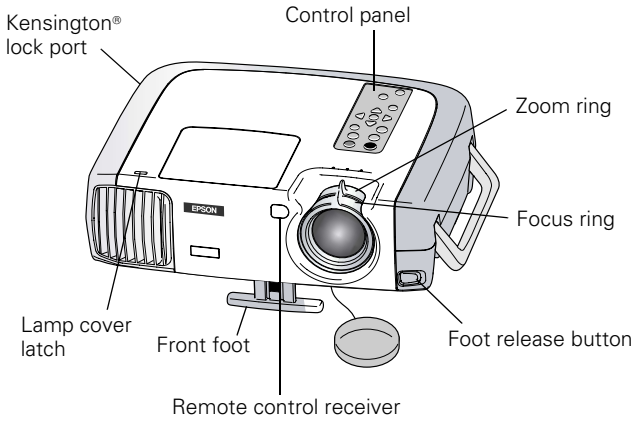
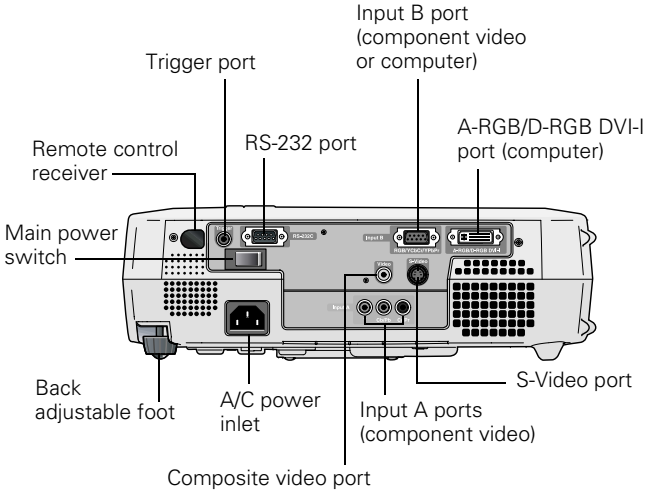
This Product Information Guide describes the new model of the EPSON PowerLite TW100 projector.

Projector Parts





Projector Specifications

General

Type of display	Poly-silicon Thin Film Transistor (TFT), active matrix
Size of LCD panels	Diagonal: 0.9 inches (22.9 mm)
Lens	F=1.74 to 2.06, f=28.3 to 37.98 mm
Resolution (native format)	1280 × 720 pixels
Brightness	700 lumens (ANSI)
Optical aspect ratio	16:9 (horizontal: vertical)
Contrast ratio	800:1
Image size	30 to 300 inches (76.2 to 762 cm) diagonal
Projection distance	3.0 to 42.7 feet (0.91 to 13.01 meters)
Projection methods	Front, rear, upside-down (ceiling mount)
Zoom ratio	1:1.35
Noise level	30 dB
Keystone correction angle	±15° maximum (vertical)
Keystone correction ratio	7.3:–1

Projection Lamp

Type	UHE (Ultra High Efficiency)
Power consumption	150 W
Lamp life	About 3000 hours
Part number	V13H010L17

Remote Control

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

Dimensions

Height	4.1 inches (104 mm)
Width	13.7 inches (348 mm)
Depth	10.8 inches (274 mm)
Weight	9.3 lb (4.2 kg)

Electrical

Rated frequency	50 to 60 Hz
Power supply	100 to 120 VAC, 2.7 A 200 to 240 VAC, 1.3 A
Power consumption	Operating: 240 W Standby: 6.7 W

Environmental

Temperature	Operating: 41 to 95 °F (5 to 35 °C)
	Storage: 14 to 140 °F (–10 to 60 °C)
Humidity	Operating: 20 to 80% RH, non-condensing
	Storage: 10 to 90% RH, non-condensing

Safety

United States	FCC Part 15B Class B UL1950 Rev. 3
Canada	DOC SOR/88-475 CSA C22.2 No. 950 Rev. 3 (cUL)
CE Marking	Directive 73/23/EEC EN 60950 Directive 89/336/EEC EN 55022, EN 55024

Compatible Video Formats

The projector supports the NTSC, HDTV, PAL, and SECAM international video standards, as well as the monitor 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. Some images are automatically resized to display in the projector's native format. The frequencies of some computers may not allow images to display correctly; see your computer's documentation for details.

Mode	Refresh Rate (Hz)	Resolution	DVI support
PC98	57	640 × 400	Supported
VGAEGA	70	640 × 350	Supported
VGA60	60	640 × 480	Supported
VESA72	72	640 × 480	Supported
VESA75	75	640 × 480	Supported
VESA85	85	640 × 480	Supported
SVGA56	56	800 × 600	Supported
SVGA60	60	800 × 600	Supported
SVGA72	72	800 × 600	Supported
SVGA75	75	800 × 600	Supported
SVGA85	85	800 × 600	Supported
XGA43i	43	1024 × 768*	–
XGA60	60	1024 × 768*	Supported
XGA70	70	1024 × 768*	Supported
XGA75	75	1024 × 768*	Supported
XGA85	85	1024 × 768*	Supported
SXGA1—70	70	1152 × 864*	Supported
SXGA1—75	75	1152 × 864*	Supported
SXGA1—85	85	1152 × 864*	Supported
SXGA2—60	60	1280 × 960*	Supported
SXGA2—75	75	1280 × 960*	Supported
SXGA2—85	85	1280 × 960*	–
SXGA3—43i	43	1280 × 1024*	–
SXGA3—60	60	1280 × 1024*	Supported
SXGA3—75	75	1280 × 1024*	Supported
SXGA3—85	85	1280 × 1024*	–
iMAC VGA	117	640 × 480	–
iMAC SVGA	95	800 × 600	–
iMAC XGA	75	1024 × 768*	Supported
MAC II 13	67	640 × 480	Supported
MAC16	75	832 × 624	Supported
MAC19	75	1024 × 768*	Supported
MAC21	75	1152 × 870*	Supported
TV480i	60	–	–
TV575i	50	–	–
SDTV480p	60	–	Supported
SDTV575P	50	*	Supported
HDTV720p	60	–	Supported
HDTV1080i	60	–	–
NTSC4.43	60	–	–
PAL	50	–	–
M-PAL	60	–	–
N-PAL	50	–	–
PAL60	60	–	–
SECAM	50	–	–

* The image is resized to display in one of the projector's native formats.

Supported Signal Resolutions

Component video

Signal	Resolution	Aspect mode				
		Normal	Squeeze	Zoom	Through	Squeeze Through
SDTV (480i, 60Hz)	640 × 480 640 × 360 (when zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
SDTV (575i, 50Hz)	768 × 576 768 × 432 (when zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)
SDTV (480p)	640 × 480 640 × 360 (when zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
SDTV (575p)	768 × 576 768 × 432 (when zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)
HDTV (720p) 16:9	1280 × 720	1280 × 720 (16:9 aspect)	—	—	1178 × 664 (16:9 aspect)	—
HDTV (1080i) 16:9	1920 × 1080	1280 × 720 (16:9 aspect)	—	—	886 × 498 (16:9 aspect)	—

Composite Video/S-Video

Signal	Resolution	Aspect mode				
		Normal	Squeeze	Zoom	Through	Squeeze Through
TV (NTSC)	640 × 480 640 × 360 (when zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	590 × 442 (4:3 aspect)	786 × 442 (16:9 aspect)
TV (PAL, SECAM)	768 × 576 768 × 432 (when zoomed)	960 × 720 (4:3 aspect)	1280 × 720 (16:9 aspect)	1280 × 720 (16:9 aspect)	700 × 525 (4:3 aspect)	934 × 525 (16:9 aspect)

RGB

Signal	Resolution	Aspect		
		Normal	Zoom	Through
PC98	640 × 400	1152 × 720	—	640 × 400
EGA	640 × 350	1280 × 700	—	640 × 350
VGA 60*, SDTV (525p)	640 × 480 640 × 360 (when zoomed)	960 × 720	1280 × 720	640 × 480
VESA 72/75/85, iMac**	640 × 480 640 × 360 (when zoomed)	960 × 720	1280 × 720	640 × 480
SVGA 56/60*/72/75/85/, iMac**	800 × 600 800 × 450 (when zoomed)	960 × 720	1280 × 720	800 × 600
XGA 43i/60*/70/75/85, iMac**	1024 × 768 1024 × 576 (when zoomed)	960 × 720	1280 × 720	—
1152 × 864 70/75/85	1152 × 864 1152 × 648 (when zoomed)	960 × 720	1280 × 720	—
QVGA 60*/75/85	1280 × 960 1280 × 720 (when zoomed)	960 × 720	1280 × 720	—
SXGA 43i/60*/75/85	1280 × 1024 1280 × 720 (when zoomed)	900 × 720	1280 × 720	—
MAC13”	640 × 480	960 × 720	—	640 × 480
MAC16”	832 × 624	960 × 720	—	832 × 624
MAC19”	1024 × 768	960 × 720	—	—

Signal	Resolution	Aspect		
		Normal	Zoom	Through
MAC21"	1152 × 870	954 × 720	—	—
SDTV (480i, 60Hz)	640 × 480 640 × 360 (when zoomed)	960 × 720	1280 × 720	590 × 442
SDTV (575i, 50Hz)	768 × 576 768 × 432 (when zoomed)	960 × 720	1280 × 720	700 × 525
SDTV (575p)	768 × 576 768 × 432 (when zoomed)	960 × 720	1280 × 720	700 × 525
HDTV (720p)	1280 × 720	1280 × 720	—	1178 × 664
HDTV (1080i, 1080p)	1920 × 1080	1280 × 720	—	886 × 498

* These resolutions are compatible with both analog and digital formats.

** This connection is not possible for models that are not equipped with a VGA output port.

ESC/VP21 Commands

When the projector is in a command ready state, it returns the **:** code. When command processing is complete, the projector also returns a **:** code. If command processing terminates with an error, an error message is output and then the **:** code is sent.

The complete list of commands is available through the Internet at http://support.epson.com.

Item		Command
Power ON/OFF	ON	PWR ON
	OFF	PWR OFF
Signal selection	Input B (Analog-RGB)	SOURCE 11
	Input B (Digital-RGB)	SOURCE 12
	Input B (RGB-Video)	SOURCE 13
	Input A/Component Video (Analog-RGB)	SOURCE 21
	Input A/Component Video (RGB-Video)	SOURCE 22
	Input A/Component Video (YCbCr)	SOURCE 23
	Input A/Component Video (YPbPr)	SOURCE 24
	Video	SOURCE 41
	S-Video	SOURCE 42
Blank ON/OFF	ON	MUTE ON
	OFF	MUTE OFF
Blank selection	Black	BSEL 00
	Blue	BSEL 01
	User's Logo	BSEL 02

Input B Port Pin Assignments

The Input B Video port is a female video RGB, 15-pin micro-D-style connector. Here are the pin assignments:

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

Positioning the Projector

Follow these guidelines to get the best results when projecting:

- ❑ Place the projector on a sturdy, level surface, between 3 and 42 feet from the screen.
- ❑ Make sure there is plenty of space for ventilation around and under the projector.
- ❑ Make sure the projector is within 10 feet of a grounded electrical outlet or extension cord and within 5 feet of the image source.
- ❑ Face the projector squarely toward the screen.

The projector supports 5 viewing setups, as shown below. If it is installed in a rear or overhead position, you need to select the correct Projection option from the Setting menu after you turn it on.

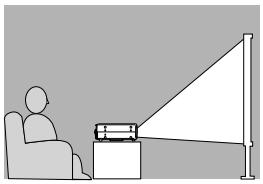
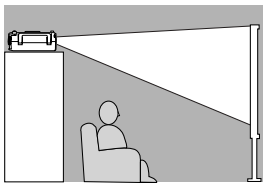
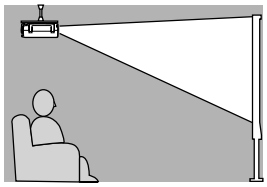


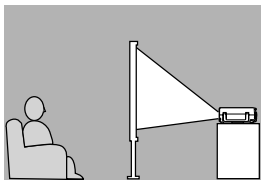
Table
Convenient for temporary front projection



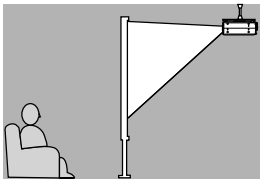
Shelf
Perfect for temporary or permanent installation. Attach the rubber feet and place the projector upside-down. Choose **Front/Ceiling** for the Projection option.



Ceiling
Professional installation recommended. Choose **Front/Ceiling** for the Projection option.



Rear
For permanent installation behind a translucent screen. Choose **Rear** for the Projection option.



Rear/Ceiling
Professional installation behind a translucent screen recommended. Choose **Rear/Ceiling** for the Projection option.

If the projector is tilted in the front or the back, you may need to adjust its shape. See page 9.

Image Size and Projection Distance

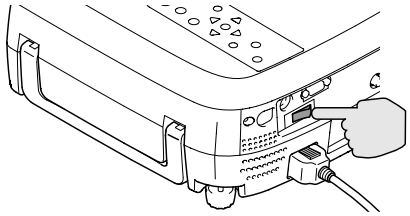
The distance between the projector and the screen determines the basic size of the projected image, as shown below. Because other adjustments—such as those made with the zoom ring, Aspect button, and Keystone button—also affect the size of the image, the numbers in the table should be considered for general guidelines, not exact measurements.

Screen size	Approximate projection distance
30 in (2.1 × 1.2 ft) (66 × 37 cm)	3.0 – 4.1 ft (0.9 – 1.2 m)
40 in (2.8 × 1.6 ft) (89 × 50 cm)	4.0 – 5.5 ft (1.2 – 1.6 m)
60 in (4.2 × 2.4 ft) (130 × 75 cm)	6.1 – 8.4 ft (1.8 – 2.5 m)
80 in (5.7 × 3.2 ft) (180 × 100 cm)	8.2 – 11.2 ft (2.5 – 3.4 m)
100 in (7.2 × 4.1 ft) (220 × 120 cm)	10.3 – 14.1 ft (3.1 – 4.3 m)
200 in (14.4 × 8.2 ft) (440 × 250 cm)	20.9 – 28.4 ft (6.3 – 8.6 m)
300 in (21.6 × 12.1 ft) (660 × 370 cm)	31.4 – 42.7 ft (9.5 – 13.0 m)

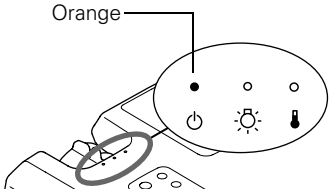
Turning the Projector On and Off

Once the projector is connected to your computer or video source and plugged in, follow these steps to turn it on and display an image:

1. Make sure the power is turned off for the projector and any sources connected to it.
2. Remove the lens cover.
3. Turn on the main power switch on the back of the projector.

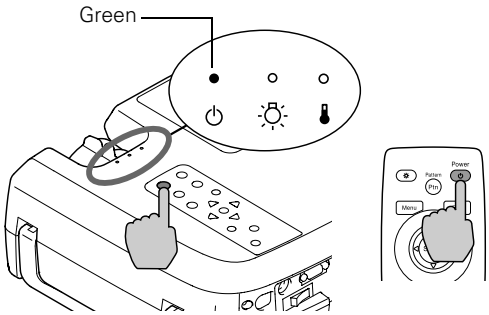


The ⏻ power light on top of the projector flashes orange, and then stays orange.



Note: *The projector will not respond to any buttons on the control panel or remote control while the power light is flashing orange or green.*

4. Turn on the power to any equipment connected to the projector.
5. Press the Power button on the remote control or the top of the projector.



The ⏻ power light flashes green as the projector warms up, and the projection lamp comes on in about 15 seconds. The power light stays green, and you may see a blue screen with the No Signal message displayed. This is normal.

6. Press the Play button on your video source to start your video (if necessary).
7. If you've connected more than one video and/or computer source, you may need to select a different source. Press the Source button on the projector or one of the Input buttons on the remote control. (See "Switching Between Picture Sources" on page 8 for more information.)

   If you're projecting from a computer and you see a New Hardware Wizard message saying that it has found a plug-and-play monitor, click Cancel.

   If the image is upside-down or reversed, you need to change the Projection option in the Setting menu. See the *User's Guide* for more information.

   If a projected image fails to appear, see "What To Do If You See a Blank Screen" below for help.

Once you see your image, see page 8 for instructions on focusing and making other image adjustments.

Turning Off the Projector

When you're ready to shut down the projector, follow these steps:

1. Turn off any video or computer sources connected to the projector first.
2. Press the Power button on the projector or remote control to turn off the projector.

   You see a confirmation message:

   If you don't want to turn it off, press any button or ignore the message. (It disappears in about 7 seconds.)

3. Press the Power button again. The lamp is turned off and the ⏻ power light flashes red for about 90 seconds and then changes to flashing orange. The light continues flashing orange until the projector cools down. When the projector has cooled, the power light stays orange and the exhaust fan shuts off.
4. If you want to turn the projector on again, wait until the light stops flashing red. Then press the Power button.
5. If you will not be using the projector for an extended period of time, make sure the power light is orange, then turn off the main switch on the back of the projector.
6. Replace the lens cover.

What To Do If You See a Blank Screen

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

- ❏ Make sure the lens cover is off.
- ❏ Check to see if the main power switch at the back of the projector is turned on.
- ❏ Make sure the power light is green and not flashing. If the ⏻ power light is orange, press the Power button on the projector or the remote control.
- ❏ Make sure the cables are connected correctly, as described on the *Quick Setup* sheet (or the *User's Guide* for connecting a computer).
- ❏ If blank mode is active, press the Blank button on the remote control to resume projection.
- ❏ Select a different source (if more than one is connected to the projector) by pressing one of the Input buttons on the remote control (S-Video, Video, A, B, D-RGB, or A-RGB) or the Source button on the control panel.

- ❑ Make sure the input signal setting matches the connected source. Use the Video Signal, Input A, or Input B commands in the Advanced menu to select the signal format that matches the connected source. See the *User's Guide* for more information.
- ❑ Try turning off your video equipment or computer and restarting it.
- ❑ If you're using a laptop, you may need to set up your system to display on the projector screen as well as the LCD screen, as described below.

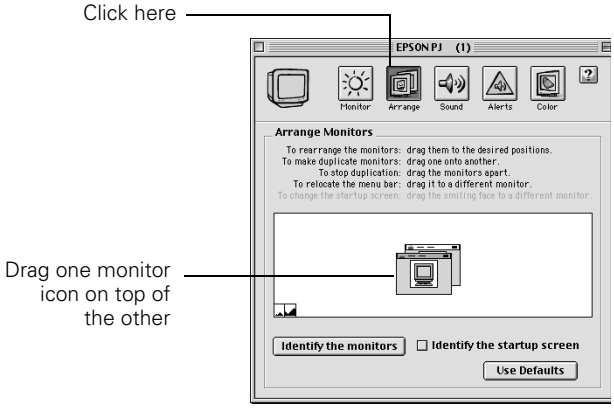
If you're using a PC laptop:

- ❑ Press the function key that lets you display on an external monitor. It's often labelled with an icon such as ⊟/▢, but it may also be labelled CRT/LCD. You may have to hold down the Fn key while pressing it. Check your laptop'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. Allow a few seconds for the projector to sync up after pressing it.
- ❑ 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:

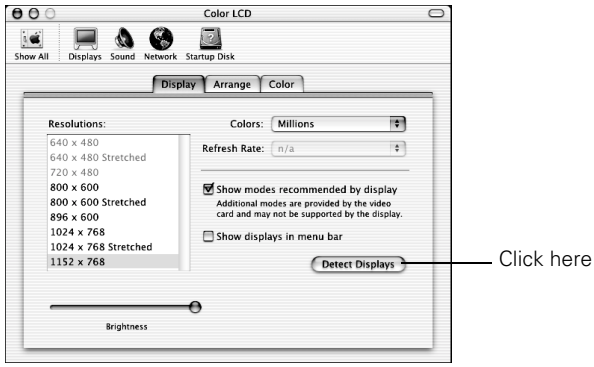
1. From the Apple menu, select Control Panels, then click Monitors and Sound.
2. Click the Arrange icon, and then drag one monitor icon on top of the other.



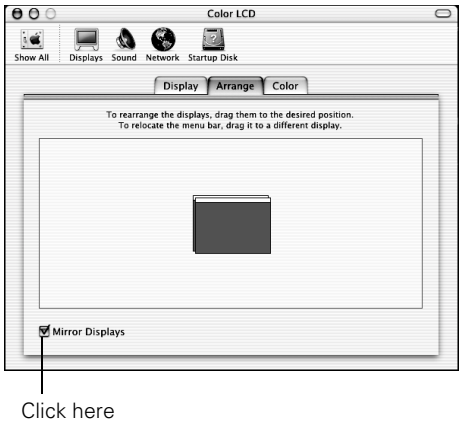
Note: If the Arrange *option isn't available, you may need to select one of the Simulscan resolution settings. Click the* Monitor *icon and then select a Simulscan resolution from the ones in the Resolution box. (Allow a few seconds for the projector to sync up after making the selection.)*

If you're using a Macintosh laptop with OS X:

1. Select System Preferences from the Apple menu and click Displays.
2. Click Detect Displays.



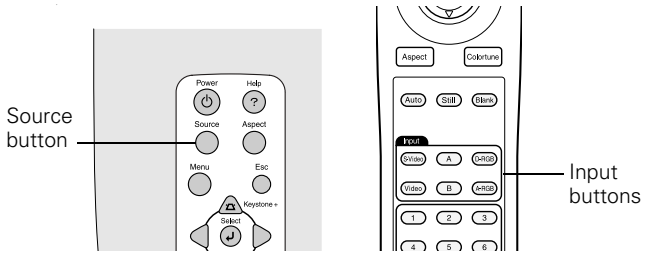
3. To display the entire desktop on both your projector screen and LCD screen, click the Arrange tab. (If you don't see this tab, make sure it is not hidden by another window on your screen.)
4. Click Mirror Displays in the lower corner of the screen. One of the monitor icons automatically moves on top of the other.



Switching Between Picture Sources

If the projector is connected to more than one video source, you can use the buttons on the control panel or remote control to switch between the different sources.

On the projector's control panel, press the Source button to display the currently selected source. Press it again quickly to switch. Continue pressing the button until the name of the source you want is displayed on the screen.



On the remote control, press one of the Input buttons to select the desired source:

Press this button	To select the source connected to this port
S-Video	S-Video
Video	Composite video
A	Input A component video
B	Input B component video or computer
D-RGB	D-RGB DVI-I port (digital cable)
A-RGB	A-RGB DVI port (analog cable)

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

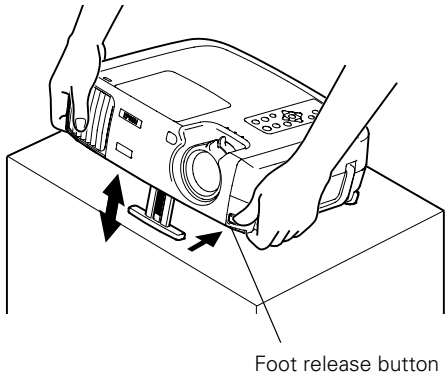
Adjusting the Image

There are many ways to adjust the image once it is displayed, as described in the following sections.

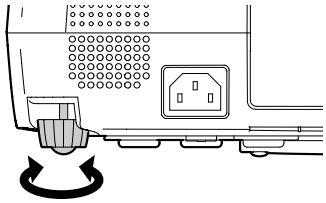
Adjusting the Height of the Image

The projector should be as perpendicular to the screen as possible. If the image is too low, you can raise it by extending the projector's front foot.

1. Stand behind the projector. Press the foot release button and lift the front of the projector. This unlocks the foot.



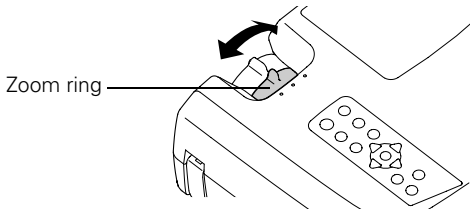
2. Once the image is positioned where you want it, release the button to lock the foot in place.
3. If you need to straighten the image, rotate the round adjustable foot at the back of the projector.



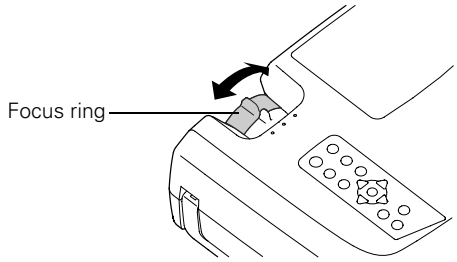
If the image is no longer square after raising it, see page 9.

Focusing and Zooming the Image

The size of the projected image is determined mainly by the distance between the projector and the screen, but you can also use the zoom ring to enlarge or reduce the image:



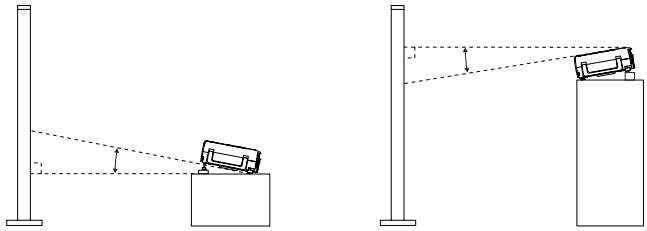
Rotate the focus ring to sharpen the image:



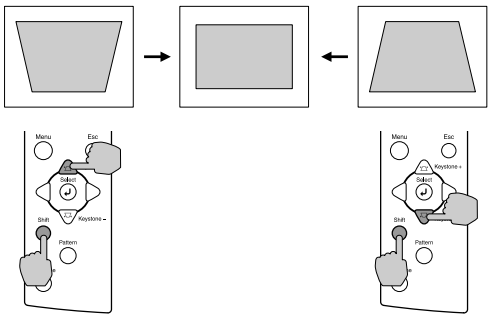
Note: *You can also adjust the focus by displaying a test pattern, as described below.*

Adjusting the Image Shape

If the projector is raised in the front or the back, like this:



the projected image may not be square or rectangular; it may have a "keystone" shape like one of the examples shown below.



To correct this, hold down the Shift button on the projector's control panel and press the top or bottom Keystone button until the corners of the image are square.

After correction, your image will be slightly smaller.

The keystone adjustment remains in the projector's memory, so if you later change the position of the projector, you might need to adjust the keystone setting as well.

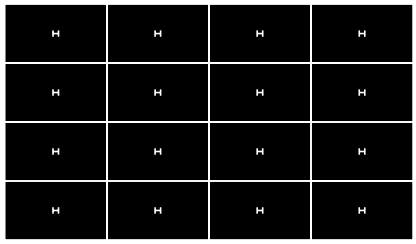
If the image becomes distorted or blurry after you make a keystone correction, try decreasing the Sharpness setting in the Video menu, as described in the *User's Guide*.

Note: *You can also correct keystone distortion by displaying a test pattern (as described in the next section) or through the projector's Setting menu.*

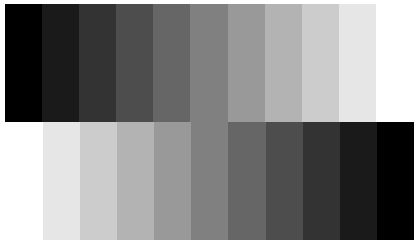
Displaying a Test Pattern

You can display a test pattern before or during projection to adjust the focus, correct keystone distortion, and select the best light and dark shades. Follow these steps:

1. Press the Pattern button on the remote control or the projector's control panel. You see the Crosshatch pattern:



2. Adjust the focus ring until the Hs are sharp. If you need to correct any keystone distortion, hold down the Shift button on the projector's control panel and press the top or bottom Keystone button, as described above.
3. Press the Pattern button again to display the Grayscale pattern:



Use this pattern to adjust the dark and light shades. First select the Video menu and choose the Color Adjustment option. Then select either Color Temp or RGB.

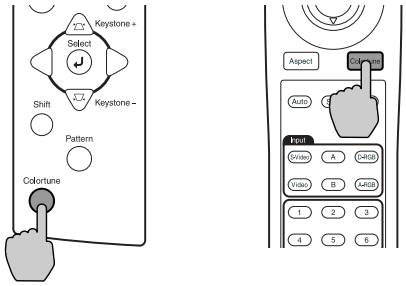
When you display the menu, the test pattern disappears. After you adjust the color, you need to exit the menu and display the test pattern again to see your changes take effect.

Selecting the Color Mode

Select from five pre-set color modes to get the best color settings:

- ❑ Dynamic—for projecting images with greater modulation and color intensity
- ❑ Theater—good when projecting movies or images with dark scenes
- ❑ Natural—best for projecting images in their natural color
- ❑ PC—brightest color mode for projecting computer images
- ❑ sRGB—good for images that conform to the sRGB standard. If the connected video source has an sRGB mode, set both the projector and the video source to sRGB.

To change the color mode, press the Colortune button until the desired setting appears on the screen.



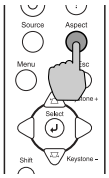
Projector Remote control

Note: You can also change the color mode through the Video menu.

Selecting the Aspect Ratio

The aspect ratio is the ratio between an image's length and its height. Standard images have an aspect ratio of 4:3 and HDTV images have an aspect ratio of 16:9. If your video source is 16:9, the projector displays it in its native ratio. If it is 4:3, you can choose the best mode for projecting it.

Press the Aspect button on the control panel or the remote control to select one of the following aspect ratios. The current setting appears on the screen each time the ratio changes.



Aspect ratio mode	Description
Normal	Normal mode maintains the aspect ratio of the image source and the images are projected onto a 16:9 screen area. When 4:3 images are being projected, black bands appear on the sides.
Squeeze	Use this setting if the video source has a 16:9 output mode. If images in Squeeze mode are viewed on a 4:3 TV screen, the images are compressed. But when Squeeze mode is selected on the projector, the images are projected correctly in their native wide-screen (16:9) format. When images output in 4:3 format are projected using the projector's Squeeze mode, they are elongated horizontally.
Zoom	In Zoom mode, images output in 4:3 format are cropped at the top and bottom by a set amount and then projected in a 16:9 format.
Through	If the input signal resolution is 1280 x 720 or less, the images are projected with the resolution unchanged. The size of the displayed images depends on the input resolution.
Squeeze Through	If the input signal resolution is 1280 x 720 or less, the input signal resolution is elongated horizontally and the images are projected at an aspect ratio of 16:9. The size of the displayed images will change depending on the input resolution.

The table below shows which aspect ratio modes are available for the different input sources.

Input signal	Normal	Squeeze	Zoom	Through	Squeeze Through
Video (SDTV)	✓	✓	✓	✓	✓
Video (HDTV)	✓			✓	
Computer (SVGA or lower)	✓		✓	✓	
Computer (XGA or higher)	✓		✓		

Turning Off the Picture and Sound

Press the Blank button on the remote control to darken your screen and turn off the sound. When you're ready to resume, press Blank again.

If you don't pause the video it continues to play even though you can't see or hear it. When you press the Blank button again to resume, the playback does not resume at the exact point you paused it.

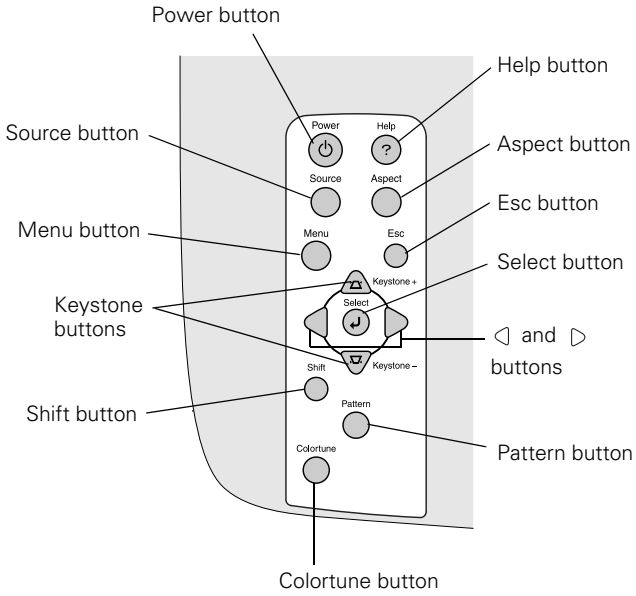
Note: *You can make the blank screen blue, instead of black, or display the EPSON logo on the screen whenever you press the* Blank *button.*

Freezing the Action

Press the Still button on the remote control to temporarily freeze the action on the screen. This freezes any moving images on the screen until you press the Still button again.

Like the Blank feature, the video and audio input continue while the moving images are paused, so when you press the Still button again to resume, the playback does not resume where you stopped it.

Using the Control Panel



The following table summarizes the functions on the control panel.

Button	Function
Power	Starts or stops projection.
Help	Displays the online help menu.
Aspect	Cycles through 5 aspect ratio settings: Normal, Squeeze, Zoom, Through, Squeeze Through.
Esc	Stops the current function. Pressing Esc while viewing a menu or the online help displays the previous screen or menu.
Select (pointer button)	Displays the line menu and lets you navigate the full menus for changing projector settings.
◁ or ▷	Select options in the menus and online help.
Pattern	Projects a test pattern on the screen to allow focusing the image and adjusting the light and dark areas.
Colortune	Cycles through color mode settings: Dynamic, Theater, Natural, PC, and sRGB.
Shift	Press with the Keystone buttons to correct distortion, as described below.
Keystone + Keystone –	Corrects keystone distortion, which occurs when the projector is tilted or not directly in front of the screen. Hold down the Shift key while pressing one of the Keystone buttons to correct distortion. You also use these buttons to scroll through the menus and select options.
Menu	Displays the menu for changing projector settings.
Source	When more than one device is connected to the projector, switches from one input source to another.

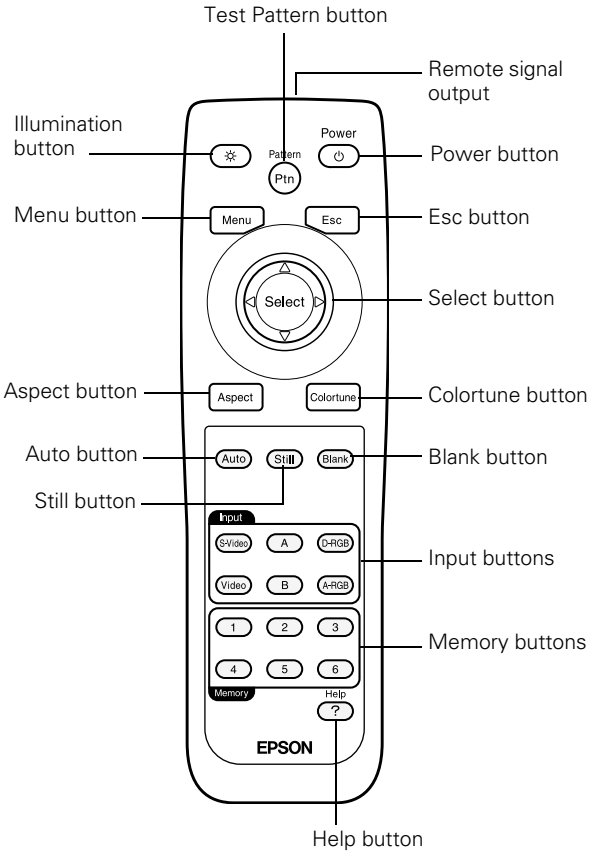
Using the Remote Control

The remote control uses a line-of-sight infrared signal. It lets you access the projector's features from anywhere in the room—up to 32 feet away. (This distance may be shorter if the remote control batteries are low.) If you have connected the mouse cable, you can also use the remote control as a wireless mouse.

The projector may not respond to remote control commands in these conditions:

- ❑ You are too far away—not within 32 feet (9 meters)—or not within 30° to the left or right of the front or rear sensor or 15° above or below it
- ❑ Batteries are weak or not installed correctly
- ❑ Ambient light is too bright
- ❑ A fluorescent light is shining into the infrared receiver
- ❑ A strong light source (such as direct sunlight) shines into the infrared receiver
- ❑ Other equipment emitting infrared energy is present (such as a radiant room heater)

The remote control buttons are shown in the following illustration.

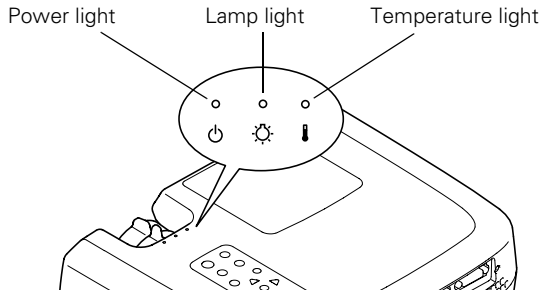


This table summarizes the functions on the remote control.

Button	Function
Pattern	Projects a test pattern on the screen to allow focusing the image and adjusting the light and dark areas.
Power	Starts or stops the projector.
Esc	Stops the current function. Pressing Esc while viewing a menu or the online help displays the previous screen or menu.
Select (pointer button)	Displays the line menu and lets you navigate the full menus for changing projector settings.
Colortune	Cycles through color mode settings: Dynamic, Theater, Natural, PC, and sRGB.
Blank	Turns off the audio and video, displaying the black, blue, or EPSON logo background.
Input buttons	When more than one device is connected to the projector, selects the source connected to the interface on the back of the projector: S-Video, Video, A, B, D-RGB, or A-RGB.
Memory buttons (1–6)	Recalls settings that have been assigned to the buttons through the memory function in the Video menu.
Help	Displays the online help menu.
Still	Keeps the current computer or video image on the screen.
Auto	Optimizes the computer image.
Aspect	Cycles through 5 aspect ratio settings: Normal, Squeeze, Zoom, Through, Squeeze Through.
Menu	Displays the menu for changing projector settings.
Illumination	Illuminates the remote control buttons.

Projector Status Lights

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



Light	Status	Description
⏻	Orange	The projector is in standby mode. You can press the **Power** button to turn it on, or turn off the power switch on the back of the projector to turn it off.
⏻	Flashing green	The projector is warming up. Wait for the image to appear.
⏻	Green	The projector is operating normally.
⏻	Flashing red or orange	The projector is cooling down. You can't turn it back on (and you should not turn off the main switch on the back or unplug it) until the light stops flashing red.
⏻ ☼ 🌡	Red Flashing red Flashing red	Power is cut off because of an internal problem. Remove the power cord and contact your dealer for help.
☼	Flashing orange	The lamp is almost burned out. Make sure you have a replacement lamp ready.
⏻ ☼	Red Red	The lamp is burned out. Replace it as described on page 14.
🌡	Flashing orange	The projector is too hot and is in cooling mode. Make sure the temperature surrounding the projector does not exceed 95 ° F (35 ° C) and there is plenty of space around and under it for ventilation. Clean the air filter if necessary. See page 14 for instructions.
🌡 ⏻	Red Red	The projector is overheating, which turns off the lamp automatically. Let it cool for five minutes, then turn it back on. Make sure there is plenty of space around and under the projector for ventilation. If it continues to overheat, you may need to change the air filter. See page 14 for instructions.
⏻ ☼	Red Flashing red	The lamp was not cooled down properly. The main power switch was turned off before the projector cooled down the last time it was used, and then the projector was turned back on before one hour. Turn off the projector, wait 2 minutes, and when the fan stops, turn off the main switch. Wait another 2 minutes, then turn the projector back on.
⏻ 🌡	Red Flashing red	There is a problem with the cooling fan or temperature sensor. Turn off the projector and unplug it. Contact your dealer for help.

Cleaning the Projector and Replacing Parts

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 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.*

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 an alcohol-based cleaner and gently wipe the lens surface.

Caution: *Do not rub the lens with any harsh materials.*

Cleaning the Projector Case

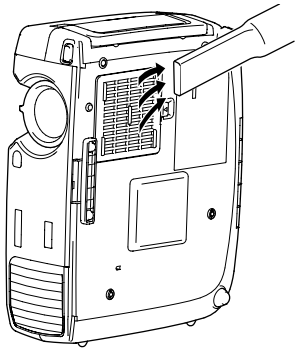
Before you clean the projector case, turn off the projector and unplug the power cord.

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

Cleaning or Replacing the Air Filter

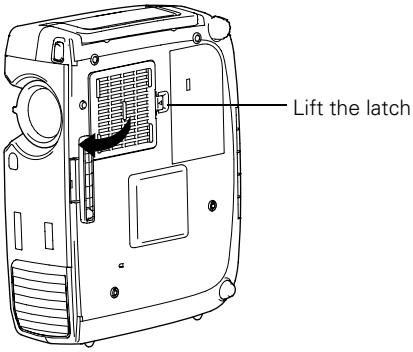
Clean the air filter at the bottom of the projector after every 100 hours of use. If it is not cleaned periodically, it can become clogged with dust, preventing proper ventilation. This can cause overheating and damage the projector. Follow these steps:

1. Turn off the projector and allow it to cool down.
2. Turn off the switch on the back of the projector.
3. Unplug the power cord.
4. Turn the projector on its side so that the handle is on top and you can access the filter easily.
5. 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).

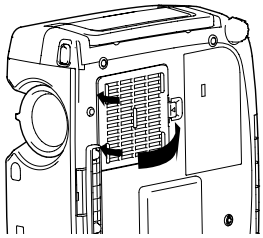
   

   If the dirt is difficult to remove or the filter is broken, replace it. Contact your dealer or call EPSON at (800) 873-7766 in the United States to obtain a new one. In Canada, please call (800) 463-7766 for dealer referral.

   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.*
6. If you need to replace the filter, lift the latch to remove the filter.



7. To install the new filter, first insert the tabs, then press on the latch until it clicks in place.



Replacing the Lamp

The projection lamp typically lasts for about 3000 hours of use. It is time to replace the lamp when:

- ❏ The projected image gets darker or starts to deteriorate.
- ❏ The lamp warning light is red or flashing orange.
- ❏ The message LAMP REPLACE appears on the screen when the lamp comes on (after about 2900 hours of use). To maintain projector brightness and image quality, replace the lamp as soon as possible.

Note: *You can check to see how many hours the lamp has been used through the About menu.*

Contact your dealer or call EPSON at (800) 873-7766 in the United States for a replacement lamp. Request part number V13H010L17. In Canada, please call (800) 463-7766 for dealer referral.

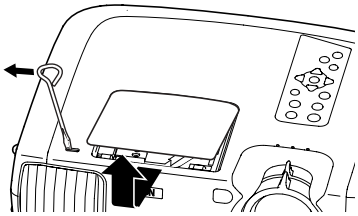
Warning: *Be extremely careful when removing the lamp module. Let the lamp cool before replacing it. If the lamp breaks, handle the shards carefully to avoid injury. In the unlikely event that the bulb has ruptured, small glass fragments may be present and should be removed with caution.*

If your projector is mounted on the ceiling, you should unmount it before accessing the lamp compartment. This will make it easier for you to replace the lamp and minimize the chance of any small glass fragments dropping from the projector.

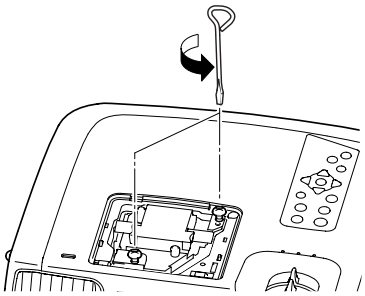
Follow these steps to replace the lamp:

1. Turn off the projector and wait for it to cool down (until the light stops flashing).
2. Turn off the power switch on the back of the projector and unplug the power cord.
3. Allow the projector to cool down for at least half an hour (if it has been on).

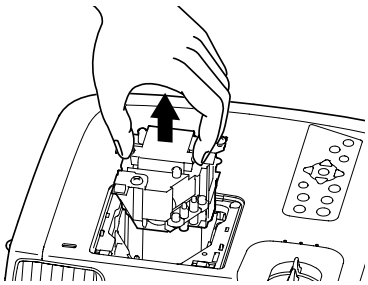
4. Use a screwdriver to slide the latch and pop open the lamp cover. Then lift it up and remove it.



5. Use a screwdriver to loosen the two silver screws holding the lamp in place. (You can't remove these screws.)

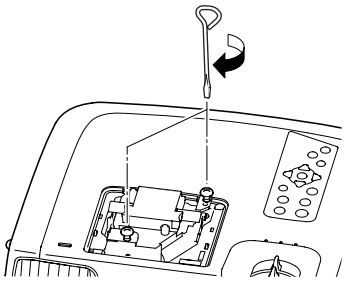


6. Grasp the lamp as shown, and pull it straight out.

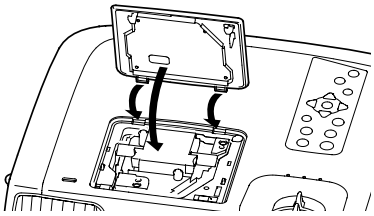


Caution: *Do not touch the glass portion of the lamp assembly.*

7. Gently insert the new lamp and tighten its screws.



8. To replace the lamp cover, insert the tabs and then snap the cover into place. (The projector won't come on if the lamp cover is loose.)

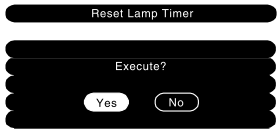


9. Reset the lamp timer as described in the next section.

Resetting the Lamp Timer

After you install a new lamp, you need to reset the timer so the projector can keep track of how many hours it has been used. Follow these steps:

1. Press the Menu button on the control panel or the remote control. You see the main menu.
2. Select the About menu. You see the lamp usage hours and other settings.
3. Select Reset Lamp Timer. You see this prompt:



4. Select Yes, then press Select.
5. When you're finished, press Esc or Menu.

The lamp usage timer doesn't register until you've used the lamp for at least 10 hours.

Optional Accessories

Product	Product number
Replacement lamp and air filter	V13H010L17
Customized carrying cases: Samsonite® wheeled soft case ATA molded hard shell case ATA shipping case Samsonite soft shoulder bag	 ELPKS35 ELPKS40 ELPKS41 ELPKS43
Installation accessories: Ceiling mount Suspension adapter False ceiling plate	 ELPMB36 ELPMBAPL ELPMBFCP
Distribution amplifier	ELPDA01
Kensington security lock	ELPSL01
Presentation cameras: High resolution document imager Motion presentation camera High resolution document camera	 ELPDC02 ELPDC03 V12H064020
Projection screens: 50-inch portable pop-up screen 60-inch portable pop-up screen 80-inch portable pop-up screen	 ELPSC06 ELPSC07 ELPSC08
Macintosh® adapter set (includes monitor adapter and desktop adapter)	ELPAP01
Component video cable (VGA to component video)	ELPKC19
Digital video cables: DVI to DVI, 10 feet (3 meters) DVI to DFP, 10 feet (3 meters) DVI to analog video, 10 feet (3 meters)	 ELPKC20 ELPKC21 V12H005C25

You can purchase these accessories from your dealer or by calling EPSON at (800) 873-7766; or visit the EPSON Store℠ at www.epsonstore.com (U.S. sales only). In Canada, please call (800) 463-7766 for dealer referral.

Related Documentation

CPD-15280	EPSON PowerLite TW100 *Quick Setup* poster
CPD-15282	EPSON PowerLite TW100 *User's Guide*

art/TW100PC7.eps 1
art/TW100PC7.eps 1
art/loc_clng.eps 5
art/loc_rear.eps 5
art/loc_rrcl.eps 5
art/loc_shlf.eps 5
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art/0013.eps 6
art/0013-2.eps 6
art/screen-001.eps 6
art/Fn.eps 7
art/Fn.eps 7
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art/mac1grey.tif @ 72 dpi 7
art/mac2grey.tif @ 72 dpi 7
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art/REMOTE.EPS 8
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