader**

此软件使您能够安装通过 DVD 驱动器读取计算机上的 DVD-RAM、DVD-RW 和 CD-RW 介质的软件。它还允许您在没有安装 DLA 的系统上读取 DLA 创建的光盘。

- **IBM RecordNow**

IBM RecordNow 是光盘控制软件，它允许您用计算机上的文件或其它光盘介质（例如 CD 或 DVD）来创建自己的音乐或数据光盘。使用 IBM RecordNow 创建的音乐光盘可以在任何 CD 播放器（无论是在家里、在车上，还是通过计算机的 CD-ROM）上播放。IBM RecordNow 使您可以方便地创建能在任何正常的 CD 或 DVD 光盘阅读器中读取的数据光盘。

**注：**某些 DVD 播放器不能读取 CD-R 介质。请参考随驱动器提供的文档以获取所支持介质的信息。

IBM RecordNow 指导您使用简单的向导和直观的用户界面逐步完成刻录过程。

使用 IBM RecordNow 可以创建：

- 现有光盘的精确副本 - Exact Copy（制作精确副本）功能制作了主光盘的副本，将原始光盘的光盘布局传送到您的 CD-R、CD-RW 或 DVD 介质。
- 从硬盘驱动器归档数据的光盘 - Make a Data Disc（制作数据光盘）功能用于存储电子数据，如驻留在计算机硬盘驱动器中的文件和应用程序。与音乐光盘不同，数据光盘用于存储仅能用计算机读取的文件，而不能在家里或汽车立体声系统中播放 - 即使光盘中有音频文件。
- 从 WAV、MP3 或 WMA 文件或者是从现有的音乐光盘编制的音乐 - Make a Music Disc（制作音乐光盘）功能从硬盘驱动器上的文件或现有的音乐光盘创建定制音乐光盘。CD 音乐数据库功能可以自动地标记文件的磁道信息以帮助您对收集的信息分类。

**注：**有关如何使用 IBM RecordNow 的 Make an Exact copy（制作精确副本）、Create a Data Disc（创建数据光盘）或 Create an Audio Disc（创建音频光盘）的更多信息，请参考 IBM RecordNow 联机帮助。

要启动 RecordNow，请完成以下过程：

1. 单击**开始**。
2. 单击**程序**。
3. 单击 **IBM RecordNow**。
4. 单击 **RecordNow** 以打开主刻录软件窗口。

- **IBM Simple Backup**

此软件使您能够在 DVD-RAM、DVD-RW、DVD-R、CD-R 或 CD-RW 介质上创建系统文件的完整备份或增量备份，并允许您在系统崩溃时复原计算机。

- **Intervideo WinDVD**

此软件使您能够在计算机上回放 DVD 视频或从硬盘驱动器播放视频文件。

**注：**某些图形适配器（如 FIREGL、Intergraph 和 3dLabs）不支持 DVD 视频回放。

---

## 安装需求

要安装多功能刻录机驱动器，您的 ThinkPad 计算机必须包含下列所需的条件：

- 具有 Ultrabay Slim 驱动器托架的 ThinkPad 系统
- ThinkPad X4 Ultrabase 扩展坞或扩展坞 II
- Windows XP 或 Microsoft Windows 2000 操作系统

注：

1. IBM 为安装了 Microsoft Windows 95、Windows 98 或 Microsoft Windows Millennium Edition (Me) 桌面操作系统的计算机提供了有限的支持。
2. ThinkPad A21e 计算机不支持 Microsoft Windows NT<sup>®</sup> 工作站下的 DVD 回放。

---

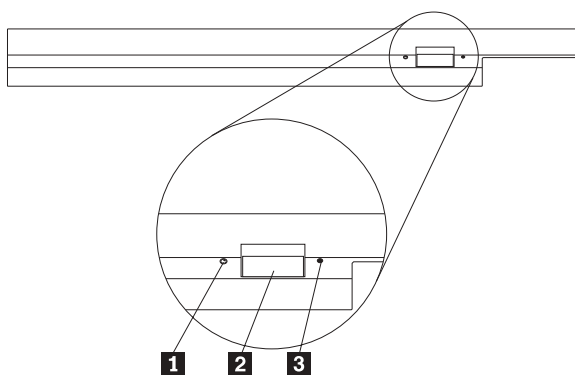
## 安装驱动器

ThinkPad 计算机包括帮助系统 Access ThinkPad，它提供特定于计算机的驱动器安装说明。要在 Ultrabay Slim 驱动器托架内正确安装多功能刻录机驱动器，请使用 Access ThinkPad 帮助系统中给出的说明。

---

## 定位驱动器控件

下图显示了驱动器正面控件的位置。



- 1** 电源灯：当正在使用驱动器时灯会发亮。
- 2** 弹出按钮：按该按钮弹出 DVD 或 CD。
- 3** 手工弹出孔：当弹出按钮不起作用时，使用该紧急释放孔来弹出 DVD 或 CD。有关手动弹出 DVD 或 CD 的更多信息，请参阅第 8 页的『手动弹出光盘』。

---

## 第 2 章 使用多功能刻录机驱动器

本部分提供了有关如何处理、装入及保养 DVD 和 CD 以及如何保养多功能刻录机驱动器的信息。

---

### 开始之前

要获得最佳效果，请在使用驱动器前仔细阅读下列准则：

- 在格式化或写光盘的同时请勿移动 ThinkPad 计算机，因为这样可能导致数据错误。并且，在格式化或写光盘的同时尽量请勿进行输入，因为这样也可能导致数据错误。
- 在写光盘时，保持 ThinkPad 计算机位于平坦的表面上。
- 在使用驱动器时，确保 ThinkPad 计算机已插入交流电源插座。如果在写入光盘的时候电池电量耗尽，则光盘可能会损坏。
- 关闭屏幕保护程序。使用屏幕保护程序可能会中断格式化和写过程。
- 当写光盘时，请勿将 ThinkPad 计算机置于休眠或暂挂方式。

**注：**驱动器的读写结果取决于所使用的 DVD 或 CD 介质的质量和特性。

---

### 处理和保养光盘

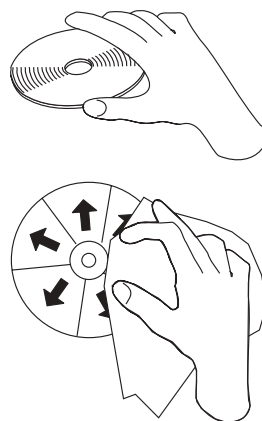
小心谨慎地处理和清洁光盘，尤其是诸如 CD-R 和 CD-RW 光盘之类的可写介质类型，从而使其保持可读。通过使用以下预防措施可以延长光盘寿命：

- 始终将光盘存放在其原始包装中。
- 始终将光盘存放在没有阳光直射的地方。
- 始终使光盘存放在远离直接热源的地方。
- 不使用光盘时将其从计算机取出。
- 在使用每张光盘“之前”检查光盘是否有裂纹。

**要点：**请勿使用有裂纹的光盘。

- 请勿强制将光盘放入计算机或包装中。
- 请勿弯曲或扭曲光盘。
- 请勿使用工业用清洗剂来清洁光盘。
- 请勿在光盘表面书写。
- 请握住光盘的边缘或中心孔。
- 请勿触摸光盘表面。
- 要除去灰尘或指纹，请用无绒软布从中心向边缘擦拭光盘。

**注意：**以圆周运动擦拭光盘可能导致数据丢失。



---

## 保养多功能刻录机驱动器

要在操作过程中保护您的驱动器，请按照以下预防措施进行操作：

- 在移动驱动器之前从驱动器中取出光盘。
- 请勿将异物插入驱动器中。
- 请勿将物品堆叠在驱动器上。
- 请勿卸下驱动器外盖或试图维修驱动器。
- 请勿在以下任一环境下运行驱动器：
  - 高温、高湿度或直接日照
  - 过度振动、意外撞击或倾斜表面
  - 过多灰尘

---

## 装入光盘



1. 按下弹出按钮。托盘从驱动器滑出。
2. 将光盘放入托盘中，标签朝上。
3. 轻轻推送托盘直到其锁住以关闭托盘。

**注意：** 请勿强行打开托盘或插入异物来打开托盘。如果在按弹出按钮时托盘不打开，请参阅第 8 页的『手动弹出光盘』以获取更多信息。

## 使用驱动器

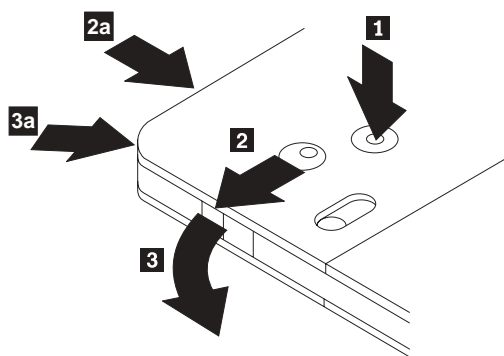
本部分包含了有关使用多功能刻录机的信息。

### 使用单面和双面 DVD-RAM 介质

DVD-RAM 介质有单面和双面两种类型可供使用。

2.6 GB 和 4.7 GB 的类型是单面的。9.4 GB 的类型是双面的。要在介质的两面都存取数据，您必须从驱动器中取出该介质、将其翻过来、再重新插入驱动器中。

### 从盒中取出光盘



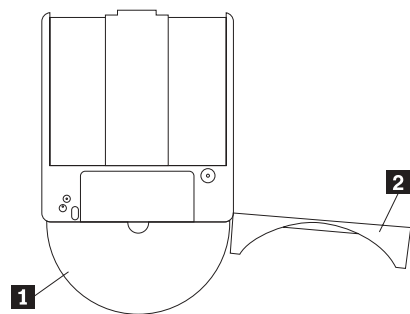
DVD-RAM 介质有裸光盘式或盒式两种形式可供使用。要在多功能刻录机中使用盒式介质，您必须首先将光盘从盒中取出。

使用圆珠笔的笔尖推动并折断锁销片 **1**。要取出光盘，使用圆珠笔在盒盖锁 **2** 上向下推并拉出盒盖 **3**。盒盖打开时，就可以取出光盘。

**注：** 盒盖锁和盒盖片在某些光盘盒的侧面，如上图 **2a** 和 **3a** 所示。

**警告：** 当操作裸露的介质时，请勿接触光盘的刻录区域。

### 将光盘放回盒中



要将光盘放回盒中，请将光盘的标签面 **1** 与 DVD-RAM 盒的标签面对齐。插入光盘并合上盒盖 **2**。当盖子合上时，会发出咔嚓声。

## 处理的预防措施

当处理取出的光盘时要小心。碎屑、灰尘颗粒、指纹、涂抹或刮花可能降低介质刻录和回放的性能。要清除灰尘或其它碎屑，请使用 CD 清洁工具包。使用柔软的干布来清洁光盘。请勿使用溶剂来清洁光盘表面。当给光盘标号时，只能使用软性的标签笔写在印刷的标签面上或光盘盒上。避免直接阳光照射、高温和潮湿。请勿在光盘的任何一面贴标签。

---

## 在驱动器中使用 CD 和 DVD

完成以下过程来读取数据光盘：

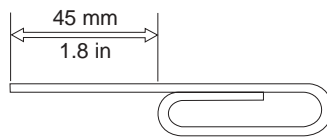
1. 开启计算机。
2. 按下驱动器正面的打开 / 关闭按钮。
3. 将光盘或光盘盒插入托盘中，标签朝上。
4. 通过按下打开 / 关闭按钮或轻推装入托盘来关闭托盘。  
**警告：** 请勿强行打开装入托盘或插入异物来打开装入托盘。
5. 等待驱动器的忙指示灯熄灭；然后双击**我的电脑**。
6. 双击 CD-ROM 或 DVD-RAM/DVD-R/DVD-RW 图标。

## 在垂直安装的驱动器中固定光盘

该驱动器有四条挡板铸造在装入托盘中以用于垂直安装操作。要插入光盘，请在关闭托盘前将其放置在下面两个挡板中。要取出光盘，请打开托盘并从下面两个挡板处拿起光盘。

## 手动弹出光盘

如果按下弹出按钮而托盘不滑出，请关闭计算机并将大回形针拉直以形成一个工具，如图所示。伸直端必须伸出至少 45 mm (1.8 in.)。将伸出端插入驱动器正面的手动弹出孔中。推送回形针直到托盘打开。轻轻拉出托盘直到可以取出光盘。



---

## 使用 DVD 播放器软件

本部分描述了如何使用和定制 DVD 播放器软件。您可以在**用户指南和软件超级 CD** 的自述文件中查找有关 DVD 播放器软件的最新信息。

---

## 使用 DVD 功能

要使用 DVD 功能，需要在将多功能刻录机驱动器安装到 Ultrabay Slim 驱动器托架后如下设置计算机：

1. 启用 DMA 设置（仅对于 Windows XP 和 Windows 2000 用户）。
2. 安装 WinDVD（DVD 电影播放器程序）。

注：对于 Windows 95，DVD 电影播放器受 Windows 95 OSR2.0 或后续版本支持。通过执行以下操作，可以检查所使用的 Windows 95 的版本：

1. 单击**开始**，将光标移到**设置**，然后单击**控制面板**。
2. 双击**系统**。

查看“系统”下的编号。

- 4.00.950B 意味着您的版本是 Windows 95 OSR2.0 或 OSR2.1。
- 4.00.950C 意味着您的版本是 Windows 95 OSR2.5。

## 启用 DMA 设置

本部分说明了如何对 Windows 2000 和 Windows XP 启用 DMA 设置。

### 对于 Windows 2000

1. 单击**开始**，将光标移到**设置**，并单击**控制面板**。
2. 双击**系统**。
3. 单击**硬件选项卡**。
4. 单击**设备管理器按钮**。
5. 单击 **IDE ATA/ATAPI 控制器**以下拉出子菜单。
6. 双击 **Secondary IDE**。（如果您使用的是 ThinkPad A21e 计算机，则请双击 **Primary IDE**。）
7. 选择 **DMA（若可用）**作为“传输方式”。
8. 单击**确定**。
9. 单击**关闭**关闭“系统属性”窗口。显示一条消息，通知您系统设置已更改。
10. 单击**确定**重新启动系统。

### 对于 Windows XP

1. 单击**开始**，移动光标到**我的电脑**，然后单击它。
2. 单击“系统任务”下的**查看系统信息**。
3. 单击**硬件选项卡**。
4. 单击**设备管理器按钮**。
5. 单击 **IDE ATA/ATAPI 控制器**下拉出子菜单。
6. 双击 **Secondary IDE**。（如果您使用的是 ThinkPad A21e 计算机，则请双击 **Primary IDE**。）
7. 单击**高级设置选项卡**。
8. 选择 **DMA（若可用）**作为“传输方式”。
9. 单击**确定**。
10. 单击**关闭**关闭“系统属性”窗口。

---

## 使用 Intervideo WinDVD Creator Plus

通过 Intervideo WinDVD Creator Plus，可以捕获、编辑和刻录视频和音频文件。还可以使用自己的视频和音频文件通过 Intervideo WinDVD Creator Plus 来创建和刻录 DVD 视频。有关 Intervideo 的 WinDVD Creator Plus 功能的更多详细信息，请转至**用户指南和软件超级 CD**中的“WinDVD Creator Plus 用户指南”。

WinDVD Creator Plus 主窗口中的主功能区域是“Capture”、“Edit”、“Author”和“Make Movie”。使用这些功能，可以导入和编辑自己的视频和音频文件，然后将它们保存为任何受支持的格式。受支持的格式包含 MPEG-1、MPEG-2、ASF、WMV 和 AVI。准备好视频和音频文件后，通过“Capture”和“Edit”步骤，就可以在“Author”功能中添加定制菜单。您可以导入自己的静态图像或选择样本图像中的一个作为菜单背景。当影片已准备好时，执行“Make Movie”，在此可以选择创建电影过程中使用的输出格式和视频标准。将电影刻录到光盘或将其保存在硬盘上以后再刻录。如果使用 WinDVD Creator Plus 在硬盘上创建 DVD 映像，可以从“Project”菜单选择“Load Image to Burn”。

WinDVD Creator Plus 还提供使用“Disk Manager”将视频直接刻录到 DVD 可刻录介质的能力。完成此操作不需要使用任何额外的硬盘空间。通过 Disk Manager，可以捕获新的视频或使用已有的视频文件，然后通过创建定制菜单来完成电影。电影可以用 +VR 或 -VR 视频格式创建。通过 Disk Manager，可以在任何时候编辑电影（添加或删除视频片段或更改定制菜单）。

## 安装 WinDVD 和观看 DVD 电影

要安装 WinDVD，请转至软件 and 用户指南超级 CD 上的“软件”部分。

安装多功能刻录机驱动器和 WinDVD 软件后，就可以观看 DVD 电影了。但是首先需要对 DVD 内容设置 DVD 区域代码。

### DVD 区域代码

DVD 区域代码有助于保护 DVD 的内容。全球分为六个区域，特定的内容只能在相应的区域观看。例如，区域 1 的内容只能在美国和加拿大观看。WinDVD 也是特定于区域的。

通过查看内容包装背面的区域代码符号可以验证内容的区域代码。

区域代码	区域
1	美国、加拿大
2	欧洲、中东、南非、日本
3	东南亚、台湾、韩国
4	拉丁美洲、澳大利亚、新西兰
5	前苏联、北非、印度
6	中华人民共和国

通过将 DVD 插入到驱动器来启动 WinDVD。区域代码会自动设置，以便您可以观看电影。这是初始设置。

在设置了区域代码后，如果插入具有不同区域代码的 DVD，则提示您更改区域代码。可以更改初始设置中的区域代码至多四次。

在更改初始设置中的区域代码四次后，它便固定下来，不能再进行更改。此后，您只能播放该区域的 DVD 内容。

要显示区域代码状态，请单击 WinDVD 用户界面上的 **WinDVD** 属性按钮。常规选项卡包含该信息。



要更改区域代码，请执行以下操作：

1. 开启计算机并启动操作系统。
2. 单击**开始**。
3. 选择**程序**。
4. 单击 **Intervideo WinDVD**。
5. 单击**属性**图标以打开**属性**窗口。
6. 单击**常规属性**选项卡。
7. 插入一张新区域的单区域 DVD。
8. 选择您国家或地区的正确的区域代码。
9. 单击**确定**。

## 启动 WinDVD

要启动 WinDVD，请完成以下过程：

1. 单击**开始**。
2. 单击**程序**。
3. 单击 **InterVideo WinDVD**。
4. 单击 **InterVideo WinDVD** 以打开 DVD 电影播放器窗口。

有关如何播放 DVD 电影播放器的更多信息，请参考**软件和用户指南超级 CD** 上的 WinDVD 帮助信息。如果要在电视机上观看 DVD 电影，请参考计算机随附的联机信息。

**注：**

1. 您的计算机已配置为提供可用系统资源所能获得的最高质量的音频和视频回放。可以通过更改“控制面板”中的视频分辨率设置来改变缺省设置。某些系统没有足够的资源来对所有分辨率设置提供最高质量的音频和视频回放。如果遇到较差的回放性能，请将分辨率调整为较低设置。
2. 音频或视频流由软件解码。音频和视频子系统必须功能齐全且已启用。

---

## 使用 Drive Letter Access ( DLA )

提供的 **Drive Letter Access ( DLA )** 使您可以将数据写入 DVD-RAM、DVD-RW、DVD-R、DVD+RW、DVD+R、CD-R 和 CD-RW 介质。DVD-RAM、DVD-RW、DVD+RW 和 CD-RW 介质可以写入多次，而 DVD-R、DVD+R 和 CD-R 介质只能进行一次格式化和写入。

要格式化并且写入 DVD-RAM、DVD-RW、DVD-R、DVD+RW、DVD+R、CD-R 或 CD-RW 介质，请：

1. 将光盘插入驱动器。
2. 双击**我的电脑**。右键单击多功能刻录机的盘符。
3. 单击**格式化**。格式化一张 DVD 可能最多花费 90 分钟。
4. 格式化完成后，您可以拖放文件到多功能刻录机驱动器图标，或可以在“Windows 资源管理器”中移动文件。

使 CD-R 和 DVD-R 介质在其它计算机中兼容：

1. 双击**我的电脑**。右键单击多功能刻录机的盘符。
2. 单击**使兼容**。

要在其它计算机中使用 UDF 格式的 DVD-RAM、DVD-RW 或 CD-RW 介质，则可以使用**用户指南和软件超级 CD**中包含的 UDF Reader。要使用 UDF Reader，请按照此过程进行操作：

1. 将**用户指南和软件超级 CD**插入到您希望在其中使用 UDF 格式的光盘的计算机的 CD 或 DVD 驱动器。
2. 单击**开始**。
3. 单击**运行**。
4. 输入 `e:\UDF\language`，其中 *e* 是 CD 或 DVD 驱动器的盘符，而 *language* 是您的语言。
5. 单击**确定**。
6. 双击 **SETUP.EXE** 并按照屏幕上的指示信息操作。

注：只有那些没有再安装一个 DLA 程序的系统需要 UDF Reader。

注：无法追加 DVD+R 介质。

---

## 使用 RecordNow 软件

RecordNow 允许您刻录音频 CD、数据 CD 并复制现有的 CD。有关使用 RecordNow 的详细信息包含在 RecordNow 帮助中。可以通过按 RecordNow 菜单中的 **F1** 来访问 RecordNow 帮助。

要启动 Windows Me 或 Windows 2000 中的 RecordNow，请选择**开始→程序→IBM RecordNow**。

要启动 Windows XP 中的 RecordNow，请选择**开始→所有程序→RecordNow**。

一旦启动了 RecordNow，就请选择以下三个过程之一。

- **Make an exact copy**: 请选择此选项来备份您自己的 CD 或制作先前创建的 CD 的副本。选择了此选项后，RecordNow 将提示您插入要被复制的光盘，然后将提示您何时插入一张空白光盘。
- **Make a music disc**: 选择此选项来创建音频 CD。第二个屏幕将询问您是否想从硬盘上的 MP3 和 Wave 文件或从其它音频 CD 制作一张音频 CD。也可以选择制作用于 MP3 播放器的光盘，就是可以在独立的 MP3 播放器中播放的特别格式的数据光盘。
- **Make a data disc**: 选择该选项来创建包含硬盘数据文件的光盘。RecordNow 会询问您是否要为 DLA 格式化光盘或制作与其它人共享的数据光盘。RecordNow 将提示您插入空白光盘。然后会显示一个屏幕，该屏幕使您能够拖放文件或浏览以查找硬盘上的文件。
- 一旦启动 RecordNow，您同样可以执行特殊的操作：
  - 单击 **Favorites** 按钮将允许您装入以前保存的音频、数据、MP3 或 CD 映像来刻录新的副本。
  - 将 ISO 或 GI CD 映像放入数据 CD 的文件框中将会把该映像直接刻录到 CD 上。

- 要通过 RecordNow 制作 CD 的 ISO 映像，请选择 **Copy a CD** 并且将刻录文件的目标刻录机设置为硬盘。

**注：**要限制 RecordNow 中的刻录速度，请选择 **Options**，并且在 **Advanced** 选项卡窗口中，从标题名为“Limit the Maximum recorder speed”的下拉框中选取速度。

---

## 使用 CD-R 和 CD-RW 功能

多功能刻录机驱动器对 CD-R 和 CD-RW 光盘都可以写入。CD-R 光盘不能擦除，但可用于标准的 CD-ROM 驱动器和 CD 播放器。

可以使用 CD-R 光盘来刻录音轨、存储数据、归档文件以及从另一张 CD 复制文件。

CD-RW 光盘可以擦除和重写，但只能用于较新的 MR 以及兼容 CD-RW 的 CD-ROM 和 DVD-ROM 驱动器。可以使用 CD-RW 光盘来备份、存储和更新文件，或从另一张 CD 复制文件。

**注：**

1. CD-R 光盘可以在音频 CD 播放器上播放。CD-RW 光盘在大多数音频 CD 播放器上不可播放。
2. 本驱动器包含的软件不支持 DOS、Windows 3.x 或 IBM OS/2® 操作系统中的驱动器 CD 刻录功能。

有关使用该软件的更多信息，请参考第 11 页的『使用 Drive Letter Access (DLA)』和第 12 页的『使用 RecordNow 软件』。

---

## 使用 DVD-R 和 DVD-RW 功能

多功能刻录机驱动器对 DVD-R 和 DVD-RW 光盘都可以写入。DVD-R 光盘不能擦除，但可用于标准 DVD-ROM 驱动器和 DVD 播放器。

可以使用 DVD-R 光盘来刻录音频磁道、存储数据、归档文件以及从另一张 DVD 复制文件。

DVD-RW 光盘可以擦除和重写，但只能用于较新的 MR 和兼容 DVD-RW 的 DVD-ROM 驱动器。可以使用 DVD-RW 光盘来备份、存储和更新文件或从另一张 DVD 复制文件。

有关使用该软件的更多信息，请参考软件和用户指南超级 CD 上的 IBM RecordNow 和 IBM DLA 帮助信息。

---

## 备份 CD 或 DVD

要复制商用 CD 或 DVD，您必须拥有版权或获得版权所有者的许可。如果不拥有版权，或未获得版权所有者的许可，则可能会侵犯版权法并可能要支付赔偿金或其它赔偿费。有关版权法的更多信息，请向您的法律顾问咨询。

---

## 问题解决

计算机问题可能由硬件、软件或用户错误造成。本部分中的信息可能有助于您解决问题或搜集可以传递给服务技术人员的有用信息。您可能还需要参考计算机、操作系统或声卡的出版物。

请检查以下列表，以获取可能适用于您所遇到情况的任何问题描述。

### 无法创建多段光盘。

确保光盘上有足够的剩余空间用于另一段。除了要刻录的数据之外，写一段还需要引入和引出空间（大约 15 MB）。

### 无法成功写 CD-R、CD-RW、DVD-R、DVD-RW 或 DVD-RAM 光盘。

请采取以下操作：

1. 验证该过程未由屏幕保护程序、反病毒程序、因特网或电子邮件程序或其它软件中断。请禁用可能会中断写操作的功能。
2. 验证硬盘是否已进行了碎片整理。
3. 如果在写操作期间，较旧的硬盘驱动器要进行热重新校准，请咨询硬盘驱动器制造商或供应商。
4. 如果 CD 已坏或刮伤，请更换 CD。
5. 在 CD-ROM 和 CD-RW 驱动器上禁用“Windows 自动插入通告”功能。

### 无法弹出 CD 或 DVD 光盘。

在确保驱动器不在写光盘过程中后，请执行以下操作：

1. 用软件弹出 CD。
2. 使用弹出按钮。
3. 关闭计算机。等待 45 秒；然后开启计算机，并再次尝试使用弹出按钮。
4. 如果其它方法不起作用，请使用手动弹出孔（可使用第 8 页的『手动弹出光盘』中给出的说明）。

### 在成功写入 CD 或 DVD 光盘后无法从 CD 或 DVD 光盘读取。

请采取以下操作：

1. 如果在另一个 CD 或 DVD 播放器中可以读取 CD 或 DVD 光盘，或者可以看到先前的段，则卷上的目录信息可能损坏，从而使其不可读。要获得故障诊断的方法，请检查软件随附的文档。
2. 可能这是损坏的 CD-R、CD-RW、DVD-R、DVD-RW 或 DVD-RAM 光盘。尝试使用新的光盘或其它品牌的 CD 或 DVD 光盘。
3. 如果在写入光盘的驱动器中（而不是另一 MR 驱动器中）可以从 CD-RW、DVD-RW 或 DVD-RAM 光盘读取，请确保计算机中已安装了 UDF Reader 程序。
4. 避免以较慢的 1 倍速执行写操作，除非计算机要求这样。

---

## 附录 A. 产品规格

本附录包含以下信息:

- 物理规格
- 电源需求
- 环境需求
- 读速度
- 写速度

### 物理规格

该驱动器的物理规格<sup>1</sup>已列出在下表中。

物理规格	
高度	9.5 mm (0.4 in.)
宽度	128 mm (5 in.)
长度	129 mm (5.09 in.)
重量	210 g (0.42 lb)

### 电源需求

下表按驱动器的电压级别列出了各电源规格。这些电源规格在驱动器的电源接口处测得，并且都是额定值。

电源规格	电压	平均值	最大值
电压	DC 5V	1100 mA	1800 mA

---

1. 产品描述数据代表 IBM 的设计目标并出于比较的目的而提供；实际结果可能依据各种因素而有所变化。本产品数据不构成保证。数据如有更改，恕不另行通知。

## 环境需求

规格	运行时	非运行时
温度 (非冷凝)	+5° C 至 +50° C (+41° F 至 +122° F)	-20° C 至 +60° C (-4° F 至 +140° F)
相对湿度 (非冷凝)	10% 到 80%	5% 到 90%

## 读速度

介质	读速度
DVD-ROM (单层)	最大 8X
DVD-ROM (双层)	最大 6X
DVD-R (4.7 GB)	最大 4X
DVD-RW (4.7 GB)	最大 4X
DVD-RAM (4.7/9.4 GB)	最大 2X
DVD-RAM (2.6 GB)	1X
CD-ROM	最大 24X
CD-R	最大 24X
CD-RW	最大 12X
CD-DA (DAE)	最大 20X

## 写速度

介质	写速度
DVD-R (一般使用, 650 nm)	2X
DVD-RW (V1.1)	2X
DVD-RAM (V2.1, 4.7/9.4 GB)	最大 2X
CD-R	最大 16X
CD-RW	4X
高速 CD-RW	最大 8X

---

## 附录 B. Service and Support

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

---

### Online technical support

Online technical support is available during the life of your product through the Personal Computing Support Web site at [www-3.ibm.com/pc/support/site.wss/](http://www-3.ibm.com/pc/support/site.wss/).

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

---

### Telephone technical support

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

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

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

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

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

Phone numbers are subject to change without notice. For the latest phone number list, go to [www-3.ibm.com/pc/support/site.wss/](http://www-3.ibm.com/pc/support/site.wss/) and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Argentina	0800-666-0011	Malaysia	03-7727-7800
Australia	1300-130-426	Mexico	001-866-434-2080
Austria	01-24592-5901	Netherlands	020-514-5770
Belgium	Dutch 02-210-9820 French 02-210-9800	New Zealand	0800-446-149
Bolivia	0800-0189	Norway	66 81 11 00
Brazil	55-11-3889-8986	Peru	0-800-50-866
Canada	1-800-565-3344 Toronto 416-383-3344	Philippines	632-995-2225
Chile	800-224-488	Portugal	21-791 51 47
China (PRC)	800-810-1818	Russia	095-940-2000
China (Hong Kong S.A.R.)	852-2825-7799	Singapore	1800-840-9911
Columbia	980-912-3021	Spain	91-662 49 16
Denmark	45 20 82 00	Sweden	08-477 4420
Ecuador	1-800-426911 (option #4)	Switzerland	058-333-09-00
Finland	09-459 69 60	Taiwan	886-2-2725-9799
France	02 38 55 74 50	Thailand	66-2-273-4000
Germany	07032-1549 201	Turkey	00-800-446-32-041
Indonesia	021-523-8535	United Kingdom	0-1475-555 055
Ireland	01-815-9202	United States	1-800-426-7378
Italy	02-7031-6101	Uruguay	000-411-005-6649
Japan	Consumer customers 0120-887-870  Business customers 0120-887-874	Venezuela	0-800-100-2011
Luxembourg	298-977 5063	Vietnam	848-8295-160



---

## 附录 C. IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002

### Part 1 - General Terms

*This Statement of Limited Warranty includes Part 1 - General Terms, Part 2 - Country-unique Terms, and Part 3 - Warranty Information. The terms of Part 2 replace or modify those of Part 1. The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you purchase for your use, and not for resale. 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. **Nothing in this Statement of Limited Warranty affects any statutory rights of consumers that cannot be waived or limited by contract.***

### What this Warranty Covers

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications ("Specifications") which are available on request. The warranty period for the Machine starts on the original Date of Installation and is specified in Part 3 - Warranty Information. The date on your invoice or sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise. 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. Unless IBM specifies otherwise, these warranties apply only in the country or region in which you purchased the Machine.

**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. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

### What this Warranty Does not Cover

This warranty does not cover the following:

- any software programs, whether pre-loaded or shipped with the Machine, or installed subsequently;

- failure resulting from misuse (including but not limited to use of any Machine capacity or capability, other than that authorized by IBM in writing), accident, modification, unsuitable physical or operating environment, or improper maintenance by you;
- failure caused by a product for which IBM is not responsible; and
- any non-IBM products, including those that IBM may procure and provide with or integrate into an IBM Machine at your request.

The warranty is voided by removal or alteration of identification labels on the Machine or its parts.

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

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

### **How to Obtain Warranty Service**

If the Machine does not function as warranted during the warranty period, contact IBM or your reseller to obtain warranty service. If you do not register the Machine with IBM, you may be required to present proof of purchase as evidence of your entitlement to warranty service.

### **What IBM Will Do to Correct Problems**

When you call for service, you must follow the problem determination and resolution procedures that IBM specifies. A technician will attempt to make an initial diagnosis of your problem and help you resolve it over the telephone.

The type of warranty service applicable to your Machine is specified in Part 3 - Warranty Information.

You are responsible for downloading and installing designated Machine Code (microcode, basic input/output system code (called "BIOS"), utility programs, device drivers, and diagnostics delivered with an IBM Machine ) and other software updates from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides.

If your problem can be resolved with a Customer Replaceable Unit ("CRU") (e.g., keyboard, mouse, speaker, memory, hard disk drive and other easily replaceable parts), IBM will ship these parts to you for replacement by you.

If the Machine does not function as warranted during the warranty period and your problem cannot be resolved over the telephone, through your application of Machine Code or software updates, or with a CRU, IBM or your reseller, if approved by IBM to provide warranty service, will either, at its discretion, 1) repair it to make it function as warranted, or 2) replace it with one that is at least functionally equivalent. If IBM is unable to do either, you may return the Machine to your place of purchase and your money will be refunded.

IBM or your reseller will also manage and install selected engineering changes that apply to the Machine.

## **Exchange of a Machine or Part**

When the 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.

## **Your Additional Responsibilities**

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 service request procedures that IBM or your reseller provides;
  - b. backup or secure all programs, data, and funds contained in the Machine;
  - c. IBM or your reseller with sufficient, free, and safe access to your facilities to permit IBM to fulfill its obligations; and
  - d. inform IBM or your reseller of changes in the Machine's location.
4. (a) ensure all information about identified or identifiable individuals (Personal Data) is deleted from the Machine (to the extent technically possible), (b) allow IBM, your reseller or an IBM supplier to process on your behalf any remaining Personal Data as IBM or your reseller considers necessary to fulfill its obligations under this Statement of Limited Warranty (which may include shipping the Machine for such processing to other IBM service locations around the world), and (c) ensure that such processing complies with any laws applicable to such Personal Data.

## **Limitation of Liability**

IBM is responsible for loss of, or damage to, your Machine only 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 are responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM for any reason. You should remove all such information from the Machine prior to its return.

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except for any liability that cannot be waived or limited by applicable laws, IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

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, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY: 1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, DATA; 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR 4) LOST PROFITS, BUSINESS REVENUE, GOODWILL OR ANTICIPATED SAVINGS. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

#### **Governing Law**

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

**THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR JURISDICTION TO JURISDICTION.**

#### **Jurisdiction**

All of our rights, duties, and obligations are subject to the courts of the country in which you acquired the Machine.

---

## **Part 2 - Country-unique Terms**

### **AMERICAS**

#### **ARGENTINA**

**Governing Law:** *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Ordinary Commercial Court of the city of Buenos Aires.

#### **BRAZIL**

**Governing Law:** *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the court of Rio de Janeiro, RJ.

## **Peru**

**Limitation of Liability:** *The following is added at the end of this section:*

In accordance with Article 1328 of the Peruvian Civil Code the limitations and exclusions specified in this section will not apply to damages caused by IBM's willful misconduct ("dolo") or gross negligence ("culpa inexcusable").

## **NORTH AMERICA**

**How to Obtain Warranty Service:** *The following is added to this Section:*

To obtain warranty service from IBM in Canada or the United States, call 1-800-IBM-SERV (426-7378).

## **CANADA**

**Limitation of Liability:** *The following replaces item 1 of this section:*

1. damages for bodily injury (including death) or physical harm to real property and tangible personal property caused by IBM's negligence; and

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

## **UNITED STATES**

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

## **ASIA PACIFIC**

### **AUSTRALIA**

**What this Warranty Covers:** *The following paragraph is added to this Section:*

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other similar legislation and are only limited to the extent permitted by the applicable legislation.

**Limitation of Liability:** *The following is added to this Section:*

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

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

#### **CAMBODIA, LAOS, AND VIETNAM**

**Governing Law:** *The following replaces ‘laws of the country in which you acquired the Machine’ in the first sentence:*  
laws of the State of New York, United States of America.

#### **CAMBODIA, INDONESIA, LAOS, AND VIETNAM**

*Arbitration: The following is added under this heading:*

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Singapore in accordance with the Arbitration Rules of Singapore International Arbitration Center ("SIAC Rules") then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the SIAC. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

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

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

#### **HONG KONG S.A.R. OF CHINA AND MACAU S.A.R. OF CHINA**

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

#### **INDIA**

**Limitation of Liability:** *The following replaces items 1 and 2 of this Section:*

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence; and
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Limited Warranty, , the charge paid by you for the individual Machine that is the subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

**Arbitration:** *The following is added under this heading :*

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Bangalore, India in accordance with the laws of India then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the Bar Council of India. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

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

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

## **JAPAN**

**Governing Law:** *The following sentence is added to this section:*

Any doubts concerning this Statement of Limited Warranty will be initially resolved between us in good faith and in accordance with the principle of mutual trust.

## **MALAYSIA**

**Limitation of Liability:** *The word "SPECIAL" in item 3 of the fifth paragraph is deleted.*

## **NEW ZEALAND**

**What this Warranty Covers:** *The following paragraph is added to this section:*

The warranties specified in this section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

**Limitation of Liability:** *The following is added to this section:*

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this section are subject to the limitations in that Act.

## **PEOPLE'S REPUBLIC OF CHINA (PRC)**

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

laws of the State of New York, United States of America (except when local law requires otherwise).

## **PHILIPPINES**

**Limitation of Liability:** *Item 3 in the fifth paragraph is replaced by the following:*

**SPECIAL (INCLUDING NOMINAL AND EXEMPLARY DAMAGES), MORAL, INCIDENTAL, OR INDIRECT DAMAGES FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR**

**Arbitration:** The following is added under this heading

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Metro Manila, Philippines in accordance with the laws of the Philippines then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the Philippine Dispute Resolution Center, Inc.. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

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

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

## **SINGAPORE**

**Limitation of Liability:** The words "**SPECIAL**" and "**ECONOMIC**" in item 3 in the fifth paragraph are deleted.

## **EUROPE, MIDDLE EAST, AFRICA (EMEA)**

### ***THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:***

The terms of this Statement of Limited Warranty apply to Machines purchased from IBM or an IBM reseller.

**How to Obtain Warranty Service:** If you purchase a Machine in Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Norway, Portugal, Spain, San Marino, Sweden, Switzerland, United Kingdom or Vatican State, 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, provided the Machine has been announced and made available by IBM in the country in which you wish to obtain service. If you



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

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

*Add the following paragraph in **Western Europe** (Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, Spain, San Marino, Sweden, Switzerland, United Kingdom, Vatican State):*

The warranty for Machines acquired in Western Europe shall be valid and applicable in all Western Europe countries provided the Machines have been announced and made available in such countries.

#### **Governing Law:**

*The phrase "the laws of the country in which you acquired the Machine" is replaced by:*

1) "the laws of Austria" in **Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, FYR Macedonia, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, and FR Yugoslavia;**  
2) "the laws of France" in **Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu, and Wallis & Futuna;** 3) "the laws of Finland" in **Estonia, Latvia, and Lithuania;** 4) "the laws of England" in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, the United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe;** and 5) "the laws of South Africa" in **South Africa, Namibia, Lesotho and Swaziland.**

**Jurisdiction:** *The following exceptions are added to this section:*

1) **In Austria** the choice of jurisdiction for all disputes arising out of this Statement of Limited Warranty and relating thereto, including its existence, will be the competent court of law in Vienna, Austria (Inner-City); 2) **in Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, West Bank/Gaza, Yemen, Zambia, and Zimbabwe** all disputes arising out of this Statement of Limited Warranty or related to its execution, including summary proceedings, will be submitted to the exclusive jurisdiction of the English courts; 3) **in Belgium and Luxembourg**, all disputes arising out of this Statement of Limited Warranty or related to its interpretation or its execution, the law, and the courts of the capital city, of the country of your registered office and/or commercial site location only are competent; 4) **in France, Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu, and Wallis & Futuna** all disputes arising out of this Statement of Limited Warranty or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 5) **in Russia**, all disputes arising out of or in relation to the interpretation, the violation, the termination, the nullity of the execution of this Statement of Limited Warranty shall be settled by Arbitration Court of Moscow; 6) **in South Africa, Namibia, Lesotho and Swaziland**, both of us agree to submit all disputes relating to this Statement of Limited Warranty to the jurisdiction of the High Court in Johannesburg; 7) **in Turkey** all disputes arising out of or in connection with this Statement of Limited Warranty shall be resolved by the Istanbul Central (Sultanahmet) Courts and Execution Directorates of Istanbul, the Republic of Turkey; 8) in each of the following specified countries, any legal claim arising out of this Statement of Limited Warranty will be brought before, and settled exclusively by, the competent court of a) Athens for **Greece**, b) Tel Aviv-Jaffa for **Israel**, c) Milan for **Italy**, d) Lisbon for **Portugal**, and e) Madrid for **Spain**; and 9) **in the United Kingdom**, both of us agree to submit all disputes relating to this Statement of Limited Warranty to the jurisdiction of the English courts.

**Arbitration:** *The following is added under this heading:*

**In Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, FYR Macedonia, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, and FR Yugoslavia** all disputes arising out of this Statement of Limited Warranty or related to its violation, termination or nullity will be finally settled under the Rules of Arbitration and Conciliation of the International Arbitral Center of the Federal Economic Chamber in Vienna (Vienna Rules) by three arbitrators appointed in accordance with these rules. The arbitration will be held in Vienna, Austria, and the official language of the proceedings will be English. The decision of the arbitrators will be final and binding upon both parties. Therefore, pursuant to paragraph 598 (2) of the Austrian Code of Civil Procedure, the parties expressly waive the application of paragraph 595 (1) figure 7 of the Code. IBM may, however, institute proceedings in a competent court in the country of installation.

**In Estonia, Latvia and Lithuania** all disputes arising in connection with this Statement of Limited Warranty will be finally settled in arbitration that will be held in Helsinki, Finland in accordance with the arbitration laws of Finland then in effect. Each party will appoint one arbitrator. The arbitrators will then jointly appoint the chairman. If arbitrators cannot agree on the chairman, then the Central Chamber of Commerce in Helsinki will appoint the chairman.

## **EUROPEAN UNION (EU)**

### ***THE FOLLOWING TERMS APPLY TO ALL EU COUNTRIES:***

Consumers have legal rights under applicable national legislation governing the sale of consumer goods. Such rights are not affected by the warranties provided in this Statement of Limited Warranty.

#### **How to Obtain Warranty Service:** *The following is added to this section:*

To obtain warranty service from IBM in EU countries, see the telephone listing in Part 3 - Warranty Information.

You may contact IBM at the following address:

IBM Warranty & Service Quality Dept.

PO Box 30

Spango Valley

Greenock

Scotland PA 16 OAH

## **AUSTRIA, DENMARK, FINLAND, GREECE, ITALY, NETHERLANDS, PORTUGAL, SPAIN, SWEDEN AND SWITZERLAND**

#### **Limitation of Liability:** *The following replaces the terms of this section in its entirety:*

Except as otherwise provided by mandatory law:

1. IBM's liability for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Statement of Limited Warranty or due to any other cause related to this Statement of Limited Warranty is limited to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault) or of such cause, for a maximum amount equal to the charges you paid for the Machine. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

The above limitation shall not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

2. **UNDER NO CIRCUMSTANCES IS IBM, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR**

**POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; 3) LOST PROFITS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES; OR 4) LOSS OF BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

## **FRANCE AND BELGIUM**

**Limitation of Liability:** *The following replaces the terms of this section in its entirety:*

Except as otherwise provided by mandatory law:

1. IBM's liability for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Statement of Limited Warranty is limited to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault), for a maximum amount equal to the charges you paid for the Machine that has caused the damages. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

The above limitation shall not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

2. **UNDER NO CIRCUMSTANCES IS IBM, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; 3) LOST PROFITS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES; OR 4) LOSS OF BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

**THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:**

### **AUSTRIA**

**What this Warranty Covers:** *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 12 months from the date of delivery. . The limitation period for consumers in action for breach of warranty is the statutory period as a minimum. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

*The second paragraph does not apply.*

**What IBM Will Do to Correct Problems:** *The following is added to this section:*

During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

**Limitation of Liability:** *The following paragraph is added to this section:*

The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

*The following sentence is added to the end of item 2:*

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

## **EGYPT**

**Limitation of Liability:** *The following replaces item 2 in this section:*

as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term 『Machine』 includes Machine Code and Licensed Internal Code (LIC).

*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**

**What this Warranty Covers:** *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 twelve months. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

*The second paragraph does not apply.*

**What IBM Will Do to Correct Problems:** *The following is added to this section:*

During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

**Limitation of Liability:** *The following paragraph is added to this section:*

The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

*The following sentence is added to the end of item 2:*

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

## **HUNGARY**

**Limitation of Liability:** *The following is added at the end of this section:*

The limitation and exclusion specified herein shall not apply to liability for a breach of contract damaging life, physical well-being, or health that has been caused intentionally, by gross negligence, or by a criminal act.

The parties accept the limitations of liability as valid provisions and state that the Section 314.(2) of the Hungarian Civil Code applies as the acquisition price as well as other advantages arising out of the present Statement of Limited Warranty balance this limitation of liability.

## **IRELAND**

**What this Warranty Covers:** *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 the terms of this section in its entirety:*

For the purposes of this section, a "Default" means any act, statement, omission, or negligence on the part of IBM in connection with, or in relation to, the subject matter of this Statement of Limited Warranty in respect of which IBM is legally liable to you, whether in contract or tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default occurring on the date of occurrence of the last such Default.

Circumstances may arise where, because of a Default, you are entitled to recover damages from IBM.

This section sets out the extent of IBM's liability and your sole remedy.

1. IBM will accept unlimited liability for death or personal injury caused by the negligence of IBM.
2. Subject always to the Items for Which IBM is Not Liable below, IBM will accept unlimited liability for physical damage to your tangible property resulting from the negligence of IBM.
3. Except as provided in items 1 and 2 above, IBM's entire liability for actual damages for any one Default will not in any event exceed the greater of 1) EUR 125,000, or 2) 125% of the amount you paid for the Machine directly relating to the Default.

## **Items for Which IBM is Not Liable**

Save with respect to any liability referred to in item 1 above, under no circumstances is IBM, its suppliers or resellers liable for any of the following, even if IBM or they were informed of the possibility of such losses:

1. loss of, or damage to, data;
2. special, indirect, or consequential loss; or
3. loss of profits, business, revenue, goodwill, or anticipated savings.

## **SLOVAKIA**

**Limitation of Liability:** *The following is added to the end of the last paragraph:*

The limitations apply to the extent they are not prohibited under §§ 373-386 of the Slovak Commercial Code.

## **SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND**

**Limitation of Liability:** *The following is added to this section:*

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

## **UNITED KINGDOM**

**Limitation of Liability:** *The following replaces the terms of this section in its entirety:*

For the purposes of this section, a "Default" means any act, statement, omission, or negligence on the part of IBM in connection with, or in relation to, the subject matter of this Statement of Limited Warranty in respect of which IBM is legally liable to you, whether in contract or tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default.

Circumstances may arise where, because of a Default, you are entitled to recover damages from IBM.

This section sets out the extent of IBM's liability and your sole remedy.

1. IBM will accept unlimited liability for:
  - a. death or personal injury caused by the negligence of IBM; and
  - b. any breach of its obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982, or any statutory modification or re-enactment of either such Section.
2. IBM will accept unlimited liability, subject always to the Items for Which IBM is Not Liable below, for physical damage to your tangible property resulting from the negligence of IBM.

- IBM's entire liability for actual damages for any one Default will not in any event, except as provided in items 1 and 2 above, exceed the greater of 1) Pounds Sterling 75,000, or 2) 125% of the total purchase price payable or the charges for the Machine directly relating to the Default.

These limits also apply to IBM's suppliers and resellers. They state the maximum for which IBM and such suppliers and resellers are collectively responsible.

### **Items for Which IBM is Not Liable**

Save with respect to any liability referred to in item 1 above, under no circumstances is IBM or any of its suppliers or resellers liable for any of the following, even if IBM or they were informed of the possibility of such losses:

- loss of, or damage to, data:
- special, indirect, or consequential loss; or
- loss of profits, business, revenue, goodwill, or anticipated savings.

---

## **Part 3 - Warranty Information**

This Part 3 provides information regarding the warranty applicable to your Machine, including the warranty period and type of warranty service IBM provides.

### **Warranty Period**

The warranty period may vary by country or region and is specified in the table below. NOTE: "Region" means either Hong Kong or Macau Special Administrative Region of China.

### **ThinkPad Multi-Burner Ultrabay Slim Drive**

<b>Country or Region of Purchase</b>	<b>Warranty Period</b>	<b>Type of Warranty Service</b>
Worldwide	1 year	1 and 4

A warranty period of 1 year on parts and 1 year on labor means that IBM provides warranty service without charge for parts and labor during the 1 year warranty period.

### **Types of Warranty Service**

If required, IBM provides repair or exchange service depending on the type of warranty service specified for your Machine in the above table and as described below. Warranty service may be provided by your reseller if approved by IBM to perform warranty service. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations, additional charges may apply outside IBM's normal service area, contact your local IBM representative or your reseller for country and location specific information.

#### **1. Customer Replaceable Unit ("CRU") Service**



IBM will ship CRU parts to you for your replacement. If IBM instructs you to return the replaced CRU, you are responsible for returning it to IBM in accordance with IBM's instructions. If you do not return the defective CRU, if IBM so instructs, within 30 days of your receipt of the replacement CRU, IBM may charge you for the replacement.

## 2. On-site Service

IBM or your reseller will either repair or exchange the failing Machine at your location and verify its operation. You must provide suitable working area to allow disassembly and reassembly of the IBM Machine. The area must be clean, well lit and suitable for the purpose. **For some Machines, certain repairs may require sending the Machine to an IBM service center.**

## 3. Courier or Depot Service<sup>2</sup>

You will disconnect the failing Machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your Machine to a designated service center. A courier will pick up your Machine and deliver it to the designated service center. Following its repair or exchange, IBM will arrange the return delivery of the Machine to your location. You are responsible for its installation and verification.

## 4. Customer Carry-In or Mail-In Service

You will deliver or mail as IBM specifies (prepaid unless IBM specifies otherwise) the failing Machine suitably packaged to a location IBM designates. After IBM has repaired or exchanged the Machine, IBM will make it available for your collection or, for Mail-in Service, IBM will return it to you at IBM's expense, unless IBM specifies otherwise. You are responsible for the subsequent installation and verification of the Machine.

The IBM Machine Warranty worldwide web site at [http://www.ibm.com/servers/support/machine\\_warranties/](http://www.ibm.com/servers/support/machine_warranties/) provides a worldwide overview of IBM's Limited Warranty for Machines, a Glossary of IBM definitions, Frequently Asked Questions (FAQs) and Support by Product (Machine) with links to Product Support pages. **The IBM Statement of Limited Warranty is also available on this site in 29 languages.**

To obtain warranty service contact IBM or your IBM reseller. In Canada or the United States, call 1-800-IBM-SERV (426-7378). For other countries, see the telephone numbers below.

Phone numbers are subject to change without notice. For the latest phone number list, go to [www-3.ibm.com/pc/support/site.wss/](http://www-3.ibm.com/pc/support/site.wss/) and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Argentina	0800-666-0011	Malaysia	03-7727-7800
Australia	1300-130-426	Mexico	001-866-434-2080
Austria	01-24592-5901	Netherlands	020-514-5770

---

2. This type of service is called ThinkPad EasyServ or EasyServ in some countries.

<b>Country or Region</b>	<b>Telephone Number</b>	<b>Country or Region</b>	<b>Telephone Number</b>
Belgium	Dutch 02-210-9820 French 02-210-9800	New Zealand	0800-446-149
Bolivia	0800-0189	Norway	66 81 11 00
Brazil	55-11-3889-8986	Peru	0-800-50-866
Canada	1-800-565-3344 Toronto 416-383-3344	Philippines	632-995-2225
Chile	800-224-488	Portugal	21-791 51 47
China (PRC)	800-810-1818	Russia	095-940-2000
China (Hong Kong S.A.R.)	852-2825-7799	Singapore	1800-840-9911
Columbia	980-912-3021	Spain	91-662 49 16
Denmark	45 20 82 00	Sweden	08-477 4420
Ecuador	1-800-426911 (option #4)	Switzerland	058-333-09-00
Finland	09-459 69 60	Taiwan	886-2-2725-9799
France	02 38 55 74 50	Thailand	66-2-273-4000
Germany	07032-1549 201	Turkey	00-800-446-32-041
Indonesia	021-523-8535	United Kingdom	0-1475-555 055
Ireland	01-815-9202	United States	1-800-426-7378
Italy	02-7031-6101	Uruguay	000-411-005-6649
Japan	Consumer customers 0120-887-870  Business customers 0120-887-874	Venezuela	0-800-100-2011
Luxembourg	298-977 5063	Vietnam	848-8295-160

---

## 附录 D. Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. 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 IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described 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:

*IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION 『AS IS』 WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change IBM product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of IBM or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

---

## Federal Communications Commission (FCC) statement

ThinkPad Multi-Burner Ultrabay Slim Drive

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

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

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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

Responsible party:

International Business Machines Corporation  
New Orchard Road  
Armonk, NY 10504  
Telephone: 1-919-543-2193



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 a 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)**

Zulassungsbeseinigunglaut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richtlinie 89/336):

Dieses Gerät ist berechtigt in Übereinstimmungmit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die:

IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024:1998 und EN 55022:1998 Klasse B.
------------------------------------------------------------------------------------------

EN 55022 Hinweis:

『 Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 55022:B festgelegt), dann kann es dabei eventuell gestört werden. In solch einem FA11 ist der Abstand bzw. die Abschirmungzu der industriellen Störquelle zu vergrößern. 』

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den IBM Handbüchern angegeben, zu installieren und zu betreiben.

## **European Union - emission directive**

This product is in conformity with the protection requirements of EU Council Directive 89/336/ECC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

IBM can not 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 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 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 - Directiva EMC (Conformidad electromagnética)**

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 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 della 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.

이 기기는 가정용으로 전자파 적합등록을 한 기기로서  
주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

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

**Japanese statement of compliance for products less than or equal to 20 A per phase**

## 高調波ガイドライン適合品

---

### Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

- IBM
- IBM Logo
- ThinkPad
- OS/2

Microsoft, Windows, and Windows NT are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel and Pentium are trademarks of Intel Corporation in the United States, other countries, or both.

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



部件号: 73P3297

Printed in China

(1P) P/N: 73P3297

