



IBM M400 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』

目錄

Safety information	v
-------------------------------------	----------

General safety guidelines	vii
--	------------

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

Registering your option	xi
--	-----------

第 1 章 產品說明	1-1
-----------------------------	------------

包裝核對清單	1-1
投影機的功能	1-4

第 2 章 設置投影機	2-1
------------------------------	------------

啓動與關閉投影機	2-1
安置投影機	2-2
調整投影機水平與高度	2-3
調整影像	2-4
影像解析度	2-5
調整音量	2-5

第 3 章 將裝置連接至投影機	3-1
----------------------------------	------------

連接裝置	3-1
----------------	-----

第 4 章 使用投影機的功能	4-1
---------------------------------	------------

使用遙控器	4-1
裝上遙控器電池	4-2
操作範圍	4-3
投影機與遙控器按鈕	4-3

第 5 章 OSD 功能表控制項	5-1
-----------------------------------	------------

OSD 導覽	5-1
Image 功能表	5-1
Color 功能表	5-2
View 功能表	5-4

Setup 功能表	5-5
Option 功能表	5-6
Information 功能表	5-8
子功能表	5-8
White Balance (白平衡)	5-8
Input format (輸入格式)	5-10
Language (語言)	5-11
Zoom (變焦)	5-11
搖鏡	5-11
Lamp Timer reset (重設燈泡計時器)	5-11
Factory default (出廠預設值)	5-12
Hot Keys (快速鍵)	5-12
Quick menu (快速功能表)	5-13

附錄 A. 維護	A-1
---------------------------	------------

清潔鏡頭	A-1
更換投影燈泡	A-1
重設投影燈泡	A-2
使用安全鎖槽	A-3

附錄 B. 疑難排解	B-1
-----------------------------	------------

投影機 LED	B-2
熱保護器	B-3

附錄 C. 規格	C-1
---------------------------	------------

附錄 D. Service and Support	D-1
--	------------

Online technical support	D-1
Telephone technical support	D-1

附錄 E. IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002	E-1
---	------------

Part 2 - Country-unique Terms	E-4
Part 3 - Warranty Information	E-16

附錄 F. Notices	F-1
--------------------------------	------------

Trademarks	F-2
Electronic emission notices	F-2
Federal Communications Commission (FCC) statement	F-2

Safety information

Before installing this product, read the Safety Information.

مج، يجب قراءة دات السلامة

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

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

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

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

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

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

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

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

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

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

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

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

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

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

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

Перед установкой продукта прочтите инструкции по
технике безопасности.

Pred inštaláciou tohto zariadenia si prečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

General safety guidelines

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

Service

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

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

Power cords and power adapters

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

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

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

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

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

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

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

Extension cords and related devices

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

Plugs and outlets

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

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

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

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

Connect and disconnect the equipment from the electrical outlet carefully

Batteries

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

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

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

Batteries can degrade when they are left unused for long periods of time. For some rechargeable batteries (particularly Lithium Ion batteries), leaving a battery unused in a

discharged state could increase the risk of a battery short circuit, which could shorten the life of the battery and can also pose a safety hazard. Do not let rechargeable Lithium-Ion batteries completely discharge or store these batteries in a discharged state.

Heat and product ventilation

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

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

CD and DVD drive safety

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

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

Registering your option

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

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

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

第 1 章 產品說明

IBM M400 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。以下為這部投影機的主要功能：

- 功能強大、重量輕、易於攜帶，只有 2.4 磅 (1.1 公斤)。
- 影像銳利清晰，對比高達 1800:1。
- 精采重現 DVD 的高品質影像。
- 運用數位技術修正投影畫面的梯形失真 (vertical keystone distortion)。

包裝核對清單

除了本使用手冊以外，包裝箱內含下列物品：

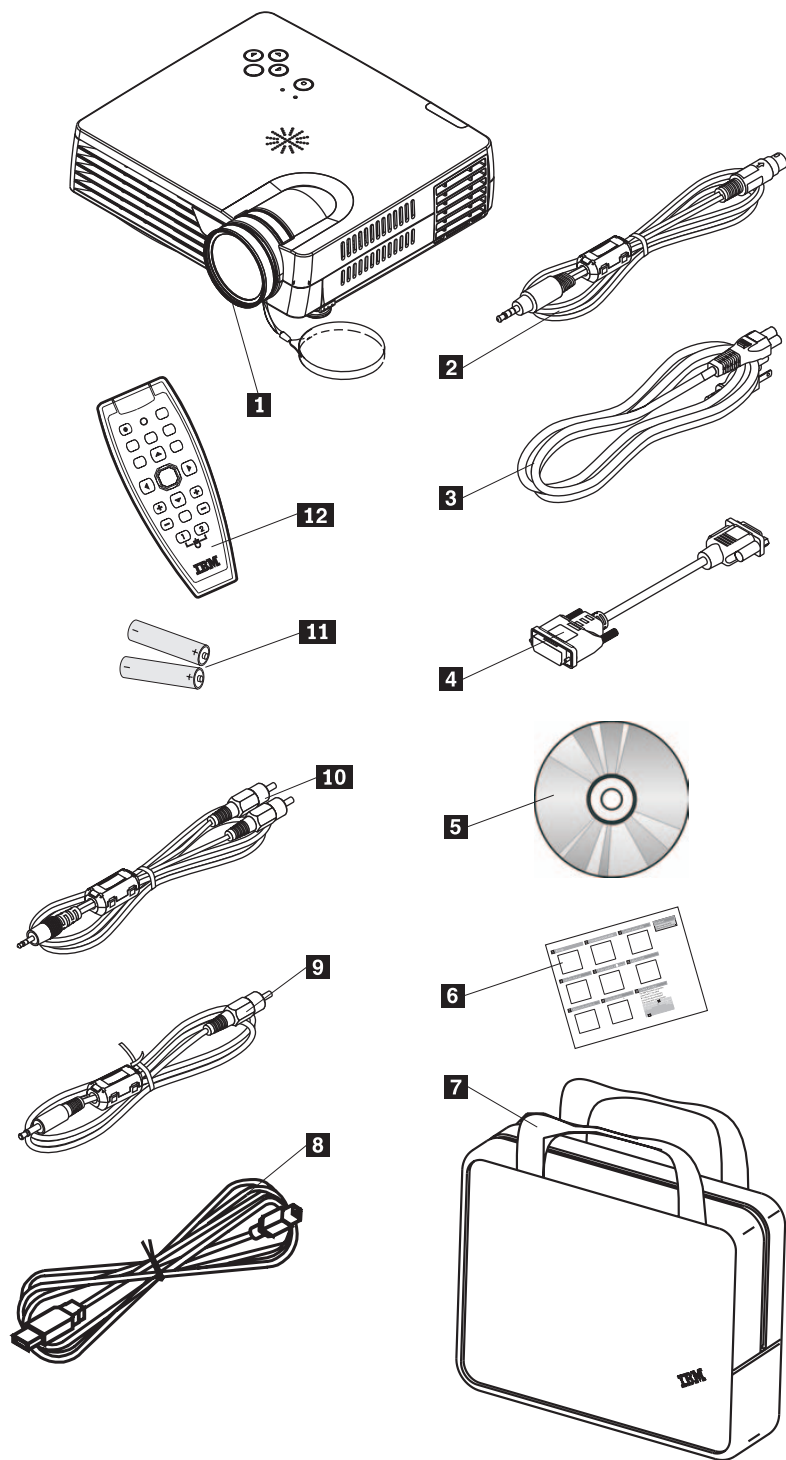


圖 1-1. 標準配件

- 1 投影機，包含鏡頭保護蓋
- 2 S 視訊纜線
- 3 電源線
- 4 電腦纜線 (DVI-DB15)
- 5 使用手冊 (以及安裝) 光碟

- 6** 多國語言快速啓動手冊
- 7** 攜帶包
- 8** USB 纜線
- 9** 視訊纜線 (Mini Jack - RCA)
- 10** 音訊纜線 (Mini Jack - RCA)
- 11** 電池
- 12** 遙控器

若上述物品遺失或受損，請與購買商店聯繫。

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>。

重要事項：

- 避免在塵土飛揚的環境內使用投影機
- 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，並以鏡頭朝上的方式將投影機放入軟質攜帶包，避免鏡頭受損。

投影機的功能

下圖顯示投影機的不同角度與功能。

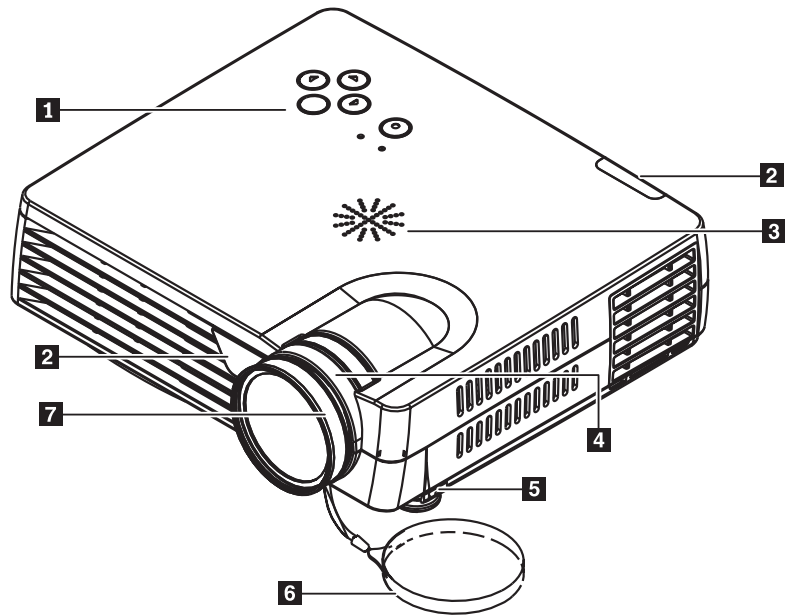


圖 1-2. 投影機正面角度

- 1** 按鍵組
- 2** 遙控接收器 (IR)
- 3** 喇叭
- 4** 變焦環
- 5** 高度調整腳/水平調整腳
- 6** 鏡頭保護蓋
- 7** 對焦環

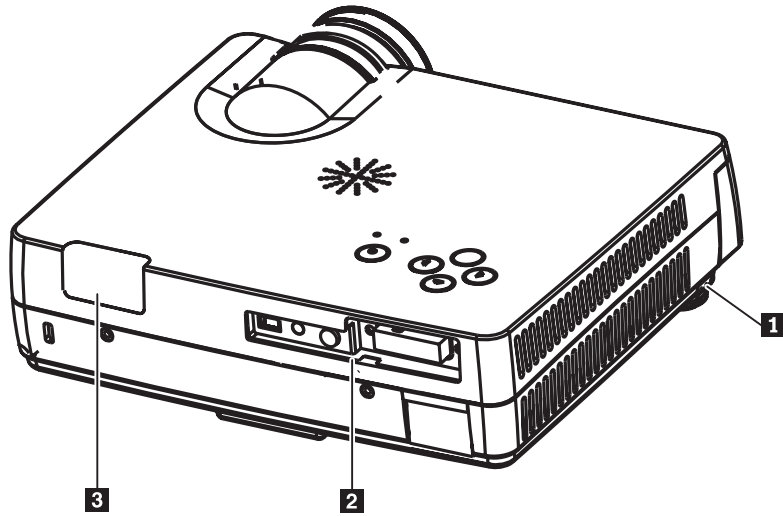


圖 1-3. 投影機背面角度

- 1** 高度調整腳/水平調整腳
- 2** 接頭
- 3** 遙控接收器 (IR)

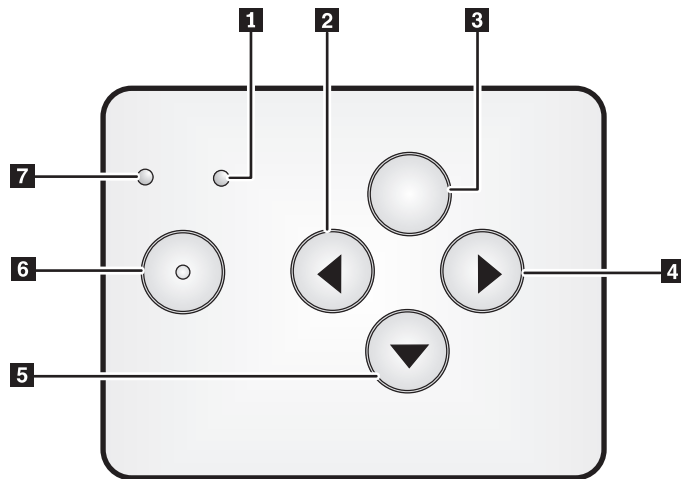


圖 1-4. 投影機上的按鍵組

- 1** 電源 LED
- 2** 信號源/向左按鈕
- 3** 功能表按鈕
- 4** 自動/向右按鈕
- 5** 快速功能表/向下按鈕
- 6** 電源按鈕
- 7** 狀態 LED

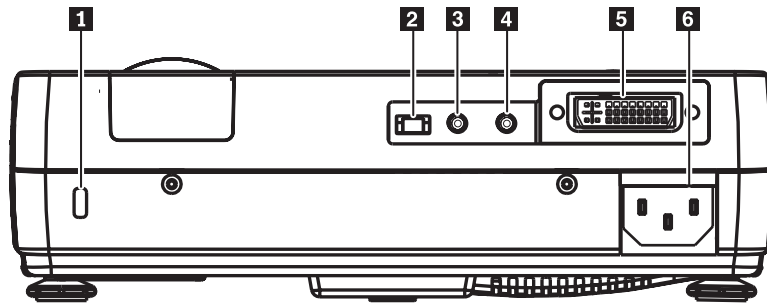


圖 1-5. 投影機背面的接頭

- 1** 安全鎖槽
- 2** USB 插槽
- 3** 音訊
- 4** 視訊 Mini Jack
- 5** DVI-I
- 6** AC 插座

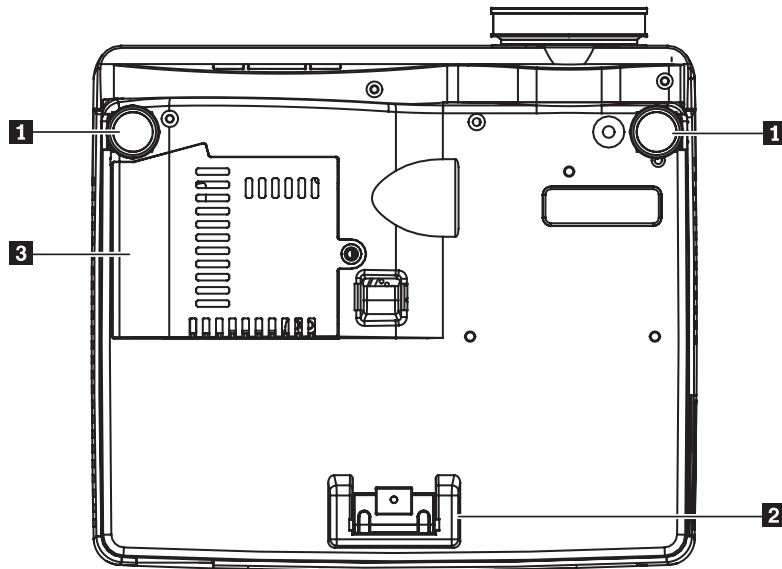


圖 1-6. 投影機底部圖

- 1** 前調整腳
- 2** 後調整腳
- 3** 投影燈泡蓋板

第 2 章 設置投影機

本章提供安置投影機、連接電腦信號源、使用投影機投射 Microsoft Windows、以及顯示與調整電腦來源影像。

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。

注意： 移動投影機之前，請確認投影機電源已正常關閉，且切斷與主要電源的連結。

1. 將電源線連接至投影機，如圖 2-1 所示。將另一端連接至牆壁插座。電源 LED 亮起。

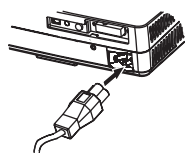


圖 2-1. 連接電源線

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。
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. 使用適當的裝置纜線連接至視訊裝置。
7. 若要關閉投影機，請按下 **Power** 按鈕。投影機準備關閉並且出現 "Power off" 訊息，如下所示。投影機在 5 秒鐘內自動關閉。

註： 按下 **Power** 按鈕以外的按鈕就可取消關機動作。再次按下 **Power** 按鈕可關閉電源。



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。在關閉電源後太快將投影機放入攜帶包，會導致投影機過熱並縮短燈泡壽命。

注意：移動投影機之前，請確認投影機電源已正常關閉，且切斷與主要電源的連結。

安置投影機

若要決定投影機的安放位置，請考慮螢幕的大小與形狀、電源插座的位置、以及投影機與其他設備之間的距離。下列為一般使用指南：

- 將投影機放置於平坦的表面，與螢幕成垂直。投影機與投射螢幕的距離至少要 1.5 公尺 (4.9 英尺)。
- 請將投影機放置在離電源 2.7 公尺 (9 英尺) 以及離視訊裝置 1.8 公尺 (6 英尺) 的地方 (除非購買延長線)。為了確定適當地使用纜線，投影機與牆壁或其他物體要相距 .15 公尺 (6 英寸) 以上。
- 將投影機放置於與螢幕保持適當距離的地方。投影機鏡頭到螢幕的距離、變焦設定、以及視訊格式決定了投射影像的大小。

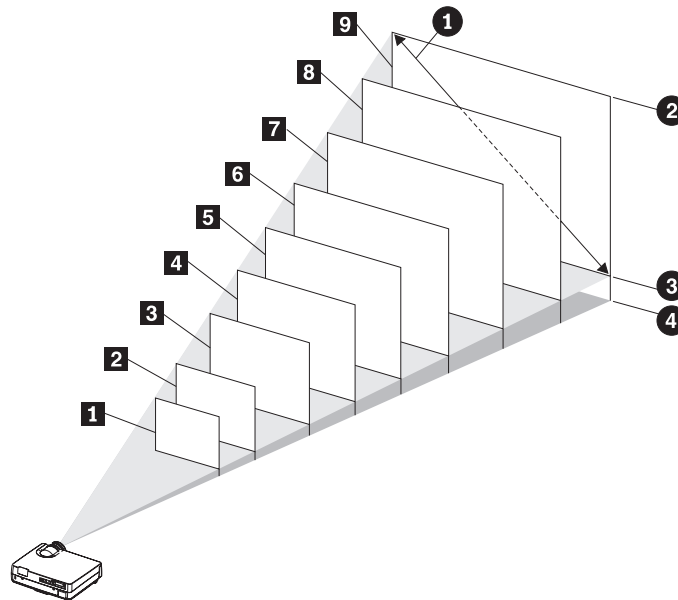


圖 2-2.

表 2-1.

變焦鏡頭操作範圍 (公尺/英尺)	螢幕對角尺寸 ① (公尺/英尺)	影像寬度 ② (公尺/英尺)	影像高度 ③ (公尺/英尺)	鏡頭中心到影像 底端的距離 ④ (公尺/英尺)
1 - 至 1.20/- 至 3.94	0.66/26	0.53/1.74	0.40/1.31	0.07/0.23
2 1.54 至 1.85/5.05 至 6.07	1.02/40	0.81/2.66	0.61/2	0.11/0.36
3 2.33 至 2.80/7.64 至 9.19	1.52/60	1.22/4	0.91/2.99	0.16/0.52

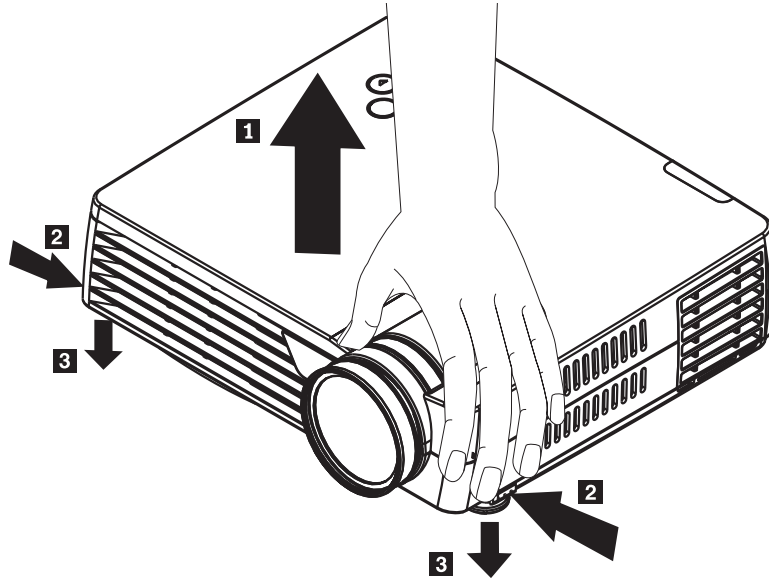
表 2-1. (繼續)

變焦鏡頭操作範圍 (公尺/英呎)	螢幕對角尺寸 ① (公尺/英吋)	影像寬度 ② (公尺/英呎)	影像高度 ③ (公尺/英呎)	鏡頭中心到影像 底端的距離 ④ (公尺/英呎)
4 3.12 至 3.75/10.24 至 12.30	2.03/80	1.63/5.35	1.22/4	0.21/0.69
5 3.91 至 4.70/12.83 至 15.42	2.54/100	2.03/6.66	1.52/4.99	0.26/0.85
6 4.70 至 5.64/15.42 至 18.50	3.05/120	2.44/8	1.83/6	0.31/1.02
7 5.89 至 7.07/19.32 至 23.20	3.81/150	3.05/10	2.29/7.51	0.39/1.28
8 7.04 至 8.45/23.10 至 27.72	4.57/180	3.55/12	2.74/8.99	0.47/1.54
9 7.85 至 9.44/25.79 至 30.97	5.08/200	4.05/13.32	3.05/10	0.52/1.71

調整投影機水平與高度

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，請抬起投影機並按下高度調整器按鈕，高度調整腳就會下降。
2. 若要微調高度，請旋轉高度調整腳。
3. 若要降低投影機的水平，請按下高度調整器按鈕並壓下投影機頂端。



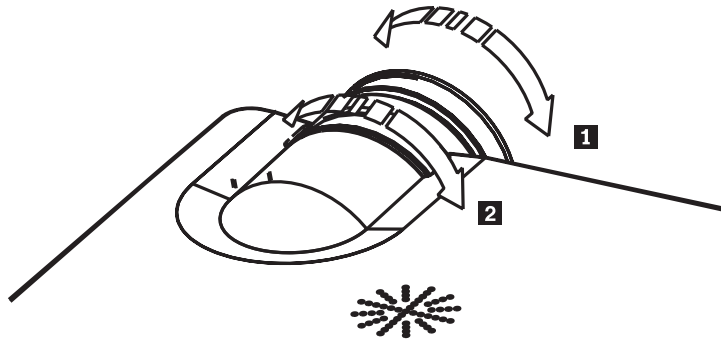
註:

- 投影機放置桌或立架應保持平穩。
- 請將投影機放置在與螢幕垂直的地方。
- 確定纜線安置在不會導致投影機被踢落的地方。

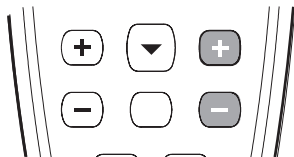
調整影像

若要調整影像的變焦、焦距及梯形，請完成下列步驟：

1. 旋轉投影機上的環來調整焦距及對焦，如下所示。



2. 使用 **Keystone** 按鈕 (只有遙控器上有) 來修正影像梯形 (頂端或底端較寬) 效果。遙控器上的 **Keystone** 按鈕顯示如下。



梯形控制項出現在 OSD 上，如圖所示。



若要調整投影機上的梯形，請按下 **Quick Menu** 並選擇 **Keystone** 子功能表，然後使用向左/向右按鈕調整梯形。

影像解析度

投射影像的 XGA 解析度為 1024 x 768 (XGA)，投影機的螢幕解析度最高相容至 1280 x 1024 (SXGA)。若您電腦螢幕解析度高於 1280 x 1024 (SXGA)，請在連接至投影機之前重設成較低解析度。

註：影像會自動把 640 x 480 (VGA) 和 800 x 600 (SVGA) 影像擴展為 1024 x 768 (XGA)。

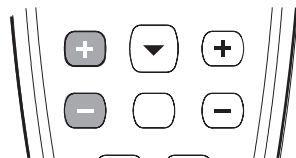
調整音量

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 (如下所示)。音量控制項會出現在 OSD 上。



2. 使用 **Volume +/-** 按鈕調整音量大小。遙控器的按鈕顯示如下。



3. 按下 **Mute** 按鈕 (只在遙控器上) 可關閉音量。再按一次 **Mute** 按鈕可打開音量。下面為啟動靜音時的 OSD。

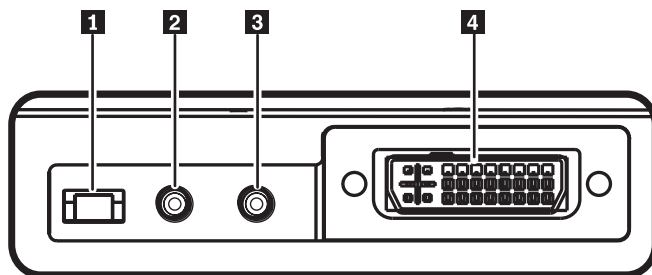


第 3 章 將裝置連接至投影機

本章提供連接裝置至 M400 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** USB 插槽
- 2** 音訊
- 3** 視訊 Mini Jack
- 4** DVI-I

第 4 章 使用投影機的功能

本章提供使用遙控器、聲音、按鍵組按鈕、以及投影機其他功能的資訊。

使用遙控器

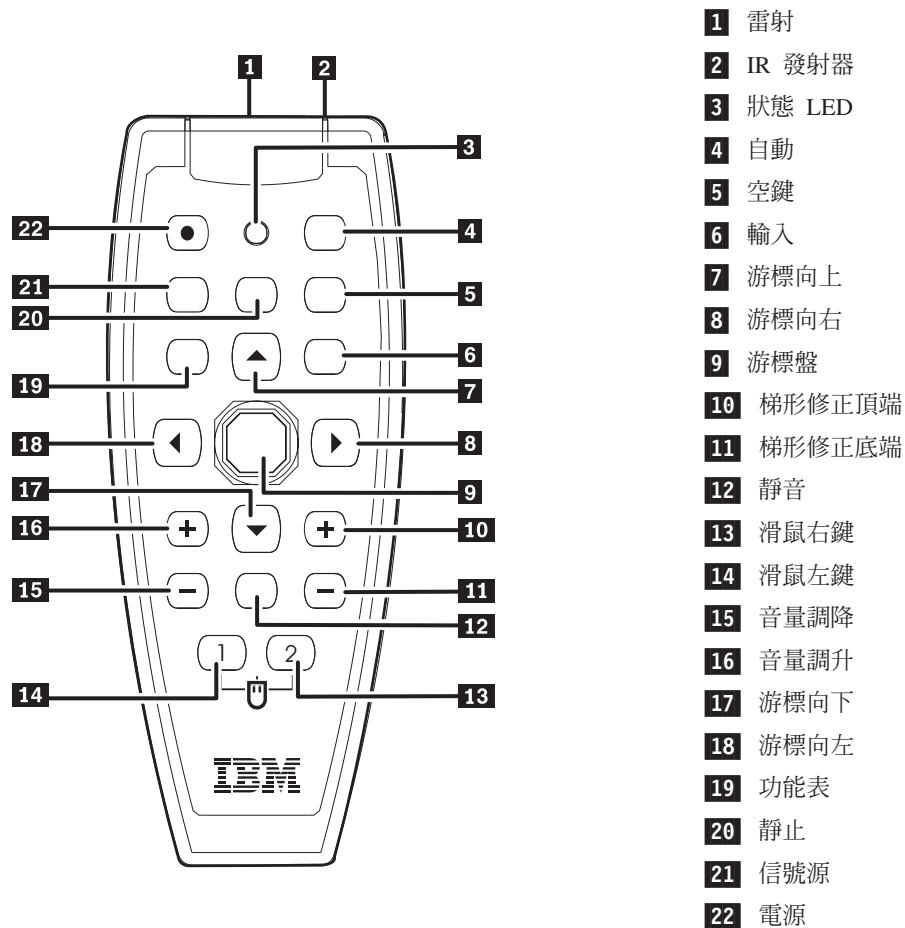
遙控器使用兩顆附贈的 AAA 電池，將遙控器背面的蓋子滑開，對準電池的 + 和 - 極，將電池裝好，然後裝上蓋子，安裝方法非常簡單。



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。

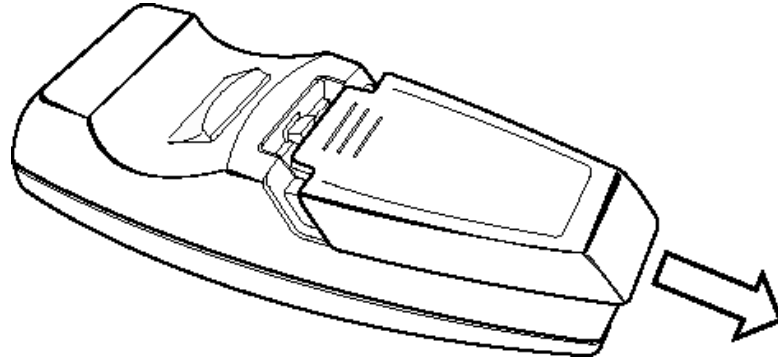
下圖為遙控器的圖例。



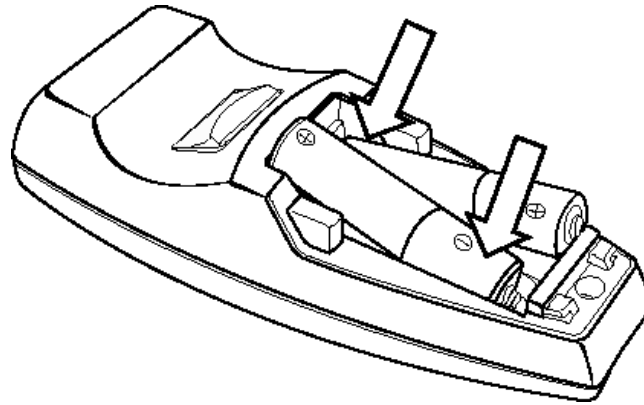
裝上遙控器電池

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。

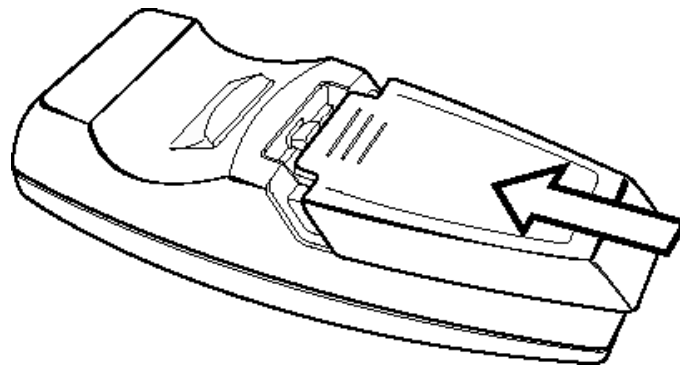
1. 依照圖示將電池室蓋板往箭頭方向滑開。



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。

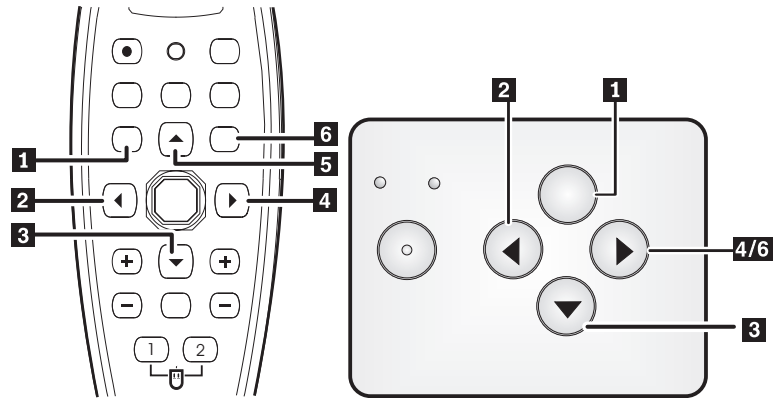
操作範圍

此遙控器使用紅外線控制投影機，並不需要將遙控器直接對著投影機。您不需將遙控器維持在投影機旁邊或後面，只要在 7 公尺 (22 英呎) 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操作 OSD 功能表的對應按鈕。



- 1** 功能表
- 2** 信號源/向左按鈕
- 3** 快速功能表/向下按鈕
- 4** 自動/向右按鈕
- 5** 向上按鈕
- 6** 自動/輸入按鈕

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。

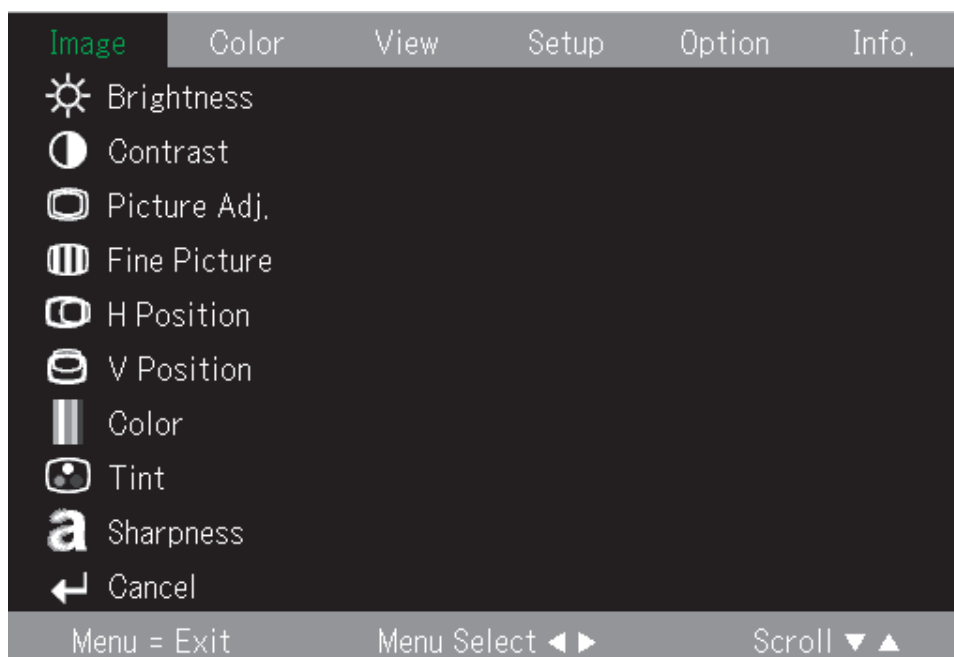
OSD 導覽

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。

Image 功能表

透過主功能表就可找到影像功能表，若要進入 Image 功能表，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 Image 功能表。
3. 按下游標向下按鈕，在 Image 功能表內往下移動。Image 功能表顯示如下。



下表顯示 Image 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：-50 至 50	0

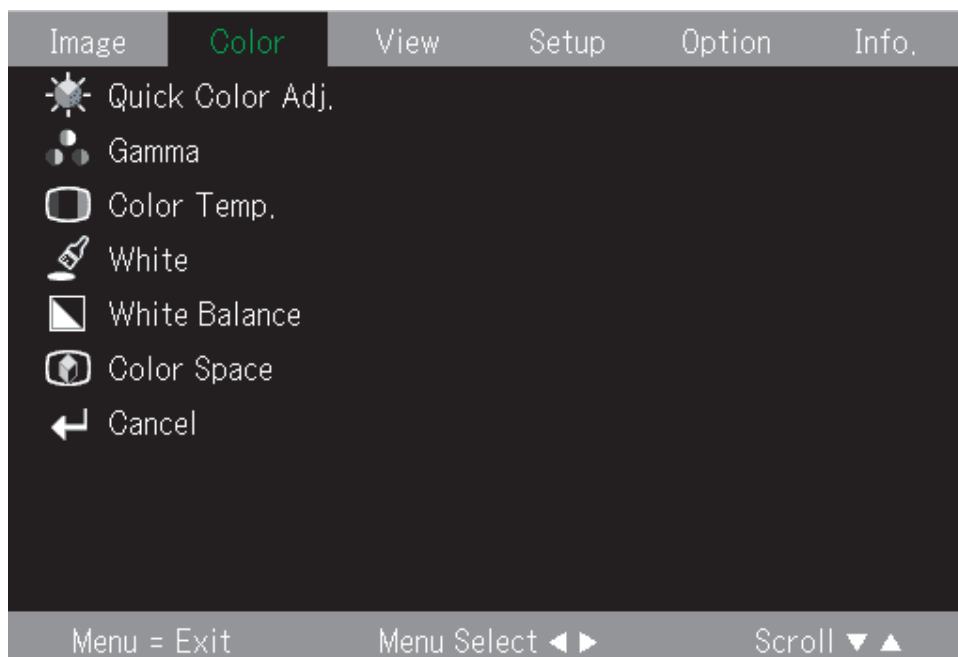
項目	說明	預設值
Contrast (對比)	按下游標向左/向右按鈕來調整對比。 範圍：-50 至 50	0
Picture Adjustment (調整畫面)	按下游標向左/向右按鈕來調整 A/D 取樣數。 範圍：-50 至 50	0
Fine Picture (最佳畫面)	按下游標向左/向右按鈕來調整 A/D 取樣時脈。 範圍：-50 至 50	自動偵測
H Position (水平位置)	按下游標向左/向右按鈕，將影像往左或往右移動。 範圍：-50 至 50	0
V Position (垂直位置)	按下游標向左/向右按鈕，將影像往上或往下移動。 範圍：-50 至 50	0
Color (色彩)	按下游標向左/向右按鈕來調整影像飽和度。 範圍：-50 至 50	0
Tint (色度)	按下游標向左/向右按鈕來調整影像色調。 範圍：-50 至 50	0
Sharpness (清晰度)	按下游標向左/向右按鈕來調整影像清晰度。 範圍：-50 至 50	0
Cancel (取消)	按下 Enter 按鈕可將 Brightness、Contrast、Picture Adjust、H Position、V Position、Color、Tint 及 Sharpness 重設為預設值。	0

Color 功能表

若要進入 Color 功能表，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 Color 功能表。

3. 按下游標向上/向下按鈕，讓游標在 Color 功能表內移動。色彩功能表顯示如下。



下表顯示 Color 功能表內的選項及預設值。

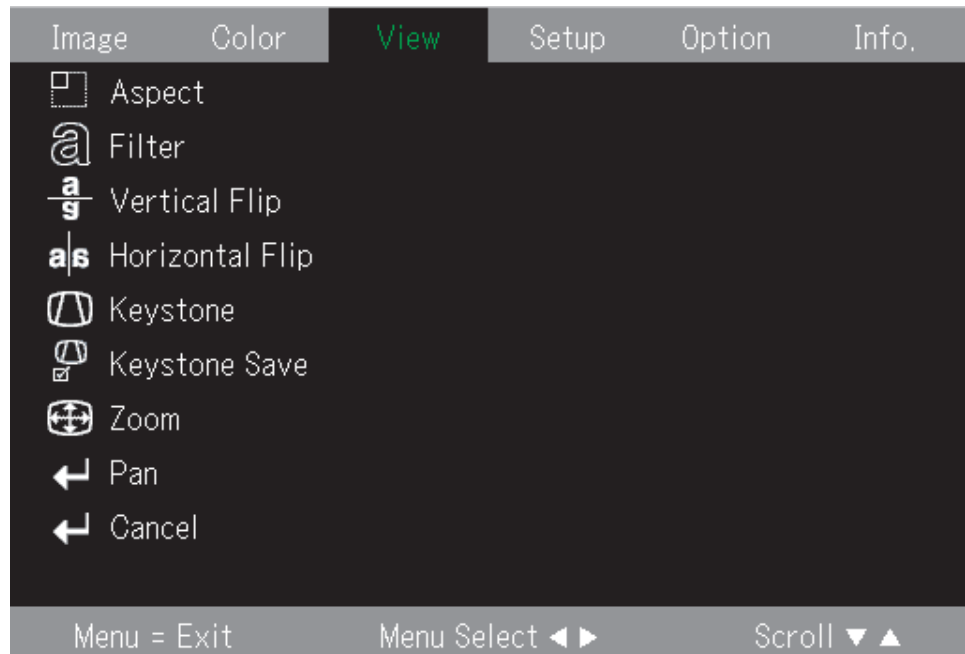
項目	說明	預設值
Quick Color Adj. (快速調整色彩)	按下游標向左/向右按鈕調整色彩。 範圍：Standard (標準)/Color (彩色)/Custom (自訂)	Standard (標準)
Gamma (伽碼)	按下游標向左/向右按鈕來選擇不同的 Gamma Correction (伽瑪校正)。 範圍：Normal (正常)/Natural (自然)/Real (真實)	Normal (正常)
Color Temperature (色溫)	按下游標向左/向右按鈕來選擇不同的色溫。 範圍：Low (低)/Middle (中)/Normal (正常)/High (高)	Normal (正常)
White (白邊)	按下游標向左/向右按鈕來選擇不同的白邊。 範圍：Low (低)/Middle (中)/High (高)	RGB : High (高) Video : Low (低)
White Balance (白平衡)	改變白平衡功能表	無
Color Space (色彩空間)	按下游標向左/向右按鈕來選擇不同的色彩空間。 範圍：BT.709/SMPTE240	BT.709

項目	說明	預設值
Cancel (取消)	將 Quick Color Adj.、Gamma、Color Temp.、White 及 Color Space 重設為預設值。	無

View 功能表

若要進入 View 功能表，請遵照下列步驟：

1. 按下 Menu 按鈕，打開主功能表。
2. 按下游標向左/向右按鈕，將游標移動至 View 功能表。
3. 按下游標向上/向下按鈕，讓游標在 View 功能表內移動。View 功能表顯示如下。



下表顯示 View 功能表內的選項及預設值。

項目	說明	預設值
Aspect (畫面比例)	按下游標向左/向右按鈕來選擇不同的畫面比例。 RGB 範圍：Auto (自動)/Direct (直接)/Rear (背後) Video 範圍：Auto (自動)/Wide (寬)/Zoom (縮放)	Auto (自動)
Filter (濾鏡)	按下游標向左/向右按鈕來選擇不同倍率的濾波器。 範圍：1 至 5	3

項目	說明	預設值
Vertical Flip (垂直翻轉)	按下游標向左/向右按鈕來選擇不同的垂直翻轉。 範圍：Off (關閉)/On (開啓)	Off (關閉)
Horizontal Flip (水平翻轉)	按下游標向左/向右按鈕來選擇不同的水平翻轉。 範圍：Off (關閉)/On (開啓)	Off (關閉)
Keystone (梯形)	按下游標向左/向右按鈕來調整梯形畫面。 範圍：-50 至 50	0
Keystone Save (梯形儲存)	按下游標向左/向右按鈕來儲存梯形。 範圍：Off (關閉)/On (開啓)	On (開啓)
Zoom (數位變焦)	數位變焦	無
Pan (搖鏡)	使用 ↑, →, ↓, ← 按鈕，在已經數位放大縮小的影像中移動。	無
Cancel (取消)	將 Aspect、Filter、Vertical Flip、Horizontal Flip、Keystone 及 Keystone Save 重設為預設值。	無

Setup 功能表

若要進入 Setup 功能表，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。Setup 功能表顯示如下。



下表顯示 Setup 功能表內的選項及預設值。

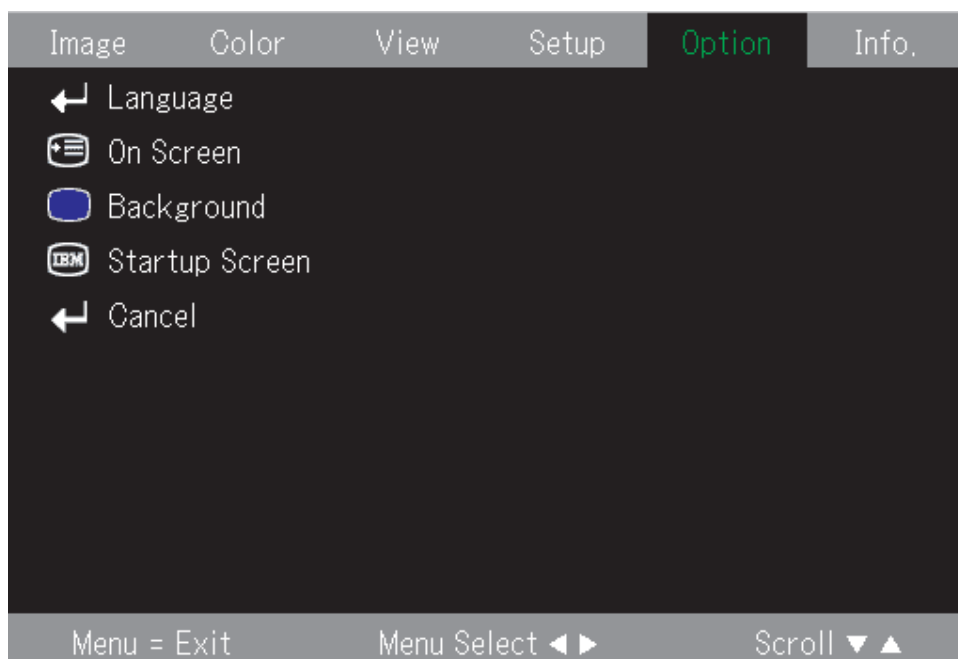
項目	說明	預設值
Auto Source (自動信號源)	按下游標向左/向右按鈕選擇，此時會自動搜尋所有輸入連接埠。 範圍：On (開啓)/Off (關閉)	On (開啓)
Auto Power Off (自動關機)	按下游標向左/向右按鈕選擇。投影機在無信號輸入長達 5 分鐘時，會自動關燈。 範圍：On (開啓)/Off (關閉)	Off (關閉)
Menu Position (功能表位置)	按下游標向左/向右按鈕來選擇不同的 OSD 位置。 範圍：Left (左)/Top (上)/Center (中央)/Right (右)/Bottom (下)	Center (中央)
Input Format (輸入格式)	改變輸入格式功能表。	Auto (自動)
Presentation Timer (簡報計時器)	按下游標向左/向右按鈕來選擇簡報計時器的時間。 範圍：Off (關閉)/10 min (分鐘)/20 min/30 min/40 min/50 min/60 min	Off (關閉)
Cancel (取消)	將 Auto Source、Auto Power off、Menu Position 及 Presentation Timer 重設為預設值。	無

Option 功能表

若要進入 Option 功能表，請遵照下列步驟：

1. 按下 Menu 按鈕，打開主功能表
2. 按下游標向左/向右按鈕，將游標移動至 Option 功能表。

3. 按下游標向上/向下按鈕，讓游標在 Option 功能表內移動。Option 功能表顯示如下。



下表顯示 Option 功能表內的選項及預設值。

項目	說明	預設值
Language (語言)	變更語言 範圍：English (英語)/German (德語)/French (法語)/Italian (義大利語)/Spanish (西班牙語)/Swedish (瑞典語)/Korean (韓語) /Simplified Chinese (簡體中文)/ Traditional Chinese (繁體中文)/ Japanese (日語)	English (英語)
On Screen (螢幕顯示)	按下游標向左/向右按鈕來選擇螢幕顯示功能表。 範圍：On (開啓)/Off (關閉)	On (開啓)
Background (背景)	按下游標向左/向右按鈕來選擇背景顏色。 範圍：Blue (藍色)/Black (黑色)	Blue (藍色)
Startup Screen (啓動畫面)	按下游標向左/向右按鈕來選擇啓動畫面。 範圍：Logo (公司標誌)/Blank (空白)	Logo (公司標誌)
Cancel (取消)	將 On Screen、Background 及 Startup Screen 重設為預設值。	無

Information 功能表

若要進入 Information 功能表，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 **Info** 功能表。
3. 按下游標向上/向下按鈕，讓游標在 **Info** 功能表內移動。**Info** 功能表顯示如下。



下表顯示 Info 功能表內的選項。

項目	說明
Factory Default (出廠預設值)	變更出廠預設訊息功能表。
Lamp Timer Reset (重設燈泡計時器)	重設燈泡計時器。
Resolution (解析度)	顯示水平/垂直的解析度格式。
Frequency (頻率)	顯示水平/垂直頻率資訊。
Lamp Timer (燈泡計時器)	顯示燈泡使用時數資訊。
Version (版本)	顯示韌體版本資訊。

子功能表

本節深入說明各個子功能表。

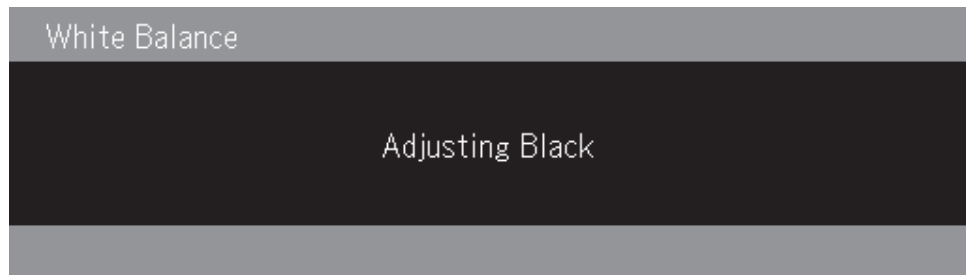
White Balance (白平衡)

White Balance 功能表用來校正畫面，請遵照下列步驟使用 White Balance 功能表。

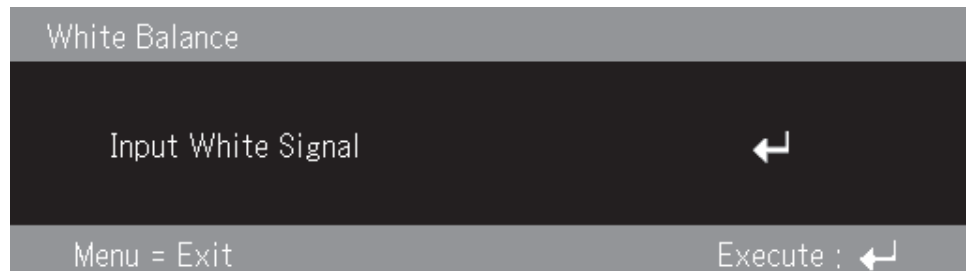
1. 一開始先找出電腦的黑色型樣信號源。



2. 按下 Enter 調整黑色。



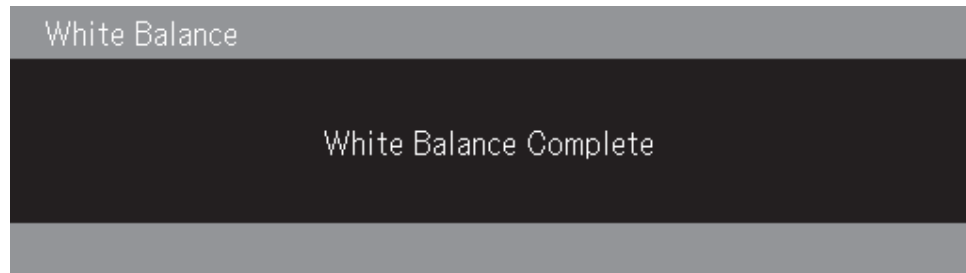
3. 接下來，找出電腦的白色型樣信號源。



4. 按下 Enter 調整白色。



5. 若順利調整完畢，畫面會顯示 "White Balance Complete"。



Input format (輸入格式)

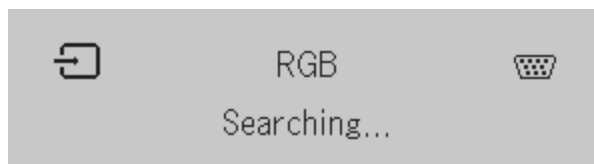
下列影像顯示輸入格式功能表。



下表顯示 Input Format 功能表內的選項以及預設值。

項目	說明	預設值
Input Format PC mode (輸入格式：PC 模式)	按下向上/向下按鈕來選擇輸入格式。 範圍：Auto (自動)/RGB/Digital (數位)/Component (色差)	Auto (自動)
Input Format Video/S-Video mode (輸入格式：視訊/S 視訊模式)	按下向上/向下按鈕來選擇輸入格式。 範圍：Auto (自動)/NTSC/PAL/SECAM/NTSC4.43/PAL M/PAL N/PAL 60	Auto (自動)

輸入格式的預設值為 Auto。投影機在搜尋輸入視訊信號源時，會出現下列畫面。



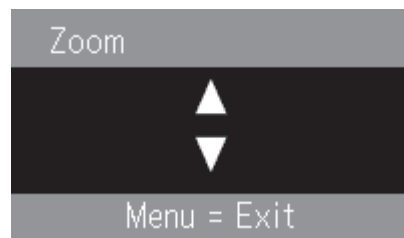
Language (語言)

下列影像顯示語言功能表，預設語言為 English。



Zoom (變焦)

按下游標向上/向下按鈕，以數位化方式變焦。



搖鏡

使用 ↑, →, ↓, ← 按鈕，在已經數位變焦的影像中移動。

Lamp Timer reset (重設燈泡計時器)

按下 **Enter** 按鈕，重設 Lamp Timer (燈泡計時器)。



Factory default (出廠預設值)

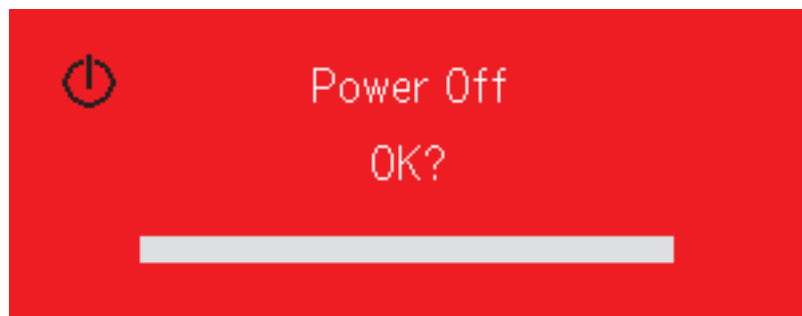
按下 **Enter** 按鈕，恢復預設設定。



Hot Keys (快速鍵)

本節顯示 Hot Key 並且說明其功能。

- **Power off (關閉電源)**：按下 Power 按鈕，關閉投影機的電源。等待 5 秒讓投影機自動關閉電源，或再次按下 Power 按鈕立即關閉電源。下面顯示投影機電源關閉時所顯示的影像。



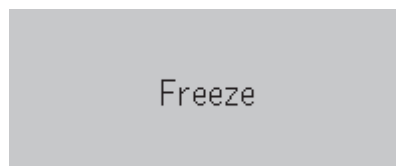
- **Keystone (梯形)**：按下 (遙控器) Keystone 游標 +/- 按鈕，調整梯形畫面。範圍為 -50 至 50。



- **Volume (音量)**：按下 (遙控器) Volume 游標 +/- 按鈕調整音量。範圍為 0 至 100。



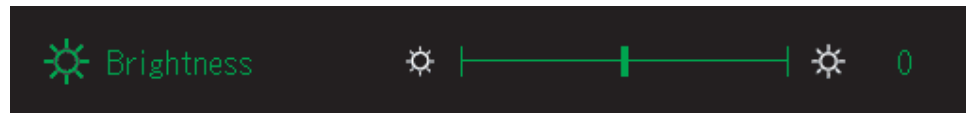
- **Freeze (靜止)**：使用靜止按鈕，靜止影像或解除靜止。



Quick menu (快速功能表)

本節為下列功能表項目的快速參考指南。

- **Brightness (亮度)**：按下游標向左/向右按鍵來調整畫面的亮度。範圍為 -50 至 50。



- **Contrast (對比)**：按下游標向左/向右按鍵來調整畫面的對比。範圍為 -50 至 50。



- **Volume (音量)**：按下向左/向右按鍵游標來調整音量。範圍為 0 至 100。



- **Keystone (梯形)**：按下游標向左/向右按鍵來調整梯形畫面。範圍為 -50 至 50。



附錄 A. 維護

本章提供維護投影機的相關資訊。

清潔鏡頭

若要清潔鏡頭，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。

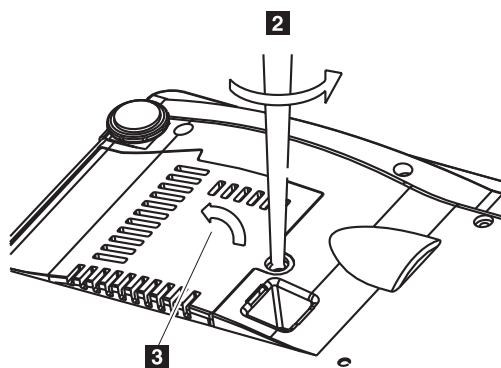
2. 用清潔布輕輕地朝同一方向擦拭鏡頭。如果您並不會立刻使用投影機，請重新蓋上鏡頭蓋。

更換投影燈泡

僅限使用 IBM 認證的零件來更換投影燈泡，您可經由企業夥伴或至 www.ibm.com/pc 訂購。

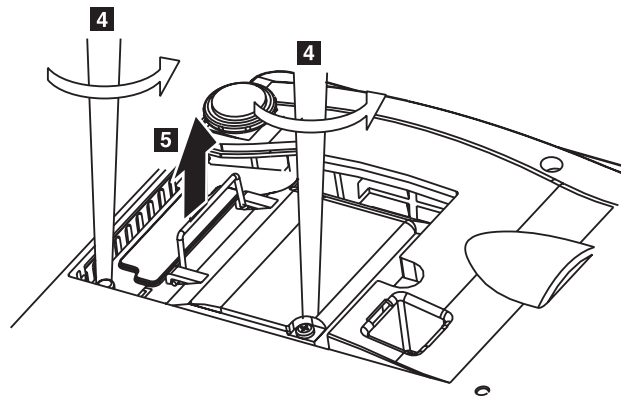
若要更換投影燈泡，請完成下列程序：

1. 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。
2. 使用十字螺絲起子拆除燈泡室蓋板螺絲，如 **2** 內所示。
3. 拆除燈泡室蓋板，如 **3** 內所示。

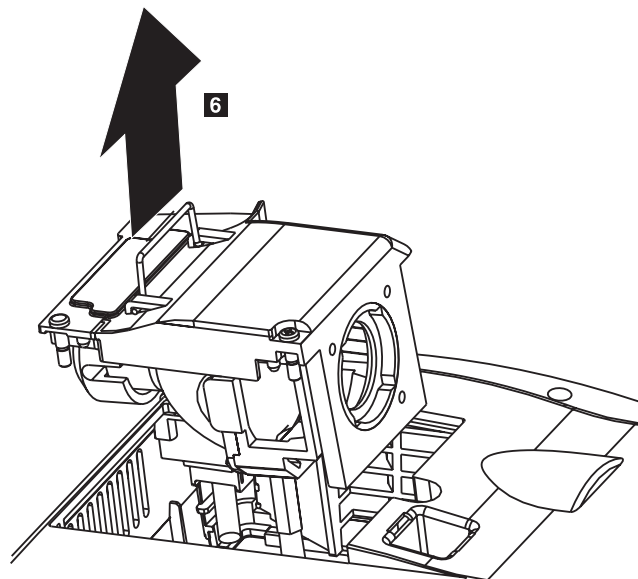


4. 拆除燈泡模組的兩只螺絲，如 **4** 內所示。

5. 抬起模組握把，如 **5** 內所示。



6. 用力拉出模組握把，將燈泡模組拆除，如 **6** 內所示。



7. 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來丟棄此燈泡。

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。

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。

重設投影燈泡

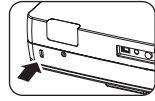
裝回投影燈泡之後，請將燈泡使用時數計數器歸零。請遵循下列步驟。

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 **Info** 功能表。
3. 按下游標向上/向下按鈕，將游標往下移動至 **Lamp Timer**。

4. 按下 **Enter** 按鈕，螢幕會顯示 "Press"ENTER" to Lamp Timer Reset"。
5. 再次按下 **Enter** 按鈕，重設投影燈泡使用時數。

使用安全鎖槽

如圖所示，本投影機具有安全鎖槽。有關如何使用的說明，請參閱安全鎖所附的資訊。



附錄 B. 疑難排解

下表提供投影機的疑難排解資訊。在某些情況下，將提供一個以上的解決方式。請依照所提供的解決方式順序嘗試。解決問題之後，可省略其他解決方式。

表 B-1. 疑難排解

問題	解決方式
螢幕上無畫面。	<ul style="list-style-type: none">• 確定都已經打開電腦與投影機的電源。• 若仍舊無畫面，請按下遙控器上的 Blank 按鈕。• 驗證筆記型電腦與桌上型 PC 上的設定。• 請依照正確順序關閉所有設備電源，然後打開電源。相關資訊，請參閱第 2-1 頁的『啟動與關閉投影機』。
影像模糊	<ul style="list-style-type: none">• 調整投影機上的焦距。相關資訊，請參閱第 2-4 頁的『調整影像』。• 按下遙控器或投影機上的 Auto 按鈕。• 確定投影機至螢幕距離位於指定的範圍內。
影像的頂端或底端過寬（梯形效果）。	<ul style="list-style-type: none">• 固定投影機，讓其盡可能與螢幕垂直。• 使用遙控器或投影機上的 Keystone 按鈕來更正問題。相關資訊，請參閱第 2-4 頁的『調整影像』。
影像左右或上下顛倒。	檢查 OSD 的 Setup 功能表上之 Projection 設定。請參閱第 5-4 頁的『View 功能表』
影像有條紋。	<ul style="list-style-type: none">• 將 OSD 的 Setup 功能表上之 Frequency 和 Tracking 設定恢復成預設值。相關資訊，請參閱第 5-1 頁的『OSD 導覽』。• 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。
影像平淡無對比	調整 OSD 的 Image 功能表上之 Contrast 設定。相關資訊，請參閱第 5-1 頁的『OSD 導覽』。
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。相關資訊，請參閱第 5-2 頁的『Color 功能表』。
投影機未投射出光線	<ul style="list-style-type: none">• 檢查電源線是否連接妥當。• 藉由測試其他電器來確定電源正常。• 以正確的順序重新啟動投影機，並檢查電源 LED 是否為綠色。• 若您最近更換過投影燈泡，請嘗試重新設定燈泡的連接。關上時，需確定燈泡蓋板與投影機外殼齊平。• 更換燈泡模組。相關資訊，請參閱第 A-1 頁的『更換投影燈泡』。• 裝回舊的燈泡，並且將投影機送修。

表 B-1. 疑難排解 (繼續)

問題	解決方式
燈泡不亮。	<ul style="list-style-type: none"> • 電源會導致燈泡熄滅，請按下 Power 按鈕兩次將投影機關閉。當 Lamp Ready LED 亮起，請按下 Power 按鈕。 • 更換新的燈泡模組。相關資訊，請參閱第 A-1 頁的『更換投影燈泡』。 • 裝回舊的燈泡並且將投影機送修。
投影機對遙控器沒有回應。	<ul style="list-style-type: none"> • 將遙控器指向投影機正面或後面的遙控感應器。 • 確定遙控器與感應器之間不受阻礙。 • 關閉室內所有日光燈。 • 檢查電池極性。 • 更換電池。 • 關閉附近其他可用紅外線遙控的裝置。 • 將遙控器送修。
沒有聲音。	<ul style="list-style-type: none"> • 調整遙控器上的音量。 • 相關資訊，請參閱第 2-5 頁的『調整音量』。 • 調整音源的音量。 • 檢查音訊纜線的連接狀態。 • 用其他喇叭測試音源的聲音輸出。 • 將投影機送修。
聲音失真。	<ul style="list-style-type: none"> • 檢查音訊纜線的連接狀態。 • 用其他喇叭測試音源的聲音輸出。 • 將投影機送修。

投影機 LED

投影機上方的 LED 指出投影機的狀態，並且可幫助您排解疑難。

表 B-2. 投影機 LED 行為以及投影機錯誤

LED 行為	說明
亮紅燈 電源開啓時 (亮綠燈) 待機 (亮琥珀色燈)	應該更換燈泡，請更換新的燈泡卡匣。請參閱第 A-1 頁的『更換投影燈泡』以取得更多資訊。
亮紅燈 琥珀色燈閃爍 60 秒，然後亮燈	燈泡壽命已盡，之後無法再開啓電源。 在燈泡到達使用壽命後，投影機還可以使用 100 個小時。請更換新的燈泡卡匣。相關資訊，請參閱第 A-1 頁的『更換投影燈泡』。
閃爍紅燈 (亮起 1 秒/熄滅 1 秒) 亮紅燈	已經打開燈泡蓋板。 燈泡蓋板沒蓋好，請重新蓋好。

表 B-2. 投影機 LED 行為以及投影機錯誤 (繼續)

LED 行為	說明
紅色閃爍 (亮起 0.5 秒/熄滅 0.5 秒) 亮紅燈	溫度異常過高。 <ul style="list-style-type: none"> 已經啟動溫度保護器，若室溫很高，請將投影機移動至低溫的地方。若投影機的內部溫度過高，請檢查冷卻風扇的通風槽，若有阻塞請予以清潔。 啟動溫度保護器時，電源會關閉，並且在某些情況下不會立即重新啟動。在此情況下，請等待 90 秒，然後再試一次。
閃爍紅燈 (亮起 0.5 秒/熄滅 0.5 秒) 亮琥珀色燈	風扇已停止。 拔掉電源線，並送至販售 IBM M400 投影機的商店維修。
閃爍紅燈 (亮起 1 秒/熄滅 1 秒) 使用中燈泡燒毀 琥珀色燈閃爍 90 秒，然後亮燈 啟動時燈泡就不亮 亮琥珀色燈	燈泡不亮。 至少等待 90 秒，然後打開電源。若還是有問題，請拔掉電源線，並送至販售 IBM M400 投影機的商店維修。

註: 若投影機 LED 的閃爍方式不在上述說明之中，請拔掉電源線並聯絡經銷商。

熱保護器

當投影機內部溫度異常過高，LED 指示燈會閃紅燈 (亮起 0.5 秒/熄滅 0.5 秒)，Standby 指示燈恆亮紅色，同時溫度保護器會運作，並關閉投影機的電源。若發生此狀態，請遵照下列步驟：

1. 關閉電源，並從牆壁插座上拔掉電源線。
2. 檢查室溫，若在室溫很高的地方使用投影機，請換到溫度低的地方使用。
3. 檢查通風口，確定不受阻礙。若受阻礙的話，請予以清除。
4. 至少等待 1 小時，直到投影機的溫度下降，然後再度插上電源。
5. 若仍舊有相同的問題，請聯繫經銷商。

附錄 C. 規格

下列為 IBM M400 投影機的規格。

溫度	5° 至 35° C (41° 至 95° F) 海平面上
(未運作)	-10° 至 60° C (14° 至 140° F)
海拔高度 (運作中)	3,048 公尺 (0 至 10,000 英尺)
海拔高度 (未運作)	12,192 公尺 (0 至 40,000 英尺)
溼度 (運作中)	相對溼度 5% 至 90%，未結露
溼度 (未運作)	相對溼度 5% 至 %95，未結露
尺寸	183 x 163 x 48 公釐 (7.2 x 6.4 x 1.9 英寸)
重量	不含包裝 1.1 公斤 (2.4 磅)
光學數據 (焦距範圍)	1.2 - 9.4 公尺 (4 至 31 英尺)
燈泡類型	114 瓦燈泡
輸入電源需求	100-240V 1.8A 50/60 Hz

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.

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

附錄 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.

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.

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.

M400 PROJECTOR

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

M400 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.

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

附錄 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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Electronic emission notices

IBM M400 PROJECTOR

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. 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.

Industry Canada Class A emission compliance statement

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

Avis de conformité a la réglementation d'Industrie Canada

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

Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Dieses Gerät ist berechtigt in Übereinstimmung mit dem deutschen EMVG vom 9.Nov.92 das EG-Konformitätszeichen zu führen.

Der Aussteller der Konformitätserklärung ist die IBM UK, Greenock.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse A. Für diese Klasse von Geräten gilt folgende Bestimmung nach dem EMVG:

Geräte dürfen an Orten, für die sie nicht ausreichend entstört sind, nur mit besonderer Genehmigung des Bundesministers für Post und Telekommunikation oder des Bundesamtes für Post und Telekommunikation betrieben werden. Die Genehmigung wird erteilt, wenn keine elektromagnetischen Störungen zu erwarten sind.

(Auszug aus dem EMVG vom 9.Nov.92, Para.3. Abs.4)

Hinweis: Dieses Genehmigungsverfahren ist von der Deutschen Bundespost noch nicht veröffentlicht worden.

European Union - EMC 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 cannot 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 A Information Technology Equipment according to CISPR 22/European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
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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 A en vertu de CISPR22/Standard européen EN 55022. Les conditions pour l'équipement de Classe A ont été définies en fonction d'un contexte d'utilisation commercial et industriel afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

Avvertissement : Ceci est un produit de Classe A. Dans un contexte résidentiel, ce produit peut causer une interférence radio exigeant que l'utilisateur prenne des mesures adéquates.

Union Europea - Normativa EMC

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

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

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le apparecchiature di informatica Classe A ai sensi del CISPR 22/Norma Europea EN 55022. I limiti delle apparecchiature della Classe A sono stati stabiliti al fine di fornire ragionevole protezione da interferenze mediante dispositivi di comunicazione in concessione in ambienti commerciali ed industriali.

Avvertimento: Questo è un prodotto appartenente alla Classe A. In ambiente domestico, tale prodotto può essere causa di interferenze radio, nel qual caso l'utente deve prendere misure adeguate.

Unione Europea - Directiva EMC (Conformidad electromagnética)

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislación de los Estados Miembros sobre compatibilidad electromagnética se refiere.

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Advertencia: Este es un producto de Clase A. En un entorno doméstico este producto podría causar radiointerferencias en cuyo caso el usuario deberá tomar las medidas adecuadas.

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