



IBM C400 PROJECTOR

User's Guide



IBM C400 PROJECTOR

User's Guide

Nota: Before using this information and the product it supports, read the information in and Apêndice E, "IBM Statement of Limited Warranty Z125-4753-08 04/2004", na página E-1.

Índice

Safety information v

General safety guidelines. vii

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

Registering your option. xi

Capítulo 1. Descrição do Produto 1-1

Lista de Verificação da Embalagem	1-1
Recursos do Projetor	1-3

Capítulo 2. Instalando o Projetor 2-1

Iniciando o Projetor	2-1
Desligando o Projetor.	2-1
Posicionando o Projetor	2-2
Ajustando o Nível e a Altura do Projetor	2-4
Ajustando a Imagem	2-4
Ajustando o Volume	2-5

Capítulo 3. Conectando Dispositivos ao Projetor. 3-1

Conectando Dispositivos.	3-1
Conectando a um Dispositivo USB	3-2
Conectando a um Monitor de Computador	3-2

Capítulo 4. Utilizando os Recursos do Projetor 4-1

Antes de Começar	4-1
Utilizando o Controle Remoto	4-2
Intervalo de Operação	4-3
Botões do Projetor e do Controle Remoto	4-3

Capítulo 5. Controles de Menu do On-Screen Display 5-1

Navegando no OSD	5-1
Language	5-1
Menu Quality	5-1
Menu Properties	5-3
Menu Options	5-5

Menu Setup	5-6
Menu Information	5-9
Menu Network Setting	5-10

Capítulo 6. Operação de Rede Remota 6-1

Visão Geral da Interface Remota	6-1
Configurando a Operação Remota	6-4
Utilizando as Configurações de Endereço DHCP	6-5
Ativando e Desativando Senhas	6-6
Definindo as Conexões Máximas	6-7
Recuperando uma Senha Esquecida	6-8

Apêndice A. Manutenção A-1

Limpando o Projetor	A-1
Limpando a Lente.	A-1
Limpando a Caixa.	A-1
Substituindo a Lâmpada do Projetor	A-1
Reconfigurando o Cronômetro da Lâmpada	A-3
Utilizando o Slot de Segurança	A-4

Apêndice B. Resolução de Problemas B-1

Problemas Comuns e Soluções.	B-1
Dicas para a Resolução de Problemas	B-1
Informações de Resolução de Problemas	B-1
LEDs do Projetor	B-3

Apêndice C. Especificações C-1

Apêndice D. Service and Support. D-1

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

Apêndice E. IBM Statement of Limited Warranty Z125-4753-08 04/2004. E-1

Part 1 - General Terms	E-1
Part 2 - Country-unique Terms	E-4
Part 3 - Warranty Information	E-14
Types of Warranty Service.	E-14

Apêndice 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 guidelines

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

Service

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

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

Power cords and power adapters

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

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

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

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

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

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

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

Extension cords and related devices

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

Plugs and outlets

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

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

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

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

Connect and disconnect the equipment from the electrical outlet carefully

Batteries

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

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

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

Batteries can degrade when they are left unused for long periods of time. For some rechargeable batteries (particularly Lithium Ion batteries), leaving a battery unused in a discharged state could increase the risk of a battery short circuit, which could

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

Heat and product ventilation

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

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

CD and DVD drive safety

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

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

Registering your option

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

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

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

Capítulo 1. Descrição do Produto

O PROJETOR IBM C400 projeta uma imagem com brilho, de qualidade que permite fazer apresentações profissionais. Por ser reduzido e compacto no tamanho, o C400 é uma grande solução departamental e permite que você o mova facilmente da sala da placa para a sala de conferência ou para onde está o cliente. Alguns recursos principais desse projetor são:

- Extremamente potente, reduzido e portátil com 3,1 kg (6,8 lbs).
- Imagens nítidas e limpas com uma alta proporção de contraste de 1200:1
- Gerenciamento de ativos: Verifique remotamente o status do PROJETOR C400 através de um navegador da Web (protegido por senha), através de uma conexão RJ-45 (duração da lâmpada e status técnico) ou faça com que o projetor envie um e-mail pró-ativo para o administrador do projetor.
- Boa reprodução de imagens de alta qualidade do PC e outras fontes de mídia (por exemplo: DVD Player).

Lista de Verificação da Embalagem

Além do guia do usuário, o pacote de opcionais contém o seguinte:

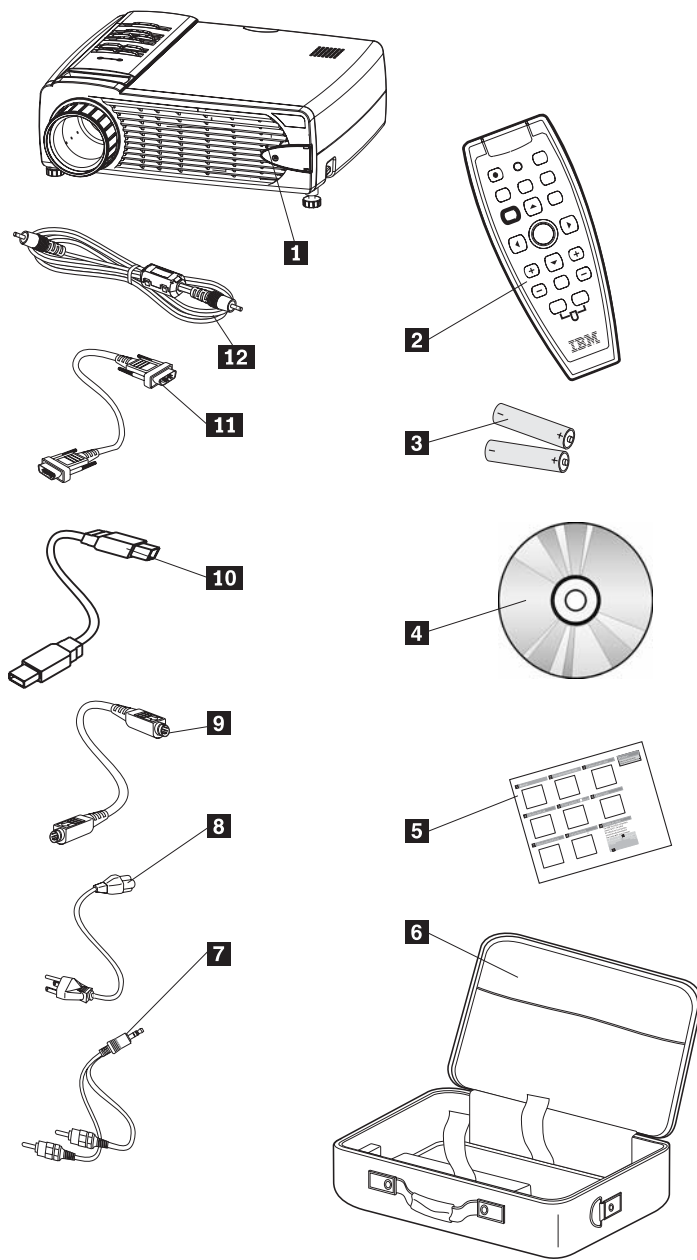


Figura 1-1. Acessórios Padrão

- 1** Projetor
- 2** Controle remoto
- 3** Baterias
- 4** CD do Guia do Usuário (e instalação)
- 5** Guia de inicialização rápida para vários idiomas
- 6** Estojo de transporte
- 7** Cabo de áudio (Mini Tomada - RCA)
- 8** Cabo de alimentação
- 9** Cabo de vídeo (S-vídeo)
- 10** Cabo USB (USB-Mini USB)

- 11** Cabo do computador (DVI-I)
- 12** Cabo de vídeo (RCA- RCA)

Se algum dos itens relacionados anteriormente estiver faltando ou estiver danificado, entre em contato com o local de compra.

Nota: Certifique-se de guardar o comprovante de compra; ele será solicitado para o recebimento do serviço de garantia.

Para obter informações sobre acessórios opcionais para o projetor, vá para <http://www.ibm.com>.

Importante:

- Evite utilizar o projetor em ambientes sujos
- Deixe o cabo de alimentação conectado (2 a 5 minutos) até o projetor retornar à temperatura ambiente antes de colocá-lo dentro do estojo. A colocação do projetor no estojo logo após desligá-lo pode fazer com que ele superaqueça e isso encurtará a vida da lâmpada.
- Para evitar danos na lente, certifique-se de colocar a capa da lente e de colocar o projetor no estojo com a lente virada para cima.

Recursos do Projetor

As figuras abaixo mostram as diferentes visualizações e recursos do projetor.

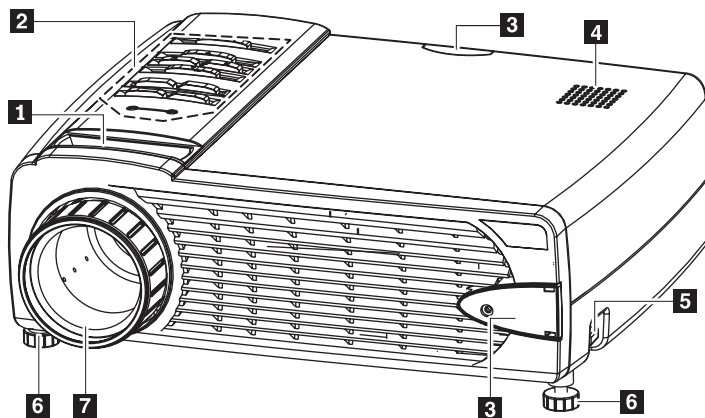


Figura 1-2. Vista Frontal do Projetor

- 1** Zoom
- 2** Botões OSD (On-Screen Display) e LEDs (Light-emitting diodes)
- 3** Receptor de controle remoto (IR)
- 4** Alto-falante
- 5** Botão de ajuste da base de elevação
- 6** Base de elevação
- 7** Anel de foco

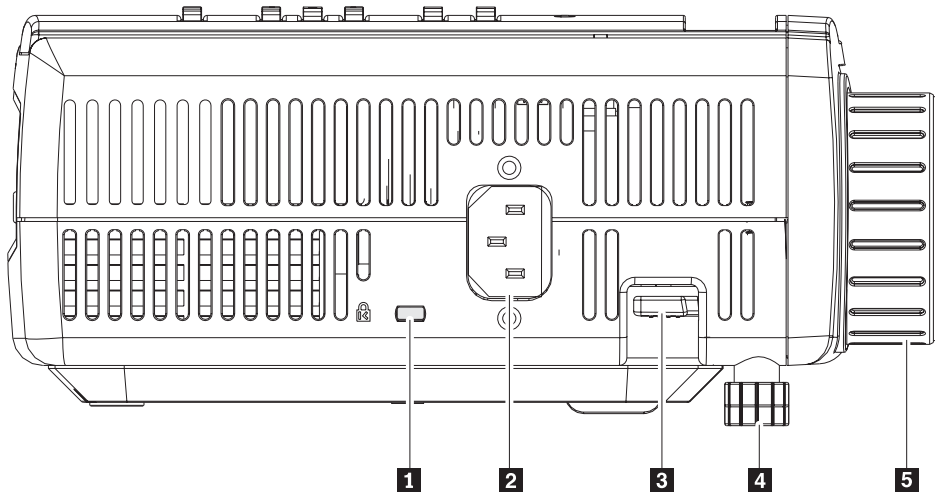


Figura 1-3. Vista Lateral do Projetor

- 1** Slot de trava de segurança
- 2** Soquete de energia AC
- 3** Botão de ajuste da base de elevação
- 4** Base de elevação
- 5** Anel de foco

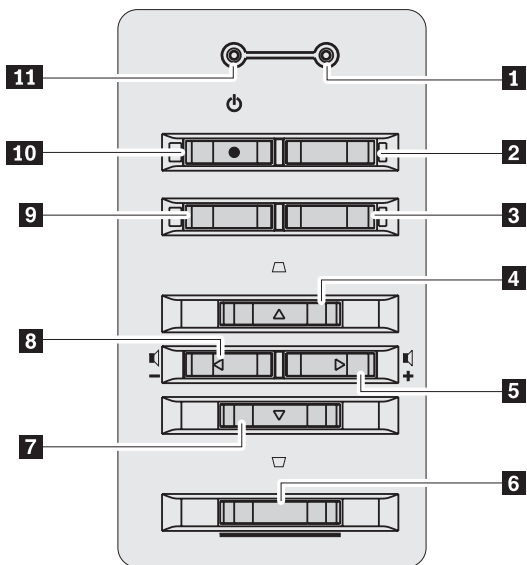


Figura 1-4. Botões OSD e LEDs

- 1** LED Pronto
- 2** Botão de origem
- 3** Botão Enter
- 4** Botão do cursor Keystone/Up
- 5** Botão do cursor Volume/right
- 6** Botão Menu

- 7** Botão do cursor Keystone/Down
- 8** Botão do cursor Volume/left
- 9** Botão Auto
- 10** Botão Power
- 11** LED de energia

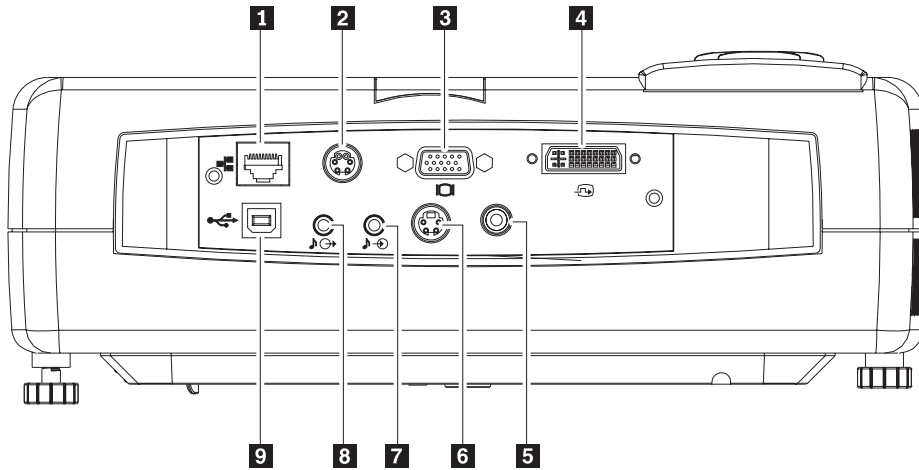


Figura 1-5. Vista Posterior do Projetor

1 Rede de Área Local RJ-45

2 RS-232

Nota: Esta é uma porta de serviço e não se destina a uso pessoal.

e **3** Monitor externo

4 DVI-I

5 Vídeo composto

6 S-vídeo

Nota: Se seu equipamento de vídeo tiver as tomadas S-vídeo e RCA (vídeo composto), conecte-se ao conector S-vídeo para obter uma qualidade de sinal ótima.

7 Audio-in

8 Audio-out

9 USB

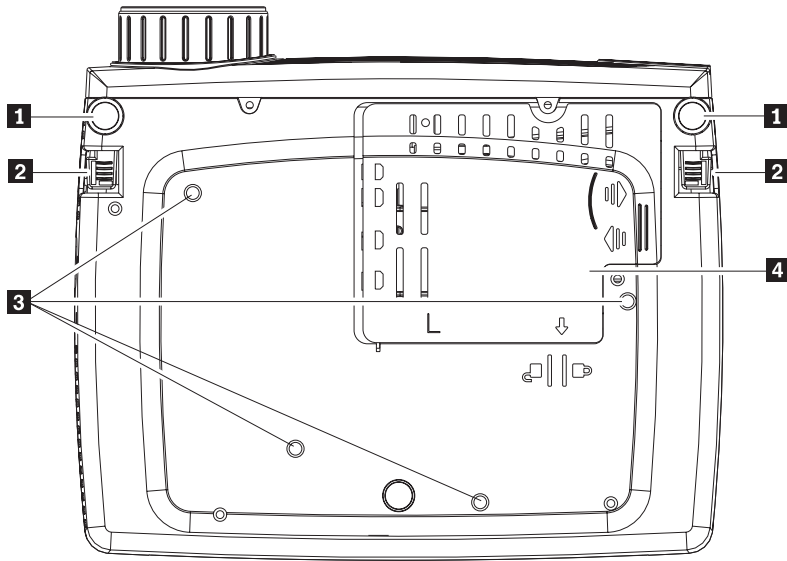


Figura 1-6. Visualização Inferior do Projetor

- 1** Bases de elevação frontal
- 2** Botões de ajuste da base de elevação
- 3** Falhas de montagem do suporte do teto
- 4** Tampa da lâmpada de projeção

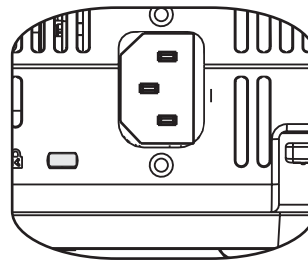
Capítulo 2. Instalando o Projetor

Este capítulo fornece informações sobre como posicionar o projetor, conectar a origem de um computador e exibir e ajustar uma imagem.

Iniciando o Projetor

Para iniciar o projetor, faça o seguinte:

1. Conecte o cabo de alimentação ao projetor, conforme mostrado a seguir. Conecte a outra extremidade do cabo a uma tomada. Os LEDs de Energia e Lâmpada pronta são ligados.



2. Remova a tampa da lente.
3. Conecte os dispositivos de entrada.
4. Ligue os dispositivos de entrada conectados.
5. Certifique-se de que o LED de Energia esteja na cor âmbar (não piscando) e, em seguida, pressione o botão **Power** para ligar o projetor.

A janela de exibição do projetor é aberta e o projetor detecta os dispositivos conectados. Se você conectou o projetor a um computador IBM, pressione Fn+F7 no computador para alternar a saída de vídeo para o projetor. Se você conectou o projetor a um computador não-IBM, consulte a documentação que veio com o computador para obter informações sobre como alterar a saída de vídeo.

Atenção: Não olhe diretamente nas lentes de projeção quando a lâmpada estiver acesa. A luz brilhante pode prejudicar seus olhos.

6. Se você tiver conectado mais de um dispositivo de entrada ao projetor, alterne o botão **Source** para alterar os dispositivos. (DVD e HDTV são suportados através do conector de cabo DVI-I.)
7. Para obter informações sobre como desligar o projetor, consulte “Desligando o Projetor”.

Atenção: Antes de mover o projetor, certifique-se de desligá-lo normalmente e de desconectá-lo da fonte de alimentação principal. Consulte “Desligando o Projetor” para obter informações adicionais sobre como desligar o projetor normalmente.

Desligando o Projetor

Para desligar o projetor, faça o seguinte:

1. Pressione o botão **Power**.

O projetor se prepara para o encerramento e a mensagem Wait a moment é exibida, conforme mostrado abaixo. O projetor é desligado automaticamente

dentro de 5 segundos.



Nota: Essa operação pode ser cancelada pressionando-se um botão diferente de **Power**. Pressionar o botão **Power** novamente desligará a energia.

Nota: Deixe o cabo de alimentação conectado por pelo menos 2 a 5 minutos até o projetor retornar à temperatura ambiente antes de colocá-lo dentro do estojo. Colocar o projetor no estojo logo após desligar a energia poderá fazer com que o projetor superaqueça.

2. Pressione o botão **Power** quando a mensagem Power Off?/Press Power again for exibida, conforme mostrado abaixo.



O projetor é desligado.

Posicionando o Projetor

Para determinar onde posicionar o projetor, considere o tamanho e a forma da tela, a localização das tomadas de força e a distância entre o projetor e o restante do equipamento. A seguir estão algumas pautas gerais:

- Posicione o projetor sobre uma superfície plana em ângulo reto à tela. O projetor deve estar pelo menos a 1,5 m (4,9 pés) da tela de projeção.
- Posicione o projetor a uma distância de 2,7 m (9 pés) da fonte de alimentação e 1,8 m (6 pés) do dispositivo de vídeo (a menos que compre cabos de extensão). Para assegurar acesso adequado aos cabos, não coloque o projetor a uma distância de 0,15 m (6 pol.) de uma parede ou outro objeto.
- Posicione o projetor na distância desejada da tela. A distância da lente do projetor à tela, a definição do zoom e o formato do vídeo determinam o tamanho da imagem projetada.

Atenção: Certifique-se de que o fluxo de ar do projetor seja suficiente e não esteja bloqueado ou utilizando ar recirculado. Certifique-se também de que o projetor não esteja em um espaço apertado.

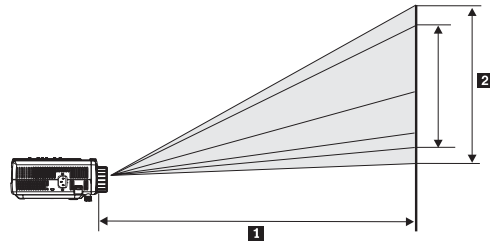


Figura 2-1. Altura da imagem

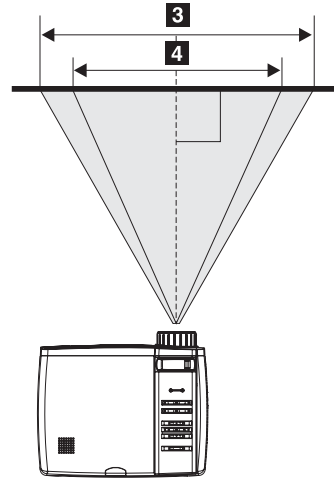


Figura 2-2. Largura da imagem

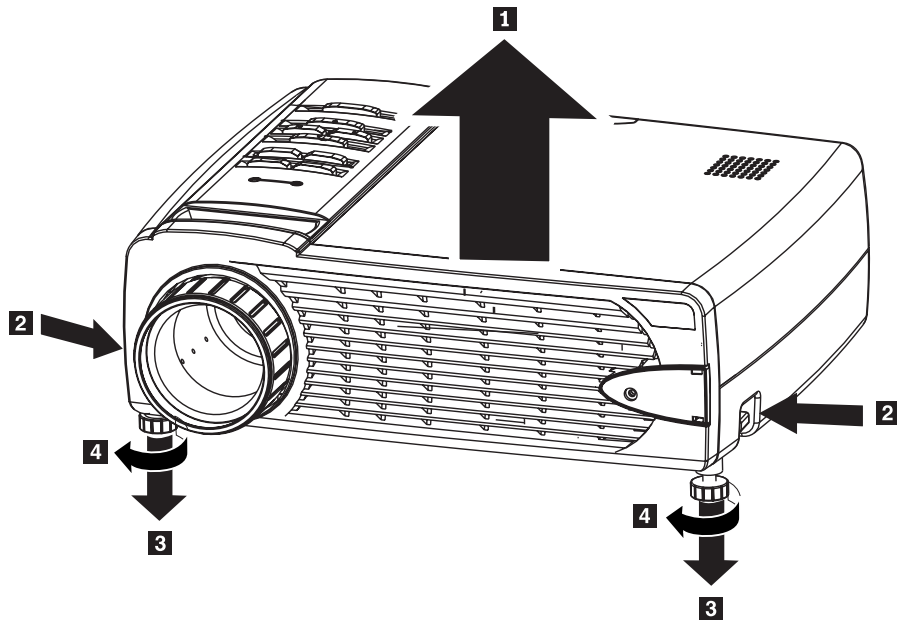
Tabela 2-1.

Distância de projeção 1 (m/pés)	Largura da Imagem 2 (m/pol.)	Tamanho da imagem diagonal 3 (m/pol.)	Altura da imagem 4 (m/pol.)
1,5 m/4,92 pés	1,1 m/42,5 pol.	0,9 m/33,8 pol.	0,7 m/25,6 pol.
2,0 m/6,56 pés	1,4 m/56,7 pol.	1,2 m/45,3 pol.	0,9 m/34,0 pol.
2,4 m/7,87 pés	1,7 m/67,7 pol.	1,4 m/53,9 pol.	1,0 m/40,5 pol.
2,8 m/9,18 pés	2,0 m/79,1 pol.	1,6 m/62,9 pol.	1,2 m/47,4 pol.
3,2 m/10,5 pés	2,3 m/90,5 pol.	1,8 m/72,4 pol.	1,4 m/54,3 pol.
3,6 m/11,81 pés	2,6 m/101,9 pol.	2,1 m/81,5 pol.	1,5 m/61,0 pol.
4,0 m/13,12 pés	2,9 m/113,4 pol.	2,3 m/90,6 pol.	1,7 m/68,1 pol.
4,4 m/14,43 pés	3,2 m/124,8 pol.	2,5 m/99,6 pol.	1,9 m/74,8 pol.
4,8 m/15,74 pés	3,5 m/135,8 pol.	2,8 m/108,7 pol.	2,1 m/81,6 pol.
5,2 m/17,06 pés	3,7 m/147,2 pol.	3,0 m/117,7 pol.	2,2 m/88,2 pol.
5,6 m/18,37 pés	4,0 m/158,7 pol.	3,2 m/126,8 pol.	2,4 m/95,3 pol.
5,0 m/19,68 pés	4,3 m/170,1 pol.	3,5 m/135,8 pol.	2,6 m/101,9 pol.
10,0 m/32,8 pés	7,2 m/283,5 pol.	5,8 m/226,8 pol.	4,3 m/170,1 pol.

Ajustando o Nível e a Altura do Projetor

Para ajustar o nível e a altura do projetor, complete o seguinte procedimento:

1. Para elevar a altura do projetor, levante o projetor **1** e pressione os botões de ajuste de altura **2**. A base de elevação **3** desce.
2. Para fazer ajustes menores na altura, gire a base de elevação **4** conforme mostrado abaixo.
3. Para diminuir o nível do projetor, pressione o botão de ajuste de altura e pressione para baixo a parte superior do projetor.



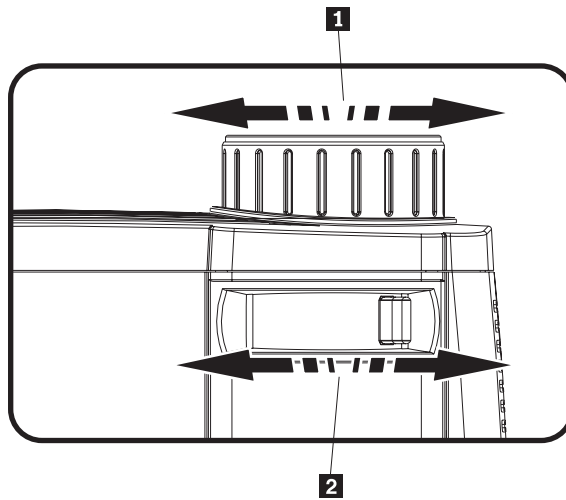
Nota:

- A mesa ou o suporte do projetor deve estar nivelado e firme.
- Posicione o projetor para que fique perpendicular à tela.
- Certifique-se de que os cabos *não* estejam em um lugar em que possam bater sobre o projetor.

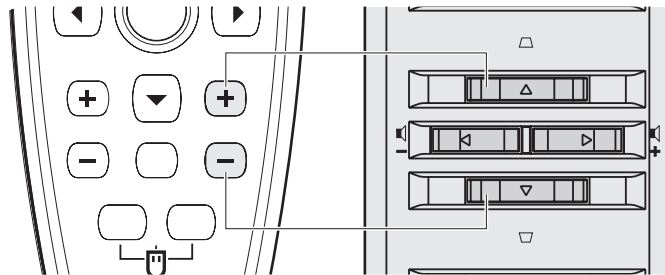
Ajustando a Imagem

Para ajustar o zoom, o foco e a base da imagem, faça o seguinte:

1. Gire os anéis no projetor para ajustar o foco **1** e o zoom **2**, conforme mostrado abaixo.



2. Utilize os botões **Keystone** no projetor ou o remoto para corrigir o efeito de imagem trapézio (parte superior ou inferior mais ampla). Os botões Keystone no remoto e no projetor são mostrados abaixo.



O controle keystone aparece no OSD (On Screen Display), conforme mostrado.



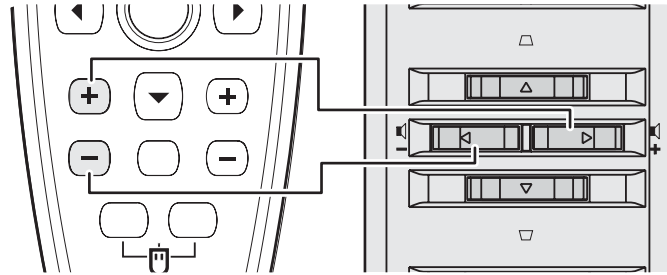
Ajustando o Volume

Para ajustar o volume, faça o seguinte:

1. Pressione os botões **Volume +/-** no projetor ou no controle remoto. O controle do volume aparece no OSD.



2. Utilize os botões **Volume +/-** mostrados abaixo para ajustar o nível.



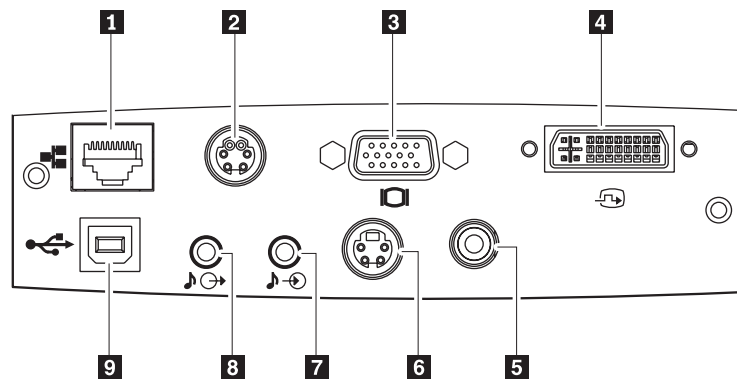
3. Pressione o botão **Mute** (apenas no controle remoto) para desligar o volume.
4. Pressione qualquer um dos botões **Volume +/-** no projetor ou no controle remoto para desligar Mute.

Capítulo 3. Conectando Dispositivos ao Projetor

Este capítulo fornece informações sobre como conectar dispositivos ao projetor C400.

Conectando Dispositivos

Os computadores e dispositivos de vídeo podem ser conectados ao projetor ao mesmo tempo. Consulte a documentação que vem com o dispositivo de conexão para verificar se o dispositivo tem o conector de saída apropriado.



1 Rede de Área Local RJ-45

2 RS-232

Nota: Esta é uma porta de serviço e não se destina a uso pessoal.

3 Monitor externo

4 DVI-I

5 Vídeo composto

6 S-vídeo

Nota: Se seu equipamento de vídeo tiver as tomadas S-vídeo e RCA (vídeo composto), conecte-se ao conector S-vídeo para obter uma qualidade de sinal ótima.

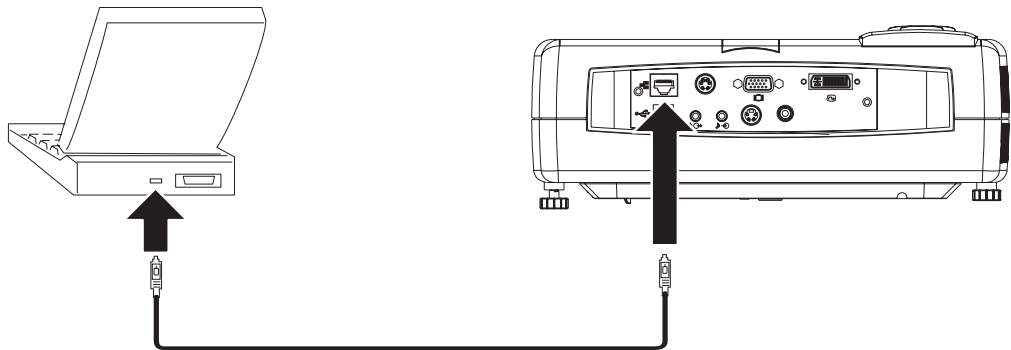
7 Audio-in

8 Audio-out

9 USB

Conectando a um Dispositivo USB

Para controlar o mouse do computador utilizando o controle remoto do projetor, conecte o projetor ao computador com um cabo USB conforme mostrado abaixo.



Nota: A função do mouse USB é suportada apenas com o Windows 2000 e Windows XP.

Conectando a um Monitor de Computador

Se você estiver utilizando um computador desktop e quiser ver a imagem na tela do computador e também na tela de projeção, conecte o cabo do monitor ao conector Monitor out no projetor.

Capítulo 4. Utilizando os Recursos do Projetor

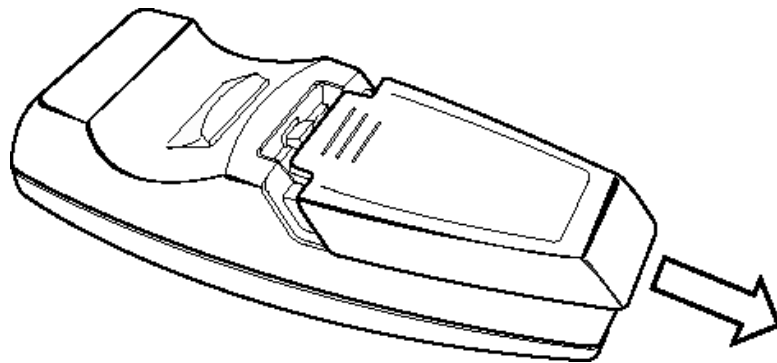
Este capítulo fornece informações sobre como instalar as baterias do controle remoto e sobre como utilizar o controle remoto, áudio, botões de keypad e outros recursos do projetor.

Antes de Começar

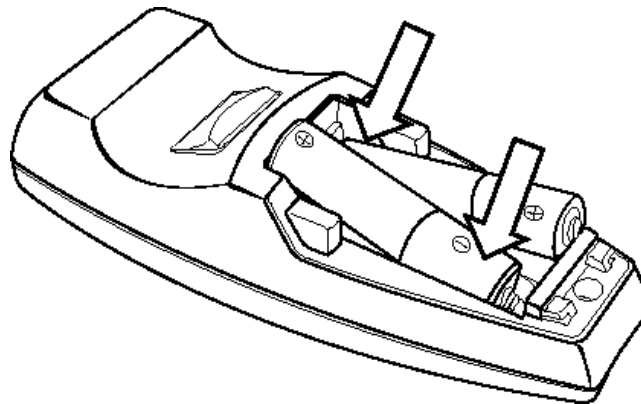
antes de poder utilizar o controle remoto, é necessário instalar as baterias AAA que vêm com este projetor. Para instalar as baterias, faça o seguinte:

Nota:

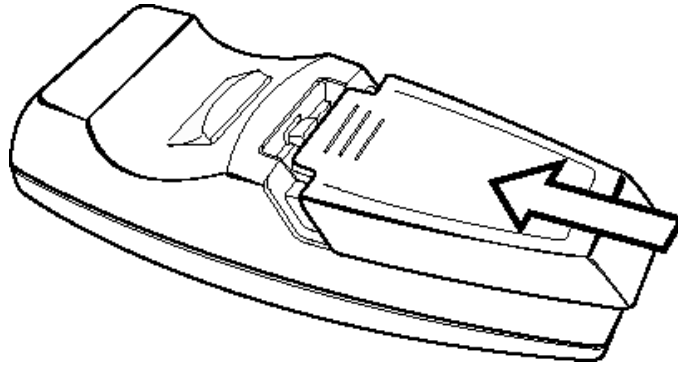
- Utilize apenas baterias alcalinas AAA.
 - Descarte as baterias usadas de acordo com as leis e os regulamentos governamentais locais.
 - Remova as baterias quando não estiver utilizando o controle remoto por períodos prolongados.
1. Remova a tampa do compartimento da bateria do controle remoto conforme mostrado.



2. Insira as baterias fornecidas no compartimento de bateria do controle remoto, alinhando a polaridade (+/-) das baterias com os ícones de polaridade no compartimento, conforme mostrado.



3. Recoloque a tampa, conforme mostrado.



Utilizando o Controle Remoto

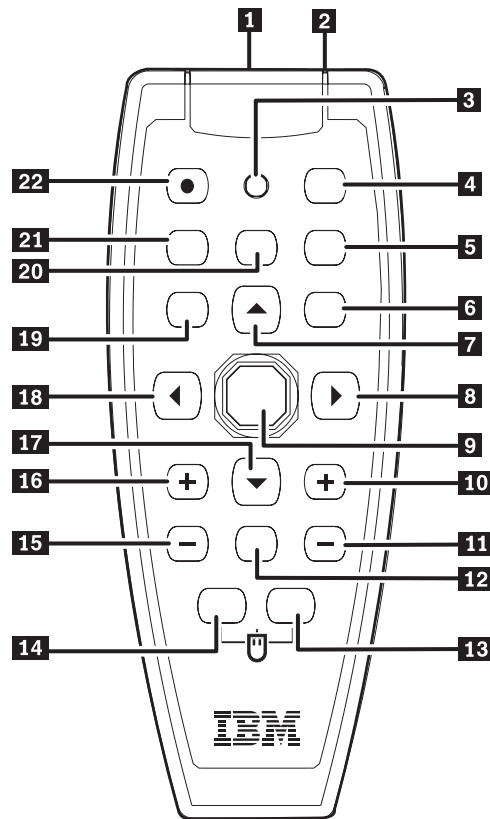
A figura a seguir fornece uma ilustração do controle remoto.



CUIDADO:

Para reduzir o risco de danos aos olhos, não olhe diretamente para a luz laser do controle remoto e não aponte a luz laser para os olhos de qualquer outra pessoa. O controle remoto é equipado com um laser Classe II que emite radiação.

1 Laser



- 2** Transmissor IR
- 3** LED de Status
- 4** Auto
- 5** Blank
- 6** Enter
- 7** Cursor para cima
- 8** Cursor para a direita
- 9** Apoio do cursor
- 10** Distorção de imagem para cima
- 11** Distorção de imagem para baixo
- 12** Mute
- 13** Mouse para a direita
- 14** Mouse para a esquerda
- 15** Abaixar volume
- 16** Subir volume
- 17** Cursor para baixo
- 18** Cursor para esquerda
- 19** Menu
- 20** Freeze
- 21** Source
- 22** Power

Intervalo de Operação

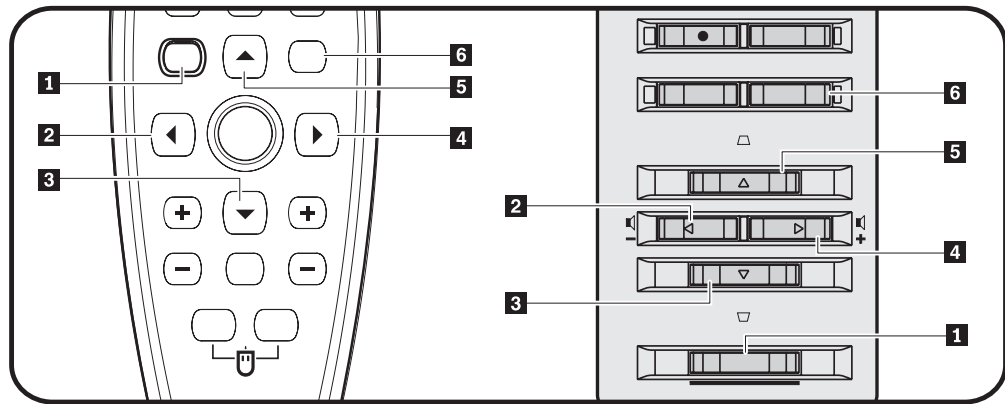
Esse controle remoto utiliza transmissão por infravermelho para controlar o projetor. Não é necessário apontar o controle remoto diretamente para o projetor. O controle remoto funcionará dentro de um raio máximo de 10m (32,8 pés) e 30° acima ou abaixo do nível do projetor. Se o projetor não responder ao controle remoto, consulte o Apêndice B, "Resolução de Problemas", na página B-1.

Nota: O remoto também funcionará quando apontado para a imagem projetada.

Botões do Projetor e do Controle Remoto

O projetor pode ser operado utilizando-se o controle remoto ou os botões na parte superior do projetor. Todas as operações podem ser executadas com o controle remoto. A figura a seguir mostra os botões correspondentes no controle remoto e

no projetor para operação no menu OSD.



- 1** Menu
- 2** Botão Left
- 3** Botão Down
- 4** Botão Right
- 5** Botão Up
- 6** Botão Enter

Capítulo 5. Controles de Menu do On-Screen Display

Esse projetor tem um OSD (On-Screen Display) que permite fazer ajustes de imagem e alterações em várias definições.

Nota: Você deve ter uma exibição na tela para acessar o OSD.

Navegando no OSD

Você pode utilizar o controle remoto ou os botões na parte superior do projetor para navegar e fazer alterações no OSD. As seguintes seções mostram os menus no OSD.

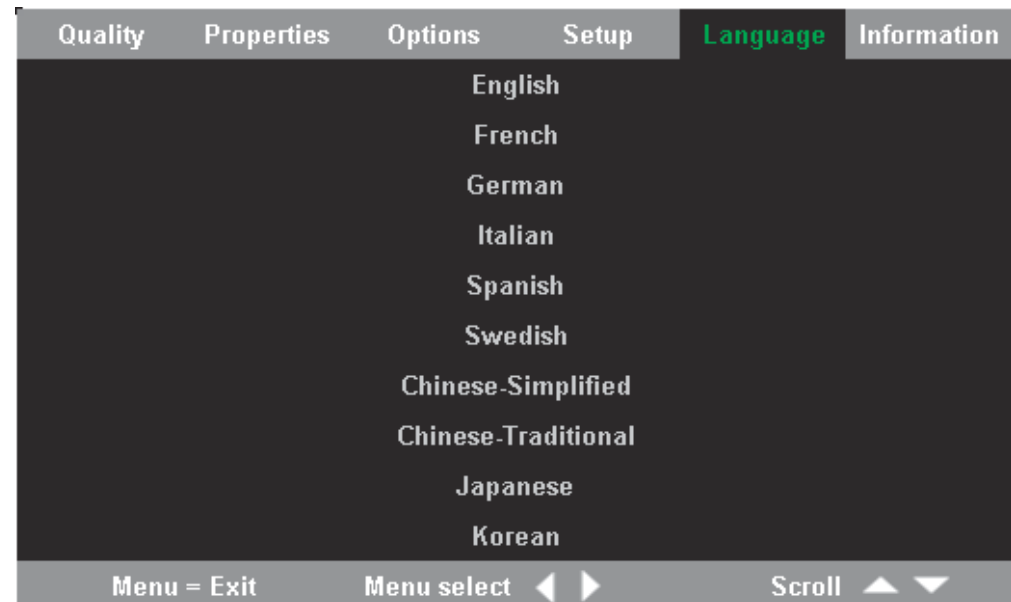
Language

Para definir o idioma OSD, faça o seguinte:

Nota: O idioma OSD padrão é o inglês.

1. Pressione o botão **Menu**. O menu Language é exibido.
2. Pressione os botões para a esquerda/para a direita do cursor até que o Language seja destacado.
3. Pressione os botões para cima/para baixo do cursor até que o idioma desejado seja destacado.
4. Pressione **Enter** para selecionar o idioma.
5. Pressione o botão **Menu** duas vezes para fechar o OSD.

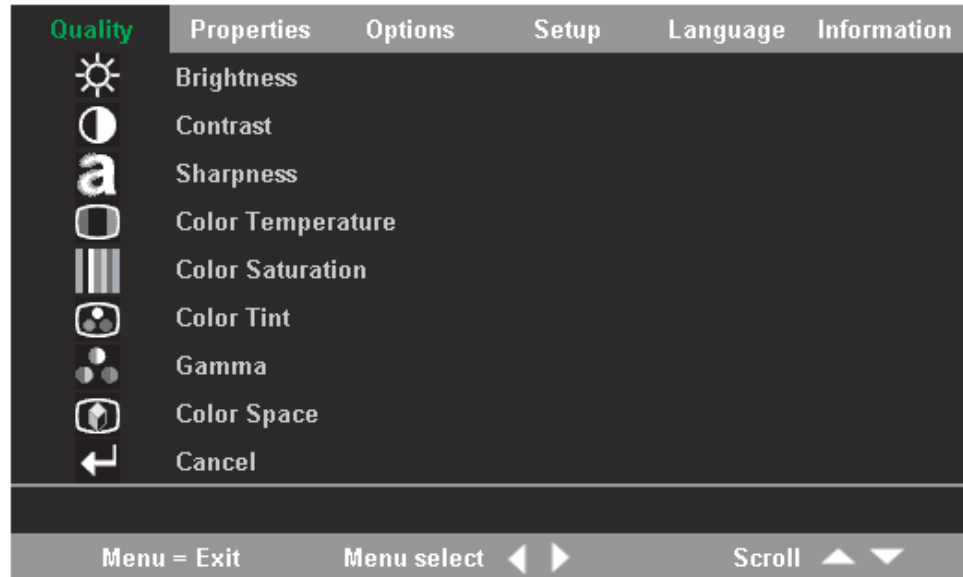
A imagem a seguir mostra o menu Language. O idioma padrão é o inglês.



Menu Quality

O menu Quality pode ser localizado através do menu principal. Para acessar o menu Quality, siga estas etapas:

1. Pressione o botão **Menu** para abrir o menu principal.
2. Pressione o botão para a esquerda/para a direita do cursor para ir para o menu Quality.
3. Pressione o botão do cursor para cima/para baixo para mover-se para cima e para baixo no menu Quality. O menu Quality é mostrado abaixo.



A tabela a seguir mostra as opções que você verá no menu Quality e o padrão.

Item	Descrição	Padrão
Brightness	Pressione o botão do cursor para a esquerda/para a direita para ajustar o brilho. Intervalo: 0 a 100	50
Contrast	Pressione o botão do cursor para a esquerda/para a direita para ajustar o contraste. Intervalo: 0 a 100	50
Sharpness	Pressione o botão do cursor para a esquerda/para a direita para ajustar a nitidez do vídeo. Intervalo: 1 a 5	3
Color Temperature	Pressione o botão do cursor para a esquerda/para a direita para ajustar a tonalidade/matiz do vídeo. Intervalo: Fria/Normal/Quente	Normal
Color Saturation	Pressione o botão do cursor para a esquerda/para a direita para ajustar a saturação do vídeo. Intervalo: 0 a 100	50

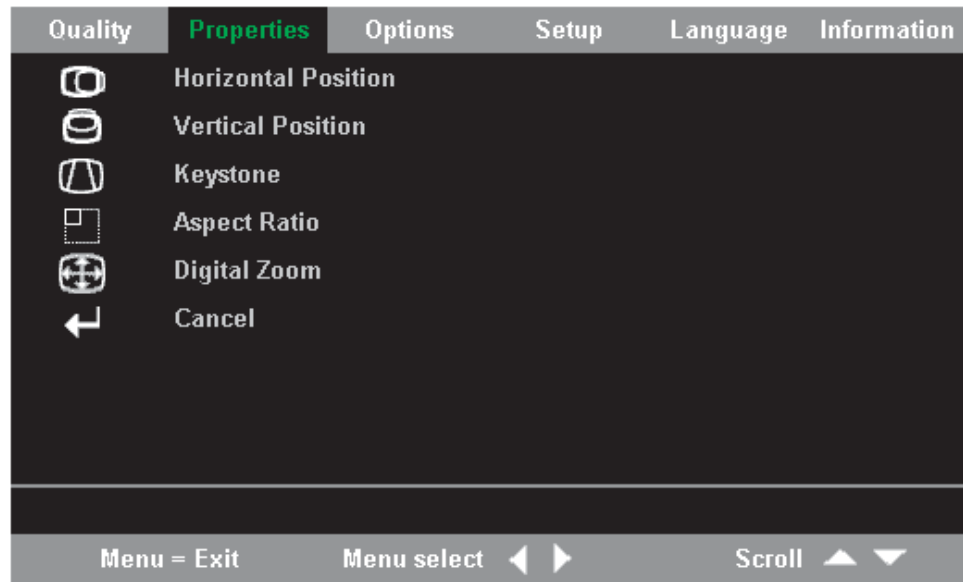
Item	Descrição	Padrão
Color Tint	Pressione o botão do cursor para a esquerda/para a direita para ajustar a tonalidade/matiz do vídeo. Intervalo: 0 a 100	50
Gamma	Pressione o botão do cursor para a esquerda/para a direita para ajustar a correção de gama do vídeo. Entrada/Gamma/Brilho: PC/2.2/Alto, MAC/1.8/Alto, Vídeo/2.4/Baixo, Gráfico/2.2/Baixo, B&W/2.4/Alto	PC
Color Space	Pressione o botão do cursor para a esquerda/para a direita para ajustar o espaço da cor. Intervalo: Auto/RGB/YpbPr/YCbCr	Automático
Cancel	Pressione o botão Enter para redefinir Brightness, Contrast, Sharpness, Color Temperature, Color Saturation, Color Tint, Gamma e Color Space para os valores padrão.	Não aplicável

Menu Properties

O menu Properties pode ser localizado através do menu principal. Para acessar o menu Properties, siga estas etapas:

1. Pressione o botão **Menu** para abrir o menu principal.
2. Pressione o botão para a esquerda/para a direita do cursor para ir para o menu Properties.

3. Pressione o botão para cima/para baixo do cursor para mover-se para cima e para baixo no menu Properties. O menu Properties é mostrado abaixo.



A tabela a seguir mostra as opções que você verá no menu Properties e o padrão.

Item	Descrição	Padrão
Horizontal position	Pressione o botão do cursor para a esquerda/para a direita para mover a imagem para a esquerda ou para a direita. Intervalo: 0 a 100	50
Vertical position	Pressione o botão do cursor para a esquerda/para a direita para mover a imagem para cima ou para baixo. Intervalo: 0 a 100	50
Keystone	Pressione o botão do cursor para a esquerda/para a direita para corrigir a imagem projetada. Intervalo: -50 a 50	0
Aspect Ratio	Pressione o botão para a esquerda/para a direita do cursor para alternar entre o formato padrão 4:3 e o formato HDTV (High Definition TV) 16:9. Intervalo: 4.3/16.9	4:3
Digital Zoom	Pressione o botão Enter para aumentar ou reduzir o tamanho da imagem.	Não aplicável
Cancel	Pressione o botão Enter para redefinir Aspect Ratio e Digital Zoom para os valores padrão.	Não aplicável

Menu Options

Para acessar o menu Options, siga as etapas abaixo:

1. Pressione o botão Menu para abrir o menu principal.
2. Pressione o botão para a esquerda/para a direita do cursor para ir para o menu Options.
3. Pressione o botão para cima/para baixo do cursor para mover-se para cima e para baixo dentro do menu Options. O menu Options é mostrado abaixo.



A tabela a seguir mostra as opções que você verá no menu Options e o padrão.

Item	Descrição	Padrão
Blank Screen	Pressione o botão do cursor para a esquerda/para a direita para selecionar uma cor de segundo plano para a tela em branco. Intervalo: Preto/Vermelho/Verde/Azul/Branco	Azul
Auto Source	Pressione o botão do cursor para a esquerda/para a direita para ativar ou desativar a detecção automática de origem. Intervalo: Ativado/Desativado	Ativado
Auto Power Off	Pressione o botão para a esquerda/para a direita do cursor para desativar o desligamento automático da lâmpada após 10 minutos de inatividade. Intervalo: Ativado/Desativado	Desativado

Item	Descrição	Padrão
Volume	Pressione o botão para a esquerda do cursor para ajustar o volume do áudio. Intervalo: 0 - 8	4
Menu Position	Pressione o botão do cursor para a esquerda/para a direita para posicionar o OSD na tela. Intervalo: Esquerda/Direita/Centro/Para Baixo/Para Cima	Centro
Menu Display	Pressione o botão do cursor para a esquerda/para a direita para determinar o retardo no tempo limite do OSD. Intervalo: 10-30 segundos	15 segundos
Translucent Menu	Pressione o botão para cima/para baixo do cursor para definir a translucidez da tela do menu. Intervalo: Ativado/Desativado	Desativado
Cancel	Redefine Auto Power-Off, Volume, Menu Position, Menu Display e Translucent Menu para os valores padrão.	Não aplicável

Menu Setup

Para acessar o menu Setup, siga estas etapas:

1. Pressione o botão **Menu** para abrir o menu principal.
2. Pressione o cursor para a esquerda/para a direita para mover-se para o menu Setup.
3. Pressione o botão do cursor para cima/para baixo para mover-se para cima e para baixo no menu Setup. O menu Setup com uma única entrada e o menu Setup com uma entrada dupla são mostrados abaixo.

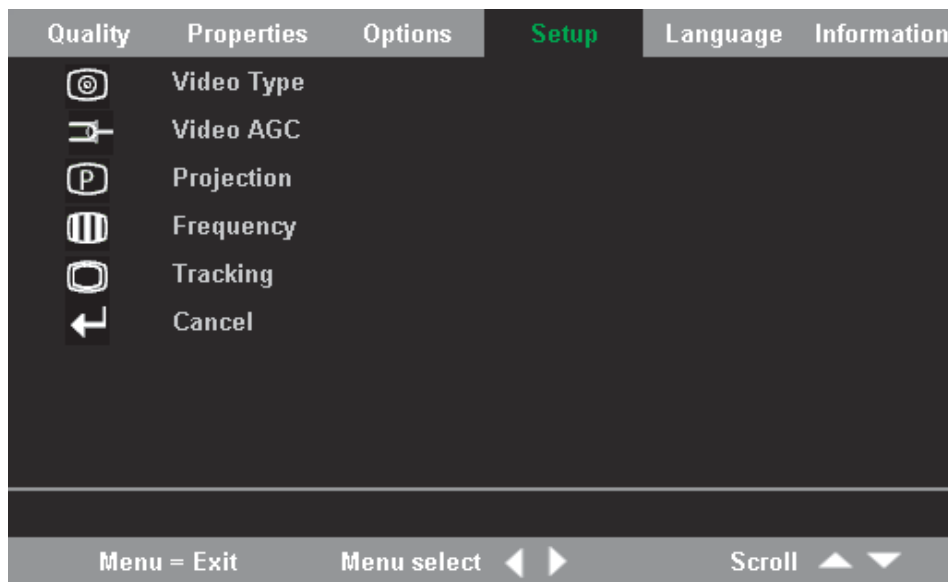


Figura 5-1. Menu Setup com Entrada Única

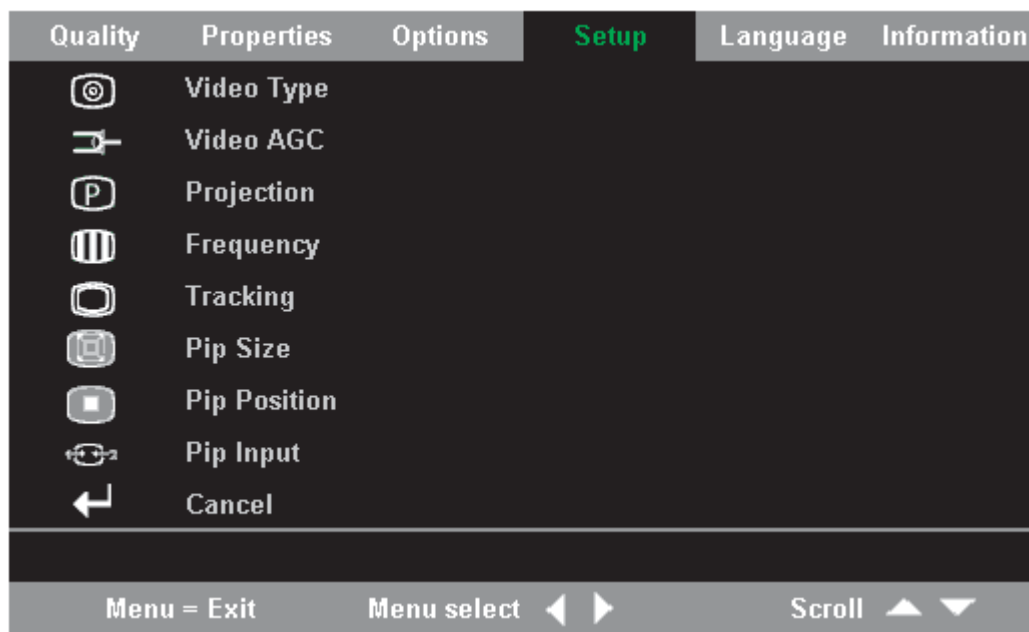


Figura 5-2. Menu Setup com Entrada Dupla

A tabela a seguir mostra as opções que você verá no menu Setup e o padrão.

Item	Descrição	Padrão
Video type	Pressione o botão para a direita/para a esquerda do cursor para selecionar o padrão de Vídeo. Intervalo: Auto/NTSC/PAL/SECAM	Automático

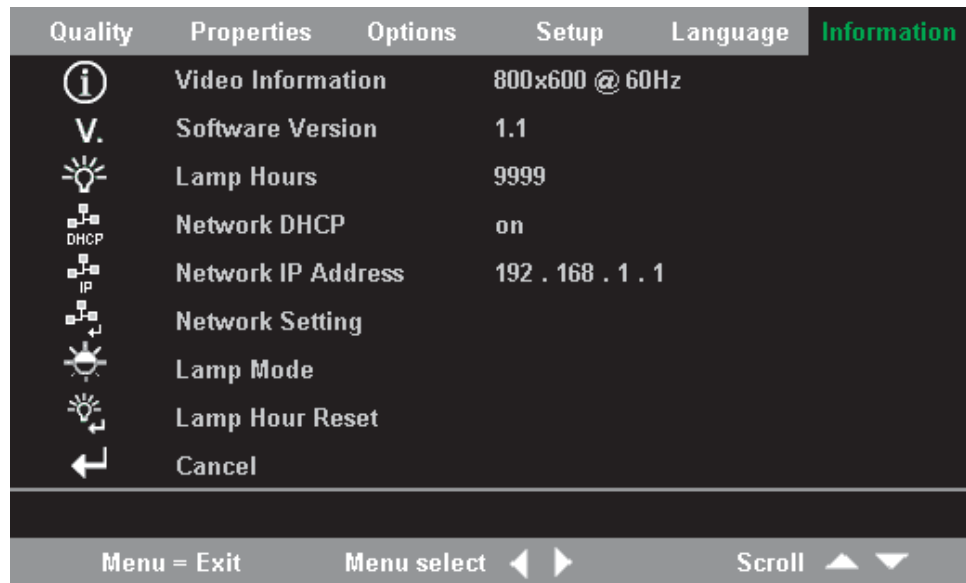
Item	Descrição	Padrão
AGC (Automatic Gain Control) do vídeo	Pressione o botão para a direita/para a esquerda do cursor para ativar ou desativar o AGC para a origem do vídeo. Intervalo: Ativado/Desativado	Ativado
Projection	Pressione o botão para a esquerda/para a direita do cursor para selecionar entre quatro métodos de projeção. Intervalo: Montagem do desktop, montagem da frente da tela/Desktop, montagem da parte de trás da tela/Teto, montagem da frente da tela/Teto, parte de trás da tela	Montagem do desktop, parte frontal da tela
Frequency	Pressione o botão do cursor para a esquerda/para a direita para ajustar o relógio de amostragem do A/D. Intervalo: 0-100	Autodetectado
Tracking	Pressione o botão do cursor para a esquerda/para a direita para ajustar o número de amostragem do A/D. Intervalo: 0-100	Autodetectado
Pip Size	Pressione o botão para a esquerda/para a direita do cursor para ajustar o tamanho da imagem secundária. Nota: Pip Size está disponível apenas quando o projetor está conectado a origens de entrada dupla. Intervalo: Desativado/Pequeno/Médio/Grande	Desativado
Pip Position	Pressione o botão para a esquerda/para a direita do cursor para ajustar a localização da imagem secundária. Nota: Pip Position está disponível apenas quando o projetor está conectado a origens de entrada dupla. Intervalo: Esquerda superior à direita inferior	Esquerda Superior

Item	Descrição	Padrão
Pip Input	Pressione o botão para a esquerda/para a direita do cursor para ajustar a origem da imagem secundária. Nota: Pip Input está disponível apenas quando o projetor está conectado a origens de entrada dupla. Intervalo: Auto/Vídeo/S-vídeo	Automático
Cancel	Reconfigura Video Type, Video AGC e Projection para os valores padrão.	N/D

Menu Information

Para acessar o menu Information, siga estas etapas:

1. Pressione o botão **Menu** para abrir o menu principal.
2. Pressione o botão esquerdo/direito do cursor para mover-se para o menu Information.
3. Pressione o botão do cursor para cima/para baixo para mover-se para cima e para baixo no menu Information. O menu Information é mostrado abaixo.



A tabela a seguir mostra as opções que você verá no menu Information.

Item	Descrição
Video Information	Exibe a resolução e a taxa de atualização do dispositivo de vídeo conectado.
Software Version	Exibe informações sobre a versão do firmware.
Lamp Hours	Exibe informações sobre as horas utilizadas da lâmpada.

Item	Descrição
Network DHCP	Exibe informações de status do Network DHCP.
Network IP Address	Exibe informações do endereço IP.
Network Setting	Exibe o menu Network Setting.
Lamp Mode	Alterna entre os modos de lâmpada Normal e ECO. O modo ECO utiliza menos energia, mas diminui o brilho da lâmpada
Lamp Hour Reset	Redefina este item após substituir a lâmpada. Para obter informações adicionais, consulte "Substituindo a Lâmpada do Projetor" na página A-1
Cancel	Redefine Lamp Mode para a definição padrão.

Menu Network Setting

Para acessar o menu Network Setting, siga as etapas abaixo:

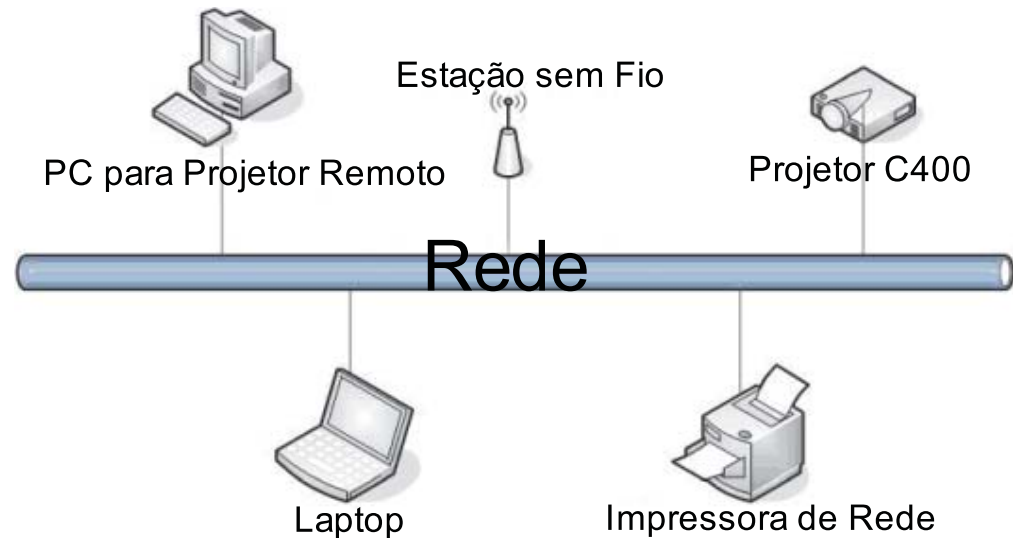
1. Pressione o botão **Menu** para abrir o menu principal.
2. Pressione o botão para a esquerda/para a direita do cursor para mover-se para o menu Information.
3. Pressione o botão para cima/para baixo do cursor para ir para Network Setting no menu Information.
4. Pressione o botão para a esquerda/para a direita do cursor ou o botão Enter para selecionar o menu Network Setting. Um menu Network Setting de exemplo é mostrado abaixo.

Network Setting		
IP Address State	Static	DHCP
IP Address	10. 0. 50. 100	
Subnet Mask	255. 255. 0. 0	
Default Gateway	10. 0. 0. 201	
DNS Server	0. 0. 0. 0	
Apply Settings	←	
Menu = Exit Scroll ▲ ▼ Item Adjust ◀ ▶		

Item	Descrição
IP Address State	<p>Pressione o botão para a esquerda/para a direita do cursor para escolher entre as configurações Static e DHCP. Em Static, o usuário pode digitar IP Address, Subnet Mask, Default Gateway e DNS Server. Em DHCP, o projetor terá IP Address, Subnet Mask, Default Gateway e DNS Server definidos.</p> <p>Nota: A definição padrão é DHCP.</p>
IP Address	<p>Pressione o botão para cima/para baixo do cursor para alterar IP Address.</p> <p>Nota: O endereço IP pode ser alterado apenas quando IP Address State é Static.</p>
Subnet Mask	<p>Pressione o botão para cima/para baixo do cursor para alterar Subnet Mask.</p> <p>Nota: A Subnet Mask pode ser alterada apenas quando IP Address State é Static.</p>
Default Gateway	<p>Pressione o botão para cima/para baixo do cursor para alterar Default Gateway.</p> <p>Nota: Default Gateway pode ser alterado apenas quando IP Address State é Static.</p>
DNS Server	<p>Pressione o botão para cima/para baixo do cursor para alterar o endereço DNS Server.</p> <p>Nota: DNS Server pode ser alterado apenas quando IP Address State é Static.</p>
Apply Settings	<p>Selecione esta opção para salvar e aplicar as configurações.</p>

Capítulo 6. Operação de Rede Remota

Quando conectado a uma LAN (Rede Local) por meio do conector RJ-45, o projetor pode ser controlado remotamente através de um navegador da Web por qualquer um dos clientes (PCs conectados à LAN) na LAN. O projetor também pode ser acessado fora da LAN, desde que um firewall esteja configurado de acordo.

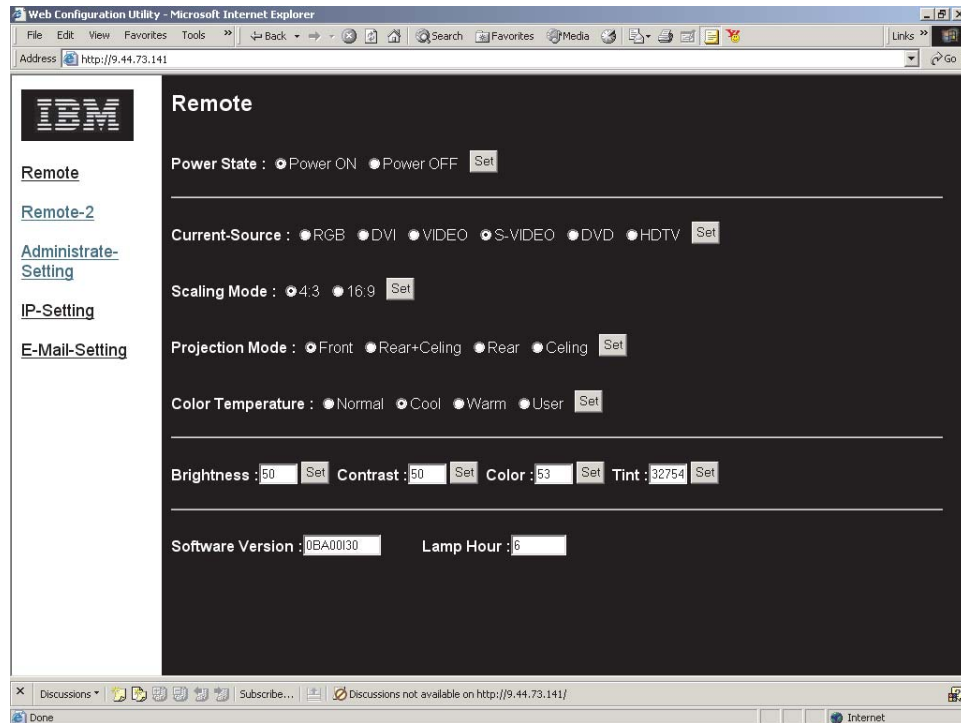


Nota: O padrão de fábrica é definido como DHCP para o projetor. O endereço IP atual pode ser visto no menu Information.

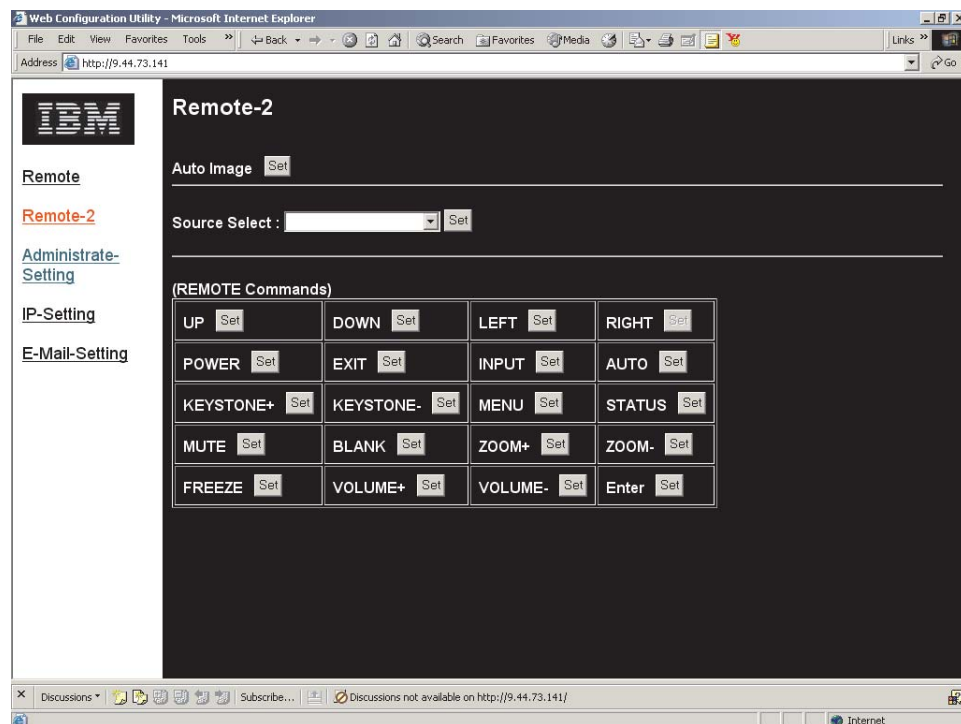
Visão Geral da Interface Remota

A seguir são mostradas as telas principais da interface remota.

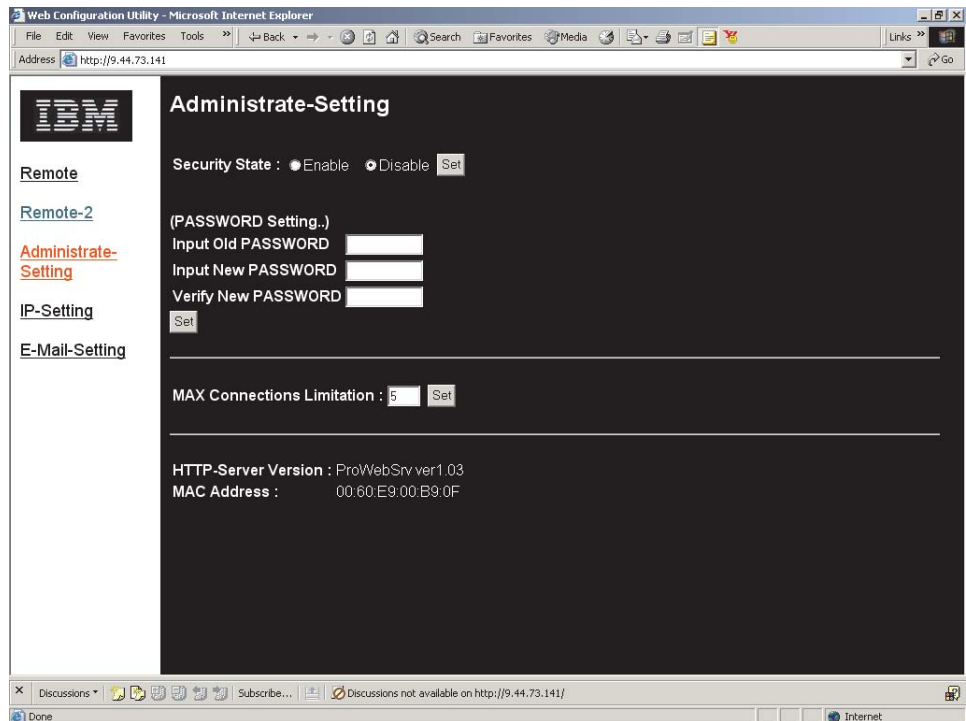
- **Remote:** Esta tela mostra o status atual do projetor.



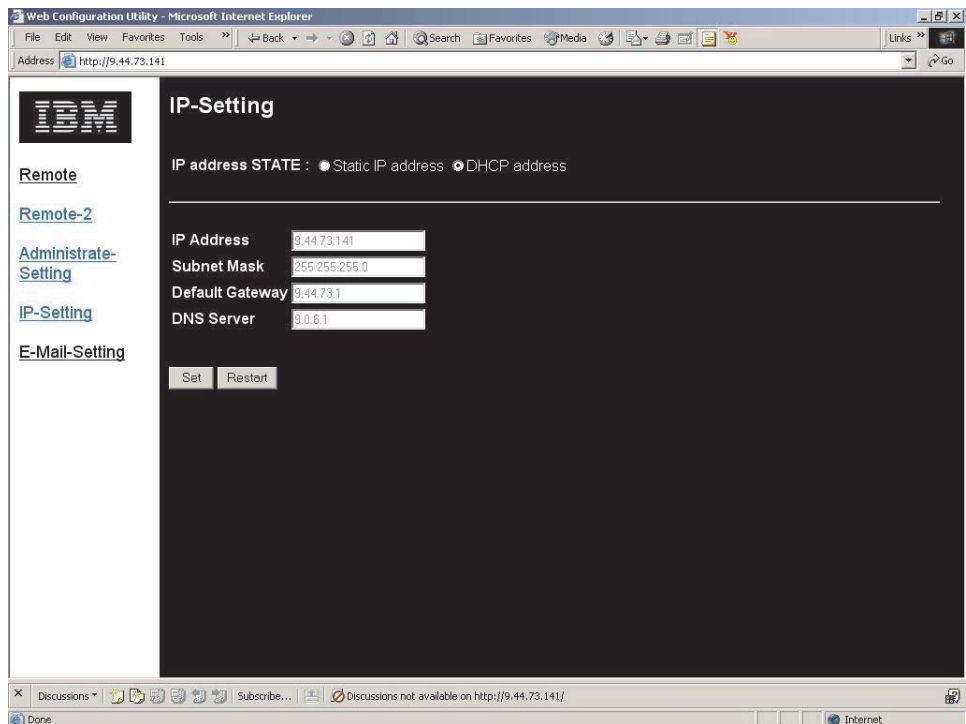
- **Remote-2:** Esta tela é utilizada para controlar o projetor.



- **Administrator Settings:** Esta tela permite que o administrador defina uma senha e limite as conexões ao projetor.



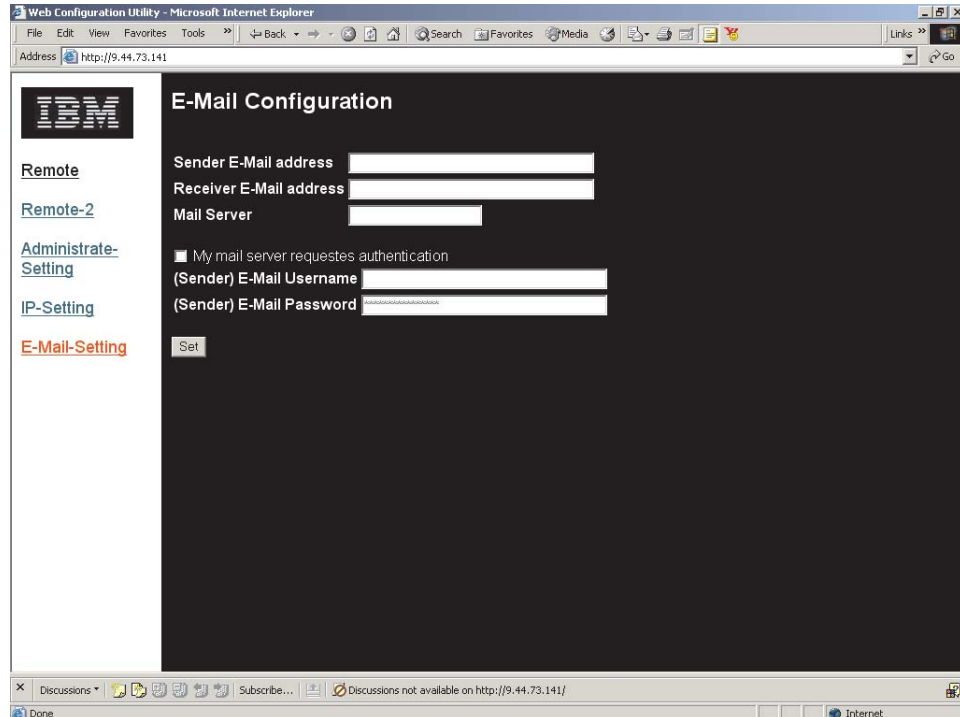
- **IP Settings:** Esta tela permite que o endereço IP seja definido como estático ou DHCP.



- **E-mail settings:** As mensagens de status para o projetor podem ser enviadas por e-mail ao administrador ou qualquer outro endereço.

Alguns servidores exigem um endereço do emissor, caso contrário o e-mail é bloqueado. Então, na maioria dos casos os endereços do Emissor e do Receptor serão iguais.

O projetor automaticamente envia por e-mail as mensagens de status, como o endereço IP e o estado Power para o endereço do Receptor. O projetor não pode receber e-mails.



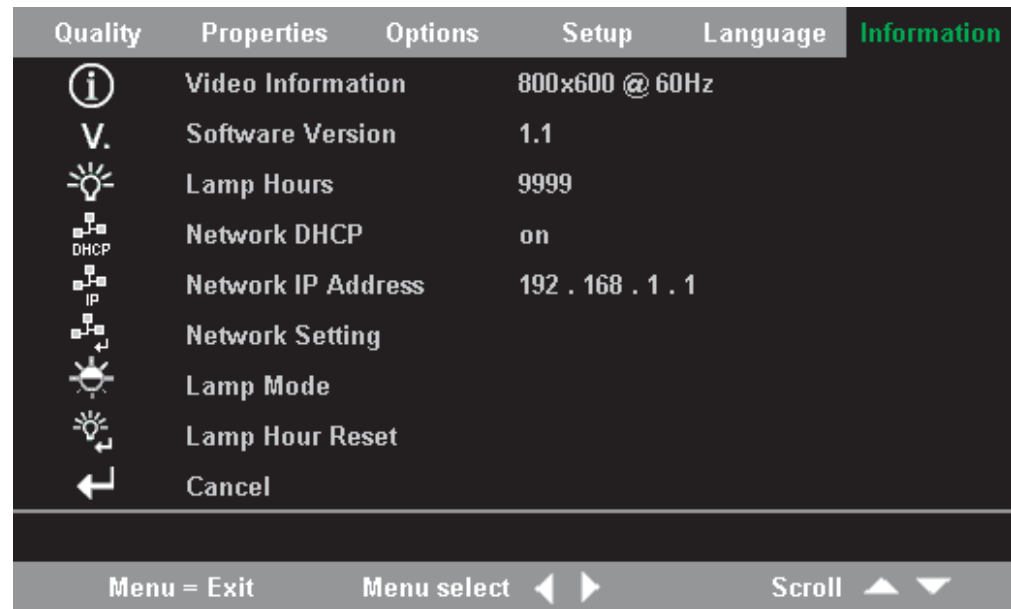
Configurando a Operação Remota

É necessário conhecer algumas ou todas as configurações de endereço a seguir:

- Endereço IP
- Máscara de Subrede
- Gateway Padrão
- Servidor DNS
- Endereço de e-mail para PC remoto
- Senha (se requerida) para PC remoto
- Servidor de saída (SMTP) para PC remoto

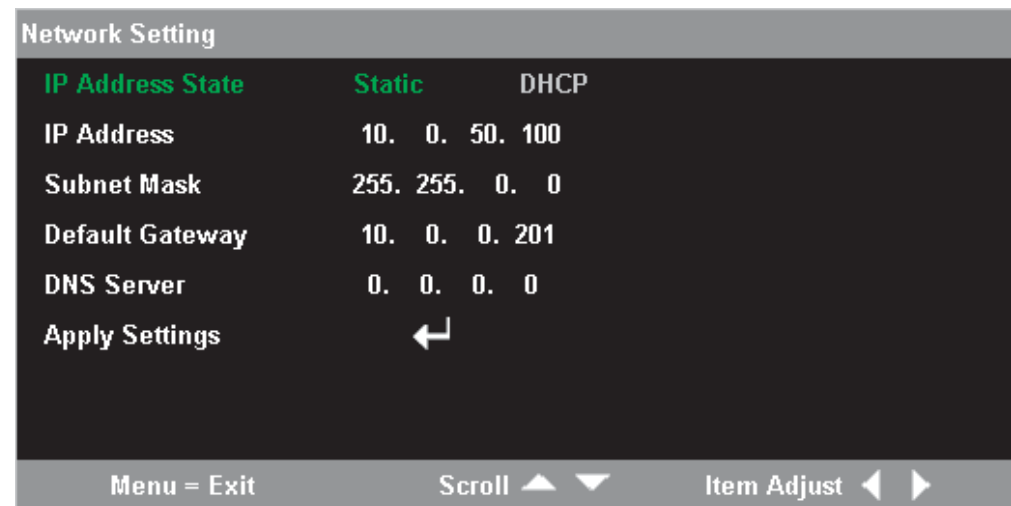
Nota: Utilizar um servidor proxy para a LAN pode filtrar mensagens do projetor. Desative o servidor proxy para evitar isso.

O padrão de fábrica é definido como DHCP para o projetor. O endereço IP atual pode ser visto no menu Information.



É possível alterar as configurações no menu Network Setting. Para acessar o menu Network Setting, siga as etapas abaixo:

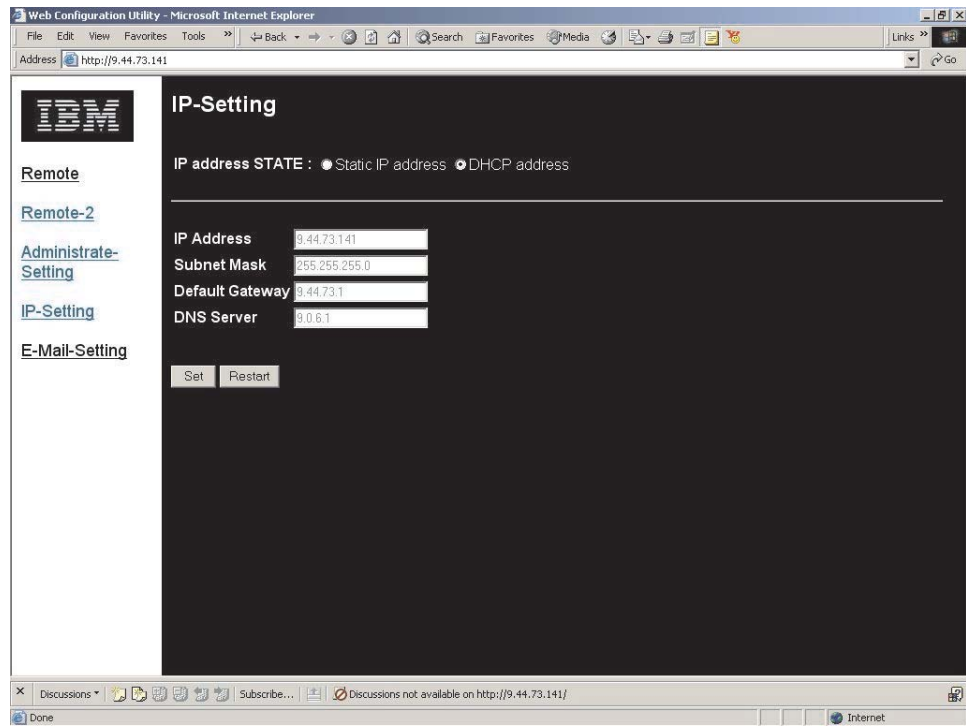
1. Pressione o botão Menu para abrir o menu principal.
2. Pressione o botão esquerdo/direito do cursor para mover-se para o menu Information.
3. Pressione o botão para cima/para baixo do cursor para ir para Network Setting no menu Information.
4. Pressione o botão Enter para acessar o menu Network Setting. O menu Network Setting é mostrado abaixo.



Utilizando as Configurações de Endereço DHCP

Defina a Configuração IP para DHCP se você estiver utilizando um servidor DHCP que designará um endereço IP ao projetor.

1. Digite o endereço do projetor na barra de endereços do navegador. Exemplo: `http://10.0.50.100`
A página Remote é aberta.
2. Clique em **IP Settings**.

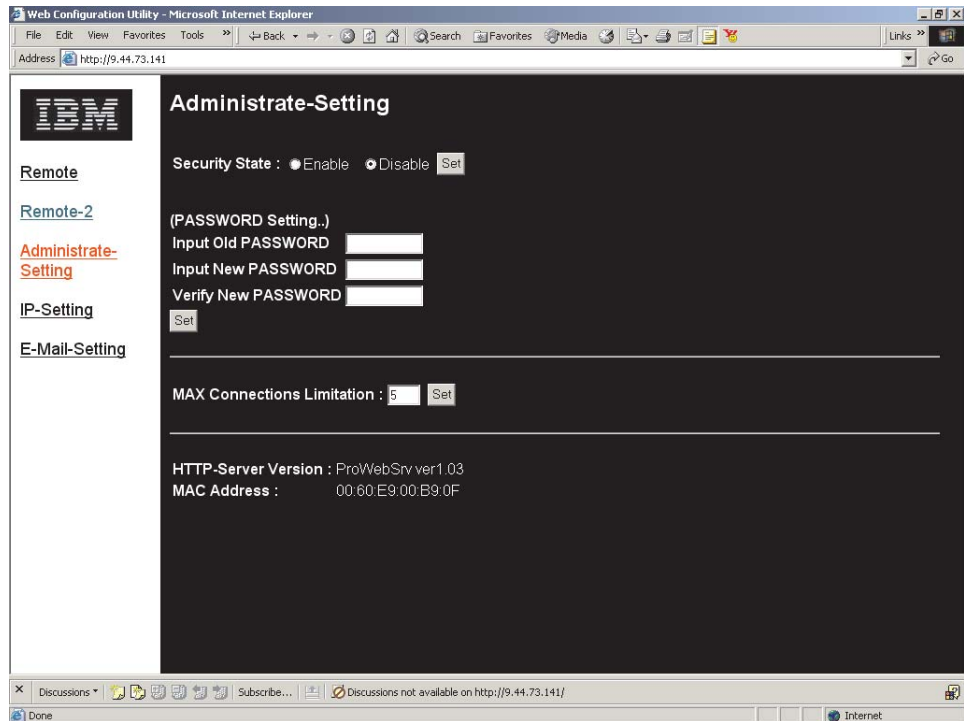


3. Verifique o botão de opções **DHCP Address** e clique em **Set**.

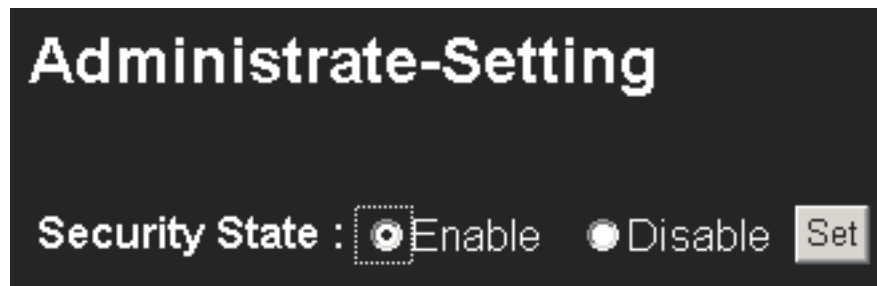
Ativando e Desativando Senhas

A definição padrão é Desable e nenhuma senha foi definida.

1. Clique em **Administrare Settings**. A página Administrate Settings é aberta.



2. Verifique o botão de opções **Enable** e, em seguida, clique em **Set** OU
Clique no botão de opções **Disable** e, em seguida, clique em **Set**.



3. Clique no botão voltar ao navegador para ir para a caixa Input PASSWORD.

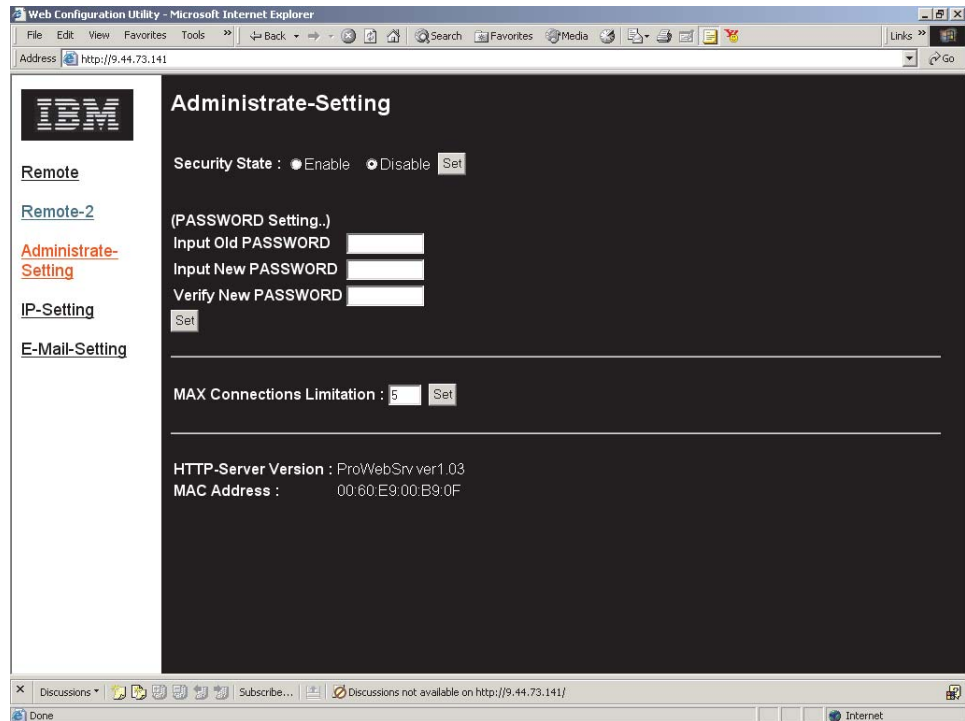


4. Digite a senha e clique em **Login**.

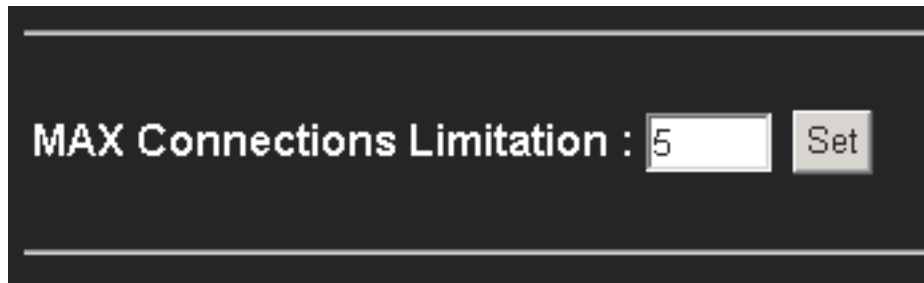
Definindo as Conexões Máximas

Consulte o seguinte para limitar a quantidade de usuários que pode efetuar logon no projetor.

1. Clique em **Administrare Settings**. A página Administrate Settings é aberta.



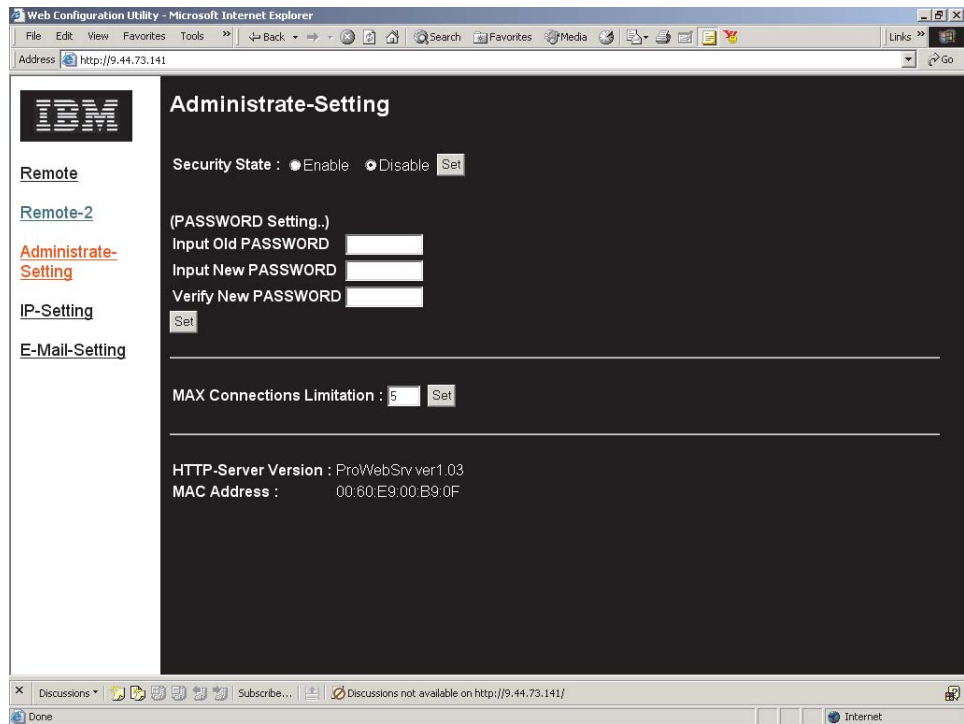
2. Digite a quantidade e clique em **Set**.



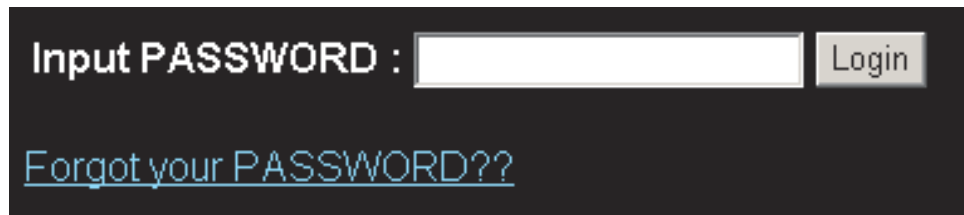
Recuperando uma Senha Esquecida

Consulte o seguinte para recuperar uma senha esquecida.

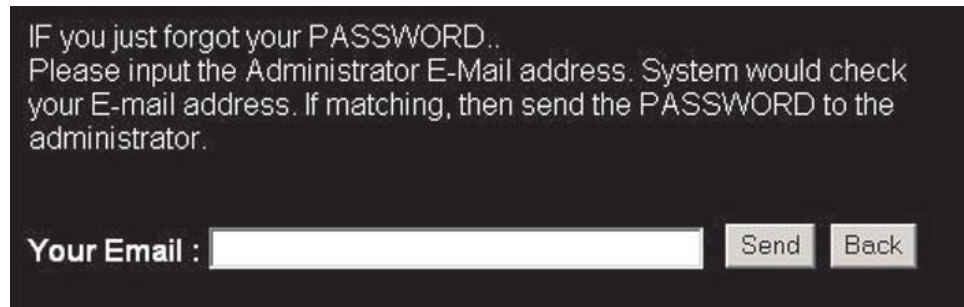
1. Certifique-se de que o botão de opções **Enable** (próximo ao Security Status) esteja selecionado e clique em **Set**.



2. Na tela Input Password, clique em **Forgot your Password?**



3. Digite seu endereço de e-mail e clique em **Send**.



4. A senha atual do projetor é enviada a você por e-mail.

Apêndice A. Manutenção

Este capítulo fornece informações sobre a manutenção do projetor.

Limpendo o Projetor

Limpar o projetor para remover poeira e sujeira ajudará a garantir uma operação sem problemas.

- Certifique-se de desligar e desconectar o projetor pelo menos 1 hora antes de limpar. A falha em fazer isso pode resultar em uma queimadura grave.
- Utilize apenas um pano úmido ao limpar. Não deixe entrar água nas aberturas de ventilação do projetor.
- Se entrar um mínimo de água no interior do projetor durante a limpeza, deixe-o desconectado em uma sala bem ventilada para várias horas antes de utilizá-lo.
- Se entrar muita água no interior do projetor durante a limpeza, leve o projetor para a assistência.

Limpendo a Lente

Para limpar a lente, complete o seguinte procedimento:

1. Aplique um limpador de lente de câmera não abrasivo em um pano macio e seco.

Nota: Evite usar uma quantidade excessiva de limpador e não aplique-o diretamente nas lentes. Limpadores abrasivos, solventes ou outros produtos químicos adstringentes podem riscar a lente.

2. Passe o pano de limpeza levemente sobre a lente em um movimento circular. Se você não pretende utilizar o projetor imediatamente, recoloque a tampa das lentes.

Limpendo a Caixa

Siga as etapas abaixo para limpar a caixa do projetor:

1. Limpar a poeira com um pano úmido limpo.
2. Umedecer o pano com água morna e detergente suave (como o detergente para lavar louça) e limpar a caixa.
3. Enxaguar todo o detergente do pano e limpar a caixa novamente.

Nota: Para evitar a descoloração da caixa ou evitar que a caixa estrague, não utilize limpadores com base em álcool abrasivo.

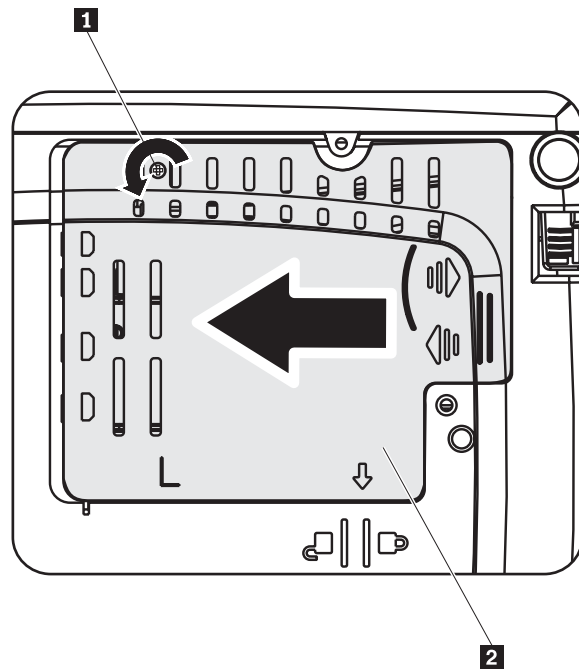
Substituindo a Lâmpada do Projetor

A lâmpada do projetor deve ser substituída apenas por uma peça de substituição certificada pela IBM, que você poderá pedir de seu parceiro de negócios ou ir para www.ibm.com/pc.

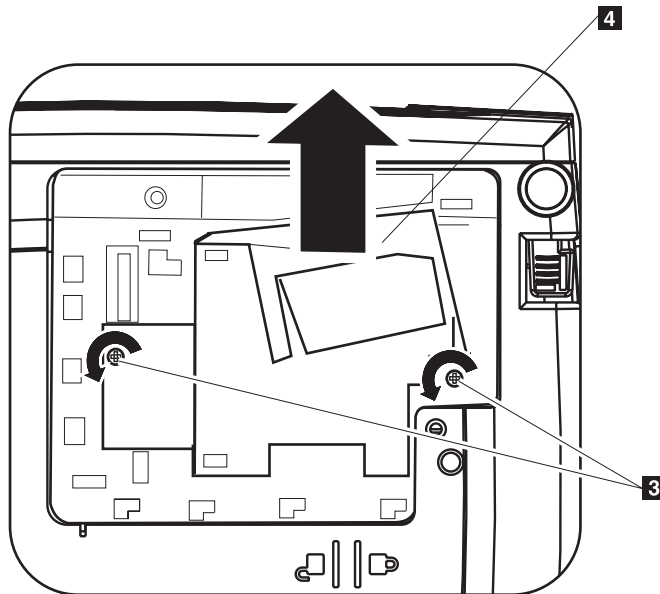
Para substituir a lâmpada do projetor, complete o seguinte procedimento:

1. Desligue o projetor, desconecte o cabo de alimentação e permita que o projetor esfrie por pelo menos 1 hora.

2. Utilize uma chave de fenda Phillips para remover o parafuso da tampa do compartimento da lâmpada conforme mostrado em **1**.
3. Remova a tampa do compartimento da lâmpada conforme mostrado em **2**.

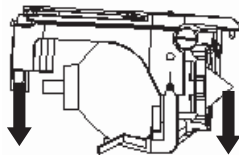


4. Remova os dois parafusos do módulo da lâmpada conforme mostrado em **3**.
5. Levante a alça do módulo e erga firmemente conforme mostrado em **4**.



6. Inverta as etapas 1 a 5 para instalar o novo módulo da lâmpada.

Nota: O módulo da lâmpada deve ser orientado conforme mostrado abaixo na substituição.



Atenção: Este produto contém uma Lâmpada de Arco de Metal, que contém Mercúrio. Descarte-a de acordo com as leis e os regulamentos locais.

Os EUA restringem ou proíbem o descarte de algumas ou de todas as lâmpadas que contêm mercúrio no lixo municipal. Visite www.lamprecycle.org para obter informações adicionais sobre requisitos específicos de descarte por estado e instalações de reciclagem.

Para usuários em Connecticut, ligue gratuitamente para Northeast Lamp Recycling no número 1-888-657-5267 para fazer um pedido da entrega de um kit que inclui uma caixa para a lâmpada, uma fita e uma etiqueta de remessa de devolução.

Reconfigurando o Cronômetro da Lâmpada

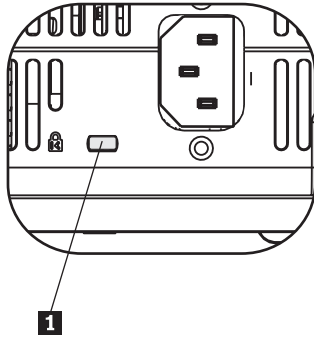
Depois de substituir a lâmpada, reconfigure o contador de hora da lâmpada para zero. Siga estas etapas.

1. Pressione o botão **Menu** para abrir o menu principal.
2. Pressione o botão esquerdo/direito do cursor para mover-se para o menu Information.
3. Pressione o botão para cima/para baixo do cursor para mover-se para baixo em Reconfigurar Hora da Lâmpada.
4. Pressione Enter para selecionar Reconfigurar Hora da Lâmpada.
O OSD mostrará "Consulte o Manual do Usuário..."
5. Pressione os botões no remoto ou no projetor na seguinte ordem: Seta para Baixo, Seta para Cima, Seta para a Esquerda, Seta para a Direita. Isso confirmará a reconfiguração da hora da lâmpada.

Atenção: Duração da Lâmpada é apenas uma medida de diminuição de brilho e não é uma especificação para o tempo que demora para uma lâmpada falhar e cessar a saída de luz. Duração da Lâmpada é definido como o tempo que leva para que mais de 50% de um preenchimento de amostra da lâmpada tenha o brilho diminuído em aproximadamente 50% dos lúmens avaliados para a lâmpada especificada. Por exemplo, se a duração definida da lâmpada for de 1500 horas e seu brilho for avaliado em 2650 lúmens, então haverá uma chance de 50% de que acima de 1500 horas de tempo de execução, a lâmpada tenha diminuído seu brilho em 50% para aproximadamente 1325 lúmens.

Utilizando o Slot de Segurança

O projetor tem um slot de segurança, conforme mostrado abaixo em **1**. Consulte as informações fornecidas com a trava para obter instruções sobre como utilizá-la.



Apêndice B. Resolução de Problemas

As orientações abaixo fornecem dicas para lidar com problemas que podem ser encontrados ao utilizar o projetor. Se o problema não for solucionado, entre em contato com seu revendedor para obter assistência.

Problemas Comuns e Soluções

Verifique o seguinte antes de continuar com as soluções específicas do problema.

- Utilize um dispositivo elétrico diferente para confirmar se a tomada está funcionando.
- Certifique-se de que o projetor esteja ligado.
- Certifique-se de que todas as conexões estejam conectadas com segurança.
- Certifique-se de que o dispositivo conectado esteja ligado.
- Certifique-se de que o PC conectado não esteja em modo suspenso.
- Certifique-se de que o computador notebook conectado esteja configurado para um monitor externo. Isso é, geralmente, feito pressionando uma combinação de teclas Fn no notebook.

Dicas para a Resolução de Problemas

Em cada seção específica do problema, tente as etapas na ordem sugerida. Isso pode ajudá-lo a resolver o problema mais rapidamente.

Tente indicar o problema e, assim, evitar substituir peças que não estejam com defeito. Por exemplo, se você substituir as baterias e o problema continuar, coloque as baterias originais de volta e vá para a próxima etapa.

Mantenha um registro das etapas executadas durante a resolução de problemas. As informações podem ser úteis quando ligar para o suporte técnico ou para o pessoal de serviço.

Informações de Resolução de Problemas

A seguinte tabela fornece informações sobre detecção de problemas do projetor. Em alguns casos, mais de uma solução possível é fornecida. Tente as soluções na ordem em que são apresentadas. Quando o problema for resolvido, você poderá ignorar as soluções adicionais.

Tabela B-1. Resolução de Problemas

Problema	Solução
Não aparece nenhuma imagem na tela.	<ul style="list-style-type: none">• Certifique-se de que o computador e o projetor estejam ligados.• Verifique as definições no PC notebook ou desktop.• Desligue todo o equipamento e ligue-o novamente na ordem correta.

Tabela B-1. Resolução de Problemas (continuação)

Problema	Solução
A imagem está borrada	<ul style="list-style-type: none"> • Ajuste o Foco no projetor. • Pressione o botão Auto no controle remoto ou no projetor. • Assegure-se de que a distância do projetor para a tela esteja dentro do intervalo especificado. • Verifique se a lente do projetor está limpa. • Certifique-se de que a resolução de saída do PC seja 1024 x 768, a resolução nativa do projetor.
A imagem está maior na parte superior ou inferior (efeito trapézio).	<ul style="list-style-type: none"> • Posicione o projetor para que fique o máximo perpendicular à tela. • Utilize o botão Keystone no controle remoto ou no projetor para corrigir o problema.
A imagem está invertida ou de cabeça para baixo.	Verifique a definição Projection no menu Setup do OSD.
A imagem está riscada.	<ul style="list-style-type: none"> • Ajuste as definições Frequency and Tracking no menu Setup do OSD para as definições padrão. • Para se assegurar de que o problema não seja causado por uma placa de vídeo do PC conectada, conecte a outro computador.
A imagem está plana sem contraste	Ajuste a definição Contrast no menu Main do OSD.
A cor da imagem projetada não corresponde à imagem de origem	Ajuste as definições Color Temp. e Gamma no menu ColorMgr do OSD.
Não há luz do projetor	<ul style="list-style-type: none"> • Verifique se o cabo de alimentação está firmemente conectado. • Assegure-se de que a fonte de alimentação esteja boa testando-a com outro dispositivo elétrico. • Reinicie o projetor na ordem correta e verifique se o LED de energia está verde. • Se tiver substituído a lâmpada recentemente, tente reconfigurar as conexões da lâmpada. Certifique-se de que a tampa da lâmpada esteja nivelada com o estojo do projetor quando fechada. • Recoloque o módulo da lâmpada. • Coloque a lâmpada antiga de volta no projetor e leve-o à assistência técnica.
A lâmpada apaga.	<ul style="list-style-type: none"> • Oscilações de energia podem fazer com que a lâmpada apague. Pressione o botão Power duas vezes para desligar o projetor. Quando o LED Lamp Ready acender, pressione o botão Power. • Substitua por um novo módulo de lâmpada. • Coloque a lâmpada antiga de volta no projetor e leve-o à assistência técnica.

Tabela B-1. Resolução de Problemas (continuação)

Problema	Solução
O projetor não responde ao controle remoto.	<ul style="list-style-type: none"> • Direcione o controle remoto na direção do sensor remoto do projetor. • Assegure-se de que o caminho entre o controle remoto e o sensor não esteja obstruído. • Apague todas as luzes fluorescentes na sala. • Verifique a polaridade da bateria. • Substitua as baterias. • Desligue outros dispositivos ativados por infravermelho que estão ao redor. • Leve o controle remoto à assistência técnica.
Não há som.	<ul style="list-style-type: none"> • Ajuste o volume no controle remoto. • Ajuste o volume na origem de áudio. • Verifique a conexão dos cabos de áudio. • Teste a saída de áudio de origem com outros alto-falantes. • Leve o projetor à assistência técnica.
O som está distorcido.	<ul style="list-style-type: none"> • Verifique a conexão dos cabos de áudio. • Teste a saída de áudio de origem com outros alto-falantes. • Leve o projetor à assistência técnica.

LEDs do Projetor

O LED na parte superior indica o estado do projetor e pode ajudá-lo a solucionar problemas. Há pausas de dois segundos entre os ciclos de piscadas. Para obter detalhes adicionais sobre os erros de projetor do LED, entre em contato com o seu representante da IBM.

Tabela B-2. Mensagens de Erro do LED Lamp-ready

Número de Piscadas do LED Lamp-ready	Explicação
Intermitente	A lâmpada não está pronta - não pressione o botão Power até que pare de piscar.
1	Erro do ventilador da tampa frontal
2	Erro do ventilador da lâmpada
3	Erro do ventilador da placa de energia
4	Erro do ventilador da ventoinha
5	Erro do ventilador do lastro

Tabela B-3. Mensagens de Erro do LED Power

Número de Piscadas do LED Power	Explicação
3	Superaquecimento do sistema
4	Erro da interface do sistema
5	Erro da lâmpada

Tabela B-3. Mensagens de Erro do LED Power (continuação)

Número de Piscadas do LED Power	Explicação
6	Erro do ventilador. Consulte o LED Lamp-ready para determinar em qual ventilador.
7	Tampa de abertura da lâmpada
8	Erro do driver DLP.

Apêndice C. Especificações

A seguir são apresentadas especificações para o projetor IBM C400.

Temperatura (não-operacional)	5° a 35° C (41° a 95° F) no nível do mar -10° a 60° C (14° a 140° F)
Altitude (operacional)	3.048 m (0 a 10.000 pés)
Altitude (não-operacional)	12.192 m (0 a 40.000 pés)
Umidade (operacional)	Umidade relativa de 5% a 90%, sem condensação
Umidade (não-operacional)	Umidade relativa de 5% a 95%, sem condensação
Dimensões (H x W x D)	86 mm x 285 mm x 220 mm (3,38 pol. x 11,21 pol. x 8,66 pol.)
Peso	3,1 kg (6,8 lbs) sem a embalagem
Óptica (intervalo de foco)	1,2 - 9,4 m (4 a 31 pés)
Tipo de lâmpada	Lâmpada de 250 W
Lúmens	2650 lúmens (Modo econômico: 1850 lúmens)
Requisitos de energia de entrada	100-240V 4,5A 50/60 Hz

Apêndice 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 <http://www.ibm.com/pc/support>.

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

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 <http://www.ibm.com/pc/support> and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Africa	+44 (0) 1475 555 055	Japan	Desktop: 0120-887-870 • Overseas calls: 81-46-266-1084 ThinkPad: 0120-887-874 • Overseas calls: 81-46-266-1084 IntelliStation and xSeries: 81-46-266-1358 PC Software: 0120-558-695 • Overseas calls: 81-44-200-8666
Argentina	0800-666-0011	Luxembourg	298-977-5063
Australia	131-426	Malaysia	(60) 3-7727-7800
Austria	01-24592-5901	Mexico	001-866-434-2080
Bolivia	0800-0189	Middle East	+44 (0) 1475 555 055
Belgium	Dutch: 02-210 9820 French: 02-210 9800	Netherlands	020-514 5770
Brazil	55-11-3889-8986	New Zealand	0800-446-149
Canada	English: 1-800-565-3344 French: 1-800-565-3344 In Toronto: 416-383-3344	Nicaragua	255-6658
Chile	800-224-488	Norway	66 81 11 00
China	800-810-1818	Panama	206-6047
China (Hong Kong and S.A.R.)	Home PC: 852-2825-7799 Commercial PC: 852-8205-0333	Peru	0-800-50-866
Colombia	980-912-3021	Philippines	(63) 2-995-2225
Costa Rica	284-3911	Portugal	21-892-7147
Denmark	45 20 82 00	Russia	095-940-2000
Dominican Republic	566-4755 or 566-5161 ext. 8201 Toll Free within the Dominican Republic: 1-200-1929	Singapore	(65) 1-800-840-9911
Ecuador	1-800-426911 (option #4)	Spain	91-714-7983

Country or Region	Telephone Number	Country or Region	Telephone Number
El Salvador	250-5696	Sweden	08-477 4420
Finland	09-459 69 60	Switzerland	058-333-0900
France	02 38 55 74 50	Taiwan	886-2-8723-9799
Germany	07032-1549 201	Thailand	(66) 2-273-4000
Guatemala	335-8490	Turkey	00-800-446-32-041
Honduras	Tegucigalpa & Sand Pedro Sula: 232-4222 San Pedro Sula: 552-2234	United Kingdom	0-1475-555 055
India	1600-44-6666	United States	1-800-IBM-SERV (1-800-426-7378)
Indonesia	(62) 21-523-8535	Uruguay	000-411-005-6649
Ireland	01-815-9202	Venezuela	0-800-100-2011
Italy	01-815-9202	Vietnam	Ho Chi Minh: (84) 8-829-5160 Hanoi: (84) 4-843-6675

Apêndice E. IBM Statement of Limited Warranty Z125-4753-08 04/2004

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 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 contact IBM for service, you must follow the problem determination and resolution procedures that IBM specifies. An initial diagnosis of your problem can be made either by a technician over the telephone or electronically by access to an IBM website. 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), IBM will ship the CRU to you for you to install. If the Machine does not function as warranted during the warranty period and your problem cannot be resolved over the telephone or electronically, 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. provide 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

Jurisdiction: *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.

BOLIVIA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the courts of the city of La Paz.

BRAZIL

Jurisdiction: *The following is added after the first sentence:*

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

CHILE

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Civil Courts of Justice of Santiago.

COLOMBIA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges of the Republic of Colombia.

EQUADOR

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges of Quito.

MEXICO

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Federal Courts of Mexico City, Federal District.

PARAGUAY

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the courts of the city of Asuncion.

PERU

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Judges and Tribunals of the Judicial District of Lima, Cercado.

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").

URUGUAY

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the City of Montevideo Court's Jurisdiction.

VENEZUELA

Jurisdiction: *The following is added after the first sentence:*

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by the Courts of the Metropolitan Area Of the City of Caracas.

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 AND LAOS

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, AND LAOS

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:

Add the following paragraph in **Western Europe** (Andorra, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, Vatican State, and any country subsequently added to the European Union, as from the date of accession): 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. If you purchase a Machine in one of the Western European countries, as defined above, 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.

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:

The warranty for Machines acquired in EU countries is valid and applicable in all EU countries provided the Machines have been announced and made available in such countries.

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 PA16 0AH

CONSUMERS

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.

AUSTRIA, DENMARK, FINLAND, GREECE, ITALY, NETHERLANDS, NORWAY, 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

The provisions of this Statement of Limited Warranty replace any applicable statutory warranties.

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 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, IBM will reimburse you for the transportation charges for the delivery of the failing Machine to IBM.

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 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.

C400 PROJECTOR

Country or Region of Purchase	Warranty Period	Type of Warranty Service
Worldwide	3 years	7

C400 PROJECTOR LAMP

Country or Region of Purchase	Warranty Period	Type of Warranty Service
Worldwide	3 months	7

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 provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your Machine and are available from IBM at any time on your request. Installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service designated for your Machine. IBM specifies in the materials shipped with a replacement

CRU whether a defective CRU must be returned to IBM. When return is required, 1) return instructions and a container are shipped with the replacement CRU, and 2) you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

2. On-site Service

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

3. Courier or Depot Service *

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.

5. CRU and On-site Service

This type of Warranty Service is a combination of Type 1 and Type 2 (see above).

6. CRU and Courier or Depot Service

This type of Warranty Service is a combination of Type 1 and Type 3 (see above).

7. CRU and Customer Carry-In or Mail-In Service

This type of Warranty Service is a combination of Type 1 and Type 4 (see above).

When a 5, 6 or 7 type of warranty service is listed, IBM will determine which type of warranty service is appropriate for the repair.

* This type of service is called ThinkPad EasyServ or EasyServ in some countries. 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). 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 <http://www.ibm.com/pc/support> and click **Support Phone List**.

Country or Region	Telephone Number	Country or Region	Telephone Number
Africa	+44 (0) 1475 555 055	Japan	Desktop: 0120-887-870 • Overseas calls: 81-46-266-1084 ThinkPad: 0120-887-874 • Overseas calls: 81-46-266-1084 IntelliStation and xSeries: 81-46-266-1358 PC Software: 0120-558-695 • Overseas calls: 81-44-200-8666
Argentina	0800-666-0011	Luxembourg	298-977-5063
Australia	131-426	Malaysia	(60) 3-7727-7800
Austria	01-24592-5901	Mexico	001-866-434-2080
Bolivia	0800-0189	Middle East	+44 (0) 1475 555 055
Belgium	Dutch: 02-210 9820 French: 02-210 9800	Netherlands	020-514 5770
Brazil	55-11-3889-8986	New Zealand	0800-446-149
Canada	English: 1-800-565-3344 French: 1-800-565-3344 In Toronto: 416-383-3344	Nicaragua	255-6658
Chile	800-224-488	Norway	66 81 11 00
China	800-810-1818	Panama	206-6047
China (Hong Kong and S.A.R.)	Home PC: 852-2825-7799 Commercial PC: 852-8205-0333	Peru	0-800-50-866
Colombia	980-912-3021	Philippines	(63) 2-995-2225
Costa Rica	284-3911	Portugal	21-892-7147
Denmark	45 20 82 00	Russia	095-940-2000
Dominican Republic	566-4755 or 566-5161 ext. 8201 Toll Free within the Dominican Republic: 1-200-1929	Singapore	(65) 1-800-840-9911
Ecuador	1-800-426911 (option #4)	Spain	91-714-7983

Country or Region	Telephone Number	Country or Region	Telephone Number
El Salvador	250-5696	Sweden	08-477 4420
Finland	09-459 69 60	Switzerland	058-333-0900
France	02 38 55 74 50	Taiwan	886-2-8723-9799
Germany	07032-1549 201	Thailand	(66) 2-273-4000
Guatemala	335-8490	Turkey	00-800-446-32-041
Honduras	Tegucigalpa & Sand Pedro Sula: 232-4222 San Pedro Sula: 552-2234	United Kingdom	0-1475-555 055
India	1600-44-6666	United States	1-800-IBM-SERV (1-800-426-7378)
Indonesia	(62) 21-523-8535	Uruguay	000-411-005-6649
Ireland	01-815-9202	Venezuela	0-800-100-2011
Italy	01-815-9202	Vietnam	Ho Chi Minh: (84) 8-829-5160 Hanoi: (84) 4-843-6675

Apêndice 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 and Windows 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 C400 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)

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

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

IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

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

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

EN 55022 Hinweis:

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

Anmerkung:

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

European Union - emission directive

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

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

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

Union Européenne - Directive Conformité électromagnétique

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

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

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

Unione Europea - Directiva EMC (Conformidad electromagnética)

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

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

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

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



Número da Peça: 73P3195

Impresso em Brazil

(1P) P/N: 73P3195

