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PROJECTOR OWNER'S MANUAL

Epson
BrightLink 436Wi

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BrightLink® 436Wi/421i User's Guide

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BrightLink 436Wi/421i User's Guide

Welcome to the BrightLink 436Wi/421i *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

BrightLink 436Wi/421iprojectors include these special features:

Unique interactive functions

- Annotation with or without a computer
- Annotation with two pens at the same time
- Enhanced Easy Interactive toolbar for Windows and Mac
- Perform computer mouse functions with the interactive pen

Short-throw projection system

- Easily mounted on a wall, ceiling, or table for fast, low-cost installations
- Can be placed on a table or desk for portability
- Reduced shadow interference and glare

Bright, high-resolution images

- BrightLink 436Wi: Up to 3000 lumens of brightness (white light output and color light output)
  BrightLink 421i: Up to 2500 lumens of brightness (white light output and color light output)
- BrightLink 436Wi: Native resolution of 1280 × 800 pixels (WXGA)
  BrightLink 421i: Native resolution of 1024 × 768 pixels (XGA)

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
- Wired network support for projection
- Projector monitoring and control via remote network computer

- Optional wireless network support, including video and audio transfer
- PC Free photo slide shows via connected USB memory devices or Epson document camera
- Dual VGA ports for connections by multiple presenters
- Port for connecting an external monitor
- Port for connecting a microphone

Innovative display and operation features

- Low total cost of ownership with long-life projector lamp and high-efficiency air filter
- High digital zoom ratio for larger images in shorter projection distances
- 3000:1 contrast ratio and Auto Iris control for sharp, detailed images
- Built-in closed captioning decoder
- Powerful 16 W speaker system with audio out port for connecting external speakers
- Epson's Instant Off and Direct Power On features for quick setup and shut down
- Support for Crestron RoomView network monitoring systems
- Network message broadcast system to project timely messages to all networked projectors

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

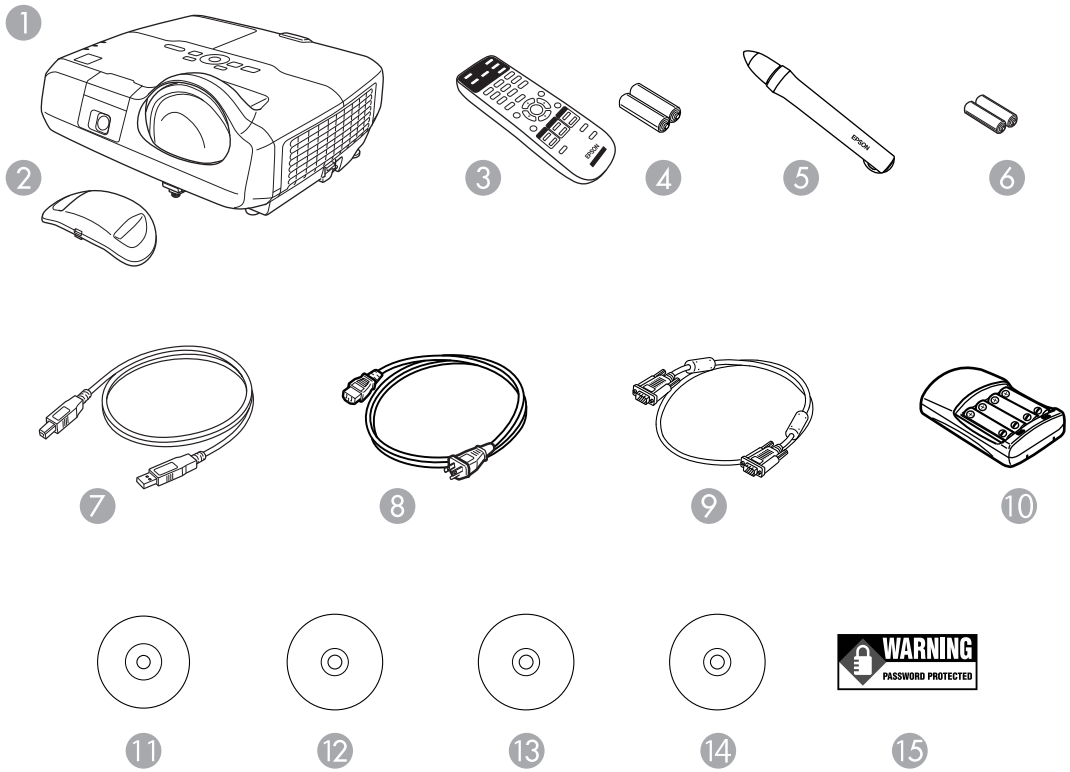
Parent topic: Introduction to Your Projector

Related concepts
Projector Part Locations

Product Box Contents

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

Make sure your projector box included all of these parts:



1 Projector
2 Lens cover
3 Remote control
4 2 AA alkaline batteries (for remote control)
5 Interactive pen A (orange end)
6 2 AA alkaline batteries (for interactive pen)
7 USB cable
8 Power cord
9 VGA computer cable

10 Battery charger with 4 AA rechargeable batteries (for interactive pen) (not included with BrightLink 421i)

11 Projector software CD-ROM (for network usage)

12 Projector software for Easy Interactive Function CD-ROM

13 TeamBoard Draw CD-ROM (not included with BrightLink 421i)

14 Projector Manual CD-ROM

15 Password Protected sticker

Note: The product box contents vary by country.

Note: A Video Tutorials DVD is also included in the Welcome Kit.

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

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

- To project with audio from certain ports, you may need a commercially available audio cable compatible with your device. See your local computer or electronics dealer for purchase information.
- To connect a Mac that includes only a Mini DisplayPort, Thunderbolt port, or Mini-DVI port for video output to the projector's VGA video port, you need to obtain an adapter. Contact Apple for compatible adapter options.

Parent topic: Projector Features

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 www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

Note: Availability of accessories varies by country.

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

Option or part	Part number
Genuine Epson replacement lamp (ELPLP61) (BrightLink 436Wi)	V13H010L61
Genuine Epson replacement lamp (ELPLP60) (BrightLink 421i)	V13H010L60
Air filter replacement set (2 filters) (ELPAF36)	V13H134A36
Wireless LAN module (ELPAP07)	V12H418P12
Quick Wireless Connection USB key (ELPAP09)	V12H005M09
Additional interactive pen A (orange) (ELPPN03A)	V12H522001
Additional interactive pen B (blue) (ELPPN03B)	V12H523001
Replacement set of 6 pen tips (ELPPS01)	V12H524001
Interactive pen extension	V12H590001
USB extension cable (16')	V12H525001
Epson DC-11 document camera (ELPDC11)	V12H377020
Epson DC-20 document camera (ELPDC20)	V12H500020
PowerLite Pilot (ELPCB01)	V12H443020
Wireless Pendant Microphone (ELPMC02)	V12H4430M2
Active speakers (ELPSP02)	V12H467020
Soft carrying case (ELPKS66)	V12H001K66

Option or part	Part number
On Wall Cable Management Kit	ELPCK01
Kensington security lock	ELPSL01
90-inch whiteboard	V12H468002
96-inch whiteboard	V12H468001
Short-throw wall mount (ELPMB27)	V12H003727
6 ft (1.8 m) VGA computer cable (ELPKC02)	F3H982-06
10 ft (3.0 m) VGA computer cable (ELPKC09)	F3H982-10
25 ft (20 m) VGA computer cable (ELPKC10)	F3H982-25
HD-TV cable	ELPKC22
Component-to-VGA video cable (ELPKC19)	V12H005C19
Universal projector ceiling mount	ELMPMBPJF
Adjustable suspended ceiling channel kit	ELMPMBP01
False ceiling plate kit	ELMPMBP02
Structural round ceiling plate kit	ELMPMBP03
Adjustable extension column (pipe) 8" - 11"	ELMPMBC01
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: www.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.

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

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

- For detailed instructions on using your projector in a network environment, see the *EasyMP Network Projection Operation Guide*.
- If you still need help after checking this manual and the sources listed above, you can use the Epson PrivateLine Support service to get help fast. For details, see "Where to Get Help".

Parent topic: Introduction to Your Projector

Related references

Where to Get Help

Projector Part Locations

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

Projector Parts - Front/Top

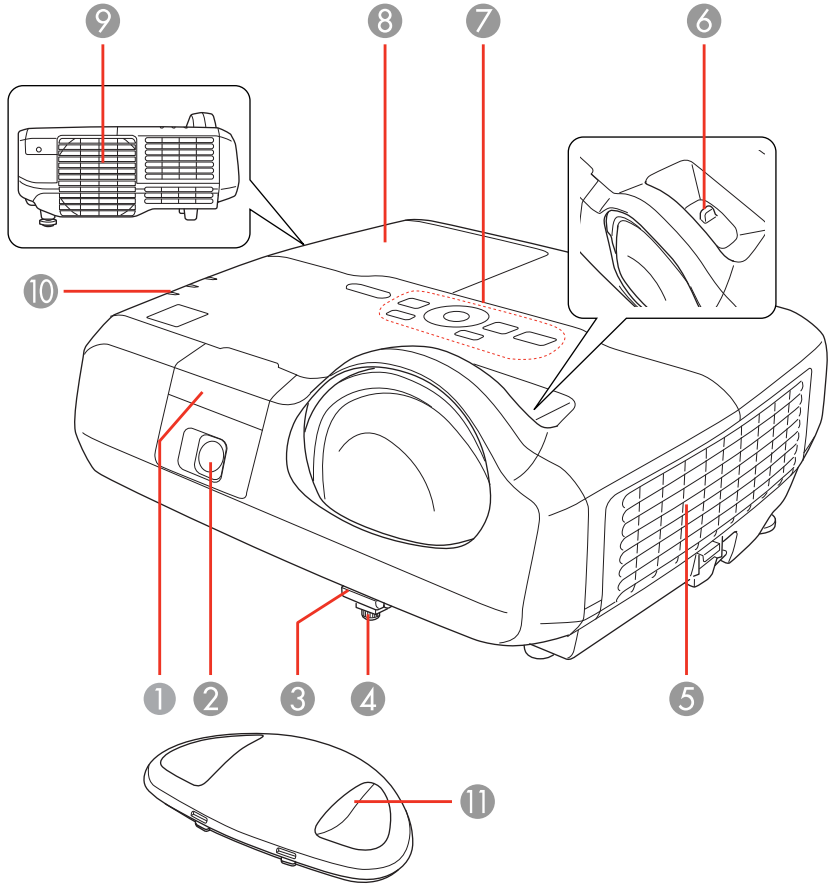
Projector Parts - Rear

Projector Parts - Base

Projector Parts - Control Panel

Projector Parts - Interactive Pen
Projector Parts - Remote Control
Parent topic: Introduction to Your Projector

Projector Parts - Front/Top

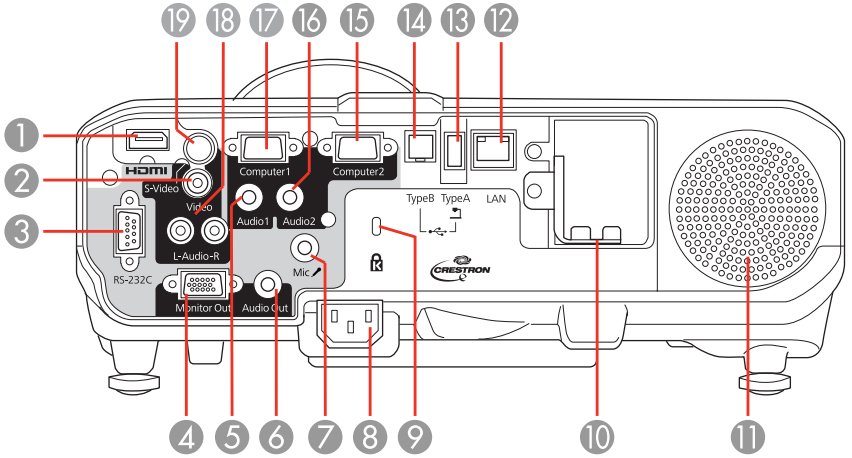


1 Remote control receiver
2 Easy Interactive Function receiver

3 Foot release lever
4 Front adjustable foot
5 Air intake vent (air filter)
6 Focus ring
7 Control panel
8 Lamp cover
9 Exhaust vent
10 Projector status lights
11 Lens cover

Parent topic: Projector Part Locations

Projector Parts - Rear

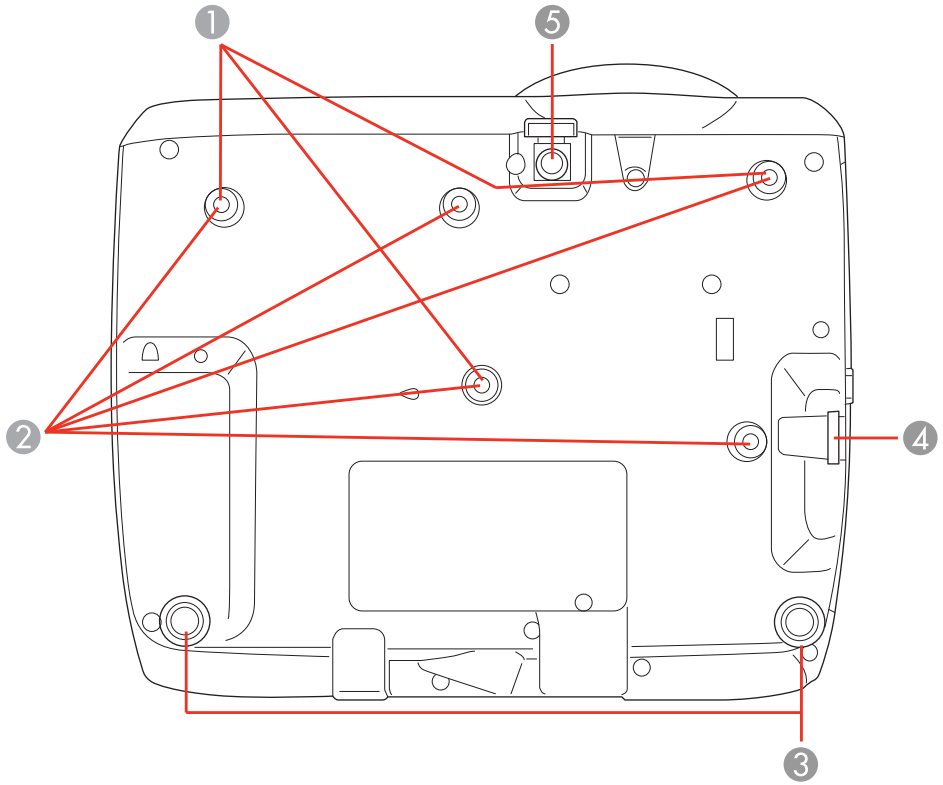


1 **HDMI** port
2 **Video** port
3 **RS-232C** port

4 **Monitor Out** port
5 **Audio1** port
6 **Audio Out** port
7 **Mic** (microphone) port
8 Power inlet
9 Kensington security slot
10 Optional wireless LAN unit slot
11 Speaker
12 Network (**LAN**) port
13 USB **TypeA** port
14 USB **TypeB** port
15 **Computer2** port
16 **Audio2** port
17 **Computer1** port
18 **L-Audio-R** audio ports
19 **S-Video** port

Parent topic: Projector Part Locations

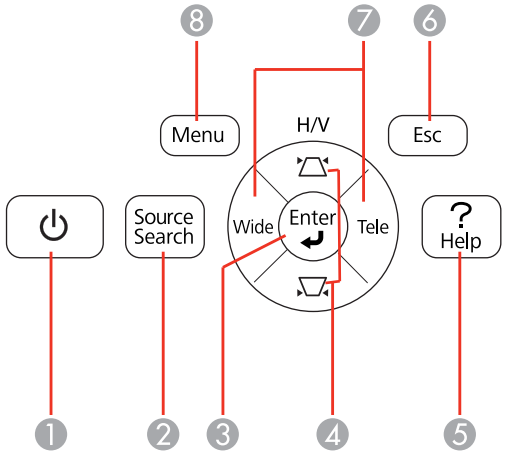
Projector Parts - Base



1 Ceiling mount holes (3)
2 Wall mount holes (5)
3 Rear feet
4 Security cable attachment point
5 Front adjustable foot

Parent topic: Projector Part Locations

Projector Parts - Control Panel



1 Power button

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

3 **Enter** button (selects options)

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

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

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

7 **Wide**/**Tele** buttons (adjust projected image size), horizontal keystone adjustment buttons (adjust screen shape), and arrow buttons

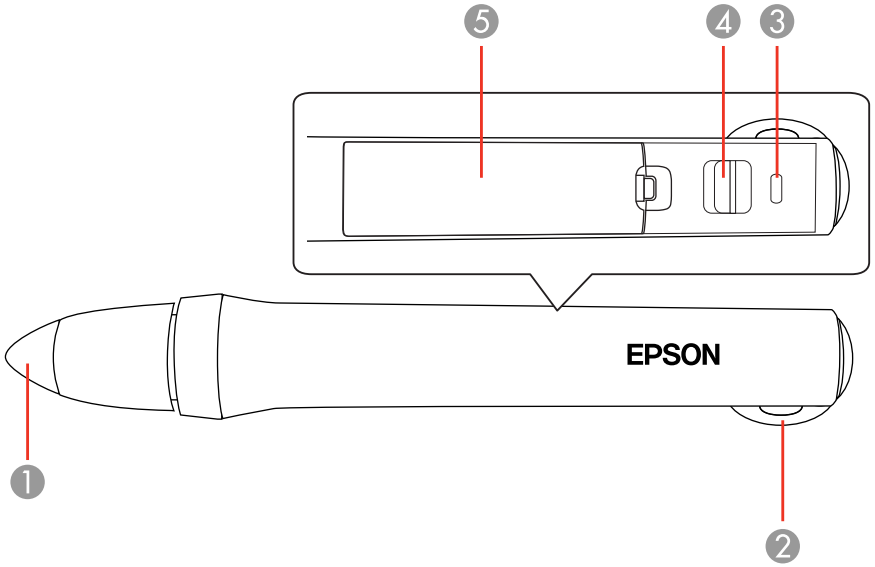
8 **Menu** button (accesses projector menu system)

Parent topic: Projector Part Locations

Related references

Projector Light Status

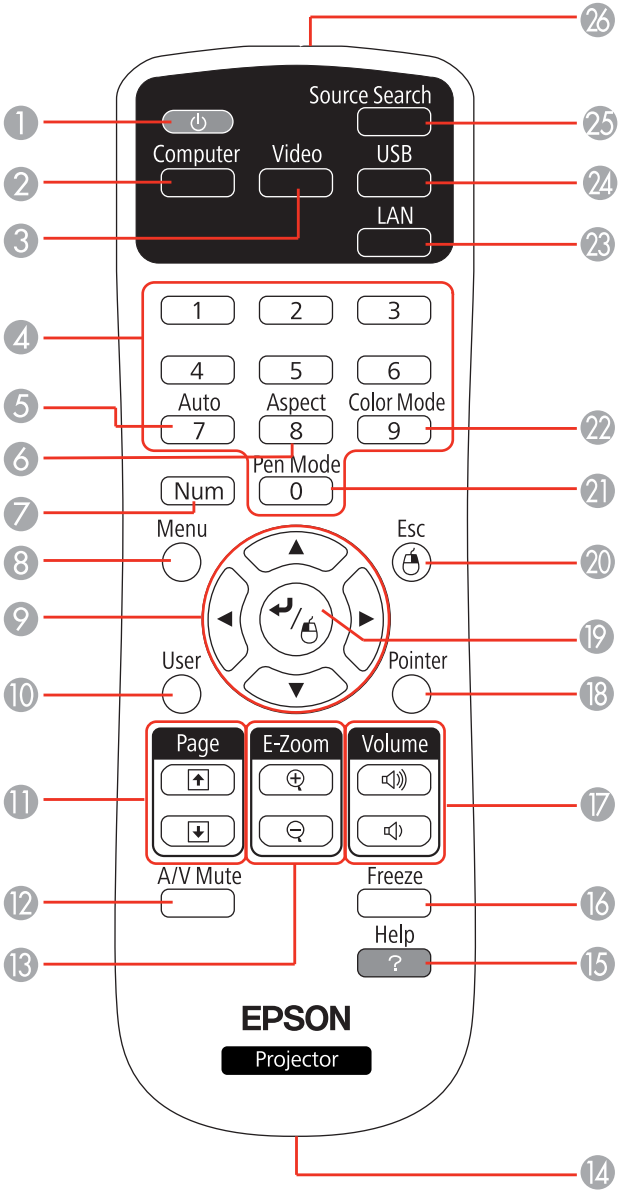
Projector Parts - Interactive Pen



1 Pen tip
2 Attachment for optional strap or cord
3 Battery light
4 Power switch
5 Battery cover

Parent topic: Projector Part Locations

Projector Parts - Remote Control



1 Power button
2 **Computer** button (cycles through connected computer sources)
3 **Video** button (cycles through connected video sources)
4 Numeric buttons (enter numbers)
5 **Auto** button (automatically adjusts position, tracking, and sync settings)
6 **Aspect** button (selects the image aspect ratio)
7 **Num** button (when held down, switches numeric buttons to number function)
8 **Menu** button (accesses projector menu system)
9 Arrow buttons (move through on-screen options and control wireless mouse functions)
10 **User** button (customizable for different functions; starts auto calibration by default)
11 **Page** up/down buttons (control presentation slides)
12 **A/V Mute** button (turns off picture and sound)
13 **E-Zoom +/–** buttons (zoom into and out of the image)
14 Strap attachment hole (strap not included)
15 **Help** button (accesses projector help information)
16 **Freeze** button (stops video action)
17 **Volume** up/down buttons (adjust speaker volume)
18 **Pointer** button (activates on-screen pointer)
19 Enter button (selects options and controls wireless mouse functions)
20 **Esc** button (cancels/exits functions and controls wireless mouse functions)
21 **Pen Mode** button (switches between annotation and computer interactive modes)
22 **Color Mode** button (selects display modes)
23 **LAN** button
24 **USB** button (cycles through connected USB sources)
25 **Source Search** button (searches for connected sources)
26 Light emitting area (outputs remote control signals)

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
Installing Batteries in the Interactive Pen

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 or wall 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.

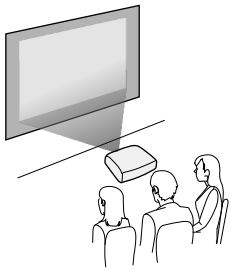
Projector Setup and Installation Options
Projection Distance

Parent topic: Setting Up the Projector

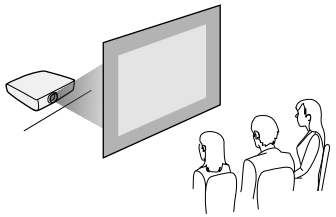
Projector Setup and Installation Options

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

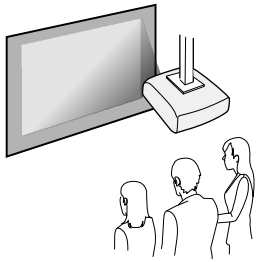
Front



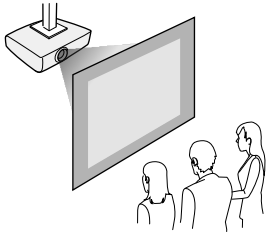
Rear



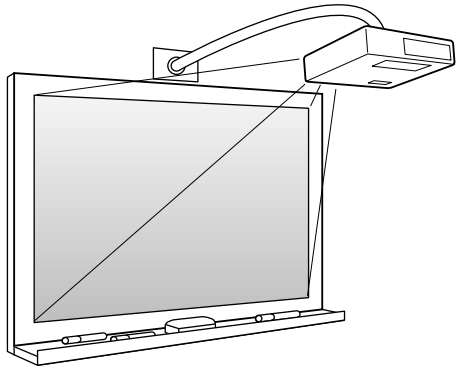
Front ceiling



Rear ceiling



Wall-mounted



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

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

Note: Interactivity is not available when using rear or rear ceiling projection.

Parent topic: Projector Placement

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.

Refer to the tables in the *Installation Guide* to determine approximately how far to place the projector from the screen based on the size of the projected image. (Conversion figures may have been rounded up or down.) You can also use the projector Throw Distance Calculator at www.epson.com/support (U.S.) or www.epson.ca/support (Canada).

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 camera phones with compatible video output ports.
- If your presentation or video includes sound, you can connect audio input cables, if necessary.
- For slide shows without a computer, you can connect USB devices (such as a flash drive or camera) or an optional Epson document camera.

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

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

Parent topic: Setting Up the Projector

Related references

Projector Setup Settings - Extended Menu
Product Box Contents

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 Pen Use or USB Mouse Control
Connecting to a Computer for Sound

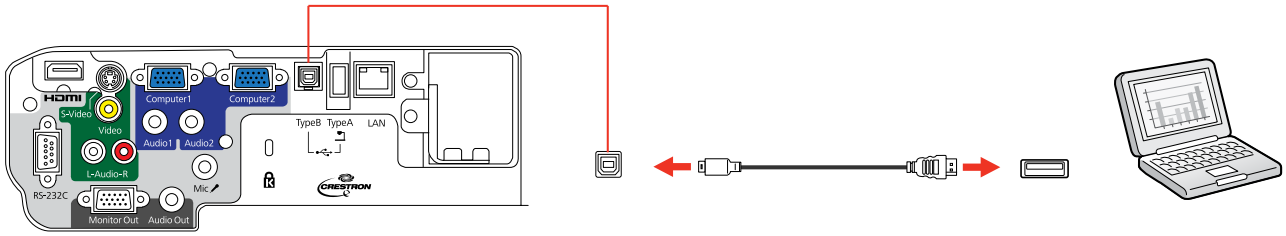
Parent topic: Projector Connections

Connecting to a Computer for USB Video and Audio

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

Note: You may experience slow interactive pen function when connecting the projector to your computer using USB Display. For the best interactive performance, VGA or HDMI cable connections are recommended.

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



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

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

Parent topic: Connecting to Computer Sources

Related references

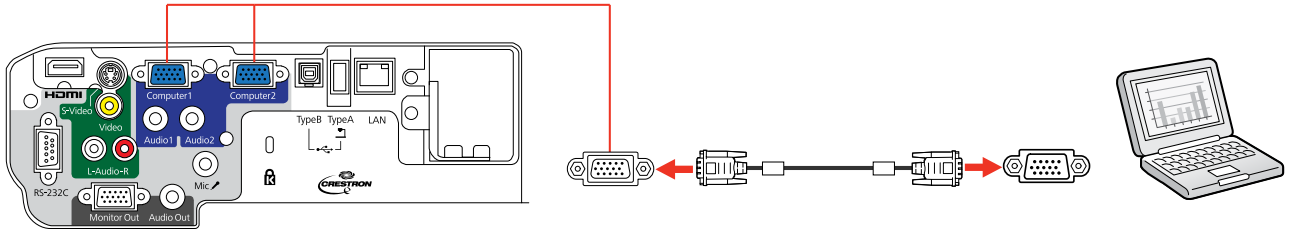
Projector Setup Settings - Extended Menu

Connecting to a Computer for VGA Video

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

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

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



4. Tighten the screws on the VGA connectors.

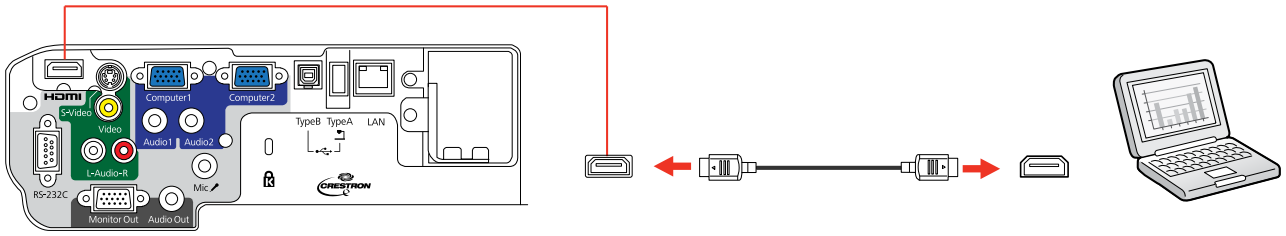
Parent topic: Connecting to Computer Sources

Connecting to a Computer for HDMI Video and Audio

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

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

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



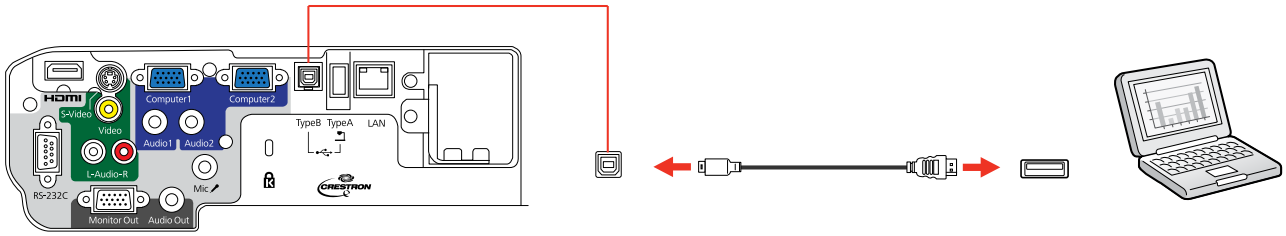
Parent topic: Connecting to Computer Sources

Connecting to a Computer for Pen Use or USB Mouse Control

If you connected your computer to a **Computer** or **HDMI** port on the projector, you also need to connect the USB cable so you can use the pens with your computer.

Connecting the USB cable also lets you set up the remote control to act as a wireless mouse, but you cannot use this feature at the same time you are using the pens with your computer.

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



2. Connect the other end to any available USB port on your computer.

If you want to use the remote control as a wireless mouse, you need to change the **USB Type B** setting in the projector's Extended menu. You may also need to configure your computer to work with an external USB mouse. See your computer documentation for details.

Parent topic: Connecting to Computer Sources

Related references

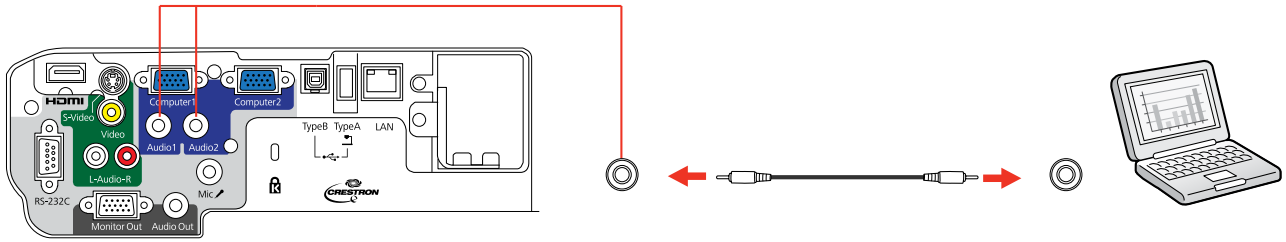
Projector Setup Settings - Extended Menu

Projector Parts - Remote Control

Connecting to a Computer for Sound

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

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



Parent topic: Connecting to Computer Sources

Connecting to Video Sources

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

Connecting to an HDMI Video Source

Connecting to a Component-to-VGA Video Source

Connecting to a Composite Video Source

Connecting to an S-Video Video Source

Connecting to a Video Source for Sound

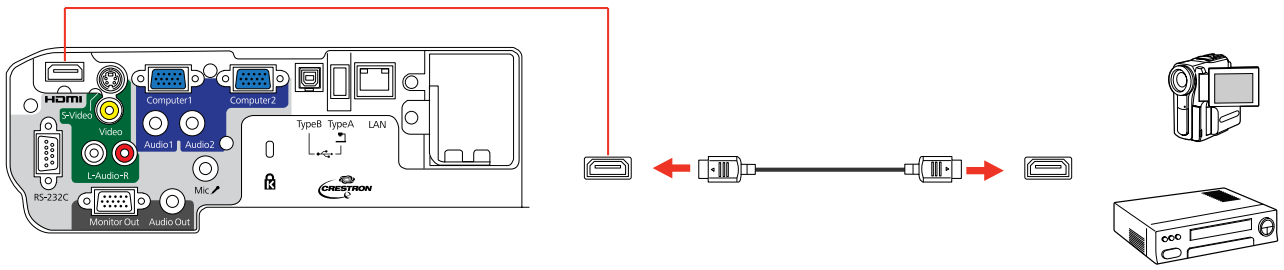
Parent topic: Projector Connections

Connecting to an HDMI Video Source

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

1. Connect the HDMI cable to your video source's HDMI output port.

2. Connect the other end to the projector's **HDMI** port.

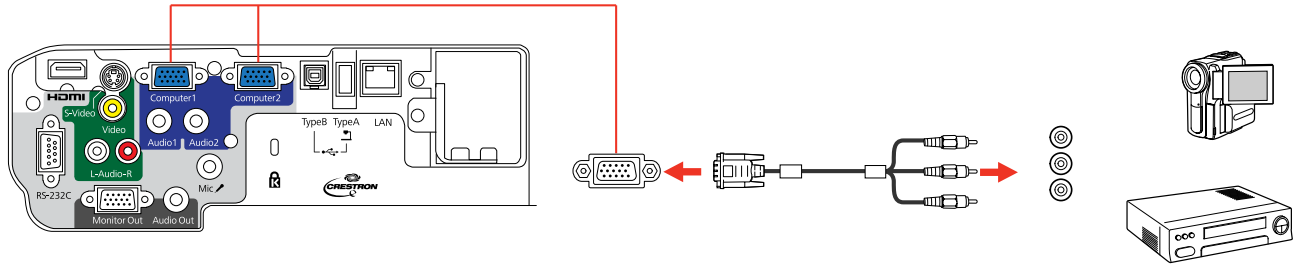


Parent topic: Connecting to Video Sources

Connecting to a Component-to-VGA Video Source

If your video source has component video ports, you can connect it to the projector using a 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 the projector's **Computer** port.



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

Parent topic: Connecting to Video Sources

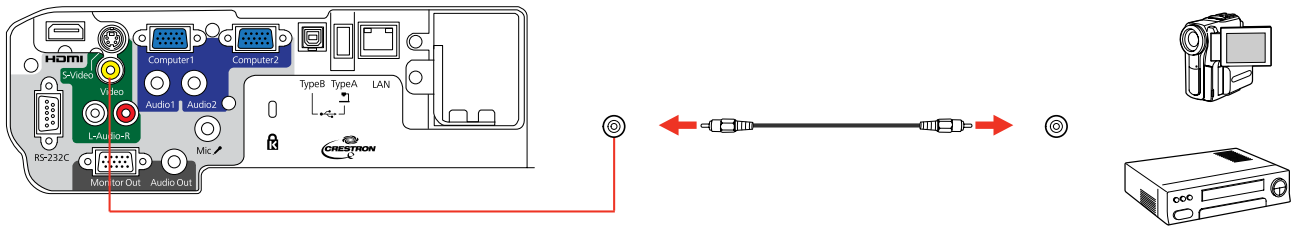
Related references

Input Signal Settings - Signal Menu

Connecting to a Composite Video Source

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

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

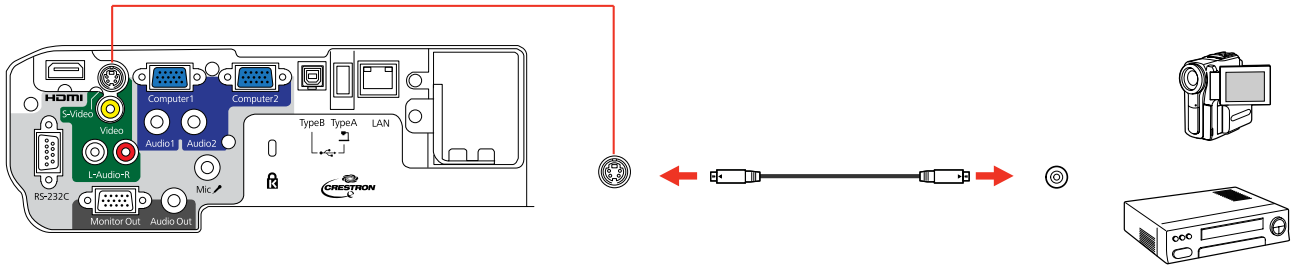


Parent topic: Connecting to Video Sources

Connecting to an S-Video Video Source

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

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



Parent topic: Connecting to Video Sources

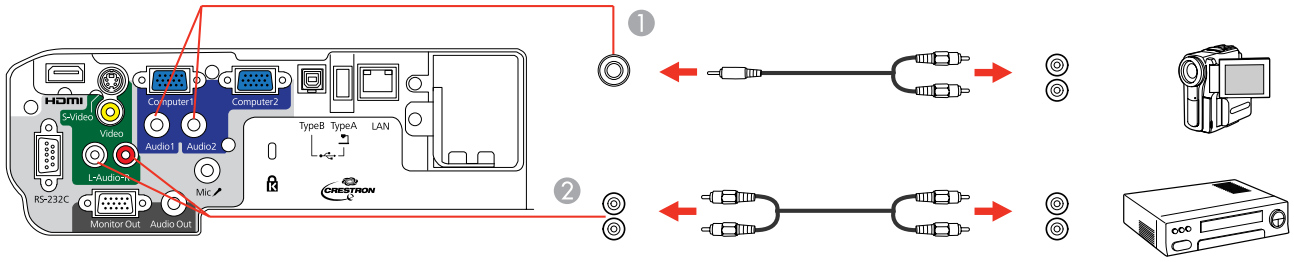
Connecting to a Video Source for Sound

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

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

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

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



1 **Audio1** or **Audio2** port

2 **L-Audio-R** ports

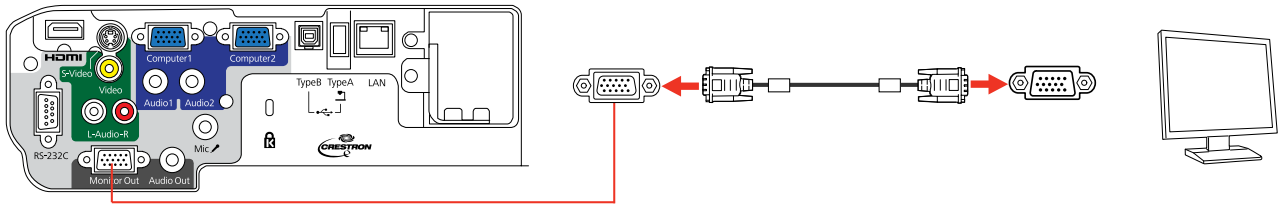
Parent topic: Connecting to Video Sources

Connecting to an External Computer Monitor

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

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

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



Parent topic: Projector Connections

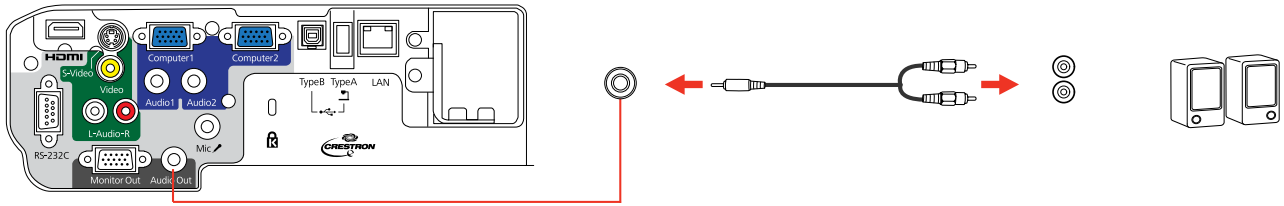
Connecting to External Speakers

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

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

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

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



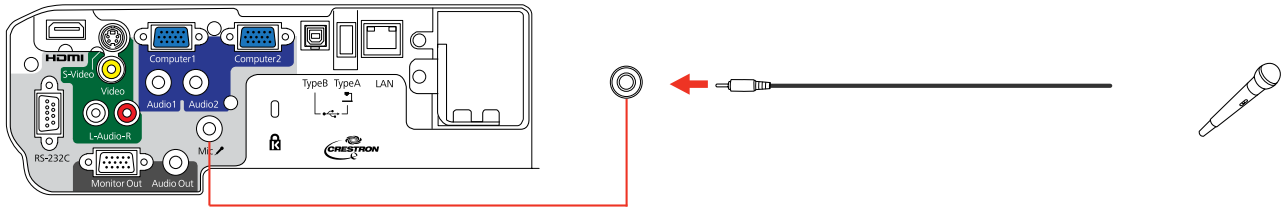
Parent topic: Projector Connections

Connecting a Microphone

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

Note: The projector supports dynamic microphones only. (Condensor microphones are not supported.) If you want to output audio from the microphone when the projector is turned off, you need to adjust the **Standby Mode** and **Standby Microphone** settings in the Extended menu.

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



2. Turn on the microphone, if necessary.

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 camera phone
- USB hard drive
- Multimedia storage viewer
- USB memory card reader

Note: Digital cameras or camera phones must be USB-mounted devices, not TWAIN-compliant devices.

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

Parent topic: Connecting to External USB Devices

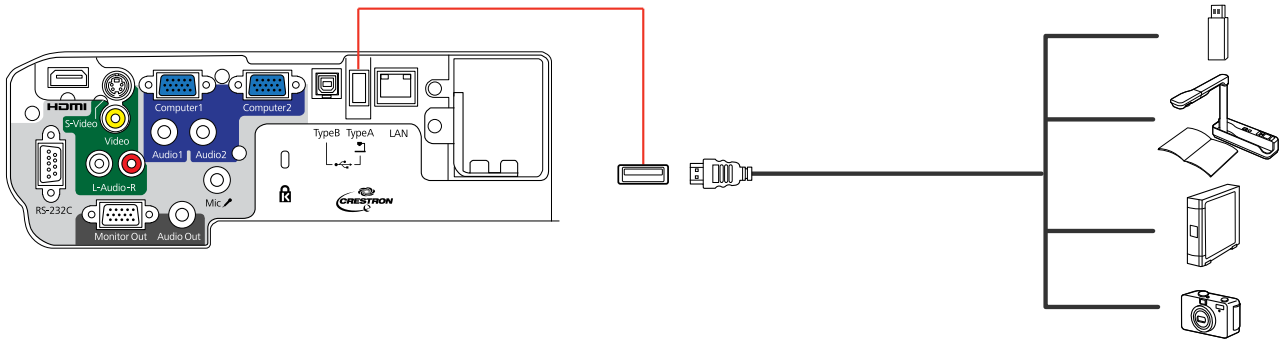
Related topics

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 **TypeA** 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 **TypeA** 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 a USB **TypeA** port.

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

Parent topic: Connecting to External USB Devices

Disconnecting a USB Device or Camera From the Projector

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

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

Parent topic: Connecting to External USB Devices

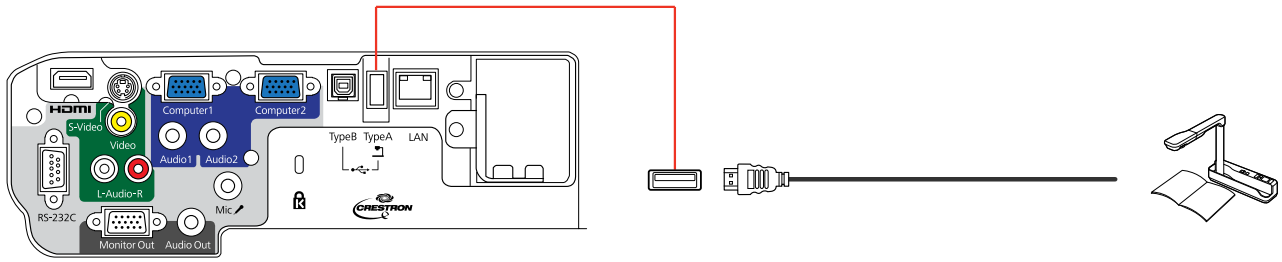
Connecting to a Document Camera

You can connect the Epson DC-06 document camera to your projector's USB **TypeA** port to project images viewed by the camera.

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

1. Locate the USB cable that came with the document camera.

2. Connect the USB cable to the projector's USB **TypeA** port.



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

Parent topic: Projector Connections

Related references

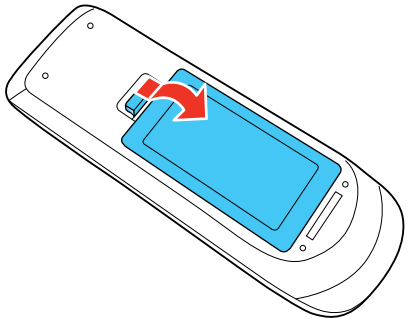
Optional Equipment and Replacement Parts

Installing Batteries in the Remote Control

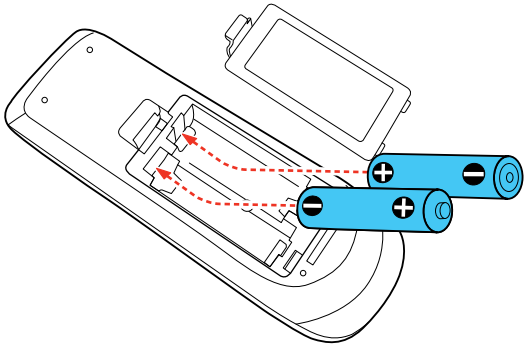
The remote control uses the two AA batteries that came with the projector.

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

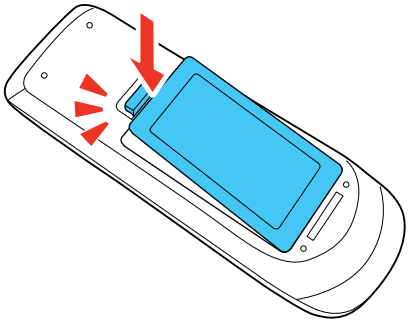
1. Open the battery cover as shown.



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.



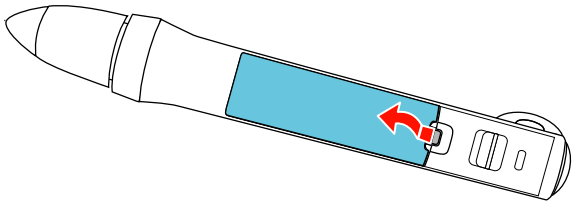
Warning: Dispose of used batteries according to local regulations. Do not expose batteries to heat or flame. Keep batteries out of the reach of children; they are choking hazards and are very dangerous if swallowed.

Parent topic: Setting Up the Projector

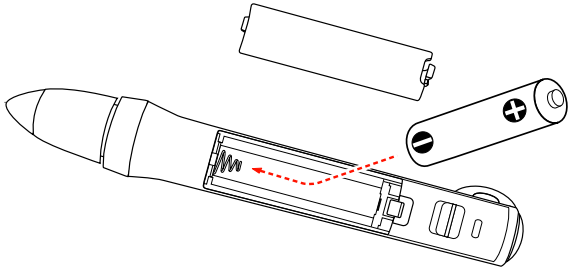
Installing Batteries in the Interactive Pen

The interactive pen uses one AA battery.

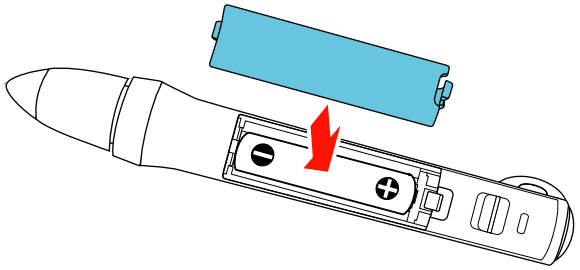
1. Open the battery cover as shown.



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



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



Parent topic: Setting Up the Projector

Using the Projector on a Network

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

Note: To use the interactive pen with your projected computer image, you need to connect the USB cable, even if you are projecting through the network.

Wired Network Projection
Wireless Network Projection

Wired Network Projection

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

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

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

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

Connecting to a Wired Network
Selecting Wired Network Settings

Parent topic: Using the Projector on a Network

Connecting to a Wired Network

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

1. Connect one end of the network cable to your network hub, switch, or router.

2. Connect the other end of the cable to the projector's **LAN** port.

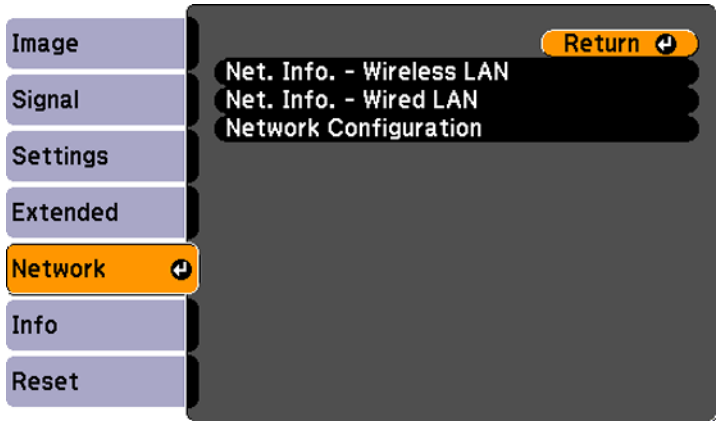
Parent topic: Wired Network Projection

Selecting Wired Network Settings

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

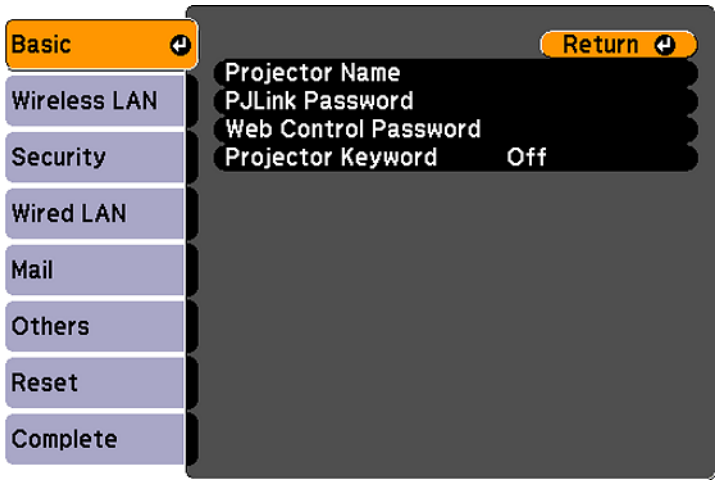
Note: Make sure you already connected the projector to your wired network using the **LAN** port.

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



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

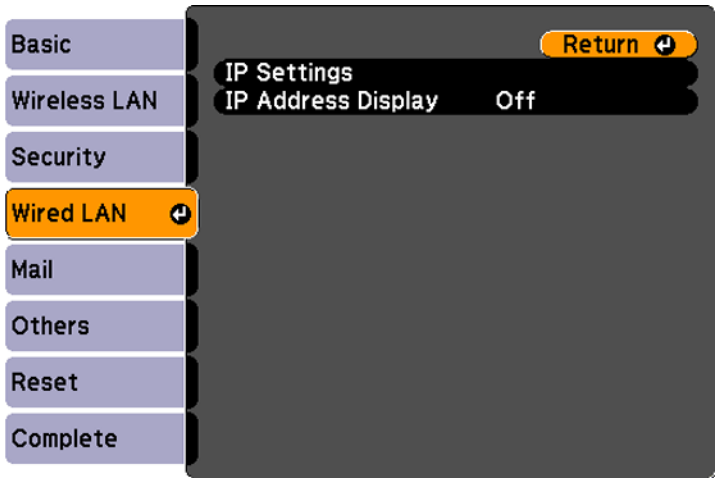
5. Select the **Basic** menu and press **Enter**.



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

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

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



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

   Note: To highlight the numbers you want from the displayed keyboard, press the arrow buttons on the remote control. To select a highlighted number, press **Enter**.

10. To prevent display of the IP address on the standby screen, turn off **IP Address Display**.
11. When you finish selecting settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

Parent topic: Wired Network Projection

Wireless Network Projection

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

Note: To use the interactive pen with your projected computer image, you need to connect the USB cable, even if you are projecting wirelessly through the network. Or, you can use the built-in toolbar to annotate images projected over the network.

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

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

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

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

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

Installing the Wireless LAN Module
Using Quick Wireless Connection (Windows Only)
Selecting Wireless Network Settings Manually
Selecting Wireless Network Settings in Windows
Selecting Wireless Network Settings in Mac OS X
Setting Up Wireless Network Security
Setting Up Projector Network E-Mail Alerts
Setting Up Monitoring Using SNMP
Controlling a Networked Projector Using a Web Browser
Crestron RoomView Support

Parent topic: Using the Projector on a Network

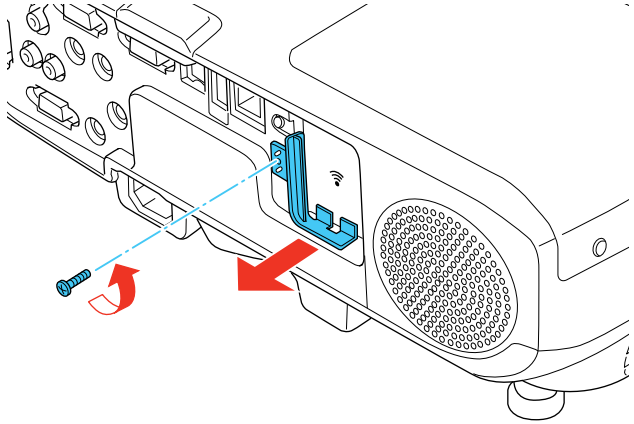
Related references
Optional Equipment and Replacement Parts
Projector Network Settings - Network Menu
Solutions When Network Alert E-Mails are Not Received
Projector Setup Settings - Extended Menu

Installing the Wireless LAN Module

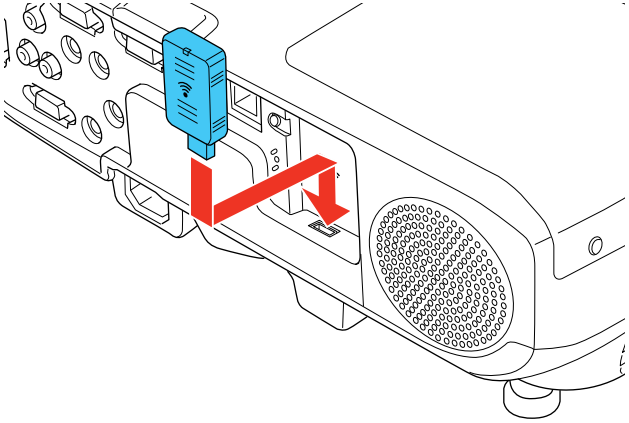
To use the projector over a wireless network, install the optional Epson 802.11b/g/n wireless LAN module. Do not install any other type of wireless LAN module.

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

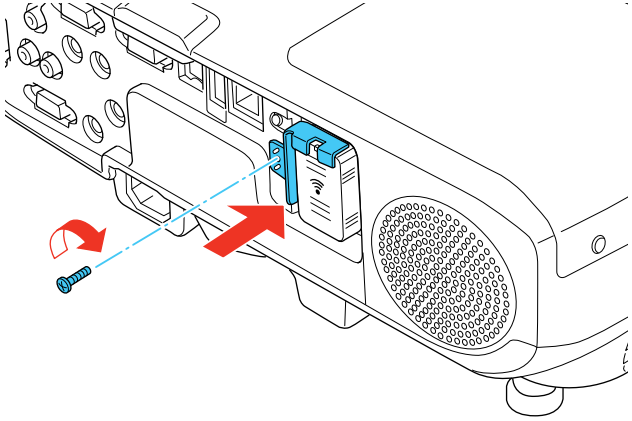
1. Turn off the projector and unplug the power cord.
2. Remove the screw securing the wireless LAN module stopper, then remove the stopper.



3. Insert the wireless LAN module into the port.



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



5. Plug in and turn on the projector.

Parent topic: Wireless Network Projection

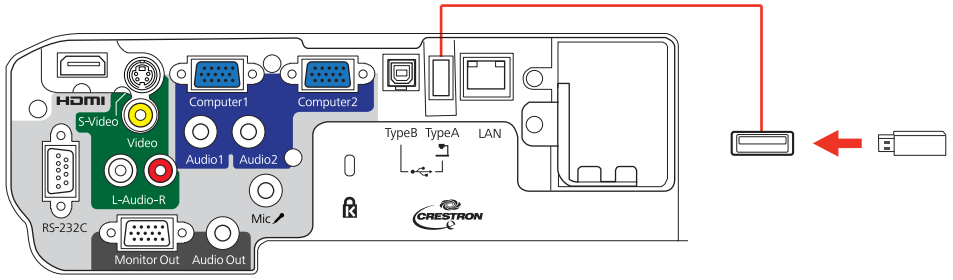
Related references

Optional Equipment and Replacement Parts

Using Quick Wireless Connection (Windows Only)

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

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



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

3. Remove the USB key.
4. Now connect the USB key to a USB port on your computer or notebook.

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

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

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

   After a few minutes, your computer image is displayed by the projector. If it does not appear, press the **LAN** button on your projector remote control or restart your computer.
6. Run your presentation as necessary.

7. When you finish projecting wirelessly, remove the USB key from your computer.

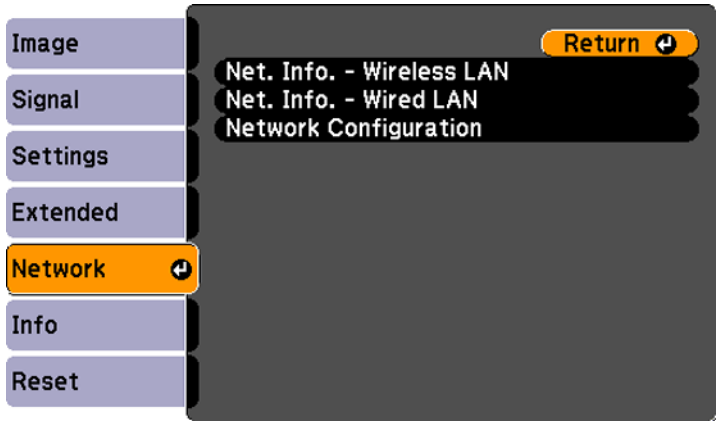
   Note: You may need to restart your computer to reactivate your wireless LAN connection.

Parent topic: Wireless Network Projection

Selecting Wireless Network Settings Manually

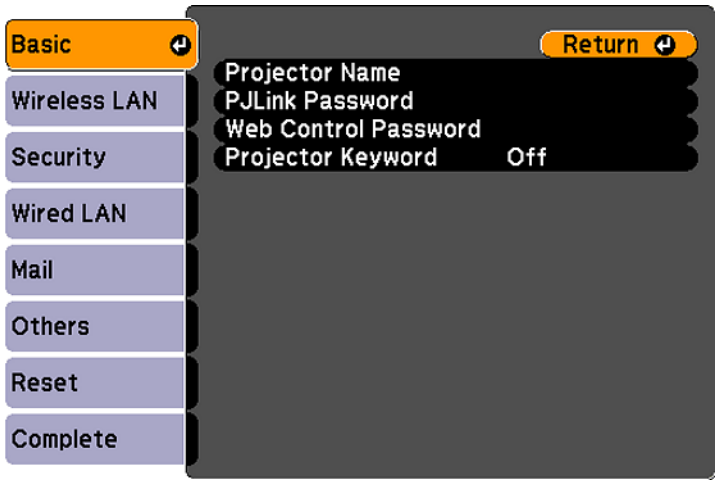
Before you can project from your wireless network, you must select the network settings for the projector using its menu system.

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



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

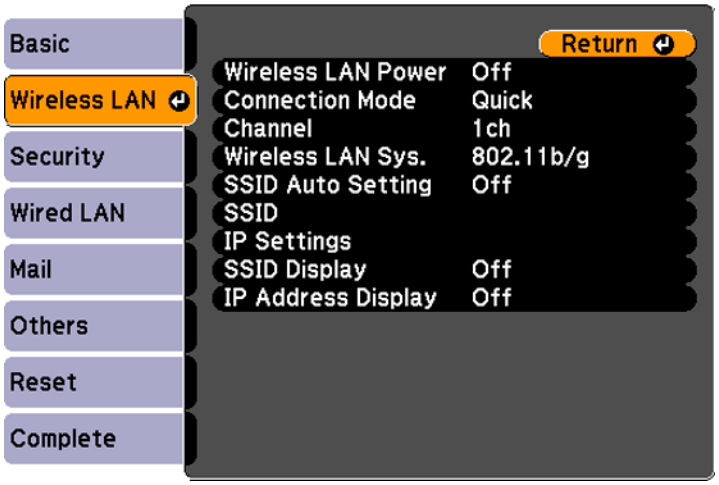
5. Select the **Basic** menu and press **Enter**.



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

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

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



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

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

Wireless LAN Menu Settings

Parent topic: Wireless Network Projection

Wireless LAN Menu Settings

Note: See your projector's *EasyMP Network Projection Operation Guide* for details on selecting these settings.

Setting	Options	Description
Wireless LAN Power	**On** **Off**	Turns on wireless LAN support

Setting	Options	Description
Connection Mode	**Quick** **Advanced**	Selects the type of wireless connection: **Quick**: lets you quickly connect to one computer or use the optional Quick Wireless Connection USB Key to connect **Advanced**: lets you connect to multiple computers via a wireless network access point
Channel	**1ch** **6ch** **11ch**	In **Quick** connection mode, selects the frequency band (channel) used by the wireless LAN
Wireless LAN Sys.	**802.11b/g** **802.11b/g/n**	Sets the type of wireless LAN system the projector is connecting to
SSID Auto Setting	**On** **Off**	Turns on automatic SSID searching in **Quick** connection mode; set to **Off** when connecting to multiple projectors at the same time
SSID	Up 32 alphanumeric characters	Sets the SSID (network name) of the wireless LAN system the projector is connecting to
IP Settings	**DHCP** (**On** or **Off**) **IP Address** **Subnet Mask** **Gateway Address**	Selects DHCP if your network assigns addresses automatically, or turns off DHCP so you can enter the network's IP address, subnet mask, and gateway address as needed
SSID Display	**On** **Off**	Selects whether to display the SSID on the network standby screen

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

Parent topic: Selecting Wireless Network Settings Manually

Selecting Wireless Network Settings in Windows

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

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

Parent topic: Wireless Network Projection

Selecting Wireless Network Settings in Mac OS X

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

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

Parent topic: Wireless Network Projection

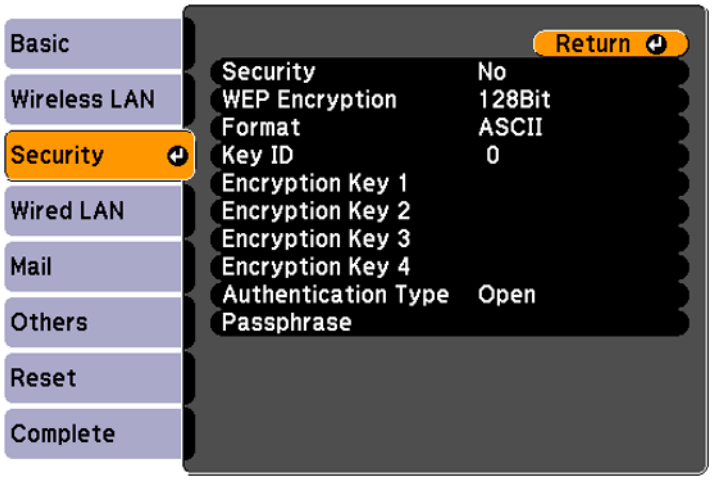
Setting Up Wireless Network Security

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

- WEP encryption
- WPA security

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

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



5. Select the security settings as necessary to match your network settings.
6. When you finish selecting settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

Wireless Security Menu Settings

Parent topic: Wireless Network Projection

Wireless Security Menu Settings

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

Setting	Options	Description
Security	**WEP** and **WPA** types available	Selects the type of security used on the wireless network

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

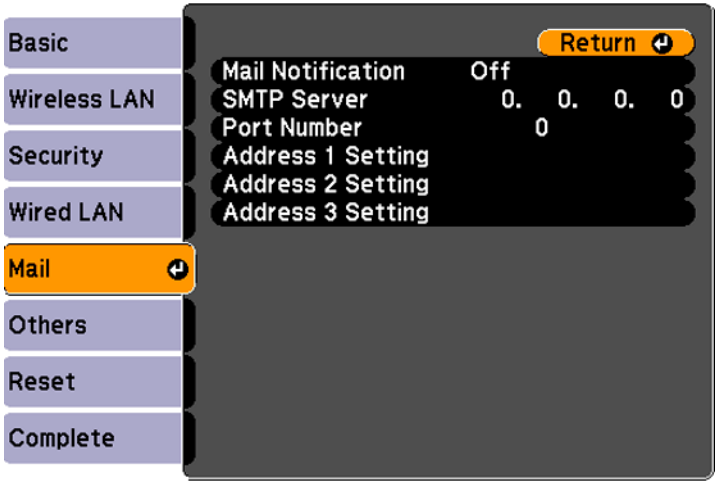
Parent topic: Setting Up Wireless Network Security

Setting Up Projector Network E-Mail Alerts

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

1. Press the **Menu** button.

2. Select the **Network** menu and press **Enter**.
3. Select **Network Configuration** and press **Enter**.
4. Select the **Mail** menu and press **Enter**.



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

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

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

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

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

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

Network Projector E-mail Alert Messages

Parent topic: Wireless Network Projection

Network Projector E-mail Alert Messages

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

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

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

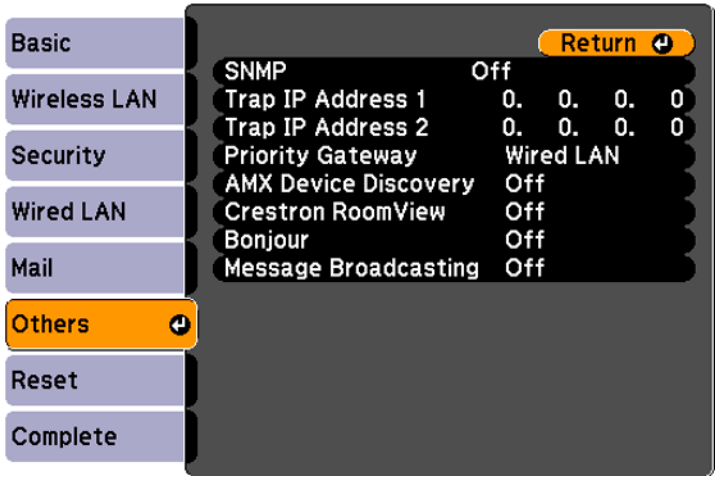
Parent topic: Setting Up Projector Network E-Mail Alerts

Setting Up Monitoring Using SNMP

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

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

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



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

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

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

Parent topic: Wireless Network Projection

Controlling a Networked Projector Using a Web Browser

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

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

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

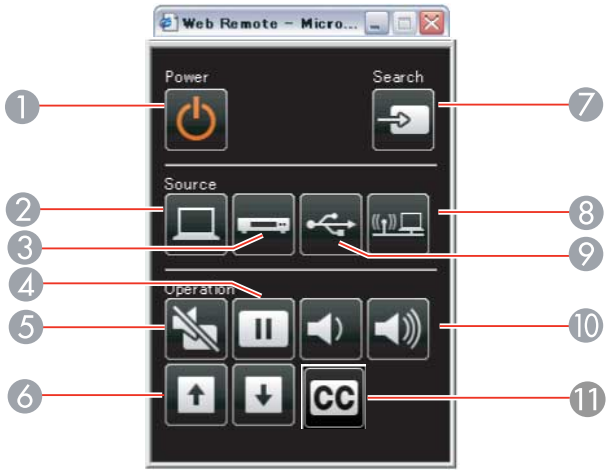
1. Make sure the projector is turned on.
2. Start your web browser on a computer connected to the network.
3. Type the projector's IP address into the browser's address box and press the computer's **Enter** key.

   You see the Web Control screen.

   Note: The Web Control screen appears only after you log in. The first time you try to use Web Remote, the log in screen appears.

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

   You see this screen:



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

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

Parent topic: Wireless Network Projection

Crestron RoomView Support

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

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

For additional information on Crestron RoomView, contact Crestron.

Setting Up Crestron RoomView Support

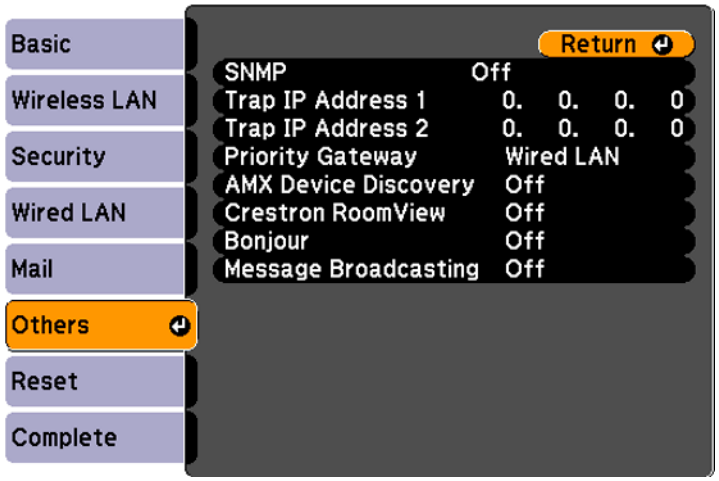
Controlling a Networked Projector Using Crestron RoomView

Parent topic: Wireless Network Projection

Setting Up Crestron RoomView Support

To set up your projector for monitoring and control using a Crestron RoomView system, make sure your computer and projector are connected to the network. If you are connecting wirelessly, set up the projector using the Advanced network connection mode.

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



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

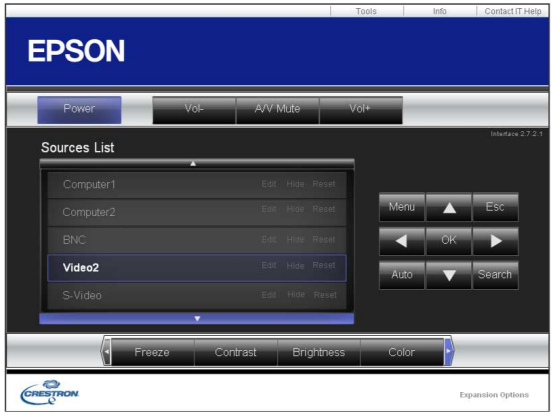
Parent topic: Crestron RoomView Support

Controlling a Networked Projector Using Crestron RoomView

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

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

   You see this screen:



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

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

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

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

Parent topic: Crestron RoomView Support

Using Basic Projector Features

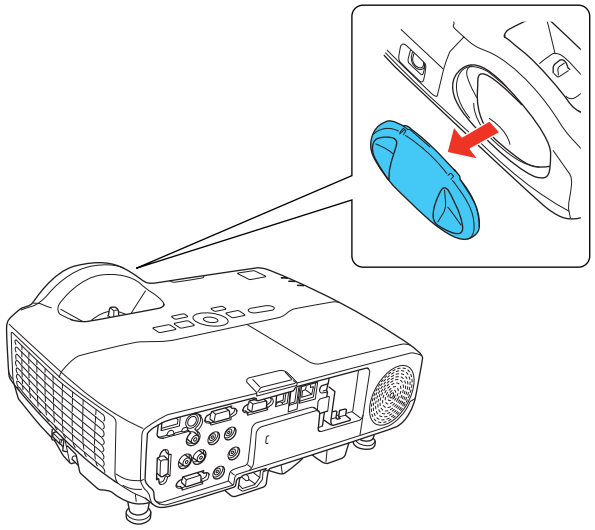
Follow the instructions in these sections to use your projector's basic features.

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

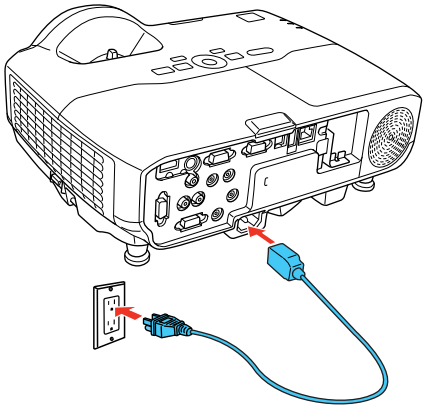
Turning On the Projector

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. Remove 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:

- 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

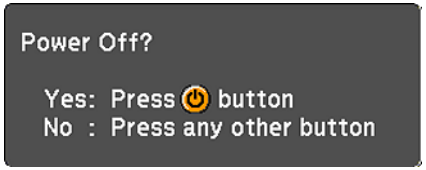
Turning Off the Projector

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

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

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

   The projector displays a shutdown confirmation screen.

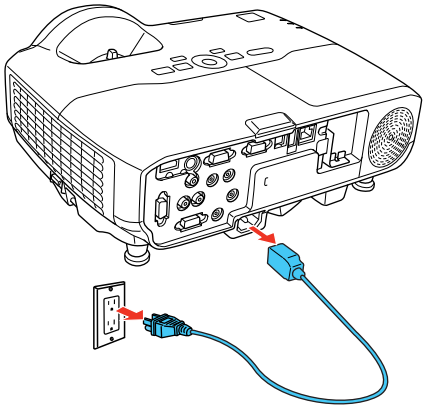


2. Press the power button again. (To leave it on, press any other button.)

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

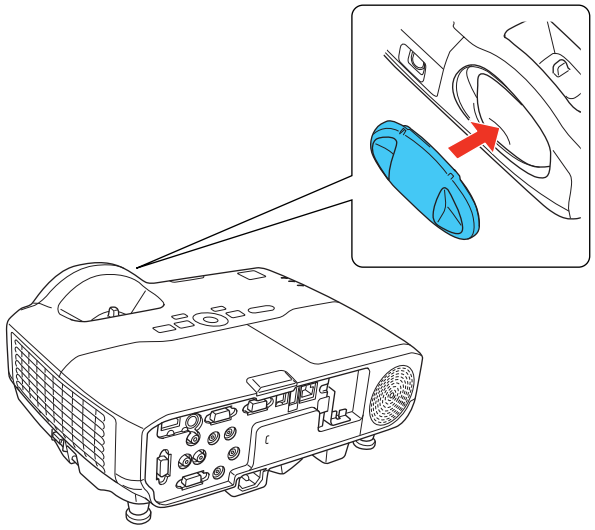
   Note: With Epson's Instant Off technology, there is no cool-down period so you can pack up the projector for transport right away (if necessary).

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



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

4. Replace the projector's lens cover.



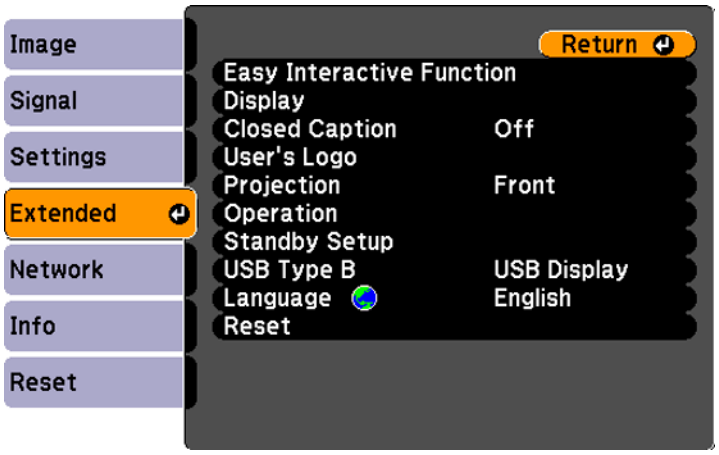
Parent topic: Using Basic Projector Features

Selecting the Language for the Projector Menus

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

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

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



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

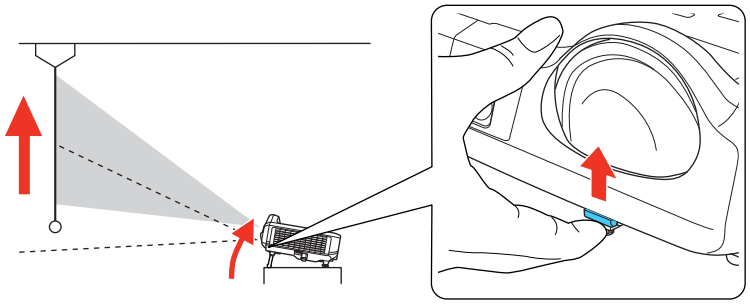
Parent topic: Using Basic Projector Features

Adjusting the Image Height

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

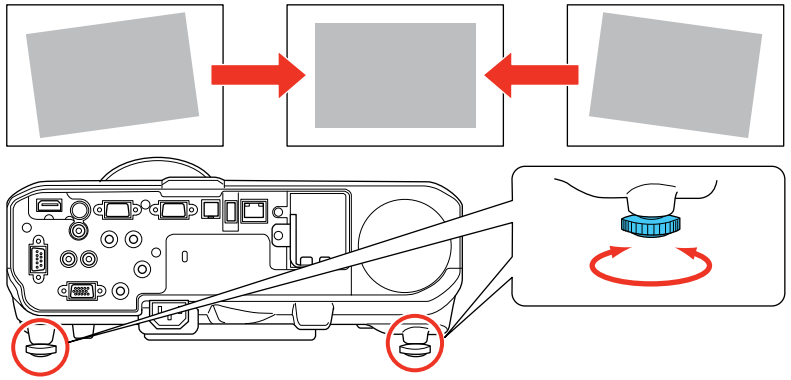
1. Turn on the projector and display an image.

2. To adjust the front foot, pull up on the foot release lever and lift the front of the projector.



The foot extends from the projector.

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



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

Parent topic: Using Basic Projector Features

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.

Note: For interactive use, the image must be evenly rectangular, without distortion.

Correcting Image Shape with the Keystone Buttons
Correcting Image Shape with Quick Corner

Parent topic: Using Basic Projector Features

Correcting Image Shape with the Keystone Buttons

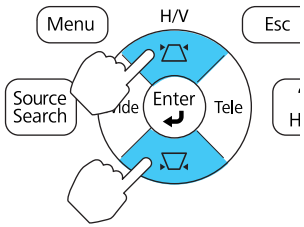
You can use the projector's keystone correction buttons to correct the shape of an image that is unevenly rectangular on the sides.

Note: For interactive use, make sure the degree of horizontal and vertical keystone correction is no more than ± 6º.

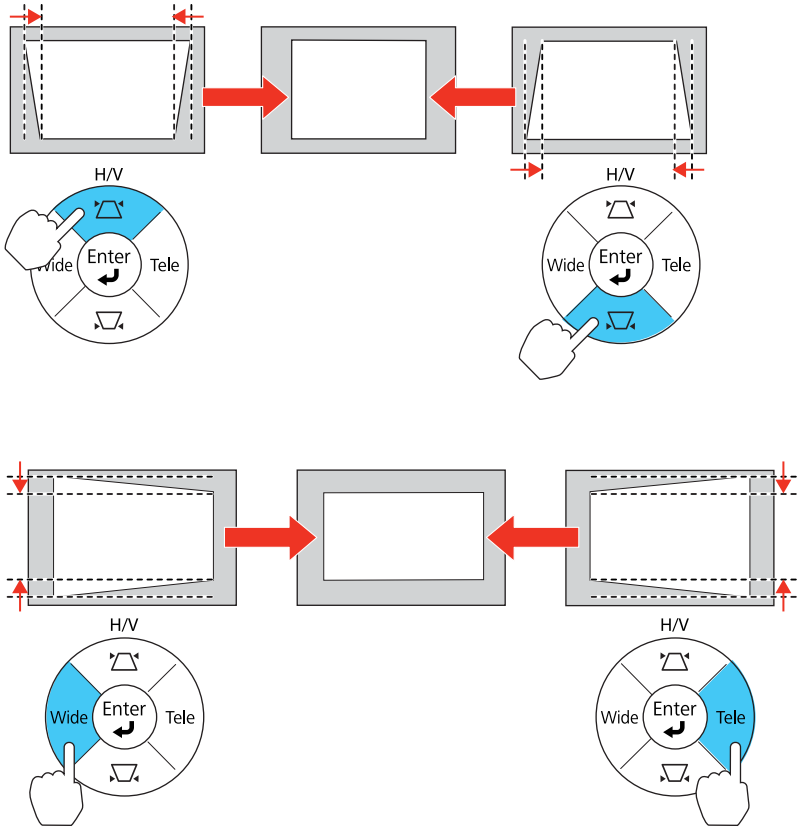
1. Turn on the projector and display an image.

   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.



Note: The horizontal keystone adjustment buttons are labeled **Wide** and **Tele**.

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

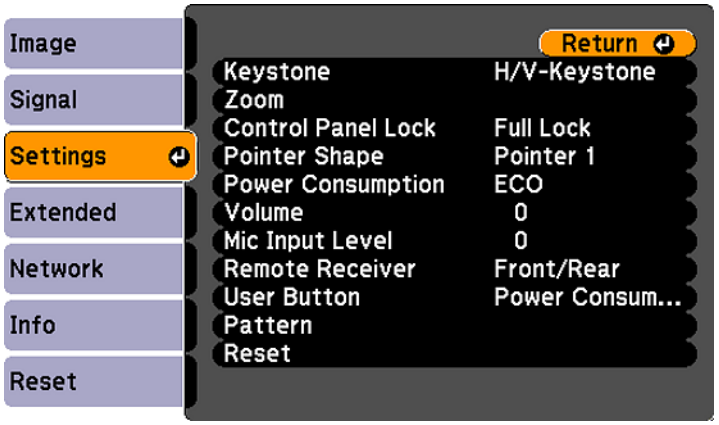
Correcting Image Shape with Quick Corner

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.

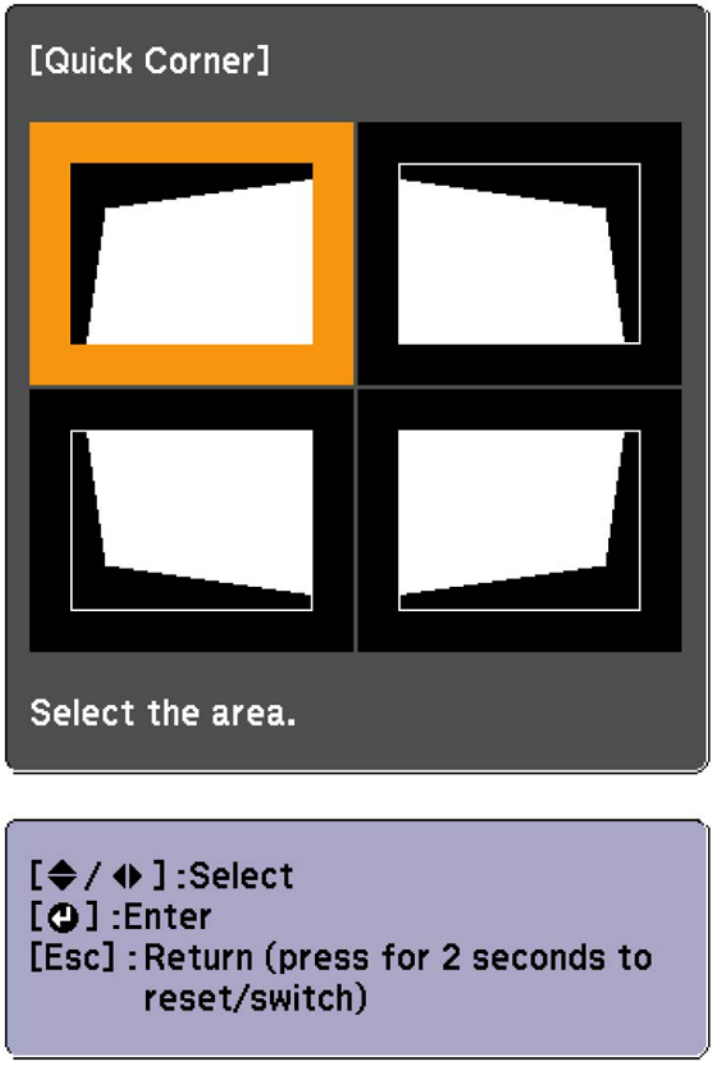
   Note: You can display a pattern to aid in adjusting the projected image using the Settings menu.

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.

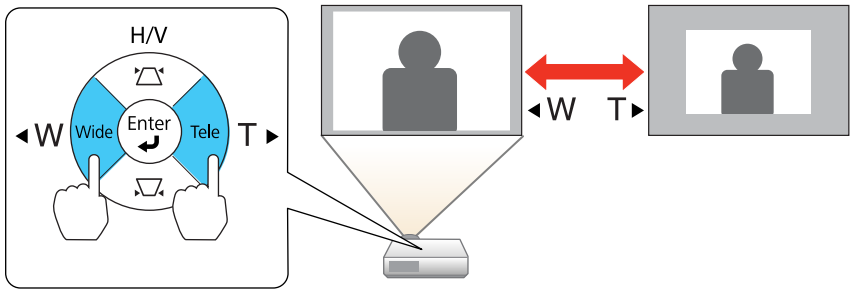


6. Use the arrow buttons on the projector or the remote control to select the corner of the image you want to adjust. Then press **Enter**.
7. Press the arrow buttons to adjust the image shape as necessary.
8. When you are finished, press **Esc**.

Parent topic: Image Shape

Resizing the Image with the Wide and Tele Buttons

1. Turn on the projector and display an image.
2. To enlarge the image size, press the **Wide** button on the projector's control panel.
3. To reduce the image size, press the **Tele** button.



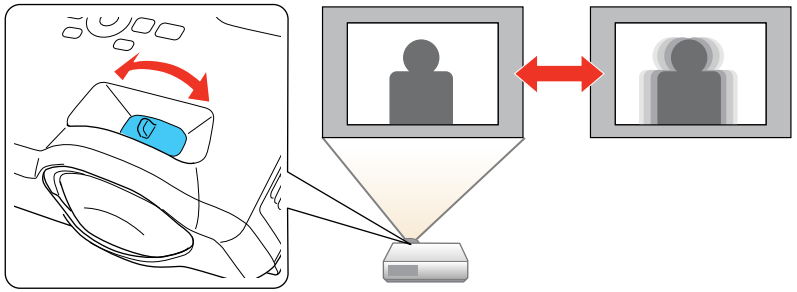
Note: If the projector is installed out of reach, you can also adjust the image size with the remote control using the Zoom setting in the projector menus.

Parent topic: Using Basic Projector Features

Focusing the Image Using the Focus Ring

1. Turn on the projector and display an image.

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

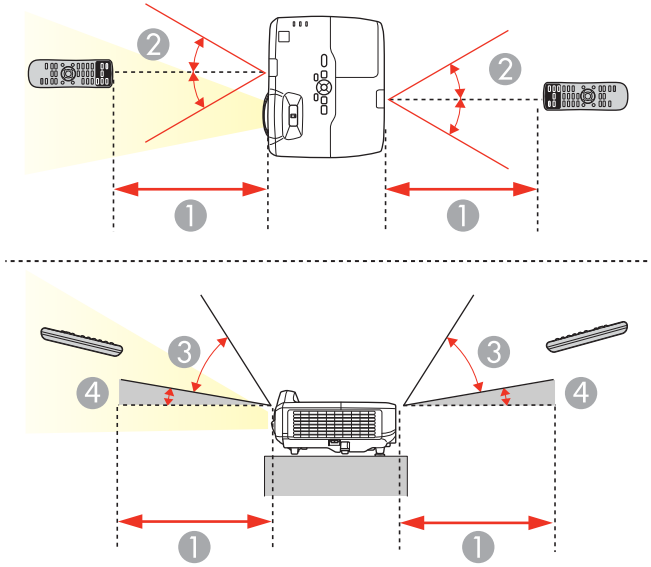


Parent topic: Using Basic Projector Features

Remote Control Operation

The remote control lets you control the projector from almost anywhere in the room, up to 19.7 feet (6 m) away. You can point it at the screen or board, or the front or back of the projector.

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



1	19.7 feet (6 m)
2	± 30º
3	60º
4	10º

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 Presentation Pointer

Parent topic: Using Basic Projector Features

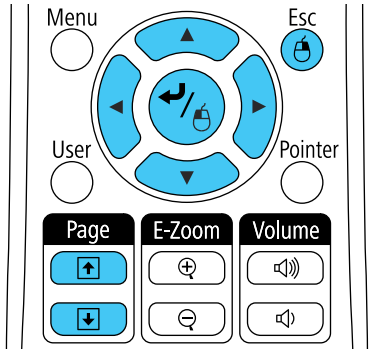
Related tasks

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 your computer presentation from a distance.

1. Connect the projector to a computer using the projector's USB **TypeB**, **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 **TypeB** port and to a USB port on your computer (for wireless mouse support).
3. Start your presentation.
4. Use the following buttons on the remote control to control your presentation:
   - To move through slides or pages, press the up or down **Page** buttons.



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

Parent topic: Remote Control Operation

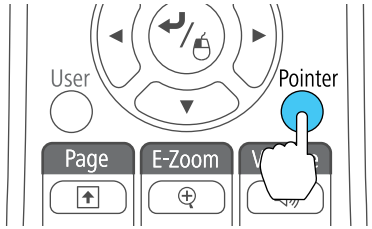
Related references

Projector Setup Settings - Extended Menu

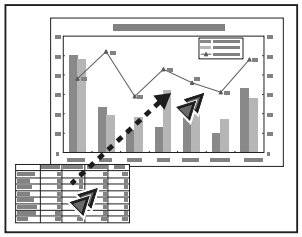
Using the Remote Control as a Presentation Pointer

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

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



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



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

Parent topic: Remote Control Operation

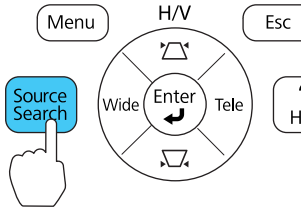
Related references

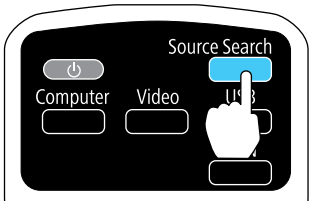
Projector Feature Settings - Settings Menu

Selecting an Image Source

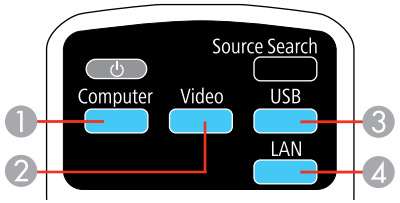
If you connected multiple image sources to the projector, such as a computer and DVD player, you may want to switch from one image source to the other.

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





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



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

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.

You can change the projection mode using the remote control or by changing a menu setting.

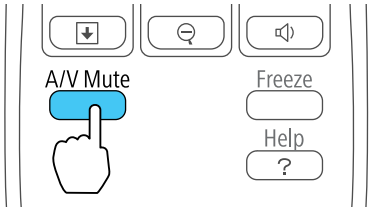
Changing the Projection Mode Using the Remote Control
Changing the Projection Mode Using the Menus

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.

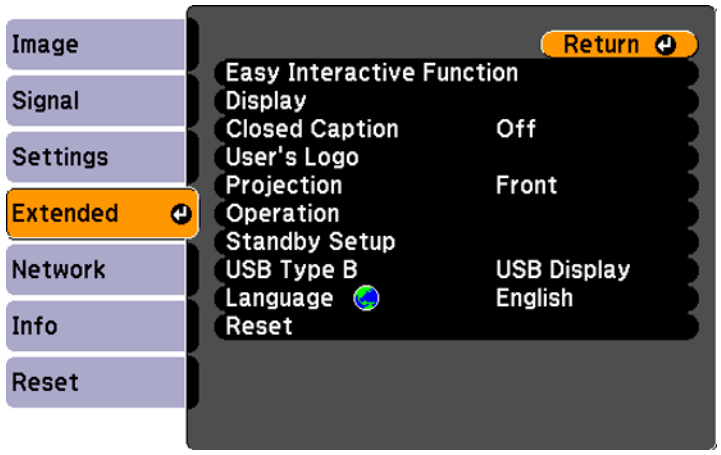
Parent topic: Projection Modes

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.

Note: If you change the image aspect ratio while using the interactive pen, you will need to recalibrate the pen.

Changing the Image Aspect Ratio
Available Image Aspect Ratios

Parent topic: Using Basic Projector Features

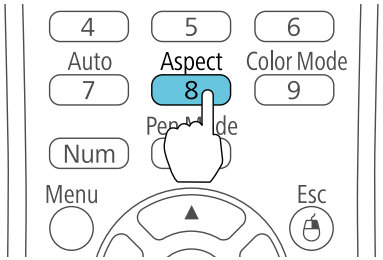
Related references

Image Quality Settings - Image Menu

Changing the Image Aspect Ratio

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

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



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

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

Parent topic: Image Aspect Ratio

Available Image Aspect Ratios

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

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

BrightLink 436Wi

Aspect ratio setting	Description
Normal	Displays images using the full projection area and maintains the aspect ratio of the image.

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

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

BrightLink 421i

Aspect ratio setting	Description
4:3	Displays images using the full projection area at 4:3 aspect ratio.
16:9	Converts the aspect ratio of the image to 16:9.

Parent topic: Image Aspect Ratio

Color Mode

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

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

Changing the Color Mode
Available Color Modes
Turning On Auto Iris

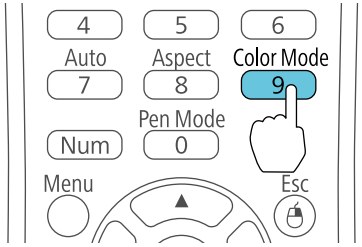
Parent topic: Using Basic Projector Features

Related references
Image Quality Settings - Image Menu

Changing the Color Mode

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

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



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

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

Parent topic: Color Mode

Available Color Modes

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

Color Mode	Description
Dynamic	Best for projecting 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

Color Mode	Description
Blackboard	Best for presentations onto a green chalkboard (adjusts the colors accordingly)
Whiteboard	Best for presentations onto a whiteboard (adjusts the colors accordingly)

Parent topic: Color Mode

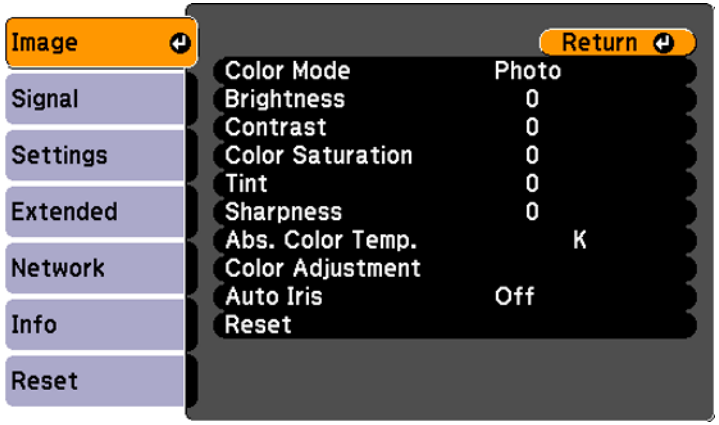
Related references

Image Quality Settings - Image Menu

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.

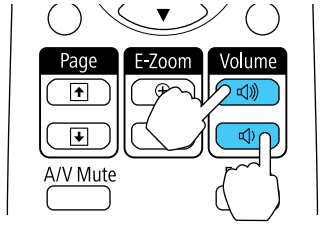
Parent topic: Color Mode

Controlling the Volume with the Volume Buttons

You can use the **Volume** buttons on the 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.



A volume gauge appears on the screen.

3. To set the volume to a specific level for an input source, you can set the volume using a projector menu.

Parent topic: Using Basic Projector Features

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 or presentation, and control it using the projector's remote control.

Slideshow Features

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

Slideshow Features

Your projector's Slideshow feature lets you do the following:

- Display individual images
- Present a slide show of all images in a folder

Parent topic: Projecting a Slide Show

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 × 800
	.gif	Make sure the file is not: • Above 1280 × 800 resolution • Animated
	.png	Make sure the file resolution is not above 1280 × 800

Parent topic: Projecting a Slide Show

Starting a Slide Show

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

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

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

   The Slideshow screen appears.



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

- To display a slide show of all the images in a folder, press the arrow buttons to highlight the **Slideshow** option at the bottom of the screen and press **Enter**.

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

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

Slideshow Display Options

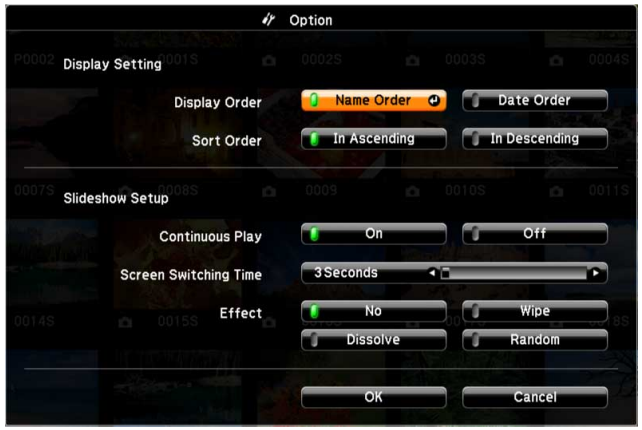
Parent topic: Projecting a Slide Show

Related tasks

Disconnecting a USB Device or Camera From the Projector

Slideshow Display Options

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



Setting	Options	Description
Display Order	**Name Order**	Displays files in name order
	Date Order	Displays files in date order

Setting	Options	Description
Sort Order	**In Ascending**	Sorts files in first-to-last order
	In Descending	Sorts files in last-to-first order
Continuous Play	**On**	Displays a slide show continuously
	Off	Displays a slide show one time through
Screen Switching Time	**No**	Does not display the next file automatically
	1 Second to 60 Seconds	Displays files for the selected time and switches to the next file automatically
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.

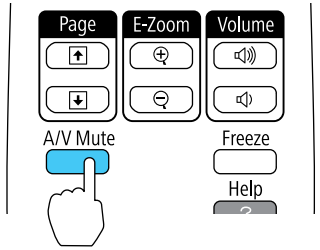
Shutting Off the Picture and Sound Temporarily
Stopping Video Action Temporarily
Zooming Into and Out of Images
Projector Security Features
Creating a User Pattern to Display

Shutting Off the Picture and Sound Temporarily

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

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

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.

Parent topic: Adjusting Projector Features

Related references

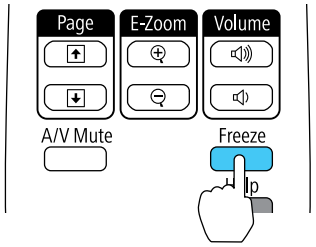
Projector Setup Settings - Extended Menu

Stopping Video Action Temporarily

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

Note: You can also stop video action using the interactive pens.

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.

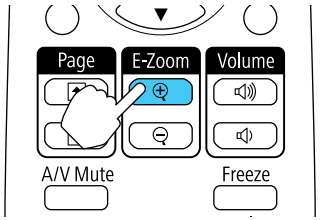
Parent topic: Adjusting Projector Features

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.

Note: You can also zoom into your image using the interactive pens.

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



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

2. Use the following buttons on the remote control to adjust the zoomed image:
   - Use the arrow buttons to position the crosshair in the image area you want to zoom into.
   - Press the **E-Zoom +** button repeatedly to zoom into the image area, enlarging it as necessary.
   - To pan around the zoomed image area, use the arrow buttons.
   - To zoom out of the image, press the **E-Zoom –** button as necessary.
   - To return to the original image size, press **Esc**.

Parent topic: Adjusting Projector Features

Projector Security Features

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

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

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

Parent topic: Adjusting Projector Features

Password Security Types

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

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

Setting a Password

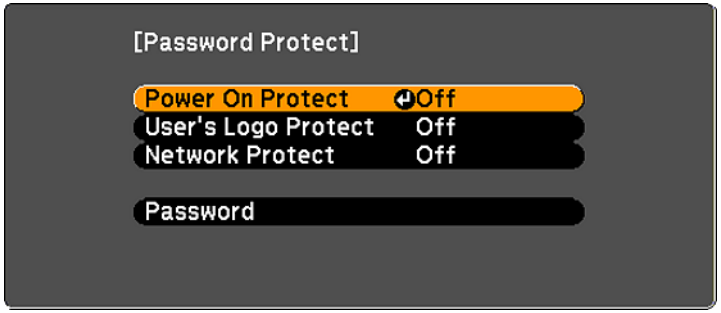
Selecting Password Security Types
Entering a Password to Use the Projector
Saving a User's Logo Image to Display

Parent topic: Projector Security Features

Setting a Password

To use password security, you must set a password.

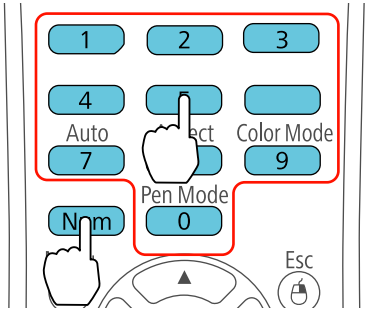
1. Hold down the **Freeze** button on the remote control until you see the Password Protect menu. This takes about five seconds.



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.

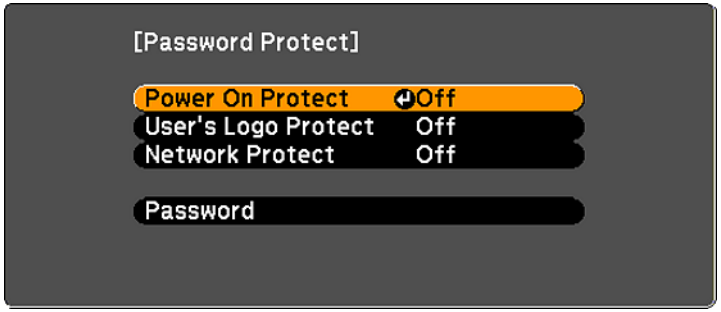
   You see the message "Password accepted."

6. Press **Esc** to return to the Password Protect 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**.
3. To prevent changes to network settings, select **Network Protect**, press **Enter**, select **On**, press **Enter** again, and press **Esc** .

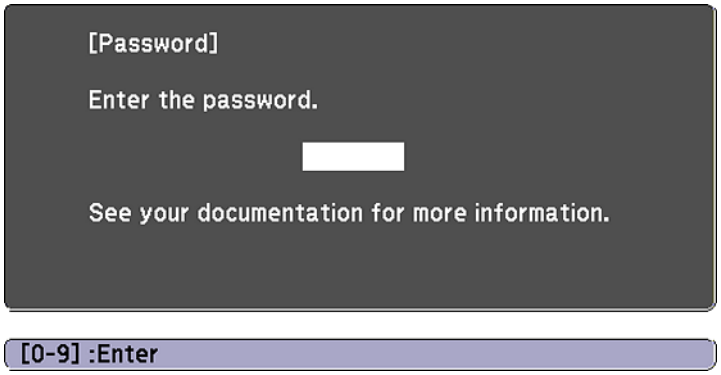
You can attach the Password Protect sticker to the projector as an additional theft deterrent.

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

Parent topic: Password Security Types

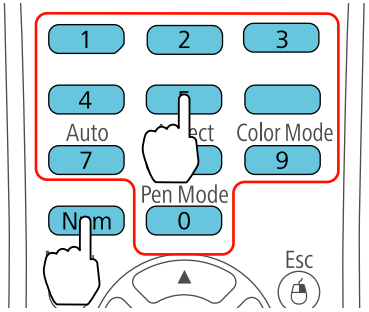
Entering a Password to Use the Projector

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



You must enter the correct password to use the projector.

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



   The password screen closes.

2. If the password is incorrect, the following may happen:
   - You see a "wrong password" message and a prompt to try again. Enter the correct password to proceed.

- If you enter an incorrect password several times in succession, the projector displays a request code and a message to contact Epson Support. When you contact Epson Support, provide the displayed request code and proof of ownership for assistance in unlocking the projector.

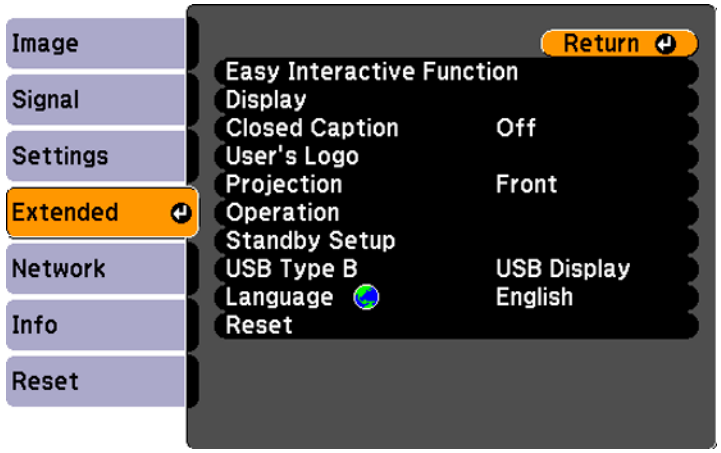
Parent topic: Password Security Types

Saving a User's Logo Image to Display

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

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

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



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

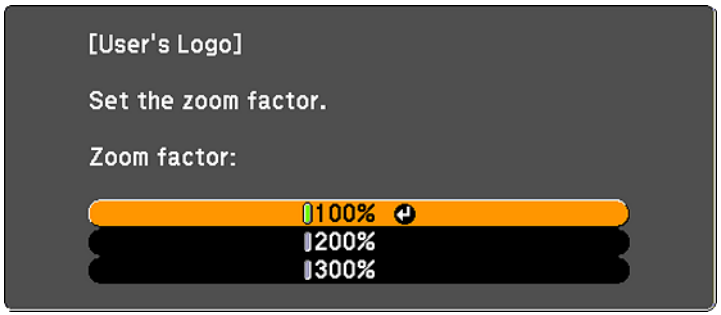
   You see a prompt asking if you want to use the displayed image as a user's logo.
4. Select **Yes** and press **Enter**.

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

You see a prompt asking if you want to select this image area.

6. Select **Yes** and press **Enter**. (If you want to change the selected area, select **No**, press **Enter**, and repeat the last step.)

   You see the User's Logo zoom factor menu.



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

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

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

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

   You see a completion message.

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

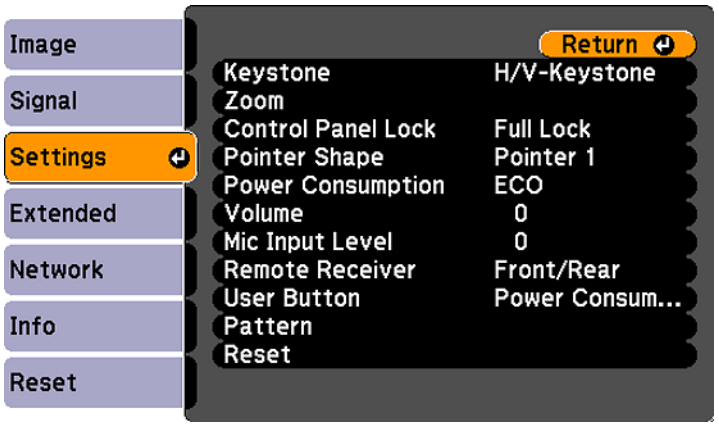
To prevent anyone from changing the User's Logo settings without first entering a password, set a password and enable User's Logo security.

Parent topic: Password Security Types

Locking the Projector's Buttons

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

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



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

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

Unlocking the Projector's Buttons

Parent topic: Projector Security Features

Unlocking the Projector's Buttons

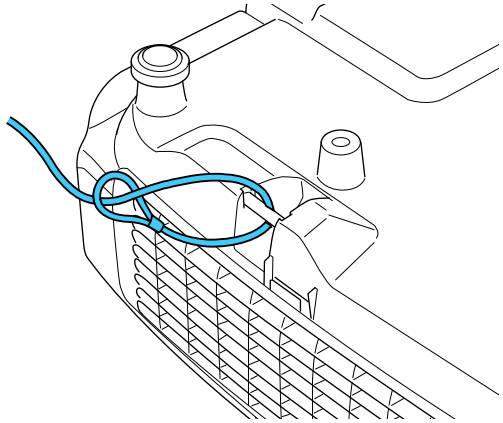
If the projector's buttons have been locked, hold the **Enter** button on the projector's control panel for seven seconds to unlock them.

Parent topic: Locking the Projector's Buttons

Installing a Security Cable

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

- Use the security slot on the back of 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.



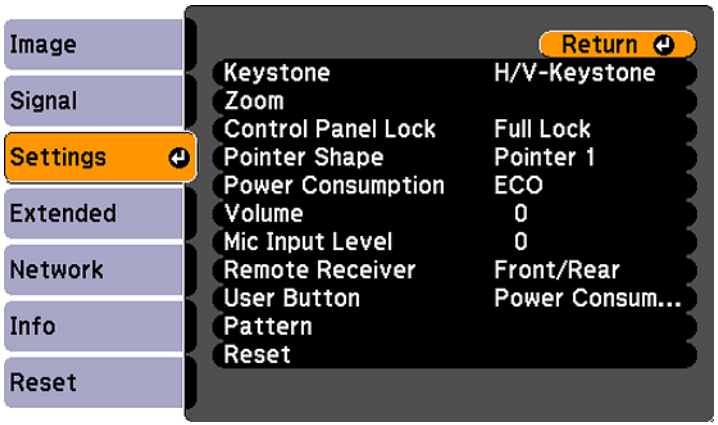
Parent topic: Projector Security Features

Creating a User Pattern to Display

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

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

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



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

   You see a prompt asking if you want to use the displayed image as a User Pattern.
5. Select **Yes** and press **Enter**.

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

   You see a completion message.
6. Press **Esc** to exit the message screen.

Parent topic: Adjusting Projector Features

Related references

Projector Feature Settings - Settings Menu

Using the Interactive Pens

The BrightLink interactive pens turn any wall into an interactive whiteboard, either with or without a computer.

- With a computer, you can use Easy Interactive Tools. This software lets you use the pen as a mouse to annotate, save, and interact with content from your computer. Two people can annotate at the same time.
- Without a computer, you can use the built-in toolbar (PC Free Annotation). This lets you annotate images (using one pen or two pens simultaneously) from a document camera, iPad, DVD player, or other source.

Follow the instructions in these sections to use the interactive pens.

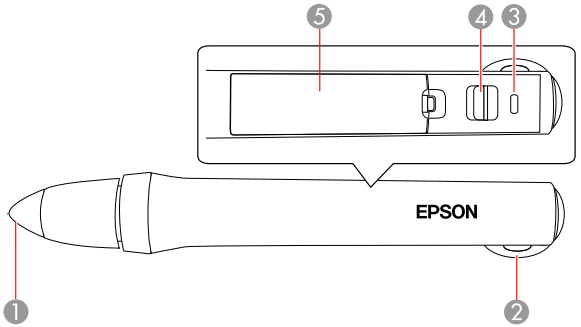
Using the Pens
Using BrightLink With a Computer
Easy Interactive Tools
Windows Tablet PC and Ink Tools
Using BrightLink Without a Computer

Using the Pens

Your projector came with an orange pen (Interactive Pen A), identified by the color on the end of the pen. If you want to use dual pen interactivity and annotation, you will need to purchase the optional blue pen (Interactive Pen B). You can use either pen, or both at the same time (one of each color).

Make sure the pen batteries are installed.

Note: The pens turn off automatically after 20 minutes of inactivity. Slide the switch to turn the pen back on.

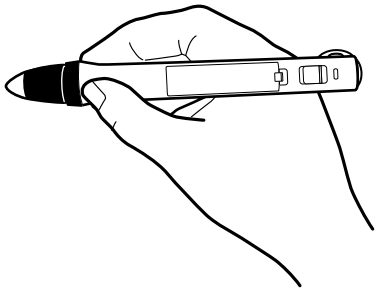


1 Pen tip
2 Attachment for optional strap or cord
3 Battery light
4 Power switch
5 Battery cover

1. To turn on the pen, slide the power switch.

   The green light comes on for a few seconds, then turns off. If the battery is low, the light flashes.

   Note: For best performance, hold the pen perpendicular to the board, as shown below. Do not cover the black section near the tip of the pen.



2. Do the following to use the pen as a mouse:
   - To left-click, tap the board.
   - To double-click, tap twice.
   - To right-click, press the board with the pen for about 3 seconds.
   - To click and drag, tap and drag with the pen.
   - To move the cursor, hover over the board without touching it.

   Note: If you do not want to use the hovering feature, you can turn it off using the **Easy Interactive Function** in the projector's Extended menu.

3. When you are finished using the pen, slide the power switch to turn it off.

Calibrating Automatically
Calibrating Manually

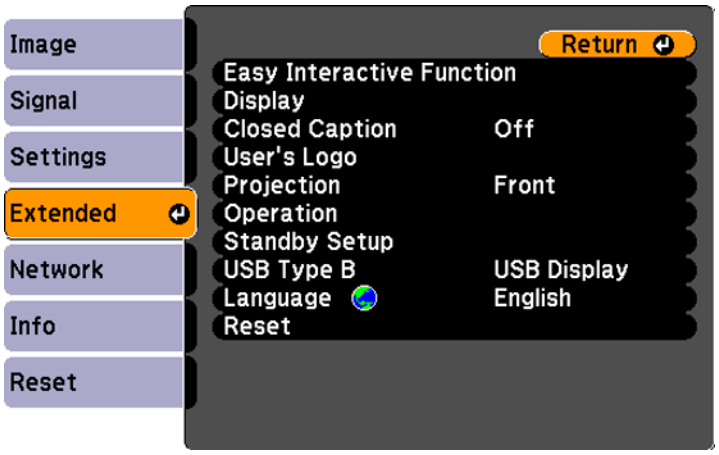
Parent topic: Using the Interactive Pens

Calibrating Automatically

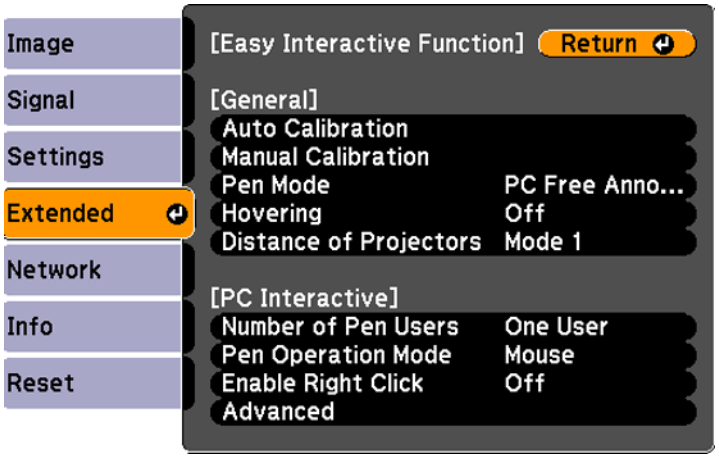
Calibration coordinates the positioning of the pen with the location of your cursor. You only need to calibrate the first time you use your projector, and you do not need the pens or a computer for calibration. You should not need to calibrate again unless the projector or image is moved, or the image is resized.

Note: You can start Auto Calibration by pressing the **User** button on the remote control or by pressing the **Menu** button on the remote control as described here.

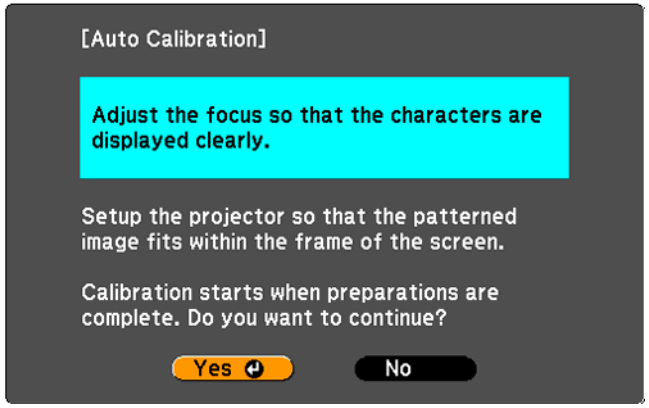
1. Press the **Menu** button, select the **Extended** menu, and press **Enter**.



2. Select the **Easy Interactive Function** setting and press **Enter**.



3. Select **Auto Calibration** and press **Enter**.



4. Adjust the focus if necessary, by turning the focus ring.
5. Press **Enter** to select **Yes**.

   A pattern appears then disappears, and the system is calibrated. If you see a message that calibration failed, you need to calibrate manually.

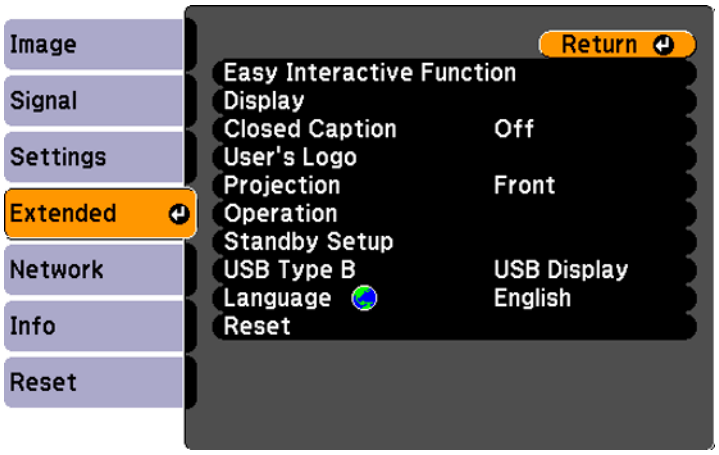
The cursor location and pen position should match after calibration. If not, you may need to calibrate manually.

Parent topic: Using the Pens

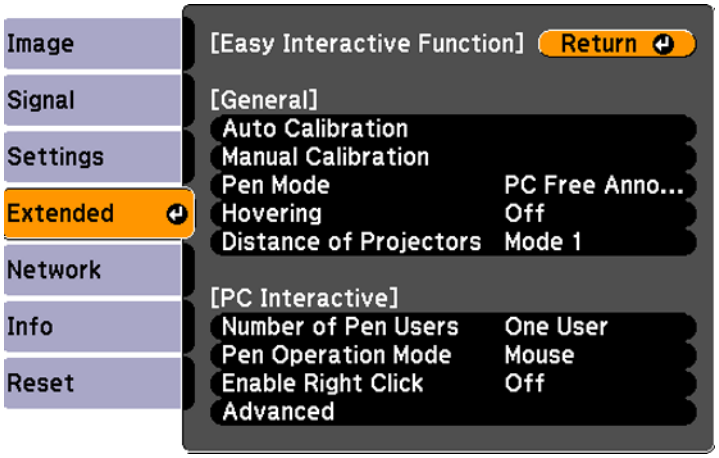
Calibrating Manually

If the cursor location and pen position do not match after auto calibration, you can calibrate manually.

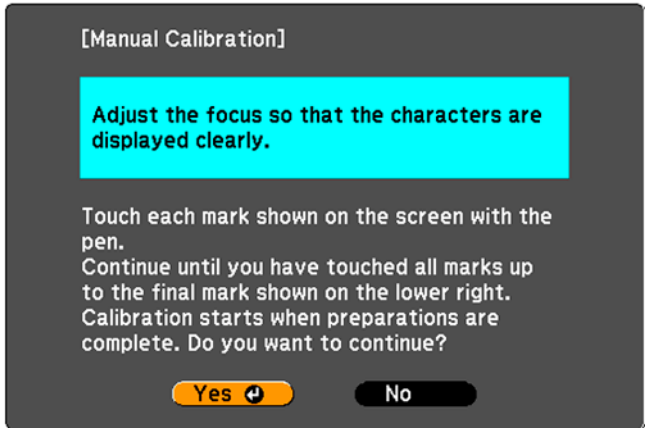
1. Press the **Menu** button, select the **Extended** menu, and press **Enter**.



2. Select the **Easy Interactive Function** setting and press **Enter**.



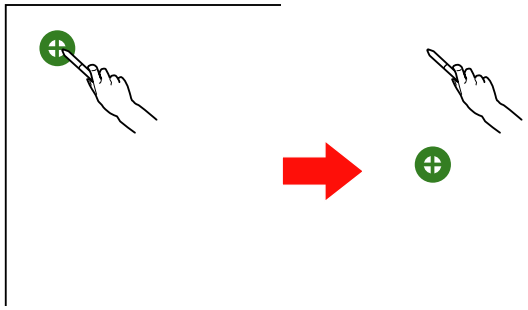
3. Select **Manual Calibration** and press **Enter**.



4. Adjust the focus if necessary, by turning the focus ring.
5. Press **Enter** to select **Yes**.

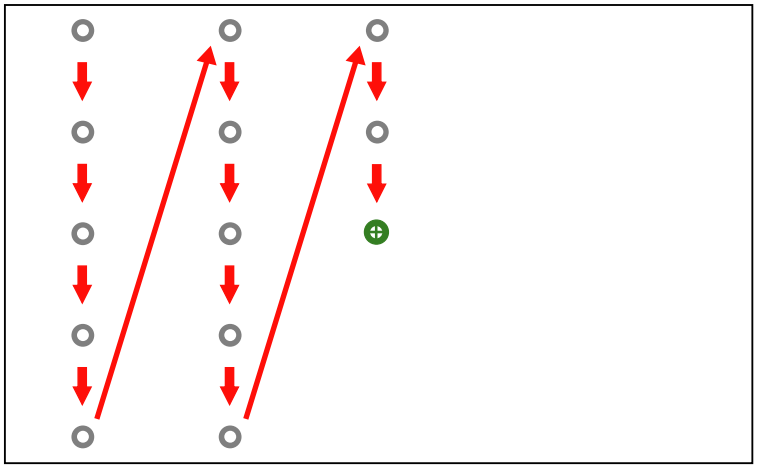
   A flashing green circle appears in the upper left corner of your projected image.
6. Touch the center of the circle with the tip of the pen.

   The circle disappears, and you see another circle below the first one.



Note: For the most accurate calibration, make sure you touch the center of the circle.





7. Touch the center of the next circle, then repeat. When you get to the bottom of the column, the next circle appears at the top of a new column.

   Note: Make sure you are not blocking the signal between the pen and the interactive receiver.

   If you make a mistake, press the **Esc** button on the remote control to go back to the previous circle. To restart the calibration process, press and hold the **Esc** button for 2 seconds.

8. Continue until all of the circles disappear.

Parent topic: Using the Pens

Using BrightLink With a Computer

You can connect a computer to the projector and install the software from the CD labeled "Epson Projector Software for Easy Interactive Function." You can then do the following:

- Use one of the pens as a mouse to control your computer
- Use Easy Interactive Tools to annotate with both pens at the same time
- Save and print your annotations
- Use the Tablet PC input panel in Windows 8, Windows 7 or Windows Vista
- Use Ink Tools for annotation in Microsoft Office applications

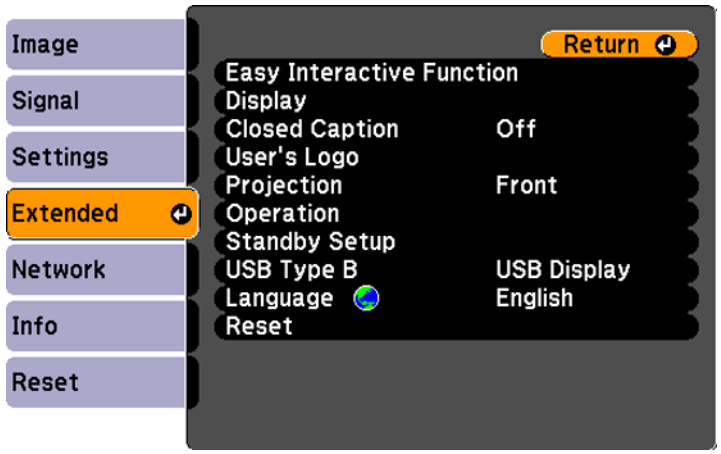
Adjusting the Pen Operation Area

Parent topic: Using the Interactive Pens

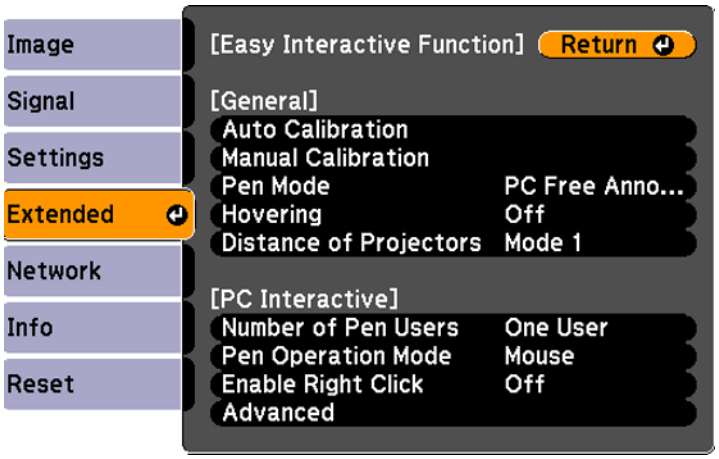
Adjusting the Pen Operation Area

The pen operation area is normally adjusted automatically if you connect a different computer or adjust the computer's resolution. If you notice that the pen position is incorrect, you can adjust the pen area manually.

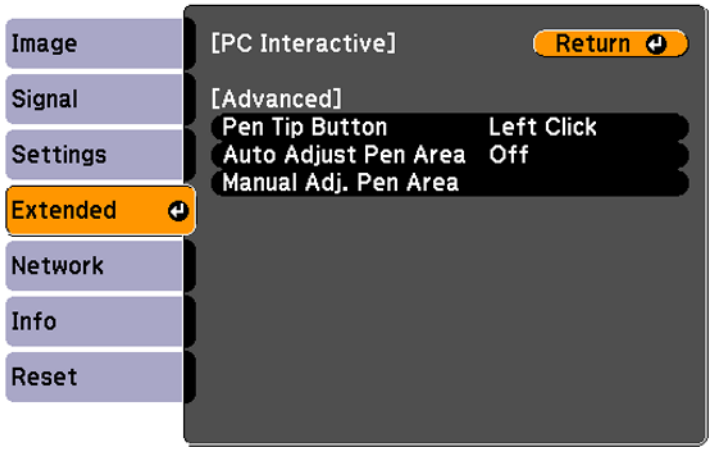
1. Project your computer's desktop.
2. Set the Pen Mode option to **PC Interactive**.
3. Press the **Menu** button, select the **Extended** menu, and press **Enter**.



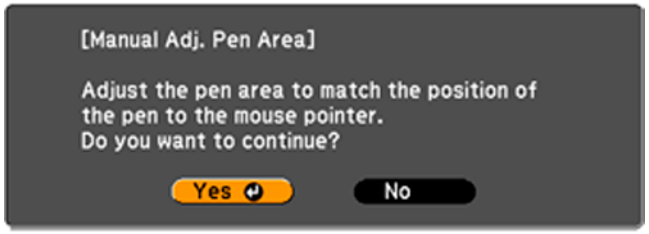
4. Select the **Easy Interactive Function** setting and press **Enter**.



5. Select **Advanced** and press **Enter**.



6. Select **Manual Adj. Pen Area** and press **Enter**.



7. Press **Enter** to select **Yes**.

   The mouse pointer moves toward the top left corner.

8. When the mouse pointer stops at the top left corner of the image, touch the tip of the pointer with the pen.

   The mouse pointer moves toward the bottom right corner.

9. When the mouse pointer stops at the bottom right corner of the image, touch the tip of the pointer with the pen.

Parent topic: Using BrightLink With a Computer

Easy Interactive Tools

Your projector came with a CD containing the Easy Interactive Tools software for use with a computer. Easy Interactive Tools lets you use your interactive pen as a mouse to navigate, select, scroll, draw, save, and interact with projected content from your computer.

These two modes are available:

- Interactive (Annotation) mode displays the toolbar on the projected image and lets you use the pen as a mouse to open applications, access links, and operate scroll bars, for example (using one pen at a time). You can also annotate whatever is displayed from your computer (using both pens at the same time).
- Whiteboard mode lets you project on one of 3 solid colors or 6 background patterns, and use the toolbar to write or draw on the background. You can also import images from your computer or a document camera. In whiteboard mode, two people can use the pens at the same time.

Easy Interactive Tools System Requirements
Installing Easy Interactive Tools
Starting and Exiting Easy Interactive Tools

Using the Easy Interactive Tools for Interactive Mode
Using Easy Interactive Annotation Tools
Using the Easy Interactive Tools for Whiteboard Mode
Using Easy Interactive Tools for Saving, Printing, and More

Parent topic: Using the Interactive Pens

Easy Interactive Tools System Requirements

Your computer system must meet the system requirements here to use Easy Interactive Tools.

Note: Easy Interactive Driver must be installed and running to use Easy Interactive Tools on a Mac.

Requirement	Windows	Mac
Operating system	Windows XP Professional, Home Edition, and Tablet PC Edition (32-bit); except for Service Pack 1	Mac OS X 10.4.x, 10.5.x, 10.6.x, or 10.7.x, 10.8.x
	Windows Vista Ultimate, Enterprise, Business, Home Premium, and Home Basic (32-bit)	
	Windows 8, Windows 7 Ultimate, Enterprise, Professional, and Home Premium (32- and 64-bit); Home Basic (32-bit)	
CPU	Intel Pentium M 1.6 GHz or faster (Core2 Duo 1.2 GHz or faster recommended)	Power PC G4 1.5 GHz or faster (Core Duo 1.5 GHz or faster recommended)
Memory	512MB or more (1G or more recommended)	
Hard disk space	100MB or more	
Display	Resolution between 1024 × 768 and 1920 × 1080, 16-bit color or greater	

Parent topic: Easy Interactive Tools

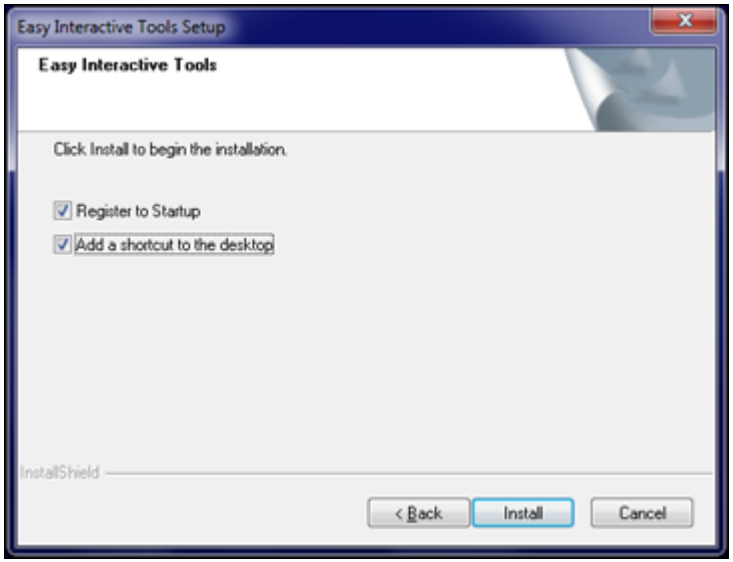
Installing Easy Interactive Tools

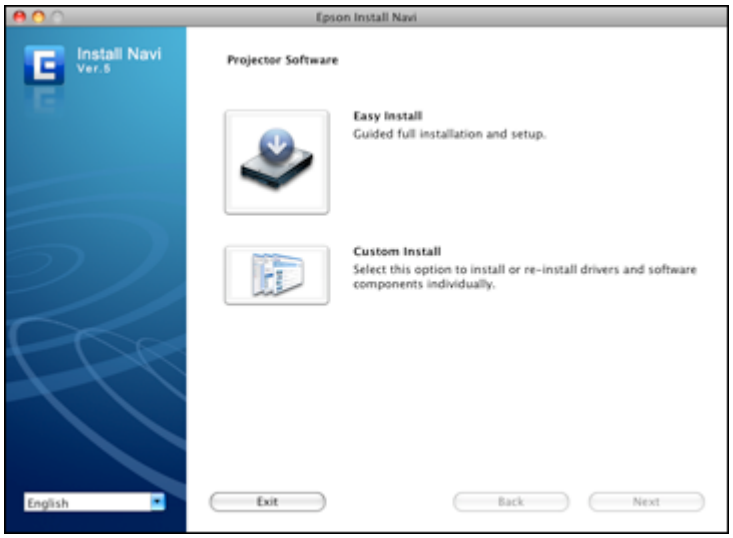
The Easy Interactive Tools software is included on the CD labeled "Epson Projector Software for Easy Interactive Function." This CD also includes the Easy Interactive Driver, which is required for BrightLink pen usage on a Mac.

Note: You can also download the software from the Epson website. Visit Epson's support site (U.S. downloads or Canadian downloads).

1. Insert the CD labeled "Epson Projector Software for Easy Interactive Function" in your drive.
2. Do one of the following:
   - **Windows**: If you see the AutoPlay window, select **Run EIN_TTWInst.exe**. If you see the User Account Control screen, select **Yes** or **Continue**.
   - **Mac OS X**: Double-click the **Install Navi** icon in the Epson window.
3. Follow the on-screen instructions to install the software.

   Make sure you select **Register to Startup** (Windows) or **Easy Install** (Mac OS X).





Note: In Mac OS X, you will need to restart after installing the software.

Parent topic: Easy Interactive Tools

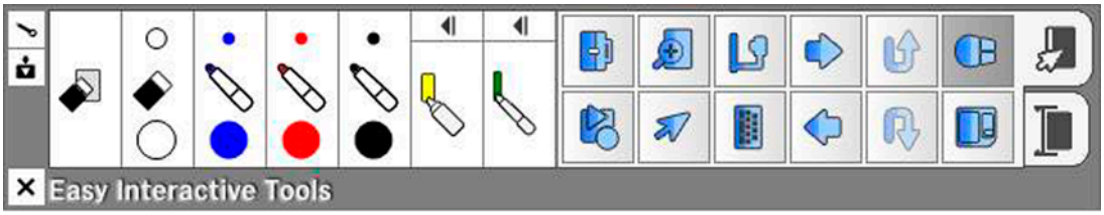
Starting and Exiting Easy Interactive Tools

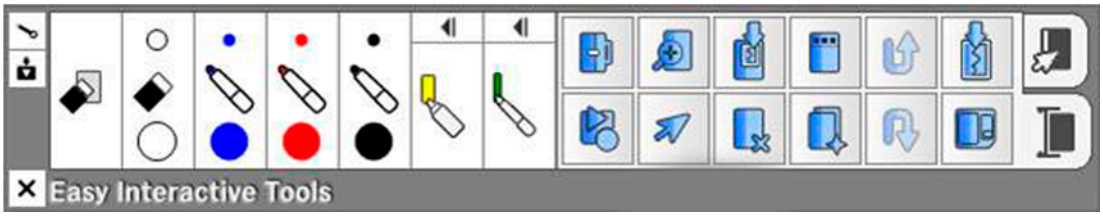
Make sure Easy Interactive Tools is installed on your computer, and the computer is connected to the projector.

1. Turn on your computer and wait until you see its desktop image projected.
2. To start Easy Interactive Tools, do one of the following:

   - **Windows**: Double-click the **Easy Interactive Tools** icon on your desktop or select or **Start > All Programs** or **Programs > EPSON Projector > Easy Interactive Tools**.
   - **Mac OS X**: Select **Applications > Easy Interactive Tools > Easy Interactive Tools**.

   The Easy Interactive Toolbar appears on the projected image, and an arrow appears on the other side of the image.


Easy Interactive Tools


Easy Interactive Tools

Note: The illustration shows the interactive mode (Annotation) toolbar on the left, and the whiteboard mode toolbar on the right. You can select the  Close icon to hide the toolbar, then select the  arrow to redisplay the toolbar.

3. To exit Easy Interactive Tools, select the **X** in the lower right corner of the toolbar.

Parent topic: Easy Interactive Tools

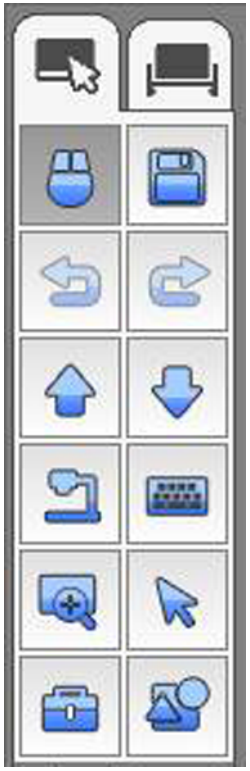
Using the Easy Interactive Tools for Interactive Mode

You can use the pen as a mouse and add annotations to your presentations or other work displayed from your computer. Follow the instructions in these sections to use the tools for interactive mouse mode.

Easy Interactive Tools for Interactive (Annotation) Mode
Using the On-Screen Keyboard
Using a Document Camera With Easy Interactive Tools
Using the Magnifier

Parent topic: Easy Interactive Tools

Easy Interactive Tools for Interactive (Annotation) Mode



	Switch to interactive (Annotation) mode
	Switch to whiteboard mode
	Toggle between mouse and pen modes
	Save the current screen

	Undo multiple operations (one at a time)
	Redo multiple operations (one at a time)
	Page up in a browser or other software program
	Page down in a browser or other software program
	Display the image from a document camera connected to the computer via USB
	Use an on-screen keyboard to enter text on a website or in a browser or other software program
	Use the magnifier to display an enlarged view of the image at the center of the screen
	Display a cursor that lets you resize or move an inserted image
	Display additional tools for saving, printing, and more
	Insert a circle, square, triangle, or other shape

Parent topic: Using the Easy Interactive Tools for Interactive Mode

Using the On-Screen Keyboard

You can enter text in a browser or other program, such as a word processor or spreadsheet.

1. Open your internet browser or other program.
2. Select the  Keyboard tool.

   You see the on-screen keyboard.



3. Tap on the projected field where you want to enter text.
4. Select the letters and numbers on the on-screen keyboard.

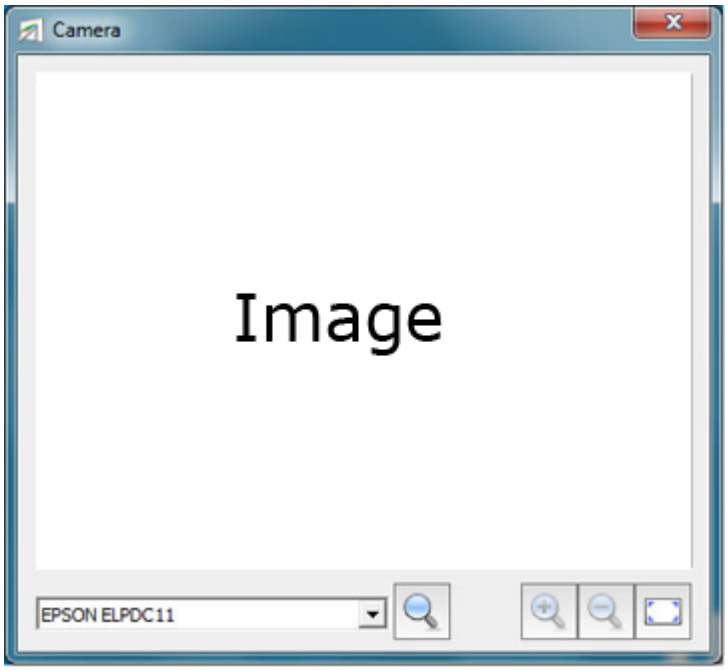
Parent topic: Using the Easy Interactive Tools for Interactive Mode

Using a Document Camera With Easy Interactive Tools

You can connect a document camera to your computer and use Easy Interactive Tools to annotate and work with any image projected from the camera.

1. Connect a document camera to your computer's USB port and focus on the image you want to project.
2. Select the  Camera tool.

   You see a window like this:



3. Select the camera you want to use from the drop-down list.
4. Do one of the following to work with the image if necessary:
   - To search among connected sources, select the icon.
   - To zoom in, select the icon.
   - To zoom out, select the icon.
   - To display a full-screen image from the camera, select the icon.
5. When you are done, close the camera window.

Parent topic: Using the Easy Interactive Tools for Interactive Mode

Using the Magnifier

You can use the Magnifier tool to zoom in on a section of your projected image.

1. Select the  Magnifier tool.

   You see a window like this:



2. Drag the Magnifier window to the area you want to enlarge.
3. Do the following to adjust the magnification as necessary:
   - To zoom in, select the  icon.
   - To zoom out, select the  icon.
4. When you are done, close the Magnifier window.

Parent topic: Using the Easy Interactive Tools for Interactive Mode

Using Easy Interactive Annotation Tools

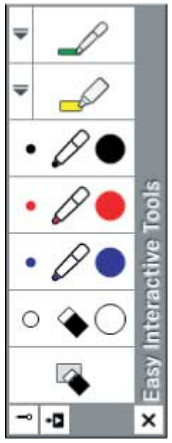
Follow the instructions in these sections to use the Easy Interactive Tools for annotation.

Easy Interactive Annotation Tools
Selecting Line Width and Color With Easy Interactive Tools

Parent topic: Easy Interactive Tools

Easy Interactive Annotation Tools

The annotation tools shown here appear on the lower half of the toolbar and are available in all modes.



	Change custom pen color and width
	Write or draw with custom pen
	Change highlighter pen color and width
	Write or draw with transparent highlighter pen
	Write or draw with black pen (fine point on left, thick point on right)
	Write or draw with red pen (fine point on left, thick point on right)
	Write or draw with blue pen (fine point on left, thick point on right)
	Use the eraser (thin width on left, thick width on right)
	Clear all annotations (select Undo to restore annotations)

	Toggle between hiding the toolbar after use and showing it continuously
	Minimize the toolbar
✕	Exit Easy Interactive Tools

Parent topic: Using Easy Interactive Annotation Tools

Selecting Line Width and Color With Easy Interactive Tools

You can select the color and line width for both the custom Pen and the Highlighter tools.

1. Select the icon next to the custom Pen or Highlighter annotation tool.
   A box like the following appears:



2. Select the line width and color you want to use for the Pen or Highlighter tools.
3. Select the or tool, then use the pen to write or draw on the projection surface.

Parent topic: Using Easy Interactive Annotation Tools

Using the Easy Interactive Tools for Whiteboard Mode

You can write or draw on a blank surface, add background images, and save your pages. Follow the instructions in these sections to use the tools for whiteboard mode.

Easy Interactive Tools for Whiteboard Mode
Using the Shapes Tool in Whiteboard Mode

Parent topic: Easy Interactive Tools

Easy Interactive Tools for Whiteboard Mode

To display the whiteboard tools shown here, select the  Whiteboard icon on the toolbar.



	Switch to interactive (Annotation) mode
	Switch to whiteboard mode
	Select from 6 background patterns and 3 solid colors, select or import computer desktop screen as background, or display an image file from a folder or an image from a document camera
	Save the current screen
	Undo multiple operations (one at a time)
	Redo multiple operations (one at a time)
	Display a list of pages currently being edited
	Open a new page
	Insert an image from a file or from a document camera connected to the computer
	Delete the current page
	Use the magnifier to display an enlarged view of the image at the center of the screen
	Display a cursor that you can use to adjust the size or position of an inserted image
	Display additional tools for saving, printing, and more
	Insert a circle, square, triangle, or other shape

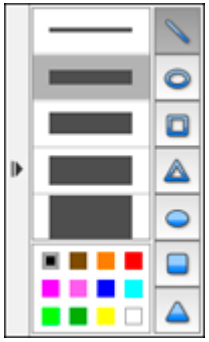
Parent topic: Using the Easy Interactive Tools for Whiteboard Mode

Using the Shapes Tool in Whiteboard Mode

You can add a variety of shapes to your projected image and select the color and line width.

1. Select the  Shapes tool.

   The Shapes box opens:

2. Select the line width, color, and shape you want to create, or select the  Line tool to define your own shape.
3. Drag the pen on the projection surface to draw the shape you want.

Parent topic: Using the Easy Interactive Tools for Whiteboard Mode

Using Easy Interactive Tools for Saving, Printing, and More

Follow the instructions in these sections to use the tools that let you save and print your annotated pages, adjust settings, access help, and perform other special functions.

Easy Interactive Tools for Saving, Printing, and More
Working With the Page List
Saving Your Pages
Selecting Language and General Settings

Parent topic: Easy Interactive Tools

Easy Interactive Tools for Saving, Printing, and More

To display the additional tools shown here, select the  Other tools icon on the interactive or whiteboard toolbar.

Note: Only the first 4 tools are available in whiteboard mode.



	Display a spotlight effect that hides most of the image and reveals a circular area. Drag the spotlight frame to reveal different parts of the image.
	Cover the projected image with a shade. Drag the sides to move or resize the shaded area.
	Print the currently displayed image. In whiteboard mode, you can print all of the current pages or select the ones you want.
	Open the settings screen, which lets you select general settings, language, and settings for saving your pages.
	Capture the screen and move it to the clipboard. The clipboard holds only one image at a time.
	Change the next pen tap to a right-click (interactive mouse mode only)
	Display Help information for Easy Interactive Tools (interactive mouse mode only)

Parent topic: Using Easy Interactive Tools for Saving, Printing, and More

Working With the Page List

You can display thumbnail images of the pages you are working with in the current Easy Interactive Tools session.

1. Select the  Page list tool.

   Thumbnail images of the current pages open on the side of your screen:



2. Do one of the following:
   - To keep the page list open, select the  icon.
   - To close the page list, select the **X** in the upper right corner.

Parent topic: Using Easy Interactive Tools for Saving, Printing, and More

Saving Your Pages

You can save your screen or pages as .jpg, .bmp, .png, or .pdf files and select the location where you want to store your files.

To save as .pdf files in your **Documents > Easy Interactive Tools** folder, simply select the  Save tool. Easy Interactive Tools names your file automatically based on the date and time. You can save the current screen with annotations in interactive (Annotation) mode, or all the pages in the current session in whiteboard mode.

You can also select other locations and formats for saving your files, as described here. If you save as PDF, for example, all your whiteboard pages are combined in one file.

1. Select the  Keyboard tool.

   The on-screen keyboard is displayed.

2. Select the  Other tools icon.

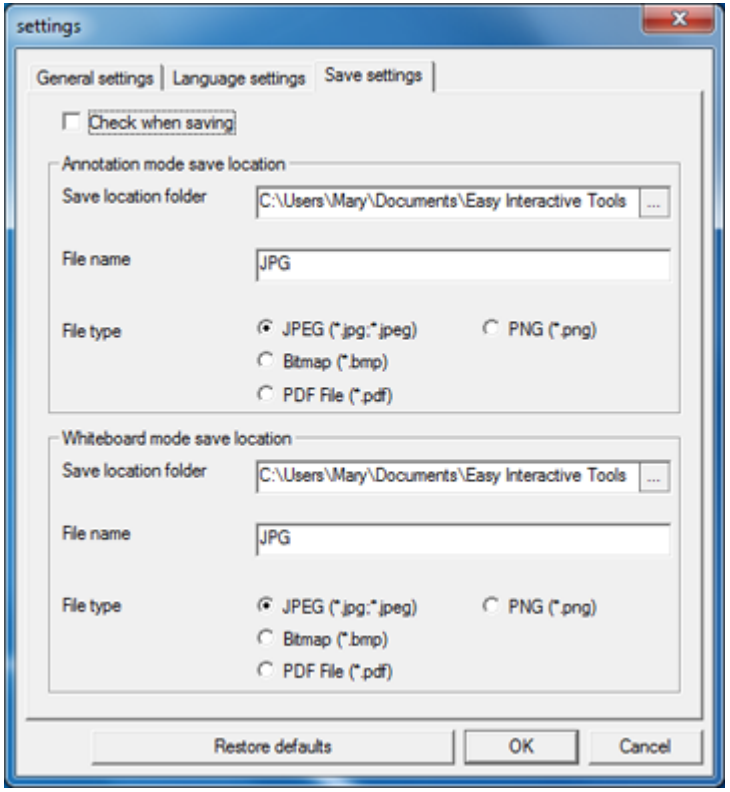
   You see additional tools.

3. Select the  Settings tool.

   The Settings window opens.

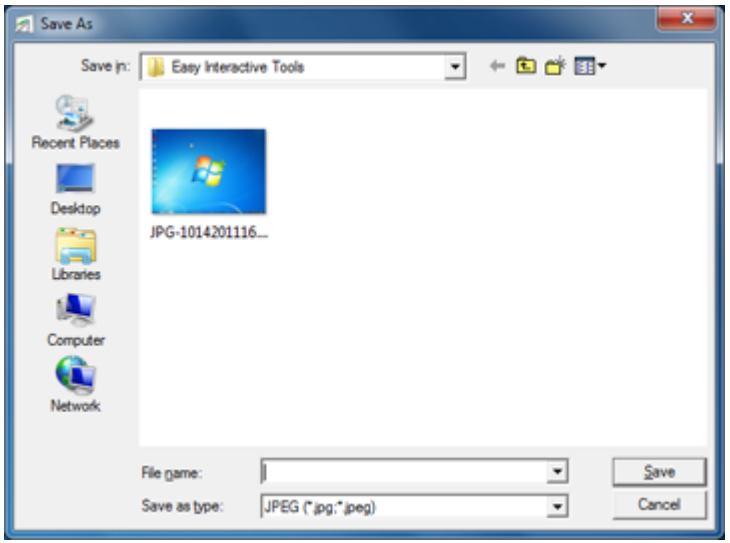
4. Select the **Save Settings** tab.

   You see a screen like the following:



5. Select the location, file name, and file type for saving annotation mode and whiteboard mode pages. Easy Interactive Tools will automatically add the date and time to each file you save.
6. If you want to select different settings each time you save, select the **Check when saving** checkbox.
7. Select **OK** to close the Settings window.
8. When you want to save, select the  Save tool.

   If you selected **Check when saving**, the on-screen keyboard is displayed, along with a window like the following:



9. Select the location and file type and enter a file name using the on-screen keyboard if necessary.
10. Select **Save**.

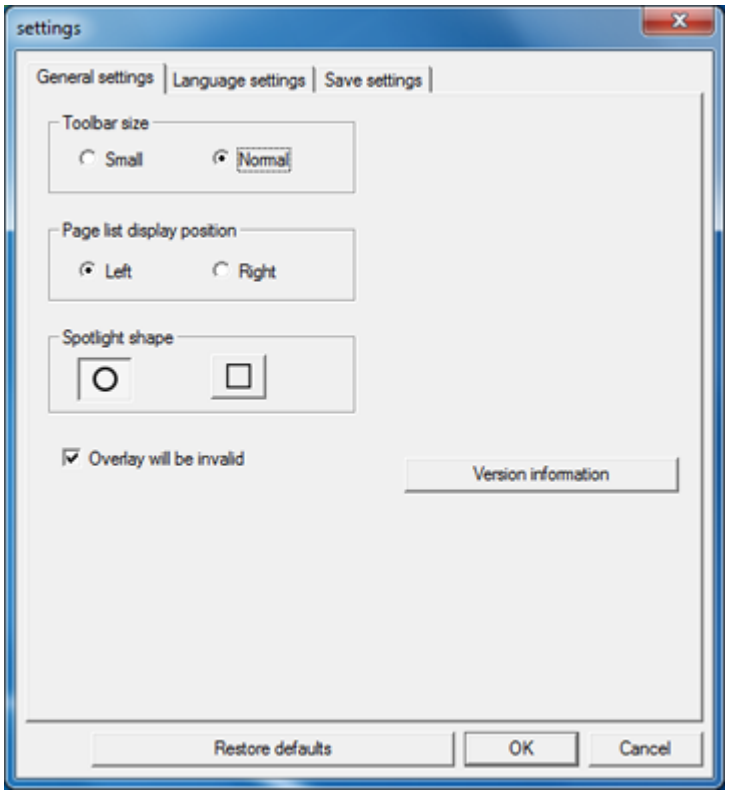
Parent topic: Using Easy Interactive Tools for Saving, Printing, and More

Selecting Language and General Settings

You can change the following settings in Easy Interactive Tools:

- Toolbar size
- Page list display position
- Spotlight shape
- Language (Windows only)

1. Select the  Other tools icon.
   You see additional tools.
2. Select the  Settings icon.
   The Settings window opens.



3. Select the toolbar size, page list display position, and spotlight shape.
4. If you want to change the language, select the **Language settings** tab, then select the language you want.
5. Select **OK** to close the Settings window.

Parent topic: Using Easy Interactive Tools for Saving, Printing, and More

Windows Tablet PC and Ink Tools

If you are using Windows 8, Windows 7 or Windows Vista, you can use the Tablet PC and Ink tools to add handwritten input and annotations to your work.

Enabling Windows Tablet PC and Ink Features

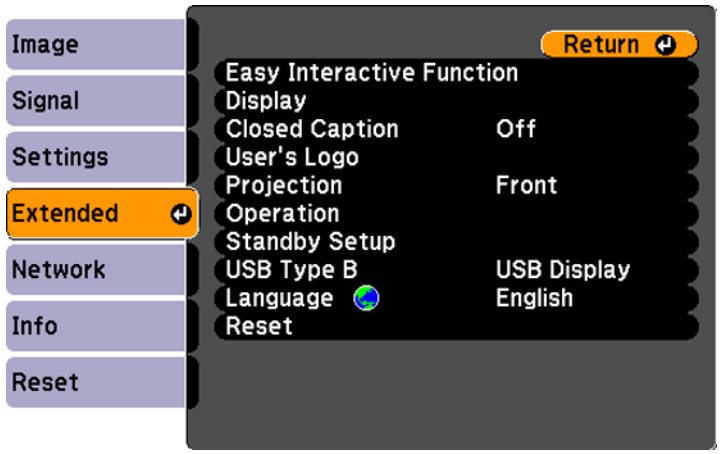
Using Windows Tablet PC and Ink Features

Parent topic: Using the Interactive Pens

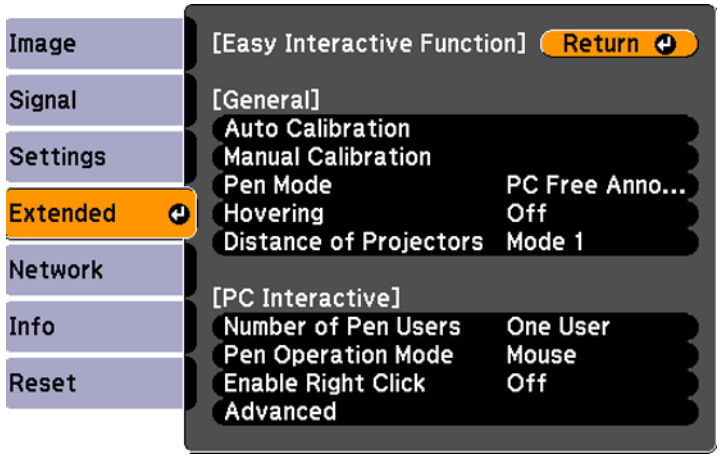
Enabling Windows Tablet PC and Ink Features

If you want to use the Tablet PC and Ink features in Windows 8, Windows 7, or Windows Vista, you need to adjust the pen settings in the Extended menu.

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



2. Select the **Easy Interactive Function** setting and press **Enter**.



3. Select **Number of Pen Users** and press **Enter**.
4. Select **One User** and press **Enter**.
5. Press **Esc** on the remote control to return to the Easy Interactive Function screen.
6. Select **Pen Operation Mode** and press **Enter**.
7. Select **Pen** and press **Enter**.

Parent topic: Windows Tablet PC and Ink Tools

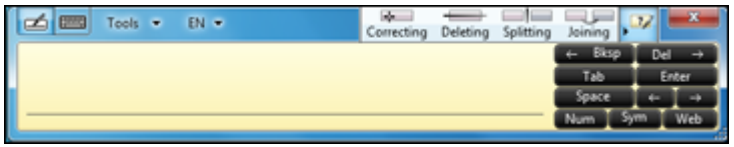
Using Windows Tablet PC and Ink Features

If you are using Windows 8, Windows 7 or Windows Vista, you can use the Tablet PC input panel to add handwritten input and convert it to text.

If you have Microsoft Office 2003 or later, you can also use the Ink function to add handwritten notes to a Word document, Excel spreadsheet, or PowerPoint presentation.

Note: Option names for the annotation functions may vary depending on your version of Microsoft Office.

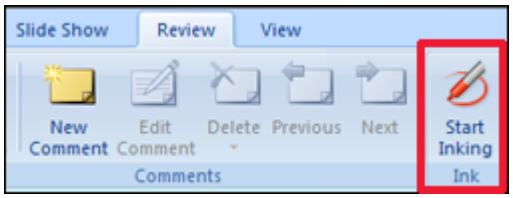
- To open the Tablet PC input panel, select **> All Programs > Accessories > Tablet PC > Tablet PC Input Panel**. (In Windows 8, navigate to the Start screen and then select the program.)



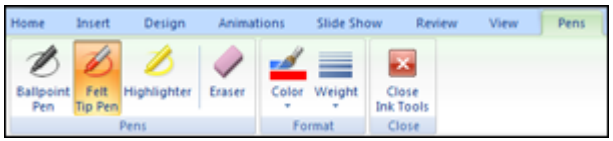
  You can write in the box using the pen, then select from a variety of options to edit and convert the text.

- To add Ink annotations in Microsoft Office applications, select the **Review** menu, then select **Start Inking**.

  Note: In Microsoft Word or Excel, select the **Insert** tab and then click on **Start Inking**.



You can select from a variety of Ink Tools:



- To annotate your PowerPoint slides in Slideshow mode, press and hold the pen against the projection surface to right-click, then select **Pointer Options > Pen** from the pop-up menu.

  Note: This also works in Windows XP.

For more information about these features, see your Windows Help.

Parent topic: Windows Tablet PC and Ink Tools

Using BrightLink Without a Computer

You can use the pens to write or draw on the projection surface simultaneously without connecting a computer (PC Free Annotation). This lets you annotate images from a document camera, iPad, DVD player, or other source.

These two modes are available:

- Annotation mode displays the built-in toolbar on whatever image is being projected from a document camera, iPad, or other source.
- Whiteboard annotation mode lets you project a white or black screen or one of 4 background patterns, and use the toolbar to write or draw as you would on a chalkboard or dry erase board.

Using PC Free Annotation

Built-in Tools for Use Without a Computer

Zooming Images Using the Built-in Toolbar

Using the Built-in Whiteboard Annotation Mode
Changing Pen Width and Color Using the Built-in Toolbar
Parent topic: Using the Interactive Pens

Using PC Free Annotation

You can use either pen with the built-in toolbar or both pens at the same time.

1. Press one of the Source buttons on the remote control to select the source for the image you want to annotate. If you simply want to use a blank screen, press the **Computer** button and select **Computer2** or another unused source.
2. To activate the toolbar, tap the projection surface with the pen.

   You see  arrow icons on the left and right side of the projected image.

   Note: The toolbar arrows disappear if they are not used. To make them reappear, tap the projection surface with the pen.

3. To display the toolbar, select one of the  arrows.

   Note: You can use the pen to move the arrows up or down.

4. To close the toolbar, select the  icon at the bottom of the toolbar.

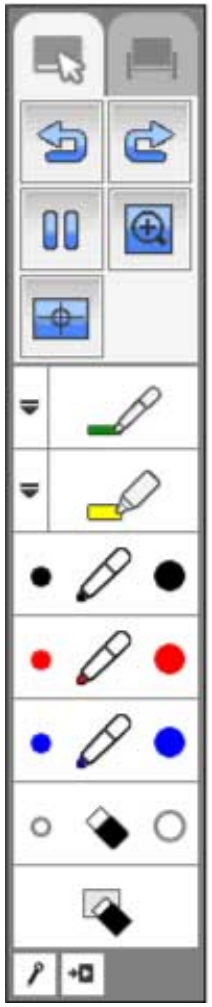
Note: If you want to hide the toolbar automatically after drawing, select the  icon at the bottom of the toolbar.

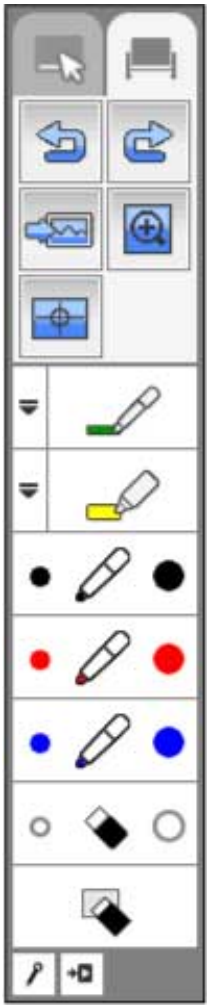
Parent topic: Using BrightLink Without a Computer

Built-in Tools for Use Without a Computer

The built-in toolbar is embedded in the projector and provides fewer functions than Easy Interactive Tools. For example, you cannot save your work with the built-in toolbar. If you want to save, connect a computer to the projector and use Easy Interactive Tools.

In the following illustration, the annotation mode tools are shown on the left, and the whiteboard annotation mode tools on the right:





	Switch to annotation mode
	Switch to whiteboard annotation mode

	Undo the last annotation
	Redo the last undo
	Freeze/continue video action
	Select a white or black background or one of 4 patterns
	Zoom into and out of image
	Repeat calibration
	Change custom pen color and width
	Write or draw free-form lines with custom pen
	Change highlighter pen color
	Write or draw free-form lines with transparent highlighter pen
	Black pen (fine point on left, thick on right)
	Red pen (fine point on left, thick on right)
	Blue pen (fine point on left, thick on right)
	Eraser (thin width on left, thick on right)
	Clear all annotations

	Hide the toolbar after each annotation
	Close the toolbar

Parent topic: Using BrightLink Without a Computer

Zooming Images Using the Built-in Toolbar

You can use the pen to zoom in and scroll around your enlarged desktop or image, then zoom out when you are done.

Note: Annotations are unaffected by zooming and will remain the same size.

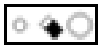
1. Select the  E-zoom tool, then tap the image where you want to zoom in.
   You see a target on the image, which you can move if necessary.
2. Select the  E-zoom tool again to increase the magnification, up to 24 times.
3. Do one of the following to adjust the image if necessary:
   - Drag the pen to scroll around the image.
   - Select the  icon reduce the image.
   - Select the  icon to return to the original size.
4. When you are done, select the  icon to exit the E-zoom function.

Parent topic: Using BrightLink Without a Computer

Using the Built-in Whiteboard Annotation Mode

In whiteboard annotation mode, you can project a solid or patterned background, and then write or draw on it as you would on a chalkboard or dry erase board.

1. Select the  Whiteboard tool on the built-in toolbar.
   You see a white background.

2. If you want to change the background, do the following:
   - Select the  Background tool.
   - Select a black background or one of 4 different patterns.
   - Select the right arrow icon to close the selection window.
3. Do one of the following to write or draw on the background.
   - To erase, select the  Eraser tool.
   - To clear the whole screen, select the  Clear all tool.

Parent topic: Using BrightLink Without a Computer

Changing Pen Width and Color Using the Built-in Toolbar

When you use the  custom Pen, you can select from 8 colors and 5 line widths. For the  Highlighter, you can select from 2 colors.

Note: You can also select the Black, Red, or Blue pen on the toolbar, and select the small circle on the left of the pen for a thin line, or the large circle on the right for a thick line.

1. Select the  arrow next to the  custom Pen or  Highlighter pen on the toolbar.
2. Select the color and line width you want.
3. Select the right arrow icon to close the selection window.

Parent topic: Using BrightLink Without a Computer

Adjusting the Menu Settings

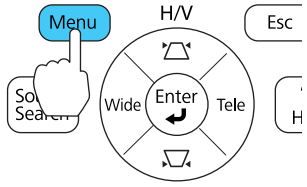
Follow the instructions in these sections to access the projector menu system and change projector settings.

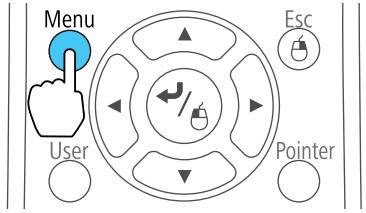
Using the Projector's Menus
Image Quality Settings - Image Menu
Input Signal Settings - Signal Menu
Projector Feature Settings - Settings Menu
Projector Setup Settings - Extended Menu
Projector Network Settings - Network Menu
Projector Information Display - Info Menu
Projector Reset Options - Reset Menu

Using the Projector's Menus

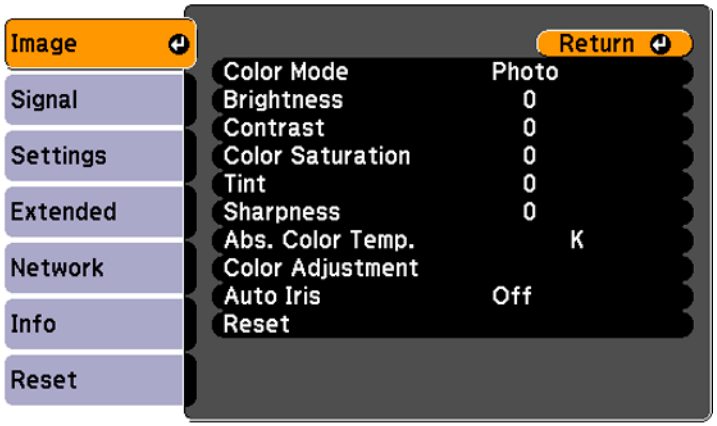
You can use the projector's menus to adjust the settings that control how your projector works. The projector displays the menus on the screen.

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





You see the menu screen displaying the Image menu settings.



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

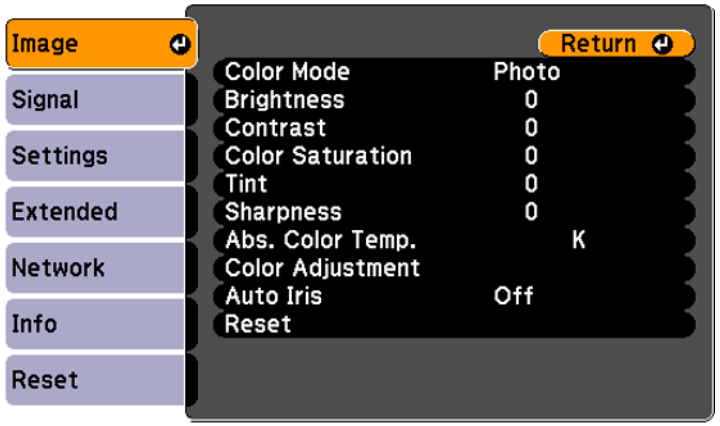
   Note: The available settings depend on the current input source.

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

Parent topic: Adjusting the Menu Settings

Image Quality Settings - Image Menu

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



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

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

Setting	Options	Description
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.

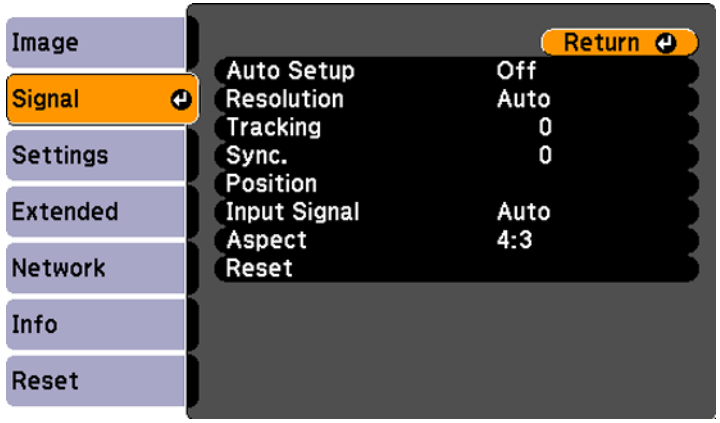
Parent topic: Adjusting the Menu Settings

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 **Auto** option
Tracking	Varying levels available	Adjusts signal to eliminate vertical stripes in computer images
Sync.	Varying levels available	Adjusts signal to eliminate fuzziness or flickering in computer images
Position	Up, down, left, right	Adjusts the image location on the screen
Progressive	**Off** **Video** **Film/Auto**	Sets whether to convert interlaced-to-progressive signals for certain video image types **Off**: for fast-moving video images **Video**: for most video images **Film/Auto**: for movies, computer graphics, and animation
Noise Reduction	**Off** **NR1** **NR2**	Reduces flickering in analog images in two levels

Setting	Options	Description
HDMI Video Range	**Normal** **Expanded** **Auto**	Sets the video range to match the setting of the device connected to the HDMI input port **Auto**: detects the video range automatically **Expanded**: normally for images from a computer; can also be selected if the image is too dark **Normal**: normally for images from a device other than a computer; can also be selected if the black areas of the image are too bright
Input Signal	**Auto** **RGB** **Component**	Specifies the signal type from input sources connected to computer ports **Auto**: detects signals automatically **RGB**: corrects color for computer/RGB video inputs **Component**: corrects color for component video inputs
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

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

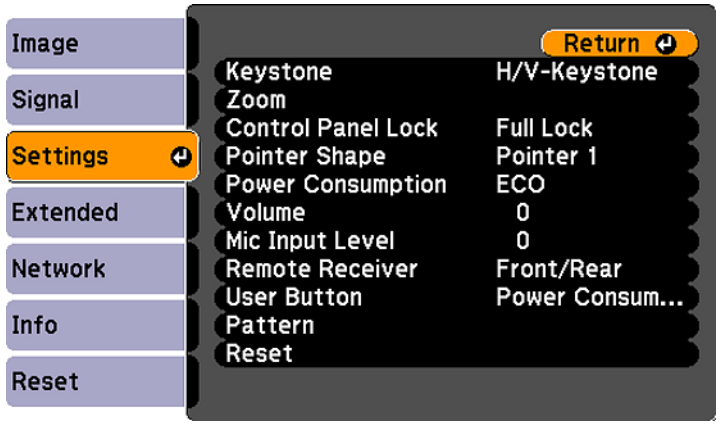
Parent topic: Adjusting the Menu Settings

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
Zoom	Varying levels available	Adjusts the size of the projected image
Control Panel Lock	**Full Lock** **Partial Lock** **Off**	Controls projector button locking to secure the projector **Full Lock**: locks all buttons **Partial Lock**: locks all buttons except the power button **Off**: no buttons locked
Pointer Shape	Three shapes available	Changes the shape of the remote control pointer feature
Power Consumption	**Normal** **ECO**	Selects the brightness mode of the projector lamp **Normal**: sets maximum lamp brightness **ECO**: reduces lamp brightness and fan noise, and saves power and lamp life
Volume	Varying levels available	Adjusts the volume of projector's speaker system or external speakers
Mic Input Level	Varying levels available	Adjusts the volume of the projector's speaker system when you use a connected microphone

Setting	Options	Description
Remote Receiver	**Front** **Rear** **Front/Rear** **Off**	Limits reception of remote control signals by the selected receiver; **Off** turns off all receivers
User Button	**Power Consumption** **Info** **Progressive** **Closed Caption** **Test Pattern** **Resolution** **Mic Input Level** **Pattern Display** **Auto Calibration**	Assigns a menu option to the **User** button on the remote control for one-touch access
Pattern	**Pattern Display** **Pattern Type** **User Pattern** **Test Pattern**	Selects various pattern display options **Pattern Display**: lets you display the selected pattern type on the screen to aid in presentation **Pattern Type**: selects the type of grid or line pattern to display **User Pattern**: captures a projected screen and saves it as a pattern for display **Test Pattern**: displays a test pattern to assist in focusing and zooming the image and correcting image shape

Parent topic: Adjusting the Menu Settings

Related references

Solutions When the Image is Not Rectangular

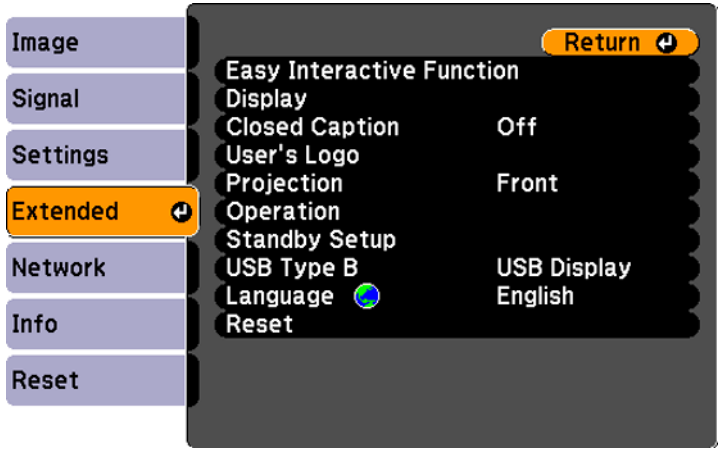
Related tasks

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
Easy Interactive Function	**Auto Calibration** **Manual Calibration** **Pen Mode** **Hovering** **Distance of Projectors** **Number of Pen Users** **Pen Operation Mode** **Enable Right Click** **Advanced**	The **Auto Calibration** and **Manual Calibration** options start calibration **Pen Mode**: selects **PC Free Annotation** or **PC Interactive** **Hovering**: lets you turn off this feature **Distance of Projectors**: adjusts pen operation when using multiple projectors in the same room. If pen operations are unstable, try changing modes. **Number of Pen Users**: selects **One User** (for compatibility with Windows Tablet PC and Ink features) or **Two Users** **Pen Operation Mode**: selects **Mouse** or **Pen** mode when one pen user is selected **Enable Right Click**: lets you use a long pen press as a right click when mouse mode is selected **Advanced**: lets you assign **Right Click** or **Left Click** to the **Pen Tip Button** and select either **Auto Adjust Pen Area** or **Manual Adj. Pen Area**

Setting	Options	Description
Display	**Messages** **Display Background** **Startup Screen** **A/V Mute** **Pen Toolbar Tab** **Pen Mode Icon**	Selects various display options **Messages**: controls whether messages are displayed on the screen **Display Background**: selects the screen color or logo to display when no signal is received **Startup Screen**: controls whether a special screen appears when the projector starts up **A/V Mute**: selects the screen color or logo to display when A/V Mute is turned on **Pen Toolbar Tab**: controls whether the tab is always displayed in annotation mode **Pen Mode Icon**: controls the display and position of the pen icon in interactive computer mode
Closed Caption	**Off** **CC1** **CC2**	Controls use of closed captions and selects the closed caption type (closed captions are only visible for NTSC signals connected through the **S-Video** or **Video** ports)
User's Logo	–	Creates a screen that the projector displays to identify itself and enhance security

Setting	Options	Description
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** **High Altitude Mode** **Audio Input**	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 **High Altitude Mode**: regulates the projector's operating temperature at altitudes above 4921 feet (1500 m) **Audio Input**: regulates audio for the projected image

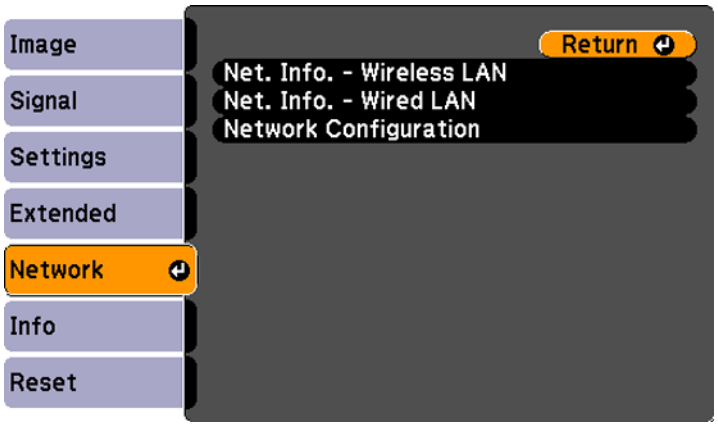
Setting	Options	Description
Standby Setup	**Standby Mode** **Standby Microphone** **Standby Audio**	Selects the following when the projector is in standby mode (turned off): **Standby Mode**: **Energy Saving** saves power by turning off Standby Mode features, **Networked Standby** lets you monitor the projector over a network, **A/V Standby** lets you output audio to an external speaker, change the volume over the network, and output computer signals on an external monitor **Standby Microphone**: the **On** setting lets you output audio from a connected microphone **Standby Audio**: the **On** setting lets you output audio from a connected source

Setting	Options	Description
USB Type B	**Easy Interactive Function** **USB Display/Easy Interactive Function** **Wireless Mouse/USB Display**	Selects what happens when you connect your computer to the projector's USB **TypeB** port **Easy Interactive Function**: lets you use the interactive pens with your computer **USB Display/Easy Interactive Function**: lets you display your computer's image through the USB port and use the interactive pens with your computer **Wireless Mouse/USB Display**: lets you use the wireless mouse feature and display your computer's image through the USB port (interactivity not available)
Language	Various languages available	Selects the language for projector menu and message displays (not changed by **Reset** option)

Parent topic: Adjusting the Menu Settings

Projector Network Settings - Network Menu

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



Setting	Options	Description
Net. Info - Wireless LAN	**Connection mode** **Antenna level** **Projector Name** **SSID** **DHCP** **IP Address** **Subnet Mask** **Gateway Address** **MAC Address** **Region Code**	Displays wireless network status and details
Net. Info - Wired LAN	**Projector Name** **DHCP** **IP Address** **Subnet Mask** **Gateway Address** **MAC Address**	Displays wired network status and details

Setting	Options	Description
Network Configuration	Accesses additional network menus	Configures your network settings

Parent topic: Adjusting the Menu Settings

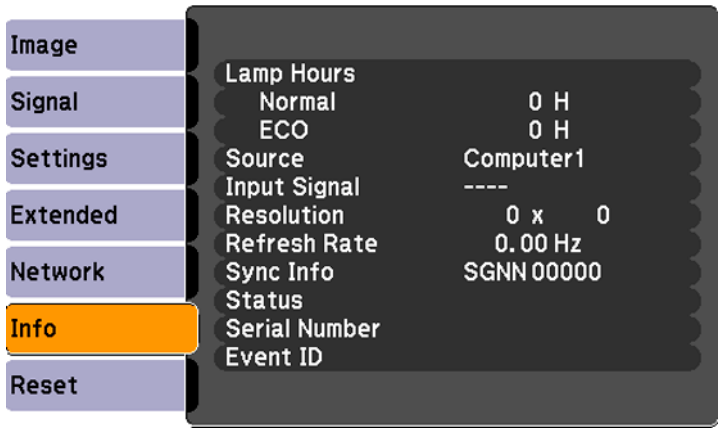
Related concepts

Wired Network Projection

Wireless Network Projection

Projector Information Display - Info Menu

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



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

Information item	Description
Lamp Hours	Displays the number of hours (**H**) the lamp has been used in **Normal** and **ECO** Power Consumption modes; if the information is displayed in yellow, obtain a genuine Epson replacement lamp soon

Information item	Description
Source	Displays the name of the port to which the current input source is connected
Input Signal	Displays the input signal setting of the current input source
Resolution	Displays the resolution of the current input source
Video Signal	Displays the video signal format of the current input source
Refresh Rate	Displays the refresh rate of the current input source
Sync Info	Displays information that may be needed by a service technician
Status	Displays information about projector problems that may be needed by a service technician
Serial Number	Displays the projector's serial number
Event ID	Displays the Event ID number corresponding to a specific projector problem; see the list of Event ID codes

Event ID Code List

Parent topic: Adjusting the Menu Settings

Related concepts

Projector Lamp Maintenance

Related references

Optional Equipment and Replacement Parts
Projector Lamp Specifications

Event ID Code List

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

Event ID code	Cause and solution
0432	The EasyMP Network Projection program did not start. Turn the projector off and then on again.
0435	

Event ID code	Cause and solution
0434	Unstable network communication. Check the network communication status, wait a few moments, and try connecting to the network again.
0482	
0484	
0485	
0433	Cannot display the transferred images. Restart the EasyMP Network Projection program.
0481	Communication with computer was disconnected. Restart the EasyMP Network Projection program.
0483	The EasyMP Network Projection program quit unexpectedly. Check the network communication status, then turn the projector off and then on again.
04FE	
0479	A projector system error has occurred. Turn the projector off and then on again.
04FF	
0891	Cannot find an access point with the same SSID. Set your computer, access point, and projector to the same SSID.
0892	The WPA/WPA2 authentication type does not match. Make sure the wireless network security settings are correct.
0893	The WEP/TKIP/AES encryption type does not match. Make sure the wireless network security settings are correct.
0894	Communication with unauthorized access point was disconnected. Contact your network administrator.
0898	Failed to acquire DHCP address. Make sure the DHCP server is operating correctly. If you are not using DHCP, turn off the **DHCP** setting in the Network menus.
0899	A communication error has occurred. Try restarting the EasyMP Network Projection program and restarting your projector. If that does not solve the problem, contact Epson for help.

Parent topic: Projector Information Display - Info Menu

Projector Reset Options - Reset Menu

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

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



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

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

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 Cover Glass
Cleaning the Projector Case
Air Filter and Vent Maintenance
Projector Lamp Maintenance
Replacing the Remote Control Batteries
Replacing the Pen Batteries
Replacing the Pen Tips

Parent topic: Maintaining and Transporting the Projector

Cleaning the Lens Cover Glass

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

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

- To remove stubborn smudges, moisten a soft, lint-free cloth with lens cleaner and gently wipe the lens cover glass.

  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 used canned air, or the gases may leave a residue.

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 residue.

Parent topic: Projector Maintenance

Air Filter and Vent Maintenance

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

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

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

Cleaning the Air Filter and Vents

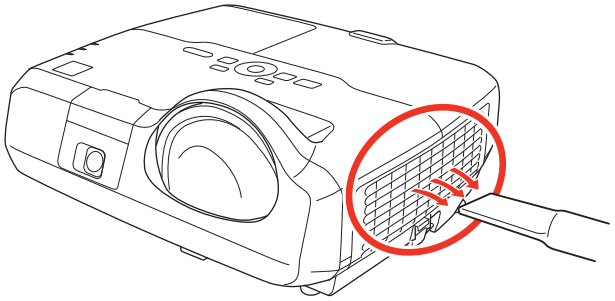
Replacing the Air Filter

Parent topic: Projector Maintenance

Cleaning the Air Filter and Vents

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

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



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

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

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

Parent topic: Air Filter and Vent Maintenance

Replacing the Air Filter

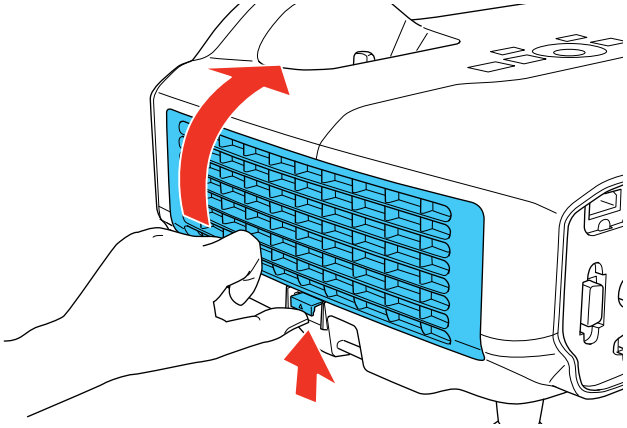
You need to replace the air filter in the following situations:

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

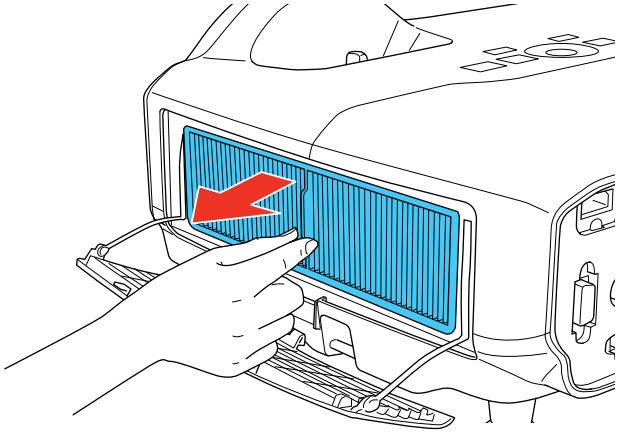
You can replace the air filter while the projector is mounted to the ceiling, if necessary. The illustrations here show the projector placed on a table.

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

2. Lift the tab on the air filter cover and open the cover.

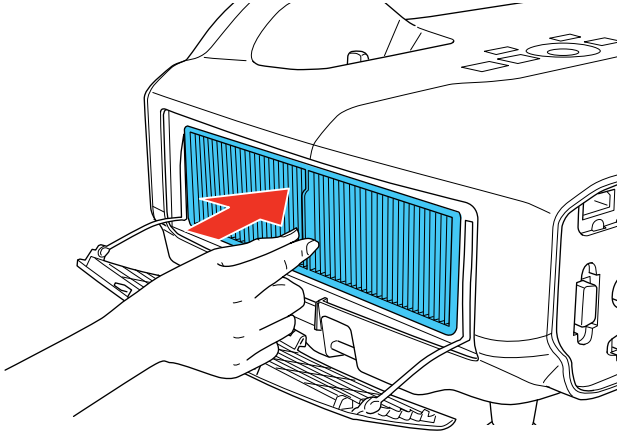


3. Pull the air filter out of the projector.

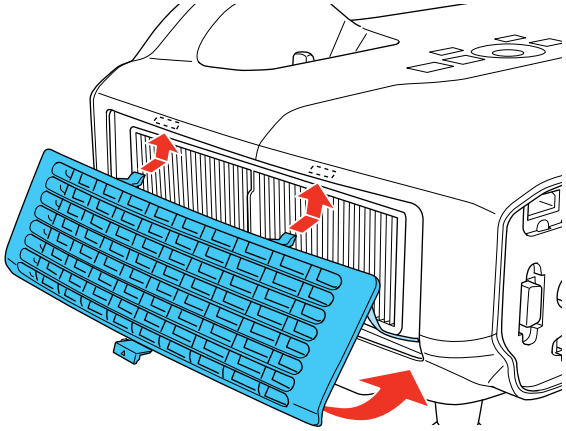


Note: Air filters contain polypropylene. Dispose of used air filters according to local regulations.

4. Place the new air filter in the projector as shown.



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

Optional Equipment and Replacement Parts
Projector Lamp Specifications
Projector Information Display - Info Menu

Replacing the Lamp

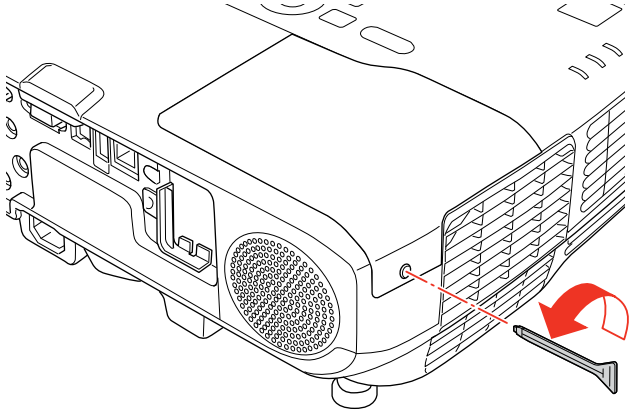
Before you replace the lamp, let the projector cool down for at least one hour so the lamp will not be hot.

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

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

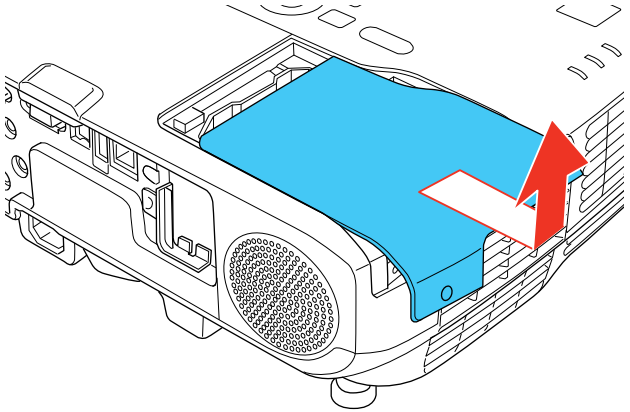
1. Turn off the projector and unplug the power cord.
2. Allow the projector lamp to cool down for at least one hour.

3. Use the screwdriver included with the replacement lamp to loosen the screw securing the lamp cover.

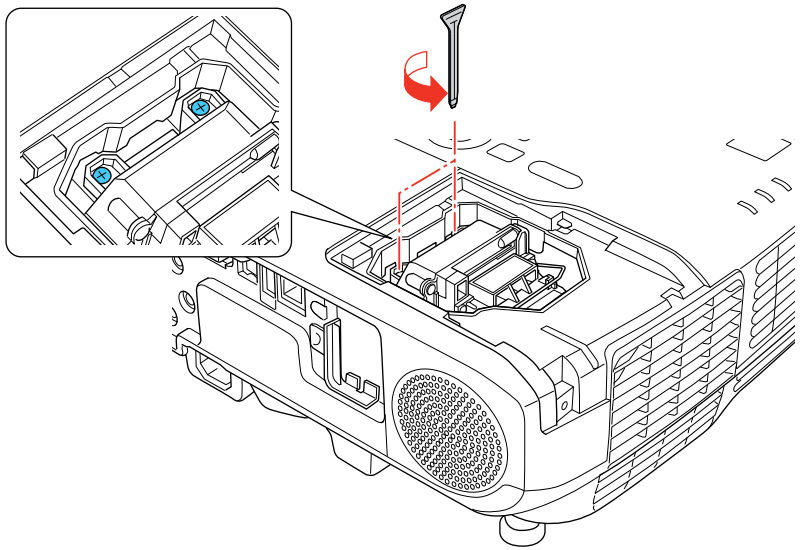


Warning: If the lamp is broken, glass fragments may be loose inside the lamp chamber. Be careful removing any broken glass to avoid injury.

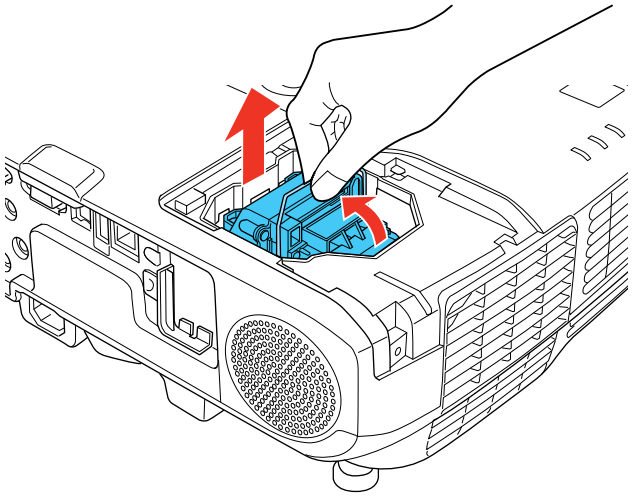
4. Slide the lamp cover out and lift it off.



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

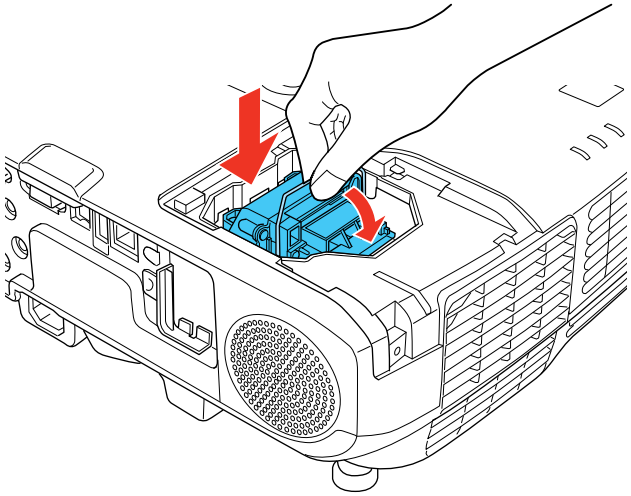


6. Lift up the lamp handle and gently pull the lamp out of the projector.



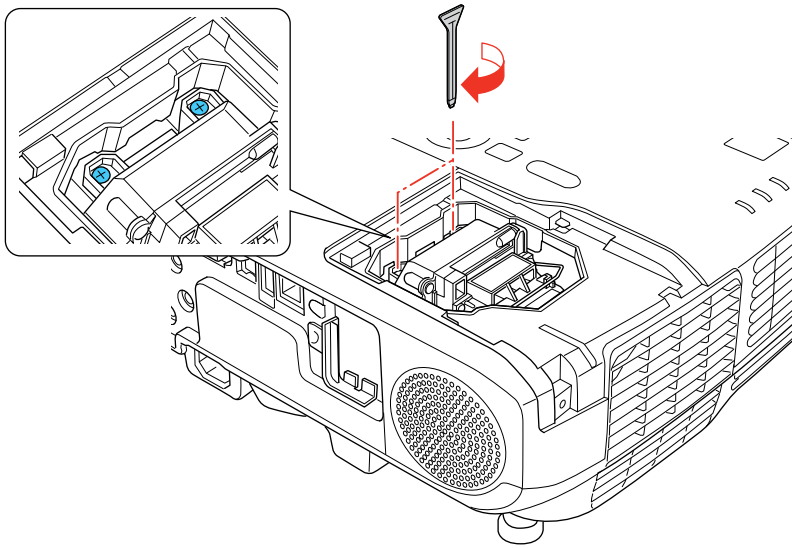
Note: Hg The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.

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

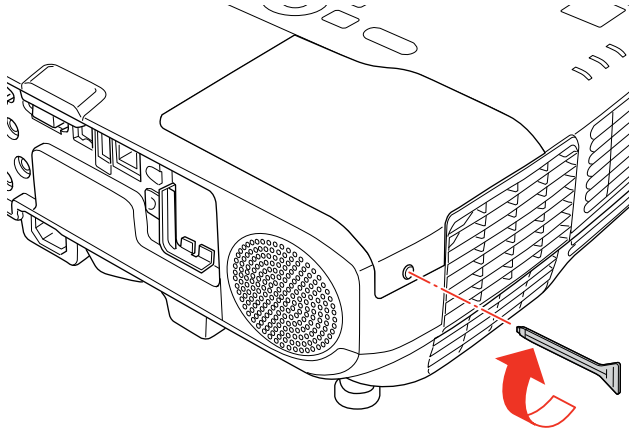


Caution: Do not touch any glass on the lamp assembly to avoid premature lamp failure.

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



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



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

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

Parent topic: Projector Lamp Maintenance

Related tasks

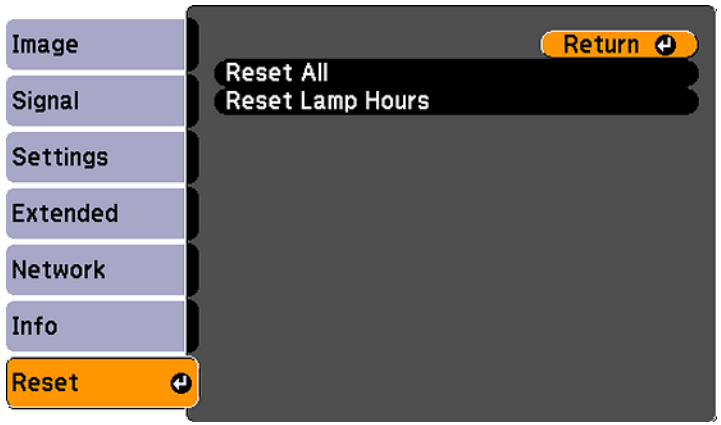
Resetting the Lamp Timer

Resetting the Lamp Timer

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

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

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



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

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

Parent topic: Projector Lamp Maintenance

Related tasks

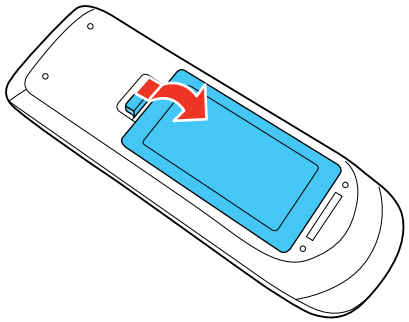
Replacing the Lamp

Replacing the Remote Control Batteries

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

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

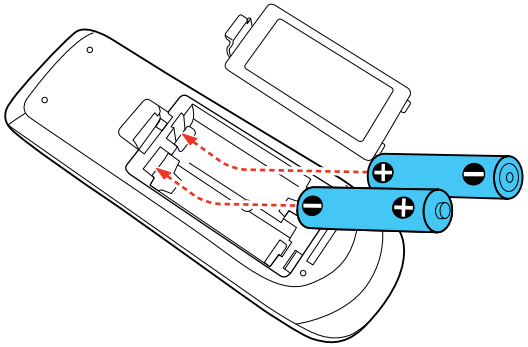
1. Open the battery cover as shown.



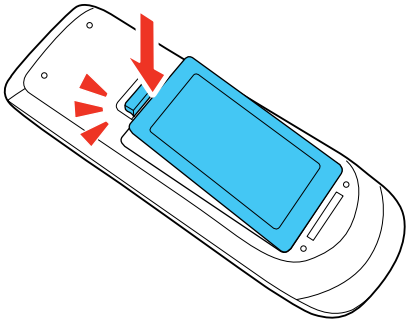
2. Remove the old batteries.

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

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



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



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

Parent topic: Projector Maintenance

Related references

Remote Control Operation

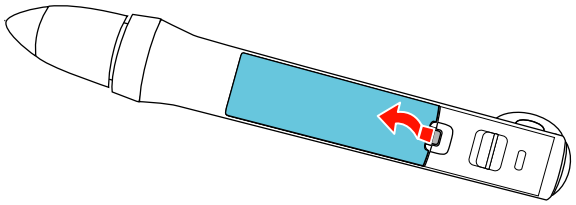
Replacing the Pen Batteries

Each pen uses one AA alkaline or Sanyo Eneloop rechargeable battery. Replace the battery as soon as it runs out.

When the battery is low, the pen light flashes as you turn on the switch. When the battery runs out, the pen light goes out.

Caution: Use only the type of batteries specified in this manual.

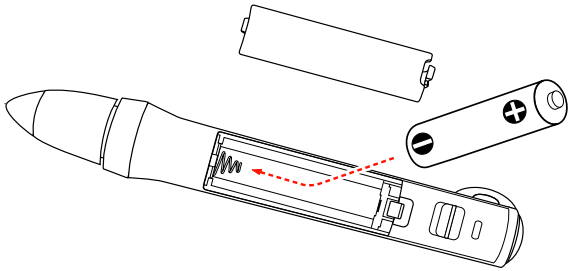
1. Open the battery cover as shown.



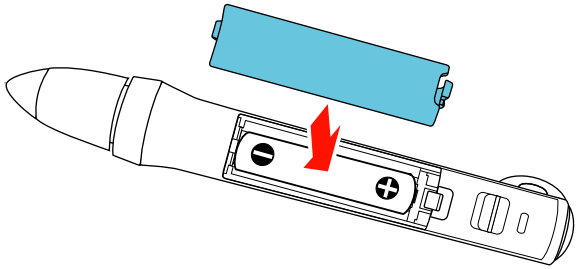
2. Remove the old battery.

   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 battery with the **+** and **–** ends facing as shown.



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



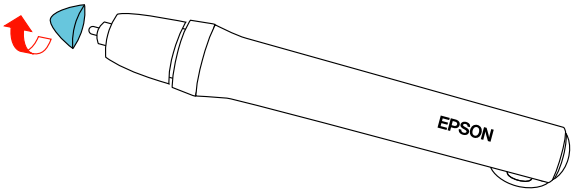
Warning: Dispose of used batteries according to local regulations. Do not expose batteries to heat or flame. Keep batteries out of the reach of children; they are choking hazards and are very dangerous if swallowed.

Parent topic: Projector Maintenance

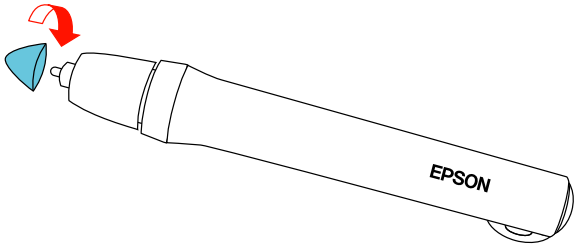
Replacing the Pen Tips

If the pen tips become damaged or no longer work correctly, you can replace them.

1. Twist off the tip of the pen to remove it.



2. Twist on the new tip.



Parent topic: Projector Maintenance

Transporting the Projector

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

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

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

Parent topic: Maintaining and Transporting the Projector

Solving Problems

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

Projection Problem Tips
Projector Light Status
Using the Projector Help Displays
Solving Image or Sound Problems
Solving Projector or Remote Control Operation Problems
Solving Interactive Problems
Solving Network Problems
Where to Get Help

Projection Problem Tips

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

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

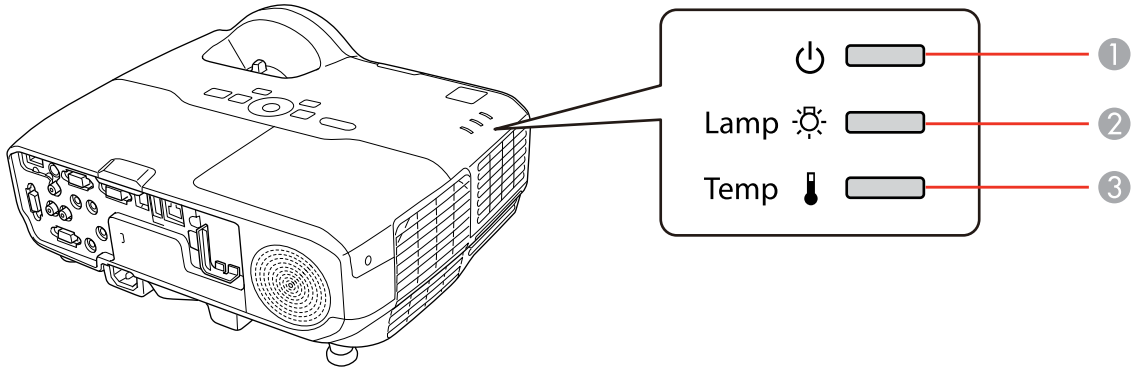
- The lights on the projector may indicate what the problem is.
- The projector's Help system can display information about common problems, if the projector is operating.
- The solutions in this manual can help you solve many problems.

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

Parent topic: Solving Problems

Projector Light Status

The lights on the projector's control panel 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 Temperature light

Power light	Lamp light	Temperature light	Status and solution
Green	Off	Off	Normal operation.
Flashing green	Off	Off	Warming up. Wait for an image to appear.
Orange	Off	Off	Standby or sleep mode.
Flashing orange	Off	Off	Preparing network monitoring or shutting down. (Wait for the light to remain orange before unplugging the projector.)
Flashing red	Off	Flashing orange	Projector is too hot. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • Make sure the environmental temperature is not too hot.

Power light	Lamp light	Temperature light	Status and solution
Red	Off	Red	Projector has overheated and turned off. Leave it turned off to cool down for five minutes. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • If operating the projector at high altitude, turn on **High Altitude Mode**. • If the problem persists, unplug the projector and contact Epson for help.
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. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • If operating the projector at high altitude, turn on **High Altitude Mode**. • If the problem persists, unplug the projector and contact Epson for help.
On	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**.

Note: You can also display image adjustment recommendations by pressing the **Help** button on the projector or remote control, then pressing the left arrow button.

Parent topic: Solving Problems

Solving Image or Sound Problems

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

Solutions When No Image Appears

Solutions When Image is Incorrect Using the USB Display Function

Solutions When "No Signal" Message Appears

Solutions When "Not Supported" Message Appears

Solutions When Only a Partial Image Appears

Solutions When the Image is Not Rectangular

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

Parent topic: Solving Image or Sound Problems

Related references

Projector Setup Settings - Extended Menu
Image Quality Settings - Image Menu
Input Signal Settings - Signal 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.
- Make sure the **USB Type B** setting in the Extended menu is set to one of the **USB Display** options.
- 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** button and wait a few seconds for an image to appear.
- Turn on the connected computer or video source, and press its play button to begin your presentation, if necessary.
- Check the connection from the projector to your video sources.
- If you are projecting from a laptop computer, make sure it is set up to display on an external monitor.
- If necessary, turn the projector and the connected computer or video source off and then on again.

Displaying From a PC Laptop

Displaying From a Mac Laptop

Parent topic: Solving Image or Sound Problems

Displaying From a PC Laptop

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

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

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 **VGA 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 twice to return 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:

- If the projector is not mounted on the wall or ceiling, place it 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.
- Adjust the **Quick Corner** or **Keystone** 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
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
- 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 that is compatible with the projector.
- If you are projecting from a computer, press the **Auto** button on the remote control to automatically adjust the **Tracking** and **Sync** settings.
- If you adjusted the image shape using the projector controls, try decreasing the **Sharpness** setting to improve image quality.
- If you connected an extension power cable, try projecting without it to see if it caused interference in the signal.

Parent topic: Solving Image or Sound Problems

Related references

Input Signal Settings - Signal Menu
Supported Video Display Formats

Related tasks

Displaying From a PC Laptop
Displaying From a Mac Laptop

Solutions When the Image is Fuzzy or Blurry

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

- Adjust the image focus.
- Clean the projector lens.
- Check the projector lens cover glass for condensation.

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, and directly in front of it.
- Position the projector so the keystone adjustment angle is not so wide that it distorts the image.
- Adjust the **Sharpness** setting to improve image quality.
- If you are projecting from a computer, press the **Auto** button on the remote control to automatically adjust the tracking and sync. If any bands or overall blurriness remain, display a uniformly patterned image on the screen and manually adjust the **Tracking** and **Sync** settings.
- If you are projecting from a computer, use a lower resolution.

Parent topic: Solving Image or Sound Problems

Related references

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

Related tasks

Focusing the Image Using the Focus Ring
Cleaning the Lens Cover Glass

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.
- 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 Settings menu.
- If the image has been progressively darkening, you may need to replace the projector lamp soon.

Parent topic: Solving Image or Sound Problems

Related concepts

Projector Lamp Maintenance

Related references

Input Signal Settings - Signal Menu

Image Quality Settings - Image Menu

Projector Feature Settings - Settings Menu

Solutions to Sound Problems

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

- Adjust the projector's volume settings.
- Press the **A/V Mute** button on the remote control to resume video and audio if they were temporarily stopped.
- Press the **Source Search** 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 **A/V Standby**.

Parent topic: Solving Image or Sound Problems

Solutions to Microphone Problems

If there is no sound when you use a microphone connected to the projector, try the following solutions:

- Make sure the microphone is securely connected to the projector.
- Make sure you are using a dynamic microphone, not a condenser microphone.
- Adjust the **Mic Input Level** setting as necessary in the projector's menus.

- If you want to use the microphone when the projector is off, set the **Standby Mode** option to **A/V Standby** and turn on the **Standby Microphone** option.

Parent topic: Solving Image or Sound Problems

Related references

Projector Feature Settings - Settings Menu

Projector Setup Settings - Extended Menu

Related tasks

Connecting a Microphone

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

Projector Feature Settings - Settings Menu

Projector Light Status

Related tasks

Unlocking the Projector's Buttons

Solutions to Problems with the Remote Control

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

- Check that the remote control batteries are installed correctly and have power. If necessary, replace the batteries.
- Make sure you are operating the remote control within the reception angle and range of the projector.
- Make sure the projector is not warming up or shutting down.
- Check to see if a button on the remote control is stuck down, causing it to enter sleep mode. Release the button to wake the remote control up.
- Strong fluorescent lighting, direct sunlight, or infrared device signals may be interfering with the projector's remote receivers. Dim the lights or move the projector away from the sun or interfering equipment.
- If available, turn off one of the remote receivers in the projector's menu system, or check if all the remote receivers were turned off.
- If you assigned an ID number to the remote control to operate multiple projectors, you may need to check or change the ID setting (feature not available with all projectors).
- If you lose the remote control, you can order another one from Epson.

Parent topic: Solving Projector or Remote Control Operation Problems

Related references

Projector Feature Settings - Settings Menu

Optional Equipment and Replacement Parts

Remote Control Operation

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

Solving Interactive Problems

Check the solutions in these sections if you have problems using the interactive system.

Solutions When "Hardware Device Not Found" Message Appears
Solutions When "Error Occurred in the Easy Interactive Function" Message Appears
Solutions When the Interactive Pens Do Not Work
Solutions When Manual Calibration is Difficult
Solutions When the Built-In Toolbar (PC Free Annotation) Does Not Work
Solutions When the Interactive Pen Position Is Not Accurate
Solutions When the Interactive Pens Are Slow or Difficult to Use
Solutions When the Interactive Pens Cause Interference or Unwanted Effects

Parent topic: Solving Problems

Solutions When "Hardware Device Not Found" Message Appears

If the "Hardware device not found" message appears, try the following solutions:

- Check the USB cable connection from the projector to your computer. Try disconnecting and then reconnecting the cable.
- If you are projecting from a laptop computer, make sure the battery has enough power, or connect the laptop to a power outlet.
- If your USB cable is installed in the wall, try connecting a different USB cable to the projector and your computer.

Parent topic: Solving Interactive Problems

Solutions When "Error Occurred in the Easy Interactive Function" Message Appears

If the "Error occurred in the Easy Interactive Function" message appears, contact Epson for help.

Parent topic: Solving Interactive Problems

Related references

Where to Get Help

Solutions When the Interactive Pens Do Not Work

If the pens do not work, try the following solutions:

- The pens turn off automatically if you forget to turn them off. Slide the switch to turn the pen back on.
- Make sure you are not covering the black section near the tip of the pen.
- Make sure nothing is blocking the signal between the pen and the interactive pen receiver on the projector.
- Try holding the pen at a different angle so that your hand is not blocking the signal.
- Make sure the pen battery has enough power. Try replacing the battery.
- If you are projecting from a computer, make sure the USB cable is connected to the computer and projector.
- Dim the room lights and turn off any fluorescent lights. Make sure the projection surface and pen receiver are not in direct sunlight or other sources of bright lighting.
- Do not place any type of decorative lights around the projector or projection surface.
- If the pen tip is worn out or damaged, you may need to replace it.
- Make sure the pen receiver on the projector is clean and free from dust.
- Make sure there is no interference from infrared remote controls, mice, or infrared microphones.
- Make sure the **USB Type B** option on the Extended menu is set to **Easy Interactive Function** or **USB Display/Easy Interactive Function**.
- Make sure you have calibrated the system. Try recalibrating.

Parent topic: Solving Interactive Problems

Related tasks

Replacing the Pen Batteries
Installing Easy Interactive Tools
Calibrating Automatically
Calibrating Manually
Using the Pens
Replacing the Pen Tips

Solutions When Manual Calibration is Difficult

If you are having trouble calibrating manually, try the following solutions:

- If the circle does not move to the next position, or it moves automatically, dim or turn off any bright lights near the projection surface.
- Make sure the projector is not too close to the projection surface.

Parent topic: Solving Interactive Problems

Related tasks

Calibrating Automatically

Solutions When the Built-In Toolbar (PC Free Annotation) Does Not Work

If you cannot use the pen without a computer, try the following solutions:

- Make sure the **USB Type B** option on the Extended menu is set to **Easy Interactive Function** or **USB Display/Easy Interactive Function**.
- Press one of the Source buttons on the remote control to select the source for the image you want to annotate. To use a blank screen, select **Computer2** or another unused source
- Make sure you have calibrated the system. Try recalibrating.
- Press the **Pen Mode** button on the remote control to toggle between **PC Interactive** and **PC Free Annotation**.

Parent topic: Solving Interactive Problems

Solutions When the Interactive Pen Position Is Not Accurate

If the pen position is not the same as the cursor, try the following solutions:

- Make sure you have calibrated the system. Try manual calibration.
- Try adjusting the pen operation area.
- If you use the **E-Zoom +** button on the remote control to enlarge the image, the pen position is not accurate. When you return the image to the original size, the position should be correct.
- In PC Interactive mode (in the Extended menu), turn off **Auto Adjust Pen Area** and select **Manual Adj. Pen Area**.
- Try changing the computer's resolution to 1280 × 800 and select **Maintain Display Scaling**, if available.

Parent topic: Solving Interactive Problems

Related tasks

Calibrating Automatically

Calibrating Manually

Solutions When the Interactive Pens Are Slow or Difficult to Use

If the pens are difficult to use or respond too slowly, try the following solutions:

- For easier operation, hold the pen perpendicular to the projection surface.
- For the best performance, connect your computer to the projector using a VGA or HDMI cable for display and the USB cable for interactivity.
- If you are using USB display in Windows, you may need to disable Windows Aero in the Epson USB Display Settings program on your computer.
- If you are projecting over a network, refer to the *EasyMP Network Projection Operation Guide* for performance adjustment instructions.

Parent topic: Solving Interactive Problems

Related tasks

Connecting to a Computer for VGA Video

Connecting to a Computer for HDMI Video and Audio

Calibrating Automatically

Calibrating Manually

Solutions When the Interactive Pens Cause Interference or Unwanted Effects

If the pens are causing interference or unwanted effects, try the following solutions:

- When both pens are used at the same time, make sure they are approximately 4 inches (10.16 cm) apart.
- Turn off the pens when they are not in use.
- Do not rest the pens on the image area of an interactive table, to avoid interference with your computer's mouse.
- Try changing the **Number of Pen Users** setting from **One User** to **Two Users**.
- Do not press on the pen tips when away from the board; accidentally pressing on the pen tips may cause the pens to write on the interactive surface.
- Make sure that nothing is blocking the direct line to the infrared site.

Parent topic: Solving Interactive Problems

Solving Network Problems

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

Solutions When Network Alert E-Mails are Not Received

Parent topic: Solving Problems

Solutions When Network Alert E-Mails are Not Received

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

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

Parent topic: Solving Network Problems

Related concepts

Wired Network Projection

Wireless Network Projection

Related references

Projector Setup Settings - Extended Menu

Projector Network Settings - Network Menu

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 www.epson.com/support (U.S.) or www.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 www.epsonstore.com (U.S. sales) or www.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
Interactive Pen 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	**BrightLink 436Wi**:
	1280 × 800 pixels (WXGA)
	BrightLink 421i:
	1024 × 768 pixels (XGA)
Lens	F=1.80
	Focal length: 6.48 mm
Color reproduction	Full color, 16.77 million colors

Brightness	**BrightLink 436Wi**: Normal Power Consumption mode: White light output 3000 lumens (ISO 21118 standard) Color light output 3000 lumens ECO Power Consumption mode: White light output 2100 lumens (ISO 21118 standard) **BrightLink 421i**: Normal Power Consumption mode: White light output 2500 lumens (ISO 21118 standard) Color light output 2500 lumens ECO Power Consumption mode: White light output 2000 lumens (ISO 21118 standard)
Contrast ratio	3000:1 with Auto Iris on and Normal Power Consumption mode
Image size	**BrightLink 436Wi**: WXGA: 53 to 116 inches (1.34 to 2.94 m) with wall mount: 68 to 113 inches (1.73 to 2.87 m) **BrightLink 421i**: XGA: 50 to 108 inches (1.27 to 2.74 m) with wall mount: 63 to 106 inches (1.60 to 2.69 m)
Projection distance	21 to 48 inches (0.54 to 1.22 m)
Projection methods	Front, rear, wall, or ceiling-mounted
Optical aspect ratio (width-to-height)	**BrightLink 436Wi**: 16:10 **BrightLink 421i**: 4:3
Focus adjustment	Manual
Zoom adjustment	Digital

Zoom ratio (Tele-to-Wide)	1:1.35
Internal sound system	16 W monaural
Noise level	**BrightLink 436Wi**: 37 dB (Normal Power Consumption mode) 29 dB (ECO Power Consumption mode) **BrightLink 421i**: 35 dB (Normal Power Consumption mode) 28 dB (ECO Power Consumption mode)
Keystone correction angle	Vertical: ± 7º Horizontal: ± 5º
USB Type B port compatibility	USB 1.1 and 2.0 compliant for USB Display or external mouse
USB Type A port compatibility	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	**BrightLink 436Wi**: 230 W **BrightLink 421i**: 200 W

Lamp life	**BrightLink 436Wi**: Normal Power Consumption mode: Up to about 4000 hours ECO Power Consumption mode: Up to about 6000 hours **BrightLink 421i**: Normal Power Consumption mode: Up to about 5000 hours ECO Power Consumption mode: Up to about 6000 hours

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

Parent topic: Technical Specifications

Interactive Pen Specifications

Current consumption	57 mA
Power supply voltage	5 V DC
Batteries	One AA alkaline
Size	6.49 inches (165 mm) long; diameter 0.98 inches (25 mm)
Weight	1.12 oz (32 g)

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)	4.13 inches (105 mm)
Width	13.6 inches (345 mm)
Depth	11.8 inches (300 mm)
Weight	**BrightLink 436Wi**: 9 lb (4.1 kg) **BrightLink 421i**: 8.7 lb (3.9 kg)

Parent topic: Technical Specifications

Projector Electrical Specifications

Rated frequency	50/60 Hz
Power supply	100 to 240 VAC ±10% **BrightLink 436Wi**: 3.5 to 1.6 A **BrightLink 421i**: 3.1 to 1.4 A

Power consumption (100 to 120 V)	Operating: **BrightLink 436Wi**: Normal Power Consumption mode: 344 W ECO Power Consumption mode: 254 W **BrightLink 421i**: Normal Power Consumption mode: 303 W ECO Power Consumption mode: 253 W Standby: **BrightLink 436Wi**: 0.28 W (Communication Off), 6.8 W (Communication On) **BrightLink 421i**: 0.29 W (Communication Off), 6.2 W (Communication On)
Power consumption (200 to 240 V)	Operating: **BrightLink 436Wi**: Normal Power Consumption mode: 327 W ECO Power Consumption mode: 244 W **BrightLink 421i**: Normal Power Consumption mode: 292 W ECO Power Consumption mode: 246 W Standby: **BrightLink 436Wi**: 0.37 W (Communication Off), 7.3 W (Communication On) **BrightLink 421i**: 0.39 W (Communication Off), 6.8 W (Communication On)

Parent topic: Technical Specifications

Projector Environmental Specifications

Temperature	Operating: 41 to 95 ºF (5 to 35 ºC)
	Storage: 14 to 140 ºF (–10 to 60 ºC)
Humidity	Operating: 20 to 80%
(relative, non-condensing)	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 15 Class B (DoC)
	UL60950-1 2nd edition
Canada	ICES-003 Class B
	CSA C22.2 No. 60950-1-07

Parent topic: Technical Specifications

Supported Video Display Formats

For best results, your computer monitor 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 or video card refresh rate (vertical frequency) must be compatible with the projector. (See your computer or video card manual for details.)

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

Display format	Refresh rate (in Hz)	Resolution (in pixels)
Computer signals (analog RGB)		
VGA	60/72/75/85	640 × 480
SVGA	56/60/72/75/85	800 × 600

Display format	Refresh rate (in Hz)	Resolution (in pixels)
XGA	60/70/75/85	1024 × 768
WXGA	60	1280 × 768
	60	1360 × 768
	60/75/85	1280 × 800
WXGA+	60/75/85	1440 × 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
WXGA++	60	1600 × 900
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		
TV (NTSC)	60	720 × 480
TV (PAL)	50/60	720 × 576
TV (SECAM)	50	720 × 576
Component video		
SDTV (480i)	60	720 × 480
SDTV (576i)	50	720 × 576
SDTV (480p)	60	720 × 480
SDTV (576p)	50	720 × 576

Display format	Refresh rate (in Hz)	Resolution (in pixels)
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
SXGA	60	1280 × 960
	60	1280 × 1024
SXGA+	60	1400 × 1050
UXGA	60	1600 × 1200
WXGA++	60	1600 × 900
WSXGA+*	60	1680 × 1050
SDTV (480i/480p)	60	720 × 480
SDTV (576i/576p)	50	720 × 576
HDTV (720p)	50/60	1280 × 720
HDTV (1080i)	50/60	1920 × 1080
HDTV (1080p)	24/30/50/60	1920 × 1080

* BrightLink 436Wi only

** Available only when using the **Wide** option as the **Resolution** setting

Parent topic: Technical Specifications

USB Display System Requirements

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

Requirement	Windows	Mac
Operating system	Windows 2000 (Service Pack 4 only)	Mac OS X 10.5.8, 10.6.x, 10.7.x, or 10.8.x
	Windows XP Professional, Home Edition, and Tablet PC Edition (32-bit); except for Service Pack 1	
	Windows Vista Ultimate, Enterprise, Business, Home Premium, and Home Basic (32-bit)	
	Windows 7 Ultimate, Enterprise, Professional, and Home Premium (32- and 64-bit); Home Basic and Starter (32-bit)	
	Windows 8, Windows 8 Enterprise and Pro (32- and 64-bit)	
USB version	USB 1.1 and above (USB 2.0 recommended)	
CPU	Mobil 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
Wireless Telegraphy Act Regulations
Trademarks
Open Source Software and Other Licenses
Copyright Notice

Recycling

Epson offers a recycling program for end of life products. Please go to www.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 7° 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 ºF (5 to 35 ºC). Doing so may cause an unstable display and could lead to projector damage. Do not use or store the projector where it may be exposed to sudden changes in temperature.

- Do not store the projector outside of the required temperature range of 14 to 140 ºF (–10 to 60 ºC) or in direct sunlight for long periods of time. Doing so may cause damage to the case.
- Do not place anything that can become warped or damaged by heat near the exhaust vents. Do not bring your hands or face close to the vents while projection is in progress. Do not bring your face close to the projector while it is in use.
- Before you move the projector, make sure its power is turned off, the plug is disconnected from the outlet, and all cables are disconnected.
- Never try to remove the lamp immediately after use because it will be extremely hot. Before removing the lamp, turn off the power and wait at least an hour to allow the lamp to cool completely.
- Do not disassemble the lamp or subject it to impacts.
- Do not place the source of an open flame, such as a lit candle, on or near the projector.
- Do not 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.
- Do not store the interactive pens or the batteries in a hot location, such as near a heater, in direct sunlight, or in a closed vehicle.
- Remove the batteries from the interactive pens if you will not be using the pens for a long time.

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

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

Restriction of Use

Parent topic: Notices

Restriction of Use

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

Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care, please make your own judgment on this product's suitability after a full evaluation.

Parent topic: Important Safety Instructions

FCC Compliance Statement

For United States Users

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

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

WARNING

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

For Canadian Users

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

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

Parent topic: Notices

Wireless Telegraphy Act Regulations

The following acts are prohibited by the Wireless Telegraphy Act:

- Modifying and disassembling (including the antenna)
- Removing the label of conformance

Parent topic: Notices

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Parent topic: Notices

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The list of GPL Programs

busybox-1.13.4

iptables-1.4.4

libgcc1(gcc-4.3.3)

libstdc++-6.0.10

linux-2.6.27

patches

udhcp 0.9.8

uvc rev.219

wireless_tools 29

EPSON original drivers

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Version 2, June 1991

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<one line to give the program's name and a brief idea of what it does.>

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iconv (Charset Conversion Library) v2.0

(28) Artem Bityuckiy (--enable-newlib-iconv)

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