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IBM E400 PROJECTOR

User's Guide

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User's Guide

注: Before using this information and the product it supports, read the information in 第 D-1 页的附录 D, 『Service and Support』 and 第 E-1 页的附录 E, 『IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002』

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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 information

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

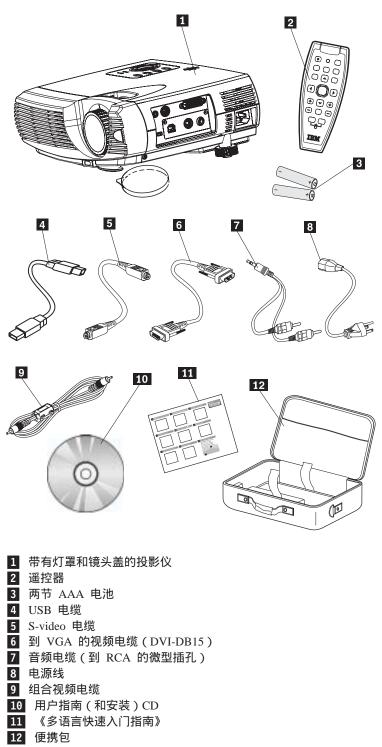
Registering your option

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. 前言

IBM[®] E400 投影仪可用于商务演示和家庭娱乐,且易于连接、使用和维护。 除了本用户指南外,您的选件包还包含以下物品:



如果以上列出的任何物品缺少或损坏,请与您的购买处联系。

注:请务必保留您的购货凭证;接受保修服务时将需要它。

有关投影仪可选配件的信息,请转至站点 http://www.ibm.com。

警告:

- 请避免在较脏的环境中使用该投影仪。
- 请勿阻塞投影仪的通风口。
- 请将投影仪保持电源线插入状态(2-5 分钟),直至恢复到室温状态后再将其放入软包。关闭电源后太快将投影仪放入包中可能导致投影仪过热并将缩短投影灯的寿命。
- 请务必盖上镜头盖后再将投影仪放入软包中以避免损坏镜头。

第 1 章 简介

下图显示了投影仪的功能部件。

图 1-1. 投影仪右前方视图

1	镜头 / 聚焦
2	IR 接收器
3	接口
4	电源线接口
5	水平调节脚
6	升降脚
7	升降脚调节按钮

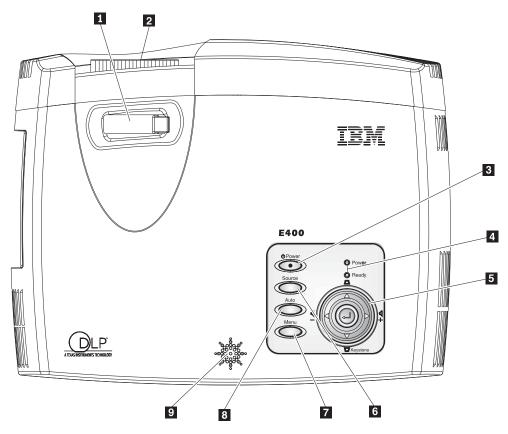


图 1-2. 投影仪顶部视图

缩放
 案焦
 聚焦
 电源
 系统状态指示灯
 控制按钮
 信号源按钮
 菜单按钮
 自动按钮
 扬声器

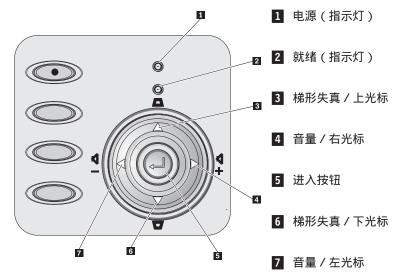


图 1-3. 投影仪上的控制按钮和指示灯的顶部视图

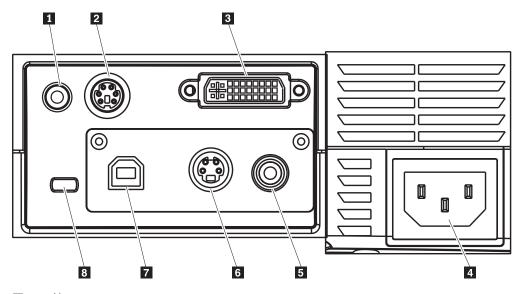
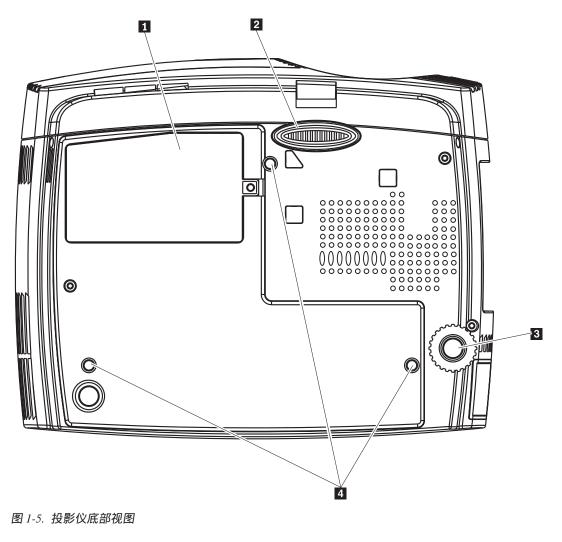


图 1-4. 接口

- 音频输入
 RS-232
 DVI-I
 交流电源插座
 组合视频
 S-video
- 7 USB
 8 安全插槽





第2章设置投影仪

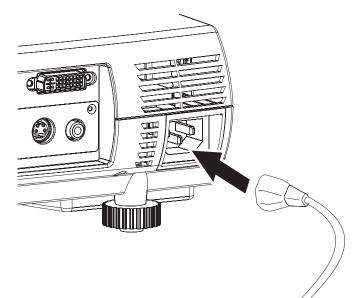
本章提供了有关启动和关闭投影仪、调整投影仪高度和水平、调整缩放、聚焦和梯形 失真以及调整音量的信息。

警告: 在移动投影仪之前,请务必正常关闭投影仪电源并从主电源断开投影仪的连 接。

启动和关闭投影仪

请按照以下步骤来启动和关闭投影仪。

 如下所示,将电源线连接到投影仪上。将电源线的另一端连接到墙上的插座。电源 指示灯和投影灯就绪指示灯亮起。



- 2. 卸下镜头盖。
- 3. 连接到输入设备。
- 4. 打开已连接的设备。
- 5. 确保投影灯就绪指示灯显示为稳定的淡黄色,然后按电源按钮打开投影仪。

显示带有雪花的屏幕并检测已连接的设备。如果连接设备是 IBM ThinkPad,则按计 算机键盘上的 Fn + F7 来将显示输出切换到投影仪。请查看非 IBM PC 的用户手 册以确定相应的 Fn 热键来更改显示输出。

警告: 当投影灯亮起时,请勿直视投影镜头。明亮的灯光可能会刺伤您的眼睛。

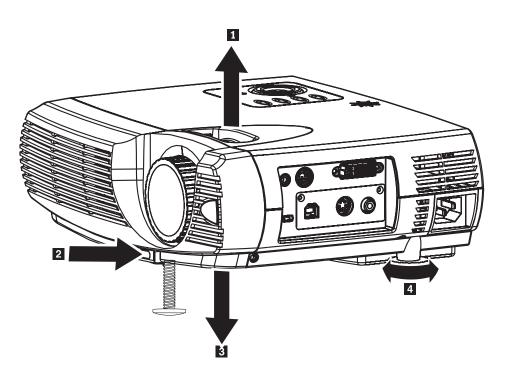
- 6. 如果已连接多个输入设备,则重复按信号源按钮来在设备之间切换。
- 7. 要关闭投影仪,请按电源按钮。投影仪准备关闭,并显示"Wait a moment please..." 的消息。
- 8. 当 "Power off?/Press Power again " 消息出现时,请按电源按钮。投影仪关闭。

- 注:请将投影仪保持电源线插入状态(至少 2-5 分钟),直至恢复到室温状态后再将其 放入软包。关闭电源后太快将投影仪放入包中可能导致投影仪过热。
- 警告: 移动投影仪之前,请务必正常关闭投影仪电源并从主电源断开投影仪的连接。

调整投影仪高度

要调整投影仪高度,请完成以下过程:

- 2. 要增加投影仪的高度,请抬起投影仪(如图 1 所示)并按升降脚按钮(如图 2 所示)。升降脚下降(如图 3 所示)。
- 2. 要降低投影仪的高度,请按升降脚按钮(如图 2 所示)并从投影仪顶部向下压。
- 3. 要对水平位置进行调整,请旋转水平调节脚(如图 4 所示)。



定位投影仪

要确定投影仪的位置,请考虑屏幕的大小和形状、电源插座的位置以及投影仪和其余 设备之间的距离。以下为一些常规准则:

- 将投影仪定位在与屏幕夹合适的角的平面上。投影仪必须离投影屏幕至少 1.5 米 (4.9 英尺)。
- 将投影仪定位在距电源 2.7 米(9 英尺)以内且距视频设备 1.8 米(6 英尺)以内 (除非您购买了扩展电缆)。要确保电缆能够正确连接,请勿将投影仪放置在距墙壁 或其它物体 0.15 米(6 英寸)以内。
- 将投影仪放置在距屏幕期望的距离。从投影仪镜头到屏幕的距离、缩放设置以及视频格式确定了投影图像的大小。

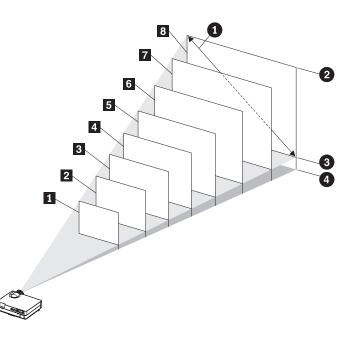


图 2-1.

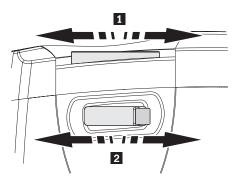
表 2-1.			
对角线屏幕尺寸	图像宽度	图像高度	镜头中心到图像底部 的距离
0	2	3	4
(米/英寸)	(米/英尺)	(米/英尺)	(米/英尺)
1 1.10/43.3	0.88/2.88	0.66/2.16	1.5/4.92
2 1.47/57.8	1.17/3.83	0.88/2.88	2/6.56
3 1.76/69.3	1.4/4.59	1.1/3.6	2.4/7.87
4 2.06/81.1	1.64/5.38	1.23/4.03	2.8/9.18
5 2.35/92.5	1.87/6.13	1.41/4.62	3.2/10.5
6 2.65/104.3	2.11/6.92	1.58/5.18	3.6/11.81
7 2.94/115.7	2.34/7.67	1.76/5.77	4/13.12
8 3.23/127.2	2.57/8.43	1.94/6.36	4.4/14.4

调整缩放、聚焦和梯形失真

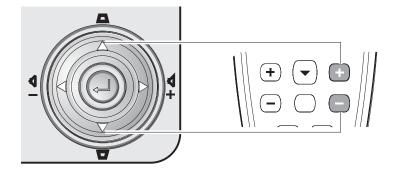
要调整图像,请按照这些步骤操作:

1. 使用投影仪上的图像聚焦控件以使投影图像清晰(如图 11 所示)。

2. 使用投影仪上的图像缩放控件以调整投影图像的大小和屏幕尺寸 (如图 2 所示)。



3. 使用梯形失真按钮(如下所示)纠正图像梯形效果。

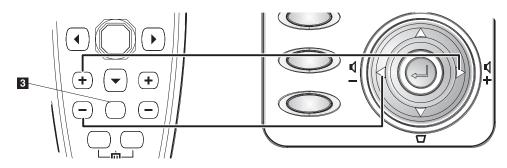


梯形失真控件出现在显示器上。

调整音量

要调整音量,请按照以下步骤操作:

- 1. 按投影仪或遥控器上的音量 +/- 按钮。音量控件出现在 OSD 上。
- 2. 使用音量 +/- 按钮调整级别。投影仪和遥控器上的音量按钮显示如下。



- 3. 按静音按钮 (仅在遥控器上才有)关闭声音。请参阅上图中的 3。
- 4. 按投影仪或遥控器上的音量 +/- 按钮关闭静音。

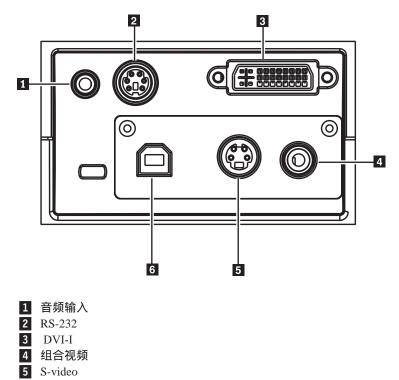
第3章将设备连接到投影仪

6 USB

本章提供了有关将设备连接到 E400 投影仪的信息。

连接设备

可以同时将计算机和视频设备连接到投影仪上。请查看连接设备的用户手册以确认它 有相应的输出接口。



第4章使用投影仪功能部件

本章提供使用遥控器、音频、小键盘按钮和其它投影仪功能部件的信息。

使用遥控器

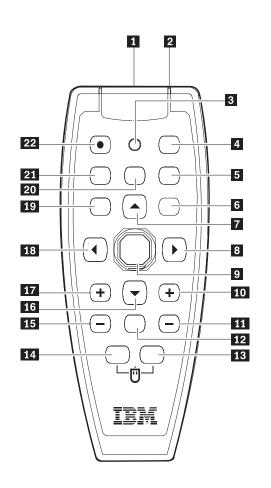
遥控器使用两节 AAA 电池(已提供)。安装电池很简单,滑下遥控器背面的盖子,对齐 电池的 + 和 - 两端,并把它们滑入到位,然后重新盖上盖子。



注意:

为了减少伤害眼睛的危险,请勿直视遥控器的激光并且请勿将激光指向任何人的眼睛。遥控器装配有发出辐射的二类激光器。

下图是对遥控器的图解。

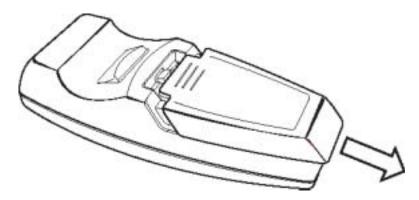




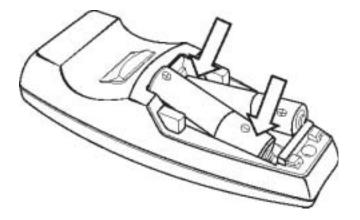
插入遥控器电池

当首次使用遥控器时,请安装提供的电池。请按照以下步骤操作,将新电池插入遥控器。

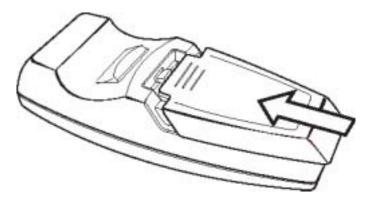
1. 如图所示,沿箭头方向滑动电池舱外盖来卸下它。



2. 如图所示,插入提供的电池,请注意极性(+/-)。



3. 如图所示,重新盖上外盖。



注:

- 仅使用 AAA 碱性电池。
- 根据本地政府的法令和法规处理使用过的电池。
- 当长期不使用遥控器时,请取出电池。

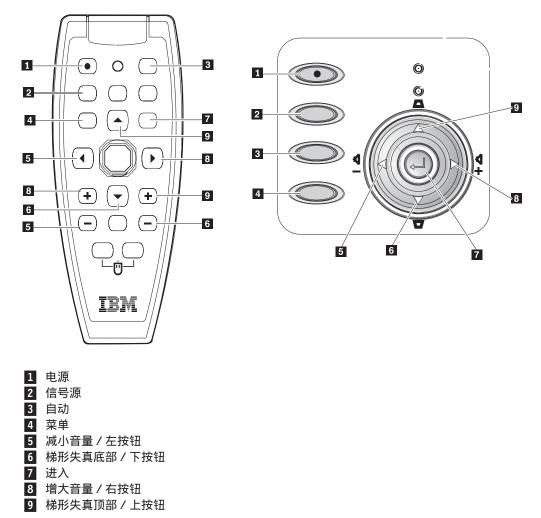
操作范围

该遥控器使用红外传输来控制投影仪。不必将遥控器直接指向投影仪,该遥控器的操作范围是:半径约 10 米(33 英尺),投影仪平面上下 30°。如果投影仪没有对遥控器 作出反应,请靠近些。

注:您也可以将遥控器指向投影图像。

投影仪和遥控器按钮

可以使用遥控器或投影仪顶部的按钮操作投影仪。遥控器可以执行全部操作。下图显示了遥控器和投影仪上对应的按钮。



第5章 屏幕显示菜单控件

该投影仪具有可以让您进行图像调整和更改各种设置的屏幕显示。

注:要操作 OSD,屏幕上必须有显示。

浏览 OSD

您可以使用遥控器或投影仪顶部的按钮浏览和更改 OSD。以下部分显示 OSD 中的菜单选项。

设置 OSD 语言

在阅读本部分时您可能想要参考投影仪上的 OSD。在按照以下步骤继续进行操作之前, 请将 OSD 语言设置为您想要的语言。

- 1. 按菜单按钮。出现 Quality 菜单。
- 2. 按光标左 / 右按钮直到 Language 突出显示。

Quality	Properties	Options	Setup	Language	Information
		Engli	sh		
		Frend	:h		
		Germ	an		
		Italia	n		
		Spani	sh		
		Swedi	ish		
		Chinese-Si	mplified		
		Chinese-Tra	nditional		
		Japan	ese		
		Когеа	an		
Menu =	Exit	Menu select	< ▶	Scroll	•

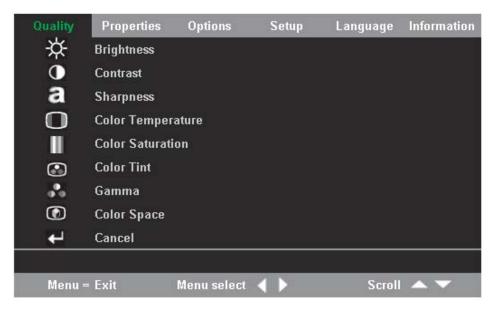
- 3. 按光标上 / 下按钮直到要选择的语言突出显示。
- 4. 按进入按钮选择语言。
- 5. 按菜单按钮两次来关闭 OSD。

Quality 菜单

请按照以下步骤操作以访问 Quality 菜单。

1. 按菜单按钮打开 OSD 菜单。

2. 按光标左 / 右按钮移动到 Quality 菜单。



3. 按光标上 / 下按钮在 Quality 菜单中上下移动。

项	描述	缺省值
Brightness	按光标左 / 右按钮调整亮度。	50
	范围:0 到 100	
Contrast	按光标左 / 右按钮调整对比 度。	50
	范围:0 到 100	
Sharpness	按光标左 / 右按钮调整显示清 晰度。	3
	范围:1 到 5	
Color Temperature	按光标左 / 右按钮调整颜色温 度。	Normal
	范围:Cool/Normal/Warm	
Color Saturation	按光标左 / 右按钮调整视频饱 和度。	50
	只有当输入源为	
	Video/S-Video/YPbPr 时 Color Saturation 才是活动的。	
	范围:0 到 100	

下表显示您在 Quality 菜单中将看到的选项和缺省值。

项	描述	缺省值
Color Tint	按光标左 / 右按钮调整视频色 彩 / 色调。	50
	只有当输入源为 Video/S-Video/YPbPr 时 Color	
	Video/S-Video/YPBPr 时 Color Tint 才是活动的。	
	范围:0 到 100	
Gamma	按光标左 / 右按钮调整显示的 伽玛校正。	PC
	输入 Gamma 亮度	
	PC 2.2 高	
	MAC 1.8 高	
	视频 2.4 低	
	图表 2.2 低	
	B&W 2.4 高	
Color Space	按光标左 / 右按钮调整颜色间 隔。	Auto
	范围:Auto、RGB、YpbPr 和 YCbCr	
Cancel	将所有 Quality 项的设置复位 到缺省值	N/A

Properties 菜单

请按照以下步骤操作来访问 Properties 菜单。

- 1. 按菜单按钮打开 OSD 菜单。
- 2. 按光标左 / 右按钮移动到 Properties 菜单。

Quality	Properties	Options	Setup	Language	Information
0	Horizontal Po	osition			
0	Vertical Posit	tion			
\heartsuit	Keystone				
巴	Aspect Ratio				
4	Cancel				
Menu =	Exit	Menu select		Scroll	

3. 按光标上 / 下按钮在 Properties 菜单内上下移动。

下表显示您在 Properties 菜单中将看到的选项和缺省值。

项	描述	缺省值
Horizontal Position	按光标左 / 右按钮左右移动图 像。	50
	范围:0 到 100	
Vertical Position	按光标左 / 右按钮上下移动图 像。	50
	范围:0 到 100	
Keystone	按光标左 / 右按钮纠正投影图 像的失真。 范围:-50 到 50	0
Aspect Ratio	按光标左 / 右按钮在 4:3 标准 格式和 16:9 高清晰电视 (HDTV)格式之间切换。	4:3
Cancel	将 Keystone 和 Aspect Ratio 复位为缺省值。	N/A

Options 菜单

要操作 Options 菜单,请按照以下步骤操作。

1. 按菜单按钮打开 OSD 菜单。

2. 按光标左 / 右按钮移动到 Options 菜单。



3. 按光标上 / 下按钮在 Options 菜单中上下移动。

项	描述	缺省值
Blank Screen	按光标左 / 右按钮为空白屏幕 选择背景色。 范 围 :	Blue
	Black、Red、Green、Blue 和 White	
Auto Source	按光标左 / 右按钮启用或禁用 自动信号源检测。 范围: On/Off	On
Auto Power Off	按光标左 / 右按钮启用或禁用 10 分钟没有进行任何操作后自 动关闭投影灯。	Off
Volume	范围:On/Off 按光标左/右按钮调整音量级 别。 范围:0 到 8	4
Menu Position	按光标左 / 右按钮调整 OSD 在屏幕上的位置。 范围: Left、Right、Center、Down 和 Up	Center

项	描述	缺省值
Menu Display	按光标左 / 右按钮确定 OSD 的超时延迟。	15
	范围:10 到 20 秒	
Translucent Menu	按光标左 / 右按钮设置菜单屏 幕半透明。	Off
	范围:On/Off	
Cancel	将所有 Options 屏幕项复位为 缺省值。	N/A

Setup 菜单

请按照以下步骤操作来访问 Setup 菜单。

- 1. 按菜单按钮打开 OSD 菜单。
- 2. 按光标左 / 右按钮移动到 Setup 菜单。

Quality	Properties	Options	Setup	Language	Information
0	Video Type				
7-	Video AGC				
P	Projection				
Ø	Frequency				
	Tracking				
+	Cancel				
Menu	= Exit	Menu select	•	Scroll	

3. 按光标上 / 下按钮在 Setup 菜单中上下移动。

下表显示您在 Setup 菜单中将看到的选项和缺省值。

项	描述	缺省值
Video Type	按光标左 / 右按钮选择视频标 准。	Auto
	只有当输入源为 Video 或 S-Video 时 Video Type 才是活 动的。	
	范围:Auto、NTSC、PAL 和 SECAM	

项	描述	缺省值
Video AGC	按光标左 / 右按钮启用或禁用 视频源的自动晶粒控制。	On
	只有当输入源为 Video 或	
	S-Video 时 Video AGC 才是活	
	动的。	
	范围: On/Off	
Projection	按光标左 / 右按钮在四个投影 方法中进行选择:	Desktop mount, front of screen
	• Desktop mount, front of	
	screen	
	• Desktop mount, rear of screen	
	• Ceiling mount, front of screen	
	• Ceiling mount, rear of screen	
Frequency	按光标左 / 右按钮调整 A/D 采 样时钟。	自动检测
	只有当输入源为 Analog RGB	
	时 Frequency 才是活动的。	
	范围:0 到 100	
Tracking	按光标左 / 右按钮调整 A/D 采 样数。	自动检测
	只有当输入源为 Analog RGB	
	时 Tracking 才是活动的。	
	范围:0 到 100	
Cancel	将 Video Type、Video AGC 和	N/A
	Projection 复位为缺省值。	

Info 菜单

请按照以下步骤操作来访问 Info 菜单。

1. 按菜单按钮打开 OSD 菜单。

2. 按光标左 / 右按钮移动到 Info 菜单。

Quality	Properties Option	s Setup	Language	Information
í	Video Information	800 × 600 @	60 Hz	
Ð	Active Source	Analog RGB		
V.	Software Version	08A00I6		
-ÿ-	Lamp Hours	9999		
÷	Lamp Mode	Normal	Eco	
~~~_~~~~~~	Lamp Hour Reset	←		
Changes brightness and power consumption				
Men	nu = Exit Item	Adjust 🔹	Scro	તા ▲▼

3. 按光标上 / 下按钮在 Info 菜单中上下移动。

下表显示您在 Info 菜单中将看到的选项和简短描述。

项	描述	
Video Information	显示已连接视频设备的分辨率和刷新率。	
Active Source	有关活动源的信息。	
Software Version	有关软件修正的信息。	
Lamp Hours	投影灯已使用的小时数。	
Lamp Mode	按光标左 / 右按钮选择投影灯方式:	
	• Normal	
	• Eco	
Lamp Hour Reset	在更换投影灯后,该项应该复位。	

## 附录 A. 维护

本章提供有关投影仪维护的信息。

## 清洁镜头

- 要清洁镜头,请完成以下过程:
- 1. 在一块柔软的干布上涂上非磨蚀性的照相机镜头清洁剂。
  - 注:避免使用过量的清洁剂,并且不要将清洁剂直接涂在镜头上。磨蚀性的清洁 剂、溶剂或其它粗糙的化学品可能擦伤镜头。
- 以圆周运动的方式用清洁布在镜头上轻轻擦拭。如果不想立刻使用投影仪,请重新 盖上镜头盖。

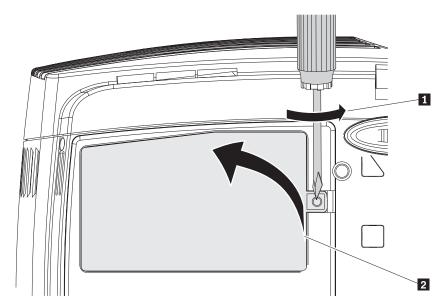
### 更换投影灯

请仅使用与原始投影灯相同类型和等级的灯来替换。请联系您的 IBM 代表以获得信息 或转至 www.ibm.com/pc。

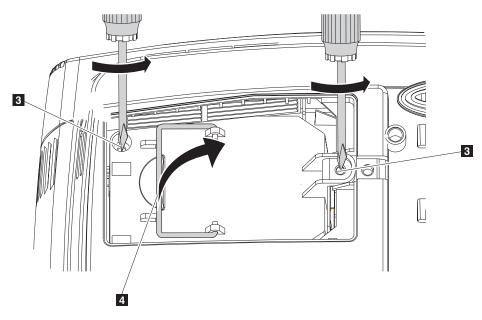
注:关闭投影仪,拔出电源线,并让投影仪冷却至少1个小时后才可尝试更换投影灯。

要更换投影灯,请完成以下过程:

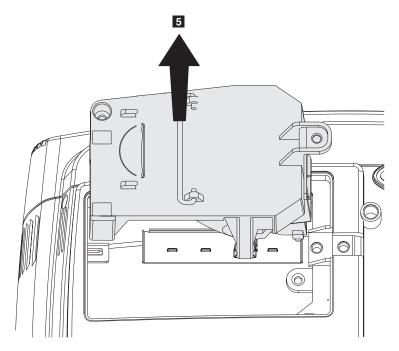
- 1. 如图所示,松开投影灯舱外盖上的螺丝。
- 2. 如图所示,卸下投影灯舱外盖。



- 3. 如图所示, 卸下投影灯模块上的两颗螺丝。
- 4. 如图所示,抬起模块手柄。



5. 如图所示, 使劲拉模块手柄以卸下投影灯模块。



6. 逆向执行步骤 1 到 5 来安装新的投影灯模块。

警告: 本产品包含一个含汞的金属弧光灯。请按照本地法令和法规的要求处理它。

美国限制或禁止随城市垃圾流处理某些或所有含有汞的灯。请访问站点 www.lamprecycle.org 来获得更多有关特别的行政处理要求和回收设施的信息。

在康涅狄格州的用户请拨打 1-888-657-5267 联络 Northeast Lamp Recycling (免费)预 定交付一个包含装投影灯和胶带的盒子以及退货装运标签。

## 复位投影灯计时器

更换投影灯后,您应该将投影灯计时器复位为0。请按照这些步骤操作:

- 1. 按菜单按钮打开主菜单。
- 2. 按左 / 右光标按钮移动到 Info 菜单。
- 3. 按上 / 下光标按钮下移至 Lamp Hour Reset。
- 4. 按进入按钮。出现消息屏幕。
- 5. 按照此顺序按光标按钮:下、上、左、右。Info 菜单再次出现,显示 Lamp Hours 已 复位为 0。

警告: 投影灯的寿命仅是评测亮度退化的一种方法,并非是投影灯发生故障并停止发 亮所消耗的时间规格。投影灯的寿命定义为多于 50% 的批量载入投影灯样品以指定投 影灯额定流明的大约 50% 的亮度衰减所消耗的时间。例如,如果投影灯定义的寿命为 运行时 2000 小时,则投影灯将以 550 流明的大约 50% 衰减亮度。

## 使用安全插槽

投影仪有一个安全插槽。请参考该锁随附的信息以获得它的使用说明。

## 附录 B. 故障诊断

下表提供了投影仪的故障诊断信息。在有些情况下,提供了多个可能的解决方案。请 按各解决方案排列的顺序来依次尝试它们。在问题解决之后,就可以跳过其它的解决 方案。

表 B-1. 故障诊断

问题	解决方案
屏幕上未出现任何图像。	<ul><li>• 验证您的笔记本或台式机上的设置。</li><li>• 关闭所有设备并以正确的顺序再次加电。</li></ul>
图像不清晰。	<ul> <li>调整投影仪上的聚焦。</li> <li>按遥控器或投影仪上的自动按钮。</li> <li>确保投影仪到屏幕的距离在 10 米 (33 英尺)指定范围以内。</li> <li>检查投影仪镜头是否清洁。</li> </ul>
图像的顶部或底部太宽(梯形效 果 )。	<ul> <li>调整投影仪的位置使其尽可能与屏幕垂直。</li> <li>使用遥控器或投影仪上的梯形失真按钮来纠正这一问题。</li> </ul>
图像左右相反或倒置。	检查 OSD 的 View 菜单中的投影设置。
图像中有条纹。	<ul> <li>将 OSD 的 Setup 菜单中的 Frequency 和 Tracking 设置为缺省值。</li> <li>为确保问题不是由已连接 PC 的显示卡造成的,请连接到另一台计算机。</li> </ul>
图像不鲜明无对比。	调整 OSD 主菜单上的 Contrast 设置。
投影图像的颜色与源图像不匹配。	调整 OSD 的 Color 菜单中的 Color Temp. 和 Gamma 设置。
投影仪不发光。	<ul> <li>检查电源线是否已牢固地连接。</li> <li>用另一台电气设备测试电源,确保其良好。</li> <li>以正确的顺序重新启动投影仪并检查电源指示灯是否显示为绿色。</li> <li>如果最近更换过投影灯,请尝试将其重新连接。</li> <li>更换投影灯模块。</li> <li>将原来的投影灯放回投影仪中并将投影仪送修。</li> </ul>
投影灯熄灭。	<ul> <li>电源浪涌可能导致投影灯熄灭。按电源按钮两次关闭投影仪。当投影灯就绪指示灯亮起时,按电源按钮。</li> <li>更换投影灯模块。</li> <li>将原来的投影灯放回投影仪中并将投影仪送修。</li> </ul>

表B-1. 故障诊断 (续)

问题	解决方案	
投影仪不对遥控器做出反应。	• 将遥控器指向投影仪上的遥控传感器。	
	• 确保遥控器与传感器之间没有障碍物。	
	• 关闭任何室内的荧光灯。	
	• 检查电池极性。	
	• 更换电池。	
	• 关闭附近的其它红外线设备。	
	• 将遥控器送修。	
无声音	• 调整遥控器上的音量。	
	• 调整音频源的音量。	
	• 检查音频电缆的连接。	
	• 用其它扬声器测试音频源的输出。	
	• 将投影仪送修。	
声音失真。	• 检查音频电缆的连接。	
	• 用其它扬声器测试音频源的输出。	
	• 将投影仪送修。	

## 投影仪指示灯

投影仪顶部的指示灯指示投影仪的状态并帮助您进行故障诊断。在两个闪烁序列之间 有两秒钟的暂停。有关指示灯所指示的投影仪错误的详细信息,请联系 IBM 代表。

#### 表 B-2. 投影灯就绪指示灯错误消息

投影灯就绪指示灯闪烁次数	解释
闪烁	投影灯未就绪 - 请勿按电源按钮。
1	投影灯风扇 2 错误
2	送风机风扇 1 错误
3	镇流器风扇 1 错误

#### 表 B-3. 电源指示灯错误消息

电源指示灯闪烁次数	解释
3	系统过热
4	系统接口错误
5	投影灯错误
6	风扇错误。请参考投影灯就绪指示灯以确定是哪一个风 扇出现错误
7	投影灯外盖打开
8	DLP 驱动程序错误

## 附录 C. 规格

以下是 IBM E400 投影仪的规格。

温度	5° 到 25° C ( 41° 到 05° F) — 左海亚西京府
	5°到 35°C(41°到 95°F),在海平面高度
(运行时)	
	-10° 到 60° C (14° 到 140° F)
(非运行时)	
海拔高度(运行时)	3,048 米 (0 到 10,000 英尺)
海拔高度(非运行时)	12,192 米 (0 到 40,000 英尺)
湿度(运行时)	5% 到 90% 相对湿度,非冷凝
湿度(非运行时)	5% 到 95% 相对湿度,非冷凝
尺寸(W×D×H)	280×205×97 毫米(11.02×8.07×3.82 英寸)
重量	2.09 千克(4.61 磅)未包装
光学特性(聚焦范围)	1.5 到 7 米 (4.9 到 23 英尺)
投影灯类型	VIP 200W
输入电源要求	交流电 100-240 伏 50-60Hz 2.8 安
天花板安装	UL 测试 / 列出的天花板安装的最小容量是 15.5 千克 (34
	磅)。

## 附录 D. Service and Support

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

### **Online technical support**

Online technical support is available during the life of your product through the Personal Computing Support Web site at www.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 www.ibm.com/pc/support and click **Support Phone List**.

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

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

#### Part 1 - General Terms

This Statement of Limited Warranty includes Part 1 - General Terms, Part 2 -Country-unique Terms, and Part 3 - Warranty Information. The terms of Part 2 replace or modify those of Part 1. The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you purchase for your use, and not for resale. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Nothing in this Statement of Limited Warranty affects any statutory rights of consumers that cannot be waived or limited by contract.

#### What this Warranty Covers

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications ("Specifications") which are available on request. The warranty period for the Machine starts on the original Date of Installation and is specified in Part 3 - Warranty Information. The date on your invoice or sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part. Unless IBM specifies otherwise, these warranties apply only in the country or region in which you purchased the Machine.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

#### What this Warranty Does not Cover

This warranty does not cover the following:

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

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

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

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

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

#### How to Obtain Warranty Service

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

#### What IBM Will Do to Correct Problems

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

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

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

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

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

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

#### Exchange of a Machine or Part

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

#### Your Additional Responsibilities

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

You also agree to:

- 1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
- 2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
- 3. where applicable, before service is provided:
  - a. follow the service request procedures that IBM or your reseller provides;
  - b. backup or secure all programs, data, and funds contained in the Machine;
  - c. IBM or your reseller with sufficient, free, and safe access to your facilities to permit IBM to fulfill its obligations; and
  - d. inform IBM or your reseller of changes in the Machine's location.
- 4. (a) ensure all information about identified or identifiable individuals (Personal Data) is deleted from the Machine (to the extent technically possible), (b) allow IBM, your reseller or an IBM supplier to process on your behalf any remaining Personal Data as IBM or your reseller considers necessary to fulfill its obligations under this Statement of Limited Warranty (which may include shipping the Machine for such processing to other IBM service locations around the world), and (c) ensure that such processing complies with any laws applicable to such Personal Data.

#### Limitation of Liability

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

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

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

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

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

UNDER NO CIRCUMSTANCES IS IBM, ITS SUPPLIERS OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY: 1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, DATA; 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR 4) LOST PROFITS, BUSINESS REVENUE, GOODWILL OR ANTICIPATED SAVINGS. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

#### Governing Law

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

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

#### Jurisdiction

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

## Part 2 - Country-unique Terms

### AMERICAS

#### ARGENTINA

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

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

#### BRAZIL

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

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

#### Peru

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

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

#### NORTH AMERICA

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

#### CANADA

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

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

**Governing Law:** The following replaces Flaws 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 ^{*I*} laws of the country in which you acquired the Machine *a* 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 Flaws 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 Flaws of the country in which you acquired the Machine in the first sentence: laws of the State of New York, United States of America.

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

Arbitration: The following is added under this heading:

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

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

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

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

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

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

#### INDIA

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

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

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

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

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

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

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

#### JAPAN

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

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

#### MALAYSIA

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

#### **NEW ZEALAND**

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

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

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

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

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

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

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

#### PHILIPPINES

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

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

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

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

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

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

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

#### SINGAPORE

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

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

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

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

**How to Obtain Warranty Service:** If you purchase a Machine in Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Norway, Portugal, Spain, San Marino, Sweden, Switzerland, United Kingdom or Vatican State, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM, provided the Machine has been announced and made available by IBM in the country in which you wish to obtain service. If you

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

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

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

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

#### Governing Law:

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

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

Jurisdiction: The following exceptions are added to this section:

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

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

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

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

#### **EUROPEAN UNION (EU)**

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

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

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

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

You may contact IBM at the following address:

IBM Warranty & Service Quality Dept.

PO Box 30

Spango Valley

Greenock

Scotland PA 16 OAH

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

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

Except as otherwise provided by mandatory law:

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

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

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

#### FRANCE AND BELGIUM

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

Except as otherwise provided by mandatory law:

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

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

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

THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:

#### **AUSTRIA**

What this Warranty Covers: The following replaces the first sentence of the first paragraph of this section:

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

#### The following paragraphs are added to this Section:

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

The second paragraph does not apply.

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

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

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

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

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

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

#### EGYPT

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

as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term  $\[\]^{\mathbb{P}}$ Machine  $\[\]$  includes Machine Code and Licensed Internal Code (LIC).

Applicability of suppliers and resellers (unchanged).

#### FRANCE

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

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

#### GERMANY

**What this Warranty Covers:** *The following replaces the first sentence of the first paragraph of this section:* 

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

#### The following paragraphs are added to this section:

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

The second paragraph does not apply.

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

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

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

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

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

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

#### HUNGARY

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

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

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

#### IRELAND

#### What this Warranty Covers: The following is added to this section:

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

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

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

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

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

- 1. IBM will accept unlimited liability for death or personal injury caused by the negligence of IBM.
- 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.
- 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.

#### E400 PROJECTOR

Country or Region of		
Purchase	Warranty Period	Type of Warranty Service
Worldwide	3 years	1, 4

#### E400 PROJECTOR LAMP

Country or Region of		
Purchase	Warranty Period	Type of Warranty Service
Worldwide	3 months	1, 4

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.

A warranty period of 3 months on parts and 3 months on labor means that IBM provides warranty service without charge for parts and labor during the 3 month warranty period.

#### **Types of Warranty Service**

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

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

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

#### 2. On-site Service

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

#### 3. Courier or Depot Service¹

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

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

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

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

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

^{1.} This type of service is called ThinkPad EasyServ or EasyServ in some countries.

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

Phone numbers are subject to change without notice. For the latest phone number list, go to www.ibm.com/pc/support and click **Support Phone List**.

## 附录 F. 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 IBM logo ThinkPad

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### **Electronic emission notices**

IBM E400 PROJECTOR

#### 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:

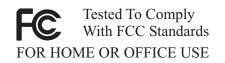
- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult an IBM authorized dealer or service representative for help.

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



#### Industry Canada Class B emission compliance statement

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

#### Avis de conformite a la reglementation d'Industrie Canada

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

#### Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Zulassungbescheinigunglaut 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:

^{**F**}Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 55022:B festgetlegt), dann kann es dabei eventuell gestört werden. In solch einem FA11 ist der Abstand bzw. die Abschirmungzu der industriellen Störquelle zu vergrößern.  $\square$ 

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 électromagnética)

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislatura 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 le apparecchiature di informatica Classe B ai sensi del 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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## IBM

部件号: 73P2776

Printed in China

(1P) P/N: 73P2776

