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PROJECTOR OWNER'S MANUAL

# Epson
# PowerLite 1950

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# PowerLite®
# 1930/1940W/1945W/1950/1955/1960/1965
# User's Guide

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# PowerLite® 1930/1940W/1945W/1950/1955/1960/1965 User's Guide

Welcome to the PowerLite® 1930/1940W/1945W/1950/1955/1960/1965 *User's Guide*.

# Introduction to Your Projector

Refer to these sections to learn more about your projector and this manual.

Projector Features
Notations Used in the Documentation
Where to Go for Additional Information
Projector Part Locations

## Projector Features

The PowerLite 1930, 1940W, 1945W, 1950, 1955, 1960, and 1965 projectors include these special features:

**Bright, high-resolution projection system**

- PowerLite 1930/1940W/1945W: Up to 4200 lumens of color brightness (color light output) and 4200 lumens of white brightness (white light output)

  PowerLite 1950/1955: Up to 4500 lumens of color brightness (color light output) and 4500 lumens of white brightness (white light output)

  PowerLite 1960/1965: Up to 5000 lumens of color brightness (color light output) and 5000 lumens of white brightness (white light output)

  **Note:** Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118.

- PowerLite 1940W/1945W: Native resolution of 1280 × 800 pixels (WXGA)

  PowerLite 1930/1950/1955/1960/1965: Native resolution of 1024 × 768 pixels (XGA)

**Flexible connectivity**

- Plug-and-play 3-in-1 USB projection, audio, and mouse control for instant setup
- Wired and wireless (PowerLite 1945W/1955/1965) network support for projection, monitoring, and control via remote network computer
- HDMI port for computer or video device connection
- DisplayPort connector for computer audio and video connection

- PC Free slide shows and presentations via connected USB memory devices or Epson document camera
- Dual VGA ports for connections by multiple presenters
- Ports for connecting an external monitor and external speakers

**Easy-to-use setup and operation features**

- Real-time, automatic vertical and horizontal keystone correction always displays a rectangular screen (PowerLite 1945W/1955/1965)
- Innovative horizontal keystone correction slider for flexible projector placement (PowerLite 1930/1940W/1950/1960)
- Epson's Instant Off and Direct Power On features for quick setup and shut down
- Screen Fit feature automatically resizes images for your projection screen (PowerLite 1945W/1955/1965)
- Support for Crestron RoomView network monitoring systems
- Network message broadcast system to project timely messages to all networked projectors (Windows only)
- Powerful 10W speaker system with audio out port for connecting external speakers

**Note:** The PowerLite 1945W/1955/1965 projectors are shown in most illustrations in this manual, unless noted otherwise.

Product Box Contents
Additional Components
Optional Equipment and Replacement Parts
Warranty and Registration Information

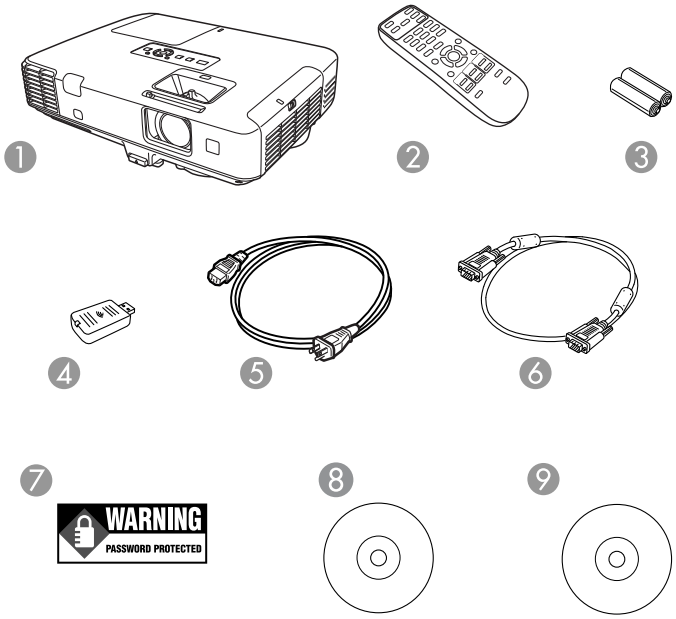
**Parent topic:** Introduction to Your Projector

**Related concepts**
Projector Part Locations

## Product Box Contents

Save all the packaging in case you need to ship the projector. Always use the original packaging (or equivalent) when shipping.

Make sure your projector box included all of these parts:




1 Projector
2 Remote control
3 Remote control batteries (two AA alkaline)
4 Wireless LAN module (PowerLite 1945W/1955/1965)
5 Power cord
6 VGA computer cable
7 Password Protected sticker
8 Projector documentation CD
9 Projector software CD

**Parent topic:** Projector Features

## Additional Components

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

- To receive a component video signal, you need a D-sub, 15-pin, component-to-VGA video cable. You can purchase one from Epson or an authorized Epson reseller.
- To receive an HDMI signal, you need a compatible HDMI cable. You can purchase one from Epson or an authorized Epson reseller.
- To receive a DisplayPort signal, you need a compatible DisplayPort cable. See your local computer or electronics dealer for purchase information.
- To project with audio from certain ports, you may need a commercially available audio cable compatible with your device. See your local computer or electronics dealer for purchase information.

**Parent topic:** Projector Features

## Optional Equipment and Replacement Parts

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

Epson offers the following optional accessories and replacement parts for your projector:

| Option or part | Part number |
|---|---|
| Genuine Epson Replacement lamp (ELPLP75; PowerLite 1940W/1945W/1950/1955/1960/1965) | V13H010L75 |
| Genuine Epson Replacement lamp (ELPLP74; PowerLite 1930) | V13H010L74 |
| Air filter replacement set (2 filters; ELPAF41) | V13H134A41 |
| Quick Wireless Connection USB key (ELPAP09; PowerLite 1945W/1955/1965) | V12H005M08 |
| Wireless LAN module (ELPAP07; PowerLite 1945W/1955/1965) | V12H418P12 |
| Epson DC-06 document camera (ELPDC06) | V12H321005 |
| Epson DC-11 document camera | V12H377020 |
| Accolade Duet portable projector screen | ELPSC80 |
| Universal projector ceiling mount | ELPMBPJF |

| Option or part | Part number |
|---|---|
| Adjustable suspended ceiling channel kit | ELPMBP01 |
| False ceiling plate kit | ELPMBP02 |
| Component-to-VGA video cable (ELPKC19) | V12H005C19 |
| VGA video cable 1.8 m length | ELPKC02 |
| VGA video cable 3.0 m length | ELPKC09 |
| VGA video cable 20 m length | ELPKC10 |
| Kensington security lock | ELPSL01 |
| Soft carrying case | V12H001K65 |
| 2-Year Extended Service Program - Exchange Service | EPPEXPA1 |

**Parent topic:** Projector Features

## Warranty and Registration Information

Your projector comes with a basic warranty that lets you project with confidence. For details, see the warranty that came with your projector.

In addition, Epson offers free Extra Care Road Service. In the unlikely event of an equipment failure, you won't have to wait for your unit to be repaired. Instead, Epson will ship you a replacement unit anywhere in the United States, Canada, or Puerto Rico. See the Extra Care Road Service brochure for details.

Register your product online using the projector CD or at this site: epson.com/webreg.

Registering also lets you receive special updates on new accessories, products, and services.

**Parent topic:** Projector Features

# Notations Used in the Documentation

Follow the guidelines in these notations as you read your documentation:

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

**Parent topic:** Introduction to Your Projector

# Where to Go for Additional Information

Need quick help on using your projector? Here's where to look for help:

- Built-in help system

  Press the **Help** button on the remote control or projector to get quick solutions to common problems.

- epson.com/support (U.S) or epson.ca/support (Canada)

  View FAQs (frequently asked questions) and e-mail your questions to Epson technical support 24 hours a day.

- For detailed instructions on using your projector in a network environment, see the *EasyMP Network Projection Operation Guide*.
- For detailed instructions on converting PowerPoint files into a slide show file format that you can display from a USB device connected to your projector (Windows only), see the *EasyMP Slide Converter Operation Guide*.
- If you still need help after checking this manual and the sources listed above, you can use the Epson PrivateLine Support service to get help fast. For details, see "Where to Get Help".

**Parent topic:** Introduction to Your Projector

**Related references**

Where to Get Help

# Projector Part Locations

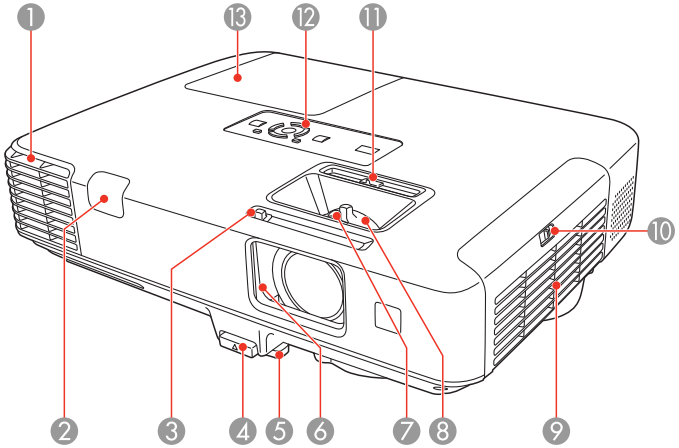
Check the projector part illustrations to learn about the parts on your projector.

Projector Parts - Front/Top
Projector Parts - Rear
Projector Parts - Base
Projector Parts - Control Panel
Projector Parts - Remote Control

**Parent topic:** Introduction to Your Projector

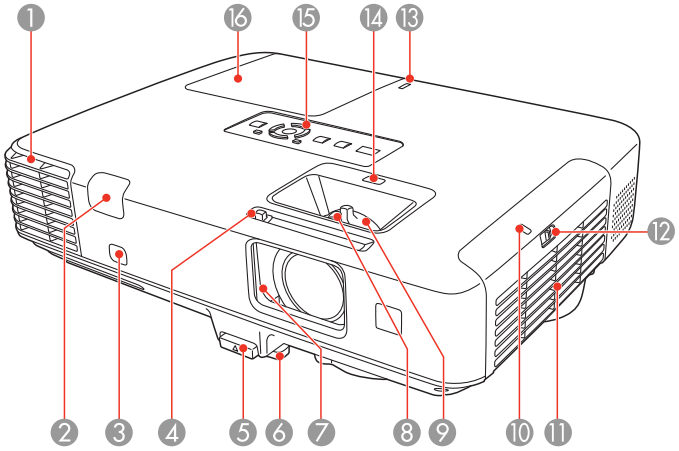
## Projector Parts - Front/Top

**PowerLite 1930/1940W/1950/1960**




1 Exhaust vent
2 Remote receiver
3 A/V Mute slide lever
4 Foot release lever
5 Front adjustable foot
6 A/V Mute slide
7 Focus ring
8 Zoom ring
9 Air filter cover
10 Air filter cover latch
11 Horizontal keystone slider
12 Control panel
13 Lamp cover

**PowerLite 1945W/1955/1965**

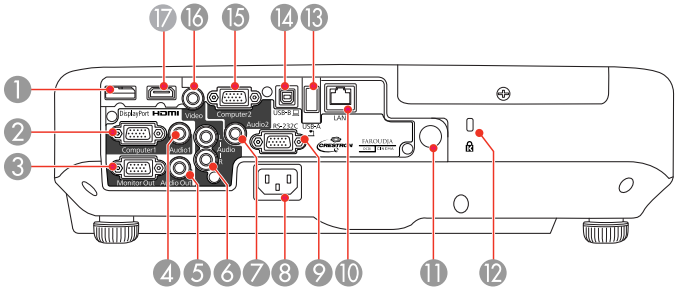



1 Exhaust vent
2 Remote receiver
3 Screen Fit sensor
4 A/V Mute slide lever
5 Foot release lever
6 Front adjustable foot
7 A/V Mute slide
8 Focus ring
9 Zoom ring
10 Wireless LAN indicator light
11 Air filter cover
12 Air filter cover latch
13 USB status indicator light
14 Focus Help button
15 Control panel
16 Lamp cover

**Parent topic:** Projector Part Locations

# Projector Parts - Rear

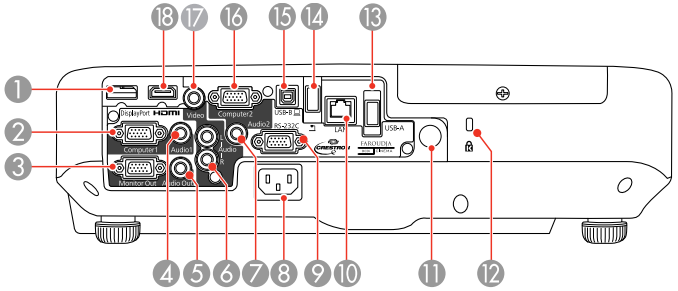
### PowerLite 1930/1940W/1950/1960



1 **DisplayPort** connector
2 **Computer1** port
3 **Monitor Out** port
4 **Audio1** port
5 **Audio Out** port
6 **L-Audio-R** audio ports
7 **Audio2** port
8 AC input port
9 **RS-232C** port
10 Network **LAN** port
11 Remote control receiver
12 Kensington security slot
13 **USB-A** port
14 **USB-B** port
15 **Computer2** port
16 **Video** port

17 **HDMI** port

### PowerLite 1945W/1955/1965

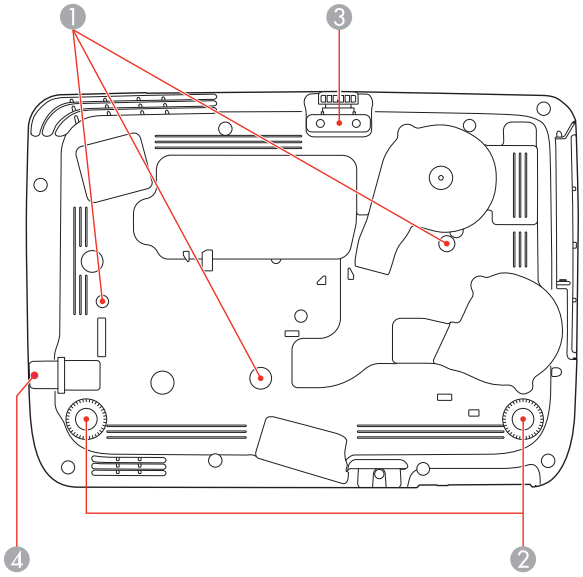


1 **DisplayPort** connector
2 **Computer1** port
3 **Monitor Out** port
4 **Audio1** port
5 **Audio Out** port
6 **L-Audio-R** audio ports
7 **Audio2** port
8 AC input port
9 **RS-232C** port
10 Network **LAN** port
11 Remote control receiver
12 Kensington security slot
13 **USB-A** port
14 Document camera port
15 **USB-B** port
16 **Computer2** port
17 **Video** port

18 **HDMI** port

**Parent topic:** Projector Part Locations

## Projector Parts - Base

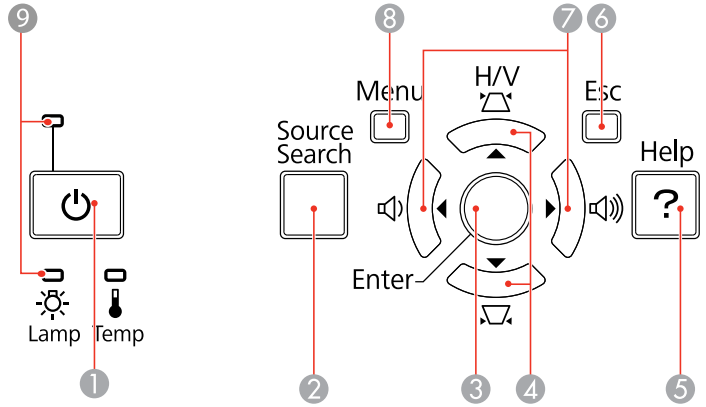



1 Mounting bracket holes
2 Rear feet
3 Front adjustable foot
4 Security cable attachment point

**Parent topic:** Projector Part Locations

## Projector Parts - Control Panel

### PowerLite 1930/1940W/1950/1960




1 Power button

2 **Source Search** button (searches for connected sources)

3 **Enter** button (selects options)

4 Vertical keystone adjustment buttons (adjust screen shape) and arrow buttons

5 **Help** button (accesses projector help information)

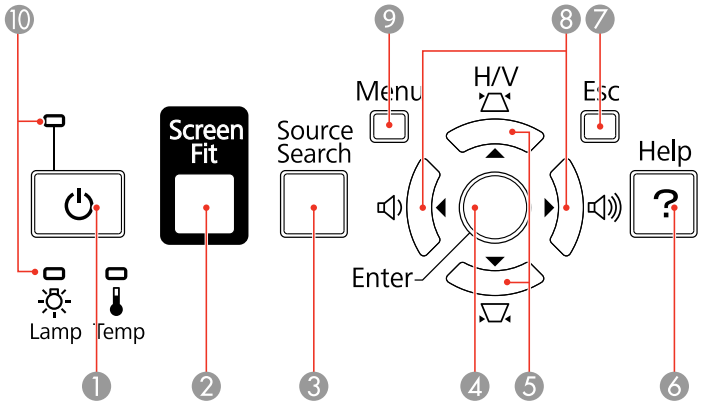
6 **Esc** button (cancels/exits functions)

7 Volume buttons (adjust speaker volume), horizontal keystone adjustment buttons (adjust screen shape), and arrow buttons

8 **Menu** button (accesses projector menu system)

9 Projector status lights

**PowerLite 1945W/1955/1965**




1 Power button

2 **Screen Fit** button

3 **Source Search** button (searches for connected sources)

4 **Enter** button (selects options)

5 Vertical keystone adjustment buttons (adjust screen shape) and arrow buttons

6 **Help** button (accesses projector help information)

7 **Esc** button (cancels/exits functions)

8 Volume buttons (adjust speaker volume), horizontal keystone adjustment buttons (adjust screen shape), and arrow buttons

9 **Menu** button (accesses projector menu system)

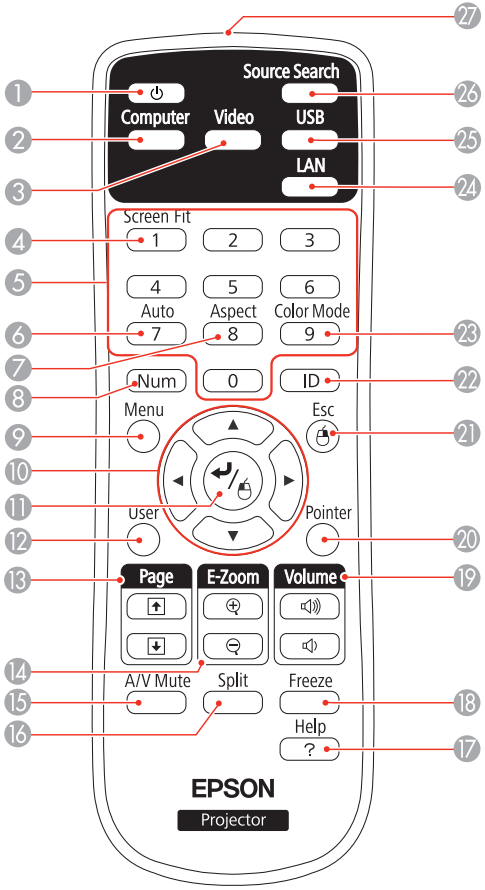
10 Projector status lights

**Parent topic:** Projector Part Locations

**Related references**

Projector Light Status

# Projector Parts - Remote Control




1 Power button

2 **Computer** button (cycles through connected computer sources)

3 **Video** button (cycles through connected video sources)

4 **Screen Fit** button (adjusts image shape; functions on PowerLite 1945W/1955/1965)

5 Numeric buttons (enter numbers)

6 **Auto** button (automatically adjusts position, tracking, and sync settings)

7 **Aspect** button (selects the image aspect ratio)

8 **Num** button (when held down, switches numeric buttons to number function)

9 **Menu** button (accesses projector menu system)

10 Arrow buttons (move through on-screen options and control wireless mouse functions)

11 Enter button (selects options and controls wireless mouse functions)

12 **User** button (customizable for different functions)

13 **Page** up/down buttons (control presentation slides)

14 **E-Zoom +/–** buttons (zoom into and out of the image)

15 **A/V Mute** button (turns off picture and sound)

16 **Split** button (splits the screen)

17 **Help** button (accesses projector help information)

18 **Freeze** button (stops video action)

19 **Volume** up/down buttons (adjust speaker volume)

20 **Pointer** button (activates on-screen pointer)

21 **Esc** button (cancels/exits functions and controls wireless mouse functions)

22 **ID** button (selects projector and remote control ID numbers )

23 **Color Mode** button (selects display modes)

24 **LAN** button (cycles between network and optional Quick Wireless Connection USB Key sources)

25 **USB** button (cycles through connected USB sources)

26 **Source Search** button (searches for connected sources)

**Parent topic:** Projector Part Locations

# Setting Up the Projector

Follow the instructions in these sections to set up your projector for use.

Projector Placement
Projector Connections
Installing Batteries in the Remote Control
Opening the Lens Cover

## Projector Placement

You can place the projector on almost any flat surface to project an image.

You can also install the projector in a ceiling mount if you want to use it in a fixed location.

Keep these considerations in mind as you select a projector location:

- Place the projector on a sturdy, level surface or install it using a compatible mount.
- Leave plenty of space around and under the projector for ventilation, and do not place it on top of or next to anything that could block the vents.
- Position the projector within reach of a grounded electrical outlet or extension cord.

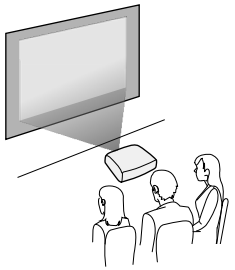
Projector Setup and Installation Options
Projection Distance

**Parent topic:** Setting Up the Projector

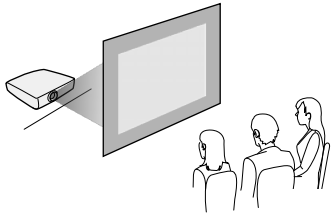
### Projector Setup and Installation Options

You can set up or install your projector in the following ways:

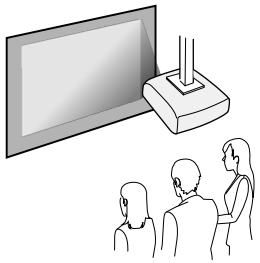
Front



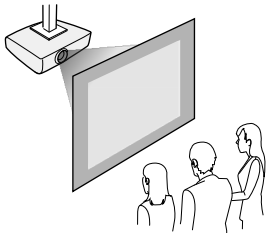
Rear



Front Ceiling



Rear Ceiling



Wherever you set up the projector, make sure to position it squarely in front of the center of the screen, not at an angle, if possible.

If you project from the ceiling or from the rear, be sure to select the correct **Projection** option in the projector's menu system.

**Parent topic:** Projector Placement

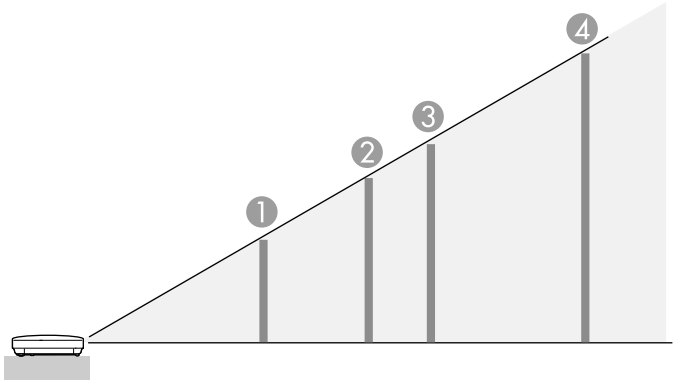
**Related references**

Projector Setup Settings - Extended Menu

## Projection Distance

The distance at which you place the projector from the screen determines the approximate size of the image. The image size increases the farther the projector is from the screen, but can vary depending on the zoom factor, aspect ratio, and other settings.

Use the tables here to determine approximately how far to place the projector from the screen based on the size of the projected image. (Conversion figures may have been rounded up or down.)




**PowerLite 1930/1950/1955/1960/1965**

**4:3 Aspect Ratio**

| | Screen or image size | Projection distance<br>Wide to Tele |
|---|---|---|
| 1 | 50 inches | 55.1 to 90.29 inches (140 to 229 cm) |
| 2 | 80 inches | 89 to 144.9 inches (226 to 368 cm) |
| 3 | 100 inches | 111 to 181.1 inches (283 to 460 cm) |
| 4 | 150 inches | 167.7 to 272.4 inches (426 to 692 cm) |

**PowerLite 1940W/1945W**

**16:10 Aspect Ratio**

| | Screen or image size | Projection distance<br>Wide to Tele |
|---|---|---|
| 1 | 50 inches | 58.7 to 95.7 inches (149 to 243 cm) |
| 2 | 80 inches | 94 to 153.5 inches (239 to 390 cm) |
| 3 | 100 inches | 118.1 to 192.1 inches (300 to 488 cm) |
| 4 | 150 inches | 177.6 to 288.6 inches (451 to 733 cm) |

**Parent topic:** Projector Placement

# Projector Connections

You can connect the projector to a variety of computer, video, and audio sources to display presentations, movies, or other images, with or without sound.

- Connect any type of computer that has a USB port, standard video output (monitor) port, DisplayPort, or HDMI port.
- For video projection, connect devices such as DVD players, gaming consoles, digital cameras, and smartphones with compatible video output ports.
- If your presentation or video includes sound, you can connect audio input cables, if necessary.
- For slide shows or presentations without a computer, you can connect USB devices (such as a flash drive or camera) or an optional Epson document camera.

**Caution:** If you will use the projector at altitudes above 4921 feet (1500 m), turn on **High Altitude Mode** to ensure the projector's internal temperature is regulated properly.

Connecting to Computer Sources
Connecting to Video Sources
Connecting to an External Computer Monitor
Connecting to External Speakers
Connecting to External USB Devices
Connecting to a Document Camera

**Parent topic:** Setting Up the Projector

**Related references**
Product Box Contents

Projector Setup Settings - Extended Menu

# Connecting to Computer Sources

Follow the instructions in these sections to connect a computer to the projector.

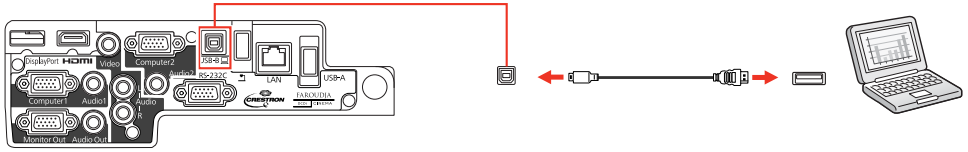
Connecting to a Computer for USB Video and Audio
Connecting to a Computer for VGA Video
Connecting to a Computer for HDMI Video and Audio
Connecting to a Computer for DisplayPort Video and Audio
Connecting to a Computer for USB Mouse Control
Connecting to a Computer for Sound

**Parent topic:** Projector Connections

## Connecting to a Computer for USB Video and Audio

If your computer meets the system requirements, you can send video and audio output to the projector through the computer's USB port (preferably USB 2.0). Connect the projector to your computer using a USB cable.

1. Turn on your computer.
2. Connect the cable to your projector's **USB-B** port.




3. Connect the other end to any available USB port on your computer.
4. Do one of the following:
   - **Windows 8.x**: Click **EPSON_PJ_UD** in the upper right-corner, then select **Run EMP_UDSE.EXE** in the dialog box that appears to install the Epson USB Display software.
   - **Windows 7/Windows Vista**: Select **Run EMP_UDSE.EXE** in the dialog box that appears to install the Epson USB Display software.
   - **Windows XP**: Wait as messages appear on your computer screen and the projector installs the Epson USB Display software on your computer.

- **Windows 2000**: Select **Computer**, **EPSON_PJ_UD**, and **EMP_UDSE.EXE** to install the Epson USB Display software.
- **OS X**: The USB Display setup folder appears on your screen. Select **USB Display Installer** and follow the on-screen instructions to install the Epson USB Display software.

Follow any on-screen instructions. You need to install this software only the first time you connect the projector to the computer.

**Note:** If you are using Windows XP or Windows 2000 and you see a message asking if you want to restart your computer, select **No**.

The projector displays the image from your computer's desktop and outputs sound, if your presentation contains audio.

**Parent topic:** Connecting to Computer Sources

**Related references**

Projector Setup Settings - Extended Menu

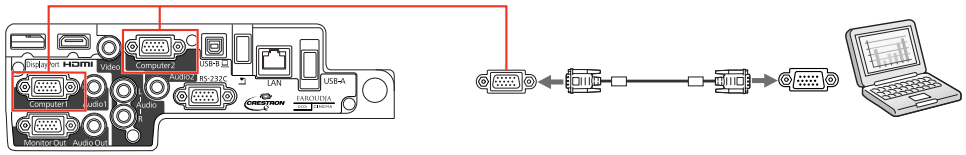
USB Display System Requirements

## Connecting to a Computer for VGA Video

You can connect the projector to your computer using a VGA computer cable.

**Note:** To connect a Mac that includes only a Thunderbolt port or Mini-DVI port for video output, you need to obtain an adapter that allows you to connect to the projector's VGA video port. Contact Apple for compatible adapter options.

1. If necessary, disconnect your computer's monitor cable.
2. Connect the VGA computer cable to your computer's monitor port.
3. Connect the other end to a **Computer** port on the projector.




4. Tighten the screws on the VGA connector.

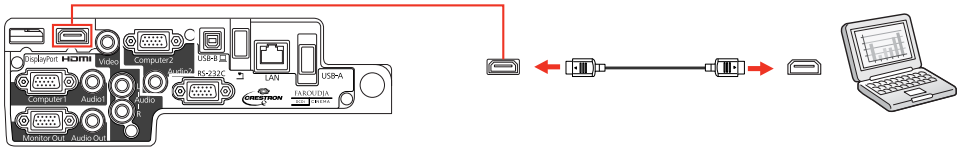
**Parent topic:** Connecting to Computer Sources

## Connecting to a Computer for HDMI Video and Audio

If your computer has an HDMI port, you can connect it to the projector using an optional HDMI cable.

**Note:** To connect a Mac that includes only a Thunderbolt port or Mini-DVI port for video output, you need to obtain an adapter that allows you to connect to the projector's **HDMI** port. Contact Apple for compatible adapter options. Older Mac computers (2009 and earlier) may not support audio through the **HDMI** port.

1. Connect the HDMI cable to your computer's HDMI output port.
2. Connect the other end to the projector's **HDMI** port.

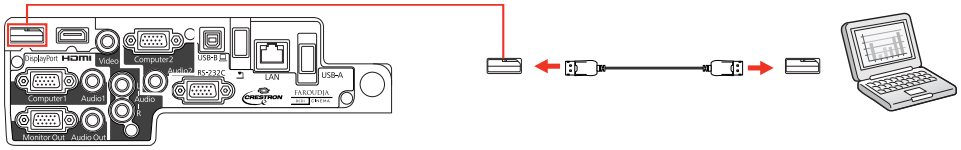


**Parent topic:** Connecting to Computer Sources

## Connecting to a Computer for DisplayPort Video and Audio

If your computer has a DisplayPort or Mini DisplayPort connector, you can connect it to the projector using an optional DisplayPort cable.

1. Connect the DisplayPort cable to your computer's DisplayPort or Mini DisplayPort connector.
2. Connect the other end to the projector's **DisplayPort** connector.



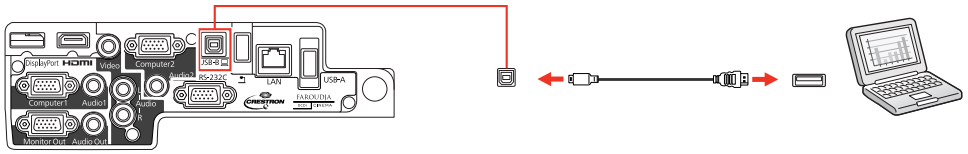
**Parent topic:** Connecting to Computer Sources

## Connecting to a Computer for USB Mouse Control

If you connected your computer to a **Computer**, **USB-B**, **DisplayPort**, or **HDMI** port on the projector, you can set up the remote control to act as a wireless mouse. This lets you control projection at a

distance from your computer. To do this, connect the projector to your computer using a USB cable, if it is not connected already.

1. Connect the USB cable to your projector's **USB-B** port.



2. Connect the other end to any available USB port on your computer.
3. If necessary, configure your computer to work with an external USB mouse. See your computer documentation for details.

**Parent topic:** Connecting to Computer Sources

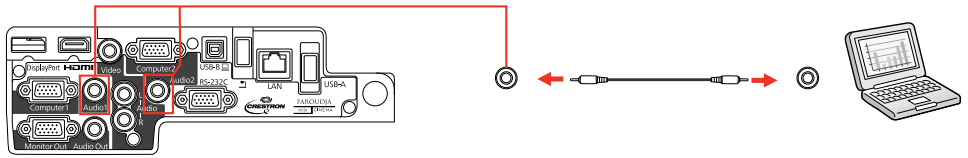
**Related tasks**

Using the Remote Control as a Wireless Mouse

### Connecting to a Computer for Sound

If your computer presentation includes sound and you did not connect it to the projector's **USB-B**, **DisplayPort**, or **HDMI** port, you can still play sound through the projector's speaker system. Just connect an optional 3.5 mm stereo mini-jack audio cable as described here.

1. Connect the audio cable to your laptop's headphone or audio-out jack, or your desktop's speaker or audio-out port.
2. Connect the other end to the **Audio** port that corresponds to the **Computer** port you are using.



**Parent topic:** Connecting to Computer Sources

## Connecting to Video Sources

Follow the instructions in these sections to connect video devices to the projector.

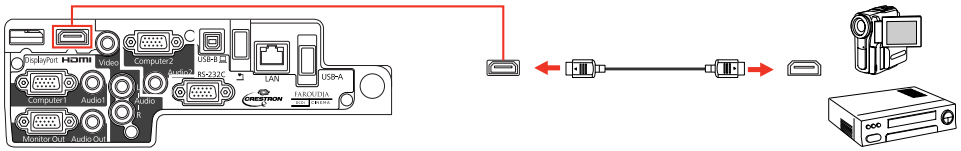
Connecting to an HDMI Video Source
Connecting to a Component-to-VGA Video Source
Connecting to a Composite Video Source
Connecting to a Video Source for Sound

**Parent topic:** Projector Connections

## Connecting to an HDMI Video Source

If your video source has an HDMI port, you can connect it to the projector using an optional HDMI cable. The HDMI connection provides the best image quality.

1. Connect the HDMI cable to your video source's HDMI output port.
2. Connect the other end to the projector's **HDMI** port.

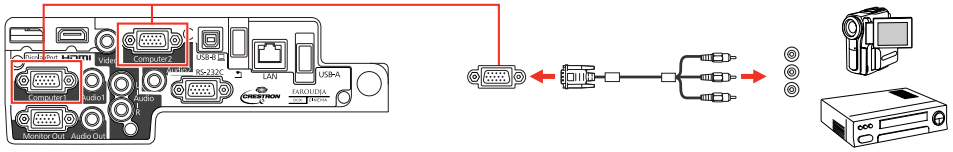


**Parent topic:** Connecting to Video Sources

## Connecting to a Component-to-VGA Video Source

If your video source has component video ports, you can connect it to the projector using an optional component-to-VGA video cable. Depending on your component ports, you may need to use an adapter cable along with a component video cable.

1. Connect the component connectors to your video source's color-coded component video output ports, usually labeled **Y**, **Pb**, **Pr** or **Y**, **Cb**, **Cr**. If you are using an adapter, connect these connectors to your component video cable.
2. Connect the VGA connector to a **Computer** port on the projector.



3. Tighten the screws on the VGA connector.

If your image colors appear incorrect, you may need to change the **Input Signal** setting in the projector's Signal menu.

**Parent topic:** Connecting to Video Sources

**Related references**

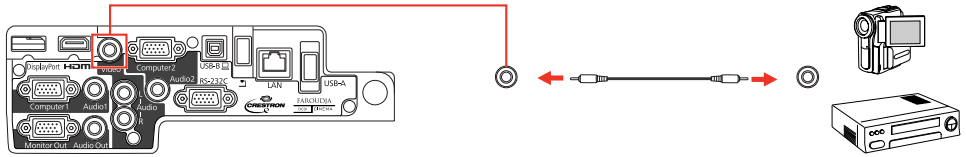
Input Signal Settings - Signal Menu

Optional Equipment and Replacement Parts

### Connecting to a Composite Video Source

If your video source has a composite video port, you can connect it to the projector using an optional RCA-style video or A/V cable.

1. Connect the cable with the yellow connector to your video source's yellow video output port.
2. Connect the other end to the projector's **Video** port.



**Parent topic:** Connecting to Video Sources

### Connecting to a Video Source for Sound

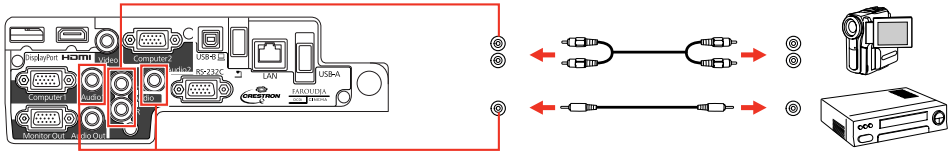
You can play sound through the projector's speaker system if your video source has audio output ports.

If you are projecting video using a **Computer** port, connect the projector to the video source using an optional stereo mini-jack audio cable or an RCA audio cable.

If you are projecting video using the **Video** port, connect the projector to the video source using an RCA audio cable.

1. Connect the audio cable to your video source's audio-out ports.
2. Do one of the following:
   - Connect the other end of the cable to the projector's **Audio** port that corresponds to the **Computer** port you are using for video.

- Connect the red and white plugs on the other end of the cable to the projector's **L-Audio-R** ports.



**Parent topic:** Connecting to Video Sources

**Related references**

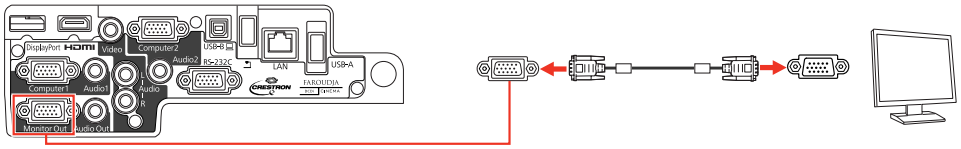
Projector Setup Settings - Extended Menu

## Connecting to an External Computer Monitor

If you connected the projector to a computer using a **Computer** port, you can also connect an external monitor to the projector. This lets you see your presentation on the external monitor even when the projected image is not visible.

**Note:** Monitors that use a refresh rate less than 60 Hz may not be able to display images correctly.

1. Make sure your computer is connected to the projector's **Computer** port. If there are two computer ports, make sure you use the **Computer1** port.
2. Connect the external monitor's cable to your projector's **Monitor Out** port.



**Parent topic:** Projector Connections

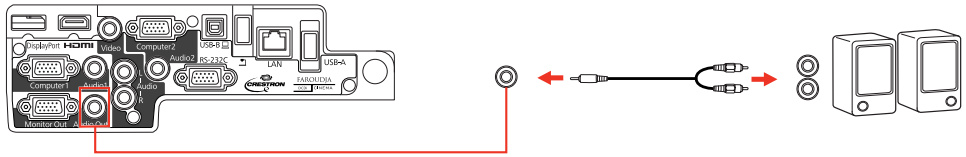
## Connecting to External Speakers

To enhance the sound from your presentation, you can connect the projector to external self-powered speakers. You can control the volume using the projector's remote control.

**Note:** You can also connect the projector to an amplifier with speakers.

**Note:** The projector's built-in speaker system is disabled when you connect external speakers.

1. Make sure your computer or video source is connected to the projector with both audio and video cables as necessary.
2. Locate the appropriate cable to connect your external speakers, such as a stereo mini-jack-to-pin-jack cable, or another type of cable or adapter.
3. Connect one end of the cable to your external speakers as necessary.
4. Connect the stereo mini-jack end of the cable to your projector's **Audio Out** port.



**Parent topic:** Projector Connections

## Connecting to External USB Devices

Follow the instructions in these sections to connect external USB devices to the projector.

USB Device Projection
Connecting a USB Device or Camera to the Projector
Selecting the Connected USB Source
Disconnecting a USB Device or Camera From the Projector

**Parent topic:** Projector Connections

### USB Device Projection

You can project images and other content without using a computer or video device by connecting any of these devices to your projector:

- USB flash drive
- Digital camera or smartphone
- USB hard drive
- Multimedia storage viewer
- USB memory card reader

**Note:** Digital cameras or smartphones must be USB-mounted devices, not TWAIN-compliant devices, and must be USB Mass Storage Class-compliant.

**Note:** USB hard drives must meet these requirements:

- USB Mass Storage Class-compliant (not all USB Mass Storage Class devices are supported)
- Formatted in FAT or FAT32
- Self-powered by their own AC power supplies (bus-powered hard drives are not recommended)
- Avoid using hard drives with multiple partitions

You can also use the EasyMP PC Free feature to create your own slide shows containing converted PowerPoint files and image files, and project them from a connected USB device or memory card reader (PowerLite 1945W/1955/1965).

You can project slide shows from image files on a connected USB device or memory card reader (PowerLite 1930/1940W/1950/1960).

**Parent topic:** Connecting to External USB Devices

**Related topics**

Projecting a PC Free Presentation

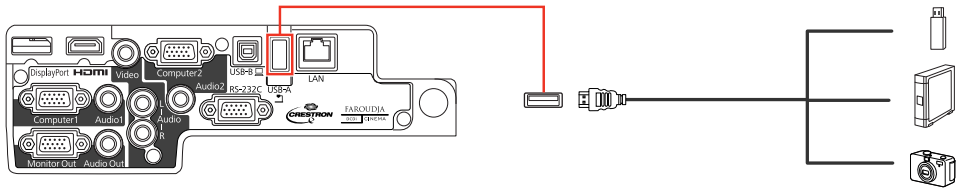
Projecting a Slide Show

### Connecting a USB Device or Camera to the Projector

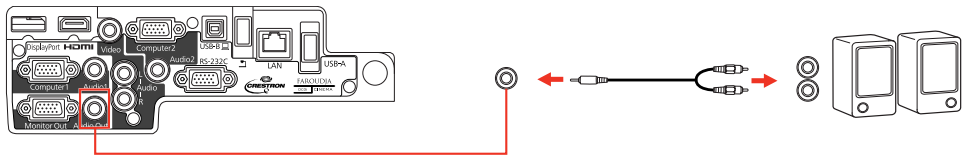
You can connect your USB device or camera to the projector's **USB-A** port and use it to project images and other content.

1. If your USB device came with a power adapter, plug the device into an electrical outlet.
2. Connect the USB cable (or USB flash drive or USB memory card reader) into the projector's **USB-A** port shown here.

**PowerLite 1930/1940W/1950/1960**




**PowerLite 1945W/1955/1965**



**Note:** Do not connect a USB hub or a USB cable longer than 10 feet (3 m), or the device may not operate correctly.

3. Connect the other end of the cable (if applicable) to your device.

**Parent topic:** Connecting to External USB Devices

**Related topics**

Projecting a PC Free Presentation

Projecting a Slide Show

### Selecting the Connected USB Source

You can switch the projector's display to the source you connected to the **USB-A** port.

1. Make sure the connected USB source is turned on, if necessary.
2. Press the **USB** button on the remote control.
3. Press the button again to cycle through other USB sources, if available.

**Parent topic:** Connecting to External USB Devices

### Disconnecting a USB Device or Camera From the Projector

When you finish presenting with a connected USB device or camera, you must prepare to disconnect the device from the projector.

1. If the device has a power button, turn off and unplug the device.
2. Disconnect the USB device or camera from the projector.

**Parent topic:** Connecting to External USB Devices

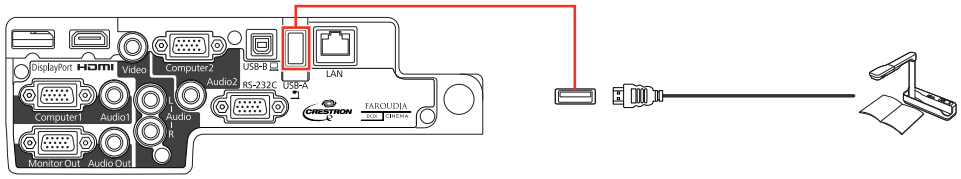
## Connecting to a Document Camera

You can connect the Epson DC-06 document camera to your projector's **USB-A** (PowerLite 1930/1940W/1950/1960) or document camera (PowerLite 1945W/1955/1965) port to project images viewed by the camera.

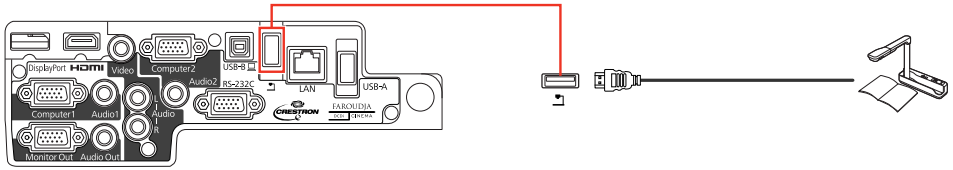
**Note:** For additional features supported by software, connect the Epson DC-06 document camera to your computer instead of the projector. You may be able to connect different Epson document camera models to your projector's **Computer** port. See the document camera's manual for instructions.

1. Locate the USB cable that came with the document camera.
2. Connect the USB cable to the projector's **USB-A** or document camera port.

   **PowerLite 1930/1940W/1950/1960**




   **PowerLite 1945W/1955/1965**




3. Connect the other end of the cable to the document camera's USB Type B port.

**Parent topic:** Projector Connections

**Related references**

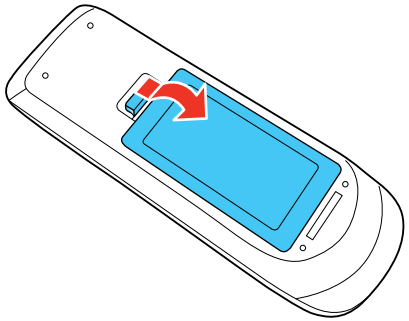
Optional Equipment and Replacement Parts

# Installing Batteries in the Remote Control

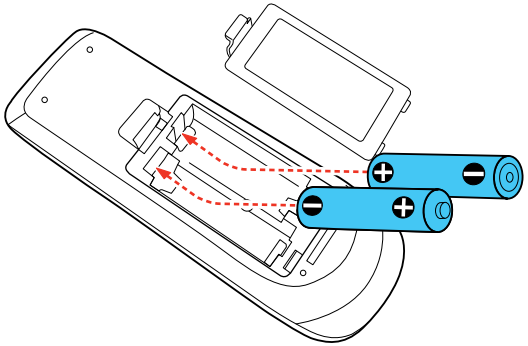
The remote control uses the two AA batteries that came with the projector.

**Caution:** Use only the type of batteries specified in this manual. Do not install batteries of different types, or mix new and old batteries.

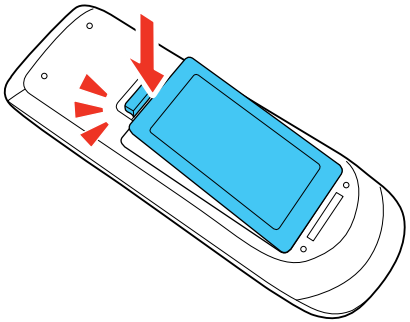
1. Open the battery cover.



2. Insert the batteries with the **+** and **–** ends facing as shown.



3. Close the battery cover and press it down until it clicks into place.

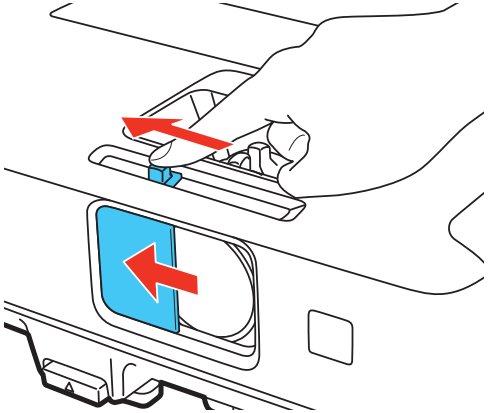


**Warning:** Dispose of used batteries according to local regulations. Do not expose batteries to heat or flame. Keep batteries out of the reach of children; they are choking hazards and are very dangerous if swallowed.

**Parent topic:** Setting Up the Projector

## Opening the Lens Cover

1. To open the projector's lens cover, slide the **A/V Mute** slide lever until it clicks into the open position.



2. To cover the lens or temporarily turn off the projected picture and sound, slide the **A/V Mute** slide cover closed.

**Parent topic:** Setting Up the Projector

# Using the Projector on a Network

Follow the instructions in these sections to set up your projector for use on a network.

Wired Network Projection
Wireless Network Projection
Registering a Digital Certificate on the Projector
Setting Up Projector Network E-Mail Alerts
Setting Up Monitoring Using SNMP
Controlling a Networked Projector Using a Web Browser
Crestron RoomView Support

## Wired Network Projection

You can send images to your projector through a wired network. To do this, you connect the projector to your network, and then set up your projector and computer for network projection.

After connecting and setting up the projector as described here, install the network software from the *Epson Projector Software* CD-ROM or download the software as necessary. Use the following software and documentation to set up, control, and monitor network projection:

- EasyMP Network Projection software sets up your computer for network projection. See the *EasyMP Network Projection Operation Guide* for instructions.
- EasyMP Monitor software (Windows only) lets you monitor and control your projector through the network. You can download the latest software and documentation from the Epson web site. Go to epson.com/support (U.S.) or epson.ca/support (Canada) and select your projector.

**Note:** If your projector is connected via a LAN cable to a network that includes a wireless access point, you can connect to the projector wirelessly through the access point using the EasyMP Network Projection software.

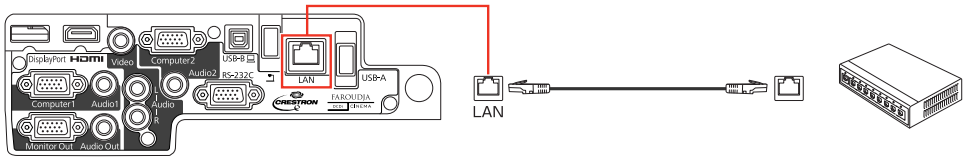
Connecting to a Wired Network
Selecting Wired Network Settings

**Parent topic:** Using the Projector on a Network

## Connecting to a Wired Network

To connect the projector to a wired local area network (LAN), use a 100Base-TX or 10Base-T network cable. To ensure proper data transmission, use a Category 5 shielded cable or better.

1. Connect one end of the network cable to your network hub, switch, or router.
2. Connect the other end of the cable to the projector's **LAN** port.



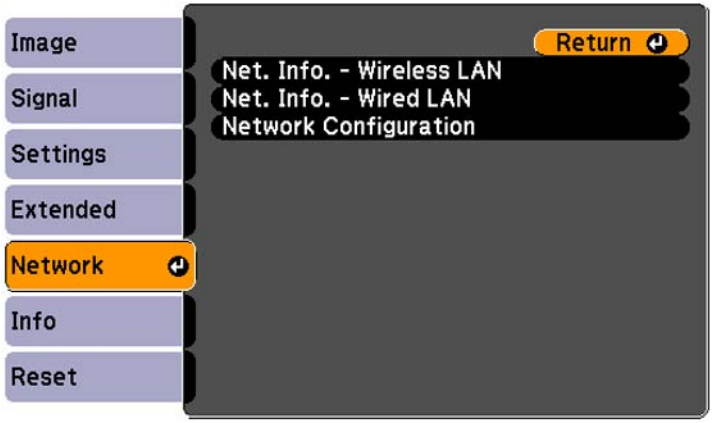

**Parent topic:** Wired Network Projection

## Selecting Wired Network Settings

Before you can project from computers on your network, you must select the network settings for the projector using its menu system.

**Note:** Make sure you already connected the projector to your wired network using the **LAN** port.

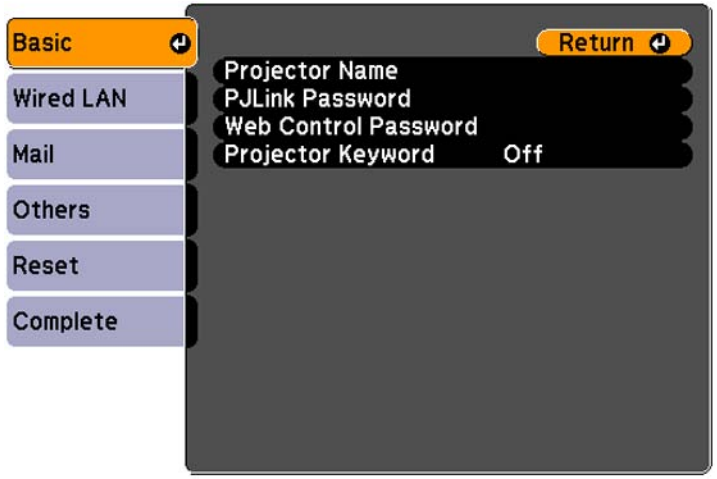
1. Turn on the projector.
2. Press the **Menu** button.
3. Select the **Network** menu and press **Enter**.




4. Select **Network Configuration** and press **Enter**.

5. Select the **Basic** menu and press **Enter**.

**PowerLite 1930/1940W/1950/1960**




**PowerLite 1945W/1955/1965**

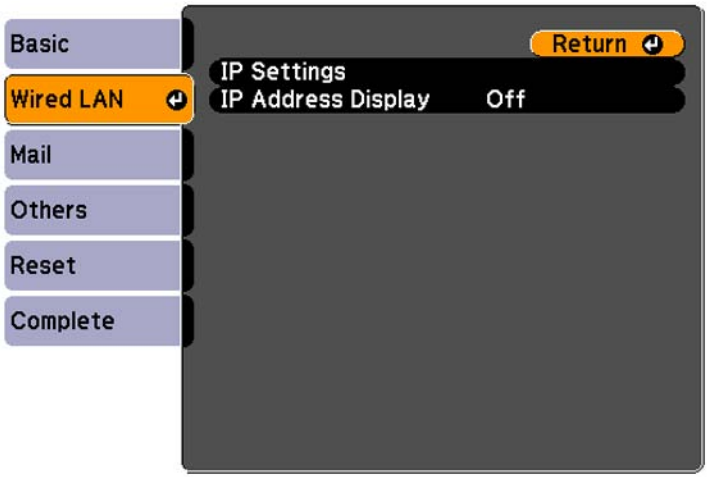


6. Select the following basic options as necessary:
   - **Projector Name** lets you enter a name up to 16 alphanumeric characters long to identify the projector over the network.
   - **PJLink Password** lets you enter a password up to 32 alphanumeric characters long for using the PJLink protocol for projector control (PowerLite 1930/1940W/1950/1960).
   - **Web Control Password** or **Web Remote Password** lets you enter a password up to 8 alphanumeric characters long for accessing the projector over the web.
   - **Projector Keyword** lets you turn on a security password to prevent access to the projector by anyone not in the room with it. You must enter a displayed, randomized keyword from a computer using the EasyMP Network Projection software to access the projector.

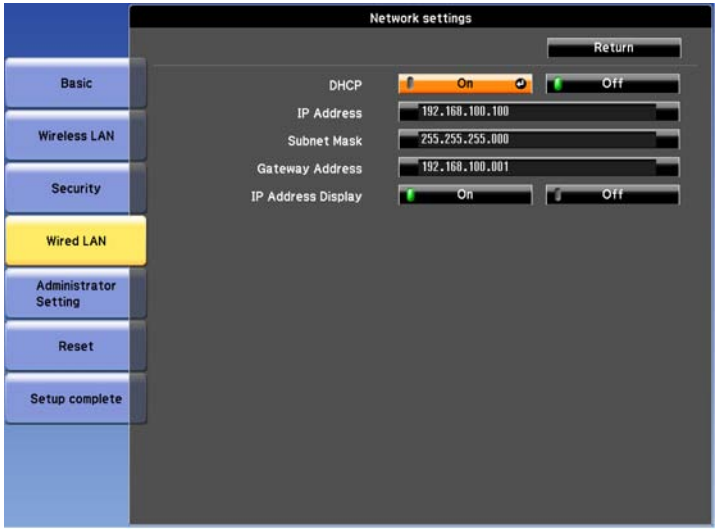
   **Note:** Use the displayed keyboard to enter the name, passwords and keyword. Press the arrow buttons on the remote control to highlight characters and press **Enter** to select them.

7. Select the **Wired LAN** menu and press **Enter**.

   **PowerLite 1930/1940W/1950/1960**




   **PowerLite 1945W/1955/1965**




8. If necessary, select **IP Settings** and press **Enter**.
9. Select your IP Settings as necessary:
   - If your network assigns addresses automatically, turn on the **DHCP** setting.
   - If you must set addresses manually, turn off **DHCP** and enter the projector's **IP Address**, **Subnet Mask**, and **Gateway Address** as needed.

   **Note:** To highlight the numbers you want from the displayed keyboard, press the arrow buttons on the remote control. To select a highlighted number, press **Enter**.
10. To prevent display of the IP address on the standby screen, turn off **IP Address Display**.
11. When you finish selecting settings, select **Complete** or **Setup Complete** and follow the on-screen instructions to save your settings and exit the menus.

**Parent topic:** Wired Network Projection

# Wireless Network Projection

You can send images to your projector through a wireless network (PowerLite 1945W/1955/1965). To do this, you must install the Epson 802.11b/g/n wireless LAN module, and then set up your projector and computer for wireless projection.

**Note:** If your projector is connected via a LAN cable to a network that includes a wireless access point, you can connect to the projector wirelessly using the EasyMP Network Projection software.

There are two ways to connect the projector to your wireless network:

- Using the optional Quick Wireless Connection USB Key (Windows only)
- Configuring the connection manually using the projector's Network menus

After installing the module and setting up the projector, install the network software from the *Epson Projector Software* CD or download the software, as necessary. Use the following software and documentation to set up, control, and monitor wireless projection:

- EasyMP Network Projection software sets up your computer for wireless network projection. See the *EasyMP Network Projection Operation Guide* for instructions.
- EasyMP Monitor software (Windows only) lets you monitor and control your projector through the network. You can download the latest software and documentation from the Epson web site. Go to epson.com/support (U.S.) or epson.ca/support (Canada) and select your projector.

Installing the Wireless LAN Module
Using Quick Wireless Connection (Windows Only)
Selecting Wireless Network Settings Manually
Searching for a Wireless Network
Selecting Wireless Network Settings in Windows
Selecting Wireless Network Settings in OS X
Enabling WPA or EAP Security

**Parent topic:** Using the Projector on a Network

**Related references**
Optional Equipment and Replacement Parts

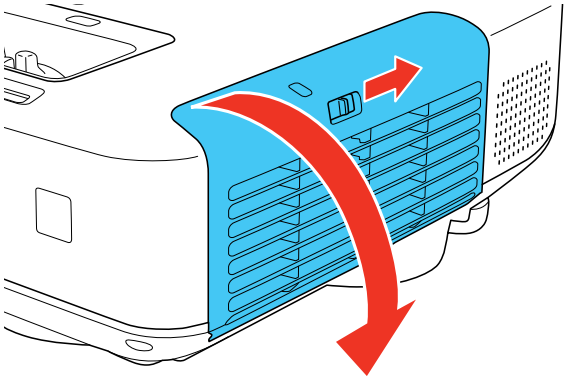
## Installing the Wireless LAN Module

To use the projector over a wireless network, install the Epson 802.11b/g/n wireless LAN module (PowerLite 1945W/1955/1965). Do not install any other type of wireless LAN module.

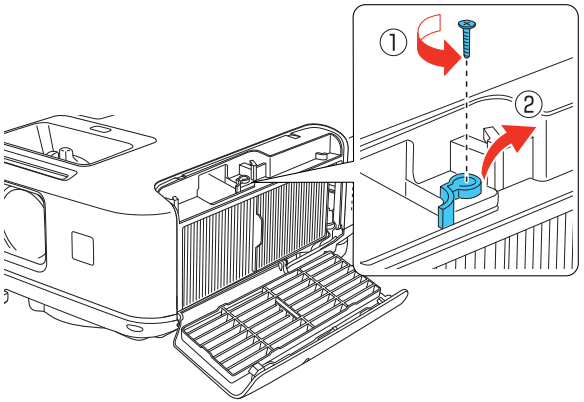
**Caution:** Never remove the module while its indicator light is green or flashing, or while you are projecting wirelessly. You may damage the module or lose data.

1. Turn off the projector and unplug the power cord.

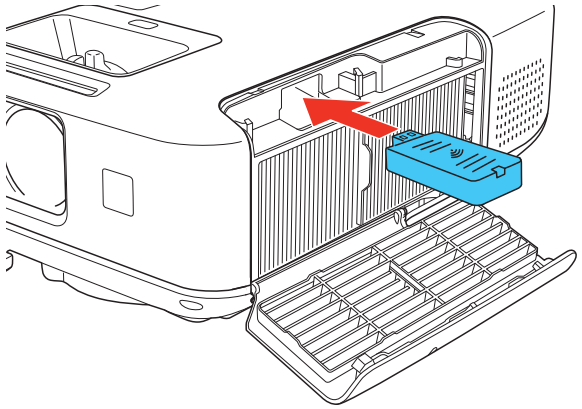
2. Slide the air filter cover latch and open the air filter cover.



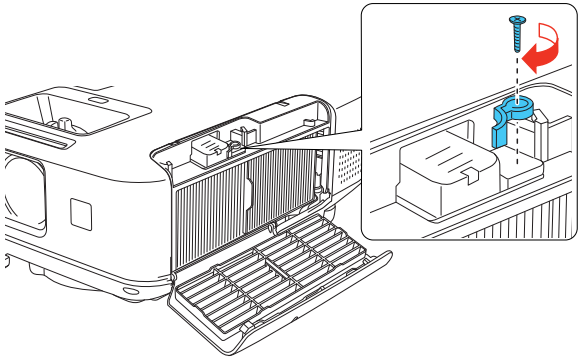
3. Remove the screw securing the wireless LAN module stopper, then remove the stopper.



4. Insert the wireless LAN module into the port.



5. Replace the wireless LAN module stopper and secure it using the screw you removed.



6. Close the air filter cover.
7. Plug in and turn on the projector.

**Parent topic:** Wireless Network Projection

**Related references**

Optional Equipment and Replacement Parts

## Using Quick Wireless Connection (Windows Only)

You can use the Quick Wireless Connection USB Key to quickly connect the projector to a Windows computer wirelessly. Then you can project your presentation and remove the key when you are done.

**Note:** The Quick Wireless Connection USB key is not included with your projector.

1. Turn on the projector.
2. Connect the USB key to the projector's **USB-A** port.

   You see a projected message that the network information update is complete.
3. Remove the USB key.
4. Now connect the USB key to a USB port on your computer or notebook.

   **Note:** In Windows Vista, if you see the AutoPlay window, select **Run LaunchU3.exe**, then select **Allow** on the next screen.

5. Follow the on-screen instructions to install the Quick Wireless Connection driver.

   **Note:** If you see a Windows Firewall message, click **Yes** to disable the firewall.

   After a few minutes, your computer image is displayed by the projector. If it does not appear, press the **LAN** button on your projector remote control or restart your computer.
6. Run your presentation as necessary.
7. When you finish projecting wirelessly, select the **Safely Remove Hardware** option in the Windows taskbar, then remove the USB key from your computer.

   **Note:** You may need to restart your computer to reactivate your wireless LAN connection.

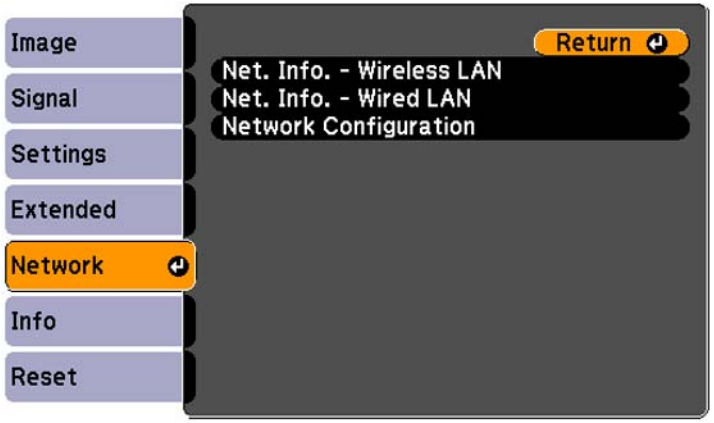
**Parent topic:** Wireless Network Projection

## Selecting Wireless Network Settings Manually

Before you can project from your wireless network, you must select the network settings for the projector using its menu system.

1. Turn on the projector.
2. Press the **Menu** button.

3. Select the **Network** menu and press **Enter**.



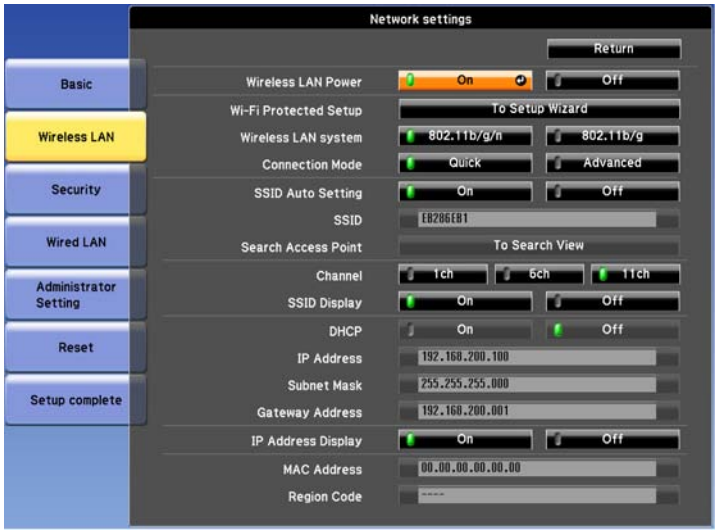

4. Select **Network Configuration** and press **Enter**.
5. Select the **Basic** menu and press **Enter**.



6. Select the following basic options as necessary:
   - **Projector Name** lets you enter a name up to 16 alphanumeric characters long to identify the projector over the network.
   - **Web Remote Password** lets you enter a password up to 8 alphanumeric characters long for accessing the projector over the web.
   - **Projector Keyword** lets you turn on a security password to prevent access to the projector by anyone not in the room with it. You must enter a displayed, randomized keyword from a computer using the EasyMP Network Projection software to access the projector.

   **Note:** Use the displayed keyboard to enter the name, passwords and keyword. Press the arrow buttons on the remote control to highlight characters and press **Enter** to select them.

7. Select the **Wireless LAN** menu and press **Enter**.




8. Select the settings on the Wireless LAN menu as necessary for your network.
9. When you finish selecting settings, select **Setup complete** and follow the on-screen instructions to save your settings and exit the menus.

After you complete the wireless settings for your projector, you need to select the wireless network on your computer.

Wireless LAN Menu Settings

**Parent topic:** Wireless Network Projection

## Wireless LAN Menu Settings

| Setting | Options | Description |
|---|---|---|
| **Wireless LAN Power** | **On**<br>**Off** | Turns wireless LAN support on and off |
| **Wi-Fi Protected Setup** | **Setup** | Select **Setup** to start the WPS Connection Setup utility |
| **Wireless LAN System** | **802.11b/g**<br>**802.11b/g/n** | Sets the type of wireless LAN system the projector is connecting to |
| **Connection Mode** | **Quick**<br>**Advanced** | Selects the type of wireless connection:<br>**Quick**: lets you quickly connect to one computer or use the optional Quick Wireless Connection USB key to connect<br>**Advanced**: lets you connect to multiple computers via a wireless network access point |
| **SSID Auto Setting** | **On**<br>**Off** | Turns on automatic SSID searching in **Quick** connection mode; set to **Off** when connecting to multiple projectors at the same time |
| **SSID** | Up 32 alphanumeric characters | Sets the SSID (network name) of the wireless LAN system the projector is connecting to |
| **Search Access Point** | **To Search View** | Search for available wireless network access points in **Advanced** connection mode |

| Setting | Options | Description |
|---|---|---|
| **Channel** | **1ch**<br>**6ch**<br>**11ch** | In **Quick** connection mode, selects the frequency band (channel) used by the wireless LAN |
| **SSID Display** | **On**<br>**Off** | Selects whether to display the SSID on the network standby screen |
| **DHCP** | **On**<br>**Off** | Turns on DHCP if your network assigns addresses automatically; set to **Off** to manually enter the network's **IP Address**, **Subnet Mask**, and **Gateway Address** |
| **IP Address Display** | **On**<br>**Off** | Selects whether to display the IP address on the network standby screen |

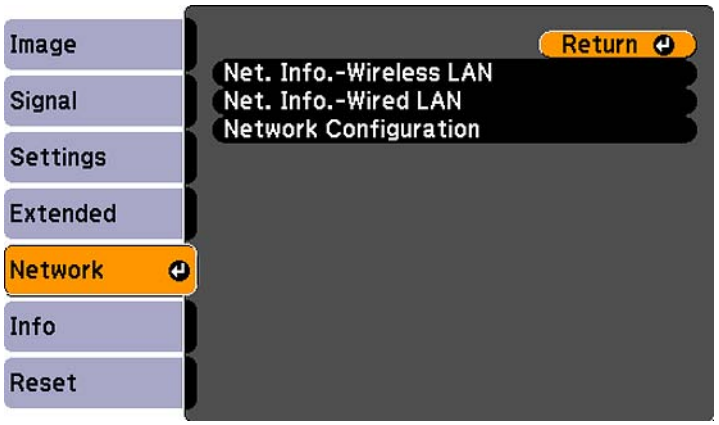
**Parent topic:** Selecting Wireless Network Settings Manually

## Searching for a Wireless Network

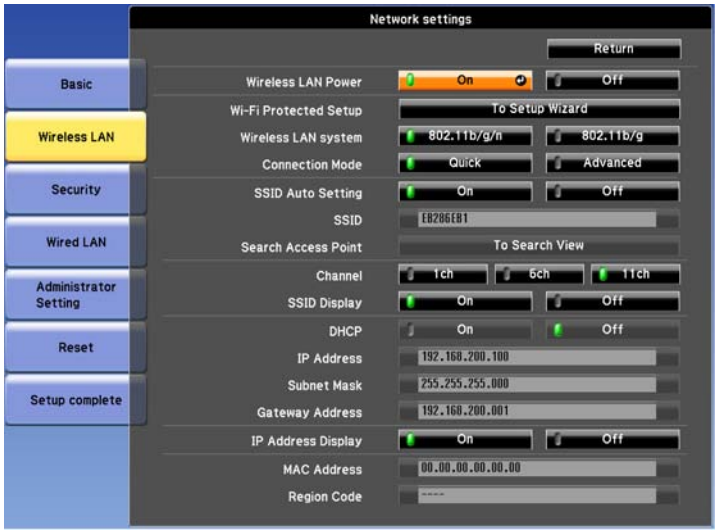
You can use your projector's site survey function to quickly locate and connect to available wireless networks.

1. Turn on the projector.
2. Press the **Menu** button on the remote control.

3. Select the **Network** menu and press **Enter**.

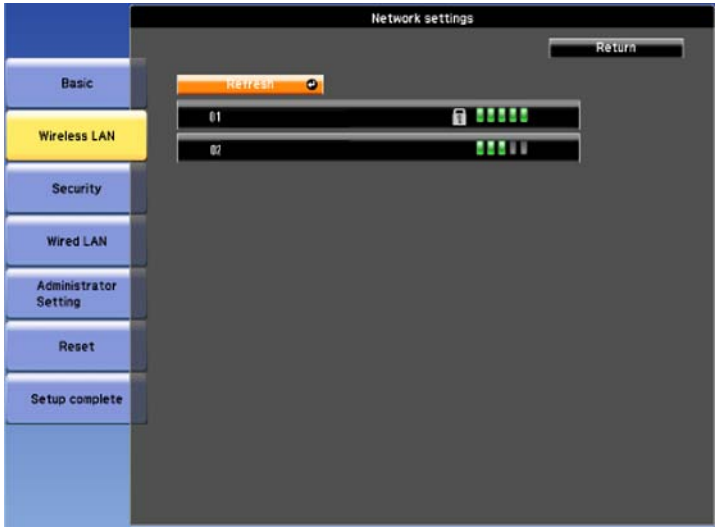



4. Select **Network Configuration** and press **Enter**.
5. Select the **Wireless LAN** menu and press **Enter**.




6. Select **Advanced** as the Connection mode and press **Enter**.

7. Select **To Search View** and press **Enter**.




8. Select the name of the wireless network you want to connect to and press **Enter**.



9. Select a **WPA** or **EAP** setting from the drop-down menu.
10. Select the settings on the security menu as necessary for your network.
11. When you finish selecting settings, select **Setup complete** and follow the on-screen instructions to save your settings and exit the menus.

**Parent topic:** Wireless Network Projection

## Selecting Wireless Network Settings in Windows

Before connecting to the projector, select the correct wireless network on your computer.

1. To access your wireless utility software, double-click the network icon on the Windows taskbar.
2. Do one of the following:
   - If your projector is set up on an existing network (Advanced mode), select the network name (SSID).
   - If your projector is configured for Quick mode, select the projector's SSID.
3. Click **Connect**.

**Parent topic:** Wireless Network Projection

## Selecting Wireless Network Settings in OS X

Before connecting to the projector, select the correct wireless network in OS X.

1. Click the AirPort icon on the menu bar at the top of the screen.
2. Make sure AirPort is turned on, then do one of the following:
   - If your projector is set up on an existing network (Advanced mode), select the network name (SSID).
   - If your projector is configured for Quick mode, select the projector's SSID.

**Parent topic:** Wireless Network Projection

## Enabling WPA or EAP Security

Set up the WPA or EAP security settings to match your network's settings. Check with your network administrator for guidance on entering the correct information.

1. Select a **WPA** or **EAP** setting from the drop-down menu.




2. Select the settings on the security menu as necessary for your network.
3. When you finish selecting settings, select **Setup complete** and follow the on-screen instructions to save your settings and exit the menus.

Wireless Security Menu Settings

**Parent topic:** Wireless Network Projection

## Wireless Security Menu Settings

Settings on the Security menu let you select the type of security and security settings that match the network you are connecting the projector to.

| Setting | Options | Description |
|---|---|---|
| **Security** | **Open**<br>**WPA2-PSK(AES)**<br>**WPA/WPA2-EAP** | Selects the type of security used on the wireless network |
| **Passphrase** | Various passphrases from 8 to 32 characters | For WPA-2-PSK security, selects the pre-shared passphrase used on the network |

| Setting | Options | Description |
|---|---|---|
| **EAP Method** | **PEAP**<br>**PEAP-TLS**<br>**EAP-TLS**<br>**EAP-Fast**<br>**LEAP** | For WPA/WPA2-EAP security, selects the protocol for authentication |
| **User name** | Various user names up to 32 characters | For WPA/WPA2-EAP security, selects the user name; automatically detected when using the **PEAP-TLS** or **EAP-TLS** EAP methods |
| **Password** | Various passwords up to 32 characters | For WPA/WPA2-EAP security, selects the password for EAP authentication |
| **Client Certificate** | — | For WPA/WPA2-EAP security, displays the certificate's **Issued to**, **Issued by**, and **Validity period** if a client certificate has been set |
| **Verify Server Certificate** | **On**<br>**Off** | For WPA/WPA2-EAP security, selects whether to verify the server certificate when a CA certificate has been set |
| **CA certificate** | — | For WPA/WPA2-EAP security, displays the certificate's **Issued to**, **Issued by**, and **Validity period** if a CA certificate has been set |
| **Setting RADIUS Server Name** | **On**<br>**Off** | For WPA/WPA2-EAP security, selects whether to verify the authentication server name during certificate verification |
| **RADIUS Server Name** | Various server names up to 32 characters | For WPA/WPA2-EAP security, selects the server name to verify |

| Setting | Options | Description |
|---|---|---|
| **Verify Exp. date of Server Cert.** | **On**<br>**Off** | For WPA/WPA2-EAP security, selects whether to verify the server certificate's validity period during certificate verification |

**Parent topic:** Enabling WPA or EAP Security

# Registering a Digital Certificate on the Projector

Follow the instructions here if you need to install a digital certificate on the projector to provide security for your presentation files.

**Note:** You can register a digital certificate over a network or from a connected USB device. However, be sure to register just once from either a USB device or network, or the certificate may not install correctly.

Secure HTTP
Registering Digital Certificates from a USB Device
Registering Digital Certificates from a Web Browser

**Parent topic:** Using the Projector on a Network

## Secure HTTP

You can use the HTTPS protocol to increase security between the projector and a web browser communicating with it. To do this, you create a server certificate, install it on the projector, and turn on the **Secure HTTP** setting in the projector menus to verify the reliability of the web browser.

Even if you do not install a server certificate, the projector automatically creates a self-signed certificate and allows communication. However, because the self-signed certificate cannot verify reliability from a web browser, you see a warning about the server's reliability when you access the projector from a web browser. This warning does not prevent communication.

**Parent topic:** Registering a Digital Certificate on the Projector

## Registering Digital Certificates from a USB Device

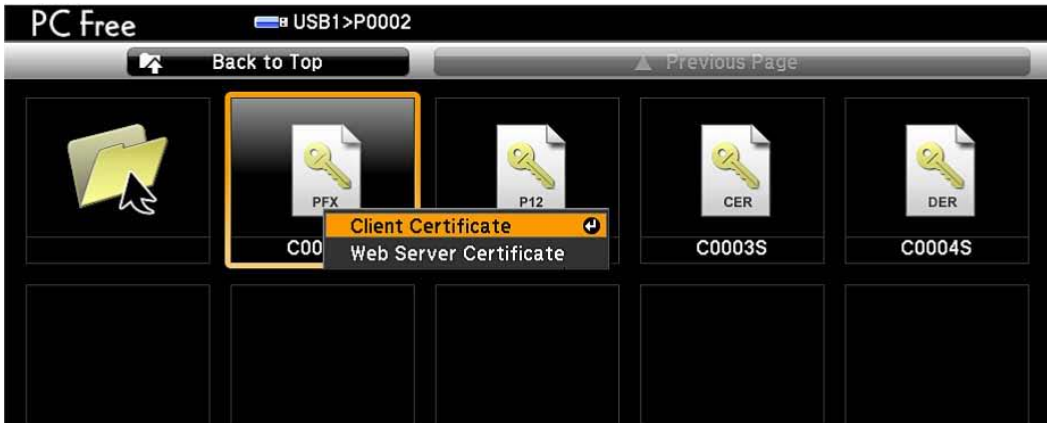
You can register the digital certificates for files on a USB device connected to the projector.

1. Make sure your digital certificate file is compatible with projector registration.
2. Connect the USB device to the projector.

3. Press the **USB** button on the projector remote control.

   The PC Free screen appears.

4. Do the following as necessary to locate your files:
   - To display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
   - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
   - To view additional files in a folder, highlight **Next page** or **Previous page** and press **Enter**.
5. Press the arrow buttons to select one of the following certificate files:
   - To register a Client Certificate or a Web Server Certificate, select the certificate file icon, press **Enter**, select **Client Certificate** or **Web Server Certificate** from the displayed menu, and press **Enter** again.




   - To register a CA Certificate, select the CA certificate file icon and press **Enter**.




The password screen is displayed (for Client or Web Server Certificates) or the certificate contents is displayed (for CA Certificates).

6. If you see the password screen, enter the certificate password using the keyboard that appears.

   The certificate contents is displayed.

7. Check the content of the certificate to make sure it is correct.
8. When you finish checking the certificate, press the arrow buttons to select **OK** and press **Enter**.

   You see a registration completion message.

Digital Certificate Types for Registration via USB

**Parent topic:** Registering a Digital Certificate on the Projector

### Digital Certificate Types for Registration via USB

You can register these types of digital certificates using the projector's PC Free feature with a connected USB device.

| Certificate type | File type (extension) |
|---|---|
| Client Certificate | .pfx |
| Web Server Certificate | .p12 |
| CA Certificate PDF | .cer |
| | .der |

**Parent topic:** Registering Digital Certificates from a USB Device

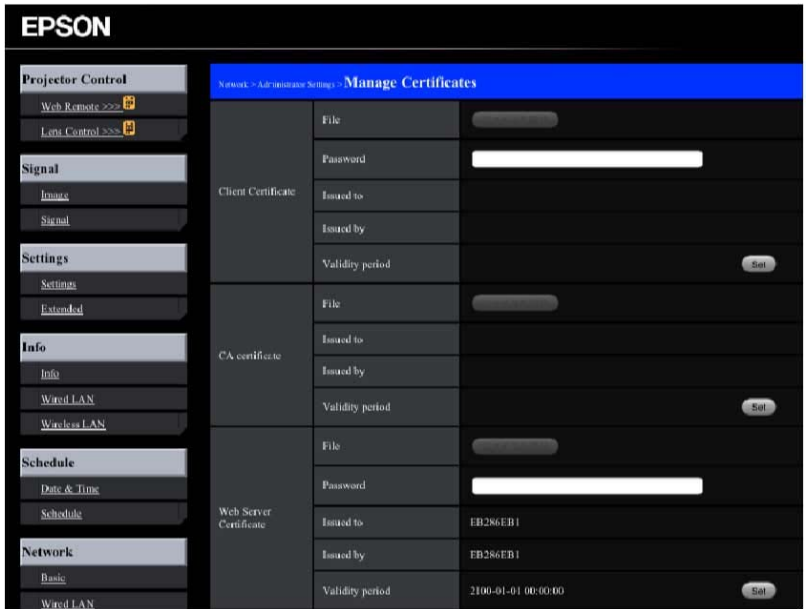
## Registering Digital Certificates from a Web Browser

You can register the digital certificates on the projector for wireless LAN authentication.

1. Make sure your digital certificate file is compatible with projector registration.
2. Make sure the projector is turned on.
3. Start your web browser on a computer connected to the network.
4. Type the projector's IP address into the browser's address box and press the computer's **Enter** key.

   You see the Web Control screen and a prompt to enter a user ID and password.
5. Enter the following information in uppercase or lowercase letters, exactly as shown:
   - For the user ID, enter **EPSONWEB**. (You cannot change the user ID.)
   - For the password, enter the default password **admin**. (You can change the Web Control password using the projector's Network menu.)
6. Under **Network**, select the **Administrator Settings** option and select **Manage Certificates**.

   You see a screen like this:



7. Click the **Browse** button, select the certificate file, and click **Open**.
8. Enter a password in the **Password** box.
9. Click **Set** to adjust the certificate validity period.
10. When you finish registering the certificate, click **Apply** to finalize your changes and complete the registration.

Digital Certificate Types for Registration via Web Control

**Parent topic:** Registering a Digital Certificate on the Projector

## Digital Certificate Types for Registration via Web Control

You can register these types of digital certificates using the projector's Web Control feature.

### Client Certificate (PEAP-TLS/EAP-TLS)

| Specification | Description |
|---|---|
| Format | PKCS#12 |
| Extension | PKCS, P12 |
| Encryption | RSA |
| Hashes | MD5/SHA-1/SHA-256/SHA-384/SHA-512 |
| Key length | 512/1024/2048/4096 bit |
| Password | Up to 32 alphanumeric characters; required |

### Server Certificate (PEAP/PEAP-TLS/EAP-TLS/EAP-Fast)

| Specification | Description |
|---|---|
| Format | X509v3 |
| Extension | DER/CER/PEM |
| Encryption | RSA |
| Hashes | MD5/SHA-1/SHA-256/SHA-384/SHA-512 |
| Key length | 512/1024/2048/4096 bit |
| Encoding | BASE64/Binary |

### Web Server Certificate (Secure HTTP)

| Specification | Description |
|---|---|
| Format | PKCS#12 |
| Extension | PKCS, P12 |
| Encryption | RSA |
| Hashes | MD5/SHA-1/SHA-256/SHA-384/SHA-512 |
| Key length | 512/1024/2048/4096 bit |
| Common name | Network host name |
| Organization | Optional |
| Password | Up to 32 alphanumeric characters; required |

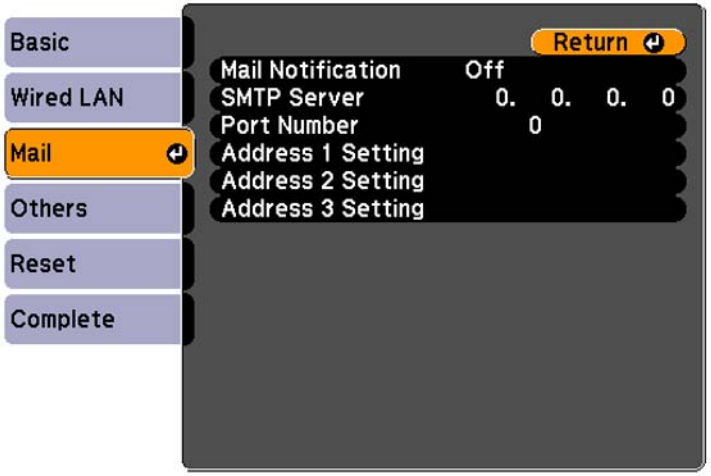
**Parent topic:** Registering Digital Certificates from a Web Browser

## Setting Up Projector Network E-Mail Alerts

You can set up the projector to send you an e-mail alert over the network if there is a problem with the projector.

1. Press the **Menu** button.
2. Select the **Network** menu and press **Enter**.
3. Select **Network Configuration** and press **Enter**.
4. Do one of the following:
   - Select the **Mail** menu and press **Enter**. Turn on **Mail Notification**.
   - Select the **Administrator Settings** menu and press **Enter**, then select **Mail Notification** and press **Enter**. Turn on **Mail Notification**.

   **PowerLite 1930/1940W/1950/1960**




**PowerLite 1945W/1955/1965**



5. Enter the IP address for the **SMTP Server** option.

   **Note:** Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255).

6. Select a number for the SMTP server **Port Number**, from 1 to 65535 (default is 25).
7. Choose an **Address** or **Email Address** field, enter the e-mail address, and select the alerts you want to receive there. Repeat for up to three addresses.

   **Note:** Your e-mail address can be up to 32 alphanumeric characters long.

8. When you finish selecting settings, select **Complete** or **Setup complete** and follow the on-screen instructions to save your settings and exit the menus.

**Note:** If a critical problem causes a projector to shut down, you may not receive an e-mail alert.

Network Projector E-mail Alert Messages

**Parent topic:** Using the Projector on a Network

## Network Projector E-mail Alert Messages

When a problem occurs with a networked projector, and you selected to receive e-mail alerts, you receive an e-mail containing the following information:

- **Epson Projector** on the subject line
- The name of the projector experiencing a problem
- The IP address of the affected projector
- Detailed information about the problem

**Note:** If a critical problem causes a projector to shut down, you may not receive an e-mail alert.

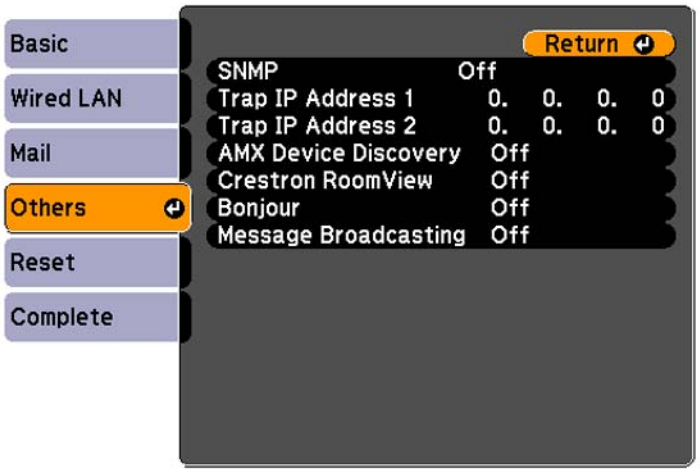
**Parent topic:** Setting Up Projector Network E-Mail Alerts

# Setting Up Monitoring Using SNMP

Network administrators can install SNMP (Simple Network Management Protocol) software on network computers so they can monitor projectors. If your network uses this software, you can set up the projector for SNMP monitoring.

1. Press the **Menu** button.
2. Select the **Network** menu and press **Enter**.
3. Select **Network Configuration** and press **Enter**.
4. Do one of the following:
   - PowerLite 1930/1940W/1950/1960: Select the **Others** menu and press **Enter**.
   - PowerLite 1945W/1955/1965: Select the **Administrator Setting** menu and press **Enter**, then select the **SNMP** menu and press **Enter**.

**PowerLite 1930/1940W/1950/1960**




**PowerLite 1945W/1955/1965**




5. Select the **SNMP** menu and press **Enter** (PowerLite 1945W/1955/1965).
6. Enter up to two IP addresses to receive SNMP notifications, using 0 to 255 for each address field.

   **Note:** Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255).

7. If your network environment uses an AMX controller, turn on the **AMX Device Discovery** setting to allow the projector to be detected (PowerLite 1930/1940W/1950/1960).
8. If your network environment uses a Crestron RoomView controller, turn on the **Crestron RoomView** setting to allow the projector to be detected (PowerLite 1930/1940W/1950/1960).
9. If you are connecting to a network using Bonjour, turn on the **Bonjour** setting (PowerLite 1930/1940W/1950/1960).
10. If you want this projector to receive broadcasted messages over the network, turn on the **Message Broadcasting** setting. Administrators can broadcast messages over the network using the Message Broadcasting plug-in for EasyMP Monitor (PowerLite 1940W/1950/1960) (Windows only).
11. When you finish selecting settings, select **Complete** or **Setup complete** and follow the on-screen instructions to save your settings and exit the menus.

**Parent topic:** Using the Projector on a Network

# Controlling a Networked Projector Using a Web Browser

Once you have connected your projector to your network, you can select projector settings and control projection using a compatible web browser. This lets you access the projector remotely.

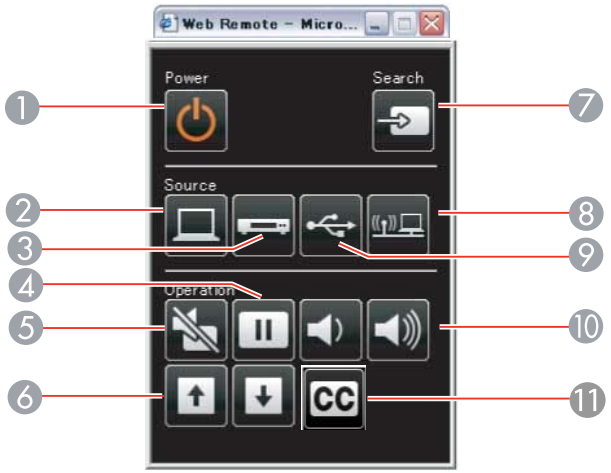
**Note:** The web setup and control features support Microsoft Internet Explorer 6.0 or later, and Safari on networks that do not use a proxy server for connection. You cannot select all of the projector menu settings or control all projector functions using a web browser.

**Note:** If you set Standby Mode to **Communication On**, you can use a web browser to select settings and control projection even if the projector is in standby mode.

1. Make sure the projector is turned on.
2. Start your web browser on a computer connected to the network.
3. Type the projector's IP address into the browser's address box and press the computer's **Enter** key.

   You see the Web Control screen.
4. To select projector menu settings, select the name of the menu and follow the on-screen instructions to select settings.
5. To control projection remotely, select the **Web Remote** option.

   You see a screen like this:



1 Power button control
2 Selects **Computer** port source
3 Selects **Video** and **HDMI** port sources
4 **Freeze** button control
5 **A/V Mute** button control
6 **Page Up** and **Page Down** button controls
7 Searches for sources
8 Selects the network source
9 Selects the USB Display or USB device source
10 **Volume** button controls
11 Closed Caption control

6. Select the icon corresponding to the projector function you want to control.

**Parent topic:** Using the Projector on a Network

# Crestron RoomView Support

If you are using the Crestron RoomView network monitoring and control system, you can set up your projector for use on the system. Crestron RoomView lets you control and monitor your projector using a web browser.

**Note:** You cannot use the Epson Web Control feature or the Message Broadcasting plug-in for EasyMP Monitor when you use Crestron RoomView.

For additional information on Crestron RoomView, contact Crestron.

Setting Up Crestron RoomView Support
Controlling a Networked Projector Using Crestron RoomView

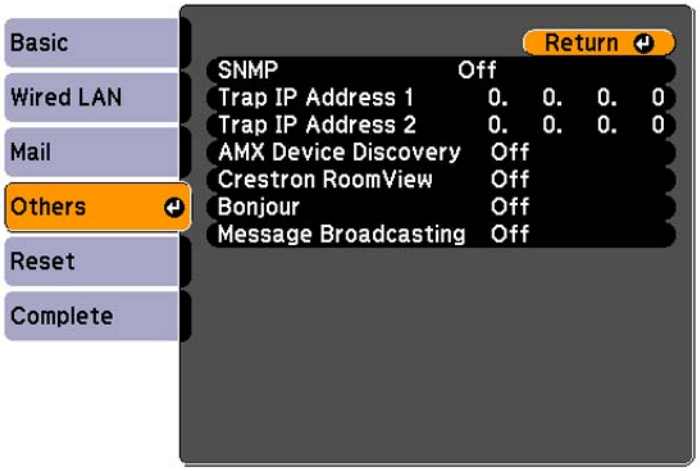
**Parent topic:** Using the Projector on a Network

## Setting Up Crestron RoomView Support

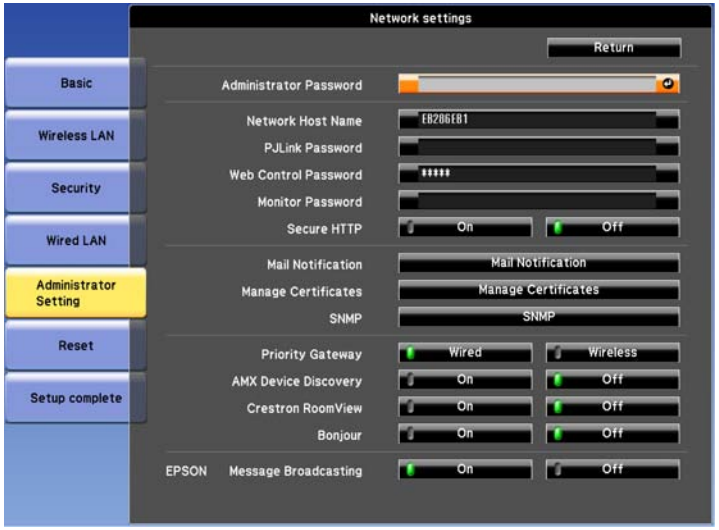
To set up your projector for monitoring and control using a Crestron RoomView system, make sure your computer and projector are connected to the network. If you are connecting wirelessly, set up the projector using the Advanced network connection mode (PowerLite 1945W/1955/1965).

1. Press the **Menu** button.
2. Select the **Network** menu and press **Enter**.
3. Select **Network Configuration** and press **Enter**.
4. Select the **Others** menu (PowerLite 1930/1940W/1950/1960) or the **Administrator Setting** menu (PowerLite 1945W/1955/1965) and press **Enter**.

**PowerLite 1930/1940W/1950/1960**




**PowerLite 1945W/1955/1965**




5. Set the **Crestron RoomView** setting to **On** to allow the projector to be detected.
6. When you finish selecting settings, select **Complete** or **Setup Complete** and follow the on-screen instructions to save your settings and exit the menus.
7. Turn off the projector, then turn it on again to enable the setting.

**Parent topic:** Crestron RoomView Support

## Controlling a Networked Projector Using Crestron RoomView

Once you have set up your projector to use Crestron RoomView, you can control and monitor projection using a compatible web browser.

1. Start your web browser on a computer connected to the network.
2. Type the projector's IP address into the browser's address box and press the computer's **Enter** key.

   You see this screen:




3. Select the input source that you want to control in the Sources List box. You can scroll through available sources using the up and down arrows in the box.
4. To control projection remotely, click the on-screen buttons that correspond to the projector's remote control buttons. You can scroll through button options at the bottom of the screen.

   **Note:** These on-screen buttons do not directly correspond to the projector's remote control buttons:

   - **OK** acts as the **Enter** button
   - **Menu** displays the projector's menu

5. To view information about the projector, click the **Info** tab.
6. To change projector, Crestron, and password settings, click the **Tools** tab, select settings on the displayed screen, and click **Send**.
7. When you finish selecting settings, click **Exit** to exit the program.

**Parent topic:** Crestron RoomView Support

# Using Basic Projector Features

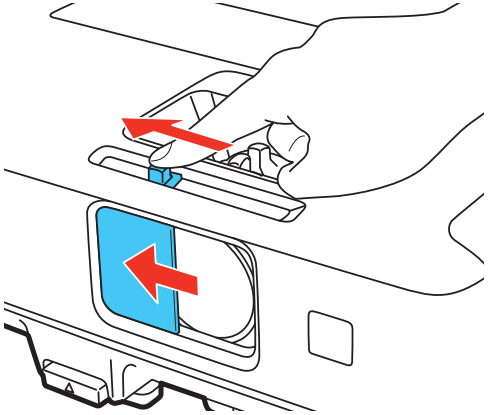
Follow the instructions in these sections to use your projector's basic features.


Turning On the Projector
Turning Off the Projector
Selecting the Language for the Projector Menus
Adjusting the Image Height
Image Shape
Resizing the Image With the Zoom Ring
Focusing the Image Using the Focus Ring
Remote Control Operation
Selecting an Image Source
Projection Modes
Image Aspect Ratio
Color Mode
Controlling the Volume with the Volume Buttons
Projecting a PC Free Presentation
Projecting a Slide Show

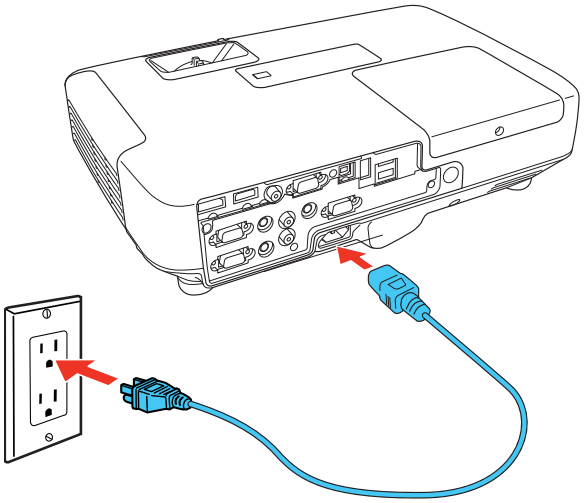

## Turning On the Projector

Turn on the computer or video equipment you want to use before you turn on the projector so it can display the image source.

1. Open the projector's lens cover.



2. Connect the power cord to the projector's power inlet.



3. Plug the power cord into an electrical outlet.

   The projector's power light turns orange. This indicates that the projector is receiving power, but is not yet turned on (it is in standby mode).

**Note:** With **Direct Power On** turned on, the projector turns on as soon as you plug it in.

4. Press the power button on the projector or the remote control to turn on the projector.

   The projector beeps and the power light flashes green as the projector warms up. Once the projector is warmed up, the power light stops flashing and turns green.

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

If you do not see a projected image right away, try the following:

- Verify the lens cover is open all the way.
- Turn on the connected computer or video device.
- Insert a DVD or other video media, and press the play button (if necessary).
- Press the **Source Search** button on the projector or remote control to detect the video source.

**Parent topic:** Using Basic Projector Features

**Related references**

Projector Setup Settings - Extended Menu

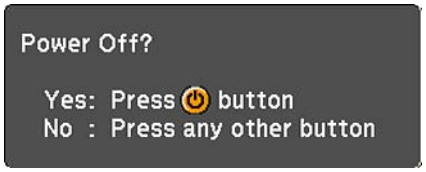
## Turning Off the Projector

Before turning off the projector, shut down any computer connected to it so you can see the computer display during shutdown.

**Note:** Turn off this product when not in use to prolong the life of the projector. Lamp life will vary depending upon mode selected, environmental conditions, and usage. Brightness decreases over time.

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

   The projector displays a shutdown confirmation screen.

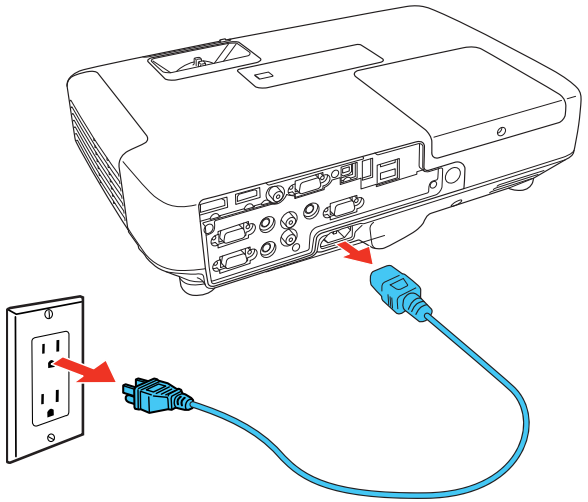


2. Press the power button again. (To leave it on, press any other button.)

   The projector beeps twice, the lamp turns off, and the power light turns orange.

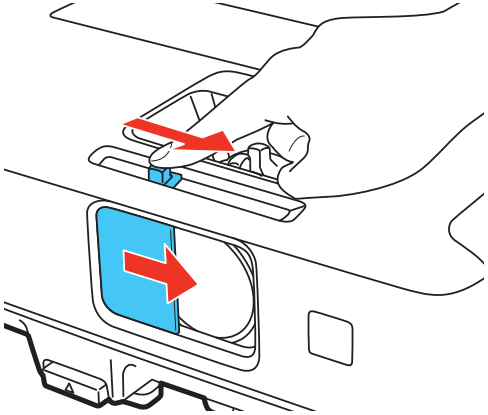
   **Note:** With Epson's Instant Off technology, there is no cool-down period so you can pack up the projector for transport right away (if necessary).

3. To transport or store the projector, make sure the power light is orange (but not flashing), then unplug the power cord.



   **Caution:** To avoid damaging the projector or lamp, never unplug the power cord when the power light is green or flashing orange.

4. Close the projector's lens cover.



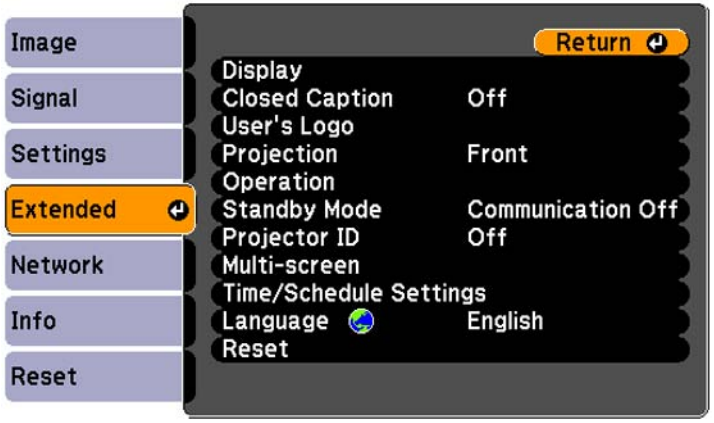
**Parent topic:** Using Basic Projector Features

## Selecting the Language for the Projector Menus

If you want to view the projector's menus and messages in another language, you can change the Language setting.

1. Turn on the projector.
2. Press the **Menu** button.

3. Select the **Extended** menu and press **Enter**.



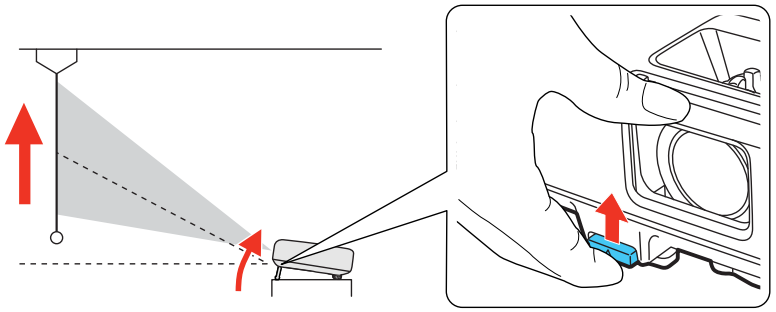

4. Select the **Language** setting and press **Enter**.
5. Select the language you want to use and press **Enter**.
6. Press **Menu** or **Esc** to exit the menus.

**Parent topic:** Using Basic Projector Features

## Adjusting the Image Height

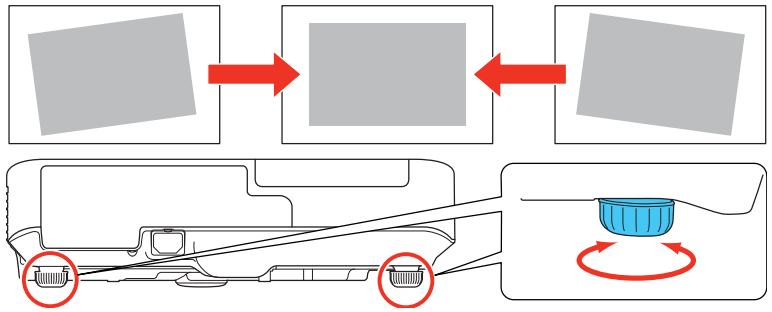
If you are projecting from a table or other flat surface, and the image is too high or low, you can adjust the image height using the projector's adjustable feet.

1. Turn on the projector and display an image.
2. To adjust the front foot, pull up on the foot release lever and lift the front of the projector.



The foot extends from the projector.

3. Release the lever to lock the foot.
4. If the image is tilted, rotate the rear feet to adjust their height.



If the projected image is unevenly rectangular, you need to adjust the image shape.

**Parent topic:** Using Basic Projector Features

**Related concepts**

Image Shape

**Related references**

Projector Feature Settings - Settings Menu

# Image Shape

You can project an evenly rectangular image by placing the projector directly in front of the center of the screen and keeping it level. If you place the projector at an angle to the screen, or tilted up or down, or off to the side, you may need to correct the image shape for the best display quality.

When you turn on automatic keystone correction in your projector's Settings menu, your projector automatically corrects keystone effects when you reposition the projector. (The PowerLite 1930/1940W/1950/1960 automatically correct vertical keystoning and the PowerLite 1945W/1955/1965 automatically correct horizontal and vertical keystoning.)

Automatically Correcting Image Shape With Screen Fit

Correcting Image Shape with the Horizontal Keystone Slider

Correcting Image Shape with the Keystone Buttons

Correcting Image Shape with Quick Corner

**Parent topic:** Using Basic Projector Features

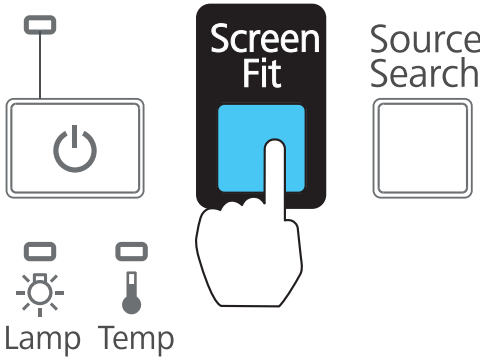
## Automatically Correcting Image Shape With Screen Fit

You can use the projector's Screen Fit feature to automatically correct the shape and position of images to fit on your screen (PowerLite 1945W/1955/1965).

The projector's sensor can detect the screen size and shape in these conditions:

- Projector is not mounted on the ceiling
- Screen size is 100 inches (254 cm) or less
- Projection distance is about 3 feet (1 m) to 11.5 feet (3.5 m)
- Projection angle is about 20º right or left, or 30º up or down
- The room is not too dark
- The projection surface is not patterned and does not deflect the sensor in some way

1. Press the **Screen Fit** button on the projector or remote control.




   You see a message on the screen.
2. Move the projector as necessary to display the message in the middle of the screen.
3. Zoom into the image until its yellow frame extends beyond the edges of the screen.
4. Press the **Screen Fit** button again.

   Two displays flash briefly, then this message appears:




5. Fine-tune the image shape as necessary using the arrow buttons on the control panel.
6. When you are finished, press **Esc**.

Now, if necessary, you can correct the image corners individually using Quick Corner by pressing the arrow buttons on the control panel.

**Parent topic:** Image Shape

**Related tasks**

Correcting Image Shape with Quick Corner

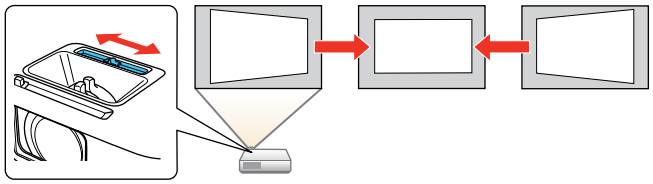
## Correcting Image Shape with the Horizontal Keystone Slider

You can use the projector's horizontal keystone slider (PowerLite 1930/1940W/1950/1960) to correct the shape of an image that is unevenly rectangular horizontally, such as when the projector is placed to the side of the projection area.

1. Turn on the projector and display an image.

   **Note:** You can display a pattern to aid in adjusting the projected image using the Settings menu.

2. Adjust the slider until the image is evenly rectangular.



   After correction, your image is slightly smaller.

**Parent topic:** Image Shape

**Related references**

Projector Feature Settings - Settings Menu

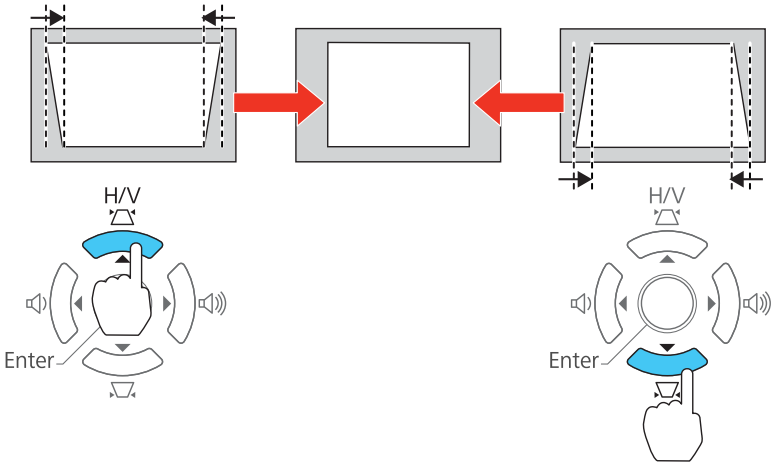
## Correcting Image Shape with the Keystone Buttons

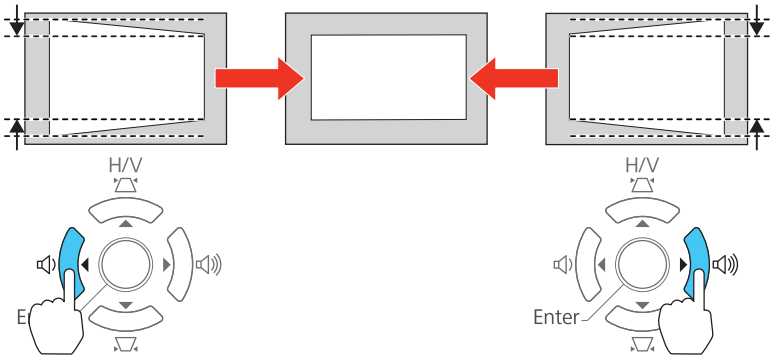
You can use the projector's keystone correction buttons to correct the shape of an image that is unevenly rectangular on the sides.

1. Turn on the projector and display an image.

   **Note:** You can display a pattern to aid in adjusting the projected image using the Settings menu.

2. Press one of these keystone buttons on the control panel to display the Keystone adjustment screen.
3. Press a keystone button on the projector's control panel to adjust the image shape.






After correction, your image is slightly smaller.

**Note:** If the projector is installed out of reach, you can also correct the image shape with the remote control using the Keystone settings in the projector menus.

**Parent topic:** Image Shape

**Related references**

Projector Feature Settings - Settings Menu

## Correcting Image Shape with Quick Corner

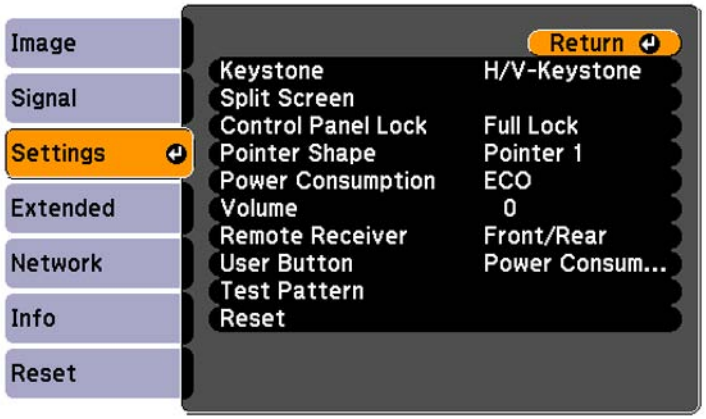
You can use the projector's Quick Corner setting to correct the shape and size of an image that is unevenly rectangular on all sides.

1. Turn on the projector and display an image.

   **Note:** You can display a pattern to aid in adjusting the projected image using the Settings menu.

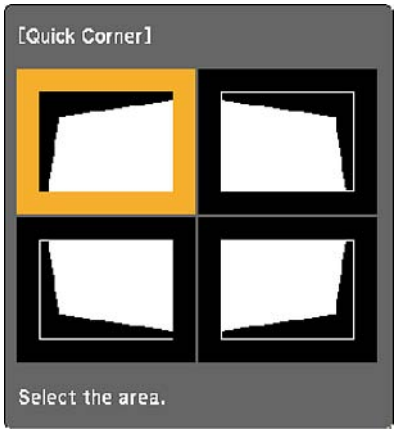
2. Press the **Menu** button.

3. Select the **Settings** menu and press **Enter**.




4. Select the **Keystone** setting and press **Enter**.
5. Select the **Quick Corner** setting and press **Enter**. Then press **Enter** again.

   You see the Quick Corner adjustment screen:




6. Use the arrow buttons on the projector or the remote control to select the corner of the image you want to adjust. Then press **Enter**.

7. Press the arrow buttons to adjust the image shape as necessary.
8. When you are finished, press **Esc**.

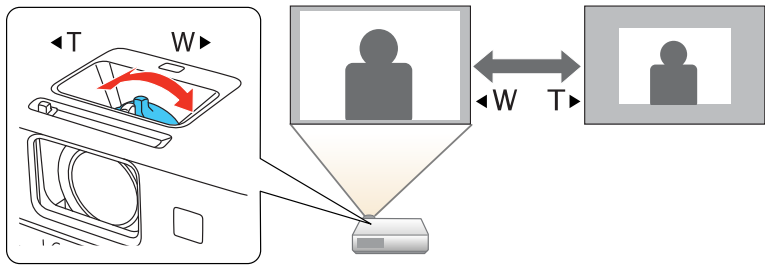
**Parent topic:** Image Shape

**Related references**

Projector Feature Settings - Settings Menu

## Resizing the Image With the Zoom Ring

1. Turn on the projector and display an image.
2. To enlarge or reduce the image size, rotate the projector's zoom ring.



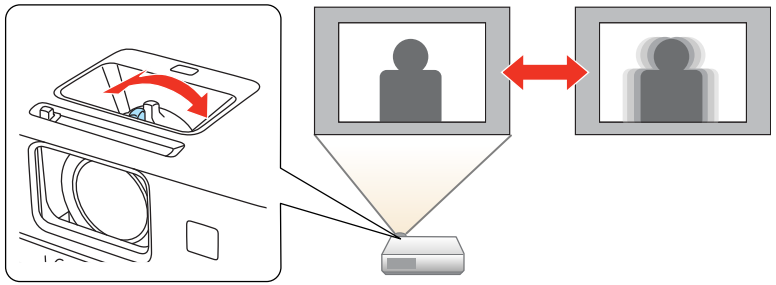

**Parent topic:** Using Basic Projector Features

## Focusing the Image Using the Focus Ring

1. Turn on the projector and display an image.

   **Note:** You can display a pattern to aid in adjusting the projected image using the Settings menu.

2. To sharpen the image focus, rotate the projector's focus ring.

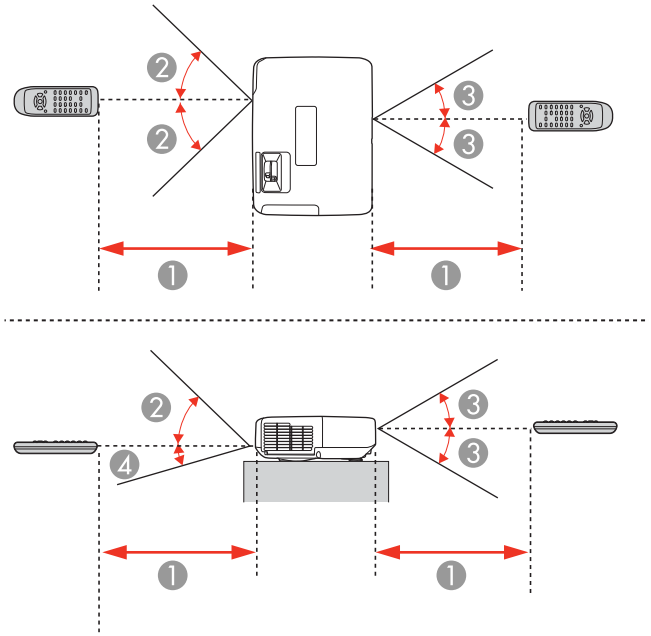


**Parent topic:** Using Basic Projector Features

# Remote Control Operation

The remote control lets you control the projector from almost anywhere in the room, up to 26 feet (8 m) away. You can point it at the screen, or the front or back of the projector.

Make sure that you aim the remote control at the projector's receivers within the angles listed here.



| | |
|---|---|
| 1 | 26 feet (8 m) |
| 2 | 45° |
| 3 | 30° |
| 4 | 15° |

**Note:** Avoid using the remote control in conditions with bright fluorescent lights or in direct sunlight, or the projector may not respond to commands. If you will not use the remote control for a long time, remove the batteries.

Using the Remote Control as a Wireless Mouse

Using the Remote Control as a Pointer

**Parent topic:** Using Basic Projector Features

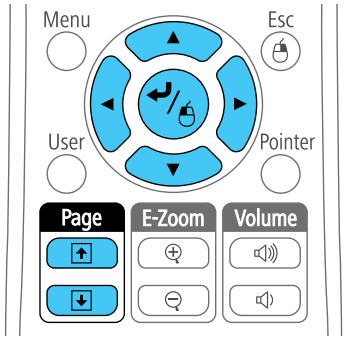
**Related tasks**

Replacing the Remote Control Batteries

## Using the Remote Control as a Wireless Mouse

You can use the projector's remote control as a wireless mouse so you can control projection at a distance from the computer.

1. Connect the projector to a computer using the projector's **USB-B**, **Computer**, **DisplayPort**, or **HDMI** port to display video.
2. If you connected your computer to the **Computer**, **DisplayPort,** or **HDMI** port, also connect a USB cable to the projector's **USB-B** port and to a USB port on your computer (for wireless mouse support).
3. Start your presentation.
4. Use the following buttons on the remote control to control your presentation:
   - To move through slides or pages, press the up or down **Page** buttons.




   - To move the cursor on the screen, use the arrow buttons.
   - To left-click, press the ↵ button once (press it twice to double-click).
   - To right-click, press the **Esc** button.
   - To drag-and-drop, hold the ↵ button as you move the cursor with the arrow buttons, then release ↵ at the destination.

**Parent topic:** Remote Control Operation

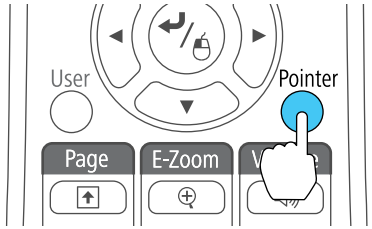
**Related references**

Projector Setup Settings - Extended Menu

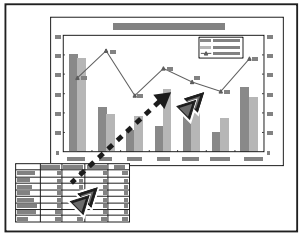
## Using the Remote Control as a Pointer

You can use the projector's remote control as a pointer to help you call out important information on the screen. The default pointer shape is an arrow, but you can select an alternative shape using the Settings menu.

1. Press the **Pointer** button on the remote control.




2. Use the arrow buttons on the remote control to move the pointer on the screen.



3. Press **Esc** to clear the pointer from the screen.

**Parent topic:** Remote Control Operation

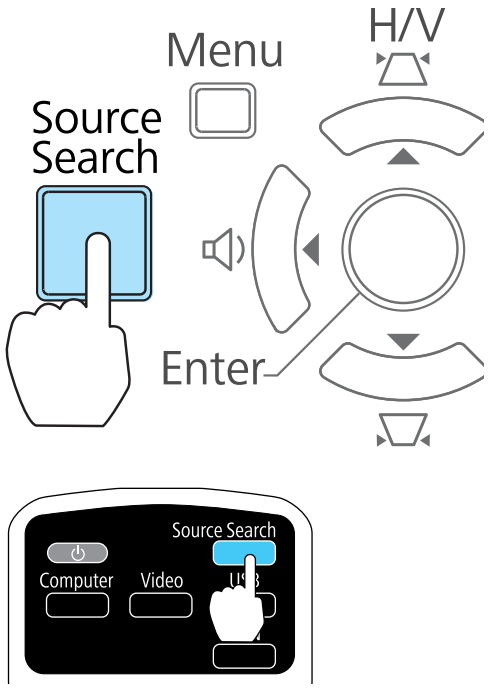
**Related references**

Projector Feature Settings - Settings Menu

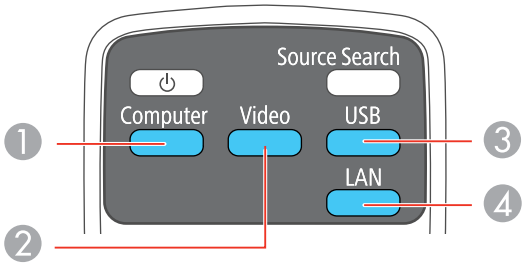
# Selecting an Image Source

If you connected multiple image sources to the projector, such as a computer and DVD player, you may want to switch from one image source to the other.

1. Make sure the connected image source you want to use is turned on.
2. For video image sources, insert a DVD or other video media and press its play button, if necessary.
3. Do one of the following:
   - Press the **Source Search** button on the projector or remote control until you see the image from the source you want.




   - Press the button for the source you want on the remote control. If there is more than one port for that source, press the button again to cycle through the sources.




1 Computer port sources
2 Video and HDMI sources
3 USB port sources (computer display and external devices)
4 Network source

**Parent topic:** Using Basic Projector Features

# Projection Modes

Depending on how you positioned the projector, you may need to change the projection mode so your images project correctly.

- **Front** (default setting) lets you project from a table in front of the screen.
- **Front/Ceiling** flips the image over top-to-bottom to project upside-down from a ceiling or wall mount.
- **Rear** flips the image horizontally to project from behind a translucent screen.
- **Rear/Ceiling** flips the image over top-to-bottom and horizontally to project from the ceiling and behind a translucent screen.

Changing the Projection Mode Using the Remote Control
Changing the Projection Mode Using the Menus

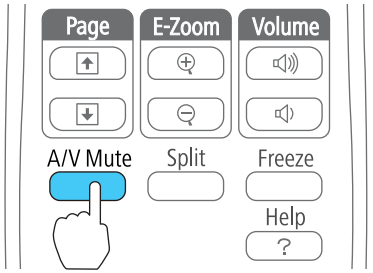
**Parent topic:** Using Basic Projector Features

## Changing the Projection Mode Using the Remote Control

You can change the projection mode to flip the image over top-to-bottom.

1. Turn on the projector and display an image.

2. Hold down the **A/V Mute** button on the remote control for five seconds.




The image disappears briefly and reappears flipped top-to-bottom.

3. To change projection back to the original mode, hold down the **A/V Mute** button for five seconds again.

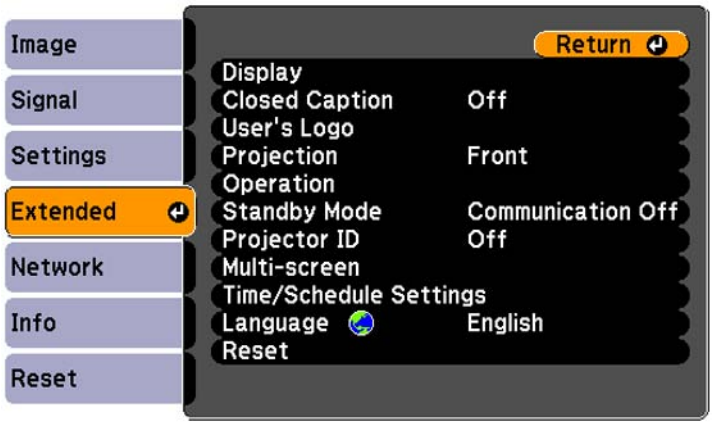
**Parent topic:** Projection Modes

## Changing the Projection Mode Using the Menus

You can change the projection mode to flip the image over top-to-bottom and/or left-to-right using the projector menus.

1. Turn on the projector and display an image.
2. Press the **Menu** button.

3. Select the **Extended** menu and press **Enter**.




4. Select the **Projection** setting and press **Enter**.
5. Select a projection mode and press **Enter**.
6. Press **Menu** or **Esc** to exit the menus.

**Parent topic:** Projection Modes

## Image Aspect Ratio

The projector can display images in different width-to-height ratios called aspect ratios. Normally the input signal from your video source determines the image's aspect ratio. However, for certain images you can change the aspect ratio to fit your screen by pressing a button on the remote control.

If you always want to use a particular aspect ratio for a certain video input source, you can select it using the projector's menus.

Changing the Image Aspect Ratio
Available Image Aspect Ratios

**Parent topic:** Using Basic Projector Features

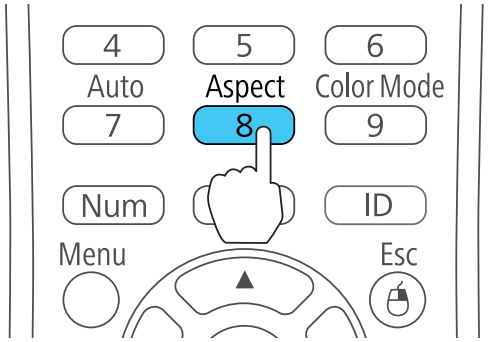
**Related references**

Input Signal Settings - Signal Menu

## Changing the Image Aspect Ratio

You can change the aspect ratio of the displayed image to resize it.

1. Turn on the projector and switch to the image source you want to use.
2. Press the **Aspect** button on the remote control.




The shape and size of the displayed image changes, and the name of the aspect ratio appears briefly on the screen.

3. To cycle through the available aspect ratios for your input signal, press the **Aspect** button repeatedly.

**Parent topic:** Image Aspect Ratio

## Available Image Aspect Ratios

You can select the following image aspect ratios, depending on the input signal from your image source.

**Note:** Black bands and cropped images may project in certain aspect ratios, depending on the aspect ratio and resolution of your input signal.

**PowerLite 1940W/1945W**

| Aspect ratio setting | Description |
|---|---|
| **Auto** | Automatically sets the aspect ratio according to the input signal and the **Resolution** setting. |

| Aspect ratio setting | Description |
|---|---|
| **Normal** | Displays images using the full projection area and maintains the aspect ratio of the image. |
| **16:9** | Converts the aspect ratio of the image to 16:9. |
| **Full** | Displays images using the full width of the projection area, but does not maintain the aspect ratio. |
| **Zoom** | Displays images using the full width of the projection area and maintains the aspect ratio of the image. |
| **Native** | Displays images as is (aspect ratio and resolution are maintained). |

**PowerLite 1930/1950/1955/1960/1965**

| Aspect ratio setting | Description |
|---|---|
| **Auto** | Automatically sets the aspect ratio according to the input signal and the **Resolution** setting. |
| **Normal** | Displays images using the full projection area and maintains the aspect ratio of the image. |
| **4:3** | Displays images using the full projection area at 4:3 aspect ratio. |
| **16:9** | Converts the aspect ratio of the image to 16:9. |

**Note:** The **Auto** aspect ratio setting is available only for HDMI image sources.

**Parent topic:** Image Aspect Ratio

# Color Mode

The projector offers different Color Modes to provide optimum brightness, contrast, and color for a variety of viewing environments and image types. You can select a mode designed to match your image and environment, or experiment with the available modes.

If you always want to use a particular color mode for a certain video input source, you can select it using the projector menus.

Changing the Color Mode
Available Color Modes
Turning On Auto Iris

**Parent topic:** Using Basic Projector Features

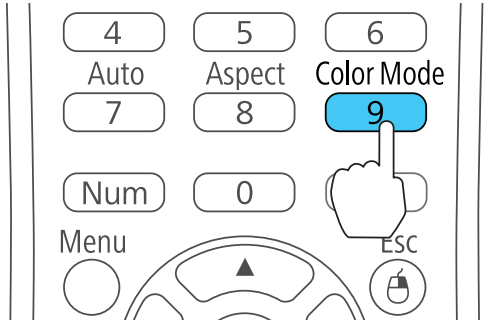
**Related references**

Image Quality Settings - Image Menu

## Changing the Color Mode

You can change the projector's Color Mode using the remote control to optimize the image for your viewing environment.

1. Turn on the projector and switch to the image source you want to use.
2. If you are projecting from a DVD player or other video source, insert a disc or other video media and press the play button, if necessary.
3. Press the **Color Mode** button on the remote control to change the Color Mode.




The image appearance changes and the name of the Color Mode appears briefly on the screen.

4. To cycle through all the available Color Modes for your input signal, press the **Color Mode** button repeatedly.

**Parent topic:** Color Mode

## Available Color Modes

You can set the projector to use these Color Modes, depending on the input source you are using:

| Color Mode | Description |
|---|---|
| **Presentation** | Best for color presentations in a bright room |
| **Dynamic** | Best for projecting in a bright room |

| Color Mode | Description |
|---|---|
| **Theatre** | Best for movies projected in a dark room |
| **Sports** | Best for television images in a bright room |
| **sRGB** | Best for standard sRGB computer displays |
| **Blackboard** | Best for presentations onto a green chalkboard (adjusts the colors accordingly) |
| **Whiteboard** | Best for presentations onto a whiteboard (adjusts the colors accordingly) |
| **Photo** | Best for still images projected in a bright room |
| **DICOM SIM** | Best for projecting X-ray photographs and other medical images |

**Note:** The **DICOM SIM** Color Mode is for reference purposes only and should not be used to make medical diagnoses.

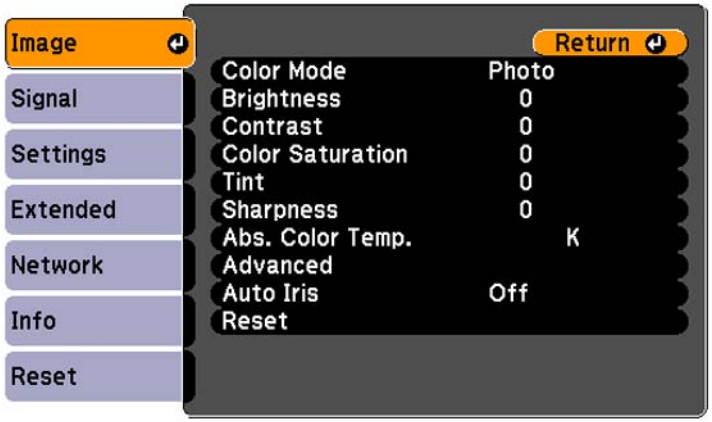
**Parent topic:** Color Mode

## Turning On Auto Iris

In certain color modes, you can turn on the Auto Iris setting to automatically optimize the image based on the brightness of the content you project.

1. Turn on the projector and switch to the image source you want to use.
2. Press the **Menu** button.

3. Select the **Image** menu and press **Enter**.




4. Select the **Auto Iris** setting and select **On**.

   **Note:** You can turn **Auto Iris** on or off for each Color Mode that supports the feature. You cannot change the **Auto Iris** setting when you are using a **Closed Caption** setting.

5. Press **Menu** or **Esc** to exit the menus.

**Parent topic:** Color Mode

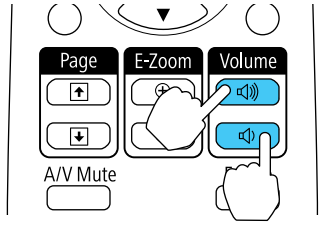
## Controlling the Volume with the Volume Buttons

The volume buttons control the projector's internal speaker system or any external speakers you connected to the projector.

You must adjust the volume separately for each connected input source.

1. Turn on the projector and start a presentation that includes audio.

2. To lower or raise the volume, press the **Volume** buttons on the remote control.




A volume gauge appears on the screen.

3. To set the volume to a specific level for an input source, use the projector menus.

**Parent topic:** Using Basic Projector Features

# Projecting a PC Free Presentation

You can use your projector's PC Free feature (PowerLite 1945W/1955/1965) whenever you connect a USB device that contains compatible presentation files. This lets you quickly and easily display a presentation and control it using the projector's remote control.

Supported PC Free File Types
Editing Scenarios (SIT Files)
Starting a PC Free PDF File Presentation
Starting a PC Free Movie Presentation

**Parent topic:** Using Basic Projector Features

**Related concepts**

USB Device Projection

**Related tasks**

Connecting a USB Device or Camera to the Projector

## Supported PC Free File Types

You can project these types of files using the projector's PC Free feature.

**Note:** For best results, place your files on media that is formatted in FAT16/32. If you have trouble projecting from media formatted for non-Windows file systems, try formatting the media for Windows

instead. You may not be able to use the security features on certain USB storage devices with PC Free features.

### Graphic and Text File Formats

| File contents | File type (extension) | Details |
|---|---|---|
| Image | .jpg | Make sure the file is not:<br>• CMYK format<br>• Progressive format<br>• Highly compressed<br>• Above 8192 × 8192 resolution<br>• Over 12MB in size<br>• Named with a .jpeg extension |
| | .bmp | Make sure the file resolution is not above 2048 × 2048 |
| | .gif | Make sure the file is not:<br>• Above 2048 × 2048 resolution<br>• Animated |
| | .png | Make sure the file resolution is not above 2048 × 2048 |
| Scenario | .fse | Main format for files converted from PowerPoint using EasyMP Slide Converter |
| | .sit | Compressed format for files converted from PowerPoint using EasyMP Slide Converter (also called scenario files) |
| PDF | .pdf | Make sure the file is not:<br>• Saved in PDF version 1.7 or earlier format<br>• Encrypted |

### Movie File Formats

| File type (extension) | Movie codec | Audio codec | Recording quality |
|---|---|---|---|
| .mpg | MPEG-2 | MPEG-1 Layer 1/2<br>You can play back audio from MPEG contents.<br>You cannot play back audio from Linear PCM and AC-3 content.<br>Make sure the file is not named with an .mpeg extension. | Maximum bit rate: 12 Mbps<br>Maximum resolution: 1280 × 720 |
| .mp4 | MPEG-4 ASP<br>MPEG-4 AVC | MPEG-4 AAC-LC | |
| .wmv | WMV9 | WMA | |
| .avi | Motion JPEG | Linear PCM<br>ADPCM | |

**Note:** For best results, do not use a USB storage device with a slow access speed or the movies may not play back correctly. You cannot project files to which DRM (Digital Rights Management) is applied.

**Parent topic:** Projecting a PC Free Presentation

## Editing Scenarios (SIT Files)

If you used the EasyMP Slide Converter software to convert your presentation to a scenario (SIT file) with the **Perform simplified conversion** command, you can edit your scenario. You can change the order of the slides, or choose to hide or show individual slides.

**Note:** Edits to SIT files apply only until you close the PC Free utility. You cannot edit FSE files.

1. Press the **USB** button on the projector remote control.

   The PC Free screen appears.

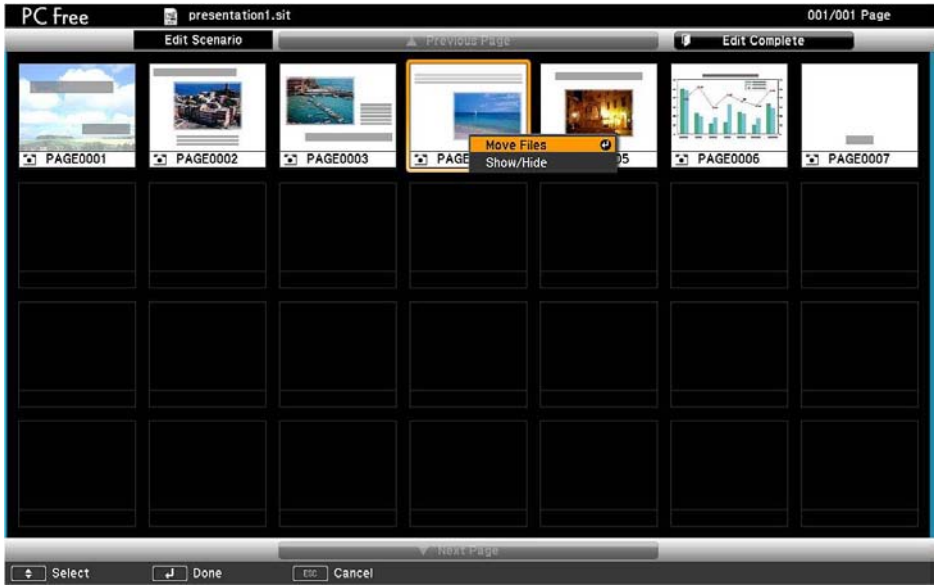
2. Do the following as necessary to locate your files:
   - If you need to display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
   - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
   - To view additional images in a folder, highlight **Next page** or **Previous page** and press **Enter**.
3. Press the arrow buttons to select the scenario file and press the **Esc** button.

   You see the scenario menu:




4. Press the arrow buttons to select **Edit Scenario** and press **Enter**.
5. Press the arrow buttons to select the slide you want to edit and press **Esc**.

   You see the editing options menu:




6. Select one of the following options to edit the slide:
   - To change the order of the slide in the scenario, select **Move Files**, move the cursor to the desired position, and press **Enter**.
   - To hide the slide or to show a hidden slide, select **Show/Hide**.
7. When you finish editing the scenario, press the arrow buttons to select **Edit Complete** and press **Enter**.

You can now play your edited scenario presentation until you remove the USB storage device.

**Parent topic:** Projecting a PC Free Presentation

**Related tasks**

Disconnecting a USB Device or Camera From the Projector

## Starting a PC Free PDF File Presentation

After connecting a USB device to the projector, you can switch to the USB input source and start your PDF file presentation.

**Note:** You cannot do the following while presenting a PDF file from a USB device:

- Release a password
- Display e-signatures, JPEG2000 images, transparent effects, 3D artwork, or comments
- Play multimedia content

1. Press the **USB** button on the projector remote control.

   The Slideshow screen appears.




2. Do the following as necessary to locate your files:
   - If you need to display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
   - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
   - To view additional files in a folder, highlight **Next page** or **Previous page** and press **Enter**.

3. To display the first page of a PDF file at full size, press the arrow buttons to highlight the file and press **Enter**. (Press the **Esc** button to return to the file list screen.)

   **Note:** If any file names are longer than 8 characters or include unsupported symbols, the file names may be shortened or changed only in the screen display. If a PDF file extension is not .pdf, the file does not appear in the file list.

4. While projecting a PDF file, use the following commands to control the display as necessary:
   - To move to the next or previous page, press the up or down arrow button.
   - To display a menu of pages to select from, press the **Esc** button. Then press the left or right arrow button to select a page and press **Enter**.
   - To enlarge the view of a page to fit the screen, press **Enter**. Press **Enter** again to return to standard size display.
   - To rotate a displayed page, press the left or right arrow button.
5. To stop the display, press the **Esc** button, press the up or down arrow button to highlight **EXIT**, and press **Enter**.

**Parent topic:** Projecting a PC Free Presentation

**Related tasks**

Disconnecting a USB Device or Camera From the Projector

## Starting a PC Free Movie Presentation

After connecting a USB device or digital camera to the projector, you can switch to the USB input source and start your movie.

**Note:** You can change the PC Free operation options by highlighting **Option** at the bottom of the screen and pressing **Enter**.

1. Press the **USB** button on the projector remote control.

   The PC Free screen appears.




2. Do the following as necessary to locate your files:
   - If you need to display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
   - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
   - To view additional files in a folder, highlight **Next page** or **Previous page** and press **Enter**.
3. To play back a movie, press the arrow buttons to highlight the file and press **Enter**.

   **Note:** If any file names are longer than 8 characters or include unsupported symbols, the file names may be shortened or changed only in the screen display. If you want to play back all the movies in a folder in sequence, select the **Slideshow** option at the bottom of the screen.

4. While playing back a movie, use the following commands to control the display as necessary:
   - To fast forward or rewind the movie, press of the left or right arrow button. To speed up the operation, press the button again.
   - To jump forward or backward in the movie, press the up or down arrow, then press the left or right arrow to jump. (Pressing the up or down arrow again increases the amount of jump.)

- To move to the next or previous movie, press the up or down arrow 4 times, then press the left or right button.

5. To stop movie playback, press the **Esc** button, highlight **Exit**, and press **Enter**.

**Parent topic:** Projecting a PC Free Presentation

**Related tasks**

Disconnecting a USB Device or Camera From the Projector

# Projecting a Slide Show

You can use your projector's Slideshow feature whenever you connect a USB device that contains compatible image files. This lets you quickly and easily display a slide show, and control it using the projector's remote control.

Supported Slideshow File Types

Starting a Slide Show

**Parent topic:** Using Basic Projector Features

**Related concepts**

USB Device Projection

**Related tasks**

Connecting a USB Device or Camera to the Projector

## Supported Slideshow File Types

You can project these types of files using the projector's Slideshow feature.

**Note:** For best results, place your files on media that is formatted in FAT16/32.

| File contents | File type (extension) | Details |
|---|---|---|
| Image | .jpg | Make sure the file is not:<br>• CMYK format<br>• Progressive format<br>• Highly compressed<br>• Above 8192 × 8192 resolution |
| | .bmp | Make sure the file resolution is not above 1280 × 800 |
| | .gif | Make sure the file is not:<br>• Above 1280 × 800 resolution<br>• Animated |
| | .png | Make sure the file resolution is not above 1280 × 800 |
| PDF | .pdf | Make sure the file is not:<br>• Saved in PDF version 1.8 or later format<br>• Encrypted |
| Movie | .avi | Make sure the file is not:<br>• Saved with an audio codec other than PCM or ADPCM<br>• Above 1280 × 720 resolution |

**Parent topic:** Projecting a Slide Show

## Starting a Slide Show

After connecting a USB device to the projector, you can switch to the USB input source and start your slide show.

**Note:** You can change the Slideshow operation options or add special effects by highlighting **Option** at the bottom of the screen and pressing **Enter**.

1. Press the **USB** button on the projector remote control.

   The Slideshow screen appears.




2. Do the following as necessary to locate your files:
   - If you need to display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
   - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
   - To view additional images in a folder, highlight **Next page** or **Previous page** and press **Enter**.
3. Do one of the following to start your slide show:
   - To display an individual image, press the arrow buttons to highlight the image and press **Enter**. (Press the **Esc** button to return to the file list screen.)
   - To display a slide show of all the images in a folder, press the arrow buttons to highlight the **Slideshow** option at the bottom of the screen and press **Enter**.

   **Note:** If any file names are longer than 8 characters or include unsupported symbols, the file names may be shortened or changed only in the screen display.
4. While projecting, use the following commands to control the display as necessary:
   - To rotate a displayed image, press the up or down arrow button.
   - To move to the next or previous image, press the left or right arrow button.
5. To stop the display, follow the on-screen instructions or press the **Esc** button.

Slideshow Display Options

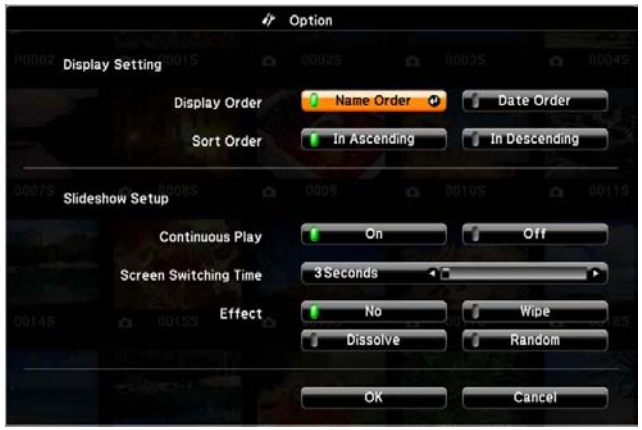
**Parent topic:** Projecting a Slide Show

**Related tasks**

Disconnecting a USB Device or Camera From the Projector

## Slideshow Display Options

You can select these display options when using the projector's Slideshow feature.




| Setting | Options | Description |
|---|---|---|
| **Display Order** | **Name Order** | Displays files in name order |
| | **Date Order** | Displays files in date order |
| **Sort Order** | **In Ascending** | Sorts files in first-to-last order |
| | **In Descending** | Sorts files in last-to-first order |
| **Continuous Play** | **On** | Displays a slide show continuously |
| | **Off** | Displays a slide show one time through |
| **Screen Switching Time** | **No** | Does not display the next file automatically |
| | 1 Second to 60 Seconds | Displays files for the selected time and switches to the next file automatically; high resolution images may switch at a slightly slower rate |

| Setting | Options | Description |
| --- | --- | --- |
| **Effect** | **Wipe** | Transitions between images with a wipe effect |
| | **Dissolve** | Transitions between images with a dissolve effect |
| | **Random** | Transitions between images using a random variety of effects |

**Parent topic:** Starting a Slide Show

# Adjusting Projector Features

Follow the instructions in these sections to use your projector's feature adjustments.

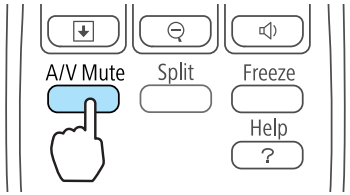
Shutting Off the Picture and Sound Temporarily
Stopping Video Action Temporarily
Zooming Into and Out of Images
Projector Security Features
Projector Identification System for Multiple Projector Control
Projecting Two Images Simultaneously

## Shutting Off the Picture and Sound Temporarily

You can temporarily turn off the projected picture and sound if you want to redirect your audience's attention during a presentation. Any sound or video action continues to run, however, so you cannot resume projection at the point that you stopped it.

If you want to display an image such as a company logo or picture when the presentation is stopped, you can set up this feature using the projector's menus.

1. Press the **A/V Mute** button on the remote control to temporarily stop projection and mute any sound.




2. To turn the picture and sound back on, press **A/V Mute** again.

**Note:** You can also stop projection using the **A/V Mute** slide lever on the projector.

**Parent topic:** Adjusting Projector Features

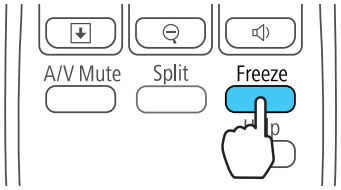
**Related references**

Projector Setup Settings - Extended Menu

# Stopping Video Action Temporarily

You can temporarily stop the action in a video or computer presentation and keep the current image on the screen. Any sound or video action continues to run, however, so you cannot resume projection at the point that you stopped it.

1. Press the **Freeze** button on the remote control to stop the video action.



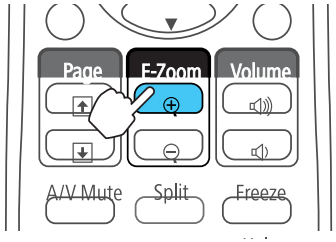

2. To restart the video action in progress, press **Freeze** again.

**Parent topic:** Adjusting Projector Features

# Zooming Into and Out of Images

You can draw attention to parts of a presentation by zooming into a portion of the image and enlarging it on the screen.

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




You see a crosshair on the screen indicating the center of the zoom area.

2. Use the following buttons on the remote control to adjust the zoomed image:
   - Use the arrow buttons to position the crosshair in the image area you want to zoom into.
   - Press the **E-Zoom +** button repeatedly to zoom into the image area, enlarging it as necessary.

- To pan around the zoomed image area, use the arrow buttons.
- To zoom out of the image, press the **E-Zoom –** button as necessary.
- To return to the original image size, press **Esc**.

**Parent topic:** Adjusting Projector Features

# Projector Security Features

You can secure your projector to deter theft or prevent unintended use by setting up the following security features:

- Password security to prevent the projector from being turned on, and prevent changes to the startup screen and other settings.
- Button lock security to block operation of the projector using the buttons on the control panel.
- Security cabling to physically cable the projector in place.

Password Security Types
Locking the Projector's Buttons
Installing a Security Cable

**Parent topic:** Adjusting Projector Features

## Password Security Types

You can set up these types of password security using one shared password:

- **Power On Protect** password prevents anyone from using the projector without first entering a password.
- **User's Logo Protect** password prevents anyone from changing the custom screen the projector can display when it turns on or when you use the A/V Mute feature. The presence of the custom screen discourages theft by identifying the projector’s owner.
- **Network Protect** password prevents anyone from changing the network settings in the projector menus.

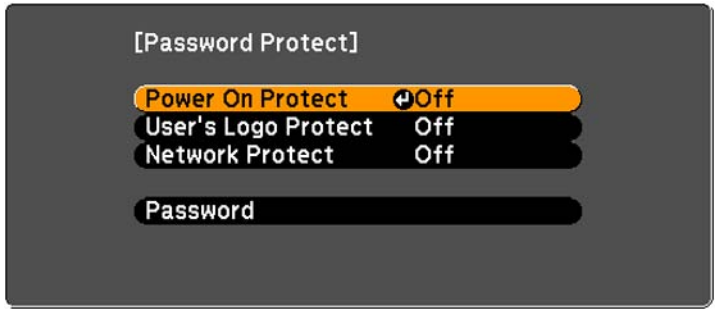
Setting a Password
Selecting Password Security Types
Entering a Password to Use the Projector
Saving a User's Logo Image to Display

**Parent topic:** Projector Security Features

### Setting a Password

To use password security, you must set a password.

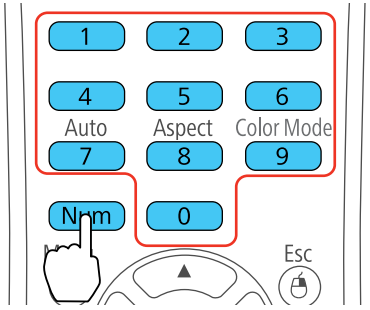
1. Hold down the **Freeze** button on the remote control for about five seconds until you see this menu.




2. Press the down arrow to select **Password** and press **Enter**.

   You see the prompt "Change the password?".

3. Select **Yes** and press **Enter**.
4. Hold down the **Num** button on the remote control and use the numeric buttons to set a four-digit password.




   The password displays as **** as you enter it. Then you see the confirmation prompt.

5. Enter the password again.

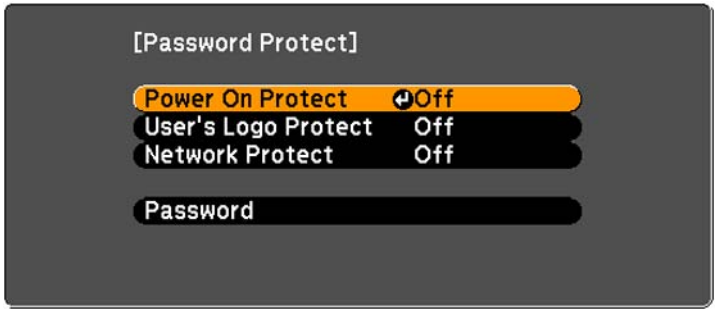
   You see the message "Password accepted."

6. Press **Esc** to return to the menu.
7. Make a note of the password and keep it in a safe place in case you forget it.

**Parent topic:** Password Security Types

### Selecting Password Security Types

After setting a password, you see this menu, allowing you to select the password security types you want to use.




If you do not see this menu, hold down the **Freeze** button on the remote control for five seconds until the menu appears.

1. To prevent unauthorized use of the projector, select **Power On Protect**, press **Enter**, select **On**, press **Enter** again, and press **Esc**.
2. To prevent changes to the User's Logo screen or related display settings, select **User's Logo Protect**, press **Enter**, select **On**, press **Enter** again, and press **Esc**.
3. To prevent changes to network settings, select **Network Protect**, press **Enter**, select **On**, press **Enter** again, and press **Esc**.

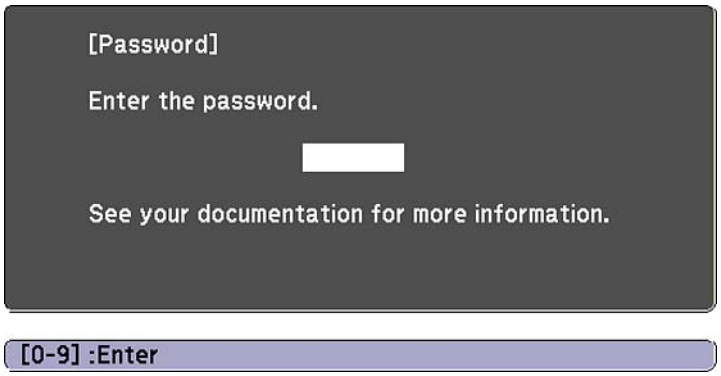
You can attach the Password Protect sticker to the projector as an additional theft deterrent.

**Note:** Be sure to keep the remote control in a safe place; if you lose it, you will not be able to enter the password required to use the projector.

**Parent topic:** Password Security Types

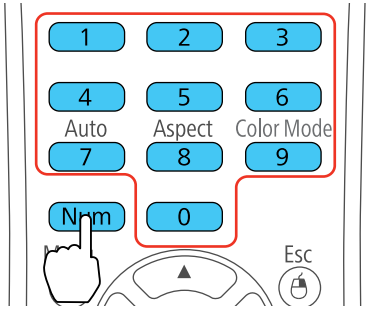
### Entering a Password to Use the Projector

If a password is set up and a **Power On Protect** password is enabled, you see a prompt to enter a password whenever you turn on the projector.




You must enter the correct password to use the projector.

1. Hold down the **Num** button on the remote control while you enter the password using the numeric buttons.




   The password screen closes.

2. If the password is incorrect, the following may happen:
   - You see a "wrong password" message and a prompt to try again. Enter the correct password to proceed.
   - If you enter an incorrect password several times in succession, the projector displays a request code and a message to contact Epson Support. When you contact Epson Support, provide the displayed request code and proof of ownership for assistance in unlocking the projector.

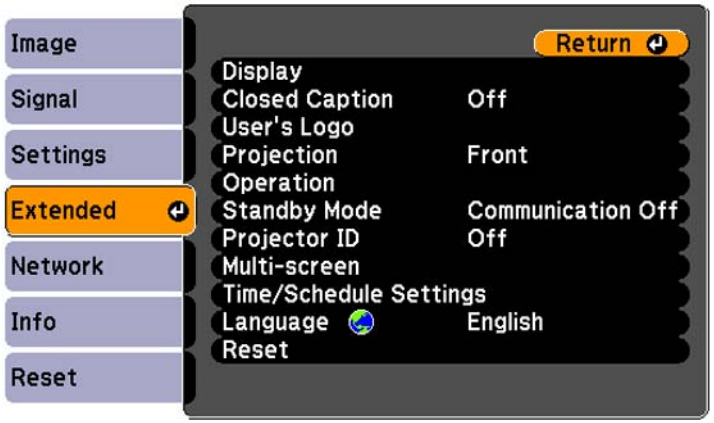
**Parent topic:** Password Security Types

### Saving a User's Logo Image to Display

You can transfer an image to the projector and then display it whenever the projector turns on. You can also display the image when the projector is not receiving an input signal or when you temporarily stop projection (using the A/V Mute feature). This transferred image is called the User's Logo screen.

The image you select as the User's Logo can be a photo, graphic, or company logo, which is useful in identifying the projector's owner to help deter theft. You can prevent changes to the User's Logo by setting up password protection for it.

1. Display the image you want to project as the User's Logo.
2. Press the **Menu** button, select the **Extended** menu, and press **Enter**.



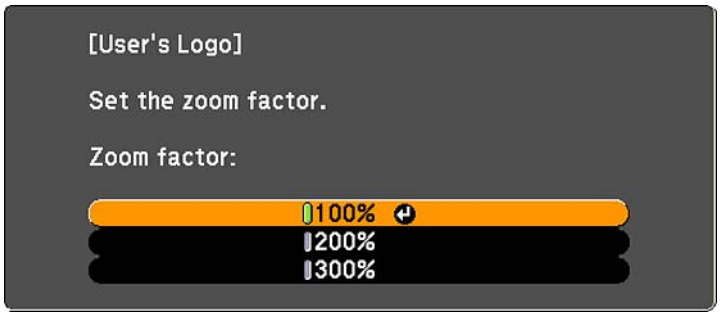

3. Select the **User's Logo** setting and press **Enter**.

   You see a prompt asking if you want to use the displayed image as a user's logo.
4. Select **Yes** and press **Enter**.

   You see a selection box overlaying your image.
5. Use the arrow buttons on the remote control to surround the image area you want to use as the User's Logo and press **Enter**.

   You see a prompt asking if you want to select this image area.
6. Select **Yes** and press **Enter**. (If you want to change the selected area, select **No**, press **Enter**, and repeat the last step.)

   You see the User's Logo zoom factor menu.




7. Select a zoom percentage and press **Enter**.

   You see a prompt asking if you want to save the image as the User's Logo.

8. Select **Yes** and press **Enter**.

   **Note:** It takes a few moments for the projector to save the image; do not use the projector, its remote control, or any connected equipment until it is finished.

   You see a completion message.

9. Press **Esc** to exit the message screen.
10. Select the **Extended** menu and press **Enter**.
11. Select **Display** and press **Enter**.
12. Select when you want to display the User's Logo screen:
    - To display it whenever there is no input signal, select **Display Background** and set it to **Logo**.
    - To display it whenever you turn the projector on, select **Startup Screen** and set it to **On**.
    - To display it whenever you press the **A/V Mute** button, select **A/V Mute** and set it to **Logo**.

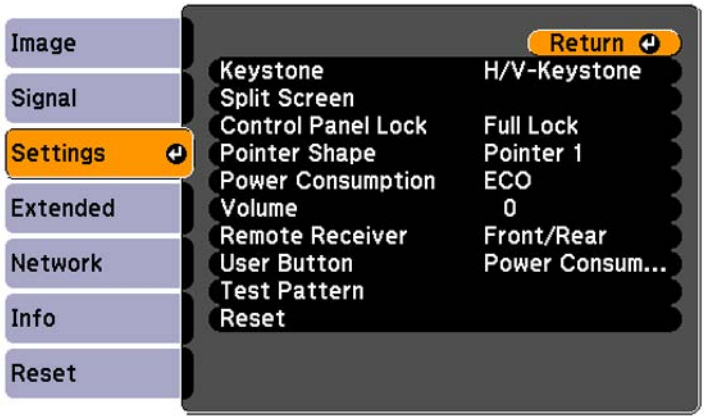
To prevent anyone from changing the User's Logo settings without first entering a password, set a password and enable User's Logo security.

**Parent topic:** Password Security Types

## Locking the Projector's Buttons

You can lock the buttons on the projector's control panel to prevent anyone from using the projector. You can lock all the buttons or all the buttons except the power button.

1. Press the **Menu** button.
2. Select the **Settings** menu and press **Enter**.




3. Select the **Control Panel Lock** setting and press **Enter**.
4. Select one of these lock types and press **Enter**:
   - To lock all of the projector's buttons, select **Full Lock**.
   - To lock all buttons except the power button, select **Partial Lock**.

   You see a confirmation prompt.
5. Select **Yes** and press **Enter**.

Unlocking the Projector's Buttons

**Parent topic:** Projector Security Features

### Unlocking the Projector's Buttons

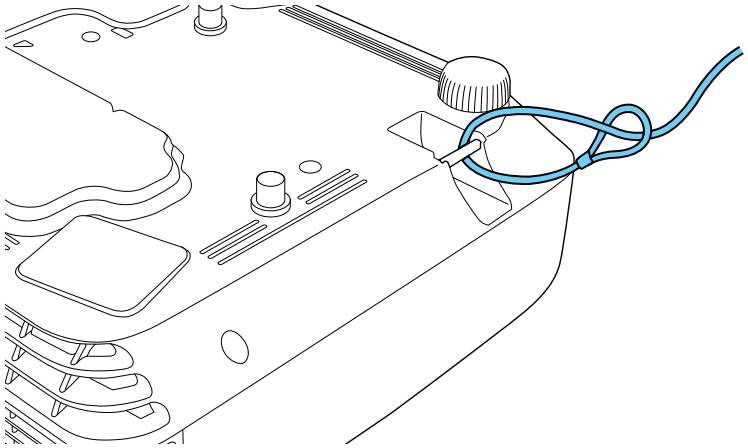
If the projector's buttons have been locked, hold the **Enter** button on the projector's control panel for seven seconds to unlock them.

**Parent topic:** Locking the Projector's Buttons

## Installing a Security Cable

You can install two types of security cables on the projector to deter theft.

- Use the security slot on the projector to attach a Kensington Microsaver Security system, available from Epson.
- Use the security cable attachment point on the projector to attach a wire cable and secure it to a room fixture or heavy furniture.



**Parent topic:** Projector Security Features

**Related references**

Projector Parts - Rear

# Projector Identification System for Multiple Projector Control

You can operate multiple projectors using one remote control for more elaborate presentations. To do this, you assign an identification number to each projector and to the remote control. Then you can operate all the projectors at once or individually.

You can also match the colors displayed by any projectors you plan to use near each other.

**Caution:** Leave at least 20 inches (50 cm) of space between the projectors to prevent them from overheating.

Setting the Projector ID

Setting the Remote Control ID

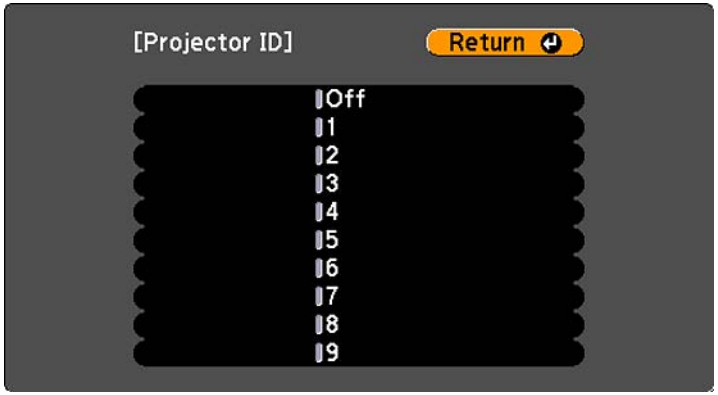
Matching Multiple-Projector Display Quality

**Parent topic:** Adjusting Projector Features

## Setting the Projector ID

If you want to control multiple projectors from a remote control, give each projector a unique ID.

1. Press the **Menu** button.
2. Select the **Extended** menu and press **Enter**.
3. Select **Projector ID** and press **Enter**.




4. Use the arrow buttons on the remote control to select the identification number you want to use for the projector. Then press **Enter**.

Repeat these steps for all the other projectors you want to operate from one remote control.

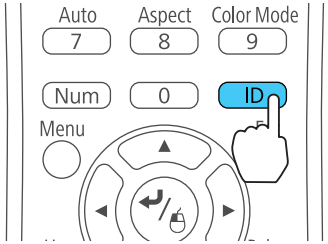
**Parent topic:** Projector Identification System for Multiple Projector Control

## Setting the Remote Control ID

The remote control's ID is set to zero by default so it can operate any compatible projector. If you want to set the remote control to operate only a particular projector, you need to set the remote control's ID to match the projector's ID.

1. Turn on the projector you want the remote control to operate with exclusively.
2. Make sure you know the projector's ID number as set in the Extended menu **Projector ID** setting.
3. Aim the remote control at that projector.

4. Hold down the **ID** button on the remote control while you press the numeric button that matches the projector's ID. Then release the buttons.




5. Press the **ID** button on the remote control to check if the ID-setting process worked.

   You see a message displayed by the projector.

   - If the remote control is listed as **On**, the remote control ID is set to operate only the listed projector.
   - If the remote control is listed as **Off**, the remote control ID is not set properly. Repeat the steps above to set the ID to match the projector you want to control.

   **Note:** You must set the remote control ID to match the projector ID each time you turn on the projector you have set it to control.

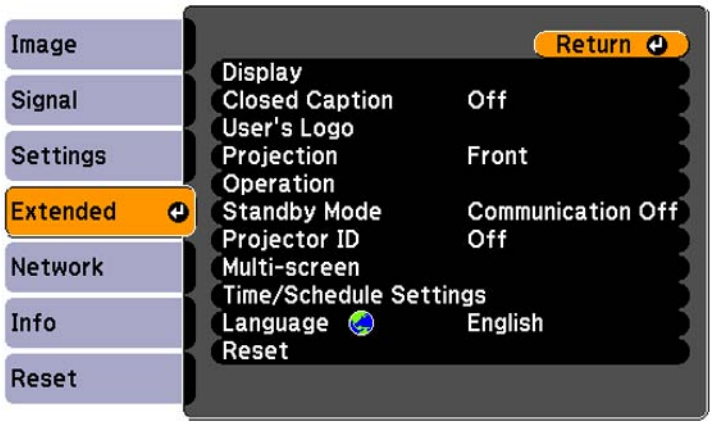
**Parent topic:** Projector Identification System for Multiple Projector Control

## Matching Multiple-Projector Display Quality

You can match the display quality of multiple projectors that will project next to each other.

1. Turn on all the projectors on which you want to match the display quality.
2. Set ID numbers on each projector.
3. Make sure all the projectors are using the same Color Mode setting.
4. It is best to match two projectors at a time, so set the remote control ID to match the first projector.

5. Press the **Menu** button, select the **Extended** menu, and press **Enter**.




6. Select the **Multi-screen** setting and press **Enter**.
7. Set the **Adjustment Level** setting to **1** and press **Enter**.
8. Set the remote control ID to match the second projector.
9. Access the Extended menu **Multi-screen** setting on the second projector and set the **Adjustment Level** setting to **1**.
10. Adjust the **Brightness Correct.** setting on the projector with the darkest display so it matches the lighter display, and press **Enter**. (You may need to switch the remote control ID back and forth to make adjustments to each projector in all of these steps.)
11. Change the **Adjustment Level** setting to **5** on each projector, but this time match the lighter display to the darker one.
12. Adjust the **Brightness Correct.** setting on **Adjustment Level 2**, **3** , and **4** in the same way.
13. Adjust the **Color Correct.** settings for green-to-red (**G/R**) and blue-to-yellow (**B/Y**) balance for all the levels on both projectors in the same way.
14. If you need to match more projectors, repeat these steps matching projector 3 to projector 2, 4 to 3, and so on.

**Parent topic:** Projector Identification System for Multiple Projector Control

**Related references**

Projector Setup Settings - Extended Menu

**Related tasks**

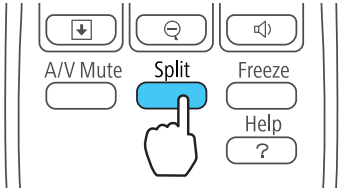
Changing the Color Mode

# Projecting Two Images Simultaneously

You can use the split screen feature to simultaneously project two images from different image sources next to each other. You can control the split screen feature using the remote control or the projector menus.

**Note:** While you use the split screen feature, other projector features may not be available and some settings may be automatically applied to both images.

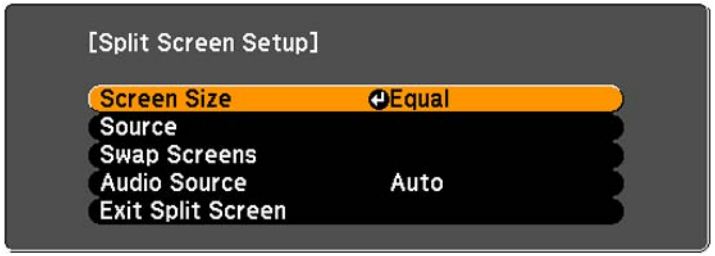
1. Press the **Split** button on the remote control.




The currently selected input source moves to the left side of the screen.

2. Press the **Menu** button.

You see this screen:




3. To select an input source for the other image, select the **Source** setting, press **Enter**, select the input source, select **Execute**, and press **Enter**. (You can also change image sources, if necessary.)

4. To switch the images, select the **Swap Screens** setting and press **Enter**.
5. To change the image sizes, select the **Screen Size** setting, press **Enter**, select a sizing option, press **Enter**, and press **Menu** to exit.

   **Note:** Depending on the video input signals, the images may not appear at the same size even if you choose the **Equal** setting.

6. To choose the audio you want to hear, select the **Audio Source** setting, press **Enter**, select an audio option, press **Enter**, and press **Menu** to exit.

   **Note:** Select **Auto** to hear audio from the largest screen or the left screen.

7. To exit the split screen feature, press the **Split** or **Esc** button.

**Parent topic:** Adjusting Projector Features

# Adjusting the Menu Settings

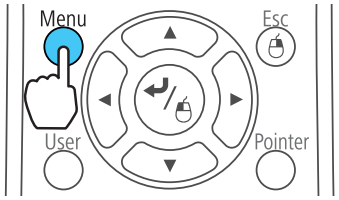
Follow the instructions in these sections to access the projector menu system and change projector settings.


Using the Projector's Menus
Image Quality Settings - Image Menu
Input Signal Settings - Signal Menu
Projector Feature Settings - Settings Menu
Projector Setup Settings - Extended Menu
Projector Network Settings - Network Menu
Projector Information Display - Info Menu
Projector Reset Options - Reset Menu

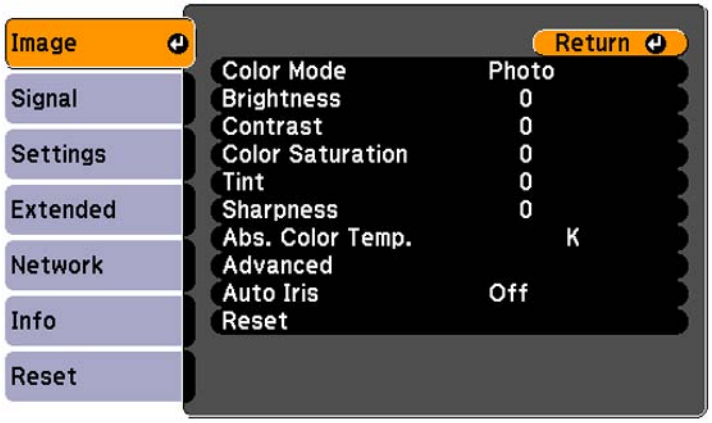

## Using the Projector's Menus

You can use the projector's menus to adjust the settings that control how your projector works. The projector displays the menus on the screen.

1. Press the **Menu** button on the control panel or remote control.




You see the menu screen displaying the Image menu settings.




2. Press the up or down arrow buttons to move through the menus listed on the left. The settings for each menu are displayed on the right.

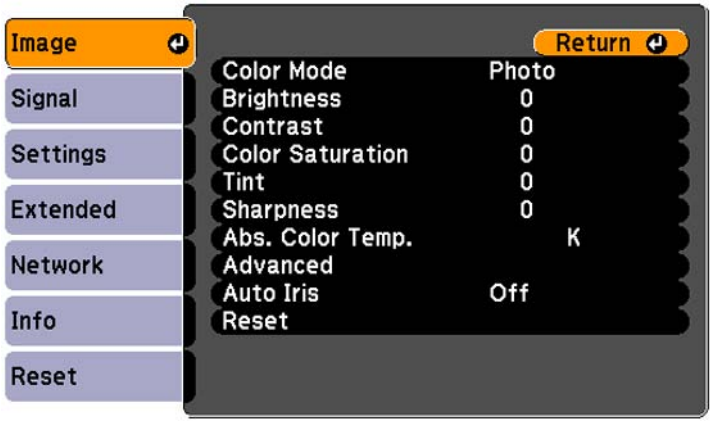
   **Note:** The available settings depend on the current input source.

3. To change settings in the displayed menu, press **Enter**.
4. Press the up or down arrow button to move through the settings.
5. Change the settings using the buttons listed on the bottom of the menu screens.
6. To return all the menu settings to their default values, select **Reset**.
7. When you finish changing settings on a menu, press **Esc**.
8. Press **Menu** or **Esc** to exit the menus.

**Parent topic:** Adjusting the Menu Settings

## Image Quality Settings - Image Menu

Settings on the Image menu let you adjust the quality of your image for the input source you are currently using. The available settings depend on the currently selected input source.




To change settings for an input source, make sure the source is connected and select that source.

| Setting | Options | Description |
|---|---|---|
| **Color Mode** | See the list of available Color Modes | Adjusts the vividness of image colors for various image types and environments |
| **Brightness** | Varying levels available | Lightens or darkens the overall image |
| **Contrast** | Varying levels available | Adjusts the difference between light and dark areas of the image |
| **Color Saturation** | Varying levels available | Adjusts the intensity of the image colors |
| **Tint** | Varying levels available | Adjusts the balance of green to magenta tones in the image |
| **Sharpness** | Varying levels available | Adjusts the sharpness or softness of image details |
| **Abs. Color Temp.** (absolute color temperature) | 5000 to 10000 ºK (Kelvin) | Sets the color tone based on color temperature |
| **Advanced** | Various options available | Adjusts the gamma levels and intensity of individual hues in the image |

| Setting | Options | Description |
|---|---|---|
| **Auto Iris** | **On**<br>**Off** | Adjusts the projected luminance based on the image brightness when certain Color Modes are selected |

**Note:** The **Brightness** setting does not affect lamp brightness. To change the lamp brightness mode, use the **Power Consumption** setting.

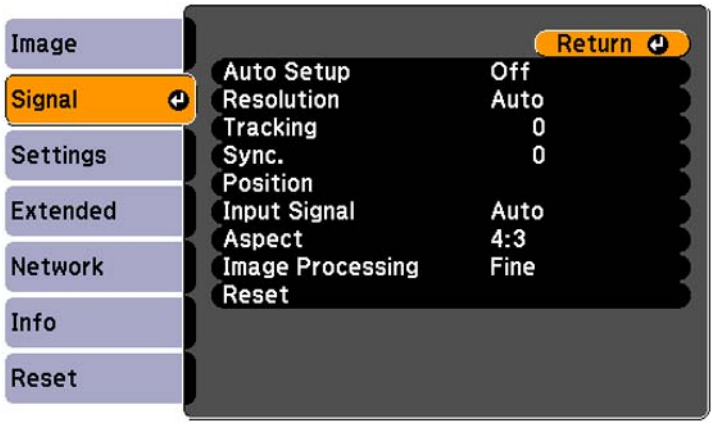
**Parent topic:** Adjusting the Menu Settings

**Related references**

Available Color Modes

## Input Signal Settings - Signal Menu

Normally the projector detects and optimizes the input signal settings automatically. If you need to customize the settings, you can use the Signal menu. The available settings depend on the currently selected input source.




**Note:** You can restore the default settings of the **Position**, **Tracking**, and **Sync** settings by pressing the **Auto** button on the remote control.

To change settings for an input source, make sure the source is connected and select that source.

| Setting | Options | Description |
| --- | --- | --- |
| **Auto Setup** | **On**<br>**Off** | Automatically optimizes computer image quality (when On) |
| **Resolution** | **Auto**<br>**Normal**<br>**Wide** | Sets the input signal resolution if not detected automatically using the **Auto** option |
| **Tracking** | Varying levels available | Adjusts signal to eliminate vertical stripes in computer images |
| **Sync.** | Varying levels available | Adjusts signal to eliminate fuzziness or flickering in computer images |
| **Position** | Up, down, left, right | Adjusts the image location on the screen |
| **Progressive** | **Off**<br>**Video**<br>**Film/Auto** | Sets whether to convert interlaced-to-progressive signals for certain video image types<br>**Off**: for fast-moving video images<br>**Video**: for most video images<br>**Film/Auto**: for movies, computer graphics, and animation |
| **Noise Reduction** | **Off**<br>**NR1**<br>**NR2** | Reduces flickering in analog images in two levels |

| Setting | Options | Description |
| --- | --- | --- |
| **HDMI Video Range** | **Normal**<br>**Expanded**<br>**Auto** | Sets the video range to match the setting of the device connected to the HDMI input port<br>**Auto**: detects the video range automatically<br>**Expanded**: normally for images from a computer; can also be selected if the image is too dark<br>**Normal**: normally for images from a device other than a computer; can also be selected if the black areas of the image are too bright |
| **DisplayPort Video Range** | **Normal**<br>**Expanded**<br>**Auto** | Sets the video range to match the setting of the device connected to the DisplayPort connector |
| **Input Signal** | **Auto**<br>**RGB**<br>**Component** | Specifies the signal type from input sources connected to computer ports<br>**Auto**: detects signals automatically<br>**RGB**: corrects color for computer/RGB video inputs<br>**Component**: corrects color for component video inputs |
| **Video Signal** | **Auto**<br>Various video standards | Specifies the signal type from the input sources connected to the video ports<br>**Auto**: detects signals automatically |
| **Aspect** | See the list of available aspect ratios | Sets the aspect ratio (width-to-height ratio) for the selected input source |

| Setting | Options | Description |
|---|---|---|
| **Overscan** | **Auto**<br>**Off**<br>**4%**<br>**8%** | Changes the projected image ratio to make the edges visible by a selectable percentage or automatically |

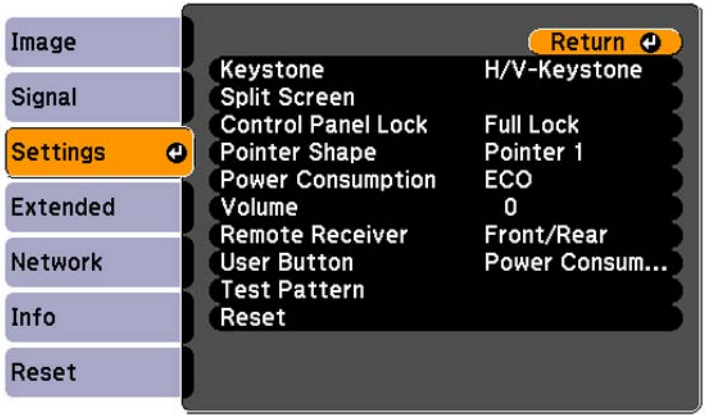
**Parent topic:** Adjusting the Menu Settings

**Related references**

Available Image Aspect Ratios

## Projector Feature Settings - Settings Menu

Options on the Settings menu let you customize various projector features.



| Setting | Options | Description |
|---|---|---|
| **Keystone** | **H/V Keystone**<br>**Quick Corner** | Adjusts image shape to rectangular horizontally and vertically<br>**H/V Keystone**: lets you manually correct horizontal and vertical sides, or turn automatic correction on or off<br>**Quick Corner**: select to correct image shape and alignment using an on-screen display |
| **Split Screen** | **Screen Size**<br>**Source**<br>**Swap Screens**<br>**Audio Source** | Divides the viewing area horizontally and displays two images side-by-side (press **Esc** to cancel split screen display) |
| **Control Panel Lock** | **Full Lock**<br>**Partial Lock**<br>**Off** | Controls projector button locking to secure the projector<br>**Full Lock**: locks all buttons<br>**Partial Lock**: locks all buttons except the power button<br>**Off**: no buttons locked |
| **Pointer Shape** | Three shapes available | Changes the shape of the remote control pointer feature |
| **Power Consumption** | **Normal**<br>**ECO** | Selects the brightness mode of the projector lamp<br>**Normal**: sets maximum lamp brightness<br>**ECO**: reduces lamp brightness and fan noise, and saves power and lamp life |
| **Volume** | Varying levels available | Adjusts the volume of projector's speaker system or external speakers |

| Setting | Options | Description |
|---|---|---|
| **Remote Receiver** | **Front**<br>**Rear**<br>**Front/Rear**<br>**Off** | Limits reception of remote control signals by the selected receiver; **Off** turns off all receivers |
| **User Button** | **Power Consumption**<br>**Info**<br>**Progressive**<br>**Closed Caption**<br>**Test Pattern**<br>**Resolution**<br>**Multi-screen** | Assigns a menu option to the **User** button on the remote control for one-touch access |
| **Test Pattern** | – | Displays a test pattern to assist in focusing and zooming the image and correcting image shape |

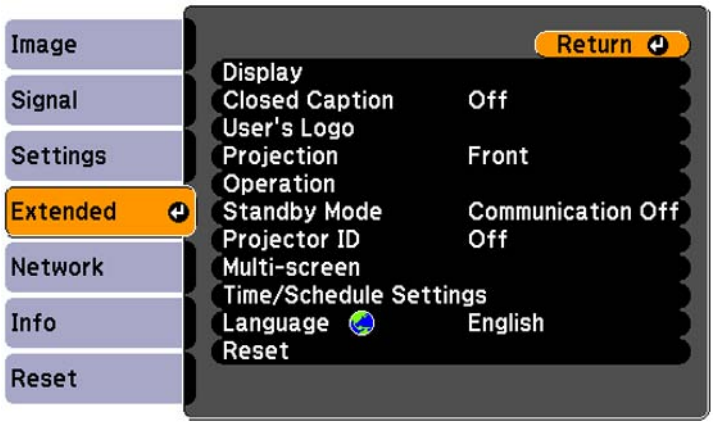
**Parent topic:** Adjusting the Menu Settings

**Related tasks**

Correcting Image Shape with Quick Corner

## Projector Setup Settings - Extended Menu

Settings on the Extended menu let you customize various projector setup features that control its operation.




| Setting | Options | Description |
|---|---|---|
| **Display** | **Messages**<br>**Display Background**<br>**Startup Screen**<br>**A/V Mute** | Selects various display options<br>**Messages**: controls whether messages are displayed on the screen<br>**Display Background**: selects the screen color or logo to display when no signal is received<br>**Startup Screen**: controls whether a special screen appears when the projector starts up<br>**A/V Mute**: selects the screen color or logo to display when A/V Mute is turned on |
| **Closed Caption** | **Off**<br>**CC1**<br>**CC2** | Controls use of closed captions and selects the closed caption type (closed captions are only visible for NTSC signals connected through the **S-Video** or **Video** ports) |

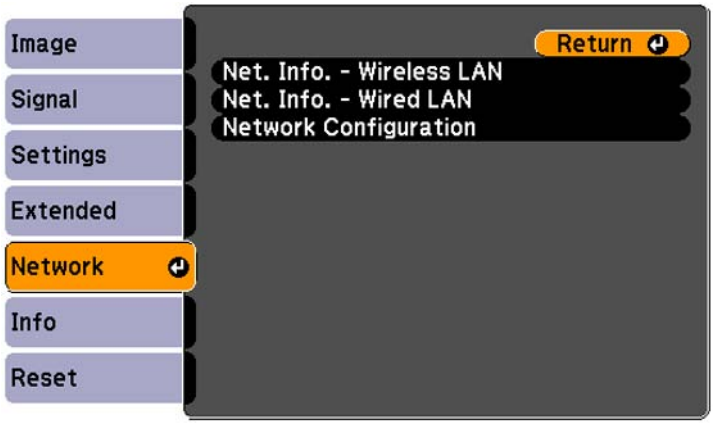
| Setting | Options | Description |
|---|---|---|
| **User's Logo** | – | Creates a screen that the projector displays to identify itself and enhance security |
| **Projection** | **Front**<br>**Front/Ceiling**<br>**Rear**<br>**Rear Ceiling** | Selects the way the projector faces the screen so the image is oriented correctly |
| **Operation** | **Direct Power On**<br>**Sleep Mode**<br>**Sleep Mode Timer**<br>**Lens Cover Timer**<br>**High Altitude Mode**<br>**Audio Input** | Selects various operation options<br>**Direct Power On**: lets you turn on the projector without pressing the power button<br>**Sleep Mode**: automatically places the projector in standby mode after an interval of inactivity<br>**Sleep Mode Timer**: sets the interval for Sleep Mode<br>**Lens Cover Timer**: automatically turns off the projector after 30 minutes if the lens cover is closed<br>**High Altitude Mode**: regulates the projector's operating temperature at altitudes above 4921 feet (1500 m)<br>**Audio Input**: specifies the audio input source if not detected automatically using the **Auto** option |
| **Standby Mode** | **Communication On**<br>**Communication Off** | Selects whether the projector can be monitored over a network or RS-232 serial connection when it is in standby mode (on) or not (off) |

| Setting | Options | Description |
|---|---|---|
| **Projector ID** | **Off**<br>**1** through **9** | Assigns an ID for the projector when you use multiple projectors |
| **Multi-screen** | **Adjustment Level** (**1** to **9**)<br>**Brightness Correct.**<br>**Color Correct.** | Matches display qualities and colors of multiple projectors |
| **Time/Schedule Settings** | Various scheduling options available | Sets the projector's date and time settings and schedules various tasks |
| **Language** | Various languages available | Selects the language for projector menu and message displays (not changed by **Reset** option) |

**Parent topic:** Adjusting the Menu Settings

# Projector Network Settings - Network Menu

Settings on the Network menu let you view network information and set up the projector for monitoring and control over a network.

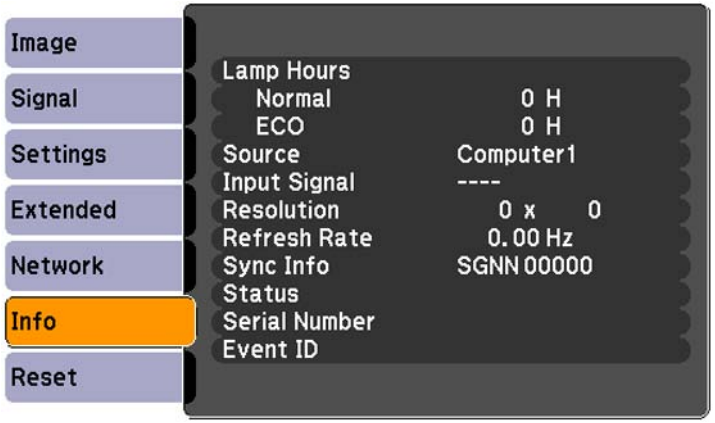


| Setting | Options | Description |
|---|---|---|
| **Net. Info - Wireless LAN**<br>(PowerLite 1945W/1955/1965) | **Connection mode**<br>**Antenna level**<br>**Projector Name**<br>**SSID**<br>**DHCP**<br>**IP Address**<br>**Subnet Mask**<br>**Gateway Address**<br>**MAC Address**<br>**Region Code** | Displays wireless network status and details |
| **Net. Info - Wired LAN** | **Projector Name**<br>**DHCP**<br>**IP Address**<br>**Subnet Mask**<br>**Gateway Address**<br>**MAC Address** | Displays wired network status and details |
| **Network Configuration** | Accesses additional network menus | Configures your network settings |

**Parent topic:** Adjusting the Menu Settings

## Projector Information Display - Info Menu

You can display information about the projector and input sources by viewing the Info menu. However, you cannot change any settings in the menu.




**Note:** Available settings depend on the current input source. The lamp usage timer does not register any hours until you have used the lamp for at least 10 hours.

| Information item | Description |
|---|---|
| **Lamp Hours** | Displays the number of hours (**H**) the lamp has been used in **Normal** and **ECO** Power Consumption modes; if the information is displayed in yellow, obtain a genuine Epson replacement lamp soon |
| **Source** | Displays the name of the port to which the current input source is connected |
| **Input Signal** | Displays the input signal setting of the current input source |
| **Resolution** | Displays the resolution of the current input source |
| **Video Signal** | Displays the video signal format of the current input source |
| **Refresh Rate** | Displays the refresh rate of the current input source |
| **Sync Info** | Displays information that may be needed by a service technician |
| **Status** | Displays information about projector problems that may be needed by a service technician |
| **Serial Number** | Displays the projector's serial number |
| **Event ID** | Displays the Event ID number corresponding to a specific projector problem; see the list of Event ID codes |

Event ID Code List

**Parent topic:** Adjusting the Menu Settings

**Related references**

Optional Equipment and Replacement Parts

Projector Lamp Specifications

## Event ID Code List

If the **Event ID** option on the Info menu displays a code number, check this list of Event ID codes for the solution to the projector problem associated with the code.

| Event ID code | Cause and solution |
|---|---|
| 0432 | The EasyMP Network Projection program did not start. Turn the projector off and then on again. |
| 0435 | |
| 0434 | Unstable network communication. Check the network communication status, wait a few moments, and try connecting to the network again. |
| 0481 | |
| 0482 | |
| 0485 | |
| 0433 | Cannot display the transferred images. Restart the EasyMP Network Projection program. |
| 0484 | Communication with computer was disconnected. Restart the EasyMP Network Projection program. |
| 0483 | The EasyMP Network Projection program quit unexpectedly. Check the network communication status, then turn the projector off and then on again. |
| 04FE | |
| 0479 | A projector system error has occurred. Turn the projector off and then on again. |
| 04FF | |
| 0891 | Cannot find an access point with the same SSID. Set your computer, access point, and projector to the same SSID. |
| 0892 | The WPA/WPA2 authentication type does not match. Make sure the wireless network security settings are correct. |
| 0893 | The WEP/TKIP/AES encryption type does not match. Make sure the wireless network security settings are correct. |

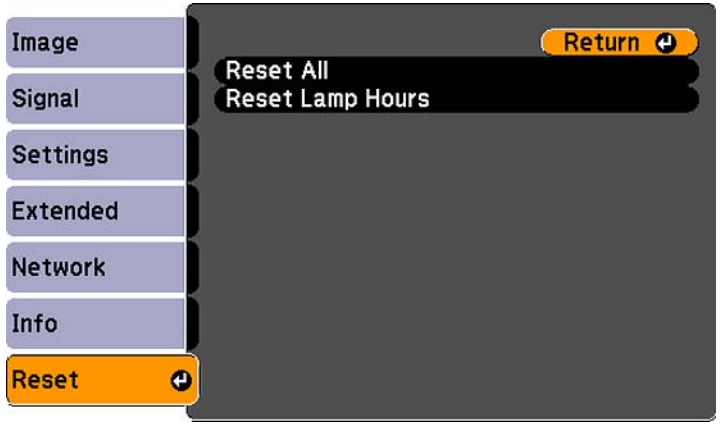
| Event ID code | Cause and solution |
|---|---|
| 0894 | Communication with unauthorized access point was disconnected. Contact your network administrator. |
| 0898 | Failed to acquire DHCP. Make sure the DHCP server is operating correctly. If you are not using DHCP, turn off the **DHCP** setting in the Network menus. |
| 089A | The projector's EAP authentication type does not match the network. Check the wireless LAN security settings and make sure that the security certificate is installed correctly. |
| 089B | EAP server authentication failed. Check the wireless LAN security settings and make sure that the security certificate is installed correctly. |
| 089C | EAP client authentication failed. Check the wireless LAN security settings and make sure that the security certificate is installed correctly. |

**Parent topic:** Projector Information Display - Info Menu

## Projector Reset Options - Reset Menu

You can reset most of the projector settings to their default values using the **Reset All** option on the Reset menu.

You can also reset the projector's lamp usage timer to zero when you replace the lamp using the **Reset Lamp Hours** option.



You cannot reset the following settings using the **Reset All** option:

- Input Signal
- User's Logo
- Language
- Network menu items
- Lamp Hours
- Password
- User Button

**Parent topic:** Adjusting the Menu Settings

# Maintaining and Transporting the Projector

Follow the instructions in these sections to maintain your projector and transport it from place to place.

Projector Maintenance
Transporting the Projector

## Projector Maintenance

Your projector needs little maintenance to keep working at its best.

You may need to clean the lens periodically, and clean the air filter and air vents to prevent the projector from overheating due to blocked ventilation.

The only parts you should replace are the lamp, air filter, and remote control batteries. If any other part needs replacing, contact Epson or an authorized Epson servicer.

**Warning:** Before cleaning any part of the projector, turn it off and unplug the power cord. Never open any cover on the projector, except as specifically explained in this manual. Dangerous electrical voltages in the projector can injure you severely.

**Warning:** Do not try to service this product yourself, except as specifically explained in this manual. Refer all other servicing to qualified servicers.

Cleaning the Lens
Cleaning the Projector Case
Air Filter and Vent Maintenance
Projector Lamp Maintenance
Replacing the Remote Control Batteries

**Parent topic:** Maintaining and Transporting the Projector

### Cleaning the Lens

Clean the projector's lens periodically, or whenever you notice dust or smudges on the surface.

- To remove dust or smudges, gently wipe the lens with lens-cleaning paper.

- To remove stubborn smudges, moisten a soft, lint-free cloth with lens cleaner and gently wipe the lens. Do not spray any liquid directly on the lens.

  **Warning:** Do not use a lens cleaner that contains flammable gas. The high heat generated by the projector lamp may cause a fire.

  **Caution:** Do not use glass cleaner or any harsh materials to clean the lens and do not subject the lens to any impacts; you may damage it. Do not use canned air, or the gases may leave a residue. Avoid touching the lens with your bare hands to prevent fingerprints on or damage to the lens surface.

**Parent topic:** Projector Maintenance

## Cleaning the Projector Case

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

- To remove dust or dirt, use a soft, dry, lint-free cloth.
- To remove stubborn dirt, use a soft cloth moistened with water and mild soap. Do not spray liquid directly on the projector.

  **Caution:** Do not use wax, alcohol, benzene, paint thinner, or other chemicals to clean the projector case. These can damage the case. Do not use canned air, or the gases may leave a flammable residue.

**Parent topic:** Projector Maintenance

## Air Filter and Vent Maintenance

Regular filter maintenance is important to maintaining your projector. Your Epson projector is designed with an easily accessible, user-replaceable filter to protect your projector and make regular maintenance simple. Filter maintenance intervals will depend on the environment.

If regular maintenance is not performed, your Epson projector will notify you when the temperature inside the projector has reached a high level. Do not wait until this warning appears to maintain your projector filter as prolonged exposure to high temperatures may reduce the life of your projector or lamp.

Damage due to the failure to properly maintain the projector or its filter may not be covered by the projector or lamp Limited Warranties.

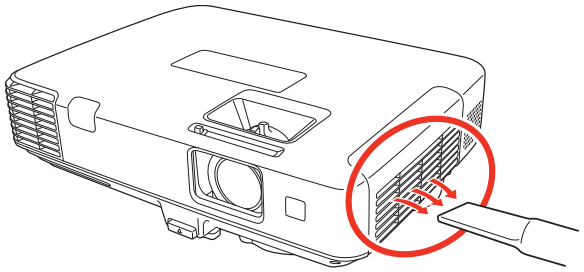
Cleaning the Air Filter and Vents
Replacing the Air Filter

**Parent topic:** Projector Maintenance

## Cleaning the Air Filter and Vents

Clean the projector's air filter or vents if they get dusty, or if you see a message telling you to clean them.

1. Turn off the projector and unplug the power cord.
2. Gently remove the dust using a small vacuum designed for computers or a very soft brush (such as a paintbrush).



**Note:** You can remove the air filter so you can clean both sides of it. Do not rinse the air filter in water, or use any detergent or solvent to clean it.

**Caution:** Do not use canned air. The gases may leave a flammable residue or push dust and debris into the projector's optics or other sensitive areas.

3. If dust is difficult to remove or the air filter is damaged, replace the air filter.

**Parent topic:** Air Filter and Vent Maintenance

## Replacing the Air Filter

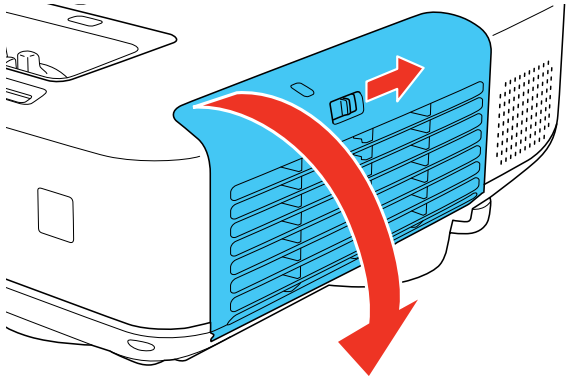
You need to replace the air filter in the following situations:

- After cleaning the air filter, you see a message telling you to clean or replace it
- The air filter is torn or damaged

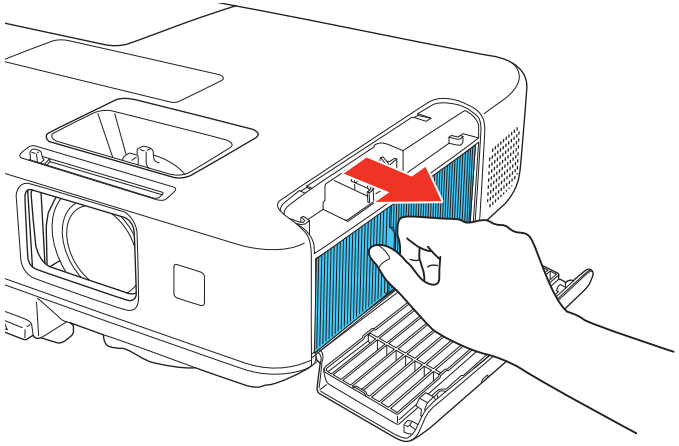
You can replace the air filter while the projector is mounted to the ceiling or placed on a table.

1. Turn off the projector and unplug the power cord.

2. Slide the air filter cover latch and open the air filter cover.

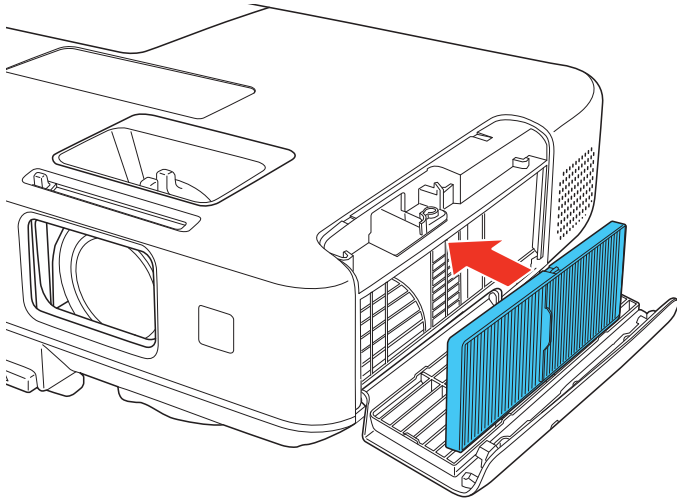


3. Pull the air filter out of the projector.



**Note:** Air filters contain polypropylene. Dispose of used air filters according to local regulations.

4. Place the new air filter in the projector as shown and push gently until it clicks into place.



5. Close the air filter cover.

**Parent topic:** Air Filter and Vent Maintenance

**Related references**

Optional Equipment and Replacement Parts

## Projector Lamp Maintenance

The projector keeps track of the number of hours the lamp is used and displays this information in the projector's menu system.

Replace the lamp as soon as possible when the following occurs:

- The projected image gets darker or starts to deteriorate
- A message appears when you turn on the projector telling you to replace the lamp
- The projector's lamp light is flashing orange

Replacing the Lamp

Resetting the Lamp Timer

**Parent topic:** Projector Maintenance

**Related references**

Optional Equipment and Replacement Parts

Projector Lamp Specifications

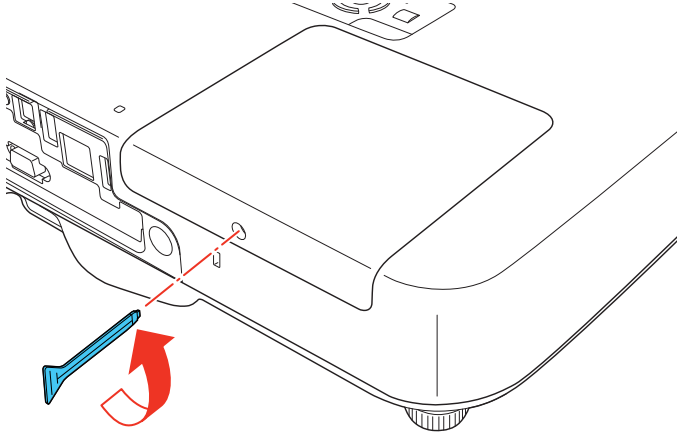
## Replacing the Lamp

Before you replace the lamp, let the projector cool down for at least one hour so the lamp will not be hot.

**Warning:** Let the lamp fully cool before replacing it to avoid injury.

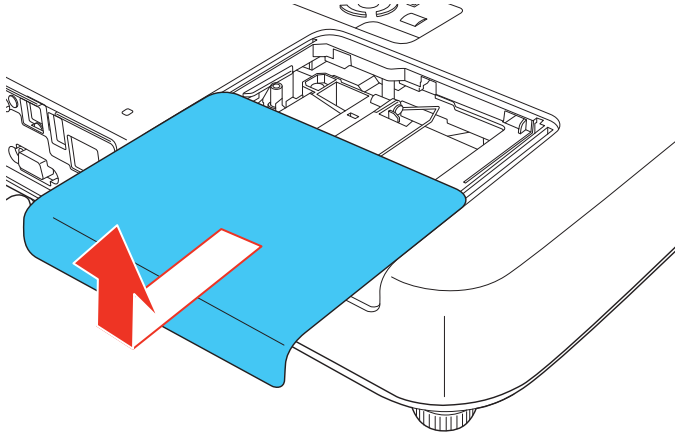
You can replace the lamp while the projector is mounted to the ceiling, if necessary.

1. Turn off the projector and unplug the power cord.
2. Allow the projector lamp to cool down for at least one hour.
3. Use the screwdriver included with the replacement lamp to loosen the screw securing the lamp cover.

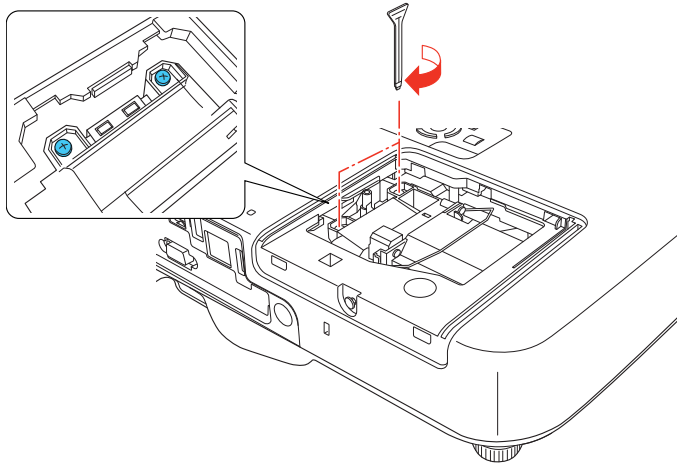


**Warning:** If the lamp is broken, glass fragments may be loose inside the lamp chamber. Be careful removing any broken glass to avoid injury.

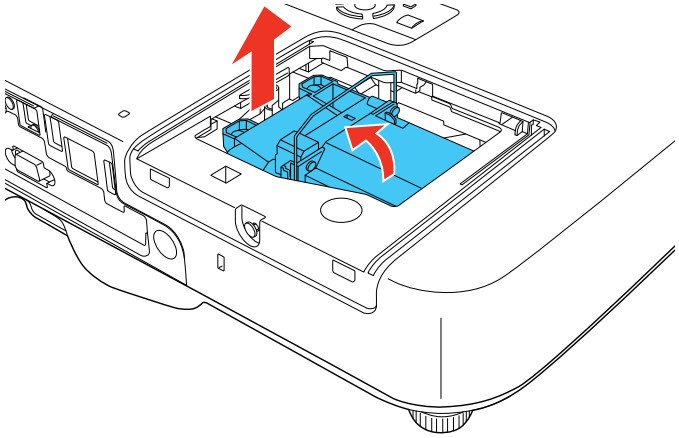
4. Slide the lamp cover out and lift it off.



5. Loosen the screws securing the lamp to the projector. The screws do not come all the way out.

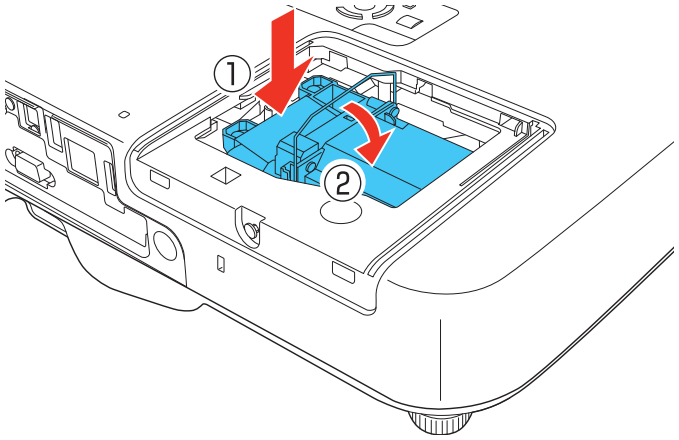


6. Lift up the lamp handle and gently pull the lamp out of the projector.



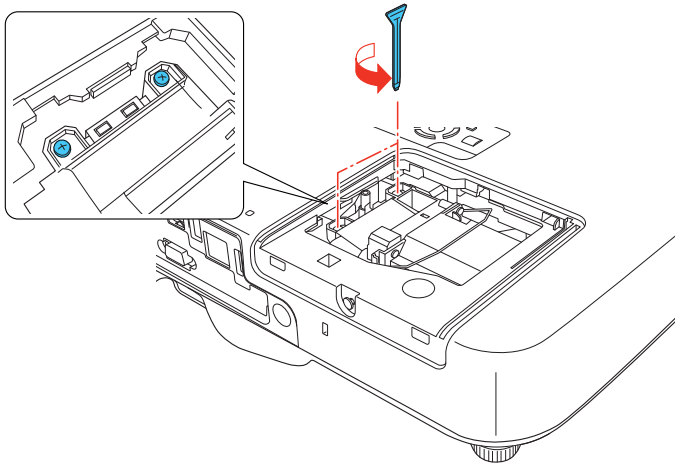
**Note:** Hg The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.

7. Gently insert the new lamp into the projector. If it does not fit easily, make sure it is facing the right way. Press the handle down.

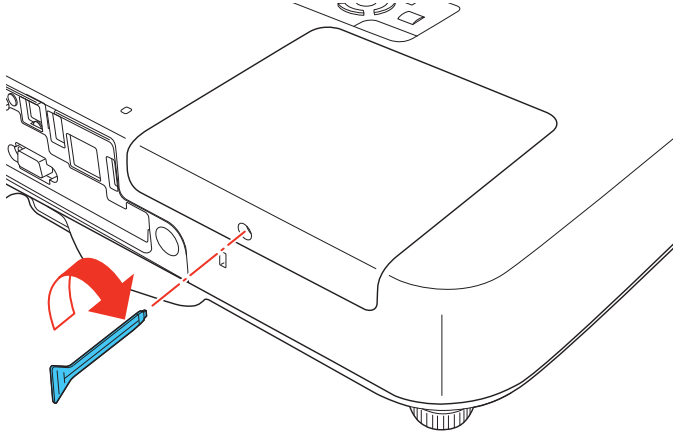



**Caution:** Do not touch any glass on the lamp assembly to avoid premature lamp failure.

8. Push in the lamp firmly and tighten the screws to secure it.



9. Replace the lamp cover and tighten the screw to secure it.



**Note:** Be sure the lamp cover is securely installed or the lamp will not come on.

Reset the lamp timer to zero to keep track of the new lamp's usage.

**Parent topic:** Projector Lamp Maintenance

**Related tasks**

Resetting the Lamp Timer

### Resetting the Lamp Timer

You must reset the lamp timer after replacing the projector's lamp to clear the lamp replacement message and to keep track of lamp usage correctly.

**Note:** Do not reset the lamp timer if you have not replaced the lamp to avoid inaccurate lamp usage information.

1. Turn on the projector.
2. Press the **Menu** button.
3. Select the **Reset** menu and press **Enter**.
4. Select **Reset Lamp Hours** and press **Enter**.

   You see a prompt asking if you want to reset the lamp hours.
5. Select **Yes** and press **Enter**.
6. Press **Menu** or **Esc** to exit the menus.

**Parent topic:** Projector Lamp Maintenance

**Related tasks**

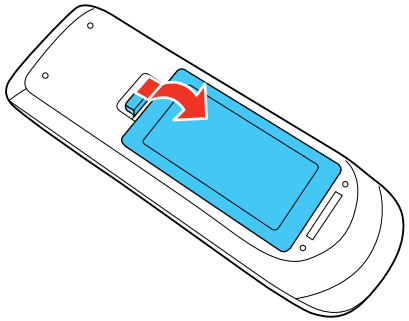
Replacing the Lamp

## Replacing the Remote Control Batteries

The remote control uses two AA manganese or alkaline batteries. Replace the batteries as soon as they run out.

**Caution:** Use only the type of batteries specified in this manual. Do not install batteries of different types, or mix new and old batteries.

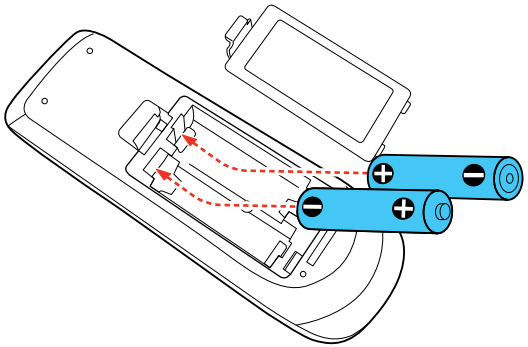
1. Open the battery cover as shown.



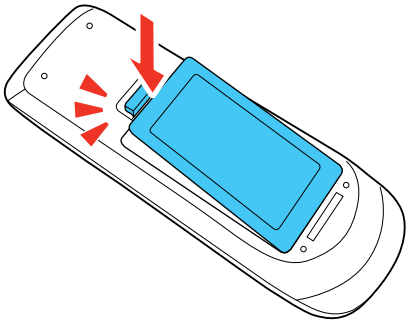
2. Remove the old batteries.

   **Warning:** If the battery fluid has leaked, wipe it away with a soft cloth and avoid getting the fluid on your hands. If it gets on your hands, wash them immediately to avoid injury.

3. Insert the batteries with the **+** and **–** ends facing as shown.



4. Close the battery cover and press it down until it clicks into place.



**Warning:** Dispose of used batteries according to local regulations. Do not expose batteries to heat or flame. Keep batteries out of the reach of children; they are choking hazards and are very dangerous if swallowed.

**Parent topic:** Projector Maintenance

**Related references**

Remote Control Operation

## Transporting the Projector

The projector contains precision parts, some of which are glass. Follow these guidelines to transport or ship the projector safely:

- Remove any equipment connected to the projector.
- When transporting the projector a long distance or as checked luggage, pack it in a firm box with cushioning around it and mark the box "Fragile."
- When shipping the projector for repairs, place it in its original packing materials, if possible, or use equivalent materials with cushioning around the projector. Mark the box "Fragile."

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

**Parent topic:** Maintaining and Transporting the Projector

# Solving Problems

Check the solutions in these sections if you have any problems using the projector.

Projection Problem Tips
Projector Light Status
Using the Projector Help Displays
Solving Image or Sound Problems
Solving Projector or Remote Control Operation Problems
Solutions When Network Alert E-Mails are Not Received
Where to Get Help

## Projection Problem Tips

If the projector is not working properly, try turning it off and unplugging it. Then plug it back in and turn it on.

If this does not solve the problem, check the following:

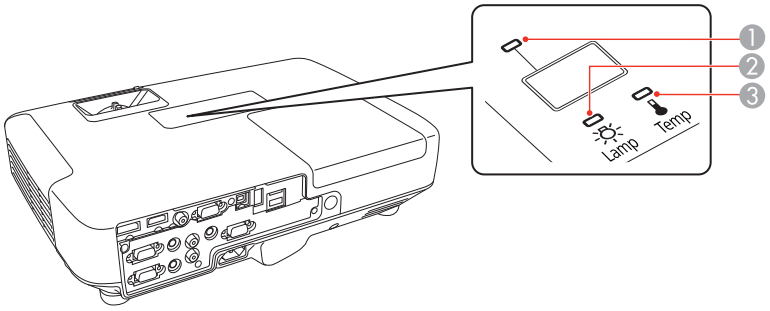
- The lights on the projector may indicate what the problem is.
- The projector's Help system can display information about common problems, if the projector is operating.
- The solutions in this manual can help you solve many problems.

If none of these solutions help, you can contact Epson for technical support.

**Parent topic:** Solving Problems

## Projector Light Status

The lights on the projector indicate the projector status and let you know when a problem occurs. Check the status and color of the lights and look for a solution in the table here.




1 Power light

2 Lamp light

3 Temp (temperature) light

| Power light | Lamp light | Temp light | Status and solution |
|---|---|---|---|
| Green | Off | Off | Normal operation. |
| Flashing green | Off | Off | Warming up. Wait for an image to appear. |
| Orange | Off | Off | Standby or sleep mode. |
| Flashing orange | Off | Off | Preparing for monitoring or shutting down. (When the light remains orange, you can unplug the projector.) |
| Flashing red | Off | Flashing orange | Projector is too hot.<br>• Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects.<br>• Clean or replace the air filter.<br>• Make sure the environmental temperature is not too hot. |

| Power light | Lamp light | Temp light | Status and solution |
|---|---|---|---|
| Red | Off | Red | Projector has overheated and turned off. Leave it turned off to cool down for five minutes.<br>• Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects.<br>• Clean or replace the air filter.<br>• If operating the projector at high altitude, turn on **High Altitude Mode**.<br>• If the problem persists, unplug the projector and contact Epson for help. |
| Red | Flashing red | Off | Lamp has a problem.<br>• Check to see if the lamp is burned out, broken, or installed incorrectly. Reseat or replace the lamp as necessary.<br>• If operating the projector at high altitude, turn on **High Altitude Mode**.<br>• If the problem persists, unplug the projector and contact Epson for help. |
| Light status varies | Flashing orange | Off | Replace the lamp soon to avoid damage. Do not continue using the projector. |
| Red | Off | Flashing red | A fan or sensor has a problem. Turn the projector off, unplug it, and contact Epson for help. |
| Red or flashing red | Flashing red | Flashing red | Internal projector error. Turn the projector off, unplug it, and contact Epson for help. |

**Note:** If the lights display a pattern not listed in the table above, turn the projector off, unplug it, and contact Epson for help.

**Parent topic:** Solving Problems

**Related references**

Projector Setup Settings - Extended Menu

Where to Get Help

**Related tasks**

Cleaning the Air Filter and Vents
Replacing the Air Filter
Replacing the Lamp

## Using the Projector Help Displays

You can display information to help you solve common problems using the projector's Help system.

1. Turn on the projector.
2. Press the **Help** button on the projector or the remote control.

   You see the Help menu.
3. Use the up and down arrow buttons to highlight the problem you want to solve.
4. Press **Enter** to view the solutions.
5. When you are finished, do one of the following:
   - To select another problem to solve, press **Esc**.
   - To exit the help system, press **Help**.

**Parent topic:** Solving Problems

## Solving Image or Sound Problems

Check the solutions in these sections if you have any problems with projected images or sound.

Solutions When No Image Appears
Solutions When Image is Incorrect Using the USB Display Function
Solutions When "No Signal" Message Appears
Solutions When "Not Supported" Message Appears
Solutions When Only a Partial Image Appears
Solutions When the Image is Not Rectangular
Solutions When the Image Contains Noise or Static
Solutions When the Image is Fuzzy or Blurry
Solutions When the Image Brightness or Colors are Incorrect
Solutions to Sound Problems

**Parent topic:** Solving Problems

## Solutions When No Image Appears

If no image appears, try the following solutions:

- Make sure the lens cover is open all the way or off.
- Press the **A/V Mute** button on the remote control to see if the image was temporarily turned off.
- Make sure all necessary cables are securely connected and the power is on for the projector and connected video sources.
- Press the projector's power button to wake it from standby or sleep mode. Also see if your connected computer is in sleep mode or displaying a blank screen saver.
- Check the settings on the Signal menu to make sure they are correct for the current video source.
- Adjust the **Brightness** setting or select the **Normal** Power Consumption setting.
- Check the **Display** setting to make sure **Messages** is set to **On**.
- If the projector does not respond when you press the control panel buttons, the buttons may be locked. Unlock the buttons.
- If the projector does not respond when you press buttons on the remote control, make sure the remote receivers are turned on.
- For images projected with Windows Media Center, reduce the screen size from full screen mode.
- For images projected from applications using Windows DirectX, turn off DirectX functions.

**Parent topic:** Solving Image or Sound Problems

**Related references**

Image Quality Settings - Image Menu
Input Signal Settings - Signal Menu
Projector Feature Settings - Settings Menu
Projector Setup Settings - Extended Menu

**Related tasks**

Unlocking the Projector's Buttons

## Solutions When Image is Incorrect Using the USB Display Function

If no image appears or if the image appears incorrectly using the USB Display function, try the following solutions:

- Press the **USB** button on the remote control.
- Make sure the USB Display software has installed correctly. Install it manually if necessary.

- With OS X, select the **USB Display** icon in the Dock or from the **Applications** folder.
- For images projected with Windows Media Center, reduce the screen size from full screen mode.
- For images projected from applications using Windows DirectX, turn off DirectX functions.
- If the mouse cursor flickers, select **Make the movement of the mouse pointer smooth** in the Epson USB Display Settings program on your computer (feature not available with Windows 2000).
- Turn off the **Transfer layered window** setting in the Epson USB Display Settings program on your computer.

**Parent topic:** Solving Image or Sound Problems

**Related references**

Projector Setup Settings - Extended Menu

## Solutions When "No Signal" Message Appears

If the "No Signal" message appears, try the following solutions:

- Press the **Source Search** or **Search** button and wait a few seconds for an image to appear.
- Turn on the connected computer or video source, and press its play button to begin your presentation, if necessary.
- Check the connection from the projector to your video sources.
- If you are projecting from a laptop computer, make sure it is set up to display on an external monitor.
- If necessary, turn the projector and the connected computer or video source off and then on again.

Displaying From a PC Laptop
Displaying From a Mac Laptop

**Parent topic:** Solving Image or Sound Problems

### Displaying From a PC Laptop

If you see the "No Signal" message when you display from a PC laptop, you need to set up the laptop to display on an external monitor.

1. Hold down the laptop's **Fn** key and press the key labelled with a monitor icon or **CRT/LCD**. (See your laptop manual for details.) Wait a few seconds for an image to appear.
2. To display on both the laptop's monitor and the projector, try pressing the same keys again.
3. If the same image is not displayed by the laptop and projector, check the Windows **Display** utility to make sure the external monitor port is enabled and extended desktop mode is disabled. (See your computer or Windows manual for instructions.)

4. If necessary, check your video card settings and set the multiple display option to **Clone** or **Mirror**.

**Parent topic:** Solutions When "No Signal" Message Appears

### Displaying From a Mac Laptop

If you see the "No Signal" message when you display from a Mac laptop, you need to set up the laptop for mirrored display. (See your laptop manual for details.)

1. Open the **System Preferences** utility and select **Displays**.
2. Select the **Display** or **Color LCD** option, if necessary.
3. Click the **Arrange** or **Arrangement** tab.
4. Select the **Mirror Displays** checkbox.

**Parent topic:** Solutions When "No Signal" Message Appears

## Solutions When "Not Supported" Message Appears

If the "Not Supported" message appears, try the following solutions:

- Make sure the correct input signal is selected on the Signal menu.
- Make sure the computer's display resolution does not exceed the projector's resolution and frequency limit. If necessary, select a different display resolution for your computer. (See your computer manual for details.)

**Parent topic:** Solving Image or Sound Problems

**Related references**

Input Signal Settings - Signal Menu

Supported Video Display Formats

## Solutions When Only a Partial Image Appears

If only a partial computer image appears, try the following solutions:

- Press the **Auto** button on the remote control to optimize the image signal.
- Try adjusting the image position using the **Position** menu setting.
- Press the **Aspect** button on the remote control to select a different image aspect ratio.
- If you zoomed into or out of the image using the **E-Zoom** buttons, press the **Esc** button until the projector returns to a full display.
- Check your computer display settings to disable dual display and set the resolution within the projector's limits. (See your computer manual for details.)

- Check the resolution assigned to your presentation files to see if they are created for a different resolution than you are projecting in. (See your software help for details.)

**Parent topic:** Solving Image or Sound Problems

**Related references**

Input Signal Settings - Signal Menu

Supported Video Display Formats

## Solutions When the Image is Not Rectangular

If the projected image is not evenly rectangular, try the following solutions:

- Place the projector directly in front of the center of the screen, facing it squarely, if possible.
- If you adjusted the projector height using the projector feet, press the keystone buttons on the projector to adjust the image shape.
- Turn on automatic keystone adjustments using the projector's menus.
- Adjust the position of the projector's horizontal keystone slider (PowerLite 1930/1940W/1950/1960).
- Press the **Screen Fit** button (PowerLite 1945W/1955/1965) and adjust the image shape using the on-screen display.
- Adjust the **Quick Corner** setting to correct the image shape.

**Parent topic:** Solving Image or Sound Problems

**Related references**

Projector Feature Settings - Settings Menu

**Related tasks**

Automatically Correcting Image Shape With Screen Fit

Correcting Image Shape with the Horizontal Keystone Slider

Correcting Image Shape with the Keystone Buttons

Correcting Image Shape with Quick Corner

## Solutions When the Image Contains Noise or Static

If the projected image seems to contain electronic interference (noise) or static, try the following solutions:

- Check the cables connecting your computer or video source to the projector. They should be:
  - Separated from the power cord to prevent interference

- Securely connected at both ends
- Not connected to an extension cable
- No longer than 10 feet (3 m) for VGA/PC cables or 24 feet (7.3 m) for HDMI cables

- Check the settings on the projector's Signal menu to make sure they match the video source. If available for your video source, adjust the **Progressive** and **Noise Reduction** settings.
- Select a computer video resolution and refresh rate that are compatible with the projector.
- If you are projecting from a computer, press the **Auto** button on the remote control to automatically adjust the **Tracking** and **Sync** settings.
- If you adjusted the image shape using the projector controls, try decreasing the **Sharpness** setting to improve image quality.
- If you connected an extension power cable, try projecting without it to see if it caused interference in the signal.

**Parent topic:** Solving Image or Sound Problems

**Related references**

Input Signal Settings - Signal Menu
Supported Video Display Formats

**Related tasks**

Displaying From a PC Laptop
Displaying From a Mac Laptop

## Solutions When the Image is Fuzzy or Blurry

If the projected image is fuzzy or blurry, try the following solutions:

- Adjust the image focus.
- Clean the projector lens.

  **Note:** To avoid condensation on the lens after bringing the projector in from a cold environment, let the projector warm up to room temperature before using it.

- Position the projector close enough to the screen.
- Position the projector so the keystone adjustment angle is not so wide that it distorts the image.
- Turn on automatic keystone adjustment in the projector's menus.
- Adjust the **Sharpness** setting to improve image quality.

- If you are projecting from a computer, press the **Auto** button on the remote control to automatically adjust the tracking and sync. If any bands or overall blurriness remain, display a uniformly patterned image on the screen and manually adjust the **Tracking** and **Sync** settings.
- If you are projecting from a computer, use a lower resolution.

**Parent topic:** Solving Image or Sound Problems

**Related references**

Input Signal Settings - Signal Menu

Image Quality Settings - Image Menu

Projection Distance

**Related tasks**

Focusing the Image Using the Focus Ring

Cleaning the Lens

## Solutions When the Image Brightness or Colors are Incorrect

If the projected image is too dark or light, or the colors are incorrect, try the following solutions:

- Press the **Color Mode** button on the remote control to try different color modes for the image and environment.
- Check your video source settings.
- Adjust the available settings on the Image menu for the current input source, such as **Brightness**, **Contrast**, **Tint**, **Color Adjustment**, and/or **Color Saturation**.
- Make sure you selected the correct **Input Signal** or **Video Signal** setting on the Signal menu, if available for your image source.
- Make sure all the cables are securely connected to the projector and your video device. If you connected long cables, try connecting shorter cables.
- If you are using the **ECO** Power Consumption setting, try selecting **Normal** in the projector's menus.
- Position the projector close enough to the screen.
- If the image has been progressively darkening, you may need to replace the projector lamp soon.

**Parent topic:** Solving Image or Sound Problems

**Related concepts**

Projector Lamp Maintenance

**Related references**

Input Signal Settings - Signal Menu

Image Quality Settings - Image Menu
Projector Feature Settings - Settings Menu

## Solutions to Sound Problems

If there is no sound when you expect it or the volume is too low or high, try the following solutions:

- Adjust the projector's volume settings.
- Press the **A/V Mute** button on the remote control to resume video and audio if they were temporarily stopped.
- Press the **Source Search** or **Search** button to switch to the correct input source, if necessary.
- Check your computer or video source to make sure the volume is turned up and the audio output is set for the correct source.
- Check the audio cable connections between the projector and your video source.
- If you do not hear sound from an HDMI source, set the connected device to PCM output.
- Make sure any connected audio cables are labeled "No Resistance".
- If you are using the USB Display function, turn on the **Output audio from the projector** setting in the Epson USB Display Settings program on your computer.
- If you are using a Mac and you do not hear sound from an HDMI source, make sure your Mac supports audio through the HDMI port. If not, you need to connect an audio cable.
- If you turn the projector on immediately after turning it off, the cooling fans may run at high speed momentarily and cause an unexpected noise. This is normal.

**Parent topic:** Solving Image or Sound Problems

# Solving Projector or Remote Control Operation Problems

Check the solutions in these sections if you have problems operating the projector or remote control.

Solutions to Projector Power or Shut-Off Problems
Solutions to Problems with the Remote Control
Solutions to Password Problems

**Parent topic:** Solving Problems

## Solutions to Projector Power or Shut-Off Problems

If the projector does not come on when you press the power button or it shuts off unexpectedly, try the following solutions:

- Make sure the power cord is securely connected to the projector and to a working electrical outlet.
- The projector's buttons may be locked for security. Unlock the buttons or use the remote control to turn on the projector.
- The power cord may be defective. Disconnect the cord and contact Epson.
- If the projector's lamp shuts off unexpectedly, it may have entered standby mode after a period of inactivity. Press the power button to wake the projector.
- If the projector's lamp shuts off and the power and Temp lights are red, the projector has overheated and shut off. Check the solutions for this light status.
- If the power button on the remote control does not turn on the projector, check its batteries and make sure the **Remote Receiver** setting is turned on in the projector's menu, if available.

**Parent topic:** Solving Projector or Remote Control Operation Problems

**Related references**

Projector Feature Settings - Settings Menu
Projector Light Status

**Related tasks**

Unlocking the Projector's Buttons

## Solutions to Problems with the Remote Control

If the projector does not respond to remote control commands, try the following solutions:

- Check that the remote control batteries are installed correctly and have power. If necessary, replace the batteries.
- Make sure you are operating the remote control within the reception angle and range of the projector.
- Make sure the projector is not warming up or shutting down.
- Check to see if a button on the remote control is stuck down, causing it to enter sleep mode. Release the button to wake the remote control up.
- Strong fluorescent lighting, direct sunlight, or infrared device signals may be interfering with the projector's remote receivers. Dim the lights or move the projector away from the sun or interfering equipment.

- If available, turn off one of the remote receivers in the projector's menu system, or check if all the remote receivers were turned off.
- If you assigned an ID number to the remote control to operate multiple projectors, you may need to check or change the ID setting (feature not available with all projectors).
- If you lose the remote control, you can order another one from Epson.

**Parent topic:** Solving Projector or Remote Control Operation Problems

**Related references**

Projector Feature Settings - Settings Menu
Projector Setup and Installation Options
Remote Control Operation

**Related tasks**

Setting the Remote Control ID

## Solutions to Password Problems

If you cannot enter or remember a password, try the following solutions:

- You may have turned on password protection without first setting a password. Try entering **0000** using the remote control.
- If you have entered an incorrect password too many times and see a message displaying a request code, write down the code and contact Epson. Provide the request code and proof of ownership for assistance in unlocking the projector.
- If you lose the remote control you cannot enter a password. Order a new one from Epson.

**Parent topic:** Solving Projector or Remote Control Operation Problems

# Solutions When Network Alert E-Mails are Not Received

If you do not receive an e-mail alerting you to problems with a projector over the network, try the following solutions:

- Make sure the projector is turned on and connected to the network correctly. (If an error shut down the projector, it cannot send an e-mail.)
- Make sure you set up the projector e-mail alert settings correctly on the projector's network Mail menu or in the network software.
- Set the **Standby Mode** setting to **Communication On** so the network software can monitor the projector in standby mode.

**Parent topic:** Solving Problems

# Where to Get Help

If you need to contact Epson for technical support services, use the following support options.

### Internet Support

Visit Epson's support website at epson.com/support (U.S.) or epson.ca/support (Canada) for solutions to common problems with your projector. You can download utilities and documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

### Speak to a Support Representative

To use the Epson PrivateLine Support service, call (800) 637-7661. This service is available for the duration of your warranty period. You may also speak with a projector support specialist by dialing (562) 276-4394 (U.S.) or (905) 709-3839 (Canada).

Support hours are 6 AM to 8 PM, Pacific Time, Monday through Friday and 7 AM to 4 PM, Pacific Time, Saturday.

Days and hours of support are subject to change without notice. Toll or long distance charges may apply.

Before you call, have the following information ready:

- Product name
- Product serial number (located on the bottom or rear of the projector, or in the menu system)
- Proof of purchase (such as a store receipt) and date of purchase
- Computer or video configuration
- Description of the problem

### Purchase Supplies and Accessories

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

To purchase a replacement remote control, call (562) 276-4394 (U.S.) or (905) 709-3839 (for dealer referral in Canada).

**Parent topic:** Solving Problems

# Technical Specifications

These sections list the technical specifications of your projector.


General Projector Specifications
Projector Lamp Specifications
Remote Control Specifications
Projector Dimension Specifications
Projector Electrical Specifications
Projector Environmental Specifications
Projector Safety and Approvals Specifications
Supported Video Display Formats
USB Display System Requirements


## General Projector Specifications

| | |
|---|---|
| **Type of display** | Poly-silicon TFT active matrix |
| **Resolution** | **PowerLite 1940W/1945W**:<br>1280 × 800 pixels (WXGA)<br>**PowerLite 1930/1950/1955/1960/1965**:<br>1024 × 768 pixels (XGA) |
| **Lens** | F=1.51 to 1.99<br>Focal length: 18.2 to 29.2 mm |
| **Color reproduction** | Full color, up to 1 billion colors |
| **Brightness** | **PowerLite 1930**:<br>Normal Power Consumption mode:<br>Color light output 4200 lumens (ISO 21118 standard)<br>White light output 4200 lumens<br>ECO Power Consumption mode:<br>White light output 2730 lumens (ISO 21118 standard) |

| | |
|---|---|
| | **PowerLite 1940W/1945W**:<br>Normal Power Consumption mode:<br>Color light output 4200 lumens (ISO 21118 standard)<br>White light output 4200 lumens<br>ECO Power Consumption mode:<br>White light output 2910 lumens (ISO 21118 standard)<br>**PowerLite 1950/1955**:<br>Normal Power Consumption mode:<br>Color light output 4500 lumens (ISO 21118 standard)<br>White light output 4500 lumens<br>ECO Power Consumption mode:<br>White light output 3120 lumens (ISO 21118 standard)<br>**PowerLite 1960/1965**:<br>Normal Power Consumption mode:<br>Color light output 5000 lumens (ISO 21118 standard)<br>White light output 5000 lumens<br>ECO Power Consumption mode:<br>White light output 3470 lumens (ISO 21118 standard) |
| **Contrast ratio** | 3000:1 with Auto Iris on and Normal Power Consumption mode |
| **Image size** | **PowerLite 1940W/1945W:**<br>29 inches (0.74 m) to 280 inches (7.11 m)<br>**PowerLite 1930/1950/1955/1960/1965**:<br>30 inches (0.76 m) to 300 inches (7.62 m) |
| **Projection distance** | 33 inches (0.84 m) to 336 inches (8.54 m) |
| **Projection methods** | Front, rear, ceiling-mounted |

| | |
|---|---|
| **Optical aspect ratio** (width-to-height) | **PowerLite 1940W/1945W**:<br>16:10<br>**PowerLite 1930/1950/1955/1960/1965**:<br>4:3 |
| **Focus adjustment** | Manual |
| **Zoom adjustment** | Manual |
| **Zoom ratio** (Tele-to-Wide) | 1:1.6 |
| **Internal sound system** | 10 W monaural |
| **Noise level** | 37 dB (Normal Power Consumption mode)<br>29 dB (ECO Power Consumption mode) |
| **Keystone correction angle** | **PowerLite 1930/1940W/1950/1960**:<br>Vertical: ± 30º (manual or Auto Keystone)<br>Horizontal: ± 30º (manual or Horizontal Keystone slider)<br>**PowerLite 1945W/1955/1965**:<br>Vertical: ± 30º (manual); ± 30º (using Auto Keystone or Screen Fit)<br>Horizontal: ± 30º (manual); ± 20º (using Auto Keystone or Screen Fit) |
| **USB Type B port compatibility** | USB 1.1 and 2.0 compliant for USB display or external mouse |
| **USB Type A port compatibility** | **PowerLite 1930/1940W/1950/1960**:<br>One USB 1.1 and 2.0 compliant port for USB device input or EPSON document camera display<br>**PowerLite 1945W/1955/1965**:<br>One USB 1.1 and 2.0 compliant port for USB device input<br>One USB 1.1 and 2.0 compliant port for EPSON document camera display |

**Parent topic:** Technical Specifications

## Projector Lamp Specifications

| | |
|---|---|
| **Type** | UHE (Ultra High Efficiency) |
| **Power consumption** | 245 W |
| **Lamp life** | Normal Power Consumption mode:<br>Up to about 2500 hours<br>ECO Power Consumption mode:<br>Up to about 4000 hours |

**Note:** Turn off this product when not in use to prolong the life of the projector. Lamp life will vary depending upon mode selected, environmental conditions, and usage. Brightness decreases over time.

**Parent topic:** Technical Specifications

## Remote Control Specifications

| | |
|---|---|
| **Reception range** | 26 feet (8 m) |
| **Batteries** | Two alkaline or manganese AA |

**Parent topic:** Technical Specifications

## Projector Dimension Specifications

| | |
|---|---|
| **Height** (excluding feet) | 3.66 inches (93 mm) |
| **Width** | 14.8 inches (377 mm) |
| **Depth** | 10.7 inches (271 mm) |
| **Weight** | **PowerLite 1930/1940W/1950/1960**:<br>8.3 lb (3.7 kg)<br>**PowerLite 1945W/1955/1965**:<br>8.6 lb (3.9 kg) |

**Parent topic:** Technical Specifications

# Projector Electrical Specifications

| | |
|---|---|
| **Rated frequency** | 50/60 Hz |
| **Power supply** | 100 to 240 VAC ±10% |
| | 3.6 to 1.6 A |
| **Power consumption** | Operating: |
| (110 to 120 V) | Normal Power Consumption mode: 353 W |
| | ECO Power Consumption mode: 258 W |
| | Standby: |
| | **PowerLite 1930/1940W/1950/1960**: |
| | 0.36 W (Communication Off), 3.8 W (Communication On) |
| | **PowerLite 1945W/1955/1965**: |
| | 0.36 W (Communication Off), 3.4 W (Communication On) |
| **Power consumption** | Operating: |
| (220 to 240 V) | Normal Power Consumption mode: 337 W |
| | ECO Power Consumption mode: 250 W |
| | Standby: |
| | **PowerLite 1930/1940W/1950/1960**: |
| | 0.44 W (Communication Off), 3.8 W (Communication On) |
| | **PowerLite 1945W/1955/1965**: |
| | 0.44 W (Communication Off), 4.3 W (Communication On) |

**Parent topic:** Technical Specifications

# Projector Environmental Specifications

| | |
|---|---|
| **Temperature** | Operating: 41 to 95 ºF (5 to 35 ºC) |
| | Storage: 14 to 140 ºF (–10 to 60 ºC) |

| | |
|---|---|
| **Humidity** (relative, non-condensing) | Operating: 20 to 80%<br>Storage: 10 to 90% |
| **Operating altitude** | Up to 4921 feet (1500 m)<br>Up to 7500 feet (2286 m) with High Altitude Mode enabled |

**Parent topic:** Technical Specifications

## Projector Safety and Approvals Specifications

| | |
|---|---|
| **United States** | FCC Part 15 Class B (DoC)<br>UL60950-1 2nd edition (cTUVus Mark) |
| **Canada** | ICES-003 Class B<br>CSA C22.2 No. 60950-1 |

**Parent topic:** Technical Specifications

## Supported Video Display Formats

For best results, your computer's monitor port or video card resolution should be set to display in the projector's native resolution. However, your projector includes Epson's SizeWise chip that supports other computer display resolutions, so your image will be resized to fit automatically.

Your computer's monitor port or video card refresh rate (vertical frequency) must be compatible with the projector. (See your computer or video card manual for details.)

The table here lists the compatible refresh rate and resolution for each compatible video display format.

| Display format | Refresh rate (in Hz) | Resolution (in pixels) |
|---|---|---|
| **Computer signals (analog RGB)** | | |
| VGA | 60/72/75/85 | 640 × 480 |
| SVGA | 56/60/72/75/85 | 800 × 600 |
| XGA | 60/70/75/85 | 1024 × 768 |
| WXGA | 60 | 1280 × 768 |
| WXGA | 60 | 1360 × 768 |

| Display format | Refresh rate (in Hz) | Resolution (in pixels) |
|---|---|---|
| WXGA | 60/75/85 | 1280 × 800 |
| SXGA | 70/75/85 | 1152 × 864 |
| SXGA | 60/75/85 | 1280 × 960 |
| SXGA | 60/75/85 | 1280 × 1024 |
| SXGA+ | 60/75 | 1400 × 1050 |
| WXGA+ | 60/75/85 | 1440 × 900 |
| WXGA++ | 60 | 1600 × 1600 |
| UXGA | 60 | 1600 × 1200 |
| WSXGA+*, ** | 60 | 1680 × 1050 |
| MAC13" | 67 | 640 × 480 |
| MAC16" | 75 | 832 × 624 |
| MAC19" | 75 | 1024 × 768 |
| MAC19" | 59 | 1024 × 768 |
| MAC21" | 75 | 1152 × 870 |
| **Composite video** | | |
| TV (NTSC) | 60 | 720 × 480 |
| TV (PAL) | 50/60 | 720 × 576 |
| TV (SECAM) | 50 | 720 × 576 |
| **Component video** | | |
| SDTV (480i) | 60 | 720 × 480 |
| SDTV (576i) | 50 | 720 × 576 |
| SDTV (480p) | 60 | 720 × 480 |
| SDTV (576p) | 50 | 720 × 576 |
| HDTV (720p) | 50/60 | 1280 × 720 |
| HDTV (1080i) | 50/60 | 1920 × 1080 |
| HDTV (1080p) | 24/30/50/60 | 1920 × 1080 |

| Display format | Refresh rate (in Hz) | Resolution (in pixels) |
|---|---|---|
| **HDMI input signals** | | |
| VGA | 60 | 640 × 480 |
| SVGA | 60 | 800 × 600 |
| XGA | 60 | 1024 × 768 |
| WXGA | 60 | 1280 × 800 |
| WXGA++ | 60 | 1600 × 900 |
| SXGA | 60 | 1280 × 960 |
| SXGA | 60 | 1280 × 1024 |
| SXGA+ | 60 | 1400 × 1050 |
| UXGA | 60 | 1600 × 1200 |
| SDTV (480i/480p) | 60 | 720 × 480 |
| SDTV (576i/576p) | 50 | 720 × 576 |
| HDTV (720p) | 50/60 | 1280 × 720 |
| HDTV (1080i) | 50/60 | 1920 × 1080 |
| HDTV (1080p) | 24/30/50/60 | 1920 × 1080 |
| **DisplayPort input signals** | | |
| VGA | 60 | 640 × 480 |
| SVGA | 60 | 800 × 600 |
| XGA | 60 | 1024 × 768 |
| WXGA | 60 | 1280 × 768 |
| WXGA | 60 | 1280 × 800 |
| WXGA++ | 60 | 1600 × 900 |
| SXGA | 60 | 1280 × 960 |
| SXGA | 60 | 1280 × 1024 |
| SXGA+ | 60 | 1400 × 1050 |
| UXGA | 60 | 1600 × 1200 |

| Display format | Refresh rate (in Hz) | Resolution (in pixels) |
|---|---|---|
| SDTV (480p) | 60 | 720 × 480 |
| SDTV (576p) | 50 | 720 × 576 |
| HDTV (720p) | 50/60 | 1280 × 720 |
| HDTV (1080i) | 50/60 | 1920 × 1080 |
| HDTV (1080p) | 50/60 | 1920 × 1080 |

* PowerLite 1940W/1945W only

** **Wide** resolution only

**Parent topic:** Technical Specifications

## USB Display System Requirements

Your computer system must meet the system requirements here to use the projector's USB Display software.

| Requirement | Windows | Mac |
|---|---|---|
| Operating system | Windows 2000 (Service Pack 4 only) | OS X 10.5.8 (32-bit); OS X 10.6.x, 10.7.x, 10.8.x, or 10.9.x (32- and 64-bit) |
| | Windows XP Professional, Home Edition, and Tablet PC Edition (32-bit); except for Service Pack 1 | |
| | Windows Vista Ultimate, Enterprise, Business, Home Premium, and Home Basic (32-bit) | |
| | Windows 7 Ultimate, Enterprise, Professional, and Home Premium (32- and 64-bit); Home Basic and Starter (32-bit) | |
| | Windows 8.x, Windows 8 Enterprise and Pro (32- and 64-bit) | |
| USB version | USB 1.1 and above (USB 2.0 recommended) | |

| Requirement | Windows | Mac |
|---|---|---|
| CPU | Mobile Pentium III 1.2 GHz or faster (1.6 GHz or faster recommended) | Power PC G4 1 GHz or faster (Core Duo 1.83 GHz or faster recommended) |
| Memory | 256MB or more (512MB or more recommended) | 512MB or more |
| Hard disk space | 20MB or more | |
| Display | Resolution between 640 × 480 and 1600 × 1200, 16-bit color or greater | Resolution between 640 × 480 and 1680 × 1200, 16-bit color or greater |

**Parent topic:** Technical Specifications

**Related tasks**

Connecting to a Computer for USB Video and Audio

# Notices

Check these sections for important notices about your projector.

Recycling
Important Safety Information
Important Safety Instructions
FCC Compliance Statement
Trademarks
Software Copyright
Copyright Notice

## Recycling

Epson offers a recycling program for end of life products. Please go to epson.com/recycle for information on how to return your products for proper disposal.

**Parent topic:** Notices

## Important Safety Information

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

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

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

**Parent topic:** Notices

# Important Safety Instructions

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

- Do not look into the lens when the projector is on. The bright light can damage your eyes. Avoid standing in front of the projector so the bright light does not shine into your eyes.
- Do not place the projector on an unstable cart, stand, or table.
- Do not operate the projector on its side, or while tilted to one side. Do not tilt the projector more than 30° forward or back.
- If the projector is mounted on a ceiling or wall, it should be installed by qualified technicians using mounting hardware designed for use with this projector.
- When installing or adjusting a ceiling or wall mount, do not use adhesives to prevent the screws from loosening and do not use oils or lubricants. This may cause the projector case to crack and the projector to fall from its ceiling mount. This could cause serious injury to anyone under the mount and could damage the projector.
- Do not use the projector near water, sources of heat, high-voltage electrical wires, or sources of magnetic fields.
- Use the type of power source indicated on the projector. Use of a different power source may result in fire or electric shock. If you are not sure of the power available, consult your dealer or power company.
- Place the projector near a wall outlet where the plug can be easily unplugged.
- Take the following precautions when handling the plug: Do not hold the plug with wet hands. Do not insert the plug into a dusty outlet. Insert the plug firmly into the outlet. Do not pull the power cord when disconnecting the plug; always be sure to hold the plug when disconnecting it. Do not overload wall outlets, extension cords, or power strips. Failure to comply with these precautions could result in fire or electric shock.
- Do not place the projector where the cord can be walked on. This may result in fraying or damage to the plug.
- Unplug the projector from the wall outlet before cleaning. Use a dry cloth (or, for stubborn dirt or stains, a moist cloth that has been wrung dry) for cleaning. Do not use liquid or aerosol cleaners, any sprays containing flammable gas, or solvents such as alcohol, paint thinner, or benzine.
- Do not block the slots and openings in the projector case. They provide ventilation and prevent the projector from overheating. Do not operate the projector on a sofa, rug, or other soft surface, or set it on top of loose papers. Do not cover the projector with a blanket, curtain, or tablecloth. If you are setting up the projector near a wall, leave at least 7.9 inches (20 cm) of space between the wall and the air exhaust vent.
- Do not operate the projector in a closed-in cabinet unless proper ventilation is provided.

- Never allow objects of any kind to enter any openings in the projector. Do not leave objects, especially flammable objects, near the projector. Never spill liquid of any kind into the projector.
- If you are using two or more projectors side-by-side, leave at least 2 feet (60 cm) of space between the projectors to allow for proper ventilation.
- You may need to clean the air filter and vent. A clogged air filter or vent can block ventilation needed to cool the projector. Do not use canned air, or the gases may leave a residue.
- Do not store the projector outdoors for an extended length of time.
- Except as specifically explained in this manual, do not attempt to service this product yourself. Refer all servicing to qualified personnel. Opening or removing covers may expose you to dangerous voltages and other hazards.
- Never open any covers on the projector except as specifically explained in this manual. Never attempt to disassemble or modify the projector. Refer all repairs to qualified service personnel.
- Unplug the projector from the wall outlet and refer servicing to qualified service personnel under the following conditions: if it does not operate normally when you follow the operating instructions, or exhibits a distinct change in performance; if smoke, strange odors, or strange noises come from the projector; if the power cord or plug is damaged or frayed; if liquid or foreign objects get inside the projector, or if it has been exposed to rain or water; if it has been dropped or the housing has been damaged.
- Do not touch the plug during an electrical storm. Otherwise, you may receive an electric shock.
- Unplug the projector when it will not be used for extended periods.
- Do not use the projector where it may be exposed to rain, water, or excessive humidity.
- Do not use or store the projector where it may be exposed to smoke, steam, corrosive gases, excessive dust, vibration, or shock.
- Do not use the projector where flammable or explosive gases may be present.
- Do not use or store the projector or remote control in a hot location, such as near a heater, in direct sunlight, or in a closed vehicle.
- If you use the projector in a country other than where you purchased it, use the correct power cord for that country.
- Do not stand on the projector or place heavy objects on it.
- Do not use the projector outside of the required temperature range of 41 to 95 °F (5 to 35 °C). Doing so may cause an unstable display and could lead to projector damage. Do not use or store the projector where it may be exposed to sudden changes in temperature.

- Do not store the projector outside of the required temperature range of 14 to 140 ºF (–10 to 60 ºC) or in direct sunlight for long periods of time. Doing so may cause damage to the case.
- Do not place anything that can become warped or damaged by heat near the exhaust vents. Do not bring your hands or face close to the vents while projection is in progress. Do not bring your face close to the projector while it is in use.
- Before you move the projector, make sure its power is turned off, the plug is disconnected from the outlet, and all cables are disconnected.
- Never try to remove the lamp immediately after use because it will be extremely hot. Before removing the lamp, turn off the power and wait at least an hour to allow the lamp to cool completely.
- Do not disassemble the lamp or subject it to impacts.
- Do not place the source of an open flame, such as a lit candle, on or near the projector.
- Do not block the lens during projection using a book or any object other than the lens cover. Use the lens cover to temporarily stop projection, but avoid projecting with the lens cover closed for a long period. This could damage the projector or cause a fire.
- Do not modify the power cord. Do not place heavy objects on top of the power cord or bend, twist, or pull it excessively. Keep the power cord away from hot electrical appliances.
- If the lamp breaks, ventilate the room to prevent gases contained in the lamp from being inhaled or coming in contact with your eyes or mouth. If you do inhale gases or gases come in contact with your eyes or mouth, seek medical advice immediately.
- If the projector is mounted overhead and the lamp breaks, be careful to prevent pieces of glass from falling into your eyes or mouth when you open the lamp cover. If pieces of glass do get into your eyes or mouth, seek medical advise immediately.
- Always lower the volume before turning off the projector. Turning on the projector with the volume too high can damage your ears.

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

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

Restriction of Use

**Parent topic:** Notices

## Restriction of Use

When this product is used for applications requiring high reliability/safety such as transportation devices related to aviation, rail, marine, automotive; disaster prevention devices; various safety devices; or functional/precision devices, you should use this product only after giving consideration to including fail-safes and redundancies into your design to maintain safety and total system reliability.

Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care, please make your own judgment on this product's suitability after a full evaluation.

**Parent topic:** Important Safety Instructions

# 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 communications. 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 or Declaration 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 complies with Canadian ICES-003.

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

**Parent topic:** Notices

## Trademarks

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EXCEED YOUR VISION

**Parent topic:** Notices

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The list of GPL Programs

- **busybox-1.13.4**
- **iptables-1.4.4**
- **libgcc1(gcc-4.3.3)**
- **libstdc++6.0.10**
- **linux-2.6.27**
- **patches**
- **udhcp 0.9.8**
- **uvc rev.219**
- **wireless_tools 29**
- **EPSON original drivers**

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