

Projector Specifications

General

Type of display	Poly-silicon Thin Film Transistor (TFT)
Size of liquid crystal panels	Diagonal: 0.9 inch (22.9 mm)
Lens	F=2.0 to 2.2, f=35 to 42mm
Resolution	1024 × 768 pixels (700c/710c) 800 × 600 pixels (500c)
Color reproduction	24 bit, 16.7 million colors
Brightness	1000 lumens (ANSI) 710c 800 lumens (ANSI) 500c/700c
Image size (diagonal)	2.2 to 25 feet (0.7 to 7.6 meters)
Projection distance	3.6 to 45.3 feet (1.1 to 13.8 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Internal speaker system	1 monaural
Optical aspect ratio	4:3 (horizontal:vertical)
Zoom ratio	1.2:1
Keystone correction angle	±15°
Supported video interface standards	NTSC, NTSC 4.43, NTSC 50, PAL, PAL-M, PAL-N, PAL-60, SECAM
Operating noise level	Less than 40 dB

Projection Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	120 W
Lamp life	About 2000 hours
Part number	ELPLP10S (710c) ELPSP10B (500c/700c)

Remote Control

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

Mouse Compatibility

Supports PS/2, USB, Macintosh

EPSON PowerLite 500c/700c/710c Projector

Mechanical

Height	2.8 to 3.0 inches (72 to 77 mm)
Width	8.4 inches (213 mm)
Depth	10.5 inches (267 mm)
Weight	5.8 lb. (2.6 kg)

Electrical

Rated frequency	50 to 60 Hz
Power supply	100 to 120 VAC, 2.4 A 200 to 240 VAC, 1.2 A

Power consumption	Operating: 360 W Standby: 12 W
-------------------	-----------------------------------

Environmental

Temperature	Operating: 41 to 95° F (5 to 35° 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

Following are the display formats supported by the projector.

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

Mode	Resolution	Frequency H(KHz)/V(Hz)	Dot (MHz)
VGACGA VGAEGA	640 x 400 640 x 350	31.46 / 70 31.46 / 70	25.175 25.175
NEC400	640 x 400	24.83 / 56.65	21.053
VGA60 VGA72 VGA75 VGA85	640 x 480 640 x 480 640 x 480 640 x 480	31.469 / 59.94 37.861 / 72.809 37.5 / 75 48.269 / 85.008	25.175 31.5 31.5 36
SVGA56 SVGA60 SVGA72 SVGA75 SVGA85	800 x 600 800 x 600 800 x 600 800 x 600 800 x 600	35.156 / 56.25 37.879 / 60.317 48.077 / 72.188 46.875 / 75 53.674 / 85.061	36 40 50 49.5 56.25
XGA43i XGA60 XGA70 XGA75 XGA85	1024 x 768 1024 x 768 1024 x 768 1024 x 768 1024 x 768	35.522 / 86.958 48.363 / 60.004 56.476 / 70.069 60.023 / 75.029 68.677 / 84.997	44.9 65 75 78.75 94.5
SXGA1_70 SXGA1_75 SXGA1_85	1152 x 864 1152 x 864 1152 x 864	63.851 / 70.012 67.5 / 75 77.094 / 84.999	94.5 108 121.5
SXGA2_60 SXGA2_75 SXGA2_85	1280 x 960 1280 x 960 1280 x 960	60 / 60 75 / 75 85.938 / 85.002	108 126 148.5
SXGA3_43i SXGA3_60 SXGA3_75 SXGA3_85	1280 x 1024 1280 x 1024 1280 x 1024 1280 x 1024	46.433 / 86.871 63.981 / 60.02 79.976 / 75.025 91.146 / 85.024	78.75 108 135 157.5
UXGA48i UXGA60 (these are not supported by PowerLite 500c)	1600 x 1200 1600 x 1200	62.5 / 96.08 75 / 60	135 162
MACLC13 MACII13 MAC16 MAC19-60 MAC19 MAC21	640 x 480 640 x 480 832 x 624 1024 x 768 1024 x 768 1152 x 870	34.975 / 66.62 35 / 66.67 49.725 / 74.55 48.193 / 59.28 60.241 / 74.93 68.682 / 75.062	31.33 30.24 57.28 64 80 100
NTSC (SXGA) NTSC (XGA)	1366 x 438 1024 x 438	15.734 / 60	28.486 20.890
PAL (SXGA) PAL (XGA)	1366 x 512 1024 x 512	15.625 / 50	28.846 21.154
SECAM (SXGA) SECAM (XGA)	1366 x 512 1024 x 512	15.625 / 50	28.846 21.154

Computer Connector Pin Assignments

The Computer port is a female video RGB, 15-pin micro-D-style connectors. The pin assignments are:

Input pin	Computer connector signals
1	Red video
2	Green video
3	Blue video
4	GND
5	GND
6	Red video GND
7	Green video GND
8	Blue video GND
9	Reserve
10	Synchronous GND
11	GND
12	SDA
13	Horizontal sync/composite sync
14	Vertical sync
15	SCL

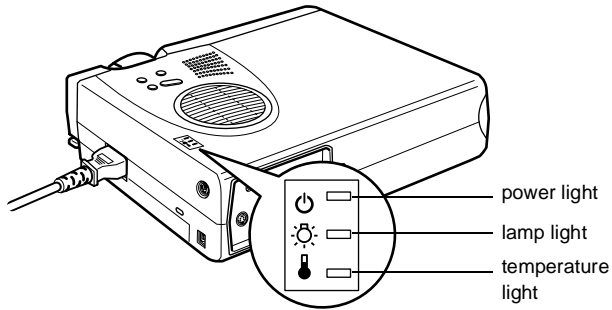
Projector Placement Guidelines

- Place the projector on a sturdy, level surface, between 3.5 and 45 feet from the screen.
- Make sure the projector is within 10 feet of a grounded electrical outlet or extension cord.
- Place the computer and/or video source within 5 feet of the projector.
- Make sure the projector is perpendicular to the screen. Otherwise, your image will be distorted.

The distance from the projector to the screen determines the actual size of the projected image. Use the general guidelines in the table below to determine the proper distance.

Image size (diagonal)	Horizontal distance from projector to screen	
	Minimum (lens set to W)	Maximum (lens set to T)
2.2 feet (0.7 meter)	—	3.6 feet (1.1 meters)
2.5 feet (0.8 meter)	3.6 feet (1.1 meters)	4.3 feet (1.3 meter)
3.3 feet (1.0 meter)	4.8 feet (1.5 meters)	5.6 feet (1.7 meters)
5.0 feet (1.5 meters)	7.5 feet (2.3 meters)	8.9 feet (2.7 meters)
6.7 feet (2.0 meters)	9.8 feet (3.0 meters)	11.8 feet (3.6 meters)
8.3 feet (2.5 meters)	12.5 feet (3.8 meters)	14.8 feet (4.5 meters)
12.5 feet (3.8 meters)	18.7 feet (5.7 meters)	22.6 feet (6.9 meters)
16.7 feet (5.1 meters)	25.3 feet (7.7 meters)	30.2 feet (9.2 meters)
25 feet (7.6 meters)	37.7 feet (11.5 meters)	45.3 feet (13.8 meters)

Projector Status Lights



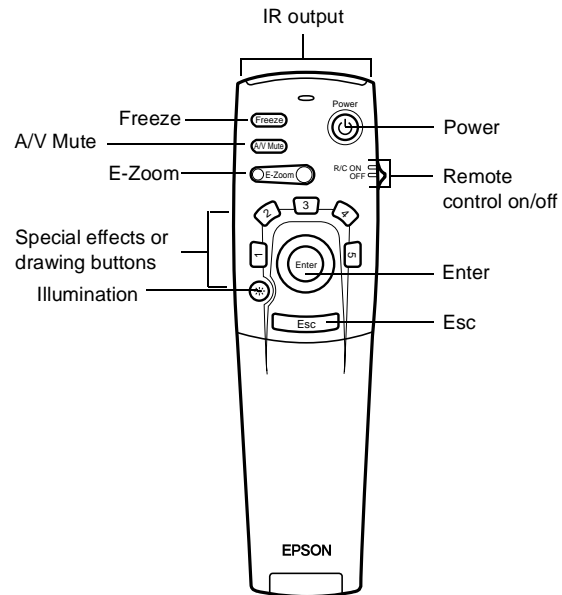
The lights on top of the projector indicate the projector's status and let you know when a problem occurs.

Light	Status	Description and action
	orange	The projector is in sleep 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 the projector on or unplug it when the light is flashing.
	red	Power is cut off because of an internal problem. Contact EPSON for help.
	red	The lamp is almost burned out. This is a good time to replace it. See page 6 for instructions.
	flashing orange	The lamp is burned out. Replace the lamp, following the instructions on page 6.
	flashing red	There is a problem with the lamp, power supply, fuse, or circuit. Contact EPSON for help.
	flashing orange	The projector is too hot. Turn it off and let it cool before using it.
	red	The projector has turned off automatically because it has overheated. Let it cool for a few minutes, then turn it back on. Make sure nothing is blocking the vents on the front and top of the projector. If it continues to overheat, you may need to change the air filter. See page 6 for instructions.
	flashing red	There is a problem with the cooling fan or temperature sensor. Contact EPSON for help.

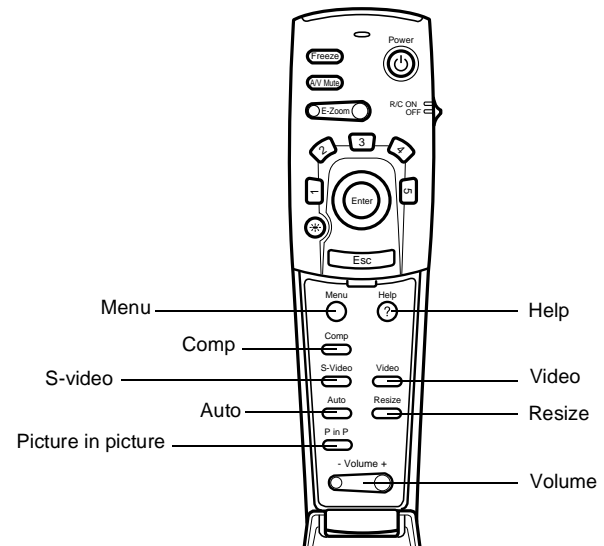
Using the Remote Control

The remote control lets you access all of your projector's features from anywhere in the room (up to 30 feet away). You can use it to turn the projector on and off, zoom the image, and display the projector's setup menu, for example.

If you have connected the mouse cable, you can also use the remote control as a wireless mouse to run your presentation.



Open the cover just below the Esc button to access these remote control functions:

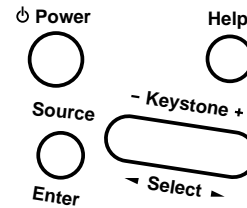


This table summarizes the functions on the remote control.

Button	Function
Power	Starts or stops the projector.
Freeze	Keeps the current computer or video image on the screen.
A/V mute	Turns off the audio and video, displaying the black, blue or user logo background.
E-Zoom	Enlarges or reduces the image size from 1x to 4x (in 24 steps). Pressing the right side of the button enlarges the image, pressing the left side of the button reduces the image. To display a portion of an enlarged image which is outside the display area, press the Enter button and scroll the image to the desired location.
R/C ON/OFF	Turns the remote control on or off.
button 1	Places an arrow or cursor stamp on the screen.
button 2	Draws a box.
button 3	Draws a horizontal or vertical line (marker tool).
button 4	Draws a freehand line.
button 5	Erases drawing effects.
Enter (pointer button)	Use the Enter button to navigate the menus or use the remote as a mouse pointer when the projector is connected to the computer with the mouse cable. When the image source is Computer, the Enter button acts as a mouse left-click.
Illumination	Illuminates all buttons on the remote control.
Esc	Stops the current function. Pressing Esc while viewing a menu or the online help displays the previous screen or menu. When the image source is Computer, the Esc button acts as a mouse right-click.
Menu	Displays or hides the menu.
Comp	Switches to Computer image.
S-Video	Switches to S-Video image.
Auto	Optimizes the computer image.
P in P	Displays a video or S-video image in a subscreen on the main display. Use the Enter button to reposition the Picture in Picture (P in P) screen, or the E-Zoom button to enlarge or reduce the image. Changes made to the P in P screen location and size are automatically carried over to the next P in P session.
Help	Displays the online help menu.
Video	Switches to Video image.
Resize	Switches the display dot mode and resize mode for VGA, UXGA, SVGA, and SXGA input. You cannot resize the image if the input resolution matches the output resolution of the projector.
- Volume +	Adjusts the volume.

Note: The projector may not respond to remote control commands in these conditions: the R/C (remote control) ON/OFF switch is in the OFF position; batteries are weak; 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.

Using the Buttons



The following table summarizes the functions of the buttons on top of the projector:

Button	Function
Power	Starts or stops projection.
Help	Displays the online help menu.
Source	Switches between Computer, Video, and S-video sources.
Enter	Selects a menu option when the Help menu is displayed.
- Keystone +	Adjusts a trapezoid distorted image to normal, correction up to a $\pm 15^\circ$ tilt.
Select	Scrolls through options when the Help menu is displayed.

Cleaning the Lens

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


Clean the lens whenever you notice dirt or dust on the surface. Lightly wipe the lens surface with a soft, dry, lint-free cloth. To remove dirt or smears on the lens, moisten a soft cloth with an alcohol-based cleaner and gently wipe the lens surface.

Cleaning the Projector

To clean the projector, first unplug the power cord. To remove dirt or dust, wipe the projector 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 projector.

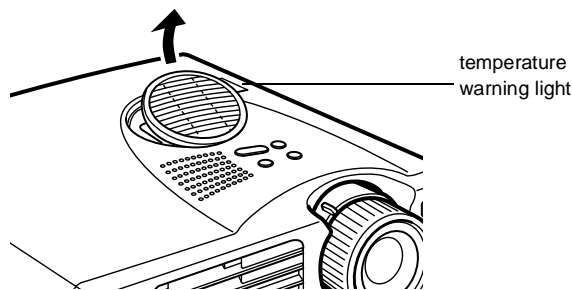
Do not use alcohol, benzene, thinner, or other chemical detergents. These can cause the projector to warp.

Cleaning the Air Filter

Clean the air filter after every 100 hours of use, or if the  temperature warning light on top of the projector turns red.

If the filter is not cleaned periodically, it can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector. Follow these steps to clean the filter:

1. Turn off the projector and unplug the power cord.
2. Pull up on the filter cover tab to release the cover. You may need to use a small screwdriver to pry it off.
3. Remove the cover.




The filter is attached to the inside of the cover.

4. To clean the filter, EPSON recommends using a small vacuum cleaner designed for computers and other office equipment. If you don't have one, use a dry, lint-free cloth.
5. If the dirt is difficult to remove or if the filter is torn, replace it. Contact your dealer to obtain a new filter.
6. Snap the filter cover back into place when you're done.

Note: A new air filter is included with the replacement lamp. You should replace the filter when you replace the lamp.

Replacing the Lamp

The projection lamp typically lasts for about 2000 hours of use. It is time to replace the lamp when you see the following:

- The projected image gets darker or starts to deteriorate.
- The  lamp warning light on top of the projector is either red or flashing orange.
- The message **LAMP REPLACE** appears on the screen when the projector lamp comes on.

This happens after about 2000 hours of use. To maintain projector brightness and image quality, replace the lamp as soon as possible after you see the message.

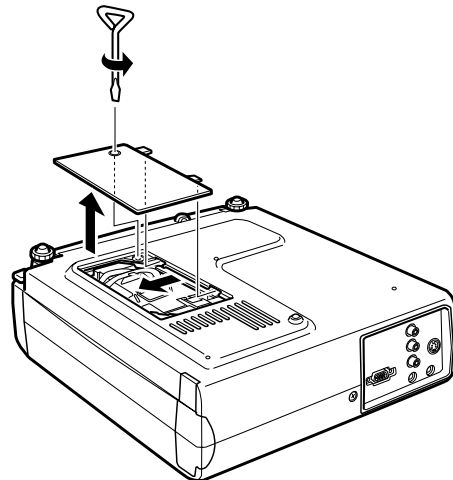
Warning: Let the lamp cool before replacing it. Also, do not touch the glass portion of the lamp assembly. Touching the glass portion of the lamp will result in premature lamp failure.

Contact your dealer or call EPSON Accessories at (800) 873-7766 in the United States and Canada for a replacement lamp. Use the following part number when you order a lamp:

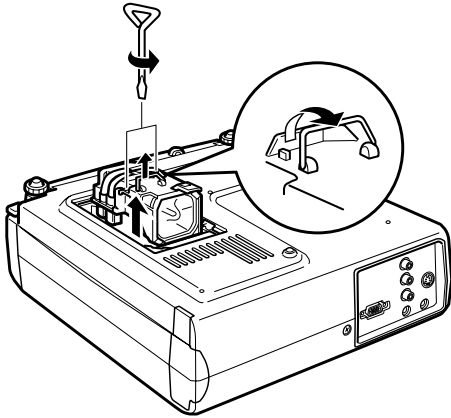
- ELPLP10B (PowerLite 700c/500c)
- ELPLP10S (PowerLite 710c)

Follow these steps to replace the lamp:

1. Turn off the projector and allow it to cool, then unplug the power cord.
2. Before removing the lamp, wait approximately one hour until the projector is fully cooled down.
3. Turn the projector upside-down to access the lamp compartment.
4. Using the screwdriver that came with the replacement lamp, loosen the lamp cover screw. You won't be able to remove the screw.
5. Remove the cover. You may need to use a small flat-head screwdriver to pry it off.



6. Remove the two mounting screws on the lamp. Then pull out the lamp using the handle.



7. Gently insert the new lamp unit by lowering it into position. Make sure it is positioned correctly, then press it into place securely.
8. Replace the mounting screws.
9. Snap the cover back into place. Then tighten the screw.

Related Documentation

CPD-9732	EPSON PowerLite 500c/700c/710c User's Guide
CPD-9733	EPSON PowerLite 500c/700c/710c Quick Setup sheet
CPD-9749	EPSON PowerLite 500c/700c/710c Start Here folder
Service Manual	SM-EMP500
Parts Price Lists	PL-EMP500, PL-EMP700, PL-EMP710