



PowerLite® 1810p Multimedia Projector

User's Guide

Important Safety Information

WARNING: 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.

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Welcome

The PowerLite® 1810p is an easy-to-use projector that weighs less than 7 pounds. The projector offers up to 3500 lumens of brightness. You can connect it to a wide range of computers and video sources.

Easy setup, control, and security:

- 5-second startup time and Instant Off® feature for fast setup and shut down
- Automatic digital keystone correction
- 1.6x optical zoom lens for flexible placement and positioning
- Security features include password, user's logo, and the ability to lock the projector buttons
- A/V mute slide (lens cover) to block the lens and save lamp life when you want to temporarily stop projecting

Using Your Documentation

This book contains all the information you need to set up and use your projector. Please follow these guidelines as you read through it:

- 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 hints.

Getting More Information

Need tips on giving presentations? Quick steps for setting up your projector? Here's where you can look for help:

- **Quick Setup sheet**
Gives you the instructions you need to get your projector up and running if you are connecting to a notebook, MacBook,[™] PowerBook,[®] or iBook[®] computer.
- **Projector kit**
Includes this *User's Guide*, your *Quick Setup* sheet, warranty brochures, and Epson PrivateLine[®] Support card. Keep the kit with your projector at all times.
- **Built-in help system**
Provides assistance for common problems. Available from the **Help** button on the projector or the remote control. See page 74 for details.
- **epson.com/support**
Download FAQs and e-mail your questions to Epson support.
- If you still need help after checking this *User's Guide* and the sources listed above, you can use the Epson PrivateLine Support service to get help fast. Call (800) 637-7661 and enter the PIN on the PrivateLine card. Or take advantage of Epson's automated support services 24 hours a day. See page 83 for more information.

■ **presentersonline.com**

Includes a library of articles covering presentation tips, tricks, and technology. The site provides templates, clip art and sound clips, as well as Presenters Services to use on the road. Even more resources and services are available if you register to join the Presenters Club®—and it's free.

Registration and Warranty

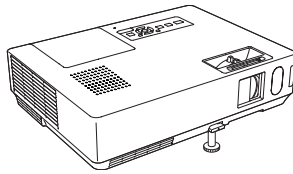
Your projector comes with a basic carry-in 2-year and 90-day lamp warranty as well as an international warranty that let you project with confidence anywhere in the world. For details, see the warranty brochures included with your projector.

In addition, for customers who register their projector, Epson offers free Extra CareSM 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 or Canada, usually via overnight delivery. See the brochure included with your projector for details.

To register, simply fill out the registration card and mail it to Epson. Or you can register online at epson.com/webreg. Registering also lets you receive special updates on new accessories, products, and service.

Unpacking the Projector

After unpacking the projector, make sure you have all these parts:



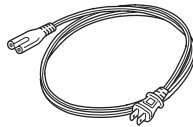
Projector



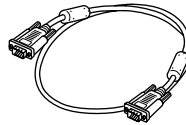
PDF manual and
registration CD-ROM



Remote control and
2 AAA batteries



Power cable



VGA computer cable



Carrying case

Save all packaging in case you need to ship the projector. Always use the original packaging (or the equivalent) when you need to send the projector to another location. If you are moving the projector by hand, use the carrying case. See page 11 for ordering information, and page 71 for transportation instructions.

Additional Components

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

- To receive an S-video signal, you'll need an S-video cable.
- To receive a component video signal from a VCR or other video device, you'll need an HD15 to component video cable.

You can purchase these items from Epson. See “Optional Accessories” on page 11.

Optional Accessories

To enhance your use of the projector, Epson provides the following optional accessories:

Product	Part number
Replacement lamp	V13H010L40
Air filter replacement set (2 filters)	V13H134A08
Universal ceiling mount False ceiling plate Security bracket/cabling for gyro lock mounts Adjustable ceiling channel Suspension adapter	ELPMBUNI ELPMBFCP ELPMBSEC ELPMBACC ELPMBAPL
Kensington® security lock	ELPSL01
50-inch portable screen (4:3 aspect ratio) 60-inch portable pop-up screen (4:3 aspect ratio) 80-inch portable pop-up screen (4:3 aspect ratio) 83.6-inch hanging pull-down screen (4:3 aspect ratio) DUET Portable Projector Screen (4:3/16:9 combination)	ELPSC06 ELPSC07 ELPSC08 ELPSC09 ELPSC80
HD-15 to component video cable S-video cable	ELPKC19 ELPSV01
Distribution amplifier	ELPDA01
Image presentation camera (ELPDC05)	V12H162020

You can purchase screens or other accessories 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).

1 *Displaying and Adjusting the Image*

Whether you're presenting from a computer or video equipment, you need to follow some basic steps to display your image on the screen.

Follow the guidelines in this chapter for:

- Positioning the projector
- Turning on and off the projector
- Displaying an image
- Troubleshooting display problems
- Adjusting the image

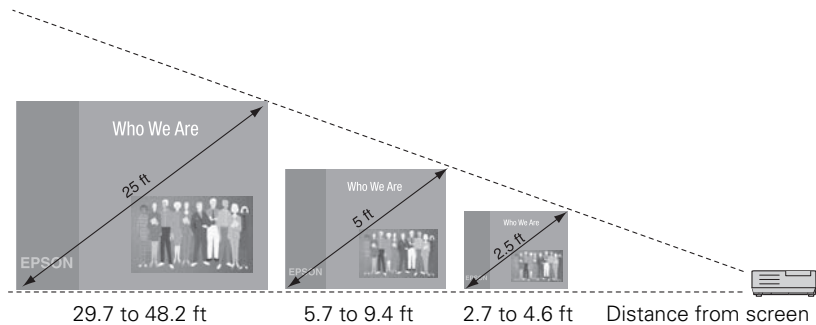
note

You can mount the projector on the ceiling, or place it behind a translucent screen for rear projection. See page 87 for details.

Positioning the Projector

If the projector isn't already installed in the room you're using, you'll probably want to place it on a table in front of the screen, as shown. This lets you stand in the front of the room, face the audience, and remain close enough to the equipment to be able to control it. Try to leave as much space as possible between the projector and the screen to get a good-size image.

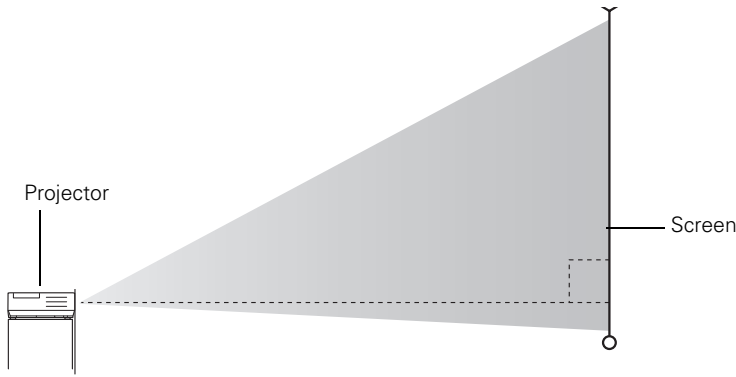
Use the figure below to help you determine placement. Image size increases with distance, but can vary depending on how you position the zoom ring and whether you've adjusted the image with other settings.



Also keep these considerations in mind:

- Place the projector on a sturdy, level surface.
- Make sure there is plenty of space for ventilation around and under the projector. Do not set the projector on top of anything that could block the vents under the projector.
- Make sure the projector is within 10 feet of a grounded electrical outlet or extension cord.

Ideally, you should place the projector directly in front of the center of the screen, facing it toward the screen squarely. The base of the lens should be at about the level of the bottom of the screen.



If you place the projector below screen level, you'll have to tilt it up by extending the front adjustable foot. This causes the image to become “keystone” shaped, but you can correct the distortion (see page 22).

For instructions on installing the projector in a permanent location, such as a theater or conference room, see page 87.

Turning On and Off the Projector

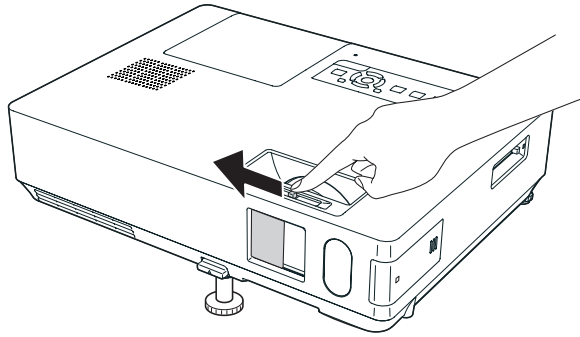
Turn on any connected computer or video equipment before starting the projector so it can automatically detect and display the image source. If you turn on the projector first, or have multiple pieces of connected equipment, you may have to select the image source manually (see page 18).

note

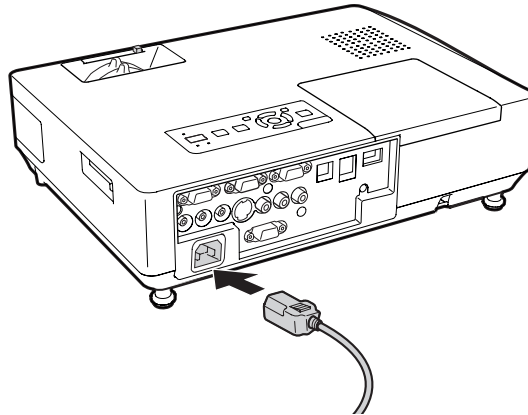
After positioning the projector, you may want to connect a Kensington MicroSaver® anti-theft device to the lock port on the projector. You can purchase this from Epson; see page 11.

Follow these steps to turn on the projector:

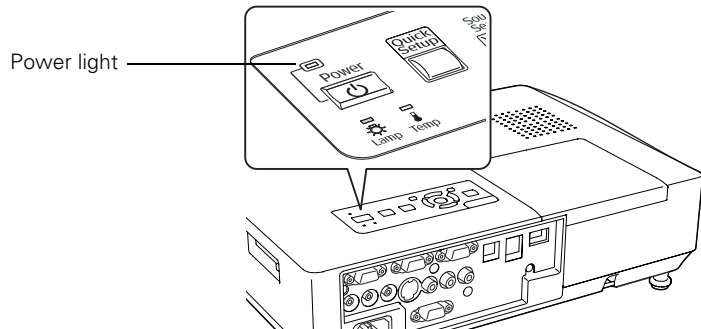
1. Open the A/V mute slide (lens cover).



2. Plug one end of the power cable into the projector, and the other end into an electrical outlet.



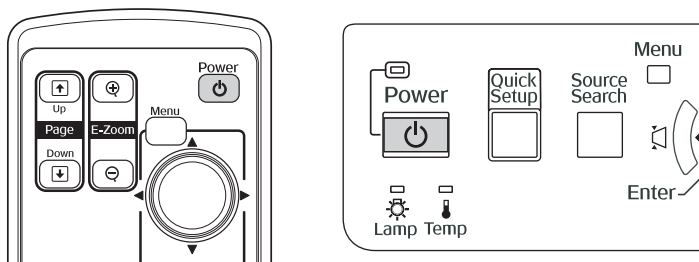
The Power light turns orange.



note

You can set the projector to automatically turn off the projector lamp and enter “sleep mode” when it has not received any signals for 30 minutes. This conserves electricity, cools the projector, and extends the life of the lamp. If you want to start projecting again, press the  Power button. If you are done using the projector, unplug the power cord. To enable sleep mode, see page 60.

3. Press the **Power** button on the remote control or on top of the projector.



The projector beeps once and the **Power** light flashes green as the projector warms up, then an image begins to appear. When the **Power** light stops flashing and remains green, the projector is ready for use.

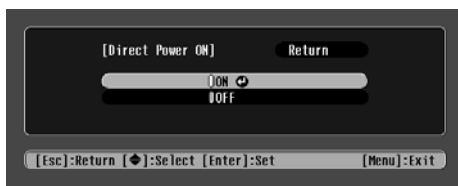
4. If you are prompted to enter a password, see page 57.

Using the Direct Power On Function

The Direct Power On function enables faster setup. The projector starts up automatically when you plug it in or turn it on with a wall switch. You don't have to press the **Power** button.

Follow these steps to enable Direct Power On:

1. Press the **Menu** button on the remote control or projector and select the **Extended** menu.
2. Choose **Operation** and press **Enter**.
3. Choose **Direct Power On** and press **Enter**.



4. Highlight **On** and press **Enter**.
5. Press **Menu** to exit. The setting will take effect the next time you plug in the projector.

warning

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

note

If a power outage occurs when Direct Power On is enabled and the projector is plugged in, the projector will start when the power is restored.

note

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

Turn off this product when not in use to prolong the life of the projector.

Shutting Down the Projector

This projector incorporates Instant Off technology. To turn it off, you can press its **Power** button as described below, unplug it, or turn off a power switch that supplies power to the projector. You don't have to wait for the projector to cool off first.

1. To turn off the projector, press the **Power** button on the remote control or projector.

You see a confirmation message.
(If you don't want to turn it off, press any other button.)



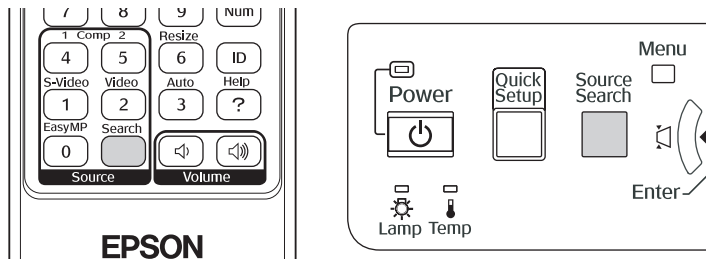
2. Press the **Power** button again. The projection lamp turns off and you can unplug the power cord.

If you want to turn the projector on again, make sure the orange **Power** light is not flashing, then press the **Power** button.

Displaying an Image

You may need to select the image source if you have multiple video sources connected to the projector (such as a computer or DVD player). Selecting the image source lets you switch between images input from different pieces of connected equipment.

If you don't see the image you want, press the **Search** button on the remote control or the **Source Search** button on the projector until you see the image you want to project.



You can also use the **Source** buttons on the remote control to switch between devices connected to the ports identified on each button. The PowerLite 1810p does not support EasyMP™.

Troubleshooting Display Problems

Follow these guidelines if you're having trouble displaying an image.

You Can't Project an Image

If you don't see the image you are trying to project, try the following:

- Make sure the cables are connected correctly, as described beginning on page 35.
- Make sure the **Power** light is green and not flashing and the A/V mute slide (lens cover) is open.
- If you've connected more than one computer and/or video source, you may need to press the **Source Search** button on the projector's control panel or **Search** button on the remote control to select the correct source. (Allow a few seconds for the projector to sync up after pressing the button.)
- If you're using a PC notebook, press the function key on your keyboard that lets you display on an external monitor. It may be labeled **CRT/LCD** or have an icon such as . You may have to hold down the **Fn** key while pressing it. Allow a few seconds for the projector to sync up after changing the setting.

The Projector and Notebook Don't Display the Same Image

If you're projecting from a notebook, and you can't see your image on the projection screen and on your computer at the same time, follow these guidelines.

If you're using a PC notebook:

- On most systems, there's a function key that lets you toggle between the LCD screen and the projector, or display on both at the same time. It may be labeled **CRT/LCD** or have an icon such as . You may have to hold down the **Fn** key while pressing it. Allow a few seconds for the projector to sync up after changing the setting.

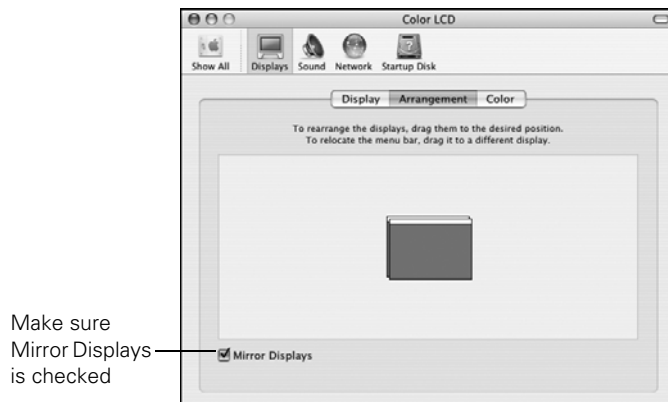
- If the function key doesn't permit you to display simultaneously on both screens, you should check your monitor settings to make sure both the LCD screen and the external monitor port are enabled.

From the Control Panel, open the **Display** utility. In the Display Properties dialog box, click the **Settings** tab, then click **Advanced**. The method for adjusting the settings varies by brand; you may need to click a **Monitor** tab, then make sure the external Monitor port is set as your primary display and/or enabled. See your computer's documentation or online help for details.

If you're using Mac OS X:

You may need to set up your system to display on the projector screen as well as the LCD screen. Follow these steps:

1. From the Apple® menu, select **System Preferences**, then select **Displays**.
2. Make sure the **VGA Display** or **Color LCD** dialog box is selected.
3. Click the **Arrangement** (or **Arrange**) tab.



4. Make sure the **Mirror Displays** checkbox is selected.

Adjusting the Image

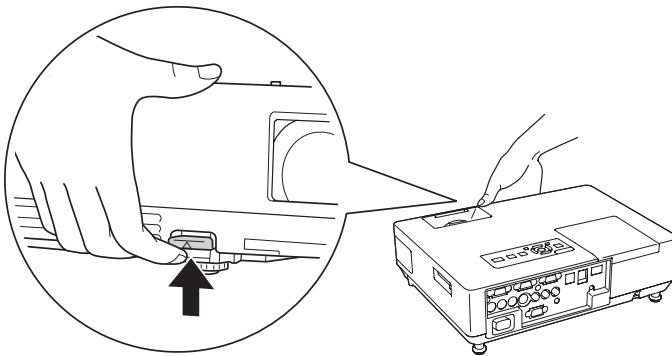
Once you see your image, you need to make certain adjustments:

- If the image is too high or too low, reposition it as described below.
- To focus or zoom your image, see page 22.
- If the image isn't square, see page 22.
- To quickly adjust the color, brightness, or contrast, see page 25.
- To change the image aspect ratio, see page 26.
- If you need to fine-tune the image and/or sound, see Chapter 4.

Adjusting the Height of the Image

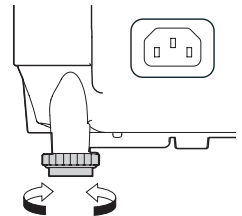
If the image is too low on the screen, you can use the front adjustable foot to raise it.

1. Stand behind the projector. Press the foot release lever up and lift the front of the projector.



2. Once the image is positioned where you want it, release the lever to lock the foot in position.
3. If necessary, you can fine-tune the height or level the image by turning any of the projector's adjustable feet.

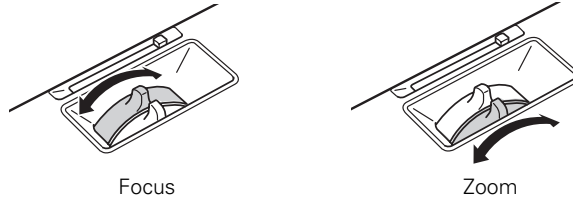
Raising the projector causes the image to distort or “keystone,” but you can correct the shape as described on page 22.



Focusing and Zooming the Image

Turn the focus ring on the projector to sharpen the image.

Turn the zoom ring on the projector to reduce or enlarge the image.



If the image still isn't large enough, you may need to move the projector farther away from the screen. You can also use the **E-Zoom** buttons on the remote control to zoom in on a portion of the image. See page 30 for instructions.

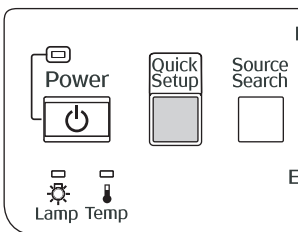
Adjusting the Image Shape

You can maintain a square or rectangular image by placing the projector directly in front of the screen and keeping it level. This also produces the best picture quality. If the projector is tilted up or placed at an angle, you'll need to correct the image shape by using one of the functions described below.

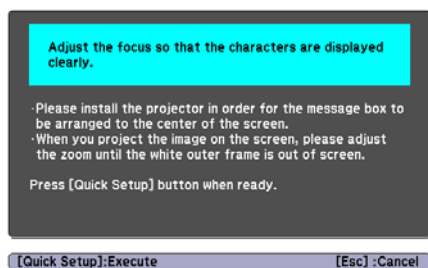
Automatic Image Adjustment

Use the projector's Quick Setup feature to set up quickly for a presentation. This function automatically corrects the shape and position of the image to fit on a screen with a 4:3 aspect ratio. It can correct image distortion when the projector is placed up to a 45° angle to the screen (vertically) and 20° (horizontally).

1. Press the **Quick Setup** button on the projector's control panel.



You see a projected message:



2. Aim the projector so the message appears near the middle of the screen. Then use the zoom ring to enlarge the image so the white frame (not shown above) extends beyond the edges of the screen on all sides.
3. Press the **Quick Setup** button again. Two white boxes flash momentarily onto the screen, and the adjustment is complete. Your projected image now fits on the screen (some slight overlap is normal).

The Quick Setup adjustment is retained when the projector is turned off. If the projector is installed in a fixed location, you won't need to repeat the adjustment each time you turn it on. To fine-tune the Quick Setup adjustment, use Quick Corner® (below).

Using Quick Corner

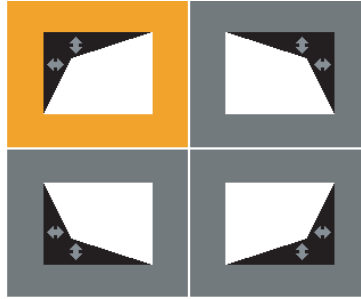
Use Quick Corner to adjust the shape and size of the image when it's uneven on all sides, or to finely adjust the image after performing Quick Setup. If you just used Quick Setup, you can use the projector's arrow buttons to make the Quick Corner adjustment. If not, you'll have to select Quick Corner as follows:

1. Press the **Menu** button on the remote control or on the projector's control panel.
2. Select the **Settings** menu and press **Enter**.
3. From the Settings menu, select **Keystone** and press **Enter**.
4. Select **Quick Corner** and press **Enter**.

note

If Quick Setup did not detect the edges of your screen (for example, if you're projecting on a wall), then the arrow buttons will be in Keystone correction mode after performing Quick Setup (see page 24).

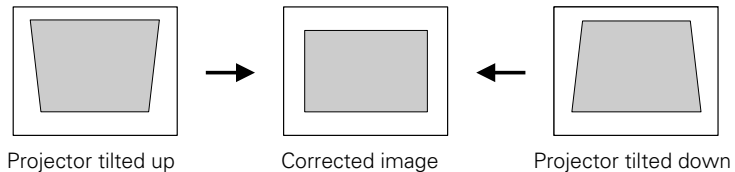
You see this screen:



5. Use the  pointer button on the remote control (or the arrow buttons on the projector) to select the corner you want to adjust, and press **Enter**.
6. Use the  pointer button on the remote control (or the arrow buttons on the projector) to adjust the shape.
7. Repeat steps 5 and 6 as needed to adjust any remaining corners.
8. When done, press **Menu** to exit the menu system.

Using Keystone Correction

The projector automatically corrects vertical keystone distortion when it is tilted within a range of 30° up or down.

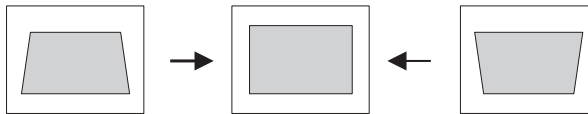


It takes about one second after projection starts for the image to be corrected. During this time, a vertical keystone correction gauge appears on the screen. If keystone correction isn't automatically carried out, you may need to turn on the **Auto V-Keystone** setting in the projector's menu system (see page 54).

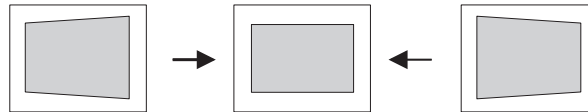
You can manually adjust the shape of the image to compensate for vertical and horizontal keystone distortion. First make sure the Keystone setting in the projector's menu system is set to **H-Keystone** or **V-Keystone**:

1. Press the **Menu** button on the remote control (or on the projector's control panel).
2. Select the **Settings** menu and press **Enter**.
3. From the Settings menu, select **Keystone** and press **Enter**.
4. Select **H/V-Keystone** and press **Enter**.
5. Select **H-Keystone** (for horizontal adjustment) or **V-Keystone** (for vertical adjustment) and use the ◀ and ▶ arrow buttons to adjust the shape of the image.

Vertical
keystone
adjustment



Horizontal
keystone adjustment



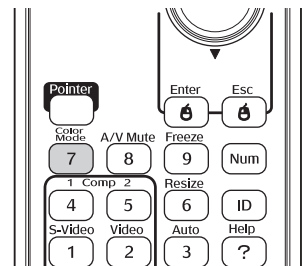
If the image becomes smaller, use the zoom ring to enlarge the image so it fits the screen. If the image contains faint lines or a gridlike pattern, decrease the sharpness setting (see page 51).

Selecting the Color Mode

The Color Mode adjusts the brightness, contrast, and color for various common viewing environments. Use this setting to quickly obtain a good picture.

note

The projector's arrow buttons may already be in Keystone correction mode if you haven't used Quick Setup or Quick Corner.



Press the **Color Mode** button on the remote control, and then select from one of these options:

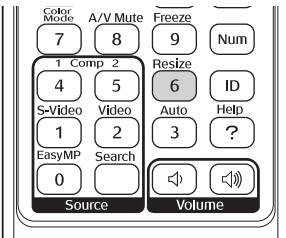
- **Presentation:** For making color presentations in a bright room.
- **Text:** For making black-and-white presentations in a bright room.
- **Theatre:** For watching movies in a darkened room; gives images a natural tone.
- **Photo:** For vivid, high-contrast still images in a bright room.
- **Sports:** For vivid TV images projected in a bright room (video, S-video, or composite video only).
- **Game:** Increases brightness when playing video games or watching TV in a bright room. Emphasizes dark gradations.
- **sRGB:** Matches the color palette of standard sRGB computer displays.
- **Blackboard:** Projects accurate colors on a green chalkboard (adjusts the white point).
- **Customized:** For manual color adjustment (see page 51).

Resizing Video Images

You can use the **Resize** button on the remote control to adjust how an image fits into the display area.

Press **Resize** to switch the aspect ratio between 4:3 and 16:9. This lets you play certain digital video images or movies recorded on certain DVDs in 16:9 widescreen format. You can also select **16:9 (Up)** or **16:9 (Down)** to reposition videos to accommodate subtitles or supertitles.

For computer images, select **Normal** to automatically resize the image and make the best use of the display area.



2

Presenting with the Remote Control

The projector includes a number of tools to enhance your presentation. All of them can be accessed using the remote control, which lets you operate the projector from anywhere in the room—up to 20 feet away.

note

For information and resources to help you give the most professional presentation, be sure to visit presentersonline.com.

You can use the remote control to adjust the picture and sound (page 28) or as a pointer to highlight your presentation (page 31). You can also use it as a wireless mouse when projecting from a computer (page 32), or to control two or more projectors at the same time (page 33).

This chapter covers:

- Using the remote control
- Controlling the picture and sound
- Highlighting your presentation
- Operating your computer with the remote control
- Operating two or more projectors with the remote control

note

If a button is pressed longer than 30 seconds, the remote control stops operating to conserve power. When you release the button, normal operation resumes.

Using the Remote Control

Make sure batteries are installed as described on page 70. Follow these tips for using the remote control:

- Point the remote control at the front of the projector or at the screen.
- Stand within 20 feet of the projector.
- Avoid using the remote under bright fluorescent lamps or in direct sunlight, or the projector may not respond properly.

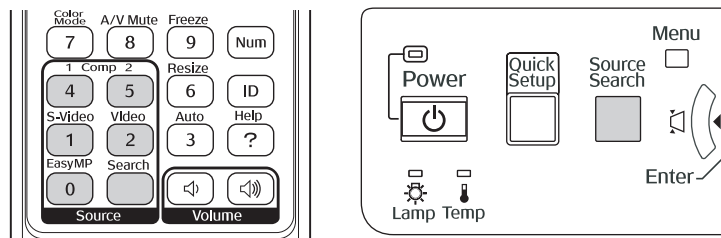
Controlling the Picture and Sound

You can use the remote control to preview and select your picture sources, temporarily turn off the picture and sound, freeze the action, zoom in on the picture, and adjust the volume.

Switching Between Picture Sources

If your projector is connected to more than one computer and/or video source, you can switch between the different sources:

- The easiest way to select your source is to press the **Search** button on the remote control (or the **Source Search** button on the projector) repeatedly until you see the image you want on the screen.



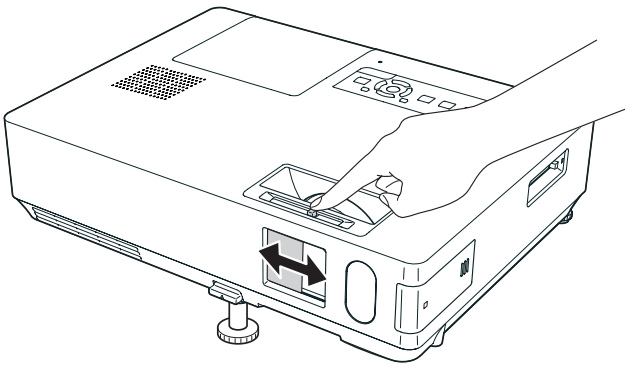
- On the remote control, there are several **Source** buttons. Use them to switch between equipment connected to the port identified on each button, or to use EasyMP (PowerLite 1815p only).

After you select a source, the screen goes dark for a moment before the image appears.

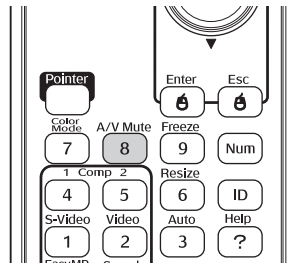
Turning Off the Picture and Sound

You can temporarily turn off the image and sound when you want to redirect your audience's attention. There are two ways to do this:

- Close the A/V mute slide, as shown below:



- Press the A/V Mute button on the remote control. This turns the image black and stops the sound. To turn the image and sound back on, press the button again.



You can have the screen turn blue when you press the A/V Mute button. You can also have an image, such as a company logo, display on the screen (see page 57).

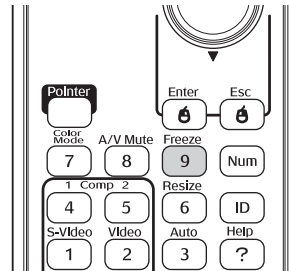
note

This function pauses the image, not the sound. Because the source continues to transmit signals, when you resume the action, it won't be at the point you stopped it.

Stopping Action

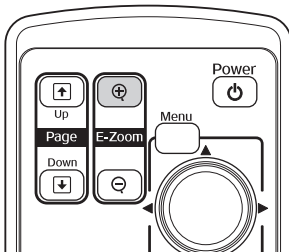
You can use the remote control to stop the action in your video or computer image.

- To stop the action and keep the current image on the screen, press the **Freeze** button. The sound continues.
- To restart it, press the **Freeze** button again.



Zooming Part of Your Image

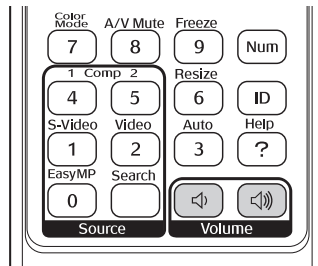
You can zoom in on a portion of the image using the E-Zoom buttons on the remote control.



1. Press the **E-Zoom**  button on the remote control.
You see a crosshair indicating the center of the zoom-in area.
2. Use the  pointer button to position the crosshair.
3. Continue pressing the **E-Zoom**  button to enlarge the selected area up to 4 times.
4. While the image is enlarged, you can:
 - Use the  pointer button to move around the screen.
 - Press the **E-Zoom**  button to zoom out.
5. When done, press the **ESC** button to return the image to its original size.

Controlling the Volume

To change the volume, press the  or  button on the remote control.



note

To temporarily shut off the sound and picture, press the **A/V Mute** button or close the A/V mute slide.

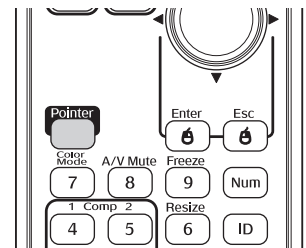
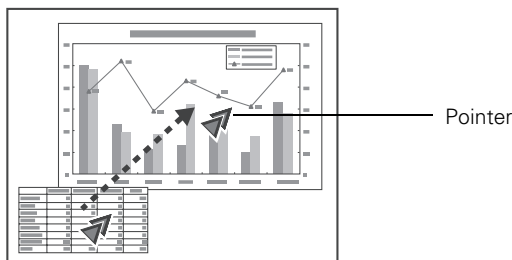
You can also adjust the volume using the projector's menu system. See page 54.

Highlighting Your Presentation

You can display a pointer to call out important information on the screen. If you want to customize the pointer tool, you can choose from three alternative shapes.

Using the Pointer Tool

1. To activate the pointer tool, press the **Pointer** button on the remote control. A pointer appears on the screen.



If you prefer to use a different style of pointer, see the instructions in the next section.

2. Use the  pointer button on the remote control to position the pointer on the screen.

3. When you're done using the pointer, press **Esc** to clear the screen.

Customizing the Pointer Tool

You can change the appearance of the pointer by choosing from three alternative shapes.

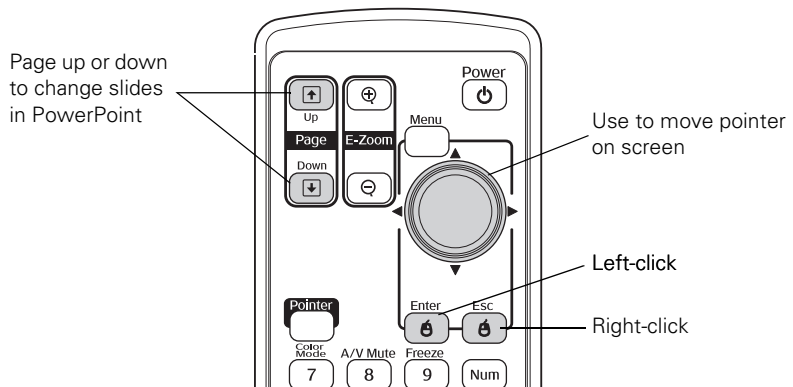
1. Press the **Menu** button on the remote control, highlight the **Settings** menu, highlight **Pointer Shape**, and press **Enter**. You can select one of the pointer shapes shown at the left.
2. Select the shape you want and press **Enter**.
3. Highlight **Return** and press **Enter**.
4. Press **Menu** to exit from the menu system.



Operating Your Computer with the Remote Control

If you connect a computer to the projector with a USB cable, you can use the remote control in place of your computer's mouse. This gives you more flexibility when delivering slideshow-style presentations, since you won't have to stand next to the computer to change slides.

- Use the **Up** and **Down** buttons to move through a Microsoft® PowerPoint® slideshow.



- Use the  pointer button to move the pointer on the screen.
- Press the **Enter** button once to left-click, or press it twice to double-click. Press the **Esc** button to right-click.
- To drag-and-drop, hold down the **Enter** button. Then use the  pointer button to drag the object. When it's where you want it, release the **Enter** button.

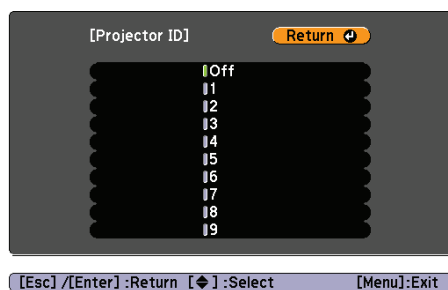
Operating Two or More Projectors with the Remote Control

If you're using more than one projector, you can control all the projectors—or just selected ones—by using the projector ID system. To operate a projector, you have to set the remote control's ID to match that of the projector. Or you can control all the projectors at once by setting the remote control's ID to zero.

Setting the Projector ID

The projector's default ID is set to Off. This lets it respond to commands from any remote control. To change the ID, follow these steps:

1. Press the **Menu** button on the remote control. You see the projector's menu screen.
2. Select **Extended > Projector ID**.



3. Use the  pointer button to highlight the new ID, and press **Enter** to select it.

4. When done, press **Menu** to exit the menu system.

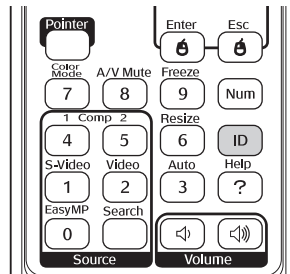
Setting the Remote Control ID

note

If you're using a remote control ID other than the default ID of zero, you have to set the ID each time you turn on the projector.

The remote control's default ID is zero. This lets you operate any projector. To set it to operate a specific projector, follow these steps:

1. Point the remote control at the projector you want to be able to operate.
2. Press and hold the **ID** button on the remote control.



3. While holding the **ID** button, press a numbered button on the remote control (0 through 9) to select the desired ID. Select zero to control all projectors, or select a number to match the ID of the projector(s) you want to operate.

After setting the ID, you can check whether the remote control works with a specific projector:

1. Point the remote control at the projector you want to check.
2. Press the **ID** button on the remote control. You see a message on the screen like one of these:

Projector ID : 3
Remote Control: On

Projector ID : 3
Remote Control: Off

If the message says the remote control is “On,” then you can use the remote control to operate that projector. If it says “Off,” then you have to change the ID of the remote control and/or projector before operation is possible.

3

Connecting to Computers and Other Equipment

This chapter tells you how to connect the projector to a notebook or desktop computer, and/or to video equipment, such as a VCR, DVD player, or video camera.

Follow the instructions in this chapter on:

- Connecting to a computer
- Connecting video equipment
- Connecting an external monitor
- Playing sound through the projector

Connecting to a Computer

You can connect the projector to any computer that has a standard video output (monitor) port, including desktop models, PC notebook computers, MacBook, PowerBook, and iBook computers, and hand-held devices.

If you want to use the projector's remote control as a wireless mouse to operate your computer during presentations, see page 37.

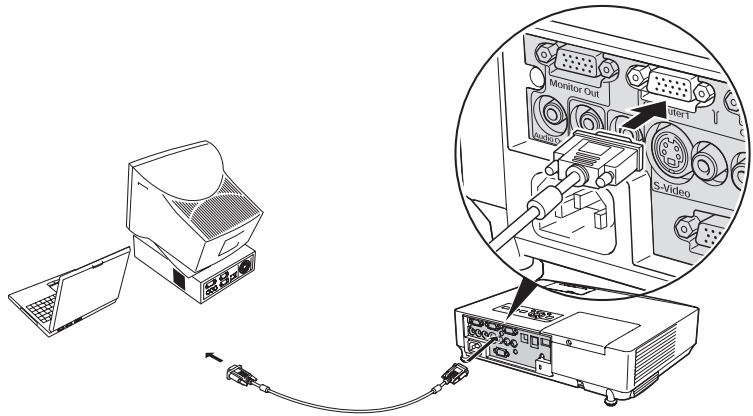
Connecting to the Computer Port

You can connect to the projector using the VGA computer cable that came with it (the monitor port on your computer must be a mini D-sub 15-pin port).

1. If you're using the VGA computer cable, connect one end to the projector's **Computer1** or **Computer 2** port, and the other end to your computer's monitor port.

caution

Don't try to force a connector to fit a port with a different shape or number of pins. You may damage the port or connector.



2. You may need to change the **Computer1 Input** or **Computer2 Input** setting in the projector's **Signal** menu to **RGB** (see page 53).
3. You can connect an optional stereo mini-jack audio cable to play sound through the projector (see page 44), or connect a USB cable to use the remote control as a mouse (see page 37).

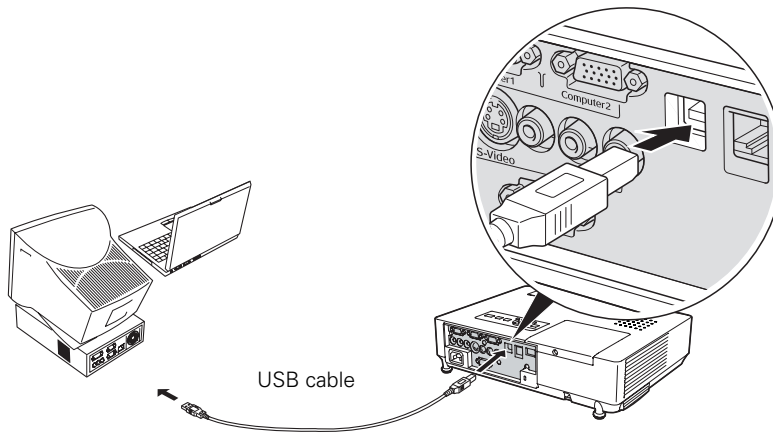
4. When you've finished making any connections, see page 15 for instructions on turning on the projector and adjusting the image.

Connecting the Cable for Remote Mouse Control

If you've connected a computer as described in this chapter (using the **Computer 1** or **Computer 2** port), you can use the projector's remote control as a wireless mouse. This lets you control your computer and click through slideshow-style presentations, such as PowerPoint, from up to 20 feet away.

The wireless mouse function is supported on systems with a USB port running Windows Vista,[™] Windows XP, 98SE, Me, or 2000, or Mac OS X 10.2.x to 10.4.x.

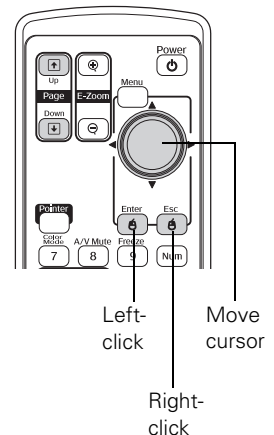
1. Connect the square end of a USB cable to the projector's  USB port.



2. Connect the flat end of the cable to any available USB port on your notebook or desktop computer.
3. If necessary, configure your computer to work with an external USB mouse. See your computer documentation for details.

note

For details on how to use the remote control in place of your computer's mouse, see page 32.



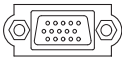
Connecting to Video Equipment



RCA connector
(composite video)



S-video
connector



VGA connector
(RGB video)

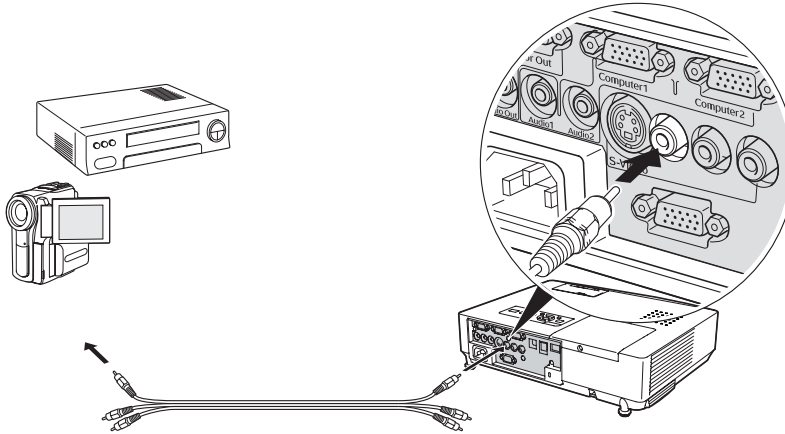
You can connect several video sources to the projector at the same time. Before starting, look at your video equipment to determine its available video output connections:

- If your video player has a yellow RCA-style video output connector, see “Connecting a Composite Video Source” on page 39.
- If your video player has an S-video connector, see “Connecting an S-Video Source” on page 40.
- If your video player has a component video port (three connectors labeled either Y/Cb/Cr or Y/Pb/Pr), see “Connecting a Component Video Source” on page 41.
- If your video player has an RGB video port (either a single connector for a VGA-style monitor cable or three connectors labeled R/G/B), see “Connecting an RGB Video Source” on page 42.

After connecting video cables, you may also want to connect an audio cable to play sound through the projector; see page 44.

Connecting a Composite Video Source

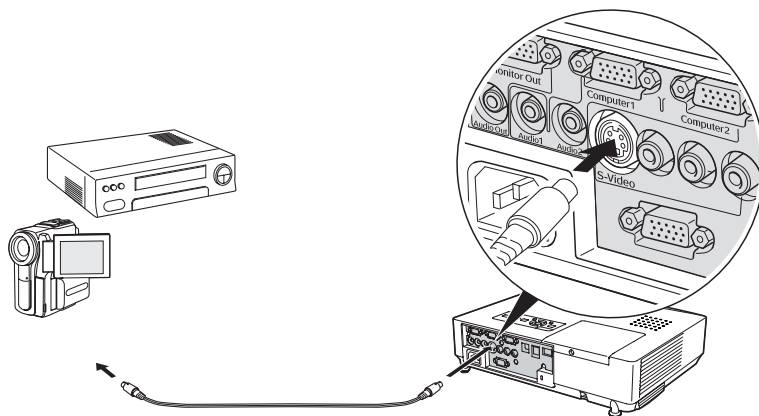
1. Locate an RCA-style video cable (one is usually provided with your video equipment or you can purchase one from an electronics dealer).
2. Connect the cable to the yellow video output connector on your player and the yellow **Video** connector on the projector:



3. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
4. If you don't need to make any other connections, see page 15 for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

Connecting an S-Video Source

1. Locate an S-video cable (one is usually provided with your video equipment or you can purchase one from Epson; see page 10).
2. Connect the cable to the S-video connector on your player and the S-Video connector on the projector:

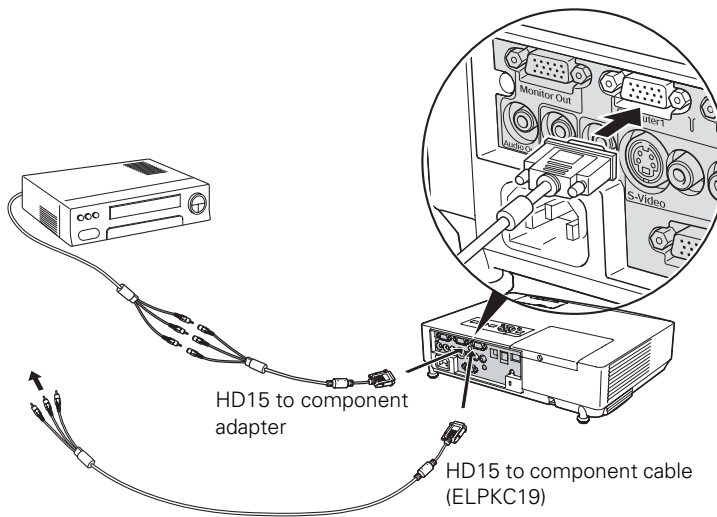


3. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
4. If you don't need to make any other connections, see page 15 for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

Connecting a Component Video Source

You will need a special cable to connect your component video equipment to the HD15 (VGA-style) connector on the projector. You can order the HD15 to component cable (ELPKC19) from Epson; see page 11 for more information.

1. Locate an HD15 to component video cable or adapter.
2. Connect the cable to your player and the **Computer 1** or **Computer 2** connector on the projector.



note

Be sure your video player is not an RGB video source. If you select the wrong source, image quality may suffer. Check your video player's documentation.

*Also, make sure the **Computer Input** setting in the **Signal** menu is set to **Auto** or **Component Video** (see page 53).*

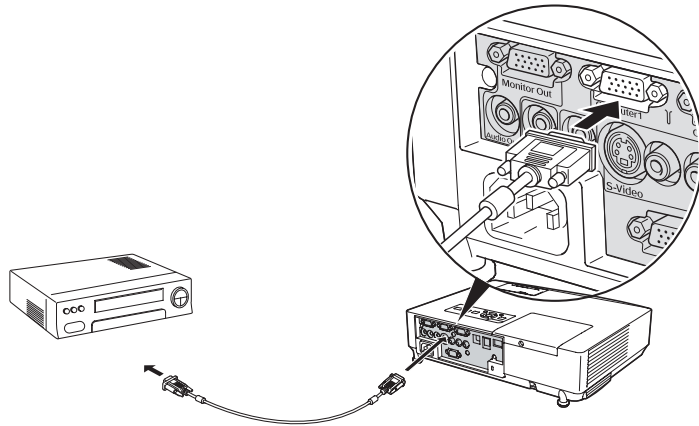
3. You may need to change the **Computer1 Input** or **Computer2 Input** setting in the projector's **Signal** menu to **Component** (see page 53).
4. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
5. If you don't need to make any other connections, see page 15 for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

note

Be sure your video player is not a component video source. If you select the wrong source, image quality may suffer. Check your video player's documentation.

Connecting an RGB Video Source

1. Locate the VGA computer cable provided with the projector.
2. Connect the cable to the video port on your player and the **Computer1** or **Computer2** port on the projector.

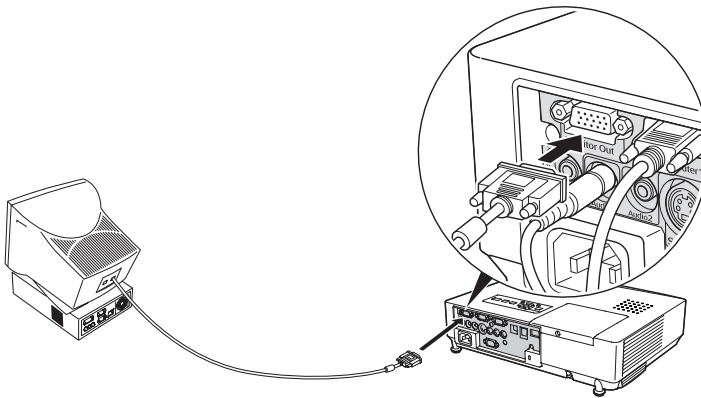


3. You may need to change the **Computer1 Input** or **Computer2 Input** setting in the projector's **Signal** menu to **RGB** (see page 53).
4. If you want to play sound through the projector, see page 44 for instructions on connecting audio cables.
5. If you don't need to make any other connections, see page 15 for instructions on turning on the projector and adjusting the image. Once the projector is turned on, select the image source: press the **Search** button on the remote control or press the **Source Search** button on the projector's control panel repeatedly until the image appears.

Connecting an External Monitor

If you want to monitor your computer presentation close-up (on a monitor placed beside the projector) as well as on the screen, you can connect an external monitor. You can use it to check on your presentation even if you've pressed the **A/V Mute** button or switched to a different picture source.

First make sure your computer's VGA cable is connected to the projector's **Computer1** port (see page 36). Then connect your monitor to the projector's **Monitor Out** port, as shown:



note

The monitor cannot display component video, nor computer images via the Computer2 port.

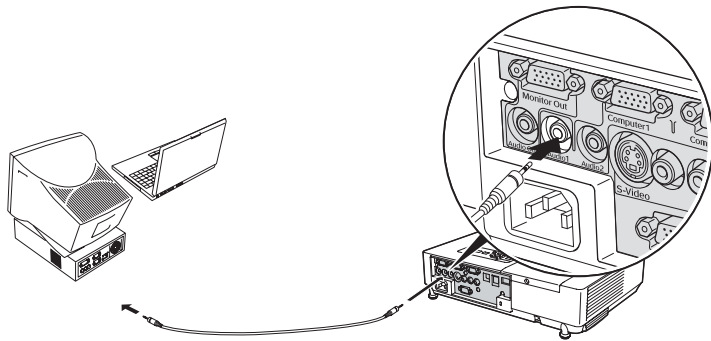
Some LCD monitors may not be able to display the image correctly. If you have trouble displaying the image, connect a multiscan monitor. If you're projecting computer images, make sure the computer's refresh rate is set to 65 Hz or greater.

Playing Sound Through the Projector

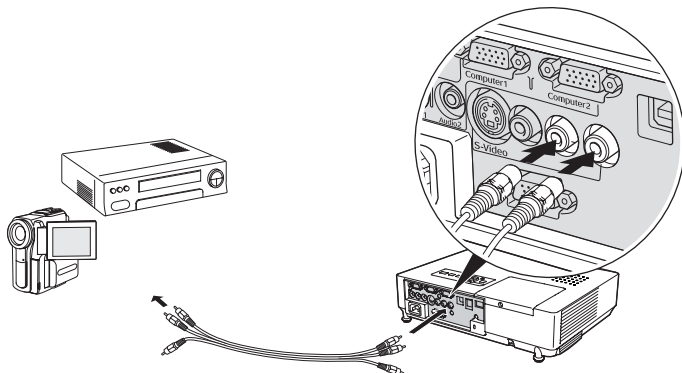
You can play sound through the projector's speaker system or attach an external speaker system.

To play sound through the projector, follow these steps:

1. Locate the appropriate cable and connect it to the **Audio** jack on the projector.
 - If you have equipment connected to the **Computer 1** or **Computer 2** port, use a stereo mini-jack cable. Connect the cable to the **Audio1** port (for Computer1) or the **Audio2** port (for Computer2).



- If you have equipment connected to the **Video** or **S-Video** port, connect an RCA-style audio cable to **L-Audio-R**.



2. Connect the other end of the cable to the audio output connector(s) on your computer or video equipment.

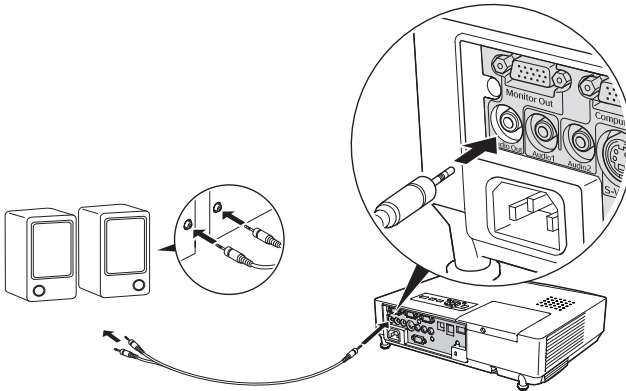
Connecting External Speakers

You can output sound to external speakers with built-in amplifiers. When you play sound through external speakers, the projector's built-in speaker system is disabled.

1. Locate the appropriate cable to connect your speakers.

Depending on your speakers, you may be able to use a commercially available audio cable with a stereo mini-jack connector on one end and pin jacks on the other end. For some speakers, you may have to purchase a special cable or use an adapter.

2. Connect the stereo mini-jack end of the audio cable to the **Audio Out** port on the projector.



3. Connect the other end of the cable to your speakers.

The projector's internal speaker system is disabled while sound is output to external speakers. You can use the remote control to adjust the volume.

4

Fine-Tuning the Projector

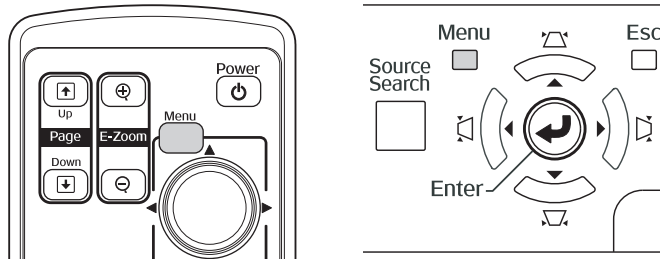
You can use the projector's on-screen menus to adjust the image, sound, and other features. This chapter covers the following information:

- Using the menu system
- Adjusting the image
- Adjusting signal settings
- Customizing projector features
- Using the projector security features
- Customizing power and operation
- Multi-screen color adjustment

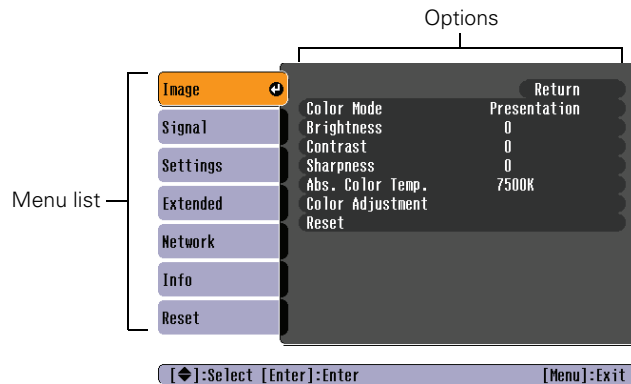
Using the Menu System

You can use the remote control or the projector's control panel to access the menus and change settings. Follow these steps:

1. To display the menu screen, press the **Menu** button on the remote control or on the projector.



You see a menu screen similar to the one below:



note

The Network menu does not appear on the 1810p.

The menus are listed on the left and the options available for the highlighted menu are shown on the right.

2. Use the pointer button on the remote control (or the navigational buttons on the projector) to scroll through the menu list. When you've highlighted the desired menu, press the **Enter** button to select it.
3. Once you've selected the menu, use the pointer button to scroll through the list of options. (Some of the options may be grayed out or unavailable, depending on the selected source.)

4. After highlighting the option you want to adjust, use the  pointer button to change the setting. In some cases, you may have to press the **Enter** button to view a sub-screen for changing the setting.
 - Press the left or right side of the  pointer button to adjust a slider bar.
 - To select from two or more settings, use the  pointer button to highlight the desired setting and press **Enter**.
5. After changing the settings, press the **Esc** button to save your changes and return to the previous menu (or press it repeatedly to exit the menu system).

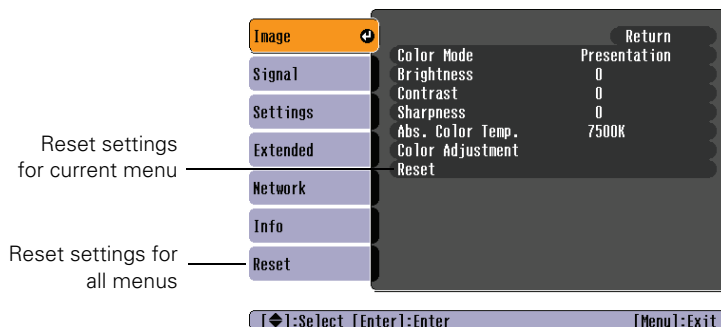
You can also press the **Menu** button to exit.



Restoring the Default Settings

You can use the menu system's Reset options to restore the factory-default settings for all the settings listed in a specific menu, or all the settings in all menus.

To restore the settings in a specific menu, enter the menu whose settings you want to change, select **Reset**, and confirm as needed. (The example below shows how to reset the Image menu.)



note

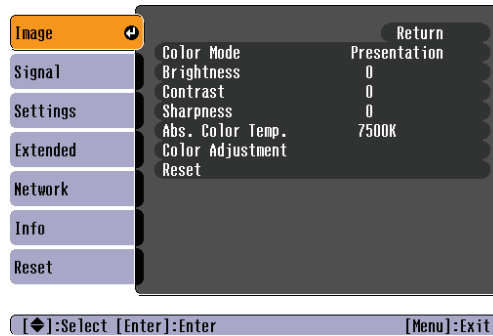
When you select **Reset All** in the **Reset** menu, it does not reset the Computer Input, User's Logo, Multi-screen, Language, Lamp Hours, or Network settings.

To restore all the projector settings to their factory-default values, select the **Reset** menu, highlight **Reset All**, and press **Enter**.

Adjusting the Image

You can use the Image menu to adjust the brightness, sharpness, color, tint, and contrast.

1. Press the **Menu** button on the projector or remote control and select the **Image** menu. You see the Image menu screen.



2. Use the  pointer button to highlight the desired option, then adjust it as needed:

note

The available settings vary depending on the input source selected.

■ Color Mode

Lets you quickly adjust the color and brightness for various environments. Use either the remote control or the **Color Mode** setting in the Image menu. You can save a different setting for each source. Select from these settings:

Game: Ideal for use in bright rooms and when playing video games, this mode produces the brightest images and most vivid colors.

Presentation: For making presentations with color materials in bright rooms.

Text: For making presentations with black-and-white materials in bright rooms.

Theatre: For watching movies in a darkened room; gives images a natural tone.

Photo: For vivid, high-contrast still images in a bright room.

Sports: For vivid TV images projected in a bright room.

sRGB: For matching the color palette of standard sRGB computer displays.

Blackboard: For projecting accurate colors on a green chalkboard (adjusts the white point).

Customized: For manual color adjustment (see below).

- **Brightness**
Lightens or darkens the overall image.
- **Contrast**
Adjusts the difference between light and dark areas.
- **Color Saturation**
Adjusts the color depth of the image.
- **Tint**
Adjusts the balance of green to magenta in the image.
- **Sharpness**
Adjusts the sharpness of the image.
- **Abs. Color Temp.**
Sets a color temperature between 5000 and 10000 °K. (Not available if sRGB is selected as the Color Mode setting.)
- **Color Adjustment**
Adjusts the color values. For **Customized** color mode, select **RGBCMY** to adjust individual red, green, blue, cyan, magenta, and yellow hue and saturation values. For other color modes, **RGB** may be selected to adjust red, green, and blue hue and saturation values. (Not available if sRGB is selected as the Color Mode setting.)

note

*The **Brightness** setting changes the opacity of the projector's LCD panels. You can also change the lamp's brightness. Select*

***Brightness Control** in the **Settings** menu, then choose **High** or **Low** (the default setting is **High**).*

Six-Axis Color Adjustment

For special projection material, such as high-quality photographs or artwork, you can adjust the hue and saturation for six different color axes.

1. Follow the instructions on page 50 to open the Image menu and select **Color Mode**.

2. Press the **Enter** button to select **Customized**, then press **Esc** to return to the Image menu.
3. Select **Color Adjustment** and press **Enter**. You see hue and saturation controls on the screen for six colors: **RGBCMY** (red, green, blue, cyan, magenta, and yellow).
4. Select the color axis you want to adjust and press **Enter**. You see color controls for hue and saturation.

Hue changes the balance of color, and saturation changes the strength of the color.
5. Use the  pointer button to adjust the hue and saturation. You see the adjustments reflected on the screen. When you are satisfied with the color, press **Esc**.
6. Repeat steps 4 and 5 for each color axis you want to adjust.

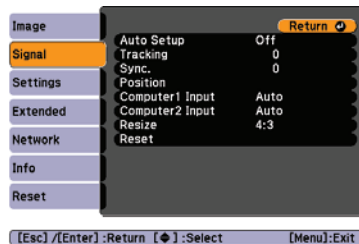
You may need to readjust the color as the lamp in your projector changes over time.

Adjusting Signal Settings

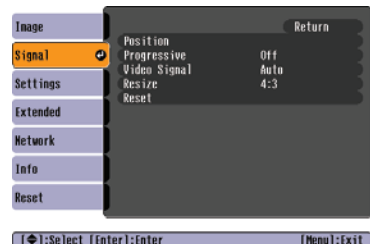
Although the projector normally detects and optimizes the input signal automatically, you can use the Signal menu to make manual adjustments. In addition to changing the position of the projected image, you can correct tracking and sync for computer images, or change the aspect ratio to widescreen format for video images.

1. Press the **Menu** button and select the **Signal** menu.

You see a screen similar to one of those below. (The settings will be different depending on the source you are projecting from.)



Computer/RGB Video



Composite Video/S-Video

2. Use the  pointer button to highlight the desired option, then adjust it as needed:

■ **Auto Setup**

Leave this setting **On** to automatically optimize computer images. Turn it off if you want to save adjustments you have made to the Tracking, Sync, and Position settings.

■ **Tracking**

Adjust this value to eliminate vertical stripes in computer images.

■ **Sync**

Adjust this value if computer images appear blurry or flicker.

■ **Progressive**

For composite video and S-video only. Turn this setting **On** to convert interlaced signals into progressive signals (best for still images). Leave the setting **Off** for moving images.

■ **Position**

If the image is slightly cut off on one or more sides, it may not be centered exactly. Select this setting and use the  pointer button to center it.

■ **Computer1 Input**

Computer2 Input

If the colors don't look right on the **Auto** setting, select the setting for the type of equipment you've connected to the **Computer1** or **Computer2** port:

RGB: For a computer or RGB-video connection.

Component: For a video player that outputs a component video signal (with connectors labeled Y/Cb/Cr or Y/Pb/Pr).

■ **Video Signal**

Leave this setting at **Auto** unless you are using a 60-Hz PAL system (then select **PAL60**).

■ **Resize**

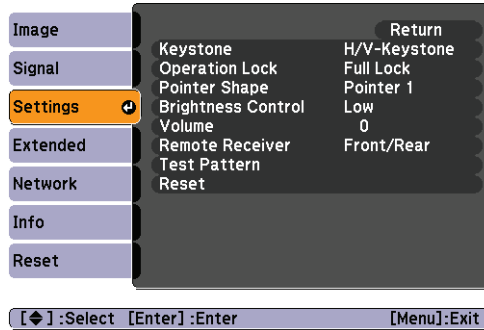
Choose an aspect ratio of either **4:3** or **16:9**. For videos, you can also select **16:9 (Up)** or **16:9 (Down)** to accommodate subtitles or supertitles. **Normal** is the default setting for a computer connection.

note

*You can also use the remote control's **Auto** button to automatically reset the projector's Tracking, Sync, and Position settings. See page 81 for details.*

Customizing Projector Features

You can use the Settings menu to lock the buttons on the projector, adjust audio volume, and customize several other features.



- **Keystone**
Adjusts the shape of the image if the projector has been tilted upward or placed at an angle to the screen.

Select **H/V-Keystone** to correct horizontal and vertical keystone distortion, or to turn **Auto V-Keystone** on or off (see page 24).

Select **Quick Corner** to adjust the shape and position of the projected image (see page 23).
- **Operation Lock**
Lets you disable all of the buttons on the projector except the **Power** button. See page 59 for more information.
- **Pointer Shape**
Lets you choose from three pointer shapes. See page 31 for more information.
- **Brightness Control**
Lets you select from two levels of brightness. The **Low** setting reduces power consumption and noise, and extends the lamp's operating life.
- **Volume**
Raises or lowers the volume of the projector's speaker.

note

You can also adjust the volume using the remote control.

- **Remote Receiver**

Deactivates the projector's front and/or back sensors that detect signals from the remote control. Use this setting to prevent use of the remote control or to stop interference from bright fluorescent lights.

- **Test Pattern**

Displays a test pattern for use when adjusting the zoom and focus, and when performing keystone correction.

Using the Projector Security Features

To prevent unauthorized use of the projector, you can do the following:

- Assign a password. You can use the password to prevent the projector from being turned on, and to prevent your custom startup screen from being changed.
- Create a custom screen that is displayed at startup and/or when the **A/V Mute** button is pressed. The screen can be locked with a password to discourage theft and provides a way to identify the projector should it be stolen. See page 57.
- Disable the projector's buttons; this is useful, for example, if you're projecting in a classroom and you want to ensure that no one touches the projector's buttons while you're using the remote control. See page 59.

Enabling Password Protection

The default setting for the password is 0000. Follow these steps to create a new password:

1. Press the **Freeze** button on the remote control for about five seconds.

note

You can also attach a security cable to the projector to prevent theft (see page 88).

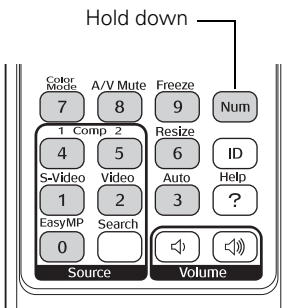
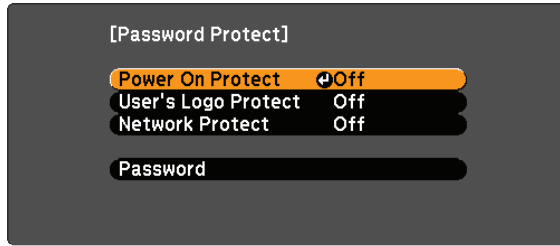
caution

If you lose the remote control, you will not be able to enter the password. Keep the remote control in a safe place at all times. Also, it's a good idea to write down your password.

You see this screen:

note

Network Protect is not available for the 1810p projector.



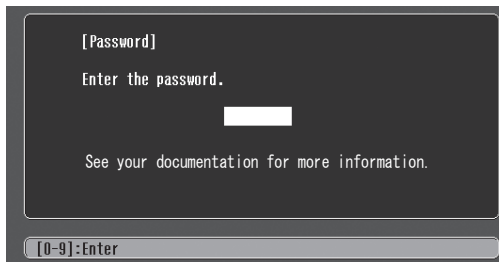
2. Use the  pointer button to select **Password** and press **Enter**.
3. When you see a message asking if you want to change the password, select **Yes** and press **Enter**.
4. Hold down the **Num** button on the remote control and use the numeric keypad to enter a four digit password. (The default setting is 0000.)
5. When you see a confirmation message, reenter the password. Then press the **Menu** button to exit the screen.

To set security options, access the Password Protect screen as described above, and then turn on any of the following options:

- **Power On Protect** to prevent unauthorized use of the projector. After the projector is plugged in and turned on, you must enter a password to use the projector. For details, see page 57.
- **User's Logo Protect** to prevent your custom screen and display settings from being changed. None of the User's Logo features in the Extended menu can be changed when the User's Logo Protect function is enabled. For details on creating a custom screen, see page 57.
-

Starting the Projector with a Password

When the password function is enabled, you see this screen when you plug in and turn on the projector:



Hold down the **Num** button on the remote control and use the numeric keypad to enter the four digit password. The password screen closes and projection begins.

If the password is not correct, you see a message prompting you to re-enter the password. If you enter an incorrect password three times in succession, you see the message **The projector's operation will be locked** and the projector switches to standby mode. Disconnect the projector's power cord from the electrical outlet, reconnect it, and turn the projector back on.

When you see the Password screen again, you can try to enter the correct password.

If you enter an incorrect password 30 times in succession, the projector remains locked and you must contact Epson to unlock it.

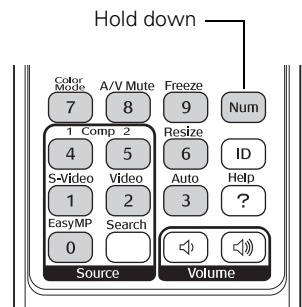
If you have forgotten the password, contact Epson with the request code number that appears in the Password screen for assistance. See "Where To Get Help" on page 83.

Creating Your Own Startup Screen

You can transfer any image from your computer or video source to the projector and then use it as your startup screen. You can also use it as the screen displayed when the projector is not receiving a signal or when you press the **A/V Mute** button. The image can be a company logo, slogan, photograph, or any other image you want to use.

note

If you leave the projector plugged in, the Password Protect Release screen will not appear. It appears only if you unplug and reconnect the power cable.



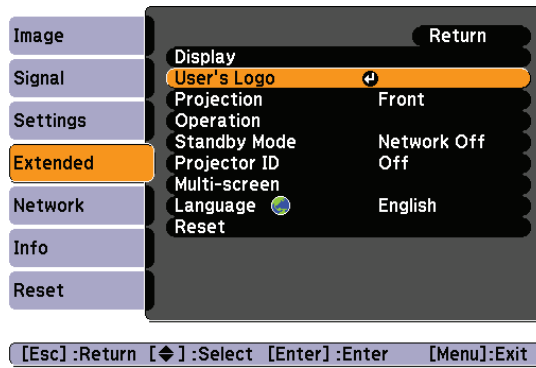
Capturing the Image

Start by displaying the image you want to use from either a computer or video source, such as a DVD player. Then follow these steps to capture the image and transfer it to the projector:

note

When you choose an image for the user's logo, it erases any previously used image. You can save an image up to 300 × 400 pixels in size.

1. Press the **Menu** button on the remote control, highlight the **Extended** menu, and press **Enter**.
2. Highlight **User's Logo** and press **Enter**.



3. When you see a message asking **Choose this image as the user's logo?**, select **Yes** and press **Enter**. A selection box displays over the image.
4. Use the  pointer button to select the area of the image you want to use. Then press **Enter**.
5. When you see the message **Select this Image?**, highlight **Yes** and press **Enter**.
6. Use the arrow buttons to select a zoom factor (display size) and press **Enter**.
7. When the message **Save this image as the user's logo?** appears, select **Yes** and press **Enter**. Saving the logo may take a few moments. Do not use your projector, remote control, or video source while the logo is being saved.
8. When you see the message **Completed**, press **Menu** to exit the menu system.

Choosing When to Display the Image

After your image is saved, you can set it to display as the startup screen, the screen you see when there's no signal, or the screen you see when you press the A/V Mute button (see page 29).

1. Press the **Menu** button, highlight the **Extended** menu, and press **Enter**.
2. Select **Display** and press **Enter**.
3. Choose from these display options:
 - Set **Display Background** to **Logo** to display your image when there is no signal.
 - Set **Startup Screen** to **On** to display your image when the projector is warming up.
 - Set **A/V Mute** to **Logo** to display your image when you press the **A/V Mute** button.
4. When you're finished, press **Menu** to exit.

note

You can lock these settings to prevent them from being changed without a password (see page 55).

Disabling the Projector's Buttons

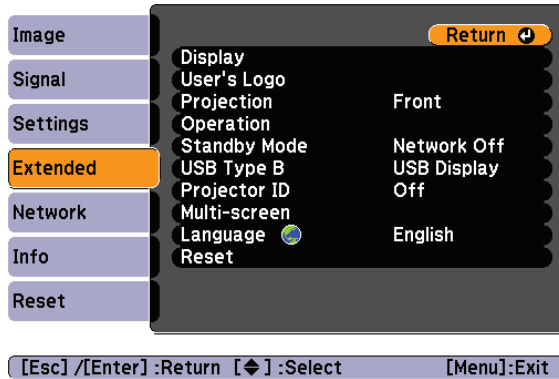
When you enable the Operation Lock function, you can lock all the projector's buttons, or all buttons except the **Power** button. The remote control can still be used to operate the projector.

1. Press the **Menu** button, highlight the **Settings** menu, and press **Enter**.
2. Select **Operation Lock** and press the **Enter** button.
3. Select **Full Lock** (to lock all projector buttons) or **Partial Lock** (to lock all buttons except the **Power** button) and press **Enter**.
4. Select **Yes** and press **Enter** to confirm the setting.
5. Press the **Menu** button to exit.

To disable the Operation Lock function, select **Off** in the Operation Lock menu. Or press and hold the **Enter** button on the projector's control panel for 7 seconds. A message is displayed and the lock is released.

Customizing Power and Operation

You can use the Extended menu to customize the way the projector displays images, enable quick startup, turn sleep mode on or off, and customize other projector operations.



- **Display**
Use this setting to turn off the display of messages, change the background color, enable logo display, or turn off the startup screen display.
- **User's Logo**
Create a custom startup screen, as described on page 57.
- **Projection**
Select **Front** (to project from the front of a screen and right side up), **Front/Ceiling** (when the projector is mounted upside-down from the ceiling), **Rear** (to project from behind onto a transparent screen), or **Rear/Ceiling** (to project from behind onto a transparent screen when the projector is mounted upside-down from the ceiling).
- **Operation**
Enable **Direct Power On** if you want to have the projector start when the power cable is connected (without pressing the **Power** button). Enable **Sleep Mode** if you want to have the projector turn off automatically if it is idle (and no signal is received) for 30

minutes or when the A/V mute slide (lens cover) is closed. Enable **High Altitude Mode** when you are using the projector above 4900 ft (1500 m).

- **Standby Mode**

This function is not used for the PowerLite 1810p.

- **Projector ID**

Lets you assign a numeric ID to each projector. When you are using multiple projectors, you can use the ID to select the one you want to operate with the remote control. See page 33 for instructions.

- **Multi-screen**

Use this option if you want to color-match two or more projectors that are being used to display images near each other. You can make image adjustments at each of five adjustment levels. First choose an **Adjustment Level** and then adjust the settings for each level: **Brightness Correct.** to adjust the brightness, and **Color Correct.** to adjust the balance between red and green, or blue and yellow. See page 62 for more information about multi-screen color adjustment.

- **Language**

Select from nine languages to be used for the projector menus.

note

If Direct Power On is enabled, the power cable is connected, and a power outage occurs, the projector will start when the power is restored.

Do not use the projector at altitudes above 7500 ft (2,286 m).

Multi-screen Color Adjustment

You can match the color of projected images when two or more projectors are being used to display images near each other. For each screen, you can set five levels of brightness and color correction.

note

If you use two or more projectors side-by-side, exhaust from adjacent projectors might cause overheating. Leave at least 2 feet (60 cm) of space between projectors.

1. Before starting, you may want to assign a numeric ID to each projector. This lets you use the remote control to select the projector you want to adjust. See page 33 for instructions.

To match the display colors as closely as possible, make sure that all the projectors are set to the same color mode before starting. See page 50 for instructions.
2. Press the **Menu** button on the remote control. You see the projector's menu screen.
3. Select **Extended > Multi-screen**.
4. Start by setting the **Adjustment Level** to 1 for two projectors. Then use **Brightness Correct.** to match the darker projector to the lighter one. Press **Enter** to see the effects of your adjustments.
5. Next, adjust the brightness of Level 5 for the same two projectors. Match the brighter projector to the darker one.
6. Adjust and match the brightness of Levels 2, 3, and 4.
7. Adjust and match the G/R color correction for all levels. Then adjust and match the B/Y correction for all levels.
8. If you are using three or more projectors, repeat steps 4 through 7 to match projector 3 to projector 2, then match projector 4 to projector 3, and so on.

5

Maintaining the Projector

warning

Before you clean any part of the projector, turn it off and unplug the power cord. Never open any cover on the projector, except the lamp cover. Dangerous electrical voltages in the projector can injure you severely. Do not try to service this product yourself, except as specifically explained in this User's Guide. Refer all other servicing to qualified service personnel.

Your projector needs little maintenance. All you have to do is keep the lens clean and periodically clean the air filter and vent. A clogged air filter or vent can block ventilation needed to cool the projector.

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

This chapter covers the following:

- Cleaning the lens
- Cleaning the projector case
- Cleaning the air filter and vent
- Replacing the lamp and air filter
- Replacing the remote control batteries
- Transporting the projector

Cleaning the Lens

Clean the lens whenever you notice dirt or dust on the surface.

Use a canister of compressed air to remove dust.

To remove dirt or smears on the lens, use lens-cleaning tissue. If necessary, moisten a soft cloth with lens cleaner and gently wipe the lens.

Cleaning the Projector Case

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

- To remove dirt or dust, wipe the case with a soft, dry, lint-free cloth.
- To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent. Then wipe the case.

caution

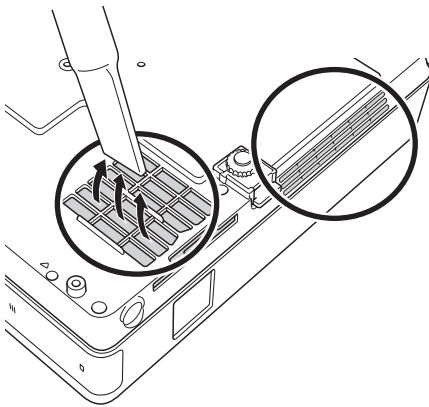
Do not use wax, alcohol, benzene, paint thinner, or other chemical detergents. These can damage the case.

Cleaning the Air Filter and Vent

Clean the air filter and air intake vent after every 100 hours of use. If they are not cleaned periodically, they can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector.

Follow these steps:

1. Turn off the projector and unplug the power cord.
2. Turn the projector upside down.
3. To clean the intake vent and filter, use a small vacuum cleaner designed for computers and other office equipment. If you don't have one, gently clean the vent with a soft brush (such as an artist's paintbrush).



4. If the dirt is difficult to remove or the filter is broken, replace the filter as described on page 68. Contact your dealer or call Epson at 800-GO-EPSON (800-463-7766) to obtain a new filter.

note

To order replacement air filters, request part number V13H134A08. See page 11 for ordering information.

note

When you get a replacement lamp for your projector, you should replace the filter.

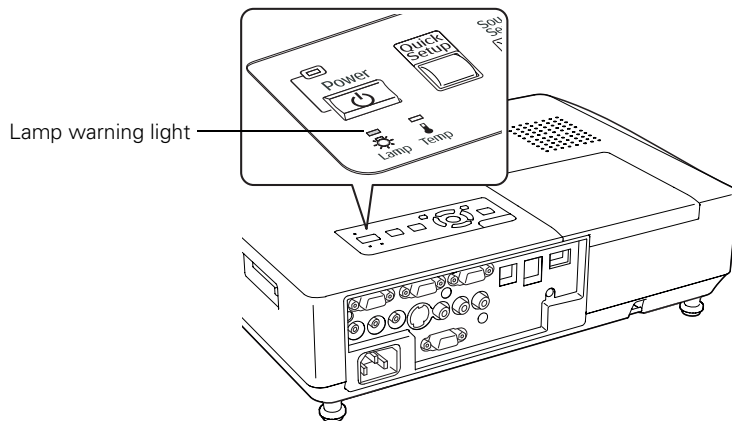
Turn off this product when not in use to prolong the life of the projector.

Replacing the Lamp and Air Filter

The life span of the projection lamp is about 2500 hours if **Brightness Control** in the Settings menu is set to **High** (default), and 3000 hours if **Brightness Control** is set to **Low**. See page 69 to check the lamp usage.

It is time to replace the lamp when:

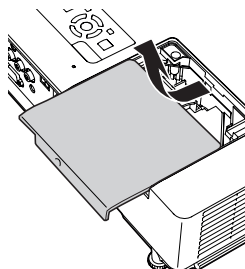
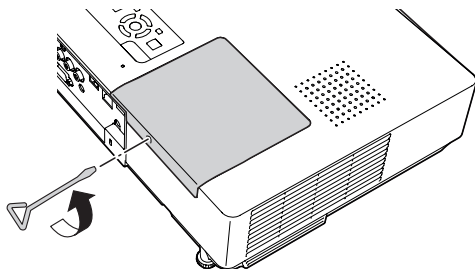
- The projected image gets darker or starts to deteriorate.
- The message **Replace the lamp** appears on the screen when the lamp comes on and the lamp warning light  flashes orange. To maintain projector brightness and image quality, replace the lamp as soon as possible.
- The lamp warning light  flashes red (the lamp is burnt out).



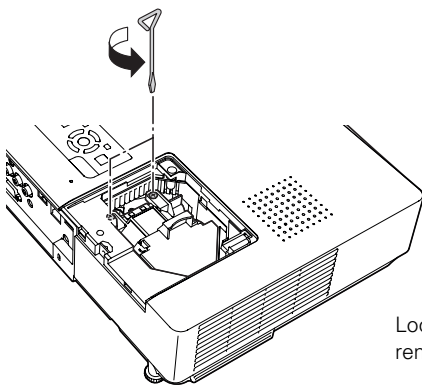
Contact your dealer or call Epson at 800-GO-EPSON (800-463-7766). Request part number V13H010L40.

Follow these steps to replace the lamp and air filter:

1. Turn off the projector and unplug the power cord.
2. Let the projector cool for at least an hour (if it has been on). The lamp is extremely hot immediately after use.
3. Loosen the lamp cover screw (you don't need to remove it). Then slide the lamp cover to the side and lift it off of the projector.



4. Loosen the two screws holding the lamp in place (you can't remove them).



Loosen, but don't
remove these screws

warning

*Let the lamp cool fully
before replacing it.*

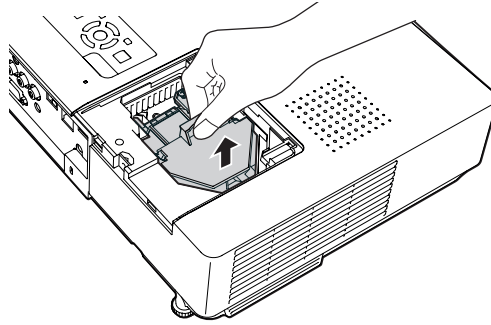
*In the unlikely event that
the lamp has broken, small
glass fragments may be
present and should be
removed carefully to avoid
injury.*

*If the lamp is used after the
replacement period has
passed, the possibility that
the lamp may break
increases. When a lamp
replacement message
appears, replace the lamp
with a new one as soon as
possible, even if it is still
working.*

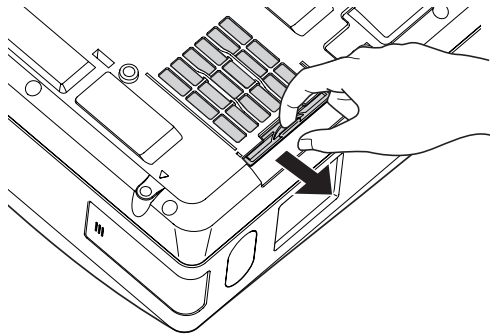
note

Ⓜ 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.

5. Hold the lamp as shown and pull it straight out.



6. Gently insert the new lamp. (If it doesn't fit easily, make sure it is facing the right way.)
7. Once the lamp is fully inserted, tighten its screws.
8. Replace the lamp cover, then tighten its screw.
9. Turn the projector over.
10. Slide the air filter out and remove it.



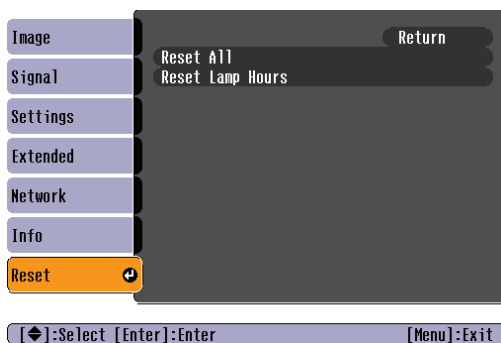
11. Slide in the new air filter until it clicks in place.
12. Reset the lamp timer as described in the next section.

Resetting the Lamp Timer

After you replace the lamp, you need to reset the lamp timer using the projector's menus.

1. Press the **Menu** button on the remote control or on the projector's control panel. You see the main menu.
2. Use the  pointer button on the remote control (or the arrow buttons on the projector) to highlight **Reset**, then press **Enter**.

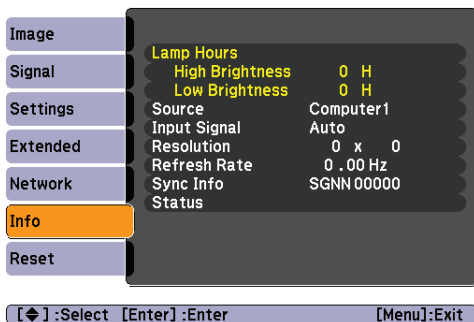
You see this screen:



3. Select **Reset Lamp Hours** and press **Enter**.
4. When you see the prompt, select **Yes** and press **Enter**.
5. When you're finished, press **Menu** to exit the menu system.

Checking Lamp Usage

To check the number of hours the lamp has been used, press the **Menu** button and highlight the **Info** menu. You see a screen like this:



note

The information displayed depends on the input signal currently selected.

The life span of the lamp is about 2500 hours if the **Brightness Control** setting in the Settings menu is set to **High** (default), and 3000 hours if the **Brightness Control** setting is set to **Low**. Make sure you have a spare lamp handy if the usage hours on this menu are close to the life span of your lamp.

Replacing the Batteries

caution

When replacing batteries, take the following precautions:

■ *Replace the batteries as soon as they run out. If the batteries leak, wipe away battery fluid with a soft cloth. If fluid gets on your hands, wash immediately.*

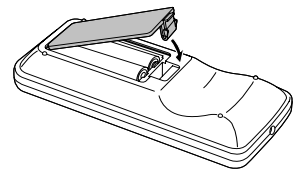
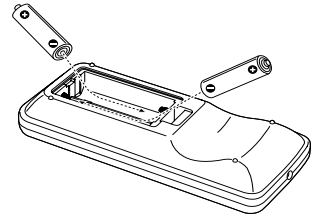
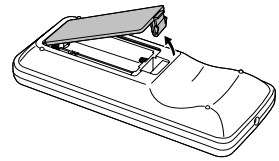
■ *Do not expose batteries to heat or flame.*

■ *Dispose of used batteries according to local regulations.*

■ *Remove the batteries if you won't be using the projector for a long period of time.*

Replace the batteries in the remote control as described below:

1. Turn the remote control over.
2. Press down on the tab on the battery cover as you lift the cover off.
3. Install two AAA batteries, inserting the + and – ends as shown.
4. Position the cover as shown, then press down until it snaps into place.



Transporting the Projector

The projector contains many glass and precision parts. Follow these guidelines to prevent damage:

- When shipping the projector for repairs, use the original packaging material if possible. If you do not have the original packaging, use equivalent materials, placing plenty of cushioning around the projector.
- When transporting the projector a long distance, first place it in a hard-shell shipping case, then pack it in a firm box with cushioning around the case.
- Close the A/V mute slide (lens cover) to protect the lens.
-

note

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

6

Solving Problems

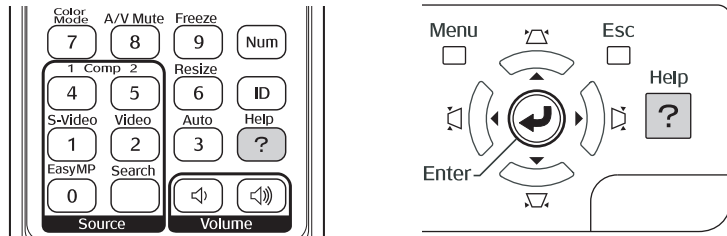
This chapter helps you solve problems with your projector, and tells you how to contact technical support for problems you can't solve yourself. The following information is included:

- Using the projector's on-screen help system
- What to do when the projector's status lights flash
- Solving projector operation problems
- Solving problems with the image or sound
- Solving problems with the remote control
- Contacting technical support

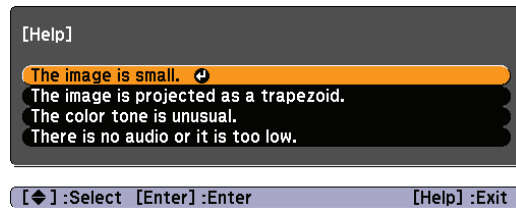
Using On-Screen Help

If the image doesn't look right or your audio isn't working, you can get help by pressing the ? Help button on top of the projector or on the remote control.

1. Press the ? Help button on the remote control or on the projector.



You see the Help menu:



2. Use the  pointer button on the remote control or the navigational buttons on the projector to highlight menu items.
3. Press the Enter button on the remote control or on the projector to select the menu item.
4. To exit the help system, press the ? Help button.

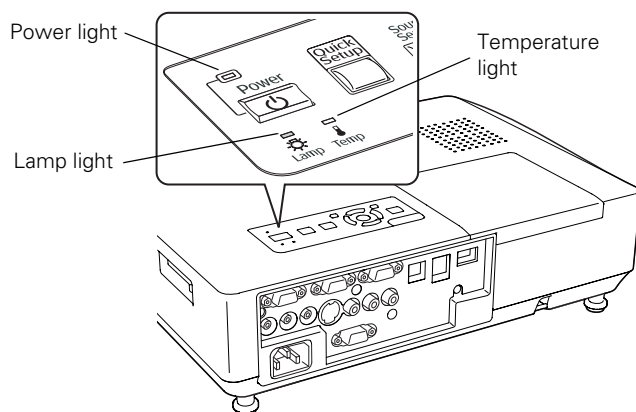
If none of the suggestions solve your problem, see additional solutions to problems in the following sections.

Checking Projector Status

If your projector isn't working correctly, first turn it off, wait for it to cool (the **Power** light stops flashing orange), and unplug it. Then plug the power cord back in and turn on the projector. If this doesn't solve the problem, check the lights on top of the projector.

What To Do When the Lights Flash

The lights on top of the projector indicate the projector's status.



Refer to the following table for a complete description of the projector's status lights:

Status lights

Light	Status	Description
	Orange	The projector is in sleep or standby mode. You can unplug it or press the Power button to turn it on.
	Flashing green	The projector is warming up. Wait for the image to appear.
	Green	The projector is operating normally.
	Flashing orange	The projector is cooling down. You can't turn it back on until the light stops flashing and remains orange.
	Red	There is a problem with the projector. Check the other two lights and the information on page 76 to diagnose the problem.

Status lights (continued)

Light	Status	Description
	Flashing orange	Rapid cooling is in progress. Although this is not an abnormal condition, projection will stop automatically if the temperature rises higher. Make sure there is plenty of space around and under the projector for ventilation, and that the air filters and vents are clear.
	Red	The projector is overheating, which turns the lamp off automatically. Wait until the cooling fan stops, then unplug the power cord. Plug the power cord back in and press the  Power button. Make sure the room temperature is not above 95 °F (35 °C), and there is plenty of space around and under the projector for ventilation. If you're using the projector above an altitude of 5000 feet (1500 m), turn on High Altitude Mode in the Operation menu (see page 60). The air filters may be clogged. Clean or replace them as described on page 65. If the projector continues to overheat after you clean the air filter, the problem may be caused by damage to the cooling fan or temperature sensor. Contact Epson for help as described on page 83. Warning: Except as specifically explained in this <i>User's Guide</i>, do not attempt to service this product yourself.
	Flashing red	There is a problem with the fan or temperature sensor. Stop using the projector, disconnect the power cable, and contact Epson as described on page 83.
	Flashing orange	It's time to replace the lamp. See page 66 for instructions. If you continue to use the lamp after the replacement warning, there is an increased possibility that the lamp may break.
	Flashing red	The lamp may be burnt out. First make sure the lamp cover is securely installed. If that's not the problem, let the lamp cool, remove the lamp, and replace it as described on page 66. If this does not resolve the problem, contact Epson as described on page 83.
 	Flashing red	Power is cut off because of an internal problem. Unplug the power cord and contact Epson for help, as described on page 83.

Solving Projector Operation Problems

The power doesn't turn on.

- If the projector doesn't turn on when you press the  Power button, make sure the power cable is connected to the projector and plugged into a working electrical outlet.
- The power cable may be defective. Disconnect the cable from the outlet and contact Epson as described on page 83.
- Check to see if the A/V mute slide (lens cover) is closed.

The buttons on the projector don't work.

If the Operation Lock function has been enabled, you can't use the buttons on the projector. Try using the remote control instead. See page 59 for information about the Operation Lock function.

Solving Problems with the Image or Sound

No image appears on the screen.

- Check that the **Power** light is green, not flashing.
- The projector may be in standby or sleep mode. If the **Power** light is orange, press the  Power button to turn the projector on.
- If the power was switched off and then on again, the projector may be cooling down. Wait until the **Power** light stops flashing and remains orange; then press the  Power button again.
- Press the **A/V Mute** button on the remote control to make sure the picture has not been turned off temporarily.
- Open the A/V mute slide (lens cover), if it is closed.
- The attached computer may be in sleep mode or displaying a black screen saver. Try pressing a key on the computer.

- If you are projecting from a DVD player or other video source, make sure you turn it on and press its **Play** button.

You've connected a computer and see a blue screen with the message No Signal displayed.

- Make sure the cables are connected correctly, as described on page 36.
- If you've connected a computer and one or more video sources, you may need to press the **Source Search** button on the projector or one of the source buttons on the remote control to select the correct source. Allow a few seconds for the projector to sync up after pressing the button.

If you're using a PC notebook:

- Hold down the **Fn** key on the keyboard and press the function key that lets you display on an external monitor. It may have an icon such as , or it may be labelled **CRT/LCD**. Allow a few seconds for the projector to sync up after pressing it. Check your notebook's manual or online help for details.

On most systems, the  key lets you toggle between the LCD screen and the projector, or display on both at the same time.

- Depending on your computer's video card, you might need to use the Display utility in the Control Panel to make sure that both the LCD screen and external monitor port are enabled. See your computer's documentation or online help for details.

If you're using Mac OS X:

1. Open **System Preferences**.
2. Click **Displays**.
3. Click **Detect Displays**.
4. Make sure the **VGA Display** or **Color LCD** dialog box is selected.
5. Click the **Arrangement** or **Arrange** tab.
6. Make sure the **Mirror Displays** checkbox is selected.

The message Not Supported is displayed.

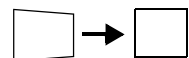
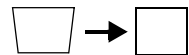
- Make sure the correct input signal is selected in the Signal menu (see page 52).
- Make sure your computer's resolution doesn't exceed UXGA (1600 × 1200) and the frequency or refresh rate is supported by the projector (see page 91). If necessary, change your computer's resolution setting.

Only part of the computer image is displayed.

- Press the **Auto** button on the remote control.
- Make sure the image **Position** setting is correct in the Signal menu. See page 53 for more information.
- Press the **Resize** button on the remote control.
- Press the **Esc** button on the remote control to cancel the E-Zoom function.
- Make sure your computer's resolution setting is correct. Ideally, it should be 1024 × 768 to match the projector's native resolution. If this option isn't available, select one of the other compatible video formats listed on page 91.
- You also may need to modify existing presentation files if you created them for a different resolution. See your software documentation for specific information.

The image isn't square, but keystone-shaped.

- If the image isn't square or rectangular, adjust its shape as described on page 22.
- Enable the Auto Keystone feature to automatically fix the shape when the projector is tilted upward. See page 54.



The image contains static or noise.

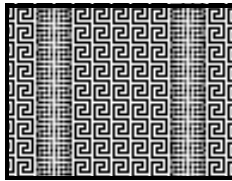
- If you're using a computer cable longer than 6 feet, or an extension cable, the image quality may be reduced.
- Keep your computer and video cables away from the power cord as much as possible to prevent interference.
- The video signal may be split between the computer and the projector. If you notice a decline in the projected image quality when the image is displayed simultaneously on your notebook computer and the projector, turn off the notebook's LCD display.
- Make sure the correct input signal is selected in the Signal menu (see page 53).
- If you've used the Quick Setup, Quick Corner, or Keystone adjustment, you may need to decrease the **Sharpness** setting in the Image menu (see page 51).

The image is blurry.

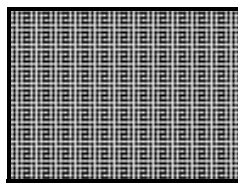
- There may be dirt or smears on the lens. Clean the lens as described on page 64.
- Adjust the focus using the focus ring (see page 22).
- If the projector is angled sharply toward the screen, it may not be possible to focus the entire image. Move the projector to position it more directly in front of the screen.
- Make sure the projector is within the proper range (projection distance) from the screen (see page 89).
- Make sure the lens is not fogged by condensation. You may need to wait before using the projector after moving it from a cold environment to a warm environment.
- If you're projecting from a computer, you may need to adjust the tracking and sync as described in the next section.

You see vertical bands or the image still looks blurry after trying the solutions in the previous section.

- If you're projecting from a computer and displaying an image that contains a lot of fine detail, you may notice vertical bands or some of the characters may look heavy or blurred. Press the **Auto** button on the remote control or the **Enter** button on the projector to reset the projector's Tracking, Sync, and Position settings.
- If further adjustment is needed, you can fine-tune the **Tracking** and **Sync** settings manually using the Signal menu, as described on page 53.
 1. Fill the screen with an image containing fine detail, such as a pattern to appear as your desktop background, or try projecting black text on a white background.
 2. Adjust the **Tracking** to eliminate vertical bands.



3. Adjust the **Sync** setting to increase the image sharpness.



The image is too light or dark, or colors are incorrect.

- Use the **Color Mode** option in the projector's Image menu to adjust the color (see page 50).
- If you're displaying video, adjust the **Color Adjustment** and **Color Mode** settings on the Image menu. You can also try adjusting the **Color Saturation**, **ABS Color Temp**, and **Tint** settings on the Image menu.

note

*You must be projecting an image for this button to have any effect. The **Auto** button works only with computer images projected through the VGA port.*

note

Because of the different technologies used, your projected image may not exactly match the colors on your notebook or computer monitor.

- Try adjusting the **Brightness** and **Contrast** settings on the Image menu.
- Check your computer display settings to correct the color balance.
- The projector's lamp may need to be replaced. See page 66 for instructions.
- Make sure the correct input signal is selected in the Signal menu (see page 53).

There is no sound, or the sound is not loud enough.

- Use the **Volume** buttons on the remote control to adjust the volume, or adjust the **Volume** setting in the Settings menu (see page 54).
- Make sure A/V Mute is not enabled. (The **A/V Mute** button may have been pressed.)
- Make sure the A/V mute slide (lens cover) is open.
- If your presentation includes computer audio, make sure the volume control on your computer is not turned all the way down or muted. In Windows, you may be able to check this by clicking the volume control in your Windows system tray (lower right corner of the screen). On a Mac, you may be able to adjust the volume from your menu bar (top right corner of the screen) or via the volume control function keys.
- If you're using a DVD player or other video source, make sure the cables are connected correctly, as described on page 44.
- If you're using a computer audio cable, make sure it is connected to your computer's  headphone jack or  audio out jack. Connect the other end to the projector's **Audio1** port when the computer's video cable is connected to the **Computer1** port. Otherwise, connect the cable to **Audio2** if you're using **Computer2** for the computer's video connection.

Solving Problems with the Remote Control

The projector doesn't respond to remote control commands.

- The remote control's batteries may not be installed correctly or may be low on power. To change the batteries, see page 70.
- Make sure you are within about 20 feet (6 meters) of the projector and within range of the projector's front or back sensor (approximately 30° to the left or right and 15° above or below).
- Dim the room lights and turn off any fluorescent lights. Make sure the projector is not in direct sunlight. Strong lighting, especially fluorescent lights, may affect the projector's infrared receivers. Also, turn off any nearby equipment that emits infrared energy, such as a radiant room heater. If necessary, use the **Remote Receiver** setting to disable the projector's front or back sensor if it continues to pick up interference (see page 55).
- Make sure the **Remote Receiver** setting isn't disabling both of the projector's sensors (see page 55).
- If any buttons are held for longer than 30 seconds, the remote enters sleep mode. Release any button that is held to wake the remote.

Where To Get Help

Epson provides these technical support services:

Internet Support

Visit Epson's [support website](#) for solutions to common problems. You can download utilities and documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

Visit [Presenters Online](#) to access tips, templates, and training for developing successful presentations.

Speak to a Support Representative

To use the Epson PrivateLine Support service, call (800) 637-7661 and enter the PIN on the included Epson PrivateLine Support card. This is the fastest way of speaking to a live representative, and it's free. This service is available 6 AM to 6 PM, Pacific Time, Monday through Friday, for the duration of your warranty period.

You may also speak with a projector support specialist by dialing one of these numbers:

- U.S.: (562) 276-4394, 6 AM to 6 PM, Pacific Time, Monday through Friday.
- Canada: (905) 709-3839, 6 AM to 6 PM, Pacific Time, Monday through Friday.

Toll or long distance charges may apply.

Before you call for support, please have the following information ready:

- Product name (PowerLite 1810p)
- Product serial number (located on the projector)
- Proof of purchase (such as a store receipt) and date of purchase
- Computer or video configuration
- Description of the problem

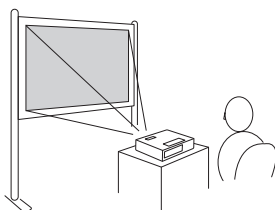
Purchase Supplies and Accessories

You can purchase screens or other accessories 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).

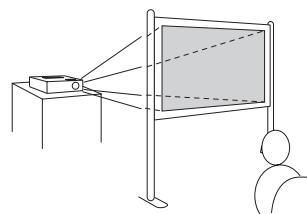
A *Projector Installation*

This appendix provides guidelines on installing the projector in a permanent location, such as a theater or conference room.

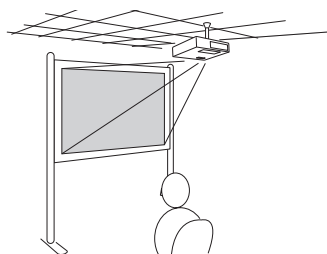
The projector can be installed for four different viewing setups: front projection, ceiling projection, rear projection onto a semi-transparent screen, or rear/ceiling projection, as shown:



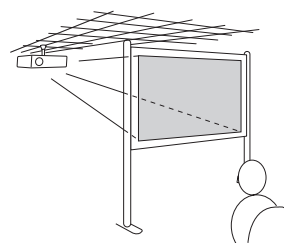
Front projection



Rear projection



Ceiling projection



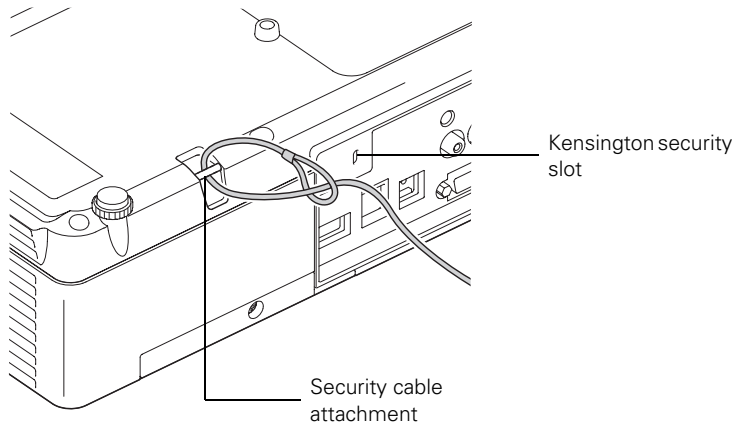
Rear/ceiling projection

To project from overhead, you'll need the optional ceiling mounting hardware (see page 11). You'll also need to select the appropriate **Projection** setting in the projector's Extended menu to flip the image upside-down (see page 60).

If you're mounting the projector on the ceiling and you place it above screen level, you'll have to tilt the projector down to position the image on the screen. This causes the image to lose its square shape. You can correct the image using the projector's **Quick Setup**, **Quick Corner**, and/or **Keystone** functions, as described on page 22.

The projector includes security features to prevent its theft when installed or used in public locations:

- **Security cable attachment** You can attach a commercially available security cable as shown below to secure the projector to a table or ceiling mount.
- **Kensington security slot** The security slot is compatible with the MicroSaver security systems manufactured by Kensington. You can purchase this lock from Epson (see page 11).



In addition, the projector includes several menu-operated security features. See page 55.

B *Technical Specifications*

General

Type of display	Epson poly-silicon TFT active matrix
Resolution (native format)	1024 × 768 pixels (XGA)
Color reproduction	16.8 million colors
Brightness	3500 lumens (High Brightness mode) 2700 lumens (Low Brightness mode)
Contrast ratio	500:1
Image size	30 to 300 inches
Projection distance	2.7 to 48.2 feet (0.8 to 14.7 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Internal sound system	5 W monaural
Optical aspect ratio	4:3 (horizontal:vertical)
Zoom ratio	1:1.6
Noise level	32 dB in Low Brightness mode, 37 dB in High Brightness mode
Keystone correction	±30° vertical (automatic/manual) ±20° horizontal (manual)
Mouse compatibility	Supports USB (type B)

note

Lamp life results will vary depending upon mode selected, environmental conditions, and usage.

Turn off this product when not in use to prolong the life of the projector.

Projection Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	210 W
Lamp life	Approx. 2500 hours (High Brightness mode) Approx. 3000 hours (Low Brightness mode)
Part number	V13H010L40

Remote Control

Range	20 feet (6 meters)
Batteries (2)	Alkaline AAA

Dimensions

Height	3.4 inches (86 mm), feet retracted
Width	13.6 inches (345 mm)
Depth	10.1 inches (257 mm)
Weight	6.5 lb (2.9 kg)

Electrical

Rated frequency	50/60 Hz AC
Power supply	100 to 120 VAC, 3.4 A 200 to 240 VAC, 1.5 A
Power consumption	Operating: 100 to 120 VAC, 306 W 220 to 240 VAC, 286 W Standby: 100 to 120 VAC, 2.6 W 220 to 240 VAC, 4.6 W

Environmental

Temperature	Operating: 41 to 95 °F (5 to 35 °C) Storage: 14 to 140 °F (–10 to 60 °C)
Humidity (non-condensing)	Operating: 20 to 80% RH Storage: 10 to 90% RH
Operating altitude	0 to 7,500 ft (0 to 2,286 m)

Safety and Approvals

United States	FCC 47CFR Part 15B Class B (DoC) UL60950 Third Edition
Canada	ICES-003 Class B CSA C22.2 No. 60950
CE Marking	Directive 73/23/EEC Directive 89/336/EEC IEC 60950 Third Edition EN 55022, EN 55024



Pixelworks™ DNX™ ICs are used in this projector.

Compatible Video Formats

The projector supports the high definition video and computer display formats listed below, as well as traditional NTSC, PAL, and SECAM video standards.

To project images output from a computer, the computer's video card must be set at a refresh rate (vertical frequency) that's compatible with the projector. Some images are automatically resized using Epson's SizeWize™ technology to display in the projector's native format (XGA). The frequencies of some computers may not allow images to display correctly; see your computer's documentation for details.

Compatible video formats

Mode	Refresh Rate (Hz)	Resolution
VGA EGA	70	640 × 350
VGA—60	60	640 × 480
VESA—72	72	640 × 480
VESA—75	75	640 × 480
VESA—85	85	640 × 480
VGA—120	120	640 × 480
SVGA—56	56	800 × 600
SVGA—60	60	800 × 600
SVGA—72	72	800 × 600
SVGA—75	75	800 × 600
SVGA—85	85	800 × 600
SVGA—120	120	800 × 600
XGA—60	60	1024 × 768
XGA—70	70	1024 × 768
XGA—75	75	1024 × 768
XGA—85	85	1024 × 768
XGA—120	120	1024 × 768
SXGA1—70	70	1152 × 864
SXGA1—75	75	1152 × 864
SXGA1—85	85	1152 × 864
SXGA1—120	120	1152 × 864
SXGA2—60	60	1280 × 960
SXGA2—75	75	1280 × 960
SXGA2—85	85	1280 × 960
SXGA+60	60	1400 × 1050
SXGA+75	75	1400 × 1050
SXGA+85	85	1400 × 1050
SXGA3—60	60	1280 × 1024
SXGA3—75	75	1280 × 1024
SXGA3—85	85	1280 × 1024
UXGA—60	60	1600 × 1200
iMAC VGA	117	640 × 480
iMAC SVGA	95	800 × 600
iMAC XGA	75	1024 × 768
MAC13	67	640 × 480
MAC16	75	832 × 624
MAC19	75	1024 × 768
MAC19-60	59	1024 × 768
MAC21	75	1152 × 870

Compatible video formats (continued)

Mode	Refresh Rate (Hz)	Resolution
NTSC	60	—
NTSC 4:43	60	—
PAL	50	—
N-PAL	50	—
M-PAL	60	—
PAL—60	60	—
SECAM	50	—
HDTV (720p)	60	—
HDTV (720p)	50	—
HDTV (1080i)	60	—
HDTV (1080i)	50	—
TV480i	60	—
TV625i	50	—
SDTV (480p)	60	—
SDTV (576p)	50	—

C

Notices

This appendix includes safety instructions and other important information about your projector.

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.
- 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 forward or back at a greater angle than that specified for vertical keystone correction (see page 89).
- If the projector is mounted on a ceiling, it should be installed by qualified technicians using mounting hardware designed for use with this projector.
- Do not stand on the projector or place heavy objects on it.
- Do not use the projector where it may be exposed to rain, water, or excessive humidity.
- Unplug the projector from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
- Never spill liquid of any kind into the projector.
- Do not use the projector where it may be exposed to excessive dust or smoke.
- Never push objects of any kind through the cabinet slots.
- 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.
- 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, which could block vents underneath your projector.

- Do not operate the projector in a closed-in cabinet unless proper ventilation is provided.
- 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.
- Clean or replace the air filter periodically to prevent overheating.
- Do not use the projector outside of the required temperature range of 41 to 95 °F (5 to 35 °C). Doing so may cause an unstable display and could lead to projector damage.
- Do not store the projector outside of the required temperature range of 14 to 140 °F (–10 to 60 °C) or in direct sunlight for long periods of time. Doing so may cause damage to the case.
- Unplug the projector during lightning storms or when it will not be used for extended periods.
- 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.
- Except as specifically explained in this *User's Guide*, 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.
- Use the type of power source indicated on the projector. If you are not sure of the power available, consult your dealer or power company.
- If you use the projector in a country other than where you purchased it, use the correct power cord for that country.
- Do not overload wall outlets, extension cords, or power strips. This can cause fire or electric shock.
- Take the following precautions when handling the plug: Do not hold the plug with wet hands. Do not insert the plug into an outlet with dust present. Insert the plug firmly into the outlet.
- Do not place the projector where the cord can be walked on.
- (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.
- If the lamp breaks, ventilate the room to prevent gases contained in the lamp from being inhaled or coming in contact with the eyes or mouth.

- If the projector is mounted overhead and the lamp breaks, be careful to prevent pieces of glass from falling into your eyes when you open the lamp cover.

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.* (Provided in accordance with Proposition 65 in Cal. Health & Safety Code §25249.5 et seq.)

FCC Compliance Statement

For United States Users

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

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

WARNING

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

For Canadian Users

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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