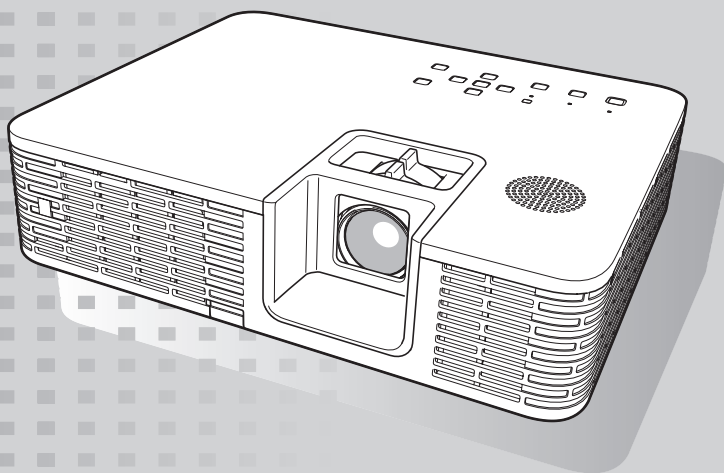# DATA PROJECTOR
XJ-H2600/XJ-H2650*

* USB Port Models

User's Guide

● Be sure to read the precautions in the Quick Start Guide that comes with the Data Projector.

● Be sure to keep all user documentation handy for future reference.

● To obtain the latest version of this manual visit the website at the URL below.
http://world.casio.com/manual/projector/

CASIO®

Contents

About this manual...

All of the operations in this manual are explained using the remote controller that comes with the projector.

Projector Overview

This section describes the features of the projector, and explains the functions of the projector and remote controller keys.

Projector Features and Main Functions

XJ-H1600/XJ-H1650/XJ-H1700/XJ-H1750/XJ-H2600/XJ-H2650/XJ-ST145/XJ-ST155

- **Mercury-free Hybrid Light Source:**
  A CASIO-original laser and LED hybrid light source delivers high luminance from 2,500 to 4,000 lumens. This projector does not use a mercury lamp, making it environmentally friendly.
- **A wide selection of input sources:**
  Analog RGB, composite video, S-video, component video (Y·Cb·Cr, Y·Pb·Pr), and HDMI input sources are supported.
- **Intelligent Brightness Control function (Eco Mode):**
  The projector senses surrounding light levels and adjusts projection brightness automatically as required for efficient low-power operation. (Requires "Eco Mode" setting to be set to "On (Auto)".)
- **3D image projection support:**
  Projection of a 3D image signal (60Hz/120Hz field sequential protocol) via one of three input sources (analog RGB, composite video, S-video) is supported.
  - * Separately available 3D glasses (YA-G30) are required in order to view a projected 3D image in 3D. Also, separately available special software (CASIO 3D Converter) is required to project a 3D image with the projector when a computer (analog RGB) is the input source.
  - * 3D image projection is not supported via an HDMI connection or component video connection.
- **Pointer:**
  The remote controller can be used to select one of a variety of different pointers for use during projection.
- **Direct Power On:**
  The projector can be configured to turn on automatically and start projecting as soon as it is plugged into a power outlet.

XJ-H2600/XJ-H2650

- **WXGA Resolution:**
  The XJ-H2600/XJ-H2650 models support WXGA (1280 × 800) resolution for optimal viewing of content formatted for today's widescreen displays. This makes it perfect for projecting images from widescreen notebook PCs and HD video input sources.

XJ-H1650/XJ-H1750/XJ-H2650/XJ-ST145/XJ-ST155

- **Projection of Data from USB Memory or a Memory Card without a Computer**[*1]**:**
  USB memory or a memory card (using a commercially available USB card reader) can be connected directly to the projector's USB-A port. Special EZ-Converter FA software, which is available by download from the CASIO website, can be used to convert PowerPoint data to a format that is compatible with the projector. The projector-compatible data can be saved to USB memory or a memory card and used as presentation data without a computer. Images and movies also can be projected directly from USB memory or a memory card.

- **Interactive Pointing Function:**
  You can use a separately available interactive pointer (YA-P10) to draw lines and figures directly on an image being projected by the projector from a connected computer. You can also use the pointer to perform mouse operations.

- **Multi Projection Camera (YC-400, YC-430) Connection**[*1]**:**
  A CASIO Multi Projection Camera can be connected directly to the projector's USB-A port for fine resolution projection of documents and other images. Document camera capabilities allow projection of data without going through a computer.

- **Graphic Scientific Function Calculator Connection**[*1]**:**
  Certain CASIO graphic scientific calculator models can be connected directly to the projector's USB-A port for projection of the calculator screen contents.

- **Projection of Computer Screen Contents via Wireless LAN**[*2]**:**
  The projector comes with a wireless LAN adapter. After a wireless LAN connection is established, the contents of the computer screen can be sent to the projector for projection.

- **Support for Wireless projection from MobiShow**[*2]**:**
  You can install AWIND's MobiShow (client software for wireless connection to a projector) on a smartphone or mobile terminal, and then use the projector to project photographs and presentation files stored in the smartphone or terminal memory.
  * Note that the type of terminal and the MobiShow version can limit certain functions or can even make projection impossible.

- **Projector operation via wired or wireless LAN:**
  Remote control of the projector is supported via a wired connection to the LAN port on the back or the projector or via wireless LAN. For details, see "Using Wired LAN to Control the Projector" (page 65).

  *1 For details, see the "USB Function Guide".
  *2 For details, see the "Wireless Function Guide".

Remote Controller and Projector Keys

Operations in this manual are presented based on the remote controller that comes with the projector. Major operation keys are also provided on the projector unit, so the most of the same procedures can also be performed directly on the projector.

Remote Controller Keys

[INPUT] key
[MENU] key
[⏻] (Power) key
[ESC] key

Remote control signal emitter

CLASS 1 LED PRODUCT

[FUNC] key
[AUTO] key
[BLANK] key
[FREEZE] key
[COLOR MODE] key
[VOLUME] key
[BRIGHT] key ([○] key)
[ECO] key ([△] key)
[ASPECT] key ([□] key)

Cursor keys (▲/▼/◀/▶)
[ENTER] key ([STYLE] key)

[D-ZOOM +] [D-ZOOM –] keys
[KEYSTONE +] [KEYSTONE –] keys
[POINTER] key
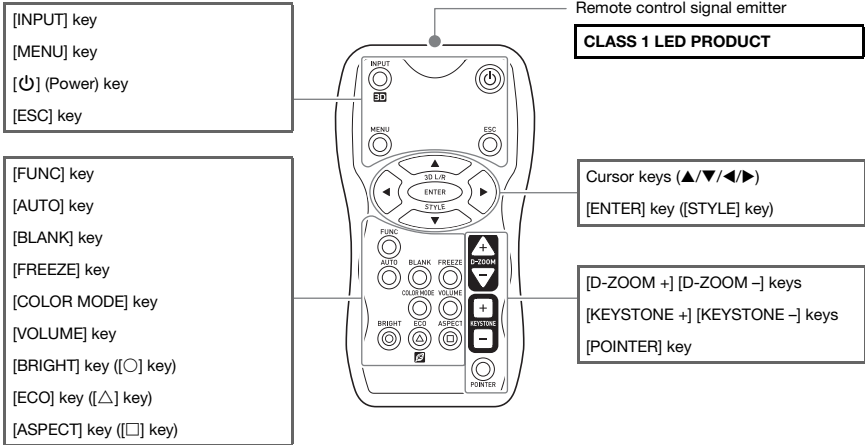
The remote controller does not come with batteries loaded. You need to load the two supplied batteries before use.

🔴 **Important!**

To avoid running down the batteries, store the remote control unit so its keys are not pressed inadvertently.

Projector Keys and Indicators

TEMP indicator
LIGHT indicator
POWER/STANDBY indicator

[ENTER] key
[MENU] key

[⏻] (Power) key
[INPUT] key
[AUTO] key
Cursor keys (∧/∨/‹/›)
[ESC] key
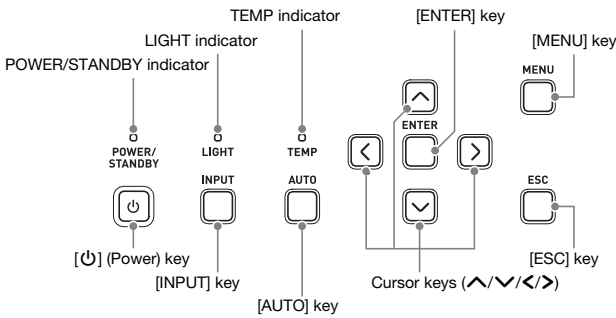
✏️ **Note**

You can configure the projector so operations of its keys are disabled and only remote controller operations are valid. This helps to protect against accidental mis-operation. For details, see "Control Panel Lock" (page 35).

Back Terminals
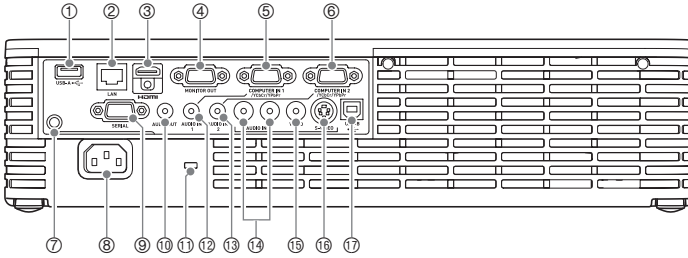
① USB-A port (XJ-H1650/XJ-H1750/XJ-H2650/XJ-ST145/XJ-ST155 only)

② LAN port (XJ-H1650/XJ-H1750/XJ-H2650/XJ-ST145/XJ-ST155 only)

③ HDMI port

④ MONITOR OUT terminal

⑤ COMPUTER IN 1 terminal

⑥ COMPUTER IN 2 terminal

⑦ Remote control signal receiver

⑧ Power connector

⑨ SERIAL port*1

⑩ AUDIO OUT terminal

⑪ Anti-theft lock hole

⑫ AUDIO IN 1 terminal

⑬ AUDIO IN 2 terminal

⑭ AUDIO IN L/R terminals

⑮ VIDEO terminal

⑯ S-VIDEO terminal

⑰ USB-B port*2 (XJ-H1650/XJ-H1750/XJ-H2650/XJ-ST145/XJ-ST155 only)

*1 This terminal is for controlling the projector from an external device. It normally is not used. For information about using control commands and other details, See "Projector RS-232C Control" (page 70).

*2 This port is for USB connection between the projector and a computer when using the optionally available interactive pointer (YA-P10).

Loading Remote Controller Batteries

⚠ **Caution**	RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

1. Open the battery cover on the back of the remote controller.
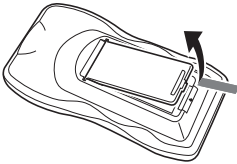
2. Load two new batteries into the case, making sure that their positive (+) and negative (–) ends are facing correctly.
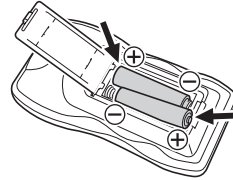
3. Close the battery cover on the back of the remote controller.

Replacing Remote Controller Batteries

Open the battery cover on the back of the remote controller, replace the old batteries with new ones, and then close the battery cover.

Setting Up the Projector

Place the projector onto a table, desk, or stand that is level and firm, making sure you allow enough room around it. Best results can be obtained when the projector is pointed directly at the screen, and not at an angle.

XJ-H1600/XJ-H1650/XJ-H1700/XJ-H1750	XJ-H2600/XJ-H2650/XJ-ST145/XJ-ST155
Screen	Screen
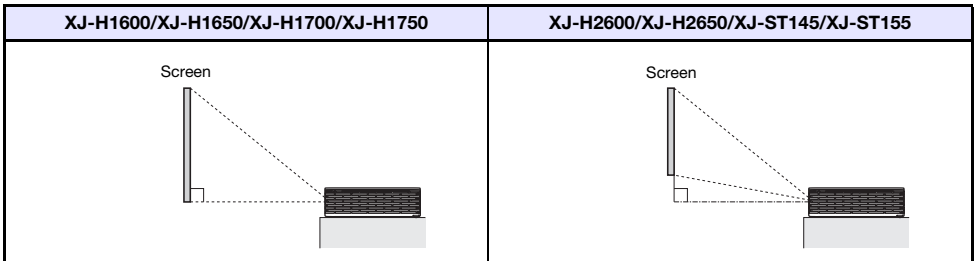
● The projector can be configured for projection from the back of a screen. For details, see "Projection Mode" (page 42) under "Screen Settings Main Menu".

Setup Precautions

● Use a conveniently located power outlet that you can reach easily when you need to unplug the projector.
● Do not allow any objects to be within the area indicated by the dashed line below, which is an area within 30cm (11.8 inches) of the projector. Keep all obstacles and other objects at least 30cm away from the projector's vents.
● Airflow from air conditioning equipment can blow the heat being exhausted from the area around the projector's lens in a way that causes heat ripples to appear in the projected image. If this happens, adjust the airflow of the air conditioning equipment or move the projector.
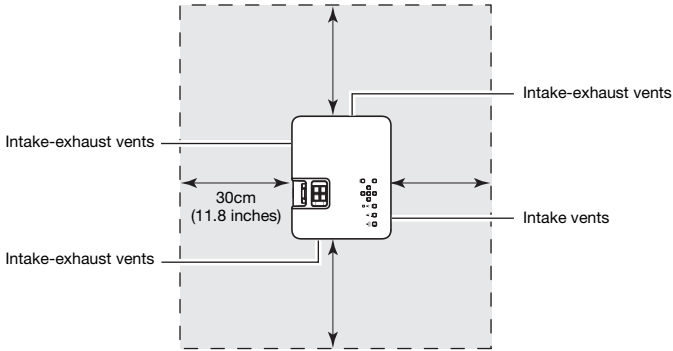
Connecting to an Image Output Device

Connecting the Analog RGB Output of a Computer to the Projector

Connect the projector's COMPUTER IN 1 or COMPUTER IN 2 terminal to the RGB terminal of a computer as shown in the illustration below.

Important!
- Always turn off the projector and the computer before connecting them.
- Take care so the volume level of the computer is not set too high.

Projector

COMPUTER IN 1 terminal

AUDIO IN 1 terminal

COMPUTER IN 2 terminal

AUDIO IN 2 terminal

Bundled mini D-Sub cable

Audio cable (commercially available)

Computer

To monitor terminal
(analog RGB output terminal)

To line output terminal
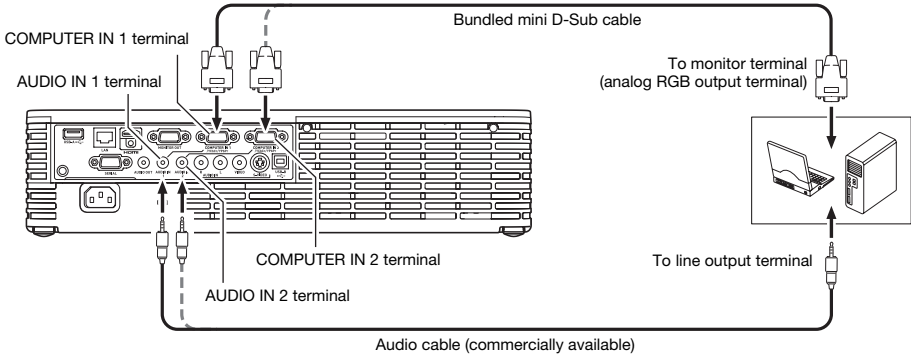
Connecting the HDMI Output of a Video Device or Computer to the Projector

The projector supports projection and output of HDMI video and audio output from a computer or video device.

Important!
Turn off the projector and the computer or video device before connecting them.

Projector   **Computer or video device**

HDMI port

HDMI cable (commercially available)

To HDMI output terminal
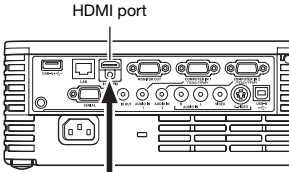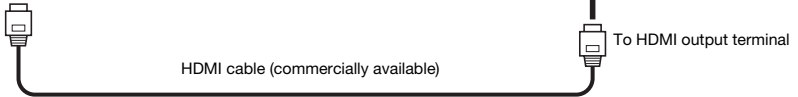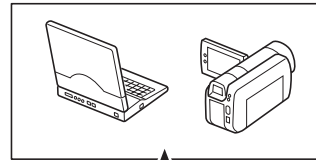
- You will need to obtain a commercially available HDMI cable with a connector that matches the terminal of the output device on one end and a connector that matches the projector's HDMI port (HDMI Type A Socket) on the other end.
- For information about HDMI video signal supported by the projector, see page 64.
- The projector supports L-PCM 32kHz, 44.1kHz, and 48kHz HDMI audio signals.

Connecting to a Video Device

The projector is able to project images from the composite video output, S-video output, or component video output of a connected video device.

🔴 **Important!** ─────────────────────────────────────

Always turn off the projector and the video device before connecting them.

Connection to a composite video output or S-video output

Projector

Video device

S-video cable (commercially available)

To S-VIDEO terminal

To S-video output terminal

Red: To AUDIO IN R terminal

Yellow: To VIDEO terminal

White: To AUDIO IN L terminal

To video/audio output terminal

Pin plug type video/audio cable (commercially available)
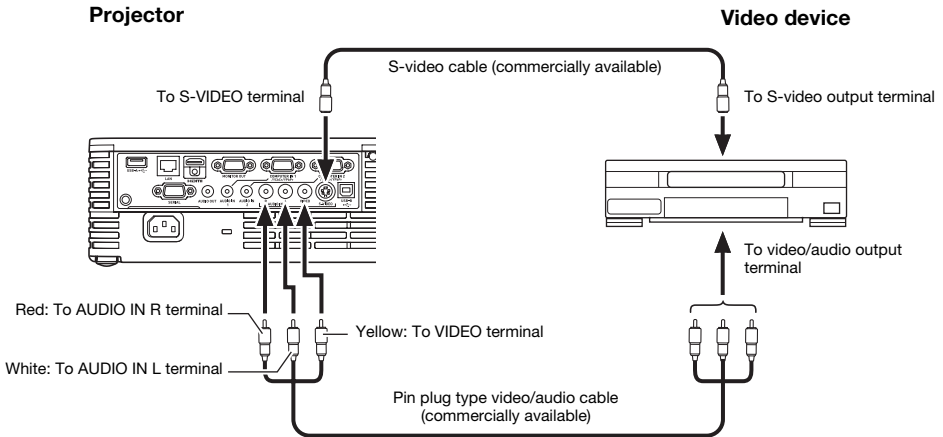
✏️ **Note** ───

Note that regardless of whether the image being projected is being input via the projector's S-VIDEO terminal or VIDEO terminal, the projector outputs audio that is input via the projector's AUDIO IN L/R terminals.

Connection to a component video output

Projector　　　　　　　　　　　　　　　　　　　　　　　　　　　　　**Video device**

Component video cable (commercially available)

COMPUTER IN 1 terminal

AUDIO IN 1 terminal

To component video output terminals

COMPUTER IN 2 terminal

To audio output terminals

AUDIO IN 2 terminal

White　　Red

Stereo mini plug ⇔ Pin plug type audio cable
(commercially available)
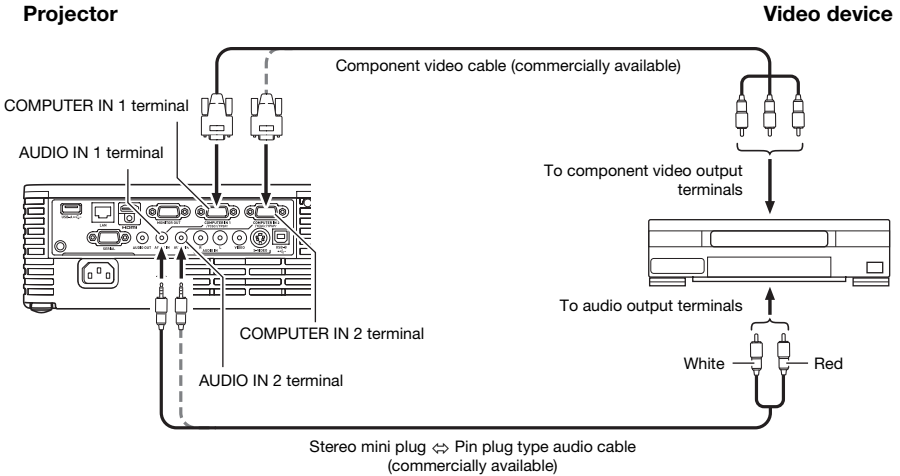
- Component video output terminals come in 3-terminal sets: Y·Cb·Cr or Y·Pb·Pr. Be sure to match the colors of the plugs on a component video cable with the colors of the terminals (Green: Y; Blue: Cb/Pb; Red: Cr/Pr).
- Note that connection only to an analog component video output terminal is supported. Connection to a digital output terminal is not supported.

Operation During Projection

Selecting the Input Source

Turning on the projector initially causes the same input source that was selected the last time it was turned off to be selected.

To select a different input source

1. **Press the [INPUT] key.**
- This displays the input source selection screen.

2. **Select either the Normal Input Mode or 3D Input Mode depending on the type of image you want to project.**
- For details, see "3D Input Mode" (page 17).

3. **Use the [▼] and [▲] keys to select the name of the input source you want to select and then press the [ENTER] key.**
- The name of the input source you select appears in the upper right corner of the projection screen for a few seconds.
- The message "No signal input" will appear if no input signal can be selected.

Resolution

Depending on the projector model, its video resolution will be fixed at XGA (1024 × 768 pixels) or WXGA (1280 × 800 pixels). Images may appear coarse, text and other figures may be difficult to read or a moire pattern may appear when the input signal from a computer does not match the projector's video resolution. If this happens, try doing the following.
- Change the computer's output resolution setting so it matches the projector's video resolution. For information about the video resolution of your projector, see the "DLP chip" item of the "Specifications" (page 73). See the user documentation that comes with your computer for details about changing its settings.
- Change the "Aspect Ratio" setting to "True" (Applies only to models that support WXGA video resolution).
  With the "True" setting, the projector projects the input signal at its actual size (1 input source dot equal to one projector output pixel dot).
  For information about configuring the Aspect Ratio setting, see "Changing the Aspect Ratio of the Projected Image" (page 23).

3D Input Mode

Your projector supports projection of 3D images. To project a 3D image, first enter the projector's 3D input mode, and then select the input source.

Important!
- Separately available 3D glasses (YA-G30) are required in order to view a projected 3D image in 3D.
- Separately available special software (CASIO 3D Converter) is required to project a 3D image with the projector when a computer (analog RGB) is the input source.
- 3D image projection is not supported via an HDMI connection or component video connection.

The input sources described below can be selected for projection in the 3D Input Mode.

Input Source	Projection Conditions

Computer (Analog RGB)	• Any of the following types of 3D image data played back using separately available special software (CASIO 3D Converter).
	  – 2D image file converted to a 3D image file using CASIO 3D Converter
	  – Side-by-side 3D format files
	• Signal with 60Hz/120Hz vertical scan frequency

Composite Video, S-video	• Field sequential 3D format files recorded with field sequential DVD software, etc. • Signal with 60Hz vertical scan frequency

Note
See "3D Signals (3D Input Mode)" (page 64) for a list of 3D image signals supported by this projector.

Entering the 3D Input Mode

1. Press the [INPUT] key to display the input source selection screen.

2. Select Computer 1 (RGB), Computer 2 (RGB), S-video, or Video as the input source.

3. Use the [▼] and [▲] keys to move the highlighting to "To 3D input mode" and then press the [ENTER] key.
- This enters the 3D input mode and closes the input source selection screen.

Important!
- You cannot select HDMI or USB as the input source in the 3D input mode. To use either of these input sources, change the input source setting back to normal input mode.
- When Computer 1 (or Computer 2) is selected as the input source in the 3D input mode, a component video signal input through the projector's COMPUTER IN 1 (or COMPUTER IN 2) terminal is treated as an RGB signal resulting in abnormal image projection.
- Except when using the projector for 3D image projection, you should normally leave it in the normal input mode.

Returning to the Normal Input Mode from the 3D Input Mode

1. **Press the [INPUT] key to display the input source selection screen.**

2. **Use the [▼] and [▲] keys to move the highlighting to "To normal input mode" and then press the [ENTER] key.**
   ● This enters the normal input mode and closes the input source selection screen.

Horizontal Flipping in the 3D Input Mode

In side-by-side 3D, a full frame consists of two halves on the left and right for each eye. In rare cases, the left and right images may be reversed, which causes a loss of 3D depth. If this happens, try using the following procedure to swap the left and right images with each other.

To swap the left and right images

In the 3D input mode, press the [ENTER] key.

Image Operations During Projection

You can perform the following operations while projecting an image.

- Image brightness adjustment
- Manual keystone correction
- Color mode selection
- Image zooming
- Momentarily blanking the image and muting the audio
- Image freeze
- Pointer display in the projected image
- Aspect ratio switching

Adjusting Image Brightness

✎ Note ───

(for USB port model users)

Use the setup menu (page 27) to adjust image brightness when the input source is an external device connected to the USB-A port.

1. **Press the [BRIGHT] key.**

- This displays the brightness adjustment window.

☼ Brightness	0	− ▭▬▭ +
[◀]/[▶]:Modify [ESC]:Quit		

2. **Use the [◀] and [▶] keys to adjust image brightness.**

3. **To hide the window, press the [ESC] key.**

To use manual keystone correction

The projector has a keystone correction feature that prevents distortion of the projected image when projecting from an angle. The projector detects when it is at a vertical angle to the screen and performs keystone correction automatically.
You can use the [KEYSTONE +] and [KEYSTONE −] keys to adjust keystone correction manually.
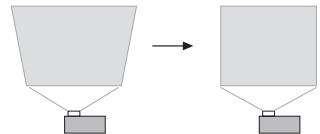
Selecting the Color Mode

You can select from among various different color mode settings in accordance with image contents and projection conditions.

> **Important!**
> - The color mode cannot be selected in the following cases.
>   - When "Off" is selected for the Eco Mode setting (page 25)
>   - When the projector is in the 3D input mode. See "3D Input Mode" (page 17).
> - The color mode cannot be selected while "On" is selected for the setup menu "Option Settings 2 → Interactive Pointer" setting. Though the color mode change operation may be possible on some projector models, doing so may cause problems with the optional interactive pointer (YA-P10) in some color modes.

To change the color mode

1. **Press the [COLOR MODE] key.**
   - This displays the color mode selection window. The currently selected color mode is the one whose button is selected (filled in).

2. **Use the [▼] and [▲] keys to move the highlighting to the color mode you want to select, and then press the [ENTER] key.**
   - This will select the button next to the highlighted color mode name.
   - For details on what each color mode does, see "Color Mode" (page 39) under "Image Adjustment 1 Main Menu".

3. **To hide the window, press the [ESC] key.**

Zooming an Image

1. **Press the [D-ZOOM +] key.**
   - This will enlarge the center of the projected image one step.

2. **To zoom in on the center of the projected image more, press the [D-ZOOM +] key again. To zoom out, press the [D-ZOOM –] key.**
   - Each press of [D-ZOOM +] zooms in (increases the zoom factor), while [D-ZOOM –] zooms out. Holding down either key continuously scrolls the zoom factor.

3. **While an image is zoomed, use the [▲], [▼], [◀], and [▶] keys to scroll the view to other parts of the image.**

4. **To exit the zoom operation, press the [ESC] key.**

Momentarily Blanking the Image and Muting the Audio

1. Press the [BLANK] key.
- This temporarily blanks the image (projecting a black screen) and mutes the audio.

2. To resume normal image and sound, press the [BLANK] key (or [ESC] key).

✎ **Note** ───────────────────────────────────
You can specify projection of a black screen, a blue screen, a logo screen, or a custom logo screen. For details, see "Blank Screen" (page 42) under "Screen Settings Main Menu".

Freezing an Image

Pressing the [FREEZE] key freezes the projected image.

To freeze the projected image

1. While an image is being projected from an input source, press the [FREEZE] key.
- This will capture the image that is on the screen at the moment you press [FREEZE] and stores it in projector memory. That image remains projected on the screen.

2. To restore projection of the image from an input source, press the [ESC] key.

Displaying a Pointer in the Projected Image

You can select from among different pointer styles, including various arrow styles, for display in the projected image. Pointers can be used during a presentation to indicate or highlight a specific part of the image.

✎ **Note** ───

Depending on the pointer style you are using, the pointer may not display properly when you are using keystone correction. If this happens, use the [KEYSTONE +] and [KEYSTONE –] keys to change the keystone correction value to zero.

To display a pointer in the image

1. **Press the [POINTER] key.**
   - This will cause a pointer to appear in the image.
   - You also can use the setup menu to specify the pointer type that appears first when you press the [POINTER] key. For details, see "Pointer" (page 46) under "Option Settings 2 Main Menu".

2. **Use the cursor keys to move the pointer to the location you want.**
   - Holding down a cursor key moves the cursor at high speed.

3. **To modify the pointer as described below, press the [STYLE] key.**

For this pointer type:	Pressing [STYLE] will change it like this:
↖	↖ → ↗ → ↘ → ↙
🖑	🖑 → ☞ → ☝ → ☟
▷	▷ → ◁ → ◁ → ▷
✛	✛ → ✖ → ✛ → ✖
▬▬▬▬▬	Toggle between flashing and not flashing

To select the pointer type

1. **Press the [POINTER] key to display the pointer.**

2. **Keep pressing the [POINTER] key until the pointer you want is displayed.**
   - Each press of the [POINTER] key cycles through the available pointer types.

To clear the pointer from the image

Press the [ESC] key.

Changing the Aspect Ratio of the Projected Image

Press the [ASPECT] key to cycle through the aspect ratio settings for the projected image.

Available settings depend on your projector model as shown below. For details about the meaning of each setting, see "Aspect Ratio" (page 41) under "Screen Settings Main Menu".

XJ-H2600/XJ-H2650

Pressing the [ASPECT] key will cycle through settings in accordance with the current input source as shown below.

Input Source	Pressing [ASPECT] will cycle through these settings:
Video, S-video, Component, HDMI (DTV)	Normal → 16:9 → 4:3 → Letter Box
RGB, HDMI (PC)	Normal → Full → 4:3 → True

XJ-H1600/XJ-H1650/XJ-H1700/XJ-H1750/XJ-ST145/XJ-ST155

Pressing the [ASPECT] key will toggle between settings in accordance with the current input source as shown below.

Input Source	Pressing [ASPECT] will toggle between these settings:
Video, S-video, Component, HDMI (DTV)	Normal ↔ 16:9
RGB, HDMI (PC)	Normal ↔ Full

Note
- For details about how the aspect ratio setting affects the projected image, see "Aspect Ratio Setting and Projection Image" (page 60).
- You also can change the aspect ratio setting using the setup menu. For details, see "Aspect Ratio" (page 41) under "Screen Settings Main Menu".

Important!
Note that enlarging or reducing the size of an image using the [ASPECT] key for commercial purposes or public presentation may infringe on the legally protected copyright of the copyright holder of the original material.

Adjusting the Volume Level

You can use the remote controller keys to adjust the volume level of the audio that is output from the projector's speaker or the AUDIO OUT terminal.

To adjust the volume level

1. **Press the [VOLUME] key.**
   ● This causes the [Volume] screen to appear on the projected image.

◀) Volume	15 − ▬▬▬▬ +
[◀]/[▶]:Modify [ENTER]:Mute [ESC]:Quit	

2. **Press the [▶] key to increase the volume, or the [◀] key to lower the volume.**

3. **After the setting is the way you want, press the [ESC] key.**
   ● This causes the [Volume] screen to disappear.

✎ **Note**
You also can use the setup menu to adjust the volume level. For details, see "Volume Adjustment Main Menu" on page 40.

To mute the audio

1. **Press the [VOLUME] key.**

2. **Press the [ENTER] key.**
   ● This stops output from the speaker.

3. **To restore the audio, press the [VOLUME] key again.**

Eco Mode (Power Saving, Low Noise)

The following three Eco Mode settings are available to specify whether priority should be given to low-power, low-noise operation or to projection brightness.

On (Auto)   : A brightness sensor on the top of the projector senses surrounding light, and automatically adjusts projection brightness and color accordingly. Brightness is reduced for darker surroundings, which saves power and reduces operation noise.

On (Manual): Enables manual adjustment to balance the needs of low-power, quiet operation and projection brightness.

**Off**   : Give top priority to projection brightness.

Important!

● While "On (Auto)" is selected as the Eco Mode setting, make sure that the brightness sensor on the top of the projector is not blocked by anything.

● The local environment and setup conditions affect the brightness sensor, so operation when "On (Auto)" is selected for the Eco Mode depends on these factors.

To select the Eco Mode

1. **Press the [ECO] key.**

● This causes "Eco Mode" window to appear on the projection screen.
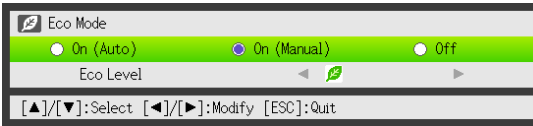
2. **Use the [◀] and [▶] keys to select the setting you want.**

● If you select "On (Manual)" here, go to step 3. If you select another setting, jump to step 4.

3. **Perform the following steps to adjust the "Eco Level" (the balance between low-power, quiet operation and projection brightness).**

① Press the [▼] key to move the highlighting to the Eco Level.

② Use the [◀] and [▶] keys to adjust the Eco Level to the setting you want.
Fewer 🍃 marks gives higher priority to projection brightness. A greater number gives high priority to low-power, quiet operation.

4. **To hide the window, press the [ESC] key.**

Important!

● The Eco Mode level is fixed whenever the projector is in the 3D input mode ("3D Input Mode", page 17) or when "On" is selected for the "Option Settings 2 → Interactive Pointer" setting. Because of this the Eco Mode setting cannot be changed.

● The "On (Auto)" setting cannot be selected for the Eco Mode while "Rear" is selected for "Screen Settings → Projection Mode" (page 42) on the setup menu. If the "Projection Mode" setting is changed to "Rear" while "On (Auto)" is selected for the Eco Mode setting, the Eco Mode setting will automatically change to "On (Manual)".

- While "Off" is selected for the Eco Mode setting, you also can specify whether brightness or color should be given emphasis. For details, see "Eco Off Mode" (page 39) under "Image Adjustment 1 Main Menu".
- **(for USB port model users)**
  Use the setup menu (page 27) to select the Eco Mode when the input source is an external device connected to the USB-A port.

Using the [FUNC] Key

Pressing the [FUNC] key displays the menu shown below.

```
Functions
   ○ : Brightness
   △ : Eco Mode
   □ : Aspect Ratio
[▲]/[▼]:Select [ENTER]:OK [ESC]:Quit
```
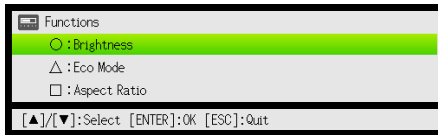
You can use this menu to perform the operations described below.
- **Adjust image brightness**
  Highlight "Brightness" and then press the [ENTER] key.
  → This performs the same operation as pressing the [BRIGHT] key (○ key) described on page 19.

- **Turn the Eco Mode on or off**
  Highlight "Eco Mode" and then press the [ENTER] key.
  → This performs the same operation as pressing the [ECO] key (△ key) described on page 25.

- **Select the aspect ratio of the projected image**
  Highlight "Aspect Ratio" and then press the [ENTER] key.
  → This performs the same operation as pressing the [ASPECT] key (□ key) described on page 23.

Note
(for USB port model users)
When the input source is an external device connected to the USB-A port, use the [FUNC], [○], [△], and [□] keys to control the connected device. For details, see the "USB Function Guide" and "Wireless Function Guide".

Configuring Advanced Projector Settings

Your projector has a setup menu that you can use to configure advanced settings.

Basic Setup Menu Operations

Displaying the Setup Menu

Pressing the [MENU] key displays the menu shown below in the center of the projection screen.

Main menu
Pressing the [MENU] key displays the main menu. The currently selected menu item is the one that is highlighted.

Sub-menu
The sub-menu shows each individual setting under each main menu item, and its current setting.

Guidance text
Guidance text provides a brief description of the main key operations available for the operation you are currently performing.

To exit the setup menu

Press the [MENU] key.

Configuring Setup Menu Settings

1. Press the [MENU] key to display the setup menu.

2. Use the [▼] and [▲] keys to select the main menu item you want by highlighting it.

3. Press the [ENTER] key.

4. Use the [▼] and [▲] keys to select the sub-menu item you want by highlighting it.

5. Perform the required operation on the selected sub-menu item screen.
- The guidance text explains the operations you need to perform to configure each setting.

6. To return to the main menu from the sub-menu, press the [ESC] key.

7. To exit the setup menu, press the [MENU] key.

Basic Setup Menu Example

The procedure below shows how to configure the following three settings:

● Image Adjustment 1 → Contrast
● Image Adjustment 1 → Color Mode
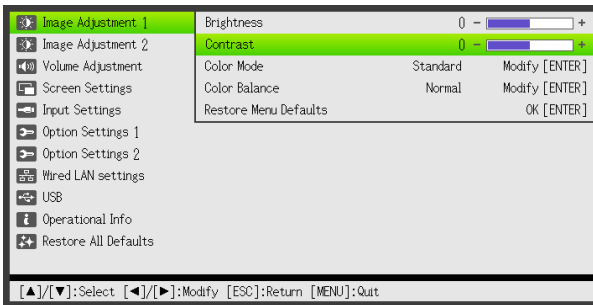● Input Settings → Signal Name Indicator

📝**Note** ───

● The setup menu items that you can change depend on whether or not an image signal is being input to the projector, and on the currently selected input source. Perform the procedure below after starting projection of an image from an input source in the normal input mode. See "3D Input Mode" on page 17 for information about how to do this.
● This example covers basic steps only. For more detailed information, see "Setup Menu Contents" on page 38.

To configure the "Image Adjustment 1 → Contrast" setting

1. Press the [MENU] key to display the setup menu.

2. "Image Adjustment 1" is initially selected on the main menu, so simply press the [ENTER] key.

3. Use the [▼] key to select "Contrast".

Image Adjustment 1	Brightness	0	– ▓▓▓░░░░ +
Image Adjustment 2	Contrast	0	– ▓▓▓▓░░░ +
Volume Adjustment	Color Mode	Standard	Modify [ENTER]
Screen Settings	Color Balance	Normal	Modify [ENTER]
Input Settings	Restore Menu Defaults		OK [ENTER]
Option Settings 1			
Option Settings 2			
Wired LAN settings			
USB			
Operational Info			
Restore All Defaults			

`[▲]/[▼]:Select [◀]/[▶]:Modify [ESC]:Return [MENU]:Quit`

4. Use the [◀] (lighter) and [▶] (darker) keys to adjust contrast.

To configure the "Image Adjustment 1 → Color Mode" setting

5. Use the [▼] key to select "Color Mode".

6. Press the [ENTER] key.
   ● This displays the color mode menu.

7. Use the [▼] and [▲] keys to select the color mode you want, and then press the [ENTER] key.

8. After selecting the color mode you want, press the [ESC] key.

To configure the "Input Settings → Signal Name Indicator" setting

9. Press the [ESC] key.

10. Use the [▼] key to select "Input Settings".

11. Press the [ENTER] key.

12. Use the [▼] key to select "Signal Name Indicator".

13. Use the [◀] and [▶] keys to select "On" or "Off".

14. After you are finished, press the [MENU] key to exit the setup menu.

Direct Power On

You can configure the projector so it powers up automatically as soon as you plug it into a power source. With this "Direct Power On" feature, you do not even need to press the [⏻] (Power) key. To enable Direct Power On, display the setup menu, and then change the "Direct Power On" setting to "On".

Important!
When you have Direct Power On enabled, do not leave the projector plugged into an electrical outlet while it is turned off. If you do, there is the chance that it (and the light source unit) might turn on automatically when power is restored after being cut off by a power outage, tripping of a breaker, etc.

Note
● Direct Power On causes the projector to turn on automatically as soon as it is plugged into a power outlet. This greatly reduces the amount of time it takes until you are ready to start projecting. Note, however, that the actual startup sequence (Standby State → Power On → Projection Starts) that the projector performs is the same, regardless of whether Direct Power On is enabled or disabled. The only difference is what triggers the sequence (plugging in or pressing the [⏻] (Power) key).
● For details about configuring the Direct Power On setting, see "Direct Power On" (page 45) under "Option Settings 1 Main Menu".

Custom Logo Capture

You can capture a projected screen and save it as image data in the projector's built-in memory. Image data you save in projector memory is called a custom logo.
The following are ways you could use a custom logo.

– As a startup screen image that appears first whenever the projector is turned on

– As a default projection image whenever there is no input signal to the projector (No Signal Screen)

– As the screen projected whenever the [BLANK] key is pressed (Blank Screen)

Important! —————————————————————————
Note that using the projector to save image data for commercial purposes or public presentation may infringe on the legally protected copyright of the copyright holder of the original material.

To capture a screen and save it as the custom logo

Important! —————————————————————————
● As soon as you start a screen capture with the operation below, any custom logo currently stored in the projector's memory is deleted.
● If you press the [ESC] key to interrupt an ongoing screen capture operation or if the capture operation is interrupted for any other reason before it is complete, your custom logo data will revert to the initial factory default image (light green image). However, depending on the timing of the interruption, you may end up with a partial capture with part of the screen image being registered as your custom logo.
● Once a screen capture operation is started, it takes a number of minutes for it to complete.

1. If the projector is in the 3D Input Mode, switch it to the Normal Input Mode (page 18).

2. Project the image you want to save as a custom logo onto the projection screen.
● Not all types of projection images are supported. For more information, see "Supported Capture Images" (page 31).

3. Press the [MENU] key to display the setup menu.

4. Use the [▼] key to select "Option Settings 1", and then press the [ENTER] key.

5. Use the [▼] key to select "Custom Logo Capture" and then press the [ENTER] key.
● If "On" is selected for "Option Settings 1 → Password protection → Logo Password", a dialog box prompting for input of the password will appear at this time. If this happens, input the password and then press the [ENTER] key. For details about the logo password, see "Password Protection" (page 32).

6. When a dialog box with the confirmation message "Starts capture of the current screen. OK to continue?" appears, press the [ENTER] key.
● As soon as you press the [ENTER] key, the projected image will become frozen and capture will begin.
● The message "Screen capture complete." will appear when capture is complete.

Supported Capture Images

Not all types of projection images are supported. Note the following precautions that correspond to each specific input source.

Input Source	Precautions
RGB	Use an image with a resolution no greater than 1280 × 800. You will not be able to execute the screen capture operation if the projected image has a resolution larger than this.
Video, S-video	Any closed captioning included in the projected image is not included in the captured image.
USB	Basically screens projected from the input source can be captured. The following types of images are supported. ● Still images or movie images being projected with Viewer ● PC screens projected by Wireless ● Images projected by YC Camera ● Graphic calculator screen image projected via a USB connection For details about projecting these types of screens, see the "USB Function Guide" and "Wireless Function Guide".
All input sources	The projected screen of protected contents cannot be captured.

To specify a custom logo as the startup screen, no signal screen, or blank screen

1. Press the [MENU] key to display the setup menu.

2. Use the [▼] key to select "Screen Settings", and then press the [ENTER] key.

3. To specify the custom logo as the Startup Screen, use the [▼] key to select "Startup Screen", and then press the [ENTER] key.
● You also could select "No Signal Screen" or "Blank Screen" in place of "Startup Screen" to use the custom logo for another type of screen.

4. Use the [◀] and [▶] keys to select "Custom Logo".

5. After you are finished, press the [MENU] key to exit the setup menu.

Password Protection

The operations described below can be password protected on the projector. You can have only one password assigned to the projector at any time, and the same password is used for operations.
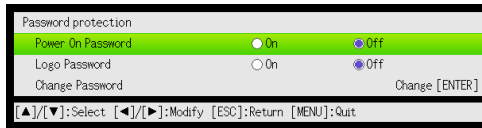
● **Projector startup protection**
  The projector can be configured so a dialog box prompting input of the password is displayed whenever the projector is turned on. In this case, further operation of the projector is not possible unless the correct password is input. This protects against unauthorized use of the projector.

● **Custom logo capture protection**
  The projector can be configured so a dialog box prompting input of the password is displayed whenever someone attempts to perform the custom logo capture (page 30) operation. This protects against inadvertent and unauthorized changing of the custom logo.

Use the "Power On Password" and "Logo Password" settings to turn password protection for the above operations on or off individually.

Password protection		
Power On Password	○ On	◉ Off
Logo Password	○ On	◉ Off
Change Password		Change [ENTER]
[▲]/[▼]:Select [◀]/[▶]:Modify [ESC]:Return [MENU]:Quit		

Inputting a Password

The password of your projector is not really a "word" made up of letters, but rather a sequence of remote controller key inputs. The following is the 8-key sequence that represents the initial factory default password.

[INPUT] [AUTO] [BLANK] [FREEZE] [▲] [▼] [◀] [▶]

Using the Password Feature

Note the following precautions whenever you use the password feature.

● The password feature protects against unauthorized use of the projector. Note that it is not an anti-theft measure.

● You will need to enter the initial factory default password the first time you use the projector after turning on the password feature. Change the initial factory default password to a different one of your choice as soon as possible after turning on the password feature.

● Remember that password operations are always performed using the remote controller, so you should take care not to lose or misplace the remote controller.

● Also note that you will not be able to input the password if the remote controller batteries are dead. Replace the remote control batteries as soon as possible after it starts to go low.

If you forget your password...

If you forget the password, you will need to bring the following two items to your CASIO distributor to have the password cleared. Note that you will be charged to have the password cleared.

1. Personal identification (original or copy of your driver's license, employee I.D., etc.)
2. Projector unit

Note that your CASIO distributor will not be able to clear the password of your projector unless you bring both of the items listed above.
Also, keep the projector's warranty in a safe place.

Important!

Having your password cleared using the procedure described above will return all of the settings of your projector, except for the Light Time, to their initial factory defaults.

Keep a written record of your password!

You will not be able to use the projector if you forget its password. We strongly suggest that you keep a written or other type of record of the password so you can look it up when necessary.

To change the password

1. Press the [MENU] key to display the setup menu.

2. Use the [▼] key to select "Option Settings 1", and then press the [ENTER] key.

3. Use the [▼] key to select "Password protection", and then press the [ENTER] key.
● This will display a dialog box prompting you to enter the current password.

```
Please input the password.


___ _ _ _ _ _

[ESC]:Return
```
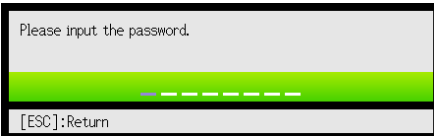
4. Enter the current password.
● If the projector is still protected by the factory default password, perform the key operation shown below to enter it.

> [INPUT] [AUTO] [BLANK] [FREEZE] [▲] [▼] [◄] [►]
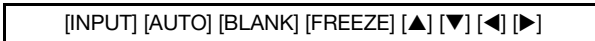
5. After entering the current password, press the [ENTER] key.
● This displays the Password protection screen.

6. Use the [▼] key to select "Change Password", and then press the [ENTER] key.
● This will display a dialog box prompting you to enter the new password.

7. Enter a key sequence up to eight key operations long.
● You can use any of the following keys as part of your password key sequence.
[INPUT], [AUTO], [BLANK], [FREEZE], [VOLUME], [COLOR MODE], [D-ZOOM +], [D-ZOOM –], [KEYSTONE +], [KEYSTONE –], [MENU], [POINTER], [○], [△], [□], [▲], [▼], [◄], [►], [FUNC]

8. **After entering the new password, press the [ENTER] key.**
- This will display a dialog box prompting you to enter the same password again.

9. **Re-enter the same password key sequence you entered in step 7 and then press the [ENTER] key.**
- The message "Your new password has been registered." indicates that the password has been changed. Press the [ESC] key.
- If the password you entered in this step is different from the one you entered in step 7, the message "The password you input is wrong." appears. Press the [ESC] key to return to step 7.

To change the power on password setting

1. **Perform steps 1 through 5 under "To change the password" (page 33) and display the Password protection screen.**

2. **After confirming that "Power On Password" is selected, use the [◀] and [▶] keys to select either the "On" or "Off" setting.**
- Changing the setting from "Off" to "On" will cause the "Prompt for password when power is turned on?" dialog box to appear. Press the [ENTER] key to confirm that you want to turn on power on password protection, or [ESC] to exit the dialog box without changing the setting.

3. **After you are finished, press the [MENU] key to exit the setup menu.**

To change the custom logo capture password setting

1. **Perform steps 1 through 5 under "To change the password" (page 33) and display the Password protection screen.**

2. **Press the [▼] key to select "Logo Password".**

3. **Use the [◀] and [▶] keys to select "On" or "Off".**
- Changing the setting from "Off" to "On" will cause the "Require password verification before custom logo capture?" dialog box to appear. Press the [ENTER] key to confirm that you want to turn on custom logo password protection, or [ESC] to exit the dialog box without changing the setting.

4. **After you are finished, press the [MENU] key to exit the setup menu.**

Control Panel Lock

Control panel lock disables (locks) all of the projectors keys, except for the [⏻] (Power) key. This limits projector operation to the remote controller, which protects against inadvertent mis-operation.

To lock the control panel

1. Press the [MENU] key to display the setup menu.

2. Use the [▼] key to select "Option Settings 2", and then press the [ENTER] key.

3. Use the [▼] key to select "Control Panel Lock" and then press the [ENTER] key.

4. Use the [◀] key to select "On".

5. When the confirmation dialog box appears, press the [ENTER] key.
   ● This disables (locks) all projector keys except for the [⏻] (Power) key.

6. After you are finished, press the [MENU] key to exit the setup menu.

Note

Even if the control panel is locked, you can clear a warning message (page 51) that appears on the projection screen by pressing the projector's [ESC] key.

To unlock the control panel

Perform either of the following operations.
● On the projector, hold down the [▼] key until the message "Control panel was unlocked." appears.
● To use the remote controller to unlock the control panel, perform the procedure under "To lock the control panel" above. In step 4, press the [▶] key of the remote controller to select "Off" and then press the [MENU] key.

Restoring Projector Settings to Their Initial Factory Defaults

You can use the procedures in this section to restore all of the settings on a particular main menu or all of the settings on the setup menu to their initial factory defaults.

To restore all settings on a particular main menu to their initial factory defaults

1. **Press the [MENU] key to display the setup menu.**

2. **Use the [▼] and [▲] keys to select the main menu whose settings you want to restore to their initial factory defaults.**
   ● You can select Image Adjustment 1, Image Adjustment 2, Volume Adjustment, Screen Settings, Input Settings, Option Settings 1, or Option Settings 2.

3. **Press the [ENTER] key.**

4. **Use the [▼] key to select "Restore Menu Defaults".**

5. **Press the [ENTER] key.**
   ● This will display a confirmation screen like the screen shown below.

```
Initialize Image Settings 1

            Do you want to initialize image settings 1?

                          Yes
                          No
[▲]/[▼]:Select [ENTER]/[ESC]:Return [MENU]:Quit
```
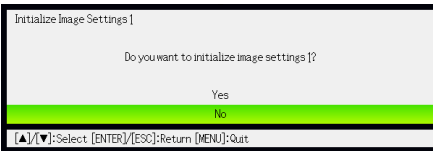
6. **Use the [▲] key to select "Yes".**

7. **To restore the settings of the main menu to their initial defaults, press the [ENTER] key.**
   ● To exit the operation without doing anything, press [ESC] instead of [ENTER].

8. **After you are finished, press the [MENU] key to exit the setup menu.**

📝 **Note** ───
   For details about how the above procedure initializes settings, see the explanations of the settings under "Setup Menu Contents" on page 38.

To restore all settings on the setup menu to their initial factory defaults

1. Press the [MENU] key to display the setup menu.

2. Use the [▼] key to select "Restore All Defaults" and then press the [ENTER] key.

3. After confirming that "Restore All Defaults" sub-menu is selected, press the [ENTER] key.
   ● This displays a confirmation message asking if you want to initialize all settings.

4. Use the [▲] key to select "Yes".

5. To restore all settings on the setup menu to their initial defaults, press the [ENTER] key.
   ● This will restore all setup menu settings to their initial factory defaults except the following: Language, Light Time, Unit Operating Time, password set with Password protection, custom logo registered with Custom Logo Capture.
   ● To exit the operation without doing anything, press [ESC] instead of [ENTER].

6. After you are finished, press the [MENU] key to exit the setup menu.

Setup Menu Contents

This section contains tables that provide detailed explanations of all of the items included on the setup menu. The following describes the type of information that appears in each of the columns of the tables.

Setting Name: This column shows the names of the settings as they appear on the sub-menu.

Input: This column shows the input source for which each setting is supported.

Input source names are abbreviated as follows:

R : RGB input

C : Component video input

V : Video or S-video input

H : HDMI (PC) input

D : HDMI (DTV) input

U : USB input (USB port models only)

The letter N indicates that the setting can be configured while there is no input signal.

Setting Unit: The setting unit indicates how a setting is stored.

"Source Specific" in this column indicates that separate settings can be stored for each individual input source.

"Single" in this column indicates that a single setting is stored and applied, regardless of the input source.

Description: This column provides details about the setting item and how to select it. The initial default setting is indicated by an asterisk (*).

Image Adjustment 1 Main Menu

Setting Name	Input	Setting Unit	Description
Brightness	R C V H D U	Source Specific	Use this sub-menu to adjust the brightness of the projected image. A larger value produces a brighter image.
Contrast	R C V H D U	Source Specific	Use this sub-menu to adjust the contrast of the projected image. A larger value produces a stronger contrast.
Sharpness	V	Source Specific	Use this sub-menu to adjust the sharpness of the outlines in the projected image. A larger value makes the image sharper, while a smaller value makes it softer.
Saturation	V	Source Specific	Use this sub-menu to adjust the color saturation of the projected image. A larger value increases color saturation.
Tint	V	Source Specific	Use this sub-menu to adjust the tint of the projected image. A larger value makes the overall image more bluish, while a smaller value makes the overall image more reddish. This setting is supported only when the signal is NTSC or NTSC4.43.

Setting Name	Input	Setting Unit	Description
Color Mode	R C V H D U	Source Specific	You can select from among various different color mode settings in accordance with image contents and projection conditions. **Standard:** Use this setting when you want to highlight the colors of your presentation. **Graphics:** Use this setting when you want photographs and graphics to appear natural. **Theater:** Use this setting to bring out the dark portions of your images. **Blackboard:** Use this setting for easy viewing when projecting onto a blackboard. **Game:** Use this setting to optimize hue and brightness.
Color Balance	R C V H D U	Source Specific	This sub-menu lets you adjust the color balance of the projected image. **Preset:** You can select from among three preset color balance settings: Warm, Normal,* Cold. **Color:** You can adjust the intensity of red, green, and blue within the range of –50 to +50. The intensity of a color increases along with the setting value. Color settings can be adjusted individually only when "Normal" is selected as the "Preset" setting.
Eco Off Mode	R C V H D U	Single	When "Off" is selected for "Option Settings 1 → Eco Mode", you can select either of the following projection image modes. **Bright:** Gives priority to brightness. **Normal:** Suppresses brightness slightly and gives priority to color balance.
Restore Menu Defaults	R C V H D U	Source Specific	Use this sub-menu to return all of the sub-menu items on the Image Adjustment 1 main menu to their initial default settings. ● Restoring menu defaults when there is no input signal will restore defaults for the currently selected input source.

Image Adjustment 2 Main Menu

Setting Name	Input	Setting Unit	Description
Vertical Position	R C V	Signal Specific	Use this sub-menu to adjust the vertical position of the input source image within the projection area.
Horizontal Position	R C V	Signal Specific	Use this sub-menu to adjust the horizontal position of the input source image within the projection area.
Frequency	R	Signal Specific	When vertical bands appear in the projected image while RGB is selected as the input source, it means that the frequency setting is not correct. When this happens, use this setting to adjust the frequency manually. **Important!** If, for some reason, your manual frequency settings cause the image input from the computer to disappear from the projection, you can press the [AUTO] key to perform an auto adjust operation, which should cause the image to appear.
Phase	R	Signal Specific	When there is flickering in the projected image while RGB is selected as the input source, it means that the phase setting is not correct. When this happens, use this setting to adjust the phase manually.
Restore Menu Defaults	R C V	Source Specific	Use this sub-menu to return all of the sub-menu items on the Image Adjustment 2 main menu to their initial default settings. ● Restoring menu defaults will restore defaults for the current signal type (XGA/60Hz, SXGA/60Hz, etc.) only.

About the "Signal Specific" Setting Unit

For the items that have "Signal Specific" in the "Setting Unit" column of the above table, the setting is saved for the specific type of signal (XGA/60Hz, SXGA/60Hz, etc.) that is being input when the setting is performed, and not for a specific input source.

Volume Adjustment Main Menu

Setting Name	Input	Setting Unit	Description
Volume	R C V H D U N	Source Specific	Use this sub-menu to adjust the volume level of the projector's speaker or the AUDIO OUT terminal. ● Changing this setting when there is no input signal changes the volume setting of the currently selected signal source.
Restore Menu Defaults	R C V H D U N	Source Specific	Use this sub-menu to return Volume to its initial default setting. ● Restoring menu defaults when there is no input signal will restore defaults for the currently selected input source.

Screen Settings Main Menu

Setting Name	Input	Setting Unit	Description
Keystone Correction	R C V H D U N	Single	Use this sub-menu to perform vertical keystone correction of the projected image.
Aspect Ratio	R C V H D	Source Specific	Use this sub-menu to select an aspect ratio setting for the projected image. **Input Source: RGB or HDMI (PC)** **Normal*:** Projects at the projector's maximum possible size while maintaining the input signal aspect ratio. **Full:** Projects at the projector's maximum possible size by enlarging or reducing the input signal. **4:3 (XJ-H2600/XJ-H2650 only):** Regardless of the input signal aspect ratio, the image is always resized to an aspect ratio of 4:3 for projection. **True (XJ-H2600/XJ-H2650 only):** Projects the input signal at its actual size (1 input source dot equal to one projector output pixel dot) in the center of the projector's projection screen. If the input signal resolution exceeds the projector's output resolution, the excess is cut off. **Input Source: Video, S-video, Component or HDMI (DTV)** **Normal*:** Projects at the projector's maximum possible size while maintaining the input signal aspect ratio. **16:9 :** This setting specifies a 16:9 aspect ratio, which is the same as a movie screen, high-definition TV, etc. Using this setting when the input signal is a 16:9 image that has been squeezed to a 4:3 image causes the image to be displayed with its normal 16:9 aspect ratio. **4:3 (XJ-H2600/XJ-H2650 only):** Regardless of the input signal aspect ratio, the image is always resized to an aspect ratio of 4:3 for projection. **Letter Box (XJ-H2600/XJ-H2650 only):** This will resize the image horizontally to 1280 dots and project 800 vertical dots of the center of the image, maintaining the aspect ratio of the input signal. **Note** ● When projecting while "True" is selected as the aspect ratio setting for an RGB signal with a resolution that is less than SVGA, the image is enlarged to SVGA and projected. ● For details about projection screen display conditions for different aspect ratio settings, see "Aspect Ratio Setting and Projection Image" (page 60). **Important!** Note that enlarging or reducing the size of an image for commercial purposes or public presentation may infringe on the legally protected copyright of the copyright holder of the original material.

Setting Name	Input	Setting Unit	Description
Projection Mode	R C V H D U N	Single	Use this sub-menu to specify whether projection will be from the front of the screen or the back of the screen. **Front*:** Select this option to project from the front of the screen. **Rear:** Select this option to project from the back of the screen. This setting flips the front projected image horizontally.
Ceiling Mount	R C V H D U N	Single	Use this sub-menu to configure the projector for use in an installation in which it is positioned upside down. **On:** Flips the projected image horizontally and vertically. **Off*:** Projects a normal image.
Startup Screen	R C V H D U N	Single	Use this sub-menu to specify whether or not a startup screen should be projected whenever the projector is turned on. **Logo:** Select this option to project the projector's built-in logo screen. **Custom Logo:** Select this option to project the custom logo registered with "Custom Logo Capture" (page 30). **None*:** Select this option when you do not want to project a startup screen.
No Signal Screen	R C V H D U N	Single	Use this sub-menu to specify what should be projected when there is no input signal to the projector. **Blue*:** Select this option to project a blue screen. **Black:** Select this option to project a black screen. **Logo:** Select this option to project the projector's built-in logo screen. **Custom Logo:** Select this option to project the custom logo registered with "Custom Logo Capture" (page 30).
Blank Screen	R C V H D U N	Single	Use this sub-menu to specify what should be projected after the [BLANK] key is pressed. **Blue:** Select this option to project a blue screen. **Black*:** Select this option to project a black screen. **Logo:** Select this option to project the projector's built-in logo screen. **Custom Logo:** Select this option to project the custom logo registered with "Custom Logo Capture" (page 30).

Setting Name	Input							Setting Unit	Description
Restore Menu Defaults	R	C	V	H	D	U	N	Source Specific	Use this sub-menu to return all of the sub-menu items on the Screen Settings main menu to their initial default settings. ● Restoring menu defaults when there is no input signal will restore defaults for the currently selected input source. ● Note that the "Keystone Correction", "Projection Mode", "Ceiling Mount", "Startup Screen", "No Signal Screen", and "Blank Screen" settings are always returned to their initial defaults, regardless of the currently selected input source.

Input Settings Main Menu

Setting Name	Input							Setting Unit	Description
COMPUTER1 Terminal/ COMPUTER2 Terminal	R	C					N	Single	Use this sub-menu to specify manually the type of signal being input from the projector's COMPUTER IN 1/COMPUTER IN 2 terminal. **Auto*:** Automatically detects the signal being input from the COMPUTER IN 1/COMPUTER IN 2 terminal and configures the appropriate input protocol. **RGB:** Select this option when a computer is connected to the COMPUTER IN 1/COMPUTER IN 2 terminal. For details about connecting a computer, see "Connecting the Analog RGB Output of a Computer to the Projector" (page 12). **Component:** Select this setting when the projector's COMPUTER IN 1/ COMPUTER IN 2 terminal is connected to the component video output terminal of a video device using a commercially available component video cable. For information about connection, see "Connecting to a Video Device" (page 14). ✎ **Note** The setting of this item cannot be changed while the projector is in the 3D input mode ("3D Input Mode", page 17) or "On" is selected for the "Option Settings 2 → Interactive Pointer" setting.
Video Signal/ S-Video Signal			V				N	Single	Use this sub-menu to specify manually the type of signal being input from the projector's VIDEO terminal or S-VIDEO terminal. **Auto*:** Select this setting to have the projector switch the video signal system automatically in accordance with the input signal from the video device that is connected to the VIDEO terminal or S-VIDEO terminal. **NTSC / NTSC4.43 / PAL / PAL-M / PAL-N / PAL60 / SECAM:** Each setting selects the applicable video system. Use these settings when you want to specify only one specific video signal for the VIDEO terminal or S-VIDEO terminal.

Setting Name	Input	Setting Unit	Description
Signal Name Indicator	R C V H D U N	Single	Use this sub-menu to specify whether or not the name of the currently selected signal source should be displayed in the projected image. **On*:** Select this option to turn on display of the name of the currently selected signal source in the projected image. **Off:** Select this option to turn off display of the signal source name.
Restore Menu Defaults	R C V H D U N	Source Specific	Use this sub-menu to return all of the sub-menu items on the Input Settings main menu to their initial default settings. ● Restoring menu defaults when there is no input signal will restore defaults for the currently selected input source. ● Note that the "Signal Name Indicator" setting is always returned to its initial default, regardless of the currently selected input source.

Option Settings 1 Main Menu

Setting Name	Input	Setting Unit	Description
Auto Keystone Correction	R C V H D U N	Single	Use this sub-menu to turn auto keystone correction on or off. **On*:** Select this option to turn on auto keystone correction. **Off:** Select this option to turn off auto keystone correction.
Auto Adjust	R N	Source Specific	Use this sub-menu to select whether the projector should detect the RGB input signal type (resolution, frequency) and adjust the projection image accordingly (auto adjust). **1*:** Select this option to turn on auto adjust. **2:** Select this option to turn on auto adjust when a 1360 × 768 or 1400 × 1050 signal is not projected correctly. **3:** Select this option to turn on auto adjust when a 1366 × 768 signal is not projected correctly. **Off:** Select this option to turn off auto adjust.
Eco Mode	R C V H D U N	Single	See "Eco Mode (Power Saving, Low Noise)" (page 25).
Auto White Balance	R C V H D U N	Single	Turns automatic white balance adjustment on or off. **On*:** White balance adjusted automatically. Can improve color reproduction. **Off:** White balance not adjusted automatically.

Setting Name	Input	Setting Unit	Description

Auto Power Off	R C V H D U N	Single	Auto Power Off lets you specify the amount of time of projector operation and input signal inactivity to be allowed before Auto Power Off is triggered to turn off projector power automatically. Auto Power Off can be disabled, if you want.
			5 min, 10 min*, 15 min, 20 min, 30 min:
			    Time until Auto Power off is triggered.
			Off:
			    Disables Auto Power Off.
			
			✎ **Note**
			    (for USB port model users)
			    Auto Power Off is disabled whenever the projector is doing any one of the following.
			        – Projecting the Viewer initial screen
			        – Projecting the Wireless standby screen
			        – Using Wireless for a wireless LAN connection between the projector and a computer or other terminal

Password protection	R C V H D U N	Single	See "Password Protection" on page 32.

Direct Power On	R C V H D U N	Single	Use this sub-menu to turn Direct Power On on or off. See "Direct Power On" on page 29.
			On:
			    Select this option to turn on Direct Power On.
			Off*:
			    Select this option to turn off Direct Power On.

Language	R C V H D U N	Single	Use this sub-menu to specify the language to use for messages, setup menus, etc.
			English / French / German / Italian / Spanish / Swedish / Portuguese / Dutch / Norwegian / Polish / Finnish / Czech / Turkish / Russian / Chinese (Simplified) / Chinese (Traditional) / Korean / Japanese
			
			✎ **Note**
			    (for USB port model users)
			    If you have Portuguese, Dutch, Norwegian, Polish, Finnish, Czech, Turkish, or Russian selected as the projector's language, selecting an external device connected to the projector's USB-A port as the input source will cause some menus and messages to be displayed in English.

Restore Menu Defaults	R C V H D U N	Single	This sub-menu returns all of the sub-menu items on the Option Settings 1 main menu to their initial default settings. ● The language setting and the password are not returned to their initial factory defaults. ● The "Auto Adjust" item is returned to its initial default only when RGB input is selected for the input source. All of the other items are returned to their initial defaults regardless of the currently selected input source.

Option Settings 2 Main Menu

Setting Name	Input	Setting Unit	Description
Pointer	R C V H D U N	Single	Use this sub-menu to specify the type of pointer that appears first when you press the [POINTER] key.
Plug and Play (USB port models only)	R C V H D U N	Single	Use this sub-menu to turn plug-and-play on or off. **On*:** Select this option to turn on plug-and-play. This will allow the projector detect when an external USB device is connected and make that device the input source automatically. **Off:** Select this option to turn off plug-and-play. 📝 **Note** ● For details about plug-and-play, see the "USB Function Guide". ● Regardless of the setting of this item, plug-and-play is disabled while the projector is in the 3D input mode ("3D Input Mode", page 17) or "On" is selected for the "Option Settings 2 → Interactive Pointer" setting.
Audio Out	R C V H D U N	Single	Specifies whether the input audio signal should be output from the projector's built-in speaker or to the line output. **Speaker*:** Outputs the audio signal being input to the projector from the speaker. **Line:** Outputs the audio signal being input to the projector from the AUDIO OUT terminal.
High Altitude	R C V H D U N	Single	Use this sub-menu to turn the high-altitude fan speed setting on or off in accordance with the altitude of the area where you are using the projector. **On:** Select this setting when using the projector in a high altitude (1,500 to 3,000 meters above sea level) area where air is thin. This setting increases cooling efficiency. **Off*:** Select this setting at normal altitudes (up to 1,500 meters). 🔑 **Important!** Do not use this projector at altitudes greater than 3,000 meters above sea level.
Control Panel Lock	R C V H D U N	Single	Use this sub-menu to disable (lock) and enable (unlock) the projector's control panel. **On:** Select this setting to disable (lock) all projector key operations except for [⏻] (Power). **Off*:** Select this setting to enable (unlock) projector key operations.
Custom Logo Capture	R C V H D U	Single	See "Custom Logo Capture" (page 30).

Setting Name	Input	Setting Unit	Description
Standby RGB/ Audio	R C V H D U N	Single	Use this sub-menu to configure the projector for output of the video signal from the COMPUTER IN 1 terminal to the MONITOR OUT terminal, and output of the audio signal from the AUDIO IN 1 terminal to the AUDIO OUT terminal while the projector is in standby (projector off with power being supplied). **Output:** Select this setting to output video and audio signals while the projector is in standby. **No Output*:** Select this setting not to output video and audio signals while the projector is in standby. **Note** ● When "Output" is selected for this setting, audio is output from the AUDIO OUT terminal during standby, regardless of the projector's current "Option Settings 2 → Audio Out" setting. ● Input signals from the COMPUTER IN 2 terminal and AUDIO IN 2 terminal cannot be output from the MONITOR OUT terminal and AUDIO OUT terminal during projector standby.
Closed Caption	V N	Single	Specifies whether to display closed captions when projecting a video signal that includes them. **Off*:** Closed captions not displayed. **CC1, CC2, CC3, CC4:** Indicates the current closed caption output setting (CC1, CC2, CC3, CC4). **Note** Keystone correction does not affect displayed closed caption text.
Interactive Pointer	R H	Single	Enables/disables operation of the optionally available interactive pointer (YA-P10). **On:** Interactive pointer operation enabled. **Off*:** Interactive pointer operation disabled. **Important!** Select "On" for this item only when using an interactive pointer. Select "Off" when you are not using it. **Note** Regardless of this setting, interactive pointer operation is always disabled when the projector is in the 3D input mode (page 17).
Restore Menu Defaults	R C V H D U N	Single	This sub-menu returns all of the sub-menu items on the Option Settings 2 main menu to their initial default settings. Note, however, that a custom logo captured with "Custom Logo Capture" is not initialized.

Wired LAN Settings Main Menu (USB Port Models Only)

Setting Name	Input	Setting Unit	Description

Remote on	R C V H D U N	Single	Specifies whether the projector can be turned on via wired LAN while the projector is in standby (projector off with power being supplied).
			Enable:
			   Power on enabled.
			Disable*:
			   Power on disabled.
			
			Important!
			   Performing an "Initialize Network Settings" operation or "Restore All Defaults" operation with the setup menu will cause this setting to change to "Disable". If you are operating the projector using a wired LAN setting, be sure to change this setting back to "Enable" after initialization.

PJLink authentication	R C V H D U N	Single	Enables and disables PJLink connection authentication.
			Enable*:
			   PJLink connection authentication enabled.
			Disable:
			   PJLink connection authentication disabled.

Wired LAN info	R C V H D U N	Single	Displays the following information.
			Projector name:
			   Name currently assigned to the projector.
			MAC Address:
			   Fixed MAC address assigned to each individual projector.
			IP Address:
			   Projector's current IP address.
			DHCP:
			   Projector's current DHCP setting status ("Auto" or "Disable").
			
			The projector name, IP address, and DHCP settings can be configured using the projector System Admin page, which can be accessed on a computer connected by LAN to the projector. For details, see the "Wireless Function Guide".

Initialize Network Settings	R C V H D U N	Single	Returns all projector network settings (all settings on the System Admin page) to their initial defaults. For detailed information about System Admin page settings, see the "System Admin Page Settings" section in the "Wireless Function Guide".

USB Settings Main Menu (USB Port Models Only)

The USB Settings main menu is available only when there is an external device connected to the USB-A port of the projector. For details, see the "USB Function Guide" and "Wireless Function Guide".

Operational Info Main Menu

Setting Name	Input	Setting Unit	Description
Input Signal	R C V H D U N	Source Specific	This sub-menu item shows the currently selected input signal (RGB, Component, Video, S-video, HDMI (PC), or HDMI (DTV)). "- - - -" is indicated here when there is no input signal.
Signal Name	R C V H D U	Source Specific	This sub-menu item shows the signal name of the signal being input to the projector. For details about signal names, see "Signal Name" under "Supported Signals" (page 62).
Resolution	R H	Source Specific	This sub-menu item appears only when RGB is the input signal. It shows the number of vertical and horizontal pixels of resolution of the RGB or HDMI (PC) input signal.
Horizontal Frequency	R C V H D	Source Specific	This sub-menu item shows the horizontal frequency of the input signal.
Vertical Frequency	R C V H D	Source Specific	This sub-menu item shows the vertical frequency of the input signal.
Scan System	R C H D	Source Specific	This sub-menu item appears only when RGB, Component, HDMI (PC), or HDMI (DTV) is the input signal, and shows the scan system of the input signal. The scan system is interlace or non-interlace for an RGB or HDMI (PC) signal input, and interlace or progressive for a component or HDMI (DTV) signal input.
Light Time	R C V H D U N	Single	This sub-menu item shows the cumulative number of hours the current light source unit has been used to date.

Restore All Defaults Main Menu

Setting Name	Input	Setting Unit	Description
Unit Operating Time	R C V H D U N	Single	This sub-menu item shows the cumulative operating time of this unit. This time cannot be initialized.
Restore All Defaults	R C V H D U N	Single	This sub-menu returns all sub-menu items on all main menus to their initial default settings. This operation can be performed regardless of the currently selected input source and regardless of whether or not a signal is currently being input. For details about this procedure, see "To restore all settings on the setup menu to their initial factory defaults" on page 37.

Cleaning the Projector

Periodically clean the projector exterior, lens, intake vents, and intake-exhaust vents on a regular basis.

> 🔑 **Important!** ────────────────────────────────────
> Before cleaning the projector, be sure to unplug it from the power outlet and make sure it is cooled down completely.

Cleaning the Projector Exterior

Wipe the exterior of the projector with a soft cloth that has been moistened in a weak solution of water and a mild neutral detergent. Be sure to wring all excess moisture from the cloth before wiping.

Never use benzene, alcohol, thinner, or any other volatile agent for cleaning.

Cleaning the Lens

Carefully wipe the lens with a commercially available lens cloth or optical lens paper, like those for eyeglasses or camera lenses. When cleaning the lens, do not apply undue force and take care to avoid damaging the lens.

Cleaning the Vents

Dust and dirt tend to collect around the vents. Because of this, you should use a vacuum cleaner to clean away accumulated dust and dirt periodically as shown below.
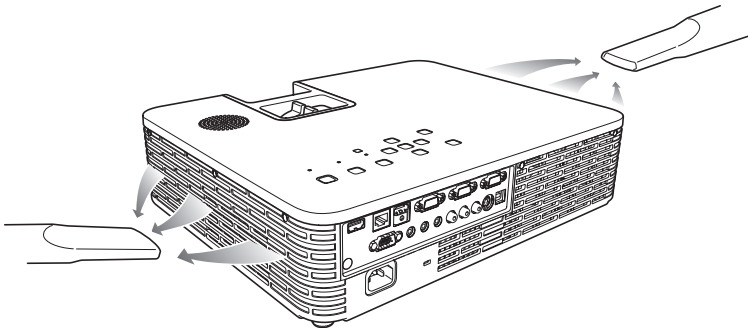
> 🔑 **Important!** ────────────────────────────────────
> Continued use of the projector after dust has accumulated around the vents can cause overheating of internal components and lead to malfunction.

Troubleshooting

Indicators

Indicators keep you informed about the current operational status of the projector. The following shows what the indicators look like when operation is normal.

When the indicators appear like this:	It means this:
POWER/STANDBY ● Amber LIGHT ● Amber TEMP ● Amber	You have just plugged the AC power cord into a power outlet. Wait until the projector enters the standby state (see below) before trying to turn on power.
● Amber ○ ○	Standby state: The AC power cord is plugged in and the projector is in standby.
◎ Green ● Amber ● Amber	Projector is warming up after being turned on.
● Green ○ ○	Projector is on and standing by for use.
◎ Amber ○ ○	Projector is performing internal power down processes.
● Green ● Green ○	"On (Auto)" or "On (Manual)" is selected for the projector's Eco Mode (page 25) setting.

● : Lit   ◎ : Flashing   ○ : Unlit

When a warning message appears on the projection screen, or when the POWER/STANDBY, LIGHT, and TEMP indicators are lit or flashing in a pattern other than those shown above, it means that a projector error has occurred. For details, see "Error Indicators and Warning Messages" (below).

Error Indicators and Warning Messages

Warning messages and indicators let you know what the problem is when a projector error occurs. When an error occurs, wait until the fan stops before unplugging the AC power cord. If you unplug the AC power cord while the fan is still operating, an error may occur when you plug the AC power cord back in.

Indicator/Error Message	Description and Required Action
POWER : Green steady LIGHT : – TEMP : – Message : Internal temperature is too high. Check projector air vents for blockage.	The projector's internal temperature is very high. Press the [ESC] key to clear the warning message and perform the following steps. ① Check for any blocking of the projector's vents, and make sure that there is sufficient space around the projector. See "Setup Precautions" (page 11). ② If there is dust accumulated around the vents, turn off the projector and remove it. See "Cleaning the Projector" (page 50).

Indicator/Error Message	Description and Required Action
POWER : Amber flashing → Amber steady LIGHT : – TEMP : – Message : Internal temperature is too high. The projector will turn off.	Power has turned off automatically due to internal overheating. Perform the following steps. ① Check for any blocking of the projector's vents, and make sure that there is sufficient space around the projector. See "Setup Precautions" (page 11). ② If there is dust accumulated around the vents, remove it. See "Cleaning the Projector" (page 50). If there is no problem with the projector's vents, confirm that the POWER/STANDBY indicator is lit amber (without flashing), and then turn power back on again. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.
POWER : Amber flashing → Red steady LIGHT : Red steady TEMP : Red steady Message : There is a problem with the fan. The projector will turn off.	Power has turned off automatically due to a fan problem. Confirm that the POWER/STANDBY indicator is lit red (without flashing) and that the fan has stopped. After checking the POWER/STANDBY indicator, disconnect the power cord from the projector and wait for all of the projector's indicators to go out. Next, reconnect the power cord and turn projector power back on. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.
POWER : Amber flashing → Red steady LIGHT : – TEMP : Red steady Message : A system problem has occurred. The projector will turn off.	Power has turned off automatically due to a system problem. After confirming that the POWER/STANDBY indicator is lit red (without flashing), disconnect the power cord from the projector and wait for all of the projector's indicators to go out. Next, reconnect the power cord and turn the projector back on. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.
POWER : Green steady LIGHT : – TEMP : – Message : A system problem has occurred. Normal projection is not possible.	A system problem has occurred, which may cause problems with some functions. Turn off the projector, disconnect the power cord from the projector and wait for all of the projector's indicators to go out. Next, reconnect the power cord and turn the projector back on. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center. Press the [ESC] key to clear the warning message.
POWER : Green steady LIGHT : – TEMP : – Message : There is some problem with the system. The audio function may not operate correctly.	
POWER : Green steady LIGHT : – TEMP : – Message : Some problem occurred with the USB port or LAN terminal.	The USB or LAN connection was terminated because of a problem with the USB port or LAN port. To use the USB or LAN function, turn off the projector and then turn it back on again. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center. Press the [ESC] key to clear the warning message.

Indicator/Error Message	Description and Required Action
POWER : Amber flashing → Red steady LIGHT : – TEMP : Red steady Message : –	The projector was turned off automatically due to some problem that was probably caused by external digital noise or some other reason. Confirm that the POWER/STANDBY indicator is lit red (without flashing). After checking the POWER/STANDBY indicator, disconnect the power cord from the projector and wait for all of the projector's indicators to go out. Next, reconnect the power cord and turn projector power back on. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.
POWER : Amber flashing → Red steady LIGHT : Red flashing (0.5-second interval) TEMP : Red flashing (0.5-second interval) Message : –	The projector was turned off automatically because the light source unit turned off or did not turn on. After confirming that the POWER/STANDBY indicator is lit red (without flashing), unplug the power cord. Wait for a short while and then plug it back in and turn on the projector again. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.
POWER : Amber flashing → Red steady LIGHT : Not lit or red flashing TEMP : Red flashing (2-second interval) Message : –	Power has turned off automatically due to a projector memory error. Confirm that the POWER/STANDBY indicator is lit red (without flashing). After checking the POWER/STANDBY indicator, disconnect the power cord from the projector and wait for all of the projector's indicators to go out. Next, reconnect the power cord and turn projector power back on. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.
POWER : Amber flashing → Red steady LIGHT : – TEMP : Amber flashing (1-second interval) Message : –	Power has turned off automatically because the light source unit cover is open. Perform the following steps. ① After confirming that the POWER/STANDBY indicator is lit red (without flashing), disconnect the power cord from the projector. ② Check to make sure that the light source unit cover is closed. ③ Plug the power cord back in and turn the projector back on again. If the error occurs again when you turn power back on, contact your retailer or nearest authorized CASIO Service Center.

Projector Troubleshooting

Check the following items whenever you experience any problem with the projector.

Problem	Cause and Recommended Action
Power does not turn on.	● If the POWER/STANDBY indicator is not lit, the AC power cord is not connected correctly. Connect the AC power cord correctly. ● If the TEMP or LIGHT indicator remains flashing or lit, it means some type of error has occurred. See "Error Indicators and Warning Messages" (page 51).
No image is projected or the projected image is abnormal.	● The computer or video device connected to the projector is not turned on or it is not outputting a video signal. Make sure the connected computer or video device is turned on, and perform the required operation on it to output a video signal. ● The correct output source is not selected on the projector. On the projector, select the correct input source that corresponds to the connected device. ● Images may not project correctly when you have the component output terminal of a video device connected to the COMPUTER IN (1 or 2) terminal of the projector. Connect to the VIDEO terminal or S-VIDEO terminal of the projector.
Image color or display is very abnormal.	The wrong option ("Component" or "RGB") may be selected for the "Input Settings → COMPUTER1 Terminal (or COMPUTER2 Terminal)" setting on the setup menu. The image will not be projected correctly if "Component" is selected while the projector's COMPUTER IN (1 or 2) terminal is connected to the RGB output terminal of a computer, or if "RGB" is selected while the projector's COMPUTER IN (1 or 2) terminal is connected to the component video output terminal of a video device. On the setup menu, select "Auto" for the "Input Settings → COMPUTER1 Terminal (or COMPUTER2 Terminal)" setting. See page 43.
I can't understand messages or menus because they are the wrong language.	Perform the following operation to select the language you want. See page 45. 1. Press the [MENU] key to display the setup menu. 2. If the input signal is HDMI, press [▼] four times and then press the [ENTER] key. If the input signal is not HDMI, press [▼] five times and then press the [ENTER] key. 3. Press [▲] twice and then press the [ENTER] key to display the language selection menu. 4. Use the [▼] and [▲] keys to move the highlighting to the language you want to select and then press the [ENTER] key. 5. Press the [MENU] key to exit the setup menu.
No sound	● The projector's volume level setting may be too low or muted. Press the remote controller [VOLUME] key and then use [◄] and [►] to adjust the volume level. See page 24. ● The volume level setting of the device connected to the projector is too low or the other device is not outputting audio. Adjust the volume level of the connected device. ● The audio output of the connected device may not be connected correctly to the projector's AUDIO IN (1 or 2) terminal or AUDIO IN L/R terminal. Check the connection, referring to one of the following (depending on the type of connected device): "Connecting the Analog RGB Output of a Computer to the Projector" (page 12) or "Connecting to a Video Device" (page 14). ● "Line" is selected for the setup menu "Option Settings 2 → Audio Out" setting. Change the "Audio Out" setting to "Speaker". See page 46.
Strange color	The input signal may not match projector settings. Try doing the following. – Use the [BRIGHT] key to adjust image brightness. – Use the [COLOR MODE] key to change the color mode. – On the setup menu, use "Image Adjustment 1 → Color Balance" to adjust the projection image color balance.

Problem	Cause and Recommended Action
Text is blurry.	● The image may be out of focus. Rotate the focus ring to focus. ● The current frequency and/or phase setting do not match the input signal. (Applies only when the input source is an RGB signal.) Press the [AUTO] key to execute an automatic adjustment operation. ● On the setup menu, perform the "Image Adjustment 2 → Frequency" and "Image Adjustment 2 → Phase" adjustments. (Applies only when the input source is an RGB signal.) See page 40. ● If the input source is a video camera or document camera, check to make sure there is no problem with the input source device.
The message "Please input the password." appears and further operation is not possible.	The "Option Settings 1 → Password protection → Power On Password" setting on the setup menu is turned on, so the projector is password protected. Input the correct password, and then press the [ENTER] key. See page 32.
The remote controller does not work.	● The remote controller batteries may be dead. Replace the batteries. ● The remote controller may be too far from the projector. Make sure the remote controller is within the allowable range when you operate it. See page 56.
The TEMP or LIGHT indicator is flashing or lit.	An error occurred. See "Error Indicators and Warning Messages" (page 51).
The light source unit does not light.	The light source unit has reached the end of its service life or it is malfunctioning. Contact your original dealer or authorized CASIO service center for replacement.

Important!
● Try performing the following steps, which may or may not return the projector to normal operation.

1. Unplug the AC power cord and wait for at least 10 minutes.
2. Plug the power cord back in and turn the projector back on again.

● If normal operation does not resume after you perform the above steps, take the projector to your retailer or authorized CASIO service center.

Appendix

Remote Controller Signal Range

When performing an operation on the remote controller, point it at the remote control signal receiver on the back or front of the projector. The following illustration shows the range of the remote controller signal.

±30 degrees max.

5 meters (16.4 feet) max.

Front

±30 degrees max.

5 meters (16.4 feet) max.

Back

±30 degrees max.

5 meters (16.4 feet) max.

5 degrees to 30 degrees

5 meters (16.4 feet) max.
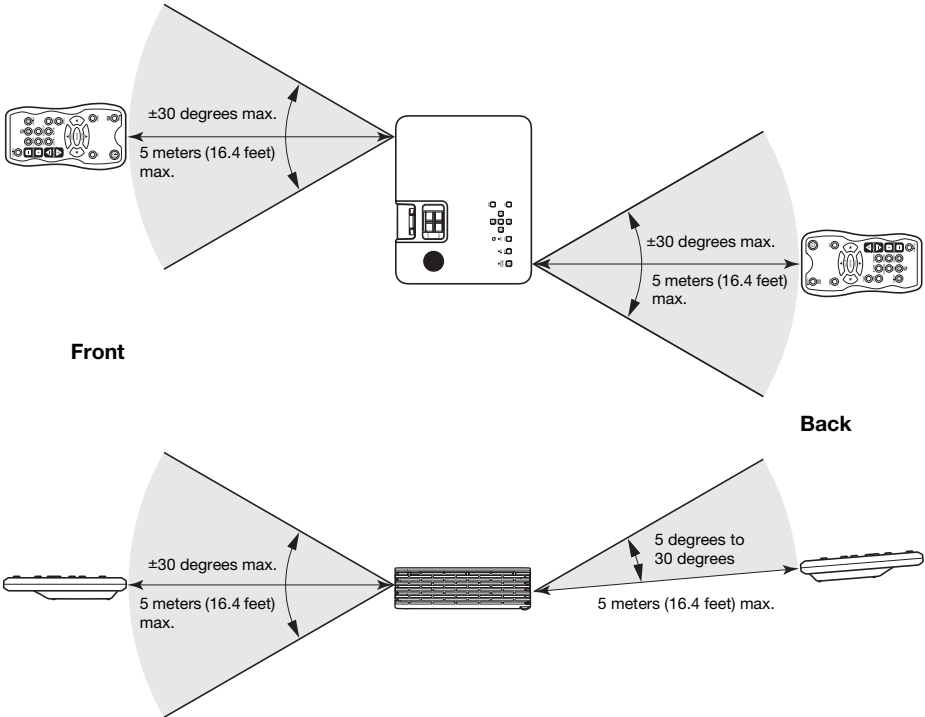
Remote Controller Range

The allowable distance between the remote controller and the projector is less when there is a sharp angle between the remote controller and the remote control signal receiver.

Important!
To avoid running down the batteries, store the remote control unit so its keys are not pressed inadvertently.

Using the MONITOR OUT Terminal

The MONITOR OUT terminal of the projector outputs the video signal being input via the COMPUTER IN 1 terminal or COMPUTER IN 2 terminal as-is. This makes it possible to simultaneously output the projection image to another display.

Note ————————————————————————————————

● The signals output from the MONITOR OUT terminal and speaker (or AUDIO OUT terminal)*1 when the projector is turned on depends on the selected input source as shown in the table below.

When this input source is selected:	The video input signal from this terminal is output to the MONITOR OUT terminal:	The audio input signal from this terminal is output to the speaker (or AUDIO OUT terminal):
Computer 1	COMPUTER IN 1	AUDIO IN 1
Computer 2	COMPUTER IN 2	AUDIO IN 2
S-video	*2	AUDIO IN L/R
Video	*2	AUDIO IN L/R
HDMI	*2	HDMI
USB	*2	USB

*1 Audio is output from either the speaker or AUDIO OUT terminal in accordance with the setup menu "Option Settings 2 → Audio Output" setting.

*2 The video input signal is output from either Computer 1 or Computer 2, in accordance with the last selected input source (COMPUTER IN 1 terminal or COMPUTER IN 2 terminal). For example, even if the input source is switched from Computer 1 to S-video, the MONITOR OUT terminal continues output the video input signal from COMPUTER IN 1.

● The projector can be configured so the input signal from the COMPUTER IN 1 terminal is output to MONITOR OUT terminal, while the input signal from the AUDIO IN 1 terminal is output to AUDIO OUT terminal, even if the projector is in the standby state. For details, see "Standby RGB/Audio" (page 47) under "Option Settings 2 Main Menu".

Hanging the Projector from a Ceiling

The projector can be hung from a ceiling. When doing so, the projector should be turned upside down, and secured to the ceiling. You also need to install a safety wire to ensure that the projector cannot fall accidentally. To attach the safety wire, remove the sticker on the bottom of the projector and attach the wire there.

For full details, contact the retailer where you purchased the projector.

Sticker
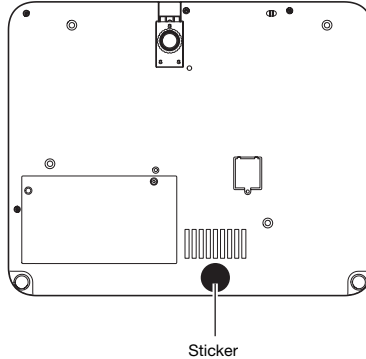
Important!
- When hanging the projector from a ceiling, make sure that it is at least one meter away from fire detectors, fire alarms, and other fire protection devices. Locating the projector too close to a fire protection device creates the risk of mis-operation of the device due to warm air exhausted from the projector. Also, avoid locating the projector close to fluorescent lights or other strong light sources. Bright light can shorten the operating range of the remote controller or even make remote control impossible. When selecting a location for the projector, be sure to test for proper operation of the remote controller.
- The vertical and horizontal orientation of the projected image is reversed from the normal configuration when projecting from a projector hung from the ceiling. You need to change the setup of the projector in order to correct for this. For details, see "Ceiling Mount" (page 42) under "Screen Settings Main Menu".

Projection Distance and Screen Size
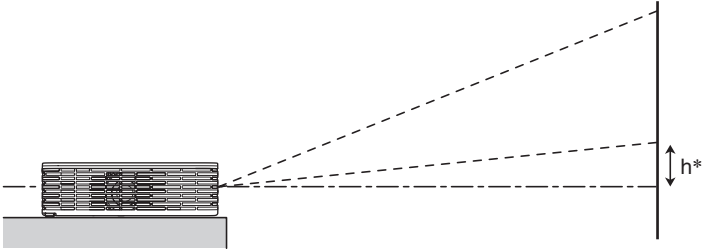
The following table shows the relationship between the distance and projected image size.

XJ-H1600/XJ-H1650/XJ-H1700/XJ-H1750

Projection Size		Approximate Projection Distance		
Screen Size	Diagonal (cm)	Minimum Distance (m / feet)	Maximum Distance (m / feet)	h*
27	69	0.85/2.79	1.0/3.28	0
40	102	1.3/4.27	1.6/5.25	0
60	152	1.9/6.23	2.3/7.55	0
80	203	2.6/8.53	3.1/10.17	0
100	254	3.3/10.83	3.9/12.8	0
150	381	4.9/16.08	5.9/19.36	0
200	508	6.6/21.65	7.9/25.92	0
300	762	9.9/32.48	11.9/39.04	0

XJ-ST145/XJ-ST155

Projection Size		Approximate Projection Distance (m / feet)	h* (cm / inch)
Screen Size	Diagonal (cm)		
45	114	0.6/1.97	6/2.36
60	152	0.8/2.62	8/3.15
80	203	1.1/3.61	10/3.94
100	254	1.4/4.59	13/5.12
142	361	2.0/6.56	19/7.48

XJ-H2600/XJ-H2650

Projection Size		Approximate Projection Distance		
Screen Size	Diagonal (cm)	Minimum Distance (m / feet)	Maximum Distance (m / feet)	h* (cm / inch)
30	76	1 / 3.28	1.2 / 3.94	4 / 1.57
40	102	1.4 / 4.59	1.7 / 5.58	6 / 2.36
60	152	2.1 / 6.89	2.5 / 8.2	9 / 3.54
80	203	2.8 / 9.19	3.4 / 11.15	12 / 4.72
100	254	3.5 / 11.48	4.2 / 13.78	15 / 5.91
150	381	5.3 / 17.39	6.4 / 21	22 / 8.66
200	508	7.1 / 23.29	8.5 / 27.89	29 / 11.42
300	762	10.6 / 34.78	12.8 / 41.99	44 / 17.32

* h = Height from the center of the lens to the bottom edge of the projection screen.

Important!
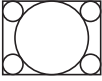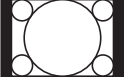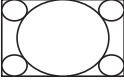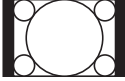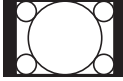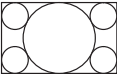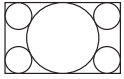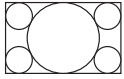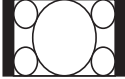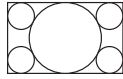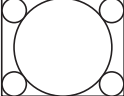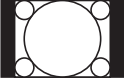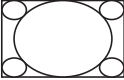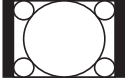
Note that the distances provided above are for reference only.

Aspect Ratio Setting and Projection Image
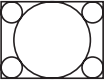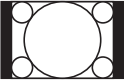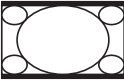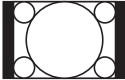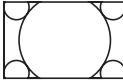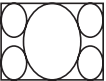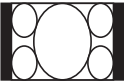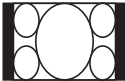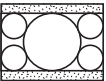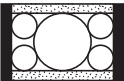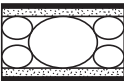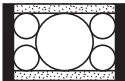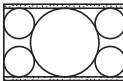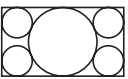
The following shows how images are projected in accordance with the type of the input signal and the aspect ratio setting of the projector.

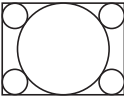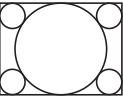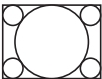## XJ-H2600/XJ-H2650

Input source: RGB or HDMI (PC)
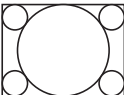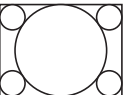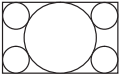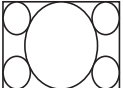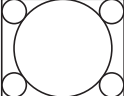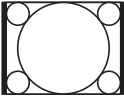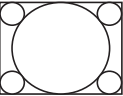
Input Signal	Normal	Full	4:3	True
SVGA (800 × 600)				
XGA (1024 × 768)				
WXGA (1280 × 800)				
SXGA (1280 × 1024)				

Input source: Video, S-video, component or HDMI (DTV)
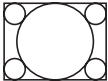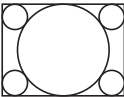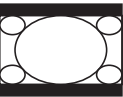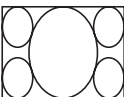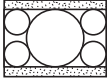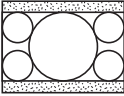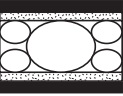
Input Signal	Normal	16:9	4:3	Letter Box
4:3 Aspect Image				
Squeezed Image				
Letter Box Image				
16:9 Aspect Image				

XJ-H1600/XJ-H1650/XJ-H1700/XJ-H1750/XJ-ST145/XJ-ST155

Input source: RGB or HDMI (PC)

Input Signal	Normal	Full
SVGA (800 × 600)		
XGA (1024 × 768)		
WXGA (1280 × 800)		
SXGA (1280 × 1024)		

Input source: Video, S-video, component or HDMI (DTV)

Input Signal	Normal	16:9
4:3 Aspect Image		
Squeezed Image		
Letter Box Image		

Supported Signals

Important!

Even if a signal is listed in the table below, it does not guarantee that you will be able to display its images correctly.

RGB Signal

	Signal Name	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
VESA	640 × 480/60	640 × 480	31.5	60
	640 × 480/72	640 × 480	37.9	73
	640 × 480/75	640 × 480	37.5	75
	640 × 480/85	640 × 480	43.3	85
	800 × 600/56	800 × 600	35.2	56
	800 × 600/60	800 × 600	37.9	60
	800 × 600/72	800 × 600	48.1	72
	800 × 600/75	800 × 600	46.9	75
	800 × 600/85	800 × 600	53.7	85
	1024 × 768/60	1024 × 768	48.4	60
	1024 × 768/70	1024 × 768	56.5	70
	1024 × 768/75	1024 × 768	60.0	75
	1024 × 768/85	1024 × 768	68.7	85
	1152 × 864/75	1152 × 864	67.5	75
	1280 × 768/60	1280 × 768	47.8	60
	1280 × 800/60	1280 × 800	49.7	60
	1280 × 960/60	1280 × 960	60.0	60
	1280 × 960/85	1280 × 960	85.9	85
	1280 × 1024/60	1280 × 1024	64.0	60
	1280 × 1024/75	1280 × 1024	80.0	75
	1280 × 1024/85	1280 × 1024	91.1	85
	1360 × 768/60[*1]	1360 × 768	47.7	60
	1366 × 768/60[*2]	1366 × 768	47.7	60
	1400 × 1050/A[*1]	1400 × 1050	65.3	60
	1440 × 900/60	1440 × 900	55.9	60
	1600 × 1200/60	1600 × 1200	75.0	60
	1680 × 1050/60	1680 × 1050	65.3	60
Other	1152 × 864/70	1152 × 864	64.0	70
	1400 × 1050/B[*1]	1400 × 1050	64.0	60

*1 If these signals do not project correctly, change the "Option Settings 1 → Auto Adjust" setting to "2" (page 44).

*2 If this signal does not project correctly, change the "Option Settings 1 → Auto Adjust" setting to "3" (page 44).

Component Signal

	Signal Name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
HDTV	1080p/50	56.3	50
	1080p/60	67.5	60
	720p/50	37.5	50
	720p/60	45.0	60
	1080i/50	28.1	50
	1080i/60	33.7	60
SDTV	576p/50	31.3	50
	576i/50	16.6	50
	480p/60	31.5	60
	480i/60	15.7	60

Video Signal, S-video Signal

Signal Name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
NTSC	15.7	60
NTSC4.43	15.7	60
PAL	15.6	50
PAL-M	15.7	60
PAL-N	15.6	50
PAL60	15.7	60
SECAM	15.6	50

HDMI Signal

Signal Name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 × 480/60	31.5	60
800 × 600/60	37.9	60
1024 × 768/60	48.4	60
1280 × 768/60	47.8	60
1280 × 800/60	49.7	60
1280 × 960/60	60	60
1280 × 1024/60	64	60
1400 × 1050/60	65.3	60
SDTV (480p)	31.5	60
SDTV (576p)	31.25	50
HDTV (720p) (50)	37.5	50
HDTV (720p) (60)	45	60
HDTV (1080i) (50)	28.13	50
HDTV (1080i) (60)	33.75	60
HDTV (1080p) (50)	56.25	50
HDTV (1080p) (60)	67.5	60

3D Signals (3D Input Mode)

	Signal Name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
RGB Signal	640 × 480/60	31.5	60
	640 × 480/120	61.7	120
	800 × 600/60	37.9	60
	800 × 600/120	77.2	120
	1024 × 768/60	48.4	60
	1024 × 768/120	98.8	120
	1280 × 768/60	47.8	60
	1280 × 768/120	97.4	120
	1280 × 800/60	49.7	60
	1280 × 800/120	101.6	120
Video Signal, S-video Signal	NTSC	15.7	60

Using Wired LAN to Control the Projector (XJ-H1650, XJ-H1750, XJ-H2650, XJ-ST145, XJ-ST155)

The projector can be controlled by a computer or other external device by connecting the device to the projector's LAN port.

Supported External Devices

This projector supports all commands of PJLink Class1 (Version 1.00).
http://pjlink.jbmia.or.jp/english/

This projector is supported by the commands of the Crestron Electronics controller and software (RoomView®).
http://www.crestron.com/

This projector is supported by AMX Device Discovery.
http://www.amx.com/

Information about the types of external devices that can be connected to the LAN port and control the projector, as well as the control commands supported for each external device will be published on the CASIO website below as such information becomes available.
http://www.casio-intl.com/support/

Controlling the Projector from a Computer

When the projector is linked to a computer over a wired or wireless LAN connection, you can use the computer's Web browser to access Network Projection Control to control the projector.

To establish a wired LAN connection between the projector and a computer

1. **Connect the LAN port of the projector to the LAN hub or other network devices to which the computer is connected.**
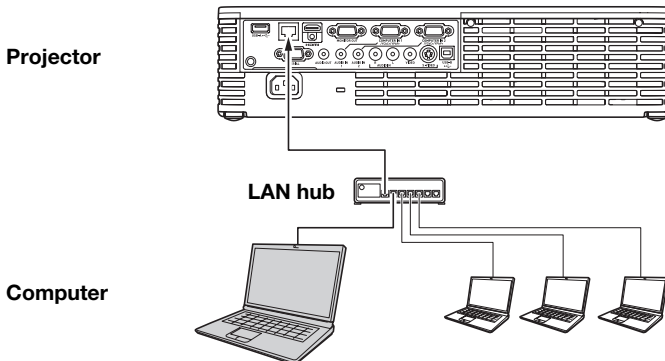
- In a configuration like the one in the illustration above, you should normally use straight type LAN cables. If you are connecting the projector's LAN port directly to the LAN port of a computer, use a cross type LAN cable.

2. **Look up the projector's IP address.**
- Perform the following steps to look up the projector's current IP address.
  1. Press the [MENU] key to display the setup menu.
  2. Use the [▼] and [▲] keys to select "Wired LAN settings" and then press the [ENTER] key.
  3. Use the [▼] and [▲] keys to select "Wired LAN info" and then press the [ENTER] key.
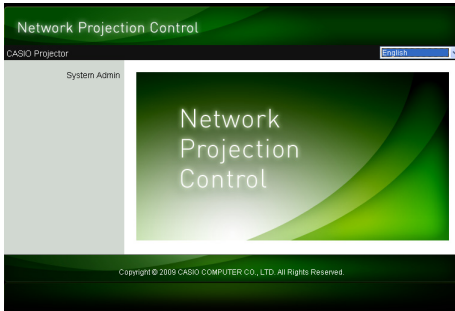
3. **On the computer, start up a Web browser.**

4. **In the Web browser address bar, input the projector's IP address and then press the [Enter] key.**
- If the projectors current IP address is 192.168.100.10, for example, you would input: "http://192.168.100.10".
- This displays the top page of the projector's System Admin page.

- For information about what you should do next, see "To control the projector using Network Projection Control" (page 67).

Important!
Under initial default settings, the projector is configured to obtain its IP address automatically from the DHCP server. This means that an IP address will be assigned automatically whenever the projector is connected to a DHCP environment network.
Depending on the network environment being connected to, there may be cases where you will need to assign a projector's IP address manually. In such cases, you will need to configure projector's network settings.
If you are unable to display the projector's System Admin page with your browser using the above procedure, it may mean that there is some problem with your network settings. Refer to the "Wireless Function Guide" and establish a wireless LAN connection between the projector and your computer. After configuring the projector's network settings, try performing the above procedure again. For details about the projector's network settings, see "To configure projector's network settings and wireless LAN connection settings" in the "Wireless Function Guide".

To control the projector using Network Projection Control

1. **Depending on the type of LAN connection you are using, perform either of the following operations to display the top page of the projector's System Admin page.**

Wired LAN Connection : "To establish a wired LAN connection between the projector and a computer" (page 65)

Wireless LAN Connection : Steps 1 and 2 under "To log in to the projector's System Admin page" of the "Wireless Function Guide"

2. **Click "System Admin". On the password input screen that appears, enter the password.**
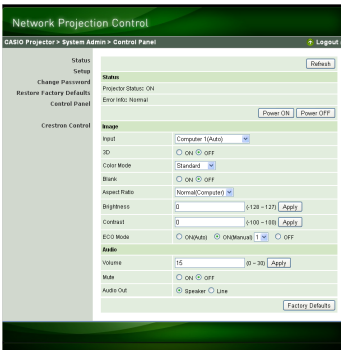● The initial default password is "admin".

3. **Click the [Login] button.**
● This logs in to the System Admin page and displays the Status screen.

4. **Click "Control Panel" on the left side of the screen.**
● This will display the Network Projection Control screen like the one shown below.

● The table below explains the status information and the projector operations included on the Network Projection Control screen.

Group	Item	Description
Refresh (Button)		Click to refresh the screen with the latest information.
Status	Projector status	Shows the projector's current status as either "On" or "Standby".
	Error info	Shows one of the following. **Normal:** Operating normally. **Temperature error:** Temperature error occurred. **Fan error:** Fan error occurred. **Light error:** Light source unit error occurred. **Other error:** Error other than above occurred.
	Power On/Power Off (Buttons)	Turn the projector on/off. [Power On] button operation is supported only when the projector is connected to a computer of a wired LAN connection, and "Enable" is selected for the "Remote on" setting (pages 48).

Group	Item	Description
Image	Input	Specifies the input source. The following are the available input source options.

<table>
<tr><th>3D Off</th><th>3D On</th></tr>
<tr><td>Computer 1/2 (Auto)</td><td>Computer 1/2 (RGB)</td></tr>
<tr><td>Computer 1/2 (RGB)</td><td>Video</td></tr>
<tr><td>Computer 1/2 (Component)</td><td>S-video</td></tr>
<tr><td>Video</td><td></td></tr>
<tr><td>S-video</td><td></td></tr>
<tr><td>HDMI</td><td></td></tr>
<tr><td>USB</td><td></td></tr>
</table>

Group	Item	Description
	3D	Puts the projector into the 3D input mode or normal input mode. **On:** 3D input mode **Off:** Normal input mode ● Note that this setting cannot be change while the currently selected input source is "Computer 1 (Component)", "Computer 2 (Component)", "HDMI", or "USB".
	Color mode	Specifies the color mode. ● For details about this setting, see "Selecting the Color Mode" (page 20).
	Blank	Selecting "On" for this setting temporarily blocks the image from the input source. "Off" causes the image from the input source to be projected. ● The operation of this item is identical to that of the remote controller's [BLANK] key. For details, see "Momentarily Blanking the Image and Muting the Audio" (page 21).
	Aspect ratio	Changes the aspect ratio of the projected image. ● For details about this setting, see "Changing the Aspect Ratio of the Projected Image" (page 23).
	Brightness	This corresponds to the "Image Adjustment 1 → Brightness" setting of the setup menu. Input a value into the box and then click the [Apply] button. This will change the projector's "Brightness" setting accordingly.
	Contrast	This corresponds to the "Image Adjustment 1 → Contrast" setting of the setup menu. Input a value into the box and then click the [Apply] button. This will change the projector's "Contrast" setting accordingly.
	Eco Mode	Switches the Eco mode. ● For details about this setting, see "Eco Mode (Power Saving, Low Noise)" (page 25).
Audio	Volume	Input a value into the box and then click the [Apply] button. This will change the volume setting accordingly.
	Mute	Specifies the mute setting. Audio is output while "Off" is selected for this setting, and muted when "On" is selected.
	Audio Output	Specifies either output from the projector's speaker output or AUDIO OUT terminal for audio. **Speaker:** Audio output from the speaker **Line:** Audio output from the AUDIO OUT terminal
Factory Defaults (Button)		Clicking to return all Network Projection Control items, except for the "Projector status" item, to their initial factory defaults.

5. After all of the settings are the way you want, click "Logout".

✎ **Note** ───

The "Status", "Setup", "Change Password", and "Restore Factory Defaults" items along the left side of the screen are mainly for accessing information and configuring settings related to projector wireless LAN connection. You can access these items when connected over a wired LAN as well. For details, see "System Admin Page Operations and Settings" in the "Wireless Function Guide".

Projector RS-232C Control

You can use a commercially available serial cable (cross) to connect the projector to a computer and control the projector from the computer.

Connecting the Projector to a Computer

Connect the projector to the computer as shown in the illustration below.

Projector

Serial port (RS-232C)

D-Sub 9-pin (female)

Computer

D-Sub 9-pin (female)

Commercially available serial cable (cross)
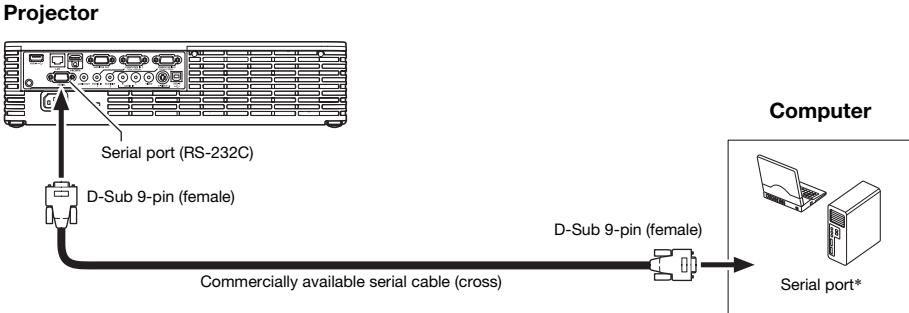
Serial port*

* A D-Sub 9-pin (male) type connector is standard for computer serial ports, but there may be cases where the shape of a particular computer's connector is different. For details about connecting a commercially available serial cable to your computer, see the user documentation that comes with it.

Using Control Commands

This section explains the commands that are used to control the projector from a computer.

Command Send Format

Communication Protocol	Configure your computer's serial port with the following settings.	
	Data Rate	19200bps
	Data Bit	8bit
	Parity	None
	Stop Bit	1bit
	Flow Control	None
Read Command	Send this command when you want information about the current setup of the data projector.	
	Send Format	(<command name>?)
	Receive Format	(<applicable command setting range>,<current setting>)
	Command Send Example	(VOL?) sent from the computer to the projector. ↓ (0-30,15) returned from the projector to the computer.
Write Command	Send this command to control the data projector (power on/off, etc.) and to write data to it.	
	Send Format	(<command name><setting value>)
	Command Send Example	(VOL0) sent from the computer to the projector. ↓ Projector volume setting becomes 0 (mute).

- See the "Command List" for details about command names and settings.
- All commands use ASCII characters and decimal format integers.
- The projector will return a question mark (?) when it is sent a command it cannot recognize. Also, any command that attempts to set a value that is outside the applicable allowable range will be ignored.
- If the projector is performing a process initiated by a previously sent command, a projector key operation, or a remote controller key operation, send of the next command must wait until the projector completes the previous process.

Command List

- Only the following functions are supported while the projector is turned off. Do not try to send any other command to the projector.
  - Power on/off: Read
  - Power on: Write
  - Get light time: Read
- Input of a valid signal must be in progress in order to use a command to turn on blank screen or change the aspect ratio.

R: Read enabled   W: Write enabled

Function	Command Name	RW	Setting Range
Power On/Off:	PWR	RW	0: Off, 1: On
Input Switching: 0: Switches the input source to the COMPUTER 1 terminal and changes the COMPUTER 1 terminal setting to RGB. **1:** Switches the input source to COMPUTER 1 terminal and changes the COMPUTER 1 terminal setting to component. **2:** Switches the input source to Video. **3:** Switches the input source to the COMPUTER 2 terminal and changes the COMPUTER 2 terminal setting to RGB. **4:** Switches the input source to COMPUTER 2 terminal and changes the COMPUTER 2 terminal setting to component. **5:** Switches the input source to USB. This setting is supported only when the projector is equipped with a USB function and the USB application is running. **6:** Switches the input source to COMPUTER 1 terminal and changes the COMPUTER 1 terminal setting to Auto. **7:** Switches the input source to HDMI. **9:** Switches the input source to S-video. **10:** Switches the input source to COMPUTER 2 terminal and changes the COMPUTER 2 terminal setting to Auto.	SRC	RW	0: RGB1, 1: Component1, 2: Video, 3: RGB2, 4: Component2, 5: USB, 6: Auto1 (RGB/Component), 7: HDMI, 9: S-video, 10: Auto2 (RGB/Component)
Blank Screen: Switches the blank screen on or off.	BLK	RW	0: Off, 1: On
Volume: Specifies a value to adjust the volume level. This setting is applied to the input source signal that is currently being projected by the projector.	VOL	RW	0-30

Function	Command Name	RW	Setting Range
Color Mode: Selects the color mode.	PST	RW	1: Graphics, 2: Theater, 3: Standard, 4: Blackboard, 5: Game
Aspect Ratio: Specifies the aspect ratio.	ARZ	RW	0: Normal[*1], 1: 16:9, 2: Normal[*2], 3: Letter Box, 4: Full, 5: True, 6: 4:3
Get Light Time: Gets the light time from the projector.	LMP	R	0- Unit: Hours

*1 Input source: RGB or HDMI (PC)

*2 Input source: Video, S-video, component or HDMI (DTV)

Specifications

Model Name	XJ-H2600	XJ-H2650
Brightness (ANSI Lumens)	3500	
Projection System	DLP	
DLP chip	Size: 0.65 inch, Number of Pixels: WXGA (1280 × 800)	
Projection Lens	1.2X manual optical zoom, manual focus	
Light Source	Laser and LED	
Terminals	**COMPUTER IN:** RGB 15-pin mini D-Sub × 2 (Also used as component signal input terminal.) **MONITOR OUT:** RGB 15-pin mini D-Sub × 1 **VIDEO:** RCA pin jack × 1 **S-video:** 4-pin mini DIN × 1 **HDMI:** HDMI type A terminal × 1 **AUDIO IN:** 3.5 φ stereo mini jack × 2, RCA pin jack × 2 **AUDIO OUT:** 3.5 φ stereo mini jack × 1 **SERIAL:** 9-pin D-Sub × 1 **USB[*]:** TYPE A terminal × 1, TYPE B terminal × 1 **LAN[*]:** RJ-45 terminal × 1	
Display Languages	English, French, German, Italian, Spanish, Swedish, Portuguese, Dutch, Norwegian, Polish, Finnish, Czech, Turkish, Russian, Chinese (Simplified), Chinese (Traditional), Korean, Japanese	

* XJ-H2650 only

● CASIO COMPUTER CO., LTD. makes no guarantees concerning the operation or suitability of any USB device that you connect to the projector's USB port.

● Specifications are subject to change without notice.

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MA1205-B