

Epson® PowerLite® 1705c/1715c Multimedia Projector

User's Guide

Important Safety Information

WARNING: Never look into the projector lens when the lamp is turned on; the bright light can damage your eyes. Never let children look into the lens when it is on. Never open any cover on the projector, except the lamp and filter covers. Dangerous electrical voltages inside the projector can severely injure you. Except as specifically explained in this *User's Guide*, do not attempt to service this product yourself. Refer all servicing to qualified service personnel.

WARNING: The projector and its accessories come packaged in plastic bags. Keep plastic bags away from small children to avoid any risk of suffocation.

Caution: When you replace the lamp, never touch the new lamp with your bare hands; the invisible residue left by the oil on your hands may shorten the lamp life. Use a cloth or glove to handle the new lamp.

Copyright Notice

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Seiko Epson Corporation. The information contained herein is designed only for use with this Epson product. Epson is not responsible for any use of this information as applied to other products.

Neither Seiko Epson Corporation nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by purchaser or third parties as a result of: accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with Seiko Epson Corporation's operating and maintenance instructions.

Seiko Epson Corporation shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original Epson Products or Epson Approved Products by Seiko Epson Corporation.

Epson is a registered trademark, and Exceed Your Vision and EasyMP are trademarks of Seiko Epson Corporation.

PrivateLine, Presenters Club, and PowerLite are registered trademarks; SizeWise is a trademark; and Epson Connection, Epson Store, and Epson Extra Care are service marks of Epson America, Inc.

Pixelworks, DNX, and the DNX logo are trademarks of Pixelworks, Inc.

General Notice: Other product names used herein are for identification purposes only and may be trademarks of their respective owners. Epson disclaims any and all rights in those marks.

C

Contents

<i>Welcome</i>	9
Using Your Documentation	10
Getting More Information	10
Registration and Warranty	11
Unpacking the Projector	12
Additional Components	13
Optional Accessories	13

1

<i>Displaying and Adjusting the Image</i>	15
Positioning the Projector	16
Projecting the Image	17
Turning On the Projector	17
Selecting the Image Source	19
Troubleshooting Display Problems	20
You Can't Project an Image	20
The Projector and Notebook Don't Display the Same Image	20
Adjusting the Image	22
Adjusting the Height of Your Image	22
Focusing and Zooming Your Image	23
Adjusting the Image Shape	23
Correcting Computer Images	25
Shutting Down the Projector	25
Using the Direct Power On Function	26

2	<i>Using the Remote Control</i>	27
	Using the Remote Control	28
	Replacing the Batteries.....	28
	Controlling the Picture and Sound.....	29
	Switching Between Picture Sources	29
	Turning Off the Picture and Sound.....	30
	Stopping Action.....	30
	Zooming Part of Your Image.....	31
	Controlling the Volume.....	31
	Resizing Video Images	32
	Adjusting the Color Mode.....	32
	Operating Your Computer with the Remote Control.....	33
	Highlighting Your Presentation	34
	Using the Pointer Tool	34
	Customizing the Pointer Tool	34

3	<i>Connecting to Computers, Cameras, and Other Equipment</i>	35
	Connecting to a Computer.....	36
	Connecting to the Computer Port.....	36
	Connecting the Cable for Remote Mouse Control	37
	Connecting to Video Equipment	38
	Connecting a Composite Video Source	39
	Connecting an S-Video Source	40
	Connecting a Component Video Source	41
	Connecting an RGB Video Source.....	42
	Connecting to a Digital Camera or Other Device.....	43
	Removing the USB Cable	43
	Playing Sound Through the Projector	44
	Connecting External Speakers	45

4	<i>Presenting Through a Wireless Network</i>	47
	Starting EasyMP	48
	Configuring Basic Settings	49
	Configuring the Connection	50
	Using Ad Hoc Mode	51
	Using Access Point Mode	57
	Using Wireless Security Options	67
	Enabling WEP Encryption	67
	Enabling WPA Security	69
	Enabling EAP, LEAP, or PEAP Authentication	70
	Enabling EAP-TLS Certificate Validation	72
	Projecting Over a Network	73
	Solving Connection Problems	75
	Using the Control Bar	76
	Connecting in Advanced Connection Mode	77
	Enabling Network Security	78
	Multi-screen Projection	81
	Removing the Wireless 802.11g/b/a Module	83
	Connecting to a Wired Network	84
	Using Projector E-mail Alerts	86

5	<i>Presenting from a Digital Camera or External Drive</i>	89
	Creating a Slideshow on the Fly	90
	Displaying the Slideshow	90
	Controlling Your Slideshow	91
	Changing Timing and Other Settings	91
	Presenting Image Files From a Digital Camera	93
	Presenting Image Files From an External Drive	94
	Creating a Scenario	95
	Converting a PowerPoint File to a Scenario	95
	Creating a Scenario from Scratch	96
	Transferring Your Scenario to a USB Drive	104
	Presenting Scenarios	106
	Controlling Your Scenario	107
	Supported File Formats	108

6	<i>Fine-Tuning the Projector</i>	109
	Using the Menu System	110
	Restoring the Default Settings	111
	Adjusting the Image	112
	Adjusting Signal Settings	113
	Customizing Projector Features	115
	Using the Projector Security Features	116
	Enabling Password Protection	117
	Creating Your Own Startup Screen	119
	Disabling the Projector's Buttons	121
	Customizing Power and Operation	121
7	<i>Managing Projectors</i>	125
	Using EMP Monitor	126
	Opening and Closing EMP Monitor	126
	Registering a Projector	127
	Monitoring Your Projectors	129
	Controlling Your Projectors	133
	Configuring the Monitoring Interval	134
	Using E-mail Alerts	135
	Understanding the Notification Messages	136
	Using a Browser to Monitor the Projector	136
8	<i>Maintaining the Projector</i>	139
	Cleaning the Lens	140
	Cleaning the Projector Case	140
	Cleaning the Air Filter and Vent	141
	Replacing the Lamp and Air Filter	142
	Resetting the Lamp Timer	145
	Transporting the Projector	146

9	<i>Solving Problems</i>	147
	Using On-Screen Help	148
	Checking Projector Status	149
	What To Do When the Lights Flash	149
	Viewing Lamp Usage and Other Information	151
	Solving Projector Operation Problems	151
	Solving Problems with the Image or Sound	152
	Solving Network Problems	157
	Solving EasyMP Problems	160
	Solving Problems with the Remote Control	161
	Where To Get Help	162
	Speak to a Support Representative	162
A	<i>Software Installation</i>	165
	Windows System Requirements	165
	Mac System Requirements	165
	Installing the Software on a Windows System	166
	Installing the Software on a Mac	166
B	<i>Projector Installation</i>	167
C	<i>Technical Specifications</i>	169
D	<i>Notices</i>	175
	Important Safety Instructions	175
	Remote Control Information	177
	Declaration of Conformity	178
	FCC Compliance Statement	179
	Warranty	180
	<i>Index</i>	183

W

Welcome

The Epson® PowerLite® 1705c/1715c is an easy-to-use projector that weighs less than 4 pounds. The projector offers up to 2700 lumens (1715c) or 2200 lumens (1705c) of brightness. You can connect it to a wide range of computers and video sources, or you can project from a USB storage device, or over an 802.11g, 802.11b, or 802.11a wireless network.

Easy control

The projector's keystone correction feature automatically corrects image distortion, and you can use the remote control to take charge of your presentation from almost anywhere in the room. Freeze the action, zoom in on part of the picture, or use the remote as a pointer. You can even use it in place of your computer's mouse to control your computer and change slides in Microsoft® PowerPoint®.

EasyManagement

With the projector's EasyManagement™ system, you can use a Windows® PC to remotely monitor and control the projector over a network.

Security

To prevent unauthorized use, this projector includes several security features including a password, user's logo, and the ability to lock the projector buttons.

Using Your Documentation

This book contains all the information you need to set up and use your projector. Please follow these guidelines as you read through it:

- Warnings must be followed carefully to avoid bodily injury.
- Cautions must be observed to avoid damage to your equipment.
- Notes contain important information about your projector.
- Tips contain additional projection hints.

Getting More Information

Need tips on giving presentations? Quick steps for setting up your projector? Here's where you can look for help:

- **Quick Setup sheet**
Gives you the instructions you need to get your projector up and running if you are connecting to a notebook, MacBook,[™] PowerBook,[®] or iBook[®] computer, or projecting over a wireless network.
- **Projector kit**
Includes this *User's Guide*, your *Quick Setup* sheet, warranty brochures, and Epson PrivateLine[®] Support card. Keep the kit with your projector at all times.
- **Built-in help system**
Provides assistance for common problems. Available from the **Help** button on the projector or the remote control. See page 148 for details.
- **<http://support.epson.com>**
Download FAQs and e-mail your questions to Epson support.
- If you still need help after checking this *User's Guide* and the sources listed above, you can use the Epson PrivateLine Support service to get help fast. Call (800) 637-7661 and enter the PIN on the PrivateLine card. Or take advantage of Epson's automated support services 24 hours a day. See page 162 for more information.

■ **presentersonline.com**

Includes a library of articles covering presentation tips, tricks, and technology. The site provides templates, clip art and sound clips, as well as Presenters Services to use on the road. Even more resources and services are available if you register to join the Presenters Club®—and it's free.

Registration and Warranty

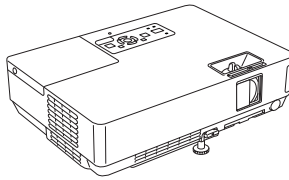
Your projector comes with a basic carry-in 2-year and 90-day lamp warranty as well as an international warranty that let you project with confidence anywhere in the world. For details, see page 180 and the warranty brochure included with your projector.

In addition, for customers who register their projector, Epson offers free Extra CareSM Road Service. In the unlikely event of an equipment failure, you won't have to wait for your unit to be repaired. Instead, Epson will ship you a replacement unit anywhere in the United States or Canada, usually via overnight delivery. See the brochure included with your projector for details.

To register, simply fill out the registration card and mail it to Epson. Or you can register online at <http://www.epson.com/webreg>. Registering also lets you receive special updates on new accessories, products, and service.

Unpacking the Projector

After unpacking the projector, make sure you have all the parts shown below:



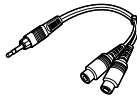
Projector with
802.11g/b/a wireless
adapter



PDF manual and
registration CD-ROM



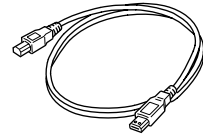
EasyMP software
CD-ROM



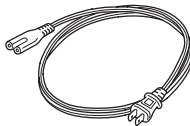
Audio adapter



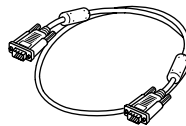
Remote control and
2 AAA batteries



USB cable



Power cable



VGA computer cable



Carrying case

Save all packaging in case you need to ship the projector. Always use the original packaging (or the equivalent) when you need to send the projector to another location. If you are moving the projector by hand, use the carrying case. See page 13 for ordering information, and page 146 for transportation instructions.

Additional Components

Depending on how you plan to use the projector, you may need additional components:

- To receive an S-Video signal, you'll need an S-Video cable. One may be provided with your video equipment, or you can purchase one from Epson; see page 13.
- To receive a component video signal from a VCR or other video device, you'll need an HD15 to component video cable. You can purchase one from Epson; see below.

Optional Accessories

To enhance your use of the projector, Epson provides the following optional accessories:

Product	Part number
Replacement lamp	V13H010L38
Air filter replacement set (2 filters)	V13H13408
ATA molded hardshell case Samsonite® wheeled soft case Notebook/projector soft shoulder bag Soft carrying case	ELPKS54 ELPKS35-S ELPKS43 ELPKS16B
Universal ceiling mount False ceiling plate Security bracket/cabling for gyro lock mounts Adjustable ceiling channel Suspension adapter	ELPMBUNI ELPMBFCP ELPMBSEC ELPMBACC ELPMBAPL
Kensington® security lock	ELPSL01
50-inch portable screen (4:3 aspect ratio) 60-inch portable pop-up screen (4:3 aspect ratio) 80-inch portable pop-up screen (4:3 aspect ratio) 83.6-inch hanging pull-down screen (4:3 aspect ratio)	ELPSC06 ELPSC07 ELPSC08 ELPSC09
Component video cable S-Video cable	ELPKC19 ELPSV01
Distribution amplifier	ELPDA01
Image presentation camera (ELPDC05)	V12H162020
Ethernet LAN module	V12H005M02

You can purchase screens, carrying cases, or other accessories from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). Or you can purchase online at www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

1 *Displaying and Adjusting the Image*

Whether you're presenting from a computer or video equipment, you need to follow some basic steps to display your image on the screen.

Follow the guidelines in this chapter for:

- Positioning the projector
- Turning the projector on and selecting the image source
- Troubleshooting display problems
- Adjusting the image
- Turning off the projector

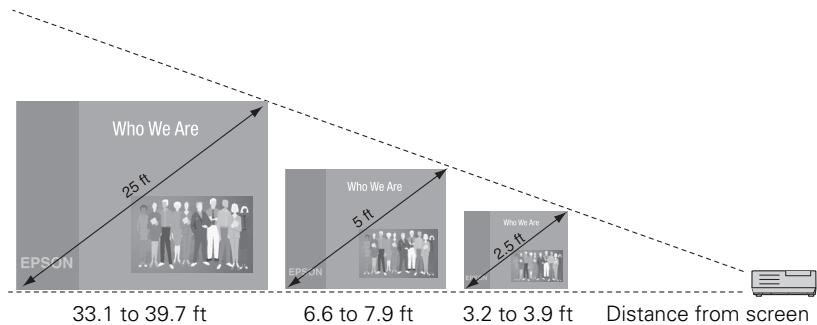
note

You can mount the projector on the ceiling, or place it behind a translucent screen for rear projection. See page 167 for details.

Positioning the Projector

If the projector isn't already installed in the room you're using, you'll probably want to place it on a table in front of the screen, as shown. This lets you stand in the front of the room, face the audience, and remain close enough to the equipment to be able to control it. Try to leave as much space as possible between the projector and the screen to get a good-size image.

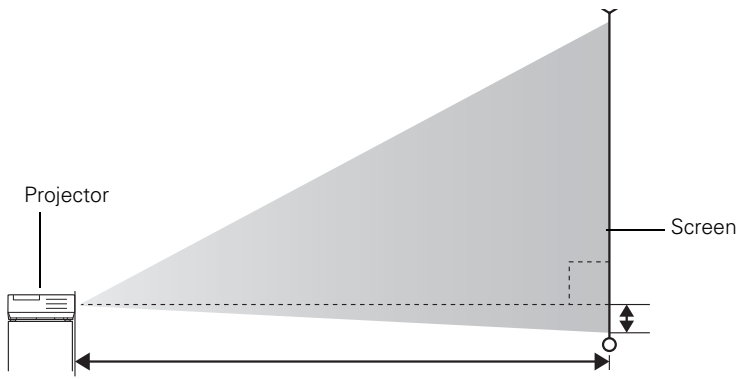
Use the figure below to help you determine placement. Image size increases with distance, but can vary depending on how you position the zoom ring and whether you've adjusted the image with other settings.



Also keep these considerations in mind:

- Place the projector on a sturdy, level surface.
- Make sure there is plenty of space for ventilation around and under the projector. Do not set the projector on top of anything that could block the vents under the projector.
- Make sure the projector is within 10 feet of a grounded electrical outlet or extension cord.

Ideally, you should place the projector directly in front of the center of the screen, facing it toward the screen squarely. The base of the lens should be at about the level of the bottom of the screen.



note

After positioning the projector, you may want to connect a Kensington MicroSaver® anti-theft device to the lock port on the projector. You can purchase this from Epson; see page 13.

If you place the projector below screen level, you'll have to tilt it up by extending the front adjustable foot. This causes the image to become "keystone" shaped, but you can correct the distortion by pressing the buttons on the projector. See page 23 for detailed information about correcting the image shape.

For instructions on installing the projector in a permanent location, such as a theater or conference room, see page 167.

Projecting the Image

Make sure your projector and other equipment are set up as described on page 35. Then follow the instructions below to start the projector and display an image.

Turning On the Projector

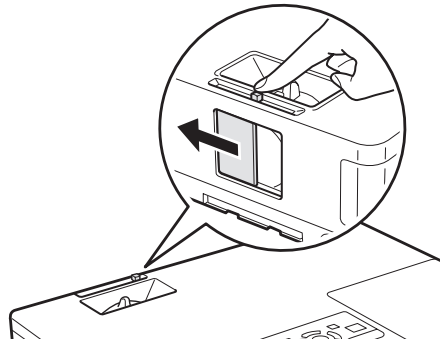
Turn on any connected computer or video equipment before starting the projector so it can automatically detect and display the image source. If you turn on the projector first, or have multiple pieces of connected equipment, you may have to select the image source manually (see page 19).

note

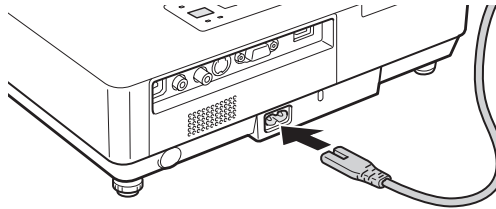
To shut down the projector, see page 25. Shutting down the projector correctly prevents premature lamp failure and possible damage from overheating.

Follow these steps to turn on the projector:

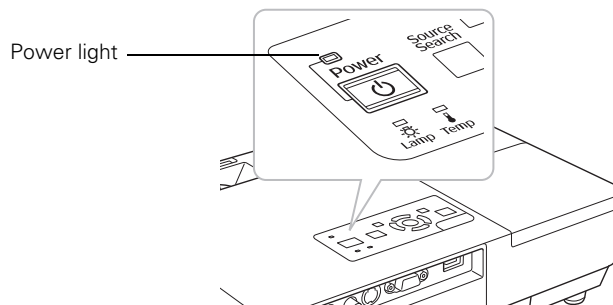
1. Open the A/V Mute slide (lens cover).



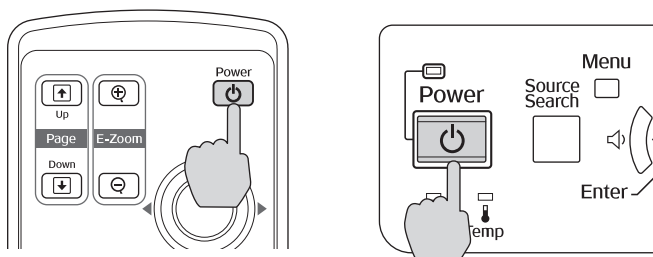
2. Plug one end of the power cable into the projector, and the other end into an electrical outlet.



The **Power** light turns orange.



3. Press the red **Power** button on the remote control or on top of the projector.



The projector beeps once and the **Power** light flashes green as the projector warms up, then an image begins to appear. When the **Power** light stops flashing and remains green, the projector is ready for use.

4. If you've connected a Windows-based computer to the projector, you may see a New Hardware Wizard screen saying your computer has found a plug-and-play monitor; if so, click **Cancel**.
5. If you are prompted to enter a password, see page 117.

Selecting the Image Source

Selecting the image source lets you switch between images input from different pieces of connected equipment (such as a computer or DVD player).

If you don't see the image you want, press the **Source Search** button on the projector or the **Search** button on the remote control until you see the image you want to project.

You can also use the **Source** buttons on the remote control to switch between devices connected to the ports identified on each button, or select EasyMP™ to project wirelessly or from a USB drive.

warning

Never look into the lens when the lamp is on. This can damage your eyes, and is especially dangerous for children.

note

To focus and adjust the image, see page 22. If a projected image fails to appear, see page 20 for help.

Troubleshooting Display Problems

Follow these guidelines if you're having trouble displaying an image.

You Can't Project an Image

If you don't see the image you are trying to project, try the following:

- Make sure the cables are connected correctly, as described beginning on page 35.
- Make sure the **Power** light is green and not flashing and the A/V Mute slide is open.
- If you've connected more than one computer and/or video source, you may need to press the **Source Search** button on the projector's control panel or **Search** button on the remote control to select the correct source. (Allow a few seconds for the projector to sync up after pressing the button.)
- If you're using a PC notebook, press the function key on your keyboard that lets you display on an external monitor. It may be labeled **CRT/LCD** or have an icon such as . You may have to hold down the **Fn** key while pressing it. Allow a few seconds for the projector to sync up after changing the setting.

The Projector and Notebook Don't Display the Same Image

If you're projecting from a notebook, and you can't see your image on the projection screen and on your computer at the same time, follow these guidelines.

If you're using a PC notebook:

- On most systems, there's a function key that lets you toggle between the LCD screen and the projector, or display on both at the same time. It may be labeled **CRT/LCD** or have an icon such as . You may have to hold down the **Fn** key while pressing it. Allow a few seconds for the projector to sync up after changing the setting.

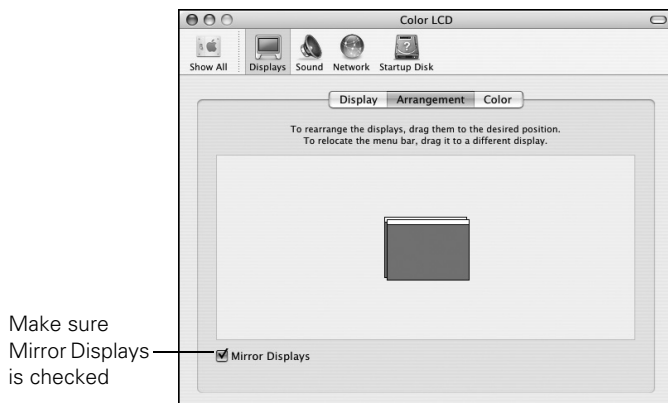
- If the function key doesn't permit you to display simultaneously on both screens, you should check your monitor settings to make sure both the LCD screen and the external monitor port are enabled.

From the Control Panel, open the **Display** utility. In the Display Properties dialog box, click the **Settings** tab, then click **Advanced**. The method for adjusting the settings varies by brand; you may need to click a **Monitor** tab, then make sure the external Monitor port is set as your primary display and/or enabled. See your computer's documentation or online help for details.

If you're using Mac OS X:

You may need to set up your system to display on the projector screen as well as the LCD screen. Follow these steps:

1. From the Apple® menu, select **System Preferences**, then select **Displays**.
2. Make sure the **VGA Display** or **Color LCD** dialog box is selected.
3. Click the **Arrangement** (or **Arrange**) tab.



4. Make sure the **Mirror Displays** checkbox is selected.

Adjusting the Image

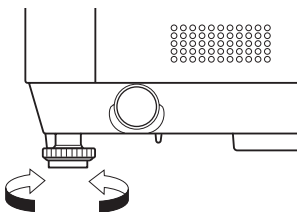
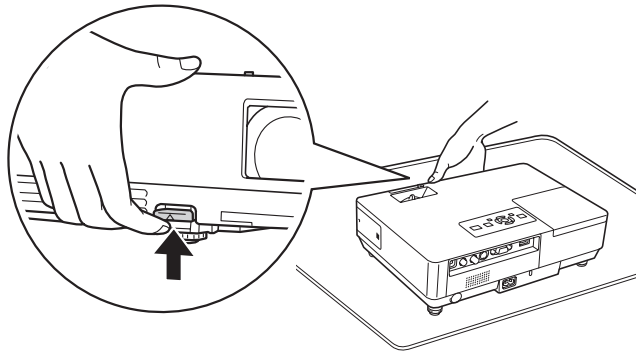
Once you see your image, you need to make certain adjustments:

- If the image is too high or too low, you can reposition it. See below.
- To focus or zoom your image, see page 23.
- If the image isn't square, see page 23.
- If a computer image displays incorrectly, see page 25.
- If you need to fine-tune the image and/or sound, see Chapter 6.

Adjusting the Height of Your Image

If the image is too low on the screen, you can use the front adjustable foot to raise it.

1. Stand behind the projector. Press the blue foot release lever up and lift the front of the projector.



Projector rear foot

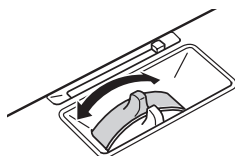
2. Once the image is positioned where you want it, release the lever to lock the foot in position.
3. If necessary, you can fine-tune the height or level the image by turning the projector's adjustable rear foot.

Raising the projector causes the image to distort or “keystone,” but you can correct the shape as described on page 23.

Focusing and Zooming Your Image

Turn the focus ring on the projector to sharpen the image.

Turn the zoom ring on the projector to reduce or enlarge the image.



Focus



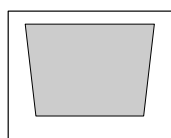
Zoom

If the image still isn't large enough, you may need to move the projector farther away from the screen. You can also use the **E-Zoom** buttons on the remote control to zoom in on a portion of the image. See page 31 for instructions.

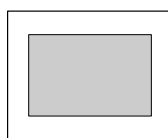
Adjusting the Image Shape

In most cases, you can maintain a square or rectangular image by placing the projector directly in front of the center of the screen with the base of the lens level with the bottom of the screen.

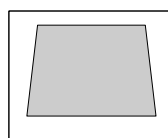
Even if the projector is slightly tilted (within a range of 30° up or down), the projector has an automatic keystone correction function that detects and corrects vertical keystone distortion.



Projector tilted up



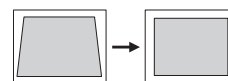
Corrected image



Projector tilted down

It takes about one second after projection starts for the image to be corrected. During this time, a vertical keystone correction gauge appears on the screen.

If your image is still distorted, you can correct it using the **Keystone** buttons on the projector's control panel or the projector's **Setting** menu.



Keystone correction

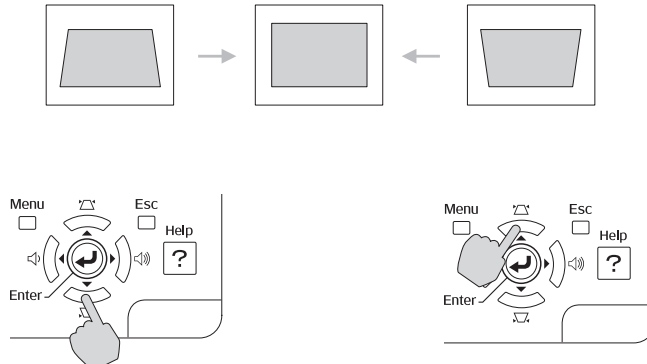
Using Keystone Correction

To adjust your image when it is wider on the top or bottom, do the following:

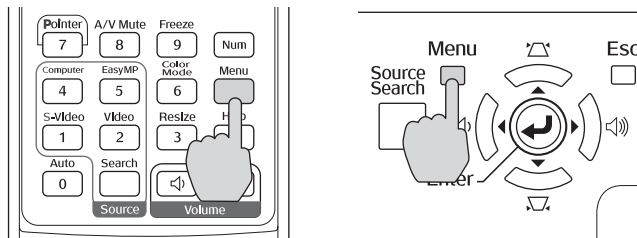
note

*The image will be slightly smaller after adjusting. If it's important to maintain the correct aspect ratio, use the menu system to perform keystone correction, then use the remote's **Resize** button to adjust the aspect ratio. See page 32.*

- Press one of the two triangular buttons on the projector's control panel, as shown below. Continue pressing the button until you are satisfied with the shape of the image.



- Or press the **Menu** button on the remote control or projector, select the **Setting** menu, and press **Enter**.

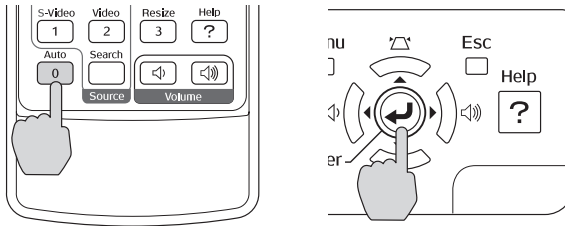


From the Setting menu, select **Keystone** and press **Enter**. Use the  pointer button on the remote control to adjust the keystone setting as needed.

If the image becomes uneven, decrease the sharpness setting. (See page 113.)

Correcting Computer Images

If you're connected to a computer and the image doesn't look right, press the **Auto** button on the remote control or the **Enter** button on the projector. This automatically resets the projector's tracking, sync, resolution, and position settings.



If the **Auto** button doesn't correct the problem, you may need to adjust the tracking or sync using the projector's **Signal** menu. See page 114 for more information.

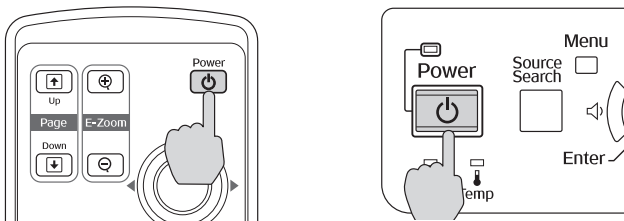
note

*You must be projecting an image for this button to have any effect. The **Auto** button works only with computer images projected through the **VGA** port.*

Shutting Down the Projector

When you've finished using the projector, follow the recommended procedure to shut it down. This extends the life of the lamp and protects the projector from possible overheating.

1. Turn off any equipment plugged into the projector.
2. To turn off the projector, press the red **Power** button on the remote control or projector.



You see a confirmation message. (If you don't want to turn it off, press any other button.)



note

Lamp life results will vary depending on mode selected, environmental conditions, and usage.

Turn off this product when not in use to prolong the life of the projector.

note

You can set the projector to automatically turn off the projector lamp and enter “sleep mode” when it has not received any signals for 30 minutes. This conserves electricity, cools the projector, and extends the life of the lamp. If you want to start projecting again, press the  Power button. If you are done using the projector, unplug the power cord. To enable sleep mode, see page 122.

3. Press the  Power button again. The lamp turns off. When the projector beeps twice, you can unplug the power cord.

(If the projector is mounted on the ceiling, you will need to wait 20 seconds for the projector to cool down before you can unplug the power cord.)

If you want to turn the projector on again, make sure the orange light is not flashing, then press the  Power button.

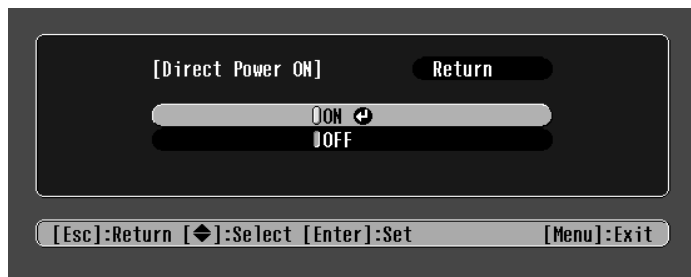
4. If you extended the adjustable front foot, press up on the blue foot release lever to retract it.
5. Close the A/V Mute slide.

Using the Direct Power On Function

The Direct Power On function enables faster setup. The projector will start up automatically when you plug it in; you won't have to press the  Power button.

Follow these steps to enable Direct Power On:

1. Press the **Menu** button on the remote control and select the **Extended** menu.
2. Choose **Operation** and press **Enter**.
3. Choose **Direct Power On** and press **Enter**.



4. Highlight **On** and press **Enter**.
5. Press **Esc** or **Menu** to exit.

The setting will take effect the next time you plug in the projector.

note

If a power outage occurs when Direct Power On is enabled and the projector is plugged in, the projector will start when the power is restored.

2

Using the Remote Control

The projector includes a number of tools to enhance your presentation. All of them can be accessed using the remote control, which lets you operate the projector from anywhere in the room—up to 20 feet away.

note

For information and resources to help you give the most professional presentation, be sure to visit presentersonline.com.

You can use the remote control to adjust the picture and sound (page 29) or as a pointer to highlight your presentation (page 34). You can also use it to adjust the color mode for various environments (page 32) or as a wireless mouse when projecting from a computer (page 33).

This chapter covers:

- Using the remote control
- Controlling the picture and sound
- Operating your computer with the remote control
- Highlighting your presentation

note

If a button is pressed longer than 30 seconds, the remote control stops operating to conserve power. When you release the button, normal operation resumes.

caution

When replacing batteries, take the following precautions:

- *Replace the batteries as soon as they run out. If the batteries leak, wipe away battery fluid with a soft cloth. If fluid gets on your hands, wash immediately.*
 - *Do not expose batteries to heat or flame.*
 - *Dispose of used batteries according to local regulations.*
 - *Remove the batteries if you won't be using the projector for a long period of time.*
-

Using the Remote Control

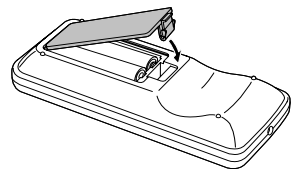
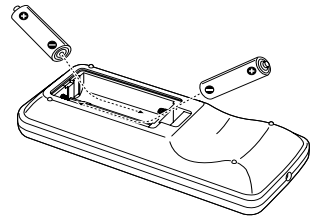
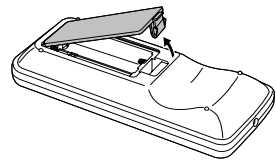
Follow these tips for using the remote control:

- Point the remote control at the front of the projector or at the screen.
- Stand within 20 feet of the projector.
- Avoid using the remote under bright fluorescent lamps or in direct sunlight, or the projector may not respond properly.

Replacing the Batteries

Replace the batteries as described below:

1. Turn the remote control over.
2. Press down on the tab on the battery cover as you lift the cover off.
3. Install two AAA batteries, inserting the + and – ends as shown.
4. Position the cover as shown, then press down until it snaps into place.



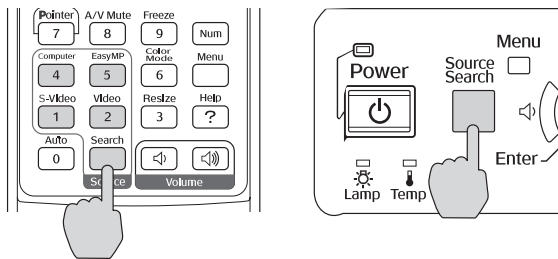
Controlling the Picture and Sound

You can use the remote control to preview and select your picture sources, temporarily turn off the picture and sound, freeze the action, zoom in on the picture, and adjust the volume.

Switching Between Picture Sources

If your projector is connected to more than one computer and/or video source, you can switch between the different sources:

- The easiest way to select your source is to press the **Search** button on the remote control (or the **Source Search** button on the projector) repeatedly until you see the image you want on the screen.



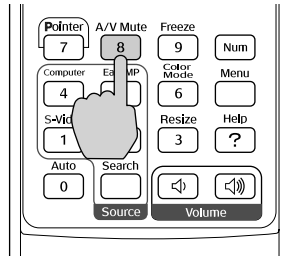
- On the remote control, there are four **Source** buttons. Use them to switch between equipment connected to the port identified on each button, or to use EasyMP to project wirelessly or from a USB drive.

After you select a source, the screen goes dark for a moment before the image appears.

Turning Off the Picture and Sound

You can use the **A/V Mute** button on the remote control to turn off the image and sound. This feature is useful if you want to temporarily redirect your audience's attention.

- To turn off the picture and sound, press the **A/V Mute** button. The screen turns black.
- To turn the image and sound back on, press the button again.

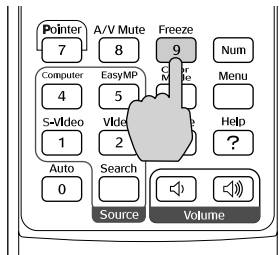


You can have the screen turn blue when you press the **A/V Mute** button. You can also have an image, such as a company logo, display on the screen (see page 119).

Stopping Action

You can use the remote control to stop the action in your video or computer image.

- To stop the action and keep the current image on the screen, press the **Freeze** button. The sound continues.
- To restart it, press the **Freeze** button again.



note

This function pauses the image, but not the sound. Also, because the source continues to transmit signals, you won't resume the action from the point you stopped it.

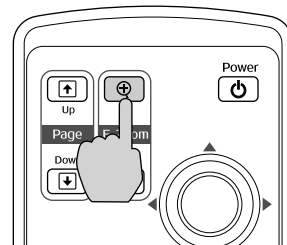
Zooming Part of Your Image

You can zoom in on a portion of the image using the E-Zoom buttons on the remote control.

1. Press the E-Zoom  button on the remote control.

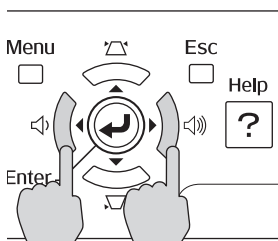
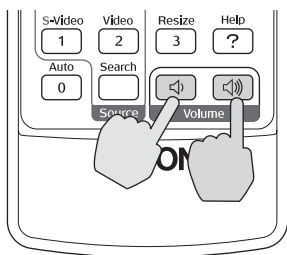
You see a crosshair indicating the center of the zoom-in area.

2. Use the  pointer button to position the crosshair.
3. Continue pressing the E-Zoom  button to enlarge the selected area up to 4 times.
4. While the image is enlarged, you can:
 - Use the  pointer button to move around the screen.
 - Press the E-Zoom  button to zoom out.
5. When done, press the ESC button to return the image to its original size.



Controlling the Volume

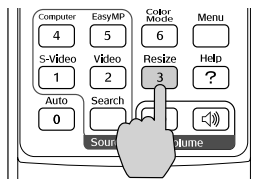
To change the volume, press the  or  button on the remote control or projector.



note

To temporarily shut off the sound and picture, press the A/V Mute button.

You can also adjust the volume using the projector's menu system. See page 116.

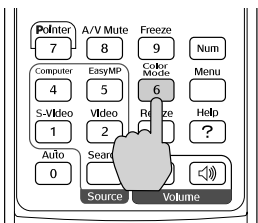


Resizing Video Images

You can use the **Resize** button on the remote control to adjust how an image fits into the display area.

For video images, press **Resize** to switch the aspect ratio between 4:3 and 16:9, (and Normal for computer images). This lets you play certain digital video images or movies recorded on certain DVDs in 16:9 widescreen format.

For computer images, resizing is normally unnecessary, since the projector automatically resizes the image to make the best use of the display area. If you press the **Resize** button on the projector or remote control, the projector displays the image at the output resolution of the computer (which makes the image larger or smaller, depending on its resolution). If the resolution of the image is the same as the projector's (1024 × 768), pressing **Resize** has no effect.



Adjusting the Color Mode

You can use the **Color Mode** button on the remote control to adjust the color, brightness, and other aspects of your image.

Press the button repeatedly to select from the following settings:

Photo: For vivid, high-contrast still images in a bright room.

Sports (video, S-video, or composite video only): For vivid TV images projected in a bright room.

Presentation: For computer presentations (the default when projecting from a computer with analog video).

Theatre: For optimizing movie images with increased contrast.

Game: For increased brightness when playing video games or watching TV in a bright room. Emphasizes dark gradations.

sRGB: For matching the color palette of standard sRGB computer displays

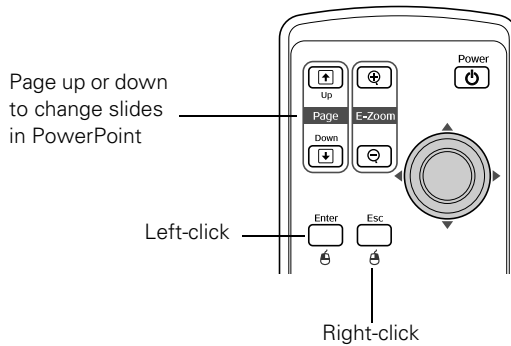
Blackboard: For projecting accurate colors on a green chalkboard (adjusts the white point).

Customized: For manual color adjustment. (See page 112).

Operating Your Computer with the Remote Control

If you connect a computer to the projector with a USB cable, as described on page 37, then select **Link21L** for the USB Type B setting in the Extended menu (see page 122), you can use the remote control in place of your computer's mouse. This gives you more flexibility when delivering slideshow-style presentations, since you won't have to stand next to the computer to change slides.

- Use the **Up** and **Down** buttons to move through a slideshow.



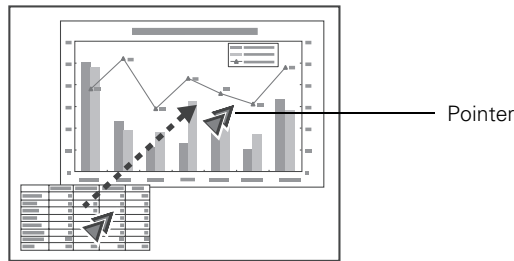
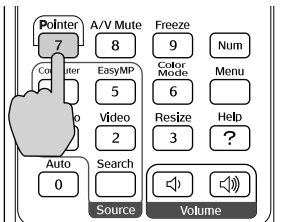
- Use the **pointer** button to move the cursor on the screen.
- Press the **Enter** button once to left-click, or press it twice to double-click. Press the **Esc** button to right-click.
- To drag-and-drop, hold down the **Enter** button. Then use the **pointer** button to drag the object. When it's where you want it, press **Enter** to release it.

Highlighting Your Presentation

You can display a pointer to call out important information on the screen. If you want to customize the pointer tool, you can choose from three alternative shapes.

Using the Pointer Tool

1. To activate the pointer tool, press the **Pointer** button on the remote control. A pointer appears on the screen.



If you prefer to use a different style of pointer, see the instructions in the next section.

2. Use the  pointer button on the remote control to position the pointer on the screen.
3. When you're done using the pointer, press **ESC** to clear the screen.

Customizing the Pointer Tool

You can change the appearance of the pointer by choosing from three alternative shapes.



1. Press the **Menu** button on the remote control, highlight the **Settings** menu, highlight **Pointer Shape**, and press **Enter**. You can select one of the pointer shapes shown at the left.
2. Select the shape you want and press **Enter**.
3. Highlight **Return** and press **Enter**.
4. Press **Menu** to exit from the menu system.

3

Connecting to Computers, Cameras, and Other Equipment

This chapter tells you how to connect the projector to a notebook or desktop computer, and/or to video equipment, such as a VCR, DVD player, or video camera. You can also connect the projector to a USB storage device, digital camera, or external speakers.

Follow the instructions in this chapter on:

- Connecting to a computer
- Connecting video equipment
- Connecting to a digital camera or other USB device
- Playing sound through the projector

note

*If you connect a Windows-based computer to the projector, you may see a New Hardware Wizard saying your computer has found a plug-and-play monitor; if so, click **Cancel**.*

note

For newer notebooks with DVI connectors, see your computer's documentation to see how to use a DVI to VGA adapter (often included with the computer) to connect to the VGA computer port.

caution

Don't try to force a connector to fit a port with a different shape or number of pins. You may damage the port or connector.

Connecting to a Computer

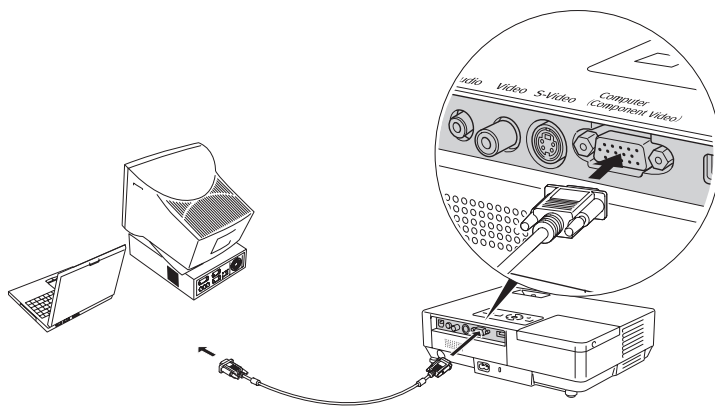
You can connect the projector to any computer that has a standard video output (monitor) port, including desktop models, PC notebook and notebook computers, MacBooks, PowerBooks and iBooks, and hand-held devices. To connect to the blue **Computer/Component Video** port (standard VGA cable connection), see the instructions below. After connecting to the computer, you may also want to do one of the following:

- Connect a USB cable so you can use the remote control as a mouse; see page 37
- Connect an audio cable to play computer audio; see page 44

Connecting to the Computer Port

You can connect to the blue **Computer/Component Video** port using the VGA computer cable that came with the projector (the monitor port on your computer must be a mini D-sub 15-pin port).

1. If you're using the VGA computer cable, connect one end to the projector's blue **Computer/Component Video** port, and the other end to your computer's monitor port. Then go to step 3.



2. You can connect an optional stereo mini-jack audio cable to play sound through the projector (see page 44), or connect a USB cable to use the remote control as a mouse (see page 37).

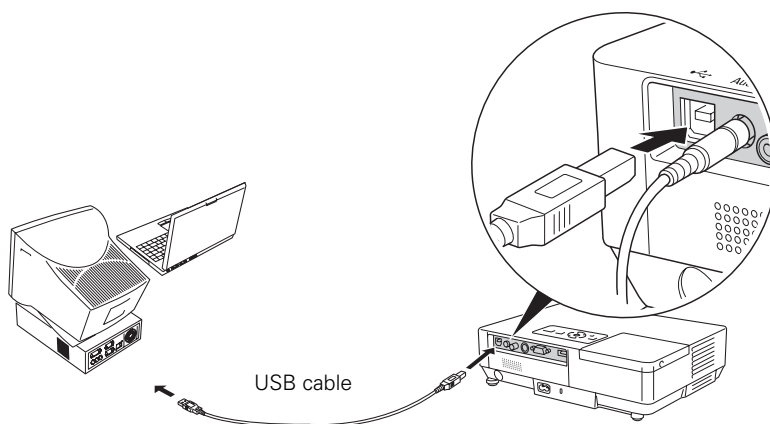
3. When you've finished making any connections, see page 17 for instructions on turning on the projector and adjusting the image.

Connecting the Cable for Remote Mouse Control

If you've connected a computer as described in this chapter (using the Computer/Component Video port) and set the USB Type B setting under the projector's Extended menu to Link21L (see page 122), you can use the projector's remote control as a wireless mouse. This lets you control your computer and click through slideshow-style presentations, such as PowerPoint, from up to 20 feet away.

The wireless mouse function is supported on systems with a USB port running Windows XP, 98SE, Me, or 2000, or Mac OS X 10.2.x to 10.4.x. This function is not supported if you use an S-Video cable to connect your computer to the projector.

1. Locate the USB cable that came with your projector.
2. Connect the square end of the cable to the projector's  USB port.



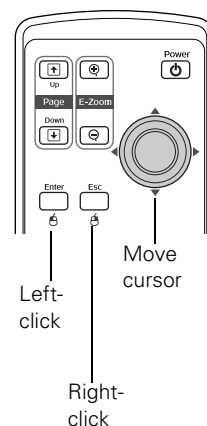
3. Connect the flat end of the cable to any available USB port on your notebook or desktop computer.

note

The remote mouse control function may not operate correctly on systems that have been upgraded from an earlier version of Windows.

note

For details on how to use the remote control in place of your computer's mouse, see page 33.



4. If necessary, configure your computer to work with an external USB mouse. See your computer documentation for details.

Connecting to Video Equipment

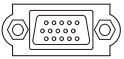
You can connect several video sources to the projector at the same time. Before starting, look at your video equipment to determine its available video output connections:



RCA connector
(composite video)



S-Video
connector



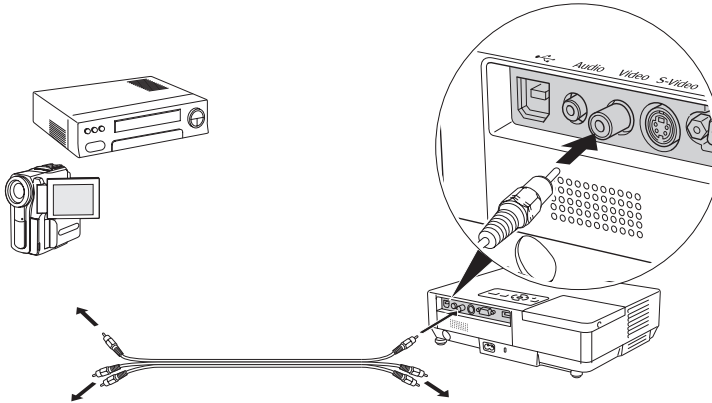
VGA connector
(RGB video)

- If your video player has a yellow RCA-style video output connector, see “Connecting a Composite Video Source” on page 39.
- If your video player has an S-Video connector, see “Connecting an S-Video Source” on page 40.
- If your video player has a component video port (three connectors labeled either Y/Cb/Cr or Y/Pb/Pr), see “Connecting a Component Video Source” on page 41.
- If your video player has an RGB video port (either a single connector for a VGA-style monitor cable or three connectors labeled R/G/B), see “Connecting an RGB Video Source” on page 42.

After connecting video cables, you may also want to connect an audio cable to play sound through the projector; see page 44.

Connecting a Composite Video Source

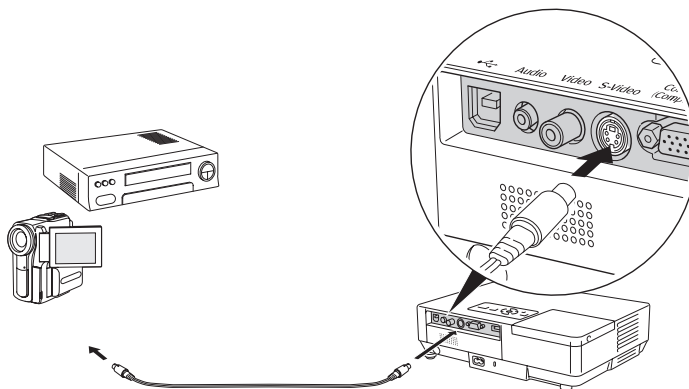
1. Locate an RCA-style video cable (one is usually provided with your video equipment or you can purchase one from an electronics dealer).
2. Connect the cable to the yellow video output connector on your player and the yellow Video connector on the projector:



3. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
4. If you don't need to make any other connections, see page 17 or the *Quick Setup* sheet for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

Connecting an S-Video Source

1. Locate an S-Video cable (one is usually provided with your video equipment or you can purchase one from Epson; see page 13).
2. Connect the cable to the S-Video connector on your player and the S-Video connector on the projector:

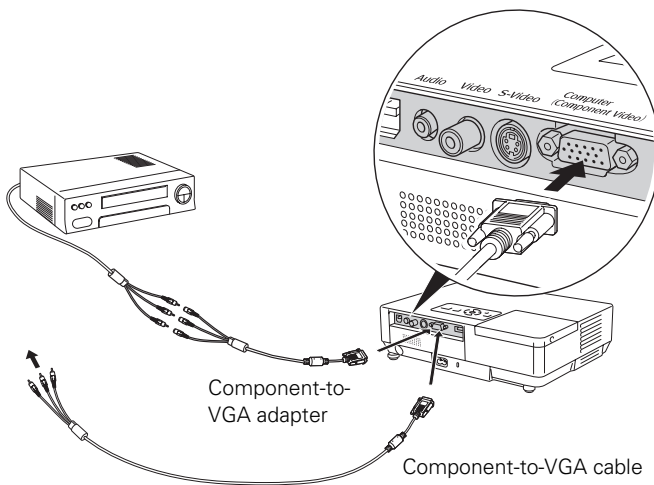


3. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
4. If you don't need to make any other connections, see page 17 or the *Quick Setup* sheet for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

Connecting a Component Video Source

You will need a component-to-VGA video cable or a component video-to-VGA adapter for this connection. You can order this cable (ELPKC19) from Epson; see page 14 for more information.

1. Locate a component-to-VGA video cable or adapter.
2. Connect the cable to your player and the blue **Computer/Component Video** connector on the projector.



3. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
4. If you don't need to make any other connections, see page 17 for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

note

Be sure your video player is not an RGB video source. If you select the wrong source, image quality may suffer. Check your video player's documentation.

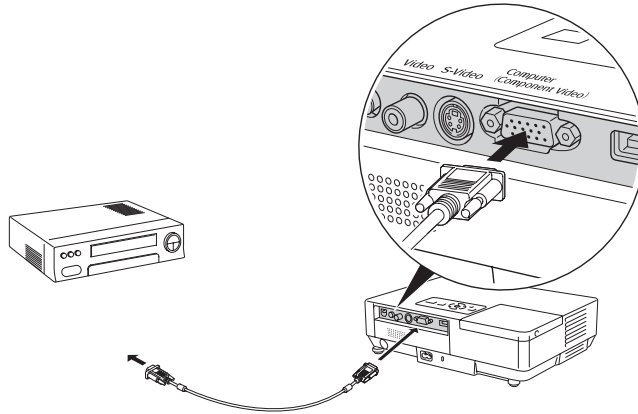
*Also, make sure the **Computer Input** setting in the **Signal** menu is set to **Auto** or **Component Video** (see page 114).*

Connecting an RGB Video Source

note

Be sure your video player is not a component video source. If you select the wrong source, image quality may suffer. Check your video player's documentation.

1. Locate the VGA computer cable provided with the projector.
2. Connect the cable to the video port on your player and the Computer/Component port on the projector.

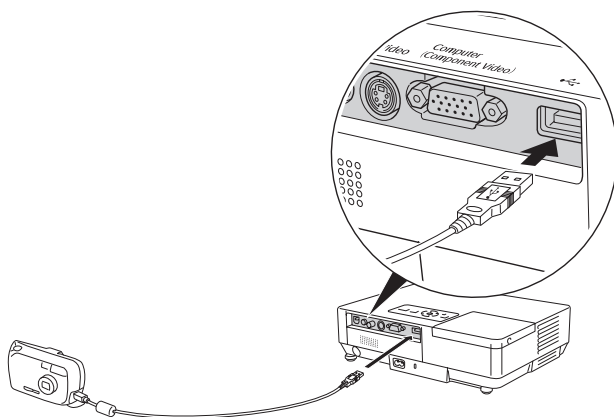


3. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
4. If you don't need to make any other connections, see page 17 for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

Connecting to a Digital Camera or Other Device

You can connect your digital camera, USB flash memory drive, USB hard drive, or multimedia storage viewer, such as the Epson P-4000 or iPod® photo. Use the USB cable specified for your device. Then you can use your device's slideshow function or the projector's EasyMP PC Free feature (see page 89) to present images.

1. Make sure there is no card inserted in the projector's card slot.
2. Connect the flat end of the USB cable to the flat USB port on the projector, as shown.



3. Connect the square end of the cable to your camera or other device.

Removing the USB Cable

If you're using PC Free mode to project your images, exit PC Free mode before you remove the USB cable from the projector.

1. Position the cursor over the **Exit** button in the upper right corner of the PC Free screen.
2. Press the **Enter** button on the remote control to close PC Free mode.
3. Disconnect the USB cable.

note

Use a cable less than 10 feet long and connect the camera directly to the projector.

Your projector may not function correctly if you use a longer cable or connect your camera to a USB hub.

If you connect a USB hard drive, make sure you use the AC adapter to power the hard drive.

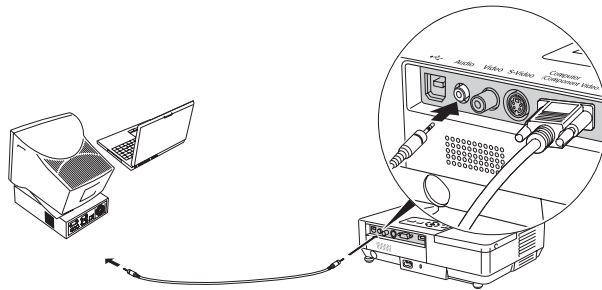
Playing Sound Through the Projector

You can play sound through the projector's speaker system or attach an external speaker system.

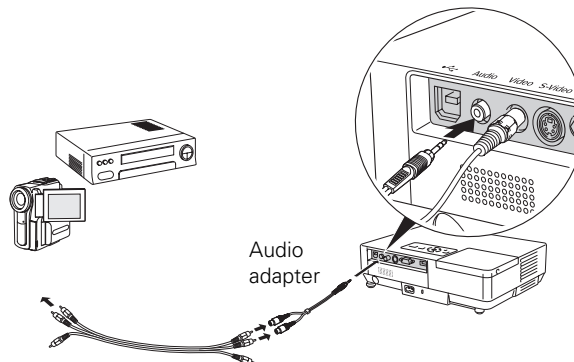
To play sound through the projector, follow these steps:

1. Locate the appropriate cable and connect it to the **Audio** jack on the projector.

- If you have a computer connected to the blue **Computer/Component Video** port, use a stereo mini-jack cable.



- If you have video equipment connected to the **Video** or **S-Video** port, use an RCA-style audio cable and the audio adapter included with the projector.



2. Connect the other end of the cable to the audio output connector(s) on your computer or video equipment.

Connecting External Speakers

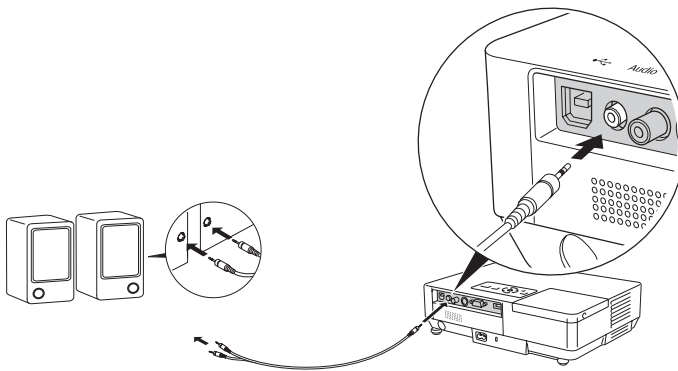
When you use EasyMP, you can output the sound to external speakers with built-in amplifiers. First, you need to use the Settings menu to set the EasyMP Audio Out option to **External**. See page 116 for instructions.

To connect speakers to the projector, follow these steps:

1. Locate the appropriate cable to connect your speakers.

Depending on your speakers you may be able to use a commercially available audio cable with a stereo mini-jack connector on one end and pin jacks on the other end. For some speakers, you may have to purchase a special cable or use an adapter.

2. Connect the stereo mini-jack end of the audio cable to the **Audio** port on the projector.



3. Connect the other end(s) of the cable to your speakers.

The projector's internal speaker system is disabled while sound is output to external speakers, and you can't use the projector or remote control to control the volume.

4

Presenting Through a Wireless Network

This chapter tells you how to send pictures to the projector through a wireless network. Using EMP NS Connection, you can project images shown on your computer screen—including text and graphics—directly to your audience. Because images are displayed in real-time, any changes you make on your PC or notebook are automatically mirrored on the screen.

You'll find instructions in this chapter on:

- Starting EasyMP
- Configuring basic settings
- Connecting to the projector in Ad Hoc (computer-to-computer) mode or Access Point (infrastructure) mode
- Using wireless security options
- Projecting wirelessly
- Multi-screen projection
- Removing the wireless 802.11g/b/a module
- Projecting from a wired LAN
- Sending e-mail alerts from the projector

Before starting, make sure you've installed EMP NS Connection as described on page 165 for each computer you want to connect to the projector. Then follow the steps in this chapter to start EasyMP, configure your projector and computer, and run EMP NS Connection.

note

Only the Epson 802.11g/b/a module is guaranteed to work. Other brands may not be compatible.

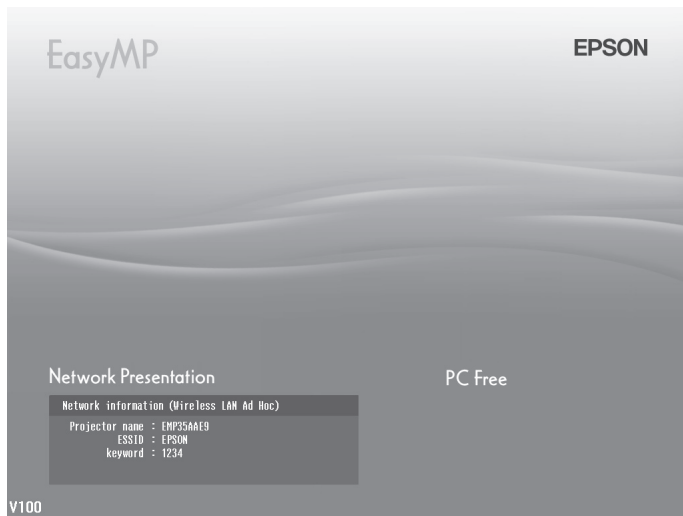
If you see a message asking you to insert a LAN or memory card, check to make sure your 802.11 g/b/a module is properly inserted.

Starting EasyMP

Before connecting to the projector, you have to switch it to EasyMP mode. Follow these steps:

1. Point the remote control at the projector and press the  **Power** button.
2. Press the **EasyMP** button on the remote control to select EasyMP as the source.

You see this screen. The network settings appear in the lower left.



3. If you've already set up your computer and projector for the mode you want to use—Ad Hoc mode (also called computer-to-computer mode) or Access Point mode (also called infrastructure mode)—skip to “Projecting Over a Network” on page 73.

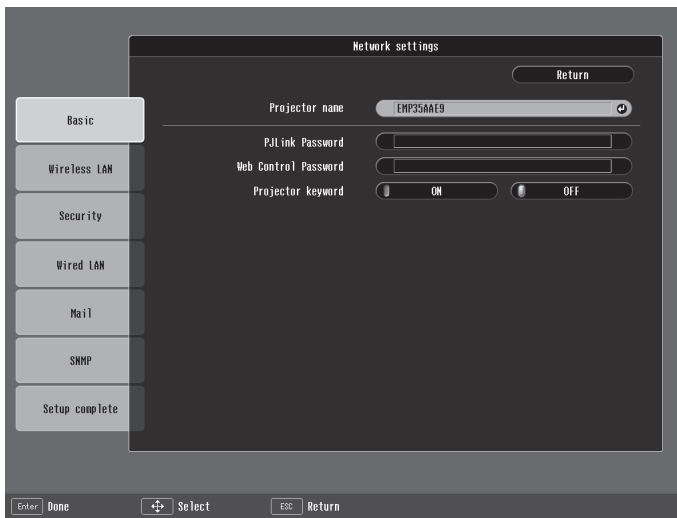
Otherwise, continue with the next section.

Configuring Basic Settings

You can give your projector a unique name, enable a projector keyword, or create a password for controlling the projector over the Web.

1. Press the **Menu** button, then choose **Network** and press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Choose **Basic** and press **Enter**.

You see the following screen:



4. Make sure the projector has a unique name, so you can identify it when connecting to it from your computer.

If you need to rename it, highlight the **Projector name** text box then press **Enter**.

5. Press the  pointer button to select individual letters; then press **Enter** to input a character. To add a blank space or to navigate backward and forward through the input text, highlight the arrows and press **Enter**. To toggle symbol settings or capital letters, highlight the option and press **Enter**. When you're done, highlight **Finish** and press **Enter**.



6. If you want to create a password for remote access to the projector, highlight **Web Control Password**, press **Enter**, and enter a password of up to 8 alphanumeric characters. When you're done, highlight **Finish** and press **Enter**.
7. If you want to set up a security keyword so that only people who are in the same room as the projector can access it, turn **Projector keyword** on. Then when you want to connect to the projector, it displays a randomized four-digit number or "keyword" on the screen. When prompted by NS Connection, you can enter the keyword on your computer to connect (see page 75).
8. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**.

Configuring the Connection

You can use NS Connection to connect to the projector and send images wirelessly in two modes: Ad Hoc mode or Access Point mode.

- **Ad Hoc mode** (computer-to-computer mode) lets you connect just one computer to the projector at a time; it's easy to set up, and the only equipment you need is a computer with a wireless (802.11g, 802.11b, or 802.11a) network card or adapter, or a

Macintosh with an AirPort® or AirPort Extreme card. When you connect with this mode, any connection to other wireless networks is broken; you can connect to the projector only.

- **Access Point mode** (infrastructure mode) lets multiple computers access the projector at the same time and easily trade off control over the projector. To use Access Point mode, you need a wireless (802.11g, 802.11b, or 802.11a) access point or an AirPort Extreme (or AirPort) base station, and one or more computers with wireless network cards or adapters.

Follow the instructions below for the mode you want to use.

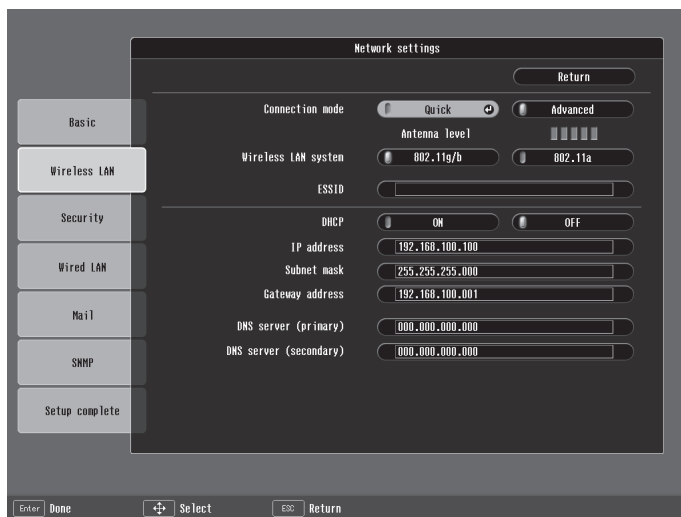
Using Ad Hoc Mode

To use Ad Hoc (computer-to-computer) mode, adjust your projector and wireless card or adapter settings as described in this section.

Configuring the Projector

1. Press the **Menu** button, then choose **Network** and press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Choose **Wireless LAN** and press **Enter**.

You see this screen:



note

Make sure you've installed the NS Connection software as described on page 165.

To connect to the projector over a wireless network, your computer must be running Windows 98, Me, 2000, or XP. Your Mac must be running Mac OS X 10.2.4 or later. See page 165 for complete system requirements for projecting wirelessly.

Access Point mode (infrastructure mode) is required to achieve transfer speeds up to 54MB/sec on an 802.11g network. Ad Hoc mode (computer-to-computer mode) limits network connections to 11MB/sec. This is a standard specification of 802.11g networking.

4. Make sure **Quick** is selected for the Connection mode. If not, use the  pointer button on the remote control to highlight **Quick**, then press **Enter** to select it.
5. If your network is using 802.11a, use the  pointer button on the remote control to highlight **802.11a**, then press **Enter** to select it.
6. If your network card supports an SSID or ESSID name (see page 55), highlight the **ESSID** text box, press **Enter**, and enter a name:

Press the  pointer button to select individual letters; then press **Enter** to input a character. To add a blank space or to navigate backward and forward through the input text, highlight the arrows and press **Enter**. To toggle symbol settings or capital letters, highlight the option and press **Enter**. When you're done, highlight **Finish** and press **Enter**.



Note that the ESSID is case-sensitive (if you enter the name in uppercase on the projector, you must type it the same way on the computer connecting to the projector).

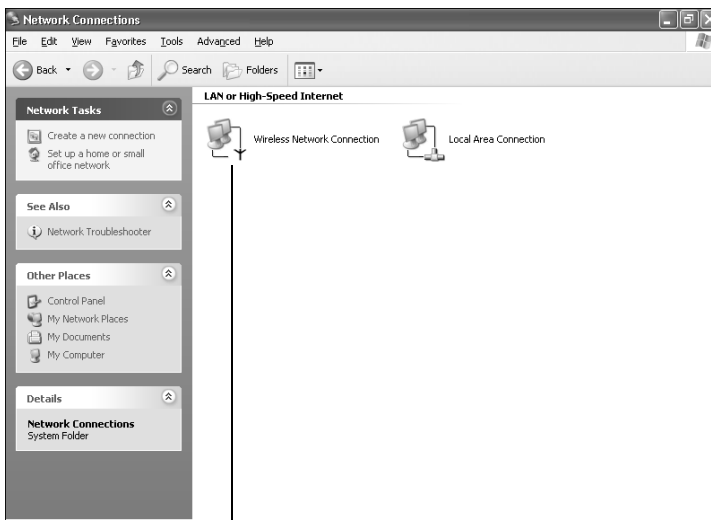
7. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**. Choose **Setup Complete** and press **Enter**, then choose **Yes** and press **Enter** to save your settings and return to the main EasyMP screen.

Now you're ready to set up your computer to project wirelessly. Go to "Configuring the Network Settings for Windows" below, or "Setting Up Your Mac for Ad Hoc Mode" on page 55.

Configuring the Network Settings for Windows

Before connecting to the projector, you need to make sure the settings for your notebook's or PC's network card match the settings you entered for the projector.

1. Access your wireless network Properties window. For example, in Windows XP you would click **Start > Control Panel > Network and Internet Connections**. Then click the **Network Connections** icon. You see a screen similar to this:



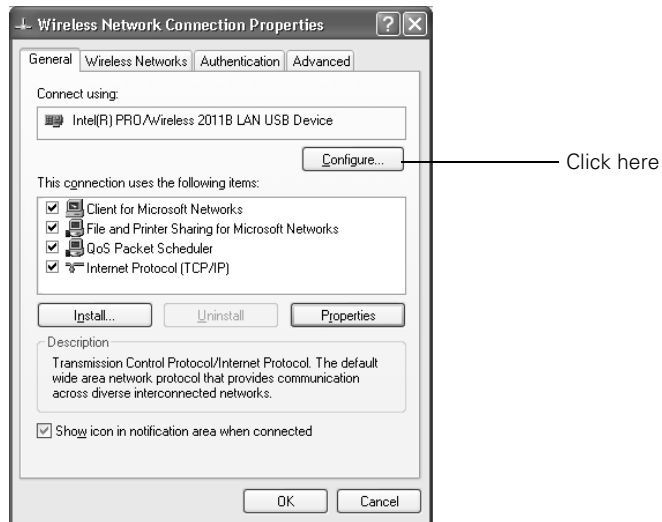
Right-click and select Properties

note

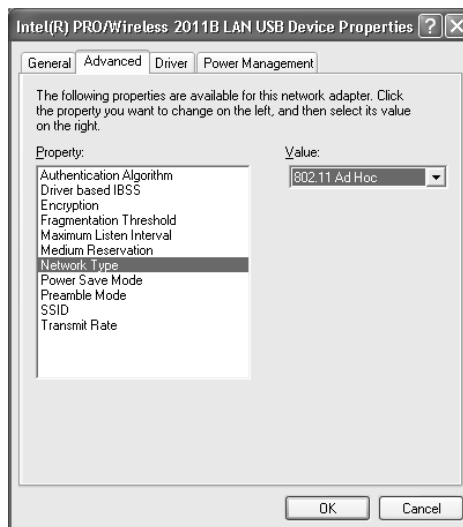
On some Windows systems, you can right-click My Network Places or Network Neighborhood on the desktop and select Properties.

Settings may vary, depending on your wireless network adapter. See the documentation for your adapter for more information.

2. Right-click the **Wireless Network Connection** icon and select **Properties**. You see a screen similar to this:



3. Click the **Configure** button.
4. Click the **Advanced** tab. You see a screen similar to this:



5. Check your wireless card or adapter device settings. (Depending on the type of card or adapter you're using, some of the settings may be different than those listed here.)
 - Set the Network Type to **802.11 Ad Hoc**.
 - Set the SSID to match the name you assigned to the projector's ESSID.
 - Make sure Encryption is **Disabled**.
6. Click the **General** tab and make sure that your wireless card or adapter is enabled.
7. When you're done, click **OK** to close the Properties dialog box.

Now you're ready to connect to the projector. See "Projecting Over a Network" on page 73.

Setting Up Your Mac for Ad Hoc Mode

Your AirPort software is automatically configured to allow your Mac to detect both computer-to-computer (Ad Hoc) and Access Point networks.

Typically, you only need to select your projector's ESSID from the AirPort status menu on the Mac menu bar. If you're having problems detecting the projector, follow these steps:

1. From the Apple pull-down menu, select **System Preferences**.
2. Double-click the **Network** icon. You see the Network settings window.

note

When you connect in Ad Hoc mode, your computer is disconnected from any other wireless networks. If you need to remain connected to your wireless network, use Access Point mode, as described on page 57. Also, make sure you reconnect to your original wireless network when you are done using the projector.

3. Make sure Location is set to **Automatic**.

note:

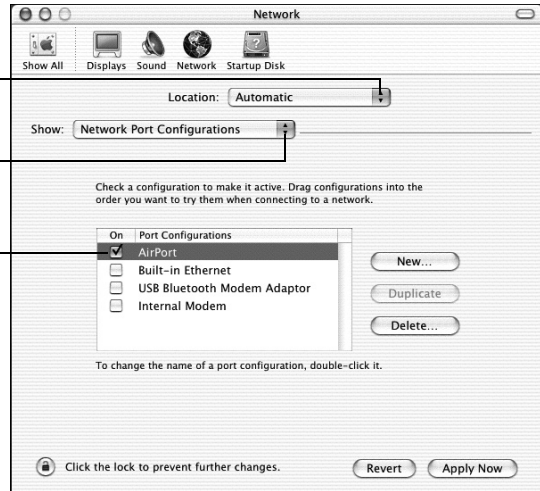
If you don't need the other network port configurations, disable them by deselecting their checkboxes.

When you connect in Ad Hoc mode, your computer is disconnected from any other wireless networks. If you need to remain connected to your wireless network, use Access Point mode, as described on page 57. Also, make sure you reconnect to your original wireless network when you are done using the projector.

Select
Automatic

Select Network Port
Configurations

then select **AirPort**



4. Select **Network Port Configurations** in the Show pull-down menu.
5. Under Port Configurations, select **AirPort**.
6. Click **Apply Now**. Then close the window.
7. Click the AirPort icon on the menu bar at the top of the Mac desktop. You see the AirPort status menu:

Choose the ESSID
you assigned to the
projector



8. Check to make sure AirPort is turned on.
9. Select your projector's ESSID.

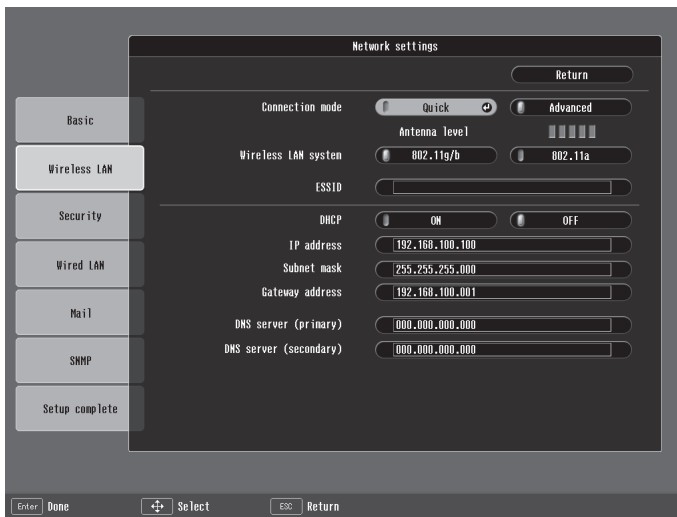
Using Access Point Mode

To use Access Point (infrastructure) mode, first adjust your projector and wireless access point or AirPort base station settings as described in this section.

Configuring the Projector

1. Press the **Menu** button, then choose **Network** and press **Enter**.
2. Choose **Wireless LAN** and press **Enter**.

You see this screen:



3. Make sure **Advanced** is selected for the **Connection mode**. If not, use the  pointer button on the remote control to highlight **Advanced**, then press **Enter** to select it.
4. If your network is using 802.11a, use the  pointer button on the remote control to highlight **802.11a**, then press **Enter** to select it.
5. To enable your computer to find the projector on the network, you need to enter an ESSID, which is the SSID name of your access point or the name of your AirPort network. (The name of

your AirPort network may be different from that of your AirPort base station; select your base station in the AirPort Admin utility and click **Configure** to check the name of your network.)

Highlight the **ESSID** text box, press **Enter**, and enter a name:

Press the  pointer button to select individual letters; then press **Enter** to input a character. To add a blank space or to navigate backward and forward through the input text, highlight the arrows and press **Enter**. To toggle symbol settings or capital letters, highlight the option and press **Enter**. When you're done, highlight **Finish** and press **Enter**.



note

For specific details about your network, please consult your network administrator.

*If you don't know your gateway or access point address, see page 64. If you're using AirPort, start the AirPort Admin utility, select your base station and click **Configure**. Then click the **Network** tab to see your base station's IP address.*

*If you want to monitor the projector using HP OpenView,TM you'll need to enter at least one trap IP address. You can enter this information in the **SNMP** menu. See page 126 for details on monitoring the projector.*

Note that the ESSID is case-sensitive (if you enter the name in uppercase on the projector, you must type it the same way on the computer connecting to the projector).

6. If your access point assigns IP addresses automatically, turn on **DHCP**. Otherwise, turn off **DHCP** and enter the following information:
 - **IP address:** Enter the IP address you want to assign to the projector. It must be formatted like other addresses on the network. The last section should be unique.
 - **Subnet mask:** For example: 255.255.255.000, but this depends on how your network is set up.
 - **Gateway address:** Enter the IP address that was assigned to the access point or AirPort base station when it was set up.
 - **DNS server (primary)/DNS server (secondary):** Enter the IP address that was assigned to the DNS server(s) for your network.

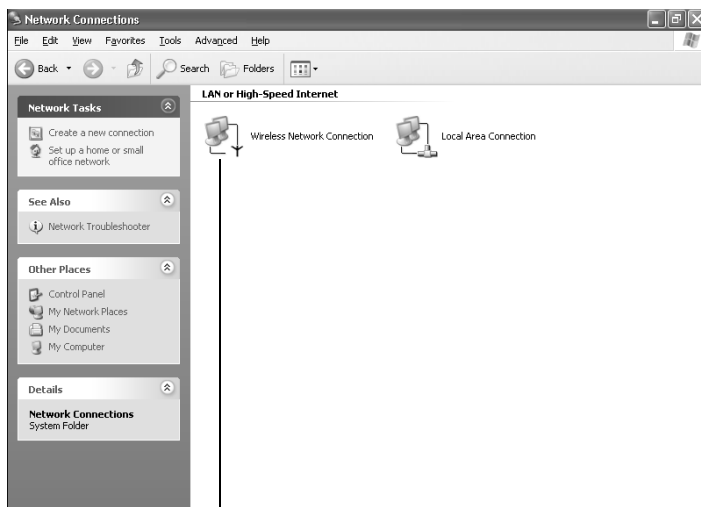
7. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**. Choose **Setup Complete** and press **Enter**, then choose **Yes** and press **Enter** to save your settings and return to the main EasyMP screen.

Now you're ready to set up your computer for wireless projecting. Go to "Configuring the Network Settings for Windows" below, or go to "Setting Up Your Mac for Access Point Mode" on page 65. If you want to enable security options for your network, see page 67 to set up the option that your network uses on the projector.

Configuring the Network Settings for Windows

Before connecting to the projector, you need to make sure the settings for your computer's wireless card or adapter match the settings you entered for the projector.

1. Access your wireless network Properties window. For example, in Windows XP you would click **Start > Control Panel > Network and Internet Connections**. Then click the **Network Connections** icon. You see a screen similar to this:



Right-click and select
Properties

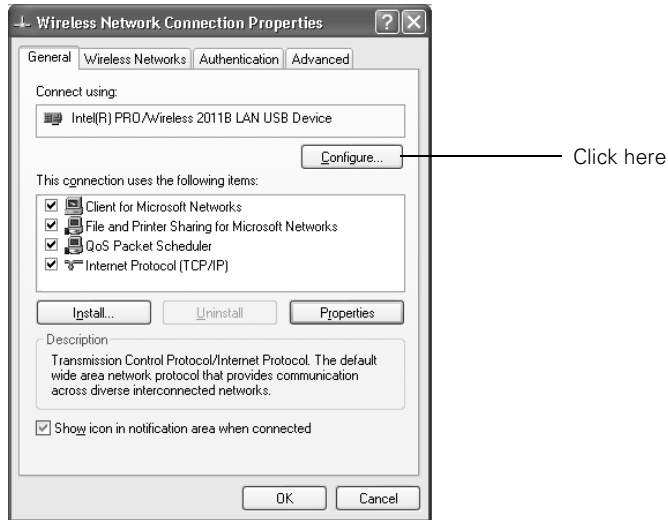
note

On some Windows systems, you can right-click My Network Places or Network Neighborhood on the desktop and select Properties.

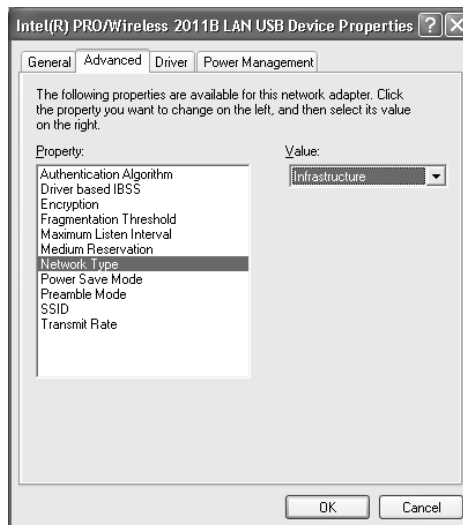
Settings may vary, depending on your wireless network adapter. See the documentation for your adapter for more information.

2. Right-click the **Wireless Network Connection** icon and select **Properties**.

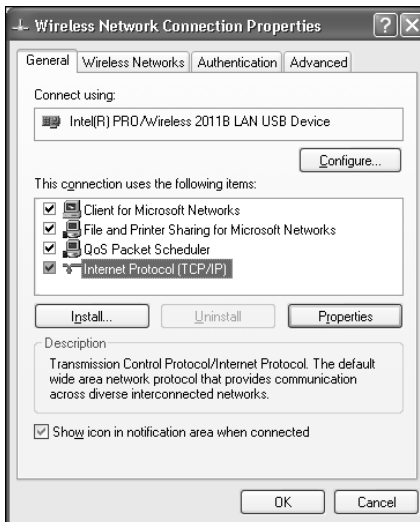
You see a screen similar to this:



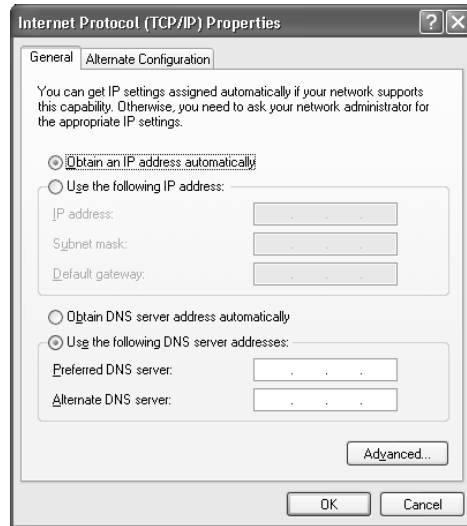
3. Click the **Configure** button.
4. Click the **Advanced** tab. You see a screen like this:



5. Check your wireless card's or adapter's device settings.
(Depending on the type of card or adapter you're using, some of the settings may be different than those listed here.)
 - Set the Network Type to **Infrastructure**.
 - Set the SSID to match the name assigned to the access point (which should also be the projector's ESSID).
 - Make sure Encryption is **Disabled** if you have not set up encryption on the projector.
6. Click the **General** tab and make sure that your wireless card or adapter is enabled.
7. When you're done, click **OK** to close the wireless properties dialog box.
8. Right-click the **Wireless Network Connection** icon again and select **Properties**. You see this screen:



9. Select **Internet Protocol** and click the **Properties** button. You see this screen:



note

For specific details about your network, please consult your network administrator.

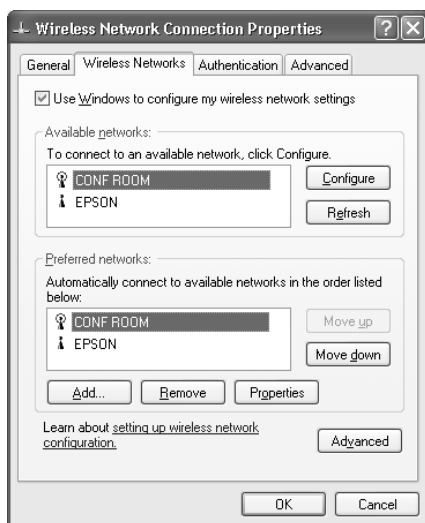
note

If you don't know your gateway or access point address, see page 64.

10. If your access point uses DHCP, select **Obtain an IP address automatically**. Otherwise select **Use the following IP address** and enter the required information:
 - **IP address:** Type in the IP address you want to assign to the computer. It must be formatted like other addresses on the network. The last section must be unique.
 - **Subnet mask:** For example: 255.255.255.000, but this depends on how your network is set up.
 - **Default gateway:** Enter the IP address that was assigned to the access point when it was set up.
11. When you're done, click **OK**.
12. Click the **Wireless Networks** tab.

(If you don't see this tab, you may need to enable your wireless card or adapter by clicking **Configure** to access the device settings; then follow any instructions on the screen to enable the device.)

You see a screen like this:



13. Verify that you've enabled your computer's connection to the access point. It should be listed with the small  icon next to it, indicating a connection.

If it's not listed, click **Configure** and type the name of your access point.

14. When you're done making settings, click **OK** to close the dialog box.

Now you're ready to connect to the projector. See "Projecting Over a Network" on page 73.

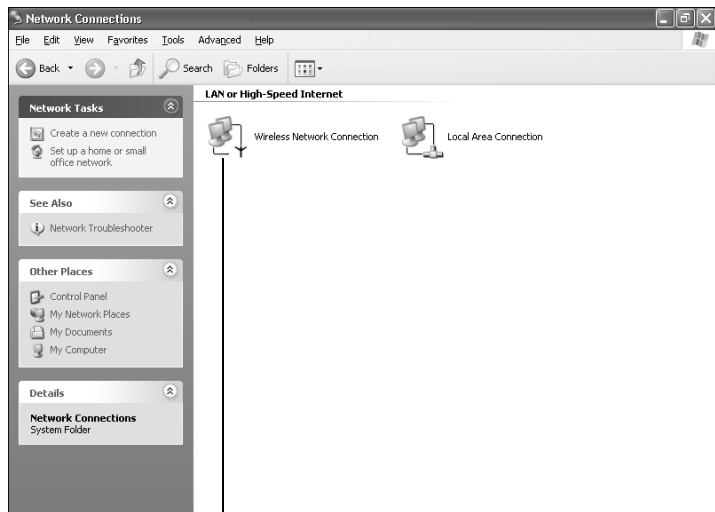
note

If you cannot identify the gateway address using this Windows utility, use the administrator's utility software that came with your access point.

Checking the Gateway IP Address on Windows

If you're entering IP addresses manually and need to find out the gateway IP address (the IP address of your access point), make sure the wireless connection to the access point is currently active, as described in the previous section. Then follow these steps:

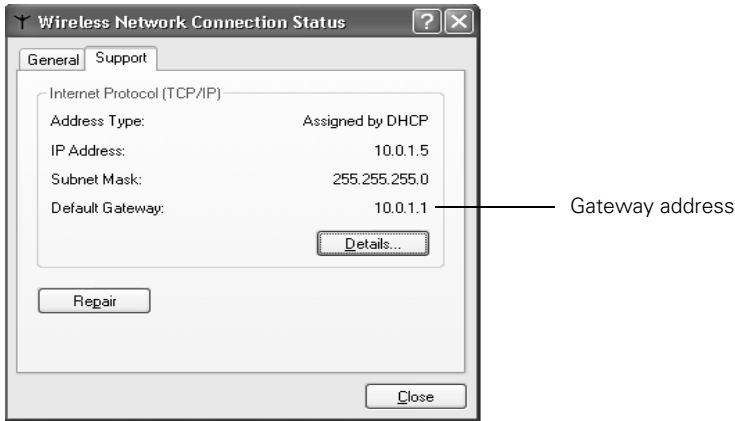
1. Access your wireless network Properties window. For example, in Windows XP you would click **Start > Control Panel > Network and Internet Connections**. Then click the **Network Connections** icon. You see a screen similar to this:



Right-click and select Status

2. Right-click the **Wireless Network Connection** icon and select **Status**.

3. Click the **Support** tab. The gateway's IP address is listed as shown:



Setting Up Your Mac for Access Point Mode

Your AirPort software is automatically configured to allow your Mac to detect Access Point networks.

Typically, you only need to select your AirPort network name from the AirPort status menu on the Mac menu bar. If you're having problems connecting to the projector, follow these steps:

1. From the Apple pull-down menu, select **System Preferences**.
2. Click the **Network** icon. You see the Network settings window.

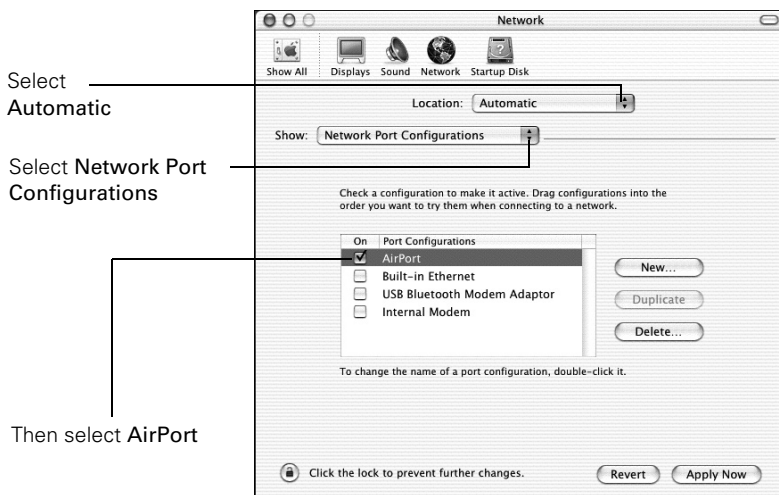
note

If you don't need the other network ports, disable them by deselecting their checkboxes. If more than one network port is enabled, the projector software warns you to turn off AirPort when you first connect the projector. Disregard this message.

*Your AirPort network and base station names may be different. To check or change your AirPort network name, start the AirPort Admin utility, select your base station, and click **Configure**. Click **Show All Settings**, then make any changes you want on the AirPort tab.*

*If you're connecting to your projector in static IP mode, deselect the **Distribute IP addresses** checkbox. Make sure your projector's gateway address is identical to the base station's IP address, and the first three segments of the projector's IP address are identical to the first three segments of the base station's IP address.*

3. Make sure Location is set to **Automatic**.



4. Select **Network Port Configurations** in the Show pull-down menu.
5. Under Port Configurations, select **AirPort**.
6. Click **Apply Now**. Then close the window.
7. Start the AirPort Admin utility. Select your base station, then click **Configure**.
8. On the AirPort tab, make sure your AirPort network name matches your projector's ESSID. If not, enter the projector's ESSID in the AirPort Network text box and click **Update**.
9. If you turned DHCP on in your projector's advanced menu, click the Network tab and make sure the **Distribute IP addresses** checkbox is selected. If you need to select it, click **Update**.

10. Click the AirPort icon on the menu bar at the top of the Macintosh desktop. You see the AirPort status menu:



11. Check to make sure AirPort is turned on.
12. Select the name of your AirPort network.

Using Wireless Security Options

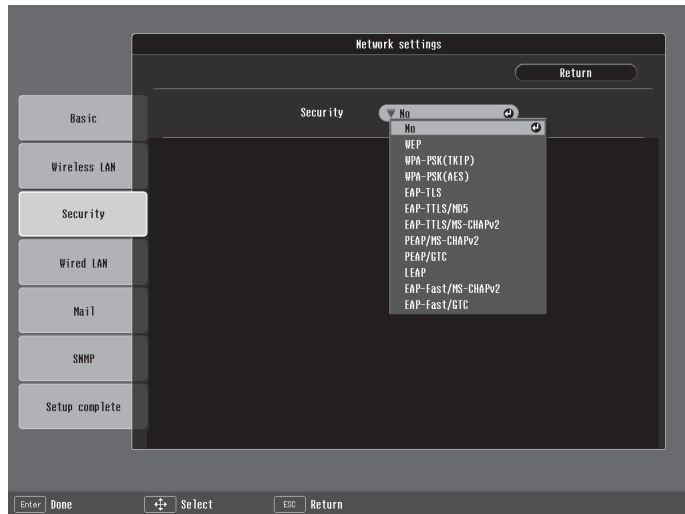
You can use the following security options when connecting to the projector wirelessly: WEP encryption, WPA security, EAP-TLS certificate validation, or LEAP, EAP, or PEAP authentication. To set these security features up on your wireless network, see your documentation or get help from your network administrator. See the following sections to enable the security option on your projector:

- “Enabling WEP Encryption” below
- “Enabling WPA Security” on page 69
- “Enabling EAP, LEAP, or PEAP Authentication” on page 70
- “Enabling EAP-TLS Certificate Validation” on page 72

Enabling WEP Encryption

1. Press **Menu** on the projector remote. Highlight **Network** and then press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Highlight **Security**, then press **Enter**.

You see the following screen:



4. Press **Enter** to show the menu, then highlight **WEP** and press **Enter**.
5. For the WEP encryption setting, highlight **128 Bit** or **64 Bit** and press **Enter**.
6. For Format, highlight **HEX** to enable hexadecimal input or **ASCII** to enable text input, then press **Enter**.
7. If you chose **64 Bit**, choose **Key ID 1, 2, 3, or 4**.

note

Text input for WEP encryption varies with different access points; check with your network administrator. Try ASCII first. If that doesn't work, try Text2 and then Text3.

Highlight the **Encryption key** text box and press **Enter**. Press the  pointer button to select individual letters; then press **Enter** to input a character. To add a blank space or to navigate backward and forward through the input text, highlight the arrows and press **Enter**. To toggle symbol settings or capital letters, highlight the option and press **Enter**. When you're done, highlight **Finish** and press **Enter**.

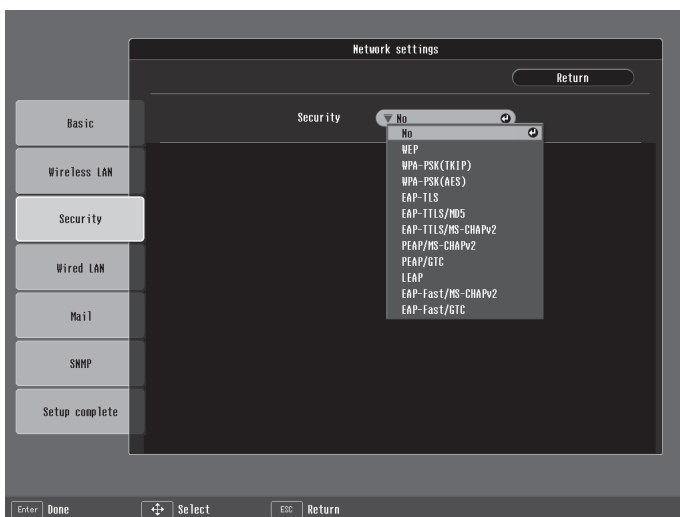


8. Check with your network administrator for directions on entering a key for your network, and follow these general guidelines:
 - For 128 bit WEP encryption with hexadecimal input, enter 26 characters, from 0 to 9 and from A to F.
 - For 64 bit WEP encryption with hexadecimal input, enter 10 characters, from 0 to 9 and from A to F.
 - For 128 bit WEP encryption with ASCII or text input, enter 13 alphanumeric characters.
 - For 64 bit WEP encryption with ASCII or text input, enter 5 alphanumeric characters.
9. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**. Choose **Setup Complete** and press **Enter**, then choose **Yes** and press **Enter** to save your settings and return to the main EasyMP screen.

Enabling WPA Security

1. Press **Menu**. Highlight **Network** and then press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Highlight **Security**, then press **Enter**.

You see the following screen:



4. Press **Enter** to show the menu, then choose **WPA-PSK (TKIP)** or **WPA-PSK (AES)** and press **Enter**.

Highlight the **PSK (pre-shared key)** text box and press **Enter**. Press the  pointer button to select individual letters; then press **Enter** to input a character. To add a blank space or to navigate backward and forward through the input text, highlight the arrows and press **Enter**. To toggle symbol settings or capital letters, highlight the option and press **Enter**. When you're done, highlight **Finish** and press **Enter**.

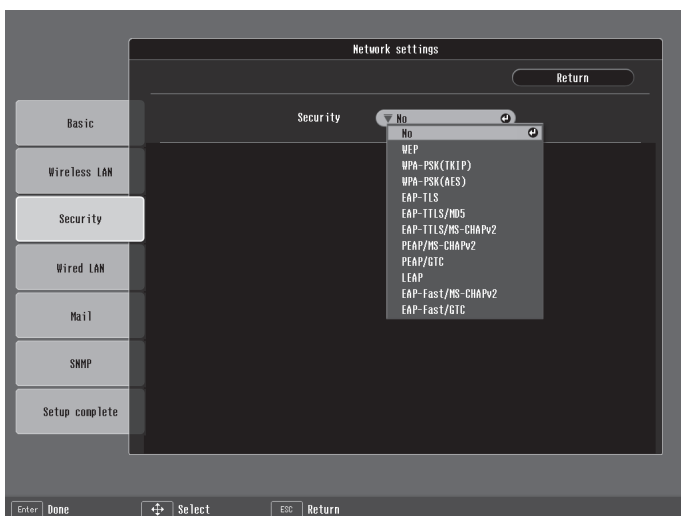


5. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**. Choose **Setup Complete** and press **Enter**, then choose **Yes** and press **Enter** to save your settings and return to the main EasyMP screen.

Enabling EAP, LEAP, or PEAP Authentication

1. Press **Menu**. Highlight **Network** and then press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Highlight **Security**, then press **Enter**.

You see the following screen:



4. Press **Enter** to show the menu, then choose EAP-TTLS/MD5, EAP-TTLS/MS-CHAPv2, LEAP, PEAP/MS-CHAPv2, or EAP-FAST/GTC and press **Enter**.
5. Enter the user name and password that match the settings on your authentication server:

Highlight the **User name** text box and press **Enter**. Press the  pointer button to select individual letters; then press **Enter** to input a character. To add a blank space or to navigate backward and forward through the input text, highlight the arrows and press **Enter**. To toggle symbol settings or capital letters, highlight the option and press **Enter**. When you're done, highlight **Finish** and press **Enter**.



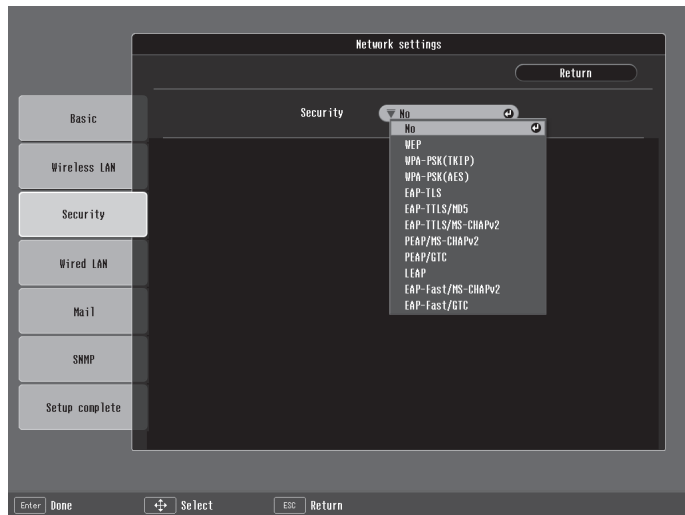
- Highlight the **Password** text box and press **Enter**. Enter the password as you entered the **User name**.

6. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**. Choose **Setup Complete** and press **Enter**, then choose **Yes** and press **Enter** to save your settings and return to the main EasyMP screen.

Enabling EAP-TLS Certificate Validation

1. Press **Menu**. Highlight **Network** and then press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Highlight **Security**, then press **Enter**.

You see the following screen:



4. Press **Enter** to show the menu, then choose **EAP-TLS** and press **Enter**.

The certificate information appears on the screen.

5. When you're done making these settings, highlight the **Return** button at the top of the screen, then press **Enter**. Choose **Setup Complete** and press **Enter**, then choose **Yes** and press **Enter** to save your settings and return to the main EasyMP screen.

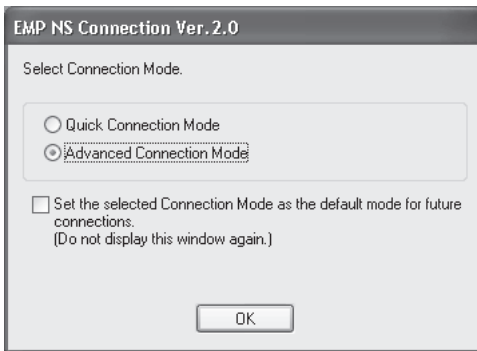
Projecting Over a Network

Once you've started EasyMP and set up your projector and computer in either Ad Hoc (Quick) mode or Access Point (Advanced) mode, or in the optional wired LAN mode, as described on page 84, follow these steps to start NS Connection and project over the network.

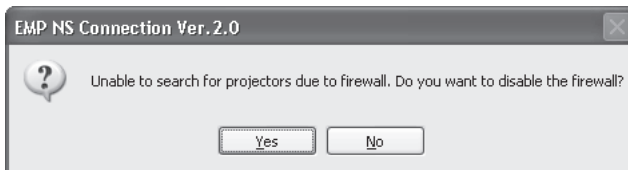
1. Make sure you've set up your projector (see page 48).
2. **Windows:** Select EMP NS Connection from the Start menu.

Mac OS X: Double-click the EMP NS Connection icon in your Applications folder.

3. The first time you start NS Connection, you see this dialog box. Choose a connection mode and click OK.



4. If you see a message asking you to disable the firewall, click **Yes** to make an exception for the projector and allow projection.



note

If you don't see your network adapter's IP address, allow a minute for it to appear. If your access point or AirPort base station uses DHCP (Distribute IP addresses setting is enabled for AirPort), sometimes it takes a minute for the server to pick up the IP address.

*Once you've selected the IP address for your network adapter, you won't see the Switch network dialog box when you start NS Connection. If you want to change to a different network adapter, click **Extension** on the EMP NS Connection dialog box, then click **Switch LAN** on the extension dialog box.*

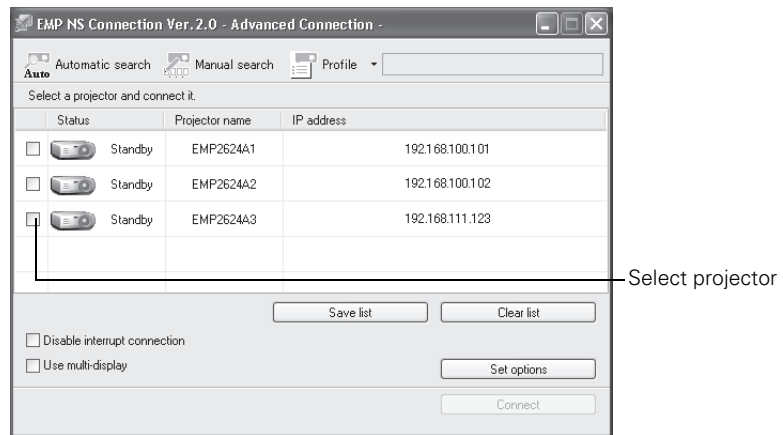
You see the screen below. (If you have previously started NS Connection, this may be the first screen you see.)

note

If a projector is in use and is “locked,” you won’t be able to select it.

To lock the projector from connection by other users while you are connected, click the Disable interrupt connection checkbox. De-select it to disable the lock and allow connection by other users.

If PowerPoint is already running when you start the projection and you see a message that says you need to restart PowerPoint, close and reopen PowerPoint after starting NS Connection.



If the connection is working properly, you see your projector listed. If you have additional Epson projectors on the network, they are also listed, along with their status.

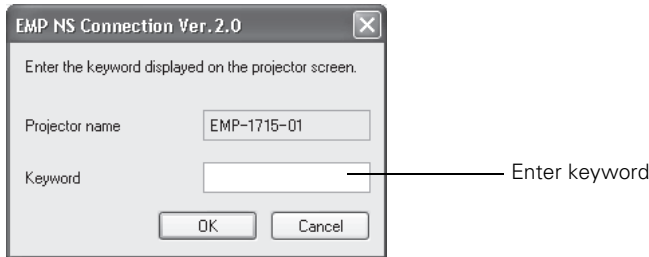
The status is indicated next to each projector’s name.

5. Once the name of your projector appears, select it and click **Connect**. If more than one projector is listed, you can select additional ones and connect to them (up to four) at the same time.

If the selected projector is already being used by another person, you can still connect to it (unless it is “locked”); doing so automatically disconnects the other user. If a projector is locked, you won’t be able to connect to it when it is in use.

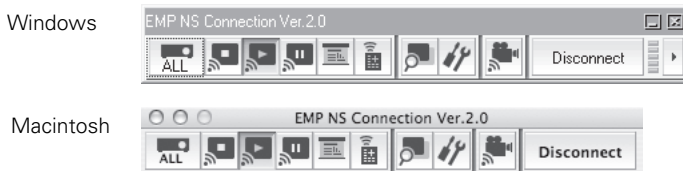
If you don’t see the projector, follow the suggestions on page 75.

6. If you set up the projector to prompt you for a keyword before connecting, you see a screen like this one:



Type in the four-digit number displayed on the EasyMP Network screen and click **OK**.

7. Once the connection is established, you see your computer's image transmitted to the screen, and a floating control bar on your computer desktop:



8. If necessary, you can drag the control bar out of the way on your screen.
9. When you're done with your presentation, click **Disconnect** on the control bar.

Solving Connection Problems

If you don't see your projector, check the following:

1. Make sure your wireless signal is strong enough to establish a connection. If you have a Mac, check the AirPort icon on the Mac menu bar. For Windows, see the documentation for your access point or wireless network card or adapter.

note

If none of these suggestions work, see the troubleshooting information beginning on page 157.

2. Make sure you're trying to connect to the right network. In Windows, verify that you've enabled your computer's connection to the access point or that your wireless card or adapter is enabled, and that its SSID matches the projector's ESSID. In Mac OS X, check the AirPort status menu (click the AirPort icon on your menu bar) to make sure AirPort is turned on and the projector's ESSID or your AirPort network is selected.
3. Make sure you aren't projecting one of the EasyMP configuration screens. (You should see a message that the projector is ready to connect.) If you have to exit a configuration screen, restart NS Connection.
4. Make sure the ESSID for your projector matches the SSID for your wireless card, adapter, or access point. If you have an AirPort base station, make sure the projector's ESSID matches the AirPort network name. Remember that the ESSID is case-sensitive.
5. Check the IP address for both your projector and your wireless card, adapter, access point, or AirPort base station. The first three segments of the IP address should be identical. The last segment of the projector's IP address should be close, but not identical, to the last segment of the IP address for your wireless interface, access point, or base station.
6. Restart your computer and start NS Connection again.
7. If you still don't see your projector, follow the instructions in "Connecting in Advanced Connection Mode" on page 77 to connect to the projector.

note

The AirPort network name may be different than the AirPort base station name. To check the network name, start the AirPort Admin utility, select your base station, and click Configure. Then click Show All Settings. The network name appears on the AirPort tab.

Using the Control Bar

From the control bar, you can access these NS Connection features:

	Displays the Select target projector dialog box.
	Stops projection of computer images while connecting to the projector.
	The projector projects the computer image.
	Pauses projection of computer images. Click again to restart projection.

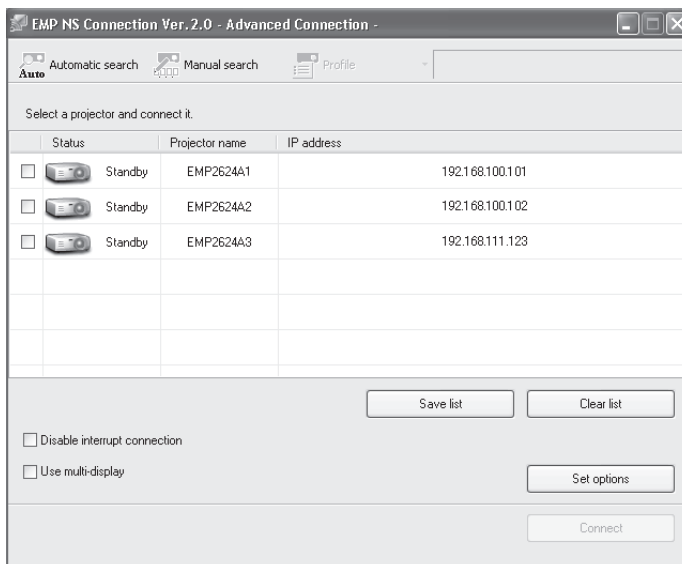
	Starts Presentation Mode for the selected projector. In Presentation Mode, only the PowerPoint slide show images are projected by the projector.
	Displays the Projector control screen, which allows you to enable A/V Mute, switch the PC source, or switch the video source.
	For projecting movie files on your computer.
	Allows you to set up multi-screen mode and see a preview of how the images will appear on each screen.
	Displays the projector settings dialog box.
	Disconnects the connection to the projector.
	Use to switch which buttons displayed on the control bar.

Clicking one of the buttons on the control bar may cause a submenu to appear above the control bar.

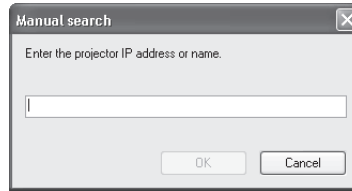
When you're done, click the arrow in the upper right corner to close the submenu.

Connecting in Advanced Connection Mode

1. Click Manual search on the NS Connection screen.



2. Enter the IP address or the projector name for the projector you want to connect to, and click **OK**.



The Projector is added to the EMP NS Connection screen.

If the search fails to find a projector with the specified IP address, the searching icon turns into a question mark. If this happens, run EasyMP on your projector (see page 48) to check the projector's IP address, then repeat this step.

3. Click the projector you want to connect to and click the **Connect** button. If more than one projector is listed, you can select additional projectors and connect to them at the same time.
4. If you are prompted for a keyword, enter the four-digit number displayed on the EasyMP Network screen and click **OK**.

The computer's image is transmitted to the projector and appears on the screen. See page 75 for details about using the floating control bar on your computer desktop.

Enabling Network Security

The projector includes the following network security options which you can enable for network projection:

- **Data encryption**
Encode and transmit data. Even if data is intercepted, it cannot be deciphered. See page 79 to enable encryption.
- **Connection limitation (Authentication)**
A user's name and a password are registered in advance, which means that only the registered wireless port can connect to the network and prevents unauthorized third parties from connecting to the network.

■ Firewall

Prevents unauthorized computer access by closing ports that are not used. The security functions that can be used with this projector vary depending on the connection mode of the wireless LAN. Use the firewall function provided with your OS.

The security functions that can be used with this projector vary depending on the connection mode:

■ Quick Connection Mode

Encrypted communication

■ Advanced Connection Mode

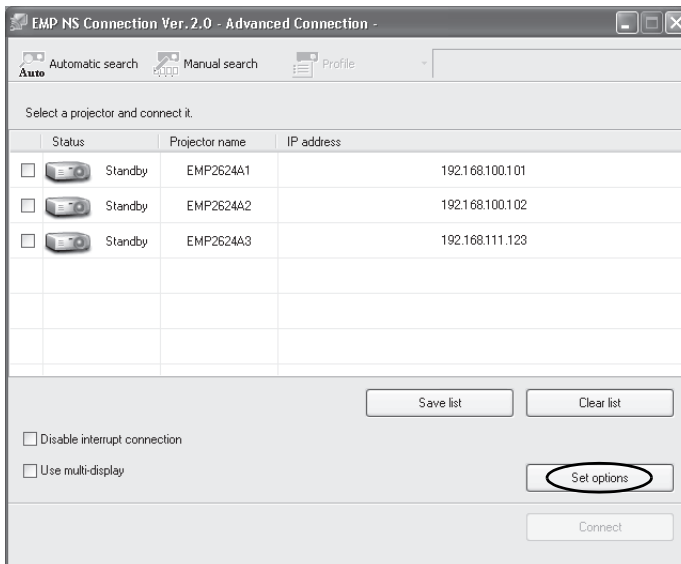
Encrypted communication, WEP, WPA-PSK (TKIP), WPA-PSK (AES), EAP-TLS, EAP-TTLS/MD5, EAP-TTLS/MS-CHAPv2, PEAP/MS-CHAPv2, PEAP/GTC, LEAP, EAP-FAST/MS-CHAPv2, EAP-FAST/GTC

note

The authentication and firewall features are only effective when the access point for the connection destination supports the same functions.

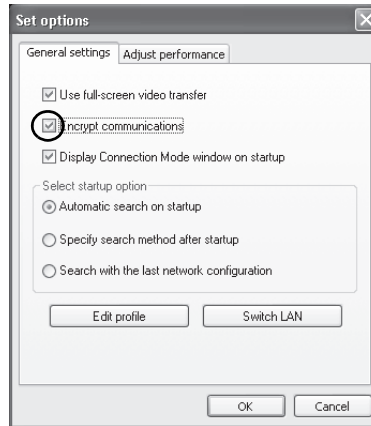
Enabling Data Encryption

1. Click **Set options** on the main screen.



2. Click the **General Settings** tab.

3. Select the **Encrypt communications** checkbox.



4. Click **OK**.

Enabling Network Security Options

You need to enable network security including WEP, WPA, EAP, LEAP, or PEAP, or firewall settings on your network and on the projector (see page 67). For network setting details, follow the directions from your network administrator.

If using EAP, you need to make settings at the projector that match the authentication server settings. Check with your network administrator for details on RADIUS settings.

Multi-screen Projection

When using Multi-screen display, you can set each projector to display a section of the screen or image, to create a single image spanning a large area.

Here are some examples:



To set up multi-screen display in NS Connection, follow these steps:

1. Click Use multi-display.

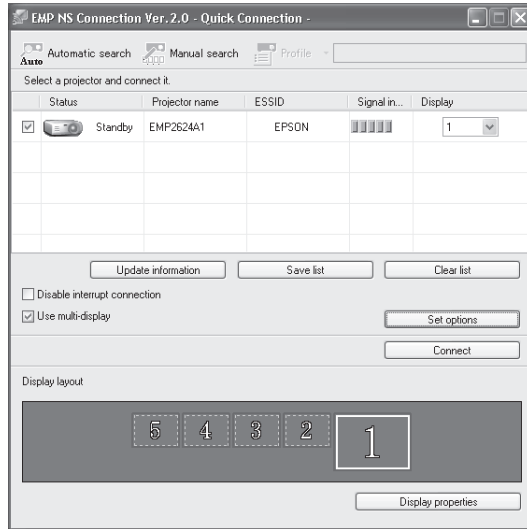
note

For a Mac, you have to connect a monitor to the computer and use the multi-screen display function. For Windows, even if a monitor is not connected, you can set a virtual display by installing the virtual display driver prepared in EMP NS Connection.

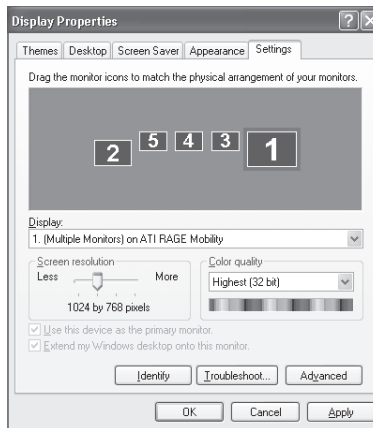
For Windows, when the real monitor is connected as a secondary monitor, the image for that screen cannot be projected.

You can adjust each projector's color tone. See page 123.

2. Click Display properties.

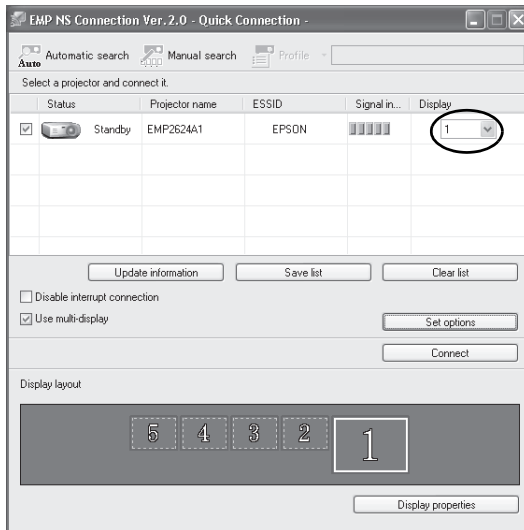


3. Drag the monitor icons to arrange the positions of the displays.



4. Close the Display Preferences (Windows) or System Preferences (Mac), when you are done arranging the display numbers.

5. To allocate projectors to each display, choose a number from the menu under **Display**.



6. Click the **Connect** button when you are ready to project the image.

Removing the Wireless 802.11g/b/a Module

Follow these steps to remove the card from your projector.

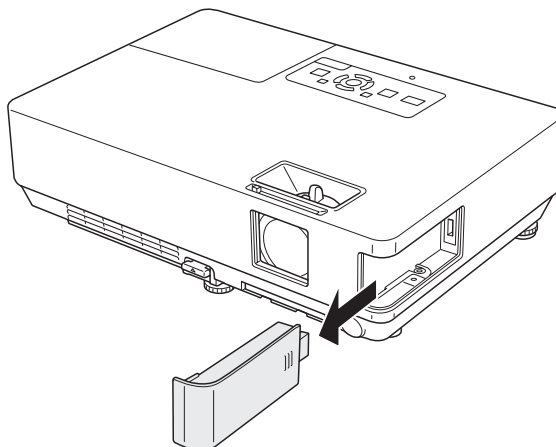
1. If you're running NS Connection, click **Disconnect** on the control bar.



caution

Never remove the module while the indicator light is green or when projecting wirelessly. You may damage the module or lose data.

2. Check the access light to make sure it isn't flashing. Then pull the module off of the projector.



Connecting to a Wired Network

With the optional Ethernet unit, you can connect the projector to your network and configure it with an IP address.

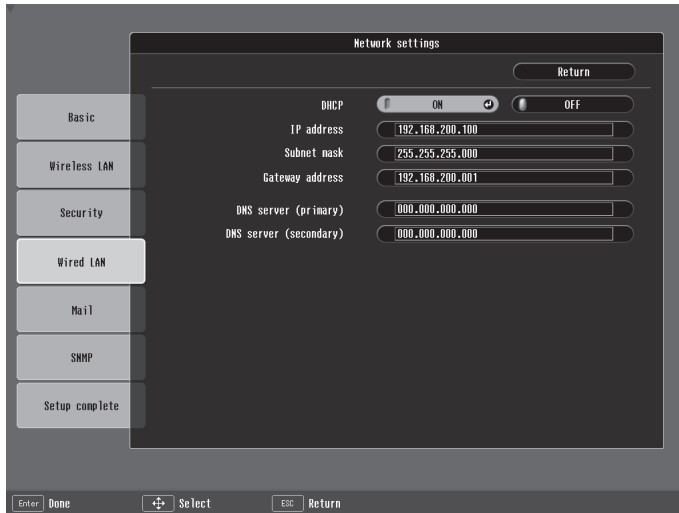
1. Remove the wireless module, as described above, then insert the Ethernet unit into the projector.
2. Connect the projector to your network using a commercially available 100BaseTX or 10BaseT network cable. Connect the cable to the LAN port on the projector.
3. Point the remote control at the projector and press the  **Power** button.
4. Press the **EasyMP** button on the remote control to select EasyMP as the source.
5. Press the **Menu** button on the remote control, select the **Network** menu, then press **Enter**.
6. Choose **To Network Configuration** and press **Enter**.
7. Choose **Wired LAN** and press **Enter**.

note

Only the Epson Ethernet unit is guaranteed to work. Other brands may not be compatible.

If you see a message asking you to insert a LAN or memory card, check to make sure your Ethernet unit is properly inserted.

You see the following screen:



8. Do one of the following:

- If your network assigns addresses automatically, turn on the DHCP setting.
- If your network does not assign addresses automatically, turn off DHCP and enter the projector's IP Address, Subnet Mask, Gateway Address, and DNS Servers, as needed.

To enter numbers, use the  pointer button on the remote control to highlight the number you want to input, then press the Enter button. When you're finished changing an address in the network menu, highlight Return, then press the Enter button.

When you're done making all necessary changes, press Menu to exit the menu system.

To connect to the projector with NS Connection using the Quick Connection mode, see page 73. To connect to the projector using Advanced Connection mode, see page 77.

note

If you're a network administrator, you can use the SNMP option to enter a trap IP address. This lets you receive trap alerts for the projectors you're monitoring. If you have HP OpenView, a plug-in will be available to allow you to manage your projectors in HP OpenView. Check with your dealer or Epson for availability.

Using Projector E-mail Alerts

When this feature is enabled, the projector sends you an e-mail alert if it has any problems.

1. Press the **Menu** button on the remote control, select the **Network** menu, then press **Enter**.
2. Choose **To Network Configuration** and press **Enter**.
3. Choose **Mail**, then press **Enter**.

You see the following screen:



4. Highlight **On** to receive email notifications, then press **Enter**.
5. Enter the IP address for the SMTP server for the projector.

You can enter a number from 0 to 255 in each field of the address. However, the following IP addresses cannot be used: 127.x.x.x, 224.0.0.0 to 255.255.255.255 (where x is a number from 0 to 255).

6. Enter the SMTP server's port number. The default value is 25. You can enter a numeric value from 1 to 65535.

7. Choose one of the **Destination Address** fields, then enter the e-mail address and the contents of the message that you will receive when an problem or warning occurs. You can register up to three addresses. You can enter up to 32 alphanumeric characters for the e-mail address.
8. Select problems or warnings to be notified about by mail.

When the selected problem or warning occurs, an e-mail message is sent to the specified notification addresses. The subject line of the e-mail is **EPSON Projector**. The e-mail includes the following information:

- Line 1: The name of the projector where the problem has occurred
- Line 2: The IP address of the projector where the problem has occurred
- Line 3: Details of the problem

note

If a critical problem develops with a projector which causes it to suddenly stop working, it may not be possible for the projector to send a message.

If Standby Mode is set to Network ON in the Extended menu, the projector can still be monitored even if the projector is in standby mode (when the power is off).

5

Presenting from a Digital Camera or External Drive

The projector's EasyMP PC Free feature lets you give presentations from a drive or a digital camera connected to the projector via USB. You can play movies, display graphics, or play a *scenario*, a format that lets you create your own slideshow using PowerPoint files, JPG image files, and BMP graphics files.

This chapter covers the following:

- Creating a slideshow on the fly
- Presenting image files from a digital camera
- Presenting image files from an external drive
- Creating a scenario
- Transferring your scenario to a memory card
- Presenting scenarios
- Supported file formats

note

To create a scenario, you need a USB drive to connect to your computer. Also make sure you've installed the EMP SlideMaker software (available for Windows only), as described on page 166.

Depending on the type of card you have, you may also need an adapter to use it with the projector. See page 104.

Creating a Slideshow on the Fly

If you have a folder containing an assortment of images, you can display them as a slideshow.

Displaying the Slideshow

First make sure the images are stored in a folder on the USB drive. Then follow these steps:

1. Use the  pointer button on the remote control to highlight the drive containing your images and press **Enter**.



2. Use the  pointer button on the remote control to highlight the folder containing your images and press **Enter**.



3. From the drop-down menu, use the pointer to select **Play Slideshow** and press **Enter**. The images contained in the folder are presented as a slideshow.

Use the remote control to run the slideshow as described in the next section.

Controlling Your Slideshow

While your slideshow is running, use the remote control as follows:

- Press **Enter** or  **Page down** to display the next slide or image, or to begin playing a movie.
- Press  **Page up** to display the previous slide or image, or to replay a movie.
- Press the appropriate side of the  pointer button to rotate a slide or image on the screen.
- To exit the slideshow at any point, press the **Esc** button. Press the **Enter** button to confirm that you want to exit.

Changing Timing and Other Settings

For each folder on the memory card, you can set the display timing for your slides and change several other display settings.

1. Select the folder containing the images for the slideshow settings you want to change and press **Enter**.
2. From the drop-down menu, use the pointer to select **Options** and press **Enter**.

You see this screen:



3. Use the  pointer button to select from the following settings. After making a selection, press **Enter** to save the change.

- **Mode switching**

Lets you choose the mode to use when presenting slideshows, movies, or images, or editing a scenario on the projector.

In **Guide mode**, a drop-down menu appears whenever you select an item and press **Enter**.

In **Quick mode**, selecting a scenario, movie, or image file and pressing **Enter** starts the presentation; selecting a folder and pressing **Enter** opens the folder. To access the menus in **Quick mode**, press the **Esc** button.

- **Display order**

Lets you choose between displaying alphabetically by file name or by image file date.

- **Continuous Play**

Determines whether to repeat the display of images in the folder.

- **Screen switching time**
Sets the display time for each image. Choose **No** if you want to change slides manually.
 - **Effect**
Lets you choose from various transitions between slides, such as Dissolve or Wipe.
4. When you're done, highlight **OK** and press **Enter**. Your changes are permanently saved with each folder—even if you turn off the projector or disconnect the drive or camera.

Presenting Image Files From a Digital Camera

This section explains how to project individual image files on your digital camera using EasyMP PC Free mode and a USB cable connection.

Follow these steps:

1. Connect your digital camera (see page 43).
2. Turn on your digital camera.
3. Turn on the projector and the remote control, if they're not already on.
4. Select EasyMP as the source by pressing the **EasyMP** button on the remote control. If your camera complies with the DCIM standard, you'll see a **DCIM** folder appear on the EasyMP PC Free screen.
5. Use the  pointer button on the remote control to position the cursor on the folder and press **Enter**.
6. Select **Open Folder** in the drop-down menu. When the folder opens, you see another folder with your manufacturer's name.
7. Position the cursor on the folder and press **Enter**.
8. Select **Open Folder**. You see your image files when the folder opens.

note

Most digital cameras also have the ability to play internal slideshows. Depending on the kind of cable you have, you can connect a camera with a video or A/V out port to the projector's Video or S-Video port and transmit your camera's slideshow directly to the projector. You must press the Video or S-Video button on the remote control to select the correct signal source. See pages 39 or 40 for details.

note

Make sure your camera shows up on your desktop as a drive letter. If it does, it is probably a USB mounted device and will work with the projector software. The EasyMP software does not support TWAIN-compliant digital cameras.

9. Position the cursor on the image file you want to project and press **Enter**.
10. Select **View Image**. The image is projected on the screen. If you want, you can press a side of the  pointer button to rotate the image while you're viewing it.

To stop viewing images, press the **Esc** button on the remote control, then select **Exit** and press **Enter**.

Presenting Image Files From an External Drive

This section explains how to project individual image or movie files from an external hard drive or flash memory drive using EasyMP and a USB connection.

Follow these steps:

1. Connect your external hard drive or flash memory drive (see page 43).
2. Plug in your external hard drive.
3. Turn on the projector and the remote control, if they're not already on.
4. Select EasyMP as the source by pressing the **EasyMP** button on the remote control.
5. Use the  pointer button on the remote control to position the cursor on the folder where your photos or movies are stored and press **Enter**.
6. Select **Open Folder**. You see your image files when the folder opens.
7. Position the cursor on the image file you want to project and press **Enter**.
8. Select **View Image**. The image is projected on the screen. If you want, you can press a side of the  pointer button to rotate the image while you're viewing it.

To stop viewing images, press the **Esc** button on the remote control, then select **Exit** and press **Enter**.

Creating a Scenario

A scenario is a combination of images, movies, and/or audio files that you can present from a USB drive. The easiest way to create a scenario is to drag and drop a PowerPoint file on the  **EMP SlideMaker2** icon on your desktop. This automatically converts the file to a scenario that you can save to the drive. Use this method if you have an existing PowerPoint presentation that you want to transfer to the projector.

If you prefer, you can create a scenario from scratch by combining a selection of PowerPoint slides, other graphics, and even movies (see page 96).

Converting a PowerPoint File to a Scenario

Follow these steps to convert a PowerPoint file to a scenario. Once the scenario is created, you can set up transitions as described on page 101.

1. Make sure the EMP SlideMaker program is closed.
2. Locate the PowerPoint file you want to use in My Computer or Windows Explorer.
3. Drag the file icon on top of the  **EMP SlideMaker2** icon on your desktop.
4. You see a message that some transitions are not supported. Click **Continue**.
5. When you see the next message, click **Start**.

EMP SlideMaker 2 starts and your PowerPoint slides open one-by-one as they are converted. Do not interrupt this process or your PowerPoint file won't be completely converted.

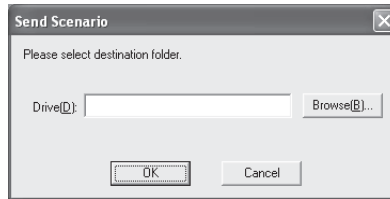
note

If you exit the PC Free mode on the projector, disconnect and re-connect your USB device before starting again.

note

To create a scenario, you need a USB drive connected to your computer. Also make sure you've installed the EMP SlideMaker software (available for Windows only), as described on page 166.

6. When the scenario is done, click **Close**. You see the following message:



7. Connect a USB device and browse to the drive, then click **OK** to transfer your scenario file.

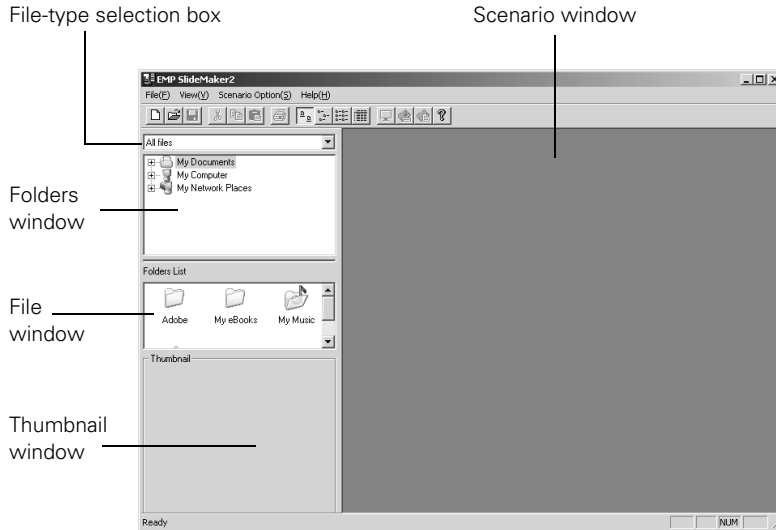
Creating a Scenario from Scratch

Use this method when you want to create a scenario from a selection of PowerPoint slides, graphics, or movie files. You'll need to set up your scenario file and folder, build the scenario, set up transitions, and check the scenario.

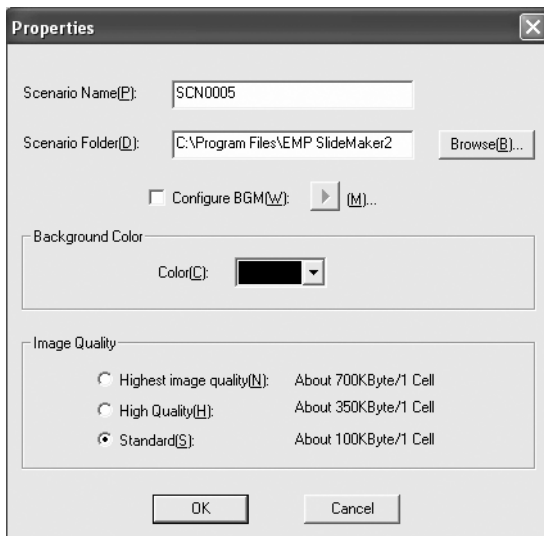
Setting Up the Scenario File and Folder

1. Double-click the  EMP SlideMaker2 icon on your computer's desktop (or click **Start > Programs** or **All Programs > Epson Projector > EMP SlideMaker2**).

You see the EMP SlideMaker 2 screen:



2. Choose **New** from the File menu. You see the scenario Properties dialog box:



note

The scenario name you enter is also the name of the folder for your scenario on your hard drive.

3. Type a name for your scenario file and folder that's easy to remember, using up to eight capital letters and numbers. Then select from the following options:
 - The default location for the scenario file and folder is in the \Program Files\EMP SlideMaker2 folder. Click **Browse** to choose a new location.
 - Click **Configure BGM(W)** to play an audio file during the scenario. A selection screen appears letting you choose a .WAV file. After you select the file you want, click the arrow button to the right of the option to play it.
 - The Background Color appears around images that don't fill the entire screen area. Select a new color, if desired.
 - Select the Image Quality for imported PowerPoint slides. Higher-quality images look better on the screen but may take longer to appear.
4. Click **OK**. You return to the EMP SlideMaker 2 screen.

Continue with the instructions in the next section to build your scenario.

Building a Scenario from Different Files

You can build your scenario from any of the following file types, either alone or in combination with other file types:

- PowerPoint slides, version 2000 through 2003 (file names have PPT extension)
- JPEG files (with JPG extension)
- Bitmap files (with BMP or DIB extension)
- Movie files (with MPG extension); must be MPEG 2 (MPEG1 is not supported)

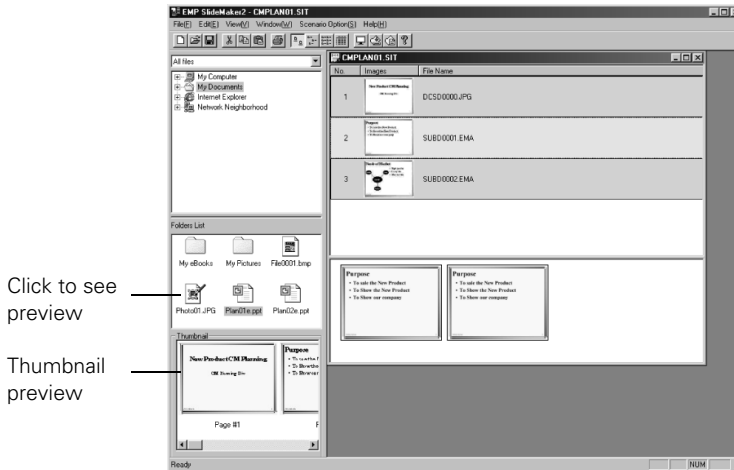
note

You can also use the instructions in this section to add files to an existing scenario.

Follow these steps:

1. Use the navigation tools on the left side of the EMP SlideMaker 2 screen to locate the files you want to include in your scenario.

PowerPoint, JPEG, bitmap, and movie files appear as icons in the file window.

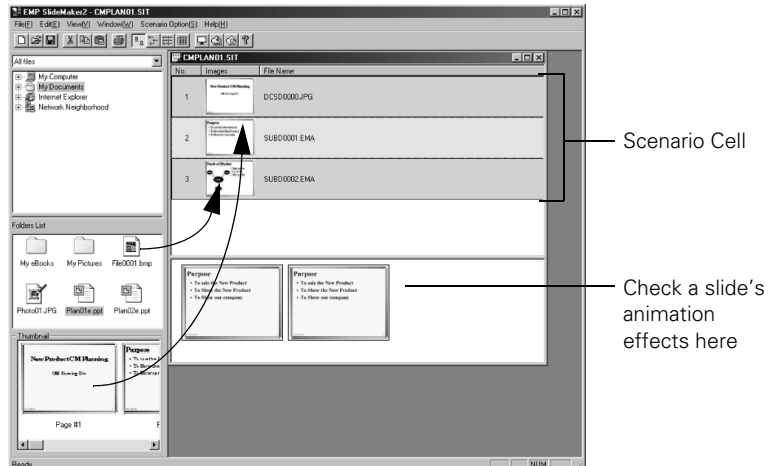


2. Click the icon for each file that you want to preview. The preview appears in the thumbnail preview window. If you click a PowerPoint icon, thumbnail images are generated for all the slides in the PowerPoint file. If you click a movie file, an illustration of a film strip appears.

note

Thumbnail previews for PowerPoint slides will not appear if PowerPoint is not installed on your computer.

3. Drag and drop the files you want to include in your scenario from either the file window or thumbnail window into the scenario window. (You can also double-click a thumbnail to add the file to the scenario.)



note

Transition effects created in PowerPoint look smoother than those you add with EMP SlideMaker 2.

To include a whole PowerPoint file (instead of individual slides), drag the PowerPoint icon itself into the scenario window. Dragging an entire file preserves the transitions set in PowerPoint.

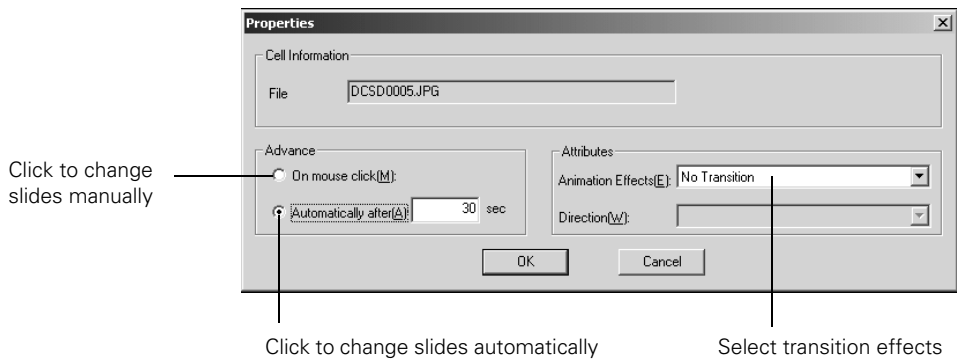
4. Continue dragging files into the scenario window to build your presentation. Each slide appears in a numbered cell. The cell background color varies according to the type of file in the cell.
5. If you want, you can make changes to the scenario:
 - To rearrange cells, drag and drop them as necessary within the scenario window.
 - To delete a cell, right-click the cell and select Cut.
 - To check the animation for a slide, click its cell. A section appears at the bottom of the scenario window displaying each animation operation. (Slides using animation have an .EMA extension.)

You can also create transitions between slides, as described in the next section.

note

Unless you change the transition setting, your slides will automatically advance after 30 seconds.

3. Click **Cell Properties**. You see this dialog box:



4. Choose how you want to advance to the next cell.

- If you want to change slides manually using the remote control, select **On mouse click**.
- If you want your slides to advance automatically, set the timing in the **Automatically after** box. You can set any length of time between 1 and 1800 seconds (30 minutes). Even if you select this setting, you can still change slides manually using the remote control.

note

Transition effects look smoother when you create them in the PowerPoint file itself and use that file to create a scenario.

5. To add a transition effect (such as a dissolve, fade, or wipe), select one of the **Animation Effects** settings and choose a **Direction** setting, if applicable.
6. When you're finished setting up the transition for the selected cell or cells, click **OK**.
7. Click the **Save** button or choose **Save** from the File menu.

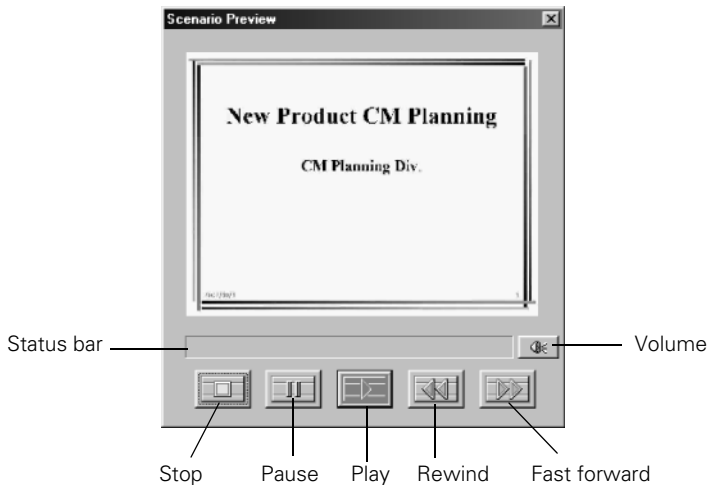
Continue with the steps in the next section when you're ready to transfer your scenario to a USB drive.

Checking Your Scenario

You can play your scenario before you transfer it to a USB drive to make sure it looks and sounds the way you want it to.

1. Use the navigation tools in the folders window to locate the scenario file you want to review. Click the file, then select **File > Open** to open the scenario.
2. Click **Scenario Option(s) > Scenario Preview**. The Scenario Preview window displays.

If the scenario is set to advance automatically (see page 102), it begins to play. If it is set to advance each time you click the mouse, click the  play button to go through your slides one by one.



3. Use the controls in the Scenario Preview window to pause, stop, rewind, or fast forward your scenario. When you're done, close the window.

Transferring Your Scenario to a USB Drive

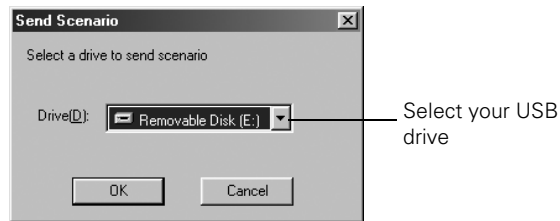
note

Don't use Windows to copy the scenario to your USB drive, or it may not play properly.

*You must connect the USB drive before you select **Send Scenario** from the Scenario Option(s) menu. If you don't, you won't be able to see the drive in the drive selection window. If this happens, close and restart EMP SlideMaker 2.*

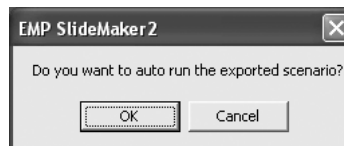
Once your scenario is saved, you can transfer it to a USB drive. Be sure to use the transfer process described below to ensure that the scenario plays properly:

1. Connect the USB drive.
2. Start EMP SlideMaker 2 (see page 96).
3. Use the navigation tools in the folders window to locate the scenario file you want to review. Click the file, then select **File > Open** to open the scenario.
4. From the Scenario Option(s) menu, choose **Send Scenario**. You see a drive selection window:



5. Choose the drive and click **OK**.
6. Click **OK** again to confirm. Your scenario is transferred to the drive.

Once the scenario is transferred, you see this message about your scenario's autorun setting:

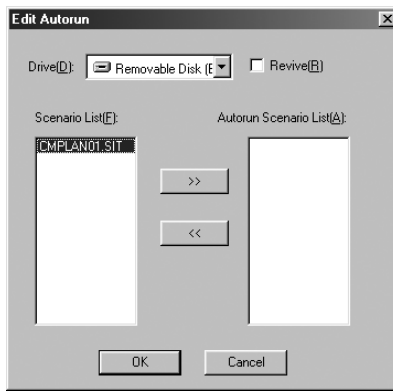


The autorun setting means that the scenario will start playing whenever the projector is turned on (with the drive connected to the projector).

7. Do one of the following:

- If you don't want the scenario to run automatically, click **Cancel**. Skip to step 11 to remove the drive and insert it in the projector.
- If you want it to run automatically, click **OK** and continue with the following instructions.

You see the Edit Autorun window:



8. To set a scenario to run automatically, select it from the list on the left side of the screen and use the **>>** arrow button to move it to the list on the right.
9. Click the **Revive** box if you want your scenario to repeat continuously. Clear the checkbox if you want it to play only once.
10. When done, click **OK**.
11. Disconnect the USB device. See your computer's documentation if you need instructions. If you're using Windows XP, 2000 or Me, you may first need to click an icon to stop or disconnect the drive.

note

If more than one scenario is set to run automatically, they will play in the order listed on this screen.

Presenting Scenarios

Before you begin, connect the USB drive containing the scenario to your projector, as described on page 89.

The follow these steps to present your scenario:

1. Turn on the projector, if it's not already on.
 - If your scenario is set to autorun, it will start as soon as the projector warms up.
 - If your scenario is not set to autorun, you need to start it manually. Continue with the following steps.
2. Select EasyMP as the source by pressing the **EasyMP** button on the remote control. You see a screen like the one below.



JPEG files are displayed as thumbnails. Other files or folders are displayed as icons. A  scenario icon identifies a scenario file.

note

Your files may take up more than one screen. If so, use the Page up and Page down buttons on the remote control to view all your files.

3. Use the  pointer button on the remote control to highlight your  scenario file and press **Enter**. A drop-down menu appears under the scenario.
4. Use the  pointer button to select **Play Scenario** and press **Enter**. In a moment, your scenario begins playing.

Controlling Your Scenario

While your scenario is running, use the remote control as follows:

- Press **Enter** or  **Page down** to display the next slide or image, or to begin playing a movie.
- Press  **Page up** to display the previous slide or image, or to replay a movie.
- Press the appropriate side of the  pointer button to rotate a slide or image on the screen.
- To exit the scenario at any point, press the **Esc** button. Press the **Enter** button to confirm that you want to exit.

note

Even if your scenario is set to change slides automatically, you can still change slides manually as described here.

Supported File Formats

The following file types may be projected from a digital camera, external hard drive, or flash memory drive:

File Type	Extension	Notes
Scenario	.sit	These are scenario files created using the EMP SlideMaker 2 program that is included with the projector.
Graphics	.bmp	Images with a resolution greater than 1024 × 768 cannot be projected.
	.gif	Images with a resolution greater than 1024 × 768 cannot be projected.
	.jpg	Projection is not possible for CMYK color formats, progressive formats, and images with a resolution in excess of 8192 × 6144.
	.png	Projection is not possible for images with a resolution in excess of 1024 × 768.
Movie	.mpg	MPEG1 MPEG2-PS If the movie exceeds a maximum size of 720 × 576, or is not in the same form as a DVD (sequence header arranged for each GOP) it cannot be played back. The reproducible audio format is MPEG-1 Layer 2. Linear PCM and AC-3 audio cannot be played back.
	.mov	QuickTime® format Motion JPEG files.
DPOF	.mrk	For DPOF version 1.10, only files named AUTPLAYx.mrk (where x is a number between 0 and 9) can be projected.

Files with the extension JPEG and MPEG can't be projected. Rename or save files as JPG or MPG. Files with high compression will not look good. Movie files may not look as good from media with a slow access speed.

6

Fine-Tuning the Projector

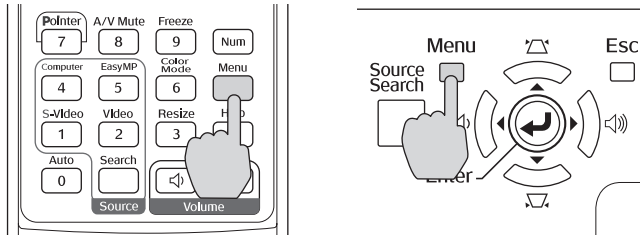
You can use the projector's on-screen menus to adjust the image, sound, and other features. This chapter covers the following information:

- Using the menu system
- Adjusting the image
- Adjusting signal settings
- Customizing projector features
- Using the projector security features
- Customizing power and operation

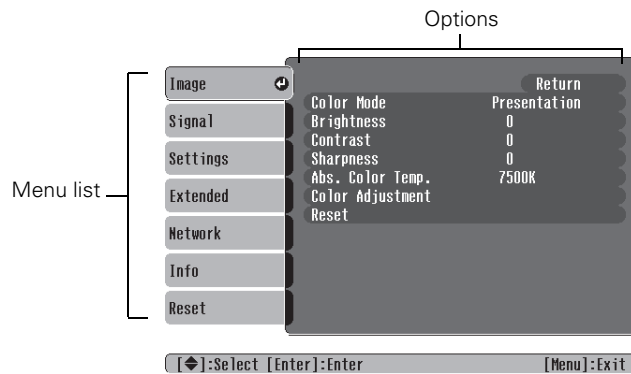
Using the Menu System

You can use the remote control or the projector's control panel to access the menus and change settings. Follow these steps:

1. To display the menu screen, press the **Menu** button on the remote control or on the projector.



You see a menu screen similar to the one below:



The menus are listed on the left and the options available for the highlighted menu are shown on the right.

2. Use the pointer button on the remote control (or the navigational buttons on the projector) to scroll through the menu list. When you've highlighted the desired menu, press the **Enter** button to select it.
3. Once you've selected the menu, use the pointer button to scroll through the list of options. (Some of the options may be grayed out or unavailable, depending on the selected source.)

4. After highlighting the option you want to adjust, use the  pointer button to change the setting. In some cases, you may have to press the **Enter** button to view a sub-screen for changing the setting.
 - Press the left or right side of the  pointer button to adjust a slider bar.
 - To select from two or more settings, use the  pointer button to highlight the desired setting and press **Enter**.
5. After changing the settings, press the **Esc** button to save your changes and return to the previous menu (or press it repeatedly to exit the menu system).

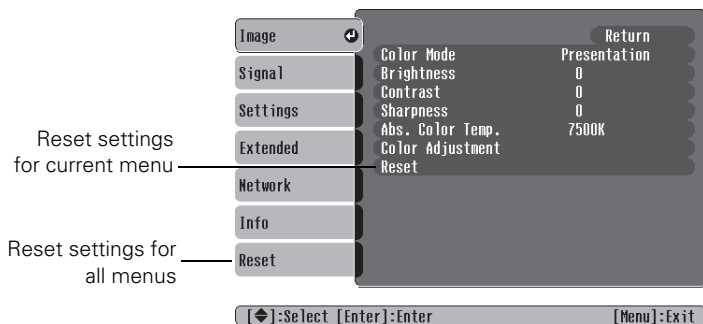
You can also press the **Menu** button to exit.



Restoring the Default Settings

You can use the menu system's Reset options to restore the factory-default settings for all the settings listed in a specific menu, or all the settings in all menus.

To restore the settings in a specific menu, enter the menu whose settings you want to change, select **Reset**, and confirm as needed. (The example below shows how to reset the Image menu.)



note

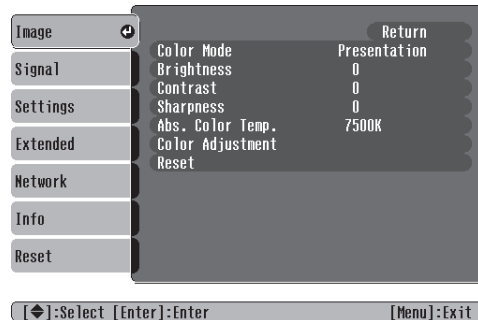
When you select **Reset All** in the **Reset** menu, it does not reset the Computer Input, Video Signal, User's Logo, Language, or Lamp settings.

To restore all the projector settings to their factory-default values, select the **Reset** menu, highlight **Reset All**, and press **Enter**.

Adjusting the Image

You can use the Image menu to adjust the brightness, sharpness, color, tint, and contrast.

1. Press the **Menu** button on the projector or remote control and select the **Image** menu. You see the Image menu screen.



2. Use the  pointer button to highlight the desired option, then adjust it as needed:

■ Color Mode

Lets you quickly adjust the color and brightness for various environments. Use either the remote control or the **Color Mode** setting in the Image menu. You can save a different setting for each source. Select from these settings:

Photo: For vivid, high-contrast still images in a bright room.

Sports (video, S-video, or composite video only): For vivid TV images projected in a bright room.

Presentation: For computer presentations (the default when projecting from a computer with analog video).

Theatre: For optimizing movie images with increased contrast.

Game: For increased brightness when playing video games or watching TV in a bright room. Emphasizes dark gradations.

sRGB: For matching the color palette of standard sRGB computer displays.

Blackboard: For projecting accurate colors on a green chalkboard (adjusts the white point).

Customized: For manual color adjustment. (See below.)

- **Brightness**
Lightens or darkens the overall image.
- **Contrast**
Adjusts the difference between light and dark areas.
- **Color Saturation (video only)**
Adjusts the color depth of the image.
- **Tint (video only)**
Adjusts the balance of green to magenta in the image (available only for component video or NTSC signals).
- **Sharpness**
Adjusts the sharpness of the image.
- **Color Adjustment**
Adjusts the color values. For **Customized** color mode, select **RGBCMY** to adjust individual red, green, blue, cyan, magenta, and yellow hue and saturation values. For other color modes, **RGB** may be selected to adjust red, green, and blue hue and saturation values. (Not available if **sRGB** is selected as the Color Mode setting.)
- **ABS Color Temp.**
Sets a color temperature between 5000 and 10000 °K. (Not available if **sRGB** is selected as the Color Mode setting.)

note

*The **Brightness** setting changes the opacity of the projector's LCD panels. You can also change the lamp's brightness. Select **Brightness Control** in the **Setting** menu, then choose **High** or **Low** (the default setting is **High**).*

Adjusting Signal Settings

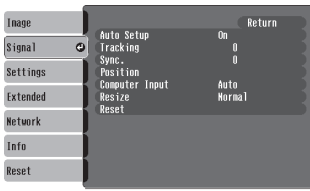
Although the projector normally detects and optimizes the input signal automatically, you can use the **Signal** menu to make manual adjustments. In addition to changing the position of the projected image, you can correct tracking and sync for computer images, or change the aspect ratio to widescreen format for video images.

1. Press the **Menu** button and select the **Signal** menu.

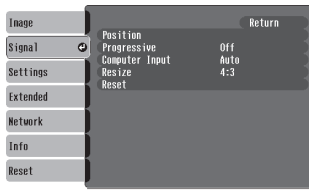
note

*You can also use the remote control's **Auto** button to automatically reset the projector's tracking, sync, resolution, and position settings. See page 25 for details.*

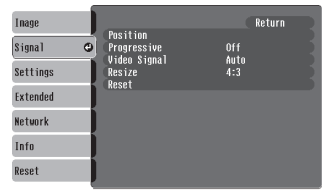
You see a screen similar to one of those below. (The settings will be different depending on the source you are projecting from.)



Computer/RGB Video



Component Video



Composite Video/S-Video

- Use the  pointer button to highlight the desired option, then adjust it as needed:

- **Auto Setup**

Leave this setting **On** to automatically optimize the computer image. Turn it off if you want to save adjustments you have made to the video settings.

- **Tracking**

Adjust this value to eliminate vertical stripes in the image.

- **Sync**

Adjust this value if the image appears blurry or flickers.

- **Progressive**

Turn this setting **On** to convert composite video signals into progressive signals (best for still images). Leave the setting **Off** for moving images.

- **Position**

If the image is slightly cut off on one or more sides, it may not be centered exactly. Select this setting and use the  pointer button to center it.

- **Computer Input**

If the colors don't look right on the **Auto** setting, select the setting for the type of equipment you've connected to the **Computer/Component Video** port:

RGB: For a computer connection.

Component Video: For a video player that outputs a component video signal.

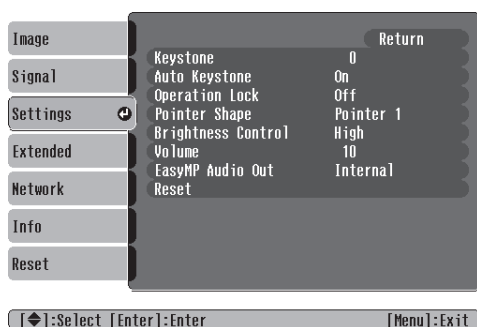
tip

Before adjusting tracking or sync, fill the screen with an image containing fine detail. For example, in Windows you can select a pattern to appear as your desktop background. If this option isn't available, try projecting black text on a white background.

- **Video Signal**
Leave this setting at **Auto** unless you are using a 60-Hz PAL system (then select **PAL60**).
- **Resize**
Choose an aspect ratio of either **4:3** or **16:9**. **Normal** is the default setting for a computer connection.

Customizing Projector Features

You can use the Settings menu to lock the buttons on the projector, adjust audio volume, and customize several other features.



- **Keystone**
Squares up the shape of the image after the projector has been tilted upward. If you notice lines or edges looking jagged after adjusting the shape, decrease the Sharpness setting (see page 112).
- **Auto Keystone**
Automatically compensates for keystone distortion when the projector is tilted upward. This feature is available only when the projector is set for front projection (it is enabled by default).
- **Operation Lock**
Lets you disable all of the buttons on the projector except the **Power** button. See page 121 for more information.

note

You can also adjust the volume using the remote control.

- **Pointer Shape**
Lets you choose from three alternative pointer shapes. See page 34 for more information.
- **Brightness Control**
Lets you select from two levels of brightness. The **Low** setting reduces power consumption and noise, and extends the lamp's operating life.
- **Volume**
Raises or lowers the volume of the projector's speaker.
- **EasyMP Audio Out**
Lets you output sound from EasyMP scenarios (.wav files) or MPEG files to external speakers with built-in amplifiers. Connect the speakers as shown on page 45.

Using the Projector Security Features

To prevent unauthorized use of the projector, you can do the following:

- Assign a password; this can be disabled for a set period if you want to loan the projector to someone.
- Create an identifying user logo that is displayed at startup and/or when the **A/V Mute** button is pressed. See page 119.
- Disable the projector's buttons; this is useful, for example, if you're projecting in a classroom and you want to ensure that no one touches the projector's buttons while you're using the remote control. See page 121.
- Lock the network configuration settings. See page 118.

If you create a user's logo for the projector, you can set up the logo so it is displayed as the startup screen and/or AV/Mute screen. Unauthorized users cannot turn it off or change it. This feature is intended to discourage theft and provides a way to identify the projector should it be stolen.

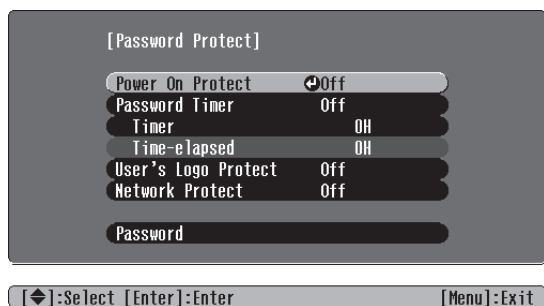
Enabling Password Protection

To prevent unauthorized use, you can assign the projector a password. If you do, a screen will appear requesting the password whenever the projector is plugged in and turned on. If an incorrect password is entered three times in succession, the projector's operation is locked and the power cord must be disconnected and reinserted to redisplay the password screen. If an incorrect password is entered thirty times in succession, the user must contact Epson to unlock the projector.

The default setting for the Password Protect function is **Off**. Follow these steps to turn password protection on:

1. Press the **Freeze** button on the remote control for about five seconds.

You see this screen:



2. Use the  pointer button to set **Power On Protect** to **On**. Then press **Enter**.
3. Press **Esc**.
4. Select **Password** and press **Enter**.
5. When you see a message asking if you want to change the password, select **Yes** and press **Enter**.
6. Hold down the **Num** button on the remote control and use the numeric keypad to enter a four digit password. (The default setting is 0000.)
7. When you see a confirmation message, reenter the password. Then press the **Menu** button to exit the screen.

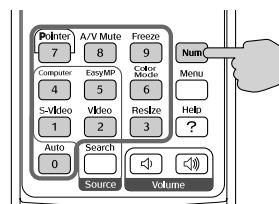
note

It's a good idea to write down your password.

If you leave the projector plugged in, the Password Protect Release screen will not appear. You only need a password if you unplug and reconnect the power cable.

caution

If you lose the remote control, you will not be able to enter the password. Keep the remote control in a safe place at all times.



8. Press the **Num** button on the remote control to deactivate the numeric keypad.
9. If you want to disable the password temporarily, select **Timer** and press **Enter**. Then hold down the **Num** button while you use the numeric keypad to enter the number of hours (from 0 to 9999) that you want the password feature disabled. If you want the projector to request the password every time it is turned on, set the timer to **0H**.

The countdown for the elapsed time begins as soon as you close the Password Protect menu. (You can check the elapsed time in this menu next to **Time elapsed**.)

10. To enable your screen logo, select **User's Logo Protect** and press **Enter**. Select **On** and press **Enter**.

When this feature is on, the logo appears whenever you turn on the projector (if the **Startup Screen** is enabled in the Extended menu; see page 119). It also appears when you press the A/V Mute button (if you selected the **Logo** for the A/V Mute setting under Display in the Extended menu). None of the User's Logo features in the Extended menu can be changed when the User's Logo Protect function is enabled.

11. To enable network setting protection, select **Network Protect** and press **Enter**. Select **On** and press **Enter**.

When this feature is on, none of the network settings on the Configuration menu can be changed.

Starting the Projector with a Password

When the password function is enabled, you see this screen when you plug in and turn on the projector:



Hold down the **Num** button on the remote control and use the numeric keypad to enter the four digit password.

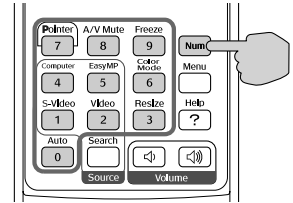
The password screen closes, the numeric keypad is automatically deactivated, and projection begins.

If the password is not correct, you see a message prompting you to re-enter the password. If you enter an incorrect password three times in succession, you see the message **The projector's operation will be locked. Request code xxxxx** and the projector switches to standby mode for approximately 5 minutes. Write down the request code. Then disconnect the projector's power cord from the electrical outlet, reconnect it, and turn the projector back on.

When you see the Password Protect Release screen again, you can try to enter the correct password.

If you enter an incorrect password 30 times in succession, the projector remains locked and you must contact Epson to unlock it.

If you have forgotten the password, contact Epson with the request code number that appears in the Password Protect Release screen for assistance. See "Where To Get Help" on page 162.



Creating Your Own Startup Screen

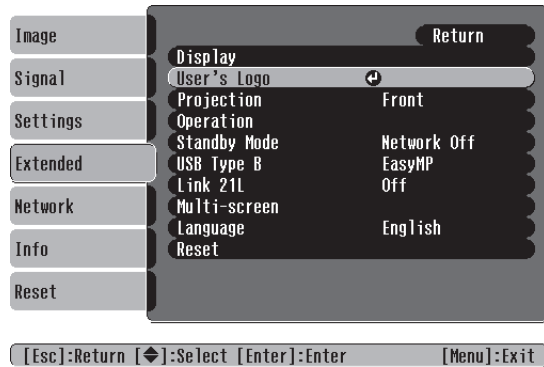
You can transfer any image from your computer or video source to the projector and then use it as your startup screen. You can also use it as the screen displayed when the projector is not receiving a signal or when you press the **A/V Mute** button. The image can be a company logo, slogan, photograph, or any other image you want to use.

Capturing the Image

Start by displaying the image you want to use from either a computer or video source, such as a DVD player or digital camera. Then follow these steps to capture the image and transfer it to the projector:

1. Press the **Menu** button on the remote control, highlight the **Extended menu**, and press **Enter**.

2. Highlight User's Logo and press Enter.



3. When you see a message asking Choose this image as the user's logo?, select Yes and press Enter. A selection box displays over the image.
4. Use the  pointer button to select the area of the image you want to use. Then press Enter.
5. When you see the message Select this Image?, highlight Yes and press Enter.
6. Use the arrow buttons to select a zoom rate (display size) and press Enter.
7. When the message Save this image as the user's logo? appears, select Yes and press Enter. Saving the logo may take a few moments. Do not use your projector, remote control, or video source while the logo is being saved.
8. When you see the message Completed, press Esc to return to the menu screen.

Choosing When to Display the Image

After your image is saved, it is automatically set as the startup screen. You can also set it to display as the screen you see when there's no signal or when you press the A/V Mute button (see page 30).

1. Press the Menu button, highlight the Extended menu, and press Enter.

2. Select **Display** and press **Enter**.
3. Highlight **Display Background** (for when there is no signal) or **A/V Mute**, and press **Enter**.
4. Select **Logo** and press **Enter**.
5. When you're finished, press **Esc** to exit.

Disabling the Projector's Buttons

When you enable the Operation Lock function, you can lock all the projector's buttons, or all buttons except the **Power** button.

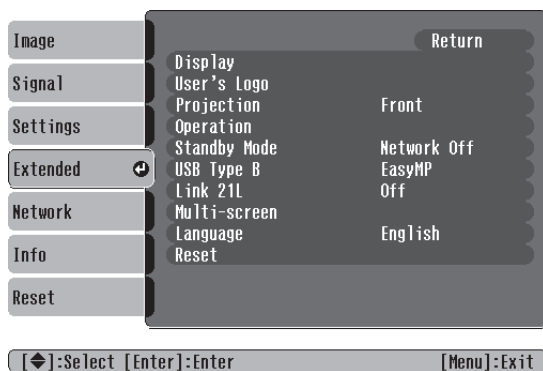
1. Press the **Menu** button, highlight the **Settings** menu, and press **Enter**.
2. Select **Operation Lock** and press the **Enter** button.
3. Select **Full Lock** (to lock all projector buttons) or **Partial Lock** (to lock all buttons except the **Power** button) and press **Enter**.
4. Select **Yes** and press **Enter** to confirm the setting.
5. Press the **Menu** button to exit.

note

*Press the **Enter** button on the projector's control panel for 7 seconds to disable the Operation Lock function.*

Customizing Power and Operation

You can use the Extended menu to customize the way the projector displays images, enable quick startup, turn sleep mode on or off, and customize other projector operations.



- **Display**

Use this setting to turn off the display of messages, change the background color, enable logo display, or turn off the startup screen display.

- **User's Logo**

Create a custom startup screen, as described on page 119.

- **Projection**

Select **Front** (to project from the front of a screen and right side up), **Front/Ceiling** (when the projector is mounted upside-down from the ceiling), **Rear** (to project from behind onto a transparent screen), or **Rear/Ceiling** (to project from behind onto a transparent screen when the projector is mounted upside-down from the ceiling).

When you select one of the Ceiling projection methods, the projector requires a 10-second cool-down after you turn it off. You need to wait until you hear the projector beep before unplugging it.

note

If Direct Power On is enabled, the power cable is connected, and a power outage occurs, the projector will start when the power is restored.

Do not use the projector at altitudes above 7500 ft (2,286 m).

- **Operation**

Enable **Direct Power On** if you want to have the projector start when the power cable is connected (without pressing the **Power** button). Enable **Sleep Mode** if you want to have the projector turn off automatically if it is idle (and no signal is received) for 30 minutes or when the A/V Mute Slide is Closed. Enable **High Altitude Mode** when you are using the projector above 4900 ft (1500 m).

- **Standby Mode**

Select **Network On** to enable the projector to be monitored over a network when it is in standby mode (the power light is orange).

- **USB Type B**

Select **Easy MP** to use Easy MP features when connecting the projector to a device via USB. Choose **Link21L** if you are using the Link21L optional software.

- **Link 21L**

Enable this setting if you want to be able to use the remote as a mouse for a USB-connected computer.

- **Multi-screen**

Enable this option if you are using the multi-screen feature to project from one source (one image) using multiple projectors (see page 81). Select **Screen ID** to define individual screen IDs.

Choose **Image Correction** then choose an adjustment:

Brightness Correct to adjust the brightness of each display,

Color Correct to adjust the balance between red and green, or blue and yellow.

- **Language**

Select from nine languages to be used for the projector menus.

7

Managing Projectors

The software included with your projector lets you monitor and control your projectors from a remote computer:

- Use EMP Monitor (available for Windows only) to see your projectors' status, switch image sources, and control basic settings.
- Use the mail notification function to receive e-mail alerts about possible problems.
- Use a network management utility running SNMP, such as HP OpenView, to manage your facility's equipment from a pre-existing system (requires an optional plug-in available on request from Epson).

You can also use NS Connection to register up to 16 projectors as a group. This allows you to provide quick and easy access to these projectors from other computers.

To use the software to manage your projectors, first install EMP Monitor as described on page 166. If you plan to create projector groups, also install EMP NS Connection. Then connect and configure each projector you want to monitor. You can connect the projector wirelessly in Access Point mode or over a wired network (as described on page 57).

This chapter covers the following information:

- Monitoring and controlling your projector with EMP Monitor
- Using e-mail alerts to warn you of problems
- Understanding notification messages
- Using a browser to monitor the projector

Using *EMP Monitor*

note

If you want to monitor projectors while they are in standby mode, select Standby Mode in the Extended menu, then select Network On. See page 122.

EMP Monitor lets you use a remote computer to manage your projectors, whether connected wirelessly or over a wired network. It lets you easily turn the projectors on or off (together or individually), switch image sources, and check their status.

Before using EMP Monitor, make sure you've installed the software (available for Windows only) as described on page 166. The computer you're using to monitor the projector should already be connected to your network.

Opening and Closing *EMP Monitor*

To start EMP Monitor, click **Start > Programs** or **All Programs > EPSON Projector > EMP Monitor**.

If you've added the program to the Startup programs folder, then it may already be open. If so, click the icon in the system tray on the lower-right corner of your screen to display the EMP Monitor window:



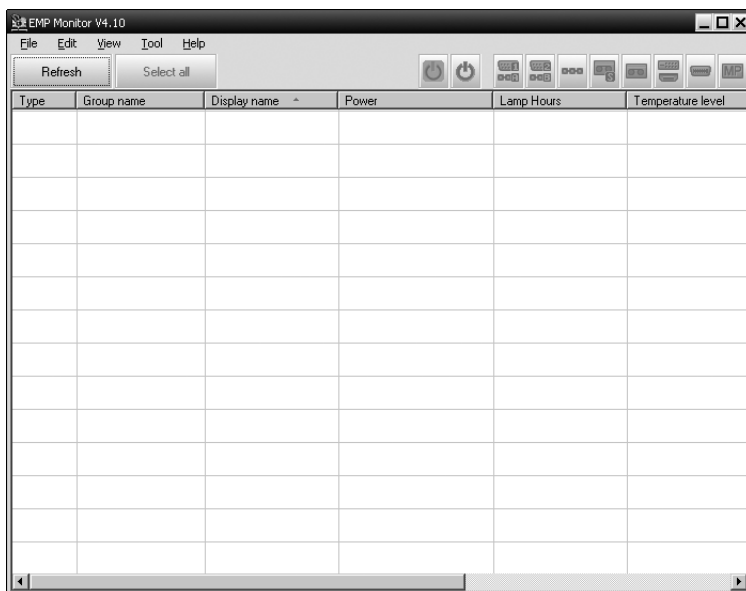
Click here to start EMP Monitor

To close EMP Monitor, select **Exit** from the File menu or right-click the program icon shown above, then select **Exit**.

Registering a Projector

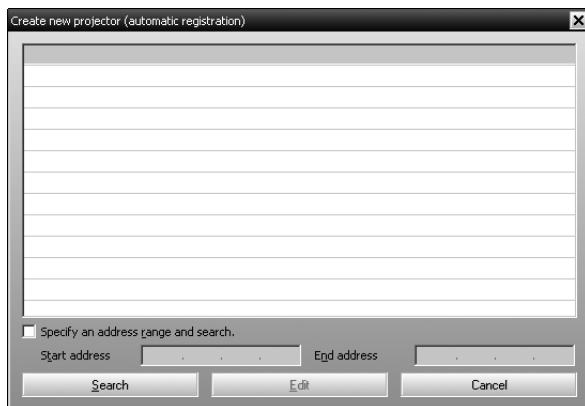
Before you can monitor a projector, you have to register it. Follow these steps to automatically search for your projector(s). To manually register your projector(s) with EMP Monitor, refer to the on-screen *Operation Guide*.

1. Open EMP Monitor as described above. You see this screen:



2. Select Edit > New > Projector (automatic search).

You see this screen:

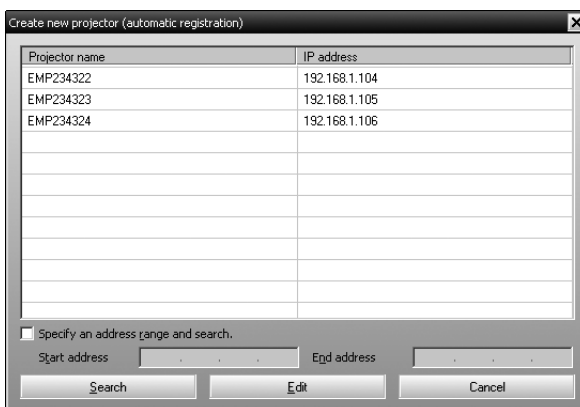


note

If the projector is not automatically found, your projector may not be connected or configured correctly for the network. See page 50.

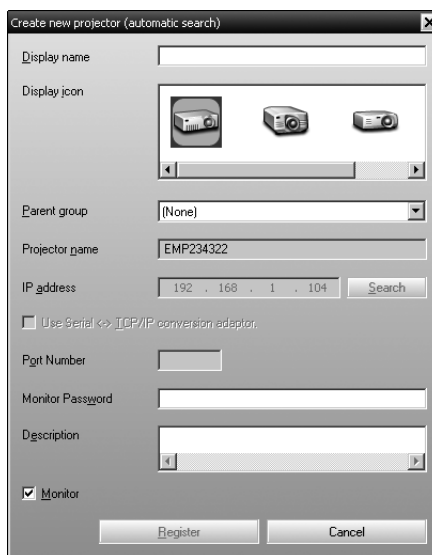
3. Click **Search** to locate projectors currently operating on the network.

Any projectors found on the network are listed as shown below:



4. Select the projector you want to add by clicking its name, then click the **Edit** button.

You see this screen:

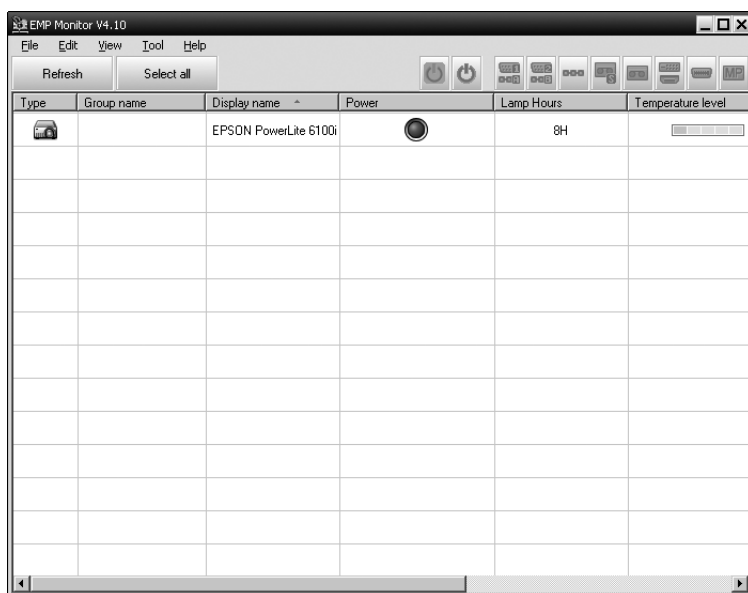


5. Enter a Display name, select a Parent group, if necessary, enter a Monitor Password, if necessary, and a Description for the projector. Then click the **Register** button.

To register additional projectors with EMP Monitor, repeat steps 2 through 5.

6. When you're done adding projectors, click **Cancel**.

You see a screen with a list of all registered projectors:



Monitoring Your Projectors

The EMP Monitor screen lets you monitor your projectors using the Status, Video Source, and Error icons shown below. This lets you see which projectors are currently being used, from which source (or port) they are projecting an image, and if a problem occurs.

For detailed status information, right-click the projector in question and click **Property**.

note

*To delete a projector from the list, right-click the projector name, and click **Delete**.*

note

*To monitor a projector when it's in standby mode (plugged in but not turned on), you must select **Network On as the Standby Mode setting** in the projector's **Extended menu** (see page 122).*

The following tables describe the status icons shown on the EMP Monitor screen.

Group status icons

	No warnings or problems. All projectors in the group are operating normally.
	Warning or problem. A projector in the group has a warning or problem.
	Monitoring disabled. Right click the icon and select Monitoring Enabled to begin monitoring the group.
	Data is currently being updated.

note

To create projector groups in EMP Monitor, refer to the on-screen Operation Guide.

Type status icons

	No warnings or problems.
	Warning or problem.
	Monitor Password error. No monitor password was entered when the projector was registered, or an incorrect password was entered.
	Monitoring disabled. Right-click the icon and select Monitoring Enabled to begin monitoring the projector.
	Data is currently being updated.
	Network error (for example, the projector is not connected to the network, or power cable is disconnected). You may also see this error if Network Off is selected in Standby Mode.
	Network error (Esc/VP.net communication error).

Power status icons

	The projector is powered on and its status is normal.
	The projector is powered off and its status is normal.
	The projector is powered on and its status is abnormal.
	The projector is powered off and its status is abnormal.

Temperature level status icons

	The projector's internal temperature is normal (low).
	The projector's internal temperature is normal (medium).
	The projector's internal temperature is normal (high).
	The projector's internal temperature is high (high-temperature warning).
	The projector's internal temperature is too high (internal temperature error). The projector is turned off automatically.

Error status icons

	Lamp life warning. The lamp is nearing the end of its life.
	High-temperature warning. The projector is getting too hot but continues to operate.
	Replace air filter.
	No air filter. The air filter is not installed or installed incorrectly.
	Low air flow. The air filter needs to be cleaned or replaced.

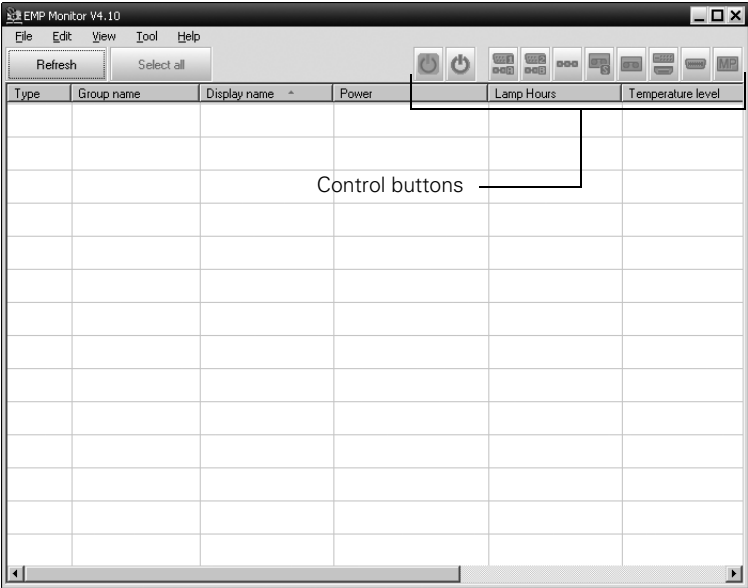
Error status icons (continued)

	Air flow sensor error. There is a problem with the projector's air flow sensor; contact Epson as described on page 162.
	Lamp cover door open. Close the lamp cover door.
	Lamp out. The lamp has reached the end of its life.
	Lamp failure at power on. The lamp has reached its end of life or is installed incorrectly.
	High internal temperature error. The projector is turned off automatically.
	Internal (system) error. Contact Epson as described on page 162.
	Fan error. Contact Epson as described on page 162.
	Sensor error. Contact Epson as described on page 162.
	Other error. Contact Epson as described on page 162.

See page 147 for recommended solutions to problems.

Controlling Your Projectors

The control buttons in the upper-right let you turn the projector on and off and select video sources. (Hold the mouse pointer over a button to see a description of its meaning.) Make sure you've selected the projector you want to operate (with the mouse pointer) before clicking one of the buttons.



note

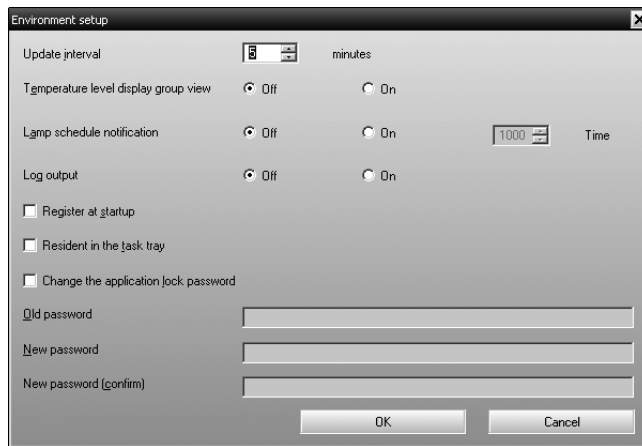
To turn on a projector when it's in standby mode (plugged in but not projecting), you must have selected **Network On** as the Standby Mode setting in the projector's menu system (see page 122).

Configuring the Monitoring Interval

If you need to have the most current status information about your projectors, click the **Refresh** button in EMP Monitor.

To select how often EMP Monitor checks the status of projectors, follow the steps below:

1. From the Tool menu, select **Environment Setup**. You see this screen.



note

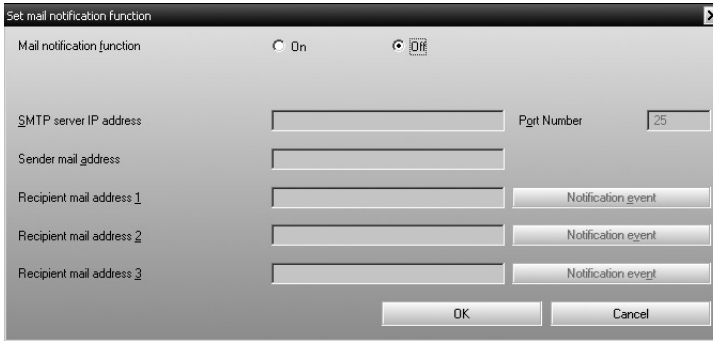
*If you want EMP Monitor to run whenever you start your computer, click **Register at startup**.*

2. Enter the desired Update interval and click **OK**.

Using E-mail Alerts

You can set up e-mail alerts to warn you of problems with the projector. Follow the steps below:

1. From the Tool menu, select **Mail notification function**. You see this screen:



The screenshot shows a window titled "Set mail notification function". At the top, there are two radio buttons: "On" and "Off". The "Off" button is selected. Below this, there are several input fields and buttons. On the left, there are labels for "SMTP server IP address", "Sender mail address", "Recipient mail address 1", "Recipient mail address 2", and "Recipient mail address 3". Each label is followed by a text input box. To the right of the "Port Number" label, there is a text input box containing the number "25". To the right of each "Recipient mail address" input box, there is a button labeled "Notification event". At the bottom of the window, there are two buttons: "OK" and "Cancel".

2. Turn the Mail notification function setting **On**.
3. Enter the IP address and port number of your network's SMTP (outgoing) mail server.
4. Enter the Sender (projector) mail address.
5. Enter up to three e-mail addresses to send alerts to in the Recipient mail address boxes.
6. Click the **Notification event** buttons to select the conditions under which an e-mail alert will be sent.
7. When you're done, click the **OK** button to close the Set mail notification function window.

Understanding the Notification Messages

note

If a projector develops a critical problem, it may not be possible for it to report the error.

If a projector experiences a problem, EMP Monitor sends an e-mail message to each of the addresses you entered in the Set mail notification function window.

The subject line of the message includes the projector's display name, shown in EMP Monitor, and the warning/error.

The body of the message contains:

- The projector's display name in EMP Monitor
- The error/warning message

The problem descriptions are similar to the errors listed on page 131.

When the problem has been fixed, EMP Monitor sends a message indicating the problem has been resolved.

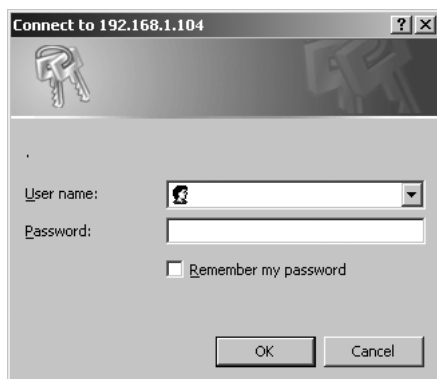
Using a Browser to Monitor the Projector

If your projector is connected to a network, you can use a standard web browser to monitor and control it.

1. Make sure that the projector is set up for your wireless network, as described on page 50. (Standby Mode in the Extended menu should be set to **Network On** to monitor the projector in standby mode.)
2. Open your web browser and enter the IP address of the projector you want to monitor in the browser window.

If you're not sure what the address of the projector is, turn the projector on and select **Wired LAN** or **Wireless LAN** from the Network menu to display the IP address of the projector.

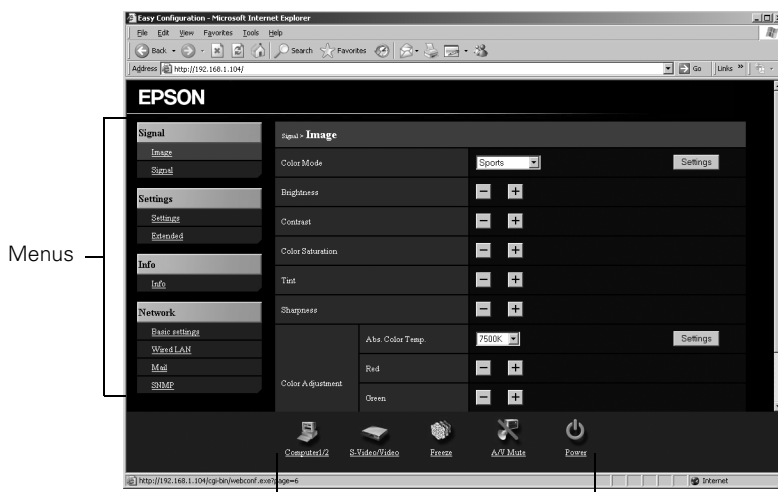
You see a login screen.



3. Do one of the following:

- If you didn't set a Web control password in the projector's Network menu, click **OK**.
- If you set a Web control password in the projector's Network menu, enter it in the Password box, then click **OK**.

You see this screen:



Functions corresponding to remote control buttons

4. Select one of the menu options listed on the left, then change any of the settings as needed. These settings correspond to those found in the projector's menu system.

You cannot change the following settings using a web browser:

- **Pointer** in the Settings menu
- **User's Logo** in the Extended menu
- **Reset All, Reset Air Filter Time, or Reset Lamp Hours** in the Reset menu

Use the controls at the bottom of the screen just as you would the corresponding remote control buttons. Choose a source, stop the action, turn off the picture and sound, or turn the projector's power on or off.

8

Maintaining the Projector

warning

Before you clean any part of the projector, turn it off and unplug the power cord. Never open any cover on the projector, except the lamp cover. Dangerous electrical voltages in the projector can injure you severely. Do not try to service this product yourself, except as specifically explained in this User's Guide. Refer all other servicing to qualified service personnel.

Your projector needs little maintenance. All you have to do is keep the lens clean and periodically clean the air filter and vent. A clogged air filter or vent can block ventilation needed to cool the projector.

The only parts you should replace are the lamp and air filter. If any other part needs replacing, contact your dealer or a qualified servicer.

This chapter covers the following:

- Cleaning the lens
- Cleaning the projector case
- Cleaning the air filter and vent
- Replacing the lamp and air filter
- Transporting the projector

Cleaning the Lens

Clean the lens whenever you notice dirt or dust on the surface.

Use a canister of compressed air to remove dust.

To remove dirt or smears on the lens, use lens-cleaning tissue. If necessary, moisten a soft cloth with lens cleaner and gently wipe the lens.

Cleaning the Projector Case

Before you clean the case, turn off the projector and unplug the power cord.

- To remove dirt or dust, wipe the case with a soft, dry, lint-free cloth.
- To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent. Then wipe the case.

caution

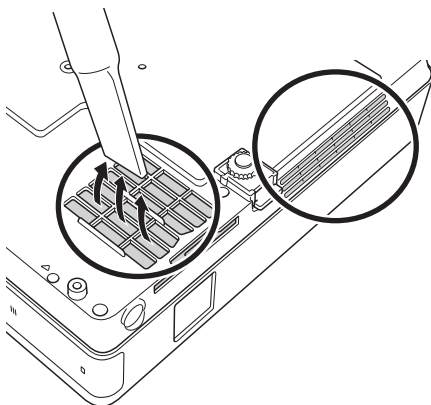
Do not use wax, alcohol, benzene, paint thinner, or other chemical detergents. These can damage the case.

Cleaning the Air Filter and Vent

Clean the air filter and air intake vent after every 100 hours of use. If they are not cleaned periodically, they can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector.

Follow these steps:

1. Turn off the projector. Wait for the **Power** light to stop flashing, then unplug the power cord.
2. Turn the projector upside down.
3. To clean the intake vent and filter, use a small vacuum cleaner designed for computers and other office equipment. If you don't have one, gently clean the vent with a soft brush (such as an artist's paintbrush).



4. If the dirt is difficult to remove or the filter is broken, replace the filter as described on page 144. Contact your dealer or call Epson at 800-GO-EPSON (800-463-7766) to obtain a new filter.

note

To order replacement air filters, request part number V13H13408. See page 13 for ordering information.

note

When you get a replacement lamp for your projector, you should replace the filter.

To check how long the lamp has been in use, see page 151.

Turn off this product when not in use to prolong the life of the projector.

warning

Let the lamp cool fully before replacing it.

In the unlikely event that the lamp has broken, small glass fragments may be present and should be removed carefully to avoid injury.

If the lamp is used after the replacement period has passed, the possibility that the lamp may break increases. When a lamp replacement message appears, replace the lamp with a new one as soon as possible, even if it is still working.

Replacing the Lamp and Air Filter

The life span of the projection lamp is about 2000 hours if **Brightness Control** in the Setting menu is set to **High** (default), and 3000 hours if **Brightness Control** is set to **Low**.

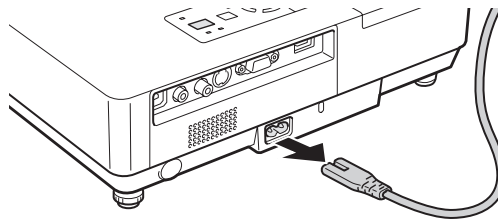
It is time to replace the lamp when:

- The projected image gets darker or starts to deteriorate.
- The message **Replace the lamp** appears on the screen when the lamp comes on and the lamp warning light  flashes orange. To maintain projector brightness and image quality, replace the lamp as soon as possible.
- The lamp warning light  flashes red (the lamp is burnt out).

Contact your dealer or call Epson at 800-GO-EPSON (800-463-7766). Request part number V13H010L38.

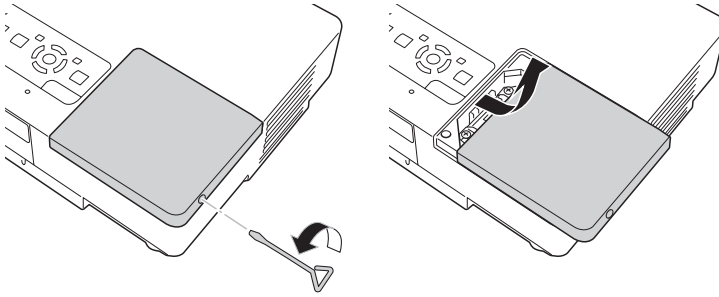
Follow these steps to replace the lamp and air filter:

1. Turn off the projector.
2. When the **Power** light stops flashing, unplug the power cord.

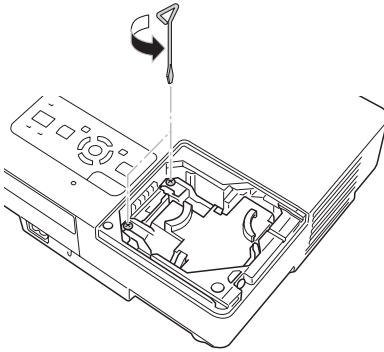


3. Let the projector cool for at least an hour (if it has been on). The lamp is extremely hot immediately after use.

4. Loosen the lamp cover screw (you don't need to remove it). Then slide the lamp cover to the side and lift it off of the projector.

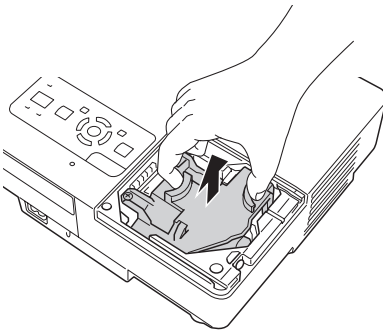


5. Loosen the two screws holding the lamp in place (you can't remove them).



Loosen, but don't
remove these screws

6. Hold the lamp as shown and pull it straight out.

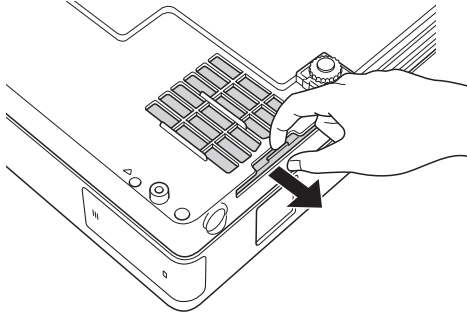


7. Gently insert the new lamp. (If it doesn't fit easily, make sure it is facing the right way.)

note

(Hg) *The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.*

8. Push down the corner marked **PUSH** until it snaps in.
9. Once the lamp is fully inserted, tighten its screws.
10. Replace the lamp cover, then tighten its screw.
11. Turn the projector over.
12. Slide the air filter out and remove it.



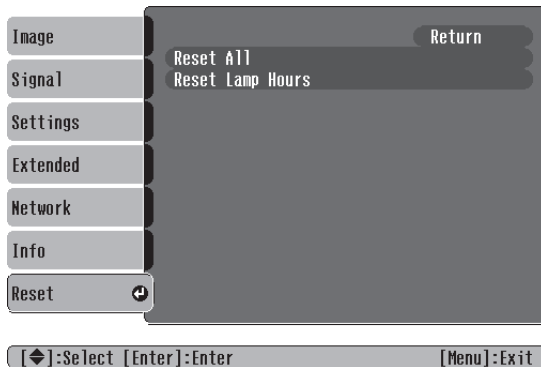
13. Slide in the new air filter until it clicks in place.
14. Reset the lamp timer as described in the next section.

Resetting the Lamp Timer

After you replace the lamp, you need to reset the lamp timer using the projector's menus.

1. Press the **Menu** button on the remote control or on the projector's control panel. You see the main menu.
2. Use the  pointer button on the remote control (or the arrow buttons on the projector) to highlight **Reset**, then press **Enter**.

You see this screen:



3. Select **Reset Lamp Hours** and press **Enter**.
4. When you see the prompt, select **Yes** and press **Enter**.
5. When you're finished, press **Esc** or **Menu** to exit the Menu system.

Transporting the Projector

The projector contains many glass and precision parts. Follow these guidelines to prevent damage:

- When shipping the projector for repairs, use the original packaging material if possible. If you do not have the original packaging, use equivalent materials, placing plenty of cushioning around the projector.
- When transporting the projector a long distance, first place it in a hard-shell shipping case, then pack it in a firm box with cushioning around the case. (An optional case is available from Epson; see page 13.)
- Close the A/V Mute slide (lens cover) to protect the lens.

note

Epson shall not be liable for any damages incurred during transportation.

9

Solving Problems

This chapter helps you solve problems with your projector, and tells you how to contact technical support for problems you can't solve yourself. The following information is included:

- Using the projector's on-screen help system
- What to do when the projector's status lights flash
- Solving projector operation problems
- Solving problems with the image or sound
- Solving network problems
- Solving EasyMP problems
- Solving problems with the remote control
- Contacting technical support

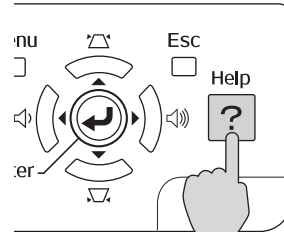
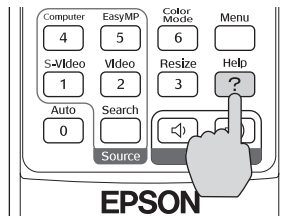
Using On-Screen Help

If the image doesn't look right or your audio isn't working, you can get help by pressing the blue ? Help button on top of the projector or on the remote control. The following choices are available:

- Problems with image
- There is no sound
- Select a different language

Follow these steps to get help:

1. Press the blue ? Help button on the remote control or on the projector.



You see the Help Menu.

2. Use the  pointer button on the remote control or the navigational buttons on the projector to highlight menu items.
3. Press the **Enter** button on the remote control or on the projector to select the menu item.
4. To exit the help system, press the ? Help button.

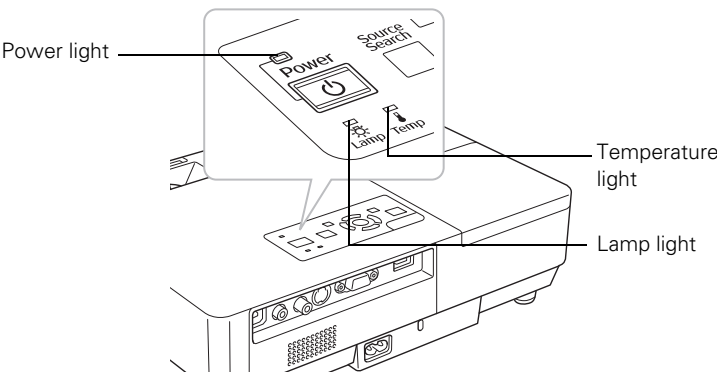
If none of the suggestions solve your problem, see additional solutions to problems in the following sections.

Checking Projector Status

If your projector isn't working correctly, first turn it off, wait for it to cool (the **Power** light stops flashing orange), and unplug it. Then plug the power cord back in and turn on the projector. If this doesn't solve the problem, check the lights on top of the projector.

What To Do When the Lights Flash

The lights on top of the projector indicate the projector's status.



Refer to the following table for a complete description of the projector's status lights:

Status lights

Light	Status	Description
	Orange	The projector is in sleep or standby mode. You can unplug it or press the Power button to turn it on.
	Flashing green	The projector is warming up. Wait for the image to appear.
	Green	The projector is operating normally.
	Flashing orange	The projector is cooling down. You can't turn it back on (and you should not unplug it) until the light stops flashing and remains orange.
	Red	There is a problem with the projector. Check the other two lights and the information on page 150 to diagnose the problem.

Status lights (continued)

Light	Status	Description
	Flashing red	There is a problem with the fan or temperature sensor. Stop using the projector, disconnect the power cable, and contact Epson as described on page 162.
	Flashing orange	Rapid cooling is in progress. Although this is not an abnormal condition, projection will stop automatically if the temperature rises higher. Make sure there is plenty of space around and under the projector for ventilation, and that the air filters and vents are clear.
	Red	The projector is overheating, which turns the lamp off automatically. Wait until the cooling fan stops, then unplug the power cord. Plug the power cord back in and press the  Power button. Make sure the room temperature is not above 95 °F (35 °C), and there is plenty of space around and under the projector for ventilation. The air filters may be clogged. Clean or replace them as described on page 141. If the projector continues to overheat after you clean the air filter, the problem may be caused by damage to the cooling fan or temperature sensor. Contact Epson for help as described on page 162. Warning: Except as specifically explained in this <i>User's Guide</i>, do not attempt to service this product yourself.
	Flashing orange	It's time to replace the lamp. See page 142 for instructions. If you continue to use the lamp after the replacement warning, there is an increased possibility that the lamp may break.
	Flashing red	The lamp may be burnt out. First make sure the lamp cover is securely installed. If that's not the problem, let the lamp cool, remove the lamp, and replace it as described on page 142. If this does not resolve the problem, contact Epson as described on page 162.
 	Flashing red	Power is cut off because of an internal problem. Unplug the power cord and contact Epson for help, as described on page 162.

Viewing Lamp Usage and Other Information

Use the Info menu to view information about the display settings of your computer and the number of hours the lamp has been used.

Press the **Menu** button and highlight the **Info** menu.

You see the lamp usage hours and various input signal settings on the right.

The life span of the lamp is about 2000 hours if the **Brightness Control** setting in the Setting menu is set to **High** (default), and 3000 hours if the **Brightness Control** setting is set to **Low**. Make sure you have a spare lamp handy if the usage hours on this menu are close to the life span of your lamp.

note

The information displayed depends on the input signal currently selected.

Solving Projector Operation Problems

The power doesn't turn on.

- If the projector doesn't turn on when you press the  **Power** button, make sure the power cable is connected to the projector and plugged into a working electrical outlet.
- The power cable may be defective. Disconnect the cable from the outlet and contact Epson as described on page 162.
- Check to see if the A/V Mute Slide is closed.

The buttons on the projector don't work.

If the Operation Lock function has been enabled, you can't use the buttons on the projector. Try using the remote control instead. See page 121 for information about the Operation Lock function.

You hear the projector's fan after the power has been turned off.

If **Standby Mode** is set to **Network On**, the fans continue to operate after the projector has cooled down. See page 122 for more information about this setting.

Solving Problems with the Image or Sound

No image appears on the screen.

- Check that the **Power** light is green, not flashing.
- The projector may be in standby or sleep mode. If the **Power** light is orange, press the  **Power** button to turn the projector on.
- If the power was switched off and then on again, the projector may be cooling down. Wait until the **Power** light stops flashing and remains orange; then press the  **Power** button again.
- Press the **A/V Mute** button on the remote control to make sure the picture has not been turned off temporarily.
- Open the **A/V Mute Slide**, if it is closed.
- The attached computer may be in sleep mode or displaying a black screen saver. Try pressing a key on the computer.
- If you are projecting from a DVD player or other video source, make sure you turn it on and press its **Play** button.

You've connected a computer and see a blue screen with the message No Signal displayed.

- Make sure the cables are connected correctly, as described on page 36.
- Try restarting your computer.
- If you've connected a computer and one or more video sources, you may need to press the **Source Search** button on the projector or one of the source buttons on the remote control to select the correct source. Allow a few seconds for the projector to sync up after pressing the button.

If you're using a PC notebook:

- Hold down the Fn key on the keyboard and press the function key that lets you display on an external monitor. It may have an icon such as , or it may be labelled CRT/LCD. Allow a few seconds for the projector to sync up after pressing it. Check your notebook's manual or online help for details.

On most systems, the  key lets you toggle between the LCD screen and the projector, or display on both at the same time.

- Depending on your computer's video card, you might need to use the Display utility in the Control Panel to make sure that both the LCD screen and external monitor port are enabled. See your computer's documentation or online help for details.

If you're using Mac OS X:

1. Open System Preferences.
2. Click Displays.
3. Click Detect Displays.
4. Make sure the VGA Display or Color LCD dialog box is selected.
5. Click the Arrangement or Arrange tab.
6. Make sure the Mirror Displays checkbox is selected.

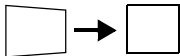
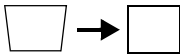
The message Not Supported is displayed.

- Make sure the correct input signal is selected in the Signal menu (see page 113).
- Make sure your computer's resolution doesn't exceed UXGA (1600 × 1200) and the frequency or refresh rate is supported by the projector (see page 171). If necessary, change your computer's resolution setting as described below.

Only part of the computer image is displayed.

- Press the Auto button on the remote control.
- Make sure the image Position setting is correct in the Signal menu. See page 114 for more information.

- Press the **Resize** button on the remote control.
- Press the **Esc** button on the remote control to cancel the E-Zoom function.
- Make sure your computer's resolution setting is correct. Ideally, it should be 1024×768 to match the projector's native resolution. If this option isn't available, select one of the other compatible video formats listed on page 171.
 - **Windows:**
Right-click the desktop, select **Properties**, click the **Settings** tab, and select a different resolution.
 - **Mac OS X:**
Open **System Preferences**, click **Displays**, and select a different resolution.
- You also may need to modify existing presentation files if you created them for a different resolution. See your software documentation for specific information.



The image isn't square, but keystone-shaped.

- If the top or bottom of the image is broader, press the  or  button on the projector until the image is square.
- If the projector is angled toward the screen from the left or right, the image will be broader on one side. Center the projector in front of the middle of the screen, facing the screen squarely.
- Enable the Auto Keystone feature to automatically fix the shape. See page 115.

The image contains static or noise.

- If you're using a computer cable longer than 6 feet, or an extension cable, the image quality may be reduced.
- Keep your computer and video cables away from the power cord as much as possible to prevent interference.

- The video signal may be split between the computer and the projector. If you notice a decline in the projected image quality when the image is displayed simultaneously on your notebook computer and the projector, turn off the notebook's LCD display.
- Make sure the correct input signal is selected in the Signal menu (see page 115).

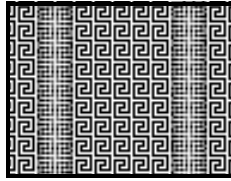
The image is blurry.

- There may be dirt or smears on the lens. Clean the lens as described on page 140.
- Adjust the focus using the focus ring (see page 23).
- Make sure the lens is not fogged by condensation. You may need to wait before using the projector after moving it from a cold environment to a warm environment.
- Adjust the **Sharpness** setting on the Image menu (see page 113). When you change video settings, you should be able to see the effect on the screen immediately. If you're projecting from a computer, you may also need to adjust the tracking and sync as described in the next section. If you don't like the new settings, you can always select **Reset** to return to the factory default settings.

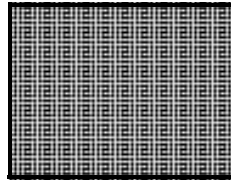
You see vertical bands or the image still looks blurry after trying the solutions in the previous section.

- If you're projecting from a computer and displaying an image that contains a lot of fine detail, you may notice vertical bands or some of the characters may look heavy or blurred. Press the **Auto** button on the remote control to reset the projector's tracking and sync settings.
- If further adjustment is needed, you can fine-tune the **Tracking** and **Sync** settings manually using the Signal menu, as described on page 114.
 1. Fill the screen with an image containing fine detail, such as a pattern to appear as your desktop background, or try projecting black text on a white background.

2. Adjust the **Tracking** to eliminate vertical bands.



3. Adjust the **Sync** setting to increase the image sharpness.



note

Because of the different technologies used, your projected image may not exactly match the colors on your notebook or computer monitor.

The image is too light or dark, or colors are incorrect.

- If you're displaying a computer image, use the **Color Mode** option in the projector's Image menu to adjust the color (see page 112).
- If you're displaying video, adjust the **Color Adjustment** and **Color Mode** settings on the Image menu. You can also try adjusting the **Color Saturation**, **ABS Color Temp**, and **Tint** settings on the Image menu.
- Try adjusting the **Brightness** and **Contrast** settings on the Image menu.
- Check your computer display settings to correct the color balance.
- The projector's lamp may need to be replaced. See page 142 for instructions.

There is no sound, or the sound is not loud enough.

- Press the  button on the projector or remote control to increase the volume.
- Make sure **A/V Mute** is not enabled. (The **A/V Mute** button may have been pressed.)
- Make sure the **A/V Mute Slide** is open.

- Try adjusting the **Volume** setting in the Setting menu (see page 116).
- If you're using a VCR or other video source, make sure the volume is not turned all the way down or muted. Also, make sure the cables are connected correctly, as described on page 44.
- If your presentation includes computer audio, make sure the volume control on your computer is not turned all the way down or muted. If you're using the audio cable, make sure it is securely connected to both the projector and your computer's  headphone jack or  audio out jack.
- Make sure the Windows volume controls on your computer are not turned all the way down or set to Mute. You may be able to check this by clicking the volume control in your Windows system tray (lower right corner of the screen).
- Make sure the Mac volume controls are not turned all the way down. You may be able to adjust the volume from your menu bar (top right corner of the screen) or via the volume control function keys.
- If you are using external speakers, you need to set the **EasyMP Audio Out** option to **External**. When this setting is enabled, you can't use the buttons on the projector or remote to control the volume. See page 45 or page 116 for more information.

Solving Network Problems

You don't see your projector in the EMP Monitor window.

- Make sure that you've connected the projector to the network and configured it correctly; see page 50. Also, make sure you've registered the projector with EMP Monitor; see page 126.
- Make sure that Standby Mode in the projector's Extended menu is set to **Network ON**.
- If the computer you are using is running Windows XP or 2000, you must be logged in as the Administrator.

- Try restarting your computer.

You can't connect to the projector using NS Connection.

- Make sure the Epson 802.11g card is installed correctly in the projector; see page 48. If you have to reinstall the card, restart NS Connection or the program will not be able to detect the projector.
- Restart your computer.
- Make sure your projector and computer are configured correctly; see page 51 (Ad Hoc mode) or page 57 (Access Point mode).
- Make sure that you have sufficient wireless signal strength (above 50 percent). On a Mac, check the AirPort icon on the Mac menu bar. In Windows, see the documentation for your computer's wireless card or adapter for details.
- Make sure you aren't projecting one of the EasyMP configuration screens. (You should see a message that the projector is ready to connect.) If you have to exit a configuration screen, restart NS Connection.
- If the projector is configured for Access Point mode and you're using DHCP, allow time for your projector to appear. It takes the server a little while to pick up the IP address.
- If you've changed any settings for your projector or network, or restarted your computer, allow a minute or two for the connection to appear. If you're using AirPort, try turning AirPort off and then on again.
- Make sure that you're trying to connect to the right network. In Windows, verify that you've enabled your computer's connection to the access point (see page 63) or that your wireless card or adapter is enabled and its SSID is set to match the projector's ESSID (see page 55). On a Mac, click the AirPort icon at the top of your Mac desktop to make sure AirPort is turned on and the projector's ESSID or your AirPort network is selected.

- If you have an access point or AirPort base station and you're not using DHCP, check your projector's IP address on the Access Point mode advanced settings screen. The first three segments of the IP address should be identical to the first three segments of the IP address of your access point or base station. The last segment of the projector's IP address should be close, but not identical, to the last segment of the IP address of the access point or base station.
- If you're not using DHCP, check your projector's Gateway address on the projector's Access Point mode advanced settings screen. It should be identical to the IP address for your access point or AirPort base station.
- If you're using a projector keyword, it changes each time you turn the projector off and then on again, or remove and reinsert the 802.11g wireless card. Check the projector's keyword on the EasyMP Network screen and enter it at the prompt.
- If you're using AirPort, check the configuration of your network. Start the AirPort Admin utility, select your base station, click **Configure** and click **Show All Settings**. Click the **Network** tab. If you set up your projector to connect in DHCP mode, turn on **Distribute IP Addresses** and **Share a Single IP Address**.
- If you're using AirPort and DHCP is turned off on your projector's Access Point mode advanced settings screen, make sure **Distribute IP Addresses** is off.
- If you're using Access Point mode and you're connecting to the wrong network, you may be experiencing signal interference from another network. Try resetting your access point or base station, then restart NS Connection.
- If you're using AirPort, the projector's ESSID should match the AirPort network name, not the name of the AirPort base station. To check the network name, start the AirPort Admin utility, select your base station, and click **Configure**. Then click **Show All Settings**. The network name appears on the AirPort tab.
- If you're prompted for a password when you connect, enter the WEP encryption key (if you're using WEP encryption).
- Try connecting using IP Connect Mode; see page 77.

Solving EasyMP Problems

An image displayed with EasyMP appears distorted.

Because of their resolution, some JPEG images cannot be displayed correctly. Some JPEG files from digital cameras cannot be previewed. Files with a high compression ratio may appear blurry.

In EMP SlideMaker 2, PowerPoint files don't appear in the file window.

EMP SlideMaker 2 does not support PowerPoint 95 or 97. Files created in these versions of PowerPoint must be opened and resaved in PowerPoint 2000 or later.

In EMP SlideMaker 2, your PowerPoint files don't display thumbnails and can't be pasted into scenarios.

Make sure the MS Office JPEG converter has been installed. Run the Office installer, display the **Converters and Filters** option, and install the JPEG filter. Also, make sure PowerPoint is installed on the computer you're using to build the scenario.

You can't edit scenario files in EMP SlideMaker after they have been transferred to the USB drive.

You can only edit scenarios before they are transferred. Open the scenario files saved on your hard drive, make any changes, then transfer the scenario to your USB drive.

You can't transfer your slideshow to the drive because you aren't able to see the drive letter.

You must connect the drive to your computer before you select **Send Scenario** from the Scenario Option(s) menu. If this happens, close and restart EMP SlideMaker 2. Make sure your drive is connected before you select **Send Scenario**.

You can't play your movies on the projector.

- The projector only supports MPEG2 files. It does not support MPEG1 files.
- Movie files included in a PowerPoint presentation can't be played back in a scenario.

EasyMP is unable to see the image files on your camera or external drive.

Make sure your camera or drive shows up on your desktop as a drive letter when you connect it to your computer. If it does, it is probably a USB-mounted device and will work with your projector. The projector does not support TWAIN-compliant digital cameras.

Solving Problems with the Remote Control

The projector doesn't respond to remote control commands.

- The remote control's batteries may not be installed correctly or may be low on power. To change the batteries, see page 28.
- Make sure you are within about 20 feet (6 meters) of the projector and within range of the projector's front or back sensor (approximately 30° to the left or right and 15° above or below).
- Dim the room lights and turn off any fluorescent lights. Make sure the projector is not in direct sunlight. Strong lighting, especially fluorescent lights, may affect the projector's infrared receivers. Also, turn off any nearby equipment that emits infrared energy, such as a radiant room heater.
- If any buttons are held for longer than 30 seconds, the remote enters sleep mode. Release any button that is held to wake the remote.

Where To Get Help

Epson provides these technical support services:

Internet Support

Visit Epson's support website at <http://support.epson.com> and select your product for solutions to common problems. You can download utilities and documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

Visit <http://www.presentersonline.com> to access tips, templates, and training for developing successful presentations.

Speak to a Support Representative

To use the Epson PrivateLine Support service, call (800) 637-7661 and enter the PIN on the included Epson PrivateLine Support card. This is the fastest way of speaking to a live representative, and it's free. This service is available 6 AM to 6 PM, Pacific Time, Monday through Friday, for the duration of your warranty period.

You may also speak with a projector support specialist by dialing one of these numbers:

- U.S.: (562) 276-4394, 6 AM to 6 PM, Pacific Time, Monday through Friday.
- Canada: (905) 709-3839, 6 AM to 6 PM, Pacific Time, Monday through Friday.

Toll or long distance charges may apply.

Before you call for support, please have the following information ready:

- Product name (Epson PowerLite 1705c/1715c)
- Product serial number (located on the projector)
- Proof of purchase (such as a store receipt) and date of purchase
- Computer or video configuration
- Description of the problem

Purchase Supplies and Accessories

You can purchase screens, carrying cases, or other accessories from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). Or you can purchase online at www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

A

Software Installation

note

You can present over a wireless network from Mac OS X, but you can only monitor the projector from a remote location using a Windows system.

The EasyMP software CD-ROM includes the software you need to use the projector's EasyMP features—for presenting over a wireless network, transferring PowerPoint presentations to a memory card, and monitoring the projector from a remote location. Epson Projector Software CD-ROM includes EMP Monitor and EMP Network Manager for presenting and monitoring the projector from a remote location.

Windows System Requirements

Before you install the software, make sure your computer meets these requirements:

- Microsoft Windows 98SE, 2000, Me, or XP
- 802.11g or 802.11b, or 802.11a network card or wireless adapter (to use EMP NS Connection wirelessly)
- IBM® compatible PC with at least a Pentium® III 700 MHz processor
- At least 256MB of RAM
- At least 128MB of free hard disk space
- SVGA (800 × 600) or better display adapter and monitor (XGA or 1024 × 768 recommended)

Mac System Requirements

Before you install the software, make sure your Mac meets the following requirements:

- Mac OS X 10.2.4 or later

- AirPort (802.11b) or AirPort Extreme (802.11g) wireless network interface to use EMP NS Connection wirelessly
- Power Macintosh® series, iMac®, PowerBook®, or iBook®
- At least 256MB of RAM
- At least 128MB of free hard disk space
- SVGA (800 × 600) or better display adapter and monitor (XGA or 1024 × 768 recommended)

Installing the Software on a Windows System

Follow these steps:

1. Insert the EasyMP CD-ROM in your computer's CD-ROM or DVD drive.
2. Click **Install**, then follow the on-screen instructions to install your projector software.

If you see a message that the Epson Projector Support Driver has not passed Windows Logo testing, click **Continue Anyway**.

3. When installation is complete, close the installation window.

Installing the Software on a Mac

Follow these steps to install EMP NS Connection:

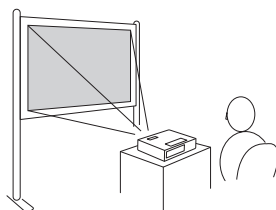
1. Insert the EasyMP software CD-ROM in your drive.
2. If necessary, double-click the **Epson** CD-ROM icon to open its window.
3. Double-click the **Installer for Mac OS X** icon.
4. Click **Install**, then follow the on-screen instructions to install the software.
5. When installation is complete, close the installation window.

B

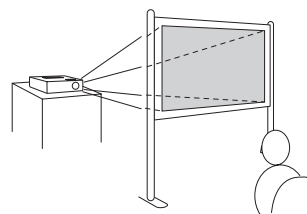
Projector Installation

This appendix provides guidelines on installing the projector in a permanent location, such as a theater or conference room.

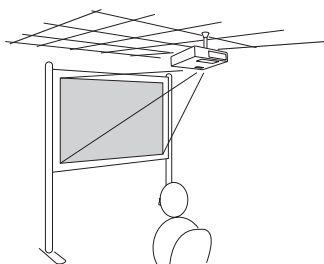
The projector can be installed for four different viewing setups: front projection, ceiling projection, rear projection onto a semi-transparent screen, or rear/ceiling projection, as shown:



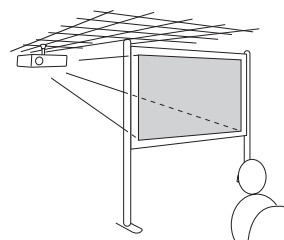
Front projection



Rear projection



Ceiling



Rear/ceiling projection

To project from overhead, you'll need the optional ceiling mounting hardware; see page 13 for ordering information. You'll also need to select **Front/Ceiling** or **Rear/Ceiling** as the Projection option in the projector's Extended menu to flip the image upside-down. To project from the rear, onto a semi-transparent screen, select **Rear** or **Rear/Ceiling** (see page 122).

If you're mounting the projector on the ceiling and you place it above screen level, you'll have to tilt the projector down to position the image on the screen. This causes the image to lose its square shape. You can correct the distortion using the **Keystone** function in the projector's menu system (see page 115).

If you place the projector so that the base of the lens is level with the bottom of the screen, the image should be square and you won't have to adjust it. If you place the lens lower than the bottom of the screen, you'll have to tilt the projector upward if you want to fill the whole screen with the image.

C

Technical Specifications

General

Type of display	Epson poly-silicon TFT active matrix
Resolution (native format)	1024 × 768 pixels (XGA)
Color reproduction	16.8 million colors
Brightness	
1705c	2200 lumens (High Brightness mode) 1700 lumens (Low Brightness mode)
1715c	2700 lumens (High Brightness mode) 2100 lumens (Low Brightness mode)
Contrast ratio	400:1
Image size	30 to 300 inches
Projection distance	3.2 to 39.7 feet (1.0 to 12.1 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Internal sound system	1 W monaural
Optical aspect ratio	4:3 (horizontal:vertical)
Zoom ratio	1:1.2
Noise level	35 dB in Low Brightness mode, 40 dB in High Brightness mode
Keystone correction	Automatic (manual adjustment capability ±30° vertical keystone correction)
Mouse compatibility	Supports USB (type B)

note

Lamp life results will vary depending upon mode selected, environmental conditions, and usage.

Turn off this product when not in use to prolong the life of the projector.

Projection Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	170 W
Lamp life	Approx. 2000 hours (High Brightness mode) Approx. 3000 hours (Low Brightness mode)
Part number	V13H010L38

Remote Control

Range	20 feet (6 meters)
Batteries (2)	Alkaline AAA

Dimensions

Height	2.7 inches (68 mm), feet retracted
Width	10.7 inches (273 mm)
Depth	7.6 inches (193 mm)
Weight	3.7 lb (1.7 kg)

Electrical

Rated frequency	50/60 Hz AC
Power supply	100 to 120 VAC, 2.7 A 200 to 240 VAC, 1.2 A
Power consumption	Operating: 100 to 120 VAC, 244 W 200 to 240 VAC, 228 W Standby: 100 to 120 VAC, 3.8 W (network off) 18 W (network on) 200 to 240 VAC, 5.1 W (network off) 18 W (network on)

Environmental

Temperature	Operating: 41 to 95 °F (5 to 35 °C) Storage: 14 to 140 °F (–10 to 60 °C)
Humidity (non-condensing)	Operating: 20 to 80% RH Storage: 10 to 90% RH
Operating altitude	0 to 7,500 ft (0 to 2,286 m)

Safety

United States	FCC 47CFR Part 15B Class B (DoC) UL60950 Third Edition
Canada	ICES-003 Class B CSA C22.2 No. 60950
CE Marking	Directive 73/23/EEC Directive 89/336/EEC IEC 60950 Third Edition EN 55022, EN 55024



Pixelworks™ DNX™ ICs are used in this projector.

Compatible Video Formats

The projector supports NTSC, PAL, and SECAM international video standards, as well as the monitor display formats listed below.

To project images output from a computer, the computer's video card must be set at a refresh rate (vertical frequency) that's compatible with the projector. Some images are automatically resized to display in the projector's "native" format (XGA). The frequencies of some computers may not allow images to display correctly; see your computer's documentation for details.

Mode	Refresh Rate (Hz)	Resolution
VGA EGA	70	640 × 350*

Mode	Refresh Rate (Hz)	Resolution
VGA—60	60	640 × 480*
VESA—72	72	640 × 480*
VESA—75	75	640 × 480*
VESA—85	85	640 × 480*
SVGA—56	56	800 × 600*
SVGA—60	60	800 × 600*
SVGA—72	72	800 × 600*
SVGA—75	75	800 × 600*
SVGA—85	85	800 × 600*
XGA—60	60	1024 × 768
XGA—70	70	1024 × 768
XGA—75	75	1024 × 768
XGA—85	85	1024 × 768
SXGA1—70	70	1152 × 864*
SXGA1—75	75	1152 × 864*
SXGA1—85	85	1152 × 864*
SXGA2—60	60	1280 × 960*
SXGA2—75	75	1280 × 960*
SXGA2—85	85	1280 × 960*
SXGA+60	60	1400 × 1050*
SXGA+75	75	1400 × 1050*
SXGA+85	85	1400 × 1050*
SXGA3—60	60	1280 × 1024*
SXGA3—75	75	1280 × 1024*
SXGA3—85	85	1280 × 1024*
UXGA—60	60	1600 × 1200*
iMAC VGA	117	640 × 480*
iMAC SVGA	95	800 × 600*
iMAC XGA	75	1024 × 768
MAC13	67	640 × 480*
MAC16	75	832 × 624*
MAC19	75	1024 × 768
MAC19-60	59	1024 × 768
MAC21	75	1152 × 870*
NTSC	60	—
NTSC 4:43	60	—
PAL	50	—
N-PAL	50	—
M-PAL	60	—
PAL—60	60	—
SECAM	50	—

Mode	Refresh Rate (Hz)	Resolution
HDTV (720p)	60	—
HDTV (720p)	50	—
HDTV (1080i)	60	—
HDTV (1080i)	50	—
TV480i	60	—
TV480i	50	—
SDTV (480p)	60	—
SDTV (480p)	50	—

*The image is resized using Epson's SizeWise™ Technology.

D

Notices

This appendix includes safety instructions and other important information about your Epson PowerLite projector.

Important Safety Instructions

Follow these safety instructions when setting up and using the projector:

- Do not place the projector on an unstable cart, stand, or table.
- Do not use the projector near water or sources of heat.
- Use the type of power source indicated on the projector. If you are not sure of the power available, consult your dealer or power company.
- Place the projector near a wall outlet where the plug can be easily unplugged.
- Do not hold the plug with wet hands.
- Take the following precautions for the plug. Failure to comply with these precautions could result in sparks or fire: Do not insert the plug into an outlet with dust present. Insert the plug firmly into the outlet.
- Do not overload wall outlets, extension cords, or integral convenience receptacles. This can cause fire or electric shock.
- Do not place the projector where the cord can be walked on. This may result in fraying or damage to the plug.
- Unplug the projector from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
- Do not block the slots and openings in the projector case. They provide ventilation and prevent the projector from overheating. Do not operate the projector on a sofa, rug, or other soft surface, or in a closed-in cabinet unless proper ventilation is provided.
- Never push objects of any kind through the cabinet slots. Never spill liquid of any kind into the projector.

- Except as specifically explained in this *User's Guide*, do not attempt to service this product yourself. Refer all servicing to qualified personnel. Opening or removing covers may expose you to dangerous voltages and other hazards.
- Unplug the projector from the wall outlet and refer servicing to qualified service personnel under the following conditions: When the power cord or plug is damaged or frayed. If liquid has been spilled into the projector, or if it has been exposed to rain or water. If it does not operate normally when you follow the operating instructions, or if it exhibits a distinct change in performance, indicating a need for service. If it has been dropped or the housing has been damaged.
- (Hg) The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.
- Unplug the projector during lightning storms or when it will not be used for extended periods.
- Do not place the projector and/or remote control on top of heat-producing equipment or in a hot location.
- If you use the projector in a country other than where you purchased it, use the correct power cord for that country.
- Do not stand on the projector or place heavy objects on it.
- Do not use the projector outside of the required temperature range of 41 to 95 °F (5 to 35 °C). Doing so may cause an unstable display and could lead to projector damage.
- Do not store the projector outside of the required temperature range of 14 to 140 °F (–10 to 60 °C) or in direct sunlight for long periods of time. Doing so may cause damage to the case.

WARNING: The cords included with this product contain chemicals, including lead, known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.*** (Provided in accordance with Proposition 65 in Cal. Health & Safety Code §25249.5 et seq.)

Remote Control Information

You can operate the projector by remote control via a line-of-sight infrared (IR) receiver at the front and rear of the projector. The projector may not respond to remote control commands under the following conditions:

- There is an object between the remote control IR emitter and the IR receiver on the projector.
- Ambient light is too bright.
- Certain types of fluorescent lighting are used.
- A strong light source shines into the IR receiver.
- Other equipment that emits infrared energy, such as a radiant room heater, is in the room.

These conditions commonly cause problems for most infrared-controlled equipment. Try the following:

- The remote control's batteries may be low on power; replace them.
- Dim the ambient lighting and/or turn off any fluorescent lights.
- Close any window coverings and/or move the projector out of direct sunlight.
- Turn off other equipment that emits infrared energy.

Declaration of Conformity

According to 47CFR, Part 2 and 15, Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class B Personal Computers

We: Epson America, Inc.
Located at: 3840 Kilroy Airport Way
MS: 3-13
Long Beach, CA 90806-2469
Telephone: (562) 290-5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR §2.909. 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.

Trade Name: Epson
Type of Product: Projector
Model: EMP-1705/1715
Marketing Name: PowerLite 1705c/1715c

FCC Compliance Statement

For United States Users

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 or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and 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 the dealer or an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For Canadian Users

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Warranty

Epson America, Inc. Limited Warranty

Basic Two-Year Warranty and 90-Day Lamp Warranty

What Is Covered: Epson America, Inc. (“Epson”) warrants to the original retail purchaser of the Epson product enclosed with this limited warranty statement that the product, if purchased new and operated in the United States or Canada, will be free from defects in workmanship and materials for a period of two (2) years from the date of original purchase (except that the warranty period is 90 days for projector lamps). For warranty service, you must provide proof of the date of original purchase.

What Epson Will Do To Correct Problems: If your product requires service, Epson will ask you to bring the product securely packaged in its original container or equivalent, along with proof of the date of original purchase, to your Epson Dealer or Epson Customer Care Center as instructed by Epson. Epson will, at its option, repair or replace the defective unit, without charge for parts or labor. When warranty service involves the exchange of the product or of a part, the item replaced becomes Epson property. The exchanged product or part may be new or previously refurbished to the Epson standard of quality, and at Epson’s option, the replacement may be another model of like kind and quality. Epson’s liability for replacement of the covered product will not exceed the original retail selling price of the covered product. Exchange or replacement products or parts assume the remaining warranty period of the product covered by this limited warranty. However, each replacement lamp carries the limited 90-day warranty stated above.

What This Warranty Does Not Cover: This warranty does not apply to refurbished or reconditioned products. This warranty covers only normal use of the product. 24-hour-per-day or other excessive continual use causes strain and is not considered normal use. This warranty does not cover consumables (e.g., fuses), other than lamps. This warranty is not transferable. Epson is not responsible for warranty service should the Epson label or logo or the rating label or serial number be removed. Epson is not responsible for warranty service should the product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters such as fire, flood, and lightning, improper electrical current, software problems, interaction with non-Epson products, or service other than by an Epson Authorized Servicer. Postage, insurance, or shipping costs incurred in presenting your Epson product for carry-in warranty service are your responsibility. If a claimed defect cannot be identified or reproduced in service, you will be held responsible for costs incurred.

THE WARRANTY AND REMEDY PROVIDED ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SOME LAWS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES. IF THESE LAWS APPLY, THEN ALL EXPRESS AND IMPLIED WARRANTIES ARE LIMITED TO THE WARRANTY PERIOD IDENTIFIED ABOVE. UNLESS STATED HEREIN, ANY STATEMENTS OR REPRESENTATIONS MADE BY ANY OTHER PERSON OR FIRM ARE VOID. IN THE EVENT THE REMEDIES ABOVE FAIL, EPSON'S ENTIRE LIABILITY SHALL BE LIMITED TO A REFUND OF THE PRICE PAID FOR THE EPSON PRODUCT COVERED BY THIS LIMITED WARRANTY. EXCEPT AS PROVIDED IN THIS WRITTEN WARRANTY, NEITHER EPSON AMERICA, INC. NOR ITS AFFILIATES SHALL BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OR INABILITY TO USE THE EPSON PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY OR ANY OTHER LEGAL THEORY.

In Canada, warranties include both warranties and conditions.

Some jurisdictions do not allow limitations on how long an implied warranty lasts and some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction.

To find the Epson Authorized Reseller nearest you, visit our website at: www.epson.com.

To find the Epson Customer Care Center nearest you, visit <http://support.epson.com>.

You can also call the Epson ConnectionSM at (800) 637-7661 + PIN or (562) 276-4394 in the U.S. and (905) 709-3839 in Canada or write to:

Epson America, Inc., P.O. Box 93012, Long Beach, CA 90809-3012.

Index

A

- A/V Mute, 30, 120 to 121, 152
- Access Point mode, 57 to 67
- Access point, checking IP address of, 64 to 65
- Accessories, 13 to 14
- Ad Hoc mode, 51 to 56
- Adapter, audio, 12, 44
- Air filter
 - cleaning, 141
 - ordering, 13
 - replacing, 142 to 144
- AirPort, configuring for wireless, 55 to 56, 65 to 67
- Altitude, 122, 171
- Anti-theft device, 13, 17
- Aspect ratio, 169
- Audio
 - adapter, 12, 44
 - connecting equipment, 44 to 45
 - controlling volume, 31
 - problems, troubleshooting, 156 to 157
 - turning off (using A/V Mute), 30
 - using with scenarios, 98
- Authentication, 70 to 72
- Auto button, 25
- Auto Setup setting, 114
- Autorun setting, 104 to 105

B

- Background Color setting, 98
- Bands, vertical, 155
- Blackboard color mode, 32, 113
- Blackboard, projecting on, 32
- Blank screen, 20 to 21
- Blurry image, 155
- bmp, 108
- Brightness, 169
- Brightness setting, 113

C

- Cables
 - illustrations, 12
 - mouse, 37
 - ordering, 13 to 14
 - remote control cable set, 13
 - S-video, 13, 40
 - VGA-to-component, 36
- Camera, *see* Digital camera
- Capturing image, 119 to 120
- Carrying case, 12, 13, 146
- Ceiling mount, 13, 167 to 168
- Certificate validation, 72
- Cleaning
 - air filter, 141
 - lens, 140
 - projector case, 140
- CMYK color format, 108
- Color
 - correcting, 32
 - problems, 156
 - saturation, 113
 - settings, 112 to 113
 - temperature, 113
- Color Mode setting, 112
- Component video cable, 13, 38
- Composite (RCA) video cable, 38 to 39
- Computer
 - connecting to, 36 to 38
 - correcting images, 25
 - selecting source, 19
- Connecting projector
 - to a computer, 36 to 38
 - to a digital camera, 43
 - to audio equipment, 44 to 45
 - to video equipment, 38 to 42
- Continuous play setting, 92, 105
- Contrast setting, 113
- Customized color mode, 32, 113

D

- Data encryption, 79 to 80
- Declaration of Conformity, 178
- Default settings, restoring, 111
- DHCP, 58, 62, 66, 159
- Digital camera
 - connecting to, 43
 - projecting images from, 93 to 94
- Direct Power On, 26
- Display order setting, 92
- Distance from projector to screen, 16, 169
- Documentation, 10
- DPOF, 108
- Drive, external, 94 to 95
- DVD player, connecting, 38 to 42

E

- EAP authentication, 70 to 72
- EAP-TLS certificate, 72
- EasyMP
 - problems, 160 to 161
 - software, 165 to 166
 - starting, 48, 84
- Electrical specifications, 170
- E-mail alerts, 86 to 87
- EMP Monitor
 - changing monitoring interval, 134
 - monitoring the projector, 126 to 134
 - problems, 157 to 158
 - using, 126 to 134
- EMP NS Connection
 - configuring projector for, 57 to 72
 - creating password for, 50
 - disconnecting, 75
 - entering keyword, 75
 - installing software, 165 to 166
 - problems, 158 to 159
 - projecting wirelessly, 47 to 83
 - using, 73 to 83

- EMP SlideMaker
 - checking scenarios, 103
 - converting PowerPoint files, 95 to 96
 - creating scenarios, 95 to 102
 - problems, 160 to 161
 - setting up transitions, 101 to 102
 - transferring scenarios to drive, 104 to 105
- Encryption, 55, 61, 68 to 69, 79 to 80
- Environmental specifications, 171
- Epson
 - accessories, 13 to 14
 - presentation tips, 11
 - PrivateLine Support, 10
 - technical support, 10, 162 to 163
- ESSID, 52, 55, 61, 66, 76, 158
- Ethernet unit, optional, 84 to 85
- External drive, projecting from, 94 to 95
- E-Zoom button, 31

F

- FCC compliance statement, 179
- Filter, *see* Air filter
- Focusing image, 23
- Freeze button, 30

G

- Game color mode, 32, 112
- Gateway address, checking, 64

H

- HDTV images, video formats, 173
- Height of image, adjusting, 22
- Help, 162 to 163
- Help system, using, 148
- Help, Epson, 10
- High altitude, 122
- HP OpenView, 58

I

Image

- adjusting, 22 to 25, 112 to 113
 - blurry, 155
 - capturing and saving in projector,
119 to 120
 - correcting shape, 23 to 24, 115, 154
 - fitting on screen, 114, 153 to 154
 - height, adjusting, 22
 - problems with, 152 to 156
 - projecting on chalkboard, 32
 - raising, 22
 - rotating, 91, 94, 107
 - selecting source, 19, 29, 39 to 42
 - size and projection distance, 16, 169
 - turning off (using A/V Mute), 30
 - zooming, 23, 31
- Image menu, 112 to 113
- Info menu, 151
- Infrastructure mode, *see* Access Point mode
- Input signal, selecting, 19, 29, 39 to 42
- Installing projector, 167 to 168
- Installing software, 165 to 166
- IP Connect Mode, 77 to 78

J

jpg, 108

K

- Kensington anti-theft device, 13, 17
- Keystone correction, 23 to 24, 115, 154, 169
- Keyword, 50, 75

L

Lamp

- number of hours used, 151
 - ordering, 13
 - replacing, 142 to 145
 - specifications, 170
 - status light, 149 to 150
- Lamp timer, resetting, 145
- Language setting, 123, 148

Laptop computer

- connecting to, 36 to 37
 - display problems, 20 to 21, 152 to 153
 - selecting source, 19, 29
- LEAP authentication, 70 to 72
- Lens, cleaning, 140
- Lights, status, 149 to 150
- Locking projector, 74
- Logo, saving on projector, 119 to 121

M

Mac

- configuring for wireless, 55 to 56, 65 to 67
 - display problems, 153
 - EasyMP system requirements, 165
 - resolution setting, 154
- Manuals, 10
- Menus
- changing settings, 110 to 111
 - default settings, restoring, 111
 - Image, 112 to 113
 - Info, 151
 - network, 49, 51, 57, 67, 69, 70, 72, 84, 86
 - Signal, 113 to 115
 - User's Logo, 119 to 120

Monitoring projector

- e-mail notifications, 86 to 87
- EMP Monitor, 126 to 134
- HP OpenView, 125

Mouse

- compatibility, 169
 - connecting cable for remote, 37 to 38
 - using remote control as, 33
- Movie files, using in scenarios, 98 to 101
- MPEG, 108
- mpg, 108
- mrk, 108
- Multi-screen projection, 81 to 83

N

Network

- managing projector remotely, 125 to 138
- problems, 157 to 159
- projecting, 73 to 75
- security, 78 to 80
- setting, 129
- wired, 84 to 85
- wireless, 47 to 84

Network card, 165

Network settings, configuring, 48 to 72

New Hardware Wizard, 19

No Signal message, 20, 152 to 153

Noise level, 169

Not Supported message, 153

NS Connection, *see* EMP NS Connection

Numeric keypad, using, 117

O

Operation Lock setting, 121

Optical aspect ratio, 169

Options for projector, 13 to 14

P

Password

- protection, 117 to 119
- remote access, 50
- request code, 119

PC Free, 90 to 95, 106 to 108

PEAP authentication, 70 to 72

Photo color mode, 32, 112

Picture source, selecting, 19, 29, 39 to 42

Picture, *see* Image

png, 108

Pointer tool, using, 34

Positioning

- image, 22
- projector, 16 to 17, 167 to 168

Power

- button, 19
- specifications, 170
- status light, 19, 149 to 150

PowerPoint files

- adding slides to a scenario, 98 to 100
- converting to scenarios, 95 to 96
- presenting, 106 to 107
- problems, 160

Presentation color mode, 32, 112

Presentations

- computer, 25, 36 to 38
- digital camera, 43, 93 to 94
- room conditions, 16, 28
- tips and training, 11
- using the pointer tool, 34
- video, 38 to 42
- wireless, 47 to 83

Presenters Online, 11

PrivateLine Support, 10

Problems

- color, 156
- connecting wirelessly, 75 to 76, 158 to 159
- image, 152 to 156
- monitoring projector, 157 to 158
- no signal, 20, 152 to 153
- remote control, 161
- scenarios, 160 to 161
- sound, 156 to 157
- using on-screen help, 148

Progressive format, 108, 114

Projecting without screen, 32

Projection lamp, *see* Lamp

Projector

- carrying case, 13, 146
- cleaning, 140
- connections, *see* Connecting projector
- disabling buttons, 121
- distance from screen, 16, 169
- installing, 167 to 168
- lamp specifications, 170
- locking, 74
- monitoring remotely, 125 to 138
- options, 13 to 14
- password protection, 117 to 119
- positioning, 16 to 17
- resolution, 169
- specifications, 169 to 171
- transporting, 146
- troubleshooting, 147 to 150
- turning off, 25 to 26
- turning on, 17 to 19
- unpacking, 12
- viewing information about, 151

R

- Raising image, 22
- Rear-screen projection, 122, 167 to 168
- Registration, 11
- Remote control
 - A/V Mute button, 30
 - as wireless mouse, 33
 - battery used, 170
 - connecting cable for mouse, 37 to 38
 - correcting color, 32
 - E-Zoom button, 31
 - Freeze button, 30
 - information, 177
 - numeric keypad, using, 117
 - pointer tool, using, 34
 - problems, 161, 177
 - range, 170
 - running slideshow with, 106 to 107
 - specifications, 170
 - switching sources, 29
 - troubleshooting, 161

Removing

- wireless card, 83 to 84
- Replacing lamp, 142 to 145
- Request code, password, 119
- Resetting lamp timer, 145
- Resetting menu options, 111
- Resize image, 32
- Resolution, 32, 153, 169
- Rotating the image, 91, 94, 107

S

Safety

- instructions, 175 to 176
- specifications, 171

Saturation setting, 113

Scenarios

- adding movie files, 98 to 101
- adding sound, 98
- background color, 98
- cells, 100
- converting PowerPoint files, 95 to 96
- creating, 95 to 102
- default location, 98
- exiting, 91, 107
- presenting on the projector, 106 to 107
- previewing, 103
- problems, 160 to 161
- rearranging, 100
- running automatically, 104 to 105
- transferring to drive, 104 to 105
- transitions, 101 to 102

Screen

- blank, 20 to 21
- distance from projector, 16, 169
- ordering, 13
- startup screen, creating, 119 to 120

Screen image, *See* Image

Screen switching time setting, 93

Security

- Kensington lock, 13
- network, 78 to 80
- password protection, 117 to 119

Sharpness setting, 113

Signal menu, 113 to 115

- sit (presentation file type), 108
- Sleep mode, 26
- SlideMaker, *see* EMP SlideMaker
- Slides
 - displaying on the fly, 90 to 93
- Software installation, 165 to 166
- Sound
 - adding to scenarios, 98
 - troubleshooting, 156, 157
- Source
 - selecting, 19, 29
 - viewing, 151
- Speaker, specifications, 169
- Speakers, connecting, 45
- Special effects, adding to slide transitions, 93, 102
- Specifications
 - brightness, 169
 - dimensions, 170
 - electrical, 170
 - environmental, 171
 - general, 169
 - lamp, 170
 - remote control, 170
 - resolution, 169
 - safety, 171
- Sports color mode, 32, 112
- sRGB color mode, 32, 112
- Standby Mode setting, 129
- Startup screen
 - creating, 119 to 121
 - user's logo, *See* User's Logo
- Status lights, 149 to 150
- Support, *see* Technical support
- S-video cable, 13, 40
- Switching picture source, 19, 29
- Sync setting, 114
- Synchronization, adjusting, 25, 155 to 156

T

- Technical support, 10, 162 to 163
- Temperature
 - requirements, 171
 - status light, 149 to 150

- Temperature, color, 113
- Theatre color mode, 32, 112
- Thumbnails, scenario, 99
- Tint setting, 113
- Tracking, adjusting, 25, 155 to 156
- Transitions, scenario, 101 to 102
- Transporting projector, 146
- Trap IP address, 58
- Troubleshooting
 - blank screen, 20 to 21, 152 to 153
 - cut-off image, 153 to 154
 - distorted image, 23 to 24
 - EasyMP problems, 160 to 161
 - image and sound problems, 152 to 157
 - network problems, 157 to 159
 - no signal, 20, 152 to 153
 - projector problems, 147 to 150
 - remote control problems, 161
 - wireless projection problems, 75 to 76, 158 to 159
- Turning off picture (using A/V Mute), 30
- Turning off projector, 25 to 26

U

- Unpacking projector, 12
- USB cable, 12, 37
- USB drive
 - transferring scenarios to, 104 to 105
- User's Logo menu, 119 to 120

V

- VCR, connecting, 38 to 42
- Video
 - cables, 12, 13 to 14, 38
 - connecting video equipment, 38 to 42
 - display settings, viewing, 151
 - formats, supported, 171 to 173
 - selecting source, 19, 29, 39, 40
- Video Signal setting, 115
- Volume, controlling, 31

W

Warning lights, 149 to 150

Warranty, 11, 180 to 181

WEP encryption, 68 to 69

Windows

- configuring for wireless, 53 to 55, 59 to 63

- display problems, 153

- EasyMP system requirements, 165

- resolution setting, 154

Wired network, 84 to 85

Wireless

- connecting manually, 77 to 78

- EAP, 70 to 72

- EAP-TLS, 72

- LEAP, 70 to 72

- network card, 48, 84, 165

- PEAP, 70 to 72

- presentation, 47 to 83

- problems, 158 to 159

- security, 78 to 80

- WEP encryption, 68 to 69

- WPA security, 69 to 70

Wireless, mouse, 33, 37 to 38

WPA security, 69 to 70

Z

Zoom ratio, 169

Zooming image, 23, 31

