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PROJECTOR OWNER'S MANUAL

Epson
PowerLite 97

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PowerLite® 97/98/99W/955W/965
User's Guide

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PowerLite 97/98/99W/955W/965 User's Guide

Welcome to the PowerLite 97/98/99W/955W/965 *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 97, 98, 99W, 955W, and 965 projectors include these special features:

Bright, high-resolution projection system

- PowerLite 97: Up to 2700 lumens of brightness (white light output and color light output)

  PowerLite 98/99W/955W: Up to 3000 lumens of brightness (white light output and color light output)

  PowerLite 965: Up to 3500 lumens of brightness (white light output and color 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 97/98/965: Native resolution of 1024 × 768 pixels (XGA)

  PowerLite 99W/955W: Native resolution of 1280 × 800 pixels (WXGA)

Flexible connectivity

- Plug-and-play 3-in-1 USB projection, audio, and mouse control for instant setup
- Projection from iOS or Android devices with the optional wireless LAN module and free Epson iProjection app; visit epson.com/projectorapp (U.S.) or epson.ca/projectorapp (Canada) for more information
- Wired and wireless network support for projection, monitoring, and control via remote network computer
- Connect up to 50 devices to the projector via a network and project from up to 4 devices simultaneously
- PC Free photo slide shows and videos via connected USB memory devices
- HDMI port for computer or video device connection

- Ports for connecting an external monitor, microphone, and external speakers

Easy-to-use setup and operation features

- Low total cost of ownership with longer lamp life
- Innovative horizontal keystone correction slider for flexible projector placement
- 1.2× (PowerLite 97/98/99W) and 1.6× (PowerLite 955W/965) optical zoom ratio for improved zooming capability
- Built-in closed captioning decoder
- Epson's Instant Off and Direct Power On features for quick setup and shut down

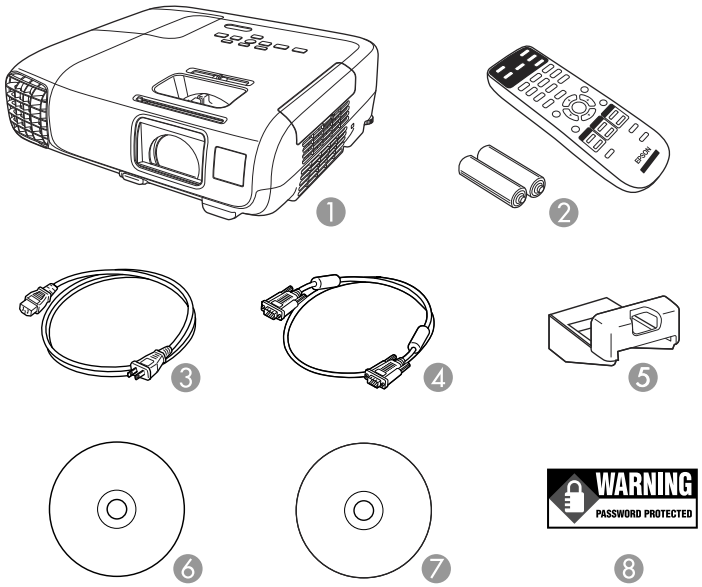
Product Box Contents
Additional Components
Optional Equipment and Replacement Parts
Warranty and Registration Information

Parent topic: Introduction to Your Projector

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 and batteries (two AA alkaline)
3 Power cord
4 VGA computer cable
5 Wireless LAN module cover
6 Projector documentation CD
7 Projector software CD
8 Password Protected sticker

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 composite video signal, you need an RCA-style video or A/V cable. See your local computer or electronics dealer for purchase information.
- To receive an S-Video signal, you need an S-Video cable compatible with your device. See your local computer or electronics dealer for purchase information.
- 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.

  Note: To connect a Mac that includes only a Mini DisplayPort, 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.

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

Parent topic: Projector Features

Related references

Optional Equipment and Replacement Parts

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 (ELPLP78)	V13H010L78

Option or part	Part number
Air filter replacement set (2 filters; ELPAF32)	V13H134A32
Wireless LAN module (ELPAP07)	V12H418P12
Quick Wireless Connection USB Key (ELPAP09)	V12H005M09
Epson DC-06 document camera (ELPDC06)	V12H321005
Epson DC-11 document camera (ELPDC11)	V12H377020
Epson DC-12 document camera (ELPDC12)	V12H594020
Epson DC-20 document camera (ELPDC20)	V12H500020
BrightLink Solo interactive module (IU-01)	V12H415020
AP-60 Projector Sound Solution	V12H329020
PixiePlus Control System	ELPSP10
Accolade Duet portable projector screen	ESPSC80
ES1000 Ultra Portable Tabletop Projection screen	V12H002S4Y
ES3000 Ultra Portable Tabletop Projection screen	V12H002S3Y
Universal projector ceiling mount	ELPMBPJF
Adjustable suspended ceiling channel kit	ELPMBP01
False ceiling plate kit	ELPMBP02
Structural Round ceiling plate	ELPMBP03
Adjustable Extension Column (pipe) 8" - 11" (20 to 28 cm)	ELPMBC01
Kensington security lock	ELPSL01
Soft carrying case	V12H001K67
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
Remote control	1599176
1-Year Extended Service Program - Exchange Service	EPPEXPA1

Option or part	Part number
2-Year Extended Service Program - Exchange Service	EPPEXPA2
1-Year Extended Service Program - Depot Repair Service	EPPFTPA1
2-Year Extended Service Program - Depot Repair Service	EPPFTPA2

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:

- 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.

- 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

Related tasks

Using the Projector Help Displays

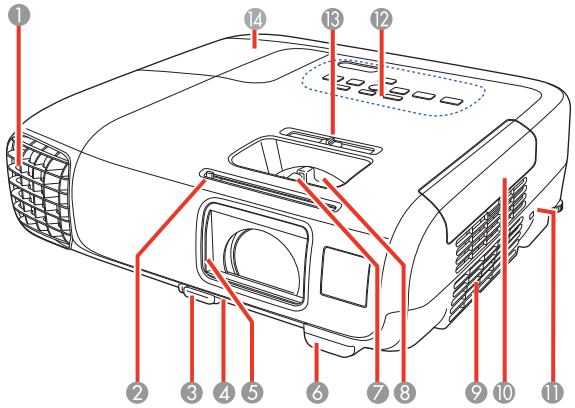
Projector Part Locations

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

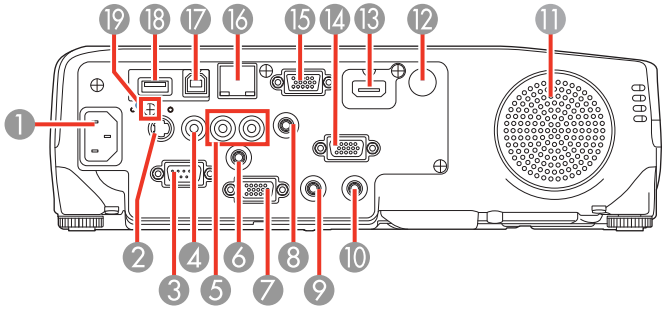


1 Exhaust vent

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

Parent topic: Projector Part Locations

Projector Parts - Rear

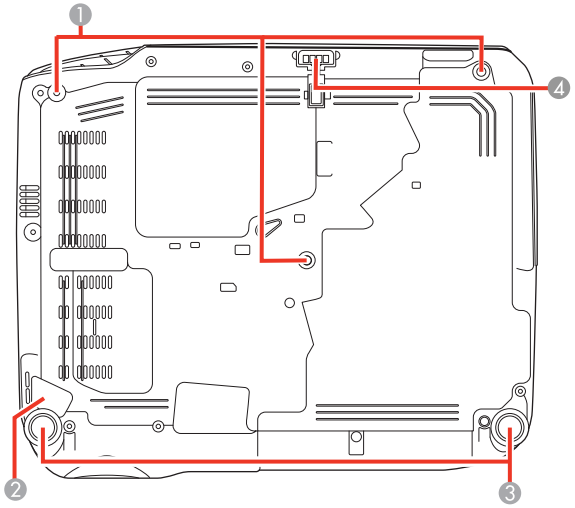


1 AC input port
2 **S-Video** port
3 **RS-232C** port

4 **Video** port
5 **Audio-L/R** ports
6 **Mic** port
7 **Monitor Out** port
8 **Audio1** port
9 **Audio Out** port
10 **Audio2** port
11 Speaker
12 Remote control receiver
13 **HDMI** port
14 **Computer2 (VGA)** port
15 **Computer1 (VGA)** port
16 Network (**LAN**) port
17 **USB-B** port
18 **USB-A** port
19 Wireless LAN module cover screw

Parent topic: Projector Part Locations

Projector Parts - Base



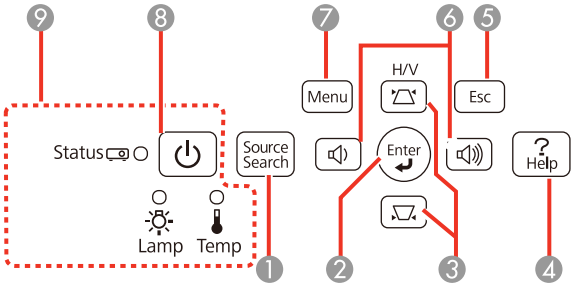
1	Mounting bracket holes
2	Security cable attachment point
3	Rear feet
4	Front adjustable foot

Parent topic: Projector Part Locations

Related tasks

Installing a Security Cable

Projector Parts - Control Panel



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

2 **Enter** button (selects options)

3 Keystone adjustment buttons (adjust screen shape) and arrow buttons

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

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

6 Volume control buttons, horizontal keystone adjustment buttons (adjusts screen shape), and arrow buttons

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

8 Power button/light

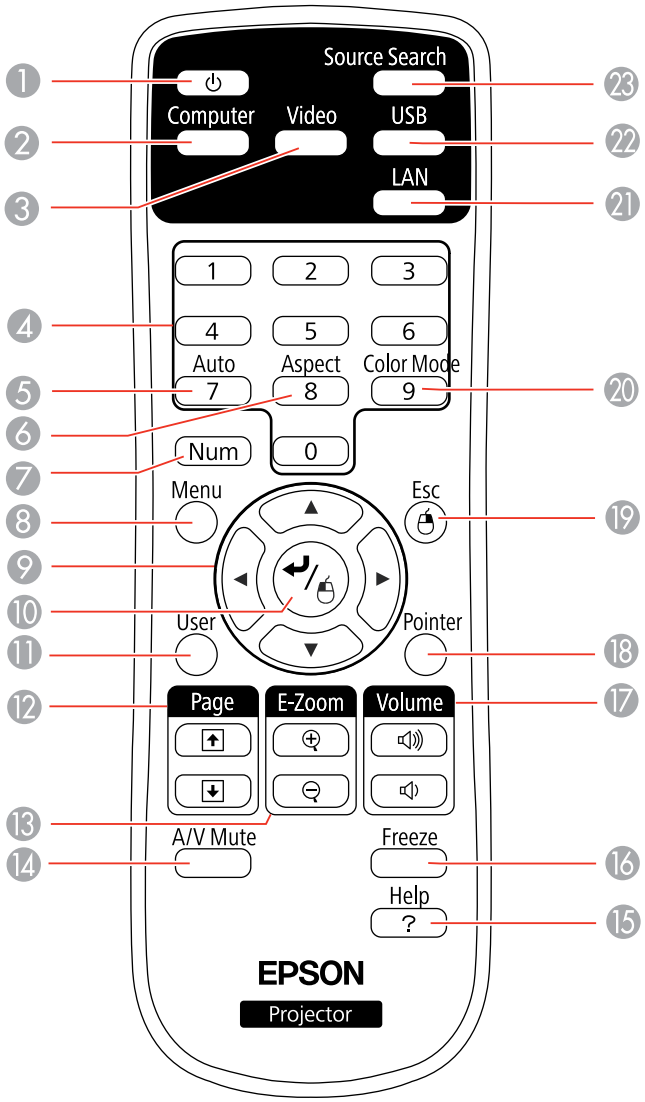
9 **Status**, **Lamp**, and **Temp** (Temperature) lights

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 Numeric buttons (enter numbers)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

21 **LAN** button (switches to available network sources)

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

23 **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.

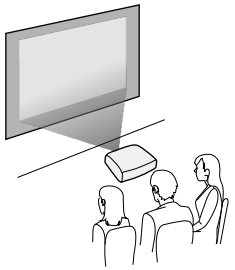
Projector Setup and Installation Options
Projection Distance

Parent topic: Setting Up the Projector

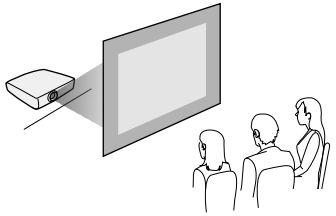
Projector Setup and Installation Options

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

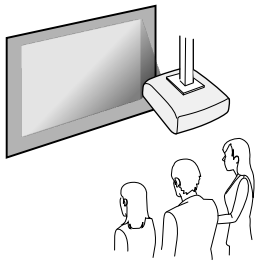
Front



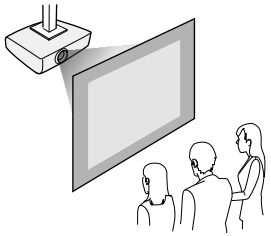
Rear



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

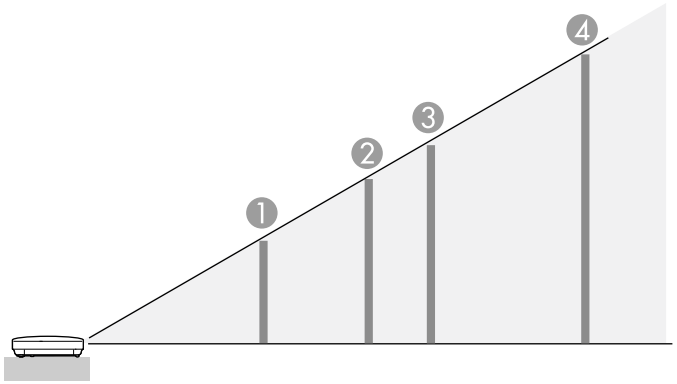
Related references

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.) You can also use the projector Throw Distance Calculator at epson.com/support (U.S.) or epson.ca/support (Canada).



PowerLite 97/98

4:3 Aspect Ratio Image or Screen

	Screen or image size	Projection distance Wide to Tele
1	50 inches	59 to 71 inches (150 to 180 cm)
2	80 inches	95 to 114 inches (241 to 290 cm)
3	100 inches	119 to 143 inches (302 to 363 cm)
4	150 inches	179 to 215 inches (454 to 546 cm)

PowerLite 99W

16:10 Aspect Ratio Image or Screen

	Screen or image size	Projection distance Wide to Tele
1	50 inches	55 to 66 inches (139 to 168 cm)
2	80 inches	88 to 106 inches (225 to 270 cm)
3	100 inches	111 to 133 inches (281 to 338 cm)
4	150 inches	167 to 200 inches (424 to 509 cm)

PowerLite 955W

16:10 Aspect Ratio Image or Screen

	Screen or image size	Projection distance Wide to Tele
1	50 inches	58 to 95 inches (149 to 243 cm)
2	80 inches	94 to 153 inches (239 to 390 cm)
3	100 inches	118 to 192 inches (300 to 488 cm)
4	150 inches	178 to 289 inches (451 to 733 cm)

PowerLite 965

4:3 Aspect Ratio Image or Screen

	Screen or image size	Projection distance Wide to Tele
1	50 inches	55 to 90 inches (140 to 229 cm)
2	80 inches	89 to 145 inches (226 to 368 cm)
3	100 inches	111 to 181 inches (283 to 460 cm)
4	150 inches	168 to 272 inches (426 to 692 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 (Windows or Mac) that has a USB port, standard video output (monitor) port, 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 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 a Microphone
Connecting to External USB Devices
Connecting to a Document Camera

Parent topic: Setting Up the Projector

Related references

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 USB Mouse Control
Connecting to a Computer for Sound

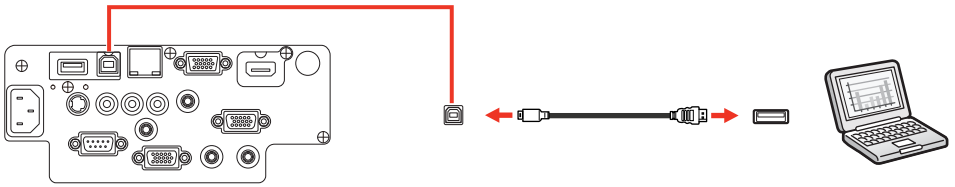
Parent topic: Projector Connections

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.

Note: An HDMI connection is recommended for projecting content requiring high bandwidth.

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**: 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.
   - **Mac 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

USB Display System Requirements

Related tasks

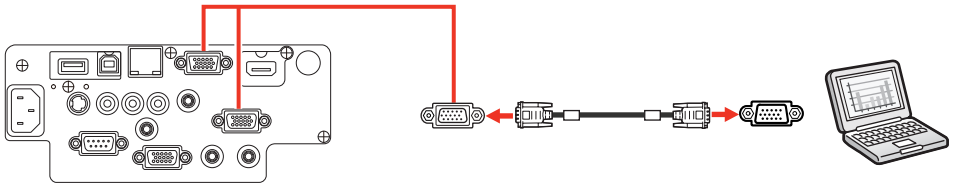
Connecting to a Computer for HDMI Video and Audio

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 Mini DisplayPort, 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

Related tasks

Connecting to a Computer for Sound

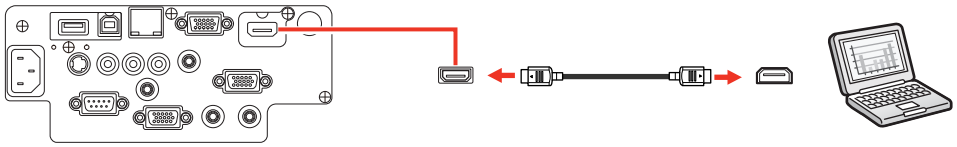
Connecting to a Computer for HDMI Video and Audio

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 Mini DisplayPort, 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.

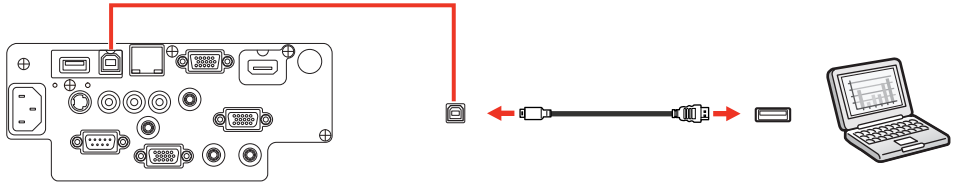


Parent topic: Connecting to Computer Sources

Connecting to a Computer for USB Mouse Control

If you connected your computer to a **Computer**, **USB-B**, 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

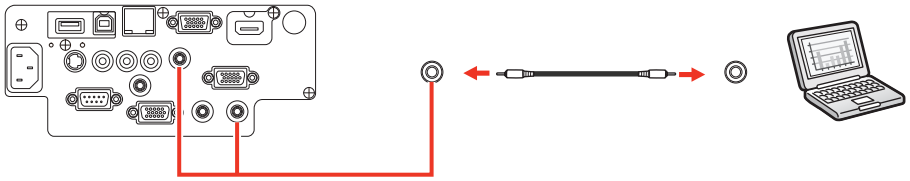
Related tasks

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** 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 an S-Video Video Source
Connecting to a Video Source for Sound

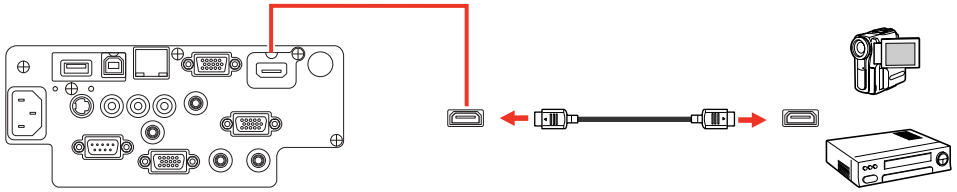
Parent topic: Projector Connections

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.

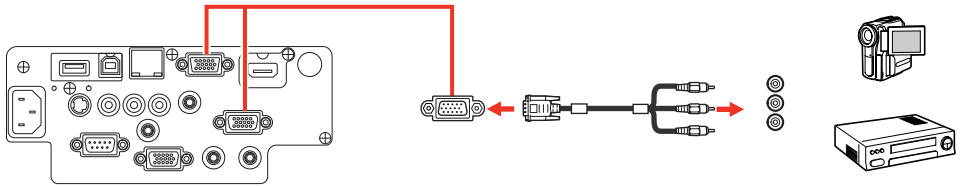


Parent topic: Connecting to Video Sources

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

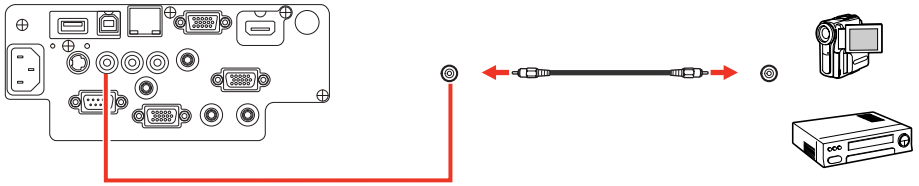
Related tasks

Connecting to a Video Source for Sound

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

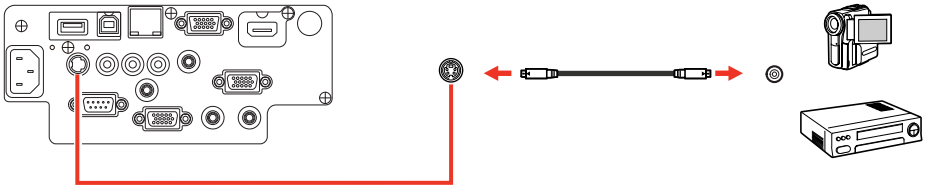
Related tasks

Connecting to a Video Source for Sound

Connecting to an S-Video Video Source

If your video source has an S-Video port, you can connect it to the projector using an optional S-Video cable.

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



Parent topic: Connecting to Video Sources

Related tasks

Connecting to a Video Source for Sound

Connecting to a Video Source for Sound

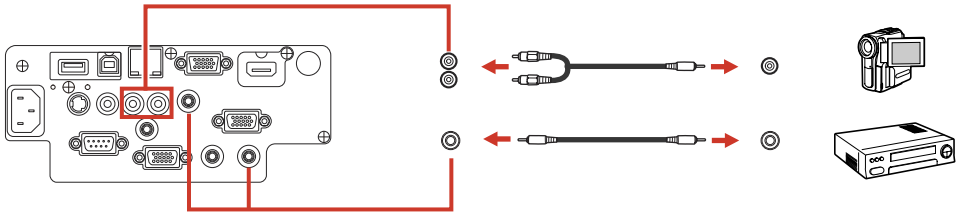
You can play sound through the projector's speaker system if your video source has audio output ports.

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

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

Note: If you connected your video source to the projector using an HDMI cable, the audio signal is transferred with the video signal; you do not need an additional cable for sound.

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

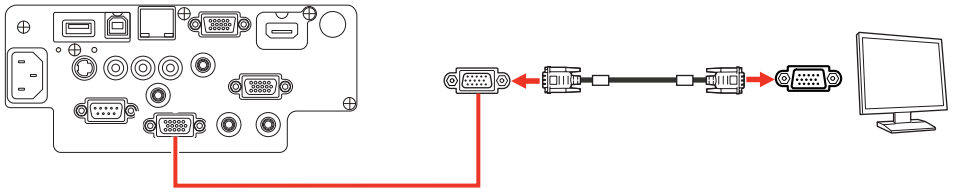
Connecting to an External Computer Monitor

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.

If you want to output images to an external monitor when the projector is turned off, you need to select **Communication On** for the **Standby Mode** setting and **Always On** for the **A/V Output** setting in the projector's menu system.

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.

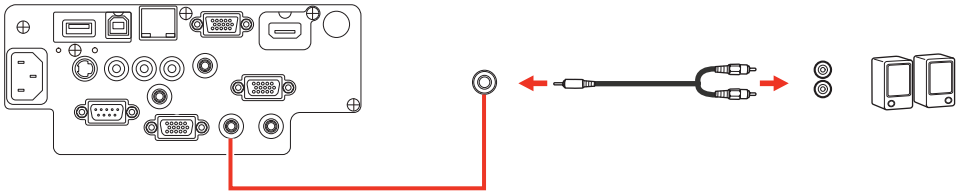
Note: You can also connect the projector to an amplifier with speakers.

If you want to output audio from the external speakers when the projector is turned off, you need to select **Communication On** for the **Standby Mode** setting and **Always On** for the **A/V Output** setting in the projector's menu system.

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.



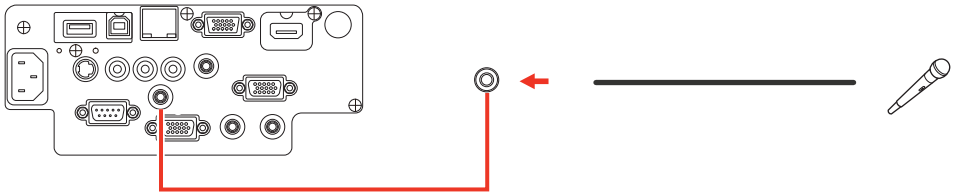
Parent topic: Projector Connections

Connecting a Microphone

You can connect a microphone to the projector's **Mic** port to provide audio support during presentations.

Note: If you connect a condenser microphone with plug-in power support, turn on the **Plug-in Power** setting in the Extended menu. If you want to output audio from the external speakers when the projector is turned off, you need to select **Communication On** for the **Standby Mode** setting and **Always On** for the **A/V Output** setting in the projector's Extended menu.

1. Connect the microphone cable to the projector's **Mic** port.



2. Turn on the microphone, if necessary.

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 project slide shows from image files on a connected USB device or memory card reader.

Parent topic: Connecting to External USB Devices

Related topics

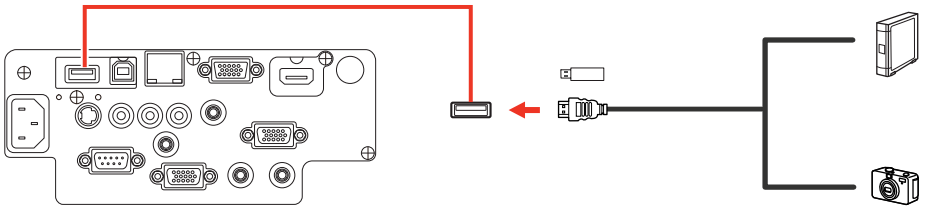
Projecting a PC Free Presentation

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.



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

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.

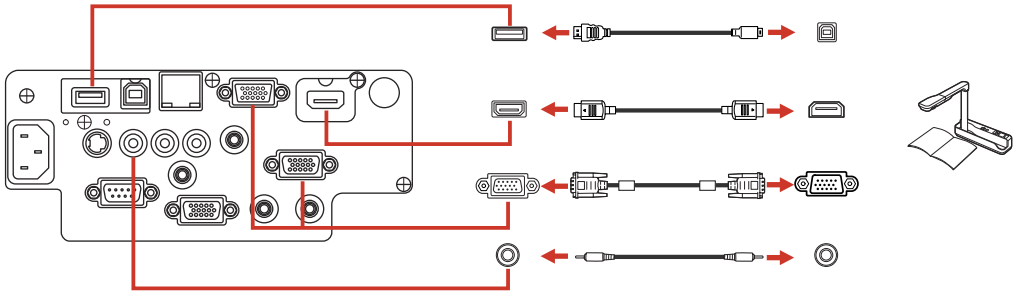
Parent topic: Connecting to External USB Devices

Connecting to a Document Camera

You can connect a document camera to your projector to project images viewed by the camera.

Depending on your Epson document camera model, do one of the following to connect the document camera to your projector:

- For the Epson DC-06 document camera, locate the USB cable that came with the camera and connect it to the to the projector's **USB-A** port and to the document camera's USB Type B port.
- For the Epson DC-11 document camera, connect it to the projector's **Computer** or **Video** port and to the corresponding port on the document camera. See the document camera manual for details.
- For the Epson DC-12 document camera, connect it to the projector's **HDMI**, **Computer**, or **Video** port and to the corresponding port on the document camera. See the document camera manual for details.
- For the Epson DC-20 document camera, connect it to the projector's **HDMI**, **Computer**, or **Video** port and to the corresponding port on the document camera. See the document camera manual for details.



Note: For additional features supported by software, connect your document camera to your computer instead of the projector. See the document camera manual for details.

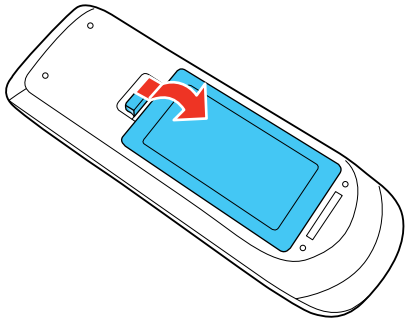
Parent topic: Projector Connections

Installing Batteries in the Remote Control

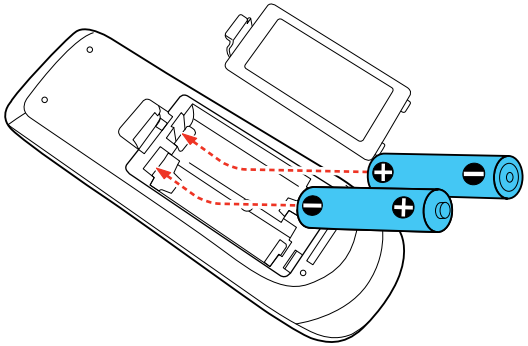
The remote control uses the two AA batteries that came with the projector.

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

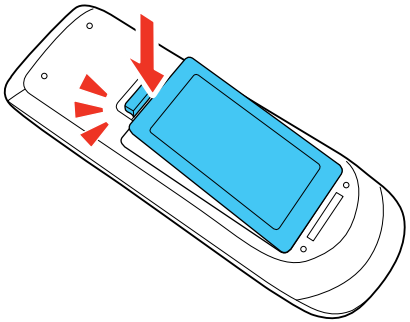
1. Open the battery cover.



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.

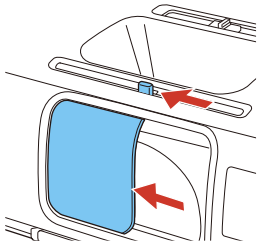
Parent topic: Setting Up the Projector

Related references

Remote Control Specifications

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
Setting Up Projector Network E-Mail Alerts
Setting Up Monitoring Using SNMP
Controlling a Networked Projector Using a Web Browser

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.
- EasyMP Multi PC Projection software allows you to hold interactive meetings by projecting the computer screens of users over a network. See the *EasyMP Multi PC Projection Operation Guide* for instructions.

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.

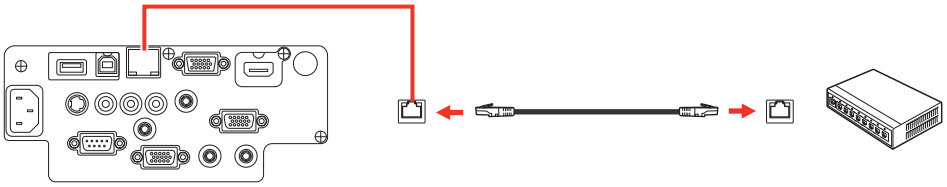
Connecting to a Wired Network
Selecting Wired Network Settings

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

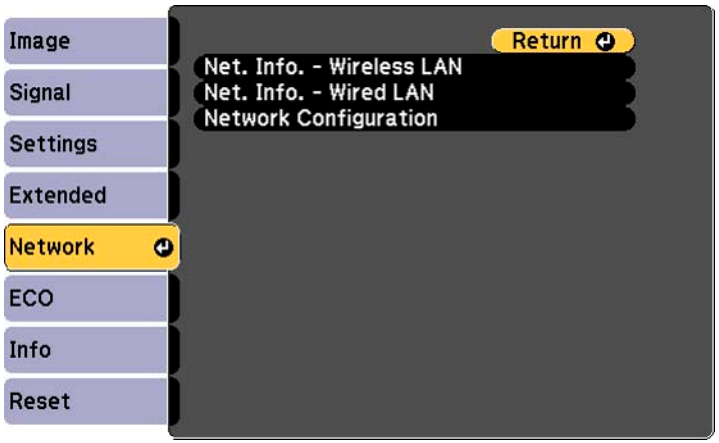
Selecting Wired Network Settings

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

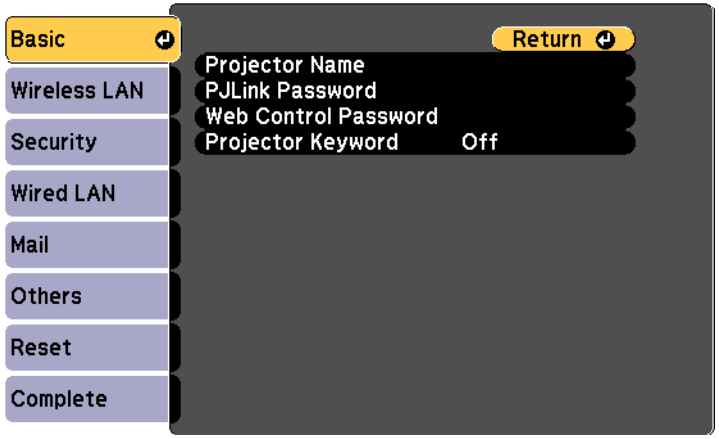
Note: Make sure you already connected the projector to your wired network using the **LAN** port.

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**.

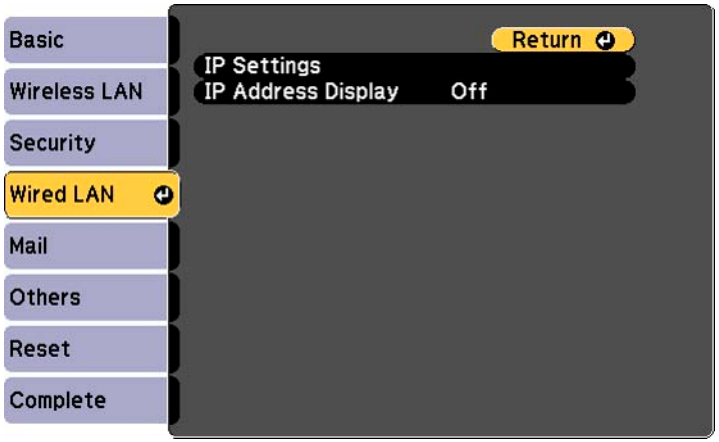


6. Select the following basic options as necessary:
   - **Projector Name** lets you enter a name up to 16 alphanumeric characters long to identify the projector over the network.

- **PJLink Password** lets you enter a password up to 32 alphanumeric characters long for using the PJLink protocol for projector control.
- **Web Control 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**.



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** 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. 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: The wireless LAN module is not included with all projector models.

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*.
- 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.
- EasyMP Multi PC Projection software allows you to hold interactive meetings by projecting the computer screens of users over a network. See the *EasyMP Multi PC Projection Operation Guide* for instructions.

Installing the Wireless LAN Module
Using Quick Wireless Connection (Windows Only)
Selecting Wireless Network Settings Manually
Selecting Wireless Network Settings in Windows
Selecting Wireless Network Settings in Mac OS X
Setting Up Wireless Network Security

Parent topic: Using the Projector on a Network

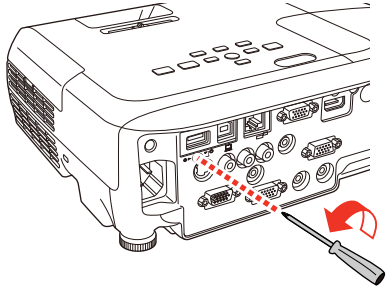
Related references

Optional Equipment and Replacement Parts

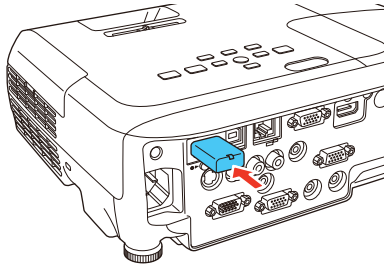
Installing the Wireless LAN Module

To use the projector over a wireless network, install the Epson 802.11b/g/n wireless LAN module in the projector. Do not install any other type of wireless module.

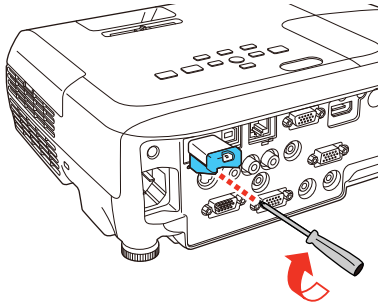
1. Remove the wireless LAN module cover screw.



2. Insert the wireless LAN module into the **USB-A** port.



3. Attach the wireless LAN module cover and secure it using the screw you removed.



The light on the wireless LAN module turns on when the module is installed and operating. The light flashes when the module is communicating over the network.

Parent topic: Wireless Network Projection

Related references

Optional Equipment and Replacement Parts

Using Quick Wireless Connection (Windows Only)

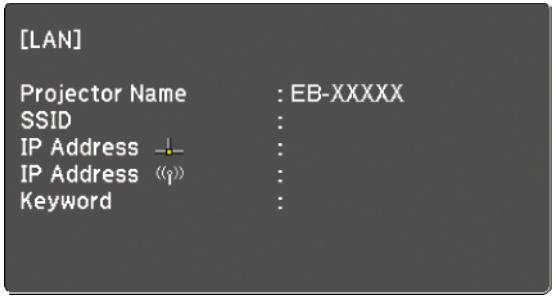
You can use the Quick Wireless Connection USB key to quickly connect your computer to the projector wirelessly. Then you can project your presentation and remove the key when you are done.

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

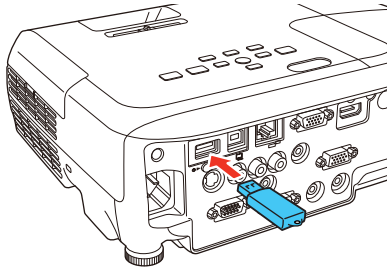
Note: Make sure the wireless LAN module is installed. The wireless LAN module is not included with all projector models.

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

   You see a screen like this:



3. Verify that an SSID and IP address are displayed, then remove the wireless LAN module from the projector.
4. Insert the Quick Wireless Connection USB key into the same port used for the wireless LAN module.



You see a projected message that the network information update is complete.

5. Remove the USB key.
6. Reinsert the wireless LAN module into the projector.
7. 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 LaunchQWRD.exe**, then select **Allow** on the next screen.

8. 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 for this application.

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.

9. Run your presentation as necessary.
10. 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

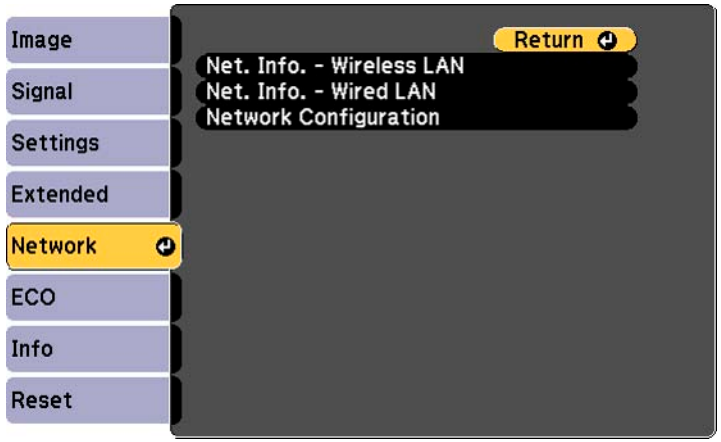
Related references

Optional Equipment and Replacement Parts

Selecting Wireless Network Settings Manually

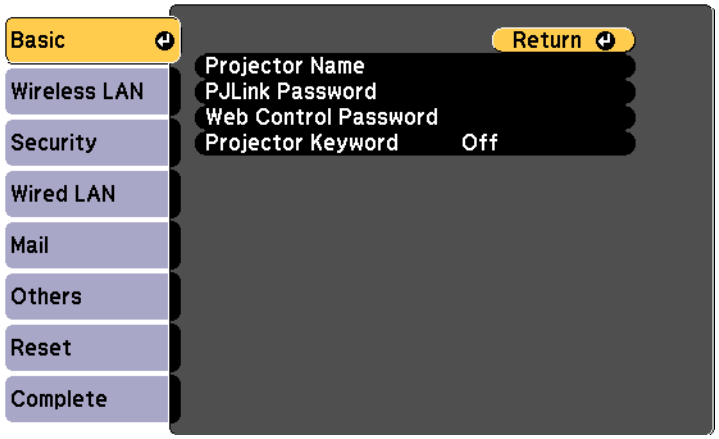
Before you can project from your wireless network, you must select the network settings for the projector using its menu system.

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**.

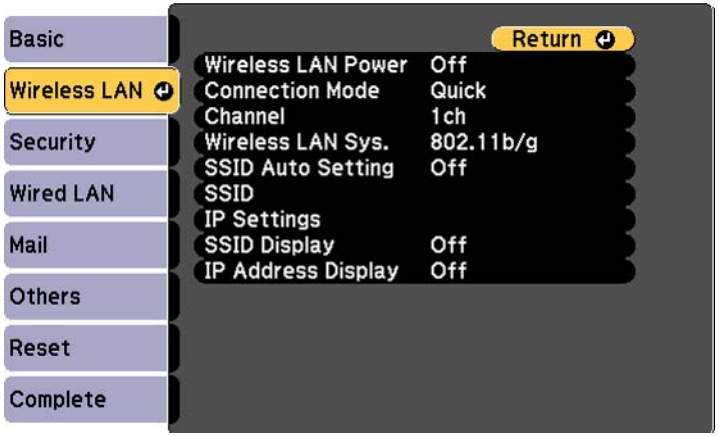
5. Select the **Basic** menu and press **Enter**.



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.
   - **PJLink Password** lets you enter a password up to 32 alphanumeric characters long for using the PJLink protocol for projector control.
   - **Web Control Password** lets you enter a password up to 8 alphanumeric characters long for accessing the projector over the web. (Default user name is **EPSONWEB**; default password is **admin**.)
   - **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 **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** **Off**	Turns on wireless LAN support

Setting	Options	Description
Connection Mode	**Quick** **Advanced**	Selects the type of wireless connection: **Quick**: lets you quickly connect to one computer or use the optional Quick Wireless Connection USB Key to connect **Advanced**: lets you connect to multiple computers via a wireless network access point
Channel	**1ch** **6ch** **11ch**	In **Quick** connection mode, selects the frequency band (channel) used by the wireless LAN
Wireless LAN Sys.	**802.11b/g** **802.11b/g/n**	Sets the type of wireless LAN system the projector is connecting to
SSID Auto Setting	**On** **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
IP Settings	**DHCP** (**On** or **Off**) **IP Address** **Subnet Mask** **Gateway Address**	Selects DHCP if your network assigns addresses automatically, or turns off DHCP so you can enter the network's IP address, subnet mask, and gateway address as needed
SSID Display	**On** **Off**	Selects whether to display the SSID on the network standby screen

Setting	Options	Description
IP Address Display	**On** **Off**	Selects whether to display the IP address on the network standby screen

Parent topic: Selecting Wireless Network Settings Manually

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 Mac OS X

Before connecting to the projector, select the correct wireless network in Mac 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

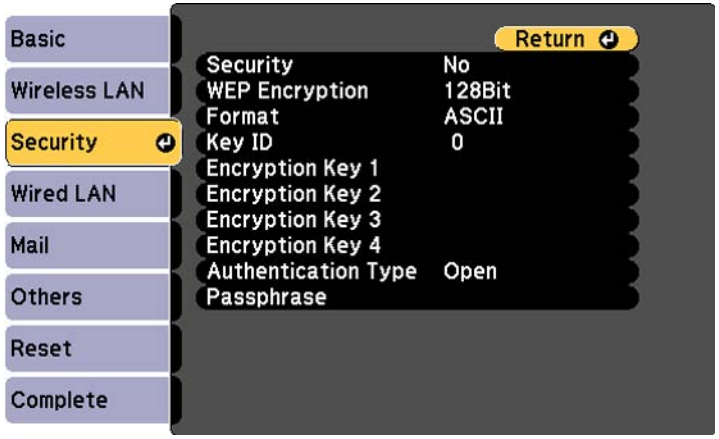
Setting Up Wireless Network Security

You can set up security for your projector to use on the wireless network. Set up one of the following security options to match the settings used on your network:

- WEP encryption
- WPA security

Note: Check with your network administrator for guidance on entering the correct information.

1. Press the **Menu** button.
2. Select the **Network** menu and press **Enter**.
3. Select **Network Configuration** and press **Enter**.
4. Select the **Security** menu and press **Enter**.



5. Select the security settings as necessary to match your network settings.
6. When you finish selecting settings, select **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	**WEP** and **WPA** types available	Selects the type of security used on the wireless network

Setting	Options	Description
WEP Encryption	**128Bit** **64Bit**	For WEP security, selects the type of encryption coding
Format	**ASCII** **HEX**	For WEP security, selects the encryption input method: **ASCII**: enables text input **HEX**: enables hexadecimal input
Key ID	**1** to **4**	For WEP security, selects the WEP encryption key ID
Encryption Key 1 to **Encryption Key 4**	Various characters depending on selected **WEP Encryption** and **Format** settings	For the selected WEP Key ID setting, enter the key used for WEP encryption: **128 bit ASCII**: 13 alphanumeric characters **128 bit HEX**: 26 characters (0 to 9 and A to F) **64 bit ASCII**: 5 alphanumeric characters **64 bit HEX**: 10 characters (0 to 9 and A to F)
Authentication Type	**Open** **Shared**	For WEP security, selects the type of WEP authentication used
Passphrase	Various keys from 8 to 32 characters	For WPA-PSK or WPA2-PSK security, selects the pre-shared key used on the network

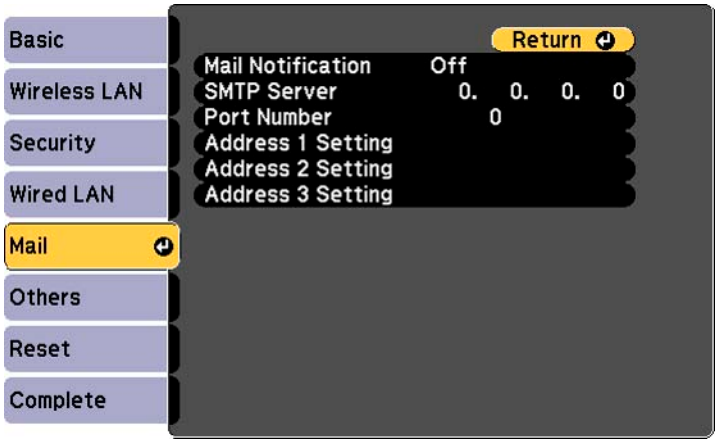
Parent topic: Setting Up Wireless Network Security

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. Select the **Mail** menu and press **Enter**.



5. Turn on **Mail Notification**.
6. Enter the IP address for the **SMTP Server** option.

   Note: To enter the IP address using the numeric keys on the remote control, press and hold the **Num** button. 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. Select a number for the SMTP server **Port Number**, from 1 to 65535 (default is 25).
8. Choose an **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.

9. When you finish selecting settings, select **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.

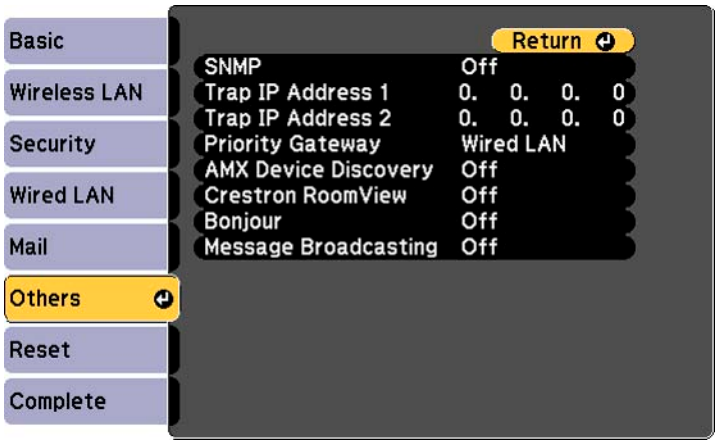
Parent topic: Setting Up Projector Network E-Mail Alerts

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. Select the **Others** menu and press **Enter**.



5. Enter up to two IP addresses to receive SNMP notifications, using 0 to 255 for each address field.

   Note: To enter the IP address using the numeric keys on the remote control, press and hold the **Num** button. 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. If available, select the **Priority Gateway** setting for your network.
7. If your network environment uses an AMX controller, turn on the **AMX Device Discovery** setting to allow the projector to be detected.
8. If your network environment uses a Crestron RoomView controller, turn on the **Crestron RoomView** setting to allow the projector to be detected.

   Note: Enabling Crestron RoomView disables the Epson Message Broadcast feature in the EasyMP Monitor software.

9. If you are connecting to a network using Bonjour, turn on the **Bonjour** setting.
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 (Windows only).
11. When you finish selecting settings, select **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 8.0 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.

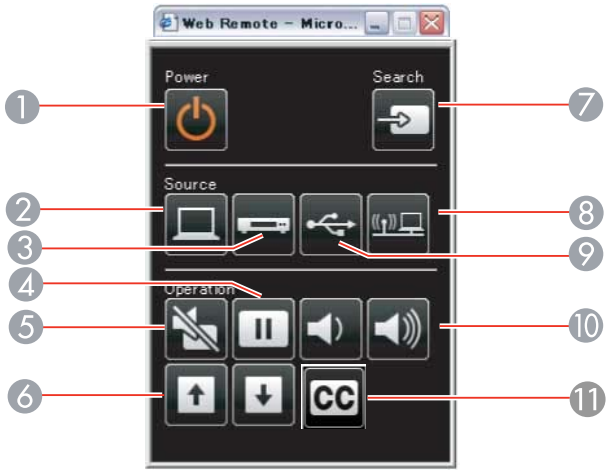
1. Make sure the projector is turned on.
2. Start your web browser on a computer connected to the network.
3. Type the projector's IP address into the browser's address box and press the computer's **Enter** key.

   You see the Web Control screen.

   Note: You may need to log in before you see the Web Control screen. If you see a log in window, enter your user name and password. (The default user name is **EPSONWEB** and the default password is **admin**.)

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**, **S-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

Related references

Projector Setup Settings - ECO Menu

Using Basic Projector Features

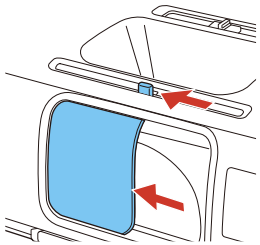
Follow the instructions in these sections to use your projector's basic features.

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

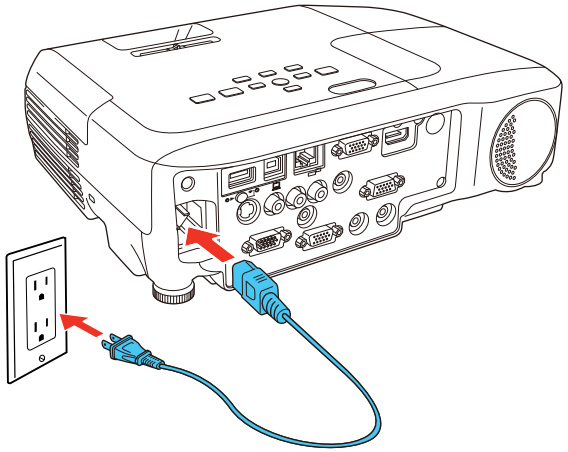
Turning On the Projector

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 blue. This indicates that the projector is receiving power.

   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 Status light flashes blue as the projector warms up. Once the projector is warmed up, the Status light stops flashing and turns blue.

   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:

- 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

Related tasks

Selecting an Image Source

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.



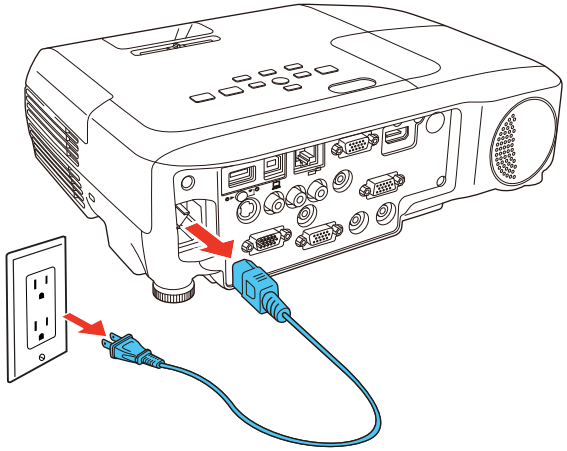
2. Press the power button again. (To leave it on, press any other button.)

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

   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).

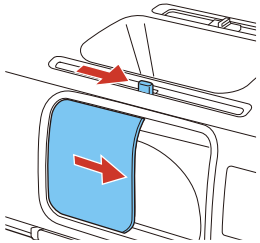
   Caution: Do not turn the projector on immediately after turning it off. Turning the projector on and off frequently may shorten the life of the lamp.

3. To transport or store the projector, make sure the Status light is off, then unplug the power cord.



Caution: To avoid damaging the projector or lamp, never unplug the power cord when the Status light is on or flashing.

4. Close the projector's lens cover.



Parent topic: Using Basic Projector Features

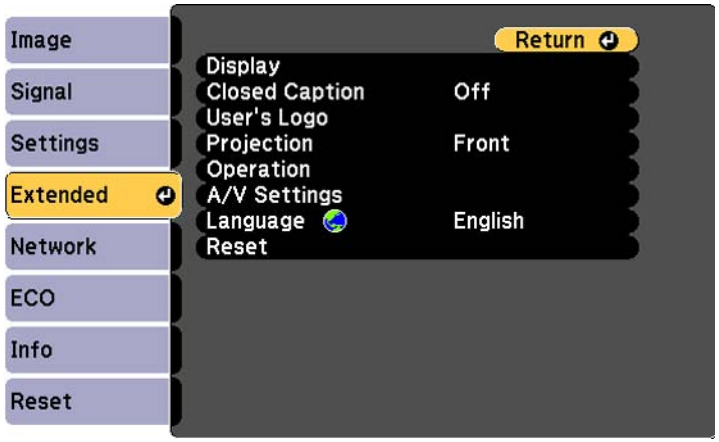
Related concepts

Image Shape

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.

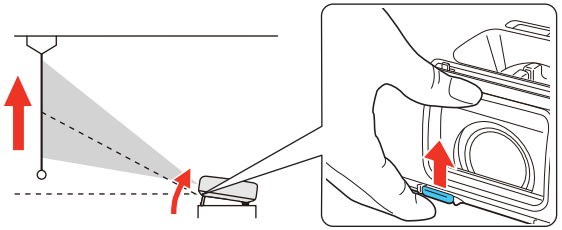
Parent topic: Using Basic Projector Features

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.

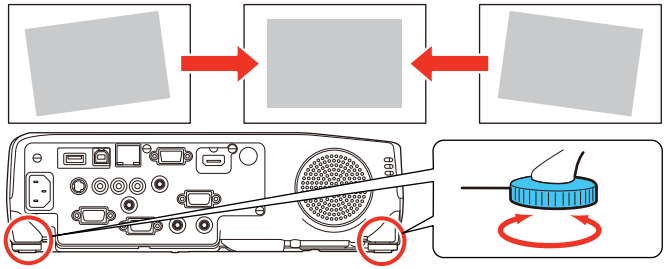
1. Turn on the projector and display an image.

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

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 vertical keystone effects when you reposition the projector.

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

Correcting Image Shape with the Horizontal Keystone Slider

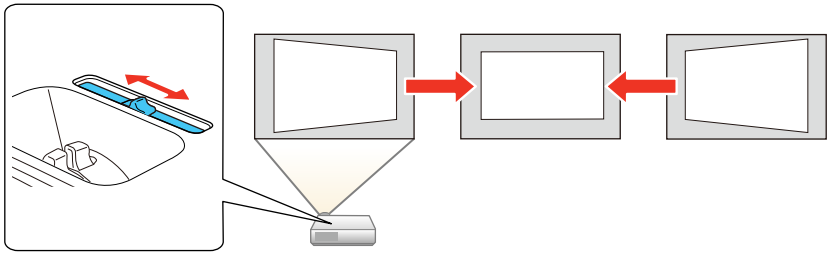
You can use the projector's horizontal keystone slider to correct the shape of an image that is unevenly rectangular horizontally, such as when the projector is placed to the side of the projection area.

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.

   Note: You can also display the pattern by pressing the **User** button on the remote control (if the test pattern is assigned to this button).

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

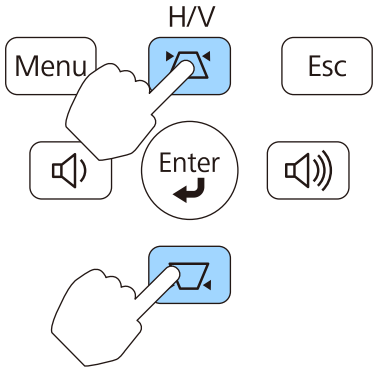
You can use the projector's keystone correction buttons to correct the shape of an image that is unevenly rectangular on the sides.

1. Turn on the projector and display an image.

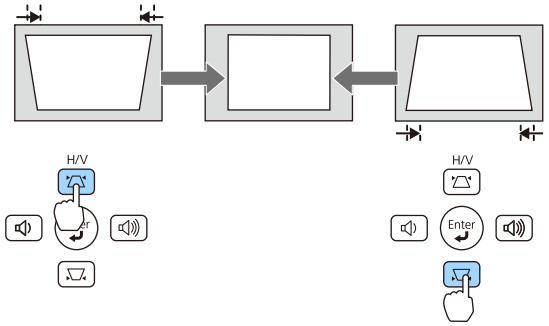
   Note: You can display a pattern to aid in adjusting the projected image using the Settings menu.

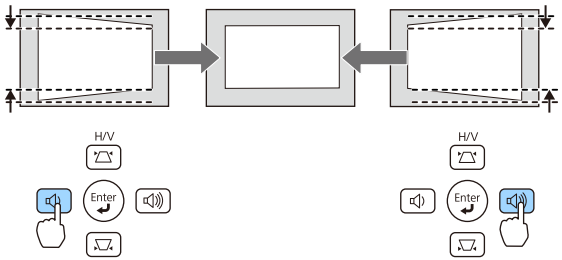
Note: You can also display the pattern by pressing the **User** button on the remote control (if the test pattern is assigned to this button).

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.

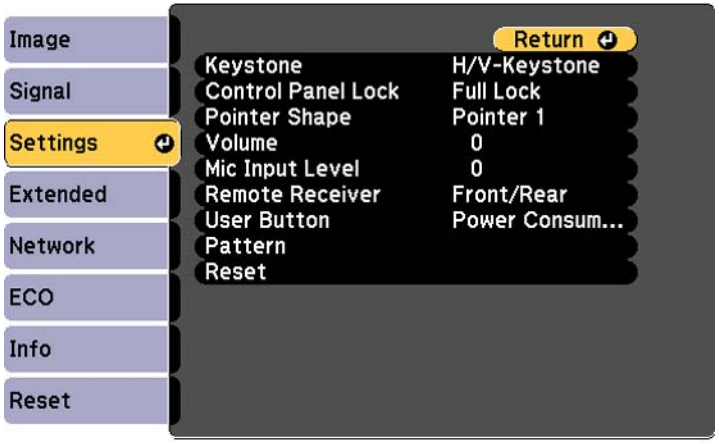
1. Turn on the projector and display an image.

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

   Note: You can also display the pattern by pressing the **User** button on the remote control (if the test pattern is assigned to this button).

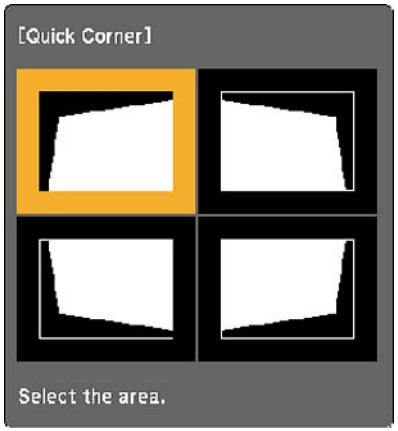
2. Press the **Menu** button.

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

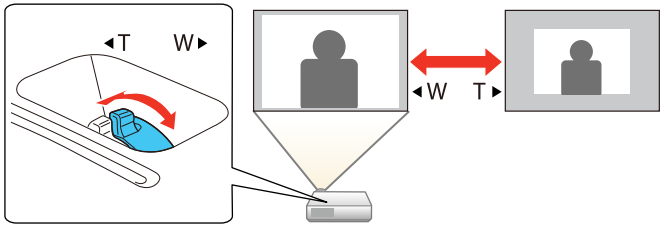
Resizing the Image With the Zoom Ring

1. Turn on the projector and display an image.

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

   Note: You can also display the pattern by pressing the **User** button on the remote control (if the test pattern is assigned to this button).

2. To enlarge or reduce the image size, rotate the projector's zoom ring.



Parent topic: Using Basic Projector Features

Related references

Projector Feature Settings - Settings Menu

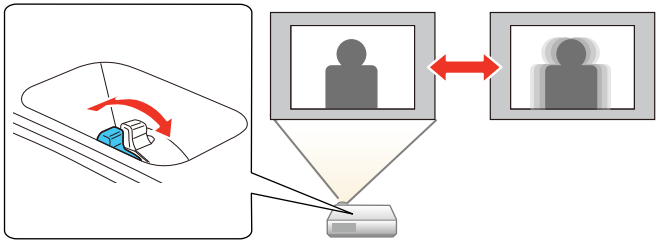
Focusing the Image Using the Focus Ring

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.

   Note: You can also display the pattern by pressing the **User** button on the remote control (if the test pattern is assigned to this button).

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



Parent topic: Using Basic Projector Features

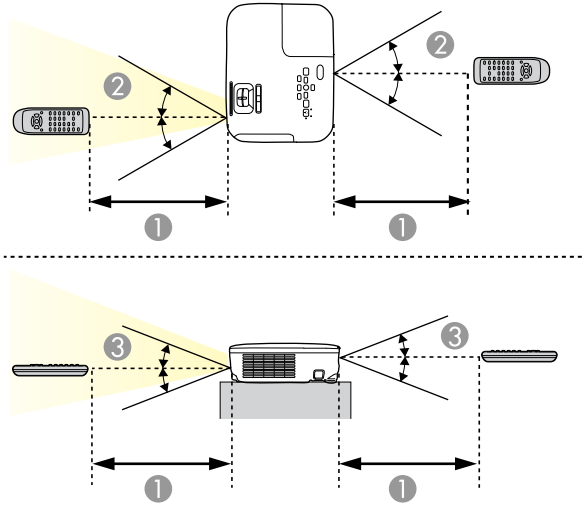
Related references

Projector Feature Settings - Settings Menu

Remote Control Operation

The remote control lets you control the projector from almost anywhere in the room. 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 distance and angles listed here.



1 19.7 feet (6 m)

2 ± 30°

3 ± 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

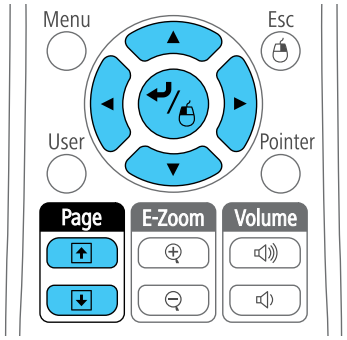
Related tasks

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**, or **HDMI** port to display video.
2. If you connected your computer to the **Computer** 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

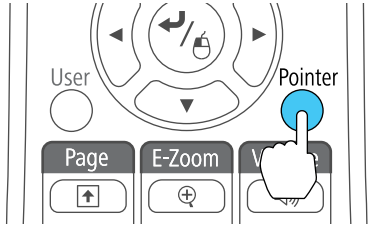
Related tasks

Connecting to a Computer for USB Mouse Control

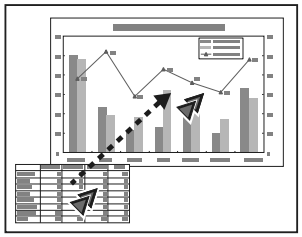
Using the Remote Control as a Pointer

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

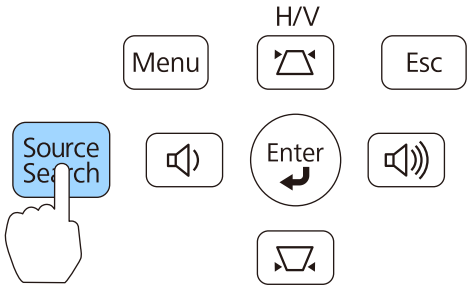
Related references

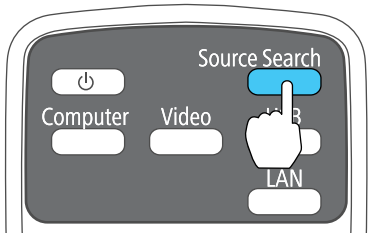
Projector Feature Settings - Settings Menu

Selecting an Image Source

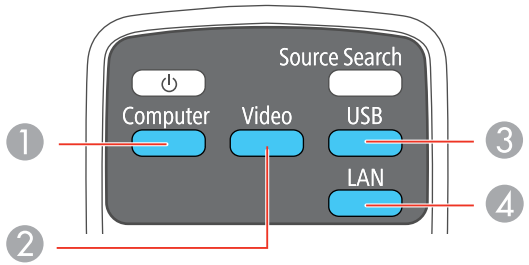
If you connected multiple image sources to the projector, such as a computer and DVD player, you may want to switch from one image source to the other.

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

Parparent 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.

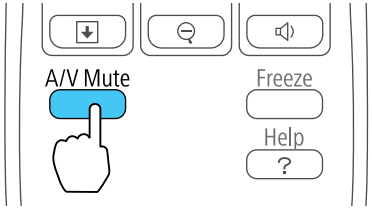
Changing the Projection Mode Using the Remote Control
Changing the Projection Mode Using the Menus

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.

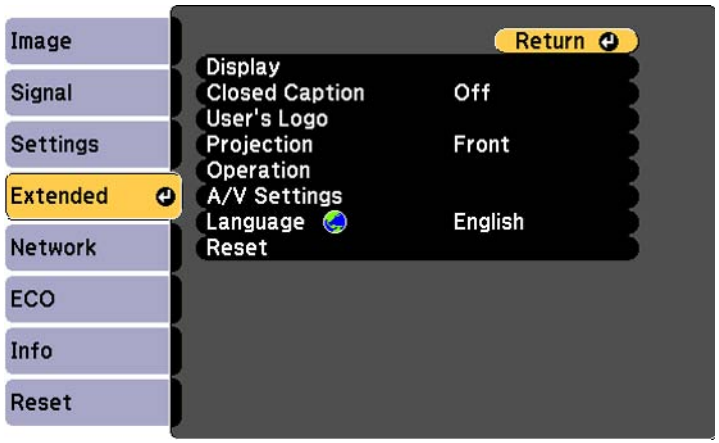
Parent topic: Projection Modes

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

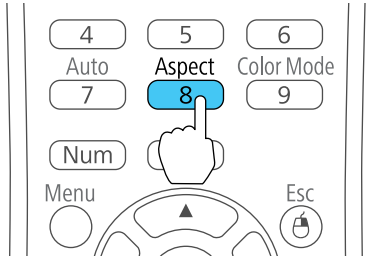
Related references

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 97/98/965

Aspect ratio setting	Description
Auto	Automatically sets the aspect ratio according to the input signal.
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.

PowerLite 99W/955W

Aspect ratio setting	Description
Auto	Automatically sets the aspect ratio according to the input signal.
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.
Zoom	Displays images using the full width of the projection area and maintains the aspect ratio of the image.
Full	Displays images using the full width of the projection area, but does not maintain the aspect ratio.
Native	Displays images as is (aspect ratio and resolution are maintained).

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

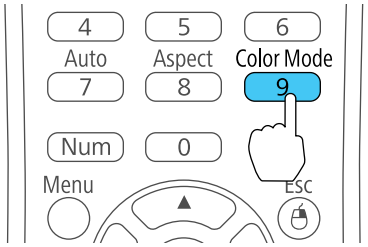
Parent topic: Using Basic Projector Features

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:

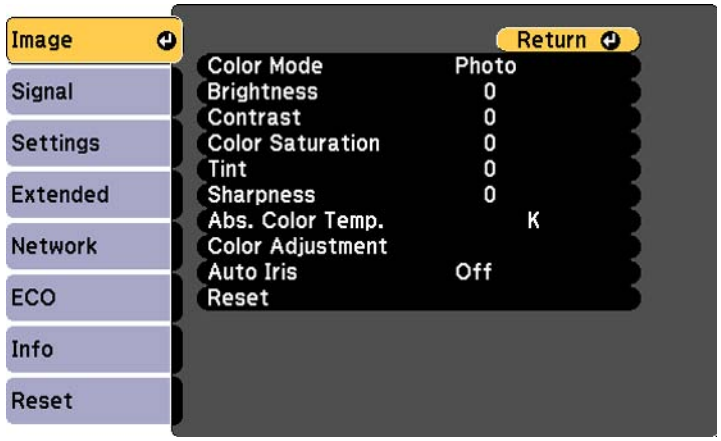
Color Mode	Description
Presentation	Best for color presentations in a bright room
Dynamic	Best for projecting in a bright room
Theatre	Best for movies projected in a dark room
Sports	Best for television images in a bright room
sRGB	Best for standard sRGB computer displays
Blackboard	Best for presentations 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

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 choose one of the following:
   - **High Speed** to adjust brightness as soon as the scene changes.
   - **Normal** for standard brightness adjustment.

   Note: You can set **Auto Iris** 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.

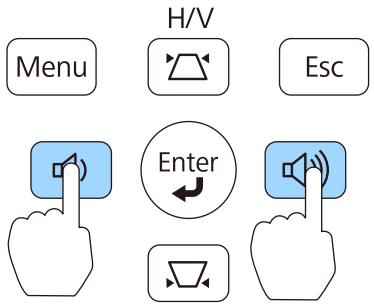
Parent topic: Color Mode

Controlling the Volume with the Volume Buttons

You can use the **Volume** buttons on the projector or the remote control to adjust the volume as you project a presentation with audio. 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 or these buttons on the control panel.



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

Related references

Projector Parts - Control Panel

Projector Feature Settings - Settings Menu

Projecting a PC Free Presentation

You can use your projector's PC Free feature whenever you connect a USB device that contains compatible image or movie files. This lets you quickly and easily display and control them using the projector's remote control. You can also display a slide show of the images.

Supported PC Free File Types

Starting a PC Free Slide Show

Starting a PC Free Movie Presentation

PC Free Display Options

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.

File contents	File type (extension)	Details
Image	.jpg	Make sure the file is not: • CMYK format • Progressive format • Highly compressed • Above 8192 × 8192 resolution
	.bmp	Make sure the file resolution is not above 1280 × 800
	.gif	Make sure the file is not: • Above 1280 × 800 resolution • Animated
	.png	Make sure the file resolution is not above 1280 × 800
Movie	.avi	Make sure the file is not: • Saved with an audio codec other than linear PCM or ADPCM • Above 1280 × 720 resolution

Parent topic: Projecting a PC Free Presentation

Starting a PC Free Slide Show

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

Note: You can change the PC Free 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 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**, or press the **Page** up or down buttons on the remote control.

3. Do one of the following:
   - 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.

Parent topic: Projecting a PC Free Presentation

Related tasks

Connecting a USB Device or Camera to the Projector
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**, or press the **Page** up or down buttons on the remote control.
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. To stop movie playback, press the **Esc** button, highlight **Exit**, and press **Enter**.

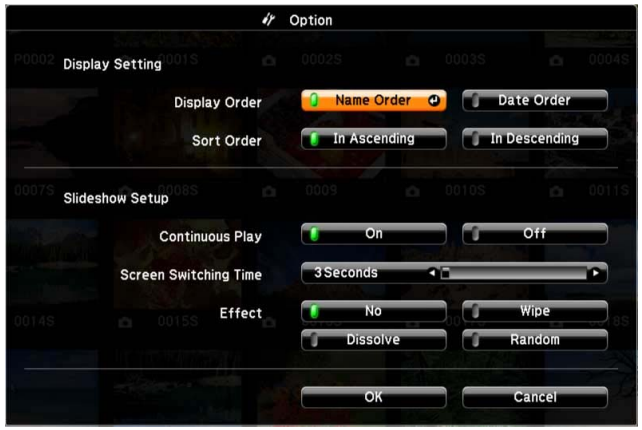
Parent topic: Projecting a PC Free Presentation

Related tasks

Connecting a USB Device or Camera to the Projector
Disconnecting a USB Device or Camera From the Projector

PC Free Display Options

You can select these display options when using the projector's PC Free 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: Projecting a PC Free Presentation

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
Creating a User Pattern to Display

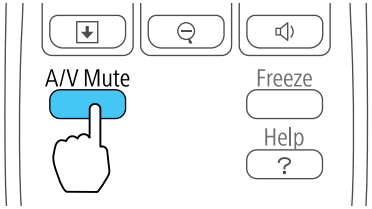
Shutting Off the Picture and Sound Temporarily

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.

Note: If the picture and sound are off for more than 30 minutes, the power automatically turns off. You can adjust this setting using the projector's menu system.

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 - ECO Menu

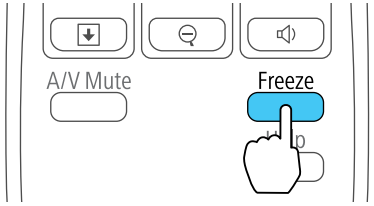
Related tasks

Saving a User's Logo Image to Display

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.



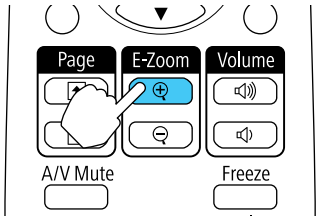
2. To restart the video action in progress, press **Freeze** again.

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. Press and hold the **E-Zoom +** button to zoom in more quickly.
   - 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 Protection** password prevents anyone from using the projector without first entering a password.
- **User's Logo Protection** 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 Protection** password prevents anyone from changing the network settings in the projector menus.

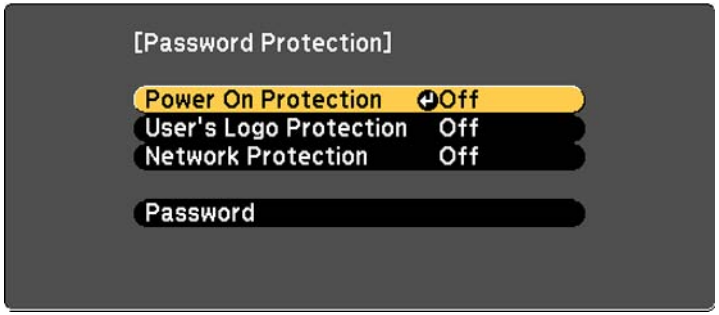
Setting a Password
Selecting Password Security Types
Entering a Password to Use the Projector
Saving a User's Logo Image to Display

Parent topic: Projector Security Features

Setting a Password

To use password security, you must set a password.

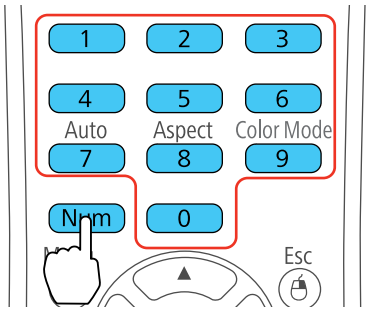
1. Hold down the **Freeze** button on the remote control for about five seconds until you see this menu.



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.

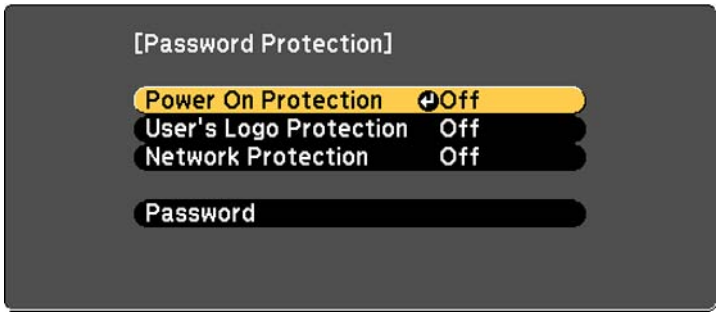
   You see the message "Password accepted."

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.

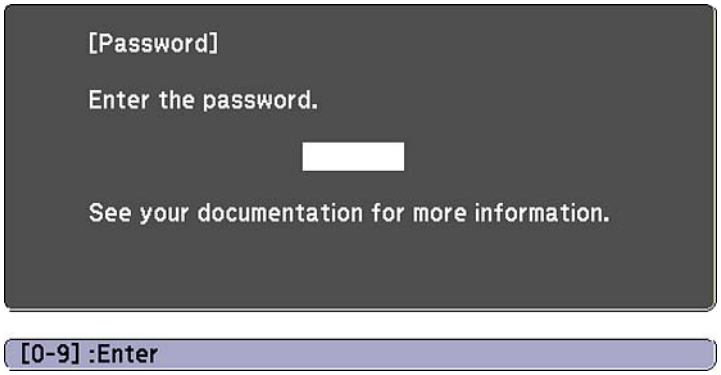
1. To prevent unauthorized use of the projector, select **Power On Protection**, press **Enter**, select **On**, press **Enter** again, and press **Esc**.
2. To prevent changes to the User's Logo screen or related display settings, select **User's Logo Protection**, press **Enter**, select **On**, press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

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

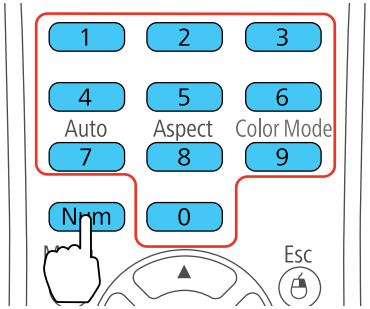
Entering a Password to Use the Projector

If a password is set up and a **Power On Protection** 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

Related references

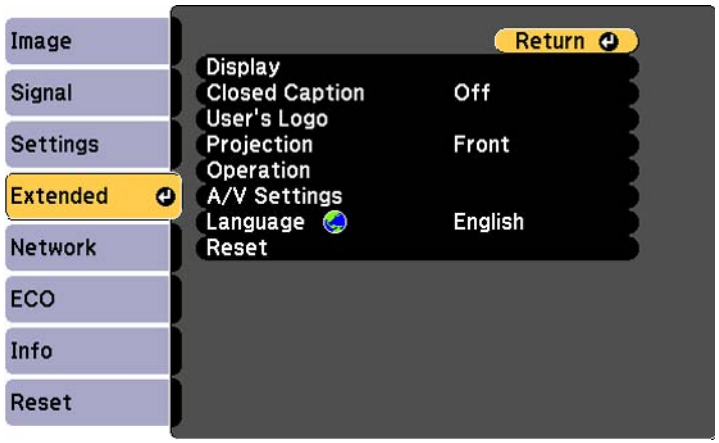
Where to Get Help

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**.

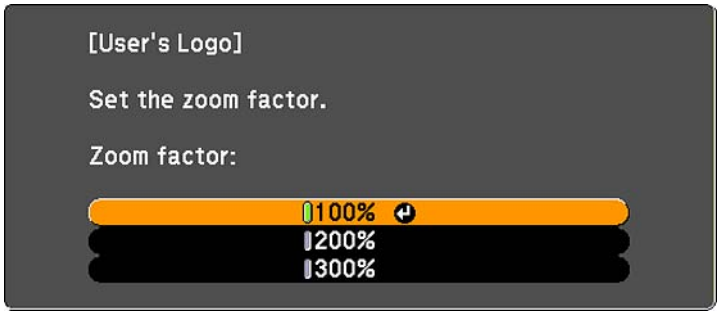
   You see a selection box overlaying your image.

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

Related tasks

Shutting Off the Picture and Sound Temporarily

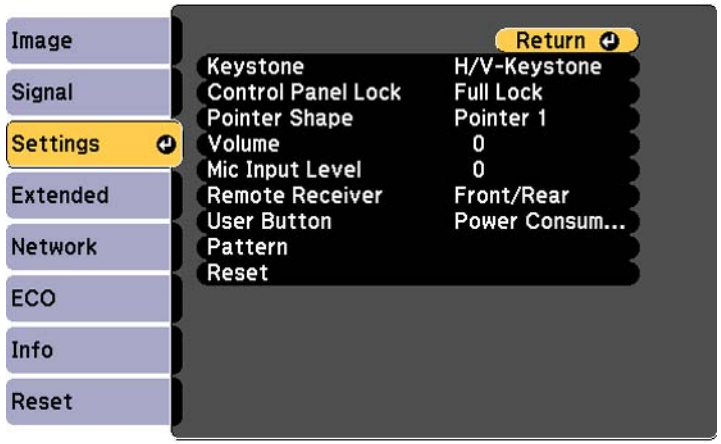
Setting a Password

Selecting 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

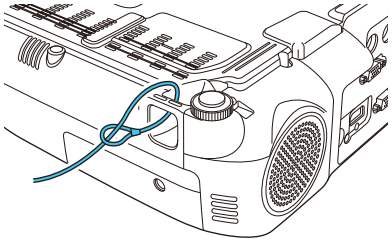
If the projector's buttons have been locked, hold the **Enter** button on the projector's control panel for seven seconds to unlock them.

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

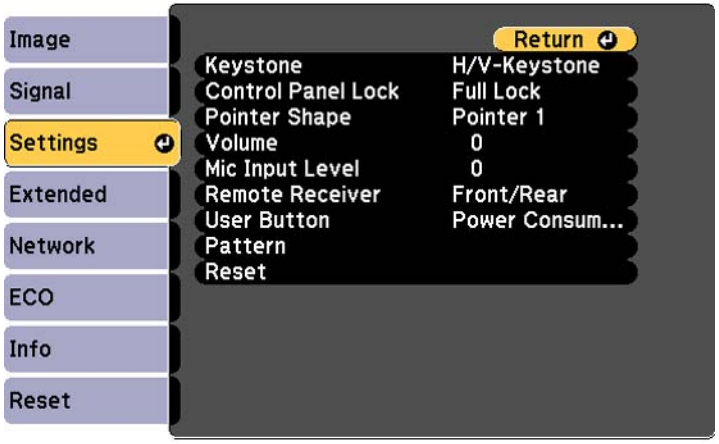
Optional Equipment and Replacement Parts

Creating a User Pattern to Display

You can transfer an image to the projector and then display it as a pattern to aid in presentations when you use the Pattern Display feature. This transferred image is called the User Pattern.

1. Display the image you want to project as the User Pattern from a connected computer or video source.

2. Press the **Menu** button, select the **Settings** menu, and press **Enter**.



3. Select the **Pattern** setting and press **Enter**.
4. Select the **User Pattern** setting and press **Enter**.

   You see a prompt asking if you want to use the displayed image as a User Pattern.
5. 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.
6. Press **Esc** to exit the message screen.

Parent topic: Adjusting Projector Features

Adjusting the Menu Settings

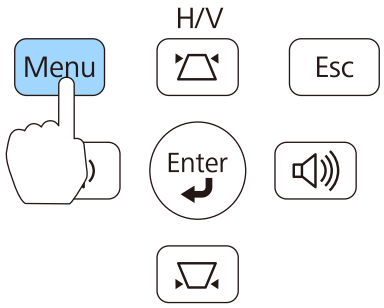
Follow the instructions in these sections to access the projector menu system and change projector settings.

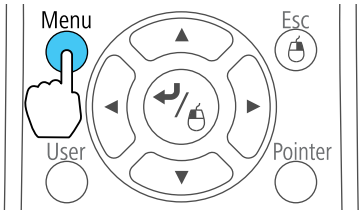
Using the Projector's Menus
Image Quality Settings - Image Menu
Input Signal Settings - Signal Menu
Projector Feature Settings - Settings Menu
Projector Setup Settings - Extended Menu
Projector Network Settings - Network Menu
Projector Setup Settings - ECO Menu
Projector Information Display - Info Menu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

Using the Projector's Menus

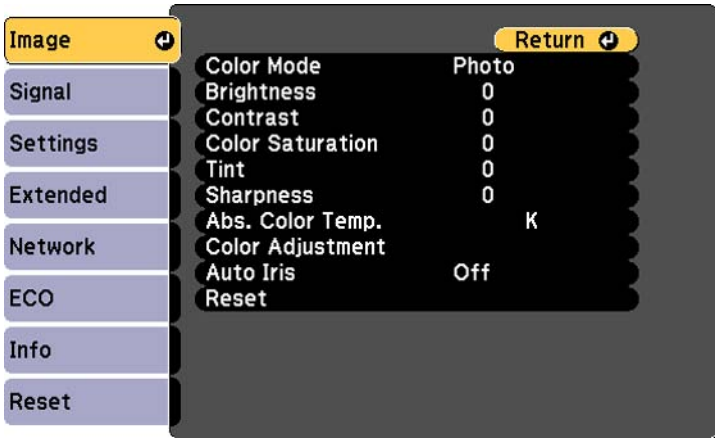
You can use the projector's menus to adjust the settings that control how your projector works. The projector displays the menus on the screen.

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.

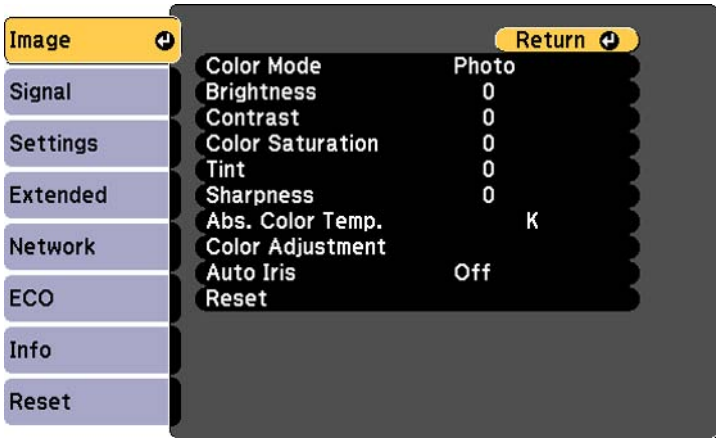
   Note: The available settings depend on the current input source.

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

Setting	Options	Description
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
Color Adjustment	Slider bars for each color	Adjusts the intensity of individual hues in the image
Auto Iris	**Off** **Normal** **High Speed**	Adjusts the projected luminance based on the image brightness when certain Color Modes are selected; **High Speed** sets faster luminance correction for fast-moving images

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

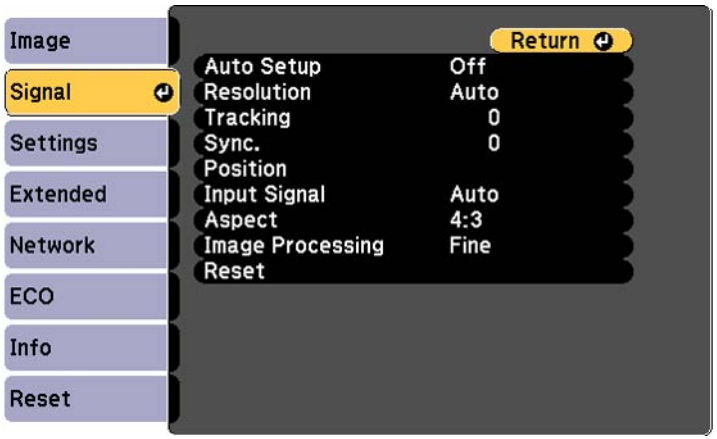
Related references

Available Color Modes

Projector Setup Settings - ECO Menu

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** **Off**	Automatically optimizes computer image quality (when On)
Resolution	**Auto** **Normal** **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

Setting	Options	Description
Progressive	**Off** **Video** **Film/Auto**	Sets whether to convert interlaced-to-progressive signals for certain video image types **Off**: for fast-moving video images **Video**: for most video images **Film/Auto**: for movies, computer graphics, and animation
Noise Reduction	**Off** **NR1** **NR2**	Reduces flickering in analog images in two levels
HDMI Video Range	**Normal** **Expanded** **Auto**	Sets the video range to match the setting of the device connected to the HDMI input port **Auto**: detects the video range automatically **Expanded**: normally for images from a computer; can also be selected if the image is too dark **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
Input Signal	**Auto** **RGB** **Component**	Specifies the signal type from input sources connected to computer ports **Auto**: detects signals automatically **RGB**: corrects color for computer/RGB video inputs **Component**: corrects color for component video inputs

Setting	Options	Description
Video Signal	**Auto** Various video standards	Specifies the signal type from the input sources connected to the video ports **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
Overscan	**Auto** **Off** **4%** **8%**	Changes the projected image ratio to make the edges visible by a selectable percentage or automatically
Image Processing	**Fine** **Fast**	Adjusts image processing speed/quality **Fast**: increases pen tracking when using the optional interactive module **Fine**: increases image quality

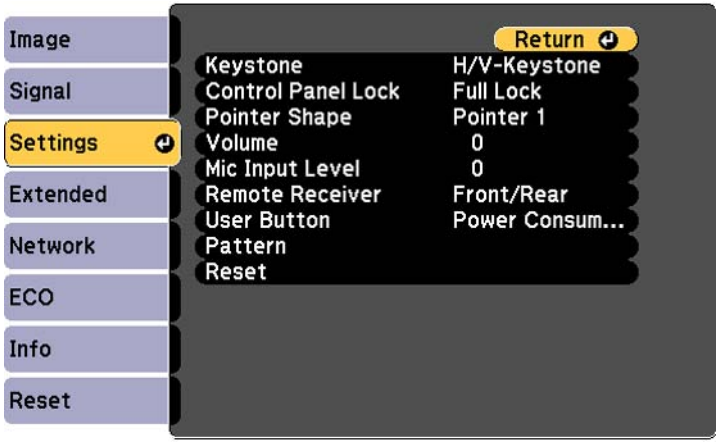
Parent topic: Adjusting the Menu Settings

Related references

Available Image Aspect Ratios

Projector Feature Settings - Settings Menu

Options on the Settings menu let you customize various projector features. The available settings depend on the currently selected input source.



Setting	Options	Description
Keystone	**H/V Keystone** **Quick Corner**	Adjusts image shape to rectangular (horizontally and vertically) **H/V Keystone**: lets you manually correct horizontal and vertical sides **Quick Corner**: select to correct image shape and alignment using an on-screen display
Control Panel Lock	**Full Lock** **Partial Lock** **Off**	Controls projector button locking to secure the projector **Full Lock**: locks all buttons **Partial Lock**: locks all buttons except the power button **Off**: no buttons locked
Pointer Shape	Three shapes available	Changes the shape of the remote control pointer feature

Setting	Options	Description
Volume	Varying levels available	Adjusts the volume of the projector’s speaker system or external speakers
Mic Input Level	Varying levels available	Adjusts the volume of the projector's speaker system when you use a connected microphone
Remote Receiver	**Front** **Rear** **Front/Rear** **Off**	Limits reception of remote control signals by the selected receiver; **Off** turns off all receivers
User Button	**Power Consumption** **Info** **Progressive** **Closed Caption** **Resolution** **Mic Input Level** **Pattern Display**	Assigns a menu option to the **User** button on the remote control for one-touch access
Pattern	**Pattern Display** **Pattern Type** **User Pattern** **Test Pattern**	Selects various pattern display options **Pattern Display**: lets you display the selected pattern type on the screen to aid in presentation **Pattern Type**: selects the type of grid or line pattern to display **User Pattern**: captures a projected screen and saves it as a pattern for display **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

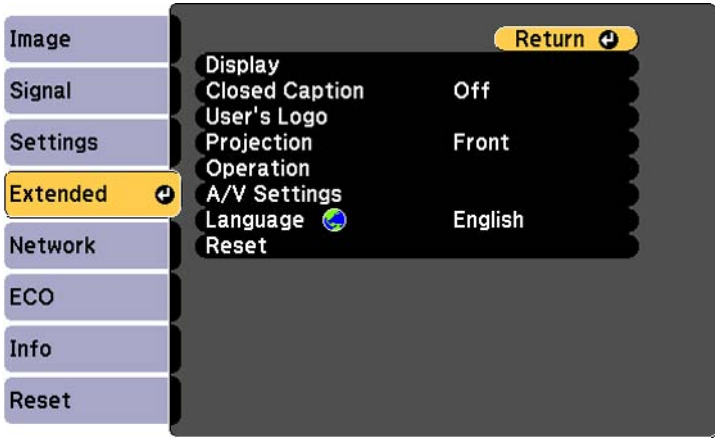
Correcting Image Shape with the Horizontal Keystone Slider

Correcting Image Shape with the Keystone Buttons

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** **Display Background** **Startup Screen** **A/V Mute**	Selects various display options **Messages**: controls whether messages are displayed on the screen **Display Background**: selects the screen color or logo to display when no signal is received **Startup Screen**: controls whether a special screen appears when the projector starts up **A/V Mute**: selects the screen color or logo to display when A/V Mute is turned on
Closed Caption	**Off** **CC1** **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)
User's Logo	–	Creates a screen that the projector displays to identify itself and enhance security
Projection	**Front** **Front/Upside Down** **Rear** **Rear Upside Down**	Selects the way the projector faces the screen so the image is oriented correctly

Setting	Options	Description
Operation	**Direct Power On** **High Altitude Mode** **Startup Source Search**	Selects various operation options **Direct Power On**: lets you turn on the projector without pressing the power button **High Altitude Mode**: regulates the projector's operating temperature at altitudes above 4921 feet (1500 m) **Startup Source Search**: automatically detects the image signal being input when the projector is turned on
A/V Settings	**A/V Output** **Audio Output** **HDMI Audio Output** **Plug-in Power**	Selects the following when the projector is in standby mode (turned off) and the **Standby Mode** setting on the ECO menu is set to **Communication On**: **A/V Output**: **Always On** outputs sound and images to external equipment when the projector is turned off **Audio Output**: selects the audio source for sound; **Auto** outputs sound from the last selected image source **HDMI Audio Output**: selects the audio source for HDMI images **Plug-in Power**: lets you use a microphone with Plug-in Power support
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	**Connection mode** **Antenna level** **Projector Name** **SSID** **DHCP** **IP Address** **Subnet Mask** **Gateway Address** **MAC Address**	Displays wireless network status and details
Net. Info - Wired LAN	**Projector Name** **DHCP** **IP Address** **Subnet Mask** **Gateway Address** **MAC Address**	Displays wired network status and details
Network Configuration	Accesses additional network menus	Configures your network settings

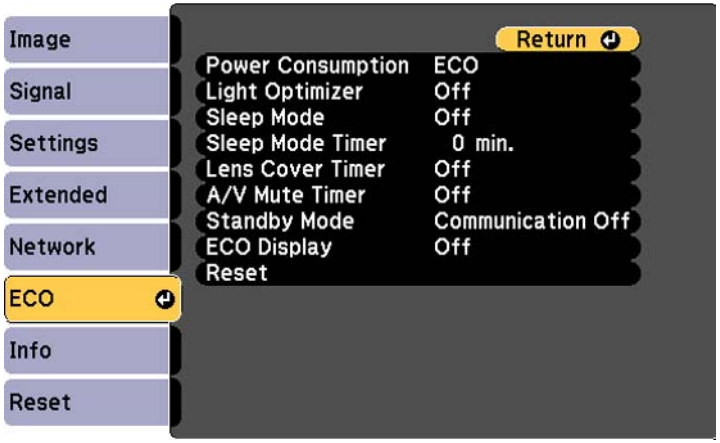
Parent topic: Adjusting the Menu Settings

Related tasks

Selecting Wireless Network Settings Manually

Projector Setup Settings - ECO Menu

Settings on the ECO menu let you customize projector functions to save power. When you select a power-saving setting, a leaf icon appears next to the menu item.



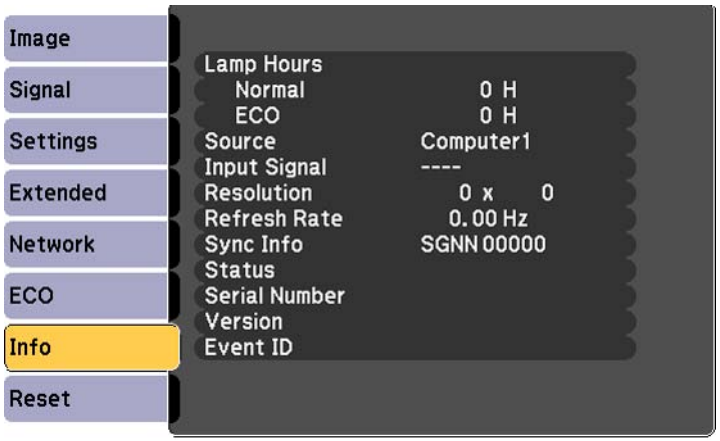
Setting	Options	Description
Power Consumption	**Normal** **ECO**	Selects the brightness mode of the projector lamp **Normal**: sets maximum lamp brightness **ECO**: reduces lamp brightness and fan noise, and saves power and lamp life
Light Optimizer	**On** **Off**	When **Power Consumption** is set to **Normal**, the lamp brightness is adjusted based on the projected image; you can set this option for each color mode
Sleep Mode	**On** **Off**	Automatically turns off the projector after an interval of inactivity
Sleep Mode Timer	1 to 30 minutes	Sets the interval for Sleep Mode

Setting	Options	Description
Lens Cover Timer	**On** **Off**	Automatically turns off the projector after 30 minutes if the lens cover is closed
A/V Mute Timer	**On** **Off**	Automatically turns off the projector after 30 minutes if **A/V Mute** is enabled
Standby Mode	**Communication On** **Communication Off**	Enable this setting to allow the following operations to occur when the projector is in standby mode: • Monitor and control the projector over a network • Output audio and video to an external device (A/V Output must be set to **Always On**) • Output audio from a microphone (A/V Output must be set to **Always On**)
ECO Display	**On** **Off**	Displays a leaf icon in the bottom left corner of the projected screen to indicate the power-saving status when the lamp brightness changes

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
Version	Displays the projector's firmware version

Information item	Description
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.

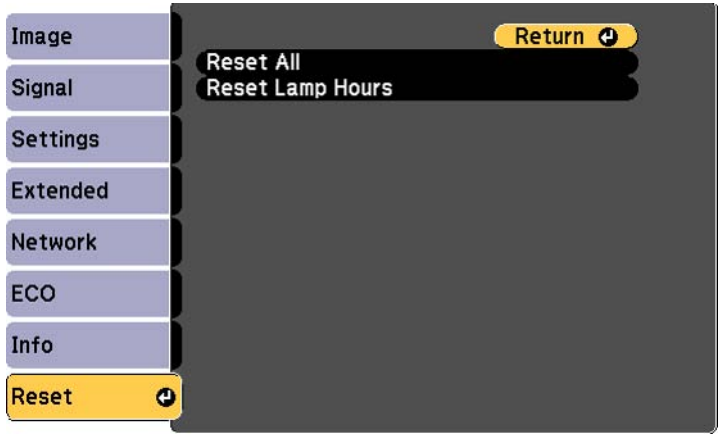
Event ID code	Cause and solution
0892	The WPA/WPA2 authentication type does not match. Make sure the wireless network security settings are correct.
0893	The WEP/TKIP/AES encryption type does not match. Make sure the wireless network security settings are correct.
0894	Communication with unauthorized access point was disconnected. Contact your network administrator.
0898	Failed to acquire DHCP address. Make sure the DHCP server is operating correctly. If you are not using DHCP, turn off the **DHCP** setting in the Network menus.
0899	A communication error has occurred. Try restarting the EasyMP Network Projection program and restarting your projector. If that does not solve the problem, contact Epson for help.

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

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

Related references

Where to Get Help

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

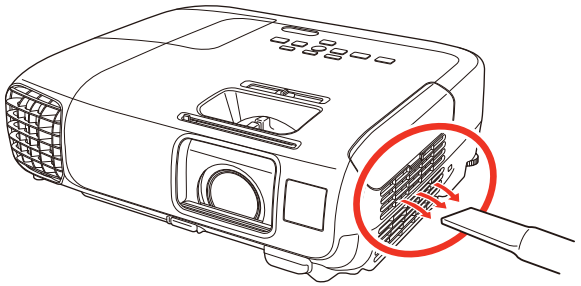
Related references

Projector Light Status

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

Related tasks

Replacing the Air Filter

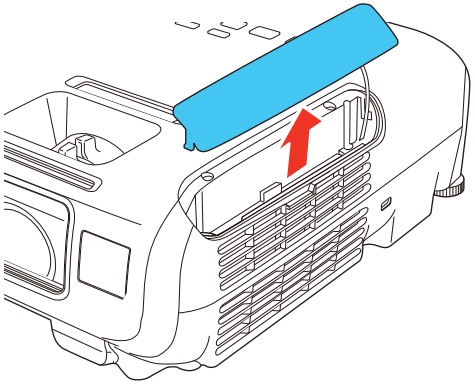
Replacing the Air Filter

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

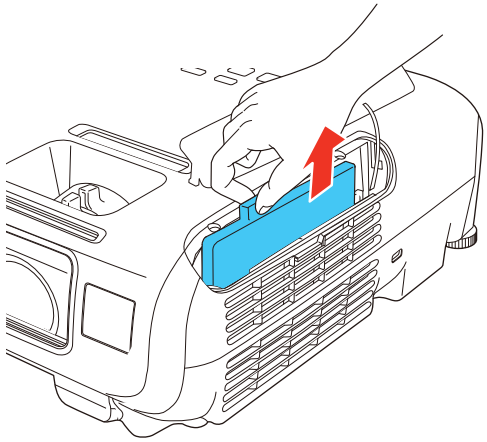
- After cleaning the air filter, you see a message telling you to clean or replace it
- The air filter is torn or damaged

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. Carefully open the air filter cover.

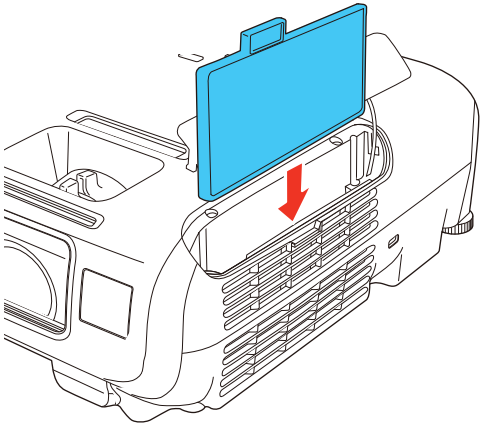


3. Pull the air filter out of the projector.



Note: Air filters contain ABS resin and polyurethane foam. 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 and its power light is flashing blue

Replacing the Lamp

Resetting the Lamp Timer

Parent topic: Projector Maintenance

Related references

Optional Equipment and Replacement Parts

Projector Information Display - Info Menu
Projector Lamp Specifications

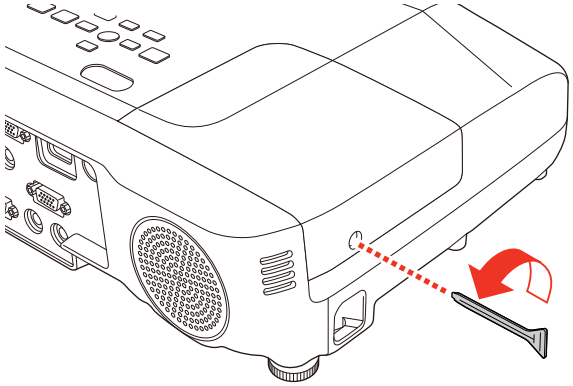
Replacing the Lamp

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.

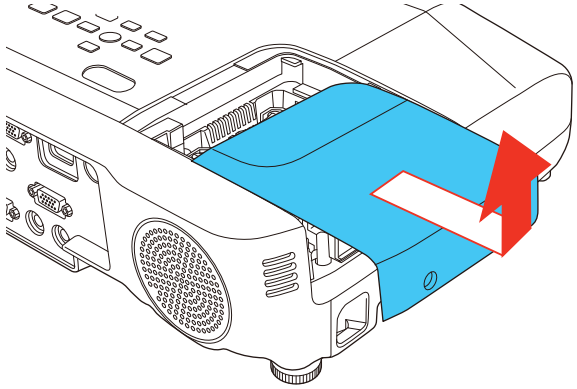
You can replace the lamp while the projector is mounted to the ceiling, if necessary.

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.

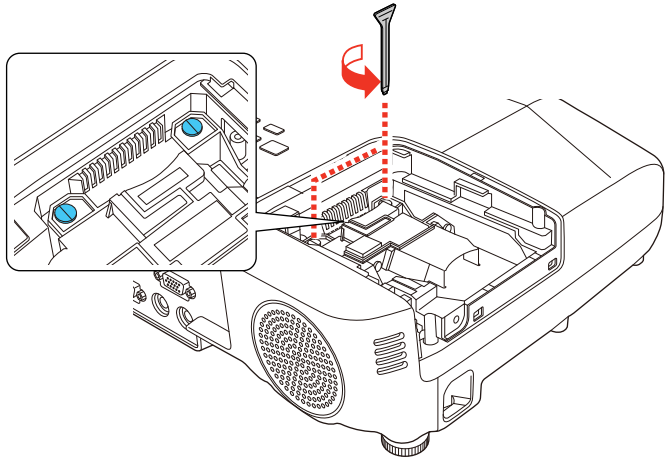


Warning: If the lamp is broken, glass fragments may be loose inside the lamp chamber. Be careful removing any broken glass to avoid injury. If the projector is installed on the ceiling, stand to the side of the lamp cover and not underneath it; pieces of glass could fall into your eyes or mouth when you open the lamp cover.

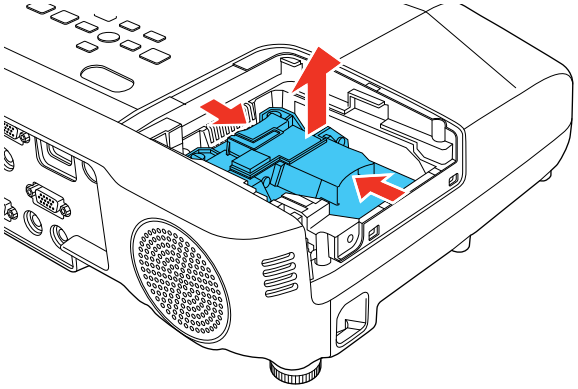
4. Slide the lamp cover out and lift it off.



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

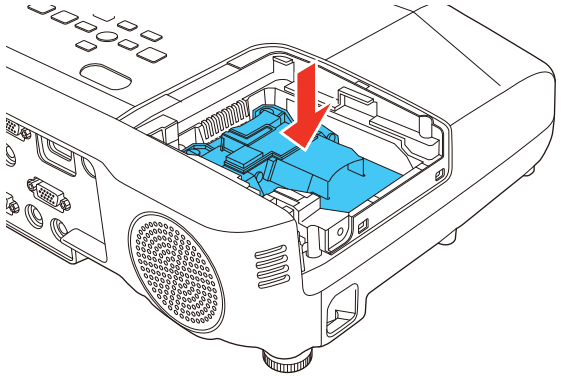


6. Grasp the raised section of the lamp and gently pull the lamp out of the projector.



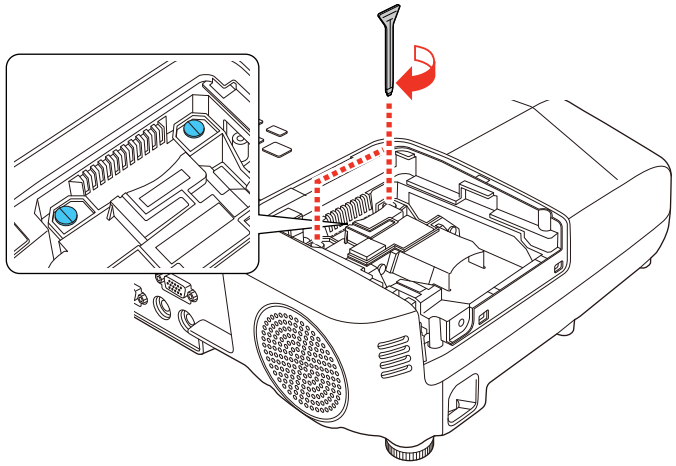
Note: Hg The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.

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

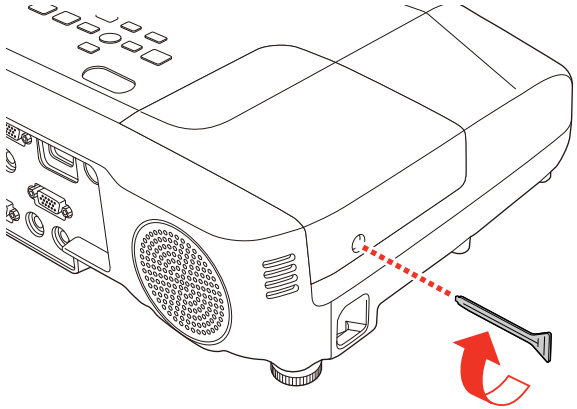


Caution: Do not touch any glass on the lamp assembly to avoid premature lamp failure.

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

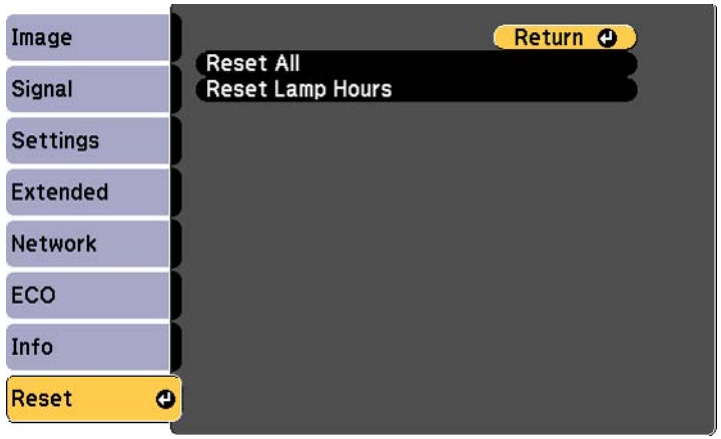
Resetting the Lamp Timer

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

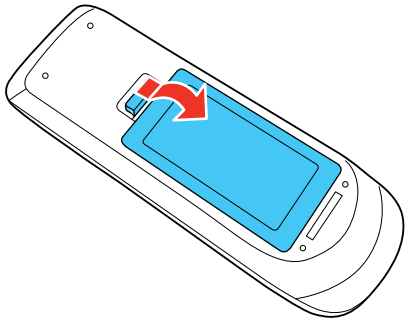
Replacing the Lamp

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.

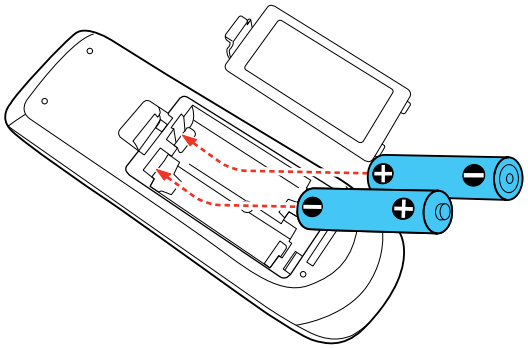
1. Open the battery cover as shown.



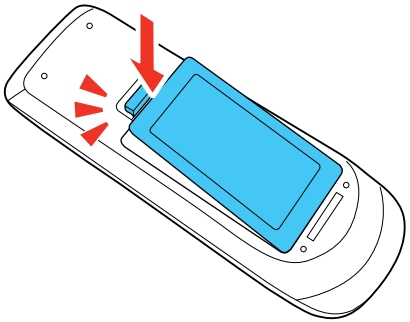
2. Remove the old batteries.

   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 Specifications

Transporting the Projector

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

- Close the lens cover to protect the lens.
- Remove any equipment connected to the projector.
- Use a carrying case to hand-carry the projector.
- When transporting the projector a long distance or as checked luggage, place it in a carrying case. Then pack the case 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
Solving Network Problems
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

Related references

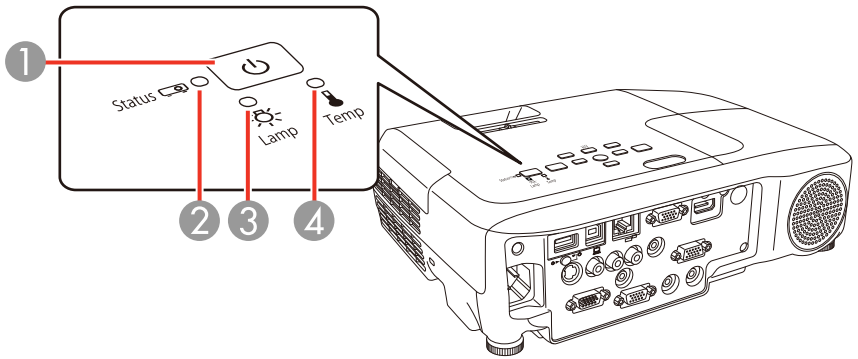
Projector Light Status
Where to Get Help

Related tasks

Using the Projector Help Displays

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 Status light

3 Lamp light

4 Temp (temperature) light

Power light	Status light	Lamp light	Temp light	Status and solution
Blue	Blue	Off	Off	Normal operation
Blue	Flashing blue	Off	Off	Warming up or cooling down
Blue	Off	Off	Off	Standby or sleep mode
Flashing blue	Light status varies	Light status varies	Flashing orange	Projector is too hot. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • Make sure the environmental temperature is not too hot.

Power light	Status light	Lamp light	Temp light	Status and solution
Off	Flashing blue	Off	Orange	Projector has overheated and turned off. Leave it turned off to cool down. Once the Temp and Status lights turn off and the power light turns blue (after about five minutes), try the suggestions below: • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • If operating the projector at high altitude, turn on **High Altitude Mode**. • If the problem persists, unplug the projector and contact Epson for help.
Off	Flashing blue	Orange	Off	Lamp has a problem. • Check to see if the lamp is burned out, broken, or installed incorrectly. Reseat or replace the lamp as necessary. • Clean or replace the air filter. • If operating the projector at high altitude, turn on **High Altitude Mode**. • If the problem persists, unplug the projector and contact Epson for help.
Flashing blue	Light status varies	Flashing orange	Light status varies	Replace the lamp soon to avoid damage. Do not continue using the projector.

Power light	Status light	Lamp light	Temp light	Status and solution
Off	Flashing blue	Off	Flashing orange	A fan or sensor has a problem. Turn the projector off, unplug it, and contact Epson for help.
Off	Flashing blue	Flashing orange	Off	Internal projector error. Turn the projector off, unplug it, and contact Epson for help.
Off	Flashing blue	Flashing orange	Flashing orange	Auto iris error. Turn the projector off, unplug it, and contact Epson for help.
Off	Flashing blue	Orange	Orange	Power 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
Projector Environmental Specifications

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 concepts

Projector Connections

Related references

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

Related tasks

Opening the Lens Cover
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 Mac 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

Related concepts

Projector Connections

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.
- 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

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)
- 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 connected an extension power cable, try projecting without it to see if it caused interference in the signal.
- If you are using the USB Display function, 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

Image Quality Settings - Image Menu
Input Signal Settings - Signal Menu
Supported Video Display Formats

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

Projection Distance
Image Quality Settings - Image Menu
Input Signal Settings - Signal Menu
Projector Feature Settings - Settings Menu

General Projector Specifications

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.

  Note: At high altitudes or locations subject to high temperatures, the image may become darker and you may not be able to adjust the Power Consumption setting.

- 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

Projection Distance

Available Color Modes

Image Quality Settings - Image Menu

Input Signal Settings - Signal Menu

Projector Setup Settings - ECO 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 want to use a connected audio source when the projector is off, set the **Standby Mode** option to **Communication On** and make sure the **A/V Settings** options are set correctly.
- 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

Related references

Projection Distance

Related tasks

Controlling the Volume with the Volume Buttons

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 sleep mode after a period of inactivity. Begin a presentation to wake the projector.
- If the projector's lamp shuts off, the Status light is flashing blue, and the Temp light is orange, 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
Where to Get Help

Related tasks

Unlocking the Projector's Buttons
Replacing the Remote Control Batteries

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

Optional Equipment and Replacement Parts
Remote Control Operation
Projector Feature Settings - Settings Menu

Related tasks

Replacing the Remote Control Batteries

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

Related references

Optional Equipment and Replacement Parts
Where to Get Help

Solving Network Problems

Check the solutions in these sections if you have problems using the projector on a network.

Solutions When You Cannot Access the Projector Through the Web

Solutions When Network Alert E-Mails are Not Received

Parent topic: Solving Problems

Solutions When You Cannot Access the Projector Through the Web

If you are unable to access the projector through a web browser, make sure you are using the correct ID and password, which are case sensitive.

- For the user ID, enter **EPSONWEB**. (You cannot change the user ID.)
- For the password, enter the password set in the projector's Network menu. The default password is **admin**.
- Make sure you have access to the network the projector is on.

Note: The user ID and password are case sensitive.

Parent topic: Solving Network 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 Network Problems

Related references

Projector Setup Settings - ECO Menu

Related tasks

Setting Up Projector Network E-Mail Alerts

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 97/98/965**: 1024 × 768 pixels (XGA) **PowerLite 99W/955W**: 1280 × 800 pixels (WXGA)
Lens	**PowerLite 97/98/99W**: F= 1.58 to 1.72 Focal length: 16.9 to 20.28 mm **PowerLite 955W/965**: F= 1.51 to 1.99 Focal length: 18.2 to 29.2 mm
Color reproduction	Full color, up to 1 billion colors

Brightness	**PowerLite 97**: Normal Power Consumption mode: White light output 2700 lumens (ISO 21118 standard) Color light output 2700 lumens ECO Power Consumption mode: White light output 1890 lumens (ISO 21118 standard) **PowerLite 98/99W/955W**: Normal Power Consumption mode: White light output 3000 lumens (ISO 21118 standard) Color light output 3000 lumens ECO Power Consumption mode: White light output 2100 lumens (ISO 21118 standard) **PowerLite 965**: Normal Power Consumption mode: White light output 3500 lumens (ISO 21118 standard) Color light output 3500 lumens ECO Power Consumption mode: White light output 2450 lumens (ISO 21118 standard) **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.
Contrast ratio	10,000:1 with Auto Iris on and Normal Power Consumption mode

Image size (in native aspect ratio)	**PowerLite 97/98/965**: 30 inches (0.76 m) to 300 inches (7.62 m) **PowerLite 99W**: 33 inches (0.84 m) to 318 inches (8.08 m) **PowerLite 955W**: 29 inches (0.74 m) to 280 inches (7.11 m)
Projection distance (in native aspect ratio)	**PowerLite 97/98/99W**: 35 inches (0.9 m) to 425 inches (10.8 m) **PowerLite 955W/965**: 33 inches (0.84 m) to 547 inches (13.9 m)
Projection methods	Front, rear, ceiling-mounted
Optical aspect ratio (width-to-height)	**PowerLite 97/98/965**: 4:3 **PowerLite 99W/955W**: 16:10
Focus adjustment	Manual
Zoom adjustment	Manual (optical)
Zoom ratio (Tele-to-Wide)	**PowerLite 97/98/99W**: 1:1.2 **PowerLite 955W/965**: 1:1.6
Internal sound system	16 W monaural
Noise level	37 dB (Normal Power Consumption mode) 29 dB (ECO Power Consumption mode)
Keystone correction angle	Vertical: ± 30º Horizontal: ± 30º
USB Type B port compatibility	USB 1.1 and 2.0 compliant for USB display or external mouse

USB Type A port compatibility	One USB 1.1 and 2.0 compliant port for USB device input, Epson document camera display, or optional wireless LAN module

Parent topic: Technical Specifications

Projector Lamp Specifications

Type	UHE (Ultra High Efficiency)
Power consumption	200 W
Lamp life	Normal Power Consumption mode: Up to about 5000 hours ECO Power Consumption mode: Up to about 6000 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	19.7 feet (6 m)
Batteries	Two alkaline or manganese AA

Parent topic: Technical Specifications

Projector Dimension Specifications

Height (excluding feet)	3.43 inches (87 mm)
Width	11.69 inches (297 mm)

Depth	**PowerLite 97/98/99W**: 9.61 inches (244 mm) **PowerLite 955W/965**: 10.59 inches (269 mm)
Weight	**PowerLite 97/98/99W**: 6.0 lb (2.7 kg) **PowerLite 955W/965**: 6.4 lb (2.9 kg)

Parent topic: Technical Specifications

Projector Electrical Specifications

Rated frequency	50/60 Hz
Power supply	100 to 240 VAC ±10% 3.0 to 1.4 A
Power consumption (100 to 120 V)	Operating: Normal Power Consumption mode: 299 W ECO Power Consumption mode: 221 W Standby: 0.24 W (Communication Off), 3.0 W (Communication On)
Power consumption (220 to 240 V)	Operating: Normal Power Consumption mode: 287 W ECO Power Consumption mode: 215 W Standby: 0.29 W (Communication Off), 3.1 W (Communication On)

Parent topic: Technical Specifications

Projector Environmental Specifications

Temperature	Operating: 41 to 95 °F (5 to 35 °C) at 7500 feet (2286 m) or less 41 to 86 °F (5 to 30 °C) at more than 7500 feet (2286 m) Storage: 14 to 140 °F (–10 to 60 °C)
Humidity (relative, non-condensing)	Operating: 20 to 80% Storage: 10 to 90%
Operating altitude	Up to 4921 feet (1500 m) Up to 9843 feet (3000 m) with High Altitude Mode enabled

Parent topic: Technical Specifications

Projector Safety and Approvals Specifications

United States	FCC Part 15 Class B (DoC) UL60950-1 2nd edition (cTUVus Mark)
Canada	ICES-003 Class B 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)		

Display format	Refresh rate (in Hz)	Resolution (in pixels)
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
	60	1366 × 768
	60/75/85	1280 × 800
WXGA+	60/75/85	1440 × 900
WXGA++	60	1600 × 900
SXGA	70/75/85	1152 × 864
	60/75/85	1280 × 960
	60/75/85	1280 × 1024
SXGA+	60/75	1400 × 1050
WSXGA+* (PowerLite 955W)	60	1680 × 1050
UXGA	60	1600 × 1200
MAC13"	67	640 × 480
MAC16"	75	832 × 624
MAC19"	75	1024 × 768
	59	
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

Display format	Refresh rate (in Hz)	Resolution (in pixels)
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
HDMI input signals		
VGA	60	640 × 480
SVGA	60	800 × 600
XGA	60	1024 × 768
WXGA	60	1280 × 800
	60	1366 × 768
WXGA+	60	1440 × 900
WXGA++	60	1600 × 900
SXGA	60	1280 × 960
	60	1280 × 1024
SXGA+	60	1400 × 1050
UXGA	60	1600 × 1200
WSXGA+ (PowerLite 955W)	60	1680 × 1050
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

* **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)	Mac OS X 10.5.8 (32-bit); Mac OS X 10.6.x, 10.7.x, or 10.8.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, Windows 8 Enterprise and Pro (32- and 64-bit)	
USB version	USB 1.1 and above (USB 2.0 recommended)	
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

Notices

Check these sections for important notices about your projector.

Recycling
Important Safety Information
Important Safety Instructions
FCC Compliance Statement
Trademarks
Open Source Software License
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 12° 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) at an altitude of 7500 feet (2286 m) or less, or 41 to 86 °F (5 to 30 °C) at a higher altitude. 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. 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: (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.

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

CAN ICES-3(B)/NMB-3(B)

Parent topic: Notices

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EXCEED YOUR VISION

Parent topic: Notices

Open Source Software License

GNU GPL

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We provide the source code of the GPL Programs until five (5) years after the discontinuation of same model of this projector product.

If you desire to receive the source code of the GPL Programs, contact Epson as described in the *User's Guide*.

These GPL Programs are WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

The list of GPL Programs is as follows and the names of author are described in the source code of the GPL Programs

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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Version 2, June 1991

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