



IBM ThinkPad Multi-Burner Plus Ultrabay Enhanced Drive

User's Guide



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注: Before using this information and the product it supports, read the information in 第 B-1 页的附录 B, 『Service and Support』 and 第 C-1 页的附录 C, 『IBM Statement of Limited Warranty Z125-4753-08 04/2004』.

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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 produktu si prečítajte bezpečnostné informácie.

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 Multi-Burner Plus 驱动器

本手册提供有关注册、安装和使用 IBM® ThinkPad® Multi-Burner Plus Ultrabay™ 增强型驱动器的信息，且可在软件和用户指南超级 CD 上以下列几种语言获得：

- 巴西葡萄牙语
- 捷克语
- 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修信息和法律声明。

产品描述

Multi-Burner Plus 与 DVD Forum DVD 多功能刻录机规格兼容，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 DVD+R、DVD+RW、CD-R、CD-RW 和高速 CD-RW 介质。可以利用缓冲欠载运行措施以确保 DVD-R、DVD+R 和 CD-R 介质的可靠刻录。Multi-Burner Plus 可以读取许多其它格式的介质，包括 DVD 视频、VCD、音频 CD 和多段、扩展体系结构（XA）CD 和 Kodak Photo CD。该 Multi-Burner Plus 是为在 Ultrabay 增强型驱动器托架中安装而设计。

介质类型	写速度
CD-R	最大 24X
CD-RW	4X
高速 CD-RW	10X
超高速 CD-RW	16X
DVD-R	最大 8X
DVD+R	最大 8X
DVD-RW	最大 4X
DVD+RW	最大 4X
DVD-RAM	最大 3X。

除了本指南外，选件包包含以下物品：

- Multi-Burner Plus 驱动器
- Ultrabay 2000 增强型驱动器适配器
- 便携盒

- 软件和用户指南超级 CD
- 《快速参考指南》

如果某一项缺少或损坏，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。关于技术支持信息，请参阅第 C-1 页的附录 C，『IBM Statement of Limited Warranty Z125-4753-08 04/2004』。

软件描述

您的 IBM Multi-Burner Plus 软件和用户指南超级 CD 包含满足下列要求的以下软件：

- **Intervideo WinDVD Creator Plus**

通过该软件，您可以将视频文件刻录到可在大多数独立 DVD 播放器中播放的 DVD-RW、DVD+RW、DVD-R 或 DVD+R 介质。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。

下表提供了有关 Intervideo WinDVD Creator Plus 系统要求的信息。

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	Windows 2000 或 Windows XP	Windows 2000 或 Windows XP
声音	支持 48 KHz 回放的兼容 Windows 的声卡	支持 48 KHz 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"> • 70 MB 用于安装 • 620 MB 用于每小时 VCD 品质的 MPEG-1 视频 • 2 GB 用于每小时 DVD 品质的 MPEG-2 视频 	<ul style="list-style-type: none"> • 70 MB 用于安装 • 620 MB 用于每小时 VCD 品质的 MPEG-1 视频 • 2 GB 用于每小时 DVD 品质的 MPEG-2 视频
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 照相机和可便携式摄像机

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。

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

通过该软件，您可以像写入软盘一样，使用盘符直接写入 CD-RW、CD-R、DVD-RAM、DVD-RW、DVD+RW、DVD-R 和 DVD+R 介质。DLA 格式化所有光盘格式类型。通过 DLA，您可以拖放文件、创建新目录或将文件从任何应用程序直接保存到 Multi-Burner Plus。

- **UDF Reader**

该软件使您能够安装软件，用于通过 DVD 驱动器读取计算机上的 DVD-RAM、DVD-RW、DVD+RW 和 CD-RW 介质。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 还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。有关受支持介质的信息，请参考驱动器随附的文档。

IBM RecordNow 指导您使用简单的向导和直观的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（精确复制）功能可以制作主光盘的副本，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）功能可以存储电子数据，例如驻留在计算机硬盘驱动器中的文件 and 应用程序。与音乐光盘不同，数据光盘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音轨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，请参阅 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**

该软件使您能够在 DVD-RAM、DVD-RW、DVD-R、CD-R、CD-RW、DVD+R 或 DVD+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 Multi-Burner Plus 驱动器, 您的 ThinkPad 计算机必须满足以下需求:

- 具有“Ultrabay 增强型驱动器托架”的 ThinkPad 系统或者 ThinkPad 扩展坞或扩展坞 II
- Ultrabay 2000 增强型驱动器适配器
- Microsoft® Windows® XP 或 Microsoft Windows 2000 Professional 操作系统

注:

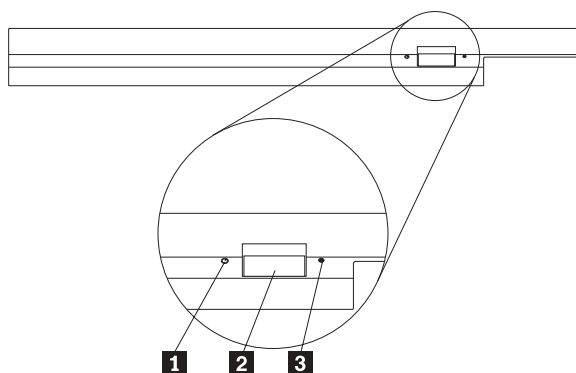
1. IBM 为安装了 Microsoft Windows 95、Microsoft Windows 98 或 Microsoft Windows Millennium Edition (Me) 桌面操作系统的计算机提供了有限的支持。
2. ThinkPad A21e 计算机不支持 Windows NT 下的 DVD 回放。

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。要将 Multi-Burner 驱动器正确地安装到 Ultrabay 增强型驱动器托架中, 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 2-4 页的『手动弹出光盘』..

第 2 章 使用 Multi-Burner Plus 驱动器

本节提供了有关如何处理、装入和保养 DVD 和 CD 以及如何保养 Multi-Burner Plus 驱动器的信息。

开始前

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。同样，在格式化或写光盘时尽量不要执行输入操作，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。
- 写光盘时不要使 ThinkPad 计算机处于休眠或暂挂方式。

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

小心地处理和清洁光盘，特别是可写的介质类型，例如 CD-R 和 CD-RW 光盘，以便使它们保持可读。通过使用以下预防措施可以延长光盘寿命：

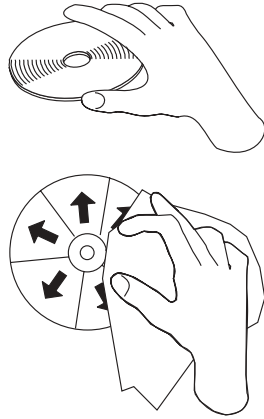
- 始终将光盘存储在其原始包装中。
- 始终将光盘存放在没有阳光直射的地方。
- 始终使光盘存放在远离直接热源的地方。
- 不使用光盘时将其从计算机取出。
- 在使用每张光盘“之前”检查光盘是否有裂纹。

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 Multi-Burner Plus 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。
- 请勿将不相关的物体插入驱动器中。
- 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、意外冲击或斜面
 - 过多灰尘

装入光盘



1. 按下弹出按钮。托盘滑出驱动器。
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 2-4 页的『手动弹出光盘』以获取更多信息。

使用驱动器

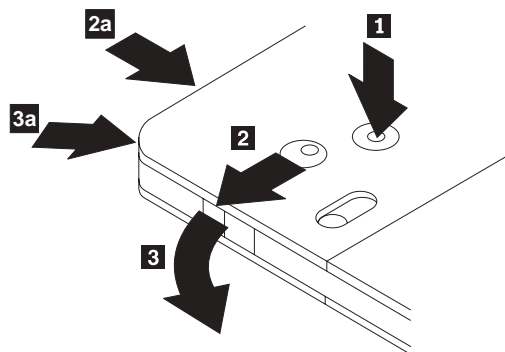
本节包含了有关使用 Multi-Burner 的信息。

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 Multi-Burner 中使用盒式介质，您必须首先将光盘从盒中取出。

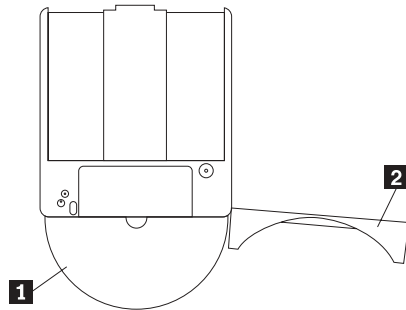
1. 使用圆珠笔的笔尖，推动并折断锁销片 **1**。
2. 要取出光盘，请使用圆珠笔在盒盖锁 **2** 上向下推并将盒盖 **3** 拔出。

当盒盖打开时，就可以取出光盘了。

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，请不要接触光盘的刻录区域。

将光盘放回盒中



1. 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。
2. 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的刻录和回放的性能。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。

在本驱动器中使用 CD 和 DVD

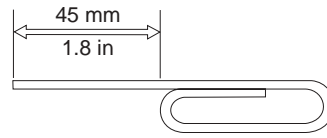
完成以下过程来读取数据光盘：

1. 开启计算机。
2. 按下驱动器前面的打开 / 关闭按钮。
3. 将光盘或光盘盒插入托盘中，使其标签朝上。
4. 通过按下打开 / 关闭按钮或通过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。

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，您需要在将 Multi-Burner Plus 驱动器安装到 Ultrabay 增强型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。通过执行以下步骤，您可以检查所使用的 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 Driver Letter Access (DLA)

所提供的 Drive Letter Access (DLA) 使您可以将数据写入 CD-R、CD-RW、DVD-RAM、DVD-RW 和 DVD-R 介质。DVD-RAM、DVD-RW、DVD+RW、CD-RW、DVD-R、DVD+R 和 CD-R 介质可以写入许多次（DVD-R 和 CD-R 介质上的数据可一直追加到这些光盘满了为止）。

要格式化和写入 DVD-R、DVD+R、CD-R、DVD-RAM、DVD-RW、DVD+RW 或 CD-RW 介质：

1. 将光盘插入驱动器。
2. 双击**我的电脑**。右键单击 Multi-Burner 的盘符。
3. 单击**格式化**。格式化时间会根据使用的格式化过程（快速或完全）而有所不同。
4. 格式化完成后，您可以拖放文件到 Multi-Burner 驱动器图标，或可以在“Windows 资源管理器”中移动文件。

要使 CD-R 介质在其它计算机中兼容：

1. 双击**我的电脑**。右键单击 Multi-Burner 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、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 **OK**。
6. 双击 **SETUP.EXE** 并按照屏幕上的指示信息操作。

注：仅那些没有为 CD-RW、DVD+RW 或 DVD-RW 再安装一个 DLA 程序的系统需要 UDF 阅读器。

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** 下拉出子菜单。
6. 双击 **Secondary IDE**。（如果使用的是 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 **OK**。
9. 单击关闭以关闭“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 **OK**。
10. 单击关闭以关闭“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。还可以通过 Intervideo WinDVD Creator Plus 来将自己的视频和音频文件创建和刻录成 DVD 视频。Intervideo WinDVD Creator Plus 处理 DVD-R、DVD+R、DVD-RW、DVD+RW 和 DVD-RAM 介质。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 Multi-Burner 驱动器和 WinDVD 软件后, 就可以观看 DVD 电影了。但是首先需要 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中观看。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, 于是您就可以观看电影了。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，则会提示您更改区域代码。可以将初始设置中的区域代码至多更改四次。

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 **OK**。

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。如果要用电视机观看 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在所有分辨率设置中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 CD-R 和 CD-RW 功能

Multi-Burner 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 光盘在音频 CD 播放器上是可播放的。CD-RW 光盘在大多数音频 CD 播放器中不可播放。
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，请参考软件和用户指南超级 CD 上的 IBM RecordNow 和 IBM DLA 帮助信息。

使用 DVD-R/DVD-RW 和 DVD+R/DVD+RW 功能

Multi-Burner 驱动器可以写 DVD-R、DVD-RW、DVD+R 和 DVD+RW 光盘。DVD-R 和 DVD+R 光盘不能擦除，但可以用于标准 DVD-ROM 驱动器和 DVD 播放器。

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

DVD-RW 和 DVD+RW 光盘可以擦除和重写，但仅能用于较新的 MR 和兼容 DVD-RW 的 DVD-ROM 驱动器。您可以使用 DVD-RW 和 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。

请查看以下列表，以获取可能适合您所遇到的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）。

无法成功写入 CD-R、CD-RW、DVD-R、DVD-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. 如果在写操作过程中，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. 如果光盘已坏或刮伤，请替换。
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. 通过软件弹出光盘。
2. 使用弹出按钮。
3. 请关闭计算机。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 2-4 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。要获取故障诊断的方法，请查看软件随附的文档。
2. 您可能使用了损坏的 CD-R、CD-RW、DVD-R、DVD-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（而不是在另一 MR 驱动器中）可以从 CD-RW、DVD-RW、DVD+RW 或 DVD-RAM 光盘读取，则请确保计算机中安装有 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¹已列出在下表中。

物理规格	
高度	12.7 mm (0.5 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

环境需求

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

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。

读速度

介质	读速度
CD-ROM	最大 24X
CD-DA (DAE)	最大 20X
CD-R	最大 24X
CD-RW	最大 24X
DVD-ROM (单层)	最大 8X
DVD-ROM (双层)	最大 6X
DVD-R (4.7 GB)	最大 8X
DVD+R	最大 8X
DVD-RW (4.7 GB)	最大 6X
DVD+RW	最大 6X
DVD-RAM (4.7 / 9.4 GB)	最大 3X。

写速度

介质类型	写速度
CD-R	最大 24X
CD-RW	4X
高速 CD-RW	10X
超高速 CD-RW	16X
DVD-R	最大 8X
DVD+R	最大 8X
DVD-RW	最大 4X
DVD+RW	最大 4X
DVD-RAM	最大 3X。

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

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 <http://www.ibm.com/pc/support> and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Africa	+44 (0) 1475 555 055	Japan	Desktop: 0120-887-870 <ul style="list-style-type: none"> Overseas calls: 81-46-266-1084 ThinkPad: 0120-887-874 <ul style="list-style-type: none"> Overseas calls: 81-46-266-1084 IntelliStation and xSeries: 81-46-266-1358 PC Software: 0120-558-695 <ul style="list-style-type: none"> Overseas calls: 81-44-200-8666
Argentina	0800-666-0011	Luxembourg	298-977-5063
Australia	131-426	Malaysia	(60) 3-7727-7800
Austria	01-24592-5901	Mexico	001-866-434-2080
Bolivia	0800-0189	Middle East	+44 (0) 1475 555 055
Belgium	Dutch: 02-210 9820 French: 02-210 9800	Netherlands	020-514 5770
Brazil	55-11-3889-8986	New Zealand	0800-446-149
Canada	English: 1-800-565-3344 French: 1-800-565-3344 In Toronto: 416-383-3344	Nicaragua	255-6658
Chile	800-224-488	Norway	66 81 11 00
China	800-810-1818	Panama	206-6047
China (Hong Kong and S.A.R.)	Home PC: 852-2825-7799 Commercial PC: 852-8205-0333	Peru	0-800-50-866
Colombia	980-912-3021	Philippines	(63) 2-995-2225
Costa Rica	284-3911	Portugal	21-892-7147
Denmark	45 20 82 00	Russia	095-940-2000
Dominican Republic	566-4755 or 566-5161 ext. 8201 Toll Free within the Dominican Republic: 1-200-1929	Singapore	(65) 1-800-840-9911
Ecuador	1-800-426911 (option #4)	Spain	91-714-7983

Country or Region	Telephone Number	Country or Region	Telephone Number
El Salvador	250-5696	Sweden	08-477 4420
Finland	09-459 69 60	Switzerland	058-333-0900
France	02 38 55 74 50	Taiwan	886-2-8723-9799
Germany	07032-1549 201	Thailand	(66) 2-273-4000
Guatemala	335-8490	Turkey	00-800-446-32-041
Honduras	Tegucigalpa & Sand Pedro Sula: 232-4222 San Pedro Sula: 552-2234	United Kingdom	0-1475-555 055
India	1600-44-6666	United States	1-800-IBM-SERV (1-800-426-7378)
Indonesia	(62) 21-523-8535	Uruguay	000-411-005-6649
Ireland	02-7031-6101	Venezuela	0-800-100-2011
Italy	01-815-9202	Vietnam	Ho Chi Minh: (84) 8-829-5160 Hanoi: (84) 4-843-6675

附录 C. IBM Statement of Limited Warranty Z125-4753-08 04/2004

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 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 contact IBM for service, you must follow the problem determination and resolution procedures that IBM specifies. An initial diagnosis of your problem can be made either by a technician over the telephone or electronically by access to an IBM website. 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), IBM will ship the CRU to you for you to install. If the Machine does not function as warranted during the warranty period and your problem cannot be resolved over the telephone or electronically, 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. provide 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

Jurisdiction: *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.

BOLIVIA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the courts of the city of La Paz.

BRAZIL

Jurisdiction: *The following is added after the first sentence:*

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

CHILE

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Civil Courts of Justice of Santiago.

COLOMBIA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges of the Republic of Colombia.

EQUADOR

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges of Quito.

MEXICO

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Federal Courts of Mexico City, Federal District.

PARAGUAY

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the courts of the city of Asuncion.

PERU

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges and Tribunals of the Judicial District of Lima, Cercado.

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").

URUGUAY

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the City of Montevideo Court's Jurisdiction.

VENEZUELA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Courts of the Metropolitan Area Of the City of Caracas.

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 AND LAOS

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, AND LAOS

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:

*Add the following paragraph in **Western Europe** (Andorra, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, Vatican State, and any country subsequently added to the European Union, as from the date of accession):* 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. If you purchase a Machine in one of the Western European countries, as defined above, 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.

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:

The warranty for Machines acquired in EU countries is valid and applicable in all EU countries provided the Machines have been announced and made available in such countries.

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 PA16 0AH

CONSUMERS

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.

AUSTRIA, DENMARK, FINLAND, GREECE, ITALY, NETHERLANDS, NORWAY, 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

The provisions of this Statement of Limited Warranty replace any applicable statutory warranties.

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 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, IBM will reimburse you for the transportation charges for the delivery of the failing Machine to IBM.

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 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.
3. 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:

1. loss of, or damage to, data;
2. special, indirect, or consequential loss; or
3. 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 Plus Ultrabay Enhanced Drive

Country or Region of Purchase	Warranty Period	Type of Warranty Service
Worldwide	3 years	7

A warranty period of 3 years on parts and 3 years on labor means that IBM provides warranty service without charge for parts and labor during the 3 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 provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your Machine and are available from IBM at any time on your request. Installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service designated for your Machine. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, 1) return instructions and a container are shipped with the replacement CRU, and 2) you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of 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 ***

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.

5. **CRU and On-site Service**

This type of Warranty Service is a combination of Type 1 and Type 2 (see above).

6. **CRU and Courier or Depot Service**

This type of Warranty Service is a combination of Type 1 and Type 3 (see above).

7. **CRU and Customer Carry-In or Mail-In Service**

This type of Warranty Service is a combination of Type 1 and Type 4 (see above).

When a 5, 6 or 7 type of warranty service is listed, IBM will determine which type of warranty service is appropriate for the repair.

* This type of service is called ThinkPad EasyServ or EasyServ in some countries. The IBM Machine Warranty worldwide web site at 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). 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 <http://www.ibm.com/pc/support> and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Africa	+44 (0) 1475 555 055	Japan	Desktop: 0120-887-870 <ul style="list-style-type: none"> • Overseas calls: 81-46-266-1084 ThinkPad: 0120-887-874 <ul style="list-style-type: none"> • Overseas calls: 81-46-266-1084 IntelliStation and xSeries: 81-46-266-1358 PC Software: 0120-558-695 <ul style="list-style-type: none"> • Overseas calls: 81-44-200-8666
Argentina	0800-666-0011	Luxembourg	298-977-5063

Australia	131-426	Malaysia	(60) 3-7727-7800
Austria	01-24592-5901	Mexico	001-866-434-2080
	Dutch: 02-210 9820		
Belgium	French: 02-210 9800	Netherlands	020-514 5770
Brazil	55-11-3889-8986	New Zealand	0800-446-149
Canada	English: 1-800-565-3344 French: 1-800-565-3344 In Toronto: 416-383-3344	Nicaragua	255-6658
Chile	800-224-488	Norway	66 81 11 00
China	800-810-1818	Panama	206-6047
China (Hong Kong and S.A.R.)	Home PC: 852-2825-7799 Commercial PC: 852-8205-0333	Peru	0-800-50-866
Colombia	980-912-3021	Philippines	(63) 2-995-2225
Costa Rica	284-3911	Portugal	21-892-7147
Denmark	45 20 82 00	Russia	095-940-2000
Dominican Republic	566-4755 or 566-5161 ext. 8201 Toll Free within the Dominican Republic: 1-200-1929	Singapore	(65) 1-800-840-9911
Ecuador	1-800-426911 (option #4)	Spain	91-714-7983
El Salvador	250-5696	Sweden	08-477 4420
Finland	09-459 69 60	Switzerland	058-333-0900
France	02 38 55 74 50	Taiwan	886-2-8723-9799
Germany	07032-1549 201	Thailand	(66) 2-273-4000

Guatemala	335-8490	Turkey	00-800-446-32-041
Honduras	Tegucigalpa & Sand Pedro Sula: 232-4222 San Pedro Sula: 552-2234	United Kingdom	0-1475-555 055
India	1600-44-6666	United States	1-800-IBM-SERV (1-800-426-7378)
Indonesia	(62) 21-523-8535	Uruguay	000-411-005-6649
Ireland	01-815-9202	Venezuela	0-800-100-2011
Italy	02-7031-6101	Vietnam	Ho Chi Minh: (84) 8-829-5160 Hanoi: (84) 4-843-6675

附录 D. Guarantee supplement for Mexico

This supplement is considered part of IBM's Statement of Limited Warranty and shall be effective solely and exclusively for products distributed and commercialized within Territory of the Mexican United States. In the event of a conflict, the terms of this supplement shall apply.

All software programs pre-loaded in the equipment shall only have a thirty- (30) day guarantee for installation defects from the date of purchase. IBM is not responsible for the information in such software programs and/or any additional software programs installed by you or installed after purchase of the product.

Services not chargeable to the guarantee shall be charged to the final user, prior an authorization.

In the event that warranty repair is required please call the IBM Support Center at 001-866-434-2080, where you will be directed to the nearest Authorized Service Center. Should no Authorized Service Center exist in your city, location or within 70 kilometers of your city or location, the guarantee includes any reasonable delivery charges related to the transportation of the product to our nearest Authorized Service Center. Please call the nearest Authorized Service Center to obtain the necessary approvals or information concerning the shipment of the product and the shipment address.

To obtain a list of Authorized Service Centers, please visit:
http://www.pc.ibm.com/la/centros_de_servicio/servicio_mexico/servicio_mexico.html

Manufactured by:

**SCI Systems de México, S.A. de C.V.
Av. De la Solidaridad Iberoamericana No. 7020
Col. Club de Golf Atlas
El Salto, Jalisco, México
C.P. 45680,
Tel. 01-800-3676900**

Marketing by:

**IBM de México, Comercialización y
Servicios, S. A. de C. V.
Alfonso Nápoles Gándara No 3111
Parque Corporativo de Peña Blanca
Delegación Álvaro Obregón
México, D.F., México
C.P. 01210,
Tel. 01-800-00-325-00**

附录 E. Notices

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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.

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ThinkPad
Ultrabay

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

Electronic emission notices

IBM ThinkPad Multi-Burner Plus Ultrabay Enhanced Drive

Federal Communications Commission (FCC) statement

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

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

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

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

Responsible party:

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



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.

Unione 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.

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取扱説明書に従って正しい取り扱いをして下さい。

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



部件号: 73P3315

Printed in China

(1P) P/N: 73P3315

