EPSON®
EXCEED YOUR VISION

User's Guide

Home Projector

EH-LS100

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Notations Used in This Guide

Safety Symbols

The projector and its manuals use graphical symbols and labels to indicate content that tells you how to use the projector safely.

Read and carefully follow the instructions that are marked with these symbols and labels to avoid injury to persons or damage to property.

⚠ **Warning**	This symbol indicates information that, if ignored, could possibly result in personal injury or even death.
⚠ **Caution**	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

General Information Notations

Attention	This label indicates procedures that may result in damage or injury if sufficient care is not taken.
	This label indicates additional information that may be useful to know.
[Button name]	Indicates the name of the buttons on the remote control or the control panel. Example: [Esc] button
Menu/Setting name	Indicates projector menu and setting names. Example: Select the **Image** menu ☞ **Image** > **Advanced**
▶▶	This label indicates links to the related pages.
☞	This label indicates the projector's current menu level.

Introduction to Your Projector

Refer to these sections to learn more about your projector's features and part names.

▶ **Related Links**
- "Projector Parts and Functions"

The following sections explain the projector parts and their functions.

⤷ **Related Links**

Projector Parts - Front/Side
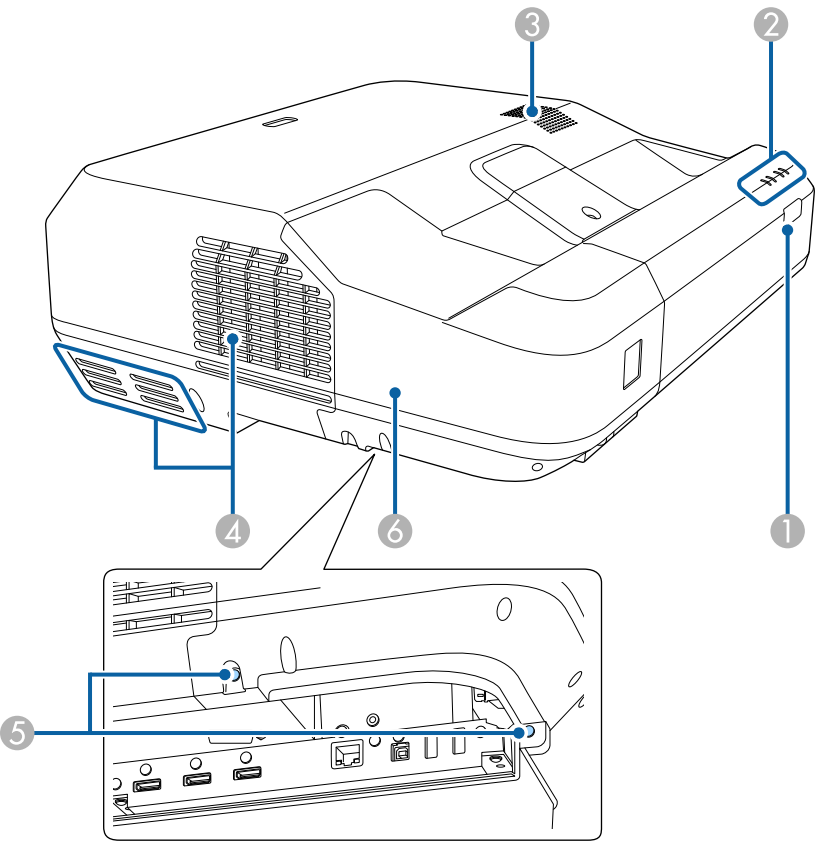
Name		Function
①	Remote receiver	Receives signals from the remote control.
②	Indicators	Indicates the projector's status.
③	Speaker	Outputs audio.

Name		Function
④	Air exhaust vent	Exhaust vent for air used to cool the projector internally.

> ### ⚠ Caution
>
> While projecting, do not put your face or hands near the air exhaust vent, and do not place objects that may become warped or damaged by heat near the vent. Hot air from the air exhaust vent could cause burns, warping, or accidents to occur.

Name		Function
⑤	Cable cover screws	Screws to fix the cable cover in place.
⑥	Cable cover	Loosen the two screws and open the cover when connecting cables for external devices or installing the wireless LAN module.

▸ **Related Links**
- "Projector Indicator Status" p.144
- "Remote Control Operation" p.27

Projector Parts - Top/Side
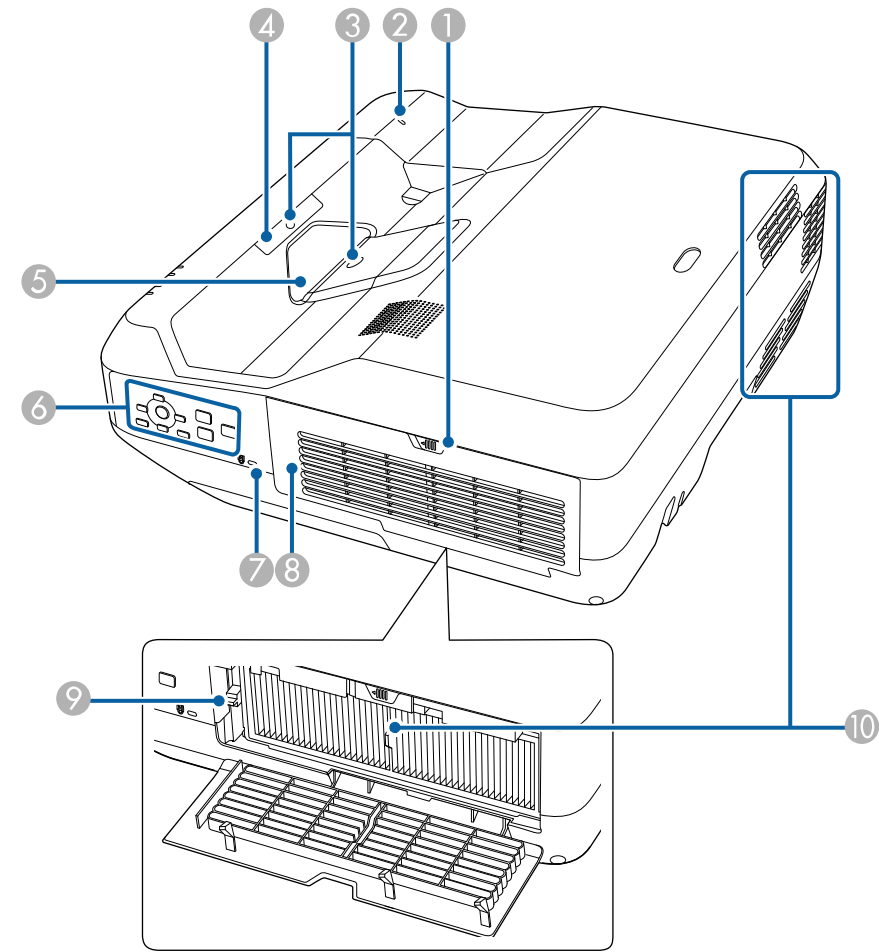
	Name	Function
❶	Filter cover latch	Opens the air filter cover.
❷	Wireless LAN indicator	Indicates the access status of the wireless LAN module.

Name		Function
③	Obstacle sensor	Detects obstacles that are interfering with the projection area.
④	Remote receiver	Receives signals from the remote control.
⑤	Projection window	Images are projected from here.

> **⚠ Warning**
>
> - Do not look into the projection window while projecting.
> - Do not place any objects or put your hand near the projection window. It could cause burns, fire, or the object to warp because this area reaches a high temperature due to the concentrated projection light.

Name		Function
⑥	Control panel	Operates the projector.
⑦	Security slot	The security slot is compatible with the Microsaver Security System manufactured by Kensington.
⑧	Air filter cover	Open to access the air filter or focus lever.
⑨	Focus lever	Adjusts the image focus. Open the air filter cover to operate.
⑩	Air intake vent (air filter)	Takes in air to cool the projector internally.

⤷ Related Links

- "Installing a Security Cable"
- "Focusing the Image"

Projector Parts - Interface
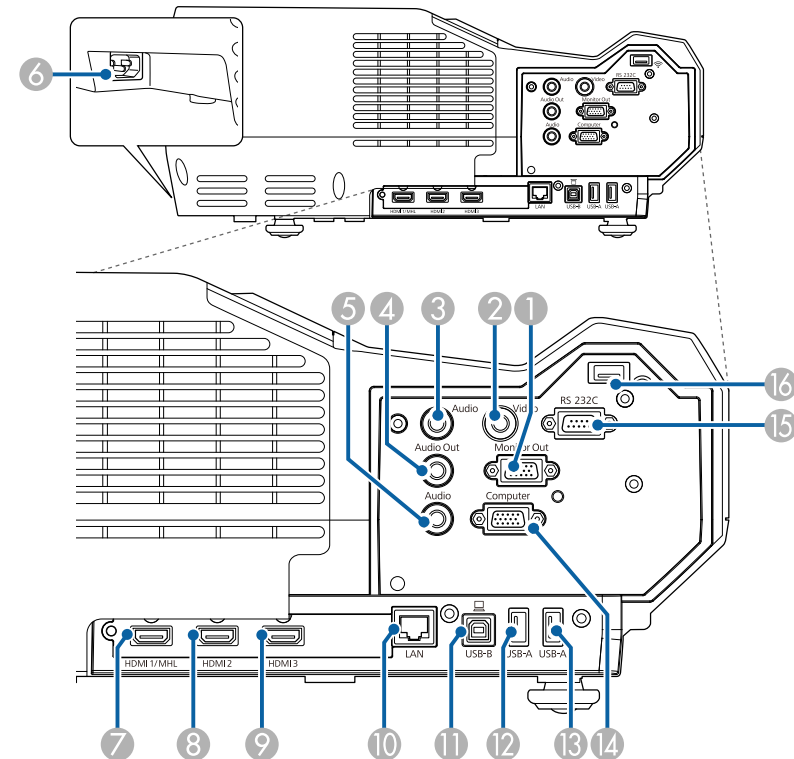
Name		Function
❶	Monitor Out port	Outputs analog RGB signals input from the Computer port to an external monitor. You cannot output signals input from other ports or component video signals.
❷	Video port	Inputs composite video signals from video sources.

Name		Function
③	Audio port	Inputs audio from equipment connected to the Video port. Inputs audio from other devices when projecting images from the device connected to the USB-A port. From now on, referred to as the Audio 2 port.
④	Audio Out port	Outputs audio from the current input source to an external speaker.
⑤	Audio port	Inputs audio from equipment connected to the Computer port. From now on, referred to as the Audio 1 port.
⑥	Power inlet	Connects the power cord to the projector.
⑦	HDMI1/MHL port	Inputs video signals from HDMI compatible video equipment and computers, or MHL (Mobile High-Definition) compatible mobile devices. This projector is compatible with HDCP.
⑧	HDMI2 port	Inputs video signals from HDMI compatible video equipment and computers. This projector is compatible with HDCP.
⑨	HDMI3 port	Inputs video signals from HDMI compatible video equipment and computers. This projector is compatible with HDCP.
⑩	LAN port	Connects a LAN cable to connect to a network.
⑪	USB-B port	Connects a USB cable to the computer to project computer images or to use the Wireless Mouse function.
⑫	USB-A port	Connects a USB memory device or a digital camera and projects movies or images using PC Free.
⑬	USB-A port	Connects a USB memory device or a digital camera and projects movies or images using PC Free.
⑭	Computer port	Inputs image signals from a computer and component video signals from other video sources.
⑮	RS-232C port	Connects an RS-232C cable to control the projector from a computer. (This port is for control use and should not normally be used.)

Name		Function
⑯	Wireless LAN module slot	Install the wireless LAN module.

� ▸ **Related Links**

Projector Parts - Base
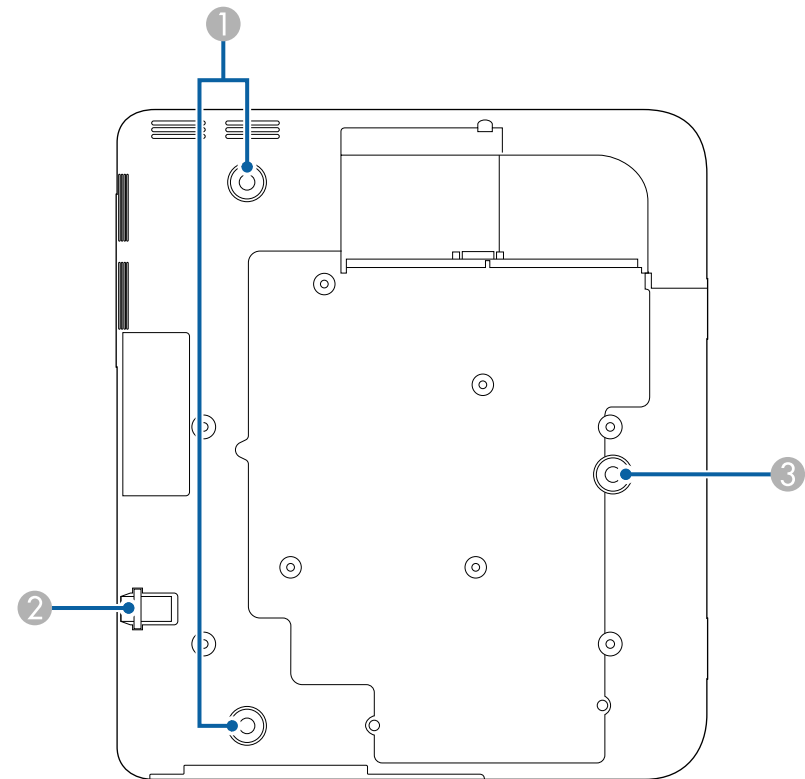
Name		Function
➊	Rear feet	Turn to extend and retract the feet to adjust the horizontal tilt.
➋	Security cable attachment point	Pass a commercially available wire lock through here and lock it in place.
➌	Front adjustable foot	Extend the foot to adjust the position of the image.

⚠ Caution

This projector is designed to be placed on a flat surface such as table. Do not use the screw holes on the bottom of the projector to attach commercially available mounting hardware. If you suspend the projector from a ceiling or install it on a wall using these screw holes, it could fall and cause damage or injury.

⏵ **Related Links**
- "Installing a Security Cable" p.86

Projector Parts - Control Panel

Name		Function
➊	[Source Search] button	Changes to the next input source.
➋	[Enter] button [↵]	Enters the current selection and moves to the next level while displaying the projector's menu or help.
		Optimizes **Tracking**, **Sync.**, and **Position** in the projector's **Signal** menu while projecting an analog RGB signal from the Computer port.
		From now on, referred to as the [Enter] button.
➌	Keystone adjustment buttons and arrow buttons	Displays the Keystone screen allowing you to correct keystone distortion.
		Selects menu items while displaying the projector's menu or help.
➍	[Esc] button	Stops the current function.
		Moves back to the previous menu level while displaying the projector's menu.
➎	Wide/Tele buttons and arrow buttons	W : Enlarges the size of the projected image.
		T : Reduces the size of the projected image.
		Corrects keystone distortion in the horizontal direction when the Keystone screen is displayed.
		Selects menu items while displaying the projector's menu or help.
➏	[Menu] button	Displays and closes the projector's menu.
➐	[Home] button	Displays and closes the Home screen.
➑	Power button [⏻]	Turns the projector on or off.
		From now on, referred to as the power button.

⏵ **Related Links**
- "Home Screen" p.30
- "Selecting an Image Source" p.47
- "Correcting the Image Shape with the Keystone Buttons" p.38
- "Resizing the Image with the Buttons" p.45

Projector Parts - Remote Control

	Name	Function
❶	Power button [⏻]	Turns the projector on or off. From now on, referred to as the power button.
❷	[Computer] button	Selects the Computer port as the image source.
❸	[HDMI/Video] button	Switches the image source between the HDMI and Video ports.
❹	Numeric buttons	Enters numbers in the projector's menu while holding down the [Num] button.
❺	[Auto] button	Optimizes **Tracking**, **Sync.**, and **Position** in the projector's **Signal** menu while projecting an analog RGB signal from the Computer port.
❻	[Aspect] button	Changes the aspect mode.
❼	[Num] button	Hold down this button to enter numbers using the numeric buttons.
❽	[Menu] button	Displays and closes the projector's menu.
❾	Arrow buttons	Selects menu items while displaying the projector's menu or help.
❿	[Enter] button [↵]	Enters the current selection and moves to the next level while displaying the projector's menu or help. Acts as a mouse's left button when using the Wireless Mouse function. From now on, referred to as the [Enter] button.
⓫	[User] button	Performs settings assigned in the **User Button** setting in the projector's **Settings** menu.
⓬	[Page] up/down buttons	Controls page up and down on your computer when you connect a projector and computer using a USB cable or over a network. Displays the previous or next screen while using the PC Free feature.
⓭	[E-Zoom] +/− buttons	Zooms in or zooms out the image area.
⓮	[A/V Mute] button	Turns the video and audio on or off temporarily.
⓯	[Split] button	Projects two images from different image sources simultaneously by splitting the projected screen.

Name	Function
⑯ Strap attachment point	Allows you to attach a commercially available strap to the remote control.
⑰ [Home] button	Displays and closes the Home screen.
⑱ [Freeze] button	Pauses or resumes images.
⑲ [Volume] up/down buttons	Adjusts the speaker volume.
⑳ [Pointer] button	Displays the on-screen pointer.
㉑ [Esc] button	Stops the current function. Moves back to the previous menu level while displaying the projector's menu. Acts as a mouse's right button when using the Wireless Mouse function.
㉒ [Pen Mode] button	The projector does not support this button's functions.
㉓ [ID] button	Hold down this button and press the numeric buttons to select the ID for the projector you want to operate using the remote control.
㉔ [Color Mode] button	Changes the color mode.
㉕ [Link Menu] button	Displays the settings menu for the device linked to the projector's HDMI ports.
㉖ [LAN] button	Switches the image source between the network connected devices.
㉗ [USB] button	Switches the image source between the USB Display and USB-A ports.
㉘ [Source Search] button	Changes to the next input source.
㉙ Remote control light emitting area	Outputs remote control signals.

➥ **Related Links**
- "Image Aspect Ratio" p.49
- "Color Mode" p.51
- "Input Signal Settings - Signal Menu" p.114
- "Projector Setup Settings - Extended Menu" p.119
- "Projecting Two Images Simultaneously" p.62
- "Using the Remote Control as a Wireless Mouse" p.73
- "Using the Remote Control as a Pointer" p.75
- "Projecting a PC Free Presentation" p.65
- "Using the Projector on a Network" p.87

Setting Up the Projector

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

▶ **Related Links**
- "Projector Placement"
- "Projector Connections"
- "Installing Batteries in the Remote Control"
- "Remote Control Operation"

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

Note the following points when selecting a projector location:

- Place the projector on a sturdy and level surface.
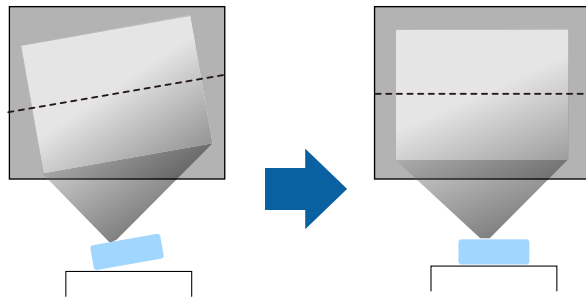
- Leave plenty of space around and under the projector for ventilation, and do not place it on top of or next to anything that could block the vents.
- Place the projector parallel to the screen.
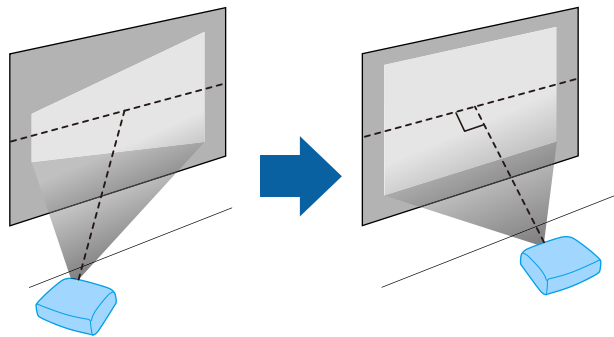
> If you cannot install the projector parallel to the screen, correct keystone distortion using the projector controls.

⚠ Warning

- Do not cover the projector's air intake or air exhaust vents. If the vents are covered, the internal temperature could rise and cause a fire.
- Do not install the projector on an unstable surface or in a location beyond the weight specifications of the projector. Otherwise, it could fall or topple causing an accident and injury.
- When installing the projector in a high position, take measures to prevent falling by using wires to ensure safety in an emergency, such as an earthquake, and to prevent accidents. If it is not installed correctly, it could fall causing an accident and injury.

Attention

- Do not operate the projector on its side. This may cause the projector to malfunction.
- If you are using the projector at altitudes above 1500 m, set the **High Altitude Mode** setting to **On** in the projector's **Extended** menu to ensure the projector's internal temperature is regulated properly.
  ☛ **Extended** > **Operation** > **High Altitude Mode**
- Try not to setup the projector in locations subject to high humidity and dust, or in locations subject to smoke from fires or tobacco smoke.

↦ **Related Links**
- "Projector Setup Settings - Extended Menu" p.119

You can connect the projector to a variety of computer, video, and audio sources to display presentations, movies, or other images, with or without sound.

> **Attention**
> 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.

> 📓 See the *Quick Start Guide* for a list of cables supplied with your projector. Purchase optional or commercially available cables when necessary.

- Connect a computer that has a USB port, standard video output (monitor) port, or HDMI port.
- For video projection, connect devices such as DVD players, gaming consoles, digital cameras, and smartphones with compatible video output ports.
- If your presentation or video includes sound, you can connect audio input cables.
- For slide shows or presentations without a computer, you can connect USB devices (such as a flash drive or camera).

» **Related Links**
- "Connecting to a Computer"
- "Connecting to Smartphones or Tablets"
- "Connecting to Video Sources"
- "Connecting to External USB Devices"
- "Connecting to External Output Devices"
- "Optional Accessories and Replacement Parts"

Connecting to a Computer

Follow the instructions in these sections to connect a computer to the projector.

» **Related Links**
- "Connecting to a Computer for VGA Video and Audio"
- "Connecting to a Computer for USB Video and Audio"
- "Connecting to a Computer for HDMI Video and Audio"

Connecting to a Computer for VGA Video and Audio

You can connect the projector to your computer using a VGA computer cable.

You can play sound through the projector's speaker system by connecting a commercially available 3.5 mm stereo mini-jack audio cable.

> 📓
> - To connect a computer that does not have a VGA video port, you need an adapter that allows you to connect to the projector's VGA video port.
> - You can also set the port used for audio input from the projector's menu.
>   ☛ **Extended** > **A/V Settings** > **Audio Output**
> - Make sure the audio cable is labeled "No resistance".

1 Connect the VGA computer cable to your computer's monitor port.

2 Connect the other end to a Computer port on the projector.
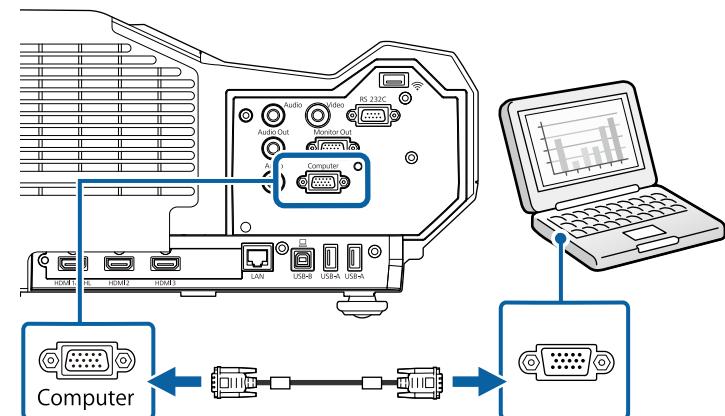
3 Tighten the screws on the VGA connector.

4 Connect the audio cable to your laptop's headphone or audio-out jack, or your desktop's speaker or audio-out port.

5 Connect the other end to the projector's Audio 1 port.
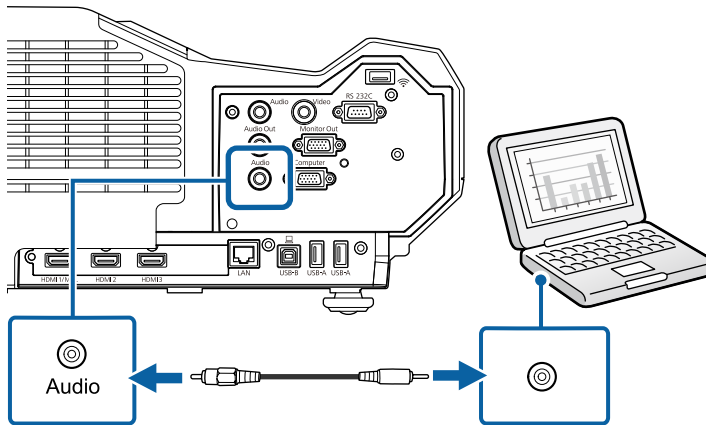
Connecting to a Computer for USB Video and Audio

If your computer meets the system requirements, you can send video and audio output to the projector through the computer's USB port. This function is called USB Display. Connect the projector to your computer using a USB cable.

> • If you use a USB hub, the connection may not operate correctly. Connect the USB cable directly to the projector.

1 Connect the cable to your projector's USB-B port.
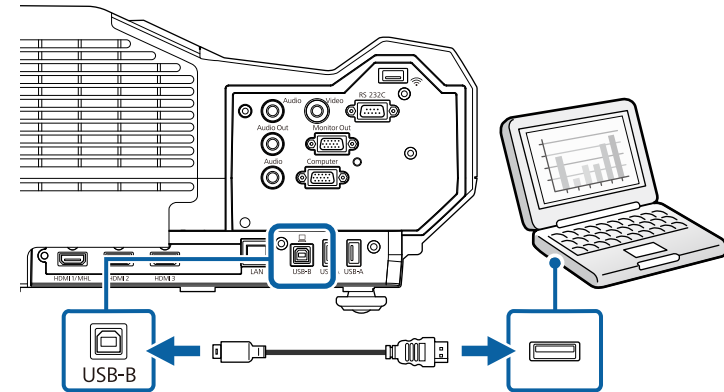
2 Connect the other end to any available USB port on your computer.

3 Turn on the projector and your computer.

4 Do one of the following to install the Epson USB Display software:

> You only need to install this software the first time you connect the projector to the computer.

- Windows: Select **Run EMP_UDSE.EXE** in the dialog box that is displayed to install the Epson USB Display software.
- Mac: The Epson USB Display setup folder is displayed on your screen. Select **USB Display Installer** and follow the on-screen instructions to install the Epson USB Display software. If the USB Display **Setup** folder is not displayed automatically, double-click **EPSON_PJ_UD** > **USB Display Installer**.

5 Follow any on-screen instructions.

Do not disconnect the USB cable or turn off the projector until the projector displays an image.

The projector displays the image from your computer's desktop and outputs sound if your presentation contains audio.

> 📝
> - If the projector does not project any images, do one of the following:
>   - Windows: Click **All Programs** > **EPSON Projector** > **Epson USB Display** > **Epson USB Display Ver.x.xx**.
>   - Mac: Double-click the **USB Display** icon in the **Application** folder.
> - When you finish projection, do one of the following:
>   - Windows: Disconnect the USB cable. You do not need to operate **Safely Remove Hardware**.
>   - Mac: Select **Disconnect** from the **USB Display** icon menu on the menu bar or **Dock**, and then disconnect the USB cable.

❯❯ **Related Links**
- "USB Display System Requirements" p.166

Connecting to a Computer for HDMI Video and Audio

If your computer has an HDMI port, you can connect it to the projector using an HDMI cable and send the computer's audio with the projected image.

> 📝
> To connect a Mac that does not have an HDMI port, you need an adapter that allows you to connect to the projector's HDMI port. Contact Apple for compatible adapter options. Older Mac computers (2009 and earlier) may not support audio through the HDMI port.

1 Connect the HDMI cable to your computer's HDMI output port.

2 Connect the other end to the projector's HDMI port.
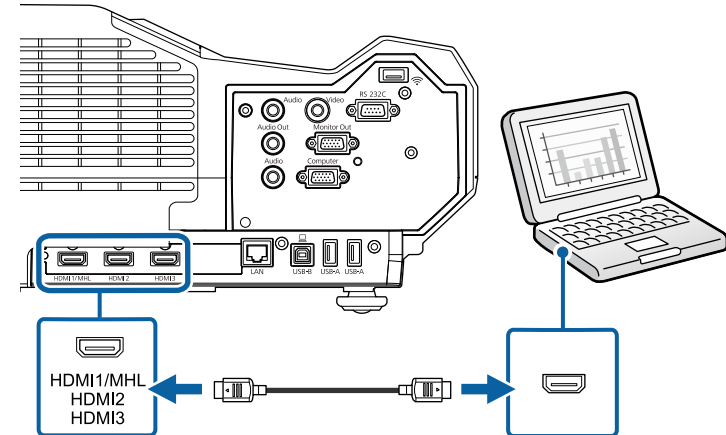
> 📝
> If you have problems hearing audio through the HDMI connection, connect one end of a commercially available 3.5 mm stereo mini-jack audio cable to the projector's Audio port and the other end to your computer's audio out port. Select the audio input port you connected to in the projector's **Extended** menu.
>
> ☛ **Extended** > **A/V Settings** > **HDMI1 Audio Output**
> ☛ **Extended** > **A/V Settings** > **HDMI2 Audio Output**
> ☛ **Extended** > **A/V Settings** > **HDMI3 Audio Output**

❯❯ **Related Links**
- "Projector Setup Settings - Extended Menu" p.119

Connecting to Smartphones or Tablets

You can connect the projector to smartphones and tablets using a MHL cable and send the audio with the projected image.

> 📝 • You may not be able to project correctly, depending on the model and settings of the smartphone or tablet.
> • You may not be able to connect an MHL cable to all devices. Contact the manufacturer of your smartphone or tablet device to check if your device supports MHL.

1 Connect the MHL cable to your device's Micro-USB port.

2 Connect the other end to the projector's HDMI1/MHL port.
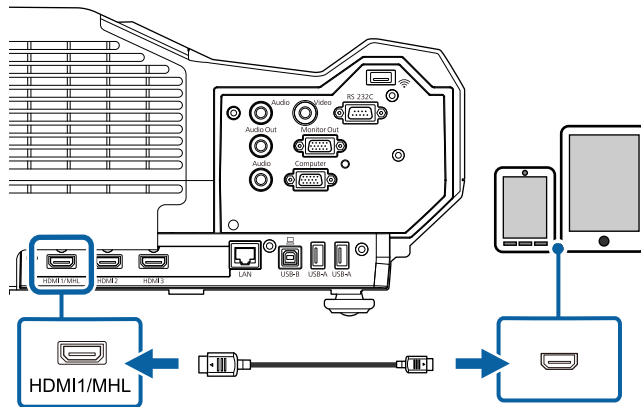
Attention
If you connect an MHL cable that does not support the MHL standards, the smartphone or tablet device may become hot, or leakage or explosion may happen.

The connected smartphone or tablet begins charging when images are projected. If you connect using a MHL-HDMI conversion adapter, charging the smartphone or tablet device may not work or you may not be able to perform operations using the projector's remote control.

> 📝 • Charging may not work when using a lot of power, such as when playing a movie.
> • Charging does not work when the projector is in standby mode or the battery in a smartphone or tablet is depleted.

> 📝 If images are not projected correctly, disconnect and then reconnect the MHL cable.

Connecting to Video Sources

Follow the instructions in these sections to connect video devices to the projector.

> 📝 • If the port on the device you connect has an unusual shape, use the cable supplied with the device or an optional cable to connect to the projector.
> • The cable differs depending on the output signal from the connected video devices.
> • Some video devices are capable of outputting different types of signals. See your video device manual to confirm what type of signals can be output.
> • If audio is not output correctly, check the settings in **Audio Out Device**.
> ☛ **Settings** > **HDMI Link** > **Audio Out Device**

↬ **Related Links**
- "Connecting to an HDMI Video Source" p.21
- "Connecting to a Component-to-VGA Video Source" p.21
- "Connecting to a Composite Video Source" p.22

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 and send the image source's audio with the projected image.

> **Attention**
> Do not turn on the video source before connecting it to the projector. Doing so could damage the projector.

a Connect the HDMI cable to your video source's HDMI output port.
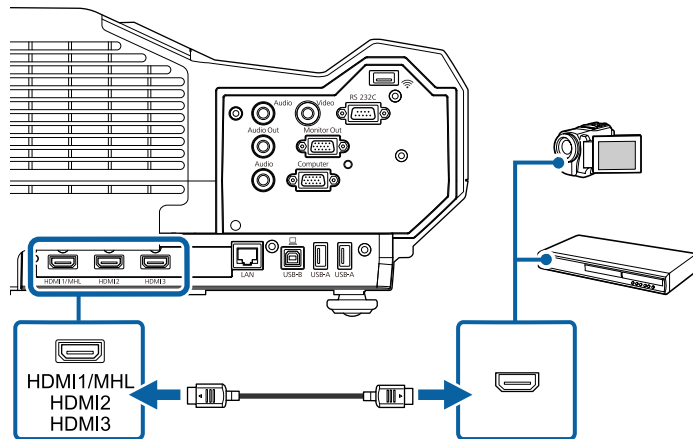
b Connect the other end to the projector's HDMI port.

HDMI1/MHL
HDMI2
HDMI3

> If you have problems hearing audio through the HDMI connection, connect one end of a commercially available 3.5 mm stereo mini-jack audio cable to the projector's Audio port and the other end to your video source's audio out port. Select the audio input port you connected to in the projector's **Extended** menu.
>
> ☞ **Extended** > **A/V Settings** > **HDMI1 Audio Output**
> ☞ **Extended** > **A/V Settings** > **HDMI2 Audio Output**
> ☞ **Extended** > **A/V Settings** > **HDMI3 Audio Output**

⤷ Related Links
-

Connecting to a Component-to-VGA Video Source

If your video source has component video ports, you can connect it to the projector using a component-to-VGA video cable. Depending on your component ports, you may need to use an adapter cable along with a component video cable.

You can play sound through the projector's speaker system by connecting a stereo mini-jack audio cable.

> - You can also set the port used for audio input in the projector's **Extended** menu.
>   ☞ **Extended** > **A/V Settings** > **Audio Output**
> - Make sure the audio cable is labeled "No resistance".

a Connect the component connectors to your video source's color-coded component video output ports.

> The ports usually labeled Y, Pb, Pr or Y, Cb, Cr. If you are using an adapter, connect these connectors to your component video cable.

2 Connect the VGA connector to a Computer port on the projector.
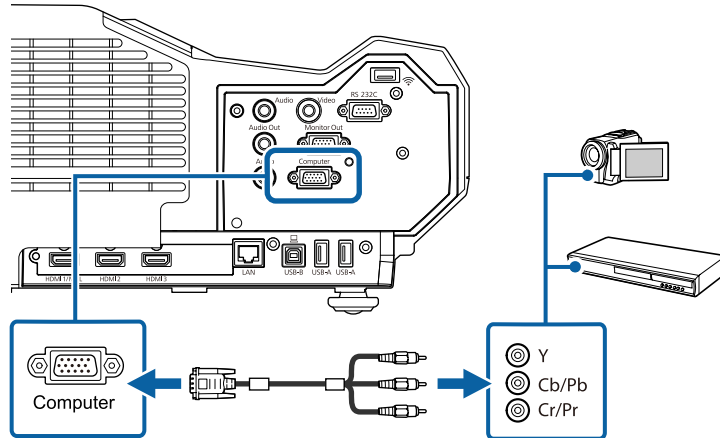
3 Tighten the screws on the VGA connector.

4 Connect the audio cable to your video source's audio-out ports.

5 Connect the other end to the projector's Audio 1 port.
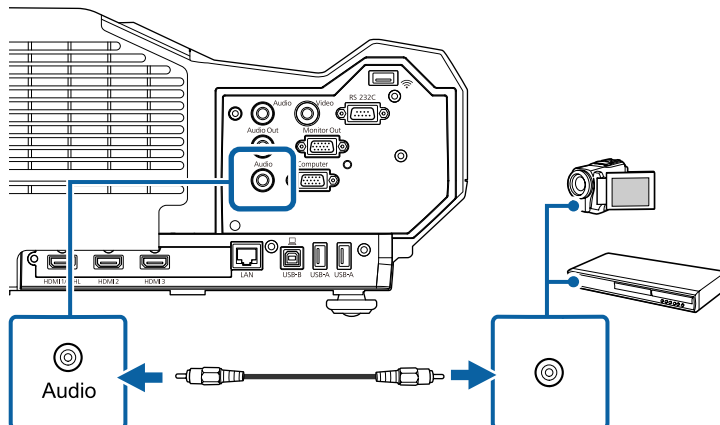
If your image colors appear incorrectly, you may need to change the **Input Signal** setting in the projector's **Signal** menu.

☛ **Signal** > **Advanced** > **Input Signal**

↪ **Related Links**
- "Input Signal Settings - Signal Menu" p.114

p.114

Connecting to a Composite Video Source

If your video source has a composite video port, you can connect it to the projector using a RCA-style video or A/V cable.

You can play sound through the projector's speaker system by connecting a stereo mini-jack audio cable.

> Make sure the audio cable is labeled "No resistance".

1 Connect the cable with the yellow connector to your video source's yellow video output port.

2 Connect the other end to the projector's Video port.
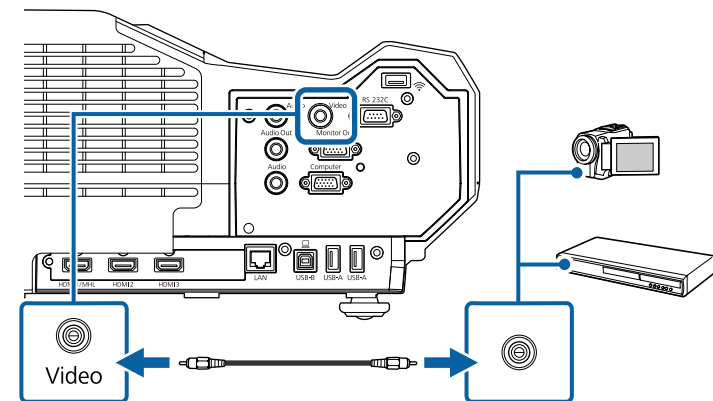
3 Connect the audio cable to your video source's audio-out ports.

4 Connect the other end to the projector's Audio 2 port.
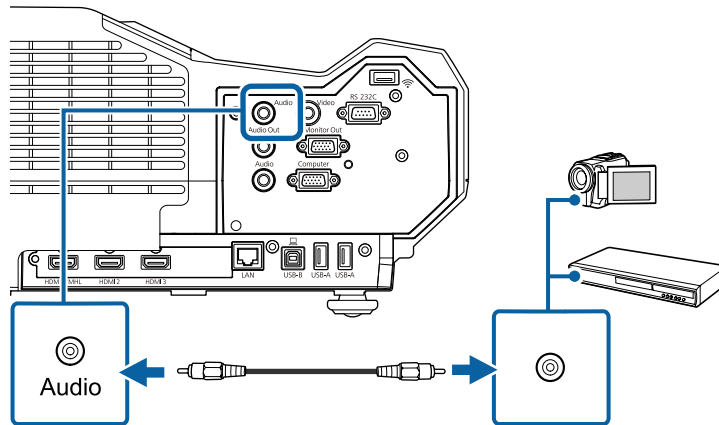
Connecting to External USB Devices

Follow the instructions in these sections to connect external USB devices to the projector.

⇥ **Related Links**
- "USB Device Projection" p.23
- "Connecting to a USB Device" p.23
- "Disconnecting a USB Device" p.24

USB Device Projection

You can project images and other content without using a computer or video device by connecting any of these devices to your projector:

- USB flash drive
- Digital camera or smartphone
- USB hard drive
- Multimedia storage viewer

📝 • Digital cameras or smartphones must be USB-mounted devices, not TWAIN-compliant devices, and must be USB Mass Storage Class-compliant.
 • USB hard drives must meet these requirements:
  • USB Mass Storage Class-compliant (not all USB Mass Storage Class devices are supported)
  • Formatted in FAT16/32
  • Self-powered by their own AC power supplies (bus-powered hard drives are not recommended)
  • Avoid using hard drives with multiple partitions

You can project slide shows from image files on a connected USB device.

⇥ **Related Links**
- "Projecting a PC Free Presentation" p.65

Connecting to a USB Device

You can connect your USB device to the projector's USB-A port and use it to project images and other content.

1 If your USB device came with a power adapter, plug the device into an electrical outlet.

2 Connect the USB cable or USB flash drive to the projector's USB-A port as shown.
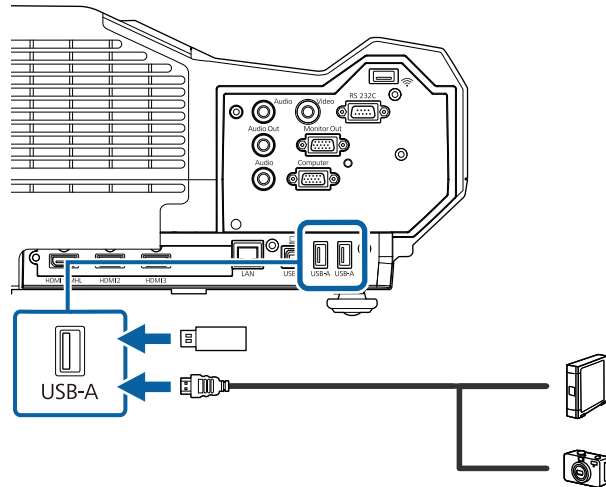
Attention

- Use the USB cable supplied with or specified for use with the device.
- Do not connect a USB hub or a USB cable longer than 3 meters, or the device may not operate correctly.

3 Connect the other end to your device, if necessary.

Disconnecting a USB Device

When you have finished presenting with a connected USB device, disconnect the device from the projector.

1 Turn off and unplug the device, if necessary.

2 Disconnect the USB device from the projector.

Connecting to External Output Devices

Follow the instructions in these sections to connect external devices to the projector.

» **Related Links**
- "Connecting to a VGA Monitor" p.24
- "Connecting to External Speakers" p.25

Connecting to a VGA Monitor

If you connected the projector to a computer using a Computer port, you can also connect an external monitor to the projector. This lets you see your presentation on the external monitor even when the projected image is not visible.

> - If you want to output images to an external monitor when the projector is turned off, select **Always On** as the **A/V Output** setting in the projector's **Extended** menu.
>   ☛ **Extended** > **A/V Settings** > **A/V Output**
> - Monitors that use a refresh rate of less than 60 Hz may not be able to display images correctly.

1 Make sure your computer is connected to the projector's Computer port.

> - Only analog RGB signals from the Computer port can be output to an external monitor. You cannot output signals input from other ports or component video signals.

2 Connect the external monitor's cable to your projector's Monitor Out port.

Monitor Out
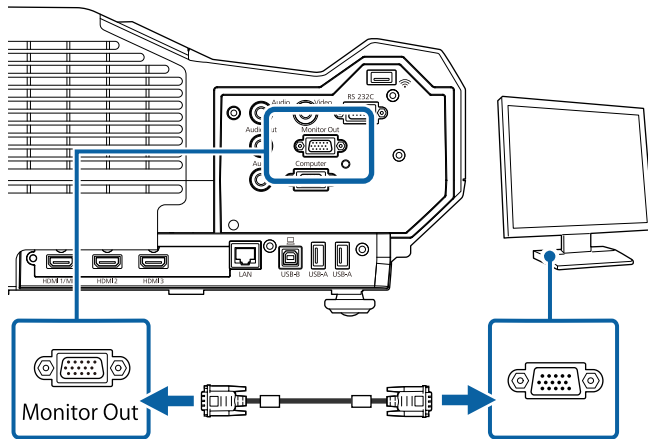
Connecting to External Speakers

To enhance the sound from your presentation, you can connect the projector to external self-powered speakers. You can control the volume using the projector's remote control.

To output audio from external speakers, select **Projector** as the **Audio Out Device** setting in the projector's **Settings** menu. When an audio/video system is not connected to the projector, audio is output from the external speakers even if **Audio Out Device** is set to **AV System**.

☛ **Settings** > **HDMI Link** > **Audio Out Device**

> • If you want to output audio from the external speakers when the projector is turned off, select **Always On** as the **A/V Output** setting in the projector's **Extended** menu.
>   ☛ **Extended** > **A/V Settings** > **A/V Output**
> • You can also connect the projector to an amplifier with speakers.
> • The projector's built-in speaker system is disabled when you connect external speakers.

1 Make sure your computer or video source is connected to the projector with both audio and video cables as necessary.

2 Locate the appropriate cable to connect your external speakers, such as a stereo mini-jack-to-pin-jack cable, or another type of cable or adapter.

3 Connect one end of the cable to your external speakers as necessary.

4 Connect the stereo mini-jack end of the cable to your projector's Audio Out port.

Audio Out
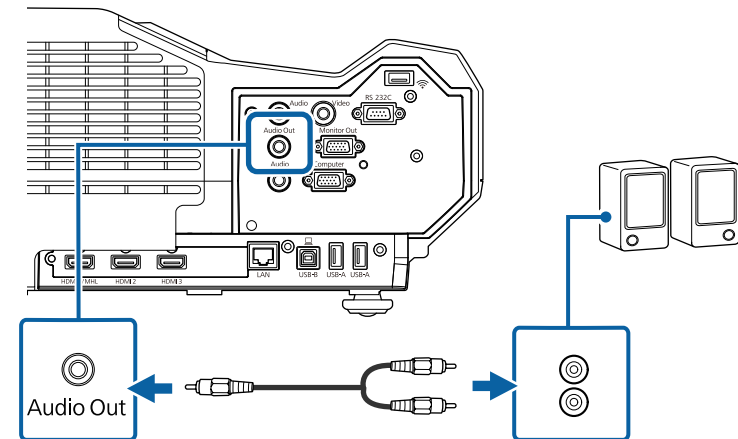
The remote control uses the two AA batteries that came with the projector.

Attention
Make sure you read the *Safety Instructions* before handling the batteries.

1 Remove the battery cover as shown.
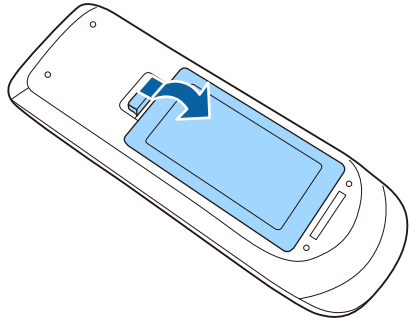
2 Insert the batteries with the + and − ends facing as shown.
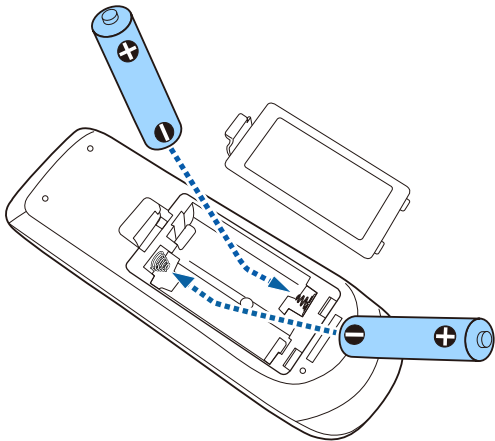
⚠ **Warning**

Check the positions of the (+) and (−) marks inside the battery holder to ensure the batteries are inserted the correct way. If the batteries are not used 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.
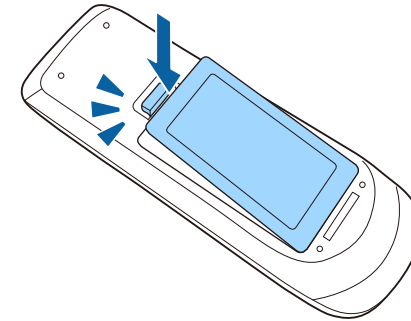
The remote control lets you control the projector from almost anywhere in the room.

Make sure that you aim the remote control at the projector's receivers within the distance and angles listed here.
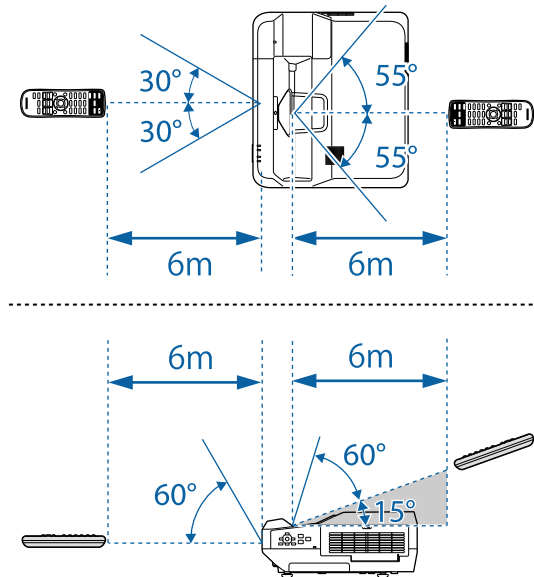
> ✎ Avoid using the remote control in conditions with bright fluorescent lights or in direct sunlight, or the projector may not respond to commands. If you are not going to use the remote control for a long time, remove the batteries.

Using Basic Projector Features

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

➤ **Related Links**

Turn on the computer or video equipment you want to use after you turn on the projector.

1 Connect the power cord to the projector's power inlet and plug it into an electrical outlet.
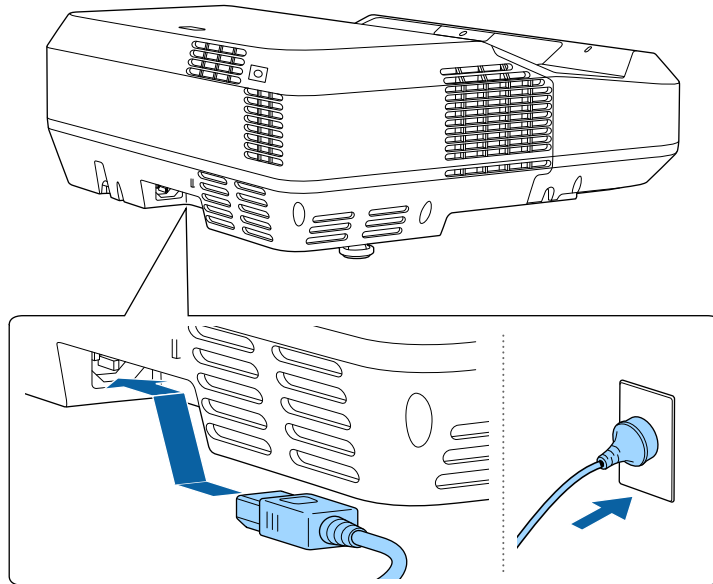
The projector's power indicator turns blue. This indicates that the projector is receiving power, but is not yet turned on (it is in standby mode).

2 Press the power button on the control panel or remote control to turn on the projector.

The projector beeps and the status indicator flashes blue as the projector warms up. Once the projector is warmed up, the status indicator stops flashing and turns blue.

> • When **Quick Startup** is enabled in the projector's **Extended** menu, the projector becomes ready for use in several seconds the next time you press the power button.
> ☛ **Extended** > **Operation** > **Quick Startup**

Try the following if you do not see a projected image.

- Turn on the connected computer or video device.
- Change the screen output from the computer when using a laptop computer.
- Insert a DVD or other video media, and press play (if necessary).
- Press the [Source Search] button on the control panel or remote control to detect the source.
- Press the button for the desired video source on the remote control.
- If the Home screen is displayed, select the source you want to project.

⚠ Warning

- Never look into the projector lens when the light source is on. This can damage your eyes and is especially dangerous for children.
- When turning on the projector at a distance using the remote control, make sure there is no one looking into the lens.
- 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.

✎ • When the **Direct Power On** setting is set to **On** in the projector's **Extended** menu, the projector turns on as soon as you plug it in. Note that the projector also turns on automatically in cases such as recovery from a power outage.
☛ **Extended** > **Operation** > **Direct Power On**
• If you select a specific port as the **Auto Power On** setting in the projector's **Extended** menu, the projector turns on as soon as it detects a signal or cable connection from that port.
☛ **Extended** > **Operation** > **Auto Power On**

▸ **Related Links**

Home Screen

The Home screen feature allows you to easily select an image source and access useful functions. You can display the Home screen by pressing the [Home] button on the control panel or remote control. The Home screen is also displayed when you turn on the projector and no signal is being input.

Press the arrow buttons on the control panel or remote control to select a menu item, and then press [Enter].
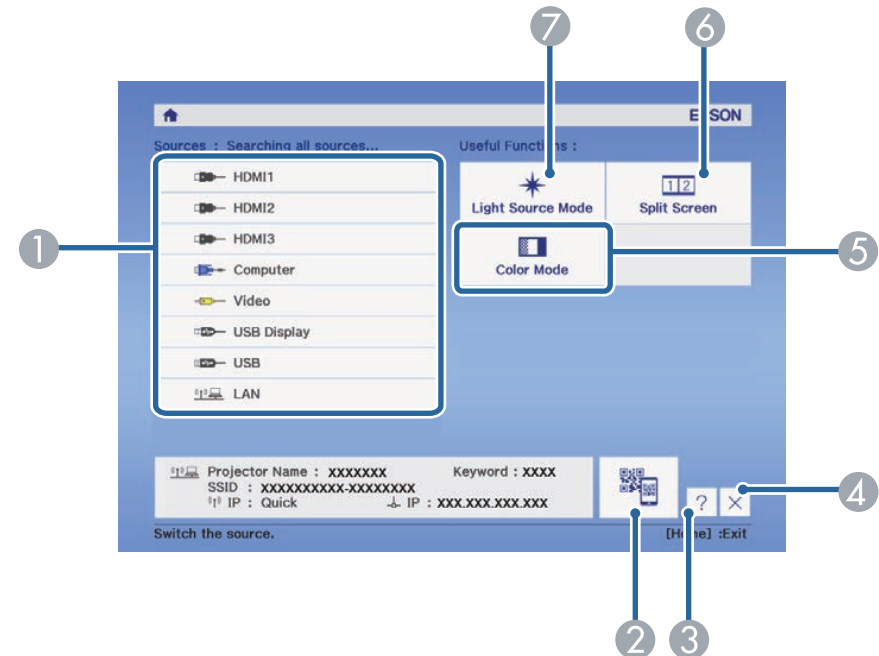
A Selects the source you want to project.

B Displays the QR code and projects data on a smartphone or tablet device.

C Displays the Help screen.

D Closes the Home screen.

E Performs menu options assigned to **Home Screen** in the projector's **Extended** menu.

F Projects two images from different image sources simultaneously by splitting the projected screen.

G Selects the brightness for the light source.

> The Home screen disappears after 10 minutes of inactivity.

▸ **Related Links**

Turn off the projector after use.

> 📝
> - Turn off this product when it is not in use to prolong the life of the projector. Light source life varies depending on the mode selected, environmental conditions, and usage. Brightness decreases over time.
> - Automatic light source calibration starts periodically when you turn off the projector.
>   However, this does not start automatically in the following situations:
>   - If you use the projector continuously for more than 24 hours
>   - If you regularly turn off the projector by shutting off the power outlet
> - Since the projector supports the direct shutdown feature, it can be turned off directly using the breaker.

1 Press the power button on the control panel or remote control.

The projector displays a shutdown confirmation screen.

```
Power Off?

Yes: Press ⏻ button
No : Press any other button
```
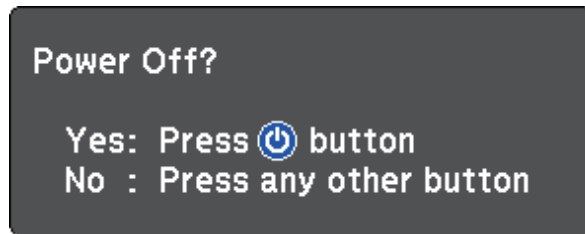
2 Press the power button again. (To leave it on, press any other button.)

The projector beeps twice, the light source turns off, and the status indicator turns off.

3 To transport or store the projector, make sure the power indicator is blue (but not flashing) and the status indicator is off, then unplug the power cord.

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 [Menu] button on the control panel or remote control.
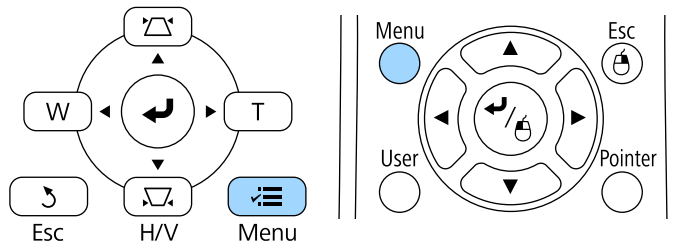
3 Select the **Extended** menu and press [Enter].
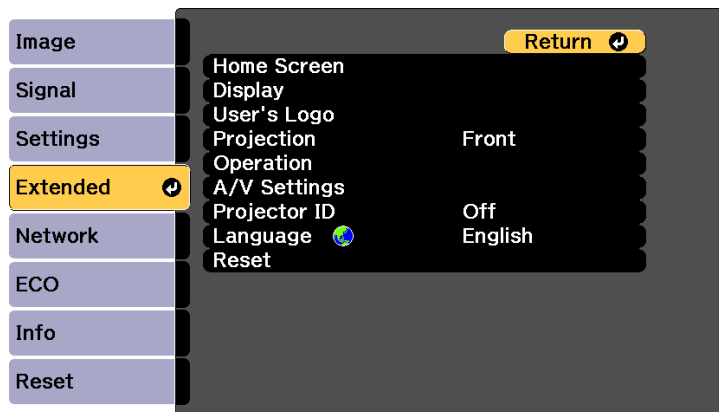
4 Select the **Language** setting and press [Enter].

5 Select the language you want to use and press [Enter].

6 Press [Menu] or [Esc] to exit the menus.

You can display the test pattern, and then adjust the focus.

> ✎ We recommend adjusting the focus at least 10 minutes after you start projecting, because images are not stable right after turning on the projector.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Settings** menu and press [Enter].

Image		Return ↵
Signal	Geometry Correction	H/V-Keystone
Settings ↵	Split Screen	
	Zoom	
Extended	Image Shift	
	Volume	0
Network	HDMI Link	
	Lock Setting	
ECO	Pointer Shape	Pointer 1
	Remote Receiver	Front/Rear
Info	User Button	Power Consum...
	Pattern	
Reset	Installation Guide	
	Reset	

3 Select **Pattern** and press [Enter].

Image		Return
Signal	Geometry Correction	H/V-Keystone
	Split Screen	
Settings ↵	Zoom	
	Image Shift	
Extended	Volume	0
	HDMI Link	
Network	Lock Setting	
	Pointer Shape	Pointer 1
ECO	Remote Receiver	Front/Rear
	User Button	Power Consum...
Info	**Pattern** ↵	
	Installation Guide	
Reset	Reset	

4 Select **Test Pattern** and press [Enter].

Image	[Pattern]	Return
Signal	Pattern Display	
	Pattern Type	Pattern 1
Settings ↵	User Pattern	
	Test Pattern ↵	
Extended		
Network		
ECO		
Info		
Reset		
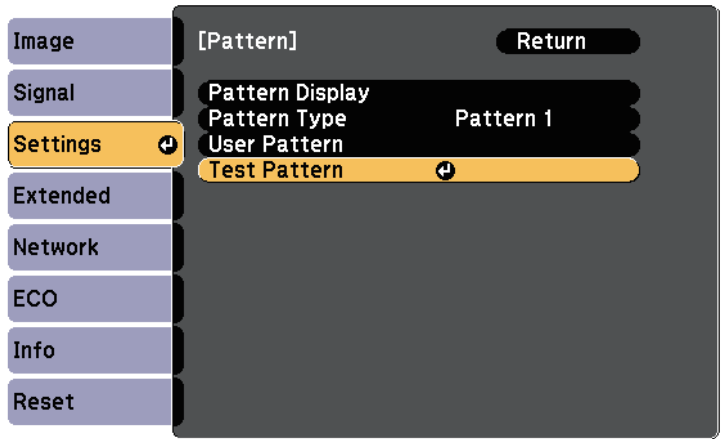
5 Open the air filter cover.
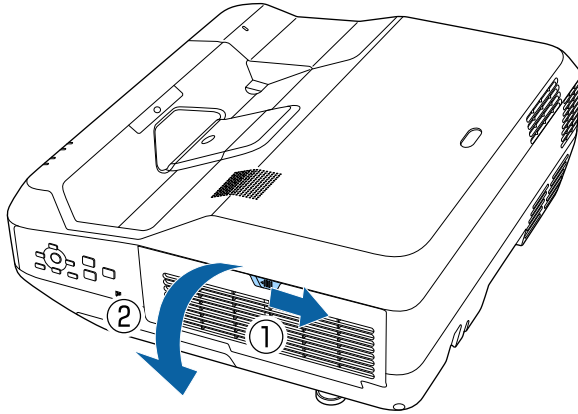
6 Move the focus lever and focus to the center-bottom of the projected screen.
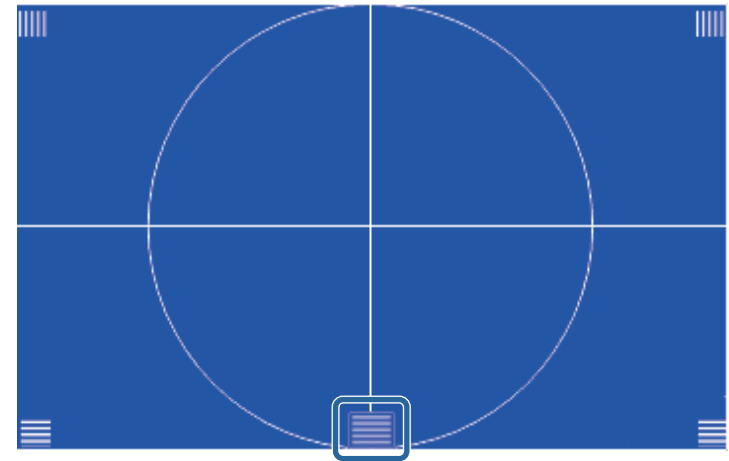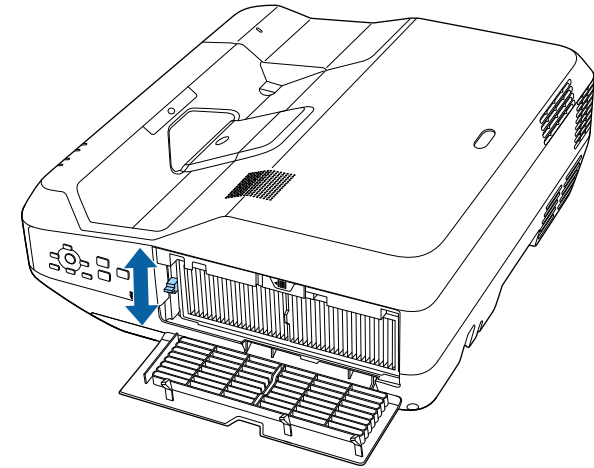
7 Check that the focus matches the corners of the projected screen.
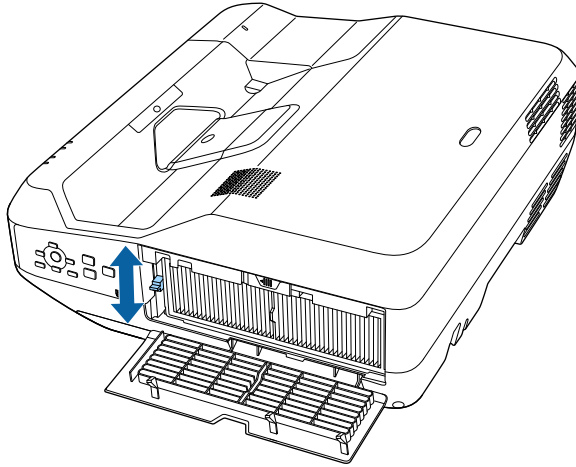
8 To remove the test pattern, press the [Esc] button on the remote control or the control panel.
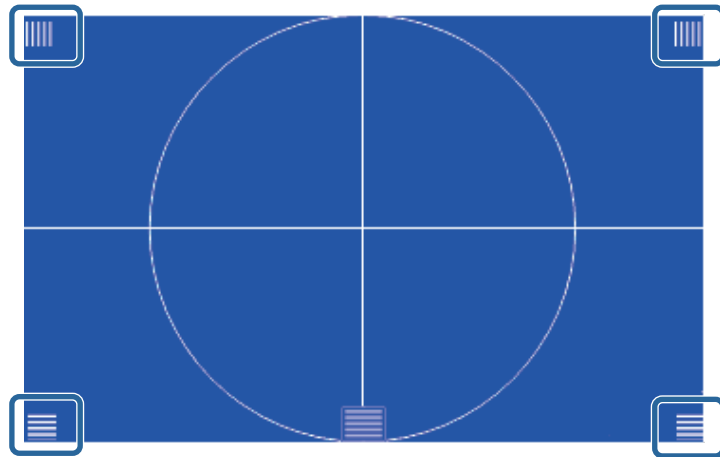
> If any areas are out of focus, use the focus lever to adjust until the corners are the same focus.

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 feet.

The larger the angle of tilt, the harder it becomes to focus. Locate the projector so that it only needs to be tilted at a small angle.

a Turn on the projector and display an image.

b To adjust the image height, rotate the front or rear feet to extend or retract them.
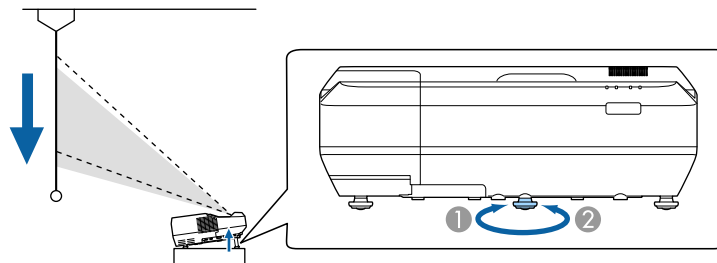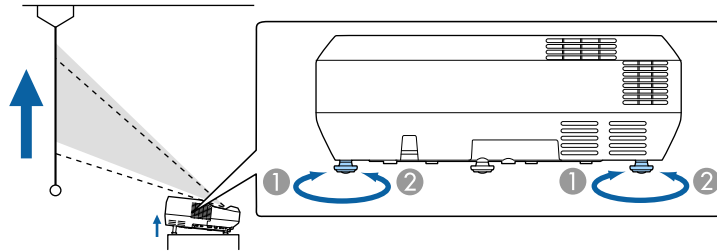
❶ Extend the front or rear feet

❷ Retract the front or rear feet

c If the image is tilted, rotate the rear feet to adjust their height.
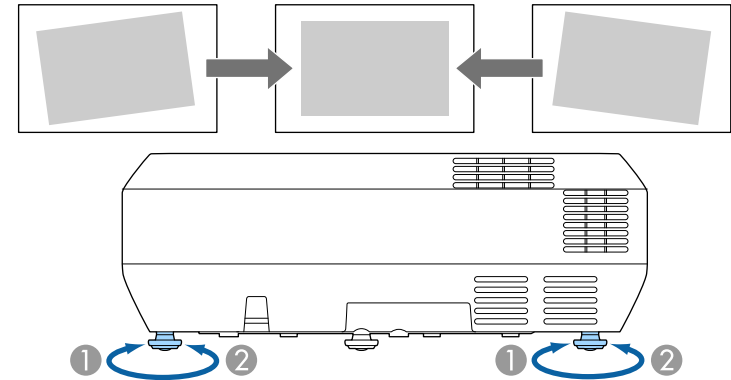
❶ Extend the rear foot

❷ Retract the rear foot

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

❧ **Related Links**
• "Image Shape" p.38

You can project an even, 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 tilt it up or down, or off to the side, you may need to correct the image shape.

> 📓 You cannot correct an image shape using multiple correction methods at the same time.

» Related Links

Correcting the Image Shape with the Keystone Buttons

You can use the projector's keystone correction buttons to correct the shape of an image that is unevenly rectangular.
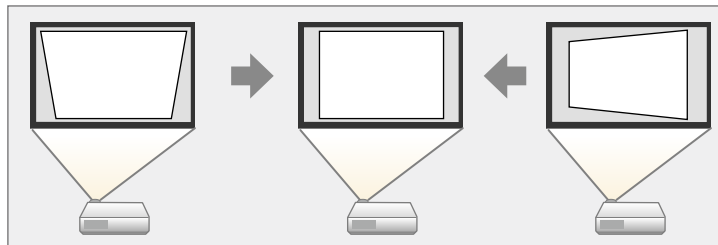
You can use keystone buttons to correct images up to 3° right, left, up, or down.

1 Turn on the projector and display an image.

2 Press one of the keystone adjustment buttons on the control panel to display the Keystone adjustment screen.

[Keystone]
V-Keystone 0
H-Keystone 0
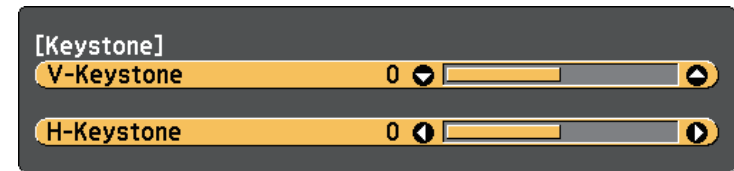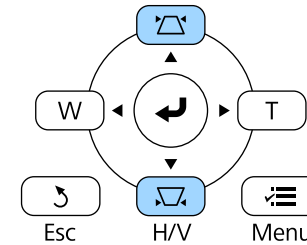
c Press a keystone button to adjust the image shape.
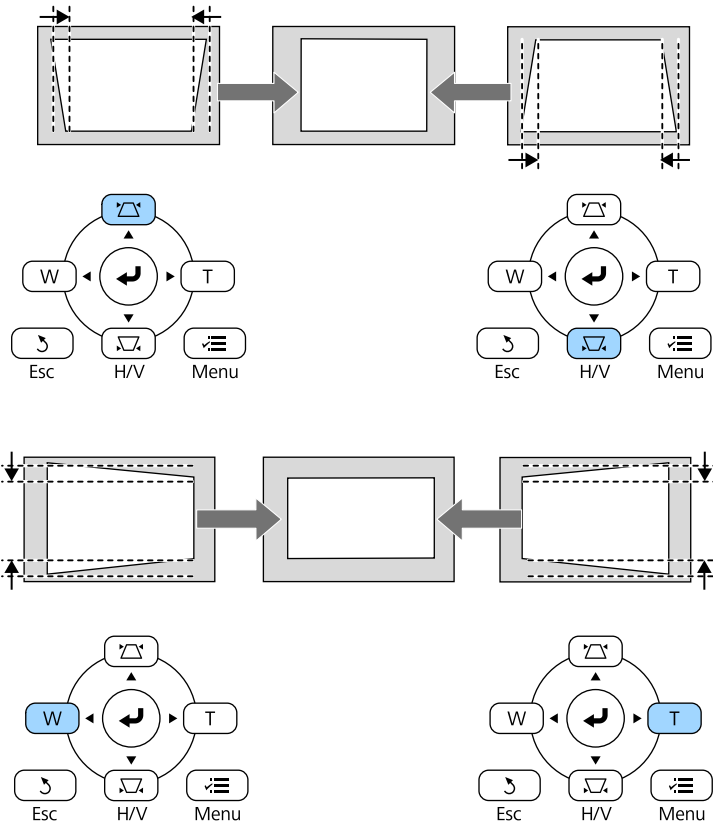
After correction, your image is slightly smaller.

> If the projector is installed out of your reach, you can also correct the shape of the image using the remote control.
> ☛ **Settings** > **Geometry Correction** > **H/V-Keystone**

⇝ Related Links

- "Projector Feature Settings - Settings Menu" p.116

Correcting the 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.
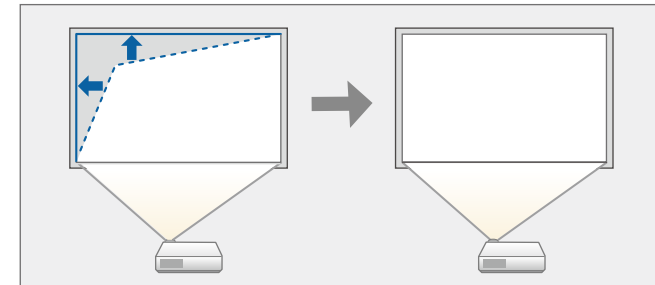
a Turn on the projector and display an image.

b Press the [Menu] button on the control panel or remote control.

3 Select the **Settings** menu and press [Enter].

Image		Return ⏎
Signal	Geometry Correction	H/V-Keystone
	Split Screen	
Settings ⏎	Zoom	
	Image Shift	
Extended	Volume	0
	HDMI Link	
Network	Lock Setting	
	Pointer Shape	Pointer 1
ECO	Remote Receiver	Front/Rear
	User Button	Power Consum...
Info	Pattern	
	Installation Guide	
Reset	Reset	

4 Select **Geometry Correction** and press [Enter].

Image		Return
Signal	Geometry Correction ⏎	H/V-Keystone
	Split Screen	
Settings ⏎	Zoom	
	Image Shift	
Extended	Volume	0
	HDMI Link	
Network	Lock Setting	
	Pointer Shape	Pointer 1
ECO	Remote Receiver	Front/Rear
	User Button	Power Consum...
Info	Pattern	
	Installation Guide	
Reset	Reset	
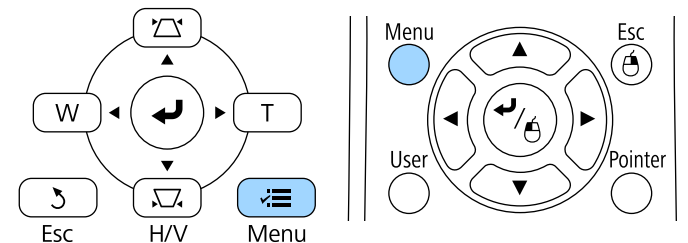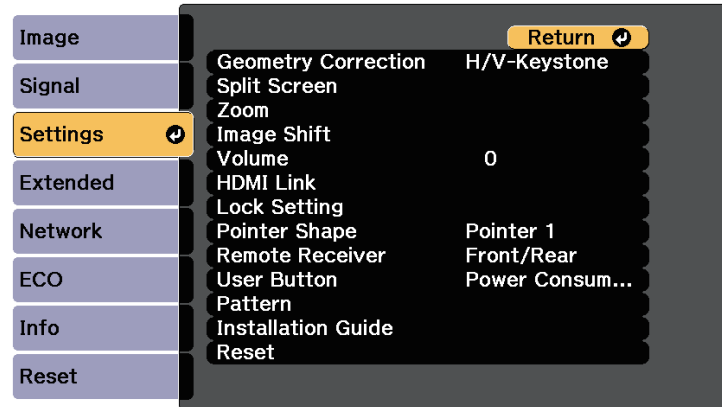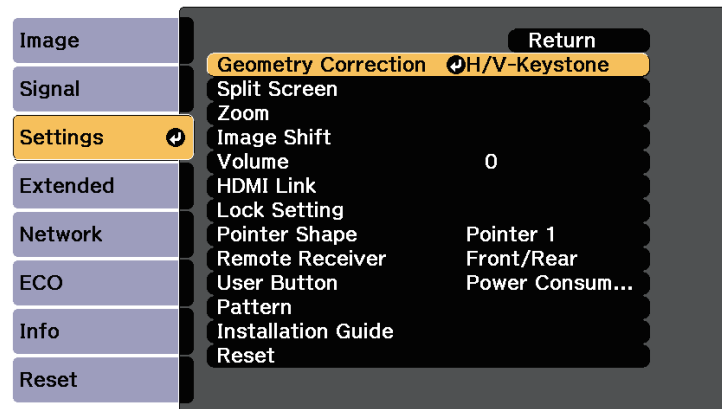
5 Select **Quick Corner** and press [Enter]. Press [Enter] again if necessary.

[Geometry Correction]	Return
H/V-Keystone	
Quick Corner ⏎	
Arc Correction	
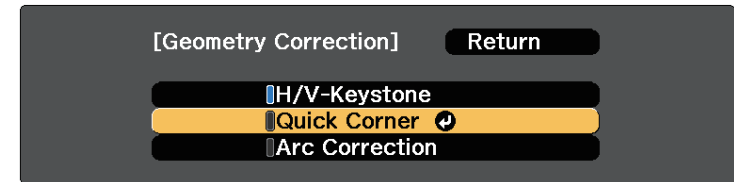
You see the area selection screen.

6 Use the arrow buttons to select the corner of the image you want to adjust. Then press [Enter].

[Quick Corner]
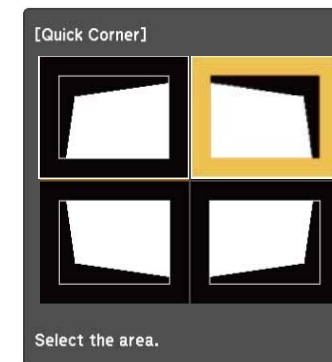
Select the area.

> To reset the Quick Corner corrections, hold down [Esc] for about two seconds while the area selection screen is displayed, and then select **Yes**.

7 Press the arrow buttons to adjust the image shape as necessary.

To return to the area selection screen, press [Enter].

✎ • If you see this screen, you cannot adjust the shape any further in the direction indicated by the gray triangle.

[Quick Corner]

Cannot adjust any further.
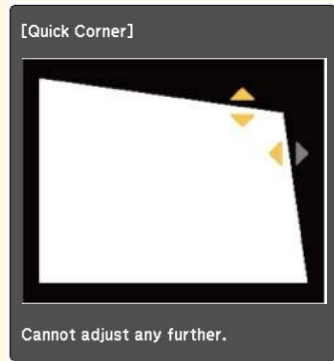
8 Repeat steps 6 and 7 as needed to adjust any remaining corners.

9 When you are finished, press [Esc].

The **Geometry Correction** setting is now set to **Quick Corner** in the projector's **Settings** menu. The next time you press the keystone adjustment buttons on the control panel, the area selection screen is displayed.

➤ **Related Links**
• "Projector Feature Settings - Settings Menu" p.116

Correcting Image Shape with Curved Surface

You can use the projector's Arc Correction setting to adjust the shape of an image projected on a curved or spherical surface.

1 Turn on the projector and display an image.

2 Press the [Menu] button on the control panel or remote control.

W   T

Esc   H/V   Menu

Menu   Esc

User   Pointer

3 Select the **Settings** menu and press [Enter].

		Return
Image		
Signal	Geometry Correction	H/V-Keystone
	Split Screen	
Settings	Zoom	
	Image Shift	
Extended	Volume	0
	HDMI Link	
Network	Lock Setting	
	Pointer Shape	Pointer 1
ECO	Remote Receiver	Front/Rear
	User Button	Power Consum...
Info	Pattern	
	Installation Guide	
Reset	Reset	

4 Select **Geometry Correction** and press [Enter].

		Return
Image		
	Geometry Correction	**H/V-Keystone**
Signal	Split Screen	
	Zoom	
Settings	Image Shift	
	Volume	0
Extended	HDMI Link	
	Lock Setting	
Network	Pointer Shape	Pointer 1
	Remote Receiver	Front/Rear
ECO	User Button	Power Consum...
	Pattern	
Info	Installation Guide	
	Reset	
Reset		

5 Select **Arc Correction** and press [Enter].

[Geometry Correction]	Return
H/V-Keystone	
Quick Corner	
Arc Correction	

6 Select **Arc Correction** and press [Enter].

[Arc Correction]	Return
Load Memory	
Save Memory	
Arc Correction	

You see the area selection screen.

7 Use the arrow buttons to select the area of the image you want to adjust, then press [Enter].

[Arc Correction]
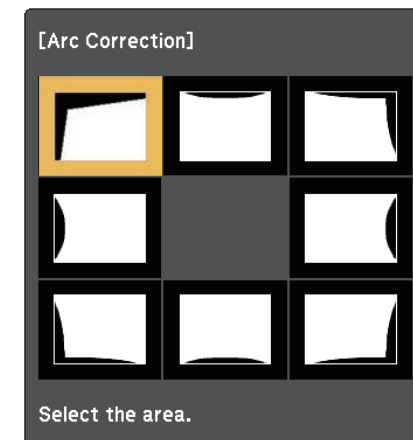
Select the area.

> 📓 To reset the Arc Correction settings, hold down [Esc] for about two seconds while the area selection screen is displayed, and then select **Yes**.

8 Press the arrow buttons to adjust the image shape of the selected area as necessary.

To return to the area selection screen, press [Enter].

> 📓 If you see this screen, you cannot adjust the shape any further in the direction indicated by the gray triangle.
>
> [Arc Correction]
>
> Perform the adjustment.
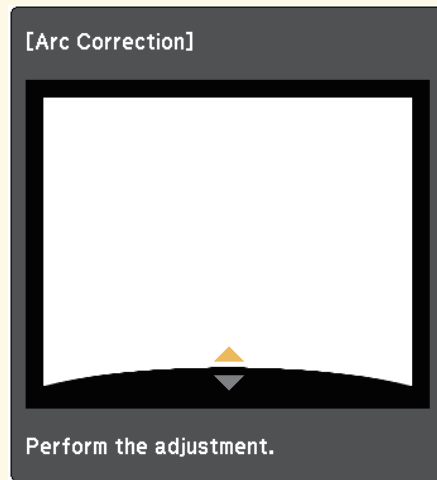
9 Repeat steps 7 and 8 as needed to adjust any remaining areas.

10 When you are finished, press [Esc].

> 📓 To save the current shape of an image you have adjusted, select **Save Memory** in the **Arc Correction** setting. You can save up to three image shapes in the Arc Correction memory.

[Arc Correction]   Return

Load Memory
Save Memory
Arc Correction
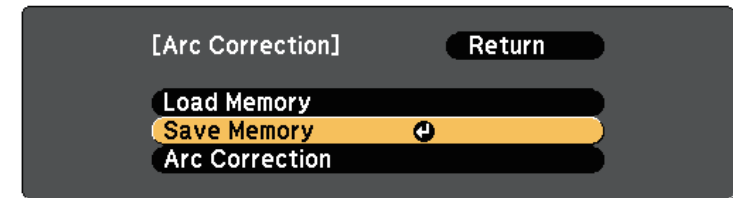
▸ Related Links
- "Loading Image Shape Setting from Memory"

Loading Image Shape Setting from Memory

You can load the settings you made and saved in the **Arc Correction** setting.

> 📓 Before loading the memory, make sure the **Geometry Correction** setting is set to **Arc Correction** in the projector's **Settings** menu.

1 Turn on the projector and display an image.

2 Hold down the [Num] button on the remote control, and then press the numeric button (1, 2, or 3) that matches the number of the saved setting.

Num + 1   Num + 2   Num + 3

Memory1   Memory2   Memory3
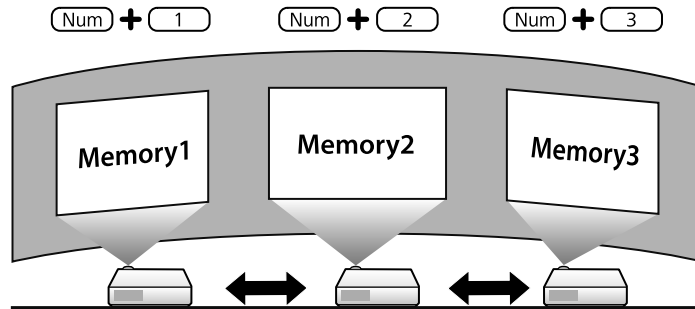
> The illustration above is only an example.

3 When you have finished loading the settings, follow the on-screen instructions.

> - You can also load the settings from **Load Memory** in the projector's **Settings** menu.
> - When an MHL compatible mobile device is connected to the projector, load the settings from **Load Memory** in the projector's **Settings** menu.
>
>   ☞ **Settings** > **Geometry Correction** > **Arc Correction** > **Load Memory**

You can resize the image using the Wide and Tele buttons.

> We recommend adjusting the image size at least 10 minutes after you start projecting, because images are not stable right after turning on the projector.

1 Turn on the projector and display an image.

2 Press the Wide button on the projector's control panel to enlarge the image size. Press the Tele button to reduce the image size.
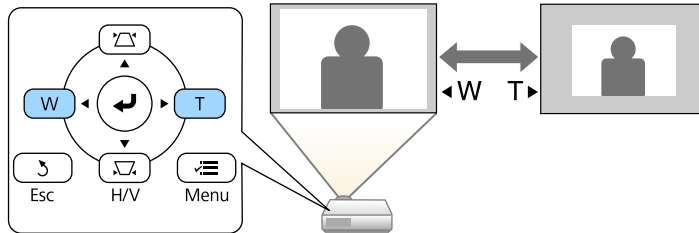
> You can also adjust the **Zoom** setting in the projector's **Settings** menu.

You can use the Image Shift feature to adjust the image position without moving the projector.

> 📝
> • This feature is not available if the Zoom option is set to the widest setting.
> • We recommend adjusting the image position at least 10 minutes after you start projecting, because images are not stable right after turning on the projector.
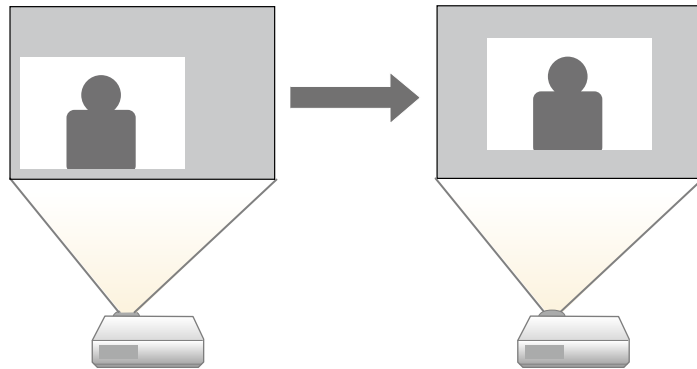
a Turn on the projector and display an image.

b Adjust the image size using the Wide and Tele buttons.

After you adjust the image size, the Image Shift screen is displayed automatically.

c Use the arrow buttons on the projector or remote control to adjust the image position.

[Image Shift]
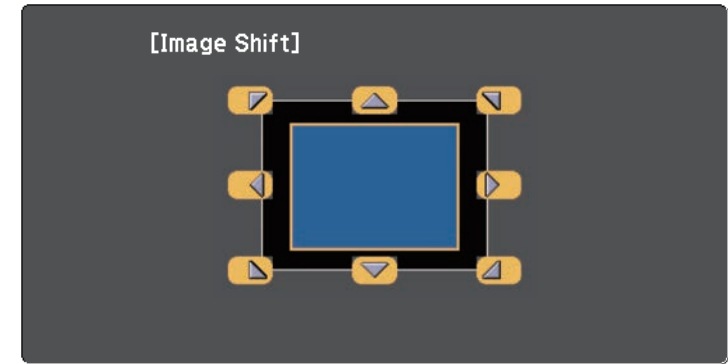
> 📝
> You can shift the image diagonally by pressing any pair of adjacent arrow buttons on the control panel or remote control.

d Press the [Esc] button to close the adjustment screen.

The adjustment screen disappears if no operation is performed after approximately 10 seconds.

> 📝
> • The Image Shift setting is retained even if the projector is turned off. You need to re-adjust the position if you change the installation location or angle of the projector.
> • You can also use the **Settings** menu to adjust the **Image Shift** setting.

When multiple image sources are connected to the projector, such as a computer and DVD player, you can 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 play.

3 Do one of the following:

- Press the [Source Search] button on the control panel or remote control until you see the image from the source you want.
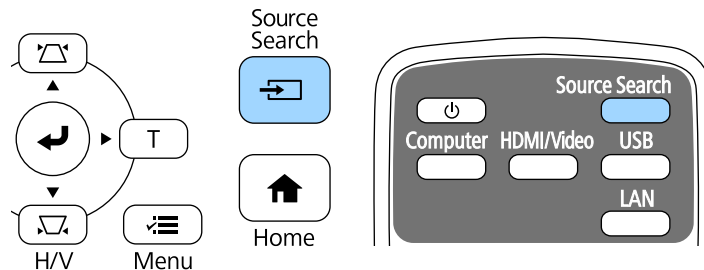
This screen is displayed when no image signal is detected. Check the cable connections between the projector and image source.

[Source Search]

	Signal Status
HDMI1	Off
HDMI2	Off
HDMI3	Off
Computer	Off
Video	Off
USB Display	Off
USB	Off
LAN	Off

·Input an image signal.
·Press ◆ to select the source.
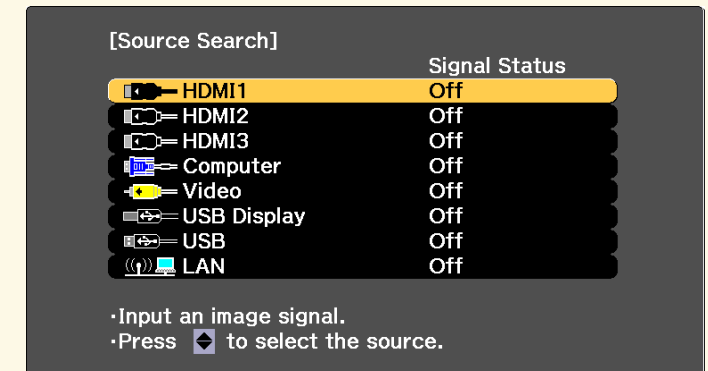
- Press the button for the source you want on the remote control. If there is more than one port for that source, press the button again to cycle through the sources.
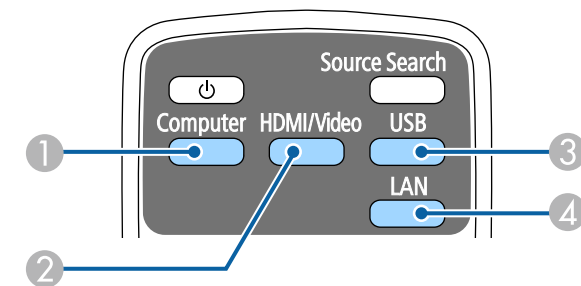
1 Computer port source (Computer port)

2 Video, HDMI, and MHL sources (Video, HDMI1/MHL, HDMI2 and HDMI3 ports)

3 USB port sources (USB-B port and external devices connected to the USB-A ports)

4 Network source (LAN)

- Press the [Home] button on the control panel or remote control.
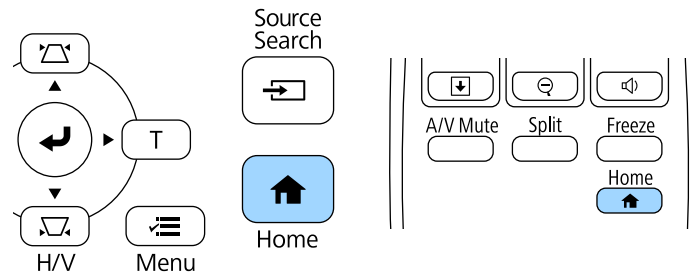
Then select the source you want to use from the screen displayed.
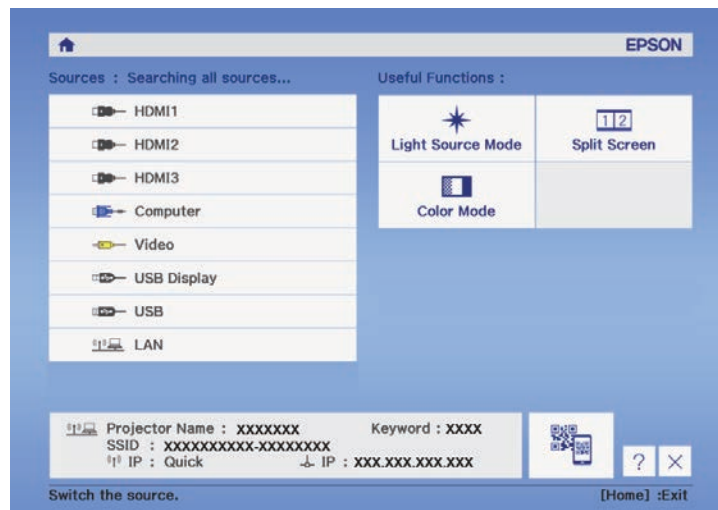
The projector can display images in different width-to-height ratios called aspect ratios. Normally, the input signal from your video source determines the image's aspect ratio. However, for certain images you can change the aspect ratio to fit your screen.

If you always want to use a particular aspect ratio for a certain video input source, you can select it using the projector's **Signal** menu.

❯❯ **Related Links**
- "Changing the Image Aspect Ratio" p.49
- "Available Image Aspect Ratios" p.49
- "Projected Image Appearance with Each Aspect Mode" p.50
- "Input Signal Settings - Signal Menu" p.114

Changing the Image Aspect Ratio

You can change the aspect ratio of the displayed image.

1 Turn on the projector and switch to the image source you want to use.

2 Press the [Aspect] button on the remote control.
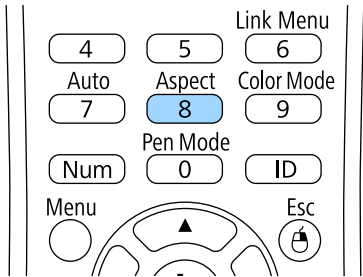
3 To cycle through the available aspect ratios for your input signal, press the [Aspect] button repeatedly.

> 📝 To display images without black bars, set **Resolution** to **Wide** or **Normal** in the projector's **Signal** menu according to the computer's resolution.

❯❯ **Related Links**
- "Input Signal Settings - Signal Menu" p.114

Available Image Aspect Ratios

You can select the following image aspect ratios, depending on the input signal from your image source.
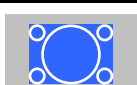
> 📝
> - Black bands and cropped images may project in certain aspect ratios, depending on the aspect ratio and resolution of your input signal.
> - The **Auto** aspect ratio setting is available only for HDMI image sources.
> - Note that using the aspect ratio function of the projector to reduce, enlarge, or split the projected image for commercial purposes or for public viewing may infringe upon the rights of the copyright holder of that image based on copyright law.

Aspect mode	Description
Auto	Automatically sets the aspect ratio according to the input signal and the **Resolution** setting.
Normal	Displays images using the full projection area and maintains the aspect ratio of the image.
16:9	Converts the aspect ratio of the image to 16:9.
Full	Displays images using the full size of the projection area, but does not maintain the aspect ratio.
Zoom	Displays images using the full width of the projection area and maintains the aspect ratio of the image.
Native	Displays images as is (aspect ratio and resolution are maintained).

Projected Image Appearance with Each Aspect Mode

Black bands and cropped images may project in certain aspect ratios, depending on the aspect ratio and resolution of your input signal. See the following table to confirm the position of black bands and cropped images.

> The image for **Native** varies depending on the input signal.

Aspect mode	Aspect ratio for input signals		
	16:10	16:9	4:3
Normal Auto			
16:9			
Full			
Zoom			
Native			

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 the mode designed to match your image and environment, or experiment with the available modes.

⤷ **Related Links**
- "Changing the Color Mode"
- "Available Color Modes"
- "Turning On Automatic Luminance Adjustment"

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 switch to the image source you want to use.

2 Press the [Color Mode] button on the remote control to change the Color Mode.
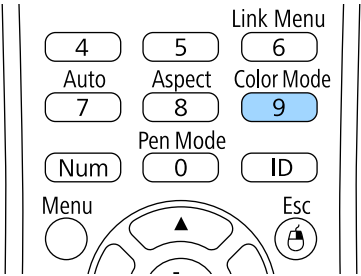
The name of the Color Mode appears briefly on the screen and then image appearance changes.

3 To cycle through all of the available color modes for your input signal, press the [Color Mode] button repeatedly.

📝 You can also set the **Color Mode** setting in the projector's **Image** menu.

⤷ **Related Links**
- "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	This is the brightest mode. Best for prioritizing brightness.
Bright Cinema	Best for projecting vivid images.
Cinema	Best for enjoying content such as movies.
Game	Best for gaming.

Turning On Automatic Luminance Adjustment

You can turn on Dynamic Contrast 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 switch to the image source you want to use.

2 Press the [Menu] button on the control panel or remote control.

3 Select the **Image** menu and press [Enter].

Image	↵		Return ↵
Signal		Color Mode	Dynamic
		Brightness	0
Settings		Contrast	0
		Color Saturation	0
Extended		Tint	0
		Sharpness	0
Network		White Balance	
		Image Enhancement	
ECO		Advanced	
		Dynamic Contrast	Off
Info		Reset	
Reset			
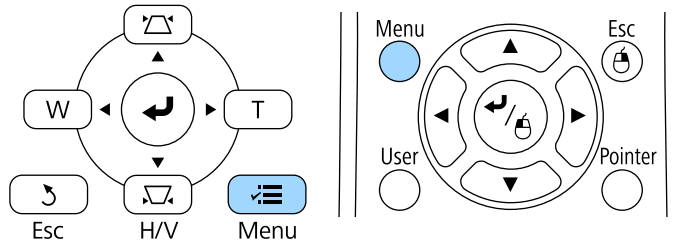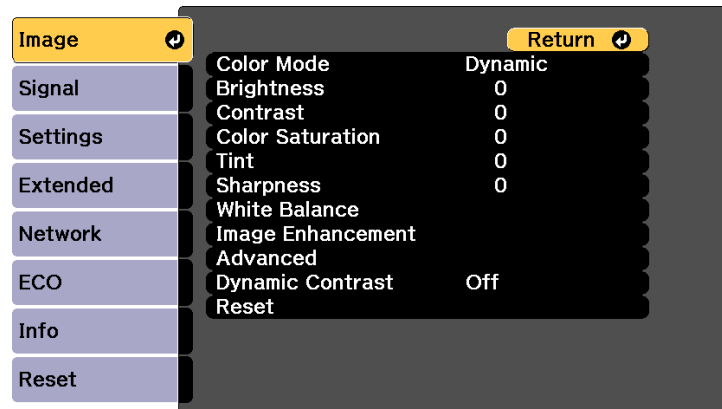
4 Select **Dynamic Contrast** and press [Enter].

Image	↵		Return
Signal		Color Mode	Dynamic
		Brightness	0
Settings		Contrast	0
		Color Saturation	0
Extended		Tint	0
		Sharpness	0
Network		White Balance	
		Image Enhancement	
ECO		Advanced	
		Dynamic Contrast	↵Off
Info		Reset	
Reset			

5 Choose one of the following options and press [Enter]:

- **High Speed** to adjust brightness as soon as the scene changes.
- **Normal** for standard brightness adjustment.

6 Press [Menu] or [Esc] to exit the menus.

You can fine-tune various aspects of how colors are displayed in your projected images.

» Related Links

- "Adjusting the Hue, Saturation, and Brightness"
- "Adjusting the Gamma"
- "Adjusting the Skin Tone"

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 switch to the image source you want to use.

2 Press the [Menu] button on the control panel or remote control.

3 Select the **Image** menu and press [Enter].

Image	Return
Signal	Color Mode	Dynamic
	Brightness	0
Settings	Contrast	0
	Color Saturation	0
Extended	Tint	0
	Sharpness	0
Network	White Balance	
	Image Enhancement	
ECO	Advanced	
	Dynamic Contrast	Off
Info	Reset	
Reset		
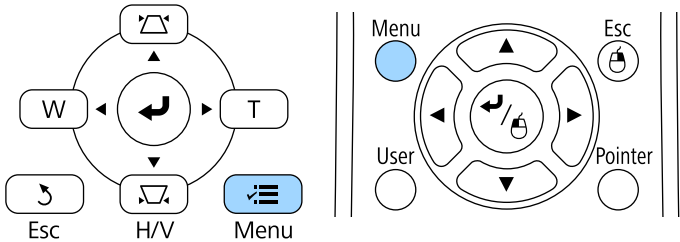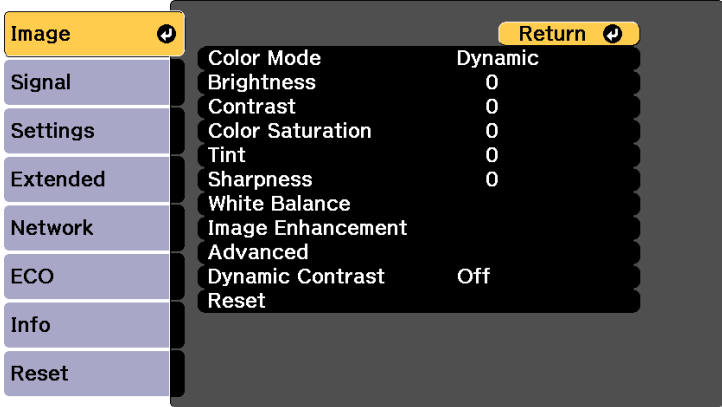
4 Select **Advanced** and press [Enter].

5 Select **RGBCMY** and press [Enter].

6 Select the color to adjust, and press [Enter].

[RGBCMY]	Hue	Saturation	Return Brightness
R	0	0	0
G	0	0	0
B	0	0	0
C	0	0	0
M	0	0	0
Y	0	0	0
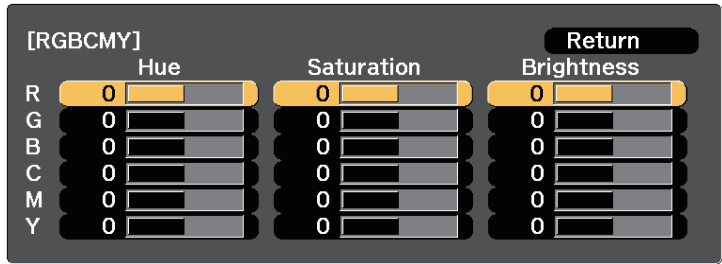
7 Do the following as necessary for each setting:

- 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 color brightness of the color, adjust the **Brightness** setting.

```
[R]                                          Return ⏎
Hue           0 R  ◀ ▭▭▭▭▭▭     ▶ R
Saturation    0    ◀ ▭▭▭▭▭       ▶
Brightness    0    ◀ ▭▭▭▭▭       ▶
```
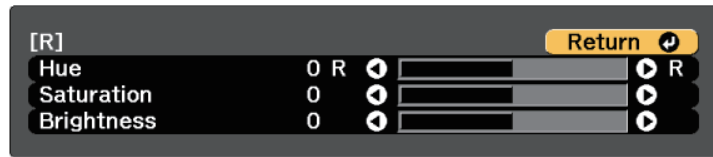
8 Press [Menu] or [Esc] to exit the menus.

Adjusting the Gamma

You can correct differences in projected image colors that occur between different image sources by adjusting the Gamma setting.

1 Turn on the projector and switch to the image source you want to use.

2 Press the [Menu] button on the control panel or remote control.

3 Select the **Image** menu and press [Enter].

```
Image        ⏎                               Return ⏎
                        Color Mode           Dynamic
Signal                  Brightness           0
                        Contrast             0
Settings                Color Saturation     0
                        Tint                 0
Extended                Sharpness            0
                        White Balance
Network                 Image Enhancement
                        Advanced
ECO                     Dynamic Contrast     Off
                        Reset
Info

Reset
```
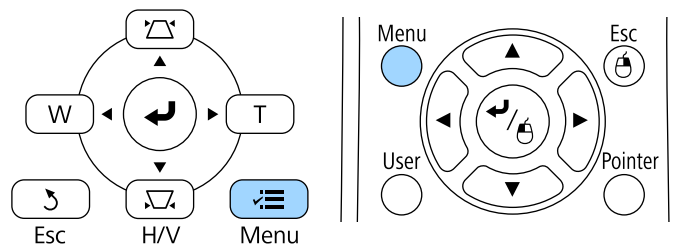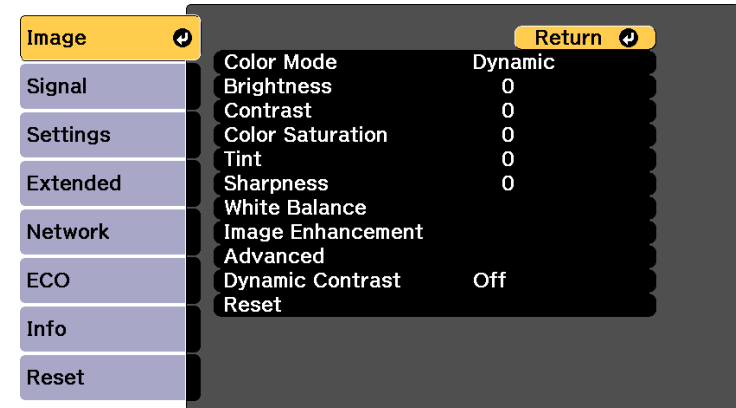
4 Select **Advanced** and press [Enter].

5 Select **Gamma** and press [Enter].

6 Select and adjust the correction value.

```
[Gamma]                                      Return

     2 ⏎
     1
     0
    -1
    -2
```
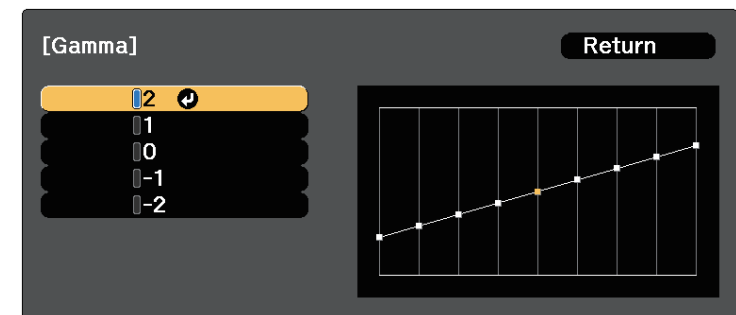
When you select a smaller value, you can reduce the overall brightness of the image to make the image sharper. When you select a larger value,

the dark areas of images become brighter, but the color saturation for lighter areas may become weaker.
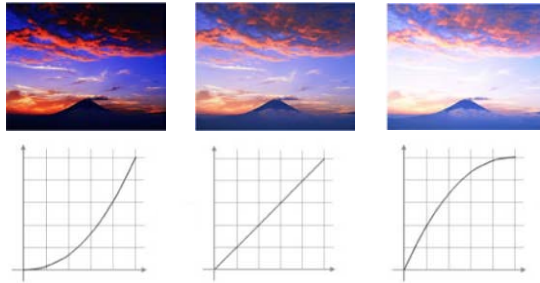
7 Press [Menu] or [Esc] to exit the menus.

Adjusting the Skin Tone

You can make fine adjustments to the color tone by adjusting the G-M Correction setting.

1 Turn on the projector and switch to the image source you want to use.

2 Press the [Menu] button on the control panel or remote control.

3 Select the **Image** menu and press [Enter].

Image	Return
	Color Mode — Dynamic
Signal	Brightness — 0
	Contrast — 0
Settings	Color Saturation — 0
	Tint — 0
Extended	Sharpness — 0
	White Balance
Network	Image Enhancement
	Advanced
ECO	Dynamic Contrast — Off
	Reset
Info	
Reset	
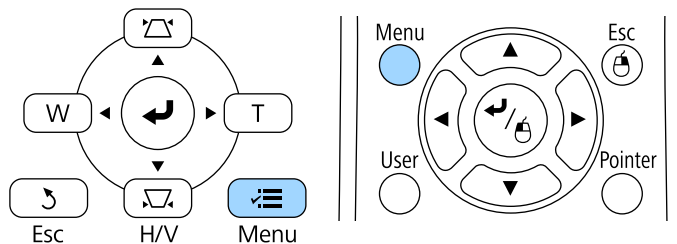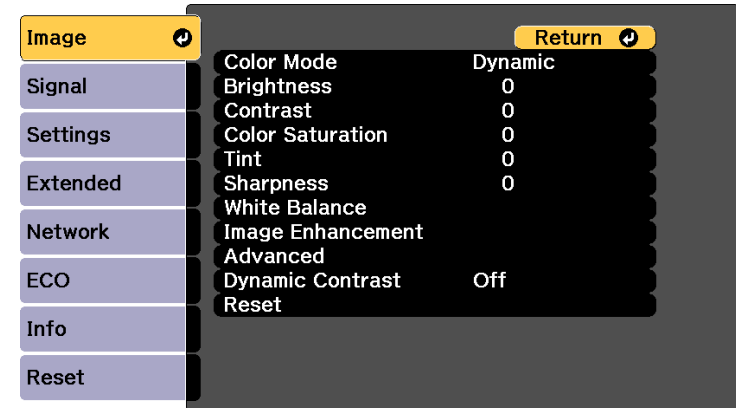
4 Select **White Balance** and press [Enter].

5 Select **G-M Correction** and press [Enter].

6 Press the left or right arrow button to adjust the skin tone of the image.

[White Balance]   Return
G-M Correction   0

Higher values tint the image blue and lower values tint the image red.

7 Press [Menu] or [Esc] to exit the menus.

You can adjust the brightness of your projector's light source.

1 Turn on the projector and switch to the image source you want to use.

2 Press the [Menu] button on the control panel or remote control.
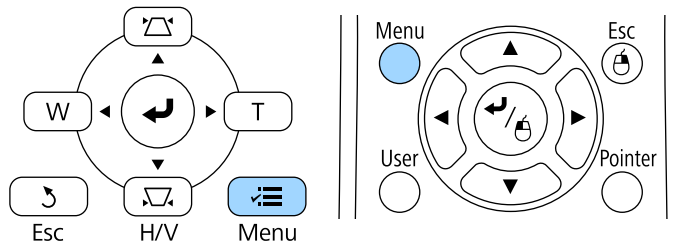
3 Select the **ECO** menu and press [Enter].
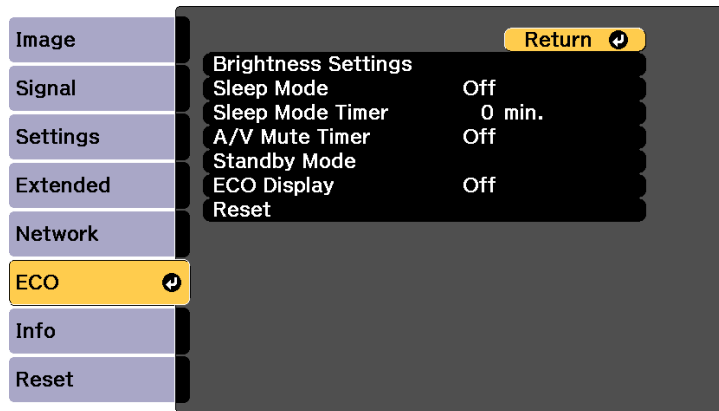
4 Select **Brightness Settings** and press [Enter].
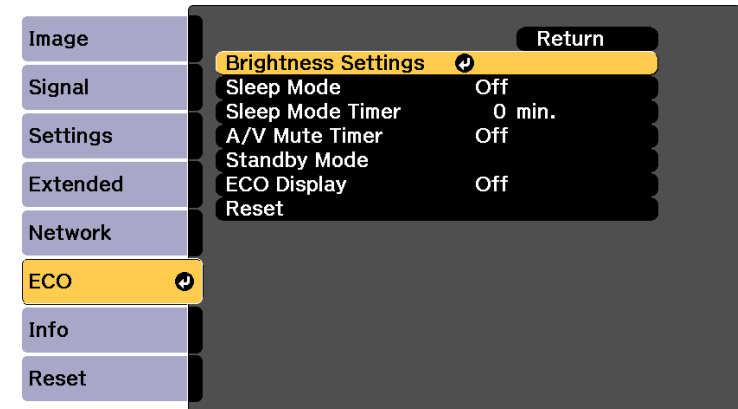
5 Select **Light Source Mode** and press [Enter].

6 Select one of the following options:

- **Normal** lets you set the brightness to the maximum level. This makes the estimated life span of the light source approximately 20,000 hours.

- **Quiet** lets you set the brightness to 70% and reduces fan noise. This makes the estimated life span of the light source approximately 20,000 hours.

- **Extended** lets you set the brightness to 70% and extends the life expectancy of the light source. This makes the estimated life span of the light source approximately 30,000 hours.

- **Custom** lets you to select a custom brightness level between 70 to 100%.

7 If you selected **Custom**, select **Brightness Level** from the Brightness Settings screen and use the left and right arrow buttons to select the brightness.

8 Press [Menu] or [Esc] to exit the menus.

Brightness Level setting	Hours
70%	30000 hours

Light Source Life Span

The estimated life span of the light source varies depending on the **Brightness Level** setting.

> - The light source life span varies depending on the environmental conditions and usage.
> - The hours listed here are an approximate and are not guaranteed.
> - After 20,000 hours of use, you may need to replace parts in the projector.

Brightness Level and light source life
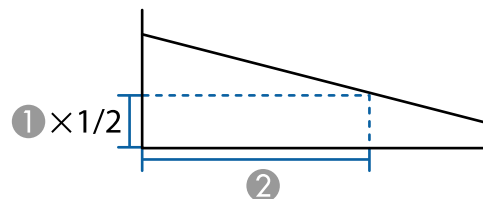
❶ Brightness level

❷ Time before the brightness of the light source is reduced by half (approximate)

Brightness Level setting	Hours
100%	20000 hours
90%	21000 hours
80%	24000 hours

The volume buttons control the projector's internal speaker system.

You can also control the volume of any external speakers you connected to the projector.

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

> ✎ • To adjust the volume for connected audio/video system, set the **HDMI Link** setting to **On** and the **Audio Out Device** setting to **AV System** in the projector's **Settings** menu.
> ☞ **Settings** > **HDMI Link** > **HDMI Link**
> ☞ **Settings** > **HDMI Link** > **Audio Out Device**

1 Turn on the projector and start a presentation.

2 To lower or raise the volume, press the [Volume] buttons on the remote control as shown.
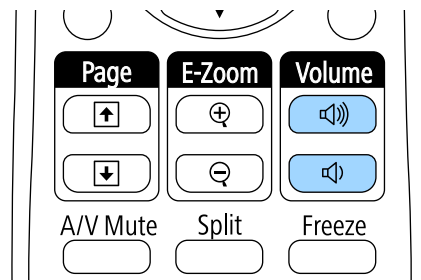
A volume gauge appears on the screen.

3 To set the volume to a specific level for an input source, select **Volume** in the projector's **Settings** menu.

> ⚠ **Caution**
>
> Do not start a presentation at a high volume setting. Sudden loud noises may cause hearing loss.
>
> Always lower the volume before powering off, so that you can power on and then gradually increase the volume.

➤ **Related Links**
• "Projector Feature Settings - Settings Menu" p.116

Adjusting Projector Features

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

When an audio/video source that meets the HDMI CEC standard is connected to the projector's HDMI port, you can use the projector's remote control to control certain features of the linked device.

Example: Projector, audio/video system, and multi-media players connection
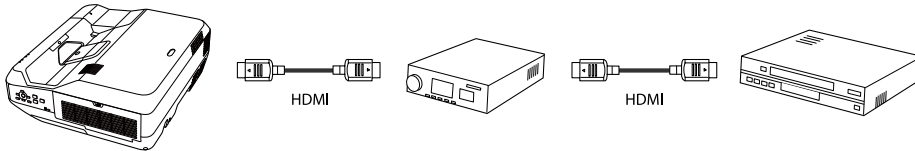
> 📝 • As long as the connected device meets the HDMI CEC standard, you can use the HDMI Link features even if the audio/video system in-between does not meet the HDMI CEC standard.
> • Up to 3 multi-media players that meet the HDMI CEC standard can be connected at the same time.

» Related Links
• "Operating the Connected Devices Using the HDMI Link Features"

Operating the Connected Devices Using the HDMI Link Features

You can select the connected device that is available for HDMI Link and control the selected device using the HDMI Link features.

> 📝 • You must also configure the connected device. See the documentation supplied with the device for more information.
> • Some connected devices or functions of those devices may not operate properly even if they meet the HDMI CEC standard. See the documentation supplied with the device for more information.
> • Use a cable that supports the HDMI standard.

1 Press the [Menu] button on the control panel or remote control.
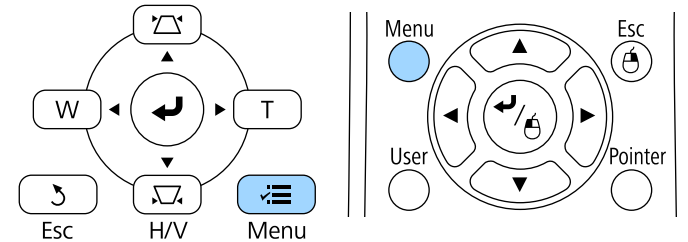
2 Select the **Settings** menu and press [Enter].
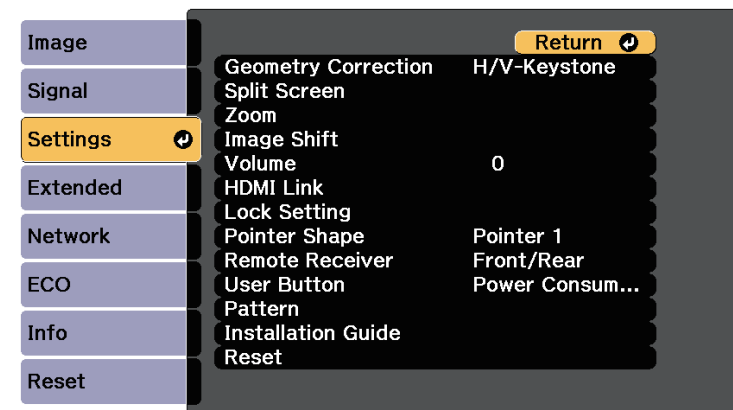
3 Select **HDMI Link** and press [Enter].

4 Select **HDMI Link** and press [Enter].

5 Select **On** and press [Enter].

6 Select **Device Connections** and press [Enter].

You see the Device Connections list.

7 Select the device you want to control and project the image from, and press [Enter].
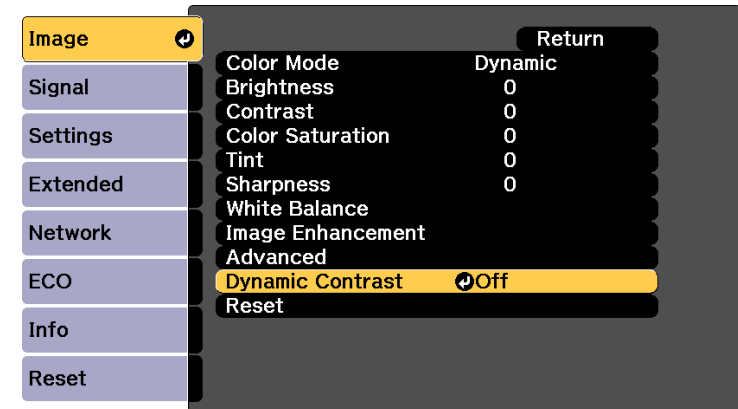
```
[Device Connections]                    Return

 Type              Name           Source
 MHL               XXX-XXX        HDMI1
 Recorder 1        XXX-XXX        HDMI2
 Player 1          XXX-XXX        HDMI2




 AV System                        HDMI2
```
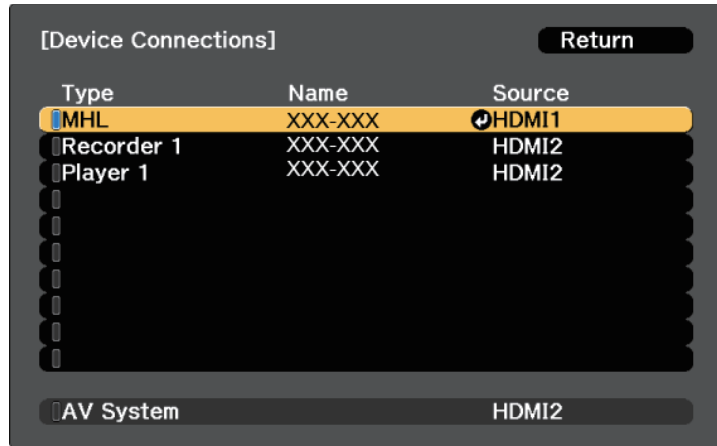
> ✎ • A linked device is indicated by a blue mark.
>   • The device name is left blank if it cannot be acquired.

8 Press [Esc] to select the HDMI Link options as necessary.

- **Audio Out Device** lets you select whether to output audio from the internal speakers or a connected audio/video system.

- **Power On Link** lets you control 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. Select **Device -> PJ** or **Bidirectional** to turn the projector on when the linked device is turned on.

- **Power Off Link** lets you control whether linked devices are turned off when the projector is turned off.

> ✎ • **Power Off Link** only works when the connected device's CEC power link function is enabled.
>   • Note that depending on the status of the connected device (for example, if it is recording), the device may not be turned off.

- **Link Buffer** improves the performance of the linked operations by changing the settings if the HDMI Link function is not working correctly.

```
 Image          [HDMI Link]                 Return

 Signal          Device Connections   ↵
                 HDMI Link            On
 Settings  ↵     Audio Out Device     Projector
                 Power On Link        Off
 Extended        Power Off Link       Off
                 Link Buffer          Off
 Network

 ECO

 Info

 Reset
```
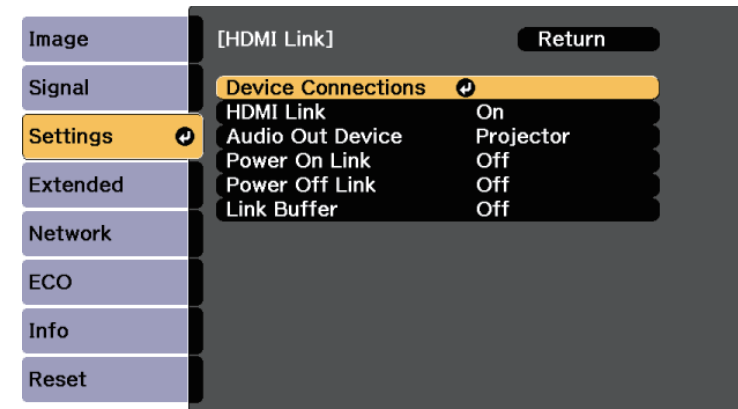
9 Press [Menu] or [Esc] to exit the menus.

You can use the projector's remote control to control the linked device such as playback, stop, or adjust the volume.

> ✎ • The input source is changed to HDMI when content is played back on the linked device.

↳ **Related Links**
- "Projector Feature Settings - Settings Menu"

You can use the split screen feature to simultaneously project two images from different image sources. You can control the split screen feature using the remote control or the projector menus.
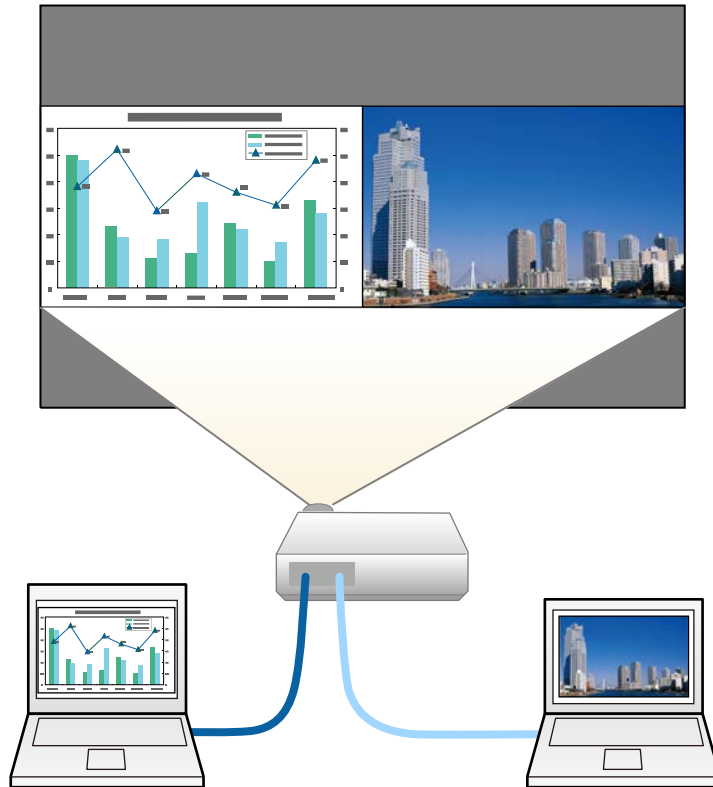
> 📝 • While using the split screen feature, other projector features may not be available and some settings may be automatically applied to both images.

1 Press the [Split] button on the remote control.
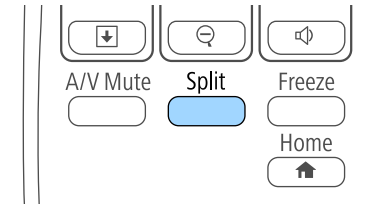
The currently selected input source moves to the left of the screen.

> 📝 You can perform the same operations from **Split Screen** in the projector's **Settings** menu.

2 Press the [Menu] button.

You see this screen:

[Split Screen Setup]

Screen Size	Equal
Source	
Swap Screens	
Audio Source	Auto
Align	Top

[Network]
Display the QR Code
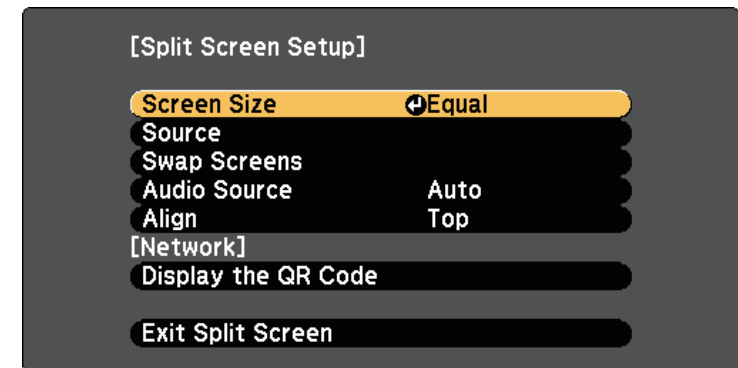
Exit Split Screen

c To select an input source for the other image, select the **Source** setting, press [Enter], select the input source, select **Execute**, and press [Enter].
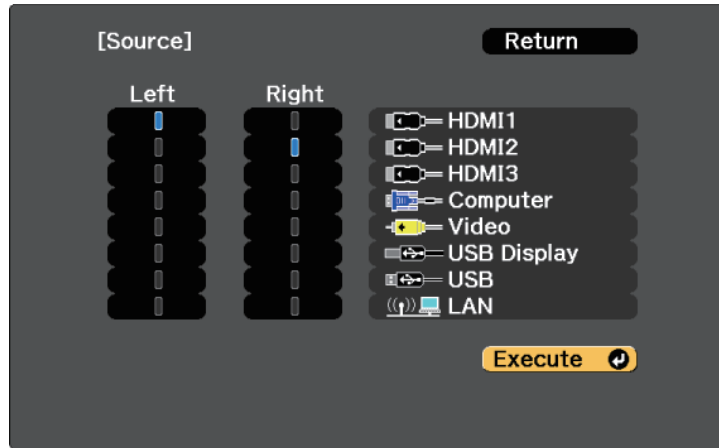
> ✎ • You can only select input sources that can be combined.
> • While using the split screen feature, the **Source** screen appears when you change the input source from the remote control.

d To switch images, select **Swap Screens** and press [Enter].

The projected images on the left and right are swapped.

e To enlarge one image while reducing the other image, select **Screen Size**, press [Enter], select a size, and press [Enter]. To exit the menu, press [Menu].

> ✎ Depending on the video input signals, the images may not appear at the same size even if you select **Equal**.

f To select the audio, select **Audio Source**, press [Enter], select an audio option, and press [Enter]. To exit the menu, press [Menu].

> ✎ Select **Auto** to hear audio from the largest screen or the left screen.

g To align the projected images, select **Align**, press [Enter], select the setting, and press [Enter] again. To exit the menu, press [Menu].

h To exit the split screen feature, press [Split] or [Esc].

» Related Links

Unsupported Input Source Combinations for Split Screen Projection

These input source combinations cannot be projected on a split screen.

• Computer and Video

• USB Display and USB/LAN

• USB and LAN

Split Screen Projection Restrictions

Operating restrictions

The following operations cannot be performed during split screen projection.

- Setting the projector's menu
- E-Zoom
- Switching the aspect mode (the aspect mode is set to **Normal**)
- Operations using the [User] button on the remote control
- Dynamic Contrast

Image restrictions

- If you make adjustments such as **Brightness**, **Contrast**, **Color Saturation**, **Tint**, and **Sharpness** in the projector's **Image** menu, you can apply them only to the image on the left. Default adjustments are applied to the image on the right. Adjustments that affect the entire projected image such as **Color Mode** and **Color Temp.** are applied for both left and right images.
- Even if you make adjustments for **Noise Reduction** and **Deinterlacing** in the projector's **Image** menu, **Noise Reduction** is set to 0 and **Deinterlacing** is set to **Off** for the image on the right.
  ☛ **Image** > **Image Enhancement** > **Noise Reduction**
  ☛ **Image** > **Advanced** > **Deinterlacing**
- Even if you set **Display Background** to **Logo** in the projector's **Extended** menu, the blue screen appears when no image signal is being input.

➤ **Related Links**

You can use your projector's PC Free feature whenever you connect a USB device that contains compatible presentation files. This lets you quickly and easily display a presentation and control it using the projector's remote control.
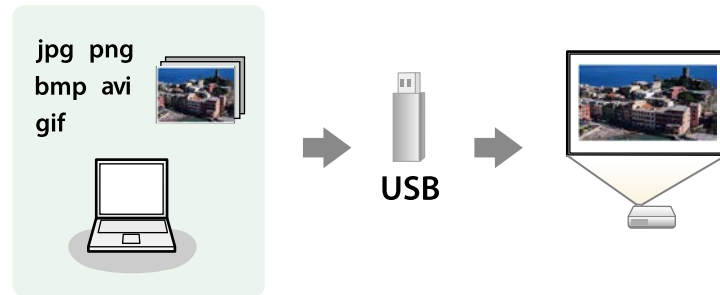
❯❯ **Related Links**

Supported PC Free File Types

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

> • 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.

File contents	File type (extension)	Details
Image	.jpg	Make sure the file is not: • CMYK format • Progressive format • Highly compressed • Above 8192 × 8192 resolution
	.bmp	Make sure the file is not: • Above 1280 × 800 resolution
	.gif	Make sure the file is not: • Above 1280 × 800 resolution • Animated
	.png	Make sure the file is not: • Above 1920 × 1200 resolution
Movie	.avi (Motion JPEG)	Supports only AVI 1.0. Make sure the file is not: • Saved with an audio codec other than PCM or ADPCM • Above 1280 × 720 resolution • Larger than 2 GB

Precautions on PC Free Projection

Note the following precautions when using PC Free features.

- You cannot use a USB key for PC Free features.
- Do not disconnect the USB storage 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 storage 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 device with your projector.

- Some commercially available USB card readers may not be compatible with the projector.
- The projector can recognize up to 5 cards inserted into the connected card reader at one time.
- You cannot correct keystone distortion while projecting in PC Free, so correct the image shape before you begin your presentation.
- You can use the following functions while projecting in PC Free.

  - Freeze
  - A/V Mute
  - E-Zoom
  - Pointer

⤷ **Related Links**
- "Stopping Video Action Temporarily" p.71
- "Shutting Off the Image and Sound Temporarily" p.70
- "Zooming Images" p.72
- "Using the Remote Control as a Pointer" p.75

Starting a PC Free Slide Show

After connecting a USB device to the projector, you can switch to the USB input source and start your slide show.

> - You can change the PC Free operation options or add special effects by highlighting **Option** at the bottom of the screen and pressing [Enter].

1 Press the [USB] button on the remote control.

The PC Free file list screen is displayed.

> - If the Select Drive screen is displayed, press the arrow buttons to select the drive and press [Enter].
> - To display images on the other USB drive, highlight **Select Drive** at the top of the file list screen and press [Enter].

2 Do one of the following 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 [Enter].
- 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], or press the [Page] up or down buttons on the remote control.

3 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].

> - You can change the image switching time by highlighting **Option** at the bottom of the screen and pressing [Enter].
> - If any file names are longer than the display area or include unsupported symbols, the file names may be shortened or changed only on the screen display.

d While projecting, use the following commands to control the display:

- To rotate a displayed image, press the up or down arrow button.
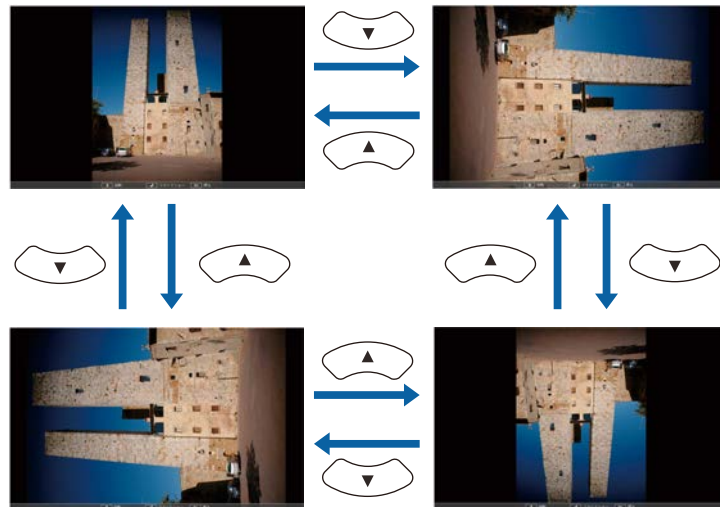
- To move to the next or previous image, press the left or right arrow button.

e To stop the display, follow the on-screen instructions or press the [Esc] button.

You return to the file list screen.

f Turn off the USB device, if necessary, and then disconnect the device from the projector.

» Related Links
- "PC Free Display Options" p.68
- "Connecting to a USB Device" p.23

Starting a PC Free Movie Presentation

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

> - You can change the PC Free operation options by highlighting **Option** at the bottom of the screen and pressing [Enter].

a Press the [USB] button on the remote control.

The PC Free file list screen is displayed.

📝 • If the Select Drive screen is displayed, press the arrow buttons to select the drive and press [Enter].
• To display movie files on the other USB drive, highlight **Select Drive** at the top of the file list screen and press [Enter].

2 Do one of the following 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 [Enter].

• 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], or press the [Page] up or down buttons on the remote control.

3 To play back a movie, press the arrow buttons to highlight the file and press [Enter].

📝 • If any file names are longer than the display area or include unsupported symbols, the file names may be shortened or changed only on 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.

4 To stop movie playback, press the [Esc] button, highlight **Exit**, and press [Enter].

You return to the file list screen.

5 Turn off the USB device, if necessary, and then disconnect the device from the projector.

➔ **Related Links**
• "PC Free Display Options" p.68
• "Connecting to a USB Device" p.23

PC Free Display Options

You can select these display options when using PC Free. To access this screen, highlight **Option** at the bottom of the PC Free file list screen and press [Enter].

Setting	Options	Description
Display Order	Name Order	Displays files in name order
	Date Order	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 slide show continuously
	Off	Displays a slide show once
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

Setting	Options	Description
Effect	No	No effect
	Wipe	Transitions between images using a wipe effect
	Dissolve	Transitions between images using a dissolve effect
	Random	Transitions between images using a random variety of effects

You can temporarily turn off the projected image and sound if you want to redirect your audience's attention during a presentation. Any sound or video action continues to run, however, so you cannot resume projection at the point that you stopped it.
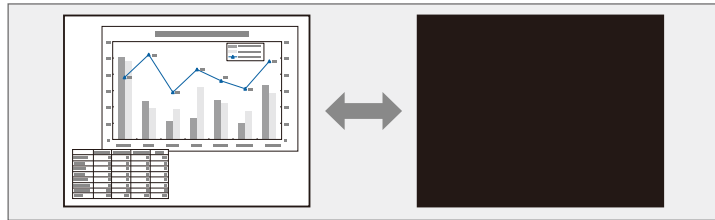
1 Press the [A/V Mute] button on the remote control to temporarily stop projection and mute any sound.
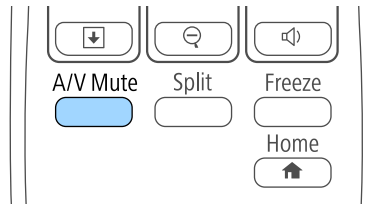
2 To turn the image and sound back on, press [A/V Mute] again.

> ✎ • The projector's power automatically turns off 30 minutes after A/V Mute is enabled. You can disable this feature in the projector's **ECO** menu.
> ☞ **ECO > A/V Mute Timer**

» Related Links
- "Projector Setup Settings - Extended Menu" p.119
- "Projector Setup Settings - ECO Menu" p.127

You can temporarily stop the action in a video or computer presentation and keep the current image on the screen. Any sound or video action continues to run, however, so you cannot resume projection at the point that you stopped it.

1 Press the [Freeze] button on the remote control to stop the video action.
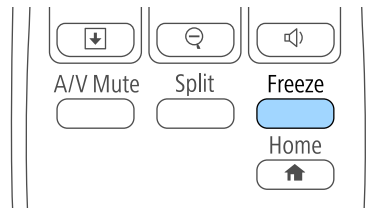
2 To restart the video action in progress, press [Freeze] again.

You can draw attention to parts of a presentation by zooming into a portion of the image and enlarging it on the screen.
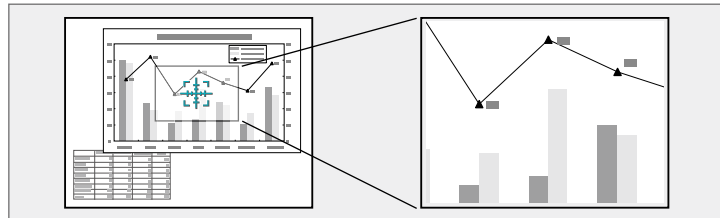
The enlarged image is projected and the enlargement ratio is displayed on the screen.

You can enlarge the selected area to between one to four times in 25 incremental steps.

1 Press the [E-Zoom] + button on the remote control.
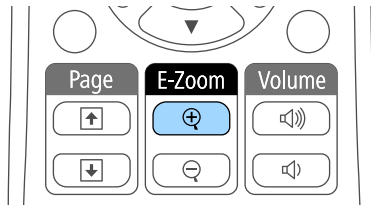
You see a crosshair on the screen indicating the center of the zoom area.

2 Use the following buttons on the remote control to adjust the zoomed image:

- Use the arrow buttons to position the crosshair in the image area you want to zoom into. To move the crosshair diagonally, press any pair of adjacent arrow buttons at the same time.

- Press the [E-Zoom] + button repeatedly to zoom into the image area. Press and hold the [E-Zoom] + button to zoom in more quickly.

- To pan around the zoomed image area, use the arrow buttons.

- To zoom out of the image, press the [E-Zoom] – button.

- To return to the original image size, press [Esc].

You can use the projector's remote control as a wireless mouse so you can control projection at a distance from the computer.

> ✎ You can use the wireless mouse features with Windows Vista and later, or OS X 10.7.x and later.

1 Connect the projector to a computer using the projector's USB-B, Computer, or HDMI port.

> ✎ The wireless mouse function does not work when projecting images from a device connected to the HDMI1/MHL port using an MHL cable.

2 If you connected your computer to the port other than the USB-B port, also connect a USB cable to the projector's USB-B port and to a USB port on your computer (for wireless mouse support).

3 Start your presentation.

4 Use the following buttons on the remote control to control your presentation:
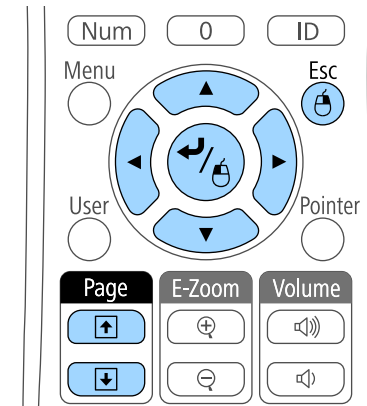
- To move through slides or pages, press the [Page] up or down buttons.
- To move the cursor on the screen, use the arrow buttons. To move the cursor diagonally, press any pair of adjacent arrow buttons at the same time.
- To left-click, press the [Enter] button once (press it twice to double-click). To right-click, press the [Esc] button.
- To drag-and-drop, hold the [Enter] button as you move the cursor with the arrow buttons, then release [Enter] at the destination.

> ✎ • If the mouse button settings are set to reverse on the computer, the operation of the remote control buttons is also reversed.
> • The Wireless Mouse function does not work under the following conditions:
>   • When the projector's menu or a Help screen is displayed.
>   • When operating functions other than the Wireless Mouse function (such as adjusting the volume).
>   However, when using the E-Zoom or Pointer function, the page up or down function is available.

⤷ Related Links

You can use the projector's remote control as a pointer to help you focus your audience on important information on the screen. The default pointer shape is an arrow. You can change the shape in the **Pointer Shape** setting in the projector's **Settings** menu.
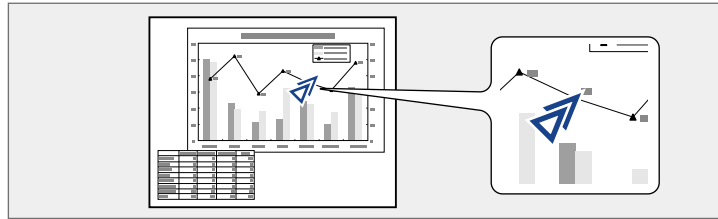
1 Press the [Pointer] button on the remote control.
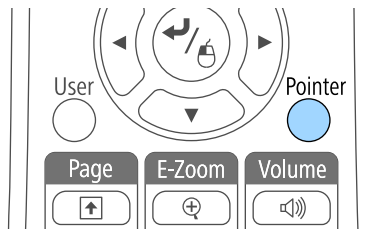
2 Use the arrow buttons to move the pointer on the screen. To move the pointer diagonally, press any pair of adjacent arrow buttons at the same time.
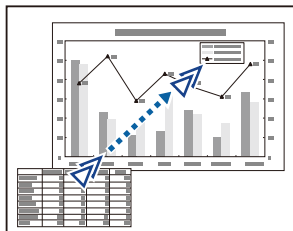
3 Press [Esc] to remove the pointer from the screen.

You can save an image on the projector and display it whenever the projector turns on. You can also display the image when the projector is not receiving an input signal. This image is called the user's logo screen.

You can select a photo, graphic, or company logo as the user's logo, which is useful in identifying the projector's owner to help deter theft. You can prevent changes to the user's logo by setting up password protection.

> • Once you save a user's logo, you cannot return to the factory default logo.
> • If the **User's Logo Protection** setting is set to **On** in the **Password Protection** setting menu, set to **Off** before saving the user's logo.

1 Display the image you want to project as the user's logo.

2 Press the [Menu] button on the control panel or remote control.

3 Select the **Extended** menu and press [Enter].

Image		Return
Signal	Home Screen	
Settings	Display	
Extended	User's Logo	
Network	Projection	Front
ECO	Operation	
Info	A/V Settings	
Reset	Projector ID	Off
	Language	English
	Reset	
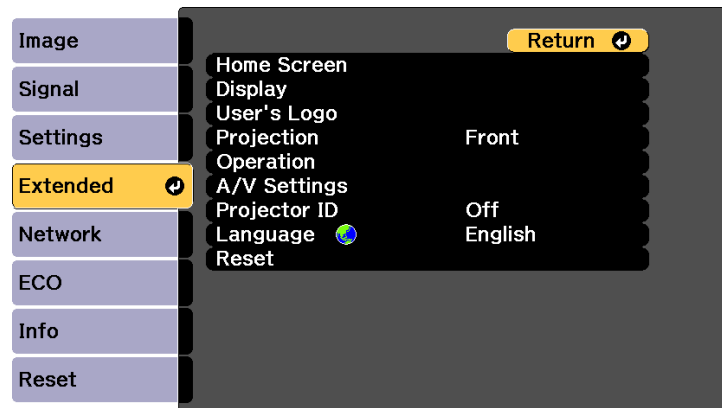
4 Select **User's Logo** and press [Enter].

Image		Return
Signal	Home Screen	
Settings	Display	
Extended	**User's Logo**	
Network	Projection	Front
ECO	Operation	
Info	A/V Settings	
Reset	Projector ID	Off
	Language	English
	Reset	
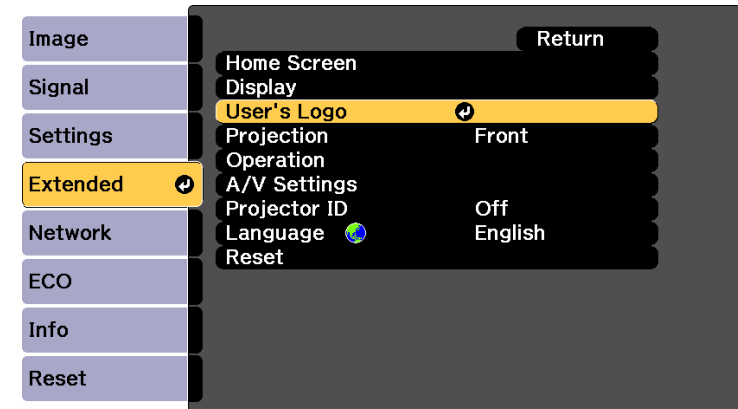
You see a prompt asking if you want to use the displayed image as a user's logo.

> Adjustments such as Keystone, E-Zoom, or Aspect are temporarily canceled when you select **User's Logo**.

5 Select **Yes** and press [Enter].

You see a selection box overlaying your image.

> Depending on the current image signal, the screen size may change to match the resolution of the image signal.

6 Use the arrow buttons to surround the image area you want to use as the user's logo and press [Enter].
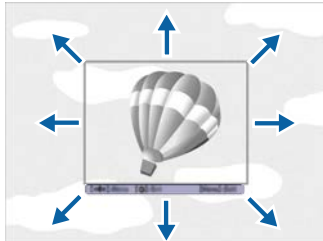
You see a prompt asking if you want to select this image area.

> 📝 You cannot change the image area size (400 × 300 pixels).

7 Select **Yes** and press [Enter]. (If you want to change the selected area, select **No**, press [Enter], and repeat the last step.)

You see the User's Logo zoom factor menu.

8 Select a zoom percentage and press [Enter].
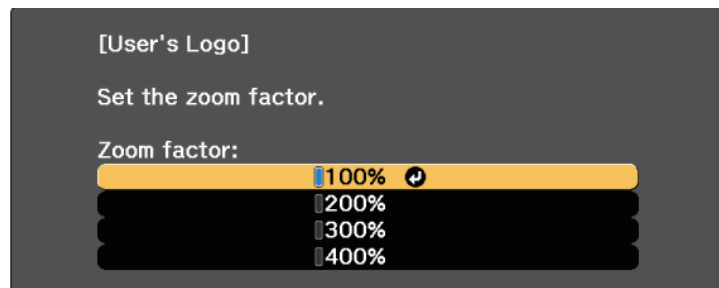
You see a prompt asking if you want to save the image as the user's logo.

9 Select **Yes** and press [Enter].

The user's logo is overwritten and a completion message appears.

10 Press [Esc] to exit the message screen.

11 Select the **Extended** menu and press [Enter].

12 Select **Display** and press [Enter].

13 Select when you want to display the User's Logo screen:

- To display it whenever there is no input signal, select **Display Background** and set it to **Logo**.
- To display it whenever you turn the projector on, select **Startup Screen** and set it to **On**.

To prevent anyone from changing the User's Logo settings without first entering a password, set the **User's Logo Protection** setting to **On** in the **Password Protection** setting menu and set the password.

➧ **Related Links**
- "Selecting Password Security Types"

There are four types of patterns pre-registered in the projector, such as ruled lines and grid patterns. You can project these patterns to aid in presentations using the **Pattern Display** settings in the **Settings** menu.

You can also save the image that is currently being projected as a User Pattern.

> Once you save a User Pattern, the pattern cannot be returned to the factory default.

1 Project the image you want to save as the User Pattern, and then press the [Menu] button on the control panel or remote control.

2 Select the **Settings** menu and press [Enter].

Image		Return
Signal	Geometry Correction	H/V-Keystone
Settings	Split Screen	
	Zoom	
Extended	Image Shift	
	Volume	0
Network	HDMI Link	
ECO	Lock Setting	
	Pointer Shape	Pointer 1
Info	Remote Receiver	Front/Rear
Reset	User Button	Power Consum...
	Pattern	
	Installation Guide	
	Reset	

3 Select **Pattern** and press [Enter].

Image		Return
Signal	Geometry Correction	H/V-Keystone
Settings	Split Screen	
	Zoom	
Extended	Image Shift	
	Volume	0
Network	HDMI Link	
ECO	Lock Setting	
	Pointer Shape	Pointer 1
Info	Remote Receiver	Front/Rear
Reset	User Button	Power Consum...
	Pattern	
	Installation Guide	
	Reset	

4 Select **User Pattern** and press [Enter].

You see a prompt asking if you want to use the displayed image as a User Pattern.

> Adjustments such as Keystone, E-Zoom, Aspect, Adjust Zoom, or Image Shift are temporarily cancelled when you select **User Pattern**.

5 Select **Yes** and press [Enter].

You see a prompt asking if you want to save the image as the User Pattern.

6 Select **Yes** and press [Enter].

You see a completion message.

When lining up multiple projectors to project images, you can correct the brightness and color tone of each projector's image so that the images match closely.

You can set a unique projector ID for each projector to operate them individually using a remote control, and then correct the brightness and color for each projector.

> • In some cases the brightness and color tone may not match completely even after correction.
> • If brightness and color tone differences become more noticeable over time, repeat the adjustments.

↪ Related Links

Setting the Projector ID

To control multiple projectors from a remote control, give each projector a unique ID.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Extended** menu and press [Enter].

3 Select **Projector ID** and press [Enter].

4 Use the arrow buttons to select the identification number you want to use for the projector. Then press [Enter].
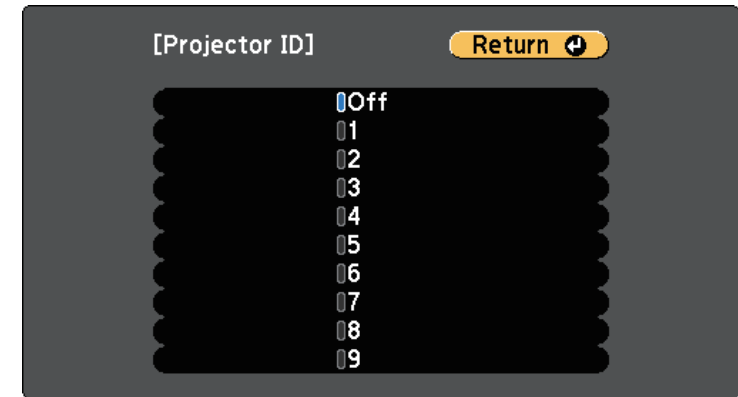
5 Press [Menu] or [Esc] to exit the menus.

Repeat these steps for all the other projectors you want to operate from one remote control.

Selecting the Projector You want to Operate

After setting the projector's ID, select the ID for the projector you want to operate using the remote control.

1 Aim the remote control at the target projector and press the [ID] button.
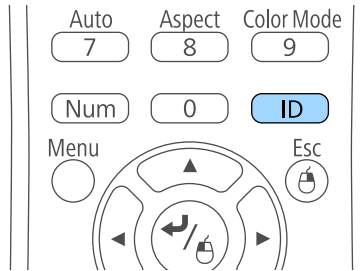
The current Projector ID is displayed on the projected screen. It disappears after about 3 seconds.

```
Projector ID    : 3
Remote Control : On
```
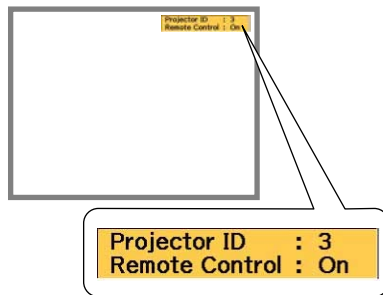
2 While holding the [ID] button, press the number button that matches the ID of the projector you want to operate.
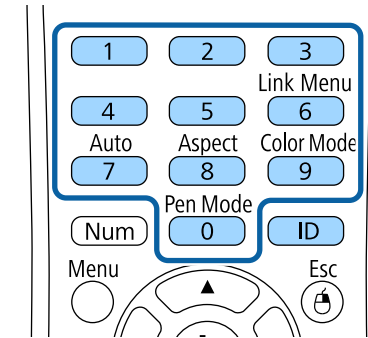
The projector you want to operate is selected.

3 Press the [ID] button to check if the ID-setting process worked.

You see a message displayed by the projector.

- If the remote control is listed as **On**, you can operate the projector from the remote control.
- If the remote control is listed as **Off**, you cannot operate the projector from the remote control. Repeat the steps above to enable the remote control.

> - When you select 0 on the remote control, you can operate all projectors regardless the Projector ID setting.
> - You must select the projector ID from the remote control each time you turn on the projector you have set it to control. When you turn on the projector, 0 is selected as the remote control's projector ID.
> - When you set the **Projector ID** setting to **Off**, you can operate the projector using the remote control whichever ID you select on the remote control.

Matching Multiple-Projector Display Quality

You can match the display quality of multiple projectors that will project next to each other.

1 Turn on all the projectors on which you want to match the display quality.

2 Set ID numbers on each projector.

3 Make sure all the projectors are using the same Color Mode setting.

4 Select the remote control ID to match the first projector.

5 Press the [Menu] button, select the **Image** menu, and press [Enter].

Image		Return
Signal	Color Mode	Dynamic
	Brightness	0
Settings	Contrast	0
	Color Saturation	0
Extended	Tint	0
	Sharpness	0
Network	White Balance	
	Image Enhancement	
ECO	Advanced	
	Dynamic Contrast	Off
Info	Reset	
Reset		
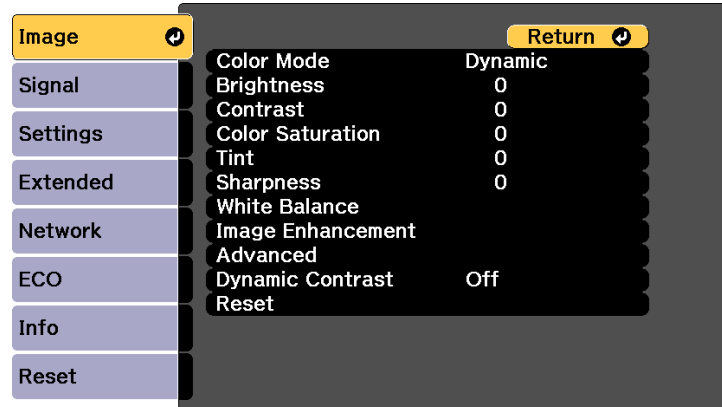
6 Select settings as necessary.

7 Select the remote control ID to match the next projector, then repeat Image menu adjustments as necessary to match the projectors' displays.

You can secure your projector to deter theft or prevent unintended use by setting up the following security features:

- Password security to prevent people who do not know the password from using the projector, and prevent changes to the startup screen and other settings.
  This acts as an anti-theft function as the projector cannot be used even if it is stolen, and you can limit who can use the projector.
- Button lock security to block operation of the projector using the buttons on the control panel.
  This is useful at events or shows when you want to deactivate all buttons during projection or at schools when you want to limit button operation.
- Security cabling to physically secure the projector in place.

⇢ **Related Links**
- "Password Security Types" p.82
- "Locking the Projector's Buttons" p.84
- "Installing a Security Cable" p.86

Password Security Types

You can set up the following types of password security using one shared password:

- **Power On Protection** password prevents anyone from using the projector without first entering a password. When plugging the power cord and turning on the projector at first time, you must enter the correct password. This also applies to Direct Power On and Auto Power On.
- **User's Logo Protection** password prevents anyone from changing the custom screen displayed when the projector turns on, or when no signal is being input. The custom screen discourages theft by identifying the projector's owner.
- **Network Protection** password prevents anyone from changing the projector's **Network** settings.

⇢ **Related Links**
- "Setting a Password" p.82

- "Selecting Password Security Types" p.83
- "Entering a Password to Use the Projector" p.84

Setting a Password

To use password security, you must set a password.

> The default password is set to "0000". Change this to your own password.

1 Hold down the [Freeze] button on the remote control for about 5 seconds.
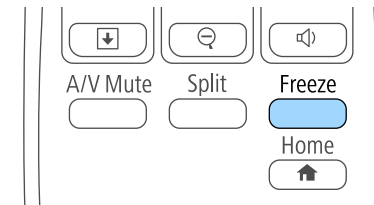
You see the Password Protection setting menu.

> If Password Protection is already activated, you must enter the correct password to display the Password Protection setting menu.

2 Select **Password** and press [Enter].

[Password Protection]

Power On Protection	Off
User's Logo Protection	Off
Network Protection	Off
Password	↵
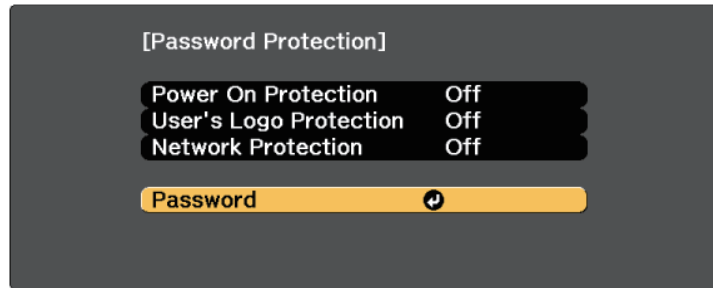
You see the prompt "Change the password?".

3 Select **Yes** and press [Enter].

> If you select **No**, the Password Protection setting menu is displayed again.

4 Hold down the [Num] button on the remote control and use the numeric buttons to set a four-digit password.
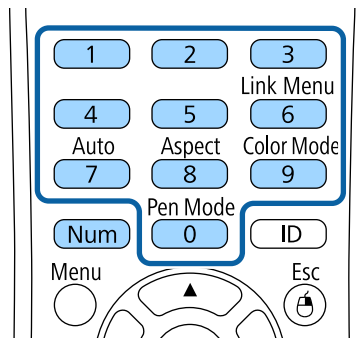
The password displays as **** as it is entered. A confirmation prompt is displayed when you enter the fourth digit.

5 Enter the password again.

You see the message "Password accepted". If you enter the password incorrectly, a message is displayed prompting you to re-enter the password.

6 Press [Esc] to return to the menu.

7 Make a note of the password and keep it in a safe place.

Selecting Password Security Types

After setting a password, you see this menu, allowing you to select the password security types you want to use.

[Password Protection]

Power On Protection	Off
User's Logo Protection	Off
Network Protection	Off
Password	
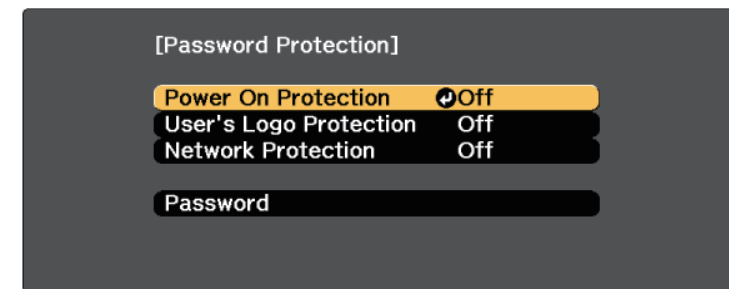
If you do not see this menu, hold down the [Freeze] button on the remote control for 5 seconds until the menu appears.

- To prevent unauthorized use of the projector, select **On** as the **Power On Protection** setting.
- To prevent changes to the User's Logo screen or related display settings, select **On** as the **User's Logo Protection** setting.
- To prevent changes to network settings, select **On** as the **Network Protection** setting.

You can attach the password protect sticker to the projector as an additional theft deterrent.

> ✎ Be sure to keep the remote control in a safe place; if you lose it, you will not be able to enter the password.

Entering a Password to Use the Projector

When the password screen is displayed, enter the correct password.
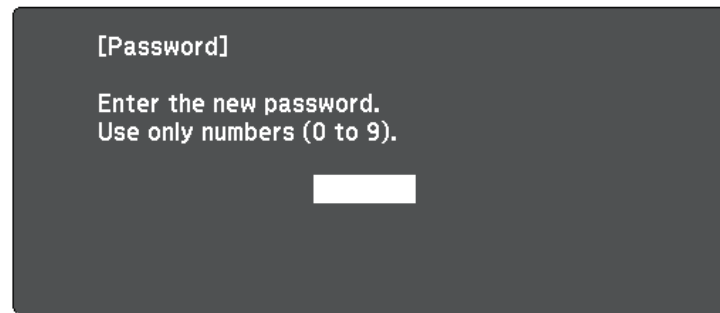
1 Hold down the [Num] button on the remote control while you enter the password using the numeric buttons.
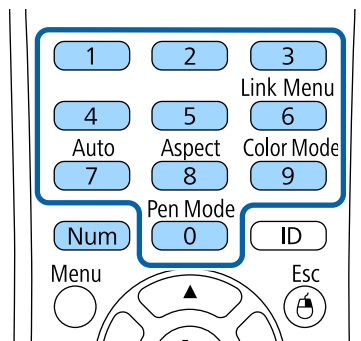
The password screen closes.

2 If the password is incorrect, you see a message and a prompt to try again. Enter the correct password to proceed.

Attention
- If an incorrect password is entered three times in succession, the message "The projector's operation will be locked." is displayed for approximately 5 minutes, and the projector switches to standby mode. If this happens, disconnect the power plug from the electrical outlet, reinsert it, and turn the projector back on. The projector displays the password entry screen again so that you can enter the correct password.
- If you have forgotten the password, make a note of the "**Request Code**: xxxxx" number that appears on the screen and contact Epson for help.
- If you continue to repeat the above operation and input the wrong password 30 times in succession, the message "The projector's operation will be locked. Contact Epson as described in your documentation." is displayed and the projector does not accept any more password entries. Contact Epson for help.

Locking the Projector's Buttons

You can lock the buttons on the control panel to prevent anyone from using the projector. The projector can still be operated using the remote control.

1 Press the [Menu] button on the control panel or remote control.
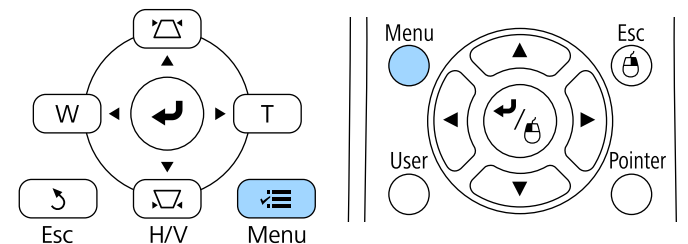
2 Select the **Settings** menu and press [Enter].
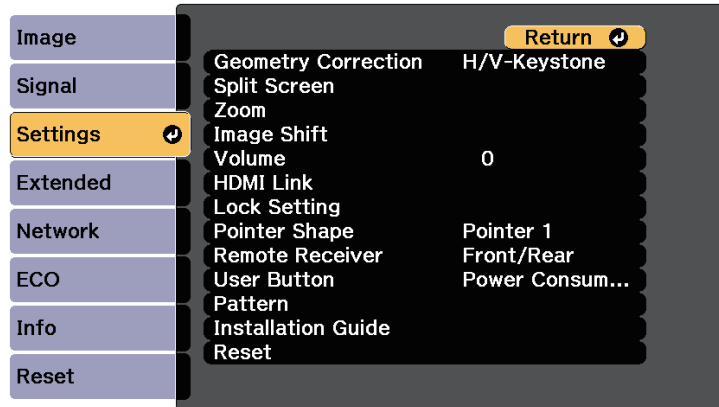
3 Select **Lock Setting** and press [Enter].
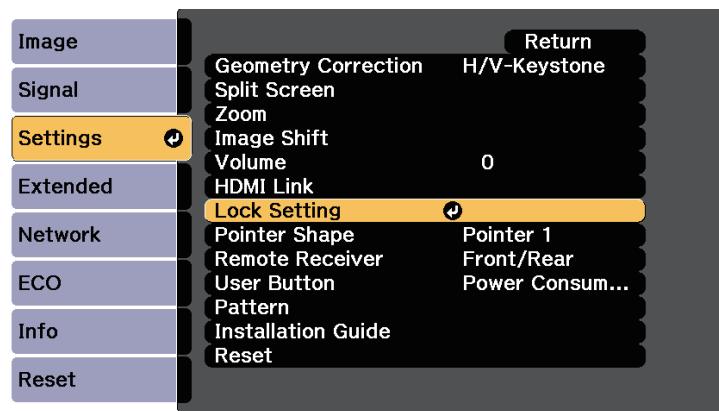
4 Select **Control Panel Lock** and press [Enter].
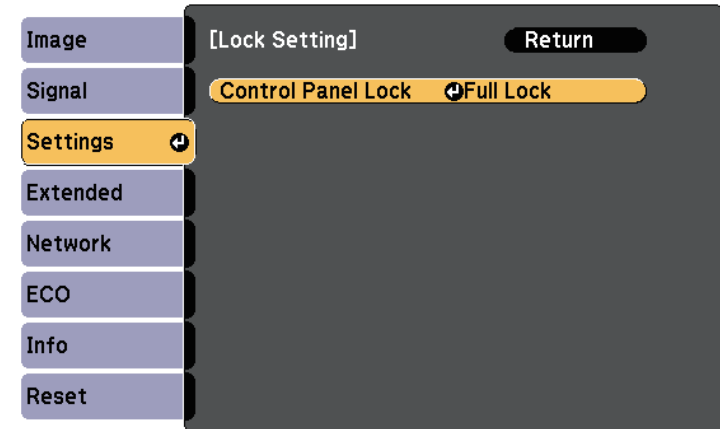
5 Select one of these lock types and press [Enter]:

- To lock all of the projector's buttons, select **Full Lock**.
- To lock all buttons except the power button, select **Partial Lock**.

You see a confirmation prompt.

6 Select **Yes** and press [Enter].

The **Control Panel Lock** setting takes effect.

➠ Related Links
- "Unlocking the Projector's Buttons"

Unlocking the Projector's Buttons

If the projector's buttons have been locked, do one of the following to unlock them.

- Hold down the [Enter] button on the control panel for 7 seconds. A message is displayed and the lock is released.
- Select **Off** as the **Control Panel Lock** setting in the projector's **Settings** menu.

☛ **Settings** > **Lock Setting** > **Control Panel Lock**

↠ **Related Links**
• "Projector Feature Settings - Settings Menu"

Installing a Security Cable

You can install the security cable on the projector to deter theft.
• Use the security slot on the projector to attach a Kensington Microsaver Security system.

> 📝 For more details on the Microsaver Security System, see http://www.kensington.com/.

• Use the security cable attachment point on the projector to attach a wire cable and secure it to a room fixture or heavy furniture.
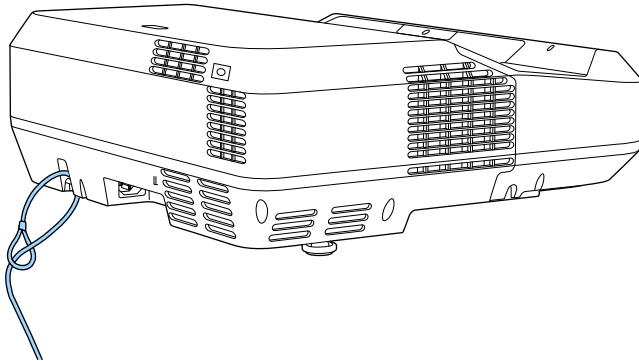
> 📝 You can use a commercially available theft-prevention wire lock. See the documentation supplied with the wire lock for locking instructions.

Using the Projector on a Network

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

➤ **Related Links**
- "Wired Network Projection" p.88
- "Wireless Network Projection" p.91

You can send images to your projector through a wired network. To do this, connect the projector to your network, and then set up your projector and computer for network projection.

After connecting and setting up the projector as described here, install Epson iProjection (Windows/Mac) from the Epson Projector Software CD-ROM (if available) or Web site.

Epson iProjection software sets up your computer for network projection. It also allows you to hold interactive meetings by projecting user's computer screens over a network. See the *Epson iProjection Operation Guide (Windows/Mac)* for instructions.

⋙ Related Links
- "Connecting to a Wired Network" p.88
- "Selecting Wired Network Settings" p.88

Connecting to a Wired Network

To connect the projector to a wired local area network (LAN), use a 100Base-TX or 10Base-T network cable. To ensure proper data transmission, use a Category 5 shielded cable or better.

1 Connect one end of the network cable to your network hub, switch, or router.

2 Connect the other end of the cable to the projector's LAN port.
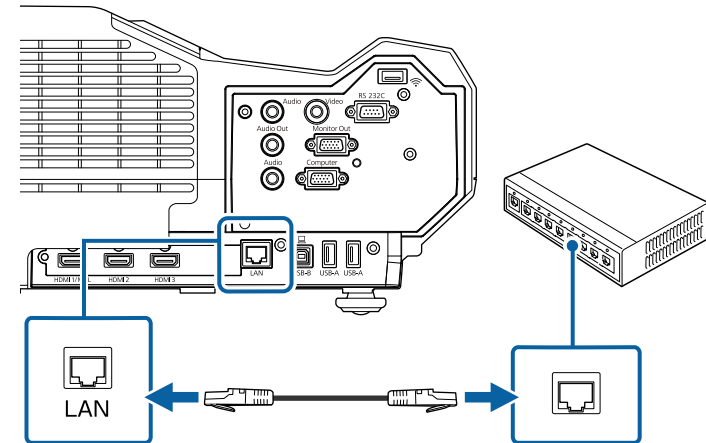
Selecting Wired Network Settings

Before you can project from computers on your network, you need to select network settings on the projector.

> Make sure you already connected the projector to your wired network using the LAN port.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Network** menu and press [Enter].

Image		Return ⏎
Signal	Wireless LAN Power	Off
Settings	Net. Info. - Wireless LAN	
Extended	Net. Info. - Wired LAN	
Network ⏎	Display the QR Code	
ECO	Network Configuration	
Info		
Reset		
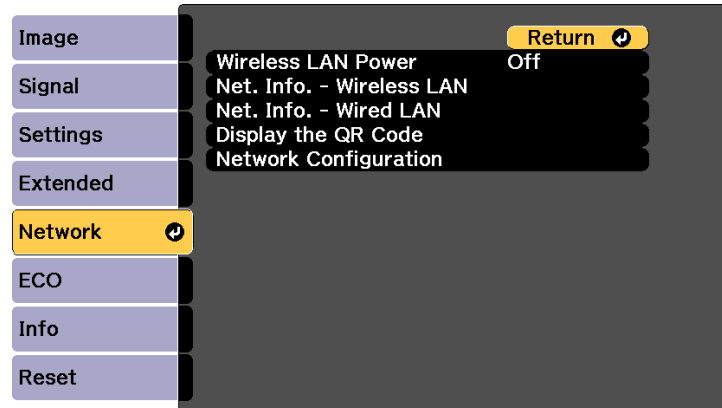
3 Select **Network Configuration** and press [Enter].

4 Select the **Basic** menu and press [Enter].

Basic ⏎		Return ⏎
Wireless LAN	Projector Name	
Wired LAN	PJLink Password	
Notifications	Remote Password	
Others	Moderator Password	
Reset	Projector Keyword	Off
Complete	Display Keyword	Off
	Display LAN Info.	Text & QR Co...

5 Select the basic options as necessary.

- **Projector Name** lets you enter a name up to 16 alphanumeric characters long to identify the projector over the network.

- **PJLink Password** lets you enter a password up to 32 alphanumeric characters long for using the PJLink protocol for projector control.

- **Remote Password** lets you enter a password up to 8 alphanumeric characters long for accessing the projector using the Web Remote. (User name is **EPSONREMOTE**; default password is **guest**.)

- **Moderator Password** lets you enter a four-digit number password for accessing the projector as a moderator using Epson iProjection. (No password is set by default.)

- **Projector Keyword** lets you turn on a security password to prevent access to the projector by anyone not in the room with it. You must enter a displayed, randomized keyword from a computer using Epson iProjection to access the projector and share the current screen.

- **Display Keyword** lets you select whether to display a projector keyword on the projected image when accessing the projector using Epson iProjection.

- **Display LAN Info.** lets you set the display format for the projector's network information.

> Use the displayed keyboard to enter numbers and characters. Press the arrow buttons on the remote control to highlight characters and press [Enter] to select them.

6 Select the **Wired LAN** menu and press [Enter].

Basic		Return ↵
Wireless LAN	IP Settings	
Wired LAN ↵	IP Address Display	Off
Notification		
Others		
Reset		
Complete		

7 Select **IP Settings** and press [Enter].

8 Select your **IP Settings** as necessary.

- If your network assigns addresses automatically, set the **DHCP** setting to **On**.

- If you must set addresses manually, set the **DHCP** setting to **Off** and enter the projector's **IP Address**, **Subnet Mask**, and **Gateway Address** as necessary.

> To highlight the numbers you want from the displayed keyboard, press the arrow buttons on the remote control. To select a highlighted number, press [Enter].

9 To prevent the IP address from being displayed on the LAN standby screen and Home screen, set the **IP Address Display** setting to **Off**.

10 When you finish selecting settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

11 Press the [LAN] button on the remote control.

The wired network settings complete when you see the correct IP address on the LAN standby screen.

```
[LAN]

Projector Name      :  EB******
SSID                :
IP Address ((ᵧ))    :
Keyword             :


Event ID            :
```

You can send images to your projector through a wireless network.

To do this, you must install the Epson 802.11b/g/n wireless LAN module, and then set up your projector and computer for wireless projection using the projector's **Network** menus.

After installing the wireless LAN module and setting up the projector, install the network software from the Epson Projector Software CD-ROM (if available) or download the software, as necessary. Use the following software and documentation to set up and control wireless projection:

- Epson iProjection (Windows/Mac) software allows you to hold interactive meetings by projecting the computer screens of users over a network. See the *Epson iProjection Operation Guide (Windows/Mac)* for instructions.
- Epson iProjection (iOS/Android) app allows you to project from iOS or Android devices.
  You can download Epson iProjection from the App Store or Google Play. Any fees incurred when communicating with the App Store or Google Play are the responsibility of the customer.
- Epson iProjection (Chromebook) app allows you to project from Chromebook devices.
  You can download Epson iProjection from the Chrome Web Store. Any fees incurred when communicating with the Chrome Web Store are the responsibility of the customer.

⤷ Related Links

Installing the Wireless LAN Module

To use the projector over a wireless network, install the Epson 802.11b/g/n wireless LAN module. Do not install any other type of wireless LAN module.

> **Attention**
> Never remove the module while its indicator is blue or flashing, or while you are projecting wirelessly. This could damage the module or lose data.

1 Remove both of the cable cover screws to open the cable cover.
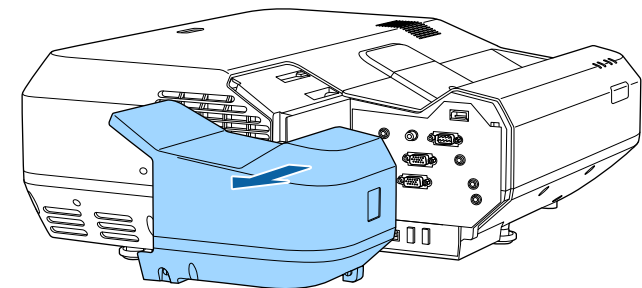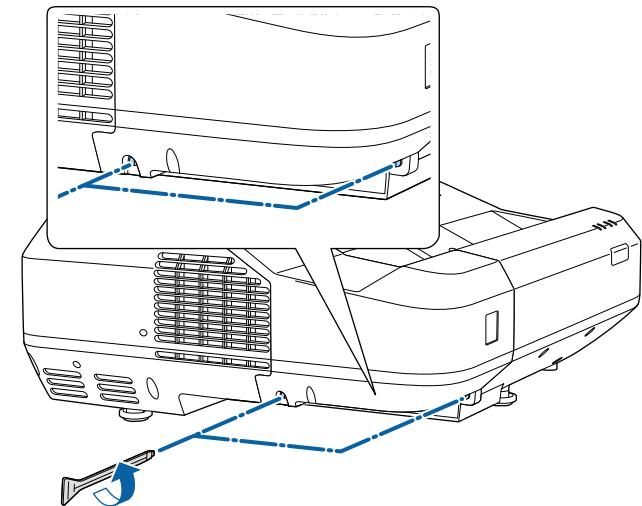
2 Connect the Wireless LAN module to the wireless LAN module slot.
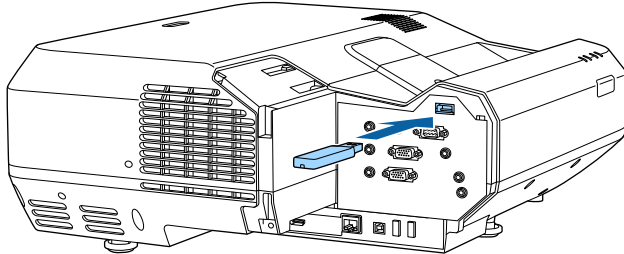
Selecting Wireless Network Settings Manually

Before you can project from your wireless network, you need to select network settings for the projector.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Network** menu and press [Enter].
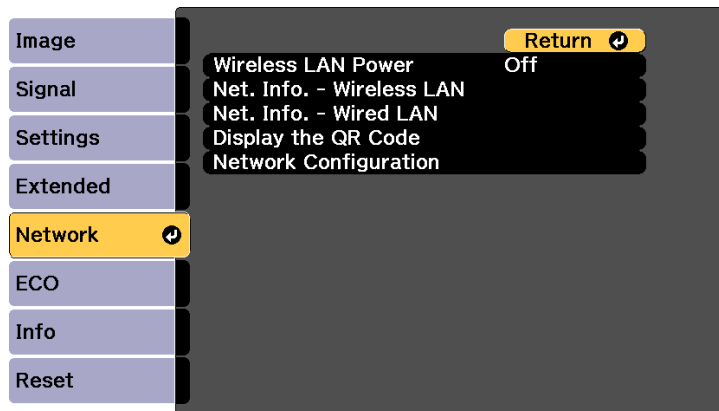
3 Select **On** as the **Wireless LAN Power** setting.
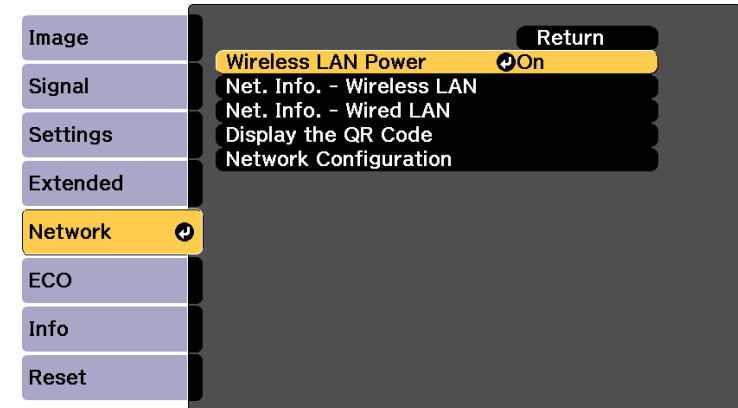
4 Select **Network Configuration** and press [Enter].

5 Select the **Basic** menu and press [Enter].

6 Select the basic options as necessary.

- **Projector Name** lets you enter a name up to 16 alphanumeric characters long to identify the projector over the network.

- **PJLink Password** lets you enter a password up to 32 alphanumeric characters long for using the PJLink protocol for projector control.

- **Remote Password** lets you enter a password up to 8 alphanumeric characters long for accessing the projector using the Web Remote. (User name is **EPSONREMOTE**; default password is **guest**.)

- **Moderator Password** lets you enter a four-digit number password for accessing the projector as a moderator using Epson iProjection. (No password is set by default.)

- **Projector Keyword** lets you turn on a security password to prevent access to the projector by anyone not in the room with it. You must enter a displayed, randomized keyword from a computer using Epson iProjection to access the projector and share the current screen.

- **Display Keyword** lets you select whether to display a projector keyword on the projected image when accessing the projector using Epson iProjection.

- **Display LAN Info.** lets you set the display format for the projector's network information.

> Use the displayed keyboard to enter numbers and characters. Press the arrow buttons on the remote control to highlight characters and press [Enter] to select them.

7 Select the **Wireless LAN** menu and press [Enter].

Basic		Return ↵
Wireless LAN ↵	Connection Mode	Quick
	SSID	
Wired LAN	Security	Open
	Passphrase	
Notification	Channel	1ch
	SSID Display	Off
Others	IP Address Display	Off
Reset		
Complete		
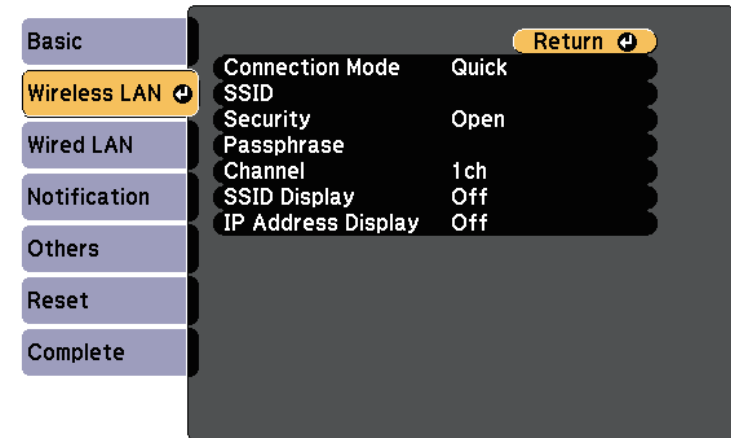
8 Select the **Connection Mode** setting.

- **Quick** lets you connect to multiple smartphones, tablets, or computers directly using wireless communication.

- **Advanced** lets you connect to smartphones, tablets, or computers over a wireless network access point.

9 If you selected the **Advanced** connection mode, select **Search Access Point** to select the access point you want to connect to.

> If you need to assign the SSID manually, select **SSID** to enter the SSID.

10 For the **Advanced** connection mode, assign the IP settings for your network as necessary.

- If your network assigns addresses automatically, select **IP Settings** to set the **DHCP** setting to **On**.

- If you must set addresses manually, select **IP Settings** to set the **DHCP** setting to **Off**, and then enter the projector's **IP Address**, **Subnet Mask**, and **Gateway Address** as necessary.

11 To prevent the SSID or IP address from being displayed on the LAN standby screen and Home screen, set the **SSID Display** setting or the **IP Address Display** setting to **Off**.

12 When you have finished selecting settings, select **Complete** and then follow the on-screen instructions to save your settings and exit the menus.

13 Press the [LAN] button on the remote control.

The wireless network settings are complete when you see the correct IP address on the LAN standby screen.

```
[LAN]

Projector Name     :  EB******
SSID               :
IP Address  ((ŋ))   :
Keyword            :


Event ID           :
```
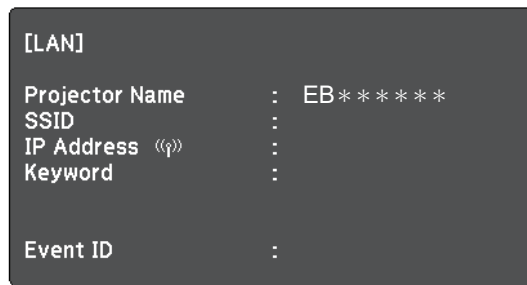
When you have finished making wireless settings for your projector, you need to select the wireless network on your computer. Then start the network software to send images to your projector through a wireless network.

Selecting Wireless Network Settings in Windows

Before connecting to the projector, select the correct wireless network on your computer.

1 To access your wireless utility software, click the network icon on the Windows taskbar.

2 When connecting in Advanced connection mode, select the network name (SSID) of the network the projector is connecting to.

3 Click **Connect**.

Selecting Wireless Network Settings in Mac

Before connecting to the projector, select the correct wireless network in Mac.

1 Click the Wi-Fi icon on the menu bar at the top of the screen.

2 When connecting in Advanced connection mode, make sure Wi-Fi is turned on and select the network name (SSID) of the network the projector is connecting to.

Setting Up Wireless Network Security

You can set up security for your projector to use on a wireless network. Set up one of the following security options to match the settings used on your network:

- WPA2-PSK security
- WPA/WPA2-PSK security *

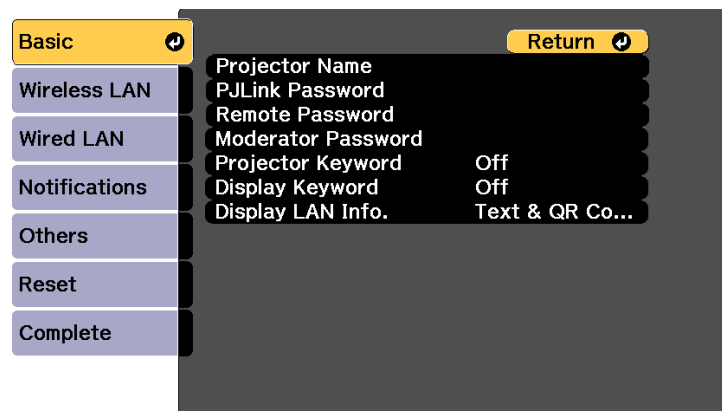* Only available for the Advanced connection mode.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Network** menu and press [Enter].

3 Select **Network Configuration** and press [Enter].

4 Select the **Wireless LAN** menu and press [Enter].

```
Basic
Wireless LAN                         Return ⏎
Wired LAN            Connection Mode    Quick
                    SSID
Notification        Security           Open
                    Passphrase
Others              Channel            1ch
                    SSID Display       Off
Reset               IP Address Display Off
Complete
```
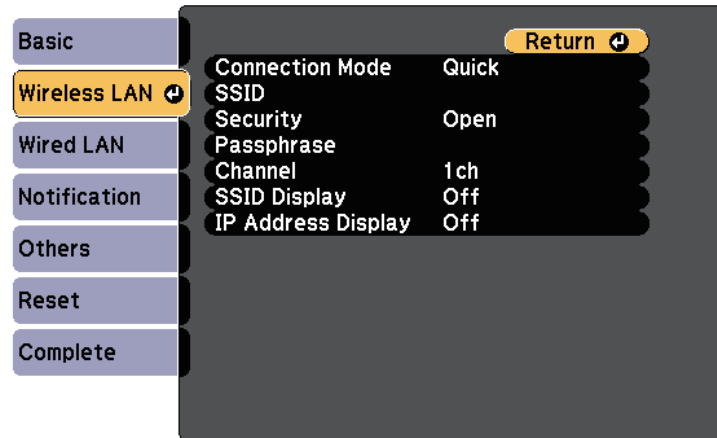
5 Select the **Security** setting and press [Enter].

```
Basic                                Return
Wireless LAN        Connection Mode    Quick
                    SSID
Wired LAN           Security         ⏎ Open
                    Passphrase
Notifications       Channel            1ch
                    SSID Display       Off
Others              IP Address Display Off
Reset
Complete
```
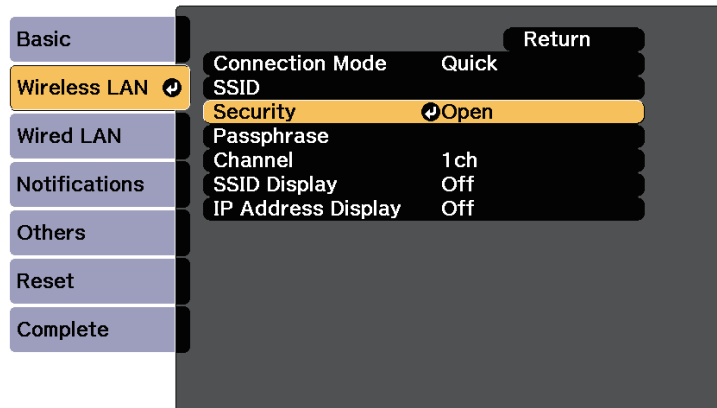
6 Select the security settings to match your network settings.

7 When you have finished making settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

❯❯ **Related Links**

- "Network Menu - Wireless LAN Menu"

Using a QR Code to Connect a Mobile Device

After selecting the wireless network settings for your projector, you can display a QR code on the screen and use it to connect a mobile device using the Epson iProjection (iOS/Android) app.

> - Make sure you have installed the latest version of Epson iProjection on your device (V1.3.0 or later supports this feature).
> - You can download Epson iProjection for free from the App Store or Google Play. Any fees incurred when communicating with the App Store or Google Play are the responsibility of the customer.
> - When using Epson iProjection in Quick connection mode, we recommend making security settings.

1 Press the [LAN] button on the remote control.

The QR code is displayed on the projected surface.

> - If you do not see the QR code, set the **Display LAN Info.** setting to **Text & QR Code** in the projector's **Network** menu.
> ☛ **Network** > **Network Configuration** > **Basic** > **Display LAN Info.**
> - To hide the QR code, press the [Esc] button.
> - When the QR code is hidden, press the [Enter] button to display the code.

2 Start Epson iProjection on your mobile device.

3 Read the projected QR code using Epson iProjection to connect it to the projector.

> 📝 To correctly read the QR code, make sure you face the screen squarely and closely enough so that the projected code fits into the guide of the mobile device's QR code reader. If you are too far from the screen, the code may not be read.

When a connection is established, select **Contents** menu from ☰, and then select the file you want to project.

▸ **Related Links**

• "Controlling a Networked Projector Using a Mobile Device" p.96

Controlling a Networked Projector Using a Mobile Device

Once you have connected your projector and mobile device, you can select projector settings and control projection using Epson iProjection (iOS/Android). This lets you access the projector remotely.

> 📝 Make sure you have installed the latest version of Epson iProjection (iOS/Android) on your device (V1.4.0 or later supports this feature).

A Tap ☰ in Epson iProjection to display the menu.

B Tap **Remote Control** on the menu.

You see the remote control screen.

> 📝 • If necessary, enter the password set in the **Remote Password** setting. Once the password is recognized, you do not have to enter it again.
> • You can change the password in the **Remote Password** setting in the projector's **Network** menu.
> ☛ **Network** > **Network Configuration** > **Basic** > **Remote Password**

C Select the icon corresponding to the projector function you want to control.
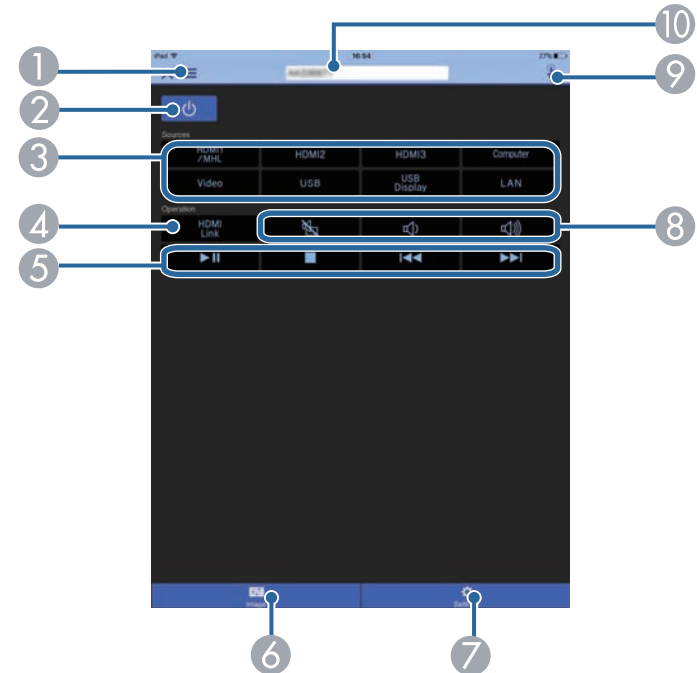
a Displays the menu

b Power button control

c Changes to the image from each input source

d Enables/disables the HDMI Link features

e HDMI Link control button controls

f Sets the projector's **Image** menu settings

g Sets the projector's useful menu settings

h A/V Mute/Volume button controls

i Opens the touch pad screen to operate the projector's menu screens

j Selects the target projector

Using a USB Key to Connect a Windows Computer

You can set up your USB flash drive as a USB key to quickly connect the projector to a wireless LAN supported Windows computer. After creating the USB key, you can quickly project images from the network projector.

1 Set up the USB key using Epson iProjection (Windows/Mac) software.

> See the *Epson iProjection Operation Guide (Windows/Mac)* for instructions.

2 Make sure the wireless LAN module is installed into your projector.

3 Turn on the projector.

4 Press the [LAN] button on the remote control.

The LAN standby screen is displayed. Verify that an SSID and IP address are displayed.

5 Connect the USB key to the projector's USB-A port.

You see a projected message that the network information update is complete.

6 Remove the USB key.

7 Connect the USB key to a USB port on your computer.

> In Windows Vista, if the AutoPlay window is displayed, select **MPPLaunch.exe**, then select **Allow**.

8 Follow the on-screen instructions to install the necessary application.

> - If the Windows Firewall message is displayed, click **Yes** to disable the firewall.
> - You need administrator authority to install the software.
> - If it is not installed automatically, double-click **MPPLaunch.exe** in the USB key.

After a few minutes, your computer image is displayed by the projector.

9 When you have finished projecting wirelessly, select the **Safely Remove Hardware** option in the Windows taskbar, and then remove the USB key from your computer.

> You may need to restart your computer to reactivate your wireless LAN connection.

Monitoring and Controlling the Projector

Follow the instructions in these sections to monitor and control the projector over a network.

▸ **Related Links**
- "Epson Projector Management"
- "Setting Up Projector Network E-Mail Alerts"
- "Setting Up Monitoring Using SNMP"
- "Using ESC/VP21 Commands"
- "PJLink Support"
- "Crestron RoomView Support"

Epson Projector Management software (Windows only) lets you monitor and control your projector through the network. See the *Epson Projector Management Operation Guide* for instructions.

You can download Epson Projector Management from the following Web site.

http://www.epson.com/

You can set up the projector to send you an e-mail alert over the network if there is a problem with the projector.

If you set the **Standby Mode** setting to **Communication On** in the projector's **ECO** menu, you can receive the e-mail alerts even if the projector is in standby mode (when the power is off).

☛ **ECO** > **Standby Mode** > **Standby Mode**

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Network** menu and press [Enter].

3 Select **Network Configuration** and press [Enter].

4 Select the **Notifications** menu and press [Enter].

Basic					
					Return ↵
Wireless LAN	Mail Notification	Off			
	SMTP Server	0.	0.	0.	0
Wired LAN	Port Number		0		
	From				
Notifications ↵	Address 1 Setting				
	Address 2 Setting				
	Address 3 Setting				
Others	SNMP	Off			
	Trap IP Address 1	0.	0.	0.	0
Reset	Trap IP Address 2	0.	0.	0.	0
	Community Name				
Complete	PJLink Notification	Off			
	Notified IP Address	0.	0.	0.	0
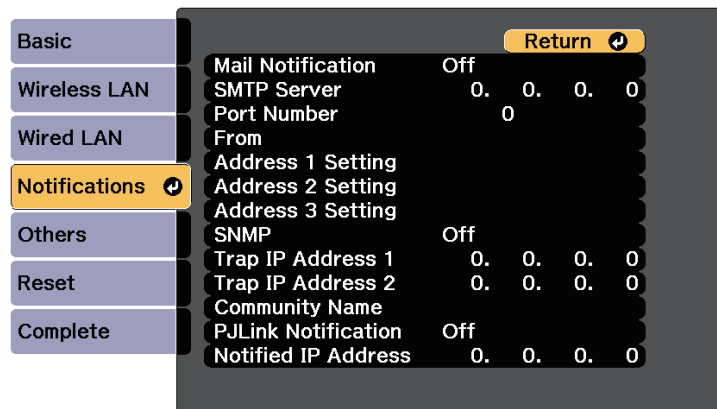
5 Set the **Mail Notification** setting to **On**.

6 Enter the IP address for the **SMTP Server** option.

> ✐ Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255).

7 Select a number for the SMTP server **Port Number**, from 0 to 65535 (default is 25).

8 Enter the e-mail address to be indicated as the sender in **From**.

9 Choose an address field, enter the e-mail address, and select the alerts you want to receive. Repeat for up to three addresses.

> ✐ Your e-mail address can be up to 32 alphanumeric characters long.

10 When you finish selecting settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

> ✐ If a critical problem causes a projector to shut down, you may not receive an e-mail alert.

▸ Related Links

Network Projector E-mail Alert Messages

When a problem occurs with a projector on the network, and you selected to receive e-mail alerts, you receive an e-mail containing the following information:

• The email address set in **From** as the mail sender
• **Epson Projector** in the subject line
• The name of the projector experiencing a problem
• The IP address of the affected projector
• Detailed information about the problem

Network administrators can install SNMP (Simple Network Management Protocol) software on network computers so they can monitor projectors. If your network uses this software, you can set up the projector for SNMP monitoring.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Network** menu and press [Enter].

3 Select **Network Configuration** and press [Enter].

4 Select the **Notifications** menu and press [Enter].

Basic						
					Return ⏎	
Wireless LAN	Mail Notification	Off				
	SMTP Server	0.	0.	0.	0	
Wired LAN	Port Number		0			
	From					
Notifications ⏎	Address 1 Setting					
	Address 2 Setting					
	Address 3 Setting					
Others	SNMP	Off				
	Trap IP Address 1	0.	0.	0.	0	
Reset	Trap IP Address 2	0.	0.	0.	0	
	Community Name					
Complete	PJLink Notification	Off				
	Notified IP Address	0.	0.	0.	0	
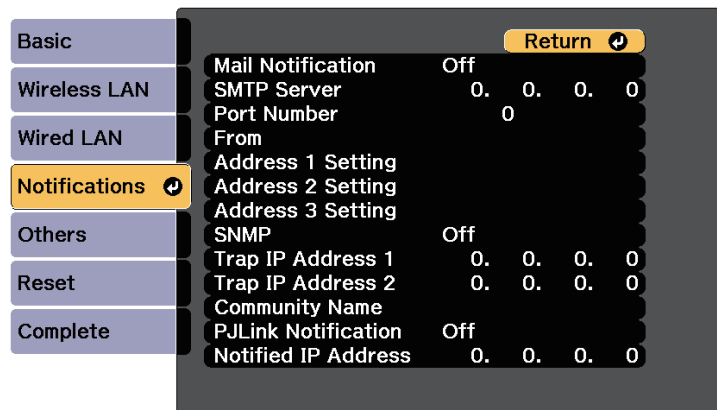
5 Set the **SNMP** setting to **On**.

6 Enter up to two IP addresses to receive SNMP notifications, using 0 to 255 for each address field.

> Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255). This projector supports SNMP agent version 1 (SNMPv1).

7 Enter the SNMP **Community Name** up to 32 alphanumeric characters long.

8 When you have finished selecting settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

You can control the projector from an external device using ESC/VP21.

▸ **Related Links**

ESC/VP21 Command List

When the power ON command is transmitted to the projector, the power turns on and it enters warm-up mode. When the projector's power has turned on, a colon ":" (3Ah) is returned.

When a command is input, the projector executes the command and returns a ":", and then accepts the next command.

If the command being processed terminates abnormally, an error message is output and a ":" is returned.

The following commands are available.

Item			Command
Power On/Off	On		PWR ON
	Off		PWR OFF
Signal selection	Computer	Auto	SOURCE 1F
		RGB	SOURCE 11
		Component	SOURCE 14
	HDMI1/MHL		SOURCE 30
	HDMI2		SOURCE A0
	HDMI3		SOURCE C0
	Video		SOURCE 41
	USB Display		SOURCE 51
	USB		SOURCE 52
	LAN		SOURCE 53

Item		Command
A/V Mute On/Off	On	MUTE ON
	Off	MUTE OFF

Add a Carriage Return (CR) code (0Dh) to the end of each command and transmit.

Contact Epson for more details.

Cable Layouts

Serial connection

- Connector shape: D-Sub 9-pin (male)
- Projector input port name: RS-232C
- Cable type: Crossover (null modem) cable

In the following illustration, the projector side is shown on the left, and the computer side on the right:
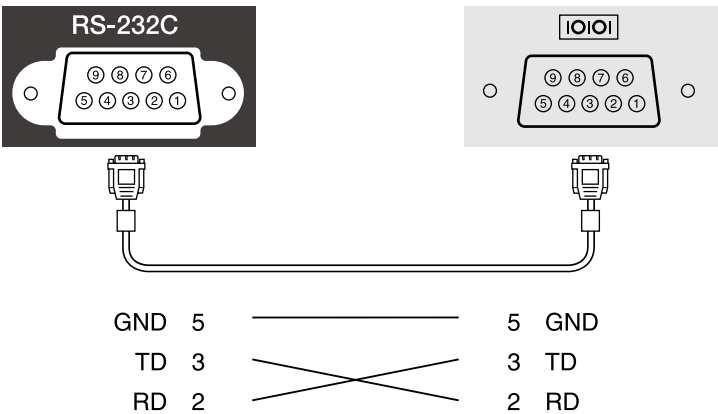
Signal name	Function
GND	Signal wire ground
TD	Transmit data
RD	Receive data

Communications protocol

- Default baud rate setting: 9600 bps
- Data length: 8 bit
- Parity: None
- Stop-bit: 1 bit
- Flow control: None

PJLink was established by the JBMIA (Japan Business Machine and Information System Industries Association) as a standard protocol for controlling network-compatible projector's as part of their efforts to standardize projector control protocols.

The projector complies with the PJLink Class2 standard established by the JBMIA.

The port number used for the PJLink search function is 4352 (UDP).

You need to make network settings before you can use PJLink.

It complies with all commands except for the following commands defined by PJLink Class2, and agreement was confirmed by the PJLink standard adaptability verification.

http://pjlink.jbmia.or.jp/english/

- Non-compatible commands

Function		PJLink command
Mute settings	Image muting set	AVMT 11
	Audio muting set	AVMT 21

- Input ports and corresponding input source number

Input port name	Input source number
Computer	11
Video	21
HDMI1/MHL	32
HDMI2	33
HDMI3	36
USB	41
LAN	52
USB Display	53

- Manufacturer name displayed for "Manufacture name information query"

EPSON

- Model name displayed for "Product name information query"
  - EPSON HCLS100/LS100

If you are using the Crestron RoomView network monitoring and control system, you can set up your projector for use on the system. Crestron RoomView lets you control and monitor your projector using a Web browser.

> ✎ • You cannot use the Epson Web Control feature or the Message Broadcasting feature in Epson Projector Management when you use Crestron RoomView.
> • If you set the **Standby Mode** setting to **Communication On** in the projector's **ECO** menu, you can control the projector even if the projector is in standby mode (when the power is off).
> ☞ **ECO** > **Standby Mode** > **Standby Mode**

For additional information on Crestron RoomView, visit the Crestron Web site.

http://www.crestron.com

To monitor devices in the system, you can use Crestron RoomView Express or Crestron RoomView Server Edition provided by Crestron. You can communicate with the help desk and send emergency messages. See the following Web site for details.

http://www.crestron.com/getroomview

This manual describes how to perform operations on your computer using a Web browser.

» Related Links
- "Setting Up Crestron RoomView Support" p.105
- "Controlling a Networked Projector Using Crestron RoomView" p.105

Setting Up Crestron RoomView Support

To set up your projector for monitoring and control using a Crestron RoomView system, make sure your computer and projector are connected to the network. If you are connecting wirelessly, set up the projector using the Advanced network connection mode.

1 Press the [Menu] button on the control panel or remote control.

2 Select the **Network** menu and press [Enter].

3 Select **Network Configuration** and press [Enter].

4 Select the **Others** menu and press [Enter].

Basic		Return ↵
Wireless LAN	Priority Gateway	Wired LAN
	AMX Device Discovery	Off
Wired LAN	Crestron RoomView	Off
	Control4 SDDP	Off
Notifications	Message Broadcasting	Off
Others ↵		
Reset		
Complete		
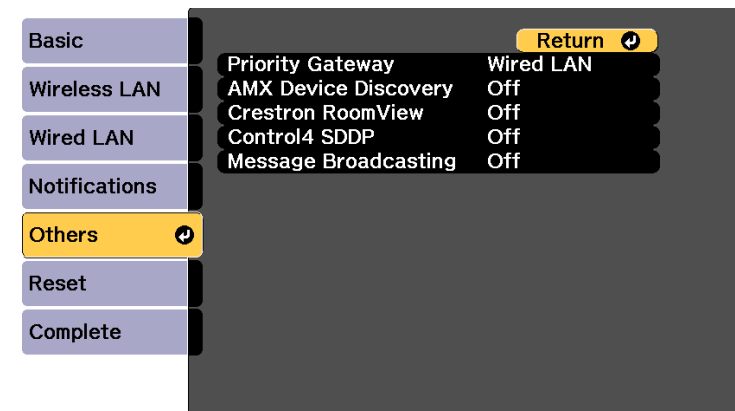
5 Set the **Crestron RoomView** setting to **On** to allow the projector to be detected.

6 When you have finished selecting settings, select **Complete** and follow the on-screen instructions to save your settings and exit the menus.

7 Turn off the projector, and then turn it on again to enable the setting.

Controlling a Networked Projector Using Crestron RoomView

Once you have set up your projector to use Crestron RoomView, you can control and monitor projection using a compatible Web browser.

1 Start your Web browser on a computer connected to the network.

2 Type the projector's IP address into the browser's address box and press the computer's **Enter** key.

You see this screen:

3 Select the input source that you want to control in the **Sources List** box. You can scroll through available sources using the up and down arrows in the box.

4 To control projection remotely, click the on-screen buttons that correspond to the projector's remote control buttons. You can scroll through button options at the bottom of the screen.

> These on-screen buttons do not directly correspond to the projector's remote control buttons:
> • OK acts as the [Enter] button
> • Menu displays the projector's menu

5 To view information about the projector, click the **Info** tab.

6 To change the projector, Crestron, and password settings, click the **Tools** tab, select settings on the displayed screen, and then click **Send**.

7 When you finish selecting settings, click **Exit** to exit the program.

▶ **Related Links**
- "Crestron RoomView Operation Window" p.106
- "Crestron RoomView Tools Window" p.107

Crestron RoomView Operation Window

Settings on the operation window let you control the projector and adjust the projection image.

ⓐ	Power	Turns the projector on or off.
	Vol-/Vol+	Adjusts the volume.
	A/V Mute	Turns the video and audio on or off.
ⓑ	Switches to the image from the selected input source. To display input sources that are not shown in **Sources List**, click (a) or (b) to scroll up or down. The current video signal input source is displayed in blue.	
	You can change the source name if necessary.	

C	Freeze	Images are paused or released.	
	Contrast	Adjusts the difference between light and shade in the images.	
	Brightness	Adjusts the image brightness.	
	Color	Adjusts the color saturation for the images.	
	Sharpness	Adjusts the image sharpness.	
	Zoom	Enlarges or reduces the image without changing the projection size. Click the arrow buttons to change the position of an enlarged image.	
D	Arrow buttons	Performs the same operations as the arrow buttons on the remote control.	
	OK	Performs the same operation as [Enter] on the remote control.	
	Menu	Displays and closes the projector's menu.	
	Auto	Optimizes **Tracking**, **Sync.**, and **Position** in the projector's **Signal** menu while projecting an analog RGB signal from Computer port.	
	Search	Changes to the next input source that is sending an image.	
	Esc	Performs the same operation as the [Esc] button on the remote control.	
E	Contact IT Help	Displays the Help Desk window. Used to send messages to, and receive messages from, the administrator using Crestron RoomView Express.	
	Info	Displays information on the projector that is currently connected.	
	Tools	Changes settings in the projector that is currently connected.	

Crestron RoomView Tools Window

Settings on the Tools window let you customize various projector setup features.
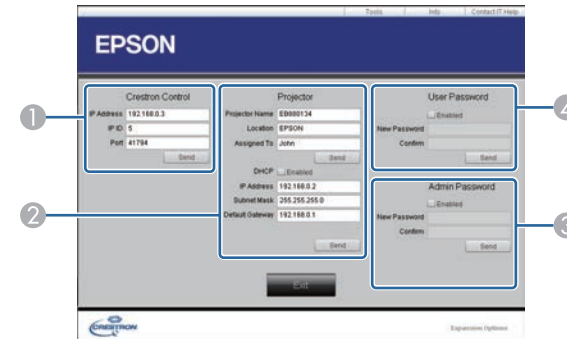
A	Make settings for Crestron central controllers.		
B	Projector Name	Enter a name to differentiate the projector that is currently connected from other projectors on the network. (up to 16 alphanumeric characters)	
	Location	Enter an installation location name for the projector that is currently connected on the network. (up to 32 alphanumeric characters and symbols)	
	Assigned To	Enter a user name for the projector. (up to 32 alphanumeric characters and symbols)	
	DHCP	Select to use DHCP. You cannot enter an IP address if DHCP is enabled.	
	IP Address	Enter the IP address to assign to the currently connected projector.	
	Subnet Mask	Enter a subnet mask for the currently connected projector.	
	Default Gateway	Enter the gateway address for the currently connected projector.	
	Send	Click to confirm the changes made to the Projector.	

③	Enabled (Admin Password)	Select to require a password to open the Tools window.
	New Password	Enter the new password when changing the password to open the Tools window. (up to 26 alphanumeric characters)
	Confirm	Enter the same password as you entered in **New Password**. If the passwords are not the same, an error is displayed.
	Send	Click to confirm the changes made to the **Admin Password**.
④	Enabled (User Password)	Select to require a password to open the operation window on the computer.
	New Password	Enter the new password when changing the password to open the operation window. (up to 26 alphanumeric characters)
	Confirm	Enter the same password as you entered in **New Password**. If the passwords are not the same, an error is displayed.
	Send	Click to confirm the changes made to the **User Password**.

Adjusting the Menu Settings

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

➠ **Related Links**

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 [Menu] button on the control panel or remote control.
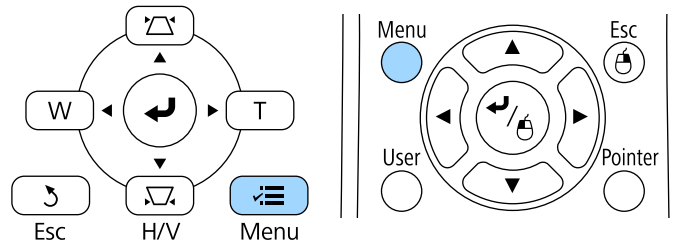
You see the menu screen displaying the **Image** menu settings.

Image	Return
Signal	Color Mode — Dynamic
	Brightness — 0
Settings	Contrast — 0
	Color Saturation — 0
Extended	Tint — 0
	Sharpness — 0
Network	White Balance
	Image Enhancement
ECO	Advanced
	Dynamic Contrast — Off
Info	Reset
Reset	
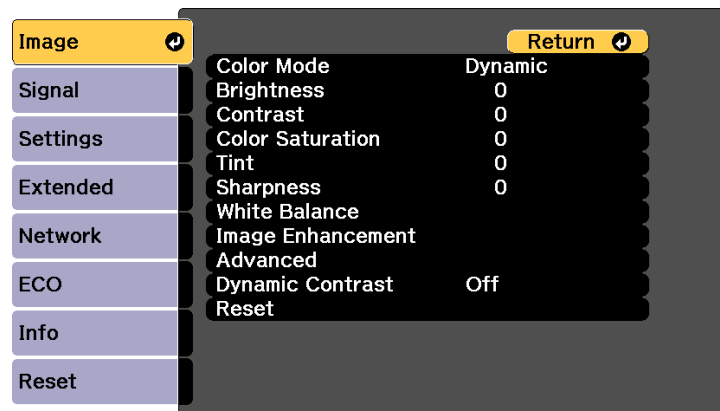
2 Press the up or down arrow buttons to move through the menus listed on the left. The settings for each menu are displayed on the right.

> 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 [Esc].

8 Press [Menu] or [Esc] to exit the menus.

You can use the displayed keyboard to enter numbers and characters.

1 Use the arrow buttons on the control panel or remote control to highlight the number or character you want to enter and press the [Enter] button.
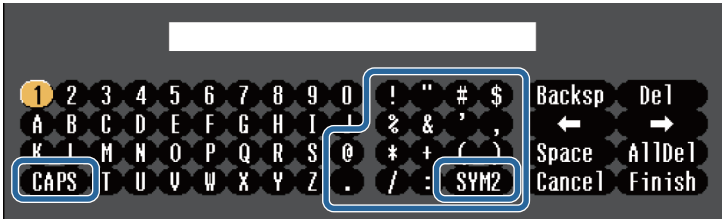
> Each time you select the **CAPS** key, the characters change between upper case and lower case. Each time you select the **SYM1/2** key, the symbols enclosed by the frame change.

2 After entering the text, select **Finish** on the keyboard to confirm your entries. Select **Cancel** to cancel entering text.

▸ Related Links
- "Available Text Using the Displayed Keyboard"

Available Text Using the Displayed Keyboard

You can enter the following text when using the displayed keyboard.

Text type	Details
Numbers	0123456789
Alphabet	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

Text type	Details
Symbols	! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` {	} ~

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.
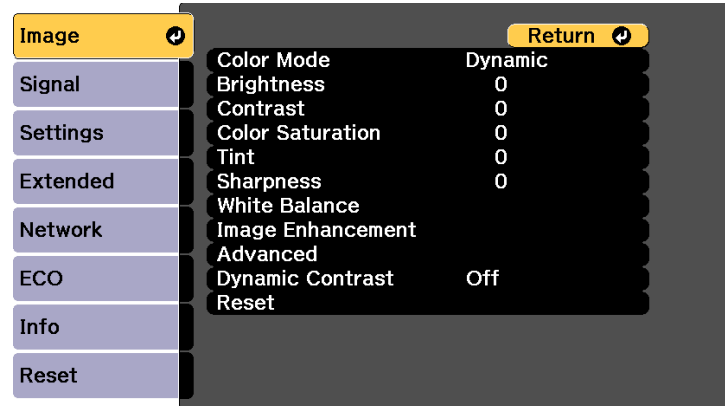
```
Image          ◐                        Return ◐
Signal              Color Mode      Dynamic
                    Brightness          0
Settings            Contrast            0
                    Color Saturation    0
Extended            Tint                0
                    Sharpness           0
Network             White Balance
                    Image Enhancement
ECO                 Advanced
                    Dynamic Contrast    Off
Info                Reset

Reset
```

To change settings for an input source, make sure the source is connected and select that 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.
Brightness	Varying levels available	Lightens or darkens the overall image.
Contrast	Varying levels available	Adjusts the difference between light and dark areas of the image.
Color Saturation	Varying levels available	Adjusts the intensity of the image colors.
Tint	Varying levels available	Adjusts the balance of green to magenta tones in the image.
Sharpness	Varying levels available	Adjusts the sharpness or softness of image details.
White Balance		Adjusts the overall tint of the image.

Setting	Options	Description
	Color Temp.	**Color Temp.**: sets the color temperature according to the color mode you selected. Higher values tint the image blue and lower values tint the image red.
	G-M Correction	**G-M Correction**: makes fine adjustments to the color tone. Higher values tint the image green and lower values tint the image red.
	Customized	**Customized**: adjusts the individual R (red), G (green), and B (blue) components of the offset and gain.
Image Enhancement		Adjusts the perceived resolution of the image:
	Noise Reduction	**Noise Reduction**: reduces flickering in analog images.
	Detail Enhancement	**Detail Enhancement**: creates a more emphatic texture and material feel of the image.
Advanced		Selects the various detailed color settings:
	Gamma	**Gamma**: adjusts the coloring by selecting one of the gamma correction values, or referring to the projected image or a gamma graph.
	RGBCMY	**RGBCMY**: adjusts the hue, saturation, and brightness of each color R (red), G (green), B (blue), C (cyan), M (magenta), Y (yellow) individually.
	Deinterlacing (For interlaced signal [480i/576i/1080i] input)	**Deinterlacing**: sets whether or not to convert interlaced-to-progressive signals for certain video image types. • **Off**: for fast-moving video images. • **Video**: for most video images. • **Film/Auto**: for movies, computer graphics, and animation.

Setting	Options	Description
Dynamic Contrast	Off Normal High Speed	Adjusts the projected luminance based on the image brightness.
Reset	—	Resets all adjustment values except **Color Mode** on the **Image** menu to their default settings.

> • The **Brightness** setting does not affect light source brightness. To change the light source brightness, select **Brightness Settings** in the projector's **ECO** menu.

▸ Related Links
- "Available Color Modes"

Normally the projector automatically detects and optimizes the input signal settings. If you need to customize the settings, you can use the **Signal** menu. The available settings depend on the currently selected input source.

> You cannot select settings on the **Signal** menu when the current input source is one of the following:
> - USB Display
> - USB
> - LAN

Image		Return ⏎
Signal ⏎	Resolution	Auto
Settings	Aspect	Normal
	Tracking	0
Extended	Sync.	0
	Position	
Network	Auto Setup	Off
	Advanced	
ECO	Reset	
Info		
Reset		
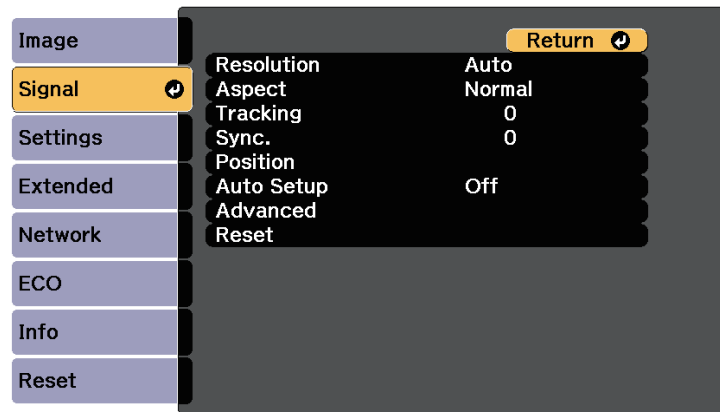
> You can restore the default settings of the **Tracking**, **Sync.**, and **Position** settings by pressing the [Auto] button on the remote control.

To change settings for an input source, make sure the source is connected and select that source.

Setting	Options	Description
Resolution	Auto Wide Normal	Sets the input signal resolution if not detected automatically using the **Auto** option.

Setting	Options	Description
Aspect	See the list of available aspect ratios.	Sets the aspect ratio (width-to-height ratio) for the selected input source.
Tracking	Varying levels available	Adjusts the signal to eliminate vertical stripes in computer images.
Sync.	Varying levels available	Adjusts the signal to eliminate fuzziness or flickering in computer images.
Position	—	Adjusts the image location on the screen.
Auto Setup	On Off	Automatically optimizes computer image quality (when **On**).
Overscan	Auto Off 4% 8%	Changes the projected image ratio to make the edges visible by a selectable percentage or automatically.
Advanced	HDMI Video Range	**HDMI Video Range**: sets the video range to match the setting of the device connected to the HDMI port. - **Auto**: detects the video range automatically. - **Normal**: normally for images from a device other than a computer; can also be selected if the black areas of the image are too bright. - **Expanded**: normally for images from a computer; can also be selected if the image is too dark.
	Input Signal	**Input Signal**: specifies the signal type from the input sources connected to the computer ports. - **Auto**: detects signals automatically. - **RGB**: inputs computer/RGB video signals. - **Component**: inputs component video signals.

Setting	Options	Description
	Video Signal	**Video Signal**: specifies the signal type from the input sources connected to the video ports. If interference appears or no image appears when set to **Auto**, select the appropriate signal according to the connected equipment.
Reset	—	Resets all adjustment values on the **Signal** menu to their default settings, except for the following: • **Input Signal**

➡ **Related Links**

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

```
                                              Return  ↵
Image
              Geometry Correction    H/V-Keystone
Signal        Split Screen
              Zoom
Settings  ↵   Image Shift
              Volume                 0
Extended      HDMI Link
              Lock Setting
Network       Pointer Shape          Pointer 1
              Remote Receiver        Front/Rear
ECO           User Button            Power Consum...
              Pattern
Info          Installation Guide
              Reset
Reset
```
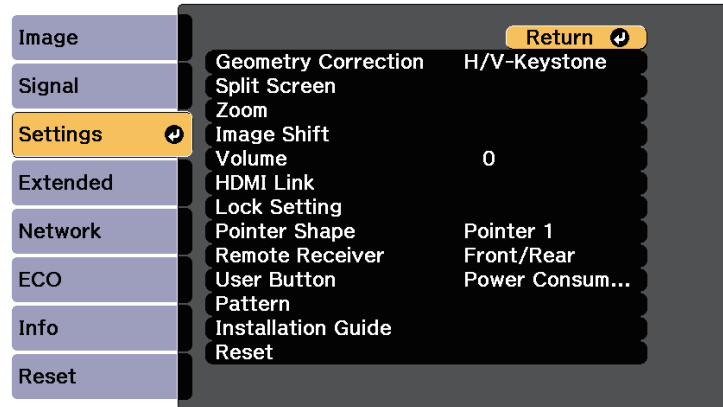
Setting	Options	Description
Geometry Correction		Adjusts image shape to rectangular.
	H/V-Keystone	**H/V-Keystone**: select to manually correct horizontal and vertical sides.
	Quick Corner	**Quick Corner**: select to correct image shape and alignment using an on-screen display.
	Arc Correction	**Arc Correction**: corrects the corners and sides of an image projected on a curved surface. • **Load Memory**: loads the settings you made and saved. • **Save Memory**: saves the current shape of an image you have adjusted.

Setting	Options	Description
Split Screen	Screen Size Source Swap Screens Audio Source Align Display the QR Code Exit Split Screen	Divides the viewing area horizontally and displays two images side-by-side (press [Esc] to cancel split screen display).
Zoom	Varying levels available	Adjusts the size of the projected image.
Image Shift	Varying positions available	Adjusts the position of the image without moving the projector.
Volume	Varying levels available	Adjusts the volume of projector's speaker system. You can also adjust the volume of external speakers. Setting values are saved for each source.
HDMI Link		Adjusts the HDMI Link options:
	Device Connections	**Device Connections**: lists the devices connected to the HDMI ports.
	HDMI Link	**HDMI Link**: enables or disables the HDMI Link features.
	Audio Out Device	**Audio Out Device**: selects whether to output audio from the internal speakers or a connected audio/video system.

Setting	Options	Description
	Power On Link	**Power On Link**: controls what happens when you turn on the projector or connected device. • **Bidirectional**: automatically turns on the connected device when you turn on the projector, and vice versa. • **Device -> PJ**: automatically turns on the projector when you turn on the connected device. • **PJ -> Device**: automatically turns on the connected device when you turn on the projector.
	Power Off Link	**Power Off Link**: controls whether connected devices are turned off when you turn off the projector.
	Link Buffer	**Link Buffer**: improves the performance of the linked operations by changing the settings if the HDMI Link function is not working correctly.
Lock Setting	Control Panel Lock	Controls projector button locking to secure the projector: **Full Lock**: locks all buttons. **Partial Lock**: locks all buttons except the power button. **Off**: no buttons locked.
Pointer Shape	Pointer 1: ▷ Pointer 2: ● (yellow circle) Pointer 3: ➡ (yellow arrow)	Changes the shape of the remote control pointer.
Remote Receiver	Front/Rear Front Rear Off	Limits reception of remote control signals by the selected receiver; **Off** turns off all receivers.

Setting	Options	Description
User Button	Light Source Mode Info Deinterlacing Resolution Pattern Display Display the QR Code	Assigns a menu option to the [User] button on the remote control for one-touch access.
Pattern		Selects various pattern display options. **Attention** If a pattern is displayed for a long time, a residual image may be visible in projected images.
	Pattern Display	**Pattern Display**: lets you display the selected pattern type on the screen to aid in presentation.
	Pattern Type	**Pattern Type**: select from Patterns 1 to 4 or **User Pattern**. Patterns 1 to 4 display patterns pre-registered in the projector, such as ruled lines or grid patterns.
	User Pattern	**User Pattern**: captures a projected screen and saves it as a pattern for display.
	Test Pattern	**Test Pattern**: displays a test pattern to assist in focusing and zooming the image and correcting image shape (press the [Esc] button to cancel pattern display).
Installation Guide	—	Displays a guide screen when installing the projector.

Setting	Options	Description
Reset	—	Resets all adjustment values on the **Settings** menu to their default settings, except for the following: • **Zoom** • **Image Shift** • **Audio Out Device** • **Power On Link** • **Power Off Link** • **Link Buffer** • **User Button**

Settings on the **Extended** menu let you customize various projector setup features.

| Image |
| Signal |
| Settings |
| Extended ⊘ |
| Network |
| ECO |
| Info |
| Reset |

```
                                        Return ↵
Home Screen
Display
User's Logo
Projection              Front
Operation
A/V Settings
Projector ID            Off
Language 🌐              English
Reset
```
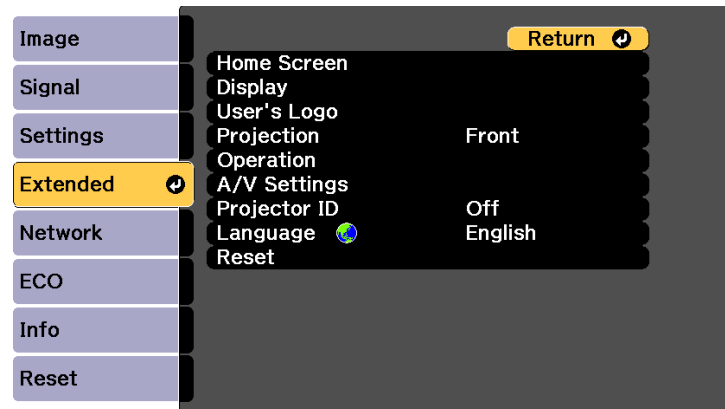
Setting	Options	Description
Home Screen		Selects the projector's Home screen display options:
	Home Screen Auto Disp.	**Home Screen Auto Disp.**: select whether or not to display the Home screen automatically when there is no input signal when turning on the projector.
	Custom Function 1 Custom Function 2	**Custom Function 1/Custom Function 2**: select to set functions and the display as the customized Home screen.
Display		Selects various display options:
	Messages	**Messages**: set to **On** to display messages such as input source name, color mode name, aspect ratio, no signal message, or high temperature warning on your projected image. Set to **Off** if you do not want to display messages.
	Display Background	**Display Background**: sets the screen color or logo to display when no signal is received.

Setting	Options	Description
	Startup Screen	**Startup Screen**: set to **On** to display a logo when the projector starts up.
	Color Uniformity	**Color Uniformity**: set to **On** to adjust the color tone balance for the whole screen. • **Adjustment Level**: set the adjustment level. • **Start Adjustments**: select the area for which you want to adjust the color tone for red, green, and blue individually.
User's Logo	—	Creates a screen that the projector displays to identify itself and enhance security.
Projection	Front Front/Upside Down Rear Rear/Upside Down	Selects the way the projector faces the screen so the image is oriented correctly.
Operation		Selects various operation options:
	Direct Power On	**Direct Power On**: lets you turn on the projector by plugging it in without pressing the power button.
	High Altitude Mode	**High Altitude Mode**: regulates the projector's operating temperature at altitudes above 1500 m.
	Auto Source Search	**Auto Source Search**: set to **On** to detect the input signal automatically and project images when there is no input signal. This function is disabled when you turn on the projector in the Quick Startup mode.

Setting	Options	Description
	Auto Power On	**Auto Power On**: select the image source from which you want to automatically start projection. When the projector detects the input signal from the selected image source, it projects automatically in standby mode. The following image sources are available for this feature: • HDMI1 • Computer • USB Display
	Quick Startup	**Quick Startup**: select the time period for Quick Startup mode. The projector enters this mode when you turn it off. You can start projecting in approximately five seconds by pressing the power button. (Set **A/V Output** to **While Projecting** first.) However, it may take longer to become ready for use in the following situations: • When projecting from the projector's USB port
A/V Settings		Selects various audio and video output settings:
	A/V Output	**A/V Output**: set to **Always On** to output audio and images to external devices when the projector is in standby mode. (Set **Quick Startup** to **Off** first.)
	Audio Output	**Audio Output**: selects the audio input port when projecting images from anything except for HDMI ports.

Setting	Options	Description
	HDMI1 Audio Output HDMI2 Audio Output HDMI3 Audio Output	**HDMI1 Audio Output/HDMI2 Audio Output/HDMI3 Audio Output**: selects the audio input port when projecting images from HDMI ports.
Projector ID	Off 1 through 9	Assigns an ID for the projector when you use multiple projectors.
Language	Various languages available	Select the language for projector menu and message displays.
Reset	—	Resets all adjustment values on the **Extended** menu to their default settings, except for the following: • **Color Uniformity** • **User's Logo** • **Projection** • **High Altitude Mode** • **Auto Source Search** • **A/V Output** • **Projector ID** • **Language**

When you set **User's Logo Protection** to **On** in the **Password Protection** screen, you cannot change the following settings related to user's logo display. Set **User's Logo Protection** to **Off** first.
• **Display Background**
• **Startup Screen**

Related Links

Settings on the **Network** menu let you view network information and set up the projector for controlling over a network.

When you set **Network Protection** to **On** in the **Password Protection** screen, you cannot change the network settings. Set **Network Protection** to **Off** first.

Setting	Options	Description
Wireless LAN Power	On Off	Configures your wireless LAN settings. Select **On** to project images via a wireless LAN. If you do not want to connect via wireless LAN, turn it off to prevent unauthorized access by others.
Net. Info. - Wireless LAN	Connection Mode Wireless LAN Sys. Antenna Level Projector Name SSID DHCP IP Address Subnet Mask Gateway Address MAC Address Region Code	Displays wireless network status and details. Available when you have set **Wireless LAN Power** to **On**.

Setting	Options	Description
Net. Info. - Wired LAN	Projector Name DHCP IP Address Subnet Mask Gateway Address MAC Address	Displays wired network status and details.
Display the QR Code	—	Displays a QR code for connecting with iOS or Android devices using the Epson iProjection app.
Network Configuration	To additional network menus	Configures your network settings.

⏵ Related Links
- "Network Menu - Basic Menu" p.121
- "Network Menu - Wireless LAN Menu" p.122
- "Network Menu - Wired LAN Menu" p.124
- "Network Menu - Notifications Menu" p.125
- "Network Menu - Others Menu" p.125
- "Network Menu - Reset Menu" p.126
- "Selecting Password Security Types" p.83

Network Menu - Basic Menu

Settings on the **Basic** menu let you select the basic network settings.

☛ **Network** > **Network Configuration** > **Basic**

```
┌──────────────┐ ┌────────────────────────────────────────────────┐
│ Basic      ⟳ │ │                              Return ⟳           │
├──────────────┤ │  Projector Name                                 │
│ Wireless LAN │ │  PJLink Password                                │
│              │ │  Remote Password                                │
│ Wired LAN    │ │  Moderator Password                             │
│              │ │  Projector Keyword       Off                    │
│ Notifications│ │  Display Keyword         Off                    │
│              │ │  Display LAN Info.       Text & QR Co...         │
│ Others       │ └────────────────────────────────────────────────┘
│              │
│ Reset        │
│              │
│ Complete     │
└──────────────┘
```
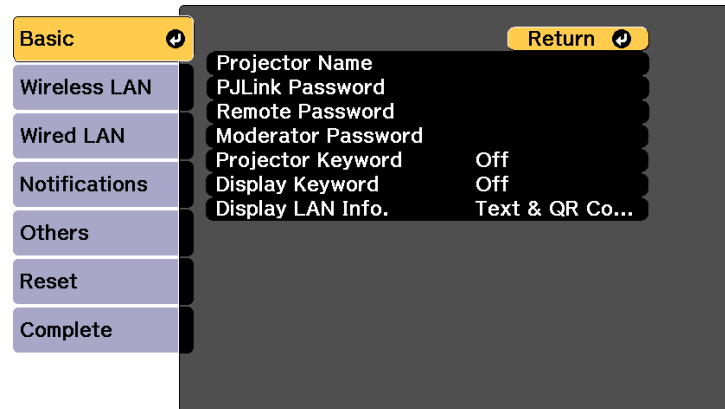
Setting	Options	Description
Projector Name	Up to 16 alphanumeric characters (do not use " * + , / : ; < = > ? [\ ] ` | spaces)	Enter a name to identify the projector over the network.
PJLink Password	Up to 32 alphanumeric characters	Enter a password for using the PJLink protocol for projector control.
Remote Password	Up to 8 alphanumeric characters	Enter a password for accessing the projector from your mobile device using Epson iProjection.
Moderator Password	Four-digit number	Enter a password for accessing the projector as a moderator using Epson iProjection. (No password is set by default.)

Setting	Options	Description
Projector Keyword	On Off	Set to **On** to enable a security password to prevent access to the projector by anyone not in the same room as the projector. You must enter the random keyword displayed from a computer using Epson iProjection to access the projector and share the current screen.
Display Keyword	On Off	Set to **On** to display a projector keyword on the projected image when accessing the projector using Epson iProjection. Available when **Projector Keyword** is set to **On**.
Display LAN Info.	Text & QR Code Text	Set the display format for the projector's network information. By simply reading the QR code with Epson iProjection, you can connect the mobile device to the projector through a network. The default value is **Text & QR Code**.

Network Menu - Wireless LAN Menu

Settings on the **Wireless LAN** menu let you select the wireless LAN settings.

☛ **Network** > **Network Configuration** > **Wireless LAN**

Basic		
Wireless LAN		
Wired LAN		
Notification		
Others		
Reset		
Complete		

	Return
Connection Mode	Quick
SSID	
Security	Open
Passphrase	
Channel	1ch
SSID Display	Off
IP Address Display	Off

Setting	Options	Description
Connection Mode		Select the type of wireless connection:
	Quick	**Quick**: lets you connect to multiple smartphones, tablets, or computers directly using wireless communication. When you select **Quick** connection mode, the projector acts as an easy access point. (We recommend limiting the number of devices to six or less to maintain the projection performance.)
	Advanced	**Advanced**: lets you connect to multiple smartphones, tablets, or computers over a wireless network access point.
Search Access Point	To Search View	Search for available wireless network access points in Advanced connection mode. Depending on the access point settings, they may not be displayed in the list.
SSID	Up to 32 alphanumeric characters	Sets the SSID (network name) of the wireless LAN system the projector is connecting to.

Setting	Options	Description
Security		Selects the type of security used on the wireless network. When setting security, follow the instructions from the administrator of the network system you want to connect to.
	Open	**Open**: security is not set.
	WPA2-PSK	**WPA2-PSK**: communication is performed using WPA2 security. Uses AES method for encryption. When establishing a connection from a computer to the projector, enter the value set in the passphrase.
	WPA/WPA2-PSK	**WPA/WPA2-PSK**: connects in WPA personal mode. Encryption method is selected automatically according to the access point settings. Set a passphrase which is the same for the access point.
Passphrase	Various passphrases from 8 to 32 characters	For **WPA2-PSK** and **WPA/WPA2-PSK** security, selects the pre-shared passphrase used on the network. When the passphrase is entered and the [Enter] button is pressed, the value is set and displayed as an asterisk (*). We recommend changing the passphrase periodically for security. If the network settings are initialized, it returns to the initial passphrase.
Channel	1ch 6ch 11ch	In Quick connection mode, selects the frequency band (channel) used by the wireless LAN.

Setting	Options	Description
IP Settings	DHCP IP Address Subnet Mask Gateway Address	**DHCP**: set to **On** if your network assigns addresses automatically; set to **Off** to manually enter the network's **IP Address**, **Subnet Mask**, and **Gateway Address** using 0 to 255 for each address field. Do not use these addresses: 0.0.0.0, 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255) for IP Address and Gateway Address and 255.255.255.255 or 0.0.0.0 through 254.255.255.255 for Subnet Mask.
SSID Display	On Off	Select whether to display the SSID on the network standby screen and Home screen.
IP Address Display	On Off	Select whether to display the IP address on the network standby screen and Home screen.

Type of security

When connecting to a wireless network in Advanced connection mode, it is strongly recommended that you set security.
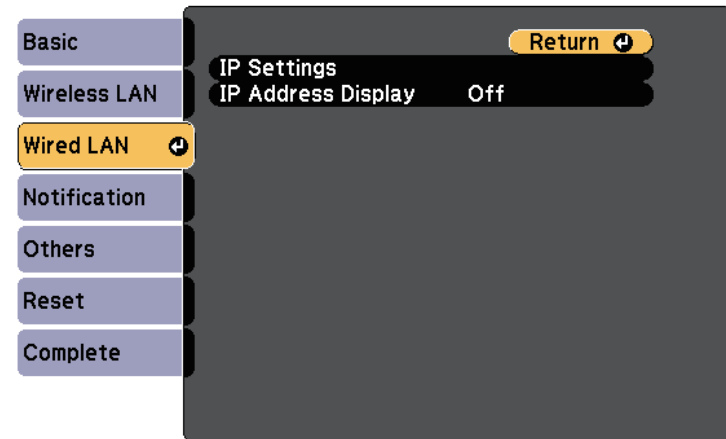
WPA is an encryption standard that improves the security for wireless networks. The projector supports TKIP and AES encryption methods.

WPA also includes user authentication functions. WPA authentication provides two methods: using an authentication server, or authenticating between a computer and an access point without using a server. This projector supports the latter method, without a server.

Network Menu - Wired LAN Menu

Settings on the **Wired LAN** menu let you select the wired LAN settings.

☛ **Network > Network Configuration > Wired LAN**

Setting	Options	Description
IP Settings	DHCP IP Address Subnet Mask Gateway Address	**DHCP**: set to **On** if your network assigns addresses automatically; set to **Off** to manually enter the network's **IP Address**, **Subnet Mask**, and **Gateway Address** using 0 to 255 for each address field. Do not use these addresses: 0.0.0.0, 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255) for IP Address and Gateway Address and 255.255.255.255 or 0.0.0.0 through 254.255.255.255 for Subnet Mask.
IP Address Display	On Off	Select whether to display the IP address on the network standby screen.

Network Menu - Notifications Menu

Settings on the **Notifications** menu let you receive an email notification if a problem or warning occurs in the projector.

☛ **Network** > **Network Configuration** > **Notifications**

```
┌─────────────┐  ┌─────────────────────────────────────────────┐
│  Basic      │  │                           Return ↵          │
│             │  │  Mail Notification    Off                   │
│ Wireless LAN│  │  SMTP Server          0.   0.   0.    0     │
│             │  │  Port Number                 0              │
│ Wired LAN   │  │  From                                       │
│             │  │  Address 1 Setting                          │
│ Notifications ↵│  Address 2 Setting                          │
│             │  │  Address 3 Setting                          │
│ Others      │  │  SNMP                 Off                    │
│             │  │  Trap IP Address 1    0.   0.   0.    0      │
│ Reset       │  │  Trap IP Address 2    0.   0.   0.    0      │
│             │  │  Community Name                             │
│ Complete    │  │  PJLink Notification  Off                   │
│             │  │  Notified IP Address  0.   0.   0.    0      │
└─────────────┘  └─────────────────────────────────────────────┘
```
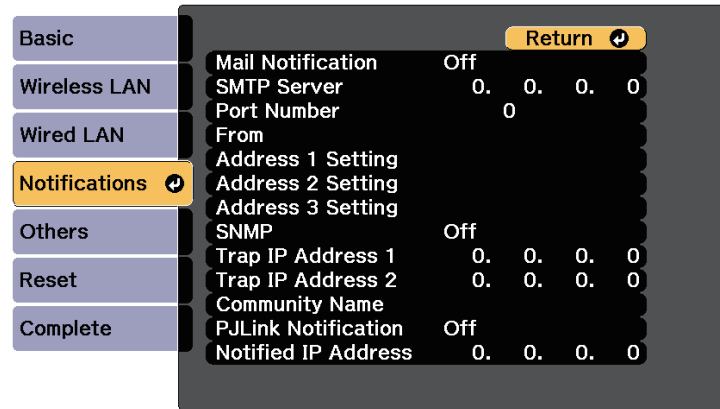
Setting	Options	Description
Mail Notification	On Off	Set to **On** to send an email to the preset addresses when a problem or warning occurs with a projector.
SMTP Server	IP address	Enter the IP address for the projector's SMTP server using 0 to 255 for each address field. Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255).
Port Number	0 to 65535 (default is 25)	Select a number for the SMTP server Port Number.
From	Up to 32 alphanumeric characters (do not use " ( ) , : ; < > [\] spaces)	Enter the email address of the sender.
Address 1 Setting Address 2 Setting Address 3 Setting		Enter the e-mail address, and select the alerts you want to receive. Repeat for up to 3 addresses.

Setting	Options	Description
SNMP	On Off	Set to **On** to monitor the projector using SNMP. To monitor the projector, you need to install the SNMP manager program on your computer. SNMP should be managed by a network administrator. The default value is **Off**.
Trap IP Address 1 Trap IP Address 2	IP address	Enter up to two IP addresses to receive SNMP notifications, using 0 to 255 for each address field. Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255).
Community Name	Up to 32 alphanumeric characters (do not use spaces and any symbols other than @)	Set the SNMP community name.
PJLink Notification	On Off	Enables or disables the PJLink notification function.
Notified IP Address	IP address	Enter the IP address to receive the projector's operating status when the PJLink notification function is enabled. Enter the addresses using 0 to 255 for each address field. Do not use these addresses: 127.x.x.x or 224.0.0.0 through 255.255.255.255 (where x is a number from 0 to 255).

Network Menu - Others Menu

Settings on the **Others** menu let you select other network settings.
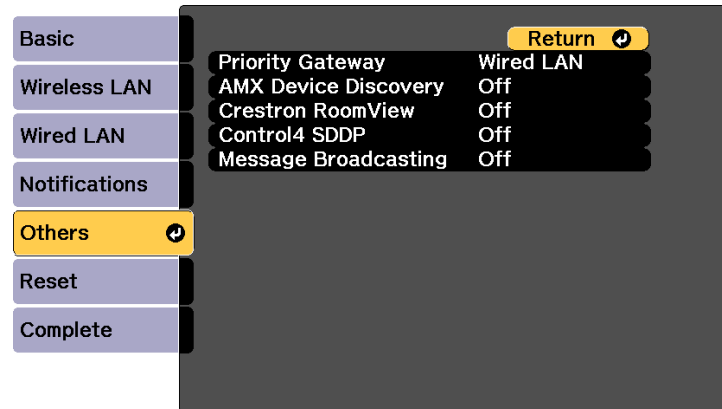
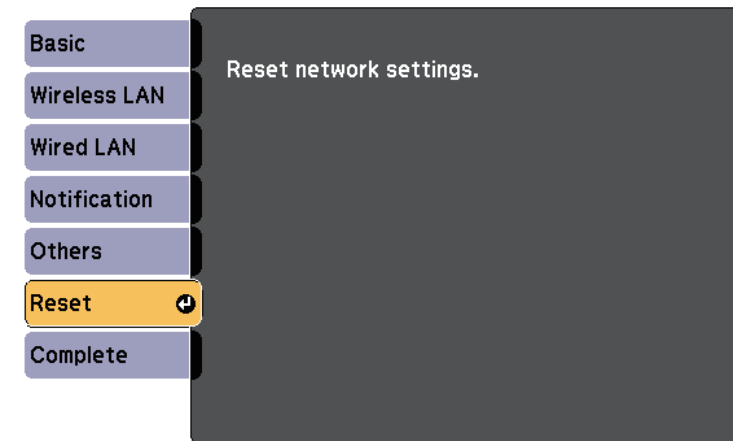☛ **Network** > **Network Configuration** > **Others**

```
          Basic                                              Return  ⏎
                        Priority Gateway        Wired LAN
        Wireless LAN    AMX Device Discovery    Off
                        Crestron RoomView       Off
         Wired LAN      Control4 SDDP           Off
                        Message Broadcasting    Off
        Notifications

          Others    ⏎

          Reset

         Complete
```

Setting	Options	Description
Priority Gateway	Wired LAN Wireless LAN	You can set the priority gateway.
AMX Device Discovery	On Off	Set to **On** when you want to allow the projector to be detected by AMX Device Discovery.
Crestron RoomView	On Off	Set to **On** only when monitoring or controlling the projector over the network using Crestron RoomView. Enabling Crestron RoomView disables the Epson Message Broadcasting feature in the Epson Projector Management software.
Control4 SDDP	On Off	Set to **On** to allow device information to be acquired using Control4 Simple Device Discovery Protocol (SDDP).
Message Broadcasting	On Off	Set to **On** to enable the Message Broadcasting feature. See the *Epson Projector Management Operation Guide* for details.

Network Menu - Reset Menu

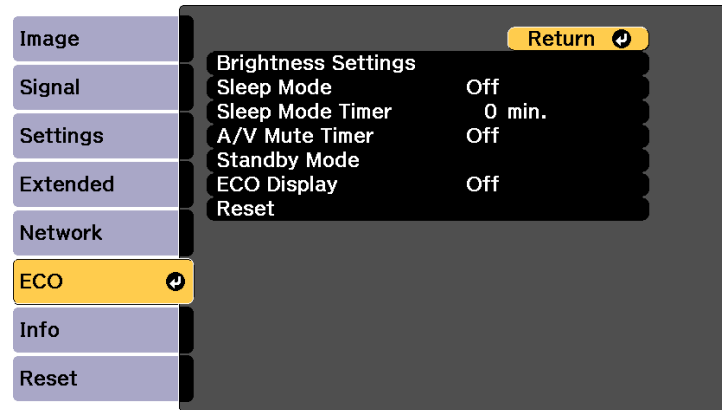Settings on the **Reset** menu let you reset all of the network settings.

☛ **Network** > **Network Configuration** > **Reset**

```
          Basic
                        Reset network settings.
        Wireless LAN

         Wired LAN

        Notification

          Others

          Reset    ⏎

         Complete
```

Setting	Options	Description
Reset network settings.	Yes No	Select **Yes** to reset all network settings.

Settings on the **ECO** menu let you customize projector functions to save power.

When you select a power-saving setting, a leaf icon appears next to the menu item.

Image	
Signal	**Return**
Settings	Brightness Settings
Extended	Sleep Mode Off
	Sleep Mode Timer 0 min.
Network	A/V Mute Timer Off
ECO	Standby Mode
Info	ECO Display Off
Reset	Reset

Setting	Options	Description
Brightness Settings		Selects the brightness mode of the projector.
	Light Source Mode	**Light Source Mode**: sets the brightness for the light source. • **Normal**: maximum brightness. • **Quiet**: 70% brightness with reduced fan noise. • **Extended**: 70% brightness and extends the life expectancy of the light source. • **Custom**: select a custom brightness level.
	Brightness Level	**Brightness Level**: select the **Custom** brightness level you want. Available when **Light Source Mode** is set to **Custom**.

| Setting	Options	Description
Sleep Mode	On Off	Automatically turns off the projector after an interval of inactivity (when **On**).
Sleep Mode Timer	1 to 30 minutes	Sets the interval for Sleep Mode.
A/V Mute Timer	On Off	Automatically turns off the projector after 30 minutes if **A/V Mute** is enabled (when **On**).
Standby Mode		Available when you have set **A/V Output** to **While Projecting**.
	Standby Mode	**Communication On** indicates that the projector can be monitored over a network when the projector is in standby mode. Enable this setting to allow the following operations to occur when the projector is in standby mode: • Monitor and control the projector over a network
	Port	Selects the port to use from **Wired LAN** or **Wireless LAN** while the **Standby Mode** setting is set to **Communication On**.
ECO Display	On Off	Displays a leaf icon in the bottom left corner of the projected screen to indicate the power-saving status when the light source brightness changes (when **On**).
Reset	—	Resets all adjustment values on the **ECO** menu to their default settings, except for **Standby Mode**.

> • When the **Sleep Mode Timer** setting is enabled, and if there is no signal input for a certain period of time, the light source dims before the projector turns off.

➤ **Related Links**

You can display information about the projector and version by viewing the **Info** menu. However, you cannot change any settings in the menu.
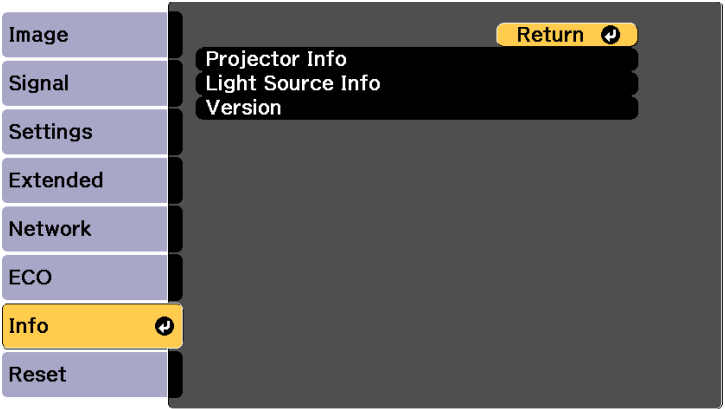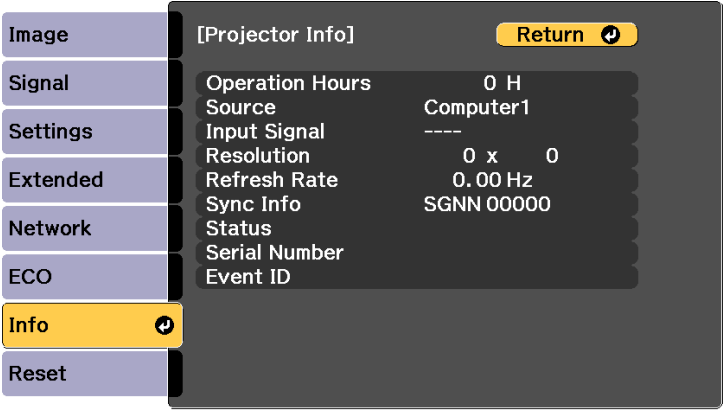
Information item	Description
Projector Info	Displays the projector information.
Light Source Info	Displays the projector's light source information.
Version	Displays the projector's firmware version.

➤ **Related Links**

Info Menu - Projector Info Menu

You can display information about the projector and input sources by viewing the **Projector Info** menu in the projector's **Info** menu.

✎ The available settings depend on the current input source.

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.
Video Signal	Displays the video signal format of the current input source.
Refresh Rate	Displays the refresh rate of the current input source.

Information item	Description
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.
Serial Number	Displays the projector's serial number.
Event ID	Displays the Event ID number corresponding to a network problem; see the list of Event ID codes.

▸ **Related Links**
- "Event ID Code List"

Event ID Code List

If the **Event ID** option on the **Projector Info** menu displays a code number, check this list of Event ID codes for the solution to the projector problem associated with the code.

If you cannot resolve the problem, contact your network administrator or Epson for technical support.

Event ID code	Cause and solution
0432 0435	The network software did not start. Turn the projector off and then on again.
0433	Cannot display the transferred images. Restart the network software.
0434 0481 0482 0485	Unstable network communication. Check the network communication status, wait a few moments, and try connecting to the network again.
0483 04FE	The network software quit unexpectedly. Check the network communication status, then turn the projector off and then on again.
0484	Communication with computer was disconnected. Restart the network software.

| Event ID code	Cause and solution
0479 04FF	A projector system error has occurred. Turn the projector off and then on again.
0891	Cannot find an access point with the same SSID. Set your computer, access point, and projector to the same SSID.
0892	The WPA/WPA2 authentication type does not match. Make sure the wireless network security settings are correct.
0893	The WEP/TKIP/AES encryption type does not match. Make sure the wireless network security settings are correct.
0894	Communication with an unauthorized access point was disconnected. Contact your network administrator.
0898	Failed to acquire DHCP. Make sure the DHCP server is operating correctly. If you are not using DHCP, set the **DHCP** setting to **Off** in the projector's **Network** menu. ☛ **Network** > **Network Configuration** > **Wireless LAN** > **IP Settings** > **DHCP** ☛ **Network** > **Network Configuration** > **Wired LAN** > **IP Settings** > **DHCP**
0899	Other communication errors.

Info Menu - Light Source Info Menu

You can display the projector's light source information by viewing the **Light Source Info** menu in the projector's **Info** menu.

Image		[Light Source Info]	Return
Signal			
Settings		Light Source Hours	
		Normal	0 H
Extended		Quiet	0 H
		Extended	0 H
Network		Custom	0 H
ECO			
Info			
Reset			
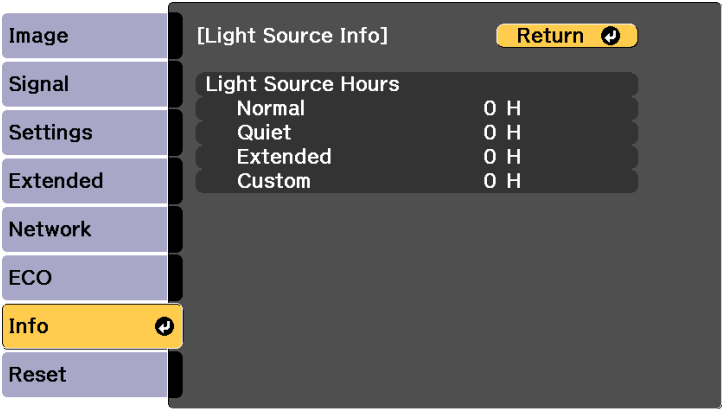
Information item	Description
Light Source Hours	Displays the number of operating hours for each of the projector's **Light Source Mode** settings.

You can reset most of the projector settings to their default values using the **Reset All** option on the **Reset** menu.
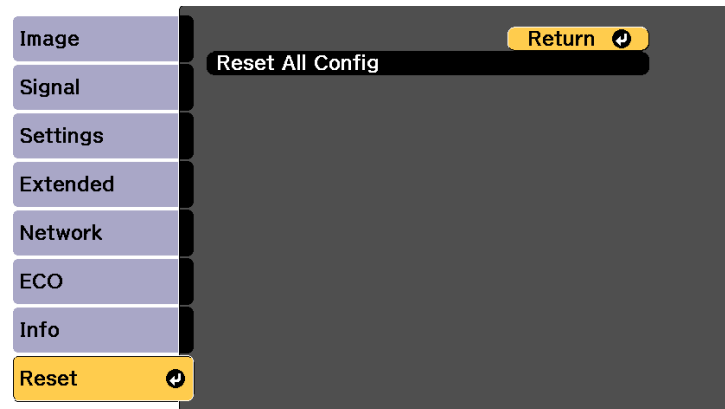
You cannot reset the following settings using the **Reset All** option:

- Input Signal
- Zoom
- Image Shift
- User's Logo
- Color Uniformity
- Language
- Except for the following Network menu items:
  - Wireless LAN Power
- Password
- Operation Hours
- Light Source Info

Maintaining the Projector

Follow the instructions in these sections to maintain your projector.

➠ **Related Links**

- "Projector Maintenance"
- "Cleaning the Projection Window"
- "Cleaning the Obstacle Sensor"
- "Cleaning the Projector Case"
- "Air Filter and Vent Maintenance"
- "Replacing the Remote Control Batteries"

You may need to clean the projection window and obstacle sensor 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.

> ### ⚠️ 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.

Clean the projection window periodically, or whenever you notice dust or smudges on the surface. To remove dust or smudges, gently wipe the projection window with lens-cleaning paper.

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

> **Attention**
> Do not use glass cleaner or any harsh materials to clean the projection window and do not subject the projection window to any impacts; otherwise, it could be damaged.

Clean the projector's obstacle sensor glass periodically, or if you see a message telling you to remove any obstacles that are interfering with the projection area. To remove dust or smudges, gently wipe the lens with lens-cleaning paper.
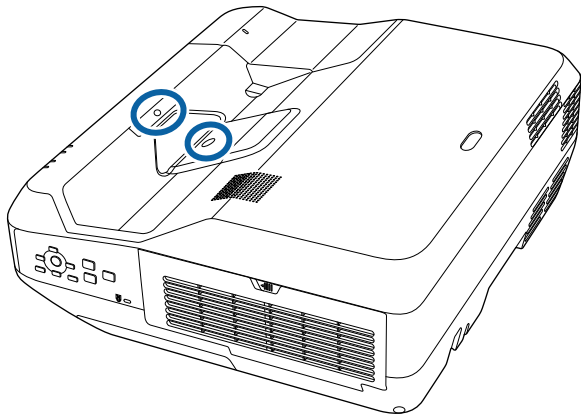
⚠ Warning

Do not use a lens cleaner that contains flammable gas to clean the obstacle sensor. The high heat generated by the projector may cause a fire.

Attention
Do not use glass cleaner or any harsh materials to clean the obstacle sensor and do not subject the obstacle sensor to any impacts. Damage on the surface of the sensor may cause malfunctions.

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.

> **Attention**
> Do not use wax, alcohol, benzene, 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.

Regular filter maintenance is important to maintaining your projector. Clean the air filer when a message appears telling you the temperature inside the projector has reached a high level. It is recommended that you clean these parts over a 20,000-hour period. Clean them more often than this if you use the projector in a particularly dusty environment.

> **Attention**
> 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.

» Related Links

Cleaning the Air Filter

Clean the projector's air filter if it gets dusty, or if you see a message telling you to clean it.

1 Turn off the projector and unplug the power cord.

**2** Slide the air filter cover latch and open the air filter cover.
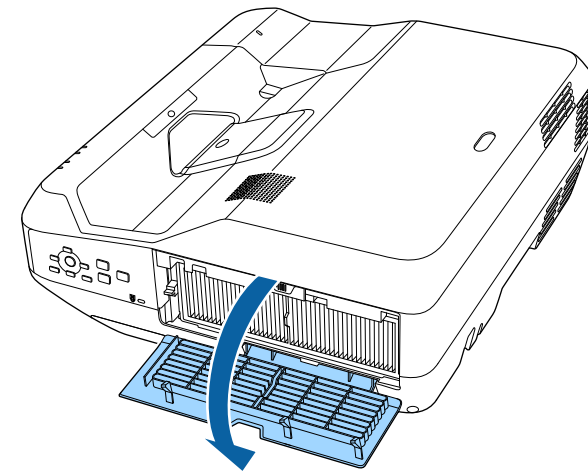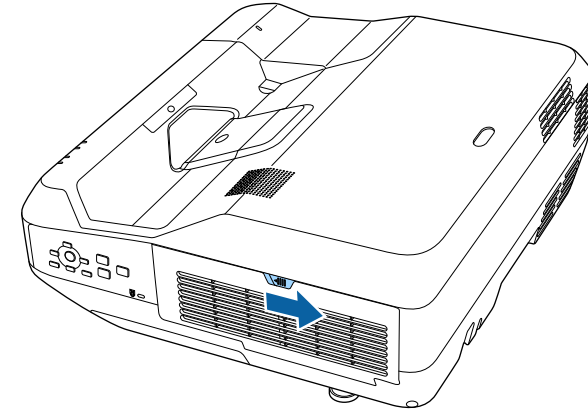
3 Pull the air filter out of the projector.
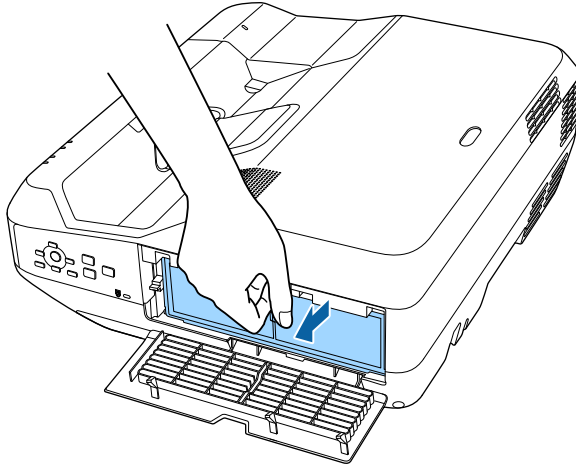
4 Tap each side of the air filter 4 to 5 times to shake off any excess dust.
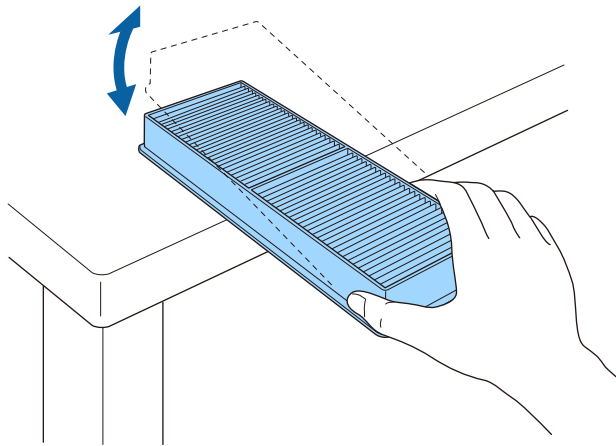
Attention
Do not use excessive force when tapping the air filter, or it may crack and become unusable.

5 Vacuum the front of the air filter (the side with the tabs) to remove any remaining dust.
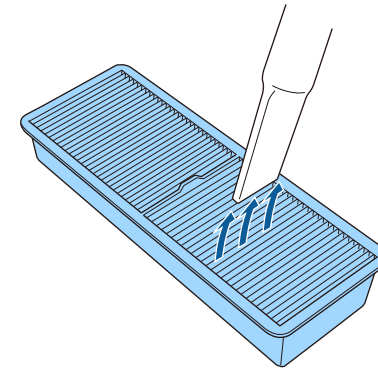
Attention
- Do not rinse the air filter in water, or use any detergent or solvent to clean it.
- Do not use canned air. The gases may leave a flammable residue or push dust and debris into the projector's optics or other sensitive areas.

f Replace the air filter in the projector as shown and push gently until it clicks into place.
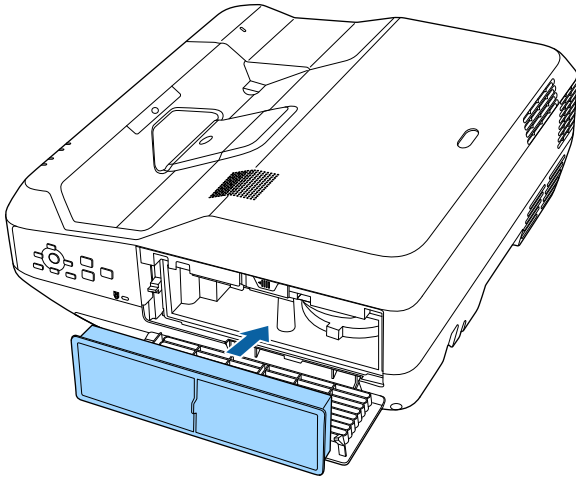
g Close the air filter cover.

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

a Turn off the projector and unplug the power cord.

b Slide the air filter cover latch and open the air filter cover.

c Pull the air filter out of the projector.

> ✎ Dispose of used air filters according to local regulations.
> • Filter frame: Polypropylene
> • Filter: Polypropylene

d Place the new air filter in the projector as shown and push gently until it clicks into place.
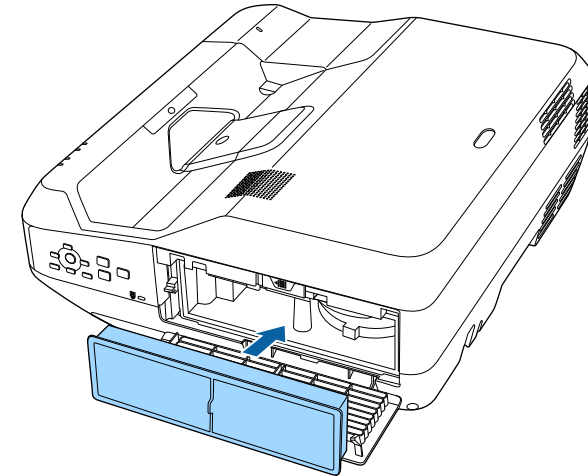
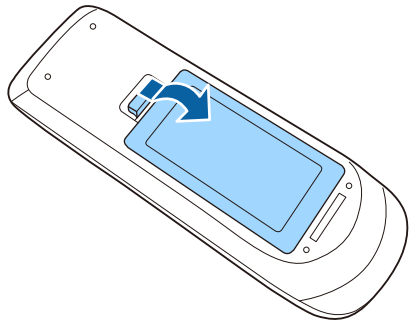**e** Close the air filter cover.

➤ **Related Links**
• "Replacement Parts" p.158

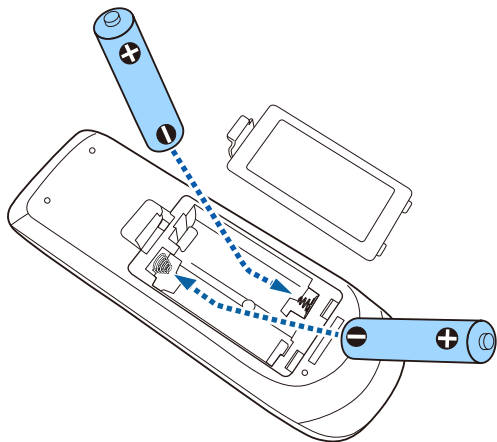The remote control uses two AA manganese or alkaline batteries. Replace the batteries as soon as they run out.

Attention
Make sure you read the *Safety Instructions* before handling the batteries.

**1** Remove the battery cover as shown.

2 Remove the old batteries.

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

⚠ Warning

Check the positions of the (+) and (–) marks inside the battery holder to ensure the batteries are inserted the correct way. If the batteries are not used 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.
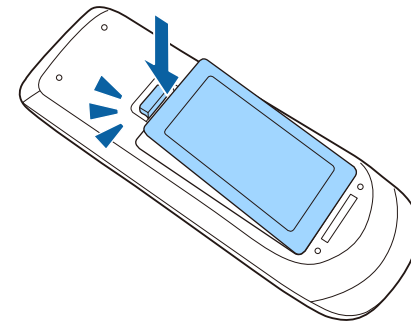
Solving Problems

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

➥ **Related Links**

If the projector is not working properly, turn it off, unplug it, and then plug it back in and turn it on.

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

- The indicators on the projector may indicate the problem.
- The projector's Help system can display information about common problems.
- The solutions in this manual can help you solve many problems.

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

The indicators on the projector indicate the projector status and let you know when a problem occurs. Check the status and color of the indicators and then refer to this table for a solution.

> ✎ • If the indicators display a pattern not listed in the table below, turn the projector off, unplug it, and contact Epson for help.

Temp Laser Status On/Standby

④ ③ ② ①
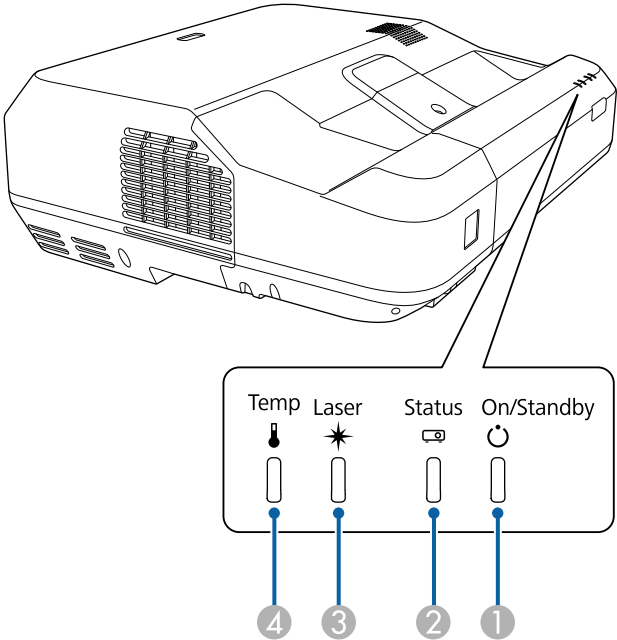
① On/Standby (power) indicator

② Status indicator

③ Laser indicator

④ Temp (temperature) indicator

Projector status

Indicator and status	Problem and solutions
Power: Lit blue Status: Lit blue Laser: Off Temp: Off	Normal operation.
Power: Lit blue Status: Flashing blue Laser: Off Temp: Off	Warming up or shutting down. When warming up, wait about 30 seconds for an image to appear. All buttons are disabled during warm-up and shutting down.
Power: Lit blue Status: Off Laser: Off Temp: Off	Standby, sleep mode, or monitoring. When you press the power button, projection starts.
Power: Flashing blue Status: Off Laser: Off Temp: Off	Preparing for monitoring or quick startup mode. All features are disabled.
Power: Flashing blue Status: Indicator status varies Laser: Indicator status varies Temp: Flashing orange	Projector is too hot. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • Make sure the environmental temperature is not too hot.

| Indicator and status	Problem and solutions
Power: Off Status: Flashing blue Laser: Off Temp: Lit orange	Projector has overheated and turned off. Leave it turned off to cool down for 5 minutes. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • If operating the projector at high altitude, set the **High Altitude Mode** setting to **On** in the projector's **Extended** menu. ☞ **Extended** > **Operation** > **High Altitude Mode** • If the problem persists, unplug the projector and contact Epson for help.
Power: Flashing blue Status: Indicator status varies Laser: Flashing orange Temp: Indicator status varies	Laser warning. Turn the projector off, unplug it, and contact Epson for help.
Power: Off Status: Flashing blue Laser: Lit orange Temp: Off	Laser has a problem. • Make sure that the vents and air filter are not clogged with dust or obstructed by nearby objects. • Clean or replace the air filter. • If the problem persists, unplug the projector and contact Epson for help.
Power: Off Status: Flashing blue Laser: Off Temp: Flashing orange	A fan or sensor has a problem. Turn the projector off, unplug it, and contact Epson for help.
Power: Off Status: Flashing blue Laser: Flashing orange Temp: Off	Internal projector error. Turn the projector off, unplug it, and contact Epson for help.

| Indicator and status	Problem and solutions
Power: Flashing blue Status: Indicator status varies Laser: Flashing orange Temp: Flashing orange	Obstacle detection warning. A beep sounds, and the message "For safety purposes remove any obstacles blocking the lens." is displayed. • Make sure that there are no obstacles interfering with the projection window. Remove any obstacles. • Clean the obstacle sensor if there are no obstacles. The projector turns off automatically if no action is taken.
Power: Off Status: Flashing blue Laser: Lit orange Temp: Lit orange	Obstacle detection error. Turn the projector off, unplug it, and contact Epson for help.

⇥ Related Links

You can display information to help you solve common problems using the projector's Help system.

1 Turn on the projector.

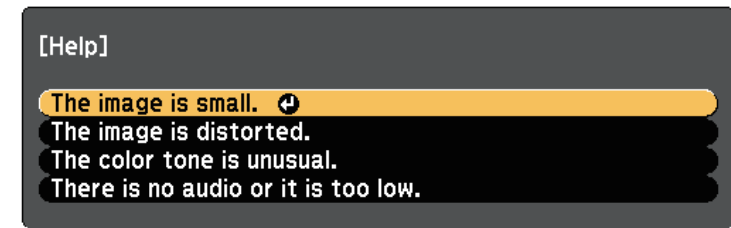**2** Press the [Home] button on the control panel or remote control.
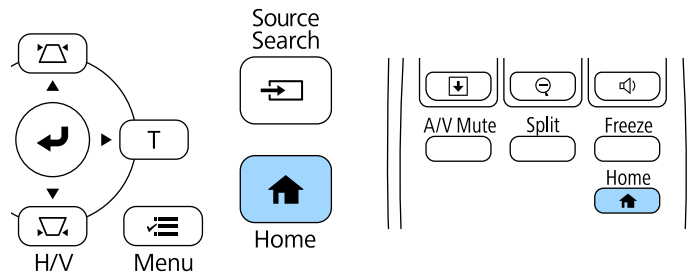
3 Select the ? icon on the Home screen.
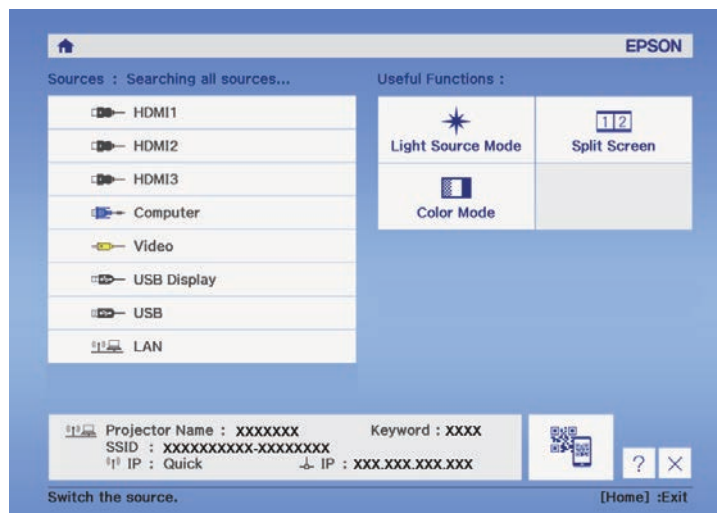
4 Select **Display the Help menu** on the displayed message.

The Help menu is displayed.

5 Use the up and down arrow buttons to highlight the problem you want to solve.

6 Press [Enter] to view the solutions.

7 Perform one of the following actions when you are finished.
- To select another problem to solve, press [Esc].
- To exit the help system, press [Menu].

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

Solutions When No Image Appears

If no image appears, try the following solutions:

- Press the power button to turn the power on.
- Press the [A/V Mute] button on the remote control to see if the image was temporarily turned off.
- Make sure all necessary cables are securely connected and the power is on for the projector and connected video sources.
- Make sure the image being projected is not completely black (only when projecting computer images).
- Make sure the projector's menu settings are correct.
- Press the projector's power button to wake it from standby or sleep mode. Also, check if the connected computer is in sleep mode or displaying a blank screen saver.
- Check the settings on the projector's **Signal** menu to make sure they are correct for the current video source.
- Adjust the **Brightness** setting in the projector's **Image** menu.

- Adjust **Brightness Settings** in the projector's **ECO** menu.
- Check the **Display** setting in the projector's **Extended** menu to make sure **Messages** is set to **On**.
- If the projector does not respond when you press the control panel buttons, the buttons may be locked for security. Unlock the buttons in the **Control Panel Lock** setting in the projector's **Settings** menu or use the remote control to turn on the projector.
  ☛ **Settings** > **Lock Setting** > **Control Panel Lock**
- If the projector does not respond when you press buttons on the remote control, make sure the remote receivers are turned on.
- For images projected with Windows Media Center, reduce the screen size from full screen mode.
- For images projected from applications using Windows DirectX, turn off DirectX functions.
- The projector may not be able to project copyrighted videos that you play back on a computer. For more details, see the manual supplied with the computer.

Solutions When Image is Incorrect Using the USB Display Function

If no image appears or if the image appears incorrectly using the USB Display function, try the following solutions:

- Press the [USB] button on the remote control.
- Make sure the Epson USB Display software has been installed correctly.

Depending on your OS or computer settings, the software may not have been installed automatically. Download the latest software from the following Web site and install it.

http://www.epson.com/

- For Mac, select the **USB Display** icon in the **Dock** folder. If the icon does not appear on the **Dock**, double-click **USB Display** in the **Applications** folder.

  If you select **Exit** from the **USB Display** icon menu on the **Dock**, USB Display does not start automatically when you connect the USB cable.

- For images projected with Windows Media Center, reduce the screen size from full screen mode.

- For images projected from applications using Windows DirectX, turn off DirectX functions.

- If the mouse cursor flickers, select **Make the movement of the mouse pointer smooth** in the **Epson USB Display Settings** program on your computer.

- Turn off the **Transfer layered window** setting in the **Epson USB Display Settings** program on your computer.

- For projectors with a resolution of WUXGA (1920 × 1200), if you change the computer resolution during projection, the performance and quality of the video may decline.

» **Related Links**
- "Connecting to a Computer for USB Video and Audio" p.18

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 play to begin your presentation, if necessary.
- Check that all cables required for projection are securely connected.
- Connect the video source directly to the projector.

- If you are projecting from a laptop computer, make sure it is set up to display on an external monitor.
- Make sure the connected computer is not in sleep mode.
- If necessary, turn off the projector and the connected computer or video source, and then turn them back on.
- If you are projecting from an HDMI source, replace the HDMI cable with the shorter one.

» **Related Links**
- "Displaying From a Laptop" p.148
- "Displaying From a Mac Laptop" p.148

Displaying From a Laptop

If the message "No Signal" is displayed when projecting from a 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.

2 To display on the laptop's monitor and the projector, try pressing the same keys again.

3 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.)

4 If necessary, check your video card settings and set the multiple display option to **Clone** or **Mirror**.

Displaying From a Mac Laptop

If the message "No Signal" is displayed when projecting 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**.

2 Select the **Display** or **Color LCD** option, if necessary.

3 Click the **Arrange** or **Arrangement** tab.

4 Select **Mirror Displays**.

Solutions When "Not Supported" Message Appears

If the message "Not supported" is displayed, try the following solutions:

- Make sure the correct input signal is selected in the projector's **Signal** menu.
- 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.)

» **Related Links**
- "Input Signal Settings - Signal Menu" p.114
- "Supported Monitor Display Resolutions" p.161

Solutions When Only a Partial Image Appears

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

- If you are projecting from a computer using a VGA computer cable, press the [Auto] button on the remote control to optimize the image signal.
- Try adjusting the image position using the **Position** setting in the projector's **Signal** menu.
- Press the [Aspect] button on the remote control to select a different image aspect ratio.
- Change the **Resolution** setting in the projector's **Signal** menu according to the signal for the connected equipment.
- If you zoomed into or out of the image using the [E-Zoom] buttons, press the [Esc] button 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. (See your software help for details.)
- Make sure you selected the correct projection mode. You can select this using the **Projection** setting in the projector's **Extended** menu.
- Perform Image Shift to adjust the image position after adjusting the image size or correcting keystone distortion.

» **Related Links**
- "Input Signal Settings - Signal Menu" p.114
- "Projector Setup Settings - Extended Menu" p.119
- "Supported Monitor Display Resolutions" p.161
- "Adjusting the Image Position" p.46

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.
- Press the keystone buttons on the projector to adjust the image shape.
- Adjust the Quick Corner setting to correct the image shape.
  ☛ **Settings** > **Geometry Correction** > **Quick Corner**
- Adjust the Arc Correction setting to correct the image shape projected on a curved surface.
  ☛ **Settings** > **Geometry Correction** > **Arc Correction**

» **Related Links**
- "Correcting the Image Shape with the Keystone Buttons" p.38
- "Correcting the Image Shape with Quick Corner" p.39
- "Correcting Image Shape with Curved Surface" p.41

Solutions When the Image Contains Noise or Static

If the projected image contains 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
- Check the settings in the projector's **Signal** menu to make sure they match the video source.
- If available for your video source, adjust the **Deinterlacing** and **Noise Reduction** settings in the projector's **Image** menu.
- Select a computer video resolution and refresh rate that are compatible with the projector.
- If you are projecting from a computer using a VGA computer cable, press the [Auto] button on the remote control to automatically adjust the **Tracking** and **Sync.** settings. If the images are not adjusted correctly, manually adjust the **Tracking** and **Sync.** settings in the projector's **Signal** menu.
- Select **Auto** as the **Resolution** setting in the projector's **Signal** menu.
- If you adjusted the image shape using the projector controls, try decreasing the **Sharpness** setting in the projector's **Image** menu to improve image quality.
- If you connected an extension power cable, try projecting without it to see if it caused interference in the signal.
- If you are using the USB Display function, turn off the **Transfer layered window** setting in the **Epson USB Display Settings** program on your computer.

⋙ Related Links

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 projection window.

> ✎ To avoid condensation on the lens after bringing the projector in from a cold environment, let the projector warm up to room temperature before using it.

- Position the projector close enough to the screen.
- Position the projector so the keystone adjustment angle is not so wide that it distorts the image.
- Adjust the **Sharpness** setting in the projector's **Image** menu to improve image quality.
- If you are projecting from a computer using a VGA computer cable, press the [Auto] button on the remote control to automatically adjust the tracking and sync. If any bands or overall blurriness remain, display a uniformly patterned image on the screen and manually adjust the **Tracking** and **Sync.** settings in the projector's **Signal** menu.
- If you are projecting from a computer, use a lower resolution or select a resolution that matches the projector's native resolution.

⋙ Related Links

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:

- Press the [Color Mode] button on the remote control to try different color modes for the image and environment.
- Check your video source settings.
- Adjust the available settings in the projector's **Image** menu for the current input source, such as **Brightness**, **Contrast**, **Tint**, **White Balance**, and/or **Color Saturation**.
- Make sure you selected the correct **Input Signal** or **Video Signal** setting in the projector's **Signal** menu, if available for your image source.
  ☛ **Signal** > **Advanced** > **Input Signal**
  ☛ **Signal** > **Advanced** > **Video Signal**
- Make sure you selected the correct **Gamma** or **RGBCMY** setting in the projector's **Image** menu.
  ☛ **Image** > **Advanced**
- Make sure all the cables are securely connected to the projector and your video device. If you connected long cables, try connecting shorter cables.
- Make sure **Brightness Settings** in the projector's **ECO** menu are set correctly.
- Position the projector close enough to the screen.

� **Related Links**
- "Color Mode" p.51
- "Input Signal Settings - Signal Menu" p.114
- "Image Quality Settings - Image Menu" p.112
- "Projector Setup Settings - ECO Menu" p.127

Solutions to Sound Problems

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

- Adjust the projector's volume settings.
- Press the [A/V Mute] button on the 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.

- Disconnect the audio cable, and then reconnect it.
- Check the audio cable connections between the projector and your video source.
- If you do not hear sound from an HDMI source, set the connected device to PCM output.
- Make sure any connected audio cables are labeled "No Resistance".
- If you are using the USB Display function, turn on the **Output audio from the projector** setting in the **Epson USB Display Settings** program on your computer.
- Select the correct audio input in the **A/V Settings** setting in the projector's **Extended** menu.
- When you are connecting the projector to a Mac using an HDMI cable, make sure your Mac supports audio through the HDMI port.
- If you want to use a connected audio source when the projector is off, set the **Quick Startup** option to **Off** and make sure the **A/V Settings** options are set correctly in the projector's **Extended** menu.
  ☛ **Extended** > **Operation** > **Quick Startup**
  ☛ **Extended** > **A/V Settings**
- If the volume for the computer is set to the minimum while the projector is set to the maximum, the noise may be mixed. Turn up the computer's volume and turn down the projector's volume. (When you use Epson iProjection (Windows/Mac) or USB Display.)
- Select the correct audio output in the **Audio Out Device** setting in the projector's **Settings** menu.
  ☛ **Settings** > **HDMI Link** > **Audio Out Device**

⟶ **Related Links**
- "Projector Connections" p.17
- "Projector Setup Settings - Extended Menu" p.119
- "Projector Setup Settings - ECO Menu" p.127
- "Controlling the Volume with the Volume Buttons" p.58

Solutions When Image File Names are not Displayed Correctly in PC Free

If any file names are longer than the display area or include unsupported symbols, the file names are shortened or changed in PC Free. Shorten or change the file name.

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

Solutions to Projector Power or Shut-Off Problems

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

- Make sure the power cord is securely connected to the projector and to a working electrical outlet.
- The projector's buttons may be locked for security. Unlock the buttons in the **Control Panel Lock** setting in the projector's **Settings** menu or use the remote control to turn on the projector.
  ☛ **Settings** > **Lock Setting** > **Control Panel Lock**
- The power cord may be defective. Disconnect the cord and contact Epson for help.
- If the projector's light source turns off unexpectedly, it may have entered sleep mode after a period of inactivity. Perform any operation to wake the projector. To turn off sleep mode, select **Off** as the **Sleep Mode** setting in the projector's **ECO** menu.
- If the projector's light source turns off unexpectedly, the A/V mute timer may be enabled. To turn off the A/V mute timer, select **Off** as the **A/V Mute Timer** setting in the projector's **ECO** menu.
- If the projector's light source turns off, the status indicator is flashing, and the temp (temperature) indicator is lit, the projector has overheated and turned off.
- If the power button on the remote control does not turn on the projector, check its batteries and make sure at least one of the remote receivers are available in the **Remote Receiver** setting in the projector's **Settings** menu.

- 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.

Solutions to Problems with the Remote Control

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.
- Make sure at least one of the remote receivers are available in the **Remote Receiver** setting in the projector's **Settings** menu.
- If the **Remote Receiver** setting is disabled, hold down the [Menu] button on the remote control for at least 15 seconds to reset the setting to its default.
- If you assigned an ID number to the projector to operate multiple projectors from the remote control, you may need to check or change the ID setting.
- If you lose the remote control, you can order another one from Epson.

- "Projector Feature Settings - Settings Menu" p.116
- "Selecting the Projector You want to Operate" p.79
- "Replacing the Remote Control Batteries" p.141

Solutions to Password Problems

If you cannot enter or remember a password, try the following solutions:

- You may have turned on password protection without first setting a password. Try entering **0000** using the remote control.

- If you have entered an incorrect password too many times and see a message displaying a request code, write down the code and contact Epson for help. Provide the request code and proof of ownership for assistance in unlocking the projector.

- If you lose the remote control you cannot enter a password. Order a new one from Epson.

Check the solutions in these sections if you have problems using the projector on a network.

Solutions When Network Alert E-Mails are not Received

If you do not receive an e-mail alerting you to problems with a projector over the network, try the following solutions:

- Make sure the projector is turned on and connected to the network correctly. (If an error shuts down the projector, the email may not be delivered.)
- Make sure you set up the projector e-mail alert settings correctly on the projector's network **Notifications** menu or in the network software.
- Set the **Standby Mode** setting to **Communication On** in the projector's **ECO** menu so the network software can monitor the projector in standby mode.
  Change the **Port** setting according to your network environment.
  ☛ **ECO** > **Standby Mode** > **Standby Mode**
- Make sure your electrical outlet or power source is functioning correctly.

Solutions When the Image Contains Static During Network Projection

If the projected image contains static during network projection, try the following solutions:

- Check for any obstacles between the access point, the computer, the mobile device, and the projector, and change their positions to improve communication.
- Make sure that the access point, the computer, the mobile device and the projector are not too far apart. Move them closer together and try to connect again.
- If the wireless connection is slow or your projected image contains noise, check for interference from other equipment, such as a Bluetooth device or microwave. Move the interfering device farther away or expand your wireless bandwidth.
- Reduce the number of connected devices if the connection speed declines.

Check the solutions in these sections if you have problems using the HDMI Link features.

⤷ Related Links
• "Solutions When HDMI Link Does not Function"

Solutions When HDMI Link Does not Function

If you cannot operate the connected devices using the HDMI Link features, try the following solutions:

• Make sure the cable meets the HDMI CEC standard.
• Make sure the connected device meets the HDMI CEC standard. See the documentation supplied with the device for more information.
• Check that all cables required for HDMI Link are securely connected.
• 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 speaker, set it to PCM output.
• If you connect a new device or change the connection, set the CEC function for the connected device again and restart the device.
• Do not connect 4 or more multi-media players. You can connect up to 3 multi-media players that meet the HDMI CEC standard at the same time.
• If the device does not appear in the Device Connections list, it does not meet the HDMI CEC standards. Connect a different device.

⤷ Related Links
• "Projector Feature Settings - Settings Menu"

Appendix

Check these sections for the technical specifications and important notices about your projector.

▸ **Related Links**

The following optional accessories and replacement parts are available. Please purchase these products as and when needed.

The following list of optional accessories and replacement parts is current as of: July 2017.

Details of accessories are subject to change without notice and availability may vary depending on the country of purchase.

» Related Links
- "Cables"
- "For Wireless Connection"
- "External Devices"
- "Replacement Parts"

Cables

Computer cable ELPKC02 (1.8 m - for mini D-sub 15-pin/mini D-Sub 15pin)
Computer cable ELPKC09 (3 m - for mini D-sub 15-pin/mini D-Sub 15pin)
Computer cable ELPKC10 (20 m - for mini D-sub 15-pin/mini D-Sub 15pin)
Use when connecting to the Computer port.

Component video cable ELPKC19 (3 m - for mini D-Sub 15-pin/RCA male x 3)
Use when connecting to a component video source.

For Wireless Connection

Wireless LAN module ELPAP10
Use this to project images from a computer via a wireless communication. (Frequency band: 2.4GHz)
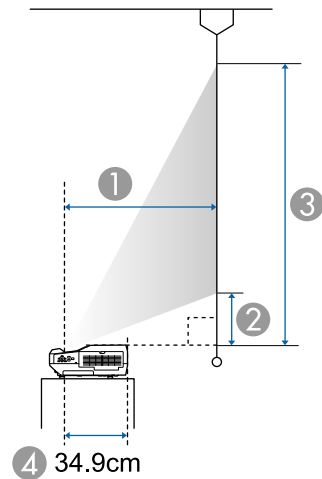
External Devices

External Speaker ELPSP02
External self-powered speaker.

Replacement Parts

Air filter ELPAF43
Use as a replacement for used air filters.

Check the table here to determine how far to place the projector from the screen based on the size of the projected image.

4 34.9cm

1 Projection distance (cm)

2 Distance from the projector to the bottom of the screen (cm)

3 Distance from the projector to the top of the screen (cm)

4 Distance from the center of the lens to the rear of the projector (cm)

16:10 screen size		❶	❷	❸
		Minimum (Wide) to Maximum (Tele)	Minimum (Wide)	Minimum (Wide)
70"	151 × 94	40.5 - 55.8	12.9	107.2
75"	162 × 101	43.6 - 60.1	14.3	115.3
80"	172 × 108	46.7 - 64.3	15.7	123.4
90"	194 × 121	53.0 - 72.8	18.6	139.7
100"	215 × 135	59.3 *	21.4	156.0
110"	237 × 148	65.6 *	24.2	172.2

16:10 screen size		❶	❷	❸
		Minimum (Wide) to Maximum (Tele)	Minimum (Wide)	Minimum (Wide)
120"	259 × 162	71.9 *	27.0	188.5
130"	280 × 175	78.1 *	29.8	204.8

* Project using Wide (maximum zoom).

4:3 screen size		❶	❷	❸
		Minimum (Wide) to Maximum (Tele)	Minimum (Wide)	Minimum (Wide)
70"	142 × 107	46.3 - 63.7	15.5	122.2
80"	163 × 122	53.4 - 73.3	18.7	140.6
90"	183 × 137	60.5 *	21.9	159.0
100"	203 × 152	67.6 *	25.1	177.5
110"	224 × 168	74.7 *	28.2	195.9
114"	232 × 174	77.5 *	29.5	203.2

* Project using Wide (maximum zoom).

16:9 screen size		❶	❷	❸
		Minimum (Wide) to Maximum (Tele)	Minimum (Wide)	Minimum (Wide)
70"	155 × 87	41.7 - 57.5	18.3	105.5
80"	177 × 100	48.1 - 66.2	21.9	121.5
90"	199 × 112	54.6 - 74.9	25.5	137.6
100"	221 × 125	61.0 *	29.1	153.6
110"	244 × 137	67.5 *	32.6	169.6
120"	266 × 149	73.9 *	36.2	185.6

16:9 screen size		❶	❷	❸
		Minimum (Wide) to Maximum (Tele)	Minimum (Wide)	Minimum (Wide)
126"	279 × 157	77.8 *	38.3	195.3

* Project using Wide (maximum zoom).

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

Component Signals (Analog RGB)

Signal	Refresh rate (Hz)	Resolution (dots)
VGA	60/72/75/85	640 × 480
SVGA	60/72/75/85	800 × 600
XGA	60/70/75/85	1024 × 768
WXGA	60	1280 × 768
	60	1366 × 768
	60/75/85	1280 × 800
WXGA+	60/75/85	1440 × 900
WXGA++	60	1600 × 900
SXGA	70/75/85	1152 × 864
	60/75/85	1280 × 960
	60/75/85	1280 × 1024
SXGA+	60/75	1400 × 1050
WSXGA+ *	60	1680 × 1050
UXGA	60	1600 × 1200
WUXGA (Reduced Blanking)	60	1920 × 1200

* Only compatible when **Wide** is selected as the **Resolution** setting in the projector's **Signal** menu.

Even when signals other than those mentioned above are input, it is likely that the image can be projected. However, not all functions may be supported.

Component Video

Signal	Refresh rate (Hz)	Resolution (dots)
SDTV (480i/480p)	60	720 × 480
SDTV (576i/576p)	50	720 × 576
HDTV (720p)	50/60	1280 × 720
HDTV (1080i)	50/60	1920 × 1080

Composite Video

Signal	Refresh rate (Hz)	Resolution (dots)
TV (NTSC)	60	720 × 480
TV (SECAM)	50	720 × 576
TV (PAL)	50/60	720 × 576

HDMI Input Signal

Signal	Refresh rate (Hz)	Resolution (dots)
VGA	60	640 × 480
SVGA	60	800 × 600
XGA	60	1024 × 768
WXGA	60	1280 × 800
	60	1366 × 768
WXGA+	60	1440 × 900
WXGA++	60	1600 × 900
SXGA	60	1280 × 960
	60	1280 × 1024
SXGA+	60	1400 × 1050
WSXGA+	60	1680 × 1050
UXGA	60	1600 × 1200
WUXGA (Reduced Blanking)	60	1920 × 1200
SDTV (480i/480p)	60	720 × 480

Signal	Refresh rate (Hz)	Resolution (dots)
SDTV (576i/576p)	50	720 × 576
HDTV (720p)	50/60	1280 × 720
HDTV (1080i)	50/60	1920 × 1080
HDTV (1080p)	24/30/50/60	1920 × 1080

MHL Input Signal

Signal	Refresh rate (Hz)	Resolution (dots)
VGA	60	640 × 480
SDTV (480i/480p)	60	720 × 480
SDTV (576i/576p)	50	720 × 576
HDTV (720p)	50/60	1280 × 720
HDTV (1080i)	50/60	1920 × 1080
HDTV (1080p)	24/30	1920 × 1080

Product name	EH-LS100
Dimensions	494 (W) × 172 (H) × 437 (D) mm (not including raised section)
LCD panel size	0.67"
Display method	Poly-silicon TFT active matrix
Resolution	2,304,000 pixels WUXGA (1,920 (W) × 1,200 (H) dots) × 3
Focus adjustment	Manual
Zoom adjustment	1.0 to 1.35 (Digital Zoom)
Light source	Laser diode
Light source output power	Up to 108 W
Wavelength	450 to 460 nm
Light source life *	Normal or Quiet Light Source Mode: Up to about 20,000 hours
	Extended Light Source Mode: Up to about 30,000 hours
Max. audio output	16 W
Speaker	1
Power supply	100-240V AC±10% 50/60Hz 4.6 - 2.0 A
Power consumption (100 to 120 V area)	Operating: 448 W
	Standby power consumption (Communication On): 2.0 W
	Standby power consumption (Communication Off): 0.5 W
Power consumption (220 to 240 V area)	Operating: 423 W
	Standby power consumption (Communication On): 2.0 W
	Standby power consumption (Communication Off): 0.5 W
Operating altitude	Altitude 0 to 3,000 m
Operating temperature	0 to +45°C (No condensation)
	When using multiple projectors at the same time: 0 to +40°C (No condensation)

Storage temperature	-10 to +60°C (No condensation)
Mass	Approx. 11.0kg

* Approximate time until the light source brightness decreases to half of its original value.

This product is also designed for IT power distribution system with phase-to-phase voltage 230V.

Computer port	1	Mini D-Sub15-pin (female)
Monitor Out port	1	Mini D-Sub15-pin (female)
Video port	1	RCA pin jack
Audio ports	2	Stereo mini pin jack
Audio Out port	1	Stereo mini pin jack
HDMI1/MHL port	1	HDMI (Audio is only supported by PCM)
HDMI2 port	1	HDMI (Audio is only supported by PCM)
HDMI3 port	1	HDMI (Audio is only supported by PCM)
USB-A ports	2	USB connector (Type A)
USB-B port	1	USB connector (Type B)
USB port (for Wireless LAN module)	1	USB connector (Type A)
LAN port	1	RJ-45
RS-232C port	1	Mini D-Sub 9-pin (male)

> • USB-A and USB-B port supports USB 2.0. However, USB ports are not guaranteed to operate all devices that support USB.
> • USB-B port does not support USB 1.1.
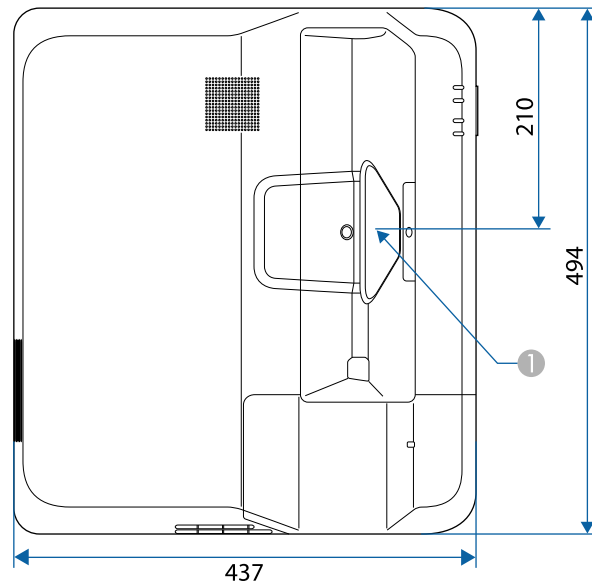
A Center of the projection window
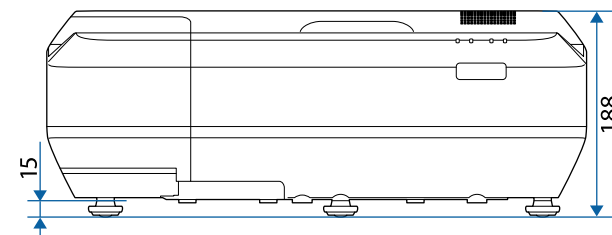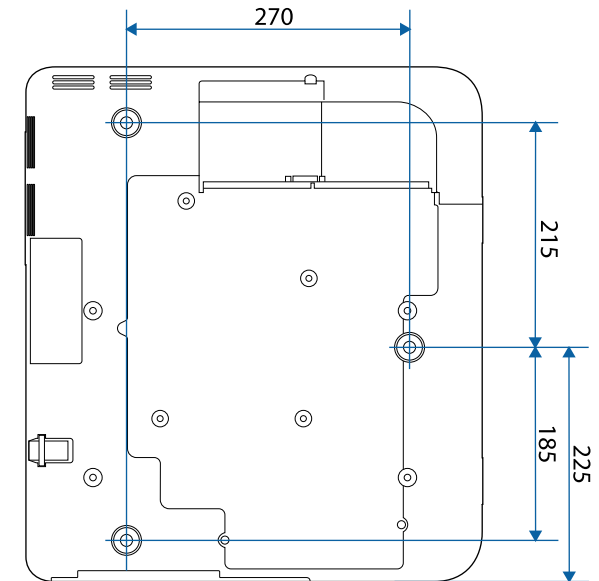
The unit in these illustrations is mm.

To use the projector's Epson USB Display software, your computer must meet the following system requirements.

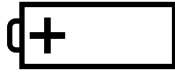| Requirement	Windows	Mac
Operating system	Windows Vista • Ultimate (32-bit) • Enterprise (32-bit) • Business (32-bit) • Home Premium (32-bit) • Home Basic (32-bit)	OS X • 10.7.x (32- and 64-bit) • 10.8.x (64-bit) • 10.9.x (64-bit) • 10.10.x (64-bit) • 10.11.x (64-bit)
	Windows 7 • Ultimate (32- and 64-bit) • Enterprise (32- and 64-bit) • Professional (32- and 64-bit) • Home Premium (32- and 64-bit) • Home Basic (32-bit) • Starter (32-bit)	macOS • 10.12.x (64-bit)
	Windows 8.1 • Windows 8.1 (32- and 64-bit) • Windows 8.1 Pro (32- and 64-bit) • Windows 8.1 Enterprise (32- and 64-bit)	
	Windows 10 • Windows 10 Home (32- and 64-bit) • Windows 10 Pro (32- and 64-bit) • Windows 10 Enterprise (32- and 64-bit)	
CPU	Intel Core2Duo or faster (Intel Core i3 or faster recommended)	Intel Core2Duo or faster (Intel Core i5 or faster recommended)

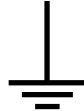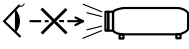| Requirement	Windows	Mac
Memory	2GB or more (4GB or more recommended)	
Hard disk space	20 MB or more	
Display	Resolution between 640 × 480 and 1920 × 1200 16-bit color or greater	

Operation is not guaranteed for Windows Vista without any service packs installed, or Windows Vista Service Pack 1.

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

No.	Symbol mark	Approved standards	Description
❶		IEC60417 No.5007	"ON" (power) To indicate connection to the mains.
❷		IEC60417 No.5008	"OFF" (power) To indicate disconnection from the mains.
❸		IEC60417 No.5009	Stand-by 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.
❹		ISO7000 No.0434B, IEC3864-B3.1	Caution To identify general caution when using the product.
❺		IEC60417 No.5041	Caution, hot surface To indicate that the marked item can be hot and should not be touched without taking care.
❻		IEC60417 No.6042 ISO3864-B3.6	Caution, risk of electric shock To identify equipment that has risk of electric shock.
❼		IEC60417 No.5957	For indoor use only To identify electrical equipment designed primarily for indoor use.
❽		IEC60417 No.5926	Polarity of d.c. power connector To identify the positive and negative connections (the polarity) on a piece of equipment to which a d.c. power supply may be connected.

No.	Symbol mark	Approved standards	Description
❾		—	The same as No.8.
❿		IEC60417 No.5001B	Battery, general On battery powered equipment. To identify a device for instance a cover for the battery compartment, or the connector terminals.
⓫		IEC60417 No.5002	Positioning of cell To identify the battery holder itself and to identify the positioning of the cell(s) inside the battery holder.
⓬		—	The same as No.11.
⓭		IEC60417 No.5019	Protective earth 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.
⓮		IEC60417 No.5017	Earth To identify an earth (ground) terminal in cases where neither the symbol No.13 is explicitly required.
⓯		IEC60417 No.5032	Alternating current To indicate on the rating plate that the equipment is suitable for alternating current only; to identify relevant terminals.
⓰		IEC60417 No.5031	Direct current To indicate on the rating plate that the equipment is suitable for direct current only; to identify relevant terminals.

No.	Symbol mark	Approved standards	Description
⑰		IEC60417 No.5172	Class II equipment To identify equipment meeting the safety requirements specified for Class II equipment according to IEC 61140.
⑱		ISO 3864	General prohibition 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		—	Never look into the optical lens while the projector is on.
㉑		—	To indicate that the marked item don't place anything on projector.
㉒		ISO3864 IEC60825-1	Caution, laser radiation To indicate the equipment has a laser radiation part.
㉓		ISO 3864	Disassembly prohibition To indicate a risk of injury, such as electric shock, if the equipment is disassembled.
㉔		IEC60417 No. 5266	Standby, partial standby To indicate that part of the equipment is in the ready status.
㉕		ISO3864 IEC60417 No. 5057	Caution, movable parts To indicate that you must keep away from movable parts according to protection standards.

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
>
> - Do not open the projector's case. The projector contains a high-powered laser.
> - Possibly hazardous optical radiation emitted from this product. Do not look at operating light source. Eye injury may result.

> ## ⚠ Caution
>
> Do not disassemble the projector when disposing of it. Dispose according to your local or national laws and regulations.

> - The projector uses a laser as the light source. The laser has the following characteristics.
>   - Depending on the surroundings, the brightness of the light source may decline. The brightness declines a lot when the temperature gets too high.
>   - The brightness of the light source declines the longer it is used. You can change the relationship between usage time and decline in brightness settings.
> - Note the following about light source calibration.
>   - Whenever the usage time reaches 100 hours, calibration starts automatically for the light source when the projector is turned off. However, this does not start automatically in the following situations:
>   - If you use the projector continuously for more than 24 hours
>   - If you regularly turn off the projector by shutting off the power outlet
>   - When performing light source calibration, the difference between the white balance and the brightness level for the light source is corrected.

⤏ Related Links
- "Laser Warning Labels" p.169

Laser Warning Labels
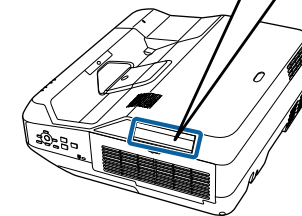
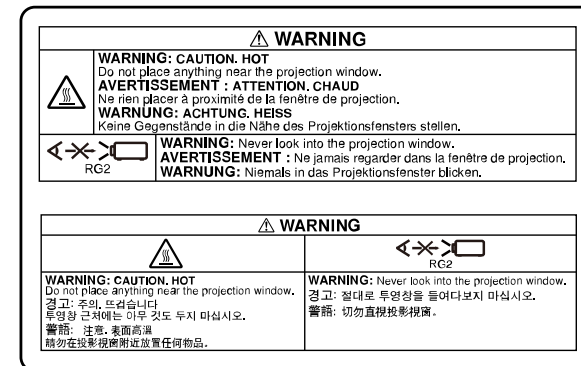Laser warning labels are attached on the projector.

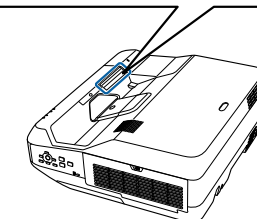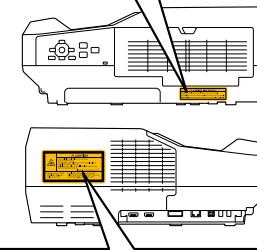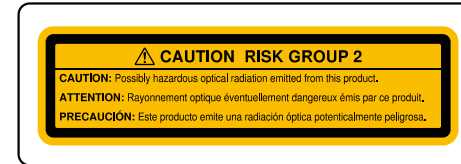**Inside**

Side

Except for North/South America

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

For North/South America

This projector is a Class 3R laser product that complies with the IEC/EN60825-1:2007 international standard for lasers. Follow these safety instructions when using the projector.

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

⚠ CAUTION RISK GROUP 2

CAUTION: Possibly hazardous optical radiation emitted from this product.

ATTENTION: Rayonnement optique éventuellement dangereux émis par ce produit.

PRECAUCIÓN: Este producto emite una radiación óptica potencialmente peligrosa.

⚠ CAUTION

LASER RADIATION AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT

RAYONNEMENT LASER EVITER LE CONTACT OCULAIRE DIRECT
APPAREIL À LASER DE CLASSE 3R

RADIATION LASER EVITE LA EXPOSICIÓN DIRECTA DE LOS OJOS
PRODUCTO LASER DE CLASE 3R
IEC60825-1:2007, dated March 30, 2007

Maximum Output: 37.5mW   Complies with FDA performance standards
Wavelength: 450-460nm   for laser products except for deviation pursuant to
Pulse Duration: CW   Laser Notice No.50, dated June 24, 2007

⚠ CAUTION

CAUTION: LASER APERTURE
ATTENTION: OUVERTURE LASER
PRECAUCIÓN: APERTURA DE LA FUENTE LASER

This section briefly explains the difficult terms that are not explained in the text of this guide. For details, refer to other commercially available publications.

AMX Device Discovery	AMX Device Discovery is a technology developed by AMX to facilitate AMX control systems for easy operation of the target equipment. Epson have implemented this protocol technology, and have provided a setting to enable the protocol function (ON). See the AMX Web site for more details. URL http://www.amx.com/
Aspect Ratio	The ratio between an image's length and its height. Screens with a horizontal:vertical ratio of 16:9, such as HDTV screens, are known as wide screens. SDTV and general computer displays have an aspect ratio of 4:3.
Component Video	A method that separates the video signal into a luminance component (Y), and a blue minus luminance (Cb or Pb) and a red minus luminance (Cr or Pr).
Composite Video	A method that combines the video signal into a luminance component and a color component for transmission down a single cable.
Contrast	The relative brightness of the light and dark areas of an image can be increased or decreased to make text and graphics stand out more clearly, or to make them appear softer. Adjusting this particular property of an image is called contrast adjustment.
DHCP	An abbreviation of Dynamic Host Configuration Protocol, this protocol automatically assigns an IP address to equipment connected to a network.
Gateway Address	This is a server (router) for communicating across a network (subnet) divided according to subnet mask.

HDCP	HDCP is an abbreviation for High-bandwidth Digital Content Protection. It is used to prevent illegal copying and protect copyrights by encrypting digital signals sent over DVI and HDMI ports. Because the HDMI port on this projector supports HDCP, it can project digital images protected by HDCP technology. However, the projector may not be able to project images protected with updated or revised versions of HDCP encryption.
HDMI™	An abbreviation for High Definition Multimedia Interface. HDMI™ is a standard aimed at digital consumer electronics and computers. This is the standard by which HD images and multichannel audio signals are digitally transmitted. By not compressing the digital signal, the image can be transferred at the highest quality possible. It also provides an encryption function for the digital signal.
HDTV	An abbreviation for High-Definition Television that refers to high-definition systems which satisfy the following conditions: • Vertical resolution of 720p or 1080i or greater (p = Progressive, i = Interlace) • Screen aspect ratio of 16:9
Infrastructure mode	A method for wireless LAN connection in which devices communicate through access points.
Interlace	Transmits information needed to create one screen by sending every other line, starting from the top of the image and working down to the bottom. Images are more likely to flicker because one frame is displayed every other line.
IP Address	A number to identify a computer connected to a network.
MHL	An abbreviation for Mobile High-definition Link, which is a standard high-definition interface that enables high-speed transfer of video signals on mobile devices. It is a standard targeting smartphones and tablets that transfers uncompressed digital signals without loss of quality and also enables simultaneous charging of such devices.

Progressive	Projects information to create one screen at a time, displaying the image for one frame.
	Even though the number of scan lines is the same, the amount of flicker in images decreases because the volume of information has doubled compared with an interlace system.
Refresh Rate	The light-emitting element of a display maintains the same luminosity and color for an extremely short time.
	Because of this, the image must be scanned many times per second to refresh the light-emitting element.
	The number of refresh operations per second is called the Refresh rate and is expressed in hertz (Hz).
SDTV	An abbreviation for Standard Definition Television that refers to standard television systems which do not satisfy the conditions for HDTV High-Definition Television.
SNMP	An abbreviation for Simple Network Management Protocol, which is the protocol for monitoring and controlling devices such as routers and computers connected to a TCP/IP network.
sRGB	An international standard for color intervals that was formulated so that colors that are reproduced by video equipment can be handled easily by computer operating systems (OS) and the Internet. If the connected source has an sRGB mode, set both the projector and the connected signal source to sRGB.
SSID	SSID is identification data for connecting to another device on a wireless LAN. Wireless communication is possible between devices with the same SSID.
Subnet Mask	This is a numerical value that defines the number of bits used for the network address on a divided network (subnet) from the IP address.
SVGA	A screen size standard with a resolution of 800 (horizontal) × 600 (vertical) dots.
SXGA	A screen size standard with a resolution of 1,280 (horizontal) × 1,024 (vertical) dots.

Sync.	The signals output from computers have a specific frequency.
	If the projector frequency does not match this frequency, the resulting images are not of a good quality.
	The process of matching the phases of these signals (the relative position of the crests and the troughs in the signal) is called Synchronization.
	If the signals are not synchronized, flickering, blurriness, and horizontal interference occur.
Tracking	The signals output from computers have a specific frequency.
	If the projector frequency does not match this frequency, the resulting images are not of a good quality.
	The process of matching the frequency of these signals (the number of crests in the signal) is called Tracking.
	If Tracking is not carried out correctly, wide vertical stripes appear in the signal.
Trap IP Address	This is the IP address for the destination computer used for error notification in SNMP.
VGA	A screen size standard with a resolution of 640 (horizontal) × 480 (vertical) dots.
XGA	A screen size standard with a resolution of 1,024 (horizontal) × 768 (vertical) dots.
WXGA	A screen size standard with a resolution of 1,280 (horizontal) × 800 (vertical) dots.
WUXGA	A screen size standard with a resolution of 1,920 (horizontal) × 1,200 (vertical) dots.

Check these sections for important notices about your projector.

⏭ **Related Links**

FCC Compliance Statement

DECLARATION of CONFORMITY
According to 47CFR, Part 2 and 15
Class B Personal Computers and Peripherals; and/or
CPU Boards and Power Supplies used with Class B Personal Computers

We: Epson America, Inc.

Located at: 3840 Kilroy Airport Way MS: 3-13 Long Beach, CA 90806

Tel: 562-981-3840

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR 2.909. 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.

Trade Name: EPSON

Type of Product: LCD Projector

Model: H879C

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.

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.

Statement for Canadian EMC Rules

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

Indication of the manufacturer and the importer in accordance with requirements of EU directive

Manufacturer: SEIKO EPSON CORPORATION

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

Telephone: 81-266-52-3131

http://www.epson.com/

Importer: EPSON EUROPE B.V.

Address: Atlas Arena, Asia Building, Hoogoorddreef 5,1101 BA Amsterdam Zuidoost

The Netherlands

Telephone: 31-20-314-5000

http://www.epson.eu/

Restriction of Use

When this product is used for applications requiring high reliability/safety such as transportation devices related to aviation, rail, marine, automotive etc.; disaster prevention devices; various safety devices etc; or functional/precision devices etc, 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 etc, please make your own judgment on this product's suitability after a full evaluation.

Operating System References

- Microsoft® Windows Vista® operating system

- Microsoft® Windows® 7 operating system
- Microsoft® Windows® 8 operating system
- Microsoft® Windows® 8.1 operating system
- Microsoft® Windows® 10 operating system

In this guide, the operating systems above are referred to as "Windows Vista", "Windows 7", "Windows 8", "Windows 8.1", and "Windows 10". Furthermore, the collective term "Windows" is used to refer to them all.

- OS X 10.7.x
- OS X 10.8.x
- OS X 10.9.x
- OS X 10.10.x
- OS X 10.11.x
- macOS 10.12.x

In this guide, the operating systems above are referred to as "OS X 10.7.x", "OS X 10.8.x", "OS X 10.9.x", "OS X 10.10.x", "OS X 10.11.x", and "macOS 10.12.x". Furthermore, the collective term "Mac" is used to refer to them all.

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