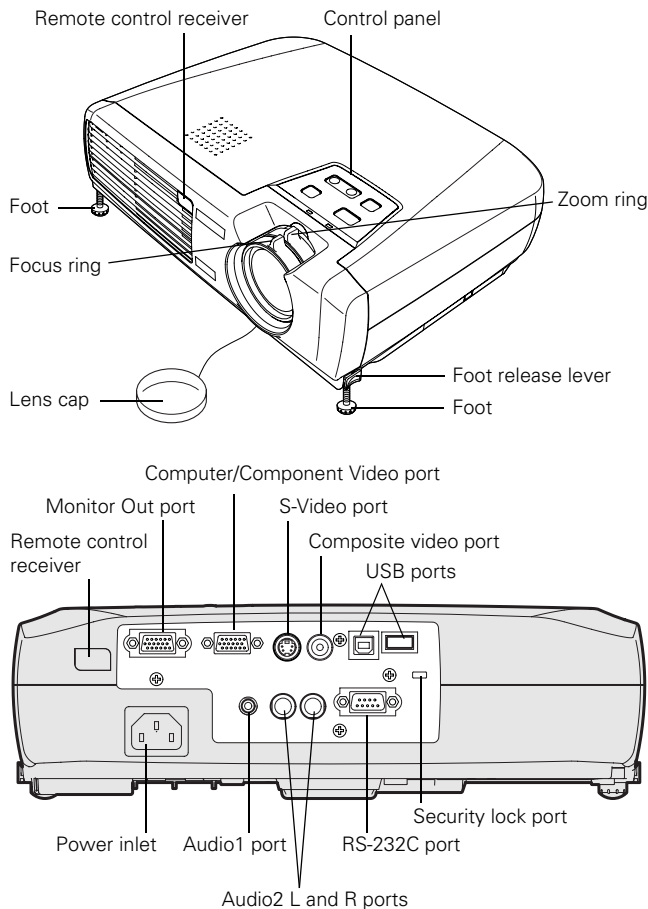




Specifications

General

Type of display	Poly-silicon TFT active matrix 73: with MLA (Micro Lens Array) 53: without MLA (Micro Lens Array)
LCD panels (3)	Diagonal size: 0.7 inches (17.8 mm)
Lens	F=1.70 to 1.87, focal length=21.3 to 25.6 mm
Resolution	1024 × 768 pixels (73) 800 × 600 pixels (53); (native formats)
Color reproduction	Full color, 16.7 million colors
Brightness (ANSI)	53: 1700 lumens (High brightness mode) 1400 lumens (Low brightness mode) 73: 1500 lumens (High brightness mode) 1200 lumens (Low brightness mode)
Contrast ratio	500:1
Image size	30 to 300 inches (0.8 to 7.6 meters)

Projection distance	2.9 to 34.4 feet (0.9 to 10.5 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Internal sound system	1 W monaural
Optical aspect ratio	4:3 (horizontal : vertical)
Zoom ratio	1:1.2
Noise level	36 dB (High brightness mode) 33 dB (Low brightness mode)
Keystone correction angle	± 15° vertical (maximum)

Projection Lamp

Power consumption	165 W
Lamp life	About 1500 hours
Part number	V13H010L21

Remote Control

Range	20 feet (6 meters)
Battery	CR2025 lithium

Mouse Compatibility

Supports USB

Dimensions

Height	3.4 to 3.8 inches (87 to 97 mm)
Width	12.4 inches (315 mm)
Depth	9.5 inches (240 mm)
Weight	6.4 lb (2.9 kg)

Electrical

Rated frequency	50/60 Hz
Power supply	100 to 120 VAC, 2.6 A 200 to 240 VAC, 1.3 A
Power consumption	Operating: 240 W Standby: 2.6 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

Safety and Approvals

United States	FCC 47CFR Part15B Class B (DoC) UL1950 Rev. 3
Canada	ICES-003 Class B CSA C22.2 No. 950-95 (cUL)
CE Marking	Directive 73/23/EEC, 89/336/EEC EN 55022, EN 55024

Compatible Video Formats

The projector supports NTSC, PAL, and SECAM international video standards, as well as the monitor and HDTV display formats listed below.

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; see the following table for compatible formats. As noted below, some images are automatically resized to display in one of the projector's "native" formats (such as XGA). In addition, the frequencies of some computers may not allow images to display correctly; see your computer's documentation for details.

Mode	Refresh Rate (Hz)	Resolution
VGAEGA	70	640 × 350*
VGA—60	60	640 × 480*
VESA—72	72	640 × 480*
VESA—75	75	640 × 480*
VESA—85	85	640 × 480*
SVGA—56	56	800 × 600* ¹
SVGA—60	60	800 × 600* ¹
SVGA—72	72	800 × 600* ¹
SVGA—75	75	800 × 600* ¹
SVGA—85	85	800 × 600* ¹
XGA—43i	43	1024 × 768* ²
XGA—60	60	1024 × 768* ²
XGA—70	70	1024 × 768* ²
XGA—75	75	1024 × 768* ²
XGA—85	85	1024 × 768* ²
SXGA1—70	70	1152 × 864*
SXGA1—75	75	1152 × 864*
SXGA1—85	85	1152 × 864*
SXGA2—60	60	1280 × 960*
SXGA2—75	75	1280 × 960*
SXGA2—85	85	1280 × 960*
SXGA3—43i	43	1280 × 1024*
SXGA3—60	60	1280 × 1024*
SXGA3—75	75	1280 × 1024*
SXGA3—85	85	1280 × 1024*
UXGA—48i	48	1600 × 1200* ³
UXGA—60	60	1600 × 1200* ³
MAC13	67	640 × 480*
MAC16	75	832 × 624*
MAC19—60	59	1024 × 768*
MAC19	75	1024 × 768* ²
MAC21	75	1152 × 870*

Mode	Refresh Rate (Hz)	Resolution
NTSC	60	—
NTSC 4:3	60	—
PAL	50	—
M-PAL	60	—
N-PAL	50	—
PAL—60	60	—
SECAM	50	—
HDTV (480i)	59.94	720 × 480*
HDTV (480p)	59.94	720 × 480*
HDTV (575i)	50	720 × 574*
HDTV (575p)	50	720 × 574*
HDTV (720p)	60	1280 × 720*
HDTV (1080i)	60	1920 × 1080*
HDTV (1080i) 33.75/31.25	50	1920 × 1080*

* The image is resized using EPSON's SizeWise Technology.

¹ Resized on the PowerLite 73c only; native mode on the PowerLite 53c.

² Resized on the PowerLite 53c only; native mode on the PowerLite 73c.

³ Resized on the PowerLite 73c only; not available on the PowerLite 53c.

Computer Video Port Pin Assignments

The Computer port is a female video RGB, 15-pin, mini-D-style connector. Here are its pin assignments:

Pin no.	Computer port
1	Red video
2	Green video
3	Blue video
4	GND
5	GND
6	Red GND
7	Green GND
8	Blue GND
9	Reserved
10	Synchronous GND
11	GND
12	SDA
13	Horizontal sync / composite sync
14	Vertical sync
15	SCL

Positioning the Projector

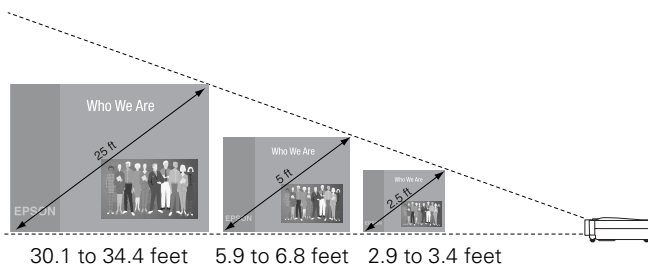
Before connecting the projector, you need to decide where to place it. The location you choose depends on the size of the room and what you are projecting.

- ❑ Place the projector on a sturdy, level surface, between 2.9 and 34.4 feet from the screen.
- ❑ Make sure there is plenty of space for ventilation around and under the projector. Leave at least 8 inches between the projector and a wall.
- ❑ Make sure the projector is within 6 feet of an electrical outlet or extension cord and within 5 feet of your computer and/or video source.
- ❑ Place the projector directly in front of the center of the screen, facing the screen squarely. Otherwise, your image will not be rectangular.

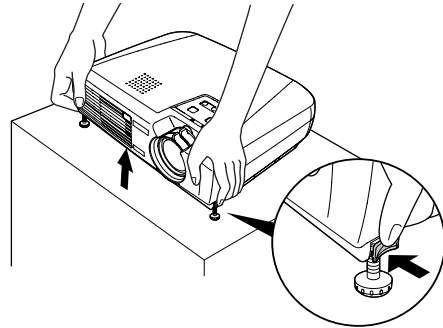
Note

It's easier to position the projector when the screen is directly in front of the room. If the screen is placed diagonally in a corner, it's much more difficult to aim the projector correctly at the screen and get a rectangular image.

Use the figure below as a guideline to help you determine how far from the screen to place the projector. Image size generally increases with distance, but may vary depending on how you position the zoom ring and whether you have adjusted the image size with other settings.



If you place the projector below the level of the screen, you'll have to tilt it up by extending the feet as shown. Tilting the projector upward causes the image to lose its rectangular shape, but the Auto Keystone feature corrects the distortion automatically. If the image does not regain its rectangular shape, the Auto Keystone feature may have been disabled. To turn it on, see page 5.



If you place the projector level with the bottom of the screen, the image will be rectangular and you won't have to adjust it. If you place the projector higher than the bottom of the screen, the image will still be rectangular, but you won't be able to fill the whole screen with the image.

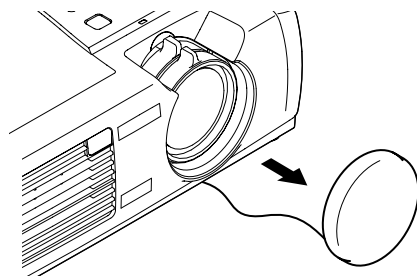
Starting Up the Projector

Make sure your projector and other equipment are set up and connected correctly. Then turn on your projector, as described below, followed by any equipment you've connected to it. You can turn on your computer and video equipment in any order, but if you have both a computer and video source connected, you may have to switch to the desired source as described in step 5 on page 4.

Turning On the Projector

Follow these steps to plug in and turn on the projector:

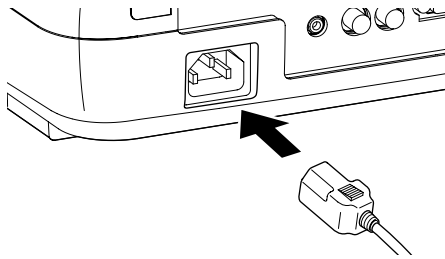
1. Remove the lens cap.



Caution

Do not use the projector with the lens cap in place. The heat generated by the lamp can damage the cap.

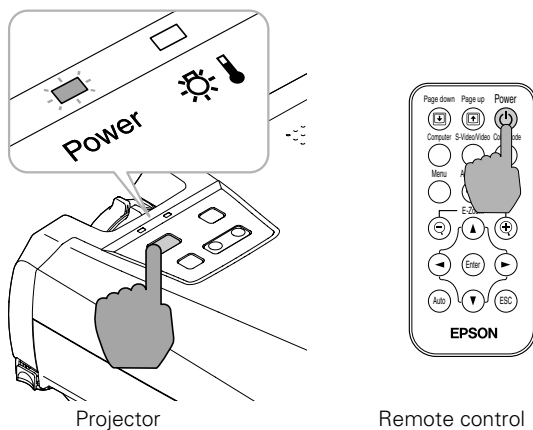
2. Connect one end of the power cord to the projector's power inlet.



3. Connect the other end to an electrical outlet.

The power light on top of the projector turns orange, indicating that the projector is receiving power but not yet turned on. Wait until the light stops flashing, but stays lit orange.

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



The power light flashes green as the projector warms up, and the projection lamp comes on in about 40 seconds. The power light stays green.

Warning

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

5. Do one of the following:

- ☐ If you're using a computer, turn it on or restart it. In a few moments, you should see your computer display projected.

(Windows® only: If you see a message saying that it has found a plug-and-play monitor, click Cancel.)

- ☐ If you're projecting a video, press the Source button on top of the projector or the S-Video/Video button on the remote control to switch to your video source. Then press the Play button on your DVD player or other device.

If a projected image fails to appear, see the next section for help.

Once you see your image, turn to page 5 for instructions on focusing and making other image adjustments.

When you're done with your presentation, shut down the projector as described on page 6. Shutting down the projector correctly prevents premature lamp failure and possible damage from overheating.

What To Do If You See a Blank Screen

If you see a blank screen or a blue screen with the message No Signal after turning on your computer or video source, try the following:

- ☐ Make sure the cables are connected correctly.
- ☐ Make sure the power light is green and not flashing and the lens cover is off.
- ☐ Try restarting your computer.
- ☐ Press the Source button on top of the projector 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 laptop:

- ☐ Hold down the Fn key 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 laptop's manual or online help for details.

On most systems, the  or CRT/LCD 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 a Macintosh laptop with OS 9.x or earlier:

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 Control Panels, then click Monitors or Monitors and Sound.
2. Click the Arrange icon.
3. Drag one monitor icon on top of the other.

If the Arrange option isn't available, you may need to select one of the Simulscan resolution settings:

1. Click the Monitor icon, if necessary.
2. Select a Simulscan resolution. (Allow a few seconds for the projector to sync up after making the selection.)

If you're using a Macintosh laptop with 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:

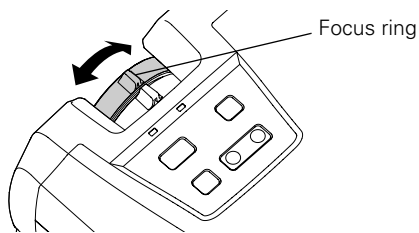
1. From the Apple menu, select System Preferences, then click Displays.
2. Select VGA Display or Color LCD, click Arrange or Arrangement, and make sure Mirror Displays is checked.

Adjusting the Image

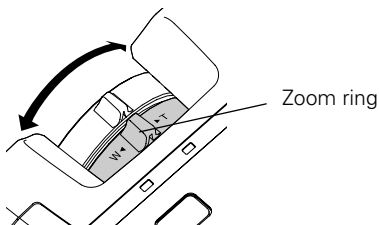
Once you see your image, you may need to make certain adjustments, as described in this section.

Focusing and Zooming Your Image

Rotate the focus ring to sharpen the image.



Rotate the zoom ring to reduce or enlarge the image.

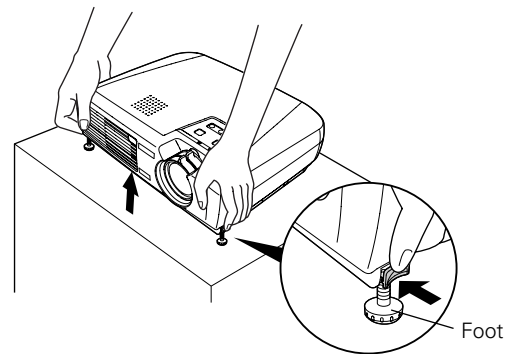


You can also change the image size by moving the projector closer to or farther away from the screen. You can use the E-Zoom buttons on the remote control to zoom in on a portion of the image. See page 8 for instructions.

Adjusting the Height of Your Image

If the image is too low, you can raise it by extending the projector's feet.

1. Stand behind the projector. Press the blue foot release levers and lift the front of the projector. This unlocks the feet.



2. Once the image is positioned where you want it, release the levers to lock the feet in position.
3. To fine-tune the height of the image, rotate the projector's feet.

If the image is no longer rectangular after raising it, see the next section.

Adjusting the Image Shape

If the projected image isn't rectangular or has a "keystone" shape, do one or more of the following:

- ☐ If your image looks like  or , you've placed the projector off to one side of the screen, at an angle. Move it directly in front of the center of the screen, facing the screen squarely.
- ☐ If your image looks like  or , the Auto Keystone feature has been disabled. You can correct this by turning on the Auto Keystone feature or by manually adjusting the keystone correction value.

To turn on Auto Keystone, press the Menu button on the remote control. Use the directional buttons to select the Setting menu, then press Enter. Use the directional buttons to highlight Auto Keystone and to turn the feature on. Press the Enter button to save your changes, then exit the menu by pressing the Menu button. (Auto Keystone is not available when you're using ceiling or rear projection.)

To manually adjust the keystone correction value, press the  or  side of the Keystone button on the projector to correct the shape of the image. After correction, your image will be slightly smaller.

You can also perform electronic keystone correction using the projector's Setting menu.

Adjusting the Color Mode

You may want to adjust the color mode to select a different setting that is appropriate for the image you're projecting and the surroundings in which you're projecting it.

If you're projecting computer images, the default color mode is Normal, which is appropriate for presentations in bright rooms. For video or S-Video images, the default color mode is Theatre, which optimizes video images using natural colors.

You can also select one of these color modes:

Color mode	Description
sRGB	Use when projecting computer images conforming to the sRGB color standard (the default setting when projecting from a computer with analog video)
Meeting	Use when you want images projected using their original tints, without any color enhancements.
Presentation	Use when you're projecting a presentation in a dark room.
Game	Use when you're projecting video games in a bright room.

To change the color mode, press the Color Mode button on the remote control. The currently selected setting appears in the upper right corner of the screen. You can also use the projector menu system to select the Color Mode in the Video menu.

Shutting Down the Projector

When you've finished using the projector, follow the recommended procedure to shut it down. This extends the life of the lamp and protects the projector from possible overheating.

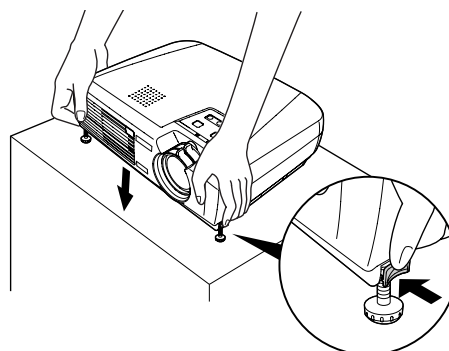
Note

When the projector has not received any input signals for 30 minutes, it automatically turns off the projector lamp and enters "sleep mode." This conserves electricity, cools the projector, and extends the life of the lamp. If you are done using the projector, unplug the power cord. If you want to start projecting again, press the Power button.

1. If you're using a computer, shut it down first.
2. To turn off the projector, press the Power button on the projector or remote control. You see a confirmation message. (If you don't want to turn it off, press any other button.)
3. Press the Power button again. The power light flashes orange for about forty-five seconds as the projector cools down. When the projector has cooled, the orange light stays on and the exhaust fan shuts off.

If you want to turn the projector on again, wait until the orange light stops flashing. Then press the Power button.

4. Retract the front feet as shown.



5. Replace the lens cap and unplug the power cord.

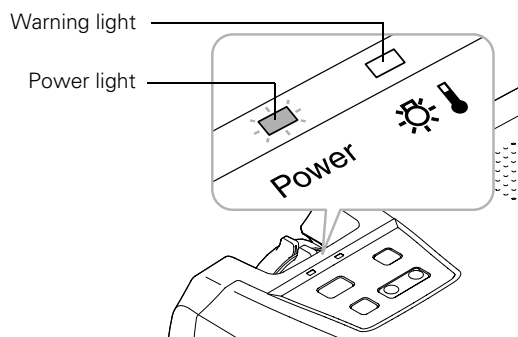
Caution

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

6. If you're using a VCR or other video source, turn it off after you turn off the projector.
7. Disconnect all equipment, and store the projector in the soft case that came with it or in a protective case.

Projector Status Lights

The lights on top of the projector indicate the projector's status and let you know when a problem occurs.



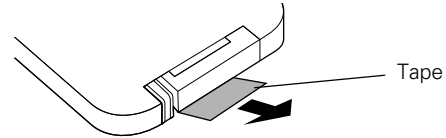
If the projector is not working correctly, first turn it off and unplug it. Then plug the power cord back in and turn on the projector. If this does not solve the problem, check the status lights on top of the projector and try the solutions recommended in the table on the next page.

Status lights

Power light	Warning light	Status	Description
—	Flashing red	Internal error	There is an internal error in the projector. Turn the projector off and unplug it. Contact EPSON for help.
—	Flashing red (quickly)	Lamp failure	The lamp is burned out or not installed correctly, or the lamp cover is open. Close the cover or replace the lamp, if necessary, as described on page 10.
—	Red	Overheating	The projector has overheated and turned itself off. Let it cool for a few minutes, then turn it back on. Make sure there is plenty of space around and under the projector for ventilation. Also clean the air filter (see page 9). If it continues to overheat, you may need to replace the air filter.
—	Flashing orange (quickly)	High temperature warning	The projector is too hot. Make sure the temperature surrounding the projector does not exceed 95 °F and there is plenty of space around and under the projector for ventilation. Clean the air filter, if necessary. See page 9 for instructions.
Orange	Off	Sleep mode	The projector is in sleep mode. You can unplug it or press the  Power button to turn it on.
Flashing green	Off	Warming up	The projector is warming up. Wait for the image to appear.
Green	Off	Operating	The projector is operating normally.
Flashing orange	Off	Cooling down	The projector is cooling down. Wait for the light to stay lit orange without flashing before unplugging it.

Using the Remote Control

Before using the remote control, pull out the tape from the battery tray as shown below.



When using the remote control, stand within 20 feet of the projector. Point the remote control either at the front or back of the projector or at the screen (the projector's front sensor can detect signals bounced off the screen). Press the button for the function you want to use. See the following pages for instructions.

Note

Most of the projector's features can only be accessed with the remote control. To avoid losing the remote control, place it in the remote control storage compartment beneath the side of the projector.



Switching Between Picture Sources

If you've connected your projector to a computer and a video source, you can use the buttons on the remote control to switch between the different sources.

- ☐ Press the Computer button to select your computer source.
- ☐ Press the S-Video/Video button to select an S-Video or standard composite video source.

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

Turning Off the Picture and Sound

You can use the A/V Mute button on the remote control to turn off the image and sound and darken your screen. This is useful if you want to temporarily re-direct your audience's attention without the distraction of a bright screen.

- ❑ To turn off the picture and sound, press the A/V Mute button. The screen goes dark.
- ❑ To turn the image and sound back on, press the button again.

Stopping Action

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

- ❑ Press the Freeze button to stop the action and keep the current image on the screen. The sound will continue.
- ❑ Press the Freeze button again to re-start it.

Zooming Your Image

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

1. Press the + button to zoom in on your image.
 - ❑ Press the button repeatedly to enlarge it up to four times in 24 steps.
 - ❑ Press and hold the button to zoom in to the size you want.
2. Use the directional buttons to pan around the screen if necessary.
3. Press the – button to zoom out. You can press the button repeatedly, or press and hold it to zoom all the way out. Press the Esc button to return to the original size.

Using the Remote Control as a Wireless Mouse

When you use the remote control as a wireless mouse, you can control your computer or click through slideshow-style presentations (such as PowerPoint) from up to 20 feet away.

To control your computer with the remote, make sure you have connected the mouse cable between the projector and your computer.

- ❑ To move the mouse pointer on the screen, aim the remote at the screen and use the directional buttons to move the cursor.
- ❑ To click (or left-click), press the Enter button.
- ❑ To right-click, press the Esc button.

- ❑ To double-click, press down twice on the Enter button.
- ❑ To click and drag, press down on the Enter button and use the directional buttons to move where you want to drag.
- ❑ To advance slides in a PowerPoint presentation in Slide Show mode, press the Page up or Enter button on the remote control. Press the Page down or Esc button to go back a slide.

Note

The Page up and Page down buttons work only when the USB mouse cable is connected.

Replacing the Battery

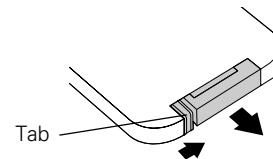
Caution

When replacing batteries, take the following precautions:

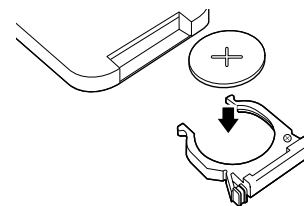
- ❑ *Replace the battery as soon as it runs out. If the battery leaks, wipe away battery fluid with a soft cloth. If fluid gets on your hands, wash them immediately.*
- ❑ *Do not expose batteries to heat or flame.*
- ❑ *Dispose of used batteries according to local regulations.*
- ❑ *Remove the battery if you won't be using the projector for a long period of time.*

Follow these steps to replace the battery:

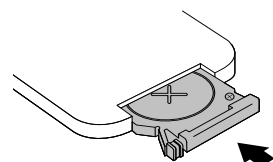
1. Press the tab towards the center of the remote and slide the battery tray out of the remote control.



2. Remove the old battery and insert a CR2025 watch battery as shown.



3. Slide the battery tray back into the remote until it clicks into place.



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 paper. If necessary, moisten a soft cloth with lens cleaner and gently wipe the lens surface.

Caution

Do not use glass cleaner to clean the lens.

Cleaning the Projector

Before you clean the case, first 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 mild detergent. Then wipe the case.
- ❑ Do not use wax, alcohol, benzene, paint thinner, or other chemical detergents. These can damage the case.

Cleaning and Replacing the Air Filter

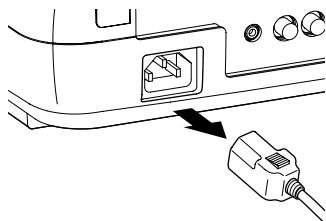
Clean the air filter on the bottom of the projector after every 100 hours of use. If it is not cleaned periodically, it can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector.

Note

When you get a replacement lamp for your projector, a new air filter is included. You should replace the filter when you replace the lamp.

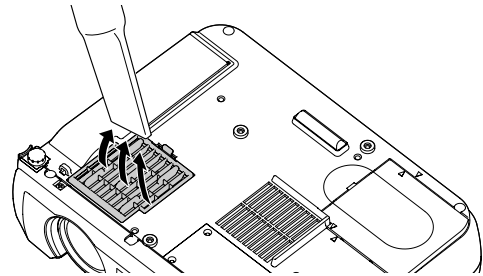
To clean the air filter, follow these steps:

1. Turn off the projector, allow it to cool down, and unplug the power cord.



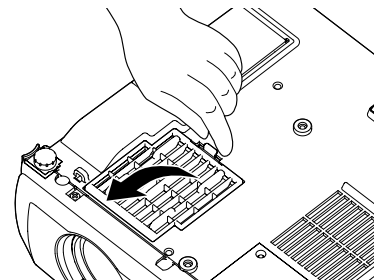
2. Turn the projector upside-down.

3. To clean the filter, EPSON recommends using a small vacuum cleaner designed for computers and other office equipment. If you don't have one, gently clean the filter using a very soft brush (such as an artist's camel-hair brush).

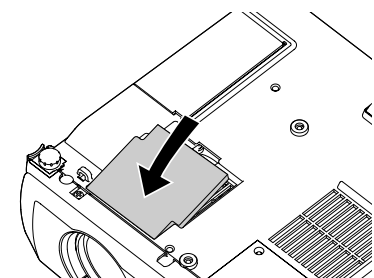


If the dirt is difficult to remove or if the filter is torn, replace it.

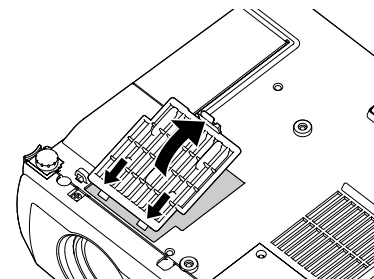
4. If you need to replace the filter, lift the tab on the filter cover and pull it upward to remove it.



5. Remove the filter.
6. Install the new filter as shown below.



7. Replace the filter cover by inserting the tabs and then pressing down the other end until it clicks into place.



Replacing the Lamp

The projection lamp typically lasts for about 1500 hours of use. It is time to replace the lamp when:

- ❑ The projected image gets darker or starts to deteriorate.
- ❑ The  warning light is flashing red.
- ❑ The message LAMP REPLACE appears on the screen when the lamp comes on (after about 1400 hours of use). To maintain projector brightness and image quality, replace the lamp as soon as possible.

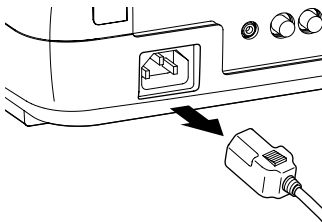
Note

To see how many hours the lamp has been used, see page 11.

Contact your dealer or call EPSON at (800) 873-7766 in the United States for a replacement lamp. Request part number V13H010L21. In Canada, please call (800) 463-7766 to locate a dealer.

Follow these steps to replace the lamp:

1. Turn off the projector, wait for the cool down period to end, then unplug the power cord.

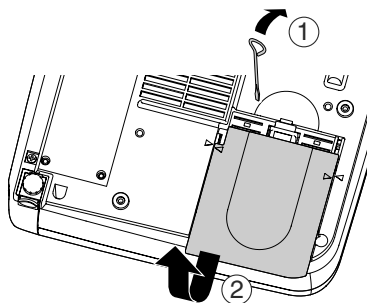


2. Allow the projector to cool down for at least one hour (if it has been on).

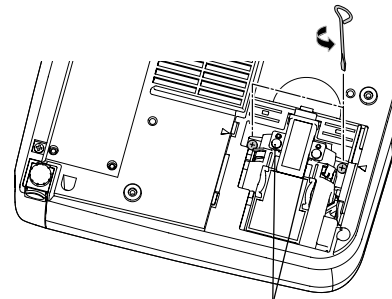
Warning

Let the lamp cool before replacing it. If the lamp breaks, handle the shards carefully to avoid injury.

3. Turn the projector upside-down to access the lamp compartment.
4. Use the screwdriver included with the replacement lamp to slide the edge of the lamp cover towards the side of the projector. Then lift off the cover.

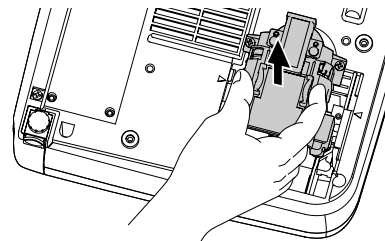


5. Use the screwdriver to loosen the two screws holding the lamp in place. The screws are deep inside the projector on the sides of the lamp. (You can't remove the screws.)



Don't remove these screws

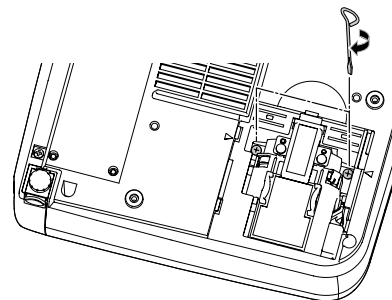
6. Hold the lamp by the top, as shown, and pull the lamp straight out.



Warning

This product includes a lamp component that contains mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put it in the trash.

7. Gently insert the new lamp as shown below.

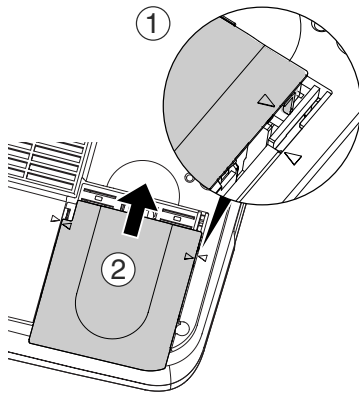


Caution

Do not touch the glass portion of the lamp assembly. Touching the glass could result in premature lamp failure.

8. Once the lamp is fully inserted, tighten its screws.

9. Position the lamp cover so the arrows on the lamp cover align with the arrows on the projector. Then slide in the cover until it clicks into place.



10. Now reset the lamp timer as described below.

Resetting the Lamp Timer

You must reset the lamp timer after replacing the lamp to clear the LAMP REPLACE warning message. Follow the directions below to reset the lamp timer:

1. Turn on the projector.
2. Press the Menu button on the remote control. You see the main menu.
3. Use the directional buttons to highlight About, then press the Enter button. You see the following:

Lamp	: 1400H
Reset Lamp Timer	⏮️ ➡️ Execute
Video Source	: Computer
Input Signal	: RGB
Frequency	: H ---.-kHz
	: V ---.-Hz
SYNC Polarity	: H -----
	: V -----
SYNC Mode	: -----
Resolution	: 0x 0
Refresh Rate	: 0.0 Hz

4. Press Enter to select the Reset Lamp Timer option.
5. Use the directional buttons to select YES and press Enter.
6. Press Esc to return to the main menu.
7. Press Esc again (or the Menu button) to exit the menu system.

Optional Accessories

EPSON provides the following optional accessories:

Product	Product number
Replacement lamp and air filter	V13H010L21
Samsonite® wheeled soft case	ELPKS35
Soft shoulder bags (projector/laptop)	ELPKS43 ELPKS45
Distribution amplifier	ELPDA01
Component video cable (VGA to component video)	ELPKC19
Macintosh adapter set (includes monitor adapter and desktop adapter)	ELPAP01
50-inch portable pop-up screen	ELPSC06
60-inch portable pop-up screen	ELPSC07
80-inch portable pop-up screen	ELPSC08
High resolution document imager	ELPDC02
Motion presentation camera	ELPDC03
High resolution document camera	V12H064020
Kensington® security lock	ELPSL01
Ceiling mount	ELPMB39
Ceiling plate	ELPMBFCP
Suspension adapter	ELPMBADL

Related Documentation

CPD-15286	EPSON PowerLite 53c/73c User's Guide
CPD-15287	EPSON PowerLite 53c/73c Quick Setup
Parts Price List	PL-EMP53, PL-EMP73

