# PowerLite® W16 User's Guide

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# **PowerLite W16 User's Guide**

Welcome to the PowerLite W16 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 W16 projector includes these special features:

#### 3D projection

- Active 3D projection with optional active shutter glasses
- Supports side-by-side, top-and-bottom, and frame packing 3D formats

#### Bright, high-resolution projection system

 Up to 3000 lumens of color brightness (color light output) and 3000 lumens of white brightness (white light output) in 2D mode

**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.

Native resolution of 1280 x 800 pixels (WXGA)

#### Flexible connectivity

- HDMI port for computer or video device connection
- Plug-and-play 3-in-1 USB projection, audio, and mouse control for instant setup
- PC Free photo slide shows via connected USB memory devices
- Dual VGA ports for connections by multiple presenters
- Ports for connecting an external monitor and external speakers

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

- Real-time, automatic vertical and horizontal keystone correction always displays a rectangular screen
- Screen Fit feature automatically resizes images for your projection screen

- Epson's Instant Off and Direct Power On features for quick setup and shut down
- · Built-in closed captioning decoder
- 1.2x optical zoom ratio for improved zooming capability
- Low total cost of ownership with longer lamp life

**Product Box Contents** 

**Additional Components** 

Optional Equipment and Replacement Parts

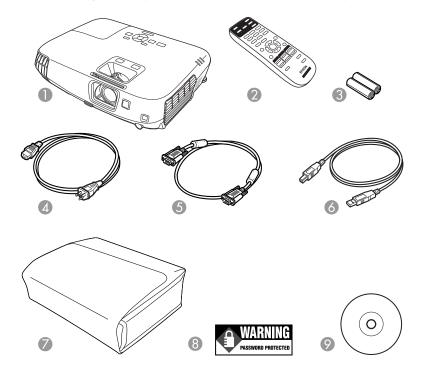
Warranty and Registration Information

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
- 3 Remote control batteries (two AA alkaline)
- 4 Power cord
- 5 VGA computer cable
- 6 USB cable
- 7 Carrying case
- 8 Password Protected sticker
- 9 Projector documentation CD

**Parent topic:** Projector Features

### **Additional Components**

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

- To receive a 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 receive and view a 3D signal, you need a compatible HDMI cable and active shutter 3D glasses.
You can purchase them from Epson or an authorized Epson reseller. If your video source is a 3D Bluray disc, you also need a Blu-ray player that supports 3D playback. See your local computer or electronics dealer for purchase information.

**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 (ELPLP67)	V13H010L67
Replacement air filter (ELPAF42)	V13H134A42
Active shutter 3D glasses (ELPGS03)	V12H548006
Active speakers (ELPSP02)	V12H467020
Epson DC-06 document camera	V12H321005
Epson DC-11 document camera	V12H377020
Epson DC-20 document camera	V12H500020
Universal projector ceiling mount	ELPMBPJF
Adjustable suspended ceiling channel kit	ELPMBP01
False ceiling plate kit	ELPMBP02
Structural round ceiling plate	ELPMBP03

Option or part	Part number
Adjustable extension column (pipe) 8" - 11" (20 to 28 cm)	ELPMBC01
Kensington security lock	ELPSL01
Accolade Duet portable projector screen	ELPSC80
ES3000 portable screen (ELPSC26H)	V12H002S3Y
Component-to-VGA video cable	ELPKC19
1-Year Extended Exchange Warranty	EPPEXPA1
2-Year Extended Exchange Warranty	EPPEXPA2

**Parent topic:** Projector Features

### **Warranty and Registration Information**

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

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

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

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

**Parent topic:** Projector Features

### **Notations Used in the Documentation**

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

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

Parent topic: Introduction to Your Projector

#### Where to Go for Additional Information

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

Built-in help system

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

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

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

• 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

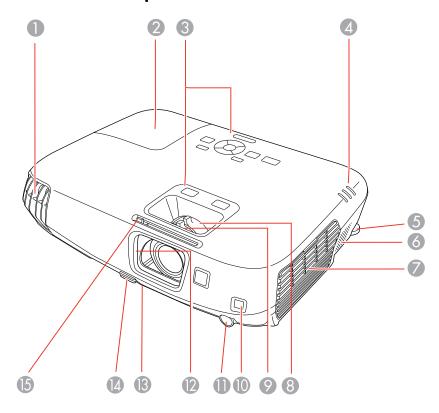
Projector Parts - Base

Projector Parts - Control Panel

Projector Parts - Remote Control

Parent topic: Introduction to Your Projector

# **Projector Parts - Front/Top**



- 1 Exhaust vent
- 2 Lamp cover
- 3 Control panel
- 4 Projector status lights
- 5 Security cable attachment point and Kensington security lock slot
- 6 Speaker
- 7 Air filter cover and intake vent
- 8 Zoom ring

- 9 Focus ring
- 10 Screen Fit sensor
- 11 Remote receiver
- 12 A/V Mute slide
- 13 Front adjustable foot
- 14 Foot release lever
- 15 A/V Mute slide lever

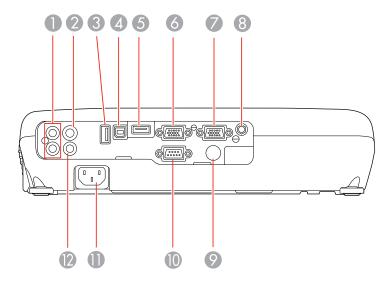
Parent topic: Projector Part Locations

Related references
Projector Light Status

Related tasks

Installing a Security Cable

# **Projector Parts - Rear**

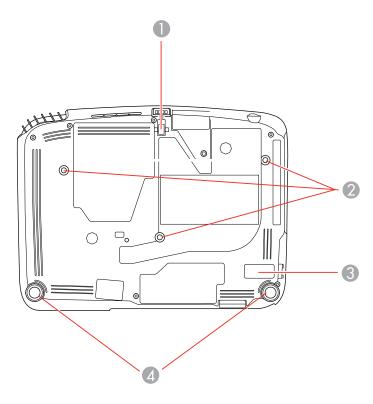


1 **Audio** ports

- **S-Video** port
- **USB-A**/document camera port
- **USB-B** port
- **HDMI** port
- **Computer1** port
- **Monitor Out/Computer2** port
- 8 Audio Out port
- 9 Remote receiver
- **RS-232C** port
- 11 AC input port
- **Video** port

Parent topic: Projector Part Locations

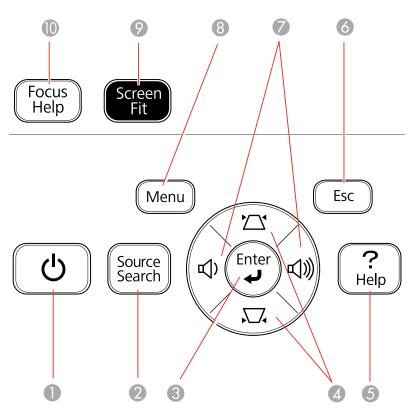
# **Projector Parts - Base**



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

Parent topic: Projector Part Locations

## **Projector Parts - Control Panel**

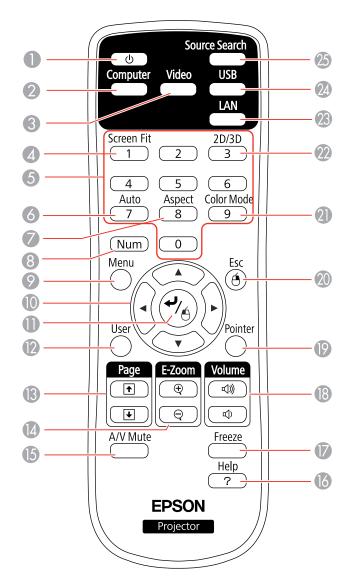


- 1 Power button
- 2 **Source Search** button (searches for connected sources)
- 3 Enter button (selects options)
- 4 Vertical keystone adjustment buttons (adjust screen shape) and arrow buttons
- 5 **Help** button (accesses projector help information)
- 6 **Esc** button (cancels/exits functions)
- Volume control buttons, horizontal keystone adjustment buttons (adjusts screen shape), and arrow buttons

- 8 **Menu** button (accesses projector menu system)
- 9 **Screen Fit** button (adjusts image shape)
- 10 Focus Help button (adjusts focus)

Parent topic: Projector Part Locations

# **Projector Parts - Remote Control**



1 Power button

- **Computer** button (cycles through connected computer sources)
- **Video** button (cycles through connected video sources)
- **Screen Fit** button (adjusts image shape)
- 5 Numeric buttons (enter numbers)
- **Auto** button (automatically adjusts position, tracking, and sync settings)
- **Aspect** button (selects the image aspect ratio)
- **Num** button (when held down, switches numeric buttons to number function)
- **Menu** button (accesses projector menu system)
- 10 Arrow buttons (move through on-screen options and control wireless mouse functions)
- 11 Enter button (selects options and controls wireless mouse functions)
- **User** button (customizable for different functions)
- 13 Page up/down buttons (control presentation slides and projected document pages)
- **E-Zoom +/** buttons (zoom into and out of the image)
- **A/V Mute** button (turns off picture and sound)
- **Help** button (accesses projector help information)
- **Freeze** button (stops video action)
- **Volume** up/down buttons (adjust speaker volume)
- **Pointer** button (activates on-screen pointer)
- **Esc** button (cancels/exits functions and controls wireless mouse functions)
- **Color Mode** button (selects display modes)
- **2D/3D** button (cycles between 2D and 3D modes)
- **LAN** button (button is not functional)
- **USB** button (cycles through connected USB sources)
- **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

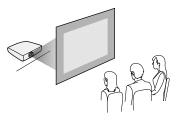
### **Projector Setup and Installation Options**

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

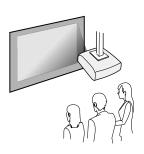
Front



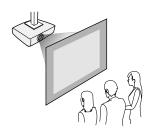
#### Rear



### 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

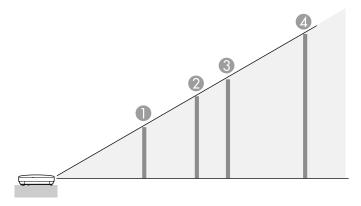
#### Related references

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.)



#### 16:10 Aspect Ratio Image or Screen

	Screen or image size	Projection distance
		Wide to Tele
1	50 inches (126 cm)	55 to 66 inches
		(139 to 168 cm)
2	80 inches (203 cm)	88 to 106 inches
		(225 to 270 cm)
3	100 inches (254 cm)	111 to 133 inches
		(281 to 338 cm)

	Screen or image size	Projection distance
		Wide to Tele
4	150 inches (381 cm)	167 to 200 inches
		(424 to 509 cm)

# 4:3 Aspect Ratio Image or Screen

	Screen or image size	Projection distance
		Wide to Tele
1	50 inches (126 cm)	62 to 75 inches
		(158 to 190 cm)
2	80 inches (203 cm)	100 to 121 inches
		(255 to 306 cm)
3	100 inches (254 cm)	126 to 151 inches
		(319 to 383 cm)
4	150 inches (381 cm)	189 to 227 inches
		(480 to 577 cm)

# 16:9 Aspect Ratio Image or Screen

	Screen or image size	Projection distance
		Wide to Tele
1	50 inches (126 cm)	56 to 68 inches
		(143 to 172 cm)
2	80 inches (203 cm)	91 to 109 inches
		(231 to 278 cm)
3	100 inches (254 cm)	114 to 137 inches
		(289 to 348 cm)
4	150 inches (381 cm)	171 to 206 inches
		(435 to 523 cm)

Parent topic: Projector Placement

# **Projector Connections**

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

- Connect any type of computer that has a USB port, standard video output (monitor) port, 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 Video Sources

**Connecting to Computer Sources** 

Connecting to an External Computer Monitor

Connecting to External Speakers

Connecting to External USB Devices

Connecting to a Document Camera

Parent topic: Setting Up the Projector

**Related references** 

Projector Setup Settings - Extended Menu

#### **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 an S-Video Video Source

Connecting to a Composite Video Source

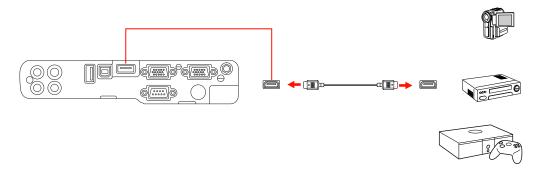
Connecting to a Video Source for Sound

**Parent topic:** Projector Connections

#### Connecting to an HDMI Video Source

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

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



**Note:** The projector converts the digital audio signal sent from your video source into a mono analog signal for the internal speaker or a stereo analog signal if you are connecting to external speakers.

**Note:** If you connected a game console, it may take a few seconds for your image to appear when you switch to the game console's input source. To reduce the potential lag in response time to game commands, set your game console's output format to a progressive signal of 480p or 720p. See your game console documentation for instructions.

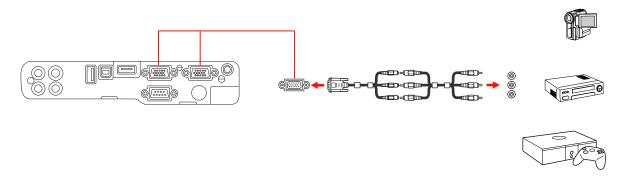
Parent topic: Connecting to Video Sources

### 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.



**Note:** If you choose the **Computer2** port, you may need to change the **Monitor Out Port** setting in the projector's Extended menu.

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.

**Note:** If you connected a game console, it may take a few seconds for your image to appear when you switch to the game console's input source. To reduce the potential lag in response time to game commands, set your game console's output format to a progressive signal of 480p or 720p. See your game console documentation for instructions.

Parent topic: Connecting to Video Sources

Related references

Projector Setup Settings - Extended Menu Input Signal Settings - Signal Menu

Related tasks

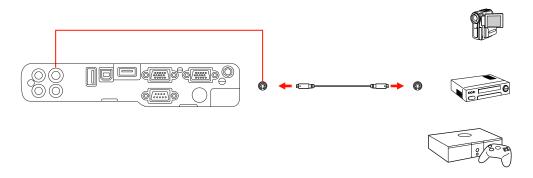
Connecting to a Video Source for Sound

#### 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.



**Note:** If you connected a game console, it may take a few seconds for your image to appear when you switch to the game console's input source. To reduce the potential lag in response time to game commands, set your game console's output format to a progressive signal of 480p or 720p. See your game console documentation for instructions.

Parent topic: Connecting to Video Sources

Related tasks

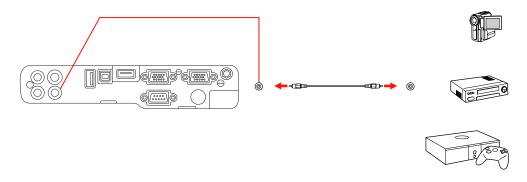
Connecting to a Video Source for Sound

### **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.



**Note:** If you connected a game console, it may take a few seconds for your image to appear when you switch to the game console's input source. To reduce the potential lag in response time to game commands, set your game console's output format to a progressive signal of 480p or 720p. See your game console documentation for instructions.

Parent topic: Connecting to Video Sources

Related tasks

Connecting to a Video Source for Sound

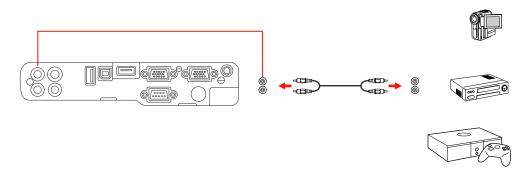
#### Connecting to a Video Source for Sound

You can play sound through the projector's speaker system if your video source has audio output ports. 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. Connect the other end of the cable to the projector's **Audio** port or ports.



Parent topic: Connecting to Video Sources

### **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

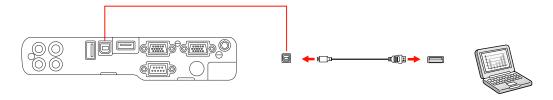
Parent topic: Projector Connections

#### 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.

1. Turn on your computer.

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



- 3. Connect the other end to any available USB port on your computer.
- 4. Do one of the following:
  - Windows 8.x: Click EPSON\_PJ\_UD in the upper right-corner, then select Run EMP\_UDSE.EXE in the dialog box that appears to install the Epson USB Display software.
  - Windows 7/Windows Vista: Select Run EMP\_UDSE.EXE in the dialog box that appears to install the Epson USB Display software.
  - **Windows XP**: Wait as messages appear on your computer screen and the projector installs the Epson USB Display software on your computer.
  - Windows 2000: Select Computer, EPSON\_PJ\_UD, and EMP\_UDSE.EXE to install the Epson USB Display software.
  - 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** 

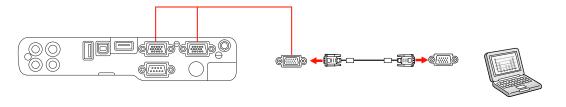
**USB Display System Requirements** 

#### 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.



**Note:** If you choose the **Computer2** port, you may need to change the **Monitor Out Port** setting in the projector's Extended menu.

4. Tighten the screws on the VGA connector.

Parent topic: Connecting to Computer Sources

**Related references** 

Projector Setup Settings - Extended Menu

Related tasks

Connecting to a Computer for Sound

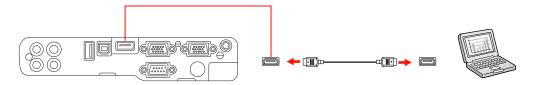
#### Connecting to a Computer for HDMI Video and Audio

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.



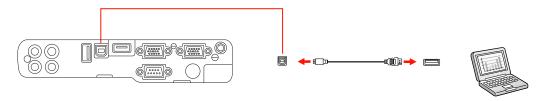
**Note:** The projector converts the digital audio signal sent from your computer into a mono analog signal for the internal speaker or a stereo analog signal if you are connecting to external speakers.

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

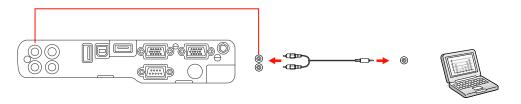
Related tasks

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 using the projector's **USB-B** or **HDMI** port, you can still play sound through the projector's speaker system. Connect an optional stereo mini-jack adapter cable (with one 3.5 mm mini-plug and two RCA plugs).

- 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 projector's **Audio** ports.



Parent topic: Connecting to Computer Sources

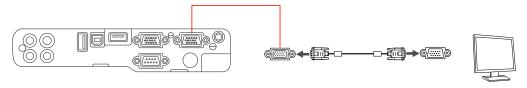
### **Connecting to an External Computer Monitor**

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 adjust the **Standby Setup** settings in the projector's Extended menu.

**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.



Note: You may need to change the Monitor Out Port setting in the projector's Extended menu.

**Parent topic:** Projector Connections

Related references

Projector Setup Settings - Extended Menu

## **Connecting to External Speakers**

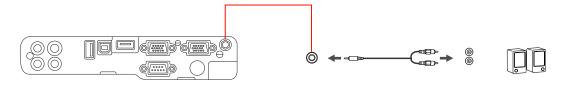
To enhance the sound from your presentation, you can connect the projector to external self-powered speakers. You can control the volume using the projector's remote control.

**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 adjust the **Standby Setup** settings in the projector's Extended menu.

**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

**Related references** 

Projector Setup Settings - Extended Menu

### **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

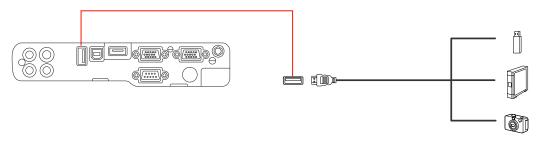
**Related topics** 

Projecting a Slide Show

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

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

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



**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 Slide Show

#### **Selecting the Connected USB Source**

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

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

Parent topic: Connecting to External USB Devices

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

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

1. If the device has a power button, turn off and unplug the device.

2. Disconnect the USB device or camera from the projector.

Parent topic: Connecting to External USB Devices

## **Connecting to a Document Camera**

You can connect 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-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

**Related references** 

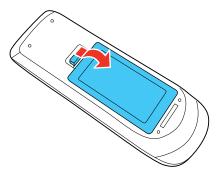
Optional Equipment and Replacement Parts

# **Installing Batteries in the Remote Control**

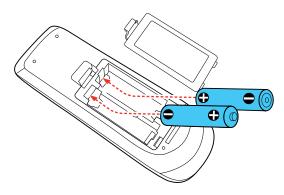
The remote control uses the two AA batteries that came with the projector.

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

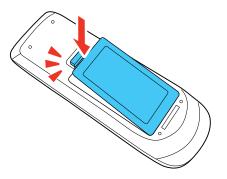
1. Open the battery cover.



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



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



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

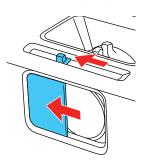
Parent topic: Setting Up the Projector

**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 Basic Projector Features**

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

Turning On the Projector

**Turning Off the Projector** 

Viewing 3D Images

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

Focusing the Image with Focus Help

**Remote Control Operation** 

Selecting an Image Source

**Projection Modes** 

**Image Aspect Ratio** 

Color Mode

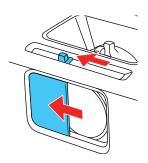
Controlling the Volume with the Volume Buttons

Projecting a Slide Show

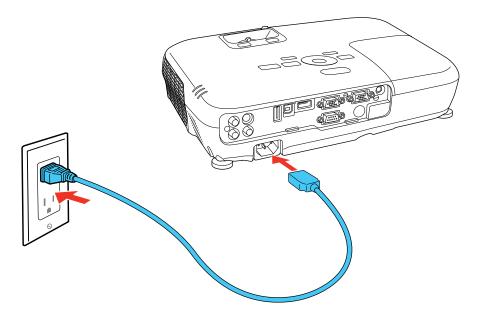
# **Turning On the Projector**

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

1. Open the projector's lens cover.



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



3. Plug the power cord into an electrical outlet.

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

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

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

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

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

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

- Verify the lens cover is open all the way.
- Turn on the connected computer or video device.

- Insert a DVD or other video media, and press the play button (if necessary).
- Press the **Source Search** button on the projector or remote control to detect the video source.
- Press the button for the video source on the remote control.

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.



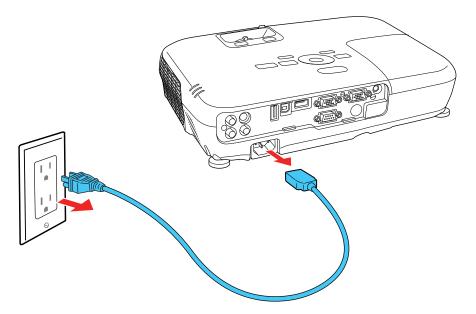
2. Press the power button again. (To leave it on, press any other button.)

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

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

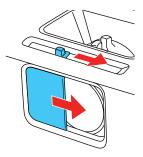
**Caution:** Do not turn the projector on immediately after turning it off. Turning the projector on and off frequently may shorten the life of the lamp.

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



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

4. Close the projector's lens cover.



Parent topic: Using Basic Projector Features

# **Viewing 3D Images**

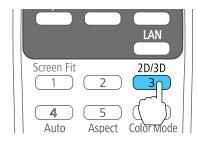
You can view 3D images using your projector. Viewing 3D images requires a 3D-compatible video device and a pair of Epson RF 3D glasses.

You can purchase Epson RF 3D glasses 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).

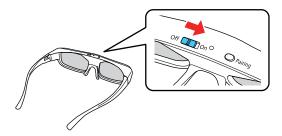
- 1. Connect a 3D-compatible video device to the projector using a compatible HDMI cable.
- 2. Turn on the video device, then turn on the projector.
- 3. Begin playback from the video device.

**Note:** Make sure you set the video device to play content in 3D mode.

4. Press the **2D/3D** button on the remote control to activate 3D mode, if necessary.



5. Slide the power switch on the 3D glasses to the **On** position.



6. Put on the 3D glasses. If you do not see a 3D image, pair the glasses with the projector.

**Note:** If you change the video source or you are not within range of your projector, the glasses enter standby mode and the indicator light flashes green. Slide the power switch on the glasses to the **Off** position and then back to the **On** position to resume 3D viewing.

Pairing the 3D Glasses with the Projector Charging the 3D Glasses 3D Viewing Range

Parent topic: Using Basic Projector Features

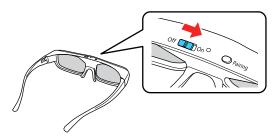
**Related tasks** 

Connecting to an HDMI Video Source Connecting to a Computer for HDMI Video and Audio

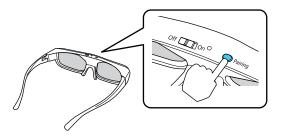
### Pairing the 3D Glasses with the Projector

Pair the glasses with the projector to establish communication between them for 3D viewing.

- 1. Turn on the projector.
- 2. Set the image source to HDMI.
- 3. Project a 3D image.
- 4. Slide the power switch on the 3D glasses to the **On** position.



5. Move the glasses within 10 feet (3 m) of the projector, then hold down the **Pairing** button on the glasses for at least three seconds.



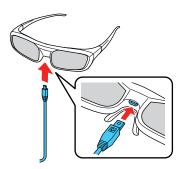
The status light on the glasses flashes green and red. If pairing is successful, the light turns green for 10 seconds and then turns off.

Parent topic: Viewing 3D Images

## **Charging the 3D Glasses**

Charge the glasses when the status light on the glasses flashes red to indicate a low battery.

1. Connect the smaller end of the charging cable to the port on the bridge of the glasses.



**Note:** Make sure you connect the cable in the correct orientation or you may damage the glasses or cable.

2. Connect the other end of the cable to the **USB-A** port on the projector.

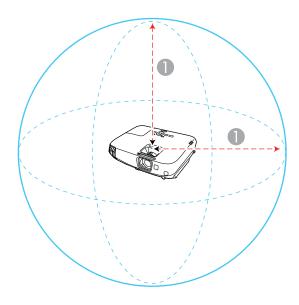
**Note:** The projector must be turned on to charge the glasses.

The glasses are fully charged when the status light on the glasses stays green.

Parent topic: Viewing 3D Images

# **3D Viewing Range**

When you view 3D images, make sure you are positioned within the viewing range shown here.



1 32 ft (10 m)

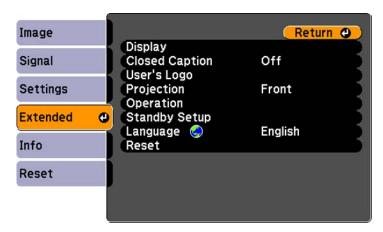
Parent topic: Viewing 3D Images

# **Selecting the Language for the Projector Menus**

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

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

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



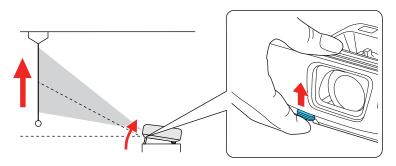
- 4. Select the **Language** setting and press **Enter**.
- 5. Select the language you want to use and press **Enter**.
- 6. Press **Menu** or **Esc** to exit the menus.

Parent topic: Using Basic Projector Features

# **Adjusting the Image Height**

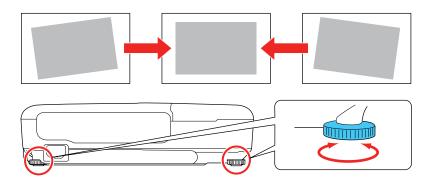
If you are projecting from a table or other flat surface, and the image is too high or low, you can adjust the image height using the projector's adjustable feet.

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



The foot extends from the projector.

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



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

Parent topic: Using Basic Projector Features

Related concepts
Image Shape

# **Image Shape**

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

When you turn on automatic keystone correction in your projector's Settings menu, your projector automatically corrects keystone effects when you reposition the projector.

Automatically Correcting Image Shape With Screen Fit Correcting Image Shape with the Keystone Buttons Correcting Image Shape with Quick Corner

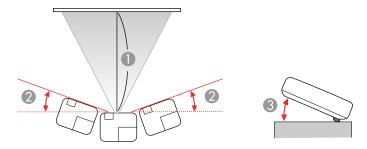
Parent topic: Using Basic Projector Features

# **Automatically Correcting Image Shape With Screen Fit**

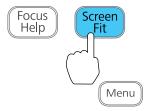
You can use the projector's Screen Fit feature to automatically correct the shape and position of images to fit on your screen.

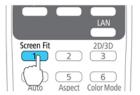
The projector's sensor can detect the screen size and shape in these conditions:

- · Projector is not mounted on the ceiling
- Screen size is 100 inches (254 cm) or less
- The room is not too dark
- The room does not receive too much daylight
- The projection surface is not patterned and does not deflect the sensor in some way
- Projector is positioned within the distances and angles listed here



- 1 4 to 10 feet (1.2 to 3 m)
- 2 20°
- 3 30°
- 1. Press the **Screen Fit** button on the projector or remote control.





You see a message on the screen.

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

Two displays flash briefly, then this message appears:

The revision result can be adjusted by on the main control panel.

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

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

Parent topic: Image Shape

Related tasks

Correcting Image Shape with Quick Corner

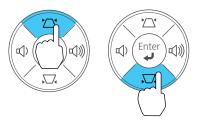
## **Correcting Image Shape with the Keystone Buttons**

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

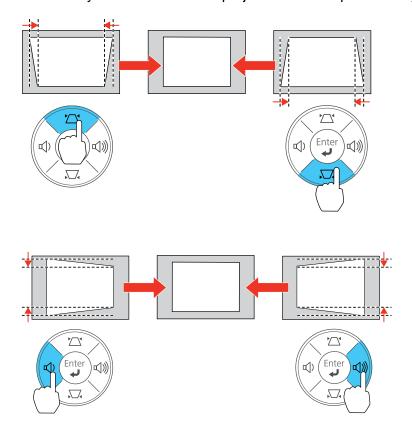
1. Turn on the projector and display an image.

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

2. Press one of these keystone buttons on the control panel to display the Keystone adjustment screen.



3. Press a keystone button on the projector's control panel to adjust the image shape.



After correction, your image is slightly smaller.

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

Parent topic: Image Shape

**Related references** 

Projector Feature Settings - Settings Menu

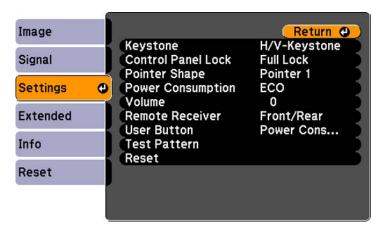
### **Correcting Image Shape with Quick Corner**

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

1. Turn on the projector and display an image.

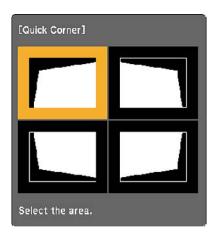
**Note:** You can display a pattern to aid in adjusting the projected image using the Settings menu.

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



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

You see the Quick Corner adjustment screen:



- 6. Use the arrow buttons on the projector or the remote control to select the corner of the image you want to adjust. Then press **Enter**.
- 7. Press the arrow buttons to adjust the image shape as necessary.
- 8. When you are finished, press **Esc**.

Parent topic: Image Shape

Related references

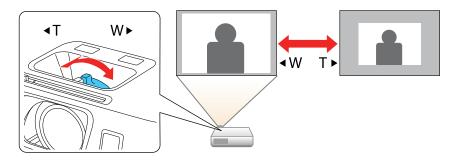
Projector Feature Settings - Settings Menu

# Resizing the Image With the Zoom Ring

1. Turn on the projector and display an image.

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

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



Parent topic: Using Basic Projector Features

**Related references** 

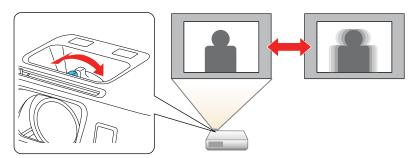
Projector Feature Settings - Settings Menu

# 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.

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



**Note:** If you need additional help sharpening the focus, you can use the Focus Help function.

Parent topic: Using Basic Projector Features

#### Related references

Projector Feature Settings - Settings Menu

#### Related tasks

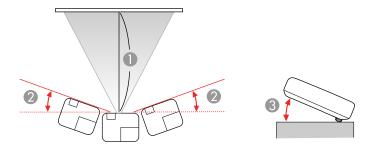
Focusing the Image with Focus Help

# Focusing the Image with Focus Help

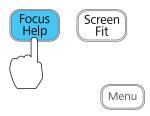
You can use the projector's Focus Help feature to focus the image.

Focus Help works in these conditions:

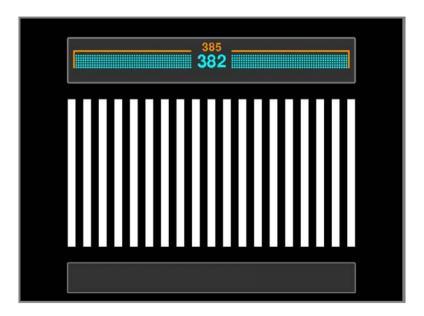
- Screen size is 100 inches (254 cm) or less
- The room is not too bright
- Projector is positioned within the distances and angles listed here:



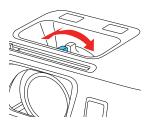
- 1 4 to 10 feet (1.2 to 3 m)
- 2 20°
- 3 30°
- 1. Press the **Focus Help** button on the projector.



You see a screen like this:



2. Turn the focus ring until the green number matches the orange number as closely as possible.



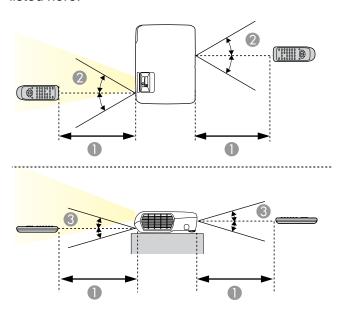
3. When you are finished, press **Esc**.

Parent topic: Using Basic Projector Features

# **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)
- $2 \pm 30^{\circ}$
- $3 \pm 15^{\circ}$

**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

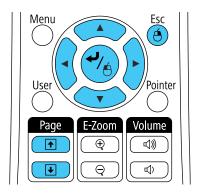
Related tasks

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

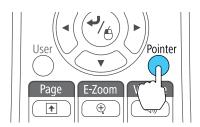
  at the destination.

Parent topic: Remote Control Operation

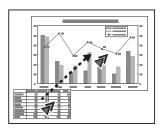
### **Using the Remote Control as a Pointer**

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

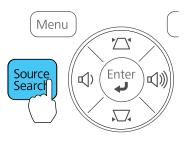
**Related references** 

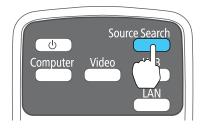
Projector Feature Settings - Settings Menu

# **Selecting an Image Source**

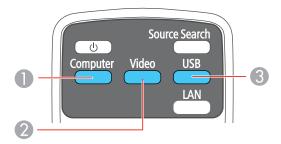
If you connected multiple image sources to the projector, such as a computer and DVD player, you may want to switch from one image source to the other.

- 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)

Parent topic: Using Basic Projector Features

# **Projection Modes**

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

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

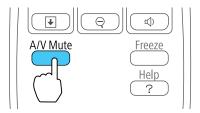
Changing the Projection Mode Using the Remote Control Changing the Projection Mode Using the Menus

Parent topic: Using Basic Projector Features

# **Changing the Projection Mode Using the Remote Control**

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

- 1. Turn on the projector and display an image.
- 2. Hold down the **A/V Mute** button on the remote control for five seconds.



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

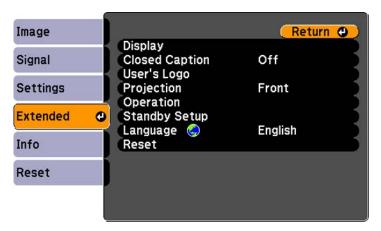
3. To change projection back to the original mode, hold down the **A/V Mute** button for five seconds again.

Parent topic: Projection Modes

### **Changing the Projection Mode Using the Menus**

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

- 1. Turn on the projector and display an image.
- 2. Press the **Menu** button.
- 3. Select the **Extended** menu and press **Enter**.



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

Parent topic: Projection Modes

# **Image Aspect Ratio**

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

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

Changing the Image Aspect Ratio Available Image Aspect Ratios

Parent topic: Using Basic Projector Features

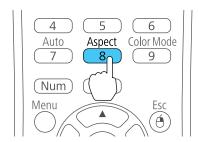
Related references

Input Signal Settings - Signal Menu

## **Changing the Image Aspect Ratio**

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

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



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

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

Parent topic: Image Aspect Ratio

### **Available Image Aspect Ratios**

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

**Note:** When the projector is in 3D mode, the aspect ratio is automatically set to **Normal**.

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

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.

Aspect ratio setting	Description
Full	Displays images using the full width of the projection area and maintains the aspect ratio of the image.
Zoom	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** 

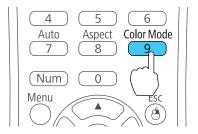
Image Quality Settings - Image Menu

## **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:

### 2D Images

Color Mode	Description
Dynamic	Best for video games in a bright room
Presentation	Best for color presentations in a bright room
Theatre	Best for movies projected in a dark room
Photo	Best for still images projected in a bright 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)

#### 3D Images

Color Mode	Description
3D Dynamic	Best for video games in a bright room
3D Theatre	Best for movies projected in a dark room

Parent topic: Color Mode

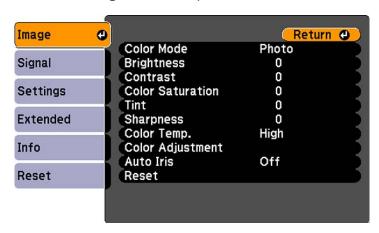
## **Turning On Auto Iris**

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 select **On**.

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

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

Parent topic: Color Mode

### **Controlling the Volume with the Volume Buttons**

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 - Remote Control

Projector Feature Settings - Settings Menu

## **Projecting a Slide Show**

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

Supported Slideshow File Types

Starting a Slide Show

Parent topic: Using Basic Projector Features

Related concepts
USB Device Projection

#### Related tasks

Connecting a USB Device or Camera to the Projector

#### **Supported Slideshow File Types**

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

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

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

Parent topic: Projecting a Slide Show

## **Starting a Slide Show**

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

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

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

The Slideshow screen appears.



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

**Note:** If any file names are longer than 8 characters or include unsupported symbols, the file names may be shortened or changed only in the screen display.

- 4. While projecting, use the following commands to control the display as necessary:
  - To rotate a displayed image, press the up or down arrow button.
  - To move to the next or previous image, press the left or right arrow button.

5. To stop the display, follow the on-screen instructions or press the **Esc** button.

Slideshow Display Options

Parent topic: Projecting a Slide Show

Related tasks

Connecting a USB Device or Camera to the Projector

Disconnecting a USB Device or Camera From the Projector

#### **Slideshow Display Options**

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



Setting	Options	Description
Display Order	Name Order	Displays files in name order
	Date Order	Displays files in date order
Sort Order	In Ascending	Sorts files in first-to-last order
	In Descending	Sorts files in last-to-first order
Continuous Play	On	Displays a slide show continuously
	Off	Displays a slide show one time through

Setting	Options	Description
Screen Switching	No	Does not display the next file automatically
Time	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
Effect	Wipe	Transitions between images with a wipe effect
	Dissolve	Transitions between images with a dissolve effect
	Random	Transitions between images using a random variety of effects

Parent topic: Starting a Slide Show

# **Adjusting Projector Features**

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

Shutting Off the Picture and Sound Temporarily

Stopping Video Action Temporarily

Zooming Into and Out of Images

**Projector Security Features** 

## **Shutting Off the Picture and Sound Temporarily**

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

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

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



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

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

Parent topic: Adjusting Projector Features

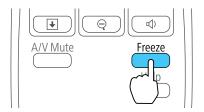
**Related tasks** 

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.



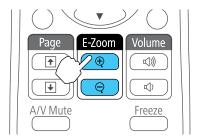
2. To restart the video action in progress, press **Freeze** again.

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 Protect prevents anyone from using the projector without first entering a password.
- **User's Logo Protect** 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.

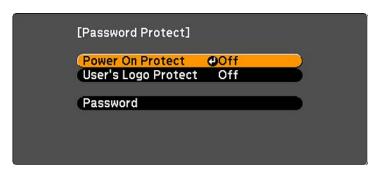
Setting a Password Selecting Password Security Types Entering a Password to Use the Projector Saving a User's Logo Image to Display

Parent topic: Projector Security Features

#### **Setting a Password**

To use password security, you must set a password.

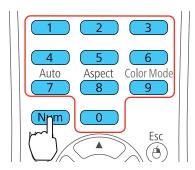
1. Hold down the **Freeze** button on the remote control for about five seconds until you see this menu.



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."

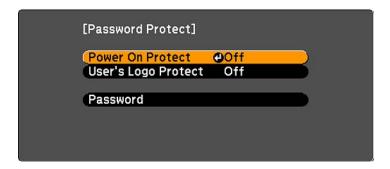
6. Press **Esc** to return to the menu.

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 the Password Protect menu. Select the password security types you want to use.



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

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

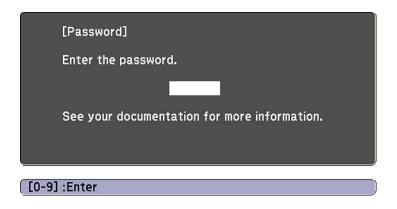
You can attach the Password Protect sticker to the projector as an additional theft deterrent.

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

Parent topic: Password Security Types

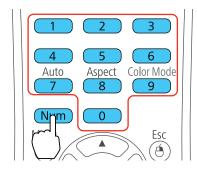
#### **Entering a Password to Use the Projector**

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



You must enter the correct password to use the projector.

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



The password screen closes.

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

Parent topic: Password Security Types

#### Related references

Where to Get Help

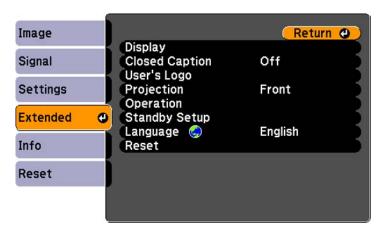
#### Saving a User's Logo Image to Display

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.

**Note:** If the projector is in 3D mode, you must change it to 2D mode before you can save a User's Logo. You can change the mode by pressing the **2D/3D** button on the remote control or by changing the **3D Display** setting in the projector's Signal menu.

- 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.

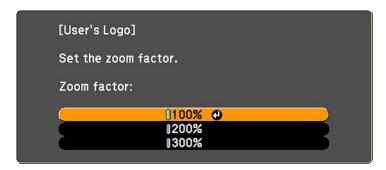
You see a selection box overlaying your image.

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 references

Input Signal Settings - Signal Menu

Related tasks

**Stopping Video Action Temporarily** 

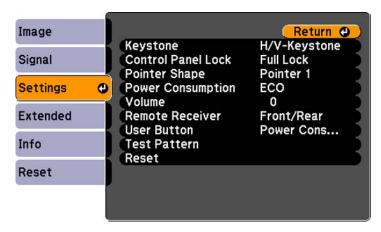
Setting a Password

**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**

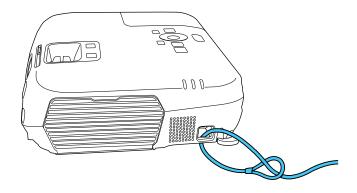
If the projector's buttons have been locked, hold the **Enter** button on the projector's control panel for seven seconds to unlock them.

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

Projector Parts - Front/Top

# **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

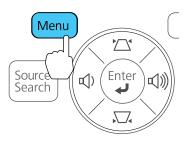
Projector Information Display - Info Menu

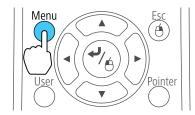
Projector Reset Options - Reset Menu

## **Using the Projector's Menus**

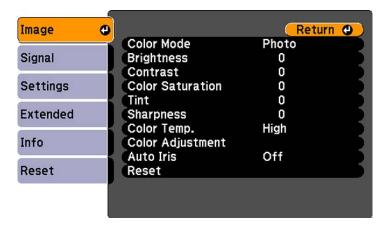
You can use the projector's menus to adjust the settings that control how your projector works. The projector displays the menus on the screen.

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





You see the menu screen displaying the Image menu settings.



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

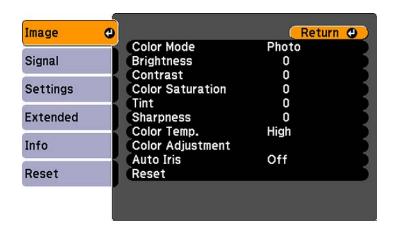
**Note:** The available settings depend on the current input source.

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

Parent topic: Adjusting the Menu Settings

## **Image Quality Settings - Image Menu**

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



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

Setting	Options	Description
Color Mode	See the list of available Color Modes	Adjusts the vividness of image colors for various image types and environments
Brightness	Varying levels available	Lightens or darkens the overall image
Contrast	Varying levels available	Adjusts the difference between light and dark areas of the image
Color Saturation	Varying levels available	Adjusts the intensity of the image colors
Tint	Varying levels available	Adjusts the balance of green to magenta tones in the image
Sharpness	Varying levels available	Adjusts the sharpness or softness of image details
Color Temp. (color temperature)	High Medium Low	Sets the overall color tone; <b>High</b> tints the image blue and <b>Low</b> tints the image red

Setting	Options	Description
Color Adjustment	Slider bars for each color	Adjusts the intensity of individual hues in the image
Auto Iris	On Off	Adjusts the projected luminance based on the image brightness when certain Color Modes are selected

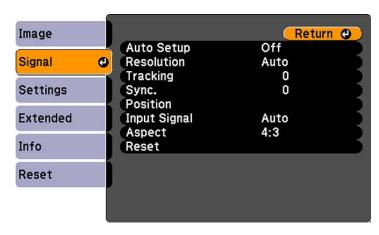
**Note:** The **Brightness** setting does not affect lamp brightness. To change the lamp brightness mode, use the **Power Consumption** setting.

Parent topic: Adjusting the Menu Settings

Related references
Available Color Modes

### **Input Signal Settings - Signal Menu**

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



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

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

Setting	Options	Description
Auto Setup	On Off	Automatically optimizes computer image quality (when On)
Resolution	Auto Normal Wide	Sets the input signal resolution if not detected automatically using the <b>Auto</b> 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
3D Setup	3D Display	Selects various 3D options
	3D Format	3D Display: enables 3D mode
	3D Brightness Inverse 3D Glasses	<b>3D Format</b> : selects the 3D format
	3D Viewing Notice	<b>3D Brightness</b> : adjusts the brightness of 3D images
		Inverse 3D Glasses: reverses the timing for the shutters on 3D active shutter glasses (only enable if 3D images are not displaying correctly)
		<b>3D Viewing Notice</b> : enables the viewing notice displayed when 3D mode is activated

Setting	Options	Description
Progressive	Off Video	Sets whether to convert interlaced-to-progressive signals for certain video image types
	Film/Auto	Off: for fast-moving video images
		Video: for most video images
		<b>Film/Auto</b> : for movies, computer graphics, and animation
Noise Reduction	Off NR1 NR2	Reduces flickering in analog images in two levels
HDMI Video Range	Normal Expanded	Sets the video range to match the setting of the device connected to the HDMI input port
	Auto	Auto: detects the video range automatically
		<b>Expanded</b> : 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	Specifies the signal type from input sources connected to computer ports
	Component	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

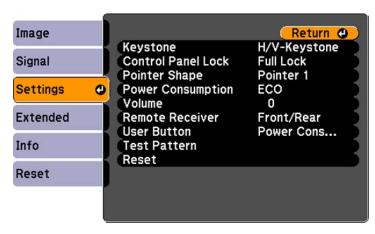
Parent topic: Adjusting the Menu Settings

**Related references** 

**Available Image Aspect Ratios** 

## **Projector Feature Settings - Settings Menu**

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



Setting	Options	Description
Keystone	H/V-Keystone Quick Corner	Adjusts image shape to rectangular (horizontally and vertically)
		H/V Keystone: lets you manually correct horizontal and vertical sides, or turn automatic correction on or off
		Quick Corner: select to correct image shape and alignment using an on-screen display
Control Panel Lock	Full Lock	Controls projector button locking to secure the projector
	Partial Lock Off	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
Power Consumption	Normal ECO	Selects the brightness mode of the projector lamp
		Normal: sets maximum lamp brightness
		<b>ECO</b> : reduces lamp brightness and fan noise, and saves power and lamp life
Volume	Varying levels available	Adjusts the volume of the projector's speaker system
Remote Receiver	Front	Limits reception of remote control
	Rear	signals by the selected receiver; <b>Off</b> turns off all receivers
	Front/Rear	on tarrie on an receivers
	Off	

Setting	Options	Description
User Button	Power Consumption	Assigns a menu option to the
	Info	User button on the remote control for one-touch access
	Progressive	
	Closed Caption	
	Test Pattern	
	Resolution	
	3D Brightness	
Test Pattern	On	Displays a test pattern to assist in
	Off	focusing and zooming the image and correcting image shape (press <b>Esc</b> to cancel pattern display)

Parent topic: Adjusting the Menu Settings

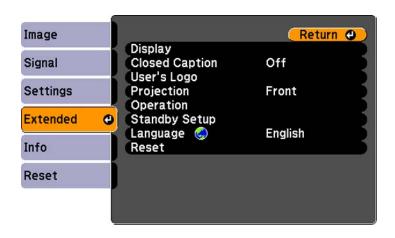
Related tasks

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	Selects various display options
	Display Background	<b>Messages</b> : controls whether messages are displayed on the
	Startup Screen	screen
	A/V Mute	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
		<b>A/V Mute</b> : 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 <b>S-Video</b>
		or <b>Video</b> ports)

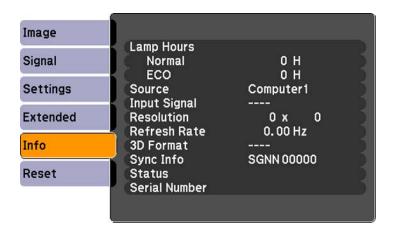
Setting	Options	Description
User's Logo	_	Creates a screen that the projector displays to identify itself and enhance security
Projection	Front Front/Ceiling Rear Rear/Ceiling	Selects the way the projector faces the screen so the image is oriented correctly
Operation	Direct Power On Sleep Mode Sleep Mode Timer Lens Cover Timer High Altitude Mode Monitor Out Port	Selects various operation options  Direct Power On: lets you turn on the projector without pressing the power button  Sleep Mode: automatically turns off the projector after an interval of inactivity  Sleep Mode Timer: sets the interval for Sleep Mode  Lens Cover Timer: automatically turns off the projector after 30 minutes if the lens cover is closed  High Altitude Mode: regulates the projector's operating temperature at altitudes above 4921 feet (1500 m)  Monitor Out Port: specifies the function of the Monitor Out/Computer2 port

Setting	Options	Description
Standby Setup	Standby Mode Standby Audio	Selects the following when the projector is in standby mode (turned off):
		Standby Mode: Communication On indicates that the projector can be controlled from a computer and can display output signals on an external monitor
		Standby Audio: The On setting indicates that the projector can output audio from a connected source
Language	Various languages available	Selects the language for projector menu and message displays (not changed by <b>Reset</b> option)

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. The information displayed depends on the currently selected input source.



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

Information item	Description
Lamp Hours	Displays the number of hours ( <b>H</b> ) the lamp has been used in each Power Consumption mode; 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
3D Format	Displays the 3D format 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

Parent topic: Adjusting the Menu Settings

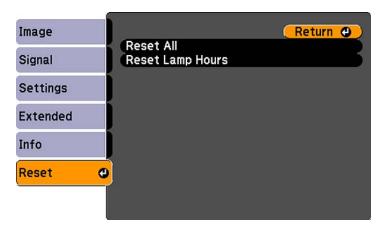
#### **Related references**

Optional Equipment and Replacement Parts Projector Lamp Specifications

## **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
- Lamp Hours
- Password
- User Button

Parent topic: Adjusting the Menu Settings

# **Maintaining and Transporting the Projector**

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

Projector Maintenance
Transporting the Projector

### **Projector Maintenance**

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

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

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

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

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

Cleaning the Lens
Cleaning the 3D Glasses
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.

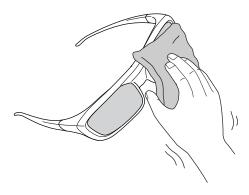
**Caution:** Do not use glass cleaner or any harsh materials to clean the lens and do not subject the lens to any impacts; you may damage it. Do not use canned air, or the gases may leave a residue. Avoid touching the lens with your bare hands to prevent fingerprints on or damage to the lens surface.

Parent topic: Projector Maintenance

#### **Cleaning the 3D Glasses**

To remove dust, dirt, smudges, or fingerprints from the glasses, use a lint-free cloth.

**Note:** Unplug any charging cables from the glasses before cleaning them.



**Caution:** Do not use paper towels or any other abrasive materials to clean the glasses.

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

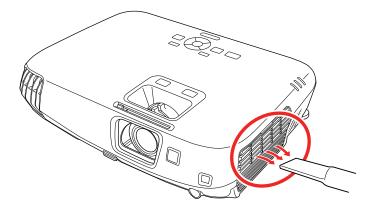
Related references
Projector Light Status

#### **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

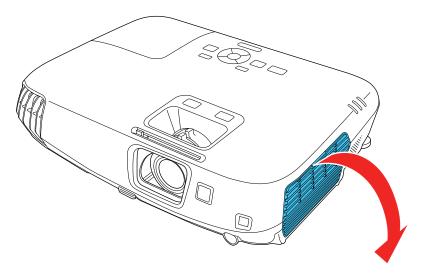
You need to replace the air filter in the following situations:

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

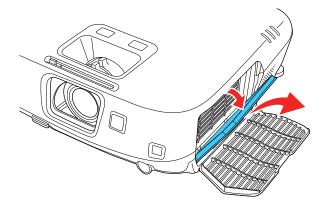
You can replace the air filter while the projector is mounted to the ceiling or placed on a table.

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

2. Place your finger into the groove at the top of the air filter cover and pull to open the cover.

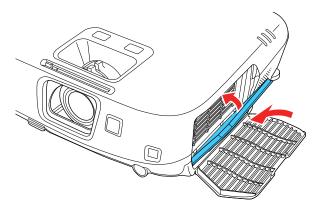


3. Pull the air filter out of the projector.



**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

### **Projector Lamp Maintenance**

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

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

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

Replacing the Lamp
Resetting the Lamp Timer

Parent topic: Projector Maintenance

**Related references** 

Projector Information Display - Info Menu Optional Equipment and Replacement Parts

**Projector Lamp Specifications** 

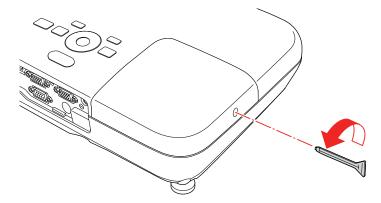
#### Replacing the Lamp

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

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

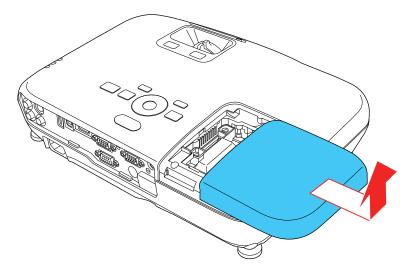
You can replace the lamp while the projector is mounted to the ceiling, if necessary.

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

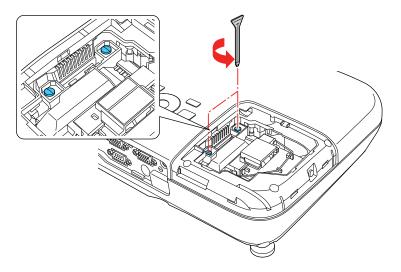


**Warning:** If the lamp is broken, glass fragments may be loose inside the lamp chamber. Be careful removing any broken glass to avoid injury. If the projector is installed on the ceiling, stand to the side of the lamp cover and not underneath it; pieces of glass could fall into your eyes or mouth when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

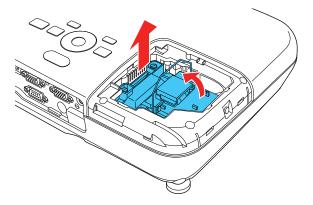
4. Slide the lamp cover out and lift it off.



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

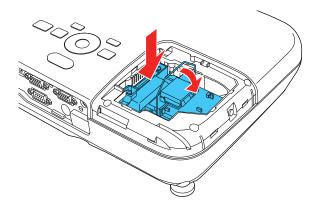


6. Lift up the lamp handle and gently pull the lamp out of the projector.



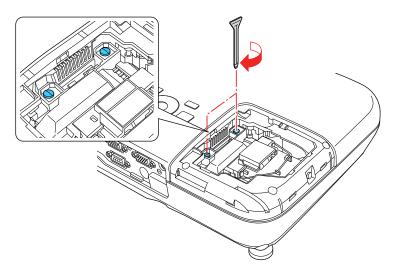
**Note:** High The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.

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

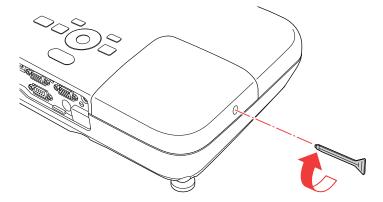


**Caution:** Do not touch any glass on the lamp assembly to avoid premature lamp failure.

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



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



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

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

Parent topic: Projector Lamp Maintenance

### Related tasks

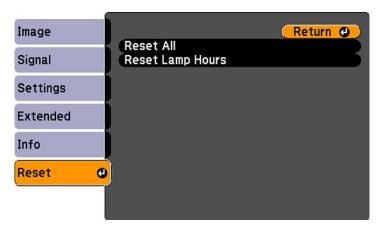
Resetting the Lamp Timer

### **Resetting the Lamp Timer**

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

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

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



4. Select **Reset Lamp Hours** and press **Enter**.

You see a prompt asking if you want to reset the lamp hours.

- 5. Select **Yes** and press **Enter**.
- 6. Press **Menu** or **Esc** to exit the menus.

Parent topic: Projector Lamp Maintenance

Related tasks

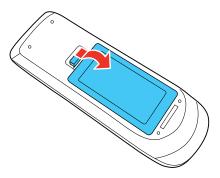
Replacing the Lamp

## **Replacing the Remote Control Batteries**

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

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

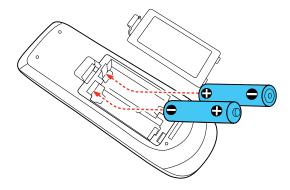
1. Open the battery cover as shown.



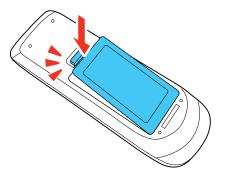
2. Remove the old batteries.

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

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



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



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

Parent topic: Projector Maintenance

Related references

Remote Control Operation

# **Transporting the Projector**

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

• 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

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

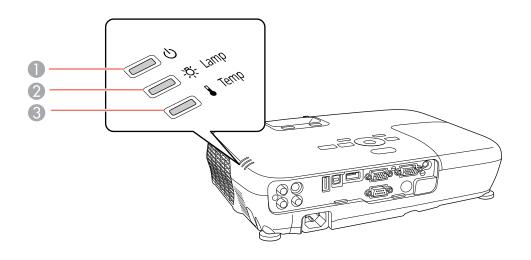
Related references
Projector Light Status
Where to Get Help

**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 Lamp light
- 3 Temp (temperature) light

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

Power light	Lamp light	Temp light	Status and solution
Red	Off	Red	Projector has overheated and turned off. Leave it turned off to cool down. Once the Temp light turns off and the power light turns orange (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 <b>High Altitude Mode</b> .
			If the problem persists, unplug the projector and contact Epson for help.
Red	Flashing red	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 <b>High Altitude Mode</b> .
			If the problem persists, unplug the projector and contact Epson for help.
Light status varies	Flashing orange	Off	Replace the lamp soon to avoid damage. Do not continue using the projector.
Red	Off	Flashing red	A fan or sensor has a problem. Turn the projector off, unplug it, and contact Epson for help.
Red or flashing red	Flashing red	Flashing red	Internal projector error. Turn the projector off, unplug it, and contact Epson for help.

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

Parent topic: Solving Problems

#### Related references

Projector Setup Settings - Extended Menu Where to Get Help

#### Related tasks

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

# **Using the Projector Help Displays**

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

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

You see the Help menu.

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

Parent topic: Solving Problems

# **Solving Image or Sound Problems**

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

Solutions When No Image Appears

Solutions When Image is Incorrect Using the USB Display Function

Solutions When "No Signal" Message Appears

Solutions When "Not Supported" Message Appears

Solutions When Only a Partial Image Appears

Solutions When the Image is Not Rectangular

Solutions When the Image Contains Noise or Static

Solutions When the Image is Fuzzy or Blurry

Solutions When the Image Brightness or Colors are Incorrect

Solutions When a 3D Image Does Not Display Correctly Solutions When No Image Appears on an External Monitor 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.
- If you connected your video source to the **Monitor Out/Computer2** port, make sure you set the **Monitor Out Port** setting to **Computer2**.
- 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

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

Related tasks

Unlocking the Projector's Buttons

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

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

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

## **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.
- Press the **Screen Fit** button and adjust the image shape using the on-screen display.
- Adjust the **Quick Corner** setting to correct the image shape.

Parent topic: Solving Image or Sound Problems

**Related references** 

Projector Feature Settings - Settings Menu

#### Related tasks

Correcting Image Shape with the Keystone Buttons Automatically Correcting Image Shape With Screen Fit 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 adjusted the image shape using the projector controls, try decreasing the **Sharpness** setting to improve image quality.
- If you connected an extension power cable, try projecting without it to see if it caused interference in the signal.
- 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

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

## 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.
- When using the **Screen Fit** feature, position the projector at a compatible distance from the screen or adjust the image shape manually.
- 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** 

Projector Feature Settings - Settings Menu

Image Quality Settings - Image Menu

Input Signal Settings - Signal Menu

#### Related tasks

Focusing the Image Using the Focus Ring

Focusing the Image with Focus Help

Cleaning the Lens

Automatically Correcting Image Shape With Screen Fit

## 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

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

### **Solutions When a 3D Image Does Not Display Correctly**

If a 3D image does not display correctly, try the following solutions:

- Press the **2D/3D** button on the remote control to switch to 3D mode, if necessary. You can also activate 3D mode by setting the **3D Display** setting on the Signal menu to **On**.
- Make sure your video device and media are both 3D-compatible. Refer to the documentation that came with your video device for more information.
- Make sure you are using an HDMI cable that supports 3D signals.
- Make sure you selected the correct **3D Format** setting on the Signal menu. Normally this should be set to **Auto**, but in some cases you may need to select a different setting to match the 3D signal from your video device.
- Make sure you are using RF 3D active shutter glasses. You can purchase them from Epson.
- Make sure your 3D glasses are turned on and fully charged. If the glasses have entered standby mode, slide the power switch on the glasses to the **Off** position and then back to the **On** position.
- Make sure your 3D glasses are paired with the projector.
- Make sure you are within the 3D viewing range.

- Avoid using the projector near wireless networks, microwave ovens, 2.4 GHz cordless phones, or other devices that use the 2.4 GHz frequency band. These devices can interfere with the signal between the projector and the 3D glasses.
- If the other solutions do not not solve the problem, change the **Inverse 3D Glasses** setting on the Signal menu. Return the setting to its original value if changing it does not solve the problem.

Parent topic: Solving Image or Sound Problems

Related references

Input Signal Settings - Signal Menu
Optional Equipment and Replacement Parts
3D Viewing Range

Related tasks

Charging the 3D Glasses
Pairing the 3D Glasses with the Projector

## **Solutions When No Image Appears on an External Monitor**

If no image appears on a connected external monitor, try the following solutions:

- Make sure a VGA cable is connected to your computer and the projector's **Computer1** port.
- Make sure your external monitor's cable is connected to the monitor and to the projector's Monitor
  Out port.
- Make sure you set the **Monitor Out Port** setting to **Monitor Out**.

Parent topic: Solving Image or Sound Problems

Related references

Projector Setup Settings - Extended 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 turn on the **Standby Audio** option.
- 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 concepts
Projector Connections

Related references

Projector Setup Settings - Extended Menu

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 and the power and Temp lights are red, the projector has overheated and shut off. Check the solutions for this light status.
- If the power button on the remote control does not turn on the projector, check its batteries and make sure the **Remote Receiver** setting is turned on in the projector's menu, if available.

Parent topic: Solving Projector or Remote Control Operation Problems

# Related references Where to Get Help

Projector Light Status

Projector Feature Settings - Settings Menu

### 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

**Remote Control Operation** 

Projector Feature Settings - Settings Menu

Where to Get Help

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 Where to Get Help

## 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** 1280 × 800 pixels (WXGA)

**Lens** F=1.58 to 1.72

Focal length: 16.9 to 20.28 mm

**Color reproduction** Full color, up to 1 billion colors

**Brightness** Normal Power Consumption mode:

White light output 3000 lumens (ISO 21118 standard)

Color light output 3000 lumens

ECO Power Consumption mode:

White light output 2400 lumens (ISO 21118 standard)

Contrast ratio 2D mode:

Up to 5000:1 with Normal Power Consumption mode

3D mode:

Up to 3000:1 with Normal Power Consumption mode

**Image size** 29 inches (0.74 m) to 320 inches (8.13 m)

**Projection distance** 36 inches (0.91 m) to 429 inches (10.90 m)

**Projection methods** Front, rear, ceiling-mounted

Optical aspect ratio 16:10

(width-to-height)

Focus adjustment Manual

Zoom adjustment Manual (optical)

Zoom ratio 1:1.2

(Tele-to-Wide)

Internal sound system 2 W monaural

**Noise level** 36 dB (Normal Power Consumption mode)

29 dB (ECO Power Consumption mode)

**Keystone correction angle** Vertical: ± 30° (manual); ± 30° (using Auto Keystone or Screen Fit)

Horizontal: ± 30° (manual); ± 20° (using Auto Keystone or Screen

Fit)

**USB Type B port compatibility** USB 1.1 and 2.0 compliant for USB display or external mouse

**USB Type A port compatibility** One USB 1.1 and 2.0 compliant port for USB device input or Epson

document camera display

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 4000 hours

ECO Power Consumption mode:

Up to about 5000 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)3.03 inches (77 mm)Width12.8 inches (325 mm)Depth9.57 inches (243 mm)

**Weight** 6.0 lb (2.7 kg)

Parent topic: Technical Specifications

# **Projector Electrical Specifications**

Rated frequency 50/60 Hz

Power supply 100 to 240 VAC  $\pm 10\%$ 

2.9 to 1.3 A

**Power consumption** Operating:

(110 to 120 V) Normal Power Consumption mode: 289 W

ECO Power Consumption mode: 237 W

Standby:

0.36 W (Communication Off), 3.2 W (Communication On)

**Power consumption** Operating:

(220 to 240 V) Normal Power Consumption mode: 277 W

ECO Power Consumption mode: 230 W

Standby:

0.40 W (Communication Off), 3.3 W (Communication On)

Parent topic: Technical Specifications

# **Projector Environmental Specifications**

**Temperature** Operating: 41 to 95 °F (5 to 35 °C)

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 7500 feet (2286 m) with High Altitude Mode enabled

Parent topic: Technical Specifications

# **Projector Safety and Approvals Specifications**

United States FCC Part 15B Class B (DoC)

UL60950-1 2nd edition (cTUVus Mark)

Canada ICES-003 Class B

CSA-C22.2 No. 60950-1-07 (cTUVus Mark)

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 tables here list the compatible refresh rate and resolution for each compatible video display format.

### 2D Signals

Display format	Refresh rate (in Hz)	Resolution (in pixels)	
Computer signals (analog RGB)			
VGA	60/72/75/85	640 × 480	
SVGA	56/60/72/75/85	800 × 600	
XGA	60/70/75/85	1024 × 768	
WXGA	60/75/85	1280 × 800	
	60	1280 × 768	
	60	1366 × 768	
WXGA+	60/75/85	1440 × 900	
	60	1600 × 900	
SXGA	70/75/85	1152 × 864	
	60/75/85	1280 × 960	
	60/75/85	1280 × 1024	
SXGA+	60/75	1400 × 1050	
UXGA	60	1600 × 1200	
WSXGA+*	60	1680 × 1050	
MAC13"	67	640 × 480	
MAC16"	75	832 × 624	
MAC19"	75	1024 × 768	
	59	1024 × 768	
MAC21"	75	1152 × 870	
Composite video	<u> </u>	•	
TV (NTSC)	60	720 × 480	

Display format	Refresh rate (in Hz)	Resolution (in pixels)
TV (PAL)	50/60	720 × 576
TV (SECAM)	50	720 × 576
Component video	•	
SDTV (480i/480p)	60	720 × 480
SDTV (576i/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
WSXGA+	60	1680 × 1050
SXGA	60	1280 × 960
	60	1280 × 1024
SXGA+	60	1400 × 1050
UXGA	60	1600 × 1200
SDTV (480i/480p)	60	720 × 480
SDTV (576i/576p)	50	720 × 576
HDTV (720p)	50/60	1280 × 720
HDTV (1080i)	50/60	1920 × 1080
HDTV (1080p)	24/30/50/60	1920 × 1080

<sup>\*</sup> Wide resolution only

### 3D Signals

Display format	Refresh rate (in Hz)	Resolution (in pixels)	3D formats
HDTV750p (720p)	50/60	1280 × 720	Frame Packing
			Side by Side
			Top and Bottom
HDTV1125i (1080i)	50/60	1920 × 1080	Side by Side
HDTV1125p (1080p)	24	1920 × 1080	Frame Packing
			Top and Bottom
	50/60	1920 × 1080	Side by Side

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

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

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

- Do not store the projector outside of the required temperature range of 14 to 140 °F (–10 to 60 °C) 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:** He 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.)

3D Safety Instructions Restriction of Use

Parent topic: Notices

## **3D Safety Instructions**

Follow these 3D safety instructions when setting up and using the projector:

- If you or any viewer experiences the following symptoms or other major discomfort from viewing 3D video images, immediately stop viewing and contact your health care provider: convulsions, eye or muscle twitching, loss of awareness, altered vision, involuntary movements, disorientation, eye strain, nausea/vomiting, dizziness, headaches, fatigue, or blurry/double vision that lasts longer than few seconds. Do not engage in any potentially hazardous activity (such as driving a vehicle or operating machinery) until your symptoms have completely gone away. If the symptoms persist, discontinue use and do not resume stereoscopic 3D viewing without discussing your symptoms with a health care provider/physician.
- Some viewers may experience a seizure or blackout when exposed to flashing images or lights contained in certain 3D content. Anyone who has a history of seizures, loss of awareness, symptoms linked to an epileptic condition, or has a family history of epilepsy, should contact a health care provider before using the 3D function. It is recommended that all viewers take regular breaks while watching 3D video images or playing stereoscopic 3D games. The suggested breaks are, at least 5 to 15 minutes after every 30 to 60 minutes of stereoscopic 3D content viewing.\*
  - \*Based on the guidelines issued by the 3D Consortium revised December 10, 2008. The length and frequency of necessary breaks will vary from person to person. If you experience any discomfort, you should immediately stop watching the 3D video images or playing stereoscopic 3D games until the discomfort ends; consult a heath care provider/physician if necessary.
- Due to the possible impact on vision development, viewers of 3D video images should be age 6 or older. Children and teenagers may be more susceptible to health issues associated with viewing in 3D and should be closely supervised to avoid prolonged viewing without rest.
- Maintain a distance from the screen of at least three times the screen height when viewing 3D images.
  The recommended viewing distance for an 80 inch screen is at least 10 feet (3 m) and at least 12 feet
  (3.6 m) for a 100 inch screen. Also, we recommended using a screen size less than 120 inches.
  Viewing any closer than the recommended viewing distance or on a screen larger than recommended
  may result in eye fatigue.
- Viewing 3D content may cause dizziness and disorientation for some viewers. Therefore, to avoid
  injury do not place your projector or screen near open stairwells, balconies, or wires, and do not sit
  near objects that could be broken if accidentally hit.
- The following people should limit 3D content viewing:
  - · People with a history of photosensitivity
  - People with heart disease
  - · People in poor health

- People who are sleep deprived
- · People who are physically tired
- · People under the influence of drugs or alcohol
- Anyone who has ever experienced epileptic seizures or sensory disturbances triggered by flashing light effects
- SOME LIGHT PATTERNS MAY INDUCE SEIZURES IN PERSONS WITH NO PRIOR HISTORY OF EPILEPSY.
- Do not use the device near any medical equipment or equipment that is automatically controlled, such as automatic doors or fire alarms. Electromagnetic interference from the device may cause such equipment to malfunction and cause an accident.
- Do not disassemble or modify the 3D glasses. This could cause a fire to occur or the images to appear abnormal when viewing, causing you to feel ill.
- Do not leave the 3D glasses or any parts supplied with the glasses within reach of children. They could be accidentally swallowed. If anything is accidentally swallowed, contact a doctor immediately.
- Do not place the 3D glasses in a fire or on a heat source, or leave them unattended in a location subject to high temperatures. Because this device has a built-in rechargeable lithium battery, it could cause burns or a fire if it ignites or explodes.
- When charging the 3D glasses, only use the supplied charging cable and connect the cable to the USB port designated by Epson. Do not charge the 3D glasses using other devices as it may cause the battery to leak, overheat, ignite, or explode.
- Do not drop the 3D glasses or press too forcefully on them. If the glass sections or other parts are broken, an injury could occur. Store the glasses in the soft case supplied with them.
- Be careful of the edges of the frame when wearing the 3D glasses and do not place your finger in any of the moving sections such as the hinges. Otherwise you could injure your eyes or fingers.
- When disposing of the 3D glasses, follow any local rules and regulations.

Parent topic: Important Safety Instructions

### **Restriction of Use**

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

Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or

medical equipment related to direct medical care, please make your own judgment on this product's suitability after a full evaluation.

Parent topic: Important Safety Instructions

# **FCC Compliance Statement**

#### For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **WARNING**

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

#### For Canadian Users

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

**Parent topic: Notices** 

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**Parent topic: Notices** 

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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
- Stonestreet One Drivers

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Version 2, June 1991

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<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

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LGPL Programs

glibc-2.8

SDL-1.2.13

SDL-Image

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Version 2.1, February 1999

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