



ThinkPad 多功能刻录机 Ultrabay 2000 驱动器

用户指南



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注意

在安装本产品前，请阅读 ThinkPad 系统《安全小册子》。对本手册所包含的内容，IBM 公司拥有最终解释权，如有变更，恕不另行通知。

注

请务必保留购货凭证，因为可能需要它来获取保修服务。请参阅第 21 页的附录 B，『Warranty Information』。

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安全: 请先阅读

Before installing this product, read the Safety Information.

مع، 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 pečítajte 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」。

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™ 2000 驱动器的信息，并以下列语言在 *Software and User's Guide CD* 上提供：

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

本指南的附录包含保证信息和法律声明。

产品注册

感谢您购买本 IBM 产品。请花一点儿时间注册您的产品，并提供有助于我们将来更好地为您服务的信息。您的反馈可以帮助我们开发更好的产品和服务，并帮助我们寻找更好的方式与您沟通。请在 www.ibm.com/pc/register/ IBM Web 站点上注册您的选项。

您将收到有关您所注册产品的信息和更新材料，除非您在 Web 站点上表明您不希望接收进一步的信息。

产品描述

该“多功能刻录机”与 DVD Forum DVD-Multi Recorder 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 Video、Video CD、音频 CD 和多段、扩展体系结构（XA）CD 以及 Kodak Photo CD。此“多功能刻录机”是设计成在“Ultrabay 2000 驱动器托架”中安装的。

| 介质类型 | 写入速度 |
|---------|--------|
| DVD-R | 1X |
| DVD-RW | 1X |
| DVD-RAM | 最大 2X |
| CD-R | 最大 16X |

| 介质类型 | 写入速度 |
|----------|-------|
| CD-RW | 4X |
| 高速 CD-RW | 最大 8X |

本驱动器还具有缓冲区欠载保护功能，该功能有助于使刻录错误减至最少。

除了本指南，选件包还包含以下物品：

- 多功能刻录机驱动器
- 便携盒
- *Super CD Disc*
- 《快速参考指南》

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。可能需要它来接收保修服务。对于技术支持信息，请参阅第 21 页的附录 B，『Warranty Information』。

软件描述

IBM Multi-Burner User's Guide and Software Disc 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 或更高频率以适应实时需要 |
| RAM | 64Mb | 128Mb |
| 操作系统 | Windows 2000 或 Windows XP | Windows 2000 或 Windows XP |
| 声音 | 支持 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） |

| 计算机部件 | 最低 | 最佳 |
|-------|--|--|
| 硬盘驱动器 | <ul style="list-style-type: none"> - 70 MB 用于安装 - 620 MB 用于每小时的 VCD 品质的 MPEG-1 视频 - 2 GB 用于每小时的 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。

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从照相机中录制视频。

- **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软件，以通过 DVD 驱动器读取计算机上的 DVD-RAM、DVD-RW 和 CD-RW 介质。它还允许您在没有安装 DLA 的情况下读取 DLA 创建的光盘。

- **IBM RecordNow**

IBM RecordNow 是光盘控制软件，允许您用计算机上的文件或其它诸如 CD 或 DVD 的光盘介质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 还使得创建能在任何适当的 CD 或 DVD 光盘阅读器中读取的数据光盘很容易。

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 — “精确复制”功能制作主光盘的副本, 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 — “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, 数据光盘是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来的音乐 — “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 音乐数据库功能部件能自动地标记文件的轨道信息以帮助您对收集的信息分类。

注: 有关如何使用 IBM RecordNow “制作精确副本”、“创建数据光盘”或“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恢复计算机。

• **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。

安装要求

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 2000 驱动器托架”的 ThinkPad 系统或
- ThinkPad 扩展坞或扩展坞 II
- Microsoft® Windows® XP 或 Microsoft Windows 2000 Professional 操作系统

注:

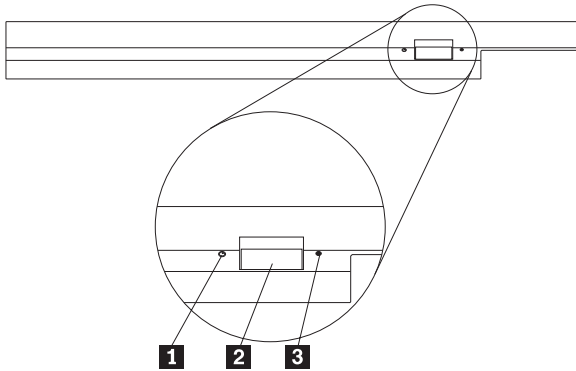
1. IBM 为安装了 Microsoft Windows 95、Microsoft Windows 98 或 Microsoft Windows Millennium Edition (Me) 桌面操作系统的计算机提供了有限的支持。
2. ThinkPad A21e 计算机不支持 Windows NT 下的 DVD 回放。

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指示信息。要在 Ultrabay 2000 驱动器托架内正确安装多功能刻录机驱动器，请使用 Access ThinkPad 帮助系统中给出的指示信息。

定位驱动器控件

下图显示了驱动器正面控件的位置。



1 电源指示灯
当使用驱动器时，该指示灯可见。

2 弹出按钮
按下此按钮弹出 DVD 或 CD。

3 手动弹出孔
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 11 页的『手动弹出光盘』。

第 2 章 使用多功能刻录机驱动器

本节提供了有关如何操作、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不要移动 ThinkPad 计算机，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不要进行输入，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正在进行的格式化和写过程。
- 当写光盘时，不要将 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 介质的质量和特征。

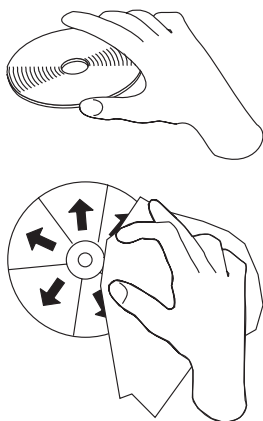
操作和保养光盘

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

- 始终将 CD ROM 存放在其原始包装中
- 始终避免将 CD ROM 存放在直接日照中
- 始终将 CD ROM 存放在远离直接热源的地方
- 不使用 CD ROM 时将其从计算机取出
- 在每次使用 CD ROM “之前”检查 CD ROM 是否有裂纹
- 不要强制将 CD ROM 放入计算机 / 包装内
- 不要扭曲或折曲 CD ROM

要点：不要使用有裂纹的 CD-ROM。

注意：以圆周运动擦拭光盘可能导致数据丢失。



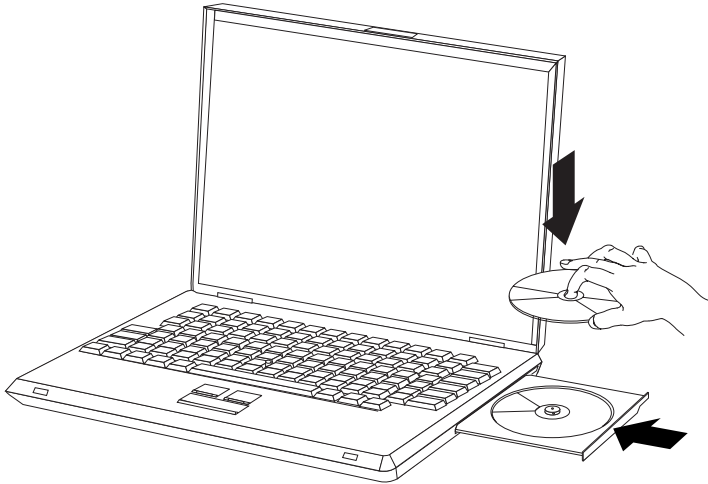
- 握住光盘的边缘或中心孔。不要触摸光盘表面。
- 要除去灰尘或指纹，请用柔软、不起毛的布从中心向边缘擦拭光盘。
- 不要在光盘表面书写。
- 不要将光盘置于直接日照下。
- 不要使用工业用清洗剂来清洁光盘。
- 不要弯曲光盘。

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，请遵守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。
- 不要将异物插入驱动器中。
- 不要将物品堆叠在驱动器上。
- 不要卸下驱动器外盖或试图维修驱动器。
- 不要在以下环境下运行驱动器：
 - 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：不要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 11 页的『手动弹出光盘』以获取更多信息。

使用驱动器

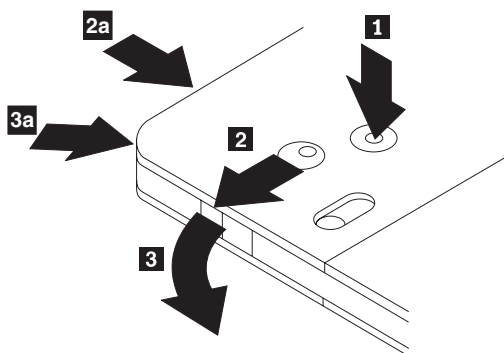
本节包含了有关使用“多功能刻录机”的信息。

使用单面和双面 DVD-RAM 介质

DVD-RAM 介质有单面和双面两种型式可供使用。

2.6 GB 和 4.7 GB 的型式是单面的。9.4 GB 的型式是双面的。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



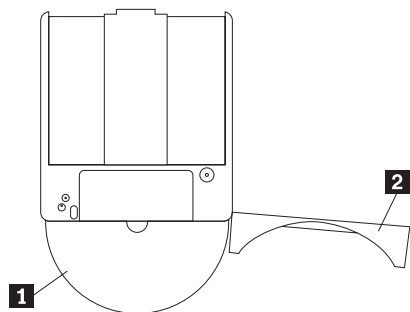
DVD-RAM 介质有裸光盘式或盒式两种形式可供使用。要在“多功能刻录机”中使用盒式介质，您首先必须将光盘从盒中取出。

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** 上向下推并拔出盒盖 **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，请不要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。

操作时的预防措施

当操作取出的光盘时要小心。碎屑、灰尘颗粒、指纹、涂抹或刮花可能损害介质的刻录和回放。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。不要使用溶剂来清洁光盘表面。当给光盘标号时，只能写在印刷的标签面上或使用软性的标签笔在光盘盒上书写。避免直接阳光照射、高温和潮湿。不要在光盘的任何一面贴标签。

将驱动器与 CD 和 DVD 一起使用

完成以下过程来读取数据光盘：

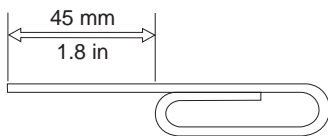
1. 打开计算机。
2. 按下驱动器前面的打开 / 关闭按钮。
3. 将光盘或光盘盒插入托盘中，标签朝上。
4. 按下打开 / 关闭按钮或轻推装入托盘来关闭托盘。
警告： 不要强行打开托盘或插入异物来打开装入托盘。
5. 等待驱动器忙指示灯关闭；然后双击“我的电脑”。
6. 双击 CD-ROM 或 DVD-RAM/DVD-R/DVD-RW 图标。

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。拉直端必须伸出至少 45 mm (1.8 in.) 长。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

本节描述了如何使用和定制 DVD 播放器软件。您可以在 User's Guide and Software Disc 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 2000 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**。

读取“系统”下的编号。

- 4.00.950B 意味着版本为 Windows 95 OSR2.0 或 OSR2.1。
- 4.00.950C 意味着版本为 Windows 95 OSR2.5。

启用 Drive Letter Access (DLA)

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、CD-RW、DVD-R 和 CD-R 介质可以写入许多次 (DVD-R 和 CD-R 介质上的数据可能会一直附加直到这些光盘满了为止)。

要格式化并写入 DVD-R、CD-R、DVD-RAM、DVD-RW 或 CD-RW 介质:

1. 将光盘插入驱动器。
2. 双击**我的电脑**。右击“多功能刻录机”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“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。

要使 CD-R 介质在其它计算机中兼容:

1. 双击**我的电脑**。右击“多功能刻录机”的盘符。
2. 单击**使兼容**。

为了在其它计算机中使用 UDF 格式的 DVD-RAM、DVD-RW 或 CD-RW 介质, User's Guide and Software CD 包含了 UDF Reader。要使用 UDF Reader, 请按照此过程进行操作:

1. 将 User's Guide and Software CD 插入到想要在其中使用 UDF 格式光盘的计算机的 CD 或 DVD 驱动器中。
2. 单击**开始**。
3. 单击**运行**。
4. 输入 e:\UDF\language, 其中 e 是该 CD 或 DVD 驱动器的盘符, 而 language 就是您的语言。
5. 单击**确定**。
6. 双击 SETUP.EXE 并按照屏幕上的指示信息操作。

注: 只有那些没有对 CD-RW 或 DVD-RW 再安装一个 DLA 程序的系统需要 UDF Reader。

启用 DMA 设置

本节说明了对 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**。（如果使用的是 ThinkPad A21e 计算机，则双击 **Primary IDE**。）
7. 选择 **DMA（若可用）**作为“传送模式”。
8. 单击**确定**。
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**以下拉出子菜单。
6. 双击**次要 IDE 通道**。（如果您使用的是 ThinkPad A21e 计算机，则请双击**主要 IDE 通道**。）
7. 单击**高级设置**选项卡。
8. 选择 **DMA（若可用）**作为“传送模式”。
9. 单击**确定**。
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、编辑和录制视频和音频文件。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 ThinkPad 多功能刻录机 CD 上的“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 来在硬盘上创建 DVD 图像，可以选择“Load Image to Burn”。

WinDVD Creator Plus 还提供了用“Disk Manager”将视频直接刻录到 DVD 可刻录介质的功能。这可以不使用任何额外的硬盘空间就可完成。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（添加或删除电影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 *Software and User's Guide CD* 上的“Software”一节。

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，特定的内容只能在合适的区域观看。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，不能再做更改。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. 打开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 *Software and User's Guide CD* 上的 WinDVD 帮助信息。如果要在电视机上观看 DVD 电影，请参考随计算机提供的联机信息。

注：

1. 您的计算机已配置为提供以可用的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。如果碰到回放性能较差，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

“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，但可与标准的 CD-ROM 驱动器和 CD 播放器一起使用。

可以使用 CD-R 光盘来刻录音频轨道、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，但只能与较新的 MR 和 CD-RW 兼容的 CD-ROM 以及 DVD-ROM 驱动器一起使用。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能在 DOS、Windows 3.x 或 IBM OS/2[®] 操作系统启用 CD 刻录功能。

有关使用该软件的更多信息，请参考 *Software and User's Guide CD* 上的 IBM RecordNow 和 IBM DLA 帮助信息。

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，但可以与标准 DVD-ROM 驱动器和 DVD 播放器一起使用。

可以使用 DVD-R 光盘来刻录音频轨道、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，但只能与较新的 MR- 和 DVD-RW 兼容的 DVD-ROM 驱动器一起使用。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 *Software and User's Guide 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损坏或其它赔偿费。有关版权法的更多信息，请向您的法律顾问咨询。

问题求解

计算机问题可能由硬件、软件或用户错误造成。本节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、操作系统或声音适配器的出版物。

请检查以下列表，以获取可能修正您所碰到情况的任何问题描述。

不能创建多段光盘。

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 自动插入通知”功能。

不能弹出 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；然后打开计算机，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 11 页的『手动弹出光盘』中给出的指示信息）。

在成功写入 CD 或 DVD 光盘后不能从 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，而使其不可读。要获得故障诊断的方法，请检查随软件提供的文档。
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. 如果在正在写的驱动器中（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. 不要以较慢的 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
- 电源要求
- 环境要求
- 读速度
- 写速度

物理规格

该驱动器的物理规格¹已列出在以下表格中。

| 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 | 240 g (0.53 lb) |

电源要求

以下表格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 |
|------|--------|---------|---------|
| 电压为 | 直流电 5V | 1100 mA | 1800 mA |

1. 产品描述数据代表 IBM 的设计目标并提供用于为比较的用途；实际结果可能基于各种因素而有所变化。本产品数据不构成保证。数据更改，恕不通知。

环境要求

| 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 8X |
| DVD-RW（4.7 GB） | 最大 8X |
| 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） | 1X |
| DVD-RW（V1.1） | 1X |
| 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. Warranty Information

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

Warranty period

Contact your place of purchase for warranty service information.

A warranty period of three years on parts and one year on labor means that IBM will provide warranty service without charge for:

1. parts and labor during the first year of the warranty period
2. parts only, on an exchange basis, in the second and third years of the warranty period. IBM will charge you for any labor it provides in performance of the repair or replacement.

Machine - IBM ThinkPad Multi-Burner Ultrabay 2000 Drive

| Warranty period | Service delivery method |
|--------------------------------|------------------------------|
| Parts - 1 year, labor - 1 year | Customer carry-in or mail-in |

With the original purchase of an IBM computer, you have access to extensive support. During the IBM Machine warranty period, you may call IBM or your reseller for problem-determination assistance under the terms of the IBM Statement of Limited Warranty.

For European warranty information, see 第 35 页的附录 C, 『European Union warranty information』.

Service and support

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

Warranty information on the World Wide Web

The IBM Machine Warranties Web site at www.ibm.com/servers/support/machine_warranties/ contains a worldwide overview of the IBM Limited Warranty for IBM Machines, a glossary of terms used in the Statement of Limited Warranty, Frequently Asked Questions (FAQ), and links to Product

Support Web pages. The IBM Statement of Limited Warranty is available from this Web site in 29 languages in Portable Document Format (PDF).

Online technical support

Online technical support is available during the life of your product through the Personal Computing Support Web site at 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 HelpCenter[®] will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

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

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

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

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

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

All other countries and regions

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

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

Part 1 - General Terms

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

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

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

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

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty: IBM does not warrant uninterrupted or error-free operation of a Machine. Any technical or other support provided for a Machine under warranty, such as assistance via telephone with 『how-to』 questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

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

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

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

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

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

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided:
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides;

- b. secure all programs, data, and funds contained in a Machine;
- c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations; and
- d. inform IBM or your reseller of changes in a Machine's location.

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

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

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

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

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

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

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

Part 2 - Country-unique Terms

AMERICAS

BRAZIL

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

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

NORTH AMERICA

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

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

CANADA

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

laws in the Province of Ontario.

UNITED STATES

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

laws of the State of New York.

ASIA PACIFIC

AUSTRALIA

The IBM Warranty for Machines: *The following paragraph is added to this Section:*

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

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

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

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

CAMBODIA, LAOS, AND VIETNAM

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

The following is added to this Section:

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

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

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

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

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

HONG KONG AND MACAU

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

INDIA

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

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

JAPAN

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

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

NEW ZEALAND

The IBM Warranty for Machines: *The following paragraph is added to this Section:*

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

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

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

PEOPLE'S REPUBLIC OF CHINA (PRC)

Governing Law: *The following replaces this Section:*

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

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

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

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

EUROPE, MIDDLE EAST, AFRICA (EMEA)

THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:

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

Warranty Service: If you purchase an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM. If you purchase an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

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

Governing Law: The applicable laws that govern, interpret and enforce rights, duties, and obligations of each of us arising from, or relating in any manner to, the subject matter of this Statement, without regard to conflict of laws principles, as well as Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided, except that in 1) Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Hungary, Former Yugoslav Republic of Macedonia, Romania, Slovakia, Slovenia, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan, the laws of Austria apply; 2) Estonia, Latvia, and Lithuania, the laws of Finland apply; 3) Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Djibouti, Democratic Republic of Congo, Equatorial Guinea, France, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Mali, Mauritania, Morocco, Niger, Senegal, Togo, and Tunisia, this Agreement will be construed and the legal relations between the parties will be determined in accordance with the French laws and all disputes arising out of this Agreement or related to its violation or execution, including summary proceedings, will be settled exclusively

by the Commercial Court of Paris; 4) Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe, this Agreement will be governed by English Law and disputes relating to it will be submitted to the exclusive jurisdiction of the English courts; and 5) in Greece, Israel, Italy, Portugal, and Spain any legal claim arising out of this Statement will be brought before, and finally settled by, the competent court of Athens, Tel Aviv, Milan, Lisbon, and Madrid, respectively.

THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:

AUSTRIA AND GERMANY

The IBM Warranty for Machines: *The following replaces the first sentence of the first paragraph of this Section:*

The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this Section:

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

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

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

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

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

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

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

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

EGYPT

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

as to any other actual direct damages, IBM's liability will be limited to the total

amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term 『Machine』 includes Machine Code and Licensed Internal Code.

Applicability of suppliers and resellers (unchanged).

FRANCE

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

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

IRELAND

Extent of Warranty: *The following is added to this Section:*

Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

Limitation of Liability: *The following replaces items one and two of the first paragraph of this Section:*

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

Applicability of suppliers and resellers (unchanged).

The following paragraph is added at the end of this Section:

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

ITALY

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

In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than:

1. *(unchanged)*
2. as to any other actual damage arising in all situations involving nonperformance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

The following replaces the third paragraph of this Section:

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

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

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

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

UNITED KINGDOM

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

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

The following item is added to this paragraph:

3. breach of IBM's obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982.

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

附录 C. European Union warranty information

Consumers in the European Union have legal rights under applicable national legislation governing the sale of consumer goods. This legislation may apply to you if you purchased this product as a consumer (that is, as a natural person, and for personal use which is not related to your trade, business or profession). To obtain warranty service under this legislation, you will need to present the proof of purchase to IBM, together with an indication that you are a consumer.

Dans l'Union européenne, les consommateurs disposent de droits selon la loi en vigueur nationale régissant la vente de biens de consommation. Cette loi peut vous être applicable si vous avez acheté ce produit en tant que consommateur (c'est-à-dire, en tant que personne physique, et pour un usage privé qui n'a aucun rapport avec votre commerce, votre métier ou profession). Pour bénéficier du service prévu par la Garantie dans le cadre de cette loi, vous devez présenter la preuve d'achat correspondante à IBM, en lui indiquant que vous êtes un consommateur.

I consumatori dell'Unione Europea sono tutelati dalla legislazione nazionale che regola la vendita dei beni al consumatore. Tale legislazione può essere applicata se il prodotto è stato acquistato da un consumatore (vale a dire, una persona fisica e per uso personale non legato al commercio, all'azienda o alla professione svolta). Per ottenere il servizio di garanzia con questa legislazione, occorre presentare una prova di acquisto alla IBM, insieme con l'indicazione che il richiedente è un consumatore.

In der Europäischen Union haben die Verbraucher nach der geltenden nationalen Gesetzgebung Rechte hinsichtlich des Verbrauchsgüterkaufs. Diese Gesetzgebung kann für Sie gelten, wenn Sie dieses Produkt als Privatkunde erworben haben (d. h. als natürliche Person und für den persönlichen Gebrauch, der nicht mit Ihrem Gewerbe, Ihrem Unternehmen oder Ihrer beruflichen Tätigkeit zusammenhängt). Um unter dieser Gesetzgebung Garantieservice zu erhalten, müssen Sie IBM den Kaufnachweis zusammen mit einem Nachweis dafür, dass Sie Privatkunde sind, vorlegen.

Los consumidores de la Unión europea tienen derechos legales de acuerdo con la legislación nacional aplicable que regula la venta de bienes de consumo. Esta legislación puede aplicarse en su caso si ha adquirido este producto como un consumidor (es decir, como una persona natural y para uso personal que no esté relacionado con su comercio, negocio o profesión). Para obtener servicio de garantía de acuerdo con esta legislación, tendrá que presentar el justificante de compra a IBM, junto con información indicando que es un consumidor.

Na União Europeia, os consumidores gozam de direitos legais nos termos da legislação nacional aplicável que rege a venda de bens de consumo. Esta legislação poderá ser-lhe aplicável caso tenha adquirido este produto na qualidade de consumidor (ou seja, um indivíduo, para utilização pessoal, não relacionada com a sua actividade profissional,

comercial ou negócio). Para obter serviço de garantia nos termos desta legislação, terá que apresentar a prova de compra à IBM, em conjunto com a indicação de que adquiriu o produto na qualidade de consumidor.

Forbrugere i EU har via gældende national lovgivning visse rettigheder i forbindelse med salg af forbrugsvarer. Denne lovgivning gælder muligvis for dig, hvis du har anskaffet dette produkt som forbruger, dvs. som fysisk person og til personlig brug og ikke i forbindelse med dit fag, din forretning eller din profession. For at opnå garantiservice i henhold til denne lovgivning skal du vise kvitteringen for købet af produktet til IBM og angive, at du er forbruger.

Klanten in de Europese Unie hebben wettelijke rechten onder toepasselijke landelijke wetgeving die van toepassing is op de verkoop van consumptiegoederen. Deze wetgeving is mogelijk op u van toepassing als u dit product als consument hebt aangeschaft (dat is als natuurlijk persoon en voor persoonlijk gebruik dat niet in verband staat tot uw handel, zaken of beroep). Voor het verkrijgen van garantieservice onder deze wetgeving moet u het bewijs van aankoop kunnen tonen aan IBM, samen met een indicatie dat u een consument bent.

EU-maissa kuluttajilla on kulutustavaroiden myyntiä koskevan paikallisen lainsäädännön mukaiset oikeudet. Tämä lainsäädäntö saattaa koskea teitä, jos olette hankkinut tämän tuotteen kuluttajana (luonnollisena henkilönä kaupankäyntiin, liiketoimintaan tai ammatinharjoittamiseen liittymättömä henkilökohtaiseen käyttöön). Täyttäkää tässä tapauksessa alla olevat tie ja toimittakaa kortti IBM:lle rekisteröintiä varten. IBM käyttää tietoja varmistaakseen, että teille kuuluvat kuluttajan oikeudet toteutuvat.

Konsumenter inom EU har lagliga rättigheter i enlighet med tillämplig lagstiftning i varje land, avseende försäljning av konsumentvaror. Denna lagstiftning kan gälla dig, om du har köpt varan i egenskap av konsument (med konsument avses en fysisk person som köper en vara för personligt bruk, ej relaterat till personens yrkesmässiga verksamhet). Om du vill ha garantiservice i enlighet med denna lagstiftning, måste du visa upp ett inköpsbevis för IBM, tillsammans med något som tyder på att du är konsument.

Οι καταναλωτές στην Ευρωπαϊκή Ένωση έχουν νόμιμα δικαιώματα βάσει της ισχύουσας εθνικής νομοθεσίας που διέπει την πώληση καταναλωτικών αγαθών. Η νομοθεσία αυτή εφαρμόζεται στην περίπτωσης σας εάν αγοράσατε αυτό το προϊόν ως καταναλωτής (δηλαδή ως φυσικό πρόσωπο και για προσωπική χρήση που δεν σχετίζεται με την επιχείρηση ή το επάγγελμά σας). Για να λάβετε υπηρεσίες εγγύησης βάσει της εν λόγω νομοθεσίας, θα πρέπει να προσκομίσετε στην IBM την απόδειξη αγοράς και να δηλώσετε ότι είστε καταναλωτής.

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.

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*IBM Director of Licensing
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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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HelpCenter
IBM
OS/2
ThinkPad
Ultrabay

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

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

Federal Communications Commission (FCC) statement

IBM ThinkPad Multi-Burner Ultrabay 2000 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)

Zulassungsbeseinigungslaut 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 Übereinstimmung mit 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. |
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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 Abschirmung zu 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 - Direttiva 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.

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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



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