



iLV200/iLC200 IBM 資料/視訊投影 機

使用手冊

OPTIONS
by IBM

註: 在使用本資訊及其支援的產品之前，請先閱讀附錄下的資訊。

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安全

在安裝本產品之前，請先閱讀「安全資訊」。

مج، يجب قراءة دات السلامة

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

在安裝本產品之前，請仔細閱讀 **Safety Information**
(安全信息)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtete příručku bezpečnostních instrukcí.
Læs sikkerhedsforskrifterne, før du installerer dette produkt.

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

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

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

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

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

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

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

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

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

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

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

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

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

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關於本書

本手冊含有如何安裝與使用 IBM® iV200 及 iLC200 多媒體投影機的指示。手冊內容分成以下部份：

第 1 部份：安裝與使用手冊

本光碟含有下列語言版本的 iLV200 與 iLC200 投影機線上使用手冊：

- 英文
- 法文
- 西班牙文
- 義大利文
- 巴西葡萄牙文
- 繁體中文
- 簡體中文
- 日文

第 2 部份：附錄

本節含有產品規格、攜帶型與筆記型電腦啟動、使用視訊鏡映、投影影像大小、說明與服務、產品保證、以注意資訊。

註：手冊中的圖例與您的硬體可能略有不同。

註冊您的選用設備

感謝您購買 OPTIONS by IBM。請用一點時間為產品註冊，並提供一些相關資訊，這將有助於 IBM 在未來提供您更好的服務。您的意見對我們的產品開發和服務十分寶貴，也促進您和我們更良好的溝通。您可以在下列 IBM 網站註冊您的選用設備：

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

除非您在網站的問卷指出您不想收到進一步資訊，否則 IBM 會提供您所註冊的產品資訊及更新。

安裝與使用手冊

本節含有安裝與使用資訊。

簡介

The IBM® iLV200 與 iLC200 資料/視訊投影機是專為滿足多功能需求而設計的機型。此兩項產品使用「數位化亮度處理」(Digital Light Processing™, DLP) 技術，影像明確清晰，同時還使用 M1-DA 連接器，連接內建數位/類比以及 USB 接頭非常方便。此兩者均為配接性高、易於使用、便於攜帶、維護簡便的投影機。iLV200 具有 SVGA 800 x 600 解析度，iLC200 具有 XGA 1024x768 解析度。此二款機型的使用者介面完全相同，因此本使用手冊提供的資訊適用於二種機型。

投影機與現行的各種擴播視訊標準相容：包括 NTSC、NTSC 4.43、PAL、PAL-M、PAL-N、PAL-60 與 SECAM。它們會配合視訊來源，自動將效能調整為最佳化。

影像解析度

iLV200 投射的影像解析度為 SVGA 800x600。本投影機相容的螢幕解析度高達 1280x1024。如果電腦的螢幕解析度超過 1280x1024，請先重設為較低的解析度，再連接投影機到電腦。

註：iLV200 投影機可將 640 x 480 影像自動放大至 800 x 600。如果您要以原有的解析度顯示這一些影像，請關閉「自動調整大小」(Auto Resize) 的功能。相關資訊請參閱 1-17 頁的「調整大小」。

iLC200 投射影像的 XGA 解析度為 1024x768。本投影機相容的螢幕解析度高達 1280x1024。如果電腦的螢幕解析度超過 1280x1024，請先重設為較低的解析度，再連接投影機到電腦。

註：iLC200 投影機可將 640x480 與 800x600 影像自動放大至 1024x768。如果您要以原有的解析度顯示這一些影像，請關閉「自動調整大小」(Auto Resize) 的功能。相關資訊請參閱 1-17 頁的「調整大小」。

相容性

本投影機與多種型式的電腦和影像顯示裝置相容，包括：

- IBM 相容電腦，包括解析度達 1280 x 1024 的筆記型電腦。
- 解析度達 1280 x 1024 的 Apple Macintosh 與 PowerBook 電腦。
- 大多數標準規格的 VCR、DVD 放映機、HDTV 視訊來源、手提式錄放機以及雷射光碟放映機等。

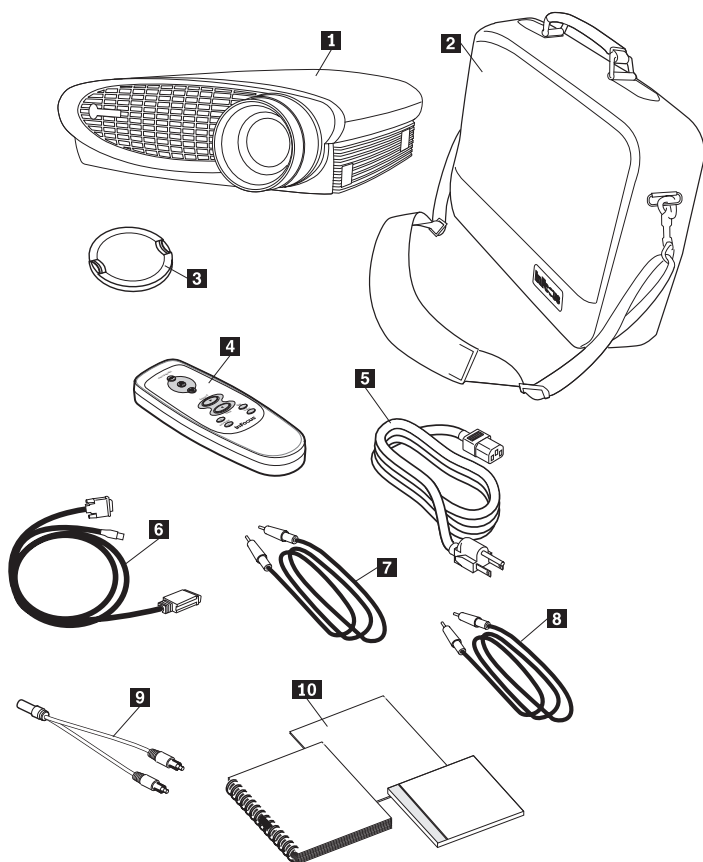
註：本投影機相容於 1080i 與 720P HDTV 播放格式。

投影機的配件

本產品包含如下圖所示的配件。請確認包裝是否有短少的項目。若有發現項目短少的情形，請與經銷商聯絡處理。如果您對安裝和設立簡報系統的作業十分有經驗，請直接參考隨附於投影機的快速入門卡。有關投影機的連接與操作詳細資訊，請參閱使用手冊。

警告： 本產品所使用的投影燈泡為含有水銀的金屬電弧燈泡。請依照當地的法令及規定處理廢棄的燈泡。

註： 包裝中的品項會隨著您所訂購的投影機配置而有所不同。



1 iLV200/iLC200 投影機

4 遙控器

7 音訊線

10 快速入門卡、多國語言使用手冊及安全資訊手冊

使用說明

請依照下列準則使用您所購買的投影機。

警告： 當投影機開啓時，請勿直視投影燈。高亮度的光線可能會傷害您的眼睛。

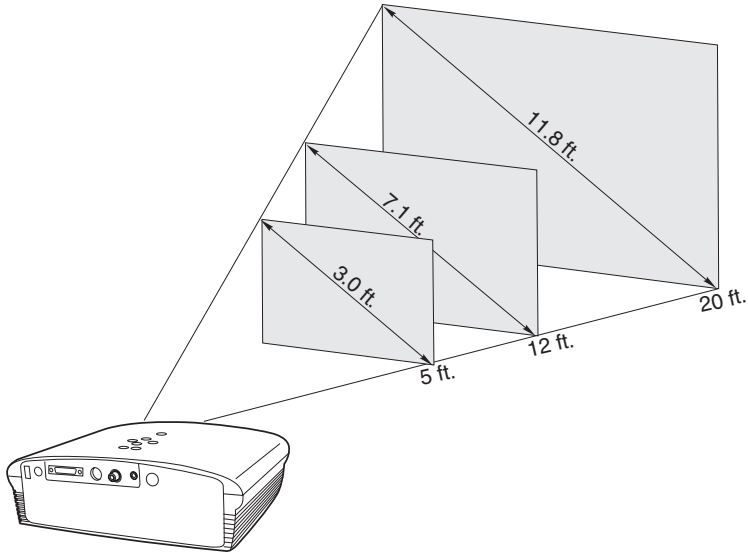
警告： 請勿阻礙投影機的散熱通風口。如果限制了散熱的氣流，則有可能造成投影機因過熱關機。如果發生這種情形，您必須等候一分鐘再開機。

- 請依照一般含有鏡頭元件的裝置來搬運及處理投影機。尤其應特別注意不可因疏忽而導致投影機掉落。
- 請避免投影機長時間處於日光直射或低溫的狀態。如果無法避免這種情形，應等待投影機達到室溫時才使用投影機。
- 攜帶時，請務必將投影機置於軟式背袋中。請參閱附錄 A 中適用於投影機的相關配件。

安裝投影機

請依照下列程序來安裝投影機：

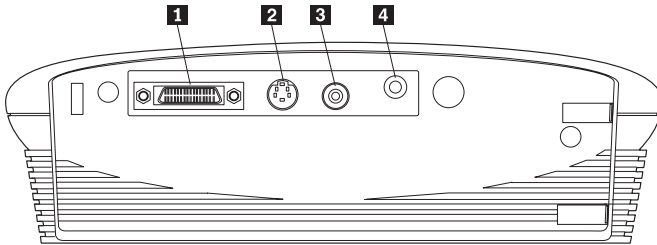
1. 使用時，請將投影機置於水平的平面。
 - 投影機與電源的距離不可以超過 10 英尺（3 公尺），和電腦的距離不可以超過 6 英尺（1.8 公尺）。
 - 如果您要以後方投射的方式將影像投射於顯示屏上，則請將投影機安置於顯示屏的後方。有關如何反向顯示影像的方法，請參閱於第 1-19 頁的「後方投影」乙節內容。
2. 投影機的位置與顯示屏的適當距離。
 - 投射影像的大小取決於投影機鏡頭與顯示屏之間的距離及縮放的設定。下列圖例中顯示了三種投射影像的大小。有關影像大小詳細資訊，請參閱 15 頁附錄 D「投影影像大小」。



3. 請確定已拔掉投影機的電源線，而且已將電腦關機。

註：當您要將投影機與電腦連接時，請確定電腦與投影機之間的距離未超過六英尺。

依照控制面板上的圖示配接所有的接線。此處提供您下列兩個圖例參考。

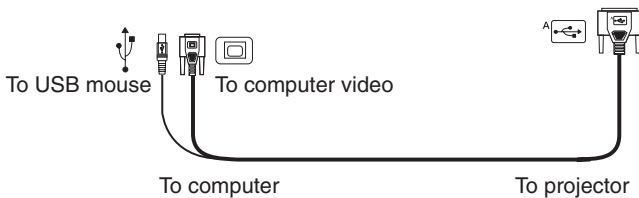


1 電腦

2 S 端子

3 Composite 視訊

4 音訊輸入





危險

電源、電話及通訊接線中的電流是具有危險性的。

若要避免觸電的危險，請注意：

- 在有閃電暴雨的環境中，請勿連接或拆卸投影機的接線，也應避免在該環境中進行安裝、保養或重新配置本項產品。
- 連接所有的電源線時，應使用符合安全規格且有接地的電源插座。
- 其它與投影機連接搭配的設備，也應使用符合安全規格的電源插座。
- 儘可能使用一隻手進行訊號線連接的工作（避免短路）。
- 在明顯得知會有水、火或結構性的損害情況時，請勿開啓投影機。
- 除非在安裝及配置程序中另有註明，否則在開啓裝備的外殼時，應先取下電源線、電信系統、網路和數據機等週邊設備。
- 在安裝、移動或開啓本產品的外殼，或是連附屬裝置時，請依照下表中的注意事項連接和取下接線。

若要連接：

1. 關閉所有的電源。
2. 先連接所有裝置的接線。
3. 將訊號線連接至連接器的接頭。
4. 將電源線插入插座中。
5. 開啓裝置的電源。

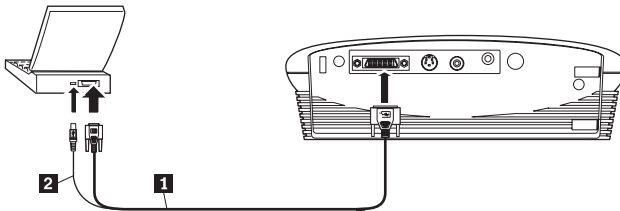
若要取下接線：

1. 關閉所有的電源。
2. 首先，拔掉插座上的電源線。
3. 取下接頭上的訊號線。
4. 取下裝置上所有的接線。

連接電腦

本投影機隨附有一條 M1-DA 類比電纜線。如果您的電腦具備有數位輸出的接頭，您可以另外選購 M1-DA 數位電纜線。有關訂購配件的資訊，請參閱附錄 A。

1. 將 M1-DA 類比電纜線標示有 A 的一端插入投影機標示 AD 的連接器。
2. 將 M1-DA 類比電纜線的一端插入您電腦上的視訊連接器。



1 電纜線

2 USB 滑鼠

註: 有許多筆記型電腦在接上第二個顯示裝置，如投影機時，並無法自動開啓外接式視訊連接埠。有關如何啓動外接式視訊連接埠的指令，請參閱您電腦手冊中的相關章節。如果您使用 IBM ThinkPad，可按 F7 來啓動外接式顯示器。其它筆記型電腦的顯示切換指令，請參閱附錄 B。

註: 如果您想要將本投影機與舊型沒有 15-pin 連接器的 Macintosh 電腦連接使用，則您必須在電腦和投影機之間使用 Mac 轉接器。

若要從投影機的搖控器或按鍵面板上控制電腦的滑鼠，則請將 M1-DA 類比電纜線插入您電腦上的滑鼠接頭。

註: USB 滑鼠只有在下列作業系統的環境中才支援：Microsoft® Windows® 98、Microsoft Windows 2000 Professional 和 Apple OS 8.5 及更新的版本。若要在投影機上播放電腦的音訊，則請將音訊線的一端插入投影機或電腦上的音訊接頭。然後將音訊線的另一端插入投影機的揚聲器接頭。

有關啓動投影機和電腦的相關資訊，請查閱第1-8頁的『啓動投影機和調整影像』乙節內容。

註: 當您連接 USB 滑鼠之後，您無需無重新啓動電腦即可使用該滑鼠。此為一熱機即插即用的裝置。

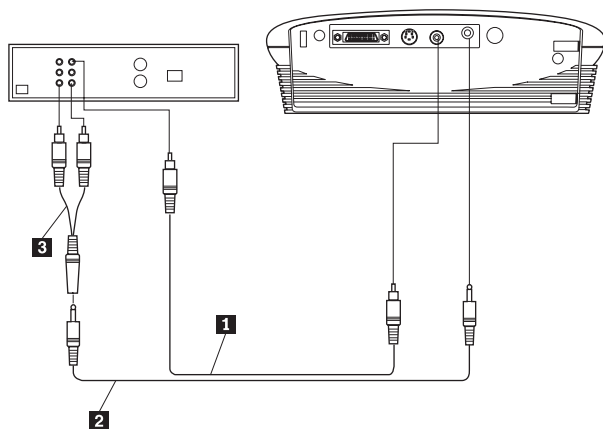
連接放映機

請依照下列程序連接投影機及放映機：

如果您的放映機使用的是一種圓形、單心的 Composite 視訊連接器，則您只需要使用隨附於投影機的音訊線、音訊轉接器以及 Composite 視訊線。但如果您的放映機使用的是圓形、四針的 S 端子接頭，則除了音訊線和音訊轉接器之外，您還需要 S 端子接線。S 端子接線需要另外選購。請參閱附錄 A 的配件資訊。

1. 將 Composite 視訊線的黃色接頭插入放映機上的「視訊輸出」接頭。這個接頭有時候會標示成「連接至顯示器 (To Monitor)」。另一種情形是，如果您使用的是 S 端子接線，則請將視訊線連接至放映機上的「S 端子輸出 (S-Video out)」接頭。
2. 再將另一端的黃色接頭連接至投影機的 Composite 視訊接頭上。而如果您所使用的是 S 端子，則請將 S 端子接線的另一端連接至投影機上的「S 端子 (S-Video)」接頭上。

註： 高畫質定義視訊影像 (High Definition Television, HDTV) 來源係使用 M1-DA 的電纜線與投影機連接。



1 Composite 線

2 音訊線

3 音訊接頭

3. 將音訊線的白色接頭插入放映機上左側的「音訊輸出」接頭。將音訊線的紅色接頭插入放映機上右側的「音訊輸出」接頭。
4. 將音訊接頭的另一端插入音訊線對應的接頭。
5. 將音訊線插入投影機上的「音訊輸入」接頭中。

註： 連接於電腦的同一條音訊線可以用音訊接頭連接到錄放影機 (VCR)。

註： 您所使用的放映機可能也會具備連接同軸電纜的「視訊輸出」接頭。投影機不可以使用這個接頭。



危險

電源、電話及通訊接線中的電流是具有危險性的。

若要避免觸電的危險，請注意：

- 在有閃電暴雨的環境中，請勿連接或拆卸投影機的接線，也應避免在該環境中進行安裝、保養或重新配置本項產品。
- 連接所有的電源線時，應使用符合安全規格且有接地的電源插座。
- 其它與投影機連接搭配的設備，也應使用符合安全規格的電源插座。
- 儘可能使用一隻手進行訊號線連接的工作（避免短路）。
- 在明顯得知會有水、火或結構性的損害情況時，請勿開啓投影機。

危險

電源、電話及通訊接線中的電流是具有危險性的。

- 除非在安裝及配置程序中另有註明，否則在開啓裝備的外殼時，應先取下電源線、電信系統、網路和數據機等週邊設備。
- 在安裝、移動或開啓本產品的外殼，或是連附屬裝置時，請依照下表中的注意事項連接和取下接線。

若要連接：

1. 關閉所有的電源。
2. 先連接所有裝置的接線。
3. 將訊號線連接至連接器的接頭。
4. 將電源線插入插座中。
5. 開啓裝置的電源。

若要取下接線：

1. 關閉所有的電源。
2. 首先，拔掉插座上的電源線。
3. 取下接頭上的訊號線。
4. 取下裝置上所有的接線。

啓動投影機和調整影像

請依照下列程序啓動投影機和調整影像。

註： 請務必使用隨附於投影機包裝中的電源線。

1. 取下投影機的鏡頭蓋。
2. 將電源線插入投影機的一側，然後再將電源線的另一端插入電源插座中。建議使用具備防突波的多孔延長線作為電源插座。投影機中的散熱風扇即會開始運轉，而在投影機軟體初始化之前，其頂部的 LED 指示燈會以橘色顯示。當初始設定完成後，LED 指示燈會顯示成綠色。投影燈 LED 為綠色時，指示您可以按投影燈開/關按鈕來打開或關閉投影燈。

註： 當您第一次將影機連接至您的電腦上時，有可能電腦會顯示「找到新的硬體」的訊息。可能還會開啓「加入新的硬體」精靈的視窗。您可以使用此精靈安裝正確的裝置驅動程式（電腦會將投影機視為一隨插即用的監視器）。

3. 按一下按鍵面板上的指示燈 on/off 開關，開啓指示燈。此時會開啓啓動視窗。
4. 如果您已將放映機連接至投影機上，請開啓放映機的電源。則顯示屏上即會顯示視訊影像。如果已有電腦的訊號來源可以使用，請按一下按鍵面板上的「來源」(Source) 按鈕，或是搖控器上的視訊 (Video) 按鈕，即可顯示您的視訊影像。您可以選擇設定預設來源，可以讓投影機在開機時先檢查該視訊來源是否存在；相關資訊，請參閱第 1-19 頁的「預設來源」乙節內容。此外，您可以使用音量按鈕來調整音量。
5. 開啓電腦。

註： 對某些電腦而言，開啓各項設備的順序是非常重要的。對大多數的電腦而言，應該等到所有連接的裝置開啓後，最後才開啓電腦。有關開機的正确順序，請參閱您電腦的相關文件。

- 電腦的影像畫面會顯示於顯示屏上。如果已啓動視訊來源，請按一下按鍵面板上的來源按鈕或搖控器上的電腦按鈕，即可切換顯示電腦的影像。請確

定您筆記型電腦上的外接式視訊連接埠已經啓動；詳細資訊，請參閱附錄 B 中的「在攜帶型和筆記型電腦上啓動外接式顯示器的圖表」內容。

- 視情況需要，使用投影機上螢幕功能表來調整影像。若要開啓此功能表，請按一下按鍵面板或遙控器上的功能表按鈕，然後選取「顯示或影像」(Display or Image) 子功能表。有關各功能表的相關資訊，請參閱第1-13頁的『使用螢幕功能表』乙節內容。

關閉投影機

如果您要暫時將投影機關閉一段時間，可以按下按鍵面板或遙控器上的「待機」(Standby) 按鈕。當您按下這個按鈕後，畫面上的影像會暫時消失 15 分鐘，但投影機仍會處於開機運轉的狀態。（您可以變更投影機待機模式的時間；詳細資訊，請參閱第1-19頁的「待機時間」乙節內容）。15 分鐘後，投影燈即會亮起，您即可繼續正常使用投影機。若要中途結束待機模式，請再按一下待機按鈕。按下此按鈕之後，請稍候數秒鐘讓投影燈泡達到足夠的能量，然後投影機即可再次投射影像。

註：若要延長或保持投影燈的使用壽命，最好是在關閉投影燈一分鐘後，待燈泡冷卻再將電源線取下。在燈泡冷卻時，投影燈的 LED 指示燈仍會顯示成綠色。

投影機的使用

本章節的內容將提供您有關使用和調整投影機的相關資訊。並同時提供您按鍵面板與遙控器上各個按鈕的對照參考，以及螢幕功能表中可用的選項。

基本影像調整

若要調整影像，請執行下列步驟。

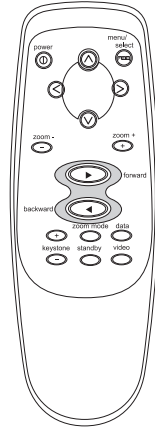
- 請確定您以正確的順序開啓各項裝備。相關資訊，請參閱第1-8頁的『啓動投影機和調整影像』乙節內容。
- 如果影像無法完整顯示，可以縮放的方式調整影像（請參閱 第1-10頁的『調整投影機』的相關內容）、調整投影機的高度（請參閱第1-10頁的『調整投影機』乙節內容）或是同時調整影像的水平及垂直位置，將影像設定在中央的位置（請參閱第 1-18頁的相關內容）。請確定投影機必須與顯示屏成 90 度的配置。
- 如果影像的焦點不正確，請旋轉鏡頭的焦距（請參閱第1-10頁的『調整投影機』乙節內容）。
- 如果影像顯得有些發散或是在調整焦距之後會顯出模糊的直線，請先關閉「自動影像調整」(Auto Image) 的功能（請參閱 第 1-17 的內容），然後再開啓此項功能，即可重設自動同步化和追蹤的選項功能。如果這樣做不能改善影像的品質，則必須關閉「自動影像調整」的功能，然後改以手動調整同步化（請參閱 第 1-18頁的內容）、追蹤（請參閱第 1-18 頁的內容），或是兩者的設定。
- 如果所顯示影像的色彩不正確，則調整亮度（請參閱第1-15 頁的內容）。

使用遙控器

投影機的遙控器上有四個功能按鈕，分別為碟形滑鼠以及兩個滑鼠按鈕（一個位於遙控器上方，另一個則位於下方）。

將遙控器指向投影機前方的顯示屏。有效的操控距離約為 25 英尺。當您將遙控器指向投影顯示屏時，顯示屏與投影機之間的距離必須小於或等於 25 英尺。若要獲得最佳的效果，可以將遙控器直接指向投影機。

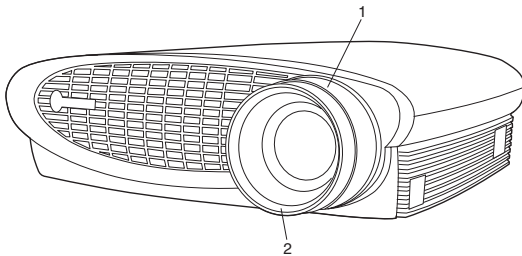
註： 如果發生遙控器有數分鐘無法運作的情況，這是因為遙控器有「睡眠」功能，而為了延長電池的壽命而處於非作用的狀態。您可以按下「碟形滑鼠」以外的任何按鈕，即可重新啟動遙控器。



要遠距使用 PowerPoint[®] 中的向前或向後來播放投影片，請將電腦上的 USB 連接器連到電腦。您的電腦必須安裝 USB 驅動程式才能夠啓用 USB 連接。若要將 PowerPoint 設定成使用此一功能，請按一下「工具」功能表中的選項，按一下檢視標籤，然後取消選取「投影片放映」區段中的按滑鼠右鍵時顯示快顯功能表核取方塊，然後按一下**確定**。接下來，當您在使用 PowerPoint 的「投影片放映模式」時，按一下滑鼠左鍵即可顯示下一張投影片，而按一下滑鼠右鍵即可回到上一張投影片（而不會影響其它的 PowerPoint 模式）。

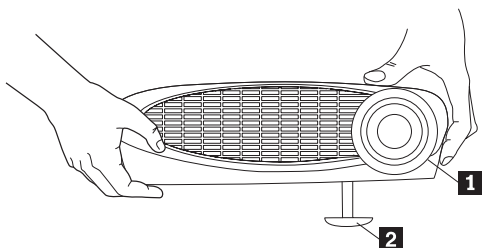
調整投影機

若要調整影像的焦點，則旋轉焦距調整環 **2**（請參閱下列圖例）直到影像清晰為止。若要縮放影像的大小，則旋轉縮放調整環 **1**。就可以在不影響影像焦距的狀況下調整影像的大小。

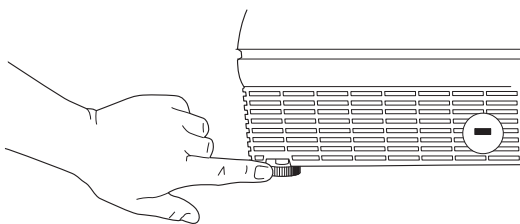


本投影機配備有自我鎖定、快速釋放的可調式定位腳及按鈕。若要將投影機升高：
1. 按住升降按鈕 **1**（請參閱下列圖例）。

- 將投影頭升高至您要的高度，接著放開按鈕，即可將升降定位腳 **2** 固定在所要位置。

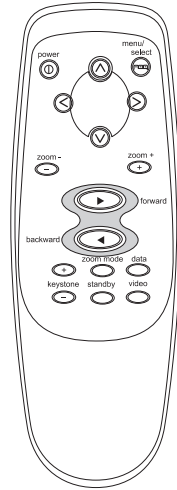


- 視情況需要，如圖所示，轉換定位旋柄來調整投射影像的角度。



使用按鍵面板及遙控器上的按鈕

在功能表顯示時，在按鍵面板上「音量」、「來源」和「待機」的按鈕便可做為功能表的導覽按鈕。相關資訊，請參閱 第1-13頁的『使用螢幕功能表』乙節內容。



投影燈開關（僅適用於按鍵面板）

您可以使用投影燈的 on/off 開關來開啓或關閉投影燈。投影燈 LED 指示燈會顯示目前投影燈的狀態。投影燈 LED 為綠色時，表示您可以打開投影燈或投影燈已經亮著。而橘色的 LED 指示燈則表示軟體正在初始化，或是投影燈正在冷卻中。當 LED 顯示為橘色時，不可以按投影燈的 on/off 開關按鈕。

功能表

按下功能表按鈕可開啓螢幕功能表。再按一次功能表按鈕，就可以關閉螢幕功能表。在您關閉投影機時，投影機會自動儲存所有您所做的變更。有關螢幕功能表的相關資訊，請參閱第1-13頁的『使用螢幕功能表』的內容。

來源（僅適用於按鍵面板）或電腦和視訊（僅適用於遙控器）

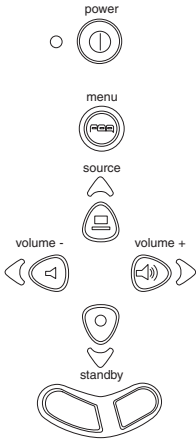
當您有一個以上的視訊來源（電腦和放映機）連接至投影機時，您可以按下按鍵面板上的來源按鈕，或是按遙控器上的電腦或放映機按鈕，來切換所需的視訊來源。

待機

當您按下待機按鈕時，顯示和音訊會關閉，然後空白的畫面會持續約 15 分鐘。您可以變更投影機待機模式的時間；詳細資訊，請參閱第1-19頁的「待機時間」乙節內容。

- 如果您在此 15 分鐘內再按一次待機按鈕，則投影機會立即回到運作的模式。
- 如果您在 15 分鐘之後才再按下待機按鈕，則須等候約 60 秒鐘燈泡才會亮起。
- 如果您不再按一下待機按鈕，則投影燈泡在 15 分鐘後會關閉。

音量（僅限按鍵面板）



若要增加音量，請按下加大音量 (volume +) 按鈕。若要調低音量，請按下降低音量 (volume -) 按鈕。

系統會針對各連接的裝置各別儲存音量調整的結果。

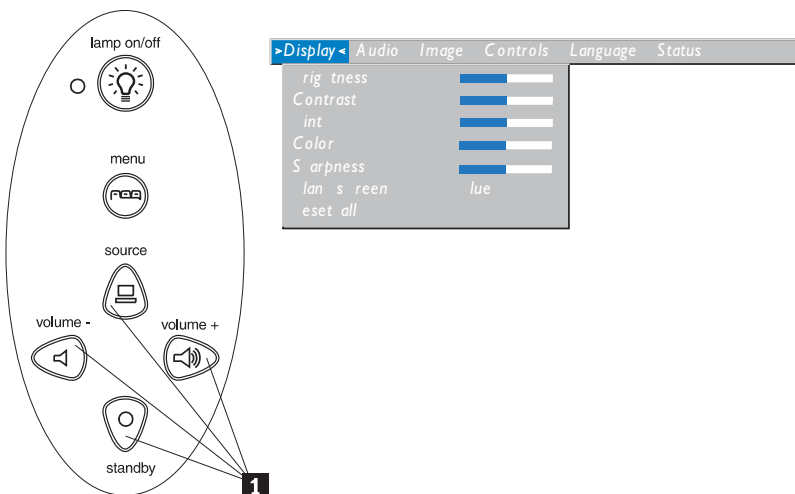
使用螢幕功能表

本投影機提供了六個下拉功能表供您使用，您可以使用這些功能表來進行影像調整和變更各類設定的工作。而大多數這些調整功能並無法直接在按鍵面板上進行。

註：某些功能表項目只有在特定的情況下才能使用。這表示這些功能表項目不適用於您目前所使用的設定（例如，視訊規格 (video standards) 即不適用於以電腦作為視訊來源的情況），或是此一功能項目必須等到您啟動或選取另一個功能項目時才能使用（例如，「手動追蹤」只有在關閉「自動影像調」功能之後才能使用）。

若要開啓螢幕功能表，請按下按鍵面板或遙控器上的「功能表」按鈕。此時，會將按鍵面板上的音量、來源和待機等按鈕變成功能表上的導覽按鈕 **1**（請參閱下列圖例）。按一下這些按鈕即可以上、下、左、右地移動螢幕上的游標，也可以使用遙控器上的碟形滑鼠來控制螢幕上的游標。若要選擇功能表，則將游標移至左側或

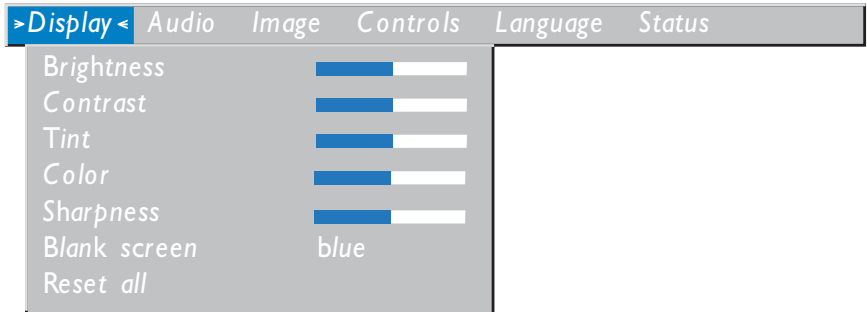
右側即可反白選取您所要使用的功能表。此時，會顯示下拉功能表。



若要變更功能表設定，使用按鍵面板上的來源（向上）和待機（向下）導覽按鈕，或是搖控器上的碟形滑鼠上下移動游標至您所要變更的項目（所選取的項目會以反白的方式顯示），然後再使用 **volume-**（向左）及 **volume +**（向右）的導覽按鈕來變更各項設定值。對某些子功能表項目而言，例如，亮度功能表中包含有滑塊，您可以使用滑塊來增加或減少其設定值；另外有一些功能表，例如待機功能表，則提供了選項清單，可供您上下捲動選取所要設定的單一項目。當您關閉功能表時，您也同時將所做的變更予以儲存。若要存取其它的功能表，使用向上和向下的導覽按鈕或是碟形滑鼠回到目前功能表的頂部，然後使用向左或向右的導覽按鈕移至其它的功能表。

顯示功能表

您可以使用下列設定來調整顯示的效果。



亮度

調整亮度會變更影像的強度。

- 按下向左導覽按鈕會加深影像。
- 按下向右導覽按鈕會淡化影像。

對比

對比是用來控制圖片明暗部份之間的差異程度。調整對比會變更影像黑點與白點的數量比例。

- 按下向左導覽按鈕會減少對比。
- 按下向右導覽按鈕會增加對比，會令深色的部份更深，而淺色的部份更淡。

色相

色相是用來調整投射影像的紅-綠平衡度。變更色相的設定值不會影響 PAL 或 SECAM 等視訊來源的品質。

- 按下向左導覽按鈕會增影像的綠色色度。
- 按下向右導覽按鈕會增加影像的紅色色度。

色彩

調整色彩的彩色值會將視訊影像由黑白轉變為完全色度的影像。

- 按下向左導覽按鈕會減少影像的色彩飽和度。
- 按下向左導覽按鈕會增加影像的色彩飽和度。

鮮明度

此一設定值是用來調整視訊影像的鮮明度。

- 按下向左導覽按鈕會減少影像的鮮明度。

- 按下向左導覽按鈕會增加影像的鮮明度。

空白螢幕

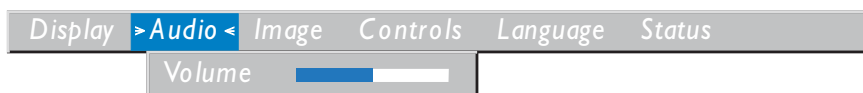
此**空白螢幕**的設定會決定投影機在待機模式或是沒有作用來源時所顯示的背景顏色。使用向左或向右導覽按鈕，選擇由藍至黑之間的顏色。

重設全部

使用向左或向右的導覽按鈕以便將各功能表中的所有項目（除了語言、視訊標準、後方投影及待機時間等項目）重設為其原始的設定值。

音訊功能表

您可以使用下列的設定來調整音訊。



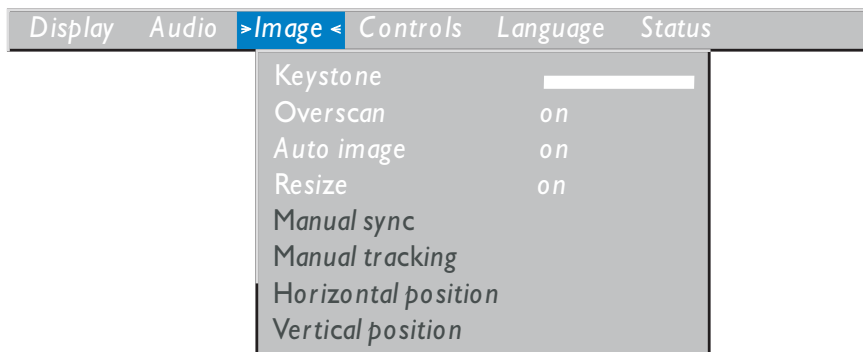
音量

註：使用功能表來變更音量，和使用按鍵面板來變更音量的結果是一樣的。

- 按下向左導覽按鈕會降低音量。
- 按下向右導覽按鈕會增加音量。

不同的來源的音量設定值可以個別儲存。

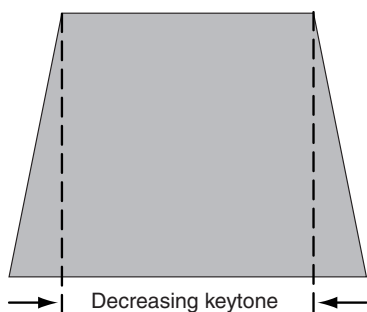
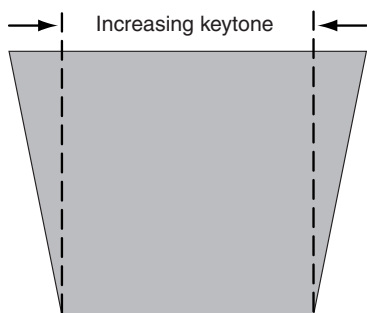
影像功能表： 下列設定可調整影像。



Keystone

使用這個選項來維持影像在投射角度改變後的方正度。若要調整 keystone，請反白選取 **Keystone**，然後按一下向右導覽按鈕。此一選項僅適用於來源為電腦，且解

析度為 XGA 1024 x 768 的情況。



Overscan

使用這個選項以裁合影像的所有外緣，移除影像外緣在投射時出現的雜訊。此一選項僅適用於來源為放映機的情況。

註：有些螢幕保護裝置會造成「自動調整影像」的功能。如果您遇到這個問題，請將螢幕保護裝置設定為關閉，然後將自動調整影像的功能關閉後重新開啓。

自動調整影像

投影機會自動調整視訊的磁軌、訊號的同步化和大多數電腦的水平及垂直的位置（自動調整大小的功能不適用於放映機來源）。如果您要以手動的方式調整這些功能，必須先關閉「自動調整影像」的功能，方法是：反白選取「影像」功能表中的**自動調整影像**，然後再按一下向左或向右導覽按鈕，並指定其值為 **off**。

調整大小

此一選項在視訊來源為電腦或放映機時會有些許差異。當視訊來源為電腦時，**調整大小**選項會自動調整大小的設定值。這個選項只影響不使用原始解析度的電腦影像。當**調整大小**選項開啓時，投影機會使影像達到最符合電腦螢幕的大小。如果您將**調整大小**的功能關閉（在「影像」功能表中反白這個選項，然後用向左或向右導

覽按鈕選取 **off**)，則影像有可能會被裁掉或是變得太小。對於來源為放映機的情況而言，您可用**調整大小**選項，而且有四種選項可供選擇。預設值為**標準 (Standard)**選項，該設定將影像從原有的大小調整為標準 4 x 3 比例的螢幕大小。**寬屏幕 (Widescreen Letterbox)** 選項會保留原有電影屏幕 16 x 9 比例的大小，但是影像會以 4 x 3 的空間設置，所以在其上下方會出現兩塊黑色的區域。**加強型寬屏幕 (Enhanced Widescreen)** 保留了原有電影影像的比例大小，同時也可以用來顯示寬屏幕電視的顯示內容。此一選項會產生比**寬屏幕 (Widescreen Letterbox)** 選項更佳的效果。**原始 (Native)** 選項會變更**標準 (Standard)** 設定的尺寸以符合 **加強型寬屏幕 (Enhanced Widescreen)** 設定的高度。

手動同步化

在與大多數電腦一起運作時，本投影機會自動同步化調整。但如果您覺得投射的影像看起來有些模糊或有條紋的現象，請試著將**自動調整影像**的功能關閉，然後再重新啟動此功能。如果影像的品質仍有問題，則請改以手動方式調整訊號同步化：

1. 關閉**自動影像調整**。
2. 反白選取**手動同步化 (Manual sync)**，然後重複按向左或向右導覽按鈕，直到影像清晰且沒有條紋為止。

手動調整磁軌

本投影機會自動調整磁軌以符合電腦的視訊訊號。但是，如果影像出現等距的空格、模糊、垂線，或甚至有投射影像太寬或太窄的情形，請先試著將**自動影像調整 (Auto Image)** 功能關閉後再開啓。如果影像的品質仍有問題，則請改以手動方式調整磁軌：

註：手動同步化 (Manual sync)、手動調整磁軌 (Manual tracking)、水平位置 (Horizontal position) 以及垂直位置 (Vertical position) 等選項只適用於訊號來源為電腦的情況。當您的視訊來源為放映機時，投影機會自動設定為這些選項。

1. 關閉**自動影像調整**。
2. 反白選取**手動調整磁軌 (Manual trackig)**，然後重複按向左或向右導覽按鈕，直到影像清晰且沒有垂線為止。

水平位置

請遵循下列步驟手動調整影像的水平位置：

1. 關閉**自動影像調整**。
2. 反白選取**水平位置 (Horizontal position)**，然後按向左或向右導覽按鈕，將影像向左或向右移動。

垂直位置

請遵循下列步驟手動調整影像的垂直位置：

1. 關閉自動影像調整。
2. 反白選取**垂直位置 (Vertical position)**，然後按向左或向右導覽按鈕，將影像向左或向右移動。

影像位置調整後的設定值，會在您關閉投影機時自動儲存起來。

控制功能表

您可以使用下列設定來調整各個控制項。

Display	Audio	Image	>Controls<	Language	Status	
Video standard						
Standby time						1 minute
Rear projection						off
Default source						computer
Auto source select						off
Plug and Play						off
Display messages						on
Display startup screen						on

視訊標準 (Video standard)

當**視訊標準**設定為**自動 (Auto)**時，投影機會試著依照其所接收到的訊號自動選取視訊標準 (如，NTSC、NTSC 4.43、PAL、PAL-M、PAL-N、PAL-60 或是 SECAM)。(隨著您身處的區域不同，視訊標準選項的內容也會隨之不同)。由於 SECAM 視訊的輸入訊號與其它種類的視訊訊號十分類似，無法自動偵測而必須以手動方式予以設定。如果投影機無法正確偵測到所使用的視訊標準，則有可能會導致影像的色彩失真或是殘破的情形。如果發生這種情形，請使用向左或向右導覽按鈕，以手動方式循序選取適用的視訊標準。

註：如果您已明確知道圖形區域使用的是「視訊標準」(Video standard)，則最好是以手動方式進行選取。

待機時間

使用這個選項可以設定投影燈泡開啓的時間長度，和投影機在關機前進入待機模式時顯示空白螢幕的時間長度。使用向左或向右導覽按鈕，指定下列即定的數值：1、5、10、15 或 30 分鐘或是 1 或 2 小時。

後方投影 (Rear projection)

當您開啓**後方投影 (Rear Projection)**的功能時，投影機會將影像反轉後再投射至透明的顯示屏上。反白選取**後方投影 (Rear Projection)**選項，然後按一下向左或向右的導覽按鈕即可開啓或關閉此項功能。

預設來源 (Default source)

使用**預設來源 (Default source)** 選項指定下列所要使用的視訊來源：**電腦類比 (Computer analog)**、**電腦數位 (Computer digital)** 和**放映機 (Video)**。此選項會決定投影機在開機時先選用該類視訊的來源。反白選取**預設來源 (Default source)** 選項，然後按向左或向右的導覽按鈕即可指定預設的視訊來源。

自動選取視訊來源 (Auto source select)

使用這個選項設定 **開啓 (On)** 和 **關閉 (Off)** 自動選取視訊來源的功能。當您關閉此項功能時，投影機的預設值為您先前在**預設視訊來源 (Default source)** 所設定的值。若要使用其它的視訊來源，您必須以手動方式在按鍵面板上選取來源按鈕，或是在搖控器上使用電腦或放映機按鈕予以指定。當您開啓此項功能時，投影機會自動尋找使用中的視訊來源，並先查預設的視訊來源。反白選取**自動選取視訊來源 (Auto Source Select)** 選項，然後按一下向左或向右的導覽按鈕即可開啓或關閉此項功能。

隨插即用 (Plug and Play)

使用這個選項設定 **開啓 (On)** 和 **關閉 (Off)** 自動選取視訊來源的功能。當開啓此項功能時，大多數新型的電腦會辨識投影機，並自動設定相關的螢幕解析度及復新率。對一些較舊型的電腦而言，您必須**關閉 (Off)** **隨插即用 (Plug and Play)** 的設定，才能獲得正常的顯示。**隨插即用** 這項功能並不會影響放映機的影響。

如果投影機不斷地在電腦影像中出現「正在進行影像最佳化調整 (Perfecting the image)」的訊息，則您可能必須將**隨插即用**的功能關閉。

顯示訊息

使用這個選項設定 **開啓 (On)** 和 **關閉 (Off)** 自動選取視訊來源的功能。當您開啓此項功能時，「偵測不到訊號 (No signal detected)」或是「啓動待機 (Standby Active)」等訊息會顯示於畫面的右下角。請按向左或向右的導覽按鈕關閉此項功能，並取消狀態訊息的顯示。

顯示啓動畫面 (Display startup screen)

使用這個選項設定 **開啓 (On)** 和 **關閉 (Off)** 自動選取視訊來源的功能。當您開啓此項功能時，在投影機開機時會顯示啓動的畫面，直到偵測到視訊訊號才消失。啓動畫面中包含有關投影機支援服務的相關資訊。按一下向左或向右的導覽按鈕，以關閉此一功能，關閉後，螢幕就會顯示黑色或藍色的畫面而不會顯示啓動畫面。

語言功能表 (Language menu)

您可以使用下列設定來調整語言的設定值。

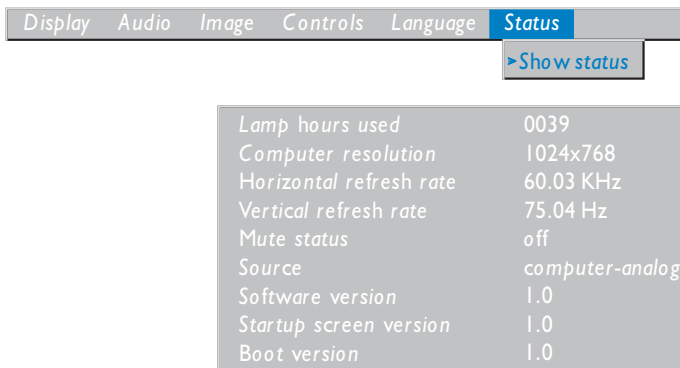


您可以將螢幕功能表設成以英文、法文、德文、西班牙文、中文或日文顯示。移動游標至您所要使用的語言，然後按一下向左或向右的按鈕。此時功能表會重新顯示。

狀態功能表 (Status menu)

這是一個唯讀性質的視窗，以提供資訊為主。

若要顯示狀態視窗，請按一下功能表中的**顯示狀態 (Show status)** 設定，然後按一下向左或向右的導覽按鈕。若要關閉此視窗，請按一下向左或向右的導覽按鈕。



投影指示燈的使用時數 (Lamp hours used)

此一選項會顯示投影燈泡截至目前為止的使用時數。計數器會從零開始，然後每使用一個小時就增加 1。當指示燈的亮度降至無法接受的程度時，請更換燈泡。詳細資訊，請參閱 第1-24頁的『更換投影燈泡』的內容。

電腦解析度 (Computer resolution)

此選項會顯示您電腦所使用的解析度設定值。若要變更此設定值，請至電腦的「控制台」資料夾中，在**顯示器**標籤中變更相關的設定值。詳細資訊，請參閱您的電腦文件。

水平復新率 (Horizontal refresh rate)

水平線顯示的時間週期。

垂直復新率 (Vertical refresh rate)

一個視訊框顯示的時間週期。

靜音狀態 (Mute status)

顯示您的音訊狀態是否為靜音的狀態。

視訊來源 (Source)

指出作用中的視訊來源：電腦類比 (Computer analog)、電腦數位 (Computer digital) 或是放映機 (Video)。

軟體版本 (Software version)

投影機的軟體版本。在您需要 IBM 的技援代表提供支援服務時，可能會用到此一資訊。

啓動畫面版本 (Startup screen version)

投影機的啓動畫面版本。在您需要 IBM 的技援代表提供支援服務時，可能會用到此一資訊。

開機版本 (Boot version)

投影機啓動的軟體版本。在您需要 IBM 的技援代表提供支援服務時，可能會用到此一資訊。

保養維護與疑難排解

本章節提供您一些保養和疑難排解的方法：

- 清理鏡頭
- 更換投影機燈泡
- 更換遙控器的電池
- 使用安全鎖的功能
- 投影機的疑難排解

清理鏡頭

清理鏡頭時，請遵循下列步驟：

1. 將不具研磨性的軟性清潔劑塗抹於鏡頭表面，再以軟質的乾布進行清理。
 - 避免使用過量的清潔劑。

- 如果使用具研磨性的清潔劑、溶劑或其它粗糙的化學物質，可能會因此刮傷鏡頭。
2. 使用乾淨的布，以圓形的方向輕拭鏡頭。
 3. 如果您不會立即使用投影機，則應將鏡頭蓋蓋上。



注意：

下列標籤表示該部份的機件或其附近有高溫的危險。



更換投影燈泡

警告：

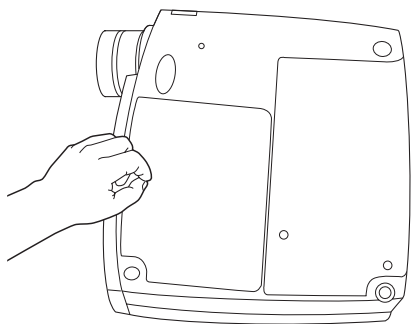
爲了要避免燒燙傷，至少應等候 30 分鐘，待投影機冷卻後才開啓燈泡模組的外蓋。投影機尚在運作的時候千萬不可以開啓燈泡模組。

位於狀態功能表中的燈泡使用時數計數器會記錄燈泡的使用時數。當燈泡使用時數達 1980 小時後，您開啓投影機電源時會暫時顯示「Change Lamp」（更換燈泡）的訊息。請在 20 小時之內更換投影燈泡。超過 2000 小時後，LED 會發出閃爍橙色光而且投影燈不會亮起。當此燈泡的亮度降低至無法接受的程度時，請更換燈泡。若需訂購新的燈泡，請洽詢各地的經銷商。請參閱附錄 A 來取得詳細資訊。

請遵循下列步驟更換投影燈泡：

1. 關閉投影機並拔掉電源線。
2. 等待 30 分鐘，讓投影機完全冷卻。
3. 將投影機反轉過來，置於表面柔軟的平面上，然後在燈泡模組的外蓋上插入平頭螺絲起子或其它扁平的物件。

4. 如所示，向上拉起投影燈模組外蓋並卸下。

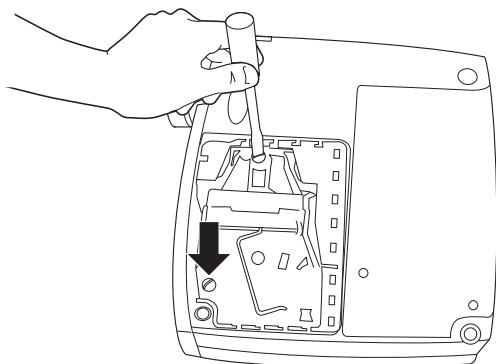


警告：

在移除燈泡模組的時候，請務必十分小心。在最壞的情況下，燈泡毀損時會產生細小的玻璃碎片。燈泡模組在設計上就是要容納這些碎片的，但在取出模組時仍應謹慎小心。

警告： 本產品所使用的投影燈泡為含有水銀的金屬電弧燈泡。請依照當地的法令及規定處理廢棄的燈泡。

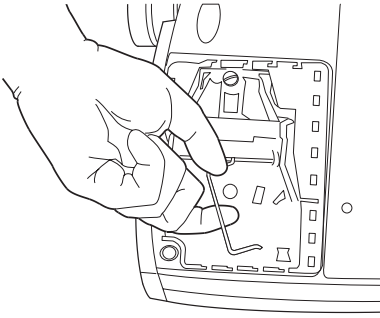
5. 鬆開模組外側的兩個螺絲。



警告：

當燈泡外蓋開啓或移除時，請勿操作投影機。這是因為氣流無法依正常狀況冷卻燈泡，有可能因而導致投影機發生過熱的現象。

6. 握住並拉起牽引卡栓，然後取出該模組。請依照各地的環保規定，妥善處理廢棄的燈泡。



警告：

請勿掉落燈泡模組或是以手去接觸燈泡的玻璃。破損的燈泡會有銳利的邊緣，容易造成傷害。

7. 裝上新的燈泡模組，應注意對齊接頭。
8. 將模組向內推入，直到燈泡進入投影機機殼的底部。
9. 上緊模組外側的兩個螺絲。
10. 裝回燈泡模組的外蓋；將燈泡模組外蓋後方的連結鉤插入投影機，然後將燈泡模組壓至適當的位置。如果燈泡模組的外蓋並未契合或是位置不正確，請將外門取出並重新安置燈泡模組。
11. 插入電源線，重新開啓投影機。
12. 若要在「狀態」視窗中重設投影燈泡使用時數的計數器，請按住 volume - 按鈕，然後按下功能表按鈕 (此時應保持按住 volume - 按鈕的狀態)，保持此二個按鈕按住 5 秒鐘。然後，按下功能時長按鈕並確認「狀態」視窗中的計數器是否已經歸零。

更換搖控器中的電池

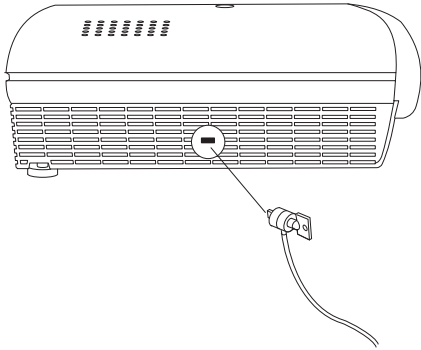
搖控器電池的使用壽命端視您使用搖控器的時間長短而定。電池電力不足的現象有搖控器的反應不靈敏，或是有效距離變短的現象。

請遵循下列步驟更換電池：

1. 在手中將搖控器翻至背面。
2. 滑下電池的蓋板至搖控器的底部。
3. 取出舊的電池，並依各地的環保規定妥善處理廢棄的電池。
4. 回裝兩顆新的 AAA 鹼性電池。回裝電池時，請注意電池的方向是否正確。
5. 再將電池的蓋板滑回原來的位置。

使用安全鎖

投影機有一安全的接頭，可以和電腦的鎖定系統同時使用。如需訂購資訊，請至 <http://www.compu-lock.com> 查詢網站的內容。有關如何使用安全鎖固定投影機的方法，請參閱隨附於安裝鎖內的相關說明。



疑難排解

問題： 沒有顯示任何畫面。

- 請確定電源線已插妥，且電源插座可以正常使用。同時也應確定電源線是否已連接至投影機上。
- 如果您是將投影機的電源線插至多孔延長線，請確定多孔延長線的開關已經開啓。
- 確定是否已將投影機鏡頭前方的鏡頭蓋取下。
- 確定投影燈泡是否已開啓。
- 請確定投影機燈泡是否穩固地插入於燈泡模組內。相關資訊，請參閱 第1-24頁的『更換投影燈泡』乙節內容。
- 請確定所有的接線不可以有曲折的現象。

問題： 無法投射出色彩或文字。

- 您可能必須調整亮度，直到可以看見文字爲止。相關資訊，請參閱第 1-15 頁的「亮度」乙節內容。

問題： 螢幕解析度不正確。

- 確定電腦視訊配接卡解析度設定未大於 1280 x 1024。

問題： 顯示屏上的影像不居中。

- 調整或移動投影機以重新定位影像。
- 使用軟體重新定位影像的位置。請參閱於第 1-18 頁的「水平位置」和「垂直位置」等節內容。
- 請確定投影機必須與顯示屏成 90 度的配置。

問題： 只顯示了啓動畫面。

- 請確定接線是否正確連接。
- 請確定輸入來源是否已適當地連接。相關資訊，請參閱 第1-12頁的『來源（僅適用於按鍵面板）或電腦和視訊（僅適用於搖控器）』乙節內容。
- 關閉所有的設備，再重新以正確的順序開啓各項設備。有關設備開啓的正確順序，請參閱您電腦的相關文件。
- 確定筆記型電腦的外接視訊連接埠已經打開。詳細資訊，請參閱附錄 B 中有關「啓動攜帶型和筆記型電腦的外接式顯示連接埠」乙節內容。
- 請確定您電腦的視訊介面卡已正確安裝，並已正確配置。
- 請確定您的電腦使用的是相容的視訊介面卡。投影機與 CGA、EGA 或 SXGA 等視訊介面卡並不相容。

如果您使用的是 Windows 98：

1. 在桌面上，連按兩下**我的電腦**，再連按兩下**控制台和顯示器**。
2. 按一下**設定值**標籤。
3. 確定桌面區域設定未大於 1280 x 1024。

問題：影像太寬或太窄。

- 調整縮放設定值或改變投影機的位置。
- 如果視訊配接卡的解析度大於 1280 x 1024，請重新調整解析度。

問題：影像的焦距不對。

- 轉動投影讀寫頭對焦。
- 請確定投影的顯示屏到投影機至少必須有 5 英呎 (1.5 公尺) 的距離。
- 請檢查投影機的鏡頭是否需要清潔。

問題：影像和功能表的方向左右顛倒。

- 有可能是開啓了後方投影的功能。請在「控制」功能表中關閉「後方投影」的功能。此舉應可立即解決這個問題。請參閱第1-19 頁的「後方投影」乙節內容。

問題：投影機出現垂直線條、邊緣有外擴的陰影或是斑點。

- 請調整亮度的設定。相關資訊，請參閱第1-15 頁的「亮度」乙節內容。
- 請檢查投影機的鏡頭是否需要清潔。

問題：沒有聲音。

- 調整音量。
- 確認音訊輸入的接線是否正確無誤。
- 調整音訊來源。

問題：影像有雜訊或是出現斑紋。

請依序嘗試下列步驟：

1. 取消電腦的螢幕保護裝置。
2. 關閉**自動影像調整**的功能，然後重新開啓此項功能。請參閱第 1-17 頁的「自動調整影像」乙節內容。
3. 關閉**自動影像調整**的功能，然後以手動方式調整同步化和磁軌的設定值以獲得最佳的結果。請參閱第 1-18 頁的「手動調整同步化 (Manual sync)」和「手動調整磁軌 (Manual tracking)」等節內容。
 - 有可能是問題出在您電腦的視訊配接卡。若有可能，請將投影機連接至另一部電腦試試看。

問題： 投射影像的顏色與電腦或放映機的色彩不同。

- 如同顯示器會顯示不同的色彩一般，電腦影像與投射影像的色彩不同是常見的問題。請試著調整「顯示」功能表中亮度、色相或對比的設定值。請參閱第 1-15 頁的「亮度」、「色相」及「對比」等節內容。

問題： 燈泡的亮度似乎愈來愈昏暗。

- 長時間使用燈泡後，燈泡會逐漸失去亮度。請依照 第1-24頁的『更換投影燈泡』乙節中的說明更換燈泡。

問題： 燈泡突然熄滅。

- 有可能是電源突波導致燈泡突然熄滅。拔掉投影機的電源，稍候一分鐘，然後再將電源線插回。
- 請確定散熱通風口未被雜物遮住。
- 確定投影燈使用時數未超過 2000 小時。使用時數著達 2000 小時，投影燈會自動關閉。請參閱第 27 頁「更換投影燈」。

附錄A. Product specifications and accessories

This section contains information on the product specifications and information for ordering accessories.

Specifications

The projector must be operated and stored within the temperature and humidity ranges specified.

Temperature

Operating	10 to 40° C (50 to 104° F)
Non-operating	-20 to 70° C- (-4 to 158°F)

Humidity

Operating and non-operating.	10% to 95% relative humidity, non-condensing
------------------------------	--

Dimensions

26 x 8.5 x 28 cm (10.25 x 3.34 x 11 in.)

Weight

2.6 kg (5.7 lbs.) unpacked

Altitude

Operating	0 to 3048 meters (10000 feet)
Non-operating	0 to 6090 meters (20,000 feet)

Optics

Focus range	1.5 to 5 m (4.9 to16 feet)
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Lamp

Type	270-watt VHP lamp
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Input power requirements

100-120 V ac, 5A; 50/60Hz
200-240 V ac 3A; 50Hz

Accessories

There are many accessories available for your new projector and new ones being added frequently. Please refer to <http://www.infocus.com/> and select from the many accessories listed there for purchase.

附錄B. Portable and mobile computer activation

Many mobile computers do not automatically turn on their external video port when a projector is connected. Activation commands for some mobile computers are listed in the following table. (If your computer is not listed or the given command does not work, refer to the computer documentation for the appropriate command.) On many mobile computers, the activation function key is labeled with an icon such as that in the following illustration.



註: Visit <http://www.infocus.com/> for the most current activation chart. It is located in the Service and Support link.

註: Usually, pressing the key commands once activates the external video port, pressing it again activates both external and internal ports, and pressing it a third time activates the internal port. Refer to your computer's documentation for details on your specific model.

Computer	Key command to activate port	Key command to deactivate port
Acer	Ctrl+Alt+Esc (for setup)	Ctrl+Alt+Esc (for setup)
AST* **	FN+D or Ctrl+D Ctrl+FN+D FN+F5 type from A:\VGA\CRT FN+F12	FN+D or Ctrl+D Ctrl+FN+D FN+F5 type from A:\VGA\CRT FN+F12
AMS	FN+F2	FN+F2
AMT	setup screen	setup screen
AT&T	FN+F3 FN+F6	FN+F3 F+F6
Advanced Logic Research	Ctrl+Alt+V	Ctrl+Alt+V
Altima	Shift-Ctrl-Alt-C setup VGA/Conf.Simulscan	Shift-Ctrl-Alt-L setup VGA/Conf.Simulscan
Ambra**	FN-F12 FN-F5 F2/Choose Option/F5	FN-F12 FN-F5 F2/Choose Option/F5
Amrel* **	setup menu Shift-Ctrl-D	setup menu Shift-Ctrl-D

Computer	Key command to activate port	Key command to deactivate port
Apple	see Mac Portable and Mac PowerBook	
Aspen	automatic	automatic
Award	FN-F6	FN-F6
BCC*	automatic	reboot computer
Bondwell	LCD or CRT options after bootup	reboot for LCD or CRT options to appear
Chaplet**	setup screen FN-F6 FN-F4	setup screen FN-F6 FN-F4
Chembook	FN-F6	FN-F6
Commax	Ctrl-Alt-#6	Ctrl-Alt-#5
Compaq* **	Ctrl-Alt-< FN-F4 automatic mode/? (for setup option)	Ctrl-Alt-> FN-F4 automatic mode/? (for setup option)
Compuadd* **	automatic Alt-F for screen setup option	automatic Alt-F for screen setup option
Data General	Ctrl-Alt-Command	Ctrl-Alt-Command
Data General Walkabout	2 CRT/X at DOS prompt	restart
Datavue	Ctrl-Shift-M	Ctrl-Shift-M
DEC**	FN-F5 FN-F4	FN-F5 FN-F4
Dell**	Ctrl-Alt-< Ctrl-Alt-F10 FN-F8 (CRT/LCD) FN-D FN-F12	Ctrl-Alt-> Ctrl-Alt-F10 FN-F8 FN-D FN-F12
Digital*	automatic FN-F2	reboot FN-F2
Dolch	dip switch to CRT	dip switch to LCD
Epson	dip switch to CRT	dip switch to LCD
Everex*	setup screen option	setup screen option
For-A	Ctrl-Alt-Shift-C	Ctrl-Shift-Alt-L

Computer	Key command to activate port	Key command to deactivate port
Fujitsu	FN-F10	
Gateway	FN-F3 FN-F1/FN-F1 again simultaneous	FN-F3 FN-F1
Grid* **	FN-F2, select auto or simultaneous Ctrl-Alt-Tab	FN-F2 Ctrl-Alt-Tab
Hitachi	FN-F7	FN-F7
Honeywell	FN-F10	FN-F10
Hyundai	setup screen option	setup screen option
IBM 970*	automatic	warm restart
IBM ThinkPad**	reboot, enter setup menu FN-F7, select choice from setup menu FN-F1, select choice FN-F5, select choice PS/2 SC select choice (such as CRT, LCD)	FN-F2
Infotel	FN-F12	FN-F12
Kaypro	start up, monitor plugged in	unplug monitor
Kris Tech	FN-F8	FN-F8
Leading Edge	FN-T	FN-T
Mac Portable 100	no video port; not compatible	
Mac PowerBook 140, 145, 150, 170 160, 165, 180, 520, 540, 5300 210, 230, 250, 270, 280, 2300	no video port; requires a third-party interface Control Panel folder, warm restart PowerBook Display folder; Activate Video Mirroring requires Apple Docking Station or Mini Dock	
Magitronic	FN-F4	FN-F4
Mastersport	FN-F2	FN-F1
Micro Express*	automatic	warm restart
Micron	FN-F2	FN-F2

Computer	Key command to activate port	Key command to deactivate port
Microslate*	automatic	warm restart
Mitsubishi	SW2 On-Off-Off-Off	SW2 Off-On-On-On
NCR	setup screen option	setup screen option
NEC* **	setup screen option CRT at the DOS prompt FN-F3	setup screen option LCD at the DOS prompt FN-F3
Olivetti*	automatic	automatic
	FN-O/*	FN-O/*
Packard Bell* **	FN-F0	FN-F0
	Ctrl-Alt-<	Ctrl-Alt->
Panasonic	FN-F2	FN-F2
Prostar	Ctrl-Alt-S at startup	Ctrl-Alt-S at startup
Samsung*	setup screen option	setup screen option
Sanyo	setup screen option	setup screen option
Sharp	dip switch to CRT	dip switch to LCD
Sun SPARC-Dataview	Ctrl-Shift-M	Ctrl-Shift-M
Tandy**	Ctrl-Alt-Insert setup screen option	Ctrl-Alt-Insert setup screen option
Tangent	FN-F5	FN-F5
Texas Instruments*	setup screen option	setup screen option
Top-Link* **	setup screen option FN-F6	setup screen option FN-F6
Toshiba* **	Ctrl-Alt-End FN-End FN-F5 setup screen option	Ctrl-Alt-Home FN-Home FN-F5 setup screen option
Twinhead*	FN-F7 FN-F5 automatic	FN-F7 FN-F5 automatic
WinBook	Ctrl-Alt-F10	Ctrl-Alt-F10
Wyse	software driven	software driven

Computer	Key command to activate port	Key command to deactivate port
Zenith**	FN-F10 FN-F2 FN-F1	FN-F10 FN-F2 FN-F1
Zeos **	Ctrl-Shift-D FN-F1	Ctrl-Shift-D FN-F1

* These manufacturers have models that automatically send video to the external video port when some type of display device is attached.

** These manufacturers offer more than one key command depending on the computer model.

附錄C. Using video mirroring

This section contains information on video mirroring.

Using video mirroring with a PowerBook computer

When you turn on video mirroring (called SimulScan in newer PowerBook computers), the projector displays the same information that appears on a PowerBook built-in screen. When video mirroring is off, the projector operates like a separate display.

To turn on video mirroring for the first time:

1. Open the Monitors control panel; click **Monitor 2**.
2. Set the number of colors that you want.
3. Open the Control Strip, and then click the monitor icon.
4. Select **Turn Video Mirroring On**.

Now you can turn video mirroring on and off from the Control Strip without having to open the monitor control panel again. When using video mirroring and high-color graphics such as slide shows, the projected image occasionally might turn black and white. If this happens, perform the following steps:

1. Turn off video mirroring.
2. Open the monitor control panel.
3. Move the white menu bar to **Monitor 2** to set the projector as the primary monitor.
4. Restart the PowerBook computer.

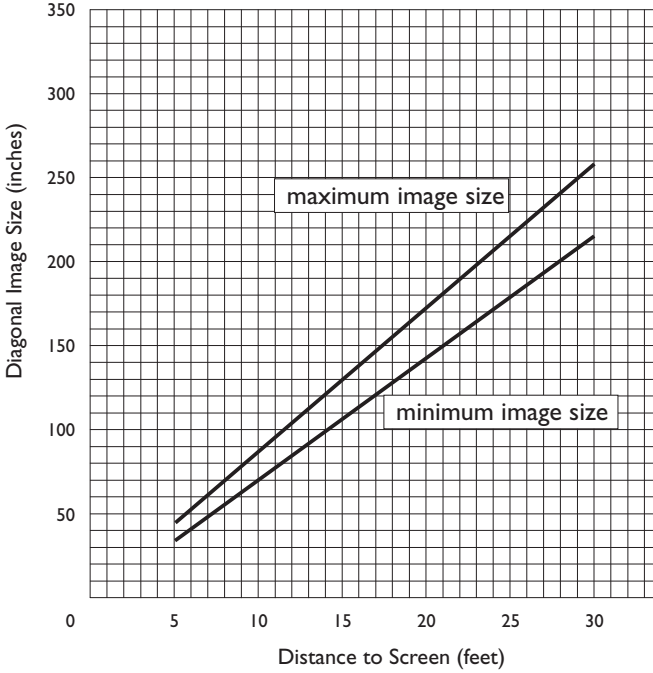
Using Simulscan

Some newer PowerBook computers display images on an external monitor or projector differently than previous ones. When using SimulScan, the projector displays the same information that appears on your PowerBook computer. To select SimulScan:

1. Open the Control Panel, and then double-click **Monitors** and **Sound**.
2. In the Resolution list, select the SimulScan mode, and then click **OK**.
3. If this changes your display settings, a window opens. Click **OK** to confirm the change.

附錄D. Projected image size

Use the following graph and tables to help you determine projected image sizes.



Distance to Screen (feet)	Diagonal (feet)	Width (feet)	Height (feet)
4.9	3.0	2.4	1.8
8	5.0	4.0	3.0
12	7.4	6.0	4.5
16	9.9	7.9	6.0
20	12.4	9.9	7.4
30	18.6	14.9	11.2

Distance to Screen (feet)	Diagonal (feet)	Width (feet)	Height (feet)
4.9	2.5	2.0	1.5
8	4.0	3.2	2.4

Distance to Screen (feet)	Diagonal (feet)	Width (feet)	Height (feet)
12	6.0	4.8	3.6
16	8.0	6.4	4.8
20	10.0	8.0	6.0
30	15.0	12.0	9.0

附錄E. Product Warranty

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

Warranty Period

Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country or region where service is performed.

Machine - iLV200/iLC200 IBM Data/Video Projector

Warranty period - One year

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.

Service and support

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

Warranty information on the World Wide Web

The IBM Machine Warranties Web site at http://www.ibm.com/servers/support/machine_warranties/ contains a worldwide overview of the IBM Limited Warranty for IBM Machines, a glossary of terms used in the Statement of Limited Warranty, Frequently Asked Questions (FAQ), and links to Product Support Web pages. The IBM Statement of Limited Warranty is available from this Web site in 29 languages in Portable Document Format (PDF).

Online technical support

Online technical support is available during the life of your product. Online assistance can be obtained through the Personal Computing Support Web site and the IBM Automated Fax System.

Online technical support

IBM Personal Computing Support Web site	http://www.ibm.com/pc/support/
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IBM Automated Fax System	1-800-426-3395 (U.S. and Canada)
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During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

Telephone technical support

Installation and configuration support through the IBM HelpCenter® will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

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

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

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

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

Support 24 hours a day, 7 days a week	
Canada (Toronto only)	416-383-3344
Canada (all other)	1-800-565-3344
U.S.A. and Puerto Rico	1-800-772-2227
All other countries and regions	Go to http://www.ibm.com/pc/support/ , and click Support Phone List .

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his warranty statement consists of two parts: Part 1 and Part 2. Be sure to read Part 1 and the country-unique terms in Part 2 that apply to your country or region.

Warranty information

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

Warranty period

Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country or region where service is performed.

Machine - iLV200/iLC200 IBM Data/Video Projector

Warranty period - One year

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.

Service and support

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

Warranty information on the World Wide Web

The IBM Machine Warranties Web site at http://www.ibm.com/servers/support/machine_warranties/ contains a worldwide overview of the IBM Limited Warranty for IBM Machines, a glossary of terms used in the Statement of Limited Warranty, Frequently Asked Questions (FAQ), and links to Product Support Web pages. The IBM Statement of Limited Warranty is available from this Web site in 29 languages in Portable Document Format (PDF).

Online technical support

Online technical support is available during the life of your product. Online assistance can be obtained through the Personal Computing Support Web site and the IBM Automated Fax System.

Online technical support

IBM Personal Computing Support Web site	http://www.ibm.com/pc/support/
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IBM Automated Fax System	1-800-426-3395 (U.S. and Canada)
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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

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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.

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

This warranty statement consists of two parts: Part 1 and Part 2. Be sure to read Part 1 and the country-unique terms in Part 2 that apply to your country or region.

Part 1 - General Terms

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

The IBM Warranty for Machines

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

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

Extent of Warranty

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

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

Items Not Covered by Warranty

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

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

Warranty Service

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

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

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

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

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

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and

3. where applicable, before service is provided:
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides;
 - b. secure all programs, data, and funds contained in a Machine;
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations; and
 - d. inform IBM or your reseller of changes in a Machine's location.

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

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

Limitation of Liability

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

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

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

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

Governing Law

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

Part 2 - Country-unique Terms

AMERICAS

BRAZIL

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

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

NORTH AMERICA

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

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

CANADA

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

UNITED STATES

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

ASIA PACIFIC

AUSTRALIA

The IBM Warranty for Machines:*The following paragraph is added to this Section:*
The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other similar legislation and are only limited to the extent permitted by the applicable legislation.

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

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974 or other similar legislation, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are

of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

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

CAMBODIA, LAOS, AND VIETNAM

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

The following is added to this Section:

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

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

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

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

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

HONG KONG AND MACAU

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

INDIA

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

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

JAPAN

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

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

NEW ZEALAND

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

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

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

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

PEOPLE'S REPUBLIC OF CHINA (PRC)

Governing Law:*The following replaces this Section:*

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

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

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

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

EUROPE, MIDDLE EAST, AFRICA (EMEA)

THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:

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

Warranty Service:

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

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

Governing Law:

The applicable laws that govern, interpret and enforce rights, duties, and obligations of each of us arising from, or relating in any manner to, the subject matter of this Statement, without regard to conflict of laws principles, as well as Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided, except that in 1) Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Hungary, Former Yugoslav Republic of Macedonia, Romania, Slovakia, Slovenia, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan, the laws of Austria apply; 2) Estonia, Latvia, and Lithuania, the laws of Finland apply; 3) Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Djibouti,

Democratic Republic of Congo, Equatorial Guinea, France, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Mali, Mauritania, Morocco, Niger, Senegal, Togo, and Tunisia, this Agreement will be construed and the legal relations between the parties will be determined in accordance with the French laws and all disputes arising out of this Agreement or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 4) Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe, this Agreement will be governed by English Law and disputes relating to it will be submitted to the exclusive jurisdiction of the English courts; and 5) in Greece, Israel, Italy, Portugal, and Spain any legal claim arising out of this Statement will be brought before, and finally settled by, the competent court of Athens, Tel Aviv, Milan, Lisbon, and Madrid, respectively.

THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:

AUSTRIA AND GERMANY

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

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

The following paragraphs are added to this Section:

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

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

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

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

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

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

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

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

EGYPT

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

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

Applicability of suppliers and resellers (unchanged).

FRANCE

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

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

IRELAND

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

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

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

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

Applicability of suppliers and resellers (unchanged).

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

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

ITALY

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

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

1. *(unchanged)*
2. as to any other actual damage arising in all situations involving nonperformance

by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

The following replaces the third paragraph of this Section:

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

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

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

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

UNITED KINGDOM

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

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

The following item is added to this paragraph:

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

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:

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

附錄F. Notices

This section contains information on the notices.

Federal Communications Commission (FCC) statement

iLV200/iLC200 Data/Video Projector

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 conformite a la reglementation d'Industrie Canada

Cet appareil numérique de la classe A est conform 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.

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 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 A de conformidad con el Estándar CISPR22 y el Estándar Europeo EN 55022. Los límites para los equipos de Clase A se han establecido para entornos comerciales e industriales a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

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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