



IBM E400 PROJECTOR

User's Guide



IBM E400 PROJECTOR

User's Guide

注: Before using this information and the product it supports, read the information in D-1 ページの『付録 D. Service and Support』 and E-1 ページの『付録 E. IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002』

本マニュアルに関するご意見やご感想は、次の URL からお送りください。今後の参考にさせていただきます。

<http://www.ibm.com/jp/manuals/main/mail.html>

なお、日本 IBM 発行のマニュアルはインターネット経由でもご購入いただけます。詳しくは

<http://www.ibm.com/jp/manuals/> の「ご注文について」をご覧ください。

(URL は、変更になる場合があります)

お客様の環境によっては、資料中の円記号がバックスラッシュと表示されたり、バックスラッシュが円記号と表示されたりする場合があります。

原 典： IBM E400 PROJECTOR
User's Guide

発 行： 日本アイ・ピー・エム株式会社

担 当： ナショナル・ランゲージ・サポート

第1刷 2004.4

この文書では、平成明朝体™W3、平成明朝体™W9、平成角ゴシック体™W3、平成角ゴシック体™W5、および平成角ゴシック体™W7を使用しています。この(書体*)は、(財)日本規格協会と使用契約を締結し使用しているものです。フォントとして無断複製することは禁止されています。

注* 平成明朝体™W3、平成明朝体™W9、平成角ゴシック体™W3、
平成角ゴシック体™W5、平成角ゴシック体™W7

© Copyright International Business Machines Corporation 2004. All rights reserved.

© Copyright IBM Japan 2004

目次

| | |
|---|-------------|
| Safety information | v |
| General safety information | 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 |
| まえがき | xiii |
| 第 1 章 概要 | 1-1 |
| 第 2 章 プロジェクターのセットアップ | 2-1 |
| プロジェクターの始動およびシャットダウン | 2-1 |
| プロジェクターの高さ調整 | 2-2 |
| プロジェクターの位置調整 | 2-3 |
| ズーム、フォーカスおよびキーストーンの調整 | 2-4 |
| 音量の調整 | 2-5 |
| 第 3 章 装置とプロジェクターの接続 | 3-1 |
| 装置の接続 | 3-1 |
| 第 4 章 プロジェクター機能の使用 | 4-1 |
| リモコンの使用 | 4-1 |
| リモコンの電池の入れ方 | 4-2 |
| 作動範囲 | 4-3 |
| プロジェクターおよびリモコンのボタン | 4-4 |
| 第 5 章 オン・スクリーン・ディスプレイ・メニューでの調整 | 5-1 |

| | |
|----------------------------|-----|
| OSD のナビゲート | 5-1 |
| OSD 言語の設定 | 5-1 |
| Quality メニュー | 5-1 |
| Properties メニュー | 5-4 |
| Options メニュー | 5-5 |
| Setup メニュー | 5-6 |
| Information メニュー | 5-8 |

| | |
|---------------------------|------------|
| 付録 A. 保守 | A-1 |
| レンズのクリーニング | A-1 |
| 投影ランプの交換 | A-1 |
| ランプ・タイマーのリセット | A-3 |
| セキュリティ・ロックの使用 | A-3 |

| | |
|------------------------------------|------------|
| 付録 B. トラブルシューティング | B-1 |
| プロジェクターの LED | B-3 |

| | |
|---------------------------|------------|
| 付録 C. 仕様 | C-1 |
|---------------------------|------------|

| | |
|--|------------|
| 付録 D. Service and Support | D-1 |
| Online technical support | D-1 |
| Telephone technical support | D-1 |

| | |
|---|------------|
| 付録 E. IBM Statement of Limited Warranty - Z125-4753-07 - 11/2002 | E-1 |
| Part 2 - Country-unique Terms | E-5 |
| Part 3 - Warranty Information | E-17 |

| | |
|---|------------|
| 付録 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 produktu si prečítajte bezpečnostné informácie.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

General safety information

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

Service

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

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

Power cords and power adapters

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

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

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

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

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

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

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

Extension cords and related devices

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

Plugs and outlets

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

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

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

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

Connect and disconnect the equipment from the electrical outlet carefully

Batteries

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

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

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

Batteries can degrade when they are left unused for long periods of time. For some rechargeable batteries (particularly Lithium Ion batteries), leaving a battery unused in a discharged state could increase the risk of a battery short circuit, which could shorten the life of the battery and can also pose a safety hazard. Do not let rechargeable Lithium-Ion batteries completely discharge or store these batteries in a discharged state.

Heat and product ventilation

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

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

CD and DVD drive safety

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

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

Registering your option

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

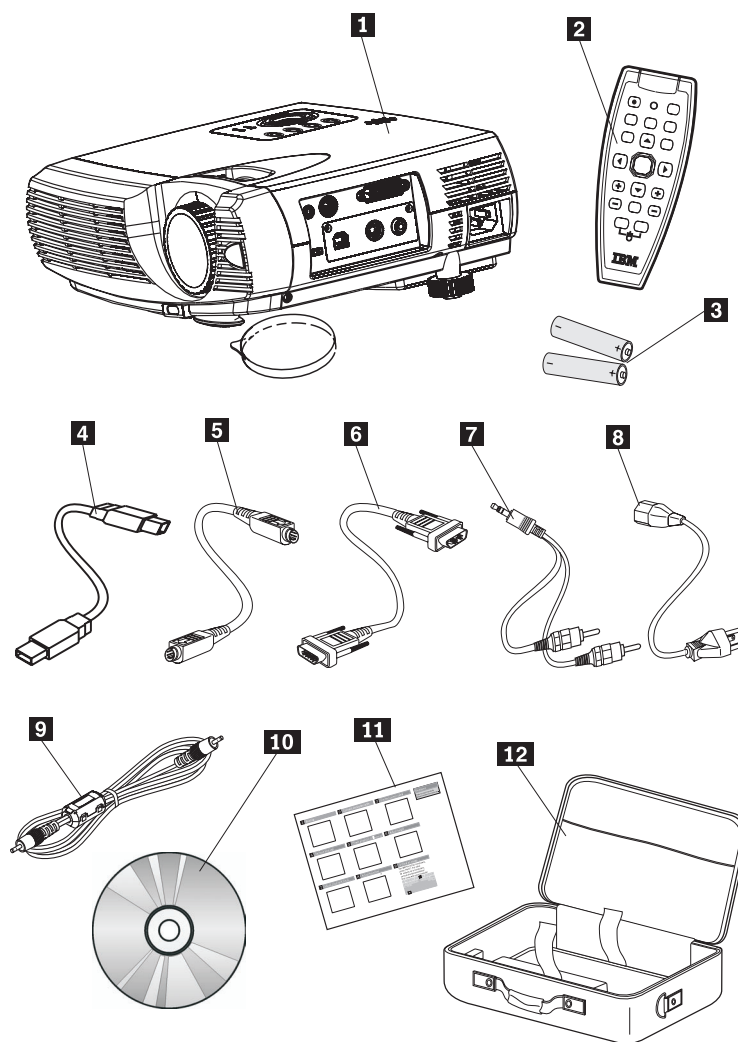
<http://www.ibm.com/pc/register/>

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

まえがき

IBM® E400 プロジェクターは、ビジネスのプレゼンテーションおよびホーム・エンターテイメントの両方に使用でき、簡単に接続でき、使いやすく、保守も簡単です。

このユーザーズ・ガイド以外に、オプション・パッケージには、次のものが含まれています。



- 1 プロジェクター (ランプ・ハウジングおよびレンズ・キャップ付き)
- 2 リモコン
- 3 単 4 電池 2 本
- 4 USB ケーブル
- 5 S ビデオ・ケーブル
- 6 VGA へのビデオ・ケーブル (DVI-DB15)
- 7 オーディオ・ケーブル (ミニ・ジャック → RCA)
- 8 電源コード
- 9 コンポジット・ビデオ・ケーブル

- 10 ユーザーズ・ガイド (およびインストール) CD
- 11 複数言語によるクイック・スタート・ガイド
- 12 キャリング・ケース

上記の品目で不足しているもの、または損傷しているものがある場合は、販売店に連絡してください。

注: ご購入を証明する書類を必ず保管してください。保証サービスを受ける際に必要です。

このプロジェクター用のオプション付属品に関する情報は、 <http://www.ibm.com> にアクセスしてください。

重要:

- プロジェクターをほこりの多い環境で使用することは避けてください。
- プロジェクター上の通気孔をふさがないでください。
- プロジェクターをソフト・ケースに収納する前に、プロジェクターが室温に戻るまで電源ケーブルを (2 ~ 5 分間) コンセントに差し込んだままにしてください。 プロジェクターを電源オフした直後にケースに収納すると、プロジェクターが加熱して、ランプ寿命を縮めることになります。
- レンズに損傷を与えないためにも、必ずレンズ・キャップを取り付けてから、プロジェクターをソフト・ケースに入れてください。
- 付属の電源ケーブルは本製品以外では使用しないでください。

第 1 章 概要

次の図では、このプロジェクターの各機構が示されています。

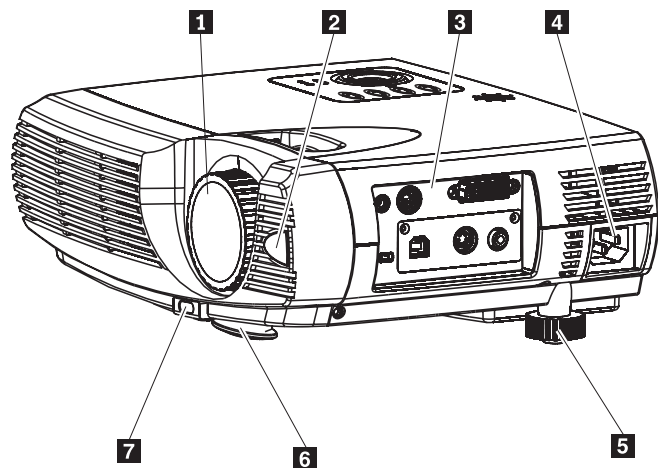


図 1-1. プロジェクターの右前面図

- 1** レンズ/フォーカス
- 2** リモコン受光部 (IR)
- 3** コネクター
- 4** 電源コード・コネクター
- 5** 水平脚
- 6** 高さ調整脚
- 7** 高さ調整脚アジャスター・ボタン

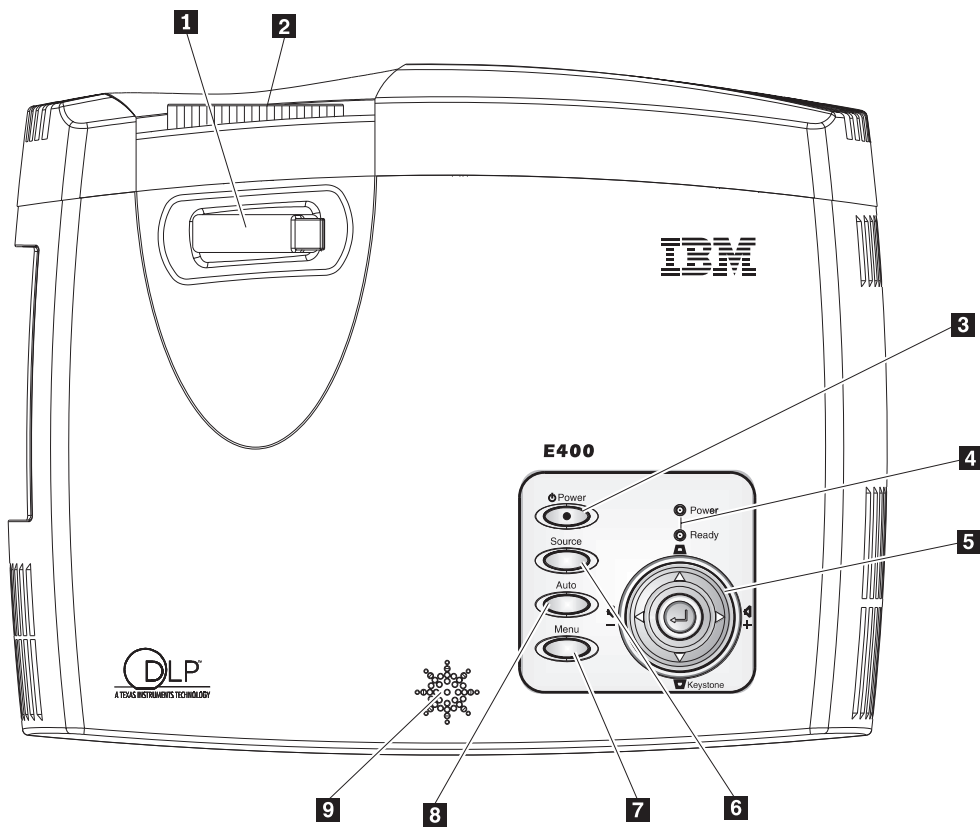


図 1-2. プロジェクターの上面図

- 1** ズーム
- 2** フォーカス
- 3** Power
- 4** システム状況 LED
- 5** コントロール・ボタン
- 6** Source ボタン
- 7** Menu ボタン
- 8** Auto ボタン
- 9** スピーカー

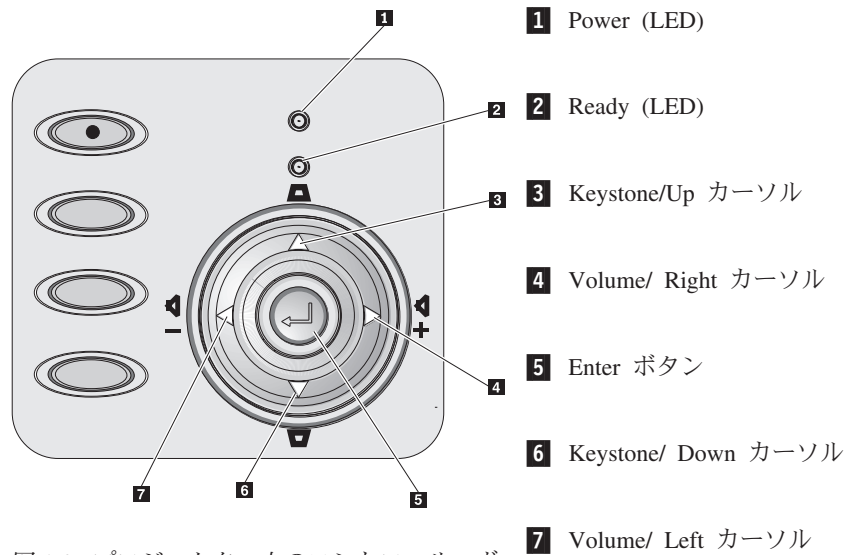


図 1-3. プロジェクター上のコントロール・ボタンおよび LED

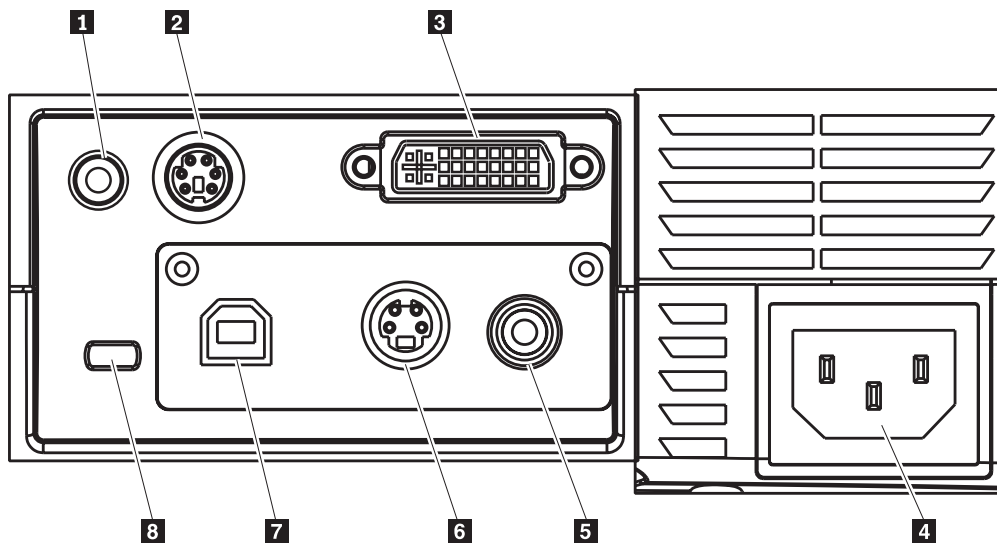


図 1-4. コネクター

- 1** オーディオ入力
- 2** RS232
- 3** DVI-I
- 4** AC ソケット
- 5** コンポジット・ビデオ入力
- 6** S ビデオ
- 7** USB
- 8** セキュリティー・ロック

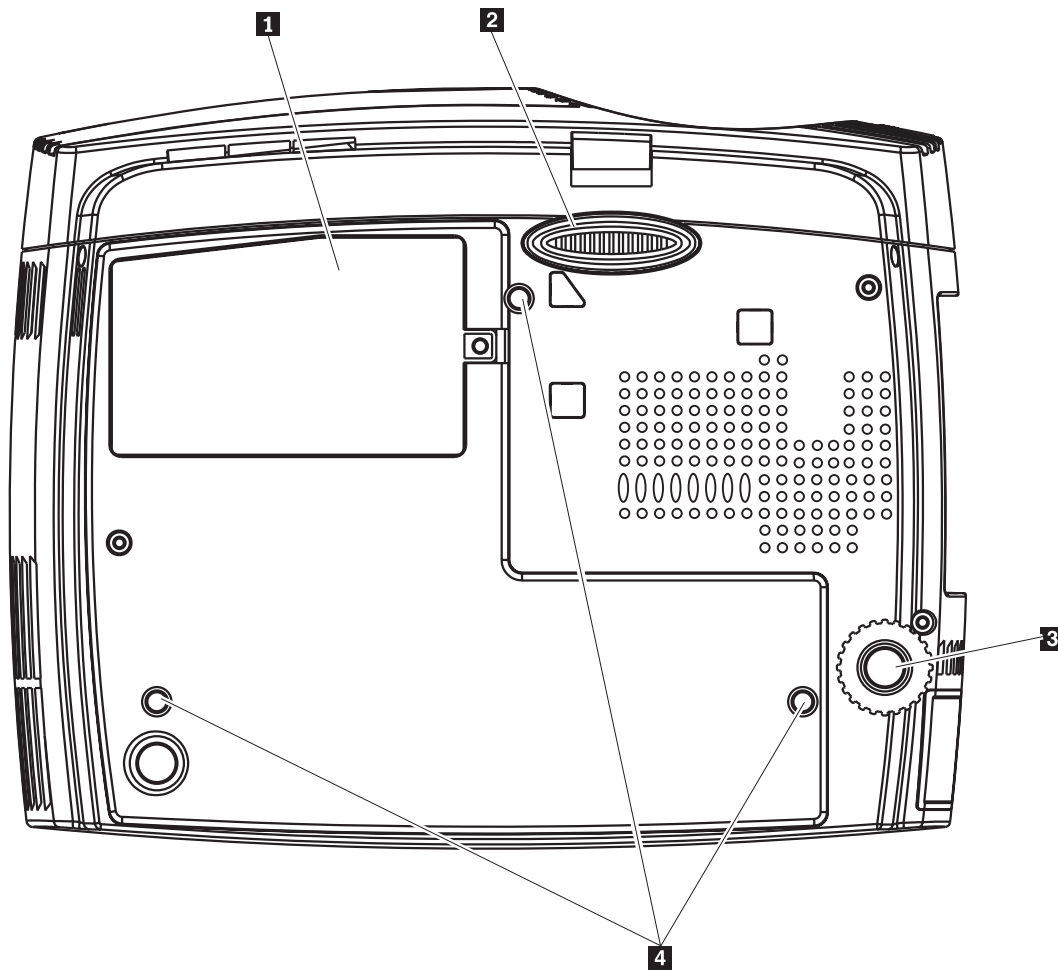


図 1-5. プロジェクターの底面図

- 1** 投影ランプ・カバー
- 2** 高さ調整脚
- 3** 水平脚
- 4** 天井取り付け用サポート穴

第 2 章 プロジェクターのセットアップ

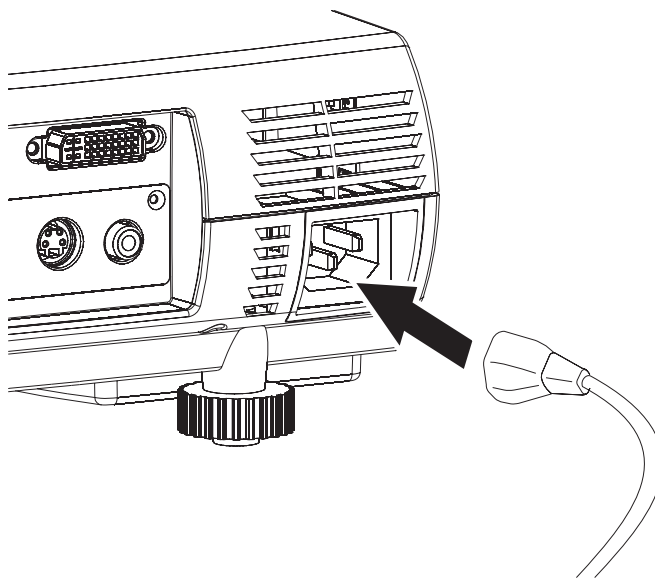
この章では、プロジェクターの始動とシャットダウン、プロジェクターの高さとレベルの調整、ズーム、フォーカス、キーストーンの調整、および音量の調整に関する説明を行います。

重要: プロジェクターを移動させる前に、必ずプロジェクターの電源を正常にオフにし、プロジェクターをコンセントから切り離してください。

プロジェクターの始動およびシャットダウン

プロジェクターの始動およびシャットダウンを行うには、次のステップを実行します。

1. 電源コードを次の図のようにプロジェクターに接続します。電源コードのもう一方の端を壁のコンセントに接続します。Power LED および Ready LED がオンになります。



2. レンズ・キャップを取り外します。
3. 入力装置に接続します。
4. 接続した装置の電源をオンにします。
5. Ready LED がオレンジ色に安定して点灯してから、プロジェクター上部にある「Power」ボタンを押して、プロジェクターオンにします。

プロジェクターのオン・スクリーン画面が表示され、接続された装置が検出されます。接続装置が IBM ThinkPad である場合は、コンピューターのキーボード上の Fn + F7 キーを押して、モニター出力をプロジェクターに切り替えます。IBM 以外の PC の場合、ユーザーズ・マニュアルを確認して、モニター出力の切り替えを行うための該当する Fn ホット・キーを判別してください。

重要: ランプがオンになっているときは、投影レンズを直接のぞき込まないでください。高輝度のライトは、目に障害を与える場合があります。

6. 複数の入力装置を接続した場合、これらの装置間の切り替えを行うには、「**Source**」ボタンを繰り返し押します。
7. プロジェクターの電源をオフにするには、「**Power**」ボタンを押します。プロジェクターはシャットダウンの準備に入り、「Wait a moment please...」というメッセージが表示されます。
8. 「Power off?/Press Power again」というメッセージが表示されたら、「**Power**」ボタンを押します。プロジェクターの電源が切れます。

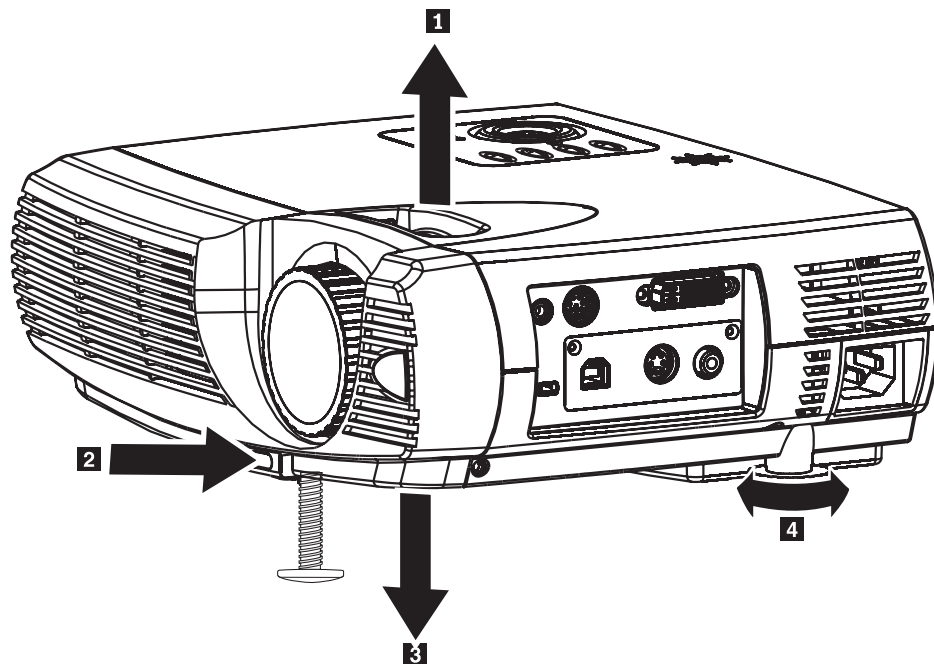
注: プロジェクターをソフト・ケースに収納する前に、プロジェクターが室温に戻るまで電源ケーブルを少なくとも 2 ～ 5 分間差し込んだままにしてください。プロジェクターを電源オフした直後にケースに収納すると、プロジェクターが加熱することがあります。

重要: プロジェクターを移動させる前に、必ずプロジェクターの電源を正常にオフにし、プロジェクターをコンセントから切り離してください。

プロジェクターの高さ調整

プロジェクターの高さ調整を行うには、次の手順を実行します。

1. プロジェクターの高さを上げるには、次の図の **1** の方向にプロジェクターを持ち上げ、**2** の高さ調整ボタンを押します。高さ調整脚 (次の図の **3**) が下がってきます。
2. プロジェクターの高さを下げるには、プロジェクター上面の高さ調整ボタン (次の図の **2**) を押します。
3. 水平に調整するためには、次の図の **4** のように水平脚を回転させます。



プロジェクターの位置調整

プロジェクターを置く最適の場所は、スクリーンのサイズ、コンセントの位置、およびプロジェクターとその他の機器とどれだけ離して置けるかによって決定されます。一般的には次のような点を考慮して位置を決めます。

- スクリーンに対して直角で、フラットな場所を選びます。 プロジェクターとスクリーンの間は最低でも 1.5 m は離してください。
- プロジェクターは電源コンセントから 2.7 m 以内に、また、使用するビデオ装置から 1.8 m (延長ケーブルを使用しない場合) 以内に置くようにします。 ケーブルが適切に扱えるように壁や他の物品の 15 cm 以内にプロジェクターを置くことは避けてください。
- スクリーンからの距離は好みにより決定します。 投影される画像の大きさは、プロジェクターのレンズとスクリーンの距離、ズームの設定、およびビデオ・フォーマットにより決まります。

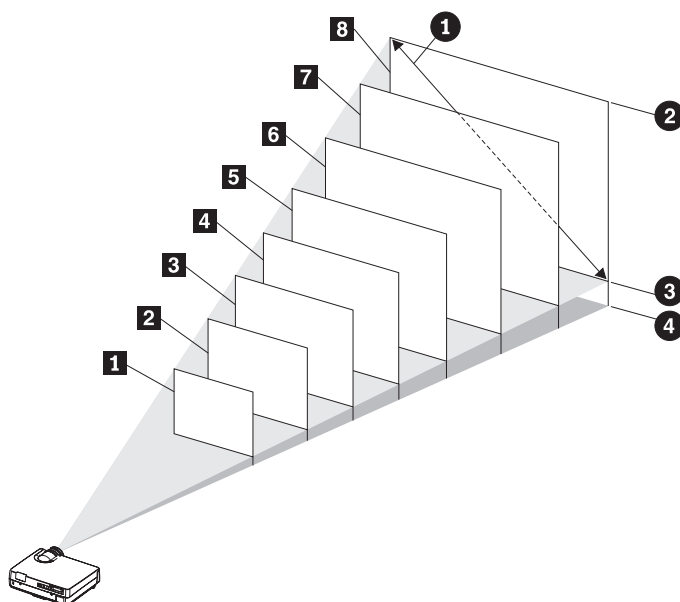


図 2-1.

表 2-1.

| 対角線スクリーン・サイズ ① | 画像幅 ② | 画像高 ③ | レンズ中心から画像の下端までの距離 ④ |
|-------------------|-----------|-----------|------------------------|
| (m/in.) | (m/ft) | (m/ft) | (m/ft) |
| ① 1.10/43.3 | .88/2.88 | .66/2.16 | 1.5/4.92 |
| ② 1.47/57.8 | 1.17/3.83 | .88/2.88 | 2/6.56 |
| ③ 1.76/69.3 | 1.4/4.59 | 1.1/3.6 | 2.4/7.87 |
| ④ 2.06/81.1 | 1.64/5.38 | 1.23/4.03 | 2.8/9.18 |
| ⑤ 2.35/92.5 | 1.87/6.13 | 1.41/4.62 | 3.2/10.5 |
| ⑥ 2.65/104.3 | 2.11/6.92 | 1.58/5.18 | 3.6/11.81 |

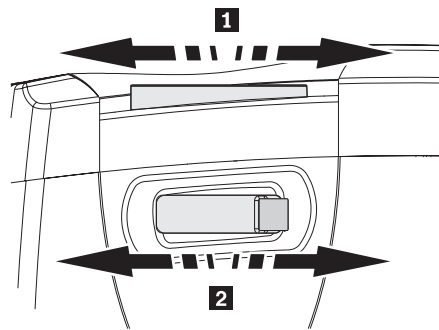
表 2-1. (続き)

| 対角線スクリーン・サイズ ① | 画像幅 ② | 画像高 ③ | レンズ中心から画像の下端までの距離 ④ |
|-------------------|-----------|-----------|------------------------|
| (m/in.) | (m/ft) | (m/ft) | (m/ft) |
| 7 2.94/115.7 | 2.34/7.67 | 1.76/5.77 | 4/13.12 |
| 8 3.23/127.2 | 2.57/8.43 | 1.94/6.36 | 4.4/14.4 |

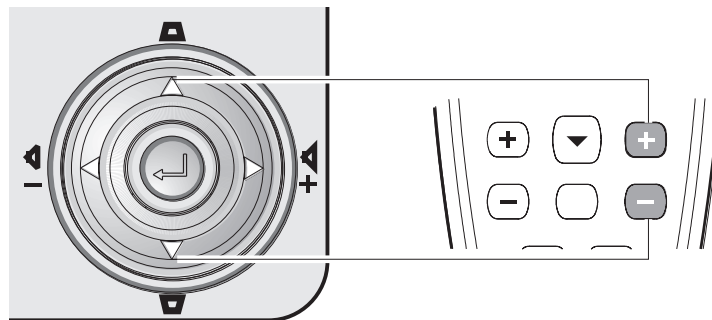
ズーム、フォーカスおよびキーストーンの調整

画像を調整するには、次のステップを実行します。

1. 投影された画像を鮮明にするには、プロジェクター上の画像/フォーカス・コントロール (次の図の **1**) を使用します。
2. 投影された画像および画面のサイズ変更を行うには、プロジェクター上の画像/ズーム・コントロール (次の図の **2**) を使用します。



3. 台形ひずみを補正するには Keystone ボタン (下図) を使用します。

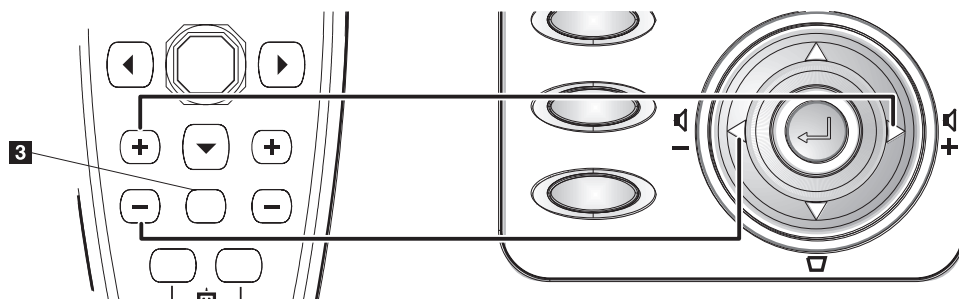


キーストーン・コントロールが表示画面に表示されます。

音量の調整

音量を調整するには、次のステップを実行します。

1. プロジェクターまたはリモコン上の「ボリューム +/-」ボタンを押します。ボリューム・コントロールが OSD に表示されます。
2. レベル調整を行うには、「ボリューム +/-」ボタンを使用します。プロジェクターおよびリモコン上のボリューム・ボタンは、次の図に示すとおりです。



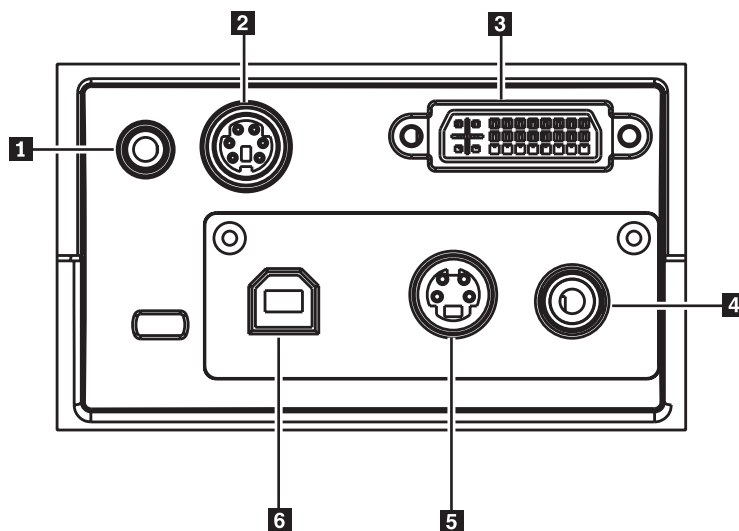
3. 消音するには、「**Mute**」ボタン (リモコン上のみ) を押します。上記の図の **3** を参照してください。
4. 消音を解除するには、プロジェクターまたはリモコン上の「ボリューム +/-」ボタンを押します。

第 3 章 装置とプロジェクターの接続

この章では、装置を E400 プロジェクターへ接続するための説明を行います。

装置の接続

コンピューターとビデオ装置は、プロジェクターに同時に接続できます。接続する装置のユーザーズ・マニュアルを調べて、その装置に該当する出力コネクターがあるかを確認してください。



- 1** オーディオ入力
- 2** RS232
- 3** DVI-I
- 4** コンポジット・ビデオ入力
- 5** S ビデオ
- 6** USB ポート

第 4 章 プロジェクター機能の使用

この章では、リモコン、オーディオ、キーパッド・ボタン、およびその他のプロジェクター機能の使用方法について説明します。

リモコンの使用

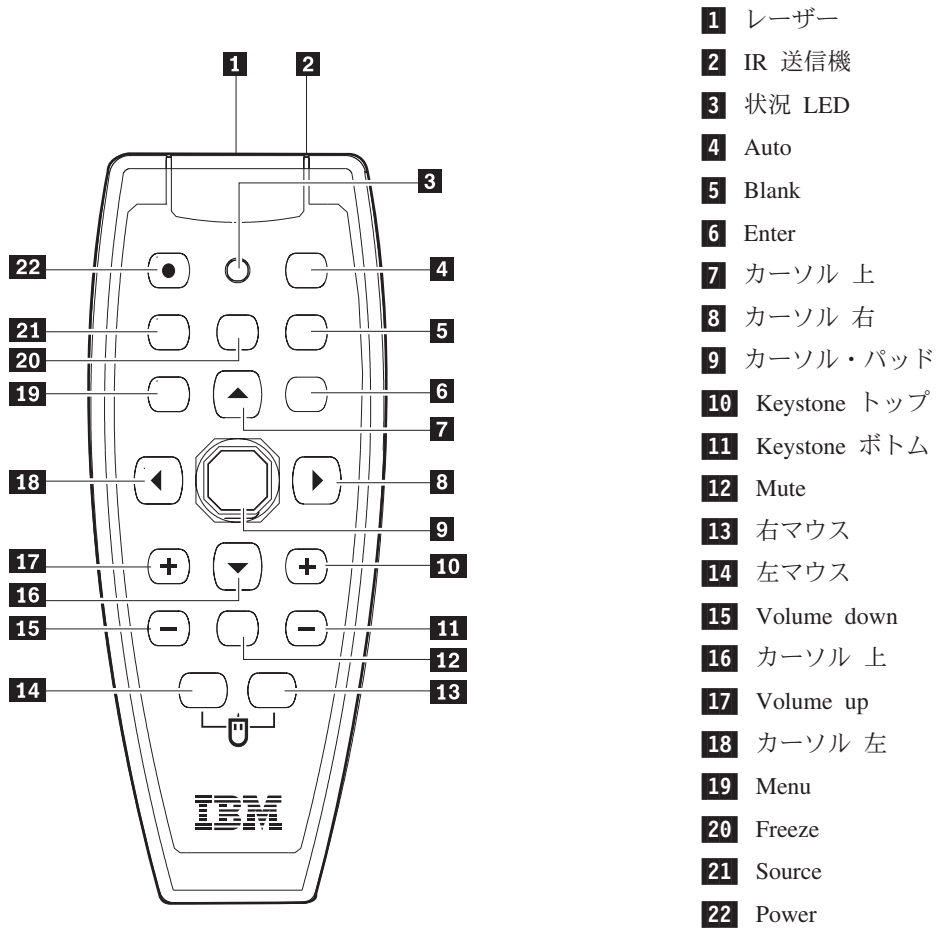
リモコンは、同梱されている 2 個の単四電池を使用します。電池は、リモコンの背面のカバーをずらしてリモコンの端から外し、バッテリーの + と - の端を正しい向きにして指定場所に取り付け、カバーを元どおりにスライドさせることにより、簡単に取り付けられます。



注意:

目に障害を与えないようにするため、リモコンのレーザー光を直視しないようにしてください。またレーザー光を他の人の目に向けたりしないでください。このリモコンはクラス II のレーザー光を放射します。

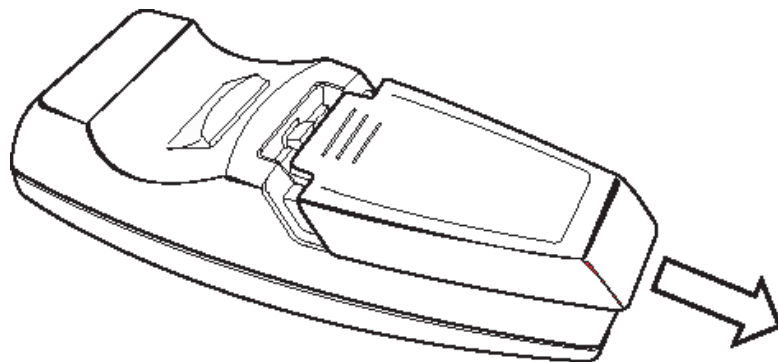
次の図は、リモコン本体を図示したものです。



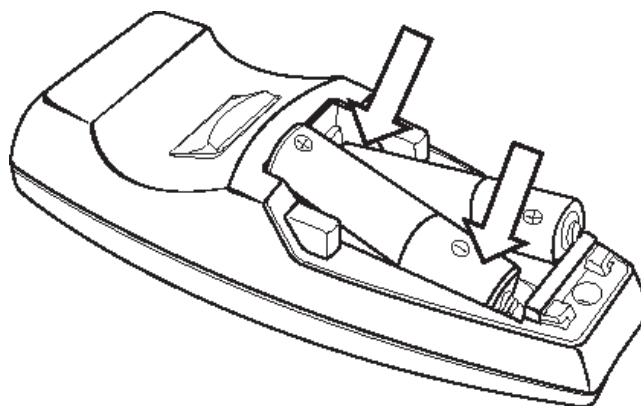
リモコンの電池の入れ方

リモコンを初めて使用するときは、付属の電池を取り付けます。リモコンに新しい電池を入れるには、次のステップに従ってください。

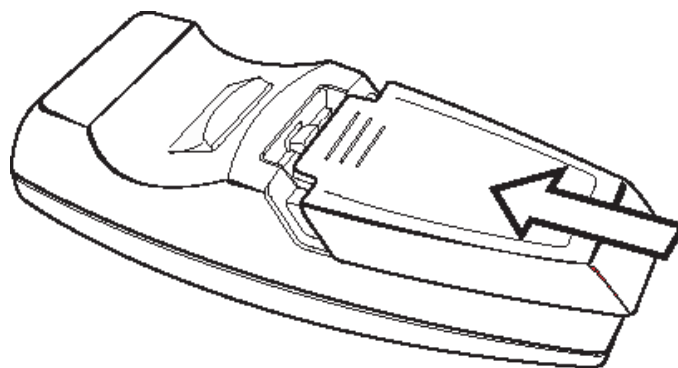
1. 電池コンパートメント・カバーを下図の矢印の方向にスライドさせて取り外します。



2. 付属の電池を表示されている極性 (+/-) に合わせて、下図のように挿入します。



3. カバーを下図のように、再度取り付けます。



注:

- 単 4 アルカリ電池だけを使用してください。
- 使用済み電池は、地方自治体が定める条例または規則にしたがって処理してください。
- リモコンを長期間使用しないときは、電池を取り外してください。

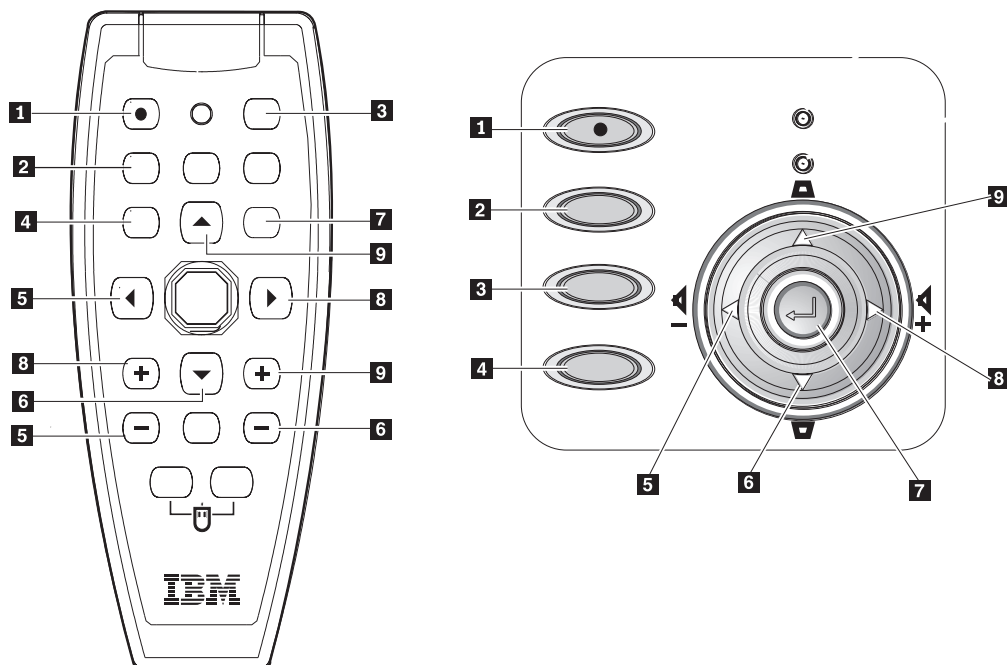
作動範囲

このリモコンは赤外線送信を使用して、プロジェクターを制御します。リモコンを直接プロジェクターに向ける必要はなく、リモコンは最大半径 10 m およびプロジェクターのレベルの上下 30° の範囲で作動します。プロジェクターがリモコンに反応しない場合、リモコンをプロジェクターに少し近づけてください。

注: リモコンを投影されている画像をポイントするのに使用することもできます。

プロジェクターおよびリモコンのボタン

リモコンまたはプロジェクター上部にあるボタンを使用して、プロジェクターを操作できます。すべての操作はリモコンを使用して行えます。次の図は、対応するリモコンのボタンとプロジェクターのボタンを示しています。



- 1** Power
- 2** Source
- 3** Auto
- 4** Menu
- 5** Volume down/左 ボタン
- 6** Keystone bottom/Down ボタン
- 7** Enter
- 8** Volume up/右 ボタン
- 9** Keystone トップ/Up ボタン

第 5 章 オン・スクリーン・ディスプレイ・メニューでの調整

このプロジェクターには、オン・スクリーン・ディスプレイ (OSD) が備わっており、これにより、画像調整および各種の設定変更が可能になります。

注: OSD にアクセスするには、表示用のモニターが必要です。

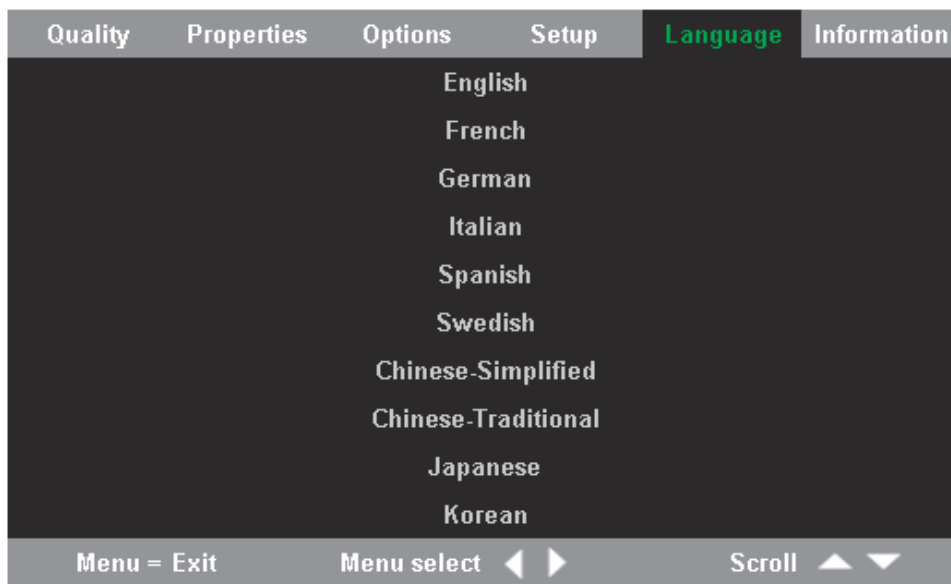
OSD のナビゲート

リモコンまたはプロジェクター上部にあるボタンを使用して、OSD をナビゲートしたり、変更したりできます。次のセクションでは、OSD の各メニュー・オプションについて説明します。

OSD 言語の設定

このセクションをお読みになる際に、ご使用のプロジェクターで OSD を参照することが必要になる場合があります。次のステップを実行して設定を続行する前に、OSD 言語をお客様の設定に設定します。

1. 「Menu」ボタンを押します。「Quality」メニューが表示されます。
2. 「Language」が強調表示されるまで、「カーソル 左 / 右」ボタンを押します。



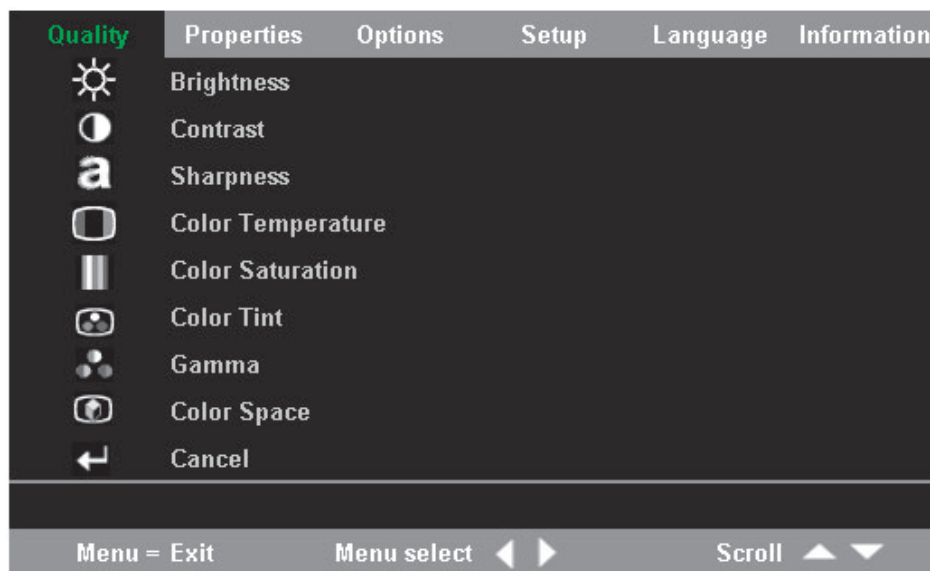
3. 目的の言語が強調表示されるまで、「カーソル 上 / 下」ボタンを押します。
4. 「Enter」ボタンを押して、言語を選択します。
5. 「Menu」ボタンを 2 回押して、OSD を閉じます。

Quality メニュー

「Quality」メニューにアクセスする場合は、次のステップを実行します。

1. 「Menu」ボタンを押して、メインメニューを開きます。

2. 「カーソル左/右」ボタンを押して、「Quality」メニューまで移動します。



3. 「カーソル上/下」ボタンを押して、「Quality」メニュー内で移動します。

次の表では、「Quality」メニューで表示されるオプションとそのデフォルト値を示しています。

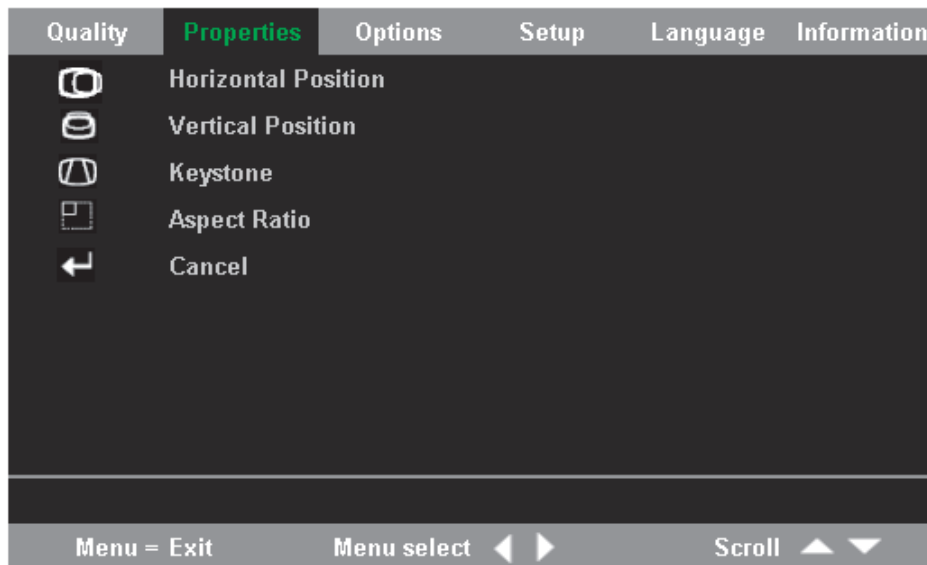
| 項目 | 説明 | デフォルト |
|-------------------|--|--------|
| Brightness | 輝度を調整するには、「カーソル 左 / 右」ボタンを押します。 範囲: 0 ~ 100 | 50 |
| Contrast | コントラストを調整するには、「カーソル 左 / 右」ボタンを押します。 範囲: 0 ~ 100 | 50 |
| Sharpness | 画像のシャープネスを調整するには、「カーソル 左 / 右」ボタンを押します。 範囲: 1 ~ 5 | 3 |
| Color Temperature | 色温度を調整するには、「カーソル 左 / 右」ボタンを押します。 範囲: Cool、Normal、Warm | Normal |

| 項目 | 説明 | デフォルト |
|------------------|--|-------|
| Color Saturation | ビデオ画像の彩度を調整するには、「カーソル 左 / 右」ボタンを押します。 「Color Saturation」は、入力ソースが Video、SVideo、または YPbPr のときにのみアクティブになります。 範囲: 0 ~ 100 | 50 |
| Color Tint | ビデオ画像の濃淡および色調を調整するには、「カーソル 左 / 右」ボタンを押します。 「Color tint」は、入力ソースが Video、S-video、または YPbPr のときにのみアクティブになります。 範囲: 0 ~ 100 | 50 |
| Gamma | モニターのガンマ補正を調整するには、「カーソル 左 / 右」ボタンを押します。 入力 ガンマ 輝度 PC 2.2 高 MAC 1.8 高 Video 2.4 低 Chart 2.2 低 B&W 2.4 高 | PC |
| Color Space | カラー・スペースを調整するには、「カーソル 左 / 右」ボタンを押します。 範囲: Auto、RGB、YpbPr、YCbCr | Auto |
| Cancel | すべての「Quality」メニューでの設定項目をデフォルト値にリセットします。 | なし |

Properties メニュー

「Properties」メニューにアクセスする場合は、次のステップを実行します。

1. 「Menu」ボタンを押して、OSD メニューを開きます。
2. 「カーソル左/右」ボタンを押して、「Properties」メニューまで移動します。



3. 「カーソル 上 / 下」ボタンを押して、「Properties」メニュー内を移動します。

次の表では、「Properties」メニューで表示されるオプションとそのデフォルト値を示しています。

| 項目 | 説明 | デフォルト |
|---------------------|---|-------|
| Horizontal Position | 画像を左右に移動させるには、「カーソル 左 / 右」ボタンを押します。 範囲: 0 ~ 100 | 50 |
| Vertical Position | 画像を上下に移動させるには、「カーソル 左 / 右」ボタンを押します。 範囲: 0 ~ 100 | 50 |
| Keystone | 投影された画像のひずみを補正するには、「カーソル 左 / 右」ボタンを押します。 範囲: -50 ~ 50 | 0 |
| Aspect Ratio | 4:3 の標準形式と 16:9 の High Definition TV (HDTV) 形式とを切り替えるには、「カーソル 左 / 右」ボタンを押します。 | 4:3 |

| 項目 | 説明 | デフォルト |
|--------|---|-------|
| Cancel | 「Keystone」と「Aspect Ratio」をデフォルト値にリセットします。 | なし |

Options メニュー

「Options」メニューにアクセスするには、次のステップを実行します。

1. 「Menu」ボタンを押して、メインメニューを開きます。
2. 「カーソル 左 / 右」ボタンを押して、「Options」メニューまで移動します。



3. 「カーソル 上 / 下」ボタンを押して、「Options」メニュー内を移動します。

次の表では、「Options」メニューで表示されるオプションとそのデフォルト値を示しています。

| 項目 | 説明 | デフォルト |
|--------------|---|-------|
| Blank Screen | ブランク・スクリーンの背景色を選択するには、「カーソル 左 / 右」ボタンを押します。 範囲: 黒、赤、緑、青、白 | 青 |
| Auto Source | 自動ソース検出を使用可能または使用不可に設定するには、「カーソル 左 / 右」ボタンを押します。 範囲: オフ/オン | オン |

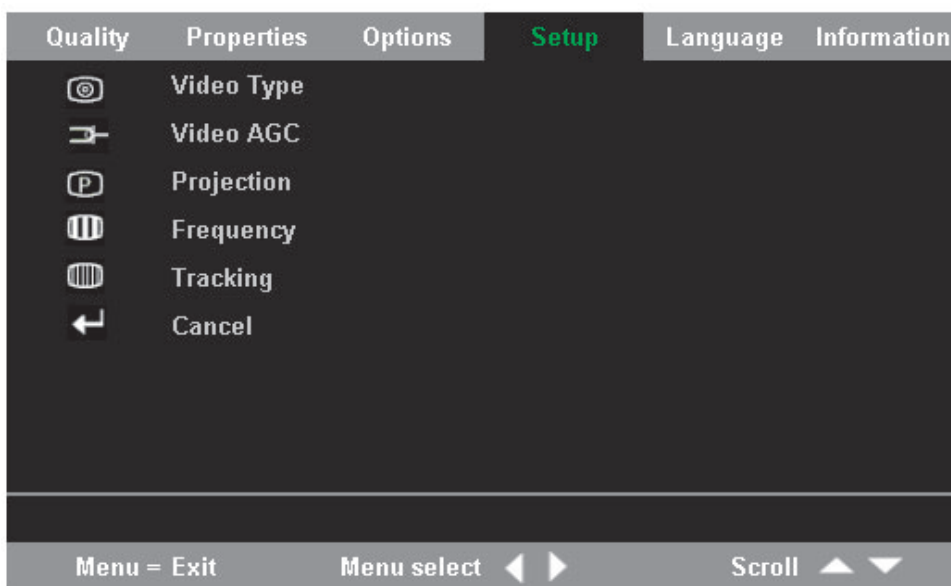
| 項目 | 説明 | デフォルト |
|------------------|---|--------|
| Auto Power Off | <p>作動していない状態が 10 分間続くとランプをシャットダウンする、ランプの自動シャットダウンを使用可能または使用不可に設定するには、「カーソル 左 / 右」ボタンを押します。</p> <p>範囲: オフ/オン</p> | オフ |
| Volume | <p>オーディオの音量レベルを調整するには、「カーソル 左 / 右」ボタンを押します。</p> <p>範囲: 0 ~ 8</p> | 4 |
| Menu Position | <p>画面上に OSD を配置するには、「カーソル 左 / 右」ボタンを押します。</p> <p>範囲: Left、Right、Center、Down、Up</p> | Center |
| Menu Display | <p>OSD のタイムアウト遅延を決定するには、「カーソル 左 / 右」ボタンを押します。</p> <p>範囲: 10 ~ 20 秒</p> | 15 |
| Translucent Menu | <p>メニュー画面の透明性を選択するには、「カーソル 左 / 右」ボタンを押します。</p> <p>範囲: オフ/オン</p> | オフ |
| Cancel | <p>すべての「Options」画面での設定項目をデフォルト値にリセットします。</p> | なし |

Setup メニュー

「Setup」メニューにアクセスする場合は、次のステップを実行します。

1. 「Menu」ボタンを押して、OSD メニューを開きます。

2. 「カーソル 左 / 右」 ボタンを押して、「Setup」メニューまで移動します。



3. 「カーソル 上 / 下」 ボタンを押して、「Setup」メニュー内で移動します。

次の表では、「Setup」メニューで表示されるオプションとそのデフォルト値を示しています。

| 項目 | 説明 | デフォルト |
|-------------------------------------|---|-------|
| Video Type | ビデオ規格を選択するには、「カーソル 左 / 右」ボタンを押します。 「Video Type」は、入力ソースがビデオまたは S ビデオのときにのみアクティブになります。 範囲: Auto、NTSC、PAL、SECAM | Auto |
| Video Automatic Grain Control (AGC) | ビデオ・ソース用の自動グレイン・コントロールを使用可能または使用不可に設定するには、「カーソル左 / 右」ボタンを押します。 「Video AGC」は、入力ソースがビデオまたは S ビデオのときにのみアクティブになります。 範囲: オフ/オン | オン |

| 項目 | 説明 | デフォルト |
|------------|---|---------------------|
| Projection | <p>投影方式を次の 4 つから選択するには、「カーソル 左 / 右」ボタンを押します。</p> <ul style="list-style-type: none"> • デスクトップ・マウント、スクリーン前面 • デスクトップ・マウント、スクリーン背面 • 天井マウント、スクリーン前面 • 天井マウント、スクリーン背面 | デスクトップ・マウント、スクリーン前面 |
| Frequency | <p>A/D サンプリング・クロックを調整するには、「カーソル 左 / 右」ボタンを押します。</p> <p>「Frequency」は、入力ソースがアナログ RGB のときのみアクティブになります。</p> <p>範囲: 0 ~ 100</p> | 自動検出 |
| Tracking | <p>A/D サンプリング・ナンバーを調整するには、「カーソル 左 / 右」ボタンを押します。</p> <p>「Tracking」は、入力ソースがアナログ RGB のときのみアクティブになります。</p> <p>範囲: 0 ~ 100</p> | 自動検出 |
| Cancel | <p>「Video Type」、「Video AGC」、および「Projection」をデフォルト値にリセットします。</p> | なし |

Information メニュー

「Information」メニューにアクセスする場合は、次のステップを実行します。

1. 「Menu」ボタンを押して、OSD メニューを開きます。

2. 「カーソル 左 / 右」 ボタンを押して、「Information」メニューまで移動します。



3. 「カーソル 上 / 下」 ボタンを押して、「Information」メニュー内で移動します。

次の表では、「Information」メニューで表示されるオプションとそのデフォルト値を示しています。

| 項目 | 説明 |
|-------------------|--|
| Video Information | 接続されたビデオ装置の解像度およびリフレッシュ速度を表示します。 |
| Active Source | アクティブ・ソースに関する情報。 |
| Software Version | ソフトウェアの改訂に関する情報。 |
| Lamp Hours | ランプがこれまでに使用された時間数。 |
| Lamp Mode | 次のランプ・モードを選択するには、「カーソル 左 / 右」 ボタンを押します。 <ul style="list-style-type: none"> • Normal • Eco |
| Lamp Hour Reset | ランプ交換時に、この項目をリセットしてください。 |

付録 A. 保守

この章では、プロジェクターの保守について説明します。

レンズのクリーニング

レンズのクリーニングは、次のように行います。

1. 研磨剤が入っていないカメラ・レンズ・クリーナーを柔らかい、乾いた布に付けます。

注: 過剰な量のクリーナーを使用しないでください。レンズにクリーナーを直接付けしないでください。研磨剤が入ったクリーナー、溶剤、またはその他のざらざらした化学薬品は、レンズに傷を付けることがあります。

2. クリーニング・クロスはレンズの上で円を描くように軽くふきます。プロジェクターをすぐに使用する予定がない場合は、レンズ・キャップを取り付け直します。

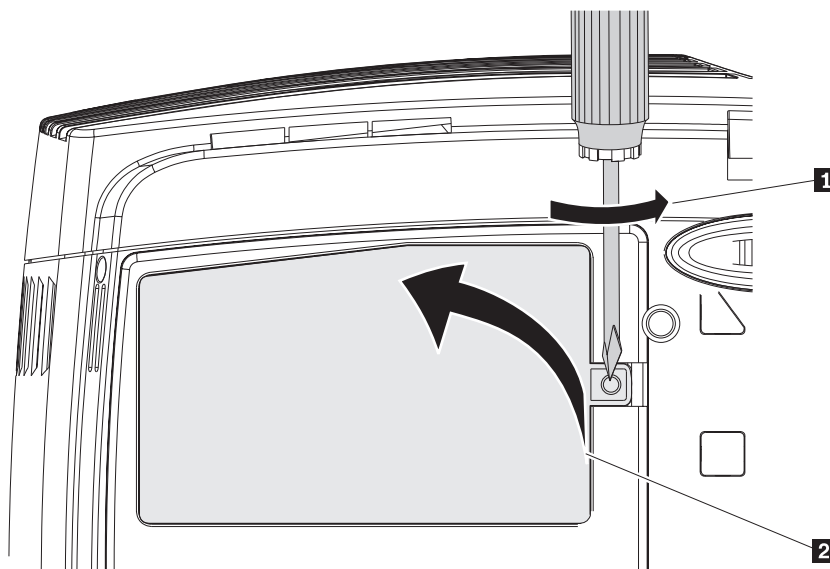
投影ランプの交換

交換ランプは、必ず、元のランプと同じタイプおよび定格のランプを使用してください。詳しくは、IBM 担当員に連絡するか、または Web サイト www.ibm.com/jp/pc にアクセスしてください。

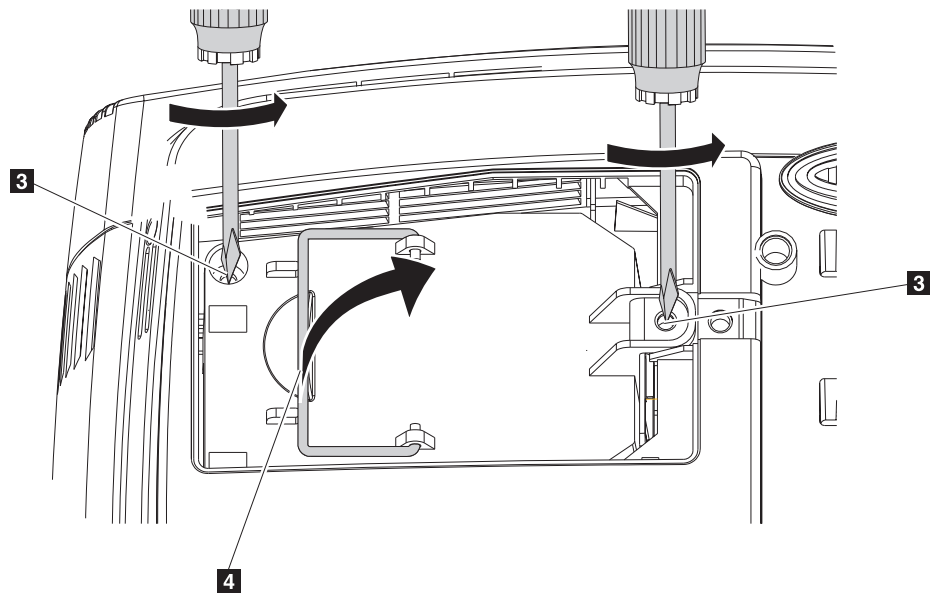
注: プロジェクターをオフにし、電源コードのプラグを抜き、プロジェクターが冷えるまで少なくとも 1 時間待ってからランプを交換します。

プロジェクターのランプを交換するには、次のようにします。

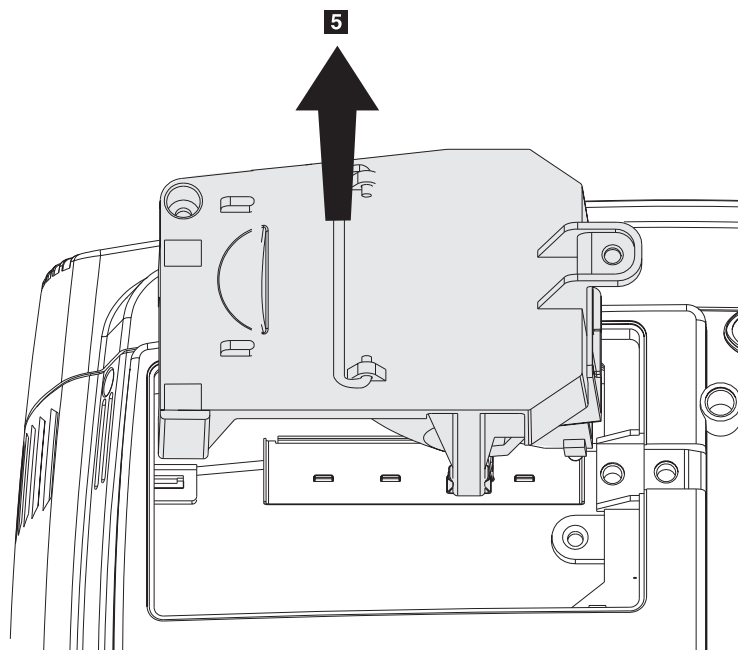
1. ランプ・ハウジング・カバーのねじを次の図のように取り外します。
2. ランプ・ハウジング・カバーを次の図のように取り外します。



3. ランプ・モジュールから 2 本のねじを次の図のように外します。
4. ランプ・モジュールのハンドルを次の図のように持ち上げます。



5. ランプ・モジュールのハンドルを次の図のようにしっかりと引っ張って、ランプ・モジュールを取り外します。



6. 新しいランプ・モジュールを取り付ける場合は、ステップ 1 ~ 5 の逆に行います。

重要: 本製品には、水銀を含む金属アーク灯が含まれています。地方自治体の条例および規則に従って廃棄してください。

ランプ・タイマーのリセット

ランプ交換後、ランプ・タイマーをゼロにリセットしてください。次のステップを実行します。

1. 「Menu」ボタンを押して、メインメニューを開きます。
2. 「カーソル 左 / 右」ボタンを押して、「Information」メニューまで移動します。
3. 「カーソル 上 / 下」ボタンを押して、「Lamp Hour Reset」まで移動します。
4. Enter ボタンを押します。メッセージ・スクリーンが表示されます。
5. カーソル・ボタンを「下」、「上up」、「左」、「右」の順に押します。
Information メニューが再表示されて、「Lamp Hours」がゼロにリセットされたことが示されます。

重要: ランプ寿命とはランプの明るさの減衰を表す尺度であり、ランプが切れて点灯しなくなるまでの時間を表す仕様ではありません。ランプ寿命とは、ある指定のランプの定格光度（ルーメン）が約半減する物の数がサンプル母集団の 50% を超えるまでの経過時間のことです。たとえば、お使いのランプの寿命が 2000 時間になったとすると、ランプの光度は 50% 減衰し約 550 ルーメンとなります。

セキュリティー・ロックの使用

このプロジェクターにはセキュリティー・ロックが備わっています。セキュリティー・ロックの使用方法については、ロックに同梱されている説明書を参照してください。

付録 B. トラブルシューティング

次の表には、プロジェクターのトラブルシューティングの説明があります。一部のケースには、複数の解決策があります。解決策は、説明されている順序で実行してください。問題が解決した場合は、残りの解決策はスキップしてかまいません。

表 B-1. トラブルシューティング

| 問題 | 解決策 |
|-------------------------------------|--|
| スクリーン上に画像が表示されません。 | <ul style="list-style-type: none">• ご使用のノートブック PC またはデスクトップ PC の設定を確認します。• すべての装置の電源をオフにしてから、もう一度正しい順序で電源をオンにします。 |
| 画像が不鮮明。 | <ul style="list-style-type: none">• プロジェクターでフォーカスを調整します。• リモコンまたはプロジェクターの「Auto」ボタンを押してください。• プロジェクターとスクリーンとの距離が指定されている範囲内 (10 m) であるかを確認してください。• プロジェクターのレンズが汚れていないかを確認してください。 |
| 画像の上部または下部のどちらかの幅が広がっている (台形ひずみ効果)。 | <ul style="list-style-type: none">• プロジェクターをスクリーンに対してなるべく直角になるように配置します。• この問題を補正するには、リモコンまたはプロジェクターの「Keystone」ボタンを使用します。 |
| 画像が反転している、または上下逆になっている。 | OSD の「 Setup 」メニューで「 Projection 」設定をチェックしてください。 |
| 画像にすじがある。 | <ul style="list-style-type: none">• OSD の「Setup」メニューで「Frequency」および「Tracking」設定をデフォルト設定に設定します。• 問題が接続された PC のビデオ・カードが原因でないことを確認するには、別のコンピューターに接続してください。 |
| 画像がフラットでコントラストに欠ける。 | OSD のメインメニューで「 Contrast 」設定を調整します。 |
| 投影された画像の色がソース・イメージと一致しない。 | OSD の「 ColorMgr 」メニューで「 Color Temp. 」および「 Gamma 」設定を調整してください。 |

表 B-1. トラブルシューティング (続き)

| 問題 | 解決策 |
|---------------------|--|
| プロジェクターから光が出ない。 | <ul style="list-style-type: none"> • 電源ケーブルがしっかりと接続されているかを確認してください。 • 他の装置を電源コンセントに接続して、電源コンセントが正常であるかをテストしてください。 • プロジェクターを正しい順序で再始動し、「Power」LED が緑になるかをチェックします。 • ランプを最近交換した場合、ランプ交換手順を再試行してください。 • ランプ・モジュールを交換します。 • 古いランプをプロジェクターに戻して、プロジェクターの保守を依頼します。 |
| ランプが消える。 | <ul style="list-style-type: none"> • 電源に過電流が発生すると、ランプが消えることがあります。「Power」ボタンを 2 回押して、プロジェクターの電源をオフにします。「Lamp Ready」LED がオンになると、「Power」ボタンを押します。 • ランプ・モジュールを交換します。 • 古いランプをプロジェクターに戻して、プロジェクターの保守を依頼します。 |
| プロジェクターがリモコンに反応しない。 | <ul style="list-style-type: none"> • リモコンをプロジェクターのリモート・センサーに向けてください。 • リモコンとセンサーとの間が妨げられていないことを確認します。 • 室内のすべての蛍光灯をオフにします。 • 電池の極性 (プラス + とマイナス - の向き) が正しいかをチェックします。 • 電池を交換します。 • 近くにある他の赤外線装置をオフにします。 • リモコンの保守を依頼します。 |
| 音が出ない。 | <ul style="list-style-type: none"> • リモコンの音量を調整してください。 • オーディオ・ソースの音量を調整してください。 • オーディオ・ケーブルの接続を確認してください。 • 他のスピーカーを使用して、ソース・オーディオ出力をテストしてください。 • プロジェクターの保守を依頼します。 |
| 音声がひずむ。 | <ul style="list-style-type: none"> • オーディオ・ケーブルの接続を確認してください。 • 他のスピーカーを使用して、ソース・オーディオ出力をテストしてください。 • プロジェクターの保守を依頼します。 |

プロジェクターの LED

プロジェクターの上部にある LED は、プロジェクターの状態を示し、トラブルシューティングに役立ちます。点滅サイクルには、2 秒の休止があります。LED プロジェクター・エラーの詳細については、IBM 担当員に連絡してください。

表 B-2. Ready LED エラー・メッセージ

| Ready LED の点滅回数 | 説明 |
|-----------------|--------------------------------|
| 点滅 | ランプが作動不能：「Power」ボタンを押さないでください。 |
| 1 | ランプ・ファン 2 エラー |
| 2 | 送風器ファン 1 エラー |
| 3 | バラスト・ファン 1 エラー |

表 B-3. Power LED エラー・メッセージ

| Power LED の点滅回数 | 説明 |
|-----------------|--|
| 3 | システムの過熱 |
| 4 | システム・インターフェース・エラー |
| 5 | ランプ・エラー |
| 6 | ファン・エラー。Ready LED を参照して、そのファンに問題があるかを判断してください。 |
| 7 | ランプ・カバーが開いている |
| 8 | DLP ドライバー・エラー。 |

付録 C. 仕様

以下は IBM E400 プロジェクターの仕様です。

| | |
|-------------------|---------------------------------------|
| 温度 (操作時) | 5° ~ 35° C (海拔レベル) |
| (停止時) | -10° ~ 60° C |
| 高度 (操作時) | 3,048 m |
| 高度 (停止時) | 12,192 m |
| 湿度 (操作時) | 5% ~ 90% の相対湿度、結露しないこと |
| 湿度 (停止時) | 5% ~ 95% の相対湿度、結露しないこと |
| 寸法 (幅 x 奥行き x 高さ) | 280 x 205 x 97 mm |
| 重量 | 2.09 kg (開梱後) |
| 光学 (フォーカス範囲) | 1.5 ~ 7 m |
| ランプ・タイプ | VIP 200W |
| 入力電源要件 | 100-240V AC 50-60Hz 2.8A |
| 天井取り付け | UL テスト済み / リスト済み天井取り付け - 最大荷重 15.5 kg |

付録 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 |

付録 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.

E400 PROJECTOR

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

E400 PROJECTOR LAMP

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

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

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

Types of Warranty Service

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

1. Customer Replaceable Unit ("CRU") Service

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

2. On-site Service

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

3. Courier or Depot Service¹

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

4. Customer Carry-In or Mail-In Service

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

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

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

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 |

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

| Country or Region | Telephone Number | Country or Region | Telephone Number |
|--------------------------|--|--------------------------|-------------------------|
| 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 |

付録 F. Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION 『AS IS』 WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change IBM product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of IBM or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

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.

Trademarks

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

IBM
IBM logo
ThinkPad

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

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

Electronic emission notices

IBM E400 PROJECTOR

Federal Communications Commission (FCC) statement

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

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

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

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

Responsible party:

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



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

Industry Canada Class B emission compliance statement

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

Avis de conformité a la réglementation d'Industrie Canada

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

Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Zulassungsbeseinigunglaut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richtlinie 89/336):

Dieses Gerät ist berechtigt in Übereinstimmungmit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die:

IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

| |
|--|
| Das Gerät erfüllt die Schutzanforderungen nach EN 55024:1998 und EN 55022:1998 Klasse B. |
|--|

EN 55022 Hinweis:

『Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 55022:B festgelegt), dann kann es dabei eventuell gestört werden. In solch einem FA11 ist der Abstand bzw. die Abschirmungzu der industriellen Störquelle zu vergrößern.』

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den IBM Handbüchern angegeben, zu installieren und zu betreiben.

European Union - emission directive

This product is in conformity with the protection requirements of EU Council Directive 89/336/ECC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

IBM can not accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

Union Européenne - Directive Conformité électromagnétique

Ce produit est conforme aux exigences de protection de la Directive 89/336/EEC du Conseil de l'UE sur le rapprochement des lois des États membres en matière de compatibilité électromagnétique.

IBM ne peut accepter aucune responsabilité pour le manquement aux exigences de protection résultant d'une modification non recommandée du produit, y compris l'installation de cartes autres que les cartes IBM.

Ce produit a été testé et il satisfait les conditions de l'équipement informatique de Classe B en vertu de Standard européen EN 55022. Les conditions pour l'équipement de Classe B ont été définies en fonction d'un contexte résidentiel ordinaire afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

Unione Europea - Directiva EMC (Conformidad electromagnética)

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

IBM no puede aceptar responsabilidad alguna si este producto deja de satisfacer dichos requisitos de protección como resultado de una modificación no recomendada del producto, incluyendo el ajuste de tarjetas de opción que no sean IBM.

Este producto ha sido probado y satisface los límites para Equipos Informáticos Clase B de conformidad con el Estándar Europeo EN 55022. Los límites para los equipos de Clase B se han establecido para entornos residenciales típicos a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

Union Europea - Normativa EMC

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

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

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

이 기기는 가정용으로 전자파 적합등록을 한 기기로서
주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Japanese statement of compliance for products less than or equal to 20 A per phase

高調波ガイドライン適合品



部品番号: 73P2776

Printed in Japan

(1P) P/N: 73P2776



日本アイ・ビー・エム株式会社
〒106-8711 東京都港区六本木3-2-12