USA's primary source for projector lamps
myprojectorlamps

PROJECTOR OWNER'S MANUAL

Epson

CINEMA 500

Need a replacement lamp for this projector?
www.myprojectorlamps.com

Original manufacturer manual, provided unmodified as a courtesy of MyProjectorLamps.com.
All trademarks belong to their respective owners.

EPSON® PowerLite® Cinema 500
Home Theater Projector

User's Guide

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 and 3LCD are registered trademarks of SEIKO EPSON CORPORATION.

EPSON Extra Care, EPSON Connection and EPSON Store are service marks, and PrivateLine and PowerLite are registered trademarks of Epson America, Inc.

DCDi is a registered trademark of Faroudja, a division of Genesis Microchip, Inc.

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

Pixelworks and DNX 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.

Copyright © 2005 by Epson America, Inc.

1/05
CPD-17304R3

Contents

Introduction 7

Registration and Warranty 7
Projector Parts 8
Projection Controls 9
Optional Accessories 10
Using This Manual 11
    Getting More Information 11

Setting Up the Projector 13

Choosing a Location 13
Connecting the Cables 15
    Making Other Connections 16
    Installing the Cable Cover 17
Displaying and Adjusting the Image 18
    Focusing and Zooming the Image 18
    Inverting and Mirroring the Image 19
    Selecting the Input Signal Setting 19
    Positioning the Image 20
    Performing Keystone Correction 20

Basic Operation 21

Turning On the Projector 21
    Turning the Projector Off 22
Selecting the Image Source 22
Choosing the Aspect Ratio 23
Choosing the Color Mode 24
Locking the Projector 25

Making Adjustments 27
Using the Menu System 27
Changing How the Menu Displays 28
Adjusting the Image Quality 29
Brightness and Contrast Settings 29
Sharpness and Picture Quality Settings 31
Color Settings 32
Adjustments for Computer Images 33
Saving and Resetting Menu Selections 34
Creating Memory Settings 34
Recalling Memory Settings 34
Resetting the Projector 35
Customizing Projector Features 36
Image Sizing 36
Screen Options 37
Connectivity 38
Other Setup Options 38

Using Cinema Color Editor 41
Setting Up Your Computer 41
System Requirements 41
Installing the Software 42
Connecting With a Serial or USB Cable 43
Connecting With a Network Cable 44
Using Cinema Color Editor 45
Remote Control Operations 46
Adjusting the Picture Quality 47
Adjusting the Color 48
Saving and Recalling Picture Settings 49
Managing Your Settings 51

Maintenance 53
Cleaning the Lens 53
Cleaning the Projector Case 53
Cleaning and Replacing the Air Filter 54
Changing the Remote Control's Batteries 55
Storing the Projector 55
Transporting the Projector 56
Replacing the Lamp 56
Resetting the Lamp Usage Timer 58
Checking the Projector Status 58

Problem Solving 59
What To Do When the Lights Flash 59
Solving Picture Problems 60
Solving Remote Control Problems 64
Where To Get Help 65

Specifications 67
General 67
Lamp 67
Remote Control 67
Dimensions 68
Electrical 68
Environmental 68
Safety 68
Compatible Video Formats 69
Image Size and Aspect Ratio Settings 70

Notices **73**

Important Safety Information **73**

Remote Control Information **74**

FCC Compliance Statement **75**

Declaration of Conformity **76**

Epson America, Inc., Limited Warranty **76**

Index **79**

Introduction

The EPSON® PowerLite® Cinema 500 projector lets you enjoy theater-quality images in the relaxing environment of your own home. Designed especially for home cinema use, it offers these outstanding features:

- 1280 × 720 resolution, 1200:1 contrast ratio, and up to 1000 lumens for incredibly rich, sharp images
- DCDi® technology by Faroudja and Pixelworks™ Digital Natural Expression™ technology to make moving images appear clear and lifelike
- HDMI™ port for superior, uncompressed digital video
- True 16:9 wide-format projection
- Flexible setup configurations, including front or rear projection and ceiling mounted, with a screen trigger port to automatically raise and lower your projection screen
- Adjustable color modes to quickly optimize viewing for different lighting environments, and Cinema Color Editor software for making fine custom color adjustments
- Vertical and horizontal lens shift to position the image without distortion, and electronic zoom and focus for precise image adjustment
- Parental control using the projector's Operation Lock

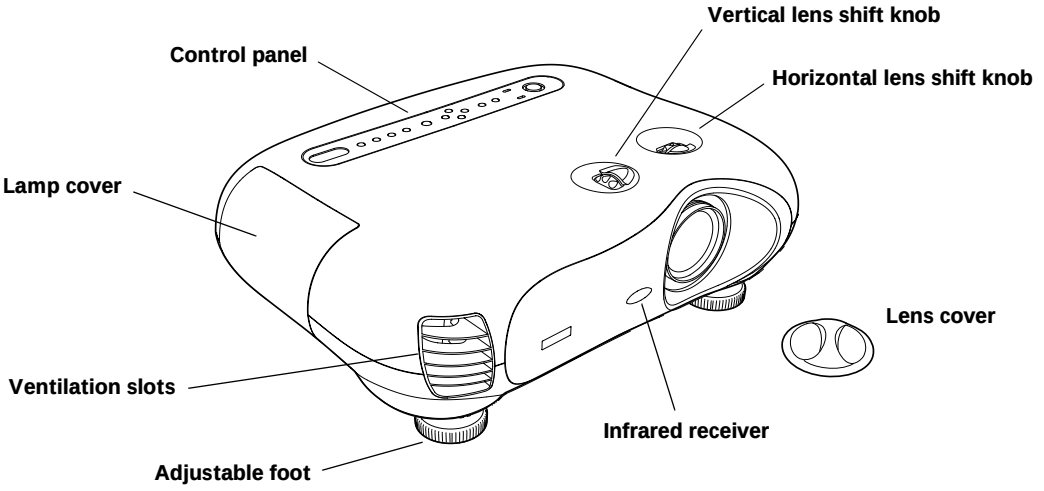
Registration and Warranty

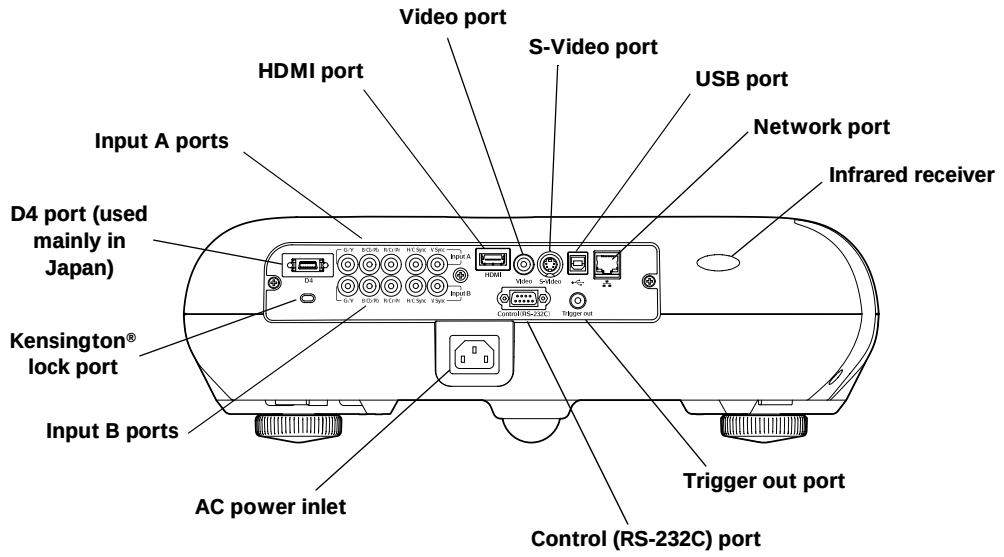
The EPSON PowerLite Cinema 500 comes with a basic two-year carry-in warranty. For details, see page 76.

In addition, for customers who register their projector, EPSON offers free Extra Care℠ Home 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 your *Extra Care Home Service* brochure for details.

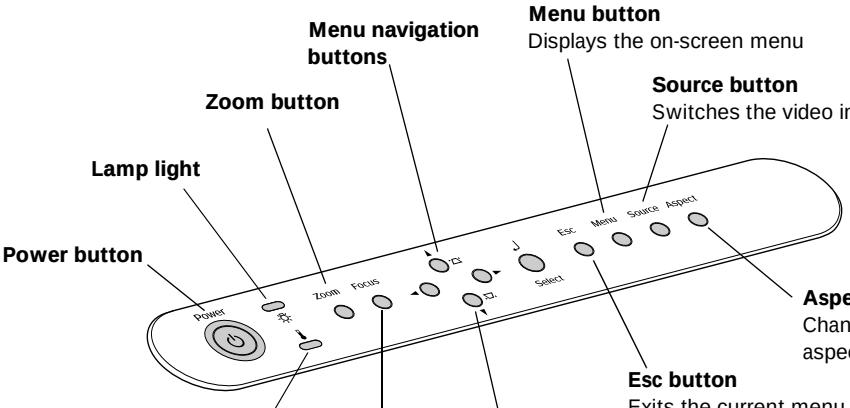
To register, simply fill out the registration card that came with your projector and mail it to EPSON. Or you can register online at http://www.epson.com/webreg. Registering also lets you receive special updates on new accessories, products, and service.

Projector Parts





Projection Controls



Menu navigation buttons

Menu button
Displays the on-screen menu

Zoom button

Source button
Switches the video input source

Lamp light

Power button

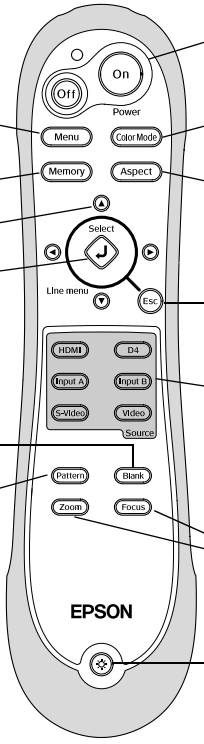
Aspect button
Changes the picture's aspect ratio

Esc button
Exits the current menu item

Temperature light

Focus button

Keystone correction buttons
Corrects the shape of a non-rectangular image



On/Off buttons

Menu button
Displays the projector's menus

Color Mode button
Optimizes viewing for different lighting environments

Memory button
Recalls custom picture settings

Aspect button
Changes the picture's aspect ratio

Menu navigation buttons

Menu selection/Line menu
Selects menu items or opens Line Menu

ESC button
Exits the current menu item

Source buttons
Switch between equipment connected to the projector

Blank button
Turns off the screen image

Pattern button
Displays test patterns to adjust the image

Zoom and Focus buttons

Illumination button
Lights the buttons on the remote control

Optional Accessories

EPSON provides the following optional accessories for the projector:

Product	Part number
Replacement lamp (ELPLP28)	V13H010L28
Air filter replacement (ELPAF04)	V13H134A04
Ceiling mount	ELPHB01
Kensington security lock	ELPSL01
Macintosh® adapter set (includes monitor adapter and desktop adapter)	ELPAP01
S-video cable	ELPSV01

You can purchase many of these accessories from your dealer, by calling EPSON at (800) 873-7766, or by visiting the EPSON Store℠ at www.epsonstore.com (U.S. sales only). In Canada, please call (800) 463-7766 for dealer referral.

Using This Manual

This book contains all the information you need to use the projector, in addition to basic setup and maintenance instructions, troubleshooting tips, important safety instructions, specifications, and warranty information.

Please follow these guidelines as you read through the manual:

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 helpful projection tips.

Getting More Information

Need additional help? Take advantage of EPSON's automated support services 24 hours a day at http://support.epson.com. Use this site to download FAQs or product information and e-mail your questions to EPSON support.

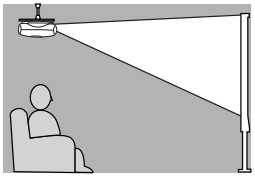
If you need more help, you can use the EPSON PrivateLine® Support service. Call (800) 637-7661 and enter the PIN on the PrivateLine support card that came with your projector.

Setting Up the Projector

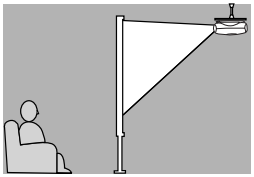
Follow the instructions in this section to choose a location for the projector, connect the cables, and display and adjust the image.

Choosing a Location

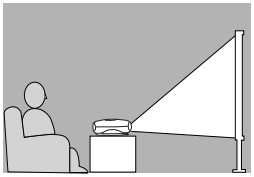
You can install the projector for various viewing setups, as shown below.



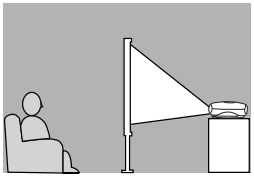
Front/Ceiling



Rear/Ceiling



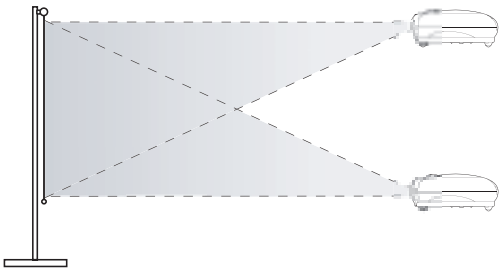
Front



Rear

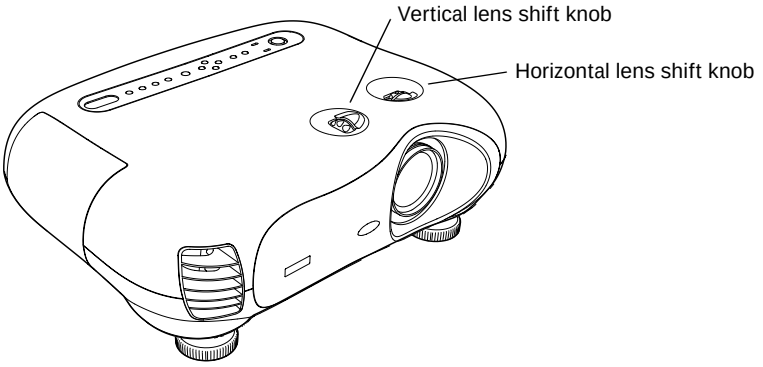
If you install the projector in a rear or overhead position, you'll need to flip and/or mirror the image by selecting the correct Projection option (see page 19). For overhead projection, you'll also need to install the optional ceiling mount bracket (see page 10 for ordering information).

For all setups, it's best to place the projector at a height where its lens is between the top and bottom of the screen. That way, you can keep the projector level and use the vertical lens shift knob to position the image. This produces the best-looking picture.



If you place the projector above or below screen level, you'll have to tilt it up or down to aim the image at the screen; this distorts the shape of the image, but you can correct its shape using the projector's Keystone function (see page 20).

If you place the projector off to the side, aim it straight ahead (rather than at the center of the screen), then use the horizontal lens shift knob to center the image. Do not place the projector farther to the left or right than the edge of the screen, or you will not be able to project a square (or rectangular) image.



The maximum size of the image is determined by the distance from the projector's lens to the screen. Depending on how you use the Zoom and other settings, the actual size may be smaller. Use this table as a rough guide for projector placement:

Projection distance	**Maximum image size (16:9)**
2.9 feet	30 in. (26 × 14 in.)
3.9 feet	40 in. (34 × 19 in.)
5.9 feet	60 in. (52 × 29 in.)
7.9 feet	80 in. (69 × 39 in.)
9.9 feet	100 in. (87 × 49 in.)
19.9 feet	200 in. (174 × 98 in.)
29.9 feet	300 in. (261 × 147 in.)

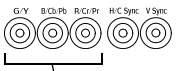
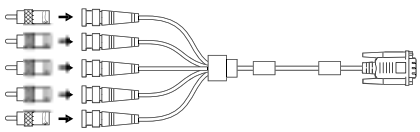
Also keep these considerations in mind:

- Make sure there is plenty of space for ventilation around and under the projector. Do not set the projector on top of loose materials that could block the vents underneath.
- Make sure the projector is within 10 feet of a grounded electrical outlet or extension cord.

Connecting the Cables

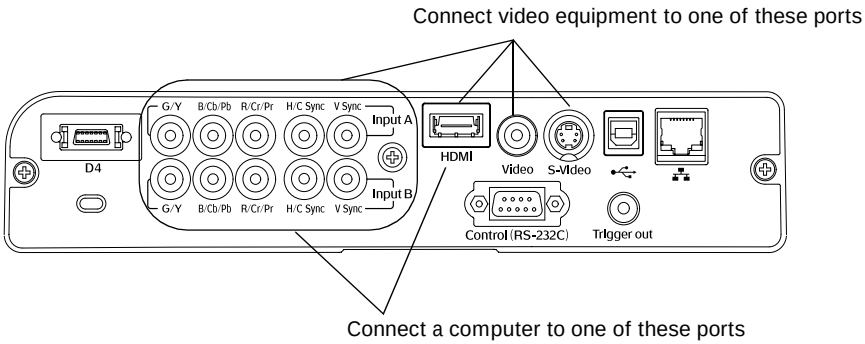
You can connect the projector to any type of video equipment, such as a VCR, DVD player, digital tuner, cable or satellite box, video game console, camcorder, or digital camera. You can also connect it to a desktop or laptop PC or Apple® Macintosh® system.

You can connect up to five pieces of video equipment at the same time, using any of the commercially available cables shown below:

Port name	Video equipment connection	Computer connection
HDMI 	Use an HDMI cable: 	Use an HDMI cable: 
Input A or Input B  Component video terminals	Use a component video cable (with RCA-style connectors):  Connect the cable to the three component video terminals on the left, as shown. Be sure to match corresponding colors between the cable and the terminals. Select YCbCr, YPbPr, or RGB-Video as the Input Signal setting (see page 19).	Use a VGA-to-BNC monitor cable, and attach RCA adapters to each of the five BNC connectors:  When connecting the cable, use the marking on each connector as a guide to match it to the correct terminal on the projector. Select RGB as the Input Signal setting (see page 19).
S-Video 	Use an S-video cable: 	—
Video 	Use an RCA video cable: 	—

Note: For details on compatible video formats, see page 69.

For best results, connect your video equipment to the HDMI (High-Definition Multimedia Interface) port, if possible. If your equipment doesn't support HDMI, connect it to one of the following ports (highest quality listed first): Input A or B (for component video), S-Video, or Video (for composite video).



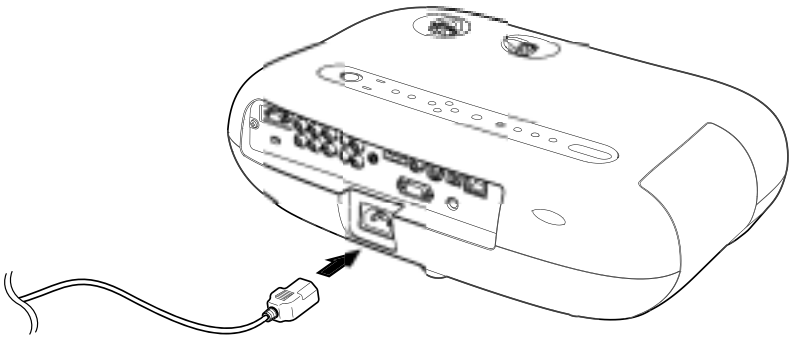
If you connect to the Input A or B port, be sure to select the correct Input Signal setting for your equipment, or the image may not display properly (see page 19).

Making Other Connections

Connect the power cable and other cables described below, depending on how you plan to use the projector.

■ Power cable

Plug the power cable into the projector and a grounded electrical outlet. The ⏻ power light on the projector's control panel turns orange when the projector is receiving power and is in standby mode.



■ Control (RS-232C), USB, or network port

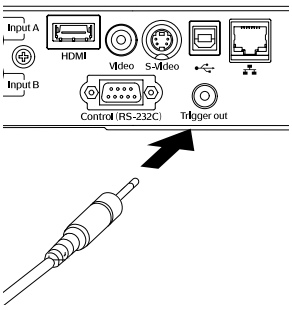
Connect a computer to one of these ports to use the Cinema Color Editor software. See pages 43 and 44 for details.

Caution: Be sure to install the Cinema Color Editor software before connecting a USB cable. See page 42.

■ Trigger out port

This port outputs a 12-volt DC signal when the projector is turned on. This lets a central control system monitor whether the projector is on or off, and can be used to raise or lower your projection screen automatically when the projector is in use.

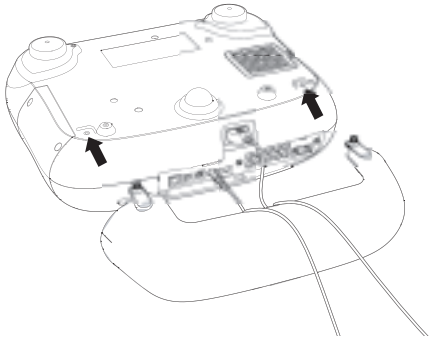
Connect a 3.5-mm mini jack to the port, as shown.



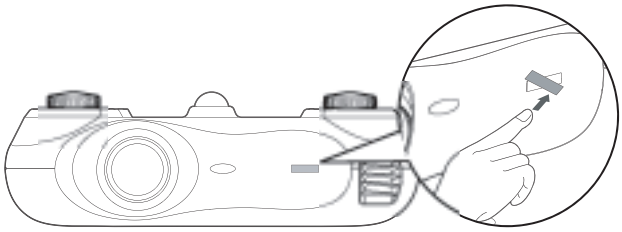
Installing the Cable Cover

Once you've connected all the cables, you can install the cover to conceal them from view.

1. Turn the projector upside-down.
2. Press the cover firmly into place, as shown.
3. Tighten the thumbscrews on the cover, then return the projector to its upright position.



Note: If the projector is to be ceiling-mounted, you can change the direction of the EPSON logo plate. Use the eraser-end of a pencil or similar tool to push in on the side of the plate closer to the ventilation slots. Rotate the plate as needed, then press it back into place.



Displaying and Adjusting the Image

Make sure your video or computer equipment is turned on, then turn on the projector as described on page 21. If necessary, select the correct source to display the image (see page 22).

Note: If you turn on the connected equipment before starting the projector, the projector automatically detects and displays the image. If you turn on the projector first, or have multiple pieces of connected equipment, you may have to select the source manually.

If an image does not appear, check the troubleshooting tips on page 61.

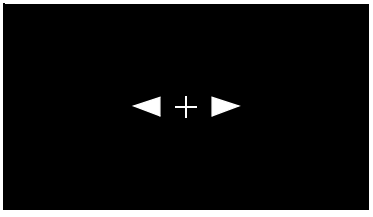
Focusing and Zooming the Image

Follow the steps below to adjust the sharpness or size of the image.

Note: Before starting, you may want to display a test pattern to facilitate adjustment. Press the Pattern button on the remote control, then select Cross-hatching.

1. Press the Focus or Zoom button on the projector or remote control.

   You see this screen:



2. Use the ◄► arrow buttons to adjust the image.

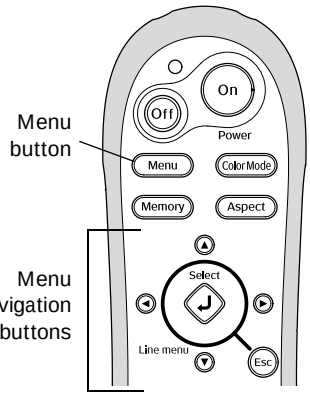
   Note: If you use the remote control, you can stand close to the screen while focusing the image. This lets you adjust the picture more precisely.

3. Press ESC when done.

Inverting and Mirroring the Image

If the image is displayed upside-down or backward, select the correct Projection option:

1. Press the Menu button on the remote control.
2. Use the menu navigation buttons to open the Setting menu, then open the Screen menu, and then select Projection.
3. Choose from these options:
   - Front if the projector is located in front of the screen (for example, on a table).
   - Front/Ceiling if the projector is located in front of the screen and mounted overhead.
   - Rear if the projector is located behind the screen.
   - Rear/Ceiling if the projector is located behind the screen and mounted overhead.



Selecting the Input Signal Setting

If you're using the projector's Input A or Input B port, select the correct setting for the type of equipment you've connected to it:

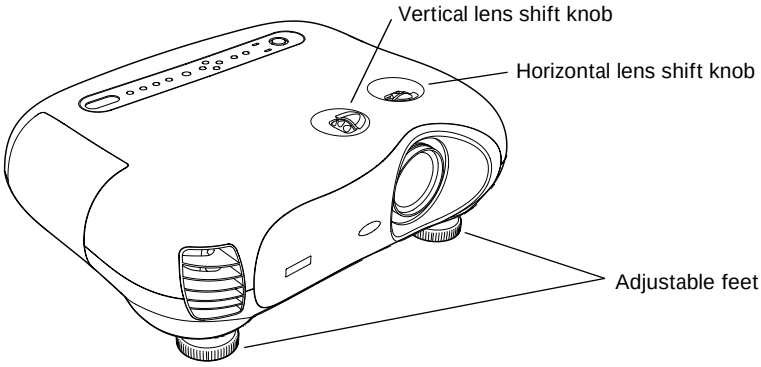
1. Press the Menu button on the remote control.
2. Use the menu navigation buttons to open the Setting menu, then open the Input Signal menu, and then select Input A or Input B (depending on the port to which you've connected the equipment).
3. Choose from these options:
   - YCbCr if your video player outputs an NTSC signal.
   - YPbPr if your video player outputs an HDTV signal.
   - RGB-Video if your video player outputs an RGB video signal.
   - RGB if the image is coming from a computer.

Note: If you're unsure which setting to use, check the label next to the port on your video equipment.

Positioning the Image

If the image is not centered on the screen, use the horizontal and vertical lens shift knobs to adjust its position.

Note: You can display a test pattern to facilitate adjustment. Press the Pattern button on the remote control, then select Cross-hatching.



If you still need to raise the height of the image after using the vertical lens shift knob, lift the front of the projector and rotate the adjustable feet until the image is positioned correctly. You can also use the feet to correct the angle of the image if it's tilted.

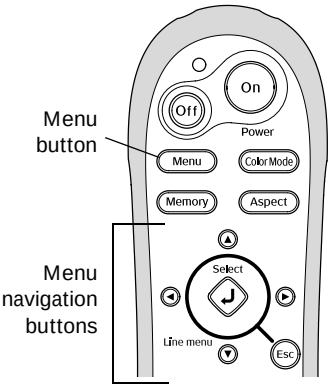
Performing Keystone Correction

If the projected image looks like ⏢ or ⏢, use the Keystone function to correct its shape.

Note: If the image is shaped like ⏢ or ⏢, the projector has been placed off to the side of the screen and angled toward it. Face the projector straight ahead (instead of at the center of the screen), then use the horizontal lens shift knob to center the image.

To perform keystone correction, press the ◄► arrow buttons on the projector, or access the menu system as follows:

1. Press the Menu button on the remote control.
2. Use the menu navigation buttons to open the Setting menu, then open the Screen menu, and then select Keystone.
3. Use the ◄► arrow buttons to adjust the shape of the image.
4. Press the Menu button when done.

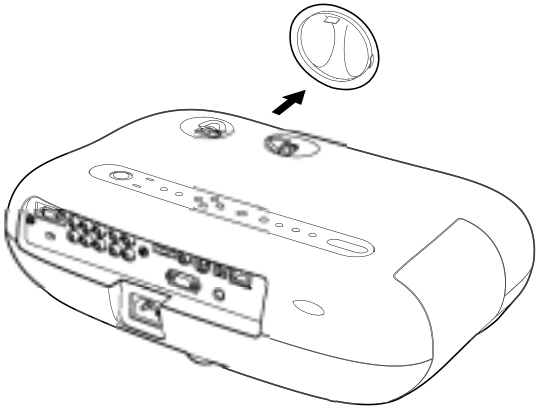


Basic Operation

Make sure the projector is set up as described on page 13, then follow the instructions below to turn it on and display an image.

Turning On the Projector

1. Remove the lens cap.



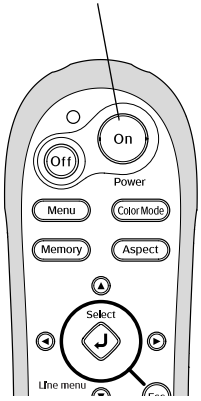
2. Press the On button on the remote control, or press the Power button on the projector.

   Note: If this is your first time using the remote control, make sure batteries are installed as described on page 55.

   To keep children from turning on the projector, you can use the projector's Operation Lock (see page 25).

   The projector takes about 30 seconds to warm up and display an image. If you don't see a picture, you may need to change the image source as described on the next page.

Turn on the projector



Turning the Projector Off

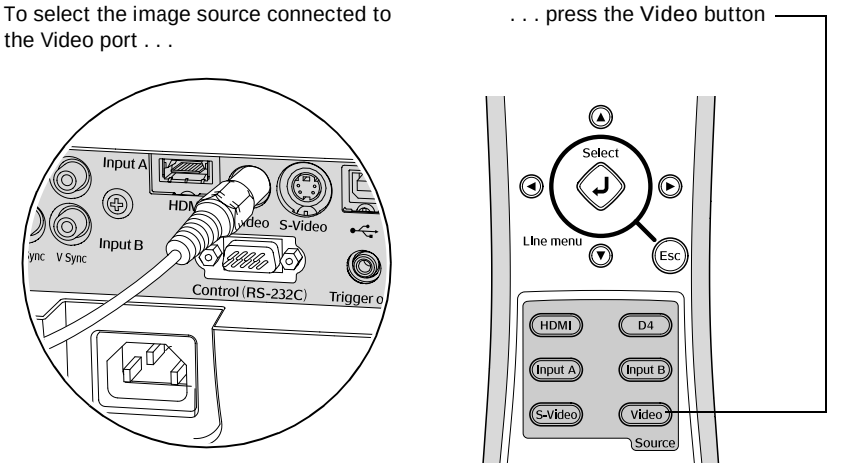
To turn off the projector, press the Off button on the remote control (or press the Power button on the projector twice). Let the projector cool while the ⏻ power light flashes (about 30 seconds). Once the light stops flashing and stays on, it's safe to unplug the projector.

Caution: Turn the projector off when not in use. Continuous 24-hour-a-day use may reduce its overall life. Never unplug the projector without turning it off and letting it cool as described above, or you could damage it and reduce lamp life.

Selecting the Image Source

The Source buttons let you switch between images from different pieces of equipment connected to the projector (such as a DVD player, cable or satellite box, or video game console).

If you don't see the image you want, press the Source button that corresponds to the port to which your video source is connected. For example:



Note: Do not press the Input A or B button repeatedly, or you will change the Input Signal setting. If the screen colors don't look right, make sure the correct Input Signal is selected (see page 19).

If you're projecting in a darkened room, press the ⊛ button (located near the bottom of the remote control). This lights up the buttons on the remote control.

To temporarily turn off the image and darken the screen (without turning off the projector), press the Blank button. Press the Blank button again to return to normal viewing.

Choosing the Aspect Ratio

In many cases, video signals are automatically resized to fit on your screen when Auto is selected as the Aspect setting. If you're viewing images through the Input A or B port, you may need to change the size of the image (or aspect ratio) by pressing the Aspect button on the remote control.

- If your video source is connected to the projector's HDMI, S-Video, or Video port, select Auto to automatically display your image in the correct size.
- If the Auto option is unavailable (when the source is connected to the Input A or B port), you'll most likely want to choose one of these settings:

  Normal for standard TV broadcasts, computer images, or images having a 4:3 aspect ratio.

  Zoom for images recorded in 16:9 (wide-screen) format.

4:3 image using Normal setting



16:9 image using Zoom setting



You can also select from these options:

- Wide if you want to expand a 4:3 image to 16:9 so it fills the whole screen. This stretches only the right and left sides of the image; the central part is unchanged.
- Squeeze for DVDs or video recordings made in a compressed (or anamorphic) 16:9 format, sometimes called "Squeeze Mode."
- Through if your image is smaller than 1280 × 720 pixels and you want to display it at its original pixel size without resizing it to fit on the screen.
- Squeeze Through if your image is recorded in Squeeze Mode, is smaller than 1280 × 720 pixels, and you want to display it at its original pixel size.

Note: If you display a 4:3 image using the Zoom setting, the edges of the image will be cut off. You can use the Zoom Caption option and other settings to resize and reposition the image to your liking (see page 36).

For details on how the projector resizes the picture when you choose an Aspect setting, see page 70.

Choosing the Color Mode

You can change the Color Mode to automatically adjust brightness, contrast, and color, letting you quickly optimize the projected image for various lighting environments. You can also select a different color mode for each input source—which is useful if you view different types of images from different sources. (For example, you might set the S-Video source to Living Room if it's usually used for watching movies, and set the Video source to Dynamic for playing video games.)

Select the image source you want to adjust, then press the Color Mode button on the remote control. Choose from these settings:

- Dynamic for projecting images with vivid color in brightly lit rooms.
- Living Room for projecting images with vivid color under ordinary room lighting.
- Natural for projecting in subdued lighting; increases contrast and makes flesh tones appear more natural.
- Theatre for projecting in subdued lighting; enhances the appearance of movies with dark scenes.
- Theatre Black for projecting in fully darkened rooms.
- sRGB for projecting computer images that conform to the sRGB color standard.
- Customized to apply your own Color Mode created with the RGBCMY color adjustments in Cinema Color Editor (see page 48). If you choose this setting without first creating your own Color Mode, the result is the same as selecting Natural.

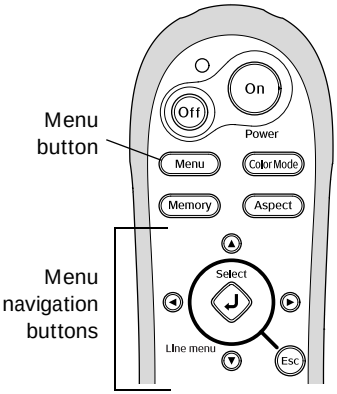
Note: You can fine-tune the color and other image quality settings using the projector's menu system (see page 29) or the Cinema Color Editor software (see page 41). You can also save combinations of picture settings with the Memory feature for easy recall (see page 34).

Locking the Projector

The projector includes various lock settings to prevent the image from being accidentally changed once it's adjusted, and to keep children from using the projector without adult supervision.

To access the lock settings, follow these steps:

1. Press the Menu button on the remote control.
2. Use the menu navigation buttons to open the Setting menu, then open the Operation menu, and then select Lock Setting.
3. Choose from these options:
   - Focus Lock to prevent the focus from being changed.
   - Zoom Lock to prevent the picture size from being changed.
   - Operation Lock to disable all the buttons on the projector's control panel. To operate the projector, you must use the remote control.



Making Adjustments

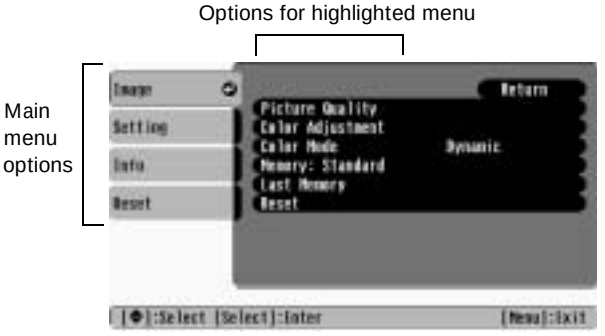
You can use the projector's on-screen menus to adjust the image quality, such as the brightness, contrast, sharpness, and color. You can also change how the menus display, sleep mode settings, and other projector features.

Using the Menu System

You can access the menu system either from the remote control or by using the buttons on the projector's control panel. With the menu system, you can adjust any of the settings described in this chapter. You can also change the menu language and choose from various options that control how the menus display (see page 28).

1. Press the Menu button on the projector or remote control.

   You see a screen similar to this one (the actual screen depends on the equipment you've connected):



   Note: If no equipment is connected to the projector, some options may not be available.

2. Use the arrow buttons to highlight the desired option, then press ↵ to select it.
3. Change any settings, as needed. (You may have to press ↵ to confirm your choice.)
4. When done, press the Esc button to return to the previous menu, or press the Menu button to exit.

Changing How the Menu Displays

Use these options to control how the menu displays on the screen.

■ Language

Setting → Language

Select from nine languages to use in the menu system.

■ Menu Position

Setting → On-Screen Display → Menu Position

Use the arrow buttons to choose a position on the screen for displaying the menu.

■ Navigation Bar

Setting → On-Screen Display → Navigation Bar

Select whether to display the navigation bar, which prompts you on which buttons to push to choose menu options.



■ Menu Color

Setting → On-Screen Display → Menu Color

Select a color scheme for displaying the menus.

Adjusting the Image Quality

Before fine-tuning the image using these adjustments, make sure you have already selected the best Color Mode for your picture and viewing environment, as described on page 24. Then use the settings in this section to finish adjusting the picture to your liking.

Most image quality settings are saved independently for each input source (Video, S-Video, HDMI, Input A, Input B). After you finish adjusting the settings for one input source, be sure to switch to each additional input source you'll be using and make any necessary adjustments.

Brightness and Contrast Settings

The Brightness setting controls how much light is produced by the projector lamp, and the other settings listed below control how the projector interprets the light and dark areas of the picture.

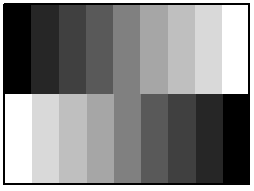
Adjust the Brightness first, then fine-tune the image with the remaining settings.

■ Brightness

Image → Picture Quality → Brightness

Adjust the brightness so it's suitable for your viewing conditions. For example, if you're projecting in a brightly lit room or onto an especially large screen, you may need to increase the brightness. Decrease the brightness for dark rooms or small screens; this also reduces power consumption and fan noise, and helps to prolong the life of the lamp.

Note: You can display a test pattern to facilitate adjustment. Press the Pattern button on the remote control, then select Gray scale. Then press the ↵ button on the remote control to open an on-screen "line menu" and access the Brightness setting.



■ Setup Level

Setting → Advanced → Setup Level

This setting adjusts the threshold at which dark areas of the image are rendered black (7.5 IRE). For compatibility with most video equipment sold in the United States, set to 7.5%. Check your video equipment's specifications to be sure of the correct setting.

■ Input Level/Contrast

Image → Picture Quality → Input Adjustment → Input Level/Contrast

Note: If you cannot access the Input Level and Contrast settings, highlight Input Adjustment (the first item in the menu list) and press the ↵ button, then choose Input Level/Contrast in the sub-menu.

Adjust the Input Level to set the overall brightness of the image. Then adjust the contrast, as needed.

■ White Level/Black Level

Image → Picture Quality → Input Adjustment → White Level/Black Level

Note: If you cannot access the White Level and Black Level settings, highlight Input Adjustment (the first item in the menu list) and press the ↵ button, then choose White Level/Black Level in the sub-menu.

Adjust the White Level so that details in the brightest parts of the image are not washed out. Then adjust the Black Level so that shadow-level details are still visible in the darkest parts of the image.

■ EPSON Super White

Setting → Advanced → EPSON Super White

Note: This setting can be used only when the Color Mode is set to Natural, Theatre, or Theatre Black (see page 24).

If bright parts of the image are washed out or overexposed (when the input signal contains values over 100 IRE), turn this setting on to compensate.

■ DVI-Video Level

Setting → Advanced → DVI-Video Level

Note: This setting can be used only when HDMI is selected as the image source (see page 22).

If your video equipment has a DVI port and you've connected it to the projector using an HDMI/DVI cable, set the level of the projector to match that of the video equipment. When this setting is turned on, the projector disregards the EPSON Super White setting.

Sharpness and Picture Quality Settings

If the image looks fuzzy, or if it contains noise or flickering, you can use these settings to correct it.

■ Sharpness

Image → Picture Quality → Sharpness

Use this function to make lines and edges appear more distinct in the image.

■ Progressive

Setting → Advanced → Progressive

Leave this setting on Film/Auto so the projector automatically senses the type of image and displays it in the optimal mode. When receiving an interlaced image (in 480i or 575i format), the projector converts it to progressive. The projector uses DCDi (Directional Correlational Deinterlacing) for video-sourced images. For film-sourced images, the projector uses 3-2 pulldown detection and optimizes the image accordingly.

You can adjust the projector's sensitivity to still or moving images using the Motion Detection setting, described below.

If you notice the projected image switching between film and video mode, change the setting to Video. If you're viewing still images (such as computer graphics or digital camera photos) or pausing a video, you may want to switch to Off to prevent interlaced-to-progressive (IP) conversion from taking place.

Note: This setting applies only when viewing component video and the input signal is in 480i or 575i format (see page 69).

■ Motion Detection

Setting → Advanced → Motion Detection

This setting works with the Progressive setting (described above). If you notice that moving images seem jittery or halting, or diagonal lines appear jagged, move the slider bar toward M (for motion). To increase detail for still images, move the slider bar toward S (for still).

■ Noise Reduction

Setting → Advanced → Noise Reduction

Leave this setting off, unless viewing images from a weak signal with a lot of noise. Turn the setting on and select one of the noise reduction options to suppress interference and makes images appear softer (available only if the image source is set to Video or S-Video).

Color Settings

If the image colors don't look correct, you can adjust them using these settings. Use the first three settings described below to make the most visible changes. If you only need to make slight adjustments, you can fine-tune the picture with the remaining settings.

Note: You can also make color adjustments by attaching a PC or laptop to the projector and using the Cinema Color Editor software. See page 41.

■ Color Intensity

Image → Picture Quality → Color Intensity

Adjusts the color saturation of the image (not available for computer images).

■ Tint

Image → Picture Quality → Tint

Shifts the color balance between magenta and green (not available for computer images).

■ Abs. Color Temp.

Image → Color Adjustment → Abs. Color Temp. → Abs. Color Temp.

Shifts the color balance between red and blue, making the image appear warmer or cooler.

Note: You can display a test pattern to facilitate adjustment. Press the Pattern button on the remote control, then select Gray scale. Then press the ↵ button on the remote control to open an on-screen "line menu" and access the Abs. Color Temp. setting.

■ Flesh Tone

Image → Color Adjustment → Abs. Color Temp. → Flesh Tone

Makes fine adjustments to the tint. Controls the amount of magenta or green in the image. Also useful for correcting black-and-white images, if they look tinted.

Note: You can also access the Flesh Tone setting by pressing the ↵ button on the remote control to open an on-screen "line menu."

■ RGB

Image → Color Adjustment → RGB/RGBCMY → RGB

Note: If you cannot access the RGB settings, highlight RGB/RGBCMY (the first item in the menu list) and press the ↵ button, then choose RGB in the sub-menu.

Use the RGB settings to fine-tune the color of the image. You can adjust the offset, gamma, and gain for each signal color (red, green, and blue). Use Offset to adjust darker shades, Gamma for intermediate shades, and Gain for the lightest shades.

■ RGBCMY

Image → Color Adjustment → RGB/RGBCMY → RGBCMY

Note: If you cannot access the RGBCMY settings, highlight RGB/RGBCMY (the first item in the menu list) and press the ↵ button, then choose RGBCMY in the sub-menu.

Use the RGBCMY settings to adjust the hue and saturation of the six color components (red, green, blue, cyan, magenta, yellow). After moving a slider bar, highlight Apply and press ↵ to save your changes.

Adjustments for Computer Images

In addition to the settings described above, you can adjust the Tracking and Sync settings for analog RGB computer images. Normally, these settings are adjusted automatically by the projector. If you notice that the image is blurry or contains dark vertical bands, you may need to adjust the settings yourself.

■ Auto Setup

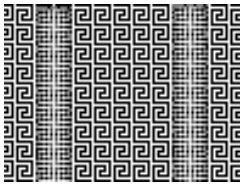
Image → Auto Setup

Leave this setting on so that the projector automatically adjusts the tracking, sync, and position of the image.

■ Tracking

Image → Picture Quality → Tracking

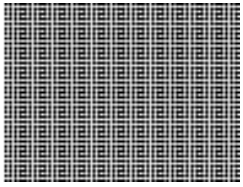
Adjust the tracking to eliminate vertical bands. Easiest to adjust when the image contains a lot of fine detail (such as black text on a white background).



■ Sync.

Image → Picture Quality → Sync.

Adjust the synchronization to eliminate blurriness. For best results, make sure the tracking is properly adjusted first.



Saving and Resetting Menu Selections

Once you've adjusted the picture settings, you can save them as a group using the Memory feature. This lets you easily recall them, and switch from one group of settings to another.

If necessary, you can use the projector's reset options to restore its factory-default settings. You can clear all the settings, or just the settings in a specific menu.

Creating Memory Settings

After adjusting the picture to your liking, you can save your settings as a group in the projector's memory. This stores all the image quality settings described on pages 29 through 33, the image sizing options (page 36), and the Aspect and Color Mode settings (pages 23 and 24).

1. Press the Menu button on the remote control.
2. Open the Image menu, then select Memory: Standard (or Memory: Advance if you've made changes using the RGBCMY settings).
3. Select the memory name you want to use, then press the ↵ button to save your settings.

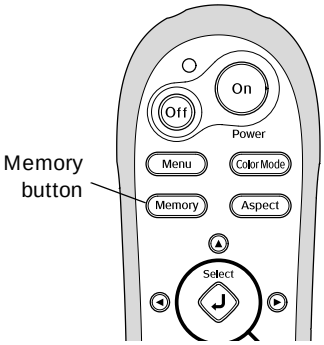
Note: Saved settings are indicated by a green highlight next to the memory name. If you select a name that is already in use, the existing settings will be erased and new ones saved in their place. You can use Cinema Color Editor to rename the settings (see page 51).

Recalling Memory Settings

Once you have created one or more memory settings, you can easily recall them:

1. Press the Memory button on the remote control.
2. If necessary, choose Standard or Advance to select the type of setting you want to use.
3. Use the arrow buttons to select the desired setting, then press the ↵ button.

   After a moment, the image appears on the screen using your selected setting.



Resetting the Projector

If the image quality isn't what you expect, one or more settings may be adjusted improperly. If necessary, you can restore the projector to its factory-default (original) settings.

To restore the settings in a specific menu (such as the Image or Setting menu), open that menu, select Reset, and confirm as needed. The example below shows how to reset the Image menu:



You can also reset the lamp usage timer, clear the memory settings, or restore all the projector settings to their original values. Follow these steps:

1. Press the Menu button on the remote control.
2. Open the Reset menu.
3. Do one of the following:
   - Select Lamp-Hours Reset to clear the lamp usage timer and reset it to zero (see page 58 for more information).
   - Select Memory Reset to clear any memory settings you created as described on page 34.
   - Select All Reset to return all projector menus to their original settings.

   Note: All Reset does not reset the lamp usage timer, menu language, Input Signal, and memory settings.

Customizing Projector Features

Use the settings in this section to adjust the image size and position, suppress on-screen text, and select basic setup options.

Image Sizing

Before adjusting any of these settings, make sure you have already selected an appropriate aspect ratio for the type of picture you're viewing (see page 23).

■ Output Scaling

Setting → Advanced → Output Scaling

For component video formats, this setting lets you see the edges of the image that are not normally visible in the picture (see page 70). Select Larger to view the both the hidden and visible parts of the image. Normal displays images at the standard size.

For HDMI signals, select Auto for normal operation. Select Smaller to show a slightly reduced image if you see interference at the top or bottom of the screen for computer images (displays digital video at standard size). Select Normal to expand digital video so it includes both the hidden and visible parts of the picture (displays computer images at full size).

■ Position

Setting → Screen → Position

Use the arrow buttons to fine-tune the position of the image on the screen.

■ Zoom Caption

Setting → Screen → Zoom Caption

Lets you adjust the shape and position of the image so that subtitles are visible (available only if the aspect ratio has been set to Zoom). Use Vertical Size to adjust the proportions of the image, and Zoom Position to move the image up or down.

Screen Options

- Message

  Setting → On-Screen Display → Message

  Turn this setting off if you want to prevent on-screen messages from appearing (such as the no-signal message, or the identifying text that appears when you switch between image sources or color modes).

- User's Logo

  Setting → User's Logo

  Lets you display an image of your choice when the projector is warming up, not receiving a signal, or when you press the Blank button to temporarily stop projection.

  To capture the image, first set the projector to display the image you want to use. Then select User's Logo and follow the instructions on the screen. When done, change the Background Color setting to Logo, as described below.

- Startup Screen

  Setting → On-Screen Display → Startup Screen

  Turn this setting off if you want to prevent your user's logo (see above) from appearing while the projector is warming up.

- Background Color

  Setting → On-Screen Display → Background Color

  Changes the screen that's used when the projector is not receiving a signal or when you press the Blank button to temporarily stop projection. Select Blue (instead of Black) or Logo to display your user's logo on a black background.

Connectivity

Use these settings to set up the projector when you connect a PC or laptop for running Cinema Color Editor (see page 41).

■ COM Port

Setting → Operation → COM Port

Select the type of cable you've connected to your PC or laptop. Choose USB or RS-232C (for a serial cable).

■ Network

Setting → Operation → Network

Use these settings to configure your projector if you've connected it to a network. Select DHCP if your network assigns addresses automatically through a DHCP router or server; otherwise enter the projector's IP address using the arrow buttons on the remote control. Press the ↵ button to confirm the new address, then turn the projector off and back on so the new settings take effect.

Note: SNMP trap IP addresses are not used in home environments. If the projector is being set up on a large-scale business network, consult your IS department for assistance.

■ Network Monitoring

Setting → Operation → Network Monitoring

If you've connected the projector to a network and you want to be able to turn it on remotely using Cinema Color Editor, switch this setting to On. Otherwise, leave it off to conserve power when the projector is in standby mode.

Note: If Network Monitoring is turned on, the cooling fan will continue to operate after the projector is turned off. This is normal.

Other Setup Options

■ Keystone

Setting → Screen → Zoom Caption

Adjusts the shape of the image, if the left and right sides are not parallel after tilting the projector up or down at the screen (see page 20).

■ Projection

Setting → Screen → Projection

Mirrors and/or inverts the image for front, rear, and overhead projection.

Input Signal

Setting → Input Signal

Adjust these settings for the type of equipment connected to the projector:

Video Signal: Leave this setting on Auto so the projector can automatically interpret the format, such as NTSC or PAL (for standard TV formats).

Input A (or Input B): Change this setting to match the type of equipment connected to the Input A (or Input B) port:

- For component video, select Component (Auto) to let the projector automatically interpret the signal; or select Component (YCbCr) or Component (YPbPr) to manually select your video equipment's signal.
- Select RGB-Video if your video equipment outputs a signal in RBG format.
- Select RGB if you've connected a computer.

D4: Change this setting to match the type of equipment connected to the D4 port (used mainly in Japan).

Trigger Out

Setting → Operation → Trigger Out

Turn on this setting if you want the Trigger out port to output a 12-volt signal while the projector is operating. You can use this to raise or lower your projection screen.

Sleep Mode

Setting → Operation → Sleep Mode

Turn off this setting if you don't want the projector to enter sleep mode. (Sleep mode shuts the projector off automatically when there is no video signal.) Select 30 min., 10 min., or 5 min. as the length of time before shutoff; decreasing the time conserves power and extends the life of the lamp. To turn the projector back on, press the On button on the remote control, or press the Power button on the projector.

Button Illumination

Setting → Operation → Button Illumination

Lets you turn off the illumination of the control panel buttons on the projector.

Lock Setting

Setting → Operation → Lock Setting

Lets you lock the projector's focus and zoom settings, or lock the projector's control panel to make it more difficult for a child to turn on the projector. See page 25.

Using Cinema Color Editor

You can use the Cinema Color Editor software that came with your projector to adjust each color in the picture individually. You can also use the software in place of the remote control to operate the projector, switch image sources, adjust the picture's aspect ratio, or change image quality settings. Once you've adjusted the picture to your liking, you can save your settings so you can easily recall them for future use.

Setting Up Your Computer

Before using Cinema Color Editor, follow the instructions in this section to install the software and connect the projector to your computer.

System Requirements

You can install Cinema Color Editor on any Windows® or Macintosh system that meets these minimum requirements:

Windows	**Macintosh**
Microsoft® Windows 98 SE, 2000, NT® 4.0, Me, or XP	Macintosh OS 8.6 through 9.x, OS X 10.1.5 or later
Pentium® MMX™, 166 MHz or better	Power Macintosh G3, 300 MHz or better
10MB RAM, 2MB hard disk space	7MB RAM, 5MB hard disk space
XGA (1024 × 768) or better display adapter and monitor	

Installing the Software

Follow these steps to install the software:

1. Insert the Cinema Color Editor CD-ROM in your computer.
2. Turn off any anti-virus software that may be running, then click Continue.
3. Read the license agreement and click Agree.

   You see this screen:



Not shown for Macintosh

4. Click Install and follow the on-screen instructions to install the software.

   Caution: If you will be using a USB cable to connect to your computer, be sure to let the USB driver install as part of the installation sequence.

5. At the last screen, click Exit.
6. Restart your computer, if prompted.

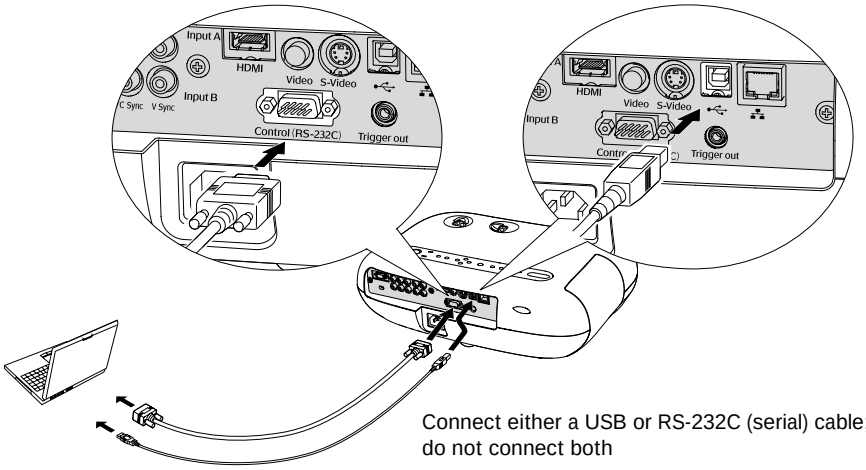


Connecting With a Serial or USB Cable

If you want to connect to your computer using a serial (RS-232C) or USB cable, follow the steps below. To connect using a network cable, see page 44.

1. Connect the projector to your computer using either a USB cable (included with your projector) or a serial (RS-232C) cable.

   Note: You can use any standard (commercially available) USB or serial cable.



Connect either a USB or RS-232C (serial) cable; do not connect both

2. Turn on the projector.
3. Make sure the projector's COM Port setting is correct for the type of cable you're using (see page 38). Select either USB (if you're using a USB cable) or RS-232C (for a serial cable).
4. Windows: If you see a Found New Hardware or Add New Hardware screen, follow the instructions on the screen to finish installing the EPSON USB driver.

   Caution: Make sure you have already installed all the software from the CD-ROM. If not, click Cancel and follow the instructions on page 42 first.

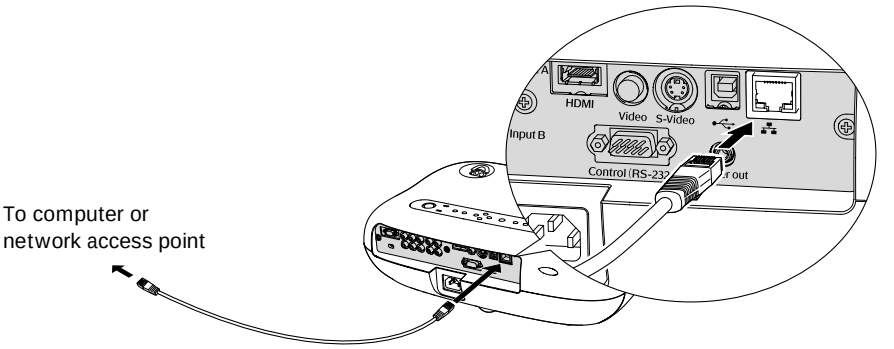
   If you see a screen saying that the software has not passed Windows Logo testing, click Continue anyway.

Connecting With a Network Cable

Follow these steps to connect to your projector using a network cable:

1. Connect to the projector using a commercially available 10baseT or 100baseTX network cable (Category 5 or better).

   Note: If you'll be connecting the cable directly to the computer running Cinema Color Editor, use a "crossover" network cable. To connect to an access point on the network, such as a hub or router, use a standard "straight-through" cable.



2. Connect the other end of the cable to your computer or network access point, as desired.
3. Turn on the projector.
4. Press the Menu button on the remote control, then access the projector's network settings (Setting → Operation → Network).
5. Do one of the following:
   - Select DHCP if your computer or network assigns addresses automatically using DHCP.
   - Otherwise, turn off DHCP and use the arrow buttons on the remote control to enter the projector's IP address. The first three parts of the address should be the same as for the computer running Cinema Color Editor; the last part should be a unique number. Use 255.255.255.0 as the subnet mask. When done entering an address, press the ↵ button to confirm it.
6. If you want to be able to turn on the projector from Cinema Color Editor, enable Network Monitoring (see page 38).
7. Turn the projector off and back on so the new settings take effect.

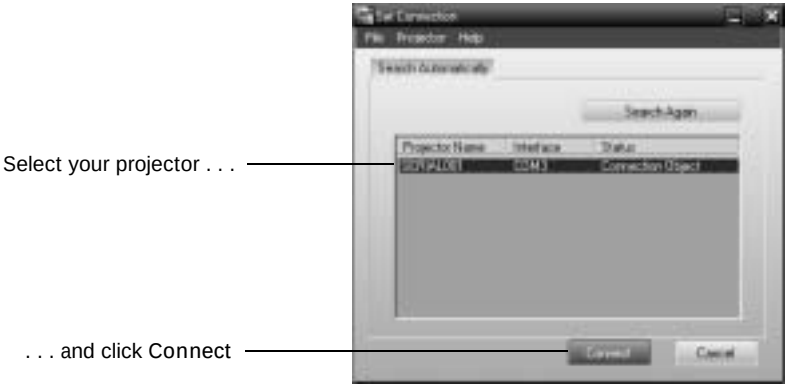
Using Cinema Color Editor

To start Cinema Color Editor, follow these steps:

1. Make sure the projector is connected and turned on, as described on the previous pages.
2. Windows: Click Start, Programs, EPSON Projector, and then Cinema Color Editor.

   Macintosh: From the Applications folder on your hard drive, open the CCEditor folder and double-click Cinema Color Editor.

   You see this screen:



3. Select the name of the projector you want to adjust, then click Connect. You see this screen:



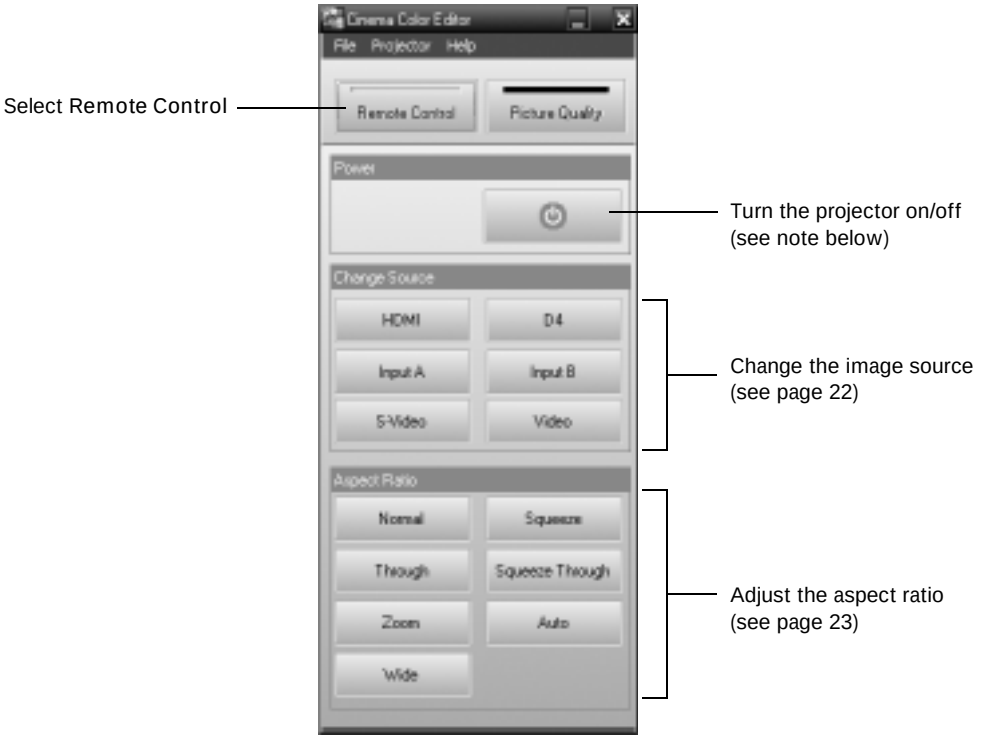
Now you can control the projector and adjust its settings as described on the following pages.

Remote Control Operations

You can use Cinema Color Editor to change the image source, adjust the aspect ratio, or turn the power on or off—just as you would from the remote control.

Caution: Do not use the remote control or projector buttons to operate the projector while Cinema Color Editor is in use. If a problem occurs, select Update to Latest Status from the Projector menu in Cinema Color Editor.

1. Click the Remote Control tab.



2. Click one of the buttons for the options shown above.

Note: To be able to turn the projector on from Cinema Color Editor, Network Monitoring must be turned on (see page 38).

Adjusting the Picture Quality

You can use Cinema Color Editor in place of the projector's menu system to adjust the image.

1. Click the Picture Quality tab.



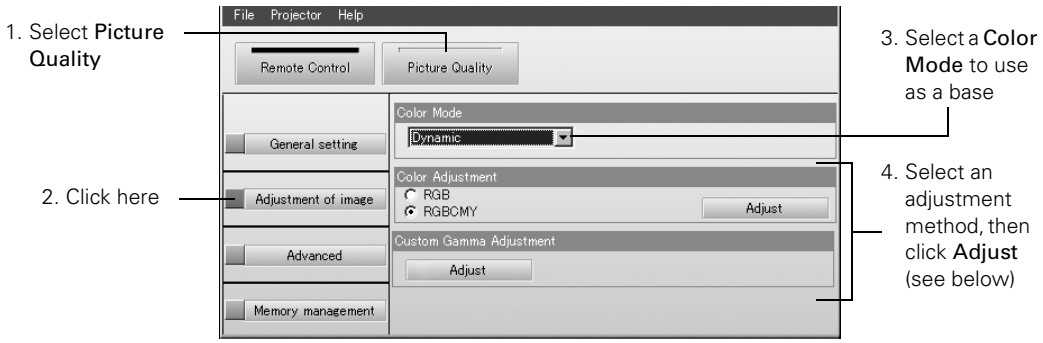
2. Click one of the buttons shown above to access additional settings. See the referenced page number below for details on using each setting:

Button	Available adjustments	Page reference
General setting	Input Adjustment Brightness Color Intensity Tint Sharpness Color Temp. and Flesh Tone Tracking Sync.	page 30 page 29 page 32 page 32 page 31 page 32 page 33 page 33
Adjustment of image	Color Mode Color Adjustment	page 24 page 48
Advanced	EPSON Super White Progressive Motion Detection Output Scaling Setup Level Noise Reduction DVI-Video Level Auto Setup	page 30 page 31 page 31 page 36 page 29 page 31 page 30 page 33

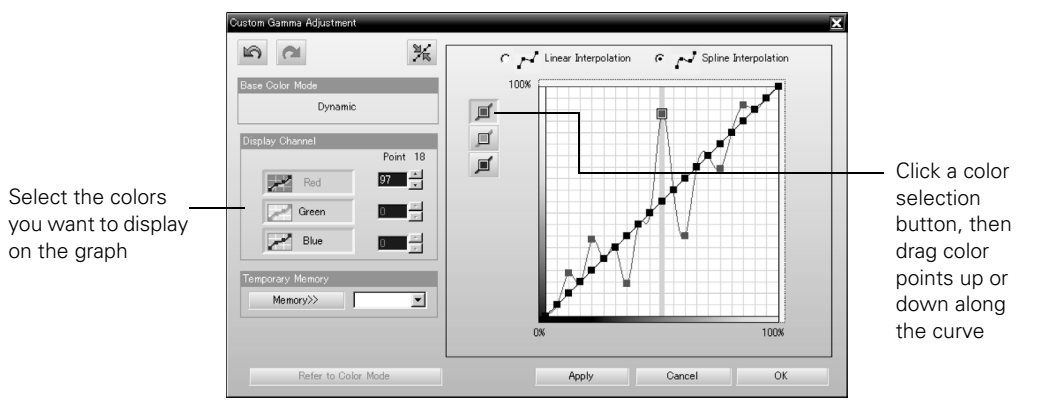
Adjusting the Color

You can use the settings described below to fine-tune the color of the image.

1. Select **Picture Quality**, then click **Adjustment of image**.



2. Select the desired **Color Mode** to use as a starting point.
3. Do one of the following:
   - To adjust the intensity of each signal color, click **RBG** and then click the **Adjust** button to its right. Use **Offset** to adjust darker shades, **Gamma** for intermediate shades, and **Gain** for the lightest shades.
   - To adjust the hue and saturation for all six colors, click **RGBCMY** and then click the **Adjust** button to its right. Move the slider bar for any color you wish to adjust (red, green, blue, cyan, magenta, yellow), then click **Apply**.
   - To adjust the gamma curve, click **RGBCMY** and then click the **Adjust** button in the Custom Gamma Adjustment section. The new settings are applied to the currently projected image. To apply the same settings at a later time, select **Customized** as the Color Mode (see page 24).

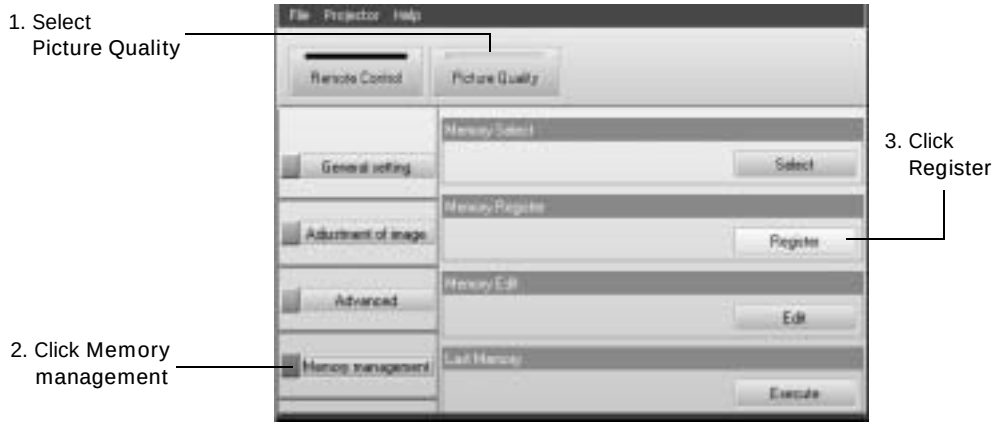


Saving and Recalling Picture Settings

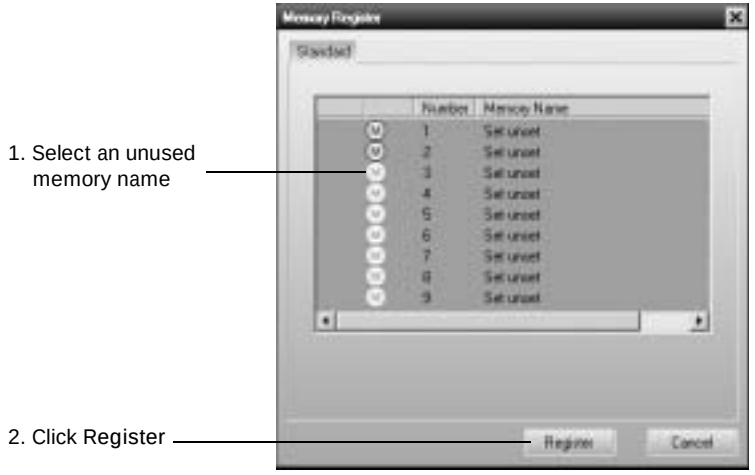
Once you've adjusted the picture using Cinema Color Editor, you can save your settings in the projector's memory. Then you can use the remote control (or Cinema Color Editor) to easily recall them for future use.

To save your settings on the projector:

1. Select Picture Quality, then click Memory management and choose Register.



2. On the next screen, select an unused memory name, then click Register. Your current settings are saved to the projector's memory.

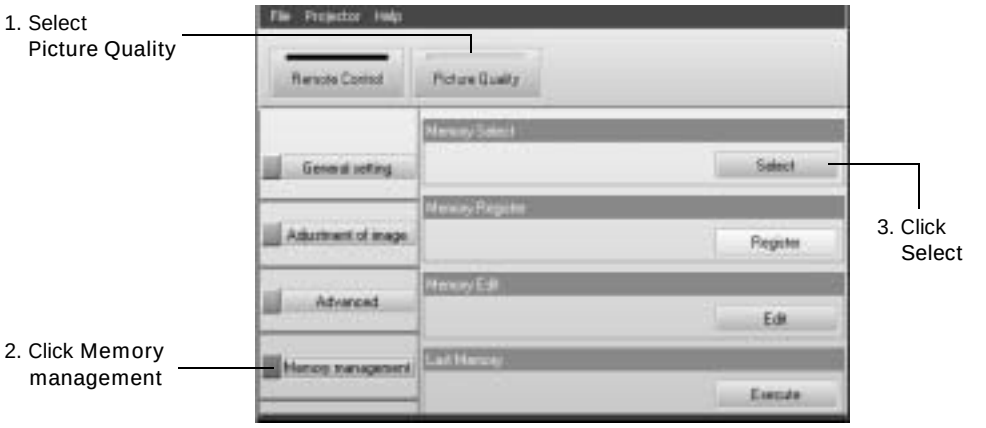


Note: If you've made changes to the projector's RGBCMY settings, your settings are saved in the projector's Advance memory area; otherwise they're saved under Standard.

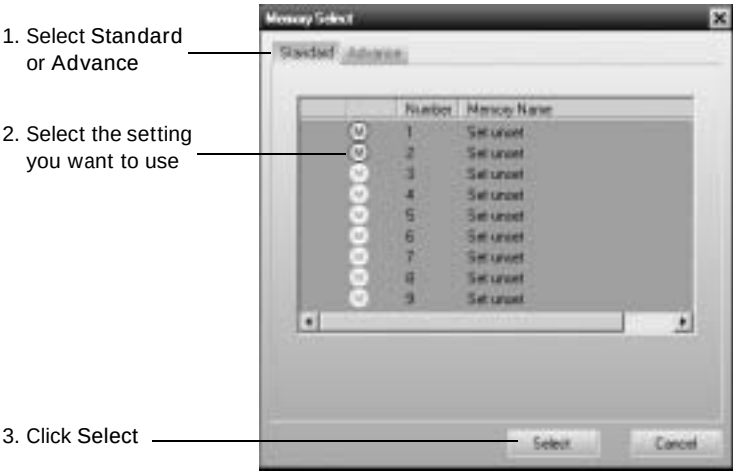
To use a memory setting you've saved on the projector:

Access the projector's memory settings either from the remote control (see page 34) or by using Cinema Color Editor as follows:

1. Select Picture Quality, then click Memory management and choose Select.



2. Click the tab where the setting you want to use is stored (Standard or Advance).



3. Select the desired memory setting, then click Select. After a moment, your image appears on the screen using the selected setting.

Managing Your Settings

In addition to your projector's memory settings, you can store any number of additional settings on your computer's hard drive. You can also use Cinema Color Editor to rename or delete memory settings stored on your projector.

To save or recall settings on your computer:

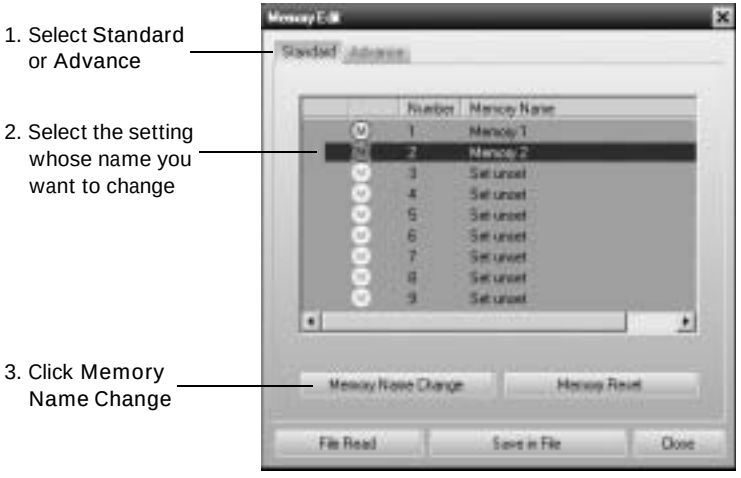
In Cinema Color Editor, open the File menu, then choose one of the following:

- Save setting to store the current Cinema Color Editor settings on your computer's hard drive.
- Set from file to adjust the picture from settings previously saved on your hard drive.

Note: You can also transfer settings directly between the projector's memory and your computer's hard drive using the File Read and Save In File buttons (shown in the figure below).

To rename a memory setting stored on the projector:

1. Select Picture Quality, then click Memory management and choose Edit.
2. Click the tab where your setting is stored (Standard or Advance), select the setting whose name you want to change, then click Memory Name Change.



3. Type a name up to 12 characters long, then click OK.

To clear a memory setting stored on the projector:

1. Select Picture Quality, then click Memory management and choose Edit.
2. Select the setting you want to delete, then click Memory Reset and confirm the deletion.

Maintenance

Your projector needs little maintenance. All you need to do on a regular basis is keep the lens clean. You also need to clean the air filter periodically to prevent overheating.

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 and filter covers. 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*.

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

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, use lens-cleaning paper. If necessary, moisten a soft cloth with lens cleaner and gently wipe the lens surface.

  Caution: Never rub the lens with abrasive materials.

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.

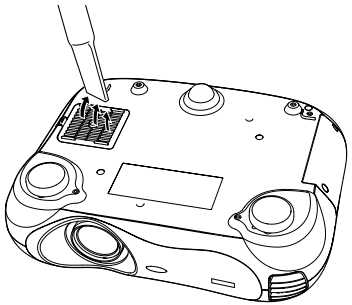
  Caution: Never use wax, alcohol, benzene, thinner, or other chemical detergents. These can damage the case.

Cleaning and Replacing the Air Filter

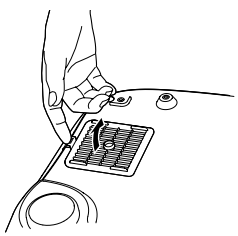
Clean the air filter on the bottom of the projector after every 100 hours of use. If it's not cleaned periodically, it can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector.

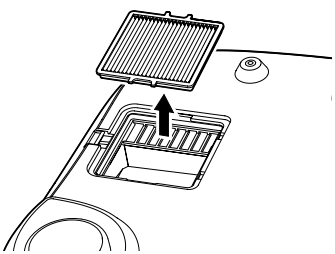
1. Turn off the projector and wait for the ⏻ power light to stop flashing.
2. Unplug the power cord and disconnect any cables.
3. Turn the projector over. Then use a small vacuum cleaner designed for computers and other office equipment to clean the filter, as shown. If you don't have one, gently clean the filter using a very soft brush (such as a clean artist's paintbrush).

   If the dirt is difficult to remove or the filter is broken, replace it. Contact your dealer or call EPSON at (800) 873-7766 and ask for part number V13H134A04. In Canada, call (800) 463-7766 for dealer referral.



4. If you need to replace the filter, release the tab and lift the cover up.
5. Remove the old filter and replace it with a new one.





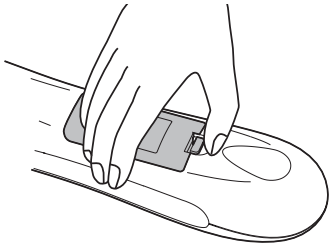
6. To replace the cover, insert the tabs and press down until the cover clicks into place.

Changing the Remote Control's Batteries

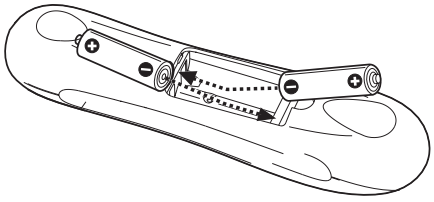
The remote control uses two AA batteries. If you suspect they are weak, take the remote control to a darkened room and press the illumination button. If the buttons on the remote control do not glow red, replace the batteries as described below.

Warning: Keep batteries away from children. If a battery should be swallowed, contact your doctor immediately.

1. Release the tab and lift open the cover.



2. Remove the old batteries and insert new AA batteries as shown.



3. Replace the cover.

Storing the Projector

If you need to store the projector for an extended time, do the following:

- Make sure the temperature and humidity of the storage area are within the recommended range for the projector (14 to 140 °F [-10 to 60 °C] and 10 to 90% relative humidity).
- Attach the lens cover and retract the feet.
- Remove the batteries from the remote control.
- Pack the projector in its original packaging or equivalent.

Transporting the Projector

Note: EPSON shall not be liable for any damages incurred during transportation.

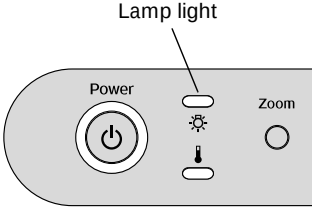
The projector contains many glass and precision parts. If you need to transport it, follow these guidelines to prevent damage:

- When shipping the projector for repairs, use the original packaging material if possible. If you do not have the original packaging, use equivalent materials. Be sure the carrier is capable of transporting fragile equipment and is aware that the projector is fragile.
- When you are hand-carrying the projector, grip the recessed handles on the sides.

Replacing the Lamp

The projection lamp lasts for up to 3000 hours (in low brightness mode) or 1700 hours (in high brightness mode). You can use the Info menu to check how long it's been in use (see page 58). It's time to replace the lamp when:

- The projected image gets darker or starts to deteriorate.
- The projector's lamp light flashes orange at half-second intervals.
- The message Replace the lamp appears on the screen when you start projecting.



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

Contact your dealer or call EPSON at (800) 873-7766 in the United States for a replacement lamp. Request part number V13H010L28. In Canada, call (800) 463-7766 for dealer referral.

Be sure to read the "Important Safety Information" on page 73 before replacing the lamp.

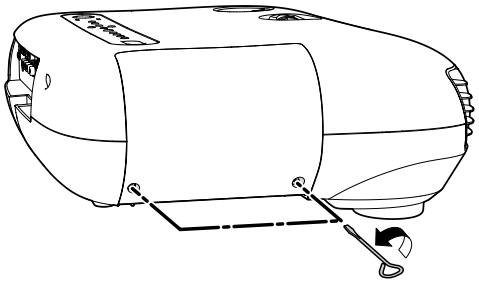
Warning: Let the lamp cool fully before replacing it. In the unlikely event that the lamp has broken, small glass fragments may be present and should be removed carefully to avoid injury.

The lamp component contains mercury. Please consult your state and local regulations regarding proper disposal or recycling, and do not place in the trash.

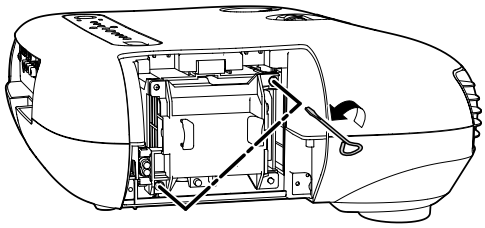
Caution: Never touch the lamp with your bare hands; the invisible residue left by the oil on your hands may shorten the lamp life. Use a cloth or glove to handle the new lamp.

Follow these steps to replace the lamp:

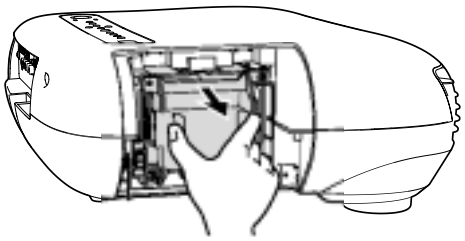
1. Turn off the projector and wait for the ⏻ power light to stop flashing.
2. Unplug the power cord and any cables.
3. If the projector has been on, let it cool for about an hour.
4. Loosen the two screws securing the lamp cover (they don't come all the way out), and then remove the cover.



5. Loosen the two screws securing the lamp.



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



7. Gently insert the new lamp and tighten its screws.

Caution: Don't touch the glass portion of the lamp assembly. Touching the glass could result in premature lamp failure.

8. Replace the cover and tighten its screws. (The projector won't work if the lamp cover is open or loose.)
9. Reset the lamp usage timer, as described in the next section.

Resetting the Lamp Usage Timer

After replacing the lamp, follow these steps to reset the lamp usage timer:

1. Press the Menu button on the projector or remote control.
2. Use the menu navigation buttons to open the Reset menu, then select Lamp-Hours Reset.
3. When you see a confirmation prompt, highlight Yes and press the ↵ button.
4. When you're finished, press the Menu button to exit.

The lamp usage timer doesn't register until you've used the lamp for at least 10 hours.

Checking the Projector Status

You can use the Info menu to view information about the current display settings and how long the projection lamp has been in use. To access the Info menu:

1. Press the Menu button on the projector or remote control.
2. Use the menu navigation buttons to open the Info menu. The following information appears:

   - Lamp Hours
   - Source
   - Input Signal
   - Resolution
   - Video Signal
   - Refresh Rate
   - Sync Info

   Note: The information displayed depends on the currently selected image source. The Lamp Hours shows 0H until you've used the lamp for at least 10 hours.

   The resolution indicates the total number of scan lines in the source signal; the number of visible scan lines depends on the signal format standard and selected display settings (see page 70).

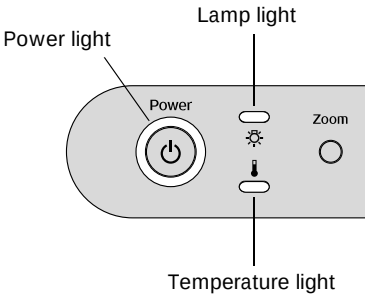
Problem Solving

This section explains how to interpret the projector's status lights, solve problems with the picture and remote control, and contact technical support.

What To Do When the Lights Flash

The lights on top of the projector indicate the projector's status and let you know when a problem occurs.

If the projector isn't working correctly, first turn it off, let it cool, and unplug it. Then plug the power cord back in and turn on the projector. If this doesn't solve the problem, check the status lights on top of the projector.



The ⏻ power light is orange.

The projector is in standby mode. Unplug it or press the Power button to turn it on.

The ⏻ power light is flashing green.

The projector is warming up. Wait for the picture to appear.

The ⏻ power light is flashing orange and you can't turn on the projector.

The lamp is cooling down. Wait until the light stops flashing, then press the Power button.

The ⏻ power light does not come on.

Make sure the power cord is connected securely both at the power outlet and the projector.

The temperature light is flashing orange.

High-speed cooling is in progress. If the projector gets too hot again, projection stops automatically. Make sure there is plenty of space around and under the projector for ventilation. Clean or replace the air filter if necessary (see page 54).

The temperature light is red.

The projector is too hot, which turns off the lamp automatically. Let it cool for five minutes, then turn it back on. Make sure there is plenty of space around and under the projector for ventilation. Also, clean or replace the filter if necessary (see page 54).

The lamp light is flashing orange.

The lamp needs to be replaced soon (see page 56). Make sure you have a spare lamp handy.

The lamp light is red.

- The lamp needs to be replaced (see page 56).
- If you just replaced the lamp, the cover may be loose or off. Make sure it's securely fastened (see page 56).

The lamp and/or temperature light is flashing red.

There is an internal problem. Disconnect the projector from its electrical outlet and contact EPSON for assistance (see page 65).

Solving Picture Problems

You cannot turn on the projector.

- Make sure the power cord is connected, then wait a moment for the ⏻ power light to turn orange before pressing the Power button.
- If you've set the Operation Lock, the control panel buttons are disabled; you must use the remote control to turn on the projector (see page 25).
- If you're trying to turn on the projector from Cinema Color Editor, the projector must be connected via a network cable and Network Monitoring must be enabled (see page 44).

No picture appears on the screen or you see the message No Signal **displayed.**

- Press the Source button on the projector or one of the Source buttons on the remote control to select the correct input source. Allow a few seconds for the projector to sync up after pressing the button.
- Press the Blank button on the remote control to make sure the picture hasn't been turned off temporarily.
- Check that the ⏻ power light is green, not flashing, and the lens cover is off.
- The projector may be in standby (or sleep) mode. If the ⏻ power light is orange, press the Power button to turn the projector back on.
- Make sure your video equipment is turned on.
- Make sure your cable(s) are connected correctly (see page 15).

You're using a computer and no picture appears on the screen.

If you're using a PC:

- Press the function key that lets you display on an external monitor. It's often labeled with an icon such as 🖳/🖵, but it may also be labeled CRT/LCD. You may have to hold down the Fn key while pressing it. Check your laptop's manual or online help.

  On most systems, the 🖳/🖵 key lets you toggle between the LCD screen and the projector, or display on both at the same time. Allow a few seconds for the projector to sync up after pressing it.
- If the function key doesn't let you display simultaneously on both screens, 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. 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 setting varies from computer to computer; you may need to click a Monitor tab, then make sure the external Monitor port is set as your primary display or enabled. See your computer manual or online help for details.

If you're using a Macintosh with OS X:

1. Select System Preferences from the Apple menu and click Displays.
2. Click Detect Displays.
3. To display the entire desktop on both your projector screen and LCD screen, click the Arrange tab. (If you don't see this tab, make sure it isn't hidden by another window.)

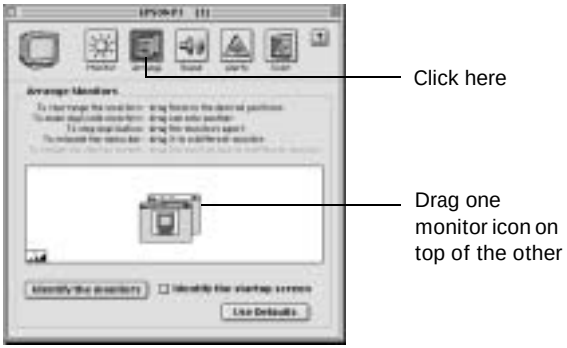
4. Click Mirror Displays in the lower corner of the screen. One of the monitor icons automatically moves on top of the other.



If you're using a Macintosh with OS 9.x or earlier:

1. From the Apple menu, select Control Panels, then click Monitors and Sound.
2. Click the Arrange icon, and then drag one monitor icon on top of the other.

   If the Arrange option isn't available, you may need to select one of the Simulscan resolutions. Click the Monitor icon and then select a Simulscan resolution from the Resolution box. (Allow a few seconds for the projector to sync up.)



The picture is upside-down or reversed.

Change the Projection setting in the menu system (see page 38).

Only part of the picture is displayed, or the picture is distorted.

- Press the Aspect button to select a different aspect ratio (see page 23).
- If the Aspect is set to Zoom, you may need to use the Zoom Caption option to see the top or bottom section of the screen (so that subtitles are visible). See page 36.
- Check the Output Scaling to make sure it's adjusted correctly (see page 36).
- Use the Position setting to reposition the image on the screen (see page 36).
- If you've connected a computer and you see only half the image, make sure the computer's Dual Display setting is turned off.

The picture isn't rectangular.

- If the image looks like  or , the projector has been placed off to one side of the screen and angled toward it. Face the projector straight ahead (instead of at the center of the screen), then use the horizontal lens shift knob to center the image (see page 20).
- If the image looks like  or , use the remote control to access the Keystone function to correct its shape (see page 20). Or press the  and  buttons on the projector's control panel.

  Note: You won't have to use the Keystone function to correct the image, as long as you place the projector level (not angled up or down) and at a height between the top and bottom of the screen. Then use the vertical lens shift knob to position the image. This produces the best-looking picture.

The picture contains static or noise.

- Make sure the Input Signal is set correctly for your connected video equipment (see page 39).
- If you're viewing still images and you notice flickering or horizontal lines, turn on the Progressive setting (see page 31). You may also need to adjust the Motion Detection setting (see page 31).
- Make sure your cables are securely connected at both ends.
- If you're using an extension cable, you may pick up interference unless you use a signal amplifier. Or try turning on Noise Reduction (see page 31).
- If you're displaying the same image on your computer and projector screen, try turning off your laptop's LCD display.

The picture is blurry.

- Make sure the Input Signal is set correctly for your video equipment (see page 39).
- There may be dirt on the lens. Clean the lens as described on page 53.
- Adjust the focus (see page 18).
- Make sure the lens is not fogged by condensation. If you've just moved the projector from a cold environment, wait a couple of minutes before using it.
- Adjust the Sharpness setting (see page 31).
- If you're projecting from a computer, you may need to adjust the Tracking and Sync settings (see page 33).

The colors on the screen don't look right.

- Make sure the Input Signal is set correctly for your connected video equipment (see page 39). If you switched picture sources by pressing the Input A or Input B button, the Input Signal setting may have changed (pressing the Input A or B button repeatedly switches the Input Signal setting).
- Press the Color Mode button on the remote control to select a different color mode.
- Check the brightness and contrast settings described on page 29.
- Fine-tune the colors with the settings listed on page 32.
- If the picture looks dark, you may need to replace the lamp. Check the lamp usage timer to see how long the lamp has been in use (see page 58). Replace the lamp if it's close to the end of its service life (see page 56).

Solving Remote Control Problems

The projector doesn't respond to remote control commands.

- Make sure you're within about 30 feet of the projector, and the remote control is not angled away from the projector by more than 30° in any direction.
- You may need to replace the remote control's batteries (see page 55).
- Dim the room lights and turn off any fluorescent lights. Make sure the projector is not in direct sunlight.
- Turn off nearby equipment that emits infrared energy, such as a radiant room heater.
- You cannot operate the projector with the remote control or control panel buttons while Cinema Color Editor is in use. If a problem occurs, select Update to Latest Status from the Projector menu in Cinema Color Editor.

Where To Get Help

EPSON provides technical assistance 24 hours a day at http://support.epson.com. Here you can access troubleshooting information, download product documentation, and receive technical advice through e-mail.

To use the EPSON PrivateLine Support service, call (800) 637-7661 and enter the PIN on the EPSON PrivateLine Support card that came with your projector. 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, please have the following information ready:

- Product name (EPSON PowerLite Cinema 500)
- Product serial number (located on the bottom of the projector)
- Computer configuration, if you're connected to a computer
- Description of the problem

You can purchase screens, carrying cases, or other accessories from EPSON at (800) 873-7766 or by visiting the EPSON Store at www.epsonstore.com (U.S. sales only). In Canada, please call (800) 463-7766 for dealer referral.

Specifications

General

Type of display	Poly-silicon TFT active matrix
Size of LCD panels	0.7 inch (18 mm) wide
Lens	F=2.1 to 4.3, f=21.4 to 31.7 mm
Resolution (native format)	1280 × 720 pixels, 720p
Brightness	1000 ANSI lumens maximum (Dynamic/Living Room color mode)
Contrast ratio	1200:1
Image size	30 to 300 inches (0.76 to 7.6 m)
Projection distance	2.9 to 37 feet (0.9 to 11.3 m)
Zoom ratio	1:1.5
Aspect ratio	16:9
Noise level	36 dB (Dynamic/Living Room color mode) 27 dB (Natural/Theatre/sRBG color mode)
Keystone correction	Vertical: -15 to +15°

Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	200 W
Lamp life	Approx. 1700 hours (Dynamic/Living Room color mode) Approx. 3000 hours (Natural/Theatre/sRBG color mode)
Part number	V13H010L28

Remote Control

Range	Approx. 30 feet (10 m)
Batteries	AA × 2

Dimensions

Height	4.7 inches (119 mm)
Width	17.7 inches (450 mm)
Depth	13.6 inches (345 mm)
Weight	13.8 lb. (6.2 kg)

Electrical

Rated frequency	50/60 Hz AC
Power supply	100 to 120 VAC, 3.3 A 200 to 240 VAC, 1.5 A
Power consumption	Operating: 290 W max. Standby: 0.7 W

Environmental

Temperature	Operating: 41 to 95 °F (5 to 35 °C) Storage: 14 to 140 °F (-10 to 60 °C)
Humidity	Operating: 20 to 80% RH, non-condensing Storage: 10 to 90% RH, non-condensing

Safety

United States	FCC 47CFR Part 15B Class B (DoC) UL1950 Rev. 3
Canada	ICES-003 Class B CSA C22.2 No. 950-95 (cUL)
CE Marking	Directive 89/336/EEC EN 55022, EN 55024



Pixelworks DNX™ ICs are used in this projector.

Compatible Video Formats

The projector supports analog video in NTSC, PAL, and SECAM formats, and it automatically adjusts to the incoming signal. It can receive these formats as composite video, S-video, or component video—which it accepts through the Video, S-Video, and Input A/B ports, respectively.

The projector also supports digital video (SDTV, HDTV) and various monitor display formats. Digital video is accepted by the HDMI port. The Input A and Input B ports also accept digital video (in either component video or RGB video format), as well as analog RGB computer monitor signals.

Digital video formats

Format	Signal name	Resolution	Aspect ratio
SDTV	480i 480p (not available in RGB video) 575i 575p	640 × 480 640 × 480 768 × 576 768 × 576	4:3 4:3 4:3 4:3
HDTV	720p 1080i	1280 × 720 1920 × 1080	16:9 16:9

Note: The signal name refers to the total number of visible scan lines (e.g., 720) and the display mode (interlaced or progressive), as defined by the signal format.

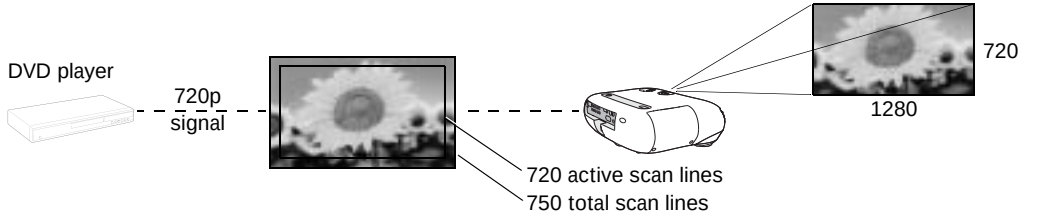
If you're projecting from a computer in analog RGB format, set the computer's video card at a refresh rate (vertical frequency) that's compatible with one of the monitor formats listed below. The frequencies of some computers may not allow images to display correctly.

Computer monitor formats

Format	Resolution	Refresh rate (Hz)
VGA	640 × 480	60
VESA	640 × 480	72, 75, 85
SVGA	800 × 600	60, 72, 75, 85
XGA	1024 × 768	43, 60, 70, 75
MAC13" MAC16" MAC19"	640 × 480 832 × 624 1024 × 768	67 75 75

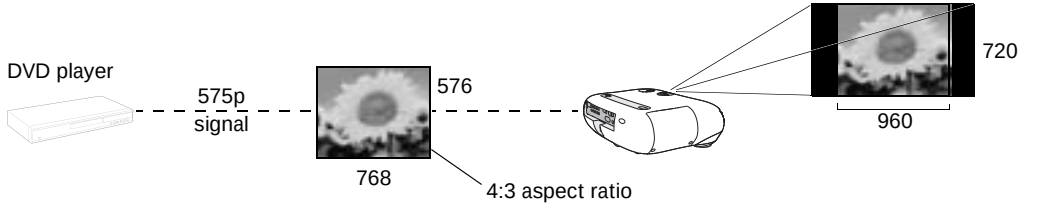
Image Size and Aspect Ratio Settings

Digital and analog picture formats include a portion of the image that is not normally visible on the screen. For example, a 720p digital video signal includes 750 total scan lines, of which only 720 are active. The projector displays the active picture area, as shown below:



Note: Using the Output Scaling function, you can set the projector to display both the hidden and visible parts of the image. You can also use the Position and Zoom Caption options to view the picture's hidden edges (see page 36).

When the source signal's resolution differs from the projector's native resolution (1280 × 720 pixels) or aspect ratio (16:9), the image has to be resized to fit optimally on the screen. In many cases, the projector can automatically resize the picture when Auto is selected as the Aspect setting (see page 23).



If necessary, you can select a different Aspect setting to optimize the image. The resolution at which the image displays for a given setting depends on the currently active picture source, as listed in the following tables.

Analog TV

Format (4:3)	**Aspect setting**				
	Normal	**Zoom**	**Squeeze/ Wide**	**Through**	**Squeeze Through**
NTSC	960 × 720	1280 × 720	1280 × 720	596 × 446	794 × 446
PAL or SECAM	960 × 720	960 × 720	960 × 720	708 × 528	944 × 528

Digital component video

Format	Signal name	Aspect setting				
		Normal	**Zoom**	**Squeeze/ Wide**	**Through**	**Squeeze Through**
SDTV (4:3)	480i 480p 575i 575p	960 × 720 960 × 720 960 × 720 960 × 720	1280 × 720 1280 × 720 1280 × 720 1280 × 720	1280 × 720 1280 × 720 1280 × 720 1280 × 720	596 × 446 596 × 446 708 × 528 708 × 528	794 × 446 794× 446 944 × 528 944 × 528
HDTV (16:9)	720p 1080i	1280 × 720 1280 × 720	— —	— —	1176 × 664 —	— —

Digital RGB video

Format	Signal name	Aspect setting				
		Normal	**Zoom**	**Squeeze/ Wide**	**Through**	**Squeeze Through**
SDTV (4:3)	480i 480p 575i 575p	960 × 720 960 × 720 960 × 720 960 × 720	1280 × 720 1280 × 720 1280 × 720 1280 × 720	1280 × 720 1280 × 720 1280 × 720 1280 × 720	640 × 480 640 × 480 768 × 576 768 × 576	853 × 480 853 × 480 1024 × 576 1024 × 576
HDTV (16:9)	720p 1080i	1280 × 720 1280 × 720	— —	— —	1280 × 720 —	— —

Computer monitor formats (analog RGB)

Format (4:3)	Aspect setting				
	Normal	**Zoom**	**Squeeze/ Wide**	**Through**	**Squeeze Through**
VGA	960 × 720	1280 × 720	1280 × 720	640 × 480	853 × 480
VESA	960 × 720	1280 × 720	1280 × 720	640 × 480	853 × 480
SVGA	960 × 720	1280 × 720	1280 × 720	800 × 600	1066 × 600
XGA	960 × 720	1280 × 720	1280 × 720	—	—
SXGA	960 × 720	1280 × 720	1280 × 720	—	—
MAC13” MAC16” MAC19” MAC21”	960 × 720 960 × 720 960 × 720 954 × 720	1280 × 720 1280 × 720 1280 × 720 1280 × 720	1280 × 720 1280 × 720 1280 × 720 1280 × 720	640 × 480 832 × 624 — —	853 × 480 1109 × 624 — —

Notices

Important Safety Information

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

- 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.
- The projector and its accessories come packaged in plastic bags. Keep plastic bags away from small children to avoid any risk of suffocation.
- Don't place the projector on an unstable cart, stand, or table. Also, don't use the projector near water or sources of heat.
- Use the type of power source indicated on the projector. If you're 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.
- Don't insert the plug into an outlet with dust present, and insert the plug firmly into the outlet. Failure to do so could result in sparks or fire.
- Don't overload wall outlets, extension cords, or integral convenience receptacles. This can cause fire or electric shock.
- Don't block the slots and openings in the projector case. They provide ventilation and prevent the projector from overheating. Don't 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 through the cabinet slots or spill liquid into the projector.
- 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 doesn't 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.

- Don’t 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.
- This product includes a lamp component that contains mercury. Please consult your state and local regulations regarding proper disposal or recycling, and do not place in the trash.
- Unplug the projector during lightning storms or when not in use for extended periods.
- Don’t place the projector or remote control on top of heat-producing equipment.
- If you use the projector in a country other than where you purchased it, use the correct power cord for that country.
- Don’t stand on the projector or place heavy objects on it.
- Don’t 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.
- Don’t 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.

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 and the IR receiver on the projector.
- Ambient light is too bright.
- Certain types of fluorescent lighting are used.
- Other equipment that emits infrared energy, such as a radiant room heater, is in the room.

If you experience problems, 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.

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.

Declaration of Conformity

According to 47CFR, Part 2 and 15 for 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-TW500
Marketing Name:	PowerLite Cinema 500

EPSON AMERICA, INC., LIMITED WARRANTY

What Is Covered: Epson America, Inc. (“EPSON”) warrants to the original end user customer that the EPSON product enclosed with this limited warranty statement, if purchased and used in the United States or Canada, conforms to the manufacturer’s specifications and 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: Should your EPSON projector require service during the warranty period, EPSON will, at its option, exchange or repair the projector without charge for parts or labor. If EPSON authorizes an exchange for the defective unit, EPSON will ship a replacement projector to you, freight prepaid, to an address in Canada or the U.S. (excluding Puerto Rico and U.S. Possessions). Shipments to other locations will be made freight collect. You are responsible for securely packaging the defective unit and returning it to EPSON within five (5) working days of receipt of the replacement. EPSON requires a debit or credit card number to secure the cost of the replacement projector in the event that you fail to return the defective one. If your projector is being repaired by carry-in warranty service, please bring the product securely packaged in its original container or an equivalent to your EPSON Dealer or EPSON Customer Care Center. EPSON will, at its option,

repair or replace on an exchange basis 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 repaired to the EPSON standard of quality, or, at EPSON's option, may be another model of like kind and quality. Exchange or replacement products assume the remaining warranty period of the product covered by this limited warranty, except that each replacement lamp carries the limited 90-day warranty stated above.

What This Warranty Does Not Cover: This warranty covers only normal use of the product in the United States and Canada. 24-hour-per-day use of this product causes unusual strain and is not considered normal use. This warranty does not cover consumables (e.g., fuses), other than lamps. This warranty does not apply to refurbished or reconditioned products, and 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 or 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. 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. IF THE REMEDY ABOVE FAILS, EPSON'S ENTIRE LIABILITY SHALL BE LIMITED TO A REFUND OF THE PRICE PAID FOR THE EPSON PRODUCT COVERED BY THIS LIMITED WARRANTY.

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 locate the Authorized EPSON Servicer nearest you, call the EPSON Connection[SM] 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

Abs. Color Temp. setting, 32
Accessories, 10, 65
Adjustment pattern, 18, 29
Air filter
  cleaning and replacing, 54
  ordering, 10
Anti-theft device, 8, 10
Aspect button, 9, 23, 62
Aspect ratio, selecting, 23, 70 to 71

B

Background Color setting, 37
Batteries, changing, 55
Black level, 30
Blank button, 9, 22
Blurry picture, 63
Brightness
  setting, 29
  specification, 67
Button Illumination setting, 39

C

Cable cover, installing, 17
Cables, connecting, 15 to 17, 43 to 44
Cinema Color Editor
  setting up, 41 to 44
  using, 45 to 51
Cleaning
  air filter, 54
  lens and projector case, 53
Color
  adjusting, 32 to 33, 47 to 48
  problems, 64
Color Mode, 9, 24, 64
Color temperature setting, 32
COM Port setting, 38
Computer, displaying an image, 61 to 62
Contrast ratio, 67
Contrast setting, 30
Control panel, projector, 9

D

DCDi, 7, 31
Declaration of Conformity, 76
Desktop adapter, Macintosh, 10
DHCP, 38, 44
Documentation, 11
DVI-Video Level setting, 30

E

Electrical requirements, 68
EPSON
  accessories, 10, 65
  Home Service, 7
  PrivateLine Support, 65
  technical support, 11, 65
  warranty, 7, 76 to 77
EPSON Super White setting, 30

F

Faroudja, 7
FCC Compliance Statement, 75
Feet, adjustable, 20
Filter, *see* Air filter
Flesh Tone setting, 32
Flickering, 31, 63
Focus adjustment, 18

G

Gain, color, 32
Gamma, 32, 48

H

HDMI, 7, 15, 16
Help, 65
Home Service, 7

I

Illumination of buttons, 22, 39
Image
  adjusting, 18 to 20, 29 to 33, 47 to 48
  changing aspect ratio, 23, 70 to 71
  positioning, 20, 36
  resizing, 23, 36
  selecting source, 22
  upside-down or backwards, 19
Image problems, 60 to 64
Info menu, 58
Input Signal setting, 19, 39
Interference, signal, 31, 63
Interlaced mode setting, 31

K

Kensington anti-theft device, 8, 10
Keystone buttons, 9
Keystone correction, 13, 20, 63

L

Lamp
  checking usage timer, 58
  life, 67
  ordering, 10, 56
  replacing, 56 to 58
  resetting usage timer, 58
  safety instructions, 73 to 74
  specifications, 67
Language setting, 28
Lens shift knobs, 20
Lens, cleaning, 53
Lights, projector, 59 to 60
Line menu, 9, 29, 32
Lock
  Kensington, 8, 10
  settings, 25

M

Macintosh desktop adapter, 10
Memory button, 9, 34
Memory settings
  creating, 34, 49
  deleting, 35, 51
  renaming, 51
  using, 34, 50
Menu button, 9, 27
Menus
  available settings, 28 to 39
  customizing, 28
  line menu, 9, 29, 32
  using, 27
Message setting, 37
Motion Detection setting, 31
Moving projector, 56

N

Network
  cable, 44
  DHCP, 38, 44
  settings, 38, 44
Network Monitoring setting, 38, 44
No image, 61 to 62
Noise reduction, 31

O

Offset, 32
Output scaling, 36, 70

P

Pattern, adjustment, 18, 29
Picture problems, 60 to 64
Pixelworks, 7, 68
Positioning image, 20, 36, 70
Positioning projector, 13 to 14
Problems
  picture, 60 to 64
  remote control, 64, 74
Progressive mode setting, 31
Projection distance, 14, 67
Projector
  cable cover, installing, 17
  checking status, 58
  cleaning, 53
  control panel, 9
  dimensions, 68
  feet, 20
  lights, 59 to 60
  locking, 8, 10, 25
  menus, 28 to 39
  parts, 8
  positioning, 13 to 14
  resetting menu options, 35
  storing, 55
  transporting, 56
  turning on and off, 21 to 22, 60

R

Registration, 7
Remote control
  buttons, 9
  changing batteries, 55
  lighting up buttons, 22
  problems, 64, 74
Replacing lamp, 56 to 58
Resetting
  lamp usage timer, 35, 58
  memory settings, 35, 51
  projector settings, 35
Resolution
  compatible formats, 69
  projector, 58, 67
RGB settings, 32, 48
RGBCMY settings, 33, 48
RS-232C (serial) cable, 38, 43

S

Safety approvals, 68
Safety instructions, 73 to 74
Serial cable, 38, 43
Setup level, 29
Sharpness, 31
Sleep mode, 39
Source buttons, 9
Source, selecting image, 22
Specifications
  compatible video formats, 69
  electrical, 68
  environmental, 68
  general, 67
  lamp, 67
  remote control, 67
Squeeze mode, 23
Startup screen, selecting, 37
Static, 63
Storing projector, 55
Support, *see* Technical support
Sync (Synchronization) setting, 33

T

Technical support, 11, 65
Through setting, 23
Tint, 32
Tracking, 33
Transporting projector, 56
Trigger Out setting, 39
Trigger port, 17
Turning on and off projector, 21 to 22, 60

U

USB cable, 38, 43
User's Logo setting, 37

V

Video, compatible formats, 69

W

Warranty, 7, 76 to 77
Where to Get Help, 65
White level, 30
Wide setting, 23

Z

Zoom adjustment, 18
Zoom Caption setting, 23, 36, 70
Zoom setting, 23