

Resolution	PowerLite 5300: SVGA, 800 × 600 pixels PowerLite 7200/7300: XGA, 1024 × 768 pixels
Color reproduction	24 bit, 16.7 million colors
Brightness	PowerLite 5300/7300: 1200 lumens (ANSI) PowerLite 7200: 1000 lumens (ANSI)
Image size	30 to 300 inches (at 3.9 to 40.6 feet distance), Tele angle 23 to 230 inches (at 5.1 to 54 feet distance), Wide angle
Projection distance	3.9 to 54.7 feet (1.2 to 16.7 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Internal speaker system	3 × 3 W stereo output 2 × 3 W 8 (ohm) speakers
Optical aspect ratio	PowerLite 5300/7300: 4:3 (horiz.:vertical) PowerLite 7200: 5:4 (SVGA); 4:3 (VGA, SVGA, XGA); 16:9 (wide screen video)
Zoom ratio	1:1.3
Tilt angle	0° to 12°
Supported video interface standards	NTSC, PAL, PAL-M, PAL-N, SECAM

Projection Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	120 W
Lamp life	2000 hours at 50% brightness
Part number	ELPLP05

Remote Control

Range	32.8 feet (10 meters)
Batteries	Alkaline AA (2)

Mouse Compatibility

Supports PS/2, serial, ADB

Repeater Interface

Supports Xantech® IR repeaters, 3.5 mm stereo mini-jack

Projector Specifications

General

Type of display	Poly-silicon Thin Film Transistor (TFT); PowerLite 5300 and 7300 models have a Micro Lens Array (MLA) built in
Size of liquid crystal panels	Diagonal: 1.3 inches (33.6 mm)
Lens	F=2.0–2.3, f=55–72 mm

Mechanical

Height	5.1 inches (130 mm), including feet
Width	11.8 inches (300 mm)
Depth	14.3 inches (363 mm), including lens
Weight	13.8 lb (6.2 kg)

Electrical

Rated frequency	50/60 Hz
Power supply	100 to 120 VAC, 2.4 A 200 to 240 VAC, 1.2 A
Power consumption	Operating: 200 W Standby: 8.4 W

Environmental

Temperature	Operating: 41 to 104° F (5 to 40° C), non-condensing Storage: 14 to 140° F (-10 to 60° C), non-condensing
Humidity	Operating: 20 to 80% RH, non-condensing Storage: 10 to 90% RH, non-condensing

Safety

United States	FCC Part 15J Class B UL1950 Rev. 3
Canada	DOC SOR/88-475 CSA C22.2 No. 950 Rev. 3

Supported Monitor Displays

Here are the display formats supported by the projector:

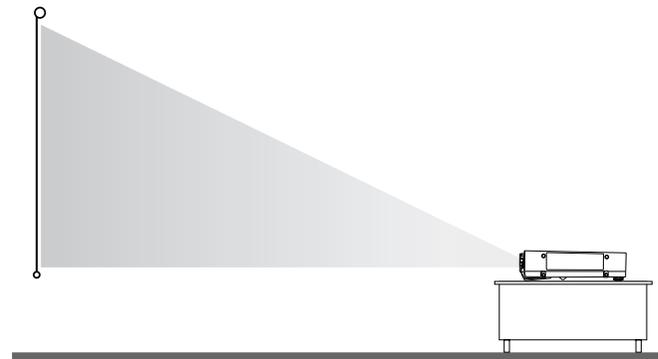
Computer type	Formats	Resolutions	
IBM PC and IBM PC compatible	EGA, VGA EGA	640 × 350	
	VGA CGA	640 × 400	
	VGA60, VESA	640 × 480	
	VGA Text	720 × 350	
	VGA Text	720 × 400	
	SVGA	800 × 600	
	XGA	1024 × 768	
	SXGA	1152 × 864	
	SXGA	1280 × 960	
	SXGA	1280 × 1024	
Apple Macintosh	Standard 8- and 24-bit color monitor	640 × 480 832 × 624 1024 × 768 1152 × 870	
	TV	NTSC,	640 × 480
		PAL, SECAM	768 × 618

Note: The frequencies of some computers may not allow the image to be displayed correctly.

Projector Placement Guidelines

To get the best results when projecting your images, it is important to position the projector at the proper height and distance relative to the screen.

When projecting from a table or desk, place the projector so the lens is aligned as closely as possible with the bottom of your screen:



When projecting from the ceiling, align the lens as closely as possible with the top of your screen:



Calculating Image Size and Projection Distance

The distance between the projector and the screen determines the actual image size. To determine the exact distance required for a particular image size (or to determine the size of an image at a particular distance), use the following formulas. (Remember that the size of the image can be changed by rotating the zoom ring.)

To determine the minimum and maximum diagonal size of an image when you know the projection distance:

□ Inches:

$$\begin{aligned} \text{Maximum diagonal size} &= (0.6124 \times \text{projection distance}) + 1.5264 \\ \text{Minimum diagonal size} &= (0.4556 \times \text{projection distance}) + 1.1410 \end{aligned}$$

□ Centimeters:

$$\begin{aligned} \text{Maximum diagonal size} &= (0.6124 \times \text{projection distance}) + 3.8771 \\ \text{Minimum diagonal size} &= (0.4556 \times \text{projection distance}) + 2.8981 \end{aligned}$$

To determine the projection distance when you know the diagonal size of the screen image:

❑ Inches:

Maximum projection distance = $(2.1949 \times \text{diagonal size}) - 2.5044$
 Minimum projection distance = $(1.6328 \times \text{diagonal size}) - 2.4923$

❑ Centimeters:

Maximum projection distance = $(2.1949 \times \text{diagonal size}) - 6.3612$
 Minimum projection distance = $(1.6328 \times \text{diagonal size}) - 6.3304$

For example, here are the measurements for three installations:

Image size (diagonal)	Horizontal distance from projector to screen	
	Minimum	Maximum
300 inches* (762 cm)	487.3 inches (12.4 m)	656.0 inches (16.7 m)
200 inches (508 cm)	324.1 inches (8.2 m)	436.5 inches (11.1 m)
100 inches (254 cm)	160.8 inches (4.1 m)	217.1 inches (5.5 m)

* For an image size of 300 inches, the projector may be up to 54 feet away from the screen, depending on the setting of the zoom ring.

Long Throw Zoom Lens Calculations

If you are using the optional long throw zoom lens, use the following formulas instead:

To determine the minimum and maximum diagonal size of an image when you know the projection distance:

❑ Inches:

Maximum diagonal size = $(0.4742 \times \text{projection distance}) + 3.2489$
 Minimum diagonal size = $(0.2849 \times \text{projection distance}) + 1.8968$

❑ Centimeters:

Maximum diagonal size = $(1.2045 \times \text{projection distance}) + 8.2521$
 Minimum diagonal size = $(0.7236 \times \text{projection distance}) + 4.8179$

To determine the projection distance when you know the diagonal size of the screen image:

❑ Inches:

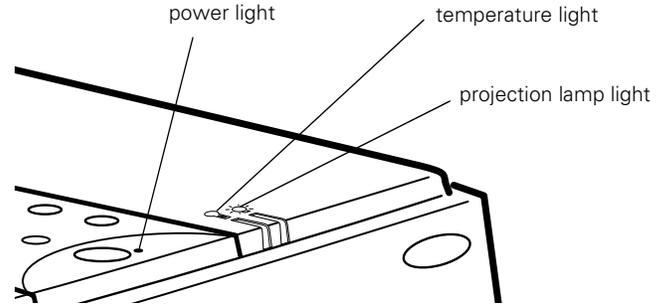
Maximum projection distance = $(3.5094 \times \text{diagonal size}) - 6.6568$
 Minimum projection distance = $(2.1090 \times \text{diagonal size}) - 6.8519$

❑ Centimeters:

Maximum projection distance = $(8.9139 \times \text{diagonal size}) - 16.9083$
 Minimum projection distance = $(5.3569 \times \text{diagonal size}) - 17.4038$

Projector Status Lights

The status lights on top of the projector tell you the projector's operating status.



Caution: A red light warns you if a serious problem occurs.

Power Light

Light status	Meaning
Steady orange	Sleep mode. (The projector is plugged in, but not projecting.)
Steady green	Power and lamp are on.
Flashing green	The projector is warming up. Allow about 30 seconds.
Flashing orange	The projector is cooling down.
Off	The power cord is not plugged in or there is an internal projector problem.

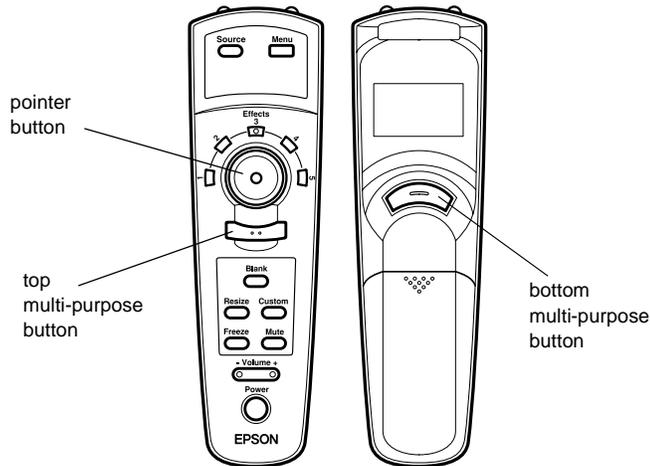
Projection Lamp Light

Light status	Meaning
Orange and red flashing alternately	Lamp timer has exceeded 1900 hours. Projection lamp needs replacing.
Steady red	Projection lamp has burned out. Replace lamp.
Flashing red	Problem with projection lamp or lamp power supply.
Off	Lamp is functioning normally.

Temperature Light

Light status	Meaning
Flashing orange	Projector is too hot.
Steady red	Projector has turned off automatically because of overheating.
Flashing red	Problem with the cooling fan or temperature sensor, generating an overheat condition.
Off	The projector is functioning normally.

Using the Remote Control



The remote control uses a line-of-sight infrared signal. To use the remote control, point it towards one of the infrared receivers located at the front and back of the projector. You can use the remote control up to about 32 feet (10 meters) from the projector. (This distance may be shorter if the remote control batteries are low.) You must also be within a $\pm 30^\circ$ angle from the front or rear receiver.

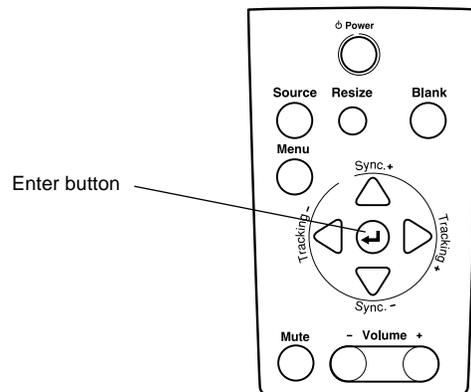
Note: The projector may not respond to remote control commands in these conditions: ambient light is too bright; a certain type of fluorescent light is present; a strong light source (such as direct sunlight) shines into the infrared receiver; or other equipment emitting infrared energy is present (such as a radiant room heater). Correct these conditions to use the remote control or control the projector from a computer.

This table summarizes the functions on the remote control.

Button	Function
Menu	Displays or hides the menu.
Source	Switches between Computer 1 and Computer 2, and from video to computer. (When the Computer 2 BNC switch on the back of the projector is set to BNC, the source is switched to 5BNC.)
Pointer button	Use the pointer button to navigate the menus or use the remote as a mouse pointer when the projector is connected to the computer with the main cable and the mouse cable.
Effects buttons	Use to display special effects assigned using the ELP Link III software.
Top multi-purpose button	Acts as a right mouse click, registers a menu selection, and selects other custom functions.
Bottom multi-purpose button	Acts as a left mouse click, registers a menu selection, and selects other custom functions.
Blank	Clears the screen and switches to a blue or black display, or a user logo.

Button	Function
Resize	Switches the display dot mode and resize mode for VGA, SVGA, XGA, and SXGA input (for resolutions that do not match the projector's output).
Custom	Accesses Custom menu functions (Zoom, Preview, and Strobe).
Freeze	Keeps the current computer or video image on the screen.
Mute	Turns off audio.
- Volume +	Adjusts the volume.
Power	Starts or stops the projector.

Using the Control Panel



You can use the control panel to control the projector instead of the remote control. However, you can program and access the custom features only with the remote control. The following table summarizes the functions on the control panel.

Button	Function
Power	Starts or stops projection.
Source	Switches between Computer 1 and Computer 2, and from video to computer. (When the Computer 2 BNC switch on the back of the projector is set to BNC, the source is switched to 5BNC.)
Menu	Displays or hides the menu.
Up, down arrows (Sync+/Sync-)	Synchronizes the computer's graphic signal. Use these buttons to adjust an image that is fuzzy or streaked, or to select menu items.
Left, right arrows (Tracking-/Tracking+)	Matches the projector's internal clock to various computer graphic signals (tracking adjustment). Use these buttons to adjust an image with vertical fuzzy lines, or to change numeric settings.
Enter	Executes a menu selection.
Resize	Switches the display dot mode and resize mode for VGA, SVGA, XGA, and SXGA input (for resolutions that do not match the projector's output).
Mute	Turns off audio.
- Volume +	Adjusts the volume.
Blank	Clears the screen and switches to a blue or black display, or a user logo.

Computer 1 and 2 and Computer Out Connector Pin Assignments

The Computer 1 and 2 and Computer Out connectors are female video RGB, 15-pin micro-D-style connectors. The pin assignments are:

Input pin	Computer Out connector signals	Computer 1 and 2 connector signals
1	Red out / red video	Red video
2	Green out / green video	Green video
3	Blue out / blue video	Blue video
4	Reserved	Monitor (ID bit 2)
5	GND	GND
6	GND	Red video GND
7	GND	Green video GND
8	GND	Blue video GND
9	Reserved	+5 V
10	GND	Synchronous GND
11	Reserved	Monitor (ID bit 0)
12	Reserved	SDA
13	Horizontal sync	Horizontal sync
14	Vertical sync	Vertical sync
15	Vertical sync	Reserved

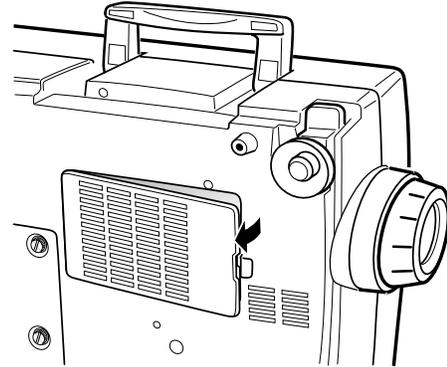
Cleaning the Air Filter

Clean the air filter at 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. To clean the air filter, follow these steps:

1. Turn off the projector and unplug the power cable.
2. Turn the projector on its side so that the handle is on top and you can access the filter easily.

Note: Standing the projector with the handle at the top keeps dust from getting inside the projector housing.

3. Pull up on the filter cover tab to release the filter cover. Remove the cover.



4. The filter is attached to the inside of the filter cover. It is recommended that you use a small vacuum cleaner designed for computers and other office equipment to clean the filter. If you don't have one, use a dry, lint-free cloth. If the dirt is difficult to remove or the filter is torn, replace it.
5. Replace the filter cover when you're done. Insert the tabs, then press down.

Replacing the Lamp

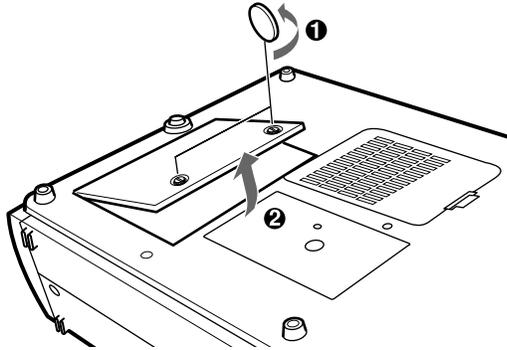
The projector lamp typically lasts for about 2000 hours of use. It is time to replace the lamp when:

- The projected image gets darker or starts to deteriorate.
- The projection lamp indicator is either red, or flashing orange and red alternately.
- The message **LAMP REPLACE** appears on the screen when the projector lamp comes on.

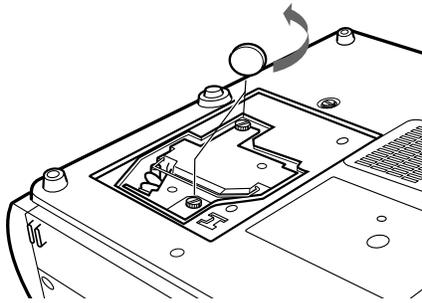
Warning: Let the lamp cool before replacing it. Also, do not touch the glass portion of the lamp assembly. Touching the glass portion of the lamp will result in premature lamp failure.

1. Turn off the projector and unplug the power cable.
2. Turn the projector over so you can access the lamp cover.

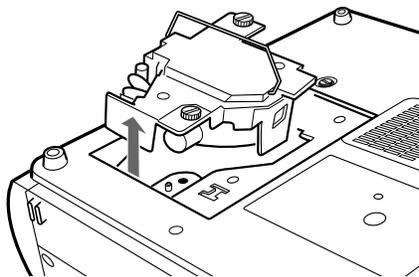
3. Use a screwdriver, coin, or similar object to loosen the two retaining screws on the lamp cover. When the screws are loose, lift off the lamp cover. (You cannot remove these screws from the cover.)



4. Use a screwdriver, coin, or similar object to loosen the two screws holding the lamp unit in position. (You cannot remove these screws.)



5. Lift up the handle and pull out the lamp unit.



6. Gently insert the new lamp unit by lowering it into position. Make sure it's inserted securely. Tighten the screws on the new lamp unit.
7. Replace the lamp cover and tighten the cover screws. (Make sure the lamp cover is securely fastened. The projector turns itself off if the lamp cover is open.)

Information Reference List

Engineering Change Notices

None.

Technical Information Bulletins

None.

Product Support Bulletins

None.

Related Documentation

CPD 7925 7541655	EPSON PowerLite 5300/7200/7300 User's Guide
CPD 7926	EPSON PowerLite 5300/7200/7300 Portable Guide
SM-ELP5300	EPSON PowerLite 5300 Multimedia Projector Service Manual
SM-ELP7273	EPSON PowerLite 7200/7300 Multimedia Projector Service Manual
PL-ELP5300	EPSON PowerLite 5300 Multimedia Projector Parts Price List
PL-ELP7200	EPSON PowerLite 7200 Multimedia Projector Parts Price List
PL-ELP7300	EPSON PowerLite 7300 Multimedia Projector Parts Price List