



# **IBM E400 PROJECTOR**

## **User's Guide**





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註: Before using this information and the product it supports, read the information in 第 D-1 頁的附錄 D, 『Service and Support』 and 第 E-1 頁的附錄 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」。



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## General safety information

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

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### 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.

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### 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.

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## 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.

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## 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

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## 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.

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## 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.

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## 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



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## 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/>

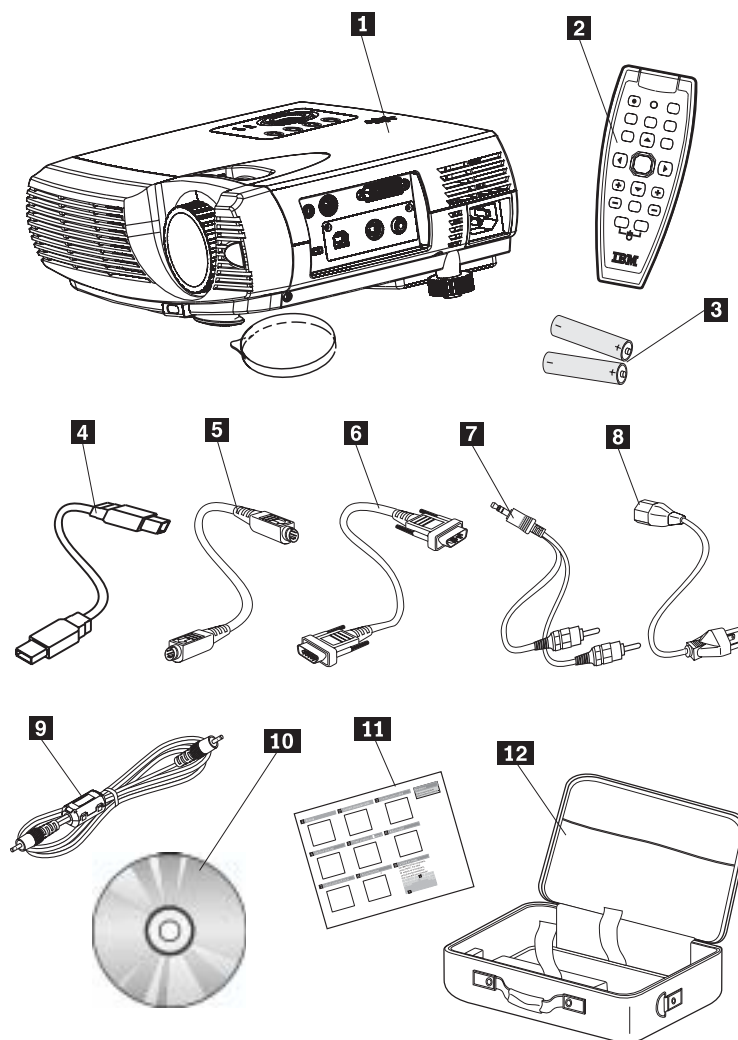
IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.



## 前言

IBM® E400 投影機能同時滿足商業簡報以及家庭劇院的需求，連接、使用以及維護都非常方便。

除了本使用手冊以外，包裝箱內含下列物品：



- 1** 投影機含燈泡槽與鏡頭保護蓋
- 2** 遙控器
- 3** 兩個 AAA 電池
- 4** USB 纜線
- 5** S 視訊纜線
- 6** 連接 VGA 的視訊纜線 (DVI-DB15)
- 7** 音訊纜線 (連接 RCA 的 Mini Jack)
- 8** 電源線
- 9** 複合視訊訊號線
- 10** 使用手冊 (以及安裝) 光碟
- 11** 多國語言快速啟動手冊

如果上述任一項目遺漏或損壞，請聯絡原購買商。

**註：**請確實保存購買證明，保固維修時將會用到。

有關投影機選購配件的資訊，請造訪 <http://www.ibm.com>。

**警告：**

- 避免在塵土飛揚的環境內使用投影機。
- 請勿阻塞投影機的散熱孔。
- 在將投影機收納至軟質攜帶包之前，請持續插著電源線 (大約 2-5 分鐘)，直到投影機溫度恢復為室溫。關閉電源後太快將投影機放入攜帶包，會導致投影機過熱。
- 確定蓋上鏡頭保護蓋，並將投影機放入軟質攜帶包，避免鏡頭受損。



## 第 1 章 簡介

下圖顯示投影機的不同角度與功能。

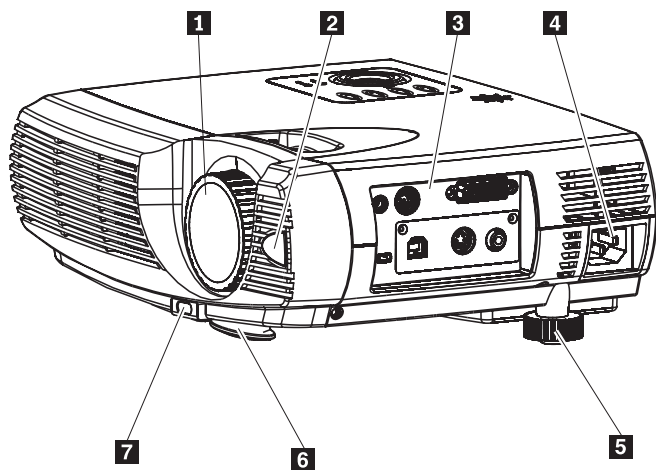


圖 1-1. 投影機右前方視圖

- 1 鏡頭/焦點
- 2 遙控接收器 (IR)
- 3 接頭
- 4 電源線接頭
- 5 水平調整腳
- 6 高度調整腳
- 7 高度調整鈕

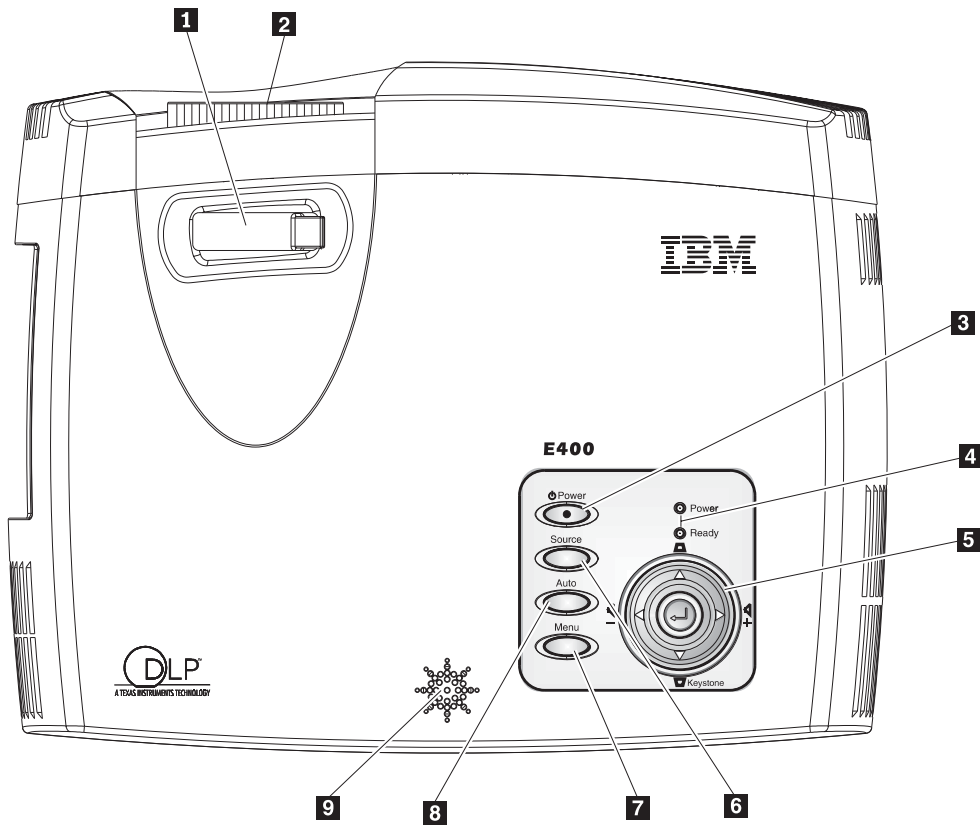


圖 1-2. 投影機上視圖

- 1** 鏡頭縮放
- 2** 變焦環
- 3** 電源按鈕
- 4** 系統狀態 LED
- 5** 控制鈕
- 6** 信號源按鈕
- 7** 功能表按鈕
- 8** 自動按鈕
- 9** 喇叭

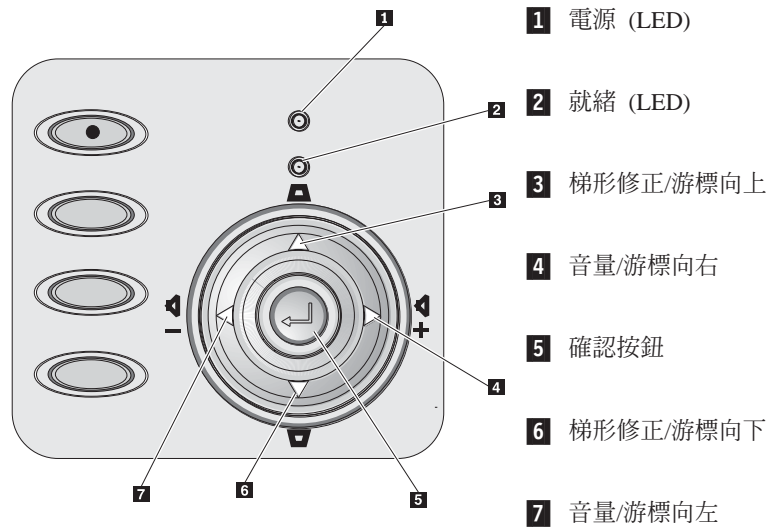


圖 1-3. 投影機控制鈕和 LED 上視圖

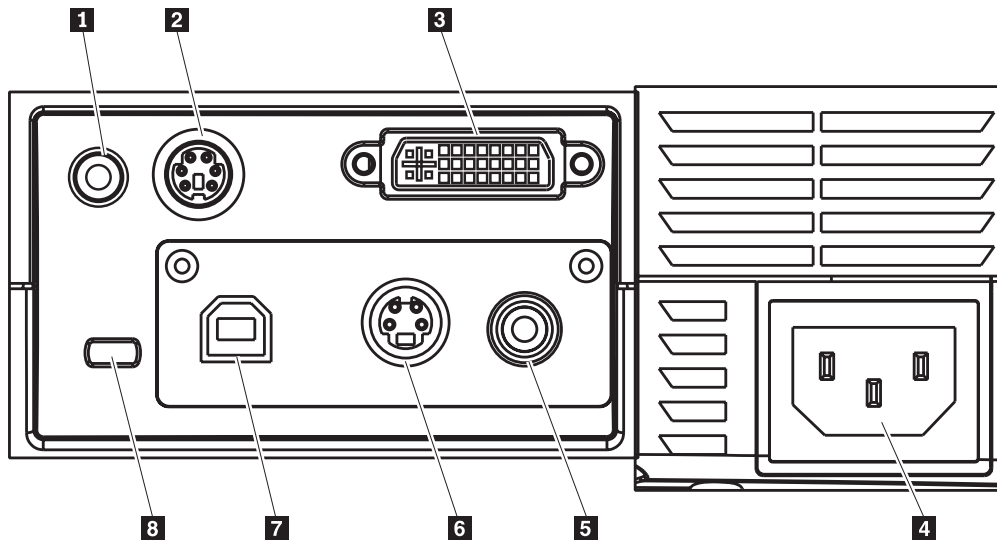


圖 1-4. 接頭

- 1 音訊輸入接頭
- 2 RS-232 接頭
- 3 DVI-I
- 4 AC 插座
- 5 複合視訊接頭
- 6 S 視訊接頭
- 7 USB 插槽
- 8 安全鎖槽

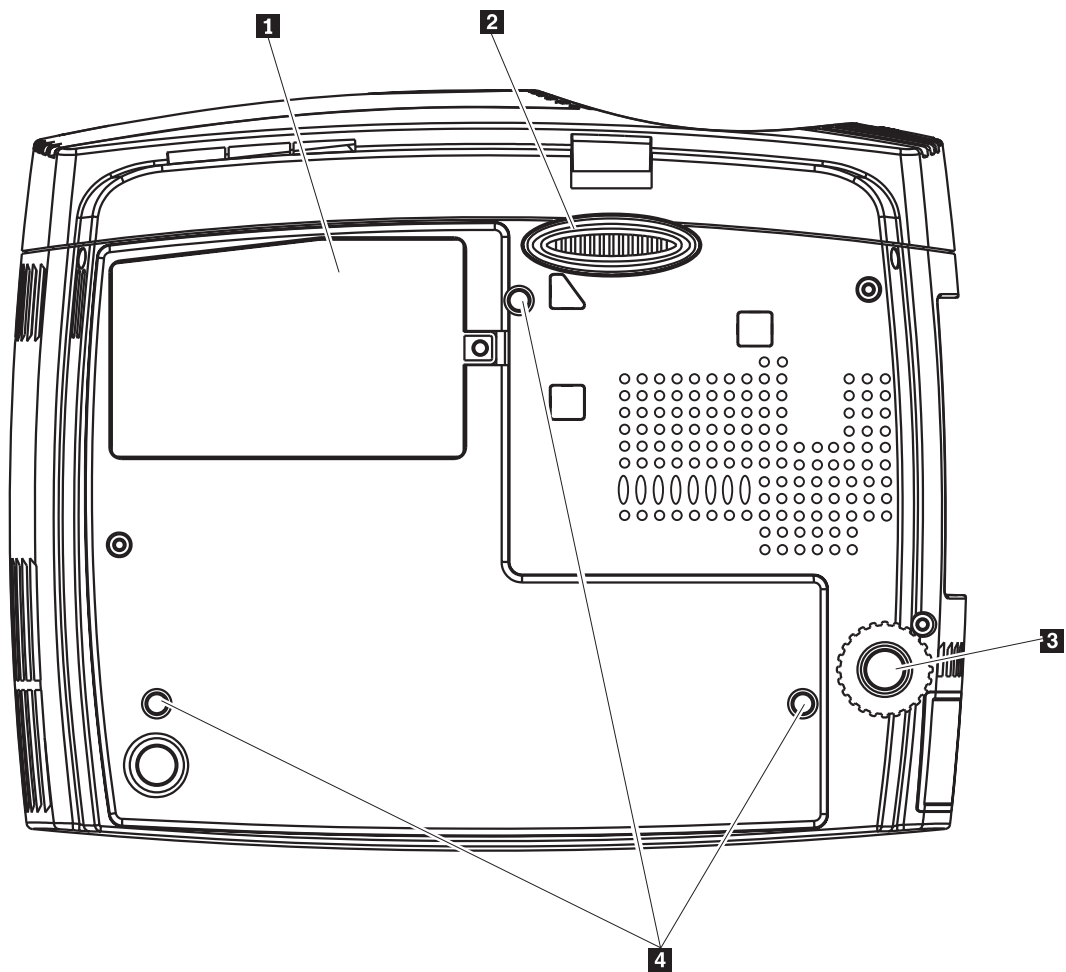


圖 1-5. 投影機下視圖

- 1** 投影燈泡蓋板
- 2** 高度調整腳
- 3** 水平調整腳
- 4** 懸吊裝載孔

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## 第 2 章 設定投影機

本章提供：開啓與關閉投影機、調整投影機的高度和角度、調整鏡頭、焦距、畫面梯形修正、和調整音量的相關資訊。

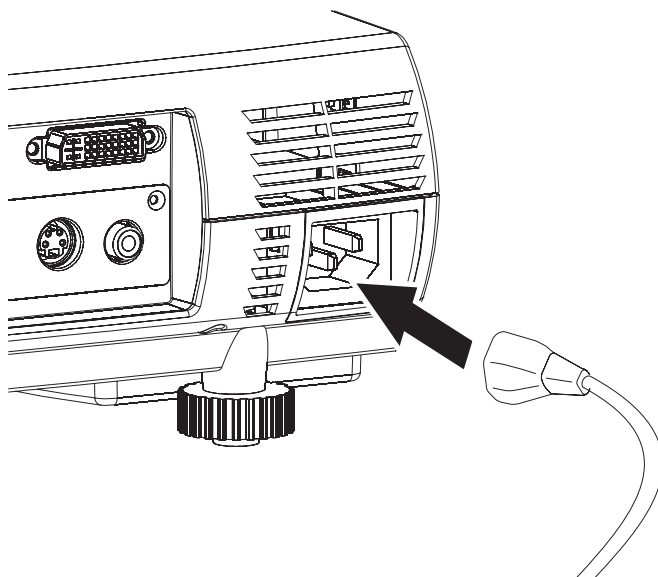
**警告：** 移動投影機之前，請確認投影機是以正確程序關閉，並且拔除電源線。

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### 啓動與關閉投影機

請遵照下列步驟啓動投影機，以及關閉投影機。

1. 將電源線連接至投影機，如圖所示。將另一端插在牆壁插座上。電源 LED 和 Lamp-ready LED 亮起。



2. 拆下鏡頭保護蓋。
3. 接上輸入裝置。
4. 打開連接裝置的電源。
5. 確定電源 LED 亮琥珀色 (不閃爍)，然後按下 **Power** 按鈕開啓投影機。

投影機投射出畫面，並且偵測到連接的裝置。若與 IBM ThinkPad 系列產品連接，請同時按下電腦鍵盤上的 Fn 和 F7 鍵，將顯示器輸出切換成投影機。非 IBM PC 電腦，請參閱使用手冊，找出適當的 Fn 快速鍵變更顯示器輸出。

**警告：** 請勿在開啓燈泡電源時，直視投影鏡頭。強光可能會傷害您的眼睛。

6. 若連接數台輸入裝置，可連續按 **Source** 按鈕，切換各裝置。
7. 若要關閉投影機，請按下 **Power** 按鈕。投影機準備關機，且出現「Wait a moment please...」訊息。
8. 當「Power off?/Press Power again」訊息出現，按下 **Power** 按鈕，投影機即關閉。

**註:** 在將投影機收納至軟質攜帶包之前，請持續插著電源線至少 2-5 分鐘，直到投影機溫度恢復為室溫。關閉電源後太快將投影機放入攜帶包，會導致投影機過熱。

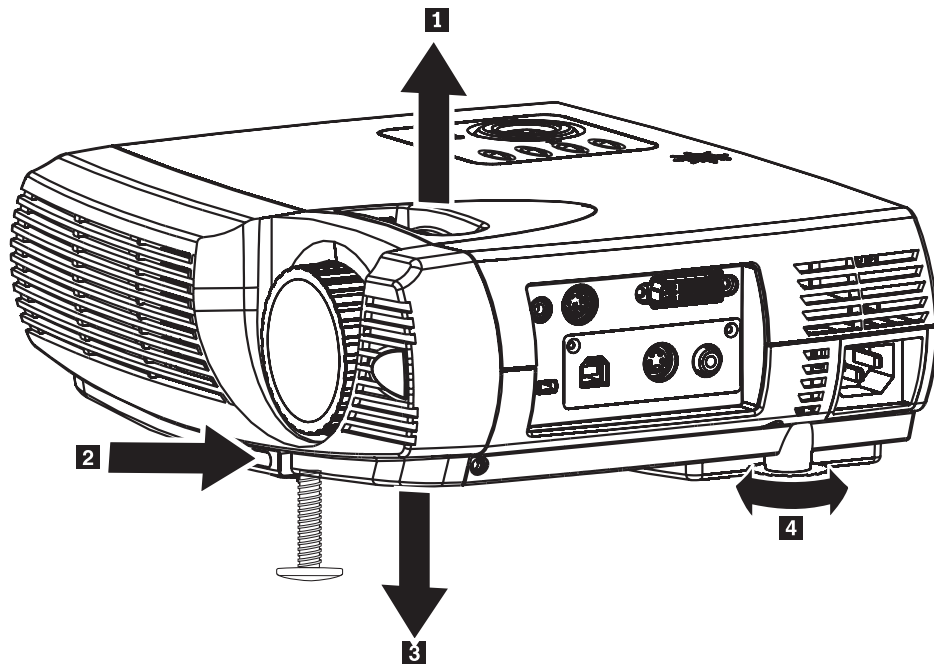
**警告:** 移動投影機之前，請確認投影機是以正確程序關閉，並且拔除電源線。

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## 調整投影機高度

若要調整投影機的水平與高度，請完成下列程序：

1. 若要提升投影機的高度，請抬起投影機如圖 **1** 所示，並按下高度調整腳的按鈕，如圖 **2** 所示。高度調整腳就會下降，如圖 **3** 所示。
2. 若要降低投影機的高度，請按下高度調整腳按鈕如圖 **2** 所示，並壓下投影機頂端。
3. 要調整水平，旋轉水平調整腳，如圖 **4** 所示。



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## 放置投影機

要決定投影機放置位置，請考慮螢幕的大小和形狀、電源插座的位置、以及投影機和其他設備之間的距離。以下是部分的一般準則：

- 將投影機放置在平坦的表面上，並和螢幕形成正確的角度。投影機與投影螢幕間距離至少為 1.5 公尺 (4.9 英尺)。
- 投影機放置位置和電源的距離需在 2.7 公尺 (9 英尺) 以內，與視訊裝置的距離需在 1.8 公尺 (6 英尺) 以內（另購延長線不在此限）。請不要將投影機放置在離牆面或其他物體 .15 公尺 (6 英尺) 以內，以免妨礙纜線連接。
- 將投影機放置在所要的螢幕距離位置。投影機和螢幕的距離、縮放設定以及視訊格式會決定投影影像的大小。

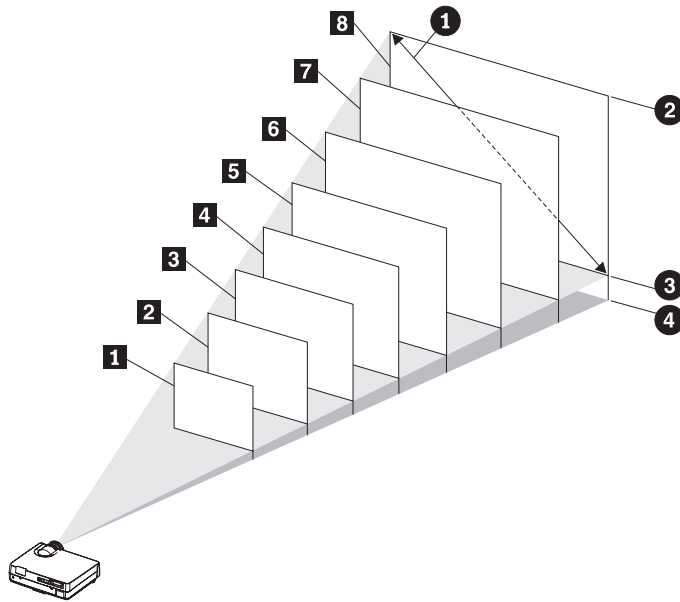


圖 2-1.

表 2-1.

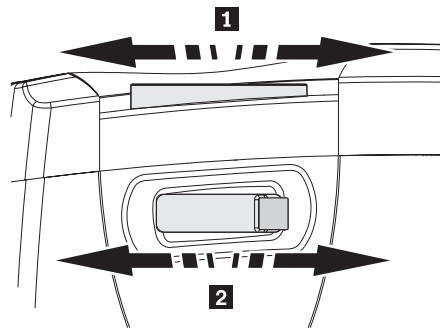
螢幕對角尺寸 ①	影像寬度 ②	影像高度 ③	螢幕中心到影像底端的距離 ④
(公尺/英吋)	(公尺/英吋)	(公尺/英吋)	(公尺/英吋)
<b>1</b> 1.10/43.3	.88/2.88	.66/2.16	1.5/4.92
<b>2</b> 1.47/57.8	1.17/3.83	.88/2.88	2/6.56
<b>3</b> 1.76/69.3	1.4/4.59	1.1/3.6	2.4/7.87
<b>4</b> 2.06/81.1	1.64/5.38	1.23/4.03	2.8/9.18
<b>5</b> 2.35/92.5	1.87/6.13	1.41/4.62	3.2/10.5
<b>6</b> 2.65/104.3	2.11/6.92	1.58/5.18	3.6/11.81
<b>7</b> 2.94/115.7	2.34/7.67	1.76/5.77	4/13.12
<b>8</b> 3.23/127.2	2.57/8.43	1.94/6.36	4.4/14.4

## 調整鏡頭，焦距和梯形修正

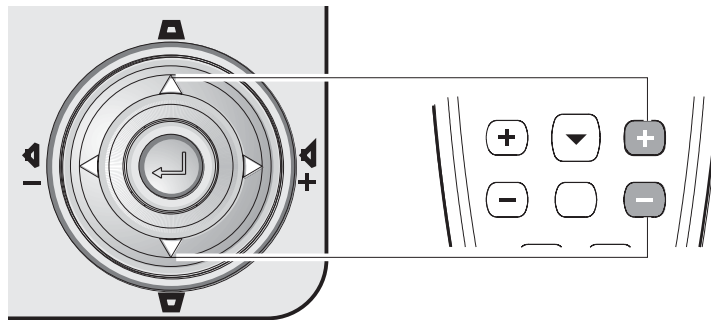
要調整影像，請完成下列程序。

1. 使用投影機上的影像和對焦控制，將影像調整清晰，如圖 **1** 所示。

2. 使用投影機上的影像和鏡頭縮放控制調整影像和螢幕大小，如圖 **2** 所示。



3. 使用梯形修正按鈕（如下圖）修正影像梯形效果。



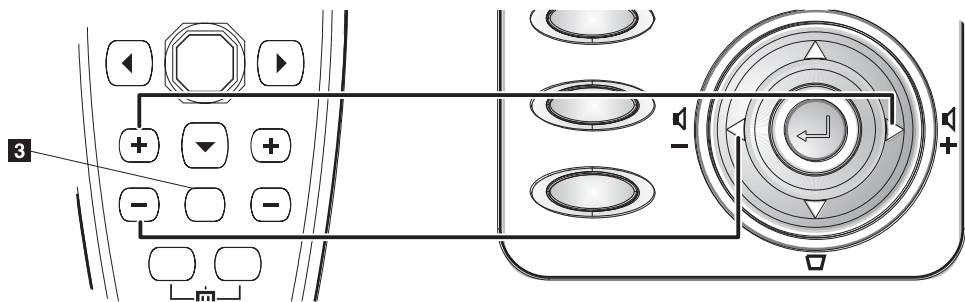
梯形控制項出現在 display 上，如圖所示。

---

## 調整音量

若要調整音量，請遵照下列步驟。

1. 按下投影機或遙控器上的 Volume +/- 按鈕。音量控制項會出現在 OSD 上。
2. 使用 Volume +/- 按鈕調整音量大小。投影機和遙控器上的音量控制調整如下所示。



3. 按下 **Mute** 按鈕（只在遙控器上）可關閉音量。參考上圖的 **3**。
4. 按下投影機或遙控器上的 Volume +/- 按鈕可以恢復音量。

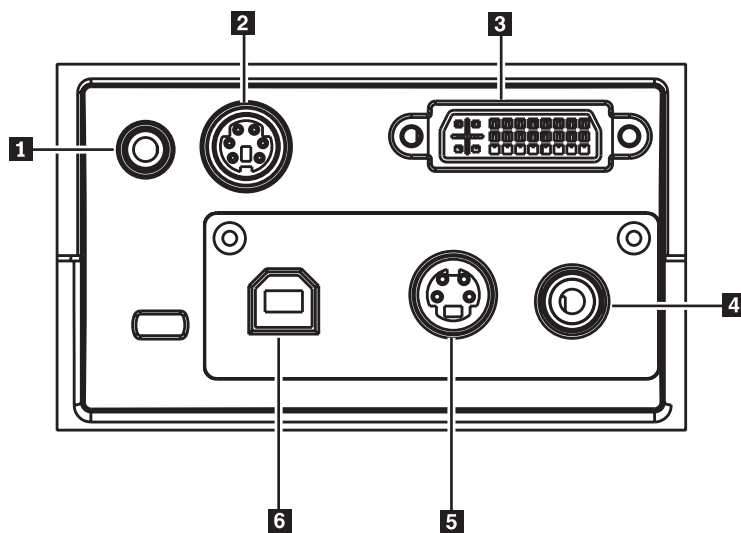


## 第 3 章 將裝置連接至投影機

本章提供連接裝置至 E400 投影機的資訊。

### 連接裝置

電腦與視訊裝置可同時連接至投影機，請檢查連接裝置的使用手冊，確認該裝置有適當的輸出接頭。



- 1** 音訊輸入接頭
- 2** RS-232 接頭
- 3** DVI-I
- 4** 複合視訊接頭
- 5** S 視訊接頭
- 6** USB 插槽



## 第 4 章 使用投影機功能

本章提供如何使用遙控器、音訊、按鍵面板按鈕以及其他投影機功能的資訊。

### 使用遙控器

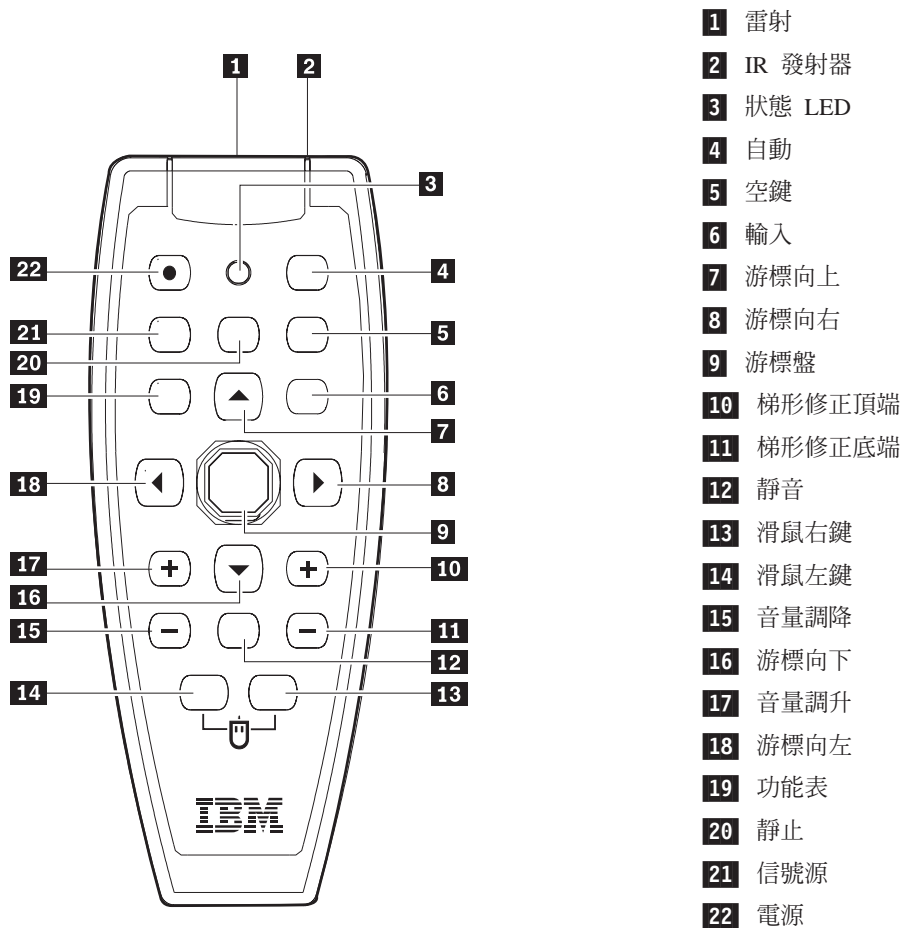
遙控器使用兩顆附贈的 AAA 電池。安裝方法很簡單：滑開遙控器背部的蓋子、將電池對準 + 和 - 兩極後推入定位，然後裝回蓋子。



注意:

若要減少眼睛受傷的風險，請勿直視遙控器雷射光，並且不要將雷射光指向他人的眼睛。此遙控器配備 **Class II** 雷射，會發射出輻射線。

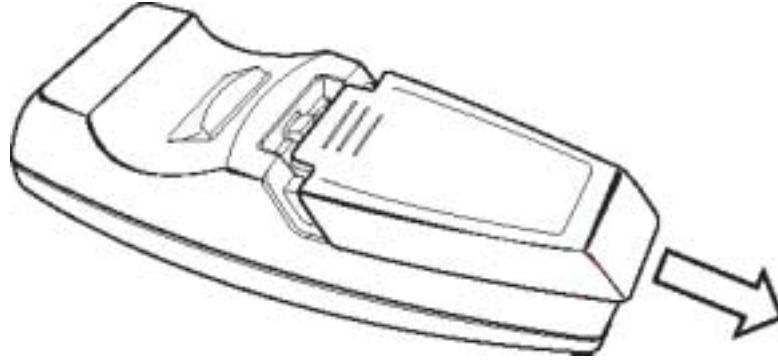
下圖為遙控器的圖例。



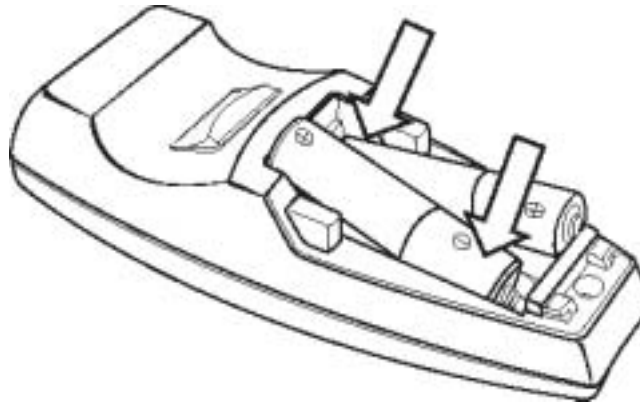
## 裝上遙控器電池

第一次使用遙控器時，請安裝附贈的電池。請遵照下列步驟，將新電池裝入遙控器內。

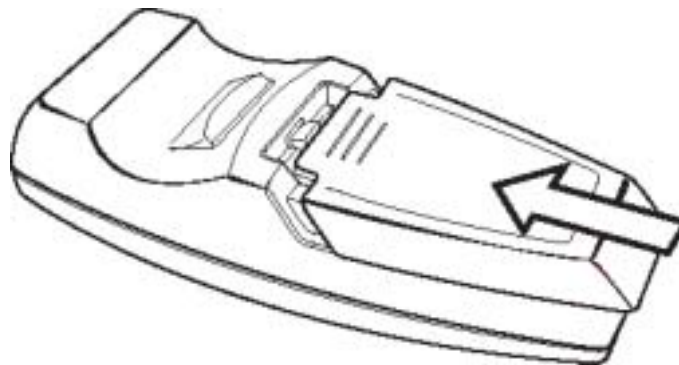
1. 依照圖示將電池室蓋板往箭頭方向滑開。



2. 注意電池的極性 (+/-) 如圖所示，裝上附贈的電池。



3. 蓋上蓋板，如圖所示。



### 註:

- 僅限使用 AAA 鹼性電池。
- 請依照當地政府法規拋棄使用過的電池。
- 長時間不使用遙控器時，請拆下電池。

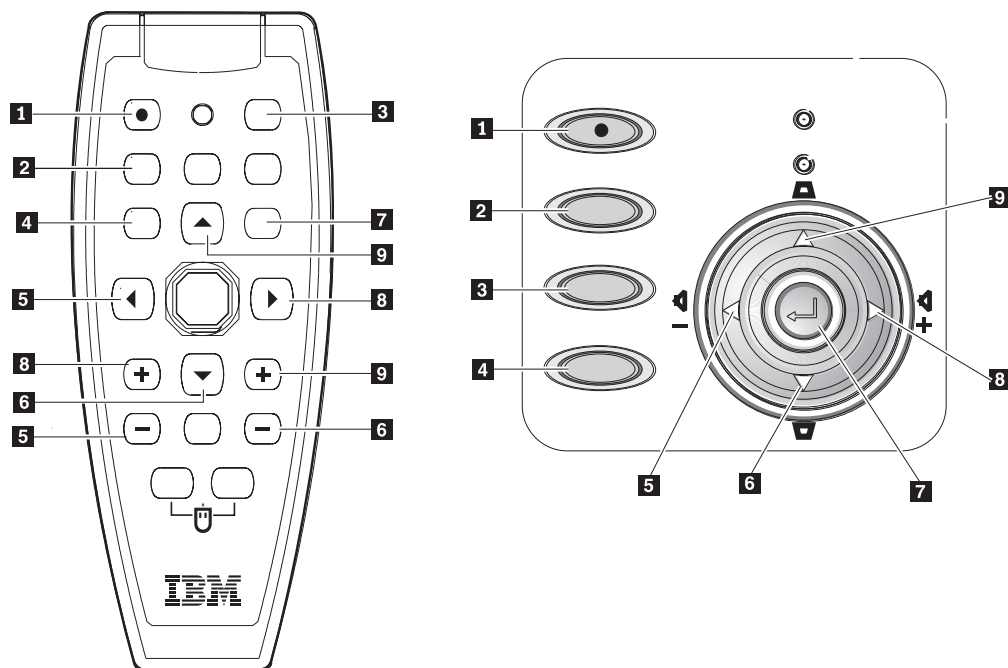
## 操作範圍

此遙控器使用紅外線控制投影機。您不需將遙控器正對著投影機，只要在 10 公尺 (33 英尺) 及投影機水平上下 30° 的範圍內，遙控器都有效。若投影機沒有回應遙控器，請靠近一點。

註：您也可將遙控器指向投射的影像。

## 投影機與遙控器按鈕

使用遙控器或投影機上的按鈕都可操作投影機，使用遙控器可以操作所有的功能。下圖顯示遙控器與投影機上的對應按鈕。



- 1 電源按鈕
- 2 信號源按鈕
- 3 自動按鈕
- 4 功能表按鈕
- 5 音量調降/游標向左
- 6 梯形修正底端/游標向下按鈕
- 7 確認按鈕
- 8 音量調升/游標向右
- 9 梯形修正頂端/游標向上按鈕



## 第 5 章 OSD 功能表控制項

這款投影機具有螢幕顯示功能（On-Screen Display，OSD），可讓您調整影像，並且變更更多項設定。

**註：**您必須在螢幕上顯示影像，才能使用 OSD。

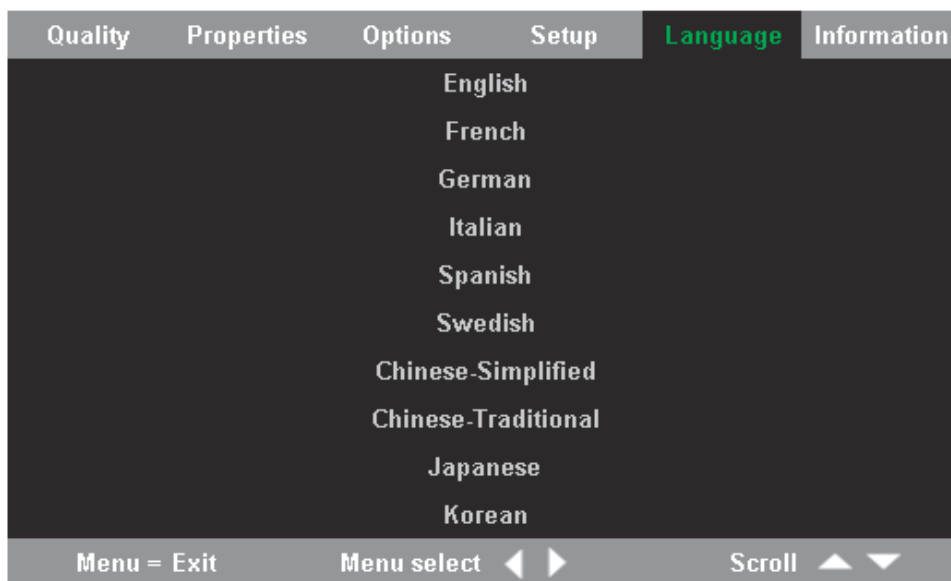
### OSD 導覽

您可使用遙控器或投影機頂端的按鈕，導覽並變更 OSD。下節顯示 OSD 內的功能表。

#### 設定 OSD 語言

參閱本章時，請對照投影機的 OSD。在開始下列步驟前，將 OSD 的語言別設定成您要使用的語言。

1. 按下 **Menu** 按鈕。出現 Quality 功能表。
2. 按下游標向左/游標向右按鈕，直到您要使用的語言被強調顯示。



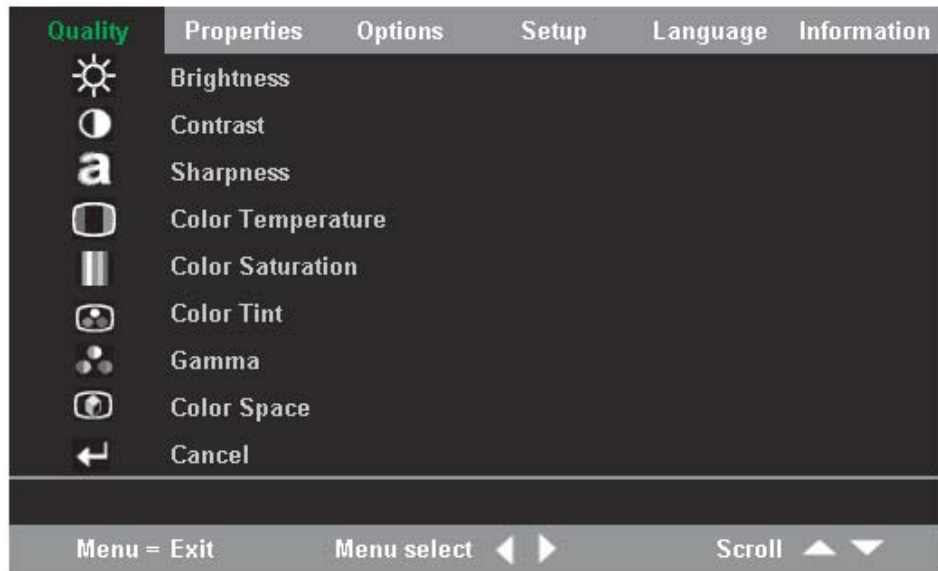
3. 按下游標向左/游標向右按鈕，將您要使用的語言強調顯示。
4. 按下**確認**按鈕選取。
5. 按下 **Menu** 按鈕兩次關閉 OSD。

#### Quality 功能表

請遵照下列步驟使用 Quality 功能表。

1. 按下 **Menu** 按鈕，開啓 OSD 功能表。

2. 按下游標向左/向右按鈕，將游標移動至 Quality 功能表。



3. 按下游標向上/向下按鈕，讓游標在 Quality 功能表內移動。

下表顯示 Quality 功能表內的選項及預設值。

項目	說明	預設值
Brightness (亮度)	按下游標向左/向右按鈕來調整亮度。 範圍：0 到 100	50
Contrast (對比)	按下游標向左/向右按鈕來調整對比。 範圍：0 到 100	50
Sharpness (清晰度)	按下游標向左/向右按鈕來調整影像清晰度。 範圍：1 至 5	3
Color Temperature (色溫)	按下游標向左/向右按鈕來調整色溫。 範圍：Cool/Normal/Warm	Normal (正常)
Color Saturation (色彩飽和度)	按下游標向左/向右按鈕來調整影像飽和度。 只有輸入來源是 Video/SVideo/YPbPr 時，才能使用色彩飽和度功能 範圍：0 到 100	50

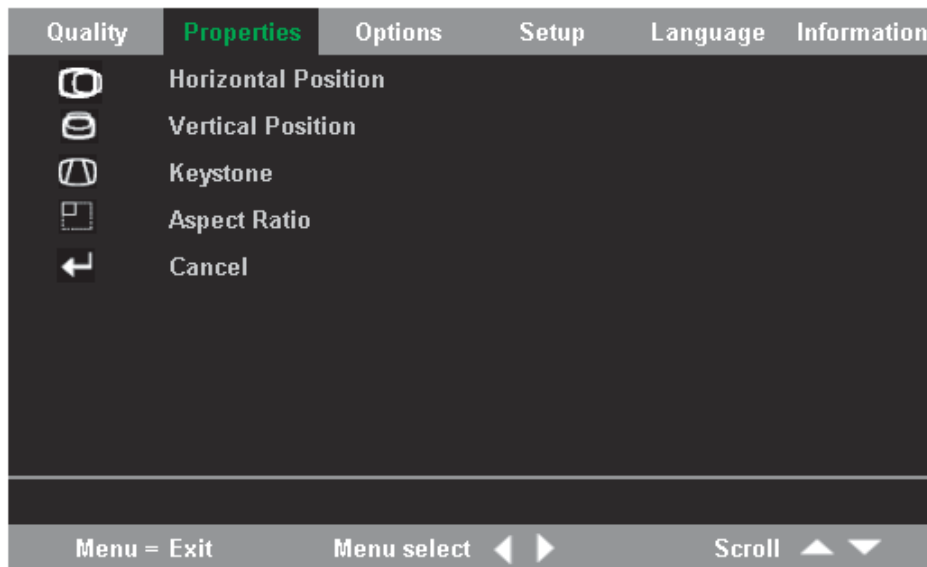


項目	說明	預設值
Color Tint (色度)	按下游標向左/向右按鈕來調整影像色度。  只有輸入來源是 Video/S-video/YpPr 時，才能使用色度功能  範圍：0 到 100	50
Gamma (伽碼值)	按下游標向左/向右按鈕來修正影像的伽碼值。  <b>輸入裝置 伽碼值 亮度</b>  PC      2.2      High (高)  MAC     1.8      High (高)  Video   2.4      Low (低)  Chart   2.2      Low (低)  B&W    2.4      High (高)	PC
Color Space (色彩空間)	按下游標向左/向右按鈕來調整色彩空間。  範圍：Auto， RGB， YpPr YCbCr	Auto (自動)
Cancel (取消)	將所有 Quality 項目恢復成預設值	無

## Properties 功能表

請遵照下列步驟使用 Properties 功能表。

1. 按下 **Menu** 按鈕開啓 OSD 功能表。
2. 按下游標向左/向右按鈕，將游標移動至 Properties 功能表。



3. 按下游標向上/向下按鈕，讓游標在 Properties 功能表內移動。

下表顯示 Properties 功能表內的選項及預設值。

項目	說明	預設值
Horizontal Position (水平位置)	按下游標向左/向右按鈕，將影像往左或往右移動。 範圍：0 到 100	50
Vertical Position (垂直位置)	按下游標向左/向右按鈕，將影像往上或往下移動。 範圍：0 到 100	50
Keystone (梯形)	按下游標向左/向右按鈕來調整影像的歪曲。 範圍：-50 至 50	0
Aspect Ratio (畫面比例)	按下游標向左/向右按鈕切換成 4:3 標準格式或 16:9 高畫質電視 (HDTV) 格式。	4:3
Cancel (取消)	將梯形和畫面比例恢復成預設值。	無

## Options 功能表

若要進入 Options 功能表，請遵照下列步驟。

1. 按下 Menu 按鈕，開啓 OSD 功能表。

2. 按下游標向左/向右按鈕，將游標移動至 Options 功能表。



3. 按下游標向上/向下按鈕，讓游標在 Options 功能表內移動。

下表顯示 Options 功能表內的選項及預設值。

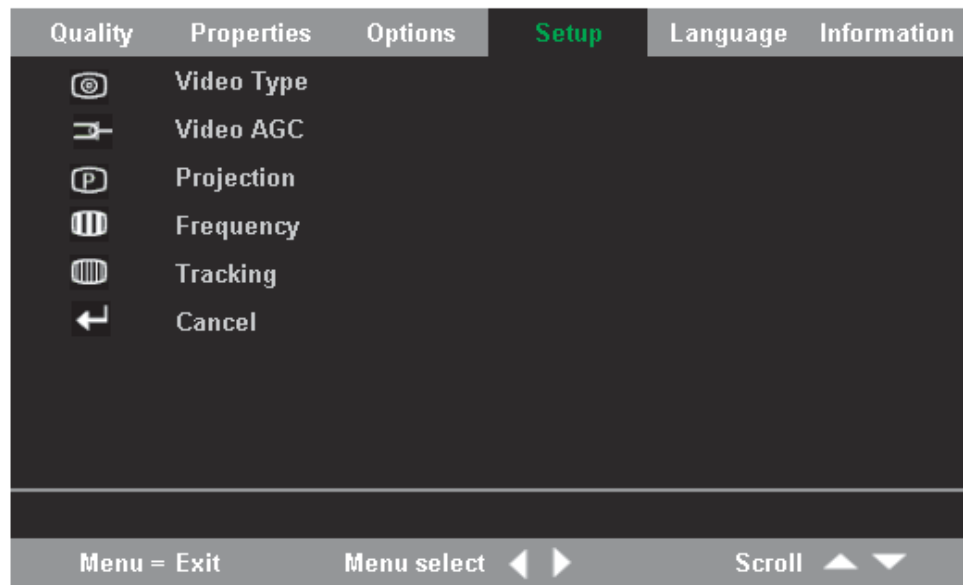
項目	說明	預設值
Blank Screen (空白螢幕)	按下游標向左/向右按鈕來選擇背景顏色。  範圍： Black , Red , Green , Blue , White	Blue (藍色)
Auto Source (自動信號源)	按下游標向左/向右按鈕來啟用或停用自動信號源偵測。  範圍：On (開啓)/Off (關閉)	On (開啓)
Auto Power Off (自動關機)	按下游標向左/向右按鈕來啟用或停用待機 10 分鐘後燈泡自動關閉功能。  範圍：On (開啓)/Off (關閉)	Off (關閉)
Volume (音量)	按下游標向左/向右按鈕來調整音量。  範圍：0 到 8	4
Menu Position (功能表位置)	按下游標向左/向右按鈕來調整 OSD 在螢幕上的位置。  範圍： Left , Right , Center , Down , Up	Center (中央)
Menu Display (功能表顯示)	按下游標向左/向右按鈕來選擇 OSD 顯示延遲時間。  範圍：10 至 20秒	15

項目	說明	預設值
Translucent Menu (透明度功能表)	按下游標向左/向右按鈕來設定畫面透明度。  範圍：On (開啓)/Off (關閉)	Off (關閉)
Cancel (取消)	將所有 Option 畫面項目恢復成預設值。	無

## Setup 功能表

請遵照下列步驟使用 Setup 功能表。

1. 按下 **Menu** 按鈕開啓 OSD 功能表。
2. 按下游標向左/向右按鈕，將游標移動至 Setup 功能表。



3. 按下游標向上/向下按鈕，讓游標在 Setup 功能表內移動。

下表顯示 Setup 功能表內的選項及預設值。

項目	說明	預設值
Video Type (視訊類型)	按下游標向左/向右按鈕來調整視訊規格標準。  只有輸入來源是 Video 或 S 視訊時，才能使用視訊類別功能  範圍： Auto , NTSC , PAL , SECAM	Auto (自動)

項目	說明	預設值
Video Automatic Grain Control (自動音量增益控制, ACG)	按下游標向左/向右按鈕來啓用或停用視訊來源的自動音量增益控制。  只有輸入來源是 Video 或 S 視訊時, 才能使用視訊 ACG 功能  範圍: On (開啓)/Off (關閉)	On (開啓)
Projection (投影距離)	按下游標向左/向右按鈕來選擇四種投影方式:  <ul style="list-style-type: none"> <li>• Desktop mount, front of screen (固定在桌上, 從螢幕前方投射)</li> <li>• Desktop mount, rear of screen (固定在桌上, 從螢幕後方投射)</li> <li>• Ceiling mount, front of screen (固定在天花板, 從螢幕前方投射)</li> <li>• Ceiling mount, rear of screen (固定在天花板, 從螢幕後方投射)</li> </ul>	Desktop mount, front of screen (固定在桌上, 從螢幕前方投射)
Frequency (頻率)	按下游標向左/向右按鈕來調整 A/D 取樣時脈。  只有輸入來源是類比 RGB 時, 才能使用頻率功能  範圍: 0 到 100	Auto detected (自動偵測)
Tracking (軌跡調整)	按下游標向左/向右按鈕來調整 A/D 取樣數。  有輸入來源是類比 RGB 時, 才能使用軌跡調整功能。  範圍: 0 到 100	Auto detected (自動偵測)
Cancel (取消)	將 Video Type, Video AGC 和 Projection 恢復成預設值。	無

## Information 功能表

請遵照下列步驟使用 Information 功能表。

1. 按下 **Menu** 按鈕開啓 OSD 功能表。

2. 按下游標向左/向右按鈕，將游標移動至 Information 功能表。



3. 按下游標向上/向下按鈕，讓游標在 Information 功能表內移動。

下表顯示 Information 功能表內的選項及簡短說明。

項目	說明
Video Information (視訊資訊)	顯示連接的視訊裝置的解析度和更新率。
Active Source (使用的來源)	使用來源的資訊
Software Version (軟體版本)	軟體版本的資訊。
Lamp Hours (重設燈泡計時器)	重設燈泡計時器的時數
Lamp Mode (燈泡模式)	按下游標向左/向右按鈕來選擇燈泡模式。 <ul style="list-style-type: none"> <li>• Normal (正常)</li> <li>• Eco</li> </ul>
Lamp Hour Reset (重新設定燈泡計時器)	更換燈泡後，需重新設定本項目。

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## 附錄 A. 維護

本章提供投影機維護的相關資訊。

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### 清潔鏡頭

要清潔鏡頭，請完成下列程序：

1. 請將不具腐蝕性的相機鏡頭清潔液，倒在乾的軟布上。

**註：** 請勿使用過量的清潔液，並且不要將清潔液直接倒在鏡頭上。具有腐蝕性的清潔液、溶劑或其他有害化學藥品可能會刮傷鏡頭。

2. 用清潔布輕輕地以畫圓方式擦拭鏡頭。如果您並不會立刻使用投影機，請重新蓋上鏡頭蓋。

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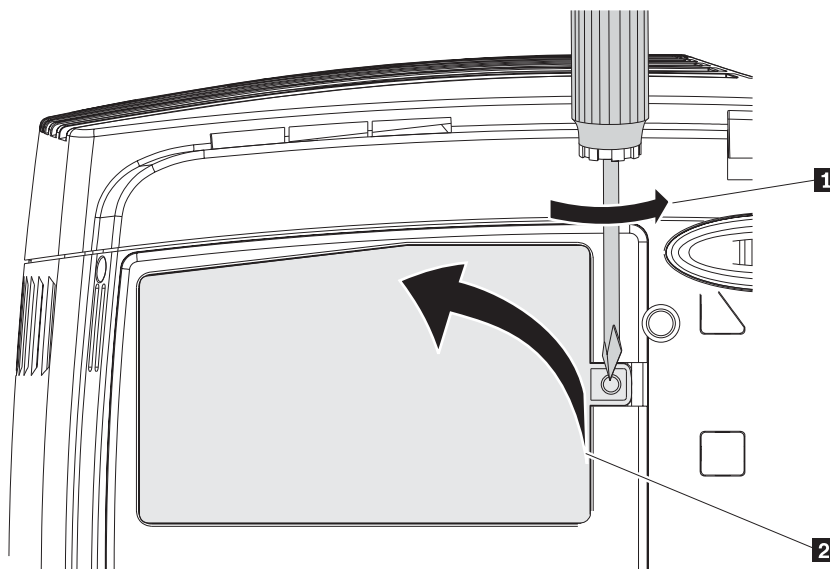
### 更換投影燈

請務必使用和原燈泡相同類型與等級的燈泡更換品。請聯絡 IBM 業務代表或至網站 [www.ibm.com/pc](http://www.ibm.com/pc) 取得資訊。

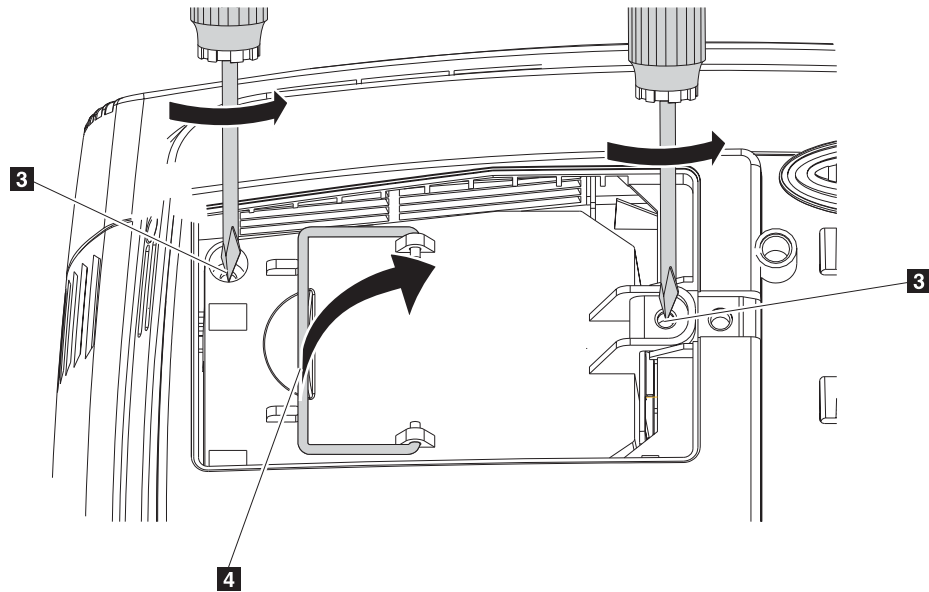
**註：** 更換燈泡前請關閉投影機，拔掉電源線，並且至少等待 1 個小時讓投影機冷卻。

要更換投影燈，請完成下列程序：

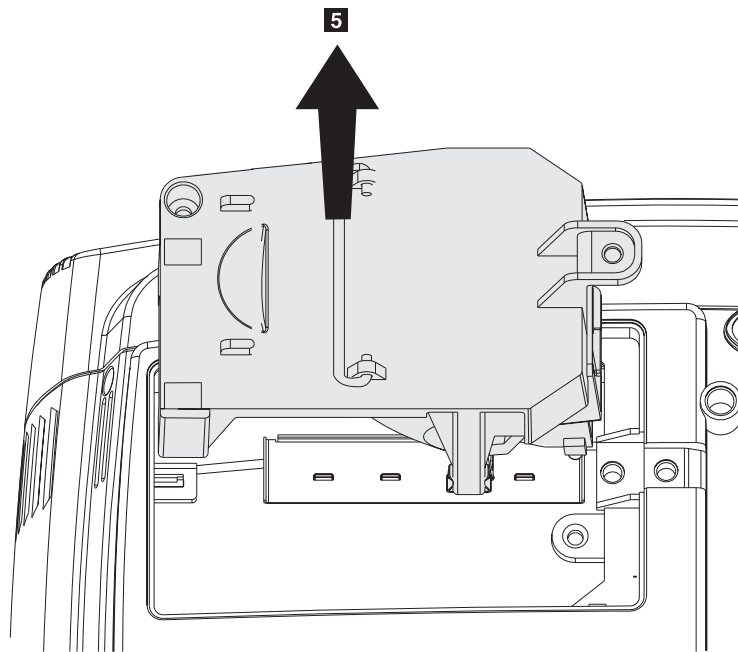
1. 鬆開燈泡室蓋板上的螺絲，如圖所示。
2. 拆除燈泡室蓋板，如圖所示。



3. 拆除燈泡模組的兩只螺絲，如圖所示。
4. 拉起模組握把，如圖所示。



5. 用力拉出模組握把，將燈泡模組卸下，如圖所示。



6. 安裝新燈泡模組時，請反向執行步驟 1 至 5。

**警告：** 本產品包含金屬放電燈泡，其中包含水銀。請按照當地的法律規章所規定的方式處置此燈泡。

在美國，限制或禁止將某些或所有內含水銀的燈泡當成一般廢棄物來處理。有關各州的拋棄處理需求及回收站，請造訪 [www.lamprecycle.org](http://www.lamprecycle.org)。

康乃迪克州的使用者，請使用免付費電話 1-888-657-5267 聯絡 Northeast Lamp Recycling，訂購內含燈泡包裝盒、膠帶及寄回標籤的運送套件。



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## 重設燈泡計時器

裝回投影燈泡之後，請將燈泡計時器歸零。請遵照下列步驟：

1. 按下 **Menu** 按鈕，開啓主功能表。
2. 按下游標向左/向右按鈕，將游標移動至 **Information** 功能表。
3. 按下游標向上/向下按鈕，將游標往下移動至 **Lamp Hour**。
4. 按下確認按鈕。出現訊息螢幕。
5. 依順序按下游標按鈕：**向下**、**向上**、**向左**、**向右**。資訊功能表再次出現，顯示燈泡計時器已歸零。

**警告：** 燈泡壽命只是一種以亮度衰減為準的測量方法，而非燈泡熄滅無法發光的使用時間。燈泡壽命的定義為：特定燈泡的燈泡樣本數中，超過 50% 燈泡的亮度減少 50% 流明素所經過的時間。例如：若定義的使用壽命為 2000 小時，則在此之後燈泡將減少 50% 的亮度 (約 550 流明素)。

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## 使用安全鎖槽

本投影機具有安全鎖槽。請參閱安全鎖附隨的資訊來取得使用說明。



## 附錄 B. 疑難排解

下表提供投影機的疑難排解資訊。某些情況下會有一個以上的解決方式。請依照所提供的解決方式順序嘗試。問題解決後，您可以略過其他解決方案。

表 B-1. 疑難排解

問題	解決方案
螢幕上無畫面。	<ul style="list-style-type: none"><li>• 檢查筆記型電腦與桌上型 PC 上的設定。</li><li>• 請依照正確順序關閉所有設備電源，然後打開電源。</li></ul>
影像模糊。	<ul style="list-style-type: none"><li>• 調整投影機上的焦距。</li><li>• 按下遙控器或投影機上的 <b>Auto</b> 按鈕。</li><li>• 確定投影機至螢幕距離位於指定的範圍內。</li><li>• 檢查投影機鏡頭是否清潔。</li></ul>
影像的頂端或底端過寬 (梯形效果)。	<ul style="list-style-type: none"><li>• 固定投影機，盡可能讓其與螢幕垂直。</li><li>• 使用遙控器或投影機上的 <b>Keystone</b> 按鈕來更正問題。</li></ul>
影像左右或上下顛倒。	檢查 OSD 的 Setup 功能表上之 Projection 設定。
影像有條紋。	<ul style="list-style-type: none"><li>• 將 OSD 的 Setup 功能表上之 Frequency 和 Tracking 設定恢復成預設值。</li><li>• 若要確定問題並非由所連接 PC 的影像卡所造成，請連接至其他電腦。</li></ul>
影像平淡無對。	調整 OSD 的 Image 功能表上之 Contrast 設定。
所投射影像的色彩與來源影像不符。	調整 OSD 的 ColorMgr 功能表上之 Color Temp. 和 Gamma 設定。
投影機未投射出光線。	<ul style="list-style-type: none"><li>• 檢查電源線是否連接妥當。</li><li>• 藉由測試其他電器來確定電源正常。</li><li>• 以正確的順序重新啟動投影機，並檢查電源 LED 是否為綠色。</li><li>• 若您最近更換過投影燈泡，請嘗試重新設定燈泡的連接。</li><li>• 更換燈泡模組。</li><li>• 裝回舊的燈泡，並且將投影機送修。</li></ul>
燈泡不亮。	<ul style="list-style-type: none"><li>• 電湧會導致燈泡熄滅，請按下 <b>Power</b> 按鈕兩次將投影機關閉。當 Lamp Ready LED 亮起，請按下 <b>Power</b> 按鈕。</li><li>• 更換燈泡模組。</li><li>• 裝回舊的燈泡，並且將投影機送修。</li></ul>

表 B-1. 疑難排解 (繼續)

問題	解決方案
投影機對遙控器沒有回應。	<ul style="list-style-type: none"> <li>• 將遙控器指向投影機正面或後面的遙控感應器。</li> <li>• 確定遙控器與感應器之間不受阻礙。</li> <li>• 關閉室內所有日光燈。</li> <li>• 檢查電池極性。</li> <li>• 更換電池。</li> <li>• 關閉附近其他可用紅外線遙控的裝置。</li> <li>• 將遙控器送修。</li> </ul>
沒有聲音。	<ul style="list-style-type: none"> <li>• 調整遙控器上的音量。</li> <li>• 調整音源的音量。</li> <li>• 檢查音訊纜線的連接狀態。</li> <li>• 用其他喇叭測試音源的聲音輸出。</li> <li>• 將投影機送修。</li> </ul>
聲音失真。	<ul style="list-style-type: none"> <li>• 檢查音訊纜線的連接狀態。</li> <li>• 用其他喇叭測試音源的聲音輸出。</li> <li>• 將投影機送修。</li> </ul>

## 投影機 LED

投影機頂端 LED 指示投影機的狀態並可協助您進行疑難排解。閃爍之間的時間是二秒鐘。有關 LED 投影機錯誤的詳細資訊，請聯絡 IBM 代表。

表 B-2. Lamp-ready LED 錯誤訊息

Lamp-ready LED 閃爍次數	說明
持續閃爍	燈泡未裝妥 - 不要按下電源按鈕。
1	燈泡 fan2 錯誤
2	散熱風扇 fan1 錯誤
3	安定器 fan1 錯誤

表 B-3. 電源 LED 錯誤訊息

電源 LED 閃爍次數	說明
3	系統過熱
4	系統介面錯誤
5	燈泡錯誤
6	風扇錯誤。判讀 Lamp-ready LED 來判別是哪一個風扇。
7	燈泡蓋版開啓
8	DLP 驅動器錯誤。

## 附錄 C. 規格

下列為 IBM E400 投影機的規格。

溫度 (作業中)	5° 至 35° C (41° 至 95° F) 海平面上
(非作業中)	-10° 至 60° C (14° 至 140° F)
高度 (作業中)	3,048 公尺 (0 至 10,000 英尺)
高度 (非作業中)	12,192 公尺 (0 至 40,000 英尺)
濕度 (作業中)	相對溼度 5% 至 90%，未結露
濕度 (非作業中)	相對溼度 5% 至 %95，未結露
尺寸 (寬 x 長 x 高)	280 x 205 x 97 mm (11.02 x 8.07 x 3.82 英寸)
重量	不含包裝 2.09 公斤 (4.61 磅)
光學 (焦點範圍)	1.5 to 7 公尺 (4.9 至 23 英尺)
燈泡類型	VIP 200 瓦
輸入電源需求	交流電 100-240 伏特，50-60赫茲，2.8 安培
懸吊裝載	UL 測試/列示的懸吊裝載，含最低承動 34 英磅 (15.5 公斤)



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## 附錄 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.

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### 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](http://www.ibm.com/pc/support).

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

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



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## 附錄 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.

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

### **AMERICAS**

#### **ARGENTINA**

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

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

#### **BRAZIL**

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

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

## **Peru**

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

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

## **NORTH AMERICA**

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

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

## **CANADA**

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

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

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

## **UNITED STATES**

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

## **ASIA PACIFIC**

### **AUSTRALIA**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **INDIA**

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

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

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

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

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

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

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

## **JAPAN**

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

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

## **MALAYSIA**

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

## **NEW ZEALAND**

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

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

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

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

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

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

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

## **PHILIPPINES**

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

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

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

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

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

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

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

## **SINGAPORE**

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

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

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

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

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



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

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

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

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

#### **Governing Law:**

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

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

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

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

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

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

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

## **EUROPEAN UNION (EU)**

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

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

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

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

You may contact IBM at the following address:

IBM Warranty & Service Quality Dept.

PO Box 30

Spango Valley

Greenock

Scotland PA 16 OAH

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

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

Except as otherwise provided by mandatory law:

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

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

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

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

## **FRANCE AND BELGIUM**

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

Except as otherwise provided by mandatory law:

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

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

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

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

### **AUSTRIA**

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

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

*The following paragraphs are added to this Section:*

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

*The second paragraph does not apply.*

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

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

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

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

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

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

## **EGYPT**

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

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

*Applicability of suppliers and resellers (unchanged).*

## **FRANCE**

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

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

## **GERMANY**

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

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

*The following paragraphs are added to this section:*

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

*The second paragraph does not apply.*

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

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

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

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

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

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

## **HUNGARY**

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

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

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

## **IRELAND**

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

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

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

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

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

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

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

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

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

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

## **SLOVAKIA**

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

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

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

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

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

## **UNITED KINGDOM**

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

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

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

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

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

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.

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## **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**

<b>Country or Region of Purchase</b>	<b>Warranty Period</b>	<b>Type of Warranty Service</b>
Worldwide	3 years	1, 4

#### **E400 PROJECTOR LAMP**

<b>Country or Region of Purchase</b>	<b>Warranty Period</b>	<b>Type of Warranty Service</b>
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 Service<sup>1</sup>**

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

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

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

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

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

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

Phone numbers are subject to change without notice. For the latest phone number list, go to [www.ibm.com/pc/support](http://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 French 02-210-9800	New Zealand	0800-446-149
Bolivia	0800-0189	Norway	66 81 11 00
Brazil	55-11-3889-8986	Peru	0-800-50-866
Canada	1-800-565-3344 Toronto 416-383-3344	Philippines	632-995-2225
Chile	800-224-488	Portugal	21-791 51 47
China (PRC)	800-810-1818	Russia	095-940-2000
China (Hong Kong S.A.R.)	852-2825-7799	Singapore	1800-840-9911
Columbia	980-912-3021	Spain	91-662 49 16
Denmark	45 20 82 00	Sweden	08-477 4420
Ecuador	1-800-426911 (option #4)	Switzerland	058-333-09-00
Finland	09-459 69 60	Taiwan	886-2-2725-9799
France	02 38 55 74 50	Thailand	66-2-273-4000
Germany	07032-1549 201	Turkey	00-800-446-32-041
Indonesia	021-523-8535	United Kingdom	0-1475-555 055
Ireland	01-815-9202	United States	1-800-426-7378
Italy	02-7031-6101	Uruguay	000-411-005-6649
Japan	Consumer customers 0120-887-870  Business customers 0120-887-874	Venezuela	0-800-100-2011
Luxembourg	298-977 5063	Vietnam	848-8295-160

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## 附錄 F. Notices

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

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## Trademarks

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

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IBM logo  
ThinkPad

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 trademarks or service marks of others.

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## Electronic emission notices

IBM E400 PROJECTOR

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## Federal Communications Commission (FCC) statement

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

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

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

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

Responsible party:

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



Tested To Comply  
With FCC Standards

FOR HOME OR OFFICE USE

### **Industry Canada Class B emission compliance statement**

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

### **Avis de 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)**

Zulassungbescheinigung laut 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.
--

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 - Directiva EMC (Conformidad electromagnética)**

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la 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.

### **Unione Europea - Normativa EMC**

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

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

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le apparecchiature di informatica Classe B ai sensi 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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**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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