

# **EF11 User's Guide**

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# **EF11 User's Guide**

Welcome to the EF11 User's Guide.

For a printable PDF copy of this guide, click here.

# **Introduction to Your Projector**

Refer to these sections to learn more about your projector and this manual.

Projector Features
Notations Used in the Documentation
Where to Go for Additional Information
Projector Part Locations

### **Projector Features**

The EF11 projector includes these special features:

#### Bright, high-resolution projection system

• Up to 1000 lumens of color brightness (color light output) and white brightness (white light output)

**Note:** Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118.

- High-definition micro cinema lens
- Advanced 3LCD technology
- Epson microlaser array projection technology
- Up to 150 inches (13 ft) projected image size (no screen required)

#### Flexible connectivity

- HDMI port for video sources or streaming devices
- Small and portable, allows you to project without wires or extra cables
- · Audio out port for connecting headphones
- · PC Free projection from external USB devices
- Miracast screen mirroring support

#### Innovative display and operation features

- Long-life laser light source
- 200,000:1 contrast ratio and Dynamic Contrast control for sharp, detailed images

· Automatic vertical keystone adjustment

**Product Box Contents** 

**Additional Components** 

**Optional Equipment and Replacement Parts** 

Warranty and Registration Information (U.S. and Canada)

Warranty and Registration Information (Latin America)

Parent topic: Introduction to Your Projector

**Related concepts** 

Wireless Network Projection from a Mobile Device (Screen Mirroring)

**Related topics** 

Projecting a PC Free Presentation

#### **Product Box Contents**

Save all the packaging in case you need to ship the projector. Always use the original packaging (or equivalent) when shipping.

Make sure your projector box included all of these parts:



- 1 Projector
- 2 Remote control and 2 AAA batteries
- 3 AC adapter
- 4 Power cord

**Parent topic:** Projector Features

### **Additional Components**

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

**Note:** To connect a Mac that does not include a compatible HDMI output port, you need to obtain an adapter that allows you to connect to the HDMI port on the projector. Contact Apple for compatible HDMI adapter options. To connect a smartphone or tablet, you may need to obtain an adapter that allows you to connect to the projector. This allows you to mirror your smartphone or tablet screens, watch movies, and more. Contact your device manufacturer for compatible adapter options.

**Note:** The projector's HDMI port does not support MHL.

Unless listed as available from Epson in this table, see your local computer or electronics dealer for purchase information.

Signal or connection type	Additional component necessary	
HDMI	Compatible HDMI cable	
	<b>U.S. and Canada:</b> Available for purchase from Epson or an authorized Epson reseller.	
	Latin America: Available for purchase from an authorized Epson resel	
	<b>Note:</b> Older Mac computers (2009 and earlier) may not support HDMI audio.	
USB	Compatible USB cable	
Audio out	Commercially available 3.5 mm mini jack stereo cable	

**Parent topic:** Projector Features

### **Optional Equipment and Replacement Parts**

**U.S.** and Canada: You can purchase screens, other optional accessories, and replacement parts from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766) in the U.S. or 800-807-7766 in Canada. Or you can purchase online at epsonstore.com (U.S. sales) or epsonstore.ca (Canadian sales).

**Latin America**: You can purchase screens, other optional accessories, and replacement parts from an Epson authorized reseller. To find the nearest reseller, go to <a href="latin.epson.com">latin.epson.com</a>. Or you can click the "Where to Get Help" link below to contact your nearest sales office.

**Note:** Availability of accessories varies by country.

Epson offers the following optional accessories and replacement parts for your projector:

#### U.S. and Canada:

Option or part	Part number
Mounting plate (ELPMB65)	V12HA40AA0
Safety wire set (ELPWR01)	V12H003W01
Air filter set (ELPAF61)	V13H134AA0

In addition to the accessories listed above, a 1-year extended service plan is available.

#### Latin America:

Option or part	Part number
Mounting plate (ELPMB65)	V12HA40AA0
Safety wire set (ELPWR01)	V12H003W01
Air filter set (ELPAF61)	V13H134AA0

**Parent topic:** Projector Features

Related references

Where to Get Help (U.S. and Canada) Where to Get Help (Latin America)

### Warranty and Registration Information (U.S. and Canada)

Your projector comes with a basic warranty that lets you project with confidence. For details, see the warranty brochure that came with your projector.

Register your product online at this site: epson.com/webreg

Registering also lets you receive special updates on new accessories, products, and services.

**Parent topic:** Projector Features

### Warranty and Registration Information (Latin America)

Your projector comes with a basic warranty that lets you project with confidence. For details, see the warranty that came with your projector.

Register your product online at latin.epson.com/support, search for your product, and select **Register**.

Registering also lets you receive special updates on new accessories, products, and services.

Parent topic: Projector Features

#### **Notations Used in the Documentation**

Follow the guidelines in these notations as you read your documentation:

- Warnings must be followed carefully to avoid bodily injury.
- Cautions must be observed to avoid damage to your equipment.
- **Notes** contain important information about your projector.
- **Tips** contain additional projection information.

Parent topic: Introduction to Your Projector

#### Where to Go for Additional Information

Need quick help on using your projector? Here's where to look for help:

- epson.com/support (U.S.), epson.ca/support (Canada), or latin.epson.com/support (Caribbean)
   View FAQs (frequently asked questions) and e-mail your questions to Epson technical support 24 hours a day.
- If you still need help after checking this manual and any other sources listed here, you can use the Epson PrivateLine Support service to get help fast (U.S. and Canada only). For details, see "Where to Get Help."

Parent topic: Introduction to Your Projector

### **Projector Part Locations**

Check the projector part illustrations to learn about the parts on your projector.

Projector Parts - Front/Top

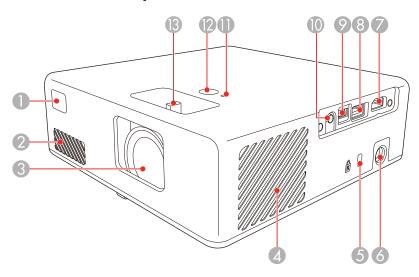
Projector Parts - Rear

Projector Parts - Base

Projector Parts - Remote Control

#### Parent topic: Introduction to Your Projector

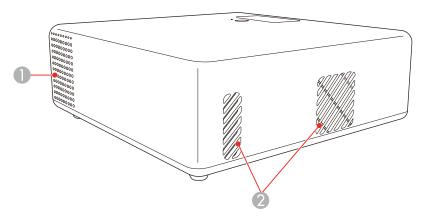
# **Projector Parts - Front/Top**



- 1 Remote receiver
- 2 Air intake vent
- 3 Lens
- 4 Air intake vent (air filter)
- 5 Kensington security slot
- 6 AC adapter port
- 7 **HDMI** port
- 8 **USB-A** port
- 9 Service port
- 10 Audio out port
- 11 Status indicator
- 12 Power button
- 13 Focus lever

**Parent topic:** Projector Part Locations

### **Projector Parts - Rear**

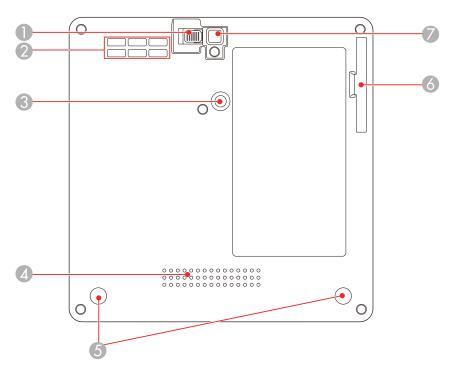


- 1 Speaker
- 2 Air exhaust vents

**Warning:** While projecting, do not put your face or hands near the air exhaust vents, and do not place objects that may become warped or damaged by heat near the vents. Hot air from the air exhaust vents could cause burns or other injuries, or warping of projector parts.

**Parent topic:** Projector Part Locations

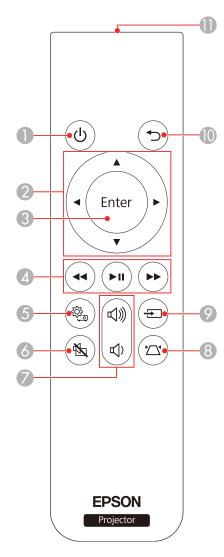
# **Projector Parts - Base**



- 1 Foot release lever
- 2 Air intake vent
- 3 Mount plate attachment point
- 4 Speaker
- 5 Rear feet (removable for mounting)
- 6 Air filter cover
- 7 Front adjustable foot

Parent topic: Projector Part Locations

# **Projector Parts - Remote Control**



- 1  $\bigcirc$  power button
- 2 Arrow buttons (move through on-screen options)

- 3 **Enter** button (selects options)
- 5 Settings button (accesses projector menus)
- 6 A/V mute button (turns off picture and sound)
- 7 ♥ volume up and ♥ volume down buttons
- 8 \( \sum \) keystone button (corrects image distortion)

- 11 Remote control emitter

Parent topic: Projector Part Locations

# **Setting Up the Projector**

Follow the instructions in these sections to set up your projector for use.

Projector Placement
Projector Connections
Installing Batteries in the Remote Control

### **Projector Placement**

You can place the projector on almost any flat surface to project an image.

You can also install the projector in a ceiling mount if you want to use it in a fixed location. A mounting plate is required when installing the projector on a VESA-compliant mount.

There is no vertical or horizontal limit to how the projector can be installed.

Keep these considerations in mind as you select a projector location:

- Place the projector on a sturdy, level surface or install it using a compatible mount.
- Place the projector parallel to the screen.
- Leave plenty of space around and under the projector for ventilation, and do not place it on top of or next to anything that could block the vents.
- Position the projector within reach of a grounded electrical outlet or extension cord.

Make sure you read the safety instructions when placing or mounting your projector. See the link below.

Projector Setup and Installation Options

**Projection Distance** 

Installing the Projector in a Mount or Tripod

Parent topic: Setting Up the Projector

**Related references** 

**Important Safety Instructions** 

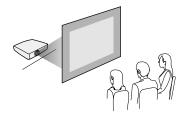
### **Projector Setup and Installation Options**

You can set up or install your projector in the following ways:

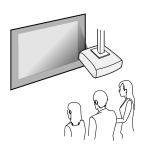
# Front



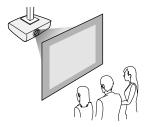
# Rear



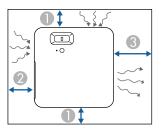
# Front ceiling



#### Rear ceiling



**Note:** Be sure to leave the following amount of space around the projector to avoid blocking the air exhaust and intake vents.



- 1 3.94 inches (10 cm)
- 2 7.87 inches (20 cm)
- 3 11.81 inches (30 cm)

**Caution:** Install the AC adapter more than 11.8 inches (30 cm) away from the projector. If the temperature of the AC adapter rises due to heat from the projector, the projector may not operate properly.

If you project from the ceiling or from the rear, be sure to select the correct **Projection** setting in the Settings menu. If necessary, adjust the **OSD Rotation** setting in the Settings > Installation menu.

Parent topic: Projector Placement

#### Related references

Projector Feature Settings - Settings Menu

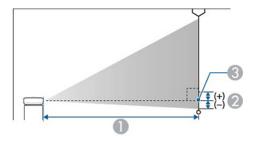
#### Related tasks

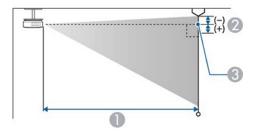
Installing the Projector in a Mount or Tripod

#### **Projection Distance**

The distance at which you place the projector from the screen determines the approximate size of the image. The image size increases the farther the projector is from the screen, but can vary depending on the zoom factor, aspect ratio, and other settings.

Use the tables here to determine approximately how far to place the projector from the screen based on the size of the projected image. (Conversion figures may have been rounded up or down.) You can also use the Projection Distance Calculator here (U.S.), here (Canada), or here (Caribbean).





- 1 Projection distance
- 2 Distance from the center of the lens to the base of the screen

16:9 Aspect Ratio Image or Screen			
Screen or image size	Projection distance (1)	Distance from center of lens to	
	Wide to Tele	base of screen (2)	
30 inches	26 to 35 inches	0 inches (0 cm)	
	(65 to 89 cm)		
40 inches	35 to 47 inches	0 inches (0 cm)	
	(88 to 120 cm)		
50 inches	43 to 59 inches	0 inches (0 cm)	
	(110 to 150 cm)		
60 inches	52 to 71 inches	0 inches (0 cm)	
	(133 to 181 cm)		
70 inches	61 to 83 inches	0 inches (0 cm)	
	(156 to 212 cm)		
80 inches	70 to 95 inches	0 inches (0 cm)	
	(179 to 243 cm)		
90 inches	79 to 108 inches	0 inches (0 cm)	
	(202 to 273 cm)		
100 inches	88 to 120 inches	0 inches (0 cm)	
	(224 to 304 cm)		
120 inches	106 inches (270 cm)	0 inches (0 cm)	
150 inches	133 inches (338 cm)	0 inches (0 cm)	

16:10 Aspect Ratio Image or Screen			
		Distance from center of lens to	
	Wide to Tele	base of screen (2)	
30 inches	28 to 38 inches	0 inches (0 cm)	
	(70 to 96 cm)		

16:10 Aspect Ratio Image or Screen			
Screen or image size	Projection distance (1) Wide to Tele	Distance from center of lens to base of screen (2)	
			40 inches
(95 to 130 cm)			
50 inches	47 to 64 inches	0 inches (0 cm)	
	(120 to 163 cm)		
60 inches	57 to 77 inches	0 inches (0 cm)	
	(144 to 196 cm)		
70 inches	66 to 90 inches	0 inches (0 cm)	
	(169 to 229 cm)		
80 inches	76 to 103 inches	0 inches (0 cm)	
	(194 to 262 cm)		
90 inches	86 to 116 inches	0 inches (0 cm)	
	(218 to 296 cm)		
100 inches	96 to 130 inches	0 inches (0 cm)	
	(243 to 329 cm)		
120 inches	115 inches	0 inches (0 cm)	
	(292 cm)		
130 inches	125 inches	0 inches (0 cm)	
	(317 cm)		
140 inches	134 inches	0 inches (0 cm)	
	(341 cm)		

4:3 Aspect Ratio Image or Screen		
Screen or image size	Projection distance (1) Wide to Tele	Distance from center of lens to base of screen (2)
(80 to 109 cm)		
40 inches	43 to 58 inches	0 inches (0 cm)
	(108 to 147 cm)	
50 inches	54 to 73 inches	0 inches (0 cm)
	(136 to 185 cm)	
60 inches	64 to 88 inches	0 inches (0 cm)
	(164 to 222 cm)	
70 inches	75 to 102 inches	0 inches (0 cm)
	(192 to 260 cm)	
80 inches	86 to 117 inches	0 inches (0 cm)
	(220 to 298 cm)	
90 inches	97 to 132 inches	0 inches (0 cm)
	(247 to 335 cm)	
100 inches	108 inches	0 inches (0 cm)
	(275 cm)	
120 inches	130 inches	0 inches (0 cm)
	(331 cm)	

Parent topic: Projector Placement

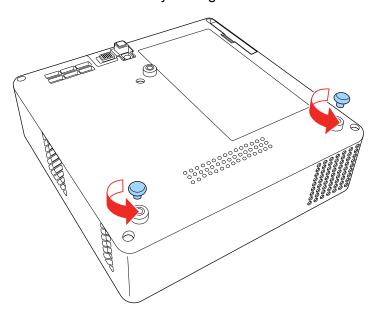
### **Installing the Projector in a Mount or Tripod**

When installing the projector in an optional mount, follow these guidelines:

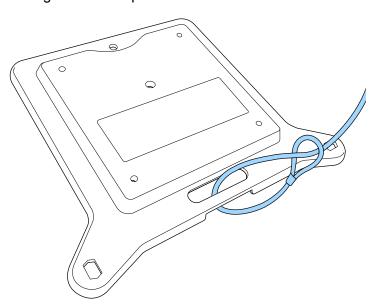
Note: You will require the optional mounting plate (ELPMB65) to install the projector in a mount.

• You can install the projector on VESA-compliant (75 × 75 mm) mounting hardware.

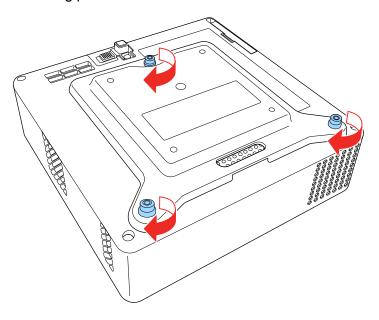
- You can install the projector on a tripod that uses 1/4-20UNC size fixed screws
- When installing the projector in a high place, be sure to install the optional security wire set (ELPWR01) for safety purposes
- 1. Turn the projector upside down.
- 2. Remove the rear feet by turning them clockwise.



3. When installing the projector in a high place, thread the optional security wire set (ELPWR01) through the mount plate.



4. Attach the mounting plate to the projector and secure it in place with the screws that came with the mounting plate.



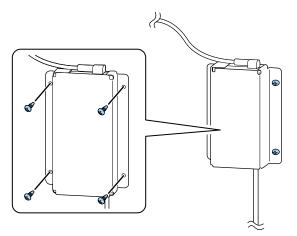
**Caution:** Do not use the feet you removed in step 2 to attach the mounting plate. They could loosen and cause the projector to fall. Use the screws supplied with the mount plate (M4  $\times$  6 mm max. depth).

5. Install the projector onto the mounting hardware or a tripod. For details, see the documentation supplied with the mount or tripod.

**Caution:** When installing the projector on the mount or tripod, make sure you tighten the screws securely. If you place the projector upside down, the screws could loosen and the projector could fall.

When installing the projector in a high location using the safety wire set, make sure you attach the carabiner to a point that is strong enough to support the weight of the projector and mounting hardware.

6. If necessary, mount the AC adapter on the wall or ceiling using the AC adapter holder that is included with the mounting plate.



**Caution:** Install the AC adapter at least 11.8 inches (30 cm) away from the projector. If the temperature of the AC adapter rises due to heat from the projector, the projector may not operate properly.

**Note:** When mounting the AC adapter on the wall or ceiling, use screws suitable for the material of the wall or ceiling. If you are unsure what screws to use, consult a professional.

Parent topic: Projector Placement

Related references

Optional Equipment and Replacement Parts

### **Projector Connections**

See these sections to connect the projector to a variety of projection sources.

**Caution:** Check the shape and orientation of the connectors on any cable you plan to connect. Do not force a connector into a port if it does not fit. The device or your projector could be damaged or could malfunction.

Connecting to an HDMI Video Source Connecting to a USB Device

#### Connecting Headphones

Parent topic: Setting Up the Projector

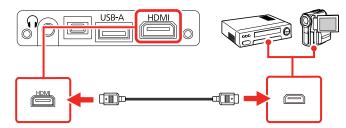
### **Connecting to an HDMI Video Source**

If your video source has an HDMI port, you can connect it to the projector using an HDMI cable. The video source's sound is output to the projector's speaker.

**Note:** You can also connect a computer or laptop to the projector using an HDMI cable.

**Caution:** Do not turn on the video source before connecting it to the projector; otherwise, you may damage the projector.

- 1. Connect one end of an HDMI cable to your video source's HDMI port.
- 2. Connect the other end of the HDMI cable to the projector's HDMI port.



**Parent topic:** Projector Connections

### **Connecting to a USB Device**

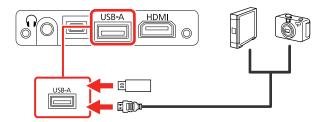
You can connect a USB device or cable to the projector's USB-A port to project images from the device. Use the USB cable supplied with the device.

**Note:** Do not connect a USB hub or a USB cable longer than 9.8 feet (3 m), or the device may not operate correctly.

Make sure the USB device meets the following requirements:

- The device must be a USB flash drive, USB hard drive, or a digital camera or smartphone
- Digital cameras and smartphones must be USB-mounted devices (not TWAIN-compliant) and must be USB Mass Storage Unit compliant.

- USB hard drives must be USB Mass Storage Class compliant (not all compliant devices are supported); formatted in FAT16/32; self-powered by their own AC power supplies (bus powered drives are not recommended); and should not have mulitple partitions.
- 1. If your USB device came with an AC adapter, plug the device into an electrical outlet.
- 2. Connect the USB device or cable to the projector's **USB-A** port.



3. If you connected a USB cable, connect the other end to the USB device as necessary.

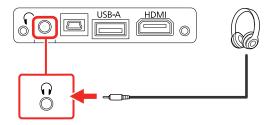
The projector displays images stored on the USB device.

**Parent topic:** Projector Connections

### **Connecting Headphones**

You can connect headphones to the projector's audio out port. You can control the volume using the projector remote control.

**Note:** The projector's audio out port only supports 3-pin stereo headphones. If you use any other type of headphones, audio may not be output normally.



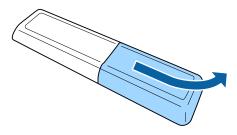
**Parent topic:** Projector Connections

### **Installing Batteries in the Remote Control**

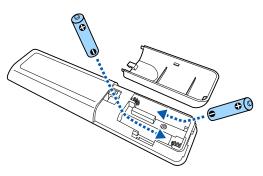
The remote control uses the two AAA batteries that came with the projector.

**Caution:** Use only the type of batteries specified in this manual. Do not install batteries of different types, or mix new and old batteries.

1. Remove the battery cover.

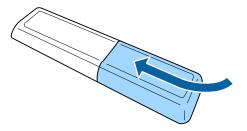


2. Insert the batteries with the + and – ends facing as shown.



**Warning:** Make sure the batteries are inserted in the correct positions. If the batteries are not inserted correctly, they could explode or leak, causing a fire, injury, or damage to the product.

3. Replace the battery cover and press it down until it clicks into place.



**Warning:** Dispose of used batteries according to local regulations. Do not expose batteries to heat or flame. Keep batteries out of the reach of children; they are choking hazards and are very dangerous if swallowed.

Parent topic: Setting Up the Projector

# **Using Basic Projector Features**

Follow the instructions in these sections to use your projector's basic features.

Turning On the Projector

Turning Off the Projector

**Remote Control Operation** 

Selecting the Language for the Projector Menus

**Projection Modes** 

Adjusting the Image Height

Image Shape

Focusing the Image Using the Focus Lever

Resizing the Image Using Zoom

Selecting an Image Source

Color Mode

Turning On Automatic Luminance Adjustment

Adjusting Light Output (Brightness)

**Adjusting Image Sharpness** 

**Using Advanced Image Adjustment Features** 

Saving Settings to Memory and Using Saved Settings

Controlling the Volume with the Volume Buttons

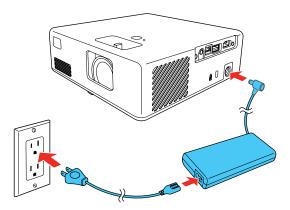
Changing the Sound Mode

### **Turning On the Projector**

Turn on the projector before you turn on the video source you want to use.

**Caution:** Do not turn on the video source before connecting it to the projector; otherwise, you may damage the projector.

1. Connect the AC adapter to the projector's power inlet.



- Plug the power cord into an electrical outlet and connect it to the AC adapter
   The projector enters standby mode. This indicates that the projector is receiving power, but is not turned on.
- 3. Press the  $\circlearrowleft$  power button on the projector or the projector remote control to turn on the projector. The status light flashes blue as the projector warms up. After the projector is warmed up, the status light stops flashing and turns blue.

**Warning:** Never look into the projector lens when the light is on. The light can damage your eyes and is especially dangerous for children and pets.

**Caution:** Make sure no objects are blocking the light from the projector lens. Objects blocking the lens for an extended time can melt and light that is reflected back into the lens can cause the projector to malfunction.

The Welcome Guide is displayed the first time you turn on the projector. To display the guide again, press the Settings button on the projector remote control and select **Settings > Display > Welcome Guide**.

Parent topic: Using Basic Projector Features

### **Turning Off the Projector**

Turn off the projector after use.

**Note:** Turn off this product when not in use to prolong the life of the projector. Laser life will vary depending upon mode selected, environmental conditions, and usage. Brightness decreases over time.

1. Press the  $\circlearrowleft$  power button on the projector or the projector remote control.

The projector displays a shutdown confirmation screen.



2. Press the  $\circlearrowleft$  power button again. (To leave it on, press any other button.)

The laser turns off and all lights turn off.

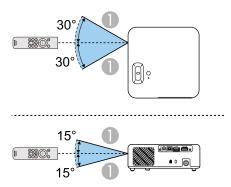
**Caution:** Do not turn the projector on immediately after turning it off. Turning the projector on and off frequently may shorten the life of the laser.

3. To transport or store the projector, make sure the status indicator light is off, then unplug the power cord.

**Parent topic:** Using Basic Projector Features

# **Remote Control Operation**

The remote control lets you control the projector from almost anywhere in the room, up to 16.4 feet (5 m) away. You can point it at the front or back of the projector.



1 16.4 feet (5 m)

**Note:** Avoid using the remote control in conditions with bright fluorescent lights or in direct sunlight, or the projector may not respond to commands. If you will not use the remote control for a long time, remove the batteries.

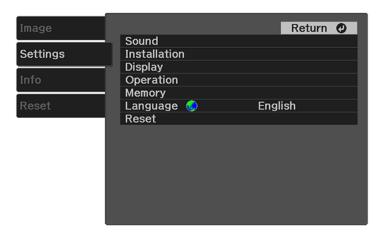
Parent topic: Using Basic Projector Features

# **Selecting the Language for the Projector Menus**

If you want to view the projector's menus and messages in another language, you can change the Language setting.

- 1. Turn on the projector.
- 2. Press the Settings button on the projector remote control.

3. Press the arrow buttons to select the **Settings** menu and press **Enter**.



- 4. Select the Language setting and press Enter.
- 5. Select the language you want to use and press **Enter**.
- 6. Press the <sup>™</sup> Settings button to exit the menu or the <sup>™</sup> Esc button to return to the previous screen.

**Parent topic:** Using Basic Projector Features

# **Projection Modes**

Depending on how you positioned the projector, you may need to change the projection mode so your images project correctly.

- Front (default setting) lets you project from a table in front of the screen or onto the ceiling.
- Front/Upside Down flips the image over top-to-bottom to project upside-down from a ceiling or wall
  mount.
- Rear flips the image horizontally to project from behind a translucent screen.
- Rear/Upside Down flips the image over top-to-bottom and horizontally to project from the ceiling and behind a translucent screen.

Changing the Projection Mode Using the Menus

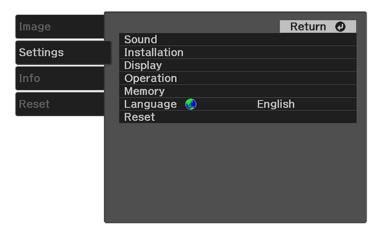
Parent topic: Using Basic Projector Features

#### **Changing the Projection Mode Using the Menus**

You can change the projection mode to flip the image over top-to-bottom and/or left-to-right using the projector menus.

**Note:** You can also press and hold the \( \frac{\strack{1}}{2} \) A/V mute button on the projector remote control for about 6 seconds to flip the image upside-down.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the projector remote control.
- 3. Press the arrow buttons to select the **Settings** menu and press **Enter**.



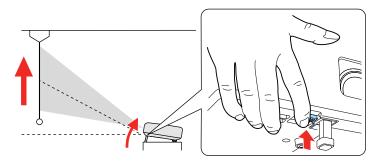
- 4. Select the **Installation** setting and press **Enter**.
- 5. Select the **Projection** setting and press **Enter**.
- 6. Select the projection mode you want to use and press **Enter**.
- 7. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Projection Modes

# **Adjusting the Image Height**

If you are projecting from a table or other flat surface and the image is too high or low, you can adjust the image height using the projector's adjustable foot.

- 1. Turn on the projector and display an image.
- 2. Press and hold the foot release lever to extend or retract the front adjustable foot.



**Note:** You can adjust the position up to 9°.

3. Release the lever to lock the foot when the image is at the position you want.

If the projected image is unevenly rectangular, you need to adjust the image shape.

Parent topic: Using Basic Projector Features

Related references
Projector Parts - Base

# **Image Shape**

You can project an evenly rectangular image by placing the projector directly in front of the center of the screen and keeping it level. If you place the projector at an angle to the screen, or tilted up or down, or off to the side, you may need to correct the image shape for the best display quality.

When you turn on automatic keystone correction in your projector's Settings menu, your projector automatically corrects vertical keystone effects when you reposition the projector.

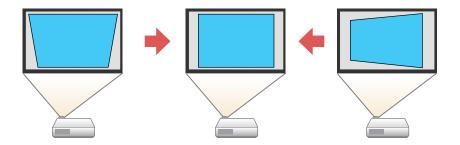
Correcting Image Shape with H/V Keystone Correcting Image Shape with Quick Corner

**Parent topic:** Using Basic Projector Features

#### Correcting Image Shape with H/V Keystone

You can use the projector remote control or control panel buttons to correct the shape of an image that is unevenly rectangular on the sides.

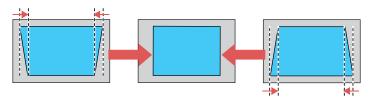
**Note:** You can also adjust the keystone settings from the **Settings** > **Installation** > **Keystone** menu.



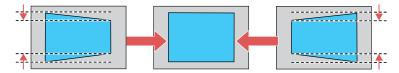
**Note:** You cannot combine **Keystone** correction with other image shape correction methods.

- 1. Turn on the projector and display an image.
- 2. Press the '\square keystone button on the projector remote control.
- 3. Use the arrow buttons on the projector remote control to select between vertical and horizontal keystone correction, and to adjust the image shape as necessary.

#### V-Keystone



#### **H-Keystone**



4. Press the <sup>♠</sup> Esc button when you are finished.

After correction, your image is slightly smaller.

Parent topic: Image Shape

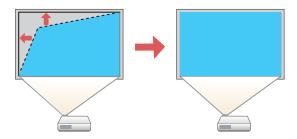
Related references

Projector Feature Settings - Settings Menu

### **Correcting Image Shape with Quick Corner**

You can use the projector's Quick Corner setting to correct the shape and size of an image that is unevenly rectangular on all sides.

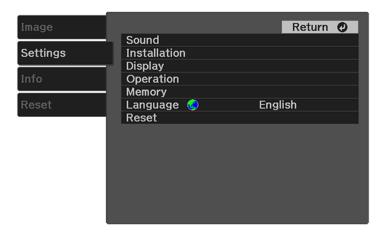
**Note:** To provide the best possible image quality, adjust the projector's position to correct the image shape. If this isn't possible, use the Quick Corner setting to correct the image shape.



Note: You cannot combine Quick Corner correction with other image shape correction methods.

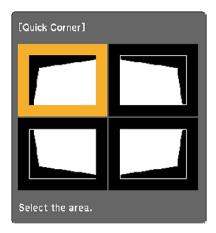
- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the projector remote control.

3. Press the arrow buttons to select the **Settings** menu and press **Enter**.



- 4. Select the **Installation** setting and press **Enter**.
- 5. Select the **Keystone** setting and press **Enter**.
- 6. Select the **Quick Corner** setting and press **Enter** twice.

You see the Quick Corner adjustment screen:



- 7. Use the arrow buttons on the projector remote control to select the corner of the image you want to adjust, then press **Enter**.
- 8. Press the arrow buttons to adjust the image shape as necessary, then press **Enter** to return to the area selection screen.

**Note:** To reset your adjustments, press and hold the  $\circlearrowleft$  Esc button for at least 2 seconds to display a reset screen, then select **Reset Quick Corner** and **Yes**.

9. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Image Shape

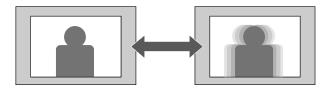
**Related references** 

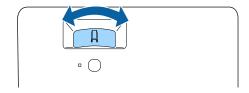
Projector Feature Settings - Settings Menu

# **Focusing the Image Using the Focus Lever**

You can adjust the sharpness of the projected image using the focus lever on the projector.

- 1. Turn on the projector and display an image.
- 2. Move the lever left or right to adjust the focus.



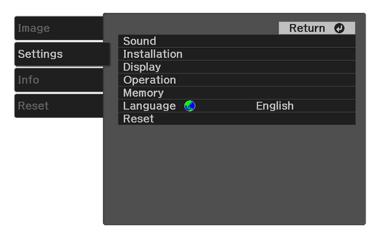


**Parent topic:** Using Basic Projector Features

# **Resizing the Image Using Zoom**

You can resize the displayed image.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the projector remote control.
- 3. Press the arrow buttons to select the **Settings** menu and press **Enter**.



- 4. Select the **Installation** setting and press **Enter**.
- 5. Select the **Zoom** setting and press **Enter**.
- 6. Press the left or right arrow button to adjust the zoom setting between **Wide** and **Tele**.
- 7. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

**Parent topic:** Using Basic Projector Features

# **Selecting an Image Source**

If you connected multiple image sources to the projector, such as a USB device and DVD player, you may want to switch from one image source to the other.

- 1. Make sure the connected image source you want to use is turned on.
- 2. For video image sources, insert a DVD or other video media and press its play button, if necessary.

3. Press the \(\frac{1}{2}\) Source Search button on the remote control. Press the up or down buttons to select the image source.

**Note:** If no image signal is detected, check the cable connections between the projector and the image source.

Parent topic: Using Basic Projector Features

#### **Color Mode**

The projector offers different Color Modes to provide optimum brightness, contrast, and color for a variety of viewing environments and image types. You can select a mode designed to match your image and environment, or experiment with the available modes.

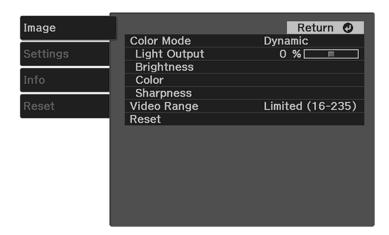
Changing the Color Mode Available Color Modes

Parent topic: Using Basic Projector Features

### **Changing the Color Mode**

You can change the projector's color mode using the remote control to optimize the image for your viewing environment.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the remote control. You see a screen like this:



3. Select the Image > Color Mode setting.

4. Select the color mode from the list.

5. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Color Mode

Related references

Image Quality Settings - Image Menu

#### **Available Color Modes**

You can set the projector to use these Color Modes, depending on the input source you are using:

Color Mode	Description
Dynamic	Best for optimizing brightness
Vivid	Best for projecting general content in a bright environment
Bright Cinema	Best for projecting movies in a bright environment
Cinema	Best for projecting movies in a dark environment
Natural	Best for projecting the image as is (choose this mode when making color adjustments)

Parent topic: Color Mode

**Related references** 

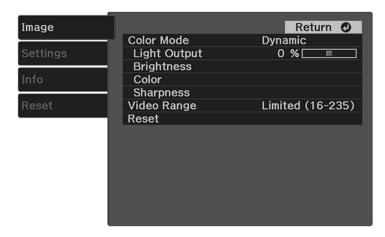
Image Quality Settings - Image Menu

# **Turning On Automatic Luminance Adjustment**

You can turn on the **Dynamic Contrast** setting to automatically optimize the image luminance. This improves the image contrast based on the brightness of the content you project.

1. Turn on the projector and display an image.

2. Press the Settings button on the projector remote control.



- 4. Select the **Brightness** setting and press **Enter**.
- 5. Select the **Dynamic Contrast** setting and press **Enter**.
- 6. Choose one of the following options and press **Enter**:
  - Off: turns off Dynamic Contrast
  - Normal: adjusts brightness at the standard speed
  - High Speed: adjusts brightness as soon as a scene changes
- 7. Press the Settings button to exit the menu or the Sec button to return to the previous screen.

Parent topic: Using Basic Projector Features

# **Adjusting Light Output (Brightness)**

You can adjust the brightness of the projector's light output.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the projector remote control.



- 4. Select the **Light Output** setting and press **Enter**.
- 5. Press the left or right arrow buttons to adjust the brightness between 50% (**ECO**) and 100% (**Normal**).
- 6. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Using Basic Projector Features

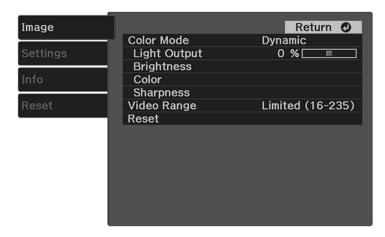
Related references

Image Quality Settings - Image Menu

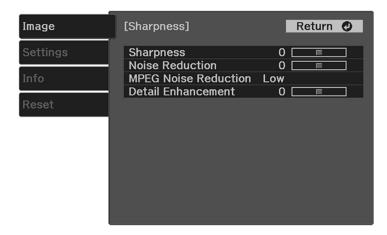
# **Adjusting Image Sharpness**

You can adjust various aspects of the displayed image.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the projector remote control.



4. Select the **Sharpness** setting and press **Enter**.



- 5. Do the following as necessary to adjust the displayed image:
  - To adjust the outline of the image, adjust the **Sharpness** setting.
  - To reduce flickering in the image, adjust the **Noise Reduction** setting.
  - To reduce flickering in an MPEG image, adjust the MPEG Noise Reduction setting.

- To create a more textural feel to the image, adjust the **Detail Enhancement** setting.
- 6. Press the <sup>ℚ</sup> Settings button to exit the menu or the → Esc button to return to the previous screen.

Parent topic: Using Basic Projector Features

Related references

Image Quality Settings - Image Menu

# **Using Advanced Image Adjustment Features**

Follow the instructions in these sections to use your projector's advanced image adjustments.

Adjusting the Color Temperature

Adjusting the RGB Offset and Gain

Adjusting the Hue, Saturation, and Brightness

**Adjusting Gamma** 

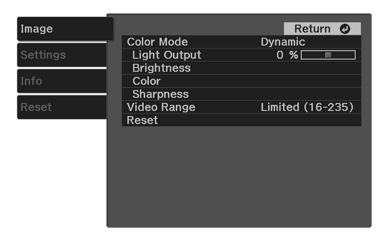
**Parent topic:** Using Basic Projector Features

### **Adjusting the Color Temperature**

You can change the overall color tone if the image contains a bluish or reddish tone.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button.

You see a screen like this:



- 4. Select the Color > White Balance > Color Temp. setting and press Enter.
- 5. Use the arrow buttons to adjust the value of the **Color Temp.** setting. Higher values increase the blue tint, and lower values increase the red tint.
- 6. Press the <sup>®</sup> Settings button to exit the menu or the → Esc button to return to the previous screen.

Parent topic: Using Advanced Image Adjustment Features

**Related references** 

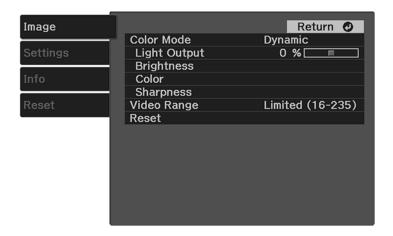
Image Quality Settings - Image Menu

# Adjusting the RGB Offset and Gain

You can adjust the brightness of darker and brighter areas of the image by adjusting the **Offset** and **Gain** settings for the individual image colors.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button.

You see a screen like this:



- 4. Select the Color > White Balance > Custom setting and press Enter.
- 5. Do the following as necessary for each color (Red, Green, and Blue):
  - To adjust the brightness of dark areas, adjust the **Offset** setting.
  - To adjust the brightness of bright areas, adjust the **Gain** setting.

Higher values will make the image brighter but can decrease shading details, while lower values will make the image darker but can increase the visibility of details.

6. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Using Advanced Image Adjustment Features

**Related references** 

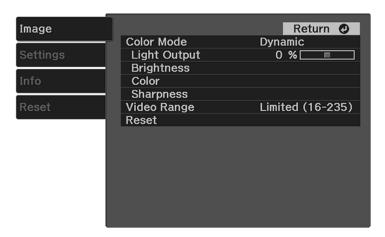
Image Quality Settings - Image Menu

### **Adjusting the Hue, Saturation, and Brightness**

You can adjust the hue, saturation, and brightness settings for individual image colors.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button.

You see a screen like this:



- 4. Select the **Color > RGBCMY** setting and press **Enter**.
- 5. Select the color to adjust and press **Enter**.



- 6. Do the following as necessary for each setting:
  - To adjust the overall hue of the color (bluish, greenish, reddish), adjust the **Hue** setting.
  - To adjust the overall vividness of the color, adjust the **Saturation** setting.
  - To adjust the overall brightness of the color, adjust the **Brightness** setting.
- 7. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♠</sup> Esc button to return to the previous screen.

Parent topic: Using Advanced Image Adjustment Features

#### Related references

Image Quality Settings - Image Menu

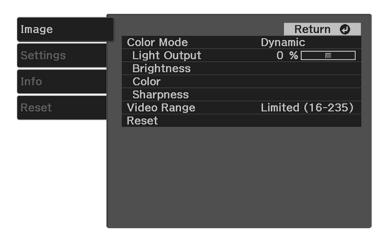
#### **Adjusting Gamma**

You can adjust the gamma to improve differences in halftone brightness that vary depending on the connected device.

**Note:** Project a still image to adjust the gamma; you cannot adjust it properly when projecting a movie or other moving video. Medical images may not reproduce correctly depending on your operating environment and screen.

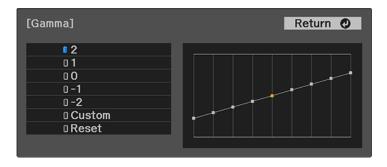
- 1. Turn on the projector and display an image.
- 2. Press the Settings button.
- 3. Select the **Image** menu and press **Enter**.

You see a screen like this:

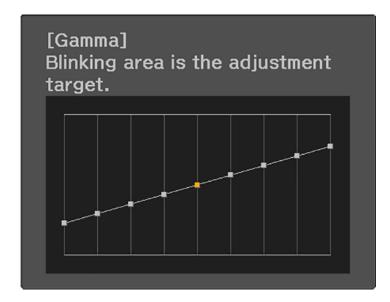


4. Select the **Brightness > Gamma** setting and press **Enter**.

You see a screen like this:



- 5. Use the arrow buttons to adjust the value of the **Gamma** setting as follows:
  - To brighten darker areas of the image, select higher gamma values. (Color saturation in the lighter areas may become weaker.)
  - To reduce overall image brightness and sharpen the image, select lower gamma values.
- 6. To adjust specific tones in the gamma using a graph, select the **Custom** setting and press **Enter**. You see a screen like this:



- 7. Press the left or right arrow button to select the tone you want to change, then press the up or down arrow button to adjust the tone and press **Enter**.
- 8. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Using Advanced Image Adjustment Features

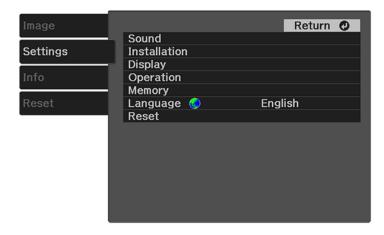
**Related references** 

Image Quality Settings - Image Menu

# Saving Settings to Memory and Using Saved Settings

You can save the customized **Image** menu settings for your video input and then select the saved settings whenever you want to use them.

- 1. Turn on the projector and display an image.
- 2. Press the Settings button on the projector remote control.
- 3. Press the arrow buttons to select the **Settings** menu and press **Enter**.



- 4. Select the **Memory** setting and press **Enter**.
- 5. Choose one of the following options and press **Enter**:
  - · Load Memory: overwrites your current settings with saved settings
  - Save Memory: saves your current settings to memory (10 memories with different names are available)

**Note:** A memory name that has already been used is indicated by a blue mark. Saving over a previously saved memory overwrites the settings with your current settings. The name of the memory defaults to the current color mode. Use the **Rename Memory** option after saving a memory set to create a custom name.

- Erase Memory: erases the selected memory settings
- Rename Memory: renames a saved memory

**Note:** To delete all saved memories, select the **Reset Memory** setting in the **Reset** menu.

6. Press the Settings button to exit the menu or the Esc button to return to the previous screen.

**Parent topic:** Using Basic Projector Features

Related references

Projector Feature Settings - Settings Menu Projector Reset Options - Reset Menu

# **Controlling the Volume with the Volume Buttons**

You can use the volume buttons to adjust the volume of the projector's internal speaker or any external speakers or headphones connected to the projector.

**Note:** You must adjust the volume separately for each connected input source.

- 1. Turn on the projector and start a video that includes audio.
- 2. To raise or lower the volume, press the ♥) volume up or ♥ volume down button on the projector remote control.

A volume gauge appears on the screen.

Parent topic: Using Basic Projector Features

**Related references** 

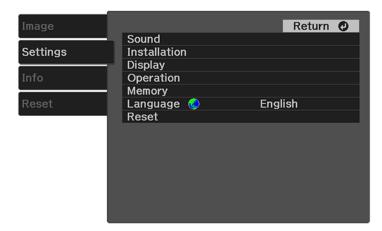
Projector Feature Settings - Settings Menu

# **Changing the Sound Mode**

You can change the projector's sound mode to provide optimal sound for a variety of image types.

1. Turn on the projector and start a video.

- 2. Press the Settings button on the remote control.
- 3. Press the arrow buttons to select the **Settings** menu and press **Enter**.



- 4. Select the **Sound > Sound Mode** setting and press **Enter**.
- 5. Select a sound mode and press **Enter**.
- 6. Press the <sup>©</sup> Settings button to exit the menu or the <sup>→</sup> Esc button to return to the previous screen.

**Available Sound Modes** 

**Parent topic:** Using Basic Projector Features

Related references

Projector Feature Settings - Settings Menu

#### **Available Sound Modes**

You can set the projector to use these sound modes, depending on the input source you are using:

Sound Mode	Description	
Standard	Outputs audio using normal sound quality	
Vocal	Best for hearing voices and spoken dialogue	
Music	Best for listening to music. Higher and lower pitched sounds are clearer.	

Sound Mode	Description	
Movie	Best for audio from videos or movies. Higher and lower pitched sounds are emphasized.	

Parent topic: Changing the Sound Mode

Related references

Projector Feature Settings - Settings Menu

# **Adjusting Projector Features**

Follow the instructions in these sections to use your projector's feature adjustments.

Operating Connected Devices Using the HDMI Link Features

Projecting a PC Free Presentation

Wireless Network Projection from a Mobile Device (Screen Mirroring)

Shutting Off the Picture and Sound Temporarily

Installing a Security Cable

Copying Menu Settings Between Projectors

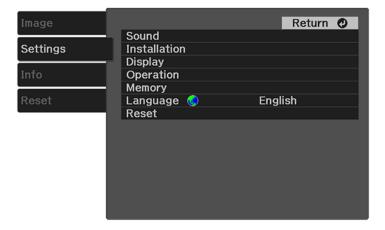
# **Operating Connected Devices Using the HDMI Link Features**

You can use the projector remote control to control certain features of devices connected to the projector's HDMI port.

**Note:** The connected device and HDMI cable must meet the HDMI CEC standard. The device must also be configured; see the documentation that came with the device. All devices or functions may not operate properly.

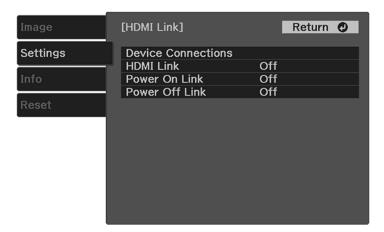
- 1. Press the Settings button on the projector remote control.
- 2. Press the arrow buttons to select the **Settings** menu and press **Enter**.

You see this screen:



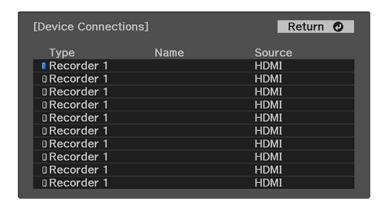
- 3. Select the **Operation** setting and press **Enter**.
- 4. Select the **HDMI Link** setting and press **Enter**.

You see this screen:



- 5. Select the **HDMI Link** setting and press **Enter**. Then select **On** and press the <sup>♠</sup> Esc button.
- 6. Select the **Device Connections** setting and press **Enter**.

You see this screen:



**Note:** Linked devices are indicated by a blue mark. You cannot select grayed-out devices.

- 7. Select the device you want to control and project images from and press **Enter**.
- 8. Select the following HDMI Link options as necessary and press Enter:
  - Power On Link: select what happens when you turn on the projector or linked device. Select PJ Device or Bidirectional to turn the linked device on when the projector is turned on, or select
     Device -> PJ or Bidirectional to turn the projector on when the linked device is turned on.
  - Power Off Link: select whether linked devices are turned off when the projector is turned off.
- 9. Press the <sup>®</sup> Settings button to exit the menu or the <sup>♣</sup> Esc button to return to the previous screen.

Parent topic: Adjusting Projector Features

Related references

Projector Feature Settings - Settings Menu

# **Projecting a PC Free Presentation**

You can use your projector's PC Free feature whenever you connect a USB device that contains compatible files. This lets you quickly and easily display the contents of the files and control their display using the projector's remote control.

**PC Free Precautions** 

Supported PC Free File Types

Starting a PC Free Slideshow

Starting a PC Free Movie Presentation

**PC Free Display Options** 

Parent topic: Adjusting Projector Features

#### **PC Free Precautions**

Note the following precautions when using PC Free features:

- Do not disconnect the USB device while it is being accessed; otherwise, PC Free may not operate correctly.
- You may not be able to use the security features on certain USB devices with PC Free features.
- When connecting a USB device that includes an AC adapter, connect the AC adapter to an electrical outlet when you use the USB device with your projector.
- Some commercially available USB card readers may not be compatible with your projector.
- You cannot correct keystone distortion while projecting in PC Free, so correct the image shape before you begin your presentation.

Parent topic: Projecting a PC Free Presentation

### **Supported PC Free File Types**

You can project these types of files using the projector's PC Free feature.

**Note:** For best results, place your files on media that is formatted in FAT16/32. If you have trouble projecting from media formatted for non-Windows file systems, try formatting the media for Windows instead. You may not be able to use the security features on certain USB storage devices with PC Free features. When connecting a USB-compatible hard drive, connect the AC adapter supplied with the drive. PC Free may not work with USB device security features.

**Note:** While projecting a PC Free presentation, you cannot correct the image shape using keystone correction. Correct the image shape before starting your presentation.

File type and extension	Details		
Image (.jpg)	Make sure the file is not:		
	CMYK format		
	Progressive format		
	Highly compressed		
	Above 8192 × 8192 resolution		
Image (.bmp)	Make sure the file resolution is not above 1280 × 800		
Image (.gif)	Make sure the file is not:		
	Above 1280 × 800 resolution		
	Animated		
	Interlaced		
Image (.png)	Make sure the file resolution is not:		
	• Above 1920 × 1080		
	Interlaced		

File type and extension	Details
Motion JPEG movie (.avi)	Supports only AVI 1.0
	Make sure the file is not:
	Saved with a video codec other than Motion JPEG
	Saved with an audio codec other than PCM or ADPCM
	Above 1280 × 720 resolution
	Larger than 2GB

Parent topic: Projecting a PC Free Presentation

# Starting a PC Free Slideshow

After connecting a USB device or digital camera to the projector, you can switch to the USB input source and start your slideshow.

**Note:** You can change the slideshow operation options or add special effects by highlighting **Option** at the bottom of the screen and pressing **Enter**.

- 1. Press the \(\frac{1}{2}\) Source Search button on the remote control.
- 2. Select the **USB** source.

The PC Free screen appears.



**Note:** If the Select Drive screen appears, press the arrow buttons to select the drive and press **Enter**.

- 3. Do the following as necessary to locate your files:
  - If you need to display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
  - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
  - To view additional files in a folder, highlight **Next page** or **Previous page** and press **Enter**.
  - To display images from a different USB drive, select **Select Drive** at the top of the PC Free screen and press **Enter**.
- 4. Do one of the following:
  - To display an individual image, press the arrow buttons to highlight the image and press **Enter**. (Press the **Esc** button to return to the file list screen.)

• To display a slide show of all the images in a folder, press the arrow buttons to highlight the **Slideshow** option at the bottom of the screen and press **Enter**.

**Note:** If any file names are longer than the display area or include unsupported symbols, the file names may be shortened or changed only in the screen display.

- 5. While projecting, use the following commands to control the display as necessary:
  - To rotate a displayed image, press the up or down arrow button.
  - To move to the next or previous image, press the left or right arrow button.
- 6. To stop the display, follow the on-screen instructions or press the **Esc** button.
- 7. Turn off the USB device, if necessary, and then disconnect the device from the projector.

Parent topic: Projecting a PC Free Presentation

#### **Starting a PC Free Movie Presentation**

After connecting a USB device or digital camera to the projector, you can switch to the USB input source and start your movie.

**Note:** You can change the operation options by highlighting **Option** at the bottom of the screen and pressing **Enter**.

- 1. Press the \(\frac{1}{2}\) Source Search button on the remote control.
- 2. Select the **USB** source.

The PC Free screen appears.



**Note:** If the Select Drive screen appears, press the arrow buttons to select the drive and press **Enter**.

- 3. Do the following as necessary to locate your files:
  - If you need to display files inside a subfolder on your device, press the arrow buttons to highlight the folder and press the **Enter** button.
  - To move back up a folder level on your device, highlight **Back to Top** and press **Enter**.
  - To view additional files in a folder, highlight **Next page** or **Previous page** and press **Enter**.
  - To display movie files from a different USB drive, select **Select Drive** at the top of the PC Free screen and press **Enter**.
- 4. To play back a movie, press the arrow buttons to highlight the file and press **Enter**.

**Note:** If any file names are longer than the display area or include unsupported symbols, the file names may be shortened or changed only in the screen display. If you want to play back all the movies in a folder in sequence, select the **Slideshow** option at the bottom of the screen.

- 5. To stop movie playback, press the **Esc** button, highlight **Exit**, and press **Enter**.
- 6. Turn off the USB device, if necessary, and then disconnect the device from the projector.

Parent topic: Projecting a PC Free Presentation

# **PC Free Display Options**

You can select these display options when using the projector's PC Free feature.



Setting	Options	Description
Display Order	Name Order	Displays files in name order
	<b>Date Order</b>	Displays files in date order
Sort Order	In Ascending	Sorts files in first-to-last order
	In Descending	Sorts files in last-to-first order
Continuous Play	On	Displays a slideshow continuously
	Off	Displays a slideshow one time through

Setting	Options	Description
Screen Switching Time	No	Does not display the next file automatically
	1 Second to 60 Seconds	Displays files for the selected time and switches to the next file automatically; high resolution images may switch at a slightly slower rate
Effect	No	No effect
	Wipe	Transitions between images with a wipe effect
	Dissolve	Transitions between images with a dissolve effect
	Random	Transitions between images using a random variety of effects

Parent topic: Projecting a PC Free Presentation

# Wireless Network Projection from a Mobile Device (Screen Mirroring)

**Screen Mirroring Restrictions** 

**Selecting Screen Mirroring Settings** 

Connecting for Screen Mirroring with Miracast

Connecting for Screen Mirroring with a Windows 8.x/Windows 10 Computer

Parent topic: Adjusting Projector Features

### **Screen Mirroring Restrictions**

Note the following when using Screen Mirroring features:

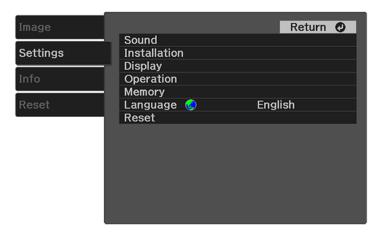
- · You cannot project an interlaced image.
- You cannot play audio with more than 3 channels.
- You cannot project images with a resolution above 1920 × 1080 and a frame rate above 30 fps.
- You cannot project 3D video.
- You cannot use extended Miracast features on Windows 8.1.
- You may not be able to view contents with copyright protection using a Miracast connection.
- Do not change the projector's Screen Mirroring settings during Screen Mirroring projection. Doing so may cause the projector to disconnect and delay reconnection.

Parent topic: Wireless Network Projection from a Mobile Device (Screen Mirroring)

### **Selecting Screen Mirroring Settings**

You can select Screen Mirroring settings for your projector and then project images from your mobile device.

- 1. Press the Settings button on the remote control.
- 2. Press the arrow buttons to select the **Settings** menu and press **Enter**.



- 3. Select the **Operation > Screen Mirroring** setting and press **Enter**.
- 4. Set the **Screen Mirroring** setting to **On**.
- 5. Select **Screen Mirroring Settings** and press **Enter**.
- 6. To enter a name for the projector, select **Display Name**. You can enter up to 32 alphanumeric characters.
- 7. Select **Basic** or **Extended** as the **Operation Mode** setting.
- 8. Select **Adjust Image Quality** to adjust the screen mirroring speed/quality. Select a small number to improve the quality and select a large number to increase the speed.

- 9. Select **Extended** and select these settings as necessary (the **Extended** setting is only available if you select **Extended** as the **Operation Mode** setting):
  - Interrupt Connection lets you select whether to allow other devices to connect while using Screen Mirroring. Select Off to prevent other devices from connecting while Screen Mirroring is active, or select On to allow another device to connect.
  - Channel lets you select the wireless channel for the Screen Mirroring connection.
- 10. Press the Settings button to exit the menu or the Esc button to return to the previous screen.

Parent topic: Wireless Network Projection from a Mobile Device (Screen Mirroring)

Related references

Projector Feature Settings - Settings Menu

## **Connecting for Screen Mirroring with Miracast**

If your mobile device supports Miracast, you can connect it to the projector wirelessly and project images and sound.

- 1. Select the Screen Mirroring settings on your projector as necessary.
- 2. Press the E Source Search button on the remote control to switch to the Screen Mirroring source. You see the Screen Mirroring standby screen.
- 3. On your mobile device, use the Miracast function to search for the projector.

Note: See your mobile device's documentation for information on accessing the Miracast function.

You see a list of available devices.

- 4. Select your projector from the list.
- 5. If you see the PIN entry screen on your mobile device, enter the PIN code displayed on the Screen Mirroring standby screen or at the bottom right of the projected image.

The projector displays the image from your mobile device.

**Caution:** It may take some time to establish the connection. Do not disconnect the projector's power cord while it is connecting to your device. Doing so may cause your device to freeze or malfunction.

**Note:** Depending on the mobile device, you may need to delete a device when connecting. Follow the on-screen instructions on your device.

Parent topic: Wireless Network Projection from a Mobile Device (Screen Mirroring)

Related references

Projector Feature Settings - Settings Menu

### Connecting for Screen Mirroring with a Windows 8.x/Windows 10 Computer

You can set up your computer to wirelessly project images and play sound using Screen Mirroring.

- 1. Select the Screen Mirroring settings on your projector as necessary.
- 2. Press the E Source Search button on the remote control to switch to the Screen Mirroring source. You see the Screen Mirroring standby screen.
- 3. Do one of the following:
  - Windows 10: Open Action Center and select Connect.
  - Windows 8.x: Select Devices > Project > Add a wireless display.
- 4. Select your projector's Display Name from the list.
- 5. If you see the PIN entry screen on your computer, enter the PIN code displayed on the Screen Mirroring standby screen or at the bottom right of the projected image.

The projector displays the image from your computer or mobile device.

**Note:** It may take some time to establish the connection. Do not disconnect the projector's power cord while it is connecting to your device. This may cause your device to freeze or malfunction.

Parent topic: Wireless Network Projection from a Mobile Device (Screen Mirroring)

Related references

Projector Feature Settings - Settings Menu

# **Shutting Off the Picture and Sound Temporarily**

You can temporarily turn off the projector's picture and sound. Any sound or video action continues to run, however, so you cannot resume projection at the point that you stopped it.

- 1. Press the 🖎 A/V mute button on the projector remote control to temporarily stop projection and mute any sound.
- 2. To turn the picture and sound back on, press the \( \frac{1}{2} \) A/V mute button again.

Parent topic: Adjusting Projector Features

## Installing a Security Cable

You can use the security slot on the side of the projector to attach a Kensington lock. See your local computer or electronics dealer for purchase information.

Parent topic: Adjusting Projector Features

# **Copying Menu Settings Between Projectors**

After you select menu settings for your projector, you can transfer them to another projector of the same model.

**Note:** Copy the projector's settings before you adjust the projected image using the projector's image adjustment settings.

**Caution:** If the copy process fails due to a power failure, communication error, or for any other reason, Epson will not be responsible for any repair costs incurred.

The following settings will not transfer between projectors:

- Info menu items
- Any settings unique to a specific projector, such as Screen Mirroring settings

Saving Settings to a USB Flash Drive

Transferring Settings from a USB Flash Drive

Saving Settings to a Computer

Transferring Settings from a Computer

Parent topic: Adjusting Projector Features

## Saving Settings to a USB Flash Drive

You can save the projector settings you want to transfer to a USB flash drive.

**Note:** Use an empty flash drive. If the drive contains other files, the transfer may not complete correctly. The flash drive must use the FAT format and cannot have any security features.

1. Turn off the projector and unplug the power cord from the projector's power inlet.

2. Insert the flash drive into the **USB-A** port.

**Note:** Connect the flash drive directly to the projector. Do not use a hub or your settings may not be saved correctly.

- 3. Press and hold the \( \to \) Esc button on the remote control as you connect the power cord to the projector.
- 4. When the status indicator light turns on, release the <sup>→</sup> Esc button.

The lights flash to indicate that settings are transferring to the flash drive. When the lights stop flashing, the status indicator turns blue and the projector enters standby mode.

**Caution:** Do not unplug the power cord or remove the flash drive while the lights are flashing. This could damage the projector.

5. Once the projector enters standby mode, remove the flash drive.

Parent topic: Copying Menu Settings Between Projectors

### **Transferring Settings from a USB Flash Drive**

After saving projector settings to a USB flash drive, you can transfer them to another projector of the same model.

**Note:** Make sure the USB flash drive contains only a single settings transfer from another projector of the same model. The settings are contained in a file called **pjconfdata.bin**. If the drive contains other files, the transfer may not complete correctly.

Do not adjust image settings on a projector until after you transfer settings to it. Otherwise, you may have to repeat your adjustments.

- 1. Turn off the projector and unplug the power cord from the projector's power inlet.
- 2. Insert the flash drive into the USB-A port.

**Note:** Connect the flash drive directly to the projector. Do not use a hub or your settings may not be saved correctly.

- 3. Press and hold the Settings button on the remote control as you connect the power cord to the projector.
- 4. When the status indicator turns on, release the Settings button.

The lights flash to indicate that settings are transferring to the projector. When the lights stop flashing, the status indicator light turns blue and the projector enters standby mode.

**Caution:** Do not unplug the power cord or remove the flash drive while the lights are flashing. This could damage the projector.

5. Once the projector enters standby mode, remove the flash drive.

Parent topic: Copying Menu Settings Between Projectors

## **Saving Settings to a Computer**

You can save the projector settings you want to transfer to a computer.

Your computer must be running one of the following operating systems:

- · Windows 7
- Windows 8.x
- Windows 10
- OS X 10.11.x
- macOS 10.12.x
- macOS 10.13.x
- macOS 10.14.x
- macOS 10.15.x
- 1. Turn off the projector and unplug the power cord from the projector's power inlet.
- 2. Connect a USB Mini-B cable to your projector's **Service** port.
- 3. Connect the other end to any available USB port on your computer.
- 4. Press and hold the <sup>♠</sup> Esc button on the remote control as you connect the power cord to the projector.
- 5. When all of the projector lights turn on, release the → Esc button.
  - The projector shows up as a removable disk on your computer.
- 6. Open the removable disk and copy the **pjconfdata.bin** file to your computer.
- 7. Once the file has copied, do one of the following:
  - Windows: Open the My Computer, Computer, Windows Explorer, or File Explorer utility. Right-click the name of your projector (listed as a removable disk) and select **Eject**.

• Mac: Drag the removable disk icon for your projector from the desktop into the trash.

The projector turns off when you disconnect the USB cable.

Parent topic: Copying Menu Settings Between Projectors

### **Transferring Settings from a Computer**

After saving projector settings to a computer, you can transfer them to another projector of the same model.

Your computer must be running one of the following operating systems:

- Windows 7
- Windows 8.x
- Windows 10
- OS X 10.11.x
- macOS 10.12.x
- macOS 10.13.x
- macOS 10.14.x
- macOS 10.15.x

Do not adjust image settings on a projector until after you transfer settings to it. Otherwise, you may have to repeat your adjustments.

- 1. Turn off the projector and unplug the power cord from the projector's power inlet.
- 2. Connect a USB cable to your projector's **Service** port.
- 3. Connect the other end to any available USB port on your computer.
- 4. Press and hold the Settings button on the control panel or remote control as you turn on the power switch.
- 5. The projector shows up as a removable disk on your computer.
- 6. Copy the **pjconfdata.bin** file from your computer to the removable disk.

Note: Do not copy any other files to the removable disk.

- 7. Once the file has copied, do one of the following:
  - Windows: Open the My Computer, Computer, Windows Explorer, or File Explorer utility. Right-click the name of your projector (listed as a removable disk) and select **Eject**.

• **Mac:** Drag the removable disk icon for your projector from the desktop into the trash. Disconnect the USB cable. When the status indicator stops flashing, the projector turns off.

**Caution:** Do not unplug the power cord while the lights are flashing. This could damage the projector.

**Note:** If the status indicator flashes orange, the batch setup file may be corrupt or the cable is not connected correctly. Disconnect the USB cable, then unplug the projector and try the procedure again. If the problem continues, unplug the projector and contact Epson for help.

Parent topic: Copying Menu Settings Between Projectors

# **Adjusting the Menu Settings**

Follow the instructions in these sections to access the projector menu system and change projector settings.

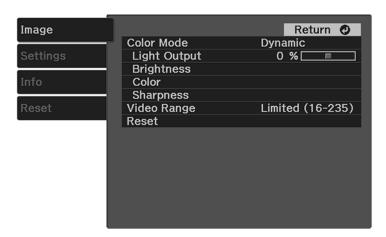
Using the Projector's Menus Image Quality Settings - Image Menu Projector Feature Settings - Settings Menu Projector Information Display - Info Menu Projector Reset Options - Reset Menu

# **Using the Projector's Menus**

You can use the projector's menus to adjust the settings that control how your projector works. The projector displays the menus on the screen.

1. Press the Settings button on the projector remote control.

You see a screen like this:



2. Press the up or down arrow button to move through the menus listed on the left. The settings for each menu are displayed on the right.

**Note:** The available settings depend on the current input source.

- 3. To change settings in the displayed menu, press **Enter**.
- 4. Press the up or down arrow button to move through the settings.
- 5. Change the settings using the buttons listed on the bottom of the menu screens.
- 6. To return all the menu settings to their default values, select **Reset**.
- 7. When you finish changing settings on a menu, press the <sup>♠</sup> Esc button.
- 8. Press the Settings button to exit the menu or the Sec button to return to the previous screen.

Parent topic: Adjusting the Menu Settings

# **Image Quality Settings - Image Menu**

Settings on the Image menu let you adjust the quality of your image for the input source you are currently using. The available settings depend on the currently selected input source.



Setting	Options	Description
Color Mode	See the list of available Color Modes	Adjusts the vividness of image colors for various image types and environments
Light Output	50% (ECO) to 100% (Normal)	Adjusts laser brightness

Setting	Options	Description
Brightness	Brightness	Lightens or darkens the overall image
	Contrast	Adjusts the difference between light and dark areas in the image
	Scene Adaptive Gamma	Adjusts the gamma depending on the displayed scene
	Gamma	Adjusts the coloring in the image
	Dynamic Contrast	Adjusts the projected luminance based on the image brightness. Select <b>Off</b> , <b>Normal</b> , or <b>High Speed</b> .
Color	Color Saturation	Adjusts the color intensity of the image
	Tint	Adjusts the balance of green to magenta tones in the image
	White Balance	Color Temp.: sets the color temperature according to the selected color mode; lower values tint the image red, and higher values tint the image blue
		<b>Customized</b> : adjusts the individual RGB components of the offset and gain
	RGBCMY	Adjusts the hue, saturation, and brightness for each individual color

Setting	Options	Description
Sharpness	Sharpness	Adjusts the sharpness or softness of image details
	Noise Reduction	Reduces flickering in analog images
	MPEG Noise Reduction	Reduces noise or artifacts in MPEG videos
	Detail Enhancement	Creates a more textured image
Video Range	Auto Limited (16–235) Full (0–255)	Sets the video range to match the setting of the device connected to the HDMI port
Reset	_	Resets all Image menu settings to their defaults

**Note:** The **Brightness** setting does not affect laser brightness. To change the laser brightness, adjust the **Light Output** setting.

Parent topic: Adjusting the Menu Settings

Related references
Available Color Modes

#### Related tasks

Changing the Color Mode

Adjusting Image Sharpness

Adjusting Light Output (Brightness)

Adjusting the Color Temperature

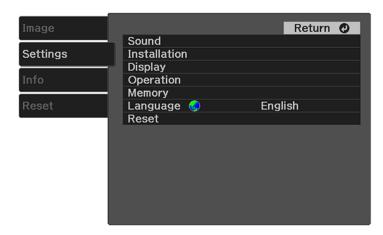
Adjusting the RGB Offset and Gain

Adjusting the Hue, Saturation, and Brightness

**Adjusting Gamma** 

# **Projector Feature Settings - Settings Menu**

Options on the Settings menu let you customize various projector features.



Setting	Options	Description
Sound	Volume	Adjusts the volume of the projector's speaker
	Sound Mode	Sets a sound mode for the type of playback content (music, movie, etc.)
		<b>Standard</b> : best for normal sound quality
		<b>Vocal</b> : best for voices and dialogue
		Music: best for music
		<b>Movie</b> : best for video or movie audio

Setting	Options	Description
Installation	Keystone	Adjusts image shape to rectangular (horizontally and vertically)
		H/V Keystone: lets you manually correct horizontal and vertical sides
		Quick Corner: select to correct image shape and alignment using an on-screen display
	Zoom	Adjusts the image size
	Projection	Selects the way the projector faces the screen
	OSD Rotation	Rotates the menu display 90°
Display	Welcome Guide	Shows the product features and usage tips
	Messages	Select <b>On</b> to display messages for color mode name, aspect ratio, or high temperature warning
	Startup Screen	Select <b>On</b> to display Epson logo at startup
	Standby Confirmation	Select <b>Off</b> to shut down the projector without displaying the shutdown confirmation prompt when you press the power button on the control panel or on the projector remote control
Operation	Various options (see table below)	Various options (see table below)
Memory	Various options	Sets up or saves customized settings to memory
Language	Various languages	Sets the language for the projector menus and messages

Setting	Options	Description
Reset	_	Resets all projector settings, except for the following:
		• Zoom
		Projection
		Power On Link
		Power Off Link
		Screen Mirroring
		Energy Save Standby
		HDMI EQ Setting
		Memory
		Language

# Operation settings

Options	Description
HDMI Link	Adjusts HDMI Link options that allow the projector remote control to control HDMI-connected devices that support the CEC standard
	<b>Device Connections</b> : lists the device connected to the HDMI port
	HDMI Link: turns HDMI Link on or off
	<b>Power On Link</b> : controls what happens when you turn on the projector or connected device
	<b>Power Off Link</b> : controls if the connected device is turned off or not when you turn off the projector
Screen Mirroring	Select <b>On</b> to enable Screen Mirroring.
Screen Mirroring Settings	Configures the Screen Mirroring settings (see table below)
Sleep Mode	Select <b>On</b> to place the projector in standby mode after a certain interval of inactivity
Sleep Mode Timer	Sets the sleep mode interval between 1 and 30 minutes

Options	Description	
Illumination	Turns off the indicators on the projector	
Energy Save Standby	Select <b>On</b> to send power to the connected USB device even if the projector is in standby mode (when the power is off).	
HDMI EQ Setting	Adjusts the signal level of the HDMI input. Change the setting if there is interference with the signal or if there is no image.	
	<b>Note:</b> If there is no image when using a media streaming device, select <b>1</b> as the setting value.	

## **Screen Mirroring Settings**

Setting	Options	Description
Display Name	Up to 32 alphanumeric characters	Sets the device name shown when searching for the projector
Operation Mode	Basic	Select Extended to display
	Extended	additional settings
Adjust Image Quality	1 to 4	Adjusts the quality of the screen mirroring image. Smaller numbers emphasize quality; larger numbers emphasize speed.
Interrupt Connection	On	Select <b>On</b> to allow devices to
	Off	interrupt the screen mirroring connection
Channel	Various options	Selects the wireless channel used for screen mirroring. Change the setting if you experience interference.
Reset	_	Resets all settings on the Screen Mirroring Settings menu

Parent topic: Adjusting the Menu Settings

#### Related references

**Available Sound Modes** 

#### Related tasks

Changing the Sound Mode

Controlling the Volume with the Volume Buttons

Correcting Image Shape with H/V Keystone

Correcting Image Shape with Quick Corner

Operating Connected Devices Using the HDMI Link Features

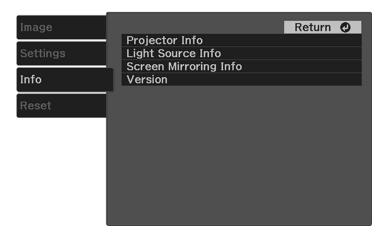
**Selecting Screen Mirroring Settings** 

Connecting for Screen Mirroring with Miracast

Connecting for Screen Mirroring with a Windows 8.x/Windows 10 Computer

# **Projector Information Display - Info Menu**

You can display information about the projector and input sources by viewing the Info menu. However, you cannot change any settings in the menu.



Select **Projector Info** to display the settings described below. Select **Light Source Info** to display the projector's light source information. Select **Screen Mirroring Info** to display information about the screen mirroring connection. Select **Version** to display the projector's firmware version.

Information item	Description
Operation Hours	Displays the number of hours the projector has been used since it was turned on
Source	Displays the name of the port to which the current input source is connected
Input Signal	Displays the input signal setting of the current input source
Resolution	Displays the resolution of the current input source
Refresh Rate	Displays the refresh rate of the current input source
Sync Info	Displays information that may be needed by a service technician
Status	Displays information about projector problems that may be needed by a service technician
Product Name	Displays the projector's model name
Serial Number	Displays the projector's serial number

Parent topic: Adjusting the Menu Settings

# **Projector Reset Options - Reset Menu**

You can reset most of the projector settings to their default values using the Reset menu.



Setting	Description
Reset Memory	Deletes all saved memories
Reset All Config	Resets most of the projector settings to their defaults, except the <b>Zoom</b> , <b>Memory</b> , <b>Screen Mirroring Settings</b> , and <b>Language</b> settings

Parent topic: Adjusting the Menu Settings

# **Maintaining and Transporting the Projector**

Follow the instructions in these sections to maintain your projector and transport it from place to place.

Projector Maintenance
Air Filter and Vent Maintenance
Replacing the Remote Control Batteries
Transporting the Projector

# **Projector Maintenance**

Your projector needs little maintenance to keep working at its best.

You may need to clean the projector lens periodically, and clean the air filter and air vents to prevent the projector from overheating due to blocked ventilation.

The only parts you should replace are the air filter and remote control batteries. If any other part needs replacing, contact Epson or an authorized Epson servicer.

This projector uses a sealed laser light source which does not need servicing and cannot be replaced.

**Warning:** Before cleaning any part of the projector, turn it off and unplug the power cord. Never open any cover on the projector, except as specifically explained in this manual. Dangerous electrical voltages in the projector can injure you severely.

**Warning:** Do not try to service this product yourself, except as specifically explained in this manual. Refer all other servicing to qualified servicers.

Cleaning the Lens
Cleaning the Projector Case

Parent topic: Maintaining and Transporting the Projector

### **Cleaning the Lens**

Clean the projector's lens periodically, or whenever you notice dust or smudges on the surface.

• To remove dust or smudges, gently wipe the lens with lens-cleaning paper.

• To remove stubborn smudges, moisten a soft, lint-free cloth with lens cleaner and gently wipe the lens. Do not spray any liquid directly on the lens.

**Warning:** Do not use a lens cleaner that contains flammable gas. The high heat generated by the projector may cause a fire.

**Caution:** Do not use glass cleaner or any harsh materials to clean the lens and do not subject the lens to any impacts; you may damage it. Do not use canned air, or the gases may leave a residue. Avoid touching the lens with your bare hands to prevent fingerprints on or damage to the lens surface.

**Parent topic:** Projector Maintenance

## **Cleaning the Projector Case**

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

• To remove dust or dirt, use a soft, dry, lint-free cloth.

 To remove stubborn dirt, use a soft cloth moistened with water and mild soap. Do not spray liquid directly on the projector.

**Caution:** Do not use wax, alcohol, benzine, paint thinner, or other chemicals to clean the projector case. These can damage the case. Do not use canned air, or the gases may leave a flammable residue.

Parent topic: Projector Maintenance

Related tasks

Turning Off the Projector

### Air Filter and Vent Maintenance

Regular filter maintenance is important to maintaining your projector. Your Epson projector is designed with an easily accessible, user-replaceable filter to protect your projector and make regular maintenance simple. Filter maintenance intervals will depend on the environment.

If regular maintenance is not performed, your Epson projector will notify you when the temperature inside the projector has reached a high level. Do not wait until this warning appears to maintain your projector filter as prolonged exposure to high temperatures may reduce the life of your projector or laser.

Damage due to the failure to properly maintain the projector or its filter may not be covered by the projector's Limited Warranty.

Cleaning the Air Filter and Vents
Replacing the Air Filter

Parent topic: Maintaining and Transporting the Projector

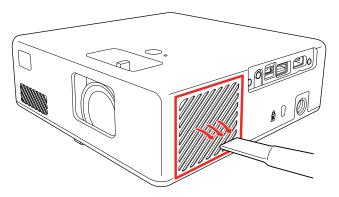
### **Cleaning the Air Filter and Vents**

Clean the projector's air filter or vents if they get dusty, or if you see a message telling you to clean them.

Clean the air filter immediately when the projector displays a message indicating high temperatures inside the projector. It is recommended that you clean the filter every 5000 hours. Clean the filter and vents more frequently if you are using the projector in a dusty or smoky environment.

**Caution:** If you do not perform regular maintenance, the projector will display a high temperature warning. Do not wait until this message appears to clean your air filter and vents, as prolonged exposure to high temperatures can reduce the life of your projector.

- 1. Turn off the projector and unplug the power cord.
- 2. Gently remove the dust using a small vacuum designed for computers or a very soft brush (such as a paintbrush).



**Note:** You can remove the air filter so you can clean both sides of it. Do not rinse the air filter in water or use any detergent or solvent to clean it.

**Caution:** Do not use canned air. The gases may leave a flammable residue or push dust and debris into the projector's optics or other sensitive areas.

3. If dust is difficult to remove or the air filter is damaged, replace the air filter.

Parent topic: Air Filter and Vent Maintenance

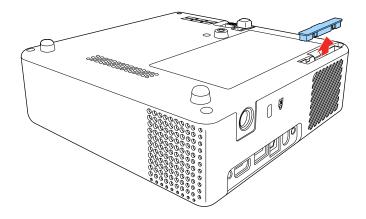
## **Replacing the Air Filter**

You need to replace the air filter in the following situations:

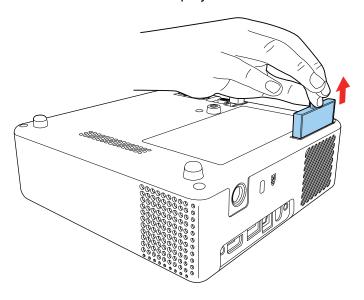
- · After cleaning the air filter, you see a message telling you to clean or replace it
- · The air filter is torn or damaged

You can replace the air filter while the projector is mounted to the ceiling using the optional Epson mounting plate (ELPMB65) or placed upside-down on a table.

- 1. Turn off the projector and unplug the power cord.
- 2. Place the projector upside-down on a table.
- 3. Remove the air filter cover.

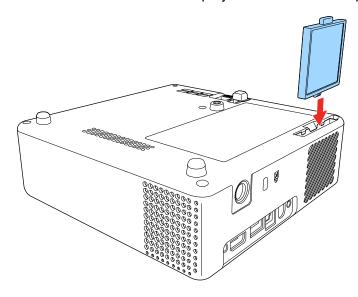


## 4. Pull the air filter out of the projector.



**Note:** Air filters contain ABS resin and polyurethane foam. Dispose of used air filters according to local regulations.

5. Place the new air filter in the projector as shown and push gently until it clicks into place.



6. Replace the air filter cover.

Parent topic: Air Filter and Vent Maintenance

Related references

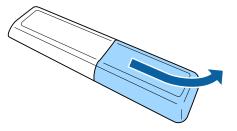
**Optional Equipment and Replacement Parts** 

# **Replacing the Remote Control Batteries**

The remote control uses two AAA manganese or alkaline batteries. Replace the batteries as soon as they run out.

**Caution:** Use only the type of batteries specified in this manual. Do not install batteries of different types, or mix new and old batteries.

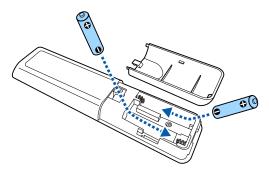
1. Remove the battery cover as shown.



2. Remove the old batteries.

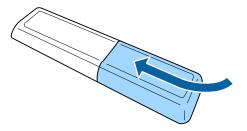
**Warning:** If the battery fluid has leaked, wipe it away with a soft cloth and avoid getting the fluid on your hands. If it gets on your hands, wash them immediately to avoid injury.

3. Insert the batteries with the + and – ends facing as shown.



**Warning:** Make sure the batteries are inserted in the correct positions. If the batteries are not inserted correctly, they could explode or leak, causing a fire, injury, or damage to the product.

4. Replace the battery cover and press it down until it clicks into place.



**Warning:** Dispose of used batteries according to local regulations. Do not expose batteries to heat or flame. Keep batteries out of the reach of children; they are choking hazards and are very dangerous if swallowed.

Parent topic: Maintaining and Transporting the Projector

# **Transporting the Projector**

The projector contains precision parts, some of which are glass. Follow the guidelines here to transport, ship, or store the projector safely.

1. Remove any equipment connected to the projector.

- 2. Turn off the projector.
- 3. Make sure the status indicator is not lit, then unplug the power cord.
- 4. Do one of the following:
  - When transporting the projector a long distance or as checked luggage, pack it in a firm box with cushioning around it and mark the box "Fragile."
  - When shipping the projector for repairs, place it in its original packing materials, if possible, or use equivalent materials with cushioning around the projector. Mark the box "Fragile."

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

Parent topic: Maintaining and Transporting the Projector

Related tasks

Turning Off the Projector

# **Solving Problems**

Check the solutions in these sections if you have any problems using the projector.

**Projection Problem Tips** 

**Projector Light Status** 

Solving Image or Sound Problems

Solving Projector or Remote Control Operation Problems

Solutions to HDMI Link Problems

Solutions When You Cannot Connect Using Screen Mirroring

Solutions When the Image or Sound Contains Static During Screen Mirroring

Where to Get Help (U.S. and Canada)

Where to Get Help (Latin America)

# **Projection Problem Tips**

If the projector is not working properly, try turning it off and unplugging it. Then plug it back in and turn it on.

If this does not solve the problem, check the following:

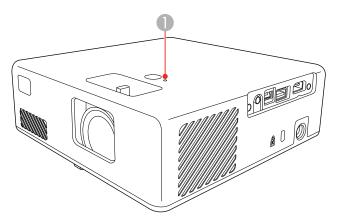
- The lights on the projector may indicate what the problem is.
- The solutions in this manual can help you solve many problems.

If none of these solutions help, you can contact Epson for technical support.

Parent topic: Solving Problems

# **Projector Light Status**

The lights on the projector indicate the projector status and let you know when a problem occurs. Check the status and color of the lights and look for a solution in the tables here.



### 1 Status indicator

Status indicator	Status and solution
Blue	Normal operation
Flashing blue	The projector is warming up, shutting down, or initializing the projector. The remote control may not function if the status indicator is flashing blue.
Off	The projector is in standby or sleep mode. When you press the power button on the projector or remote, projection begins.
	Make sure that the vents are not clogged with dust or obstructed by nearby objects.
	If the problem persists, unplug the projector and contact Epson for help.

Status indicator	Status and solution
Orange	Projector is too hot and has turned off.
	Let the projector cool down for at least five minutes
	<ul> <li>Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects.</li> </ul>
	Clean or replace the air filter.
	Make sure the environmental temperature is not too hot.
	<ul> <li>If the problem persists, unplug the projector and contact Epson for help.</li> </ul>
Flashing orange	One of the following has occurred:
	The laser has a problem
	A fan or sensor has a problem
	An internal projector error has occurred.
	Turn the projector off, unplug it, and contact Epson for help.

**Note:** If the lights display a pattern not listed in the tables above, turn the projector off, unplug it, and contact Epson for help.

Parent topic: Solving Problems

Related references

Projector Environmental Specifications Where to Get Help (U.S. and Canada) Where to Get Help (Latin America)

#### Related tasks

Turning Off the Projector Cleaning the Air Filter and Vents Replacing the Air Filter

# **Solving Image or Sound Problems**

Check the solutions in these sections if you have any problems with projected images or sound.

Solutions When No Image Appears

Solutions When "No Signal" Message Appears

Solutions When the Image is Not Rectangular

Solutions When Only a Partial Image Appears

Solutions When the Image Contains Noise or Static

Solutions When the Image is Fuzzy or Blurry

Solutions When the Image Brightness or Colors are Incorrect

Solutions to Sound Problems

Parent topic: Solving Problems

## **Solutions When No Image Appears**

If no image appears, try the following solutions:

- Press the 🖎 A/V mute button on the projector remote control to see if the image was temporarily turned off.
- Check the status light to confirm the projector is operating normally.
- Make sure all necessary cables are securely connected and the power is on for the projector and connected video sources.
- Try using a shorter HDMI cable.
- Try connecting the video source directly to the projector.
- Press the projector's power button to wake it from standby or sleep mode. Also see if your connected computer is in sleep mode or displaying a blank screen saver.
- Make sure the connected device meets the HDMI CEC standard. See the documentation supplied
  with the device for more information. If necessary, set the CEC function for the connected device
  again and restart the device. Turn off the projector and the connected streaming device or video
  source, and then turn them back on.
- Make sure the connected device does not require MHL; the projector's HDMI port does not support MHL.
- If you are projecting from a laptop computer, make sure it is set up to display on an external monitor.
- If you are projecting from a computer using an HDMI cable, turn off the computer and the projector. Make sure the HDMI cable is securely connected, turn the projector on, then turn the computer on.
- Make sure the computer's display resolution does not exceed the projector's resolution and frequency limits. If necessary, select a different display resolution for your computer. (See your computer manual for details.)

 If the other solutions do not solve the problem, reset all of the projector settings using the options on the Reset menu.

Parent topic: Solving Image or Sound Problems

Related references
Projector Light Status

Projector Parts - Remote Control

Projector Reset Options - Reset Menu

#### Related tasks

Turning On the Projector

Operating Connected Devices Using the HDMI Link Features

### **Solutions When "No Signal" Message Appears**

If the "No Signal" message appears, try the following solutions:

- Press the **Source Search** button and wait a few seconds for an image to appear.
- Turn on the connected computer or video source, and press its play button to begin your presentation, if necessary.
- Check the connection from the projector to your video sources.
- If you are projecting from a laptop computer, make sure it is set up to display on an external monitor.
- If necessary, turn the projector and the connected computer or video source off and then on again.
- If you are projecting using a thumb-sized media streaming device, set the HDMI EQ Setting to 1 in the projector's Settings > Operation menu.
- Connect the video source directly to the projector.
- Try a different video cable.
- If the other solutions do not solve the problem, reset all of the projector settings using the options on the **Reset** menu.

Displaying From a PC Laptop

Displaying From a Mac Laptop

Parent topic: Solving Image or Sound Problems

Related concepts
Projector Connections

#### Related references

Projector Feature Settings - Settings Menu Projector Reset Options - Reset Menu

#### **Displaying From a PC Laptop**

If you see the "No Signal" message when you display from a PC laptop, you need to set up the laptop to display on an external monitor.

1. Hold down the laptop's **Fn** key and press the key labeled with a monitor icon or **CRT/LCD**. (See your laptop manual for details.) Wait a few seconds for an image to appear. To display on both the laptop's monitor and the projector, try pressing the same keys again.

**Note:** On Windows 7 or later, hold down the Windows key and press **P** at the same time, then click **Duplicate**.

- 2. If the same image is not displayed by the laptop and projector, check the Windows **Display** utility to make sure the external monitor port is enabled and extended desktop mode is disabled. (See your computer or Windows manual for instructions.)
- 3. If necessary, check your video card settings and set the multiple display option to **Clone**, **Mirror**, or **Duplicate**.

Parent topic: Solutions When "No Signal" Message Appears

#### **Displaying From a Mac Laptop**

If you see the "No Signal" message when you display from a Mac laptop, you need to set up the laptop for mirrored display. (See your laptop manual for details.)

- 1. Open the System Preferences utility and select Displays, Display, or Color LCD.
- 2. Click the Arrange or Arrangement tab.
- 3. Select the Mirror Displays checkbox.

Parent topic: Solutions When "No Signal" Message Appears

## Solutions When the Image is Not Rectangular

If the projected image is not evenly rectangular, try the following solutions:

- Place the projector directly in front of the center of the screen, facing it squarely, if possible.
- Adjust the image shape using the keystone settings in the projector's menu.

Parent topic: Solving Image or Sound Problems

#### Related concepts

**Projector Placement** 

#### Related tasks

Correcting Image Shape with H/V Keystone Correcting Image Shape with Quick Corner

## **Solutions When Only a Partial Image Appears**

If only a partial computer image appears, try the following solutions:

- If you zoomed into or out of the image using the **Zoom** setting, press the <sup>←</sup>⊃ Esc button on the projector remote control until the projector returns to a full display.
- Check your computer display settings to disable dual display and set the resolution within the projector's limits. (See your computer manual for details.)
- Check the resolution assigned to your presentation files to see if they are created for a different resolution than you are projecting in. (See your software help for details.)
- If the other solutions do not solve the problem, reset all of the projector settings using the options on the Reset menu.

Parent topic: Solving Image or Sound Problems

Related references

Supported PC Free File Types

Projector Reset Options - Reset Menu

Related tasks

Resizing the Image Using Zoom

### **Solutions When the Image Contains Noise or Static**

If the projected image seems to contain electronic interference (noise) or static, try the following solutions:

- Check the cables connecting your computer or video source to the projector. They should be:
  - Separated from the power cord to prevent interference
  - · Securely connected at both ends
  - · Not connected to an extension cable
- Try decreasing the **Sharpness** setting in the **Image** menu.
- Select a computer video resolution and refresh rate that are compatible with the projector.

 If you connected an extension power cable, try projecting without it to see if it caused interference in the signal.

Parent topic: Solving Image or Sound Problems

Related references

Supported Video Display Formats

Related tasks

Adjusting Image Sharpness

## Solutions When the Image is Fuzzy or Blurry

If the projected image is fuzzy or blurry, try the following solutions:

- · Adjust the image focus.
- · Clean the projector lens.
- Position the projector close enough to the screen, and directly in front of it.
- Position the projector so the keystone adjustment angle is not so wide that it distorts the image.
- Adjust the Sharpness setting to improve image quality.
- If you are projecting from a computer, use a lower resolution or adjust the computer's resolution to match the projector's native resolution, if possible.

Parent topic: Solving Image or Sound Problems

Related references

Projector Setup and Installation Options General Projector Specifications

#### Related tasks

Cleaning the Lens

Focusing the Image Using the Focus Lever

Correcting Image Shape with H/V Keystone

Correcting Image Shape with Quick Corner

**Adjusting Image Sharpness** 

### Solutions When the Image Brightness or Colors are Incorrect

If the projected image is too dark or light, or the colors are incorrect, try the following solutions:

Try selecting a color mode that best fits the image and environment.

- Check your video source settings.
- Adjust the available settings on the Image menu, such as Brightness, Contrast, Tint, and/or Color Saturation.
- Make sure you selected the correct Video Range setting in the Image menu, if available for your image source.
- Make sure all the cables are securely connected to the projector and your video device. If you
  connected long cables, try connecting shorter cables.
- Position the projector close enough to the screen.

Parent topic: Solving Image or Sound Problems

Related references

Image Quality Settings - Image Menu

Related tasks

Changing the Color Mode

Adjusting the Hue, Saturation, and Brightness

Adjusting the Color Temperature

Adjusting the RGB Offset and Gain

**Adjusting Gamma** 

#### **Solutions to Sound Problems**

If there is no sound when you expect it or the volume is too low or high, try the following solutions:

- · Adjust the projector's volume settings.
- Press the 
   <sup>™</sup> A/V mute button on the projector remote control to resume video and audio if they were temporarily stopped.
- Check your computer or video source to make sure the volume is turned up and the audio output is set for the correct source.
- Check the cable connection between the projector and your video source.
- If you do not hear sound from an HDMI source, set the connected device to PCM output.
- If you are using a Mac and you do not hear sound from an HDMI source, make sure your Mac supports audio through the HDMI port. If not, you need to connect an audio cable.
- If you hear a hissing sound from your projector's speakers when projecting from a computer running Windows 10 over a network, you may need to adjust the Windows 10 sound properties:
  - 1. Right-click the speaker icon in the Windows taskbar and select **Sounds**.

- 2. Click the **Playback** tab, select the playback device, and click **Properties**.
- 3. Click the **Advanced** tab, set the sample rate and bit depth setting to **16 bit, 44100 Hz (CD Quality)**, click **Apply**, and click **OK**.

Note: These steps may vary depending on the Windows 10 version you are using.

• If you turn the projector on immediately after turning it off, the cooling fans may run at high speed momentarily and cause an unexpected noise. This is normal.

Parent topic: Solving Image or Sound Problems

Related tasks

Controlling the Volume with the Volume Buttons Shutting Off the Picture and Sound Temporarily

# **Solving Projector or Remote Control Operation Problems**

Check the solutions in these sections if you have problems operating the projector or remote control.

Solutions to Projector Power or Shut-Off Problems

Solutions to Remote Control Problems

Parent topic: Solving Problems

### **Solutions to Projector Power or Shut-Off Problems**

If the projector does not come on when you press the power button or it shuts off unexpectedly, try the following solutions:

- Make sure the power cord is securely connected to the projector and to a working electrical outlet.
- If the projector's laser shuts off and the Status light is orange, the projector has overheated and shut off. Check the solutions for this light status.
- If the power button on the remote control does not turn on the projector, check its batteries.
- The power cord may be defective. Try another power cord. If that doesn't work, disconnect the cord and contact Epson.
- The cooling fans may run in standby status depending on the projector settings. Also, when the
  projector wakes from standby status, the fans may cause an unexpected noise. This is not a
  malfunction.

Parent topic: Solving Projector or Remote Control Operation Problems

#### Related references

Projector Light Status
Where to Get Help (U.S. and Canada)
Where to Get Help (Latin America)

#### Related tasks

Replacing the Remote Control Batteries

### **Solutions to Remote Control Problems**

If the projector does not respond to remote control commands, try the following solutions:

- Check that the remote control batteries are installed correctly and have power. If necessary, replace
  the batteries.
- Make sure you are operating the remote control within the reception angle and range of the projector.
- Make sure the projector is not warming up or shutting down.
- Check to see if a button on the remote control is stuck down, causing it to enter sleep mode. Release the button to wake the remote control up.
- Strong fluorescent lighting, direct sunlight, or infrared device signals may be interfering with the
  projector's remote receivers. Dim the lights or move the projector away from the sun or interfering
  equipment.
- If you lose the remote control, you can purchase another from an authorized Epson reseller.

Parent topic: Solving Projector or Remote Control Operation Problems

#### Related references

**Projector Light Status** 

Where to Get Help (U.S. and Canada)

Where to Get Help (Latin America)

#### Related tasks

Replacing the Remote Control Batteries

### **Solutions to HDMI Link Problems**

If you cannot control an HDMI device using the HDMI Link buttons, try the following solutions:

- Make sure all necessary cables are securely connected and the power is on for the projector and connected video sources.
- · Make sure the cables meet the HDMI CEC standard.

- Make sure the connected device meets the HDMI CEC standard. See the documentation supplied with the device for more information.
- Make sure the HDMI Link setting is set to On.
- Check if the device is available in the **Device Connections** list in the **Settings** menu. If the device does not appear, it does not meet the HDMI CEC standards. Connect a different device.
- Make sure the connected devices are turned on and in standby status. See the documentation supplied with the device for more information.
- If you connected a new device or changed any connections, make sure the CEC function is set for the connected device. You may need to restart the device.
- If you have connected a speaker or receiver, set the output to PCM.

Parent topic: Solving Problems

Related references

Projector Feature Settings - Settings Menu

Related tasks

Operating Connected Devices Using the HDMI Link Features

## Solutions When You Cannot Connect Using Screen Mirroring

If you are unable to connect to the projector using Screen Mirroring, try the following solutions:

- Select **On** as the **Screen Mirroring** setting in the projector's Network menu.
- Make sure the **Display Name** in the screen mirroring settings does not include "-" or it may not display correctly on your mobile device.
- Make sure the **Operation Mode** and **Channel** settings are correct for your mobile environment and try connecting again.
- Select **Off** as the **Interrupt Connection** setting in the **Extended** menu.
- Change the Channel setting depending on your network environment.
- · Make sure the mobile device settings are correct.
- You may not be able to connect immediately after disconnecting from the projector. Wait a while and try connecting again.
- · Restart the mobile device.
- If you have previously connected to the projector using Screen Mirroring, the device may have saved the previous connection information. Delete the saved information and connect to the projector from the list of available devices.

Parent topic: Solving Problems

Related references

Screen Mirroring Restrictions

Related tasks

**Selecting Screen Mirroring Settings** 

Connecting for Screen Mirroring with Miracast

Connecting for Screen Mirroring with a Windows 8.x/Windows 10 Computer

# Solutions When the Image or Sound Contains Static During Screen Mirroring

If the projected image or sound contains static during Screen Mirroring, try the following solutions:

- · Avoid covering the Wi-Fi antenna of the mobile device.
- If you use a Screen Mirroring connection and an internet connection at the same time, the image may stop or contain noise. Disconnect the internet connection to expand your wireless bandwidth and improve the connection speed of the mobile device.
- · Make sure the projection contents meet the Screen Mirroring requirements.
- Depending on the settings of the mobile device, the connection may be lost when the device enters power saving mode. Check the electrical power saving settings on the mobile device.
- Update to the latest version of the wireless driver or firmware on the mobile device.

Parent topic: Solving Problems

Related references

**Screen Mirroring Restrictions** 

**Related tasks** 

Selecting Screen Mirroring Settings

# Where to Get Help (U.S. and Canada)

If you need to contact Epson for technical support services, use the following support options.

### **Internet Support**

Visit Epson's support website at epson.com/support (U.S.), epson.ca/support (Canada), or latin.epson.com/support (Caribbean) and select your product for solutions to common problems with

your projector. You can download utilities and documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

### **Speak to a Support Representative**

To use the Epson PrivateLine Support service, call (800) 637-7661. This service is available for the duration of your warranty period. You may also speak with a projector support specialist by dialing (562) 276-4394 (U.S.) or (905) 709-3839 (Canada).

Support hours are 6 AM to 8 PM, Pacific Time, Monday through Friday and 7 AM to 4 PM, Pacific Time, Saturday.

Days and hours of support are subject to change without notice. Toll or long distance charges may apply.

Before you call, have the following information ready:

- Product name
- Product serial number (located on the bottom or rear of the projector, or in the menu system)
- Proof of purchase (such as a store receipt) and date of purchase
- · Computer or video configuration
- · Description of the problem

### **Purchase Supplies and Accessories**

You can purchase screens, other optional accessories, and replacement parts from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766) in the U.S. or 800-807-7766 in Canada. Or you can purchase online at epsonstore.com (U.S. sales) or epsonstore.ca (Canadian sales).

To purchase a replacement remote control, call (562) 276-4394 (U.S.) or (905) 709-3839 (for dealer referral in Canada).

**Parent topic: Solving Problems** 

# Where to Get Help (Latin America)

If you need to contact Epson for technical support services, use the following support options.

### **Internet Support**

Visit Epson's support website at <u>latin.epson.com/support</u> and select your product for solutions to common problems. You can download utilities and documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

### **Speak to a Support Representative**

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

- Product name
- Product serial number (located on the bottom or rear of the projector, or in menu system)
- Proof of purchase (such as a store receipt) and date of purchase
- Computer or video configuration
- Description of the problem

### Then call:

Country	Telephone
Argentina	(54 11) 5167-0300
	0800-288-37766
Bolivia*	800-100-116
Brazil	State capitals and metropolitan areas: 3004-6627
	Other areas: 0800-377-6627 / 0800-EPSONBR
Chile	(56 2) 2484-3400
Colombia	Bogota: (57 1) 592-2200
	Other cities: 018000-915235
Costa Rica	800-377-6627
Dominican Republic*	1-888-760-0068
Ecuador*	1-800-000-044
El Salvador*	800-6570
Guatemala*	1-800-835-0358
Mexico	Mexico City: (52 55) 1323-2052
	Other cities: 01-800-087-1080
Nicaragua*	00-1-800-226-0368
Panama*	00-800-052-1376
Paraguay	009-800-521-0019

Country	Telephone
Peru Lima: (51 1) 418-0210	
	Other cities: 0800-10-126
Uruguay	00040-5210067
Venezuela	(58 212) 240-1111

<sup>\*</sup>Contact your local phone company to call this toll-free number from a mobile phone.

**Note:** Toll or long distance charges may apply. If your country does not appear on the list, contact the sales office in the nearest country.

### **Purchase Supplies and Accessories**

You can purchase optional accessories and replacement parts from an Epson authorized reseller. To find the nearest reseller, go to latin.epson.com. Or you can contact your nearest sales office as described in "Where to Get Help."

Parent topic: Solving Problems

# **Technical Specifications**

These sections list the technical specifications of your projector.

**General Projector Specifications** 

**Projector Light Source Specifications** 

**Remote Control Specifications** 

**Projector Dimension Specifications** 

**Projector Electrical Specifications** 

**Projector Environmental Specifications** 

**Projector Safety and Approvals Specifications** 

Safety and Approvals Specifications for Latin America

Supported Video Display Formats

# **General Projector Specifications**

**Type of display** Poly-silicon TFT active matrix **Resolution** 1920 × 1080 pixels (Full HD)

Lens F=2.0

Focal length: 13.9 mm

**Color reproduction** Up to 16.77 billion colors **Brightness** Normal light source mode:

White light output 1000 lumens (ISO 21118 standard)

Color light output 1000 lumens

ECO light source mode:

White light output 500 lumens (ISO 21118 standard)

**Note:** Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light

output measured in accordance with ISO 21118.

**Contrast ratio** 200,000 with Dynamic Color Mode and Normal light source mode

Image size Zoom (Wide): 30 inches (0.8 m) to 150 inches (3.8 m) (in native aspect ratio) Zoom (Tele): 20 inches (0.5 m) to 114 inches (2.9 m)

**Projection distance** 30" screen: 26 inches (0.66 m) (in native aspect ratio) 150" screen: 133 inches (3.37 m)

**Projection methods** Front, Front/Upside Down, Rear, Rear/Upside Down

Optical aspect ratio 16:9

(width-to-height)

Focus adjustment Manual

Internal sound system 1.5 W (2-way mono)

**Fan noise level** 27 dB (Normal power consumption)

22 dB (ECO power consumption)

USB Type A port compatibility One USB 2.0 compliant port for PC Free or firmware updates, or 5 V

(2 A) power supply

**USB Type mini-B port** 

compatibility

One USB 2.0 compliant port for service

Parent topic: Technical Specifications

# **Projector Light Source Specifications**

Type Laser diode
Light source output power Up to 22.5 W
Wavelength 449 to 461 nm

Light source life
(approximate)

Normal Light Source Mode:
Up to about 20000 hours
Quiet Light Source Mode:
Up to about 20000 hours

**Note:** Turn off this product when not in use to prolong the life of the projector. Laser life will vary depending upon mode selected, environmental conditions, and usage. Brightness decreases over time.

**Parent topic:** Technical Specifications

### **Remote Control Specifications**

**Reception range** 16.4 feet (5 m)

Batteries Two alkaline or manganese AAA

Parent topic: Technical Specifications

# **Projector Dimension Specifications**

Height (excluding feet)2.3 inches (58 mm)Width6.9 inches (175 mm)Depth6.9 inches (175 mm)WeightApprox. 2.7 lb (1.2 kg)

(not including raised section)

Parent topic: Technical Specifications

# **Projector Electrical Specifications**

Rated frequency 50/60 Hz

Power supply 100 to 240 V AC  $\pm 10\%$ 

24 V, 4.1 A

**Power consumption** Operating:

(100 to 120 V) Normal/Custom Power Consumption mode: 102 W

ECO Power Consumption mode: 73 W

Standby: 0.5 W

**Power consumption** Operating:

(220 to 240 V) Normal/Custom Power Consumption mode: 102 W

ECO Power Consumption mode: 73 W

Standby: 0.5 W

**Parent topic:** Technical Specifications

# **Projector Environmental Specifications**

**Temperature** Operating:

Up to 7500 feet (2286 m): 41 to 95 °F (5 to 35 °C)

7500 feet (2286 m) to 9843 feet (3000 m): 41 to 86 °F (5 to 30 °C)

Storage: 14 to 140 °F (-10 to 60 °C)

**Humidity** (relative, non-

condensing)

Operating: 20 to 80%

Storage: 10 to 90%

Operating altitude Up to 9843 feet (3000 m)

Parent topic: Technical Specifications

## **Projector Safety and Approvals Specifications**

United States FCC Part 15B Class B (DoC)

UL60950-1 2nd edition (cTUVus Mark)

Canada ICES-003 Class B

CSA C22.2 No. 60950-1-07 / CSA C22.2 No. 60950-1-14

**Parent topic:** Technical Specifications

# Safety and Approvals Specifications for Latin America

**Notice for Argentina** 

WLAN Module: WLU5000-D101(RoHS)

Brand: EPSON

**CNC** CNC ID: C-16265

#### **Notice for Mexico**

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Product Model: EF11

WLAN Module Model: WLU5000-D101(RoHS)

Brand: EPSON

IFT Certification Number: RCPEPWL16-0829

### **Notice for Paraguay**

Imported by:

Fastrax, S.A.

Av. Perú esq. Río de Janeiro, Barrios Las Mercedes, Asunción, Paraguay

Imported by:

Sol Control S.R.L.

Av. Gral. Bernardino Caballero 810 esq. Celsa Speratti, Asunción, Paraguay

#### **Notice for Peru**

Product Model: EF11

Brand: EPSON

This product uses the following WLAN module: WLAN Module Model: WLU5000-D101(RoHS)

FCC ID: BKMAE-WLU5000

Product Manufacturer: Seiko Epson Corporation

Address: 3-3-5 Owa Suwa-shi, Nagano-Ken 392-8502, Japan

Parent topic: Technical Specifications

# **Supported Video Display Formats**

For best results, your computer's monitor port or video card resolution should be set to display in the projector's native resolution. However, your projector includes Epson's SizeWise chip that supports other computer display resolutions, so your image will be resized to fit automatically.

Your computer's monitor port or video card refresh rate (vertical frequency) must be compatible with the projector. (See your computer or video card manual for details.)

The table here lists the compatible refresh rate and resolution for each compatible video display format.

Display format	Refresh rate (in Hz)	Resolution (in pixels)	
HDMI Input Signals			
VGA60	60	640 × 480	
SDTV (480i/480p)	59.94	720 × 480	
SDTV (576i/576p)	50	720 × 576	
HDTV (720p)	50/59.94/60	1280 × 720	
HDTV (1080i)	50/59.94/60	1920 × 1080	
HDTV (1080p)	23.98/24/29.97/30/50/59.94/60	1920 × 1080	

Parent topic: Technical Specifications

# **Notices**

Check these sections for important notices about your projector.

Recycling (U.S. and Canada) Important Safety Information

**Laser Safety Information** 

**Important Safety Instructions** 

List of Safety Symbols

**FCC Compliance Statement** 

**Binding Arbitration and Class Waiver** 

**Trademarks** 

**Copyright Notice** 

# Recycling (U.S. and Canada)

Epson offers a recycling program for end of life products. Please go to this site for information on how to return your products for proper disposal.

**Parent topic: Notices** 

### **Important Safety Information**

**Caution:** Never look into the projector lens when the light source is on. This can damage your eyes and is especially dangerous for children. Before cleaning any part of the projector, turn it off and unplug the power cord. Never open any cover on the projector, except as specifically explained in this manual. Dangerous electrical voltages in the projector can injure you severely. Except as specifically explained in this *User's Guide*, do not attempt to service this product yourself. Refer all servicing to qualified service personnel.

**Warning:** The projector and its accessories come packaged in plastic bags. Keep plastic bags away from small children to avoid any risk of suffocation.

**Parent topic: Notices** 

### **Laser Safety Information**

This projector is a Class 1 laser product that complies with the IEC/EN60825-1:2014 international standard for lasers. Follow these safety instructions when using the projector.

**Warning:** Possibly hazardous optical radiation emitted from this product. Do not look at operating light source. Eye injury may result.

- If an error occurs in the projector, turn off the power and unplug the projector immediately. Continuing to use the projector could result in an electric shock, fire, or visual impairment. Contact Epson support.
- Do not attempt to disassemble or modify the projector. The projector contains a high-power laser component. Serious injury could result.
- Do not look into the lens during projection. Also, do not look into the lens using optical devices, such as a magnifying glass or telescope. This could cause visual impairment.
- As with any bright source, do not stare into the beam, RG2 IEC/EN 62471-5:2015.
- When turning on the projector at a distance using the remote control, make sure no one is looking into the lens.
- Do not allow small children to operate the projector. Children must be accompanied by an adult.
- Do not apply optical devices, such as a magnifying glass or reflector, to the projected image. Using the projector may result in physical harm, fire, or an accident.
- Before using the projector, make sure there is nothing in the area that could reflect the projected image.
- When disposing of the projector, do not disassemble it. Dispose of the projector in accordance with your local or national laws and regulations.

Complies with FDA performance standards for laser products except for conformance as a Risk Group 2 LIP as defined in IEC 62471-5: Ed. 1.0. For more information see Laser Notice No. 57, dated May 8, 2019.

Laser warning labels are attached to the projector.

### Inside

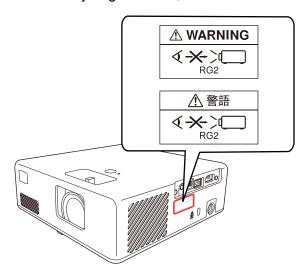


### Base

WARNING: Never open any covers on the projector except as specifically explained in the projector manual. Dangerous electrical voltages inside the projector can severely injure you.

### Side

As with any bright source, do not stare into the beam (RG2 IEC/EN 62471-5:2015).



**Parent topic: Notices** 

### **Important Safety Instructions**

Follow these safety instructions when setting up and using the projector:

- Do not look into the lens when the projector is on. The bright light can damage your eyes. Avoid standing in front of the projector so the bright light does not shine into your eyes.
- When turning on the projector at a distance using the remote control, make sure there is no one looking into the lens.
- Do not place the projector on an unstable cart, stand, or table.
- Do not install in locations where salt damage could occur, or in locations subject to corrosive gas such as sulphuric gas from hot springs. Otherwise, corrosion could cause the projector to fall. It could also cause the projector to malfunction.
- When installing the projector in a high position, take measures to prevent it from falling by using wires
  to ensure safety in an emergency, such as an earthquake, and to prevent accidents. If the projector is
  not installed correctly, the projector could fall. This may result in injury or accidents. Contact your
  dealer to carry out the installation work.
- When installing or adjusting a ceiling or wall mount, do not use adhesives to prevent the screws from loosening and do not use oils or lubricants. This may cause the projector case to crack and the

- projector to fall from its ceiling mount. This could cause serious injury to anyone under the mount and could damage the projector.
- Failure to install the mount plate, mounting hardware, and projector may cause the projector to fall. After installing the projector onto VESA compliant (75 × 75mm) mounting hardware using the optional or supplied mount plate (ELPMB65), make sure you secure the mounting hardware to all of the projector's mount plate fixing points. Also, secure the projector and the mounting hardware using wire that is strong enough to hold their weight.
- Do not install the projector in locations exposed to high humidity and dust, such as on a kitchen counter, in the kitchen, or near a humidifier, or in locations exposed to oil smoke or steam. Doing so could cause fire or electric shock.

### Examples of environments that could cause the projector to fall due to case deterioration:

- Locations subject to excessive smoke or airborne oil particles, such as factories or kitchens
- · Locations containing volatile solvents or chemicals, such as factories or laboratories
- Locations where the projector could be subjected to detergents or chemicals, such as factories or kitchens
- Locations in which aroma oils are often used, such as relaxation rooms
- Near devices that produce excessive smoke, airborne oil particles, or foam at events
- Do not use the projector near water, sources of heat, high-voltage electrical wires, or sources of magnetic fields.
- Use the type of power source indicated on the projector. Use of a different power source may result in fire or electric shock. If you are not sure of the power available, consult your dealer or power company.
- Place the projector near a wall outlet where the plug can be easily unplugged.
- Take the following precautions when handling the plug: Do not hold the plug with wet hands. Do not
  insert the plug into a dusty outlet. Insert the plug firmly into the outlet. Do not pull the power cord when
  disconnecting the plug; always be sure to hold the plug when disconnecting it. Do not overload wall
  outlets, extension cords, or power strips. Failure to comply with these precautions could result in fire or
  electric shock.
- Do not place the projector where the cord can be walked on. This may result in fraying or damage to the plug.
- Unplug the projector from the wall outlet and allow to cool before cleaning. Use a dry cloth (or, for stubborn dirt or stains, a moist cloth that has been wrung dry) for cleaning. Do not use liquid or aerosol cleaners, any sprays containing flammable gas, or solvents such as alcohol, paint thinner, or benzine.
- Do not block the slots and openings in the projector case. They provide ventilation and prevent the projector from overheating. If the vents are covered, the internal temperature could rise and cause a

fire. Do not place the projector in locations subject to high temperatures, such as near heating equipment. Do not operate the projector on a sofa, rug, or other soft surface, or set it on top of loose papers. Do not cover the projector with a blanket, curtain, or tablecloth. If you are setting up the projector near a wall, leave at least of space between the wall and the projector.

- Do not operate the projector in a closed-in cabinet unless proper ventilation is provided.
- Never allow objects of any kind to enter any openings in the projector. Do not leave objects, especially flammable objects, near the projector. Never spill liquid of any kind into the projector.
- You may need to clean the air filter and vent. A clogged air filter or vent can block ventilation needed to cool the projector. Do not use canned air, or the gases may leave a residue.
- Do not store the projector outdoors for an extended length of time.
- Except as specifically explained in this manual, do not attempt to service this product yourself. Refer all servicing to qualified personnel. Opening or removing covers may expose you to dangerous voltages and other hazards.
- Never open any covers on the projector except as specifically explained in this manual. Never attempt to disassemble or modify the projector. Refer all repairs to qualified service personnel.
- Unplug the projector from the wall outlet and refer servicing to qualified service personnel under the
  following conditions: if it does not operate normally when you follow the operating instructions, or
  exhibits a distinct change in performance; if smoke, strange odors, or strange noises come from the
  projector; if the power cord or plug is damaged or frayed; if liquid or foreign objects get inside the
  projector, or if it has been exposed to rain or water; if it has been dropped or the housing has been
  damaged.
- Do not touch the plug during an electrical storm. Otherwise, you may receive an electric shock.
- Unplug the projector when it will not be used for extended periods.
- Do not use the projector where it may be exposed to rain, water, or excessive humidity.
- Do not use or store the projector where it may be exposed to smoke, steam, corrosive gases, excessive dust, vibration, or shock.
- Do not use the projector where flammable or explosive gases may be present.
- Do not use or store the projector or remote control in a hot location, such as near a heater, in direct sunlight, or in a closed vehicle.
- If you use the projector in a country other than where you purchased it, use the correct power cord for that country.
- Do not stand on the projector or place heavy objects on it.
- Do not use the projector outside of the required temperature range below:

41 to 95 °F (5 to 35 °C) at an altitude of 7500 feet (2286 m) or less, or 41 to 86 °F (5 to 30 °C) at a higher altitude

Doing so may cause an unstable display and could lead to projector damage. Do not use or store the projector where it may be exposed to sudden changes in temperature.

- Do not store the projector outside of the required temperature range of 14 to 140 °F (–10 to 60 °C) or in direct sunlight for long periods of time. Doing so may cause damage to the case.
- Do not place anything that can become warped or damaged by heat near the exhaust vents. Do not bring your hands or face close to the vents while projection is in progress. Do not bring your face close to the projector while it is in use.
- Before you move the projector, make sure its power is turned off, the plug is disconnected from the outlet, and all cables are disconnected.
- Do not place the source of an open flame, such as a lit candle, on or near the projector.
- During projection, do not block the light from the projector with a book or other objects. If the light from the projector is blocked, the area on which the light shines becomes hot which could cause it to melt, burn, or start a fire. Also, the lens may get hot due to the reflected light which could cause the projector to malfunction. To stop projection, use the A/V Mute function, or turn off the projector.
- Do not modify the power cord. Do not place heavy objects on top of the power cord or bend, twist, or pull it excessively. Keep the power cord away from hot electrical appliances.
- Always lower the volume before turning off the projector. Turning on the projector with the volume too high can damage your ears.
- Incorrect battery usage may cause leakage of battery fluid and battery rupture, which could result in
  fire, injury, or corrosion. When replacing batteries, take the following precautions: insert batteries so
  that the polarities are correct; do not use batteries of different types or mix old and new batteries; do
  not use any batteries other than those specified; if batteries leak, wipe away battery fluid with a soft
  cloth; if battery fluid gets on your hands, wash them immediately; replace the batteries as soon as they
  run out; remove the batteries if you will not be using the projector for a long period of time; do not
  expose batteries to heat or flame and do not put them in water; dispose of used batteries according to
  local regulations; keep batteries out of the reach of children. Batteries are choking hazards and are
  very dangerous if swallowed.
- Under the following conditions, unplug the projector from the outlet and refer all repairs to qualified service personnel. Continuing to use the projector under these conditions may result in fire or electric shock.
  - If smoke is coming from the AC adapter
  - If strange odors or noises come from the AC adapter
  - · If the AC adapter has been damaged

- If liquid or foreign objects get inside the AC adapter
- Incorrect use of the AC adapter may cause malfunction, fire, or electric shock. Take the following precautions when using the AC adapter:
  - Do not use any AC adapter other than the one supplied with the projector.
  - The supplied AC adapter is designed specifically for this projector model. Do not use it with any other models.
  - Do not apply strong pressure or shocks to the AC adapter.
  - Do not hold the AC adapter with wet hands.
  - Do not install the AC adapter in a narrow space and do not cover it with cloth.
  - Do not touch the AC adapter for a long time while it is energized. It may cause a low-temperature burn.
  - Do not spray flammable gas such as insecticide on the AC adapter.
  - Do not put the AC adapter in a high-pressure container or a cooking appliance such as a microwave oven.
  - Do not place the AC adapter near the projector's air exhaust vent.
  - Do not wind the power cord around the AC adapter.

#### Restriction of Use

**Parent topic: Notices** 

### **Restriction of Use**

When this product is used for applications requiring high reliability/safety such as transportation devices related to aviation, rail, marine, automotive; disaster prevention devices; various safety devices; or functional/precision devices, you should use this product only after giving consideration to including fail-safes and redundancies into your design to maintain safety and total system reliability.

Because this product was not intended for use in applications requiring extremely high reliability/safety such as aerospace equipment, main communication equipment, nuclear power control equipment, or medical equipment related to direct medical care, please make your own judgment on this product's suitability after a full evaluation.

Parent topic: Important Safety Instructions

# **List of Safety Symbols**

The following table lists the meaning of the safety symbols labeled on the equipment.

No.	Symbol	Approved Standards	Description
1	_	IEC60417	"ON" (power)
		No.5007	To indicate connection to the mains.
	_		
2		IEC60417	"OFF" (power)
	0	No.5008	To indicate disconnection from the mains.
3	_	IEC60417	Stand-by
	(L)	No.5009	To identify the switch or switch position by means of which part of the equipment is switched on in order to bring it into the stand-by condition.
4		ISO7000	Caution
		No.0434B,	To identify general caution when using
		IEC3864-B3.1	the product.
5		IEC60417	Caution, hot surface
		No.5041	To indicate that the marked item can be hot and should not be touched without taking care.
6		IEC60417	Caution, risk of electric shock
		No.6042	To identify equipment that has risk of
	<b> </b>	ISO3864-B3.6	electric shock.
7	<b>A</b> D	IEC60417	For indoor use only
		No.5957	To identify electrical equipment designed primarily for indoor use.

No.	Symbol	Approved Standards	Description
8	<b>A a a</b>	IEC60417	Polarity of DC power connector
	$\diamondsuit \bullet \diamondsuit$	No.5926	To identify the positive and negative connections (the polarity) on a piece of equipment to which a DC power supply may be connected.
9		_	Polarity of DC power connector
	<b>(→ (+)</b>		To identify the positive and negative connections (the polarity) on a piece of equipment to which a DC power supply may be connected.
10		IEC60417	Battery, general
	4	No.5001B	On battery powered equipment. To identify a device for instance a cover for the battery compartment, or the connector terminals.
11		IEC60417	Positioning of cell
	<b>d+</b>	No.5002	To identify the battery holder itself and to identify the positioning of the cell(s) inside the battery holder.
12		_	Positioning of cell
	<b>d+</b> -		To identify the battery holder itself and to identify the positioning of the cell(s) inside the battery holder.
13		IEC60417	Protective earth
		No.5019	To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth electrode.
14		IEC60417	Earth
		No.5017	To identify an earth (ground) terminal in cases where neither the symbol No.13 is explicitly required.

No.	Symbol	Approved Standards	Description
15		IEC60417	Alternating current
		No.5032	To indicate on the rating plate that the equipment is suitable for alternating current only; to identify relevant terminals.
16		IEC60417	Direct current
		No.5031	To indicate on the rating plate that the equipment is suitable for direct current only; to identify relevant terminals.
17		IEC60417	Class II equipment
		No.5172	To identify equipment meeting the safety requirements specified for Class II equipment according to IEC 61140.
18		ISO 3864	General prohibition
	$\bigcirc$		To identify actions or operations that are prohibited.
19		ISO 3864	Contact prohibition
			To indicate injury that could occur due to touching a specific part of the equipment.
20	<b>√-×→</b>	_	Never look into the optical lens while the projector is on.
21	P=X	_	To indicate that the marked item don't place anything on projector.
22		ISO3864	Caution, laser radiation
	*	IEC60825-1	To indicate the equipment has a laser radiation part.

No.	Symbol	Approved Standards	Description
23		ISO 3864	Disassembly prohibition
			To indicate a risk of injury, such as electric shock, if the equipment is disassembled.
24		IEC60417	Standby, partial standby
	Ü	No. 5266	To indicate that part of the equipment is in the ready status.
25		ISO3864	Caution, movable parts
		IEC60417	To indicate that you must keep away
	\Q/	No. 5057	from movable parts according to protection standards.
26	_	IEC60417	Caution, moving fan blades
	<b>A</b>	No. 6056	To indicate that you must keep away from moving fan blades.
27	_	IEC60417	Caution, sharp corners
		No. 6043	To indicate that you must not touch sharp corners.
28	<b>~</b>	_	To indicate that looking into the lens while projecting is prohibited.
29		ISO7010	Warning, optical radiation (UV, visible
		No. W027	light, IR, etc.)
	<b>**</b> **********************************	ISO3864	To indicate that you must be careful not to injure your eyes or skin when in the vicinity of optical radiation.
30	\ A5.4	IEC60417	Not to be used in residential areas
		No. 5109	To indicate that the electrical equipment is not suitable for a residential area.

**Parent topic: Notices** 

### **FCC Compliance Statement**

#### For United States Users

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

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

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### WARNING

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

#### For Canadian Users

CAN ICES-3(B)/NMB-3(B)

**Parent topic: Notices** 

# **Binding Arbitration and Class Waiver**

# 1. DISPUTES, BINDING INDIVIDUAL ARBITRATION, AND WAIVER OF CLASS ACTIONS AND CLASS ARBITRATIONS

- 1.1 **Disputes**. The terms of this Section 1 shall apply to all Disputes between you and Epson. The term "Dispute" is meant to have the broadest meaning permissible under law and includes any dispute, claim, controversy or action between you and Epson arising out of or relating to this Agreement, Epson branded products (hardware and including any related software), or other transaction involving you and Epson, whether in contract, warranty, misrepresentation, fraud, tort, intentional tort, statute, regulation, ordinance, or any other legal or equitable basis. "DISPUTE" DOES NOT INCLUDE IP CLAIMS, or more specifically, a claim or cause of action for (a) trademark infringement or dilution, (b) patent infringement, (c) copyright infringement or misuse, or (d) trade secret misappropriation (an "IP Claim"). You and Epson also agree, notwithstanding Section 1.6, that a court, not an arbitrator, may decide if a claim or cause of action is for an IP Claim.
- 1.2 Binding Arbitration. You and Epson agree that all Disputes shall be resolved by binding arbitration according to this Agreement. ARBITRATION MEANS THAT YOU WAIVE YOUR RIGHT TO A JUDGE OR JURY IN A COURT PROCEEDING AND YOUR GROUNDS FOR APPEAL ARE LIMITED. Pursuant to this Agreement, binding arbitration shall be administered by JAMS, a nationally recognized arbitration authority, pursuant to its code of procedures then in effect for consumer related disputes, but excluding any rules that permit joinder or class actions in arbitration (for more detail on procedure, see Section 1.6 below). You and Epson understand and agree that (a) the Federal Arbitration Act (9 U.S.C. §1, et seq.) governs the interpretation and enforcement of this Section 1, (b) this Agreement memorializes a transaction in interstate commerce, and (c) this Section 1 shall survive termination of this Agreement.
- 1.3 **Pre-Arbitration Steps and Notice**. Before submitting a claim for arbitration, you and Epson agree to try, for sixty (60) days, to resolve any Dispute informally. If Epson and you do not reach an agreement to resolve the Dispute within the sixty (60) days), you or Epson may commence an arbitration. Notice to Epson must be addressed to: Epson America, Inc., ATTN: Legal Department, 3131 Katella Ave., Los Alamitos, CA 90720 (the "Epson Address"). The Dispute Notice to you will be sent to the most recent address Epson has in its records for you. For this reason, it is important to notify us if your address changes by emailing us at EAILegal@ea.epson.com or writing us at the Epson Address above. Notice of the Dispute shall include the sender's name, address and contact information, the facts giving rise to the Dispute, and the relief requested (the "Dispute Notice"). Following receipt of the Dispute Notice, Epson and you agree to act in good faith to resolve the Dispute before commencing arbitration.
- 1.4 **Small Claims Court**. Notwithstanding the foregoing, you may bring an individual action in the small claims court of your state or municipality if the action is within that court's jurisdiction and is pending only in that court.

- 1.5 WAIVER OF CLASS ACTIONS AND CLASS ARBITRATIONS. YOU AND EPSON AGREE THAT EACH PARTY MAY BRING DISPUTES AGAINST THE OTHER PARTY ONLY IN AN INDIVIDUAL CAPACITY, AND NOT AS A PLAINTIFF OR CLASS MEMBER IN ANY CLASS OR REPRESENTATIVE PROCEEDING, INCLUDING WITHOUT LIMITATION FEDERAL OR STATE CLASS ACTIONS, OR CLASS ARBITRATIONS. CLASS ACTION LAWSUITS, CLASS-WIDE ARBITRATIONS, PRIVATE ATTORNEY-GENERAL ACTIONS, AND ANY OTHER PROCEEDING WHERE SOMEONE ACTS IN A REPRESENTATIVE CAPACITY ARE NOT ALLOWED. ACCORDINGLY, UNDER THE ARBITRATION PROCEDURES OUTLINED IN THIS SECTION, AN ARBITRATOR SHALL NOT COMBINE OR CONSOLIDATE MORE THAN ONE PARTY'S CLAIMS WITHOUT THE WRITTEN CONSENT OF ALL AFFECTED PARTIES TO AN ARBITRATION PROCEEDING.
- 1.6 **Arbitration Procedure**. If you or Epson commences arbitration, the arbitration shall be governed by the rules of JAMS that are in effect when the arbitration is filed, excluding any rules that permit arbitration on a class or representative basis (the "JAMS Rules"), available at http://www.jamsadr.com or by calling 1-800-352-5267 (U.S. or Canada), or https://www.jamsadr.com/about/ or by calling +1-949-224-1810 (Latin America), and under the rules set forth in this Agreement. All Disputes shall be resolved by a single neutral arbitrator, and both parties shall have a reasonable opportunity to participate in the selection of the arbitrator. The arbitrator is bound by the terms of this Agreement. The arbitrator, and not any federal, state or local court or agency, shall have exclusive authority to resolve all disputes arising out of or relating to the interpretation, applicability, enforceability or formation of this Agreement, including any claim that all or any part of this Agreement is void or voidable. Notwithstanding this broad delegation of authority to the arbitrator, a court may determine the limited question of whether a claim or cause of action is for an IP Claim, which is excluded from the definition of "Disputes" in Section 1.1 above. The arbitrator shall be empowered to grant whatever relief would be available in a court under law or in equity. The arbitrator may award you the same damages as a court could, and may award declaratory or injunctive relief only in favor of the individual party seeking relief and only to the extent necessary to provide relief warranted by that party's individual claim. In some instances, the costs of arbitration can exceed the costs of litigation and the right to discovery may be more limited in arbitration than in court. The arbitrator's award is binding and may be entered as a judgment in any court of competent jurisdiction.

You may choose to engage in arbitration hearings by telephone. Arbitration hearings not conducted by telephone shall take place in a location reasonably accessible from your primary residence, or in Orange County, California, at your option.

- a) Initiation of Arbitration Proceeding. If either you or Epson decides to arbitrate a Dispute, both parties agree to the following procedure:
- (i) Write a Demand for Arbitration. The demand must include a description of the Dispute and the amount of damages sought to be recovered. You can find a copy of a Demand for Arbitration at <a href="http://www.jamsadr.com">http://www.jamsadr.com</a> ("Demand for Arbitration").

- (ii) Send three copies of the Demand for Arbitration, plus the appropriate filing fee, to: JAMS, 500 North State College Blvd., Suite 600 Orange, CA 92868, U.S.A.
- (iii) Send one copy of the Demand for Arbitration to the other party (same address as the Dispute Notice), or as otherwise agreed by the parties.
- b) Hearing Format. During the arbitration, the amount of any settlement offer made shall not be disclosed to the arbitrator until after the arbitrator determines the amount, if any, to which you or Epson is entitled. The discovery or exchange of non-privileged information relevant to the Dispute may be allowed during the arbitration.
- c) Arbitration Fees. Epson shall pay, or (if applicable) reimburse you for, all JAMS filings and arbitrator fees for any arbitration commenced (by you or Epson) pursuant to provisions of this Agreement.
- d) Award in Your Favor. For Disputes in which you or Epson seeks \$75,000 or less in damages exclusive of attorney's fees and costs, if the arbitrator's decision results in an award to you in an amount greater than Epson's last written offer, if any, to settle the Dispute, Epson will: (i) pay you \$1,000 or the amount of the award, whichever is greater; (ii) pay you twice the amount of your reasonable attorney's fees, if any; and (iii) reimburse you for any expenses (including expert witness fees and costs) that your attorney reasonably accrues for investigating, preparing, and pursuing the Dispute in arbitration. Except as agreed upon by you and Epson in writing, the arbitrator shall determine the amount of fees, costs, and expenses to be paid by Epson pursuant to this Section 1.6d).
- e) Attorney's Fees. Epson will not seek its attorney's fees and expenses for any arbitration commenced involving a Dispute under this Agreement. Your right to attorney's fees and expenses under Section 1.6d) above does not limit your rights to attorney's fees and expenses under applicable law; notwithstanding the foregoing, the arbitrator may not award duplicative awards of attorney's fees and expenses.
- 1.7 Opt-out. You may elect to opt-out (exclude yourself) from the final, binding, individual arbitration procedure and waiver of class and representative proceedings specified in this Agreement by sending a written letter to the Epson Address within thirty (30) days of your assent to this Agreement (including without limitation the purchase, download, installation of the Software or other applicable use of Epson Hardware, products and services) that specifies (i) your name, (ii) your mailing address, and (iii) your request to be excluded from the final, binding individual arbitration procedure and waiver of class and representative proceedings specified in this Section 1. In the event that you opt-out consistent with the procedure set forth above, all other terms shall continue to apply, including the requirement to provide notice prior to litigation.
- 1.8 **Amendments to Section 1**. Notwithstanding any provision in this Agreement to the contrary, you and Epson agree that if Epson makes any future amendments to the dispute resolution procedure and class action waiver provisions (other than a change to Epson's address) in this Agreement, Epson will obtain your affirmative assent to the applicable amendment. If you do not affirmatively assent to the applicable amendment, you are agreeing that you will arbitrate any Dispute between the parties in

accordance with the language of this Section 1 (or resolve disputes as provided for in Section 1.7, if you timely elected to opt-out when you first assented to this Agreement).

1.9 Severability. If any provision in this Section 1 is found to be unenforceable, that provision shall be severed with the remainder of this Agreement remaining in full force and effect. The foregoing shall not apply to the prohibition against class or representative actions as provided in Section 1.5. This means that if Section 1.5 is found to be unenforceable, the entire Section 1 (but only Section 1) shall be null and void.

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