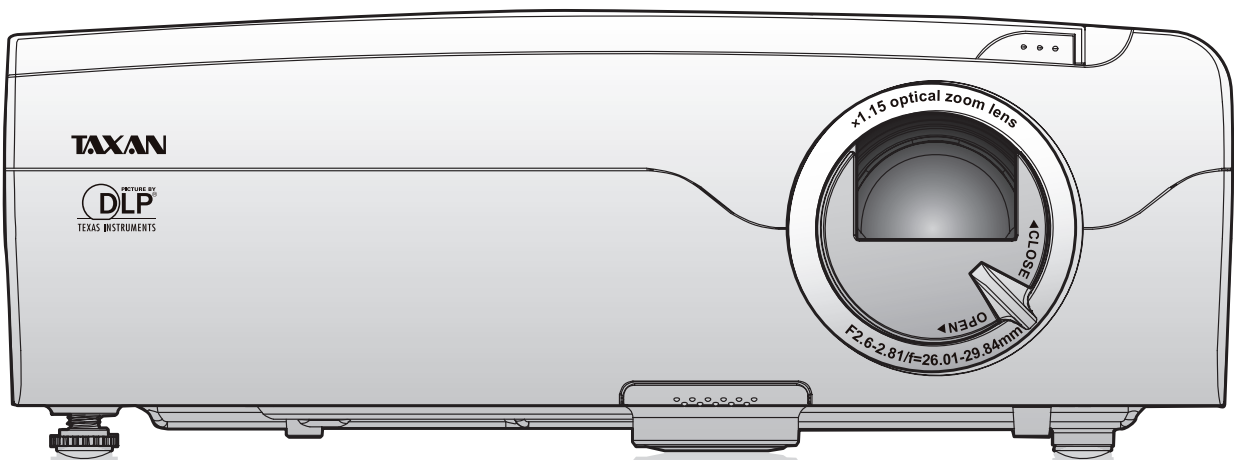


TAXAN

DATA PROJECTOR User's Manual

KG-PH1001X KG-PH1002WX



IMPORTANT

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Note that even in the absence of explanatory notes, serious attention is paid to the trademarks of the various companies and to the product trademarks.

Important safety information

DECLARATION OF CONFORMITY

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

U.S. Responsible Party:	PLUS Vision Corp. of America
Address:	9610 SW Sunshine Court Suite 500 Beaverton, OR 97005
Tel. No.:	(503) 748 8700

Type of Product: Projector
Equipment Classification: Class B Peripheral
Models: KG-PH1001X, KG-PH1002WX



We hereby declare that the equipment specified above conforms to the technical standards as specified in the FCC Rules.

Precautions

Thank you for your purchase of this TAXAN data projector.

Please read this User's Manual to the end so that you will be able to use this product properly.

After reading, keep this manual together with the Warranty in a safe place so that you may refer to it whenever you need it.

Please read this User's Manual should there be something that you need to know during operation of the projector or in case of an irregularity.

This User's Manual covers models **KG-PH1001X** and **KG-PH1002WX**.

The projection distance is the same in these models, but the screen resolution and some other functions are different. See the table below and the "Major Specifications" for details. See Pages E-98 to 99.

Model	Resolution (Full Function)
KG-PH1001X	1024 × 768 (XGA)
KG-PH1002WX	1280 X 800 (WXGA)

Important safety information



CAUTION

TO PREVENT SHOCK, DO NOT OPEN THE CABINET. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED KAGA COMPONENTS SERVICE PERSONNEL.



This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside of this unit.



This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

The above cautions are given on the bottom of the product.

WARNING

TO PREVENT FIRE OR SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. DO NOT USE THIS UNIT'S GROUNDED PLUG WITH AN EXTENSION CORD OR IN AN OUTLET UNLESS ALL THREE PRONGS CAN BE FULLY INSERTED. DO NOT OPEN THE CABINET. THERE ARE HIGH-VOLTAGE COMPONENTS INSIDE. ALL SERVICING MUST BE DONE BY QUALIFIED KAGA COMPONENTS SERVICE PERSONNEL.

RF Interference

WARNING

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

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

DOC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Hg: Lamp in This Product Contains Mercury. Dispose of Lamp According to Local, State or Federal Law.

Important safety information

Important Safeguards

These safety instructions are to ensure the long life of the unit and to prevent fire and shock. Please read them carefully and heed all warnings.

Installation

- For best results, use the unit in a darkened room.
- Place the unit on a flat, level surface in a dry area away from dust and moisture.
- Do not place the unit in direct sunlight, near heaters or heat radiating appliances.
- Exposure to direct sunlight, smoke or steam can harm internal components.
- Handle the unit carefully. Dropping or jarring can damage internal components.
- Do not place heavy objects on top of the unit.

Power Supply

- The unit is designed to operate on a power supply of 100 - 240 V 50/60 Hz AC. Ensure that your power supply fits these requirements before attempting to use the unit.
- Handle the power cable carefully and avoid excessive bending. A damaged cord can cause electric shock or fire.
- Disconnect the power cable (main's lead) from the power outlet after using the unit.
Before disconnecting the power cable, make sure that the indicator of the POWER/STANDBY lights in orange (not flashing or in blue).

Cleaning

- Disconnect the power cable (main's lead) from the unit.
- Clean the cabinet of the unit periodically with a damp cloth. If heavily soiled, use a mild detergent. Never use strong detergents or solvents such as alcohol or thinner.
- Use a blower or lens paper to clean the lens, and be careful not to scratch or mar the lens.
- Clean the ventilation slots and speaker grills on the unit periodically using a vacuum cleaner. If accumulated dust blocks the ventilation slots, the unit will overheat, which may cause the unit to malfunction.
Use a soft brush attachment when using the vacuum cleaner. Do not use a hard attachment, such as a crevice tool, to prevent the damage to the unit.

Lamp Replacement

- Be sure to replace the lamp when the LAMP indicator comes on. If you continue to use the lamp after 2000 hours of usage, the lamp will turn off.

Fire and Shock Precautions

- Ensure that there is sufficient ventilation and that vents are unobstructed to prevent the buildup of heat inside the unit. Allow at least 10 cm (4 inches) of space between the unit and walls.
- Prevent foreign objects such as paper clips and bits of paper from falling into the unit. Do not attempt to retrieve any objects that fell into the unit. Do not insert any metal objects such as a wire or screwdriver into the unit. If something should fall into the unit, immediately disconnect the power cable from the unit and have the object removed by a qualified KAGA COMPONENTS service person.
- Do not place any liquids on top of the unit.

Carrying around

When carrying the unit around, please use the soft case that comes with it and, to protect the lens from scratches, always shut the lens shutter. Also, do not subject the unit to strong mechanical shock.

CAUTION – HOT!

The area around the exhaust vents is hot during and immediately after image projection.

To avoid burns, keep your hands away from this area.

Wait until the exhaust vents area cools off before touching it.

Do not look into the lens while the unit is on. Serious damage to your eyes could result.

Ways of Viewing this Manual

There are five ways to search for information in this manual.

1 I just want to start using the projector

“The Procedure from Projection to Turning Off the Power”
→ See Page E-21

This introduces the basic operations of this product.

2 I would like to know about convenient functions when projecting

“Helpful Hints” → See Page E-8

This introduces convenient functions of this product.

3 I would like to know about operations via the remote control and the projector control panel

“Finding Information with the Remote Control and the Projector Control Panel” → See Page E-10

This introduces operating information with the remote control and the projector control panel.

4 I would like to know about menu screen operation methods

“Finding Information from the Operations Screen”
→ See Page E-12

This introduces operating information from the illustrations of the menu screens.

5 I would like to look up operating information about this product using keywords

“Finding Information with Keywords” → See Page E-14

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Convenient functions for the use of this product

I would like to use the projector in a simple manner.

When using this product, just press the POWER/STANDBY button and set the image size with the zoom ring to allow the image to be projected simply. See "Basic Operation" for details. See Page E-21.

Technical Point

What is the keystone correction function?

When the projector is tilted up or down when projecting, the picture will appear distorted.

There are two types of keystone distortion, in the horizontal or vertical direction. This projector has a function that manually corrects the distortion in the vertical direction.

See "Keystone" for details. See Pages E-54.

I would like to project a clear image in conjunction with the projection location. (Example: I would like to project onto a blackboard, etc.)

A projection mode to suit the purpose can be selected with **Projection Mode** under **Simple Menu**. For example, by selecting the **Blackboard** mode a color adjustment that suits blackboards will be made automatically, allowing a clear image to be projected without making detailed settings. By selecting the **Wall color** to suit the wall when projecting, a color adjustment that suits the standard white projection screen will be made automatically. Other modes include **Graphics** and **Presentation** modes.

See "Projection Mode Selection" for information about operation from the remote control. See Page E-42.

See "Projection Mode" and "Wall Color" for information about operation from the menu. See Page E-52 and E-53.

Technical Point

What is the projection mode?

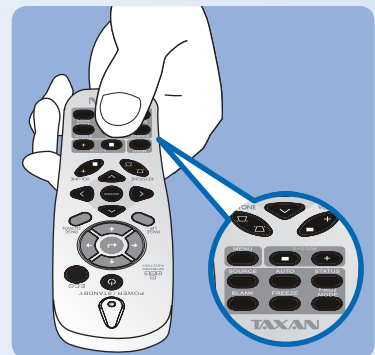
This projector is already equipped with projection modes that suit the application. This permits an immediate color adjustment to suit the purpose without performing detailed adjustments such as **Gamma Correction**, **Color Temperature**, or **White Level**.

I would like to stop the projection temporarily.

The projection can be stopped temporarily during a presentation or class. By using **Freeze**, or **Blank/Mute** (BLANK) the projection can be paused, or the video can be made blank temporarily.

See "Temporarily Blanking/Muting the Video/Audio", or "Pausing the Video" for information about operation from the remote control. See Pages E-41 and 42.

See "Blank/Mute" or "FREEZE" for information about operation from the menu. See Page E-58.



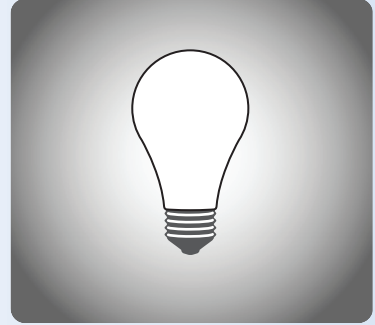
Convenient functions for the use of this product

I would like the lamp to have a longer life.

The life of the lamp can be maintained longer by using the Eco Mode to limit the power consumption of the projector.

See "Eco Mode" for information about operation from the remote control. See Page E-43.

See "Eco Mode" for information about operation from the menu. See Page E-56.



I would like to put away the projector right after using it.

The projector is equipped with a Direct Power-off function allowing you to unplug the projector without powering-off. The projector is equipped with a Quick-off function. After turning off the power, the fan independently to cool the lamp, running at high speed for approximately 10 seconds.

See "The Procedure from Projection to Turning Off the Power" for details about the Direct Power-off function and the Quick-off function. See Page E-24.

Technical Point

Why is the Quick-off function needed?

The projector allows you to immediately power off without cooling down. The projector cannot be powered on soon after powering off while the lamp is still at high temperature (the fan runs at high speed to cool down to the lamp rapidly).

Theft and mischief are concerns.

This projector is equipped with security lock functions that allow it to be used more safely including a theft-prevention lock compatible with the Kensington MicroSaver® security system, and a password setting

See "Names of the Projector Parts and their Functions" for details about the theft-prevention lock. See Page E-18.

See "Set Password" for information about setting the password.

See Page E-83.

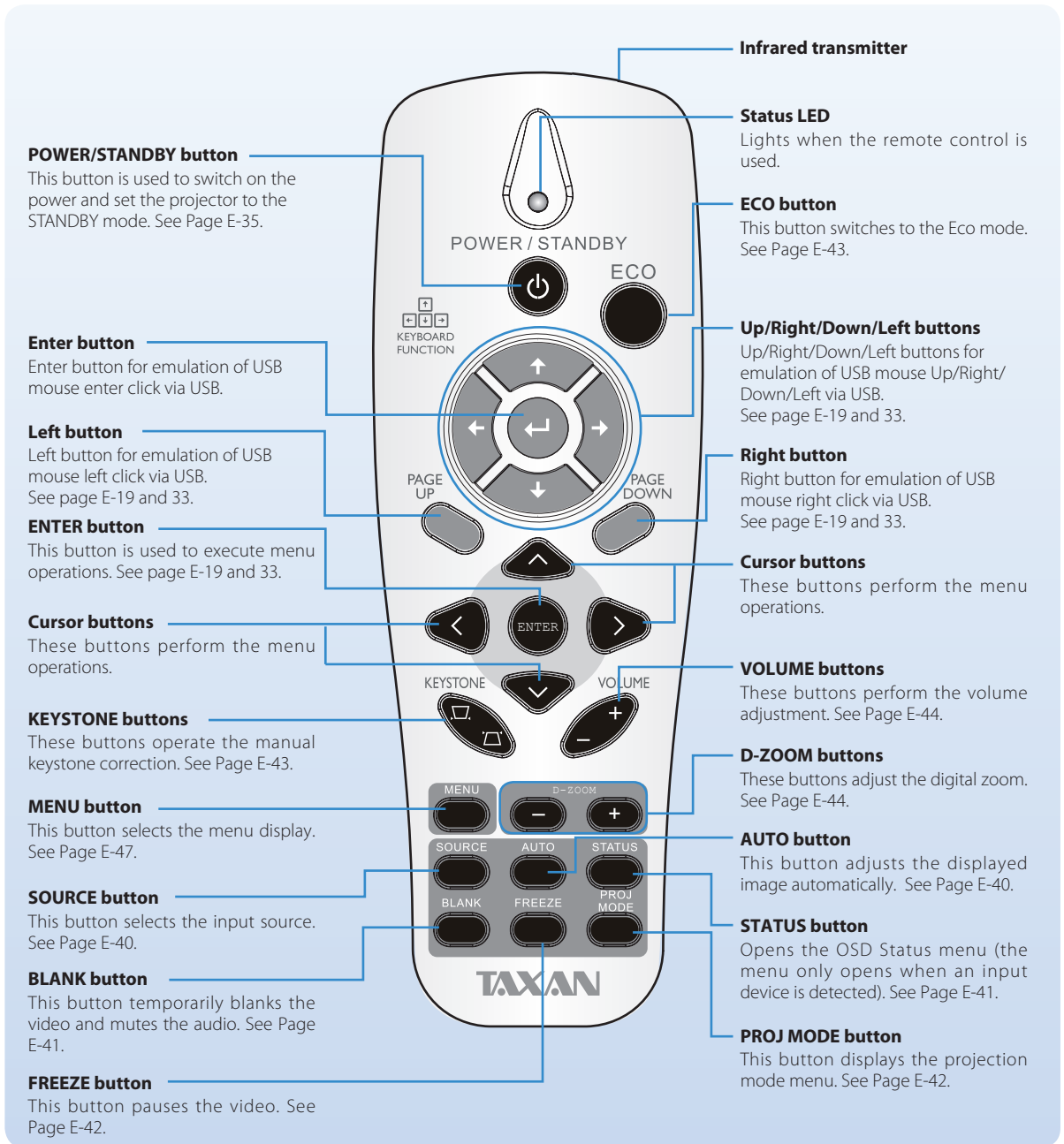
Technical Point

What is a password setting?

This projector is equipped with a function that can restrict the start-up of the projector by setting a password to avoid mischief and unauthorized use.

When a password has been set, upon starting the projector a password entry screen will be displayed. Use of the projector will not be possible unless the password is entered.

Finding Information with the Remote Control



Technical Point

What is BLANK?

It is a function that temporarily makes the screen go blank during video projection. This is convenient when you would like to temporarily blank the video when projecting to a white board, etc.
See "Temporarily Blanking/Muting the Video/Audio" for details. See Page E-41.

What is FREEZE?

It is a function that temporarily stops the projected video. This is a convenient function that allows you to temporarily stop the video and look for a document should you wish to find another document when projecting a document with the personal computer.
See "Pausing the Video" for details. See Page E-42.

What is the projection mode?

It is a function that automatically adjusts optimum color tone in conjunction with the projection circumstances. For example, when projecting to a blackboard, selecting the **Blackboard** mode will automatically set the optimum color adjustment to a blackboard.
See "Projection mode Selection" for details. See Page E-42.

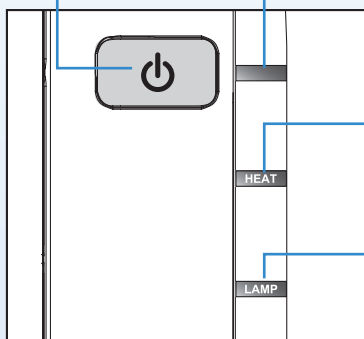
Finding Information with the Projector Control Panel

POWER/STANDBY button

This button is used to switch on the power and set the projector to the STANDBY mode. See Page E-22.

POWER/STANDBY indicator

This is the indicator that indicates the on/off status of the Eco mode, the temperature, and the lamp faults. Eco Mode: See Page E-43 and E-56. Indications of the indicator: See Page E-91.



HEAT indicator

This is an indicator that indicates faults related to the temperature of the projector. See Page E-91.

LAMP indicator

This is an indicator that indicates faults related to the lamp. See Page E-91.

MENU button

This button selects the menu display. See Page E-47.

BLANK button

This button temporarily blanks the video and mutes the audio. See Page E-41.

Cursor buttons

These buttons perform the menu operations. (They are allocated to other functions when the menu screen is not being displayed.)

KEystone buttons

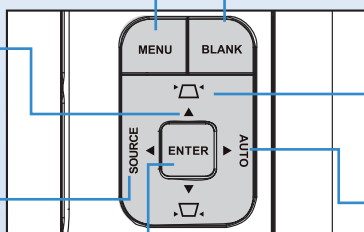
These buttons operate the keystone correction manually. See Page E-43.

SOURCE button

This button displays the input source screen. See Page E-40.

AUTO button

This automatically adjusts the video. (Usually, the video is adjusted automatically at the time of signal selection.) See Page E-40. * Only the RGB signal is adjustable.



ENTER button

This button is used to execute menu operations, etc.

Technical Point

What is the menu display?

The menus of this projector include the two types of **Simple Menu** and **Advanced Menu**. **Simple Menu** includes a collection of frequently used functions. Included are **Projection Mode** and other items. On the contrary, the **Advanced Menu** includes infrequently used settings such as fine adjustments of the image and **Set Password**, etc. See "Using the Menu" for details. See Page E-46.

What is Keystone Distortion?

Keystone distortion is distortion of the projected image that occurs when the projector is tilted vertically or horizontally with respect to the screen. There are two types of keystone distortion, in the horizontal direction when the projector is slanted to the left or right, and in the vertical direction when the projector is tilted up or down. This projector can manually correct the distortion in the vertical direction. See "Keystone" for details. See Pages E-54.

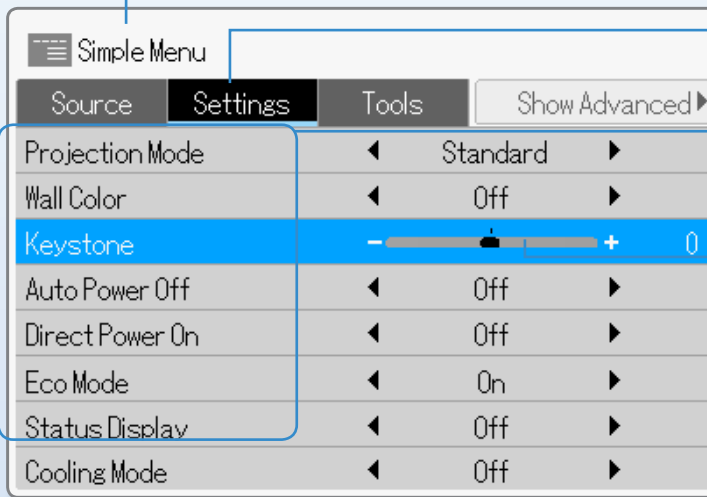
Finding Information from the Operations Screen

This section describes menu viewing and operation. Please see the various explanatory pages about menu functions and adjustment/setting methods. To use the remote control, direct it towards the remote control infrared sensor of the projector and operate it.

Menu Screen Names and Functions

This projector has two types of menu, a **Simple Menu** that enables operation of basic functions, and an **Advanced Menu** that enables detailed settings such as image settings, etc. Since the operation method is the same for both types, the **Simple Menu** will be used here to describe the names and functions of the menu screen.

With respect to the Simple and Advanced screens, **Simple Menu** has a light gray background color. Selecting **Show Advanced** will change the display to the **Advanced Menu**.



Menu Name

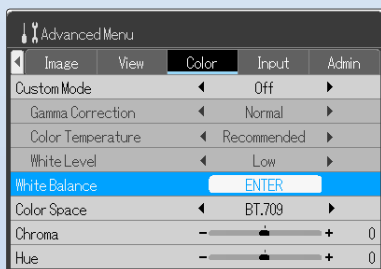
This is the title of the menu. The color of the selected menu will change.

Item Name

This is the name of the adjustment or setting. The (blue) cursor will move to the selected item.

Adjustment Bar and Settings Contents

The increases and decreases in bar length express the adjustment condition. The set contents are displayed in characters.



Advanced Menu

In the **Advanced Menu** the menu background color changes from light gray to deep gray.

Finding Information from the Operations Screen

Menu Item List

Simple Menu

Menu Name	Item Name	Page
Source	Auto Detect	E-51
	Manual selection	E-51
	Computer	E-51
	DVI-I	E-51
	Component	E-51
	Video	E-51
	S-Video	E-51
	HDMI	E-51
Settings	Projection Mode	E-52
	Wall Color	E-53
	Keystone	E-54
	Auto Power Off	E-55
	Direct Power On	E-55
	Eco Mode	E-56
	Status Display	E-56
Tools	Cooling Mode	E-57
	Blank/Mute	E-58
	Freeze	E-58
	Zoom	E-59
	Timer Display	E-61
	Volume	E-62
	Select language	E-63
	PC Control	E-63
LAN Setting	E-64	

Advanced Menu

Menu Name	Item Name	Page
Image	Brightness	E-71
	Contrast	E-71
	Sharpness	E-71
	Frequency Compensation	E-72
	Phase Control	E-73
	Definition	E-73
View	Select Aspect Ratio	E-74
	Horizontal Position	E-76
	Vertical Position	E-76
	Vertical Flip	E-76
Color	Horizontal Flip	E-76
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	Gamma Correction	E-77
	Color Temperature	E-78
	White Level	E-78
	White Balance	E-79
Input	Color Space	E-80
	Chroma	E-80
	Hue	E-81
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	Component	E-82
Admin	Video	E-82
	S-Video	E-82
	Set Password	E-83
	Version	E-86
	Lamp Timer	E-87
	Lamp Timer Reset	E-88
	Initialize	E-89
Startup Screen	E-89	
Background Color	E-90	

Finding Information with Keywords

Keyword	Page
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Background Color	E-36, 90
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Blanking of the video	E-42, 58
Blurred Screen	E-37
Brightness	E-71
Ceiling suspension setting	E-76
Chroma	E-80
Color Space	E-80
Color Temperature	E-78
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Initialize	E-89

Keyword	Page
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Lamp replacement	E-95
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Check before Use

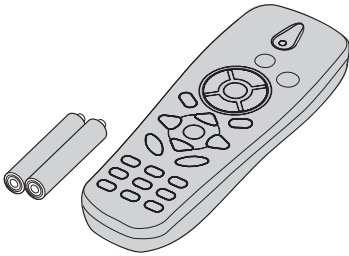
Check the Accessories

Remove the projector and the accessories from the box and check that the following items are included.

*The supplied power cable is a dedicated product for this projector. Never use it with another product.

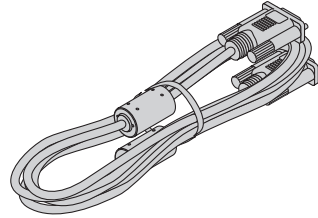
Remote control (including two AAA batteries) [1]

This remote control is used for projector operation. See Page E-19.



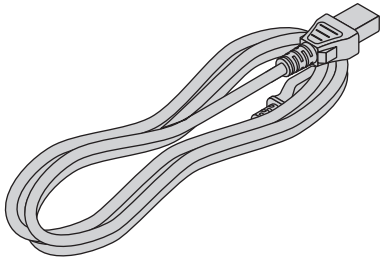
RGB signal cable (Mini D-Sub 15-pin, 1.8m / 5.9 feet) [1]

This is used for making connections with a personal computer. See "Connections with the Personal Computer" for connection information. See Page E-27.



Power cable (3 m / 9.8 feet) [1]

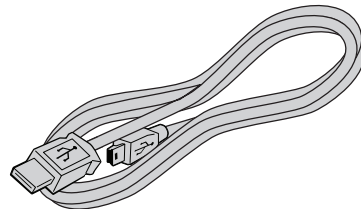
This power cable supplies power to the unit. See "Turning On the Power" for connection information. See Page E-34.



USB cable 1.8 m / 5.9 feet

Type A-B

This USB cable is used for connecting with a personal computer. See "Connections with the USB connector" for connection information. See Page E-33.



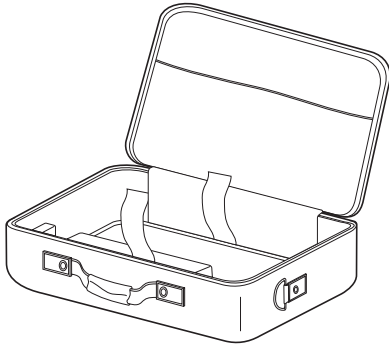
"WARNING"

Handling the cables supplied with this product, will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm.
Wash hands after handling.

Check the Accessories

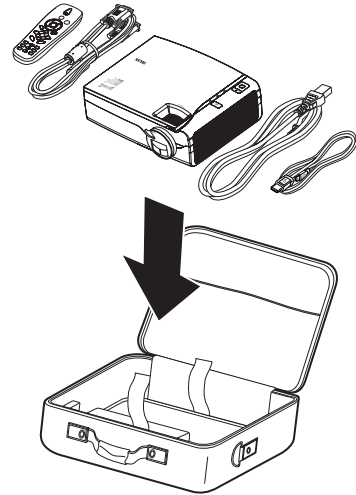
Soft Case [1]

This case will hold the projector, the accessories, and the user's manual.

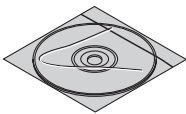


Item Insertion

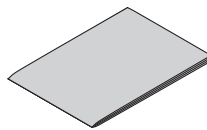
Close the lens shutter of the projector and place the projector in the case with the lens facing upward. Place the accessories in the storage pocket.



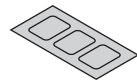
User's Manual (CD-ROM edition)
[1]



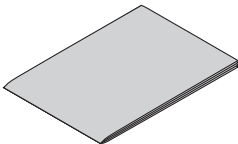
Security Sheet [1]



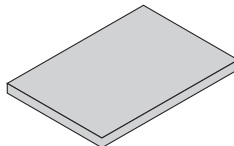
Security Label [1]



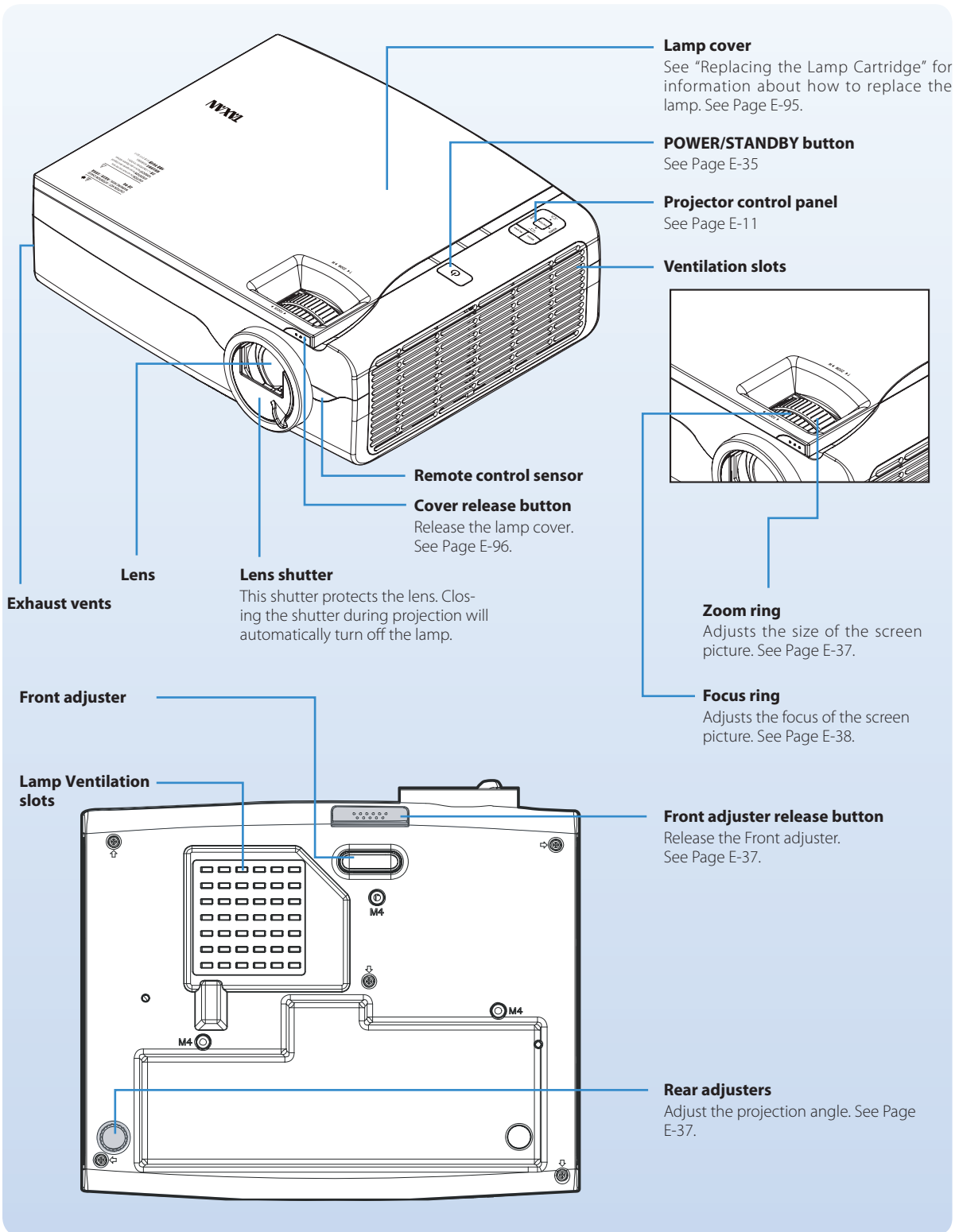
Startup Guide [1]



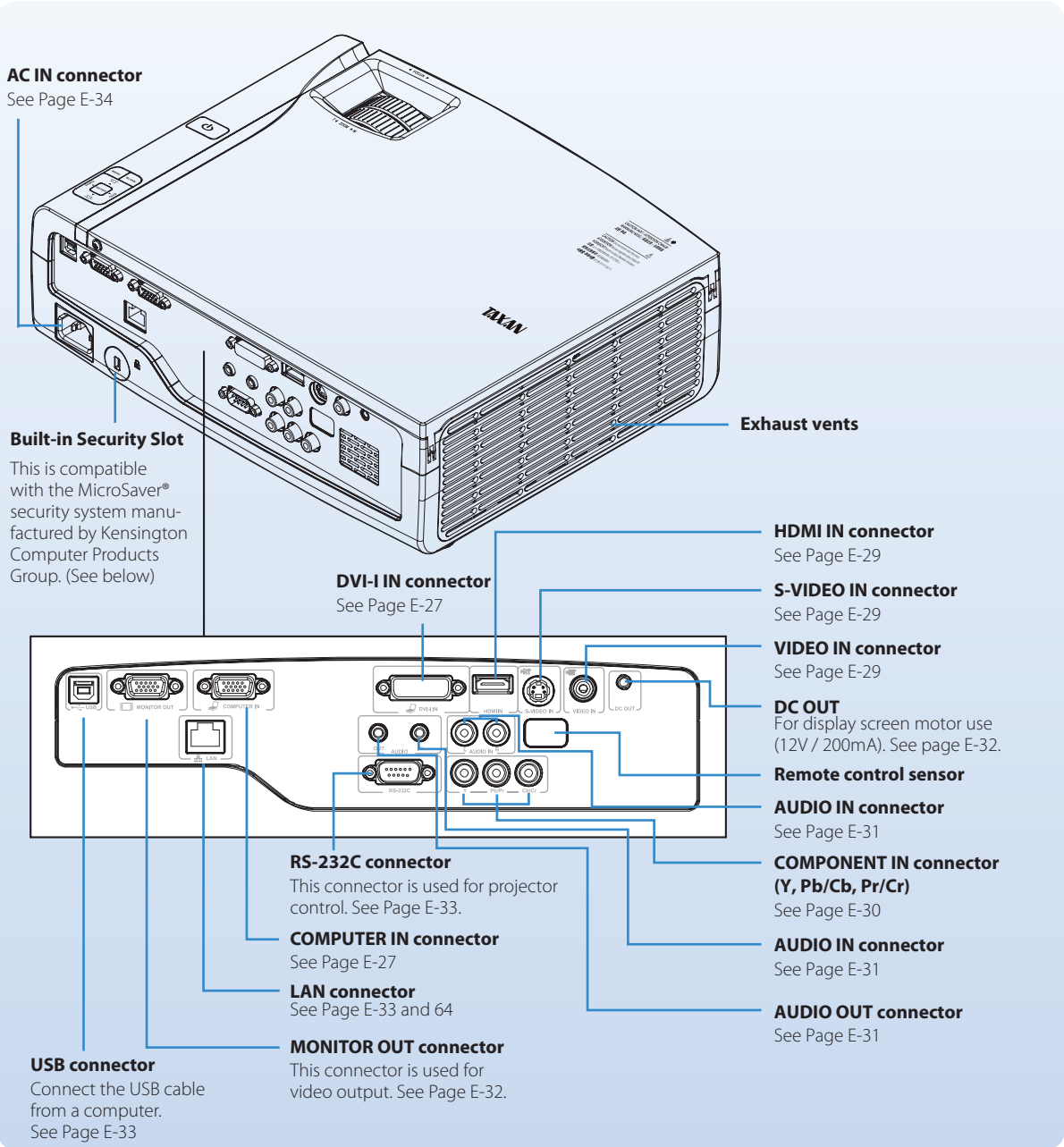
Safety and Support Service Guide
[1]



Names of the Projector Parts and their Functions



Names of the Projector Parts and their Functions



DC OUT
The DC OUT function is for use to trigger the screen motor.

 **Built-in Security Slot**
This security slot supports the MicroSaver Security System manufactured by Kensington Microware Inc.

Names of the Remote Control Parts and their Functions

Precautions

- Do not drop the remote control or handle it inappropriately.
- Do not expose the remote control to water or other liquids. Should the remote control become wet, wipe it dry immediately.
- Try to avoid use in hot and/or humid locations.
- Please keep batteries out of the reach of children. If a battery is swallowed, promptly obtain the medical care of a doctor.
- Remove the battery from the remote control when it is not going to be used for a long period.
- Some operations (such as menu operations) are available only through the use of the remote control and attention should be given to its careful handling.

The diagram shows a grey remote control with various buttons and features labeled with numbers 1 through 21. The buttons include: POWER / STANDBY, ECO, KEYBOARD FUNCTION, a directional pad (Up, Down, Left, Right), PAGE UP, PAGE DOWN, KEYPSTONE, VOLUME (+/-), MENU, D-ZOOM (200X), SOURCE, AUTO, STATUS, BLANK, FREEZE, and PROJ MODE. The TAXAN logo is at the bottom.

<p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p>	<p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p>
--	---

1. Infrared transmitter

2. Status light
Lights when the remote control is used

3. POWER/STANDBY button
This button is used to switch on the power and set the projector to the STANDBY mode. See Page E-35.

4. Up/Right/Down/Left buttons
Up/Right/Down/Left arrows when connected through USB to a PC. See page E-10 and 33.

5. Enter button
Enter button when connected through USB to a PC. See page E-10 and 33.

6. Page Up button
Page up when connected through USB to a PC. See page E-10 and 33.

7. Cursor buttons
These buttons perform the menu operations.

8. KEYSTONE buttons
These buttons operate the keystone correction manually. See Page E-43.

9. D-ZOOM buttons
These buttons adjust the digital zoom. See Page E-44.

10. MENU button
This button selects the menu display. See Page E-47.

11. SOURCE button
This button selects the input source. See Page E-40.

12. BLANK button
This button temporarily blanks the video and mutes the audio. See Page E-41.

13. ECO button
This button switches to the Eco mode. See Page E-43.

14. Page Down button
Page down when connected through USB to a PC. See page E-10 and 33.

15. ENTER button
This button is used to execute menu operations, etc.

16. Cursor buttons
These buttons perform the menu operations.

17. VOLUME buttons
These buttons perform the volume adjustment. See Page E-44.

18. STATUS button
Opens the OSD Status menu (the menu only opens when an input device is detected). See Page E-41.

19. AUTO button
Auto adjustment for phase, tracking, size, position. See Page E-40.

20. PROJ MODE button
This button displays the projection mode menu. See Page E-42.

21. FREEZE button
This button pauses the video. See Page E-42.

Technical Point

What is BLANK?

It is a function that temporarily makes the screen go blank during video projection. This is convenient when you would like to temporarily blank the video when projecting to a white board, etc.

See "Temporarily Blanking/Muting the Video/Audio" for details. See Page E-41.

What is FREEZE?

It is a function that temporarily stops the projected video. This is a convenient function that allows you to temporarily stop the video and look for a document should you wish to find another document when projecting a document with the personal computer.

See "Pausing the Video" for details. See Page E-42.

What is the projection mode?

It is a function that automatically adjusts optimum color tone in conjunction with the projection circumstances. For example, when projecting to a blackboard, selecting the **Blackboard** mode will automatically set the optimum color adjustment to a blackboard.

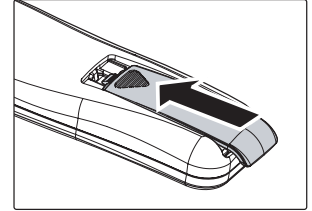
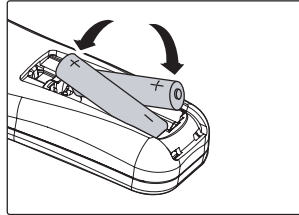
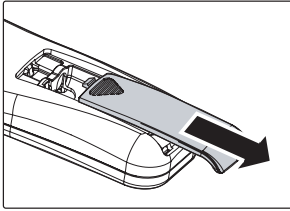
See "Projection mode Selection" for details. See Page E-42.

Preparing the Remote Control

Installing the Batteries (and Battery Replacement)

The projector and the batteries are packaged separately. Insert the batteries in the remote control before use. When it is time to replace the batteries, do so using the same procedure.

1. Open the cover of the battery case located on the back of the remote control.
2. Insert the batteries so that + and – ends match the markings inside the case.
3. Close the cover of the battery case.



! Precautions

- Use the same type of replacement batteries as the supplied AAA batteries. There is danger of explosion if different battery types are used.
- Dispose of used batteries according to the local regulations.

! Note

- Exposure of the main unit's remote control sensor or the remote control infrared transmitter to bright light or the obstruction of the signal by an obstacle located in the pathway may prevent operation. To prevent operational difficulties with the sensor when the projector is installed suspended from the ceiling, install the projector 1.5 m (4.9 feet) or further from fluorescent lighting.
- The remote control will not function properly when the batteries are weak.

The Procedure from Projection to Turning Off the Power

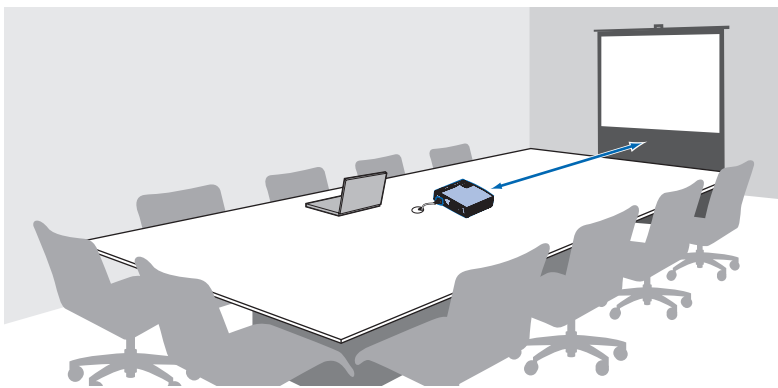
Basic Operation

This section provides a simple description of the method of operation from projector setup, to video projection, and finishing up. For the detailed operational methods of the various operations, please see the respective pages with the description.

1 Placement

Determine the setup locations of the screen and the projector and set up the items.

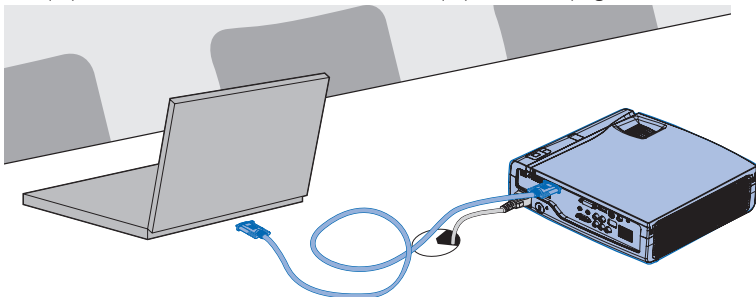
See “Screen Size and Projection Distance” for information about distance and placement considerations at the time of setup. See Page E-25 and E-26.



2 Connecting Personal Computers and Video Equipment

Connect the projector and your equipment.

- To make connection with the RGB or DVI connector of a personal computer, see “Connections with the Personal Computer” on Page E-27.
- To make connection with the video connector (RCA jack) of video equipment, or an S-video connector, see “Connections with Typical Video Equipment” on Page E-29.
- To make connection with the YCbCr connector, or YPbPr connector of video equipment, see “Using YCbCr Connectors or YPbPr Connectors” on Page E-30.
- To make connection with the HDMI connector to a personal computer, see “Connections with Personal Computer” on Page E-27 or to a video equipment, see “Connections with HDMI Equipment” on page E-29.



Note

- In consideration of quality, perfection is expected, but very rarely black or bright dots may exist among the pixels of DLP® type projectors. Thank you for your understanding.
- Please purchase a screen separately.

Technical Point

What is an RGB connector?

This is a connector used for transferring video signals to a monitor or other equipment. The three colors R (red), G (green), and B (blue) are separated and transferred as an analog signal with this system. The display of a personal computer is expressed by the RGB color space, and synthesizing the three colors permits all colors to be reproduced. These connectors mainly use a standard called mini D-Sub 15-pin that describes their form, and control signals used for signal synchronization, as well as other signals, are transferred at the same time as the RGB color signal.

What is a DVI-I connector?

Digital Visual Interface (DVI) is a video interface standard designed to maximize the visual quality of digital display devices such as flat panel LCD computer displays and digital projectors. DVI-I is a connector standard that combines DVI-A (analog) and DVI-D (digital) standards for the transfer of video signals.

What is a Video Connector, an S-connector, a YCbCr Connector, and a YPbPr Connector?

Several types of connectors are used as video connectors including composite video connectors, separate video connectors, and component video connectors.

Composite video connectors are usually called pin jacks or RCA jacks, and they are mainly included on video decks, document cameras, etc.

Separate video connectors are most typically called S-video, and because they take the form of mini DIN 4-pin connectors, mini DIN 4-pin may also be used to describe S-video. Component video connectors are called color-difference input connectors. The usual NTSC (480i) signal connector that transfers the C color signal which is divided into the B-Y color-difference signal Cb (Pb), and the R-Y color-difference signal Cr (Pr) is described as Y/Cb/Cr. Connectors that can be used for video formats above NTSC may be described as Y/Pb/Pr.

What is an HDMI connector?

High Definition Multimedia Interface (HDMI) is a new interface standard for consumer electronics devices that combines HDCP-protected digital video and audio into a single, consumer-friendly connector.

Note

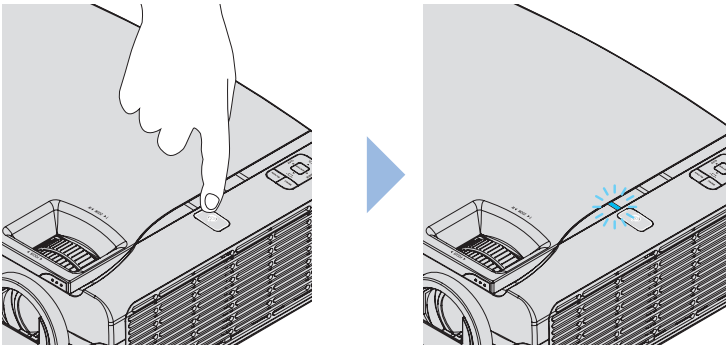
- A commercially-available component cable is required to make connection with equipment having YCbCr connectors such as DVD players, etc.
- A commercially-available component cable is required to make connection with equipment having YPbPr connectors such as high definition video equipment, etc.
- A commercially-available HDMI cable is required to make connection with equipment having HDMI connectors such as high definition DVD players, etc.

The Procedure from Projection to Turning Off the Power

3 Turn On the Power

Press the POWER/STANDBY button of the remote control or the projector and turn on the power.

The indicator of the POWER/STANDBY will change from the orange color of the standby mode to (flashing) blue. See "Turning On the Power" for details about when the power is turned on. See Page E-35.



The projector is equipped with a Direct Power-on function that, when enabled, causes the projector to power on as soon as the power cable is connected. See "Direct Power On" on Page E-55.

4 The Video Is Projected

Language Settings and other initial settings will be displayed only when the power is turned on for the first time after purchase. See "Turning On the Power for the First Time after Purchase" on Page E-35.

The factory default setting is for **Automatic Detection** be **On**. This will automatically project the video when an input signal is detected.

- When attempting to project video from a notebook computer, and video is not projected, see "To Output the External Output Signal of a Notebook Computer" on Page E-28.

Technical Point

The projector is equipped with a Quick-start function. The Quick-start function is a function that projects the video a short time after pressing the POWER/STANDBY button. The video will be projected a little over ten seconds after pressing the POWER/STANDBY button.

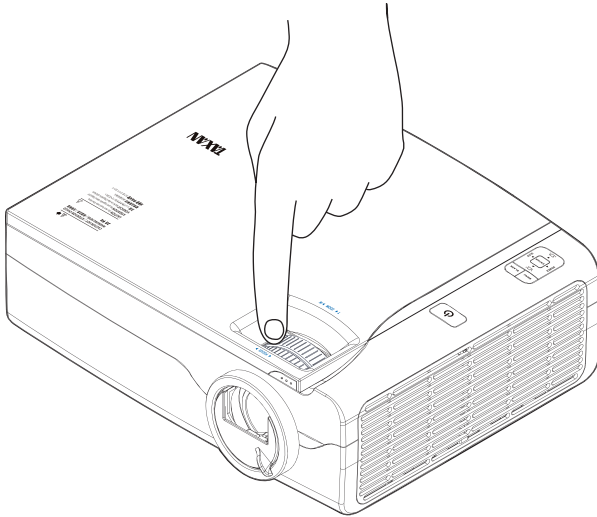
Technical Point

The projector is equipped with Direct Power-on function. You can simply shut on/off the breaker switch or the main power switch of the site without the need to power off by using the POWER/STANDBY button.

The Procedure from Projection to Turning Off the Power

5 Properly Adjusting the Projected Image to the Screen

Please adjust the size of the projected image with the zoom ring, and adjust the focus with the focus ring.



6 Adjusting Images and Video

Adjust the video to the optimal condition as required.

- **AUTO** button: Automatically adjusts the image of the RGB signal. "Automatic Adjustment" See Page E-40.
- **Projection Mode**: Can select a projection mode to suit the purpose. "Projection Mode selection" See Page E-42.
- **Advanced Menu**: Allows more detailed video settings to be made such as **Image**, and **Color**. "Advanced Menu" See Page E-71.

Technical Point

What is the projection mode?

It is a function that automatically adjusts optimum color tone in conjunction with the projection circumstances.

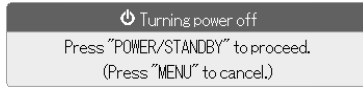
For example, when projecting to a blackboard, selecting the **Blackboard** mode will automatically set the optimum color adjustment to a blackboard.

Continued on next page →

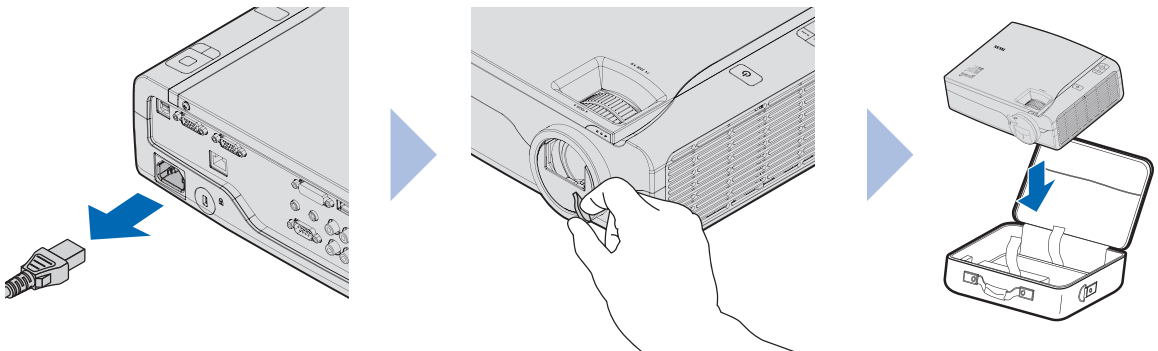
The Procedure from Projection to Turning Off the Power

7 Turn Off the Power after Projection is Finished

After projection is finished, press POWER/STANDBY to turn off the power. This message will be displayed: Turning power off – Press "POWER/STANDBY" to proceed. (Press "MENU" to cancel.)



A press of the POWER/STANDBY cause the screen to go blank and will enter the projector into the power off operation. The POWER/STANDBY indicator will be lit in orange in the standby mode after cooling. When the power cable is disconnected, the indicator of the POWER/STANDBY button will go off.



The projector is equipped with a Direct Power-off function allowing you to unplug the projector without powering-off.

Technical Point

What is the Quick-off function?

The projector is equipped with a Quick-off function. After turning off the power, the fan will continue working and the projector will be disconnected in around 10 seconds.

Why is the Quick-off function needed?

The projector allows you to immediately power off without cooling down. The projector cannot be powered on soon after powering off while the lamp is still at high temperature (the fan runs at high speed to cool down to the lamp rapidly).

Note

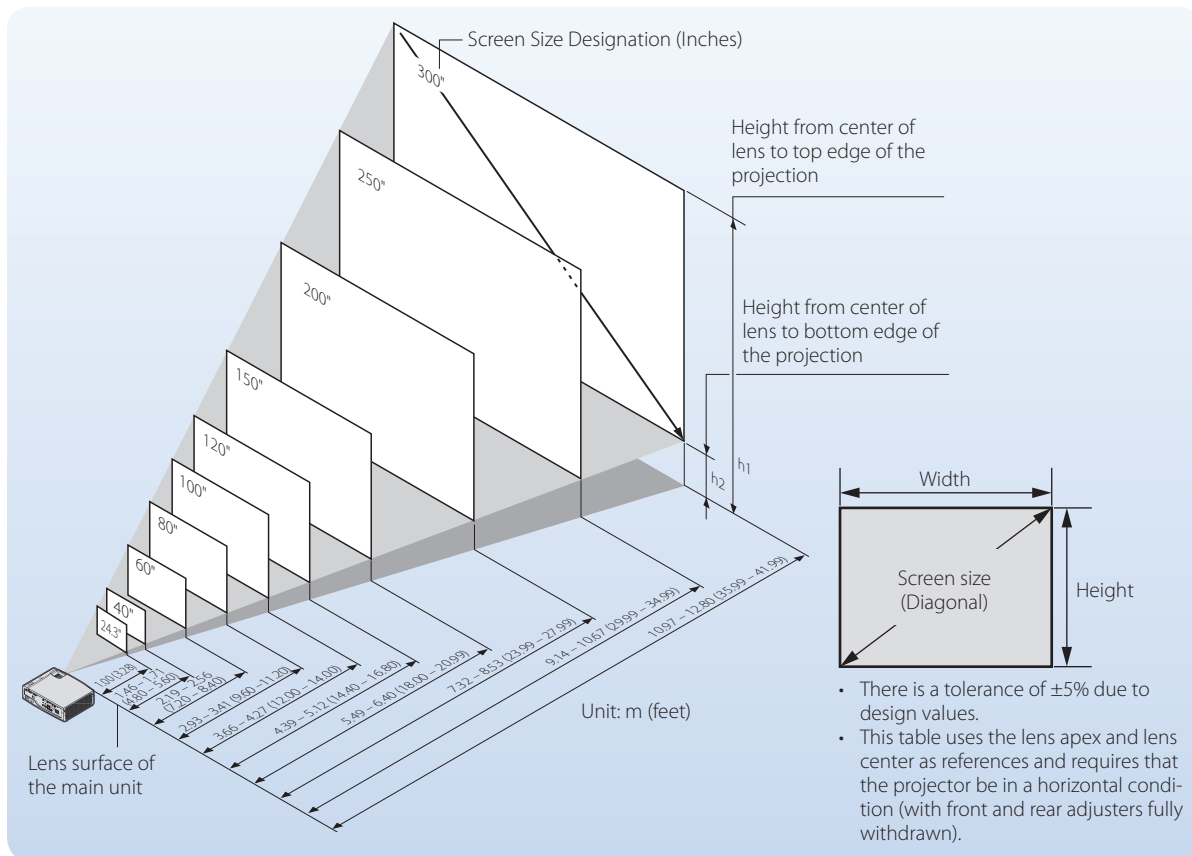
Powering on the projector without allowing sufficient time for cooling may increase the startup time.

Placement

KG-PH1001X

- Use this information as a guide to find out about what the screen size will be for the projected video when placing the projector.
- The projection distance over which focusing is adjustable is 1.00 m (3.28 feet) to 12.8 m (41.99 feet) from the projector lens surface. The projector should be placed within this range.
- It will be necessary to change the projection method when the projector is installed suspended from the ceiling. See “Vertical Flip / Horizontal Flip”. See Page E-76.

Screen Size and Projection Distance



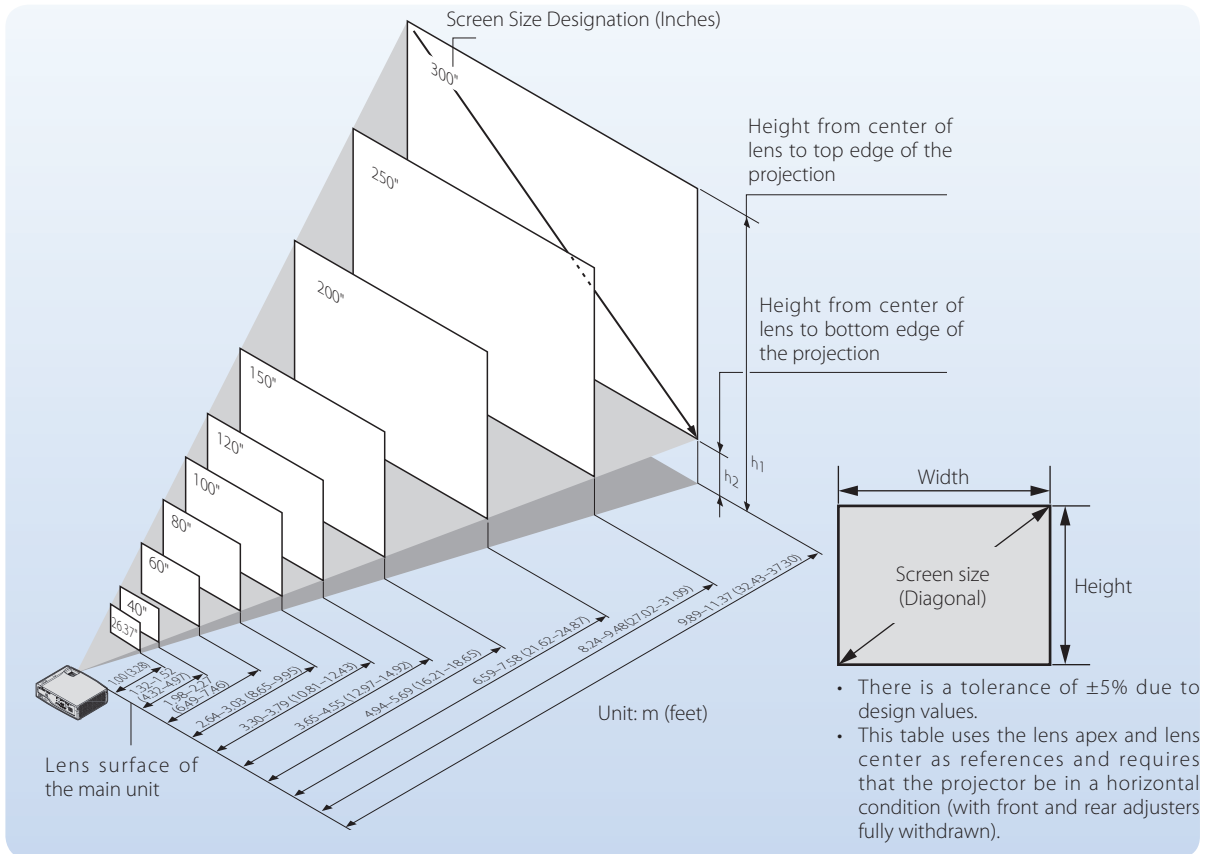
Screen Size Designation (Inches)	Screen Size Width x Height		Projection Distance		Height h1		Height h2	
	(m)	(feet)	(m)	(feet)	(m)	(feet)	(m)	(feet)
23.4"	0.48 x 0.36	1.56 x 1.17	— – 1.00	— – 3.28	0.40	1.31	0.04	0.14
40"	0.81 x 0.61	2.67 x 2.00	1.46 – 1.71	4.80 – 5.60	0.68	2.24	0.07	0.24
60"	1.22 x 0.91	4.00 x 3.00	2.19 – 2.56	7.20 – 8.40	1.02	3.36	0.11	0.36
80"	1.63 x 1.22	5.33 x 4.00	2.93 – 3.41	9.60 – 11.20	1.37	4.48	0.15	0.48
100"	2.03 x 1.52	6.66 x 5.00	3.66 – 4.27	12.00 – 14.00	1.71	5.60	0.18	0.60
120"	2.44 x 1.83	8.00 x 6.00	4.39 – 5.12	14.40 – 16.80	2.05	6.72	0.22	0.72
150"	3.05 x 2.29	10.00 x 7.50	5.49 – 6.40	18.00 – 20.99	2.56	8.40	0.27	0.90
200"	4.06 x 3.05	13.33 x 10.00	7.32 – 8.53	23.99 – 27.99	3.41	11.20	0.37	1.20
250"	5.08 x 3.81	16.66 x 12.50	9.14 – 10.67	29.99 – 34.99	4.27	14.00	0.46	1.50
300"	6.10 x 4.57	19.99 x 15.00	10.97 – 12.80	35.99 – 41.99	5.12	16.80	0.55	1.80

Placement

KG-PH1002WX

- Use this information as a guide to find out about what the screen size will be for the projected video when placing the projector.
- The projection distance over which focusing is adjustable is 1.00 m (3.28 feet) to 11.37 m (37.30 feet) from the projector lens surface. The projector should be placed within this range.
- It will be necessary to change the projection method when the projector is installed suspended from the ceiling. See “Vertical Flip / Horizontal Flip”. See Page E-76.

Screen Size and Projection Distance



Screen Size Designation (Inches)	Screen Size Width x Height		Projection Distance		Height h1		Height h2	
	(m)	(feet)	(m)	(feet)	(m)	(feet)	(m)	(feet)
26.37"	0.57 x 0.35	1.86 x 1.16	— – 1.00	— – 3.28	0.40	1.30	0.04	0.13
40"	0.86 x 0.54	2.83 x 1.77	1.32 – 1.52	4.32 – 4.97	0.60	1.97	0.06	0.20
60"	1.29 x 0.81	4.24 x 2.65	1.98 – 2.27	6.49 – 7.46	0.90	2.95	0.09	0.30
80"	1.72 x 1.08	5.65 x 3.53	2.64 – 3.03	8.65 – 9.95	1.20	3.94	0.12	0.41
100"	2.15 x 1.35	7.06 x 4.42	3.30 – 3.79	10.81 – 12.43	1.50	4.92	0.15	0.51
120"	2.58 x 1.62	8.48 x 5.30	3.95 – 4.55	12.97 – 14.92	1.80	5.91	0.19	0.61
150"	3.23 x 2.02	10.60 x 6.62	4.94 – 5.69	16.21 – 18.65	2.25	7.38	0.23	0.76
200"	4.31 x 2.69	14.13 x 8.83	6.59 – 7.58	21.62 – 24.87	3.00	9.85	0.31	1.02
250"	5.38 x 3.37	17.66 x 11.04	8.24 – 9.48	27.02 – 31.09	3.75	12.31	0.39	1.27
300"	6.46 x 4.04	21.19 x 13.25	9.89 – 11.37	32.43 – 37.30	4.50	14.77	0.46	1.52

Connecting Personal Computers and Video Equipment

Connections with the Personal Computer

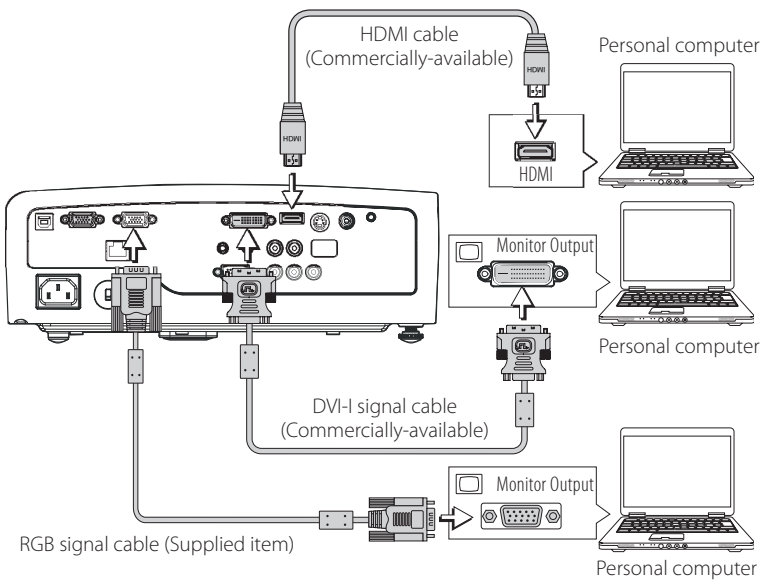
Connecting the projector with a personal computer permits the video of the personal computer to be projected to a large sized screen at meetings, lectures, and on other occasions.

Please check the following before making connections with the personal computer.

- An appropriate resolution for the **KG-PH1001X** is 1024 × 768 dots (XGA), and the maximum displayable resolution is 1600 × 1200 dots @60Hz (UXGA).
- An appropriate resolution for the **KG-PH1002WX** is 1280 × 800 dots (WXGA), and the maximum displayable resolution is 1600 × 1200 dots @60Hz (UXGA).

Please change to a displayable resolution at the PC side when the aforementioned maximum displayable resolution is exceeded. See “Table of Supported Frequency” for details. See Page E-100.

The screen resolution setting method of the personal computer will differ depending on the specific model. Please read the personal computer instruction manual or the on-line help information, or contact the manufacturer of your personal computer.



Connect the Computer IN or DVI-I IN or HDMI IN connector of the projector with the monitor output connector of the personal computer using the supplied RGB signal cable or a commercially-available one.

- When making connections, align the orientation of the connectors and insert them. Then, turn the knobs and secure to the connector of the projector.
- The factory default input signal setting is set to **Auto**; however, if there is no projection, change the setting of the input signal to Computer with **Advanced Menu ▶ Input ▶ Computer or DVI-I**. See “Input” for details about the setting of input signals. See Page E-82.

Note

- Use of a cable longer than the supplied RGB cable or extension of the cable might result in the generation of noise or deterioration of the image. When a long cable is used, we recommend the use of a noise canceller or other devices. Contact an installer or other professional for details.
- Setting the output frequency of the personal computer to 60 Hz will result in the display of the clearest video.

Technical Point

What is an RGB connector?

This is a connector used for transferring video signals to a monitor or other equipment. The three colors R (red), G (green), and B (blue) are separated and transferred as an analog signal with this system. The display of a personal computer is expressed by the RGB color space, and synthesizing the three colors permits all colors to be reproduced. These connectors mainly use a standard called mini D-Sub 15-pin that describes their form, and control signals used for signal synchronization, as well as other signals, are transferred at the same time as the RGB color signal.

What is a DVI-I connector?

Digital Visual Interface (DVI) is a video interface standard designed to maximize the visual quality of digital display devices such as flat panel LCD computer displays and digital projectors. DVI-I is a connector standard that combines DVI-A (analog) and DVI-D (digital) standards for the transfer of video signals.

What are supported frequencies?

Supported frequencies is a term that indicates the breadth of the scanning frequencies that this projector supports. The scanning frequencies express the speed when the display is drawing the screen. The number of lines that can be drawn in 1 second are called the horizontal scanning frequency, and the number of times the screen is overwritten in 1 second is called the vertical scanning frequency. The higher the scanning frequency, the higher the resolution or the greater the number of simultaneously expressed colors can will be possible, and a display having little flicker can be produced. As an example, a display having a vertical scanning frequency of 70 Hz can draw the screen 70 times in 1 second.

Connecting Personal Computers and Video Equipment

To Output the External Output Signal of a Notebook Computer

When connecting a notebook computer, knowledge will be required for the cable connection and notebook computer startup procedure as well as the operation that follows notebook computer startup. Please consult the instruction manual of your notebook computer or the on-line help while performing the following procedure.

1. Check whether a signal is being sent from the notebook computer to this projector.

An indication appearing on the liquid crystal display of the notebook computer does not necessarily mean that an external output signal is being output.

2. When a signal is not being output from the notebook computer, take steps to output an external output signal.

The output method of the external output signal will differ depending on the personal computer manufacturer. See the table below for details.

Manufacturer	Key
ACER	Fn + F5
DELL	Fn + F8
EPSON	Fn + F8
FUJITSU	Fn + F10
Hewlett-Packard	Fn + F4
IBM	Fn + F7
Lenovo	Fn + F7
NEC	Fn + F3
Panasonic	Fn + F3
SHARP	Fn + F5
SONY	Fn + F7
SOTEC	Fn + F3–F5
TOSHIBA	Fn + F5

Note: The content of the table is current as of December, 2007.

Note

When the liquid crystal screen of the notebook computer and the projector image are displayed at the same time, the projected image might not be correct even though the liquid crystal screen displays the correct image. Should this occur, stop the simultaneous display of the notebook computer and try the mode with external output only. Try an operation such as that described in step 2 at the left, and try closing the liquid crystal panel which might result in external output only.

Connecting Personal Computers and Video Equipment

Connections with Typical Video Equipment

This product can project the video from a wide variety of video equipment including video decks, television, and video cameras, etc.

Using RCA Jacks

- Connect to the projector's VIDEO IN connector using a commercially-available video cable.
- The factory default input setting of the VIDEO IN connector is set to **Auto**; however, if there is no projection, change the input setting with **Advanced Menu ▶ Input ▶ Video**. See "Input" for details. See Page E-82.

Using S-Video Connectors

- Connect to the projector's S-VIDEO IN connector using a commercially-available S-video cable.
- The factory default input setting of the S-VIDEO IN connector is set to **Auto**; however, if there is no projection, change the input setting with **Advanced Menu ▶ Input ▶ S-Video**. See "Input" for details. See Page E-82.

Using HDMI Connector

- Connect to the projector's HDMI IN connector using a commercially-available video cable.

Technical Point

What is a RCA Connector, and a S-Connector?

Several types of connectors are used as video connectors including composite video connectors, separate video connectors, and component video connectors.

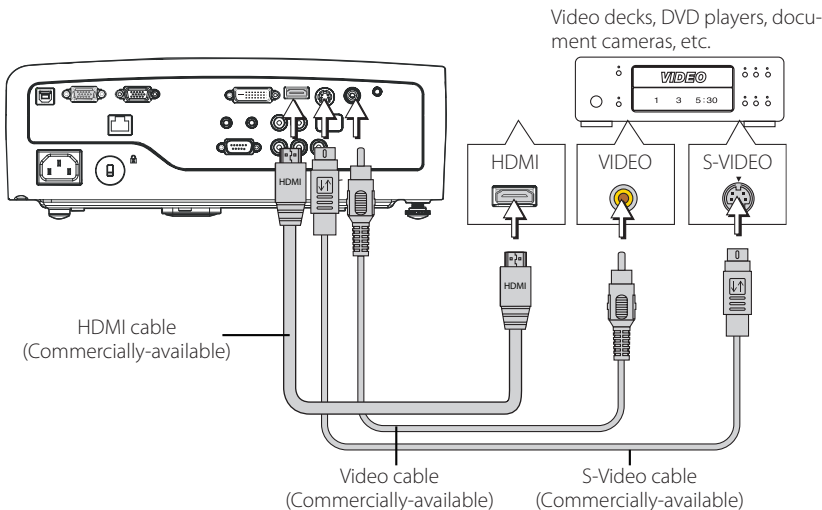
Composite video connectors are usually called pin jacks or RCA jacks, and they are mainly included on video decks, document cameras, etc.

Separate video connectors are most typically called S-video, and because they take the form of mini DIN 4-pin connectors, mini DIN 4-pin may also be used to describe S-video.

Component video connectors are called color-difference input connectors. The usual NTSC (480i) signal connector that transfers the C color signal which is divided into the B-Y color-difference signal Cb (Pb), and the R-Y color-difference signal Cr (Pr) is described as Y/Cb/Cr. Connectors that can be used for video formats above NTSC may be described as Y/Pb/Pr.

What is an HDMI connector?

High Definition Multimedia Interface (HDMI) is a new interface standard for consumer electronics devices that combines HDCP-protected digital video and audio into a single, consumer-friendly connector.



Connecting Personal Computers and Video Equipment

Using YCbCr Connectors or YPbPr Connectors

- Use a commercially-available conversion cable to connect with the COMPUTER IN or DVI-I IN connector of the projector or use a commercially-available component cable to connect with the Component (Y PbPr/Y CbCr) connector of the projector.
- The factory default input setting of the COMPUTER IN or DVI-I IN connector is set to **Auto**; however, if there is no projection, change the input setting with **Advanced Menu ▶ Input ▶ Computer** or **Advanced Menu ▶ Input ▶ DVI-I** or **Advanced Menu ▶ Input ▶ Component**. See “Input” for details. See Page E-82.
- When projecting the YCbCr signal or YPbPr signal, if the color of the overall image strongly leans toward being greenish or another color, change the setting under **Advanced Menu ▶ Color ▶ Color Space**. See “Color Space” for details. See Page E-80.

Technical Point

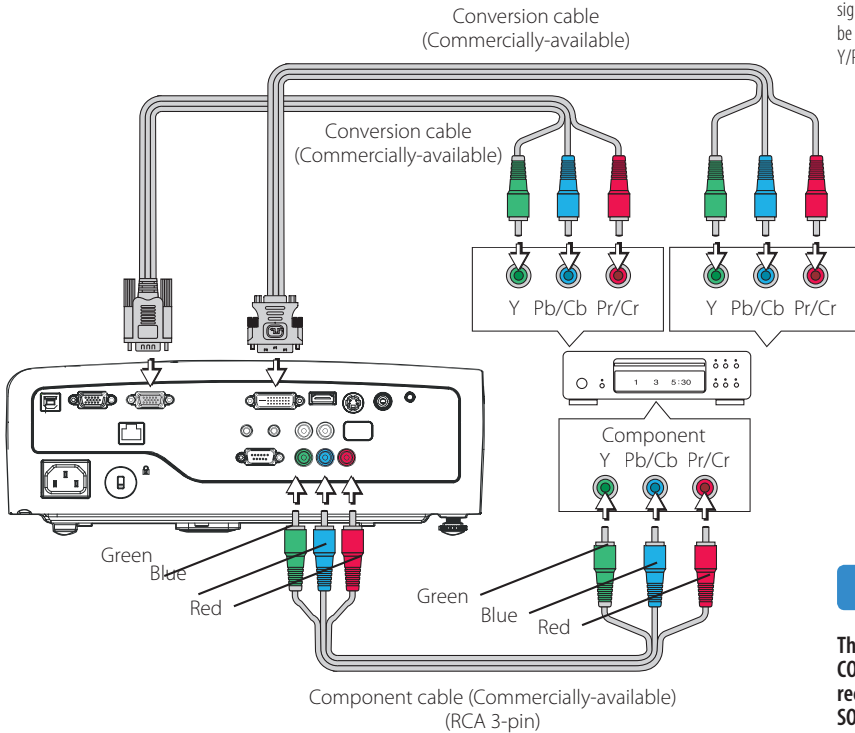
What is YCbCr Connector, and a YPbPr Connector?

Several types of connectors are used as video connectors including composite video connectors, separate video connectors, and component video connectors.

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Note

The projector supports SOG signal input for COMPUTER IN, DVI-I IN, and COMPONENT. It is recommended that only one source employs SOG input at a time.

Connecting Personal Computers and Video Equipment

Connections with the AUDIO Jacks

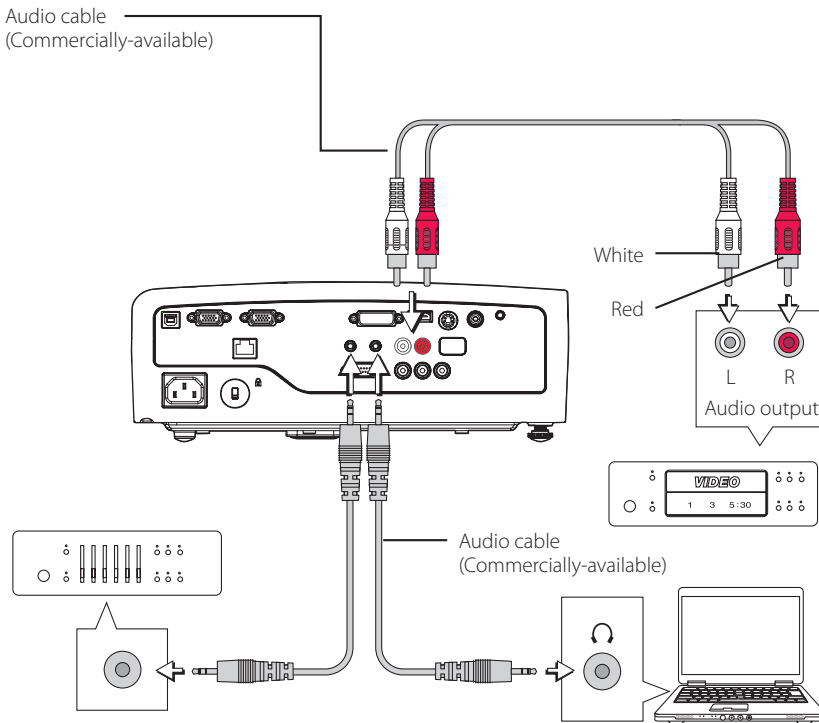
- Connect to the projector's AUDIO IN jacks using a commercially-available audio cable.
- The built-in speaker of the projector provides monaural audio. To enjoy impressive audio, connect the audio output of the projection equipment to your audio system.
- The built-in speaker will output the audio of the equipment that is connected to the AUDIO IN jacks.

Note

Audio will not be output when there is no projection.

RCA X2 AUDIO IN (L/R): Available for DVD's audio output.

Pin AUDIO IN: Available for Computer's audio output.



Connections with audio device

- Connect to the projector's Audio Out jack using a commercially-available audio cable. (The audio level in the projector is synchronized with the output level.)

Connecting Personal Computers and Video Equipment

Connections with the MONITOR OUT Connector

- The video of the personal computer connected to COMPUTER IN or DVI-I IN is output.
- Among the COMPUTER IN and DVI-I IN connections, the video of the selected input will be output.
- Inputs other than COMPUTER IN cannot be output.

Connect the DC OUT to display screen motor

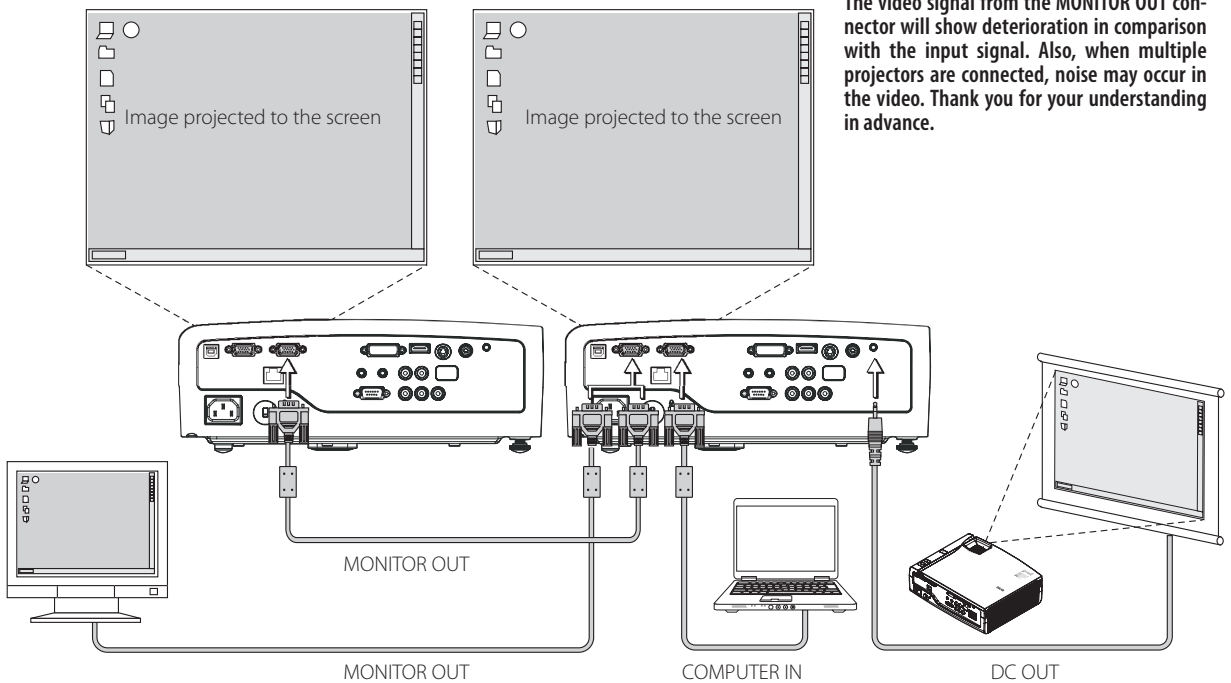
- DC OUT provides DC 12 Volts/200 mA for display screen motor use when the project is powered on.

Technical Point

When the MONITOR OUT connector is used to connect two projectors as illustrated in the diagram below, the same image can be viewed on two large screens. This is convenient when a large number of people are viewing the same image at a lecture meeting, etc. Also, when a liquid crystal display is connected, the same image as that projected by the projector can be viewed and this is convenient for personal computer operation at a position from which the screen is not visible, or when projecting to a rear projection screen.

Note

The video signal from the MONITOR OUT connector will show deterioration in comparison with the input signal. Also, when multiple projectors are connected, noise may occur in the video. Thank you for your understanding in advance.



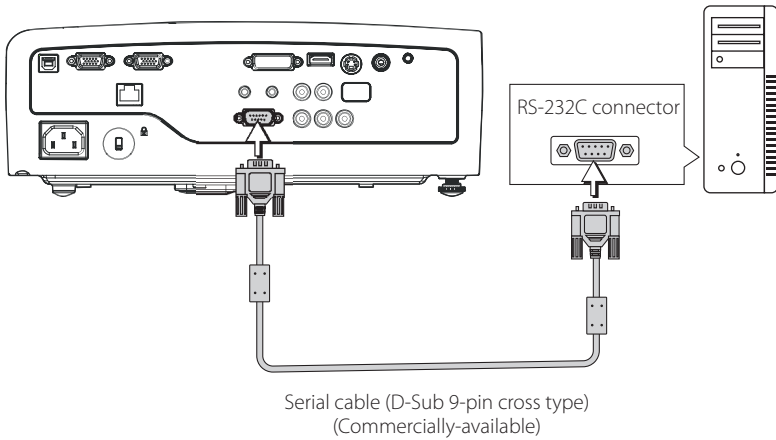
Connecting Personal Computers and Video Equipment

Connections with the RS-232C Connector

- Connect the RS-232C connector of the control equipment with the RS-232C connector of the projector using a commercially-available serial cable (of the D-Sub 9-pin cross type).
- RS232 Command Code. See page E-102.

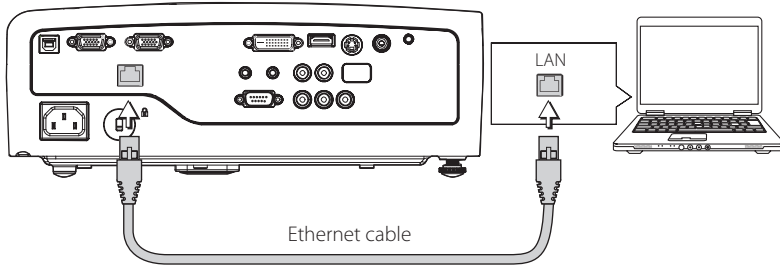
Note

The connection might not work depending on the control equipment. Thank you for your understanding in advance. Specialized knowledge is required to use the RS-232C connector. Please contact an installer or other professional for help.



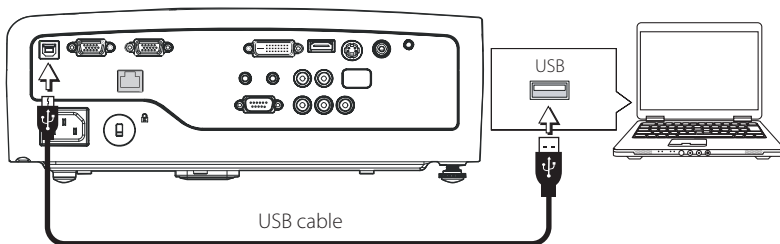
Connections with the RJ-45 Connector

- Connect the RJ-45 connector of the networking equipment with the RJ-45 connector of the projector using a commercially-available RJ-45 cable.



Connections with the USB Connector

- Connect the USB connector of the laptop with the USB connector of the projector using a supplied USB cable.



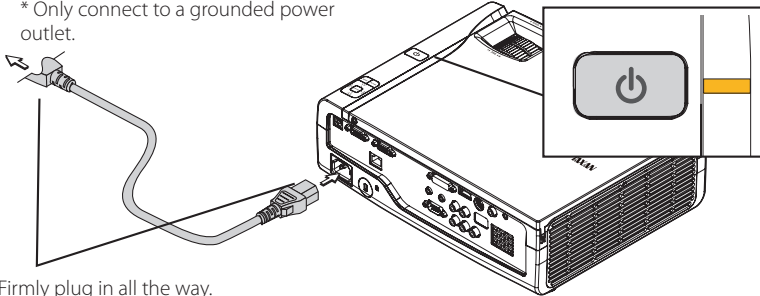
Turning On the Power

1 Connect the Power Cable

Connect the AC IN connector of the projector and the power outlet using the supplied power cable.

The indicator of the POWER/STANDBY will light in orange and the projector will enter the standby mode.

To wall outlet
* Only connect to a grounded power outlet.

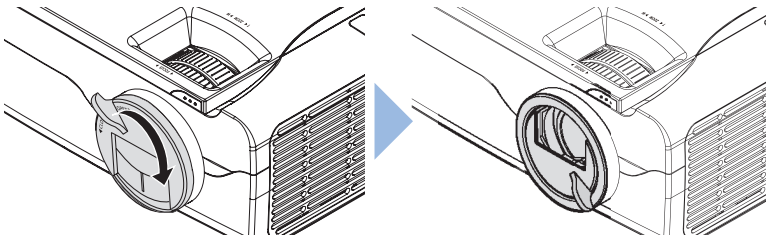


Firmly plug in all the way.

(When Direct Power On is enabled, the projector automatically powers on when the power cable is connected.)

2 Opening the Lens Shutter

Turn the lens shutter clockwise. Projection will be possible when the lens shutter has stopped with a click sound.



Continued on next page →

! Precautions

- When the power plug will be unplugged from the power outlet, please place the projector near the power outlet so that it may be reached easily.
- The supplied power cable is a dedicated product for this projector. Never use it with another product.
- Press the POWER/STANDBY button after the projector POWER/STANDBY button indicator is lit orange.

! Precautions

For usage, please connect this product to the electrical outlet with the grounding wire.

📖 Technical Point

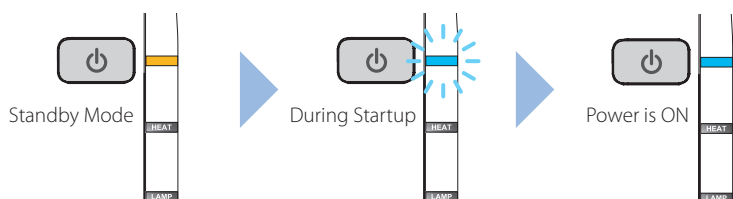
Closing the lens shutter during projection will automatically activate. The projection Lamp will turn off

Turning On the Power

3 Turning On the Projector Power

Press the POWER/STANDBY of the remote control or the projector.

- A press of the POWER/STANDBY button will change the indicator of the POWER/STANDBY from the orange of the standby mode to flashing blue during startup, and it will flash for approximately 10 seconds.
- When, after the indicator has flashed for approximately 10 seconds, it lights in green, the Eco mode will be set to **On**. For information about the Eco mode setting method see "Eco Mode" on Page E-56.
- When the LAMP/HEAT indicator is lit but the power does not turn on, see "When an indicator is lit or flashing". See Page E-91.



Turning On the Power for the First Time after Purchase

The initial setting screen will be displayed when the power is turned on for the first time after purchase. Following the steps described below, perform the initial settings.

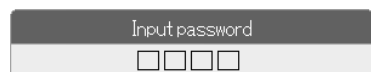
- If the video is blurred, use the focus ring to adjust the focus.
- Operations are all made using the cursor buttons and ENTER button of the remote control or the projector.

1. Language setting: Sets the language that will be displayed.

Aligning the blue cursor with **English** and pressing the ENTER button will select English. After checking the selected item, press the ► cursor button and proceed to the next setting.

Technical Point

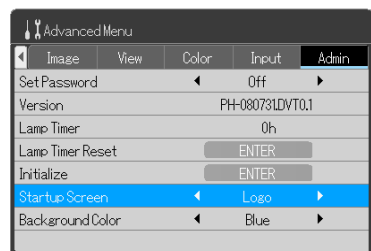
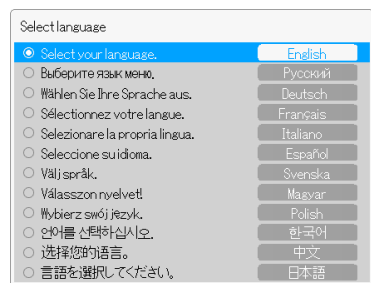
- The projector is equipped with a Quick-start function. The video will be projected a little over ten seconds after pressing the POWER/STANDBY.
 - * The video will be projected; however, because the projector is starting up, the POWER/STANDBY button indicator will continue to flash in blue.
- The projector is equipped with a function that performs a password setting for the purpose of security protection. When the password setting is performed, a screen will be displayed such as the one illustrated below, and use of the projector will not be possible unless a password is entered. See "Set Password" for details. See Page E-83.



2. Startup Screen: Performs the settings of the image that is displayed at startup.

Align the cursor with **Logo** or **None** and press the ENTER button. (The factory default setting is set to **Logo**.)

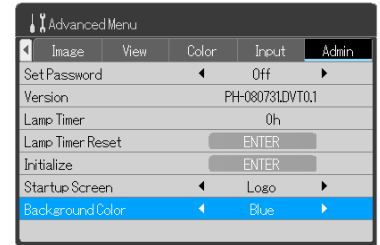
After selecting either **Logo** or **None**, press the cursor button and proceed to the next setting.



Turning On the Power

3. **Background Color:** Sets the background color when the screen is blanked temporarily or when there is no signal.

Align the cursor with **Blue** or **Black** and press the ENTER button. (The factory default setting is **Blue**.) Select either **Blue** or **Black**, and then align the blue cursor with **Initial Setting Complete** and press the ENTER button. The screen will close and the initial setting will be completed.



Note

The initial settings screen will not be displayed from the second time the projector is turned on. Please check the following matters when changing the content of the initial settings.

- Change of language setting "Select Language" See Page E-63
- Change of **Startup Screen** setting "Startup Screen" See Page E-89
- Change of **Background Color** setting "Background Color" See Page E-90

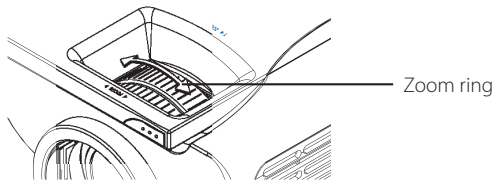
Properly Adjusting the Projected Image to the Screen

Make the adjustments with the power of the connected equipment turned on, and the video signal input to the projector.

Adjusting the Projected Image

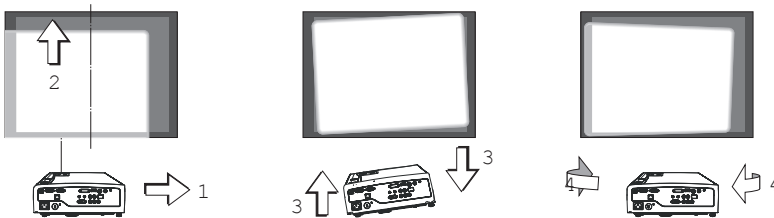
1 Turn the zoom ring and adjust the size of the projected image.

Adjust so that the desired image size is obtained. When the size does not match by adjusting the zoom ring, move the projector back or forward.



2 Adjusting the Projected Image to the Screen

Check that the screen is set horizontally and vertically.

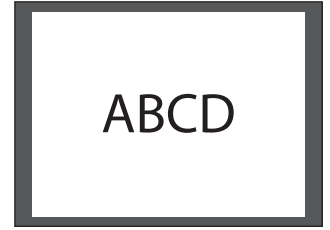
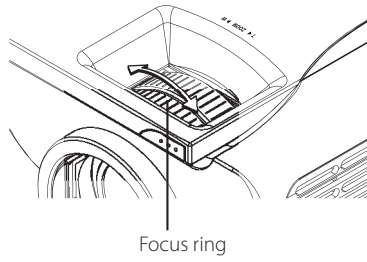


1. When shifted in the left-right direction, move the projector to the side. (Align the center of the screen with the center of the projector lens.)
2. When shifted in the vertical direction, adjust using the front adjuster.
3. When on an angle, adjust by turning the right rear adjuster.
4. In a projected screen such as that illustrated, the projector is facing the side with respect to the screen; therefore, place the projector so that it is facing the screen straight from the front.

Properly Adjusting the Projected Image to the Screen

3 Adjusting the Focus

Turn the focus ring and adjust the focus of the screen.



Note

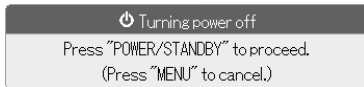
Change the projection method when the projector is installed suspended from the ceiling, or is in a rear projection setup. See "Vertical Flip / Horizontal Flip" on Page E-76.

Turn off the power after projection is finished

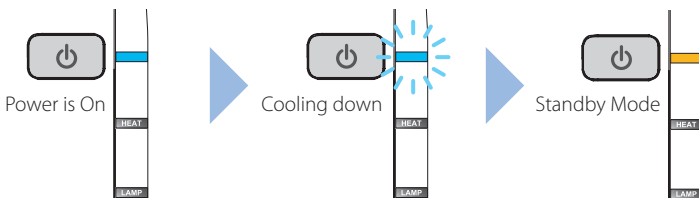
1 Turning Off the Projector Power

Press the POWER/STANDBY button of the remote control or the projector.

- This message will be displayed: Turning power off – Press "POWER/STANDBY" to proceed. (Press "MENU" to cancel.)



- Following the message, a press of the POWER/STANDBY button will cause the screen to go blank and will enter the projector into the power off operation.
- The POWER/STANDBY button must be pressed while the message is displayed if the power is to be turned off.
- A press of the MENU button while the message is displayed will cause the message to be deleted and will return the projector to the power On condition.
- The indicator of the POWER/STANDBY will change to a flashing blue, then go off about 10 seconds later, and the indicator will light in the orange of the standby mode.



Technical Point

What is the Quick-off function?

The projector is equipped with a Quick-off function. After turning off the power, the fan will continue working and the projector will be disconnected in around 10 seconds.

Why is the Quick-off function needed?

The projector allows you to immediately power off without cooling down. The projector cannot be powered on soon after powering off while the lamp is still at high temperature (the fan runs at high speed to cool down to the lamp rapidly).

Note

- It takes more time to turn on the projector soon after powering off without cooling down the lamp.

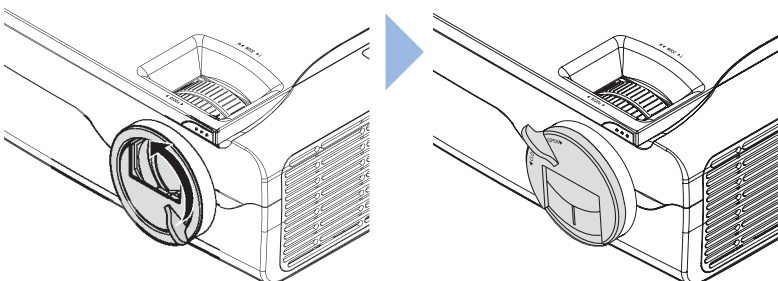
2 Disconnect the Power Cable

When the power cable is disconnected, the indicator of the POWER/STANDBY will go off.

The projector is equipped with a Direct Power-off function which can be unplugged without turning off the power and cooling down, so reducing the cooling time.

3 Closing the Lens Shutter

Turn the lens shutter counterclockwise until it stops with a click sound.



Regular Operation

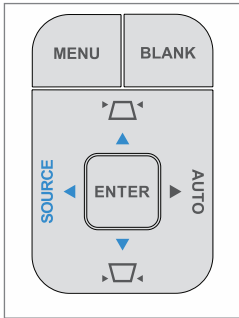
This section describes the use of direction operation with the buttons of the projector and the remote control. See “Using the Menu” for details about operation by using the menu. See Page E-46.

Selection of Input Signal

Select the input source that is to be projected.

- Press SOURCE button.
- A message like the one to the right will be displayed on the projection screen. Each press of the cursor buttons (▲▼) will move the cursor. Select the source that you would like to project and press the ENTER button to finalize.
- When **Auto Detect** is **On** and there is no input signal at the selected source, the source having an input signal will be selected automatically.
- When **Auto Detect** is **Off**, there will be switching to the selected source regardless of the presence or absence of an input signal.
- See “Auto Detect” for details about the On/Off setting of the Auto Detect function. See Page E-51.

Input Select	
Computer	1024x768 60.00Hz
DVI-I	<input type="radio"/>
Component	<input type="radio"/>
Video	<input type="radio"/>
S-Video	<input type="radio"/>
HDMI	<input type="radio"/>



Note

The projector supports SOG signal input for COMPUTER IN, DVI-I IN, and COMPONENT. It is recommended that only one source employs SOG input at a time.

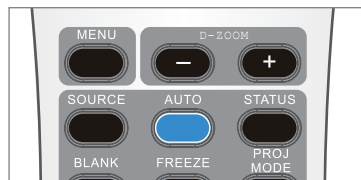
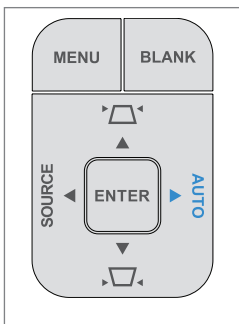
Note

When the video extends beyond the screen or is smaller than the screen, set the aspect ratio setting to **Auto**. See “Select Aspect Ratio” on Page E-74.

Automatic Adjustment

This function performs automatic adjustments of the projected RGB input signal position shift, the size of the screen image, vertical stripes, and color shift. Usually, the video is adjusted automatically at the time of input selection.

- Press AUTO button.
- Press the button to start automatic adjustment.
- When the display position is shifted, there are vertical stripes on the screen or other instances of a poor projection even though automatic adjustment has been performed, adjust the video manually. See “Image” for details. See Pages E-71 to 73.

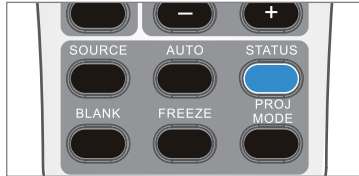


Regular Operation

Display Status

This function displays the projector source and resolution settings.

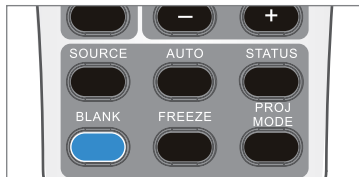
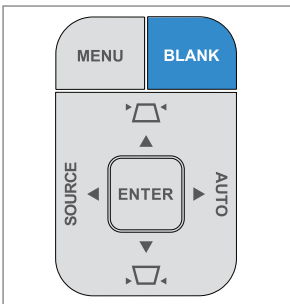
- Press the button to display the current screen resolution from the current source. See "Status display" for details. See Pages E-56.



Temporarily Blanking/Muting the Video/Audio

This convenient function can be used when you would like to temporarily blank the video and mute the audio.

- A press of the BLANK button will blank the video, and the background color of the setting (blue or black) will be set.
- To project the image or video again, press a button with the exception of the POWER/STANDBY button.

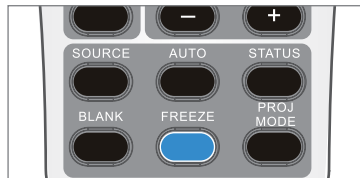


Regular Operation

Pausing the Video

This convenient function can be used when you would like to temporarily stop the video.

- A press of the FREEZE button will stop the video at that instant.
- This is a convenient function that allows a movie to be stopped, or a screen to be stopped during projection to permit searching for another document.
- A further press returns the screen to a moving picture.

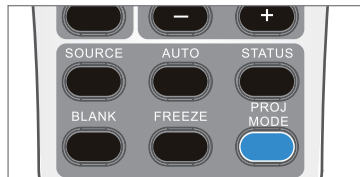


Projection Mode Selection

This projector already has projection modes set that suit the application.

- A press of the PROJ MODE on the remote control will display the selection screen.
- Using the PROJ MODE on the remote control, select the desired projection mode and press the ENTER button.

Projection Mode : Standard



* The projection modes that can be selected will differ depending on the input source. See the table below for details.

Input Source	Setting Item	Setting Content
Computer / DVI-I (RGB signal)	Standard	This is the standard setting.
	Graphics	A setting that prioritizes color reproducibility. Brightness will drop, but color reproducibility will rise. This is recommended for projection of photographs and animation.
	Presentation	A setting that prioritizes brightness. Color reproducibility will drop, but brightness will rise. This is recommended when projecting in a bright location.
	Blackboard	This is an optimum setting when projecting onto a blackboard.
	Custom	A setting that will apply the value that was set with Color under the Advanced Menu .
Computer (Component signal) Component Video S-Video HDMI	Standard	This is the standard setting.
	Movie	This is an optimum setting when projecting a movie.
	Blackboard	This is an optimum setting when projecting onto a blackboard.
	Custom	A setting that will apply the value that was set with Color under the Advanced Menu .

Regular Operation

Eco Mode

This function can limit the power consumption of the projector to permit the lamp to be used longer. By limiting the power consumption, the brightness will drop; however, the service life of the lamp will be longer than with normal use. This function can be used effectively for example when the screen is too bright when projecting onto a small screen, or when the brightness drops when projecting an image or video in a dark room.

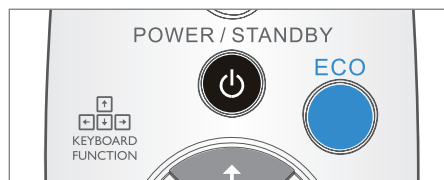
- Press the ECO button to change to the Eco mode.

On: POWER/STANDBY indicator lights in green. The brightness of the lamp will be approximately 80% of normal, and the service life of the lamp will be extended.

Off: POWER/STANDBY indicator lights in blue. The brightness of the lamp will be 100%, and there will be bright video.

Note

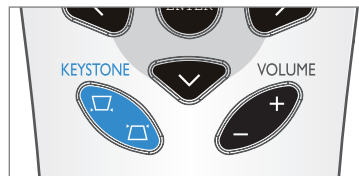
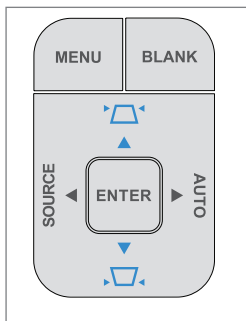
Please note that frequent switching of the Eco mode will cause deterioration of the lamp.



Manual Adjustment of Keystone

This projector is equipped with a manual keystone correction function. Manual adjustment will be described here.

- Press the KEYSTONE buttons (▭, ▭) of the remote control or the KEYSTONE buttons of the projector and perform the keystone correction. A press of the button will display the keystone correction display.



Technical Point

What is Keystone Distortion?

Keystone distortion is distortion of the projected image that occurs when the projector is tilted vertically or horizontally with respect to the screen.

There are two types of keystone distortion, in the horizontal direction when the projector is slanted to the left or right, and in the vertical direction when the projector is tilted up or down. This projector can manually correct the distortion in the vertical direction.

Regular Operation

Volume

This is the volume adjustment of the speaker that is built into the projector.

- Press the VOLUME button of the remote control (+/-), and adjust the volume. A press of the button will display the volume adjustment display.
- * Adjustment of the volume will not be possible unless video is being projected.

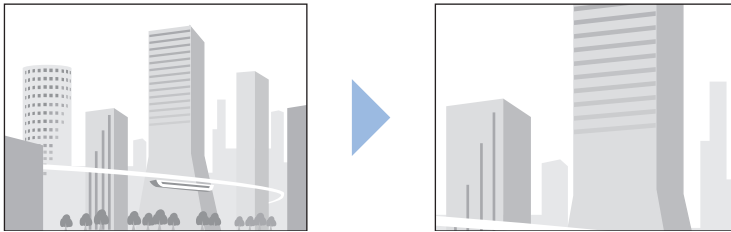


Enlargement of the Video and Image Movement

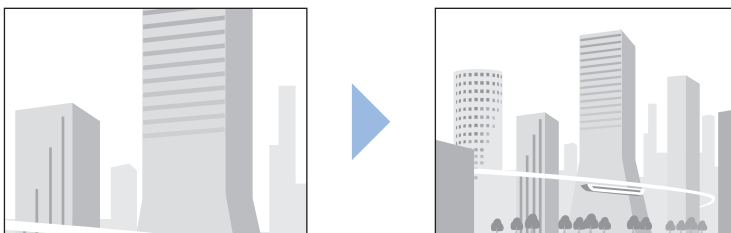
This function digitally enlarges projected images and video.

- Press the D-ZOOM button of the remote control (+), and enlarge the video. A press of the D-ZOOM button will display the zoom adjustment display.

Each press of (+) will further enlarge the video. (Up to 200%)



Each press of (-) will return the video to its original state. (To 100%)

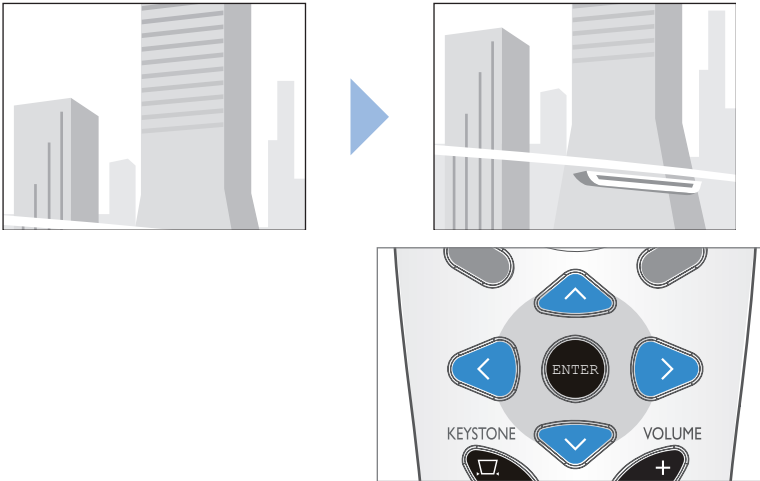


Note

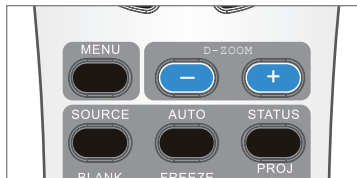
- Zoom and Image Movement will be cancelled by switching the input, or changing **Select Aspect Ratio**.
- The larger the enlargement using Zoom, the more the image will appear blurred. The reason for this is that digital correction is applied so that the dots do not stand out.
- The projected image cannot be moved while the menu screen is displayed.

Regular Operation

- Press the cursor buttons (▲▼◀▶) of the remote control while an image is enlarged will result in movement of the display position.
- * When enlargement has not been applied (i.e., Zoom is 100%), there will not be any movement.



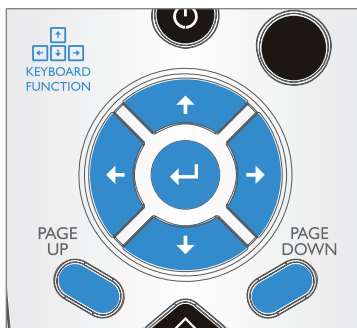
- * When finished with the enlargement operation, be sure to return the value of **Zoom** to **100**.



Keyboard Function (Remote Mouse Control)

This function remotely operates the keyboard of a PC attached to the projector.

- Connection the USB connector between the projector and laptop. See page E-33
- Press the keyboard function buttons (cursor buttons (▲▼◀▶)) in the direction you wish the cursor to move.
- Press the ENTER button (↵) to perform a Carriage Return function.
- Press the PAGE UP and PAGE DOWN buttons to switch PowerPoint® slides. See Page E-10, 19



Menu Operation Method

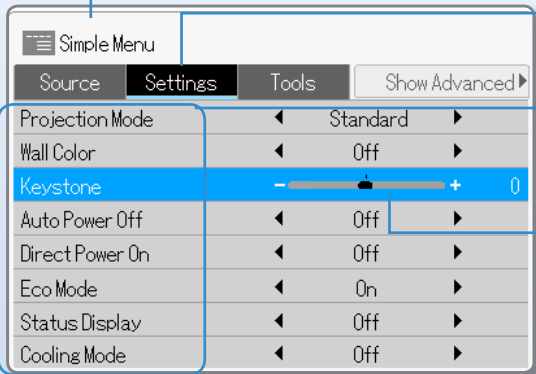
The menu operation method will be introduced so that you can more conveniently use the projector.

- Please see the various explanatory pages about the adjustment/setting methods of the various settings.
- Direct the remote control toward the infrared sensor of the projector and operate it.
- The content that can be adjusted or set will differ depending on the input signal.
- See "Initialize" to return to the standard (factory setting) values the various items that have been changed using the menu. See Page E-89.
- To operate the menu, turn on the power of the connected equipment, set the equipment to the play mode or another suitable mode, and input a video signal to the projector.

Menu Screen Names and Functions

With respect to the "Simple" and "Advanced" screens,

Simple Menu has a light gray background color. Selecting **Show Advanced** will change the display to the **Advanced Menu**.



Menu Name

This is the title of the menu. The color of the selected menu will change.

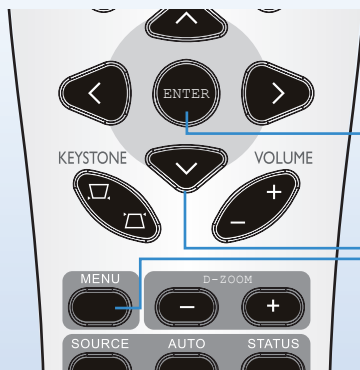
Item Name

This is the name of the adjustment or setting. The (blue) cursor will move to the selected item.

Adjustment Bar and Settings Contents

The increases and decreases in bar length express the adjustment condition. The set contents are displayed in characters.

Names and Functions of the Remote Control Buttons and Projector Buttons



MENU button

This button selects the menu display.

ENTER button

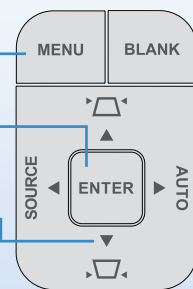
This button is used to execute menu operations, etc.

Cursor buttons

These buttons perform the menu operations. (They are allocated to other functions when the menu screen is not being displayed.)

Cursor buttons

These buttons perform the menu operations.



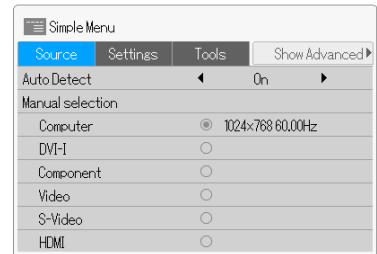
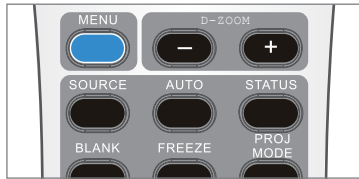
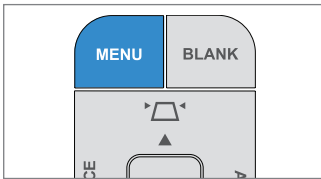
Menu Operation Method

Using Menu Operations

- Some of the settings will not be usable unless a video signal is input.
- The menu display will close automatically when an operation has not been made within approximately 45 seconds of pressing the MENU button. To close the display right away, press the MENU button.
- The projector will store the adjustment and setting values even when the power is turned off. (There are some items that are not stored.)

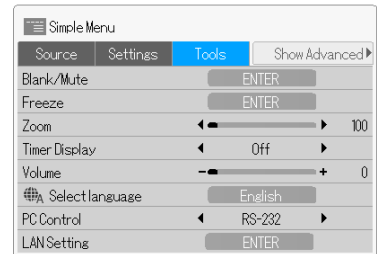
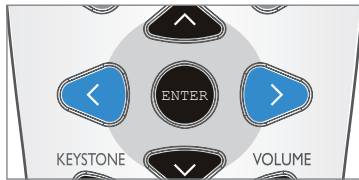
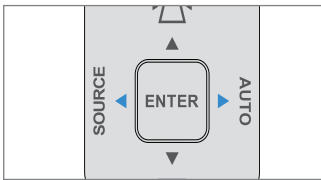
1 Display the Menu Screen

Press the MENU button of the remote control or the projector and display the **Simple Menu**. To close the display right away, press the MENU button.



2 Select the Menu Name

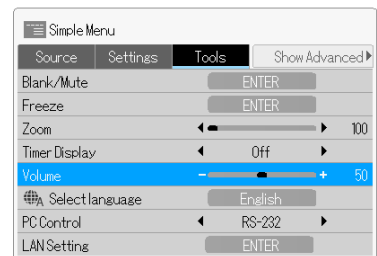
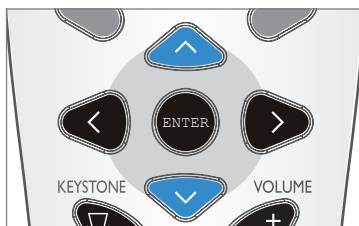
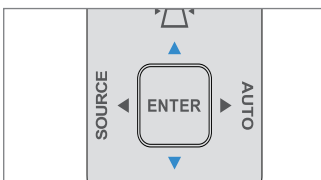
Each press of the **▶** cursor button will move the selection one step in the sequence of **Source ▶ Settings ▶ Tools ▶ Show Advanced**. Each press of **◀** will return the selection one step. When a menu name is selected, the cursor of the item name will disappear.



* Selecting **Show Advanced** will switch the display to the **Advanced Menu**. The operation method is the same as for **Simple Menu**.

3 Select the Item Name

Press the cursor buttons (**▲▼**) and select the item name.

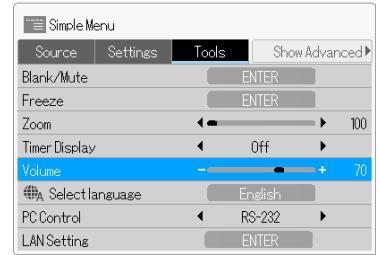
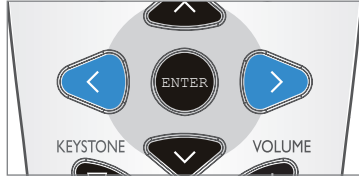
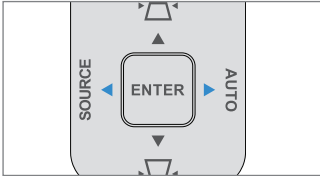


Continued on next page →

Menu Operation Method

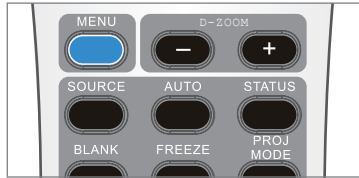
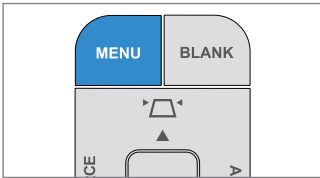
4 Making Adjustments and Settings

Press the cursor buttons (◀▶) and the ENTER button and make the adjustment or setting.



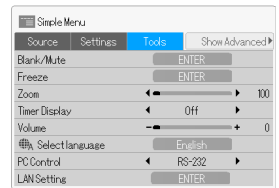
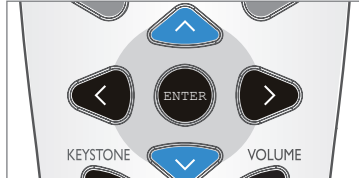
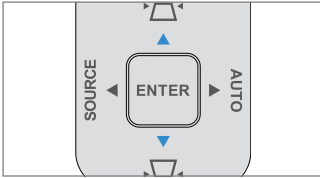
5 Close the Menu Screen

Press the MENU button and close the menu screen.

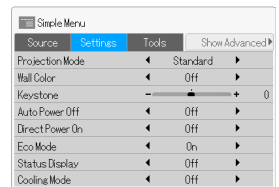
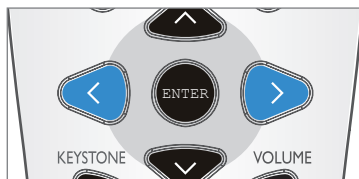
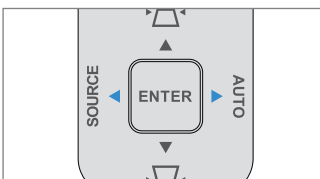


To Select another Menu Item when an Item Name Is Selected

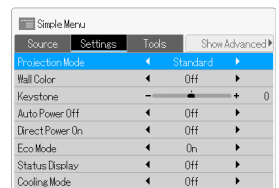
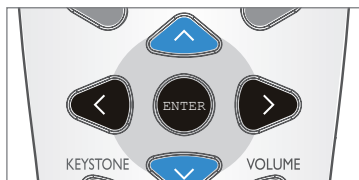
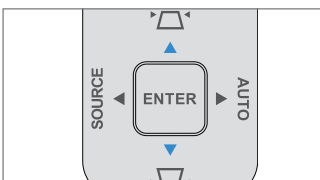
Press the cursor buttons (▲▼) and select the menu name.



Check that the cursor of the item name has disappeared, then press the cursor buttons (◀▶) and select another menu name.



After the desired menu name has been selected, select the desired item name with the cursor buttons (▲▼).

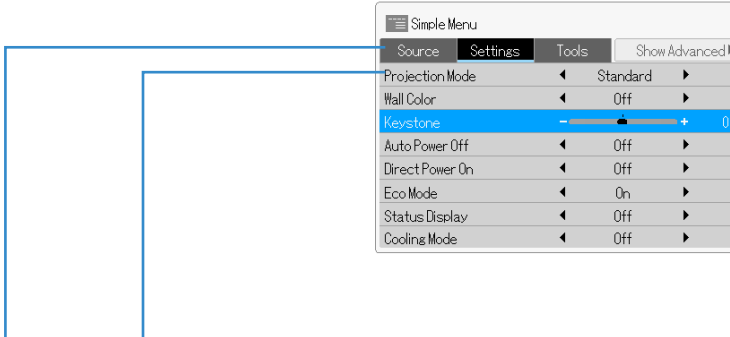


Using the Menu

List of Items Allowing Adjustment or Setting of Each Input Signal

The adjustment or setting that can be performed will differ depending on the input signal. See the table below for details.

Simple Menu



Menu Name	Item	COMPUTER IN		DVI-I IN			COMPONENT	VIDEO-IN	S-VIDEO-IN	HDMI IN	Page
		Analog RGB Signal	Component Signal	Analog RGB Signal	Digital RGB Signal	Component Signal					
Source	Auto Detect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-51
	Manual selection										E-51
	Computer	<input type="radio"/>	<input type="radio"/>								E-51
	DVI-I			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					E-51
	Component						<input type="radio"/>				E-51
	Video							<input type="radio"/>			E-51
	S-Video								<input type="radio"/>		E-51
	HDMI									<input type="radio"/>	E-51
Setting	Projection Mode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-52
	Wall Color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-53
	Keystone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-54
	Auto Power Off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-55
	Direct Power On	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-55
	Eco Mode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-56
	Status Display	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-56
	Cooling Mode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-57
Tools	Blank/Mute	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-58
	Freeze	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-58
	Zoom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-59
	Timer Display	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-61
	Volume	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-62
	Select language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-63
	PC Control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-63
	LAN Setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	E-64

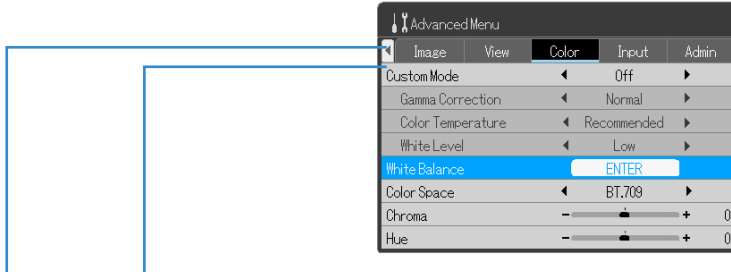
Note

The projector supports SOG signal input for COMPUTER IN, DVI-I IN, and COMPONENT. It is recommended that only one source employs SOG input at a time.

List of Items Allowing Adjustment or Setting of Each Input Signal

The adjustment or setting that can be performed will differ depending on the input signal. See the table below for details.

Advanced Menu



Menu Name	Item	COMPUTER IN		DVI-I IN			COMPONENT	VIDEO-IN	S-VIDEO-IN	HDMI IN	Page
		Analog RGB Signal	Component Signal	Analog RGB Signal	Digital RGB Signal	Component Signal					
Image	Brightness	○	○	○	○	○	○	○	○	○	E-71
	Contrast	○	○	○	○	○	○	○	○	○	E-71
	Sharpness						○	○	○	○	E-71
	Frequency Compensation	○		○							E-72
	Phase Control	○		○							E-73
	Definition	○	○	○	○						E-73
View	Select Aspect Ratio	○	○	○	○	○	○	○	○	○	E-74
	Horizontal Position	○		○							E-76
	Vertical Position	○		○							E-76
	Vertical Flip	○	○	○	○	○	○	○	○	○	E-76
	Horizontal Flip	○	○	○	○	○	○	○	○	○	E-76
Color	Custom Mode	○	○	○	○	○	○	○	○	○	E-77
	Gamma Correction	○	○	○	○	○	○	○	○	○	E-77
	Color Temperature	○	○	○	○	○	○	○	○	○	E-78
	White Level	○	○	○	○	○	○	○	○	○	E-78
	White Balance	○									E-79
	Color Space		○			○	○				E-80
	Chroma		○			○	○	○	○		E-80
	Hue		○			○	○	○	○		E-81
Admin	Set Password	○	○	○	○	○	○	○	○	○	E-83
	Lamp Timer Reset	○	○	○	○	○	○	○	○	○	E-88
	Initialize	○	○	○	○	○	○	○	○	○	E-89
	Startup Screen	○	○	○	○	○	○	○	○	○	E-89
	Background Color	○	○	○	○	○	○	○	○	○	E-90

Simple Menu / Source

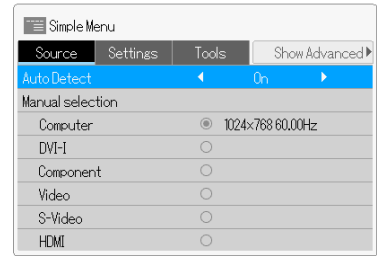
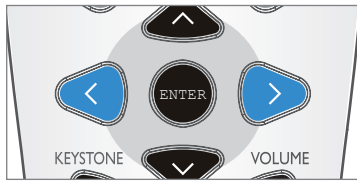
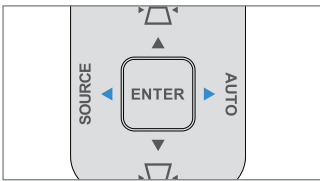
These operations serve to set **Auto Detect** to **On** or **Off**, and perform selection of the input signal that will be projected.



Auto Detect

This switches Auto Detect to On or Off.

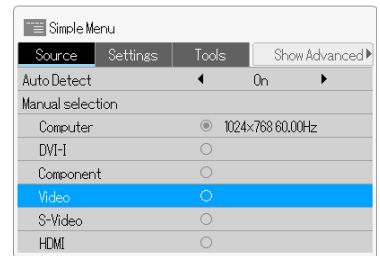
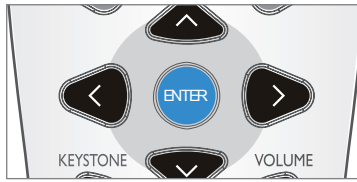
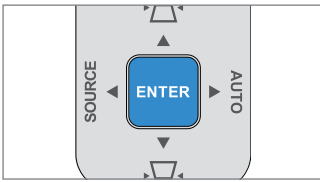
- Align the cursor with the **Auto Detect** item name and switch the function **On** or **Off** with the cursor buttons (◀▶).



Manual selection

This selects the input signal manually.

- Select the desired input source and press the ENTER button to finalize.



Simple Menu / Settings

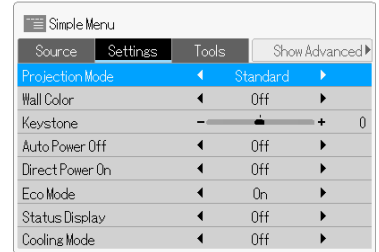
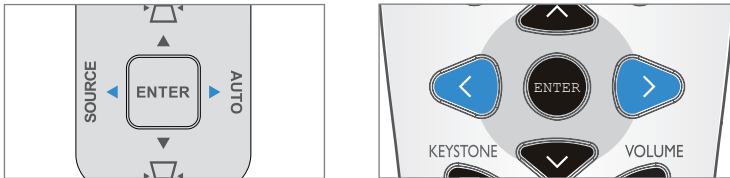
This performs simple settings when projecting images or video.



Projection Mode

This projector has preset "Projection Modes" to suit the application.

- Align the cursor with the **Projection Mode** item name and select the desired projection mode with the cursor buttons (◀▶). (The hue of the projected images or video will switch to the set projection mode each time there is switching with the cursor buttons (◀▶).



*The Projection Mode that can be selected will differ depending on the input source. See the table below for details.

Input Source	Setting Item	Setting Content
Computer/DVI-I (RGB signal)	Standard	This is the standard setting.
	Graphics	A setting that prioritizes color reproducibility. Brightness will drop, but color reproducibility will rise. This is recommended for projection of photographs and animation.
	Presentation	A setting that prioritizes brightness. Color reproducibility will drop, but brightness will rise. This is recommended when projecting in a bright location.
	Blackboard	This is an optimum setting when projecting onto a blackboard.
	Custom	A setting that will apply the value that was set with Color under the Advanced Menu .
Computer/DVI-I (Component signal) Component Video S-Video HDMI	Standard	This is the standard setting.
	Movie	This is an optimum setting when projecting a movie.
	Blackboard	This is an optimum setting when projecting onto a blackboard.
	Custom	A setting that will apply the value that was set with Color under the Advanced Menu .

Simple Menu / Settings

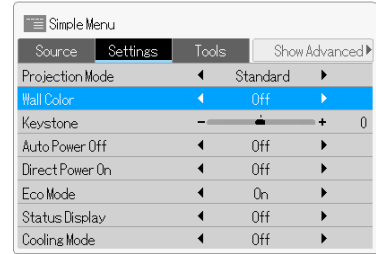
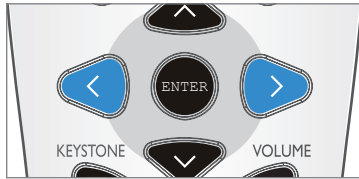
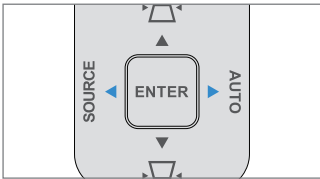
This performs simple settings when projecting images or video.



Wall Color

This turns off or sets the wall color. Available settings include: Off, Light Blue, Light Green, Light Yellow, Pink, Brown.

- Align the cursor with the **Wall Color** item name and switch the function settings with the cursor buttons (◀▶).



Simple Menu / Settings

This performs simple settings when projecting images or video.

Source

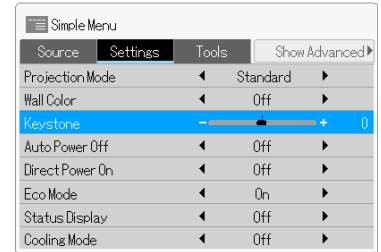
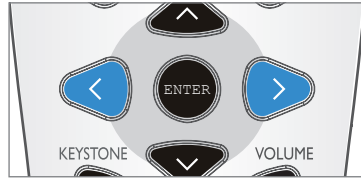
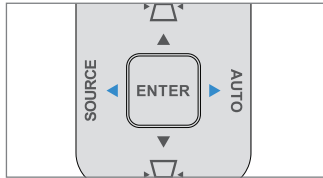
Settings

Tools

Keystone

Keystone distortion will occur when the angle of the projector is tilted (in the vertical direction) with respect to the screen. Keystone distortion can be corrected using this operation.

- Align the cursor with the **Keystone** item name and correct the keystone distortion with the cursor buttons (◀▶).



Note

- The displayed menu screen itself will not be corrected.
- Please note that depending on the content and projection conditions of the projected images or video, the image might not be corrected sufficiently.
- The adjustment value that was set with **Keystone** will be stored in the projector even after the power is turned off.

Simple Menu / Settings

This performs simple settings when projecting images or video.

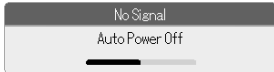


Auto Power Off

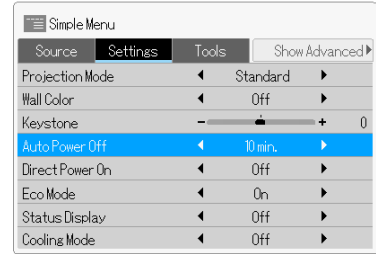
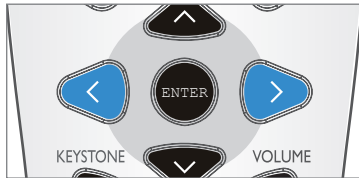
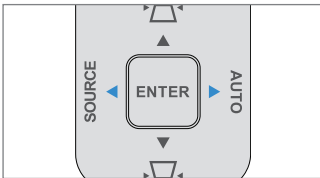
This function turns off the power of the projector automatically when the input source of the projector no longer has a signal.

The setting can be made from 5 minutes to 20 minutes in 5-minute portions.

- Align the cursor with the **Auto Power Off** item name and change the setting content with the cursor buttons (◀▶).
- Each press of the (▶) cursor button will change the setting one step in the sequence of **Off ▶ 5 min. ▶ 10 min. ▶ 15 min. ▶ 20 min.**. Adjust to the desired setting content.
- When **Auto Power Off** is set to an arbitrary number of minutes, the operation will be as described below.
 - When a no signal condition continues for approximately 10 minutes, "No Signal – Auto Power Off" will be displayed as shown below, and the power will be turned off when the set time passes.



- The source input will be processed while the display appears; however, pressing an operation button other than the POWER/STANDBY button will close the display and cancel the function.

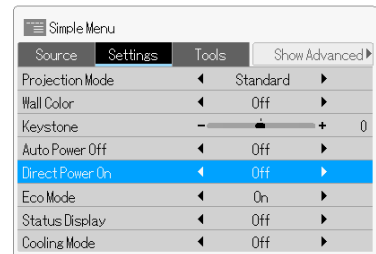
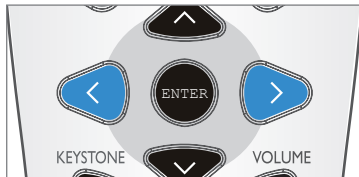
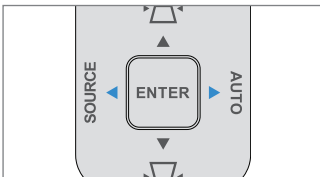


Note

Some video decks and other equipment will output a blue background or other video from the video deck side when playback is completed. Under this condition, there will be a signal input to the projector and thus **Auto Power Off** will not operate.

Direct Power On

When Direct Power On is enabled, the projector automatically powers on when the power cable is connected.



- Align the cursor with the **Direct Power On** item name and switch the function **On** or **Off** with the cursor buttons (◀▶).

Technical Point

The projector is equipped with Direct Power-on function. The projector can be powered on/off only by shutting down the breaker switch or the main power switch of the site and without using the POWER/STANDBY button on the projector or the remote.

Simple Menu / Settings

This performs simple settings when projecting images or video.



Eco Mode

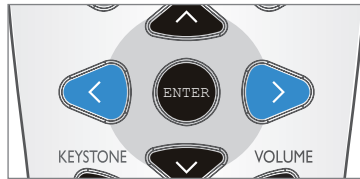
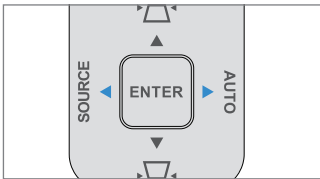
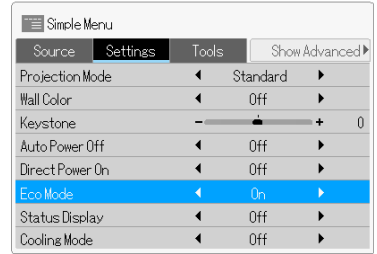
This function can limit the power consumption of the projector to permit the lamp to be used longer. By limiting the power consumption, the brightness will drop; however, the service life of the lamp will be longer than with normal use. This function can be used effectively for example when the screen is too bright when projecting onto a small screen, or when the brightness drops when projecting an image or video in a dark room.

- Align the cursor with the **Eco Mode** item name and switch the function **On** or **Off** with the cursor buttons (◀▶).

* Please note that frequent switching of the Eco mode during image projection will cause deterioration of the lamp.

On: POWER/STANDBY button indicator lights in green. The brightness of the lamp will be approximately 80% of normal, and the service life of the lamp will be extended.

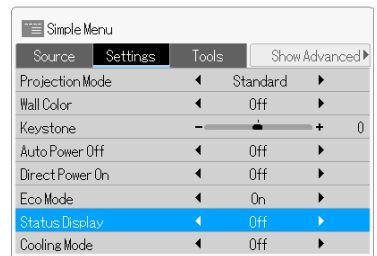
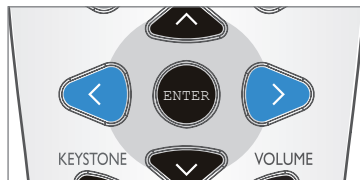
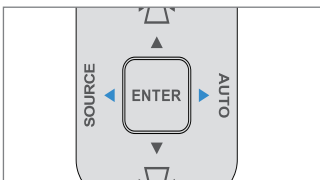
Off: POWER/STANDBY button indicator lights in blue. The brightness of the lamp will be 100%, and there will be bright video.



Status Display

This function can set On or Off the message displays that appear when the projector is operated during projection, or at the time of source input detection.

- Align the cursor with the **Status Display** item name and switch the function **On** or **Off** with the cursor buttons (◀▶).



Note

Warnings and Power Off checks will be displayed even when the **Status Display** is set to **Off**.

Simple Menu / Settings

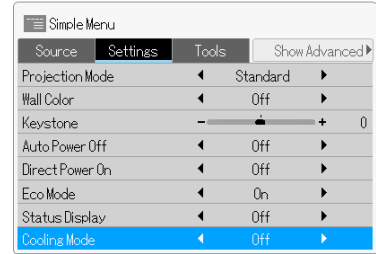
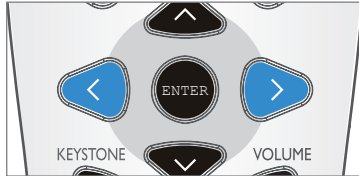
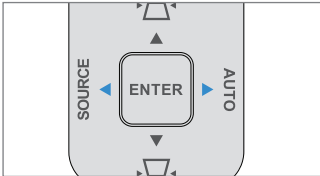
This performs simple settings when projecting images or video.



Cooling Mode

The Cooling Mode option enables the projector to automatically detect fan requirements. For higher temperature locations, high altitude locations or prolonged use, the **On** option is available providing greater cooling capacity.

- Align the cursor with the **Cooling Mode** item name and switch the function **On** or **Off** with the cursor buttons (◀▶).



Simple Menu / Tools

Useful functions for projection of images and video.

Source

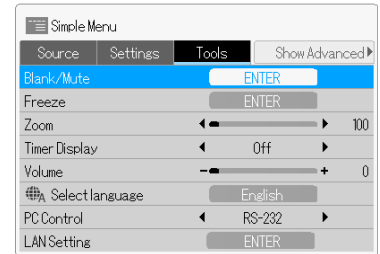
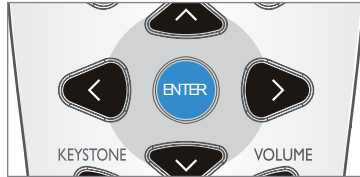
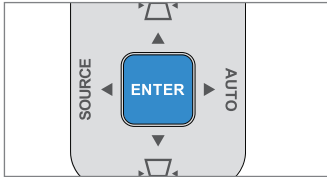
Settings

Tools

Blank/Mute

Use this function when you would like to temporarily blank/mute the video and audio.

- Align the cursor with the **Blank/Mute** item name and press the ENTER button.
- A press of the ENTER button will activate the **Blank/Mute** function and this will blank the projected images or video and close the menu display.
- To project the image or video again, press a button with the exception of the POWER/STANDBY button.



Technical Point

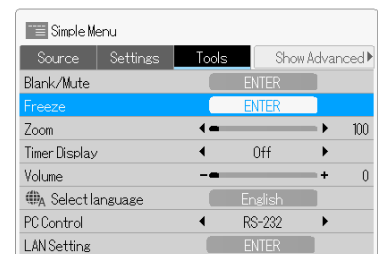
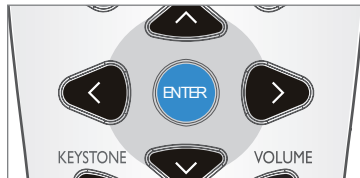
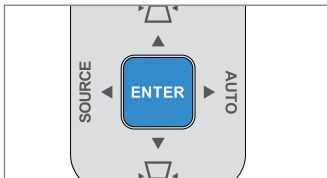
Closing the lens shutter of the projector will automatically turn On the **Blank/Mute** function. This is a convenient function when you do not have a remote control handy, or you would like to temporarily blank the video.

Freeze

Use this function when you would like to temporarily freeze the video.

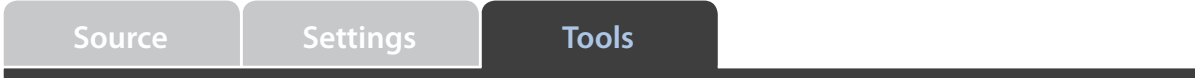
This is a convenient function that allows a movie to be stopped, or a screen to be stopped during projection to permit searching for another document.

- Align the cursor with the **Freeze** item name and press the ENTER button.
- A press of the ENTER button will activate the **Freeze** function and this will temporarily stop the projected images or video and close the menu screen.
- To cancel **Freeze**, a button with the exception of the POWER/STANDBY button.



Simple Menu / Tools

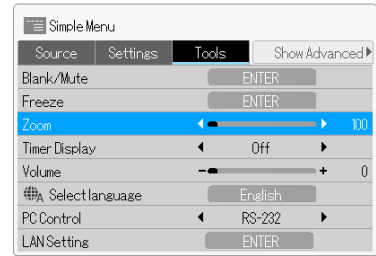
Useful functions for projection of images and video.



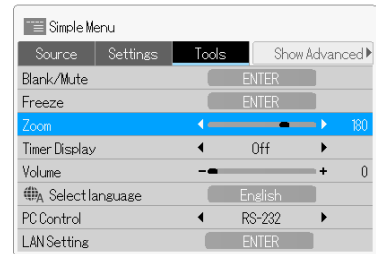
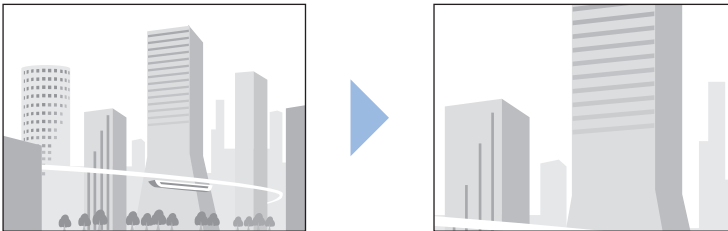
Zoom

This function digitally enlarges projected images and video.

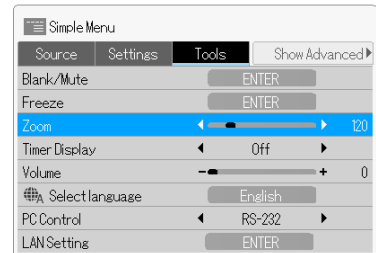
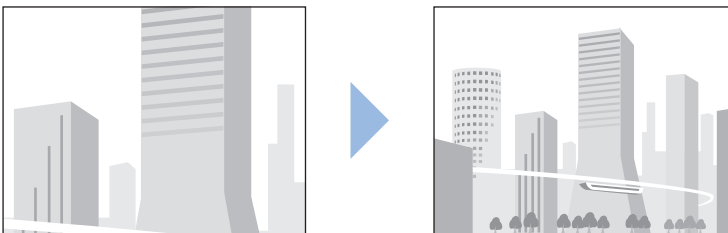
- Align the cursor with the **Zoom** item name and enlarge or reduce the image with the cursor buttons (◀▶).



Each press of ◀ will further enlarge the video. (Up to 200%)



Each press of ▶ will return the video to its original state. (To 100%)



Simple Menu / Tools

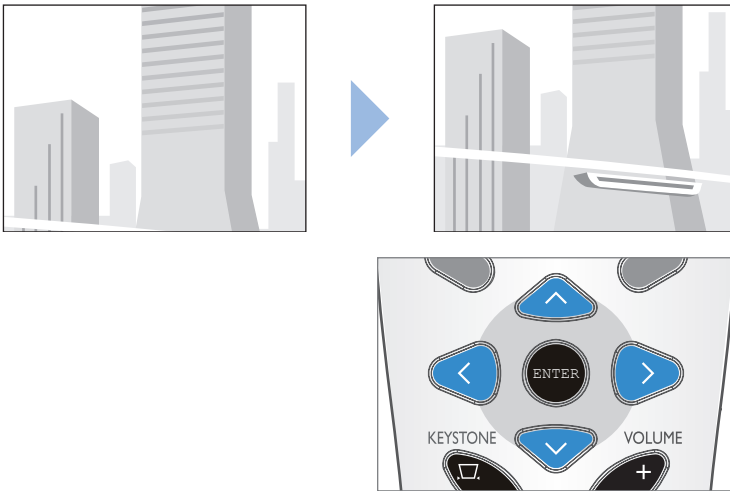
Useful functions for projection of images and video.

Source

Settings

Tools

- When the image has been enlarged to the desired size, press the ENTER button and delete the menu screen.
 - Pressing the cursor buttons (▲▼◀▶) of the remote control will result in movement of the display position.
- * When enlargement has not been applied (i.e., Zoom is 100%), there will not be any movement.



* When finished with the enlargement operation, be sure to return the value of **Zoom** to **100**.

! Note

The zoom condition will not be stored. The zoom condition will be cancelled automatically upon turning off the power or interrupting the input signal.

Simple Menu / Tools

Useful functions for projection of images and video.

Source

Settings

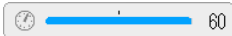
Tools

Timer Display

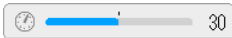
This function can provide a timer display on the screen for the timing of presentations.

By displaying a timer on the projection screen, the remaining time can be checked in an instant while giving the presentation.

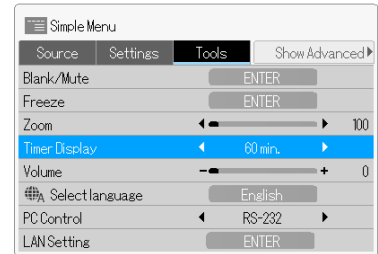
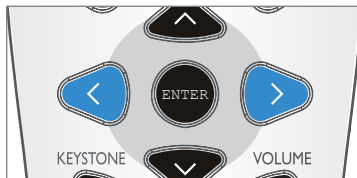
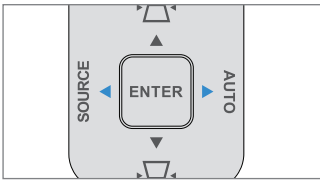
- Align the cursor with the **Timer Display** item name and make the time setting with the cursor buttons (◀▶).
- Each press of the (▶) cursor button will change the set time one step in the sequence of **Off ▶ 10 min. ▶ 20 min. ▶ 30 min. ▶ 40 min. ▶ 50 min. ▶ 60 min..**
- When the MENU button is pressed to adjust the desired number of minutes, the menu display will disappear and the timer gauge will be displayed as illustrated below.



The remaining time is indicated with the black gauge and the timer. When the gauge disappears, the set time will have passed. (The timer will continue to be displayed after the gauge has disappeared.)



- When starting the timer again after the set time has elapsed, pressing the ENTER button will start the timer for the time that been set again.
- To delete the timer, press the MENU button, align the cursor with the **Timer Display** item name, and select **Off** with the cursor buttons (◀▶). The timer gauge will disappear.



Note

- The timer time will not be stored. The timer will automatically enter the Off state upon turning off the power.
- The timer gauge will disappear while the menu is displayed, or while a message is displayed, but the timer will be operating. The timer gauge will not be displayed unless a signal is being input.

Simple Menu / Tools

Useful functions for projection of images and video.

Source

Settings

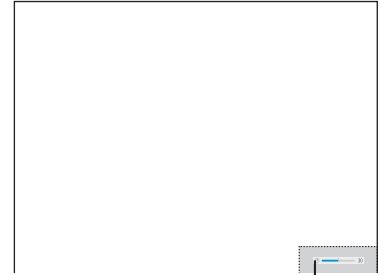
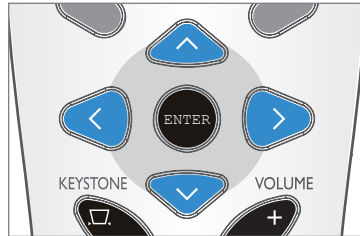
Tools

To Move the Position of the Timer Gauge

Movement within the displayable range of the timer gauge is possible with the use of the cursor buttons (▲▼◀▶) of the remote control.

While the timer gauge is being displayed, use the cursor buttons (▲▼◀▶) to move the timer gauge to the desired position.

- The timer display can be used only when there is signal input. It cannot be used when there is no input signal.
- The screen movement that occurs when zoom is used cannot be performed during the display of the timer gauge.

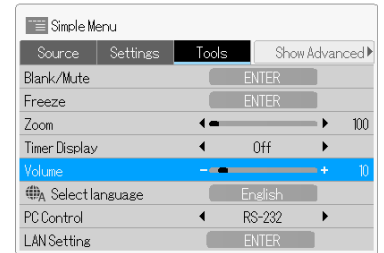
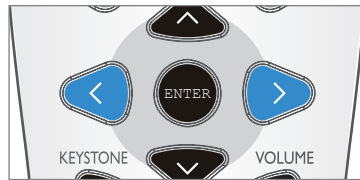
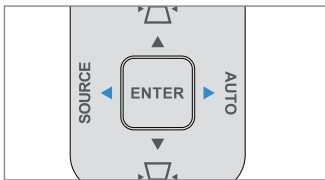


Range in which the timer display can be moved.

Volume

This is the volume adjustment of the speaker that is built into the projector.

- Align the cursor with the **Volume** item name and adjust the volume with the cursor buttons (◀▶).



Simple Menu / Tools

Useful functions for projection of images and video.

Source

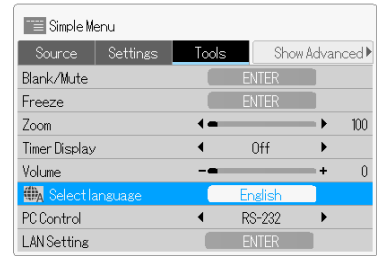
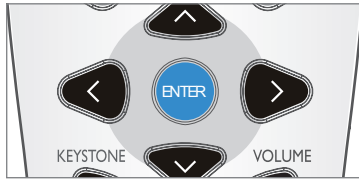
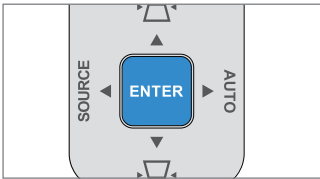
Settings

Tools

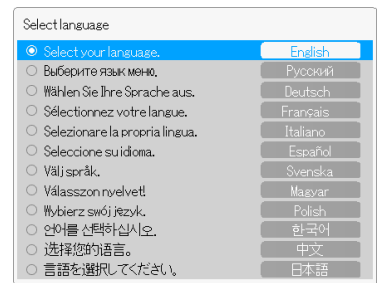
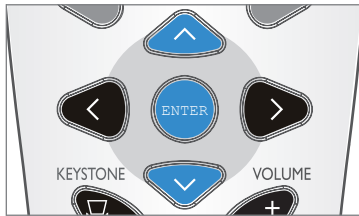
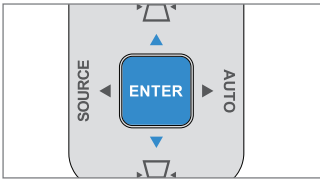
Select Language

This sets the language that is displayed in the menu displays and in the various message displays, etc.

- Align the cursor with the **Select Language** item name and press the ENTER button.



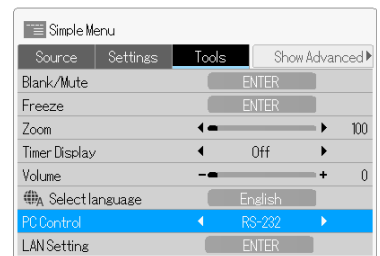
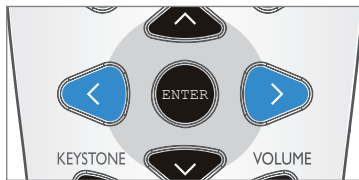
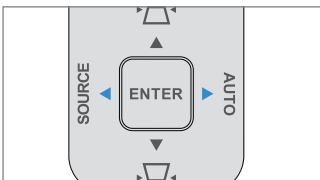
- The selection screen of display languages will be displayed. Select the desired language with the cursor buttons (▲▼) and press the ENTER button.



PC Control

This sets the PC Control RS232 mode to LAN mode when connecting to a personal computer.

- Align the cursor with the **PC Control** item name and select the items with the cursor buttons (◀▶).



Simple Menu / Tools

Useful functions for projection of images and video.

Source

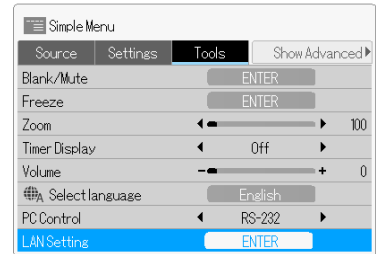
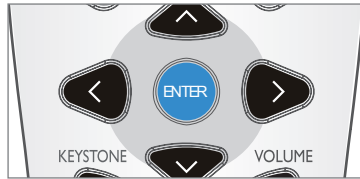
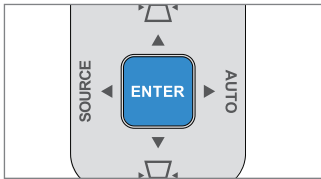
Settings

Tools

LAN Setting

This sets the general network.

- Align the cursor with the **LAN Setting** item name and press the ENTER button.



DHCP

- Align the cursor with the **DHCP** item name and press the ENTER button.
- If you select DHCP Off, complete the following fields:

IP Address

- Align the cursor with the **IP Address** item name with the cursor buttons (◀▶) and press the ENTER button.
- The selection screen of IP address will be displayed. Select the desired IP address with the cursor buttons (▲▼) and press the ENTER button.

Subnet Mask

- Align the cursor with the **Subnet Mask** item name with the cursor buttons (◀▶) and press the ENTER button.
- The selection screen of Subnet Mask will be displayed. Select the desired Subnet Mask with the cursor buttons (▲▼) and press the ENTER button.

Gateway

- Align the cursor with the **Gateway** item name with the cursor buttons (◀▶) and press the ENTER button.
- The selection screen of Gateway will be displayed. Select the desired Gateway with the cursor buttons (▲▼) and press the ENTER button.

DNS

- Align the cursor with the **DNS** item name with the cursor buttons (◀▶) and press the ENTER button.
- The selection screen of DNS will be displayed. Select the desired DNS with the cursor buttons (▲▼) and press the ENTER button.

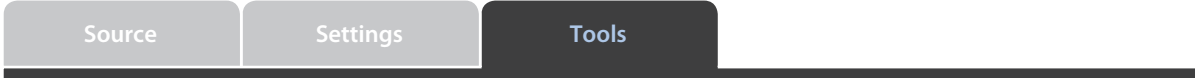
Apply Settings

- Align the cursor with the **DNS** item name with the cursor buttons (◀▶) and press the ENTER button. This message will be displayed on the screen: Apply Settings – Press "ENTER" to proceed. (Press "MENU" to cancel.)
- Pressing the ENTER button again will return the LAN settings to default.

* To cancel LAN setting, press the MENU button and there will be a return to the menu screen.

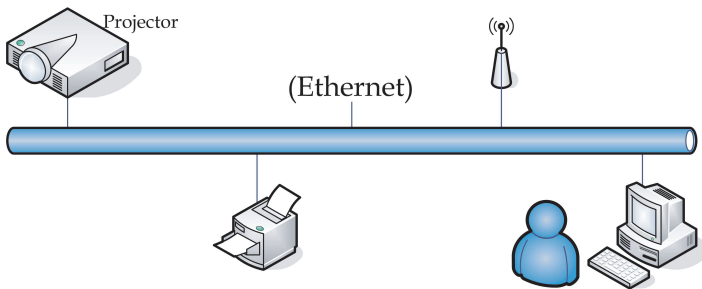
Simple Menu / Tools

Useful functions for projection of images and video.



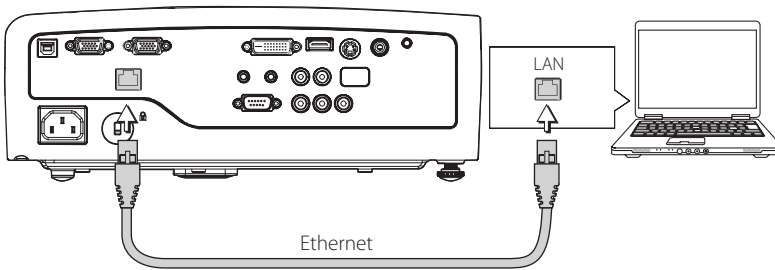
LAN RJ45

For simplicity and ease of operation, the projector provides diverse networking and remote management features. The LAN/RJ45 function of the projector through a network, such as remotely manage: Power On/Off, Brightness and Contrast settings. Also, projector status information, such as: Video-Source, Sound-Mute, etc.

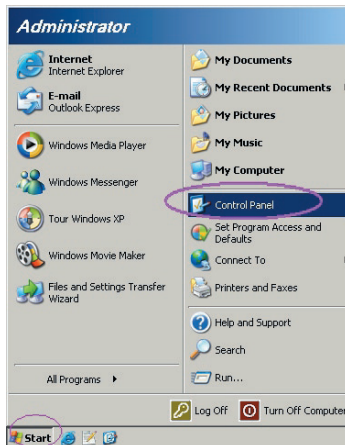


LAN_RJ45

1. Connect an RJ45 cable to RJ45 ports on the projector and the PC (Laptop).

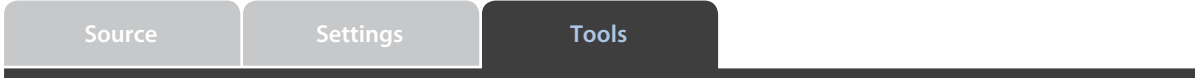


2. On the PC (Laptop), select Start → Control Panel → Network Connections.

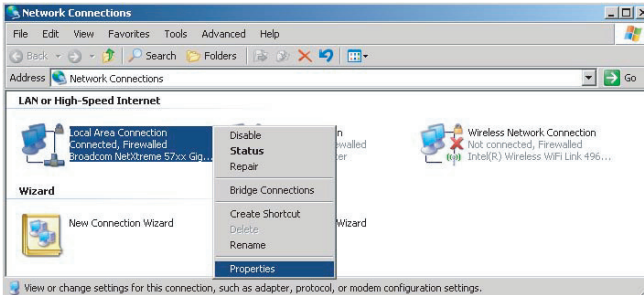


Simple Menu / Tools

Useful functions for projection of images and video.

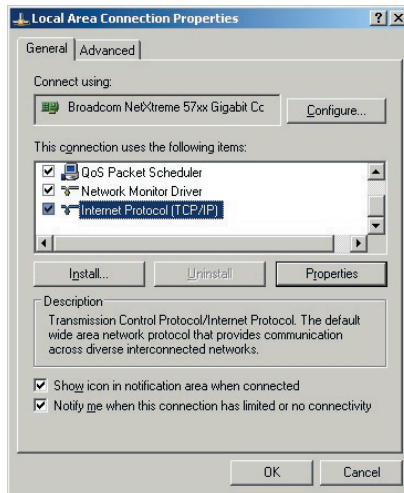


3. Right Click on your Local Area Connection, and select Properties.



4. In the Properties window, select the General tab, and select Internet Protocol (TCP/IP).

5. Click Properties.



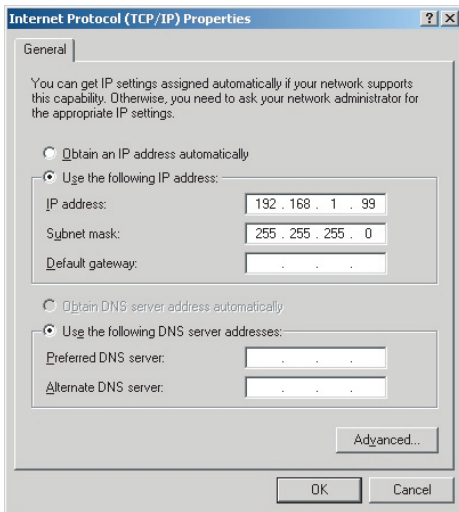
Useful functions for projection of images and video.

Source

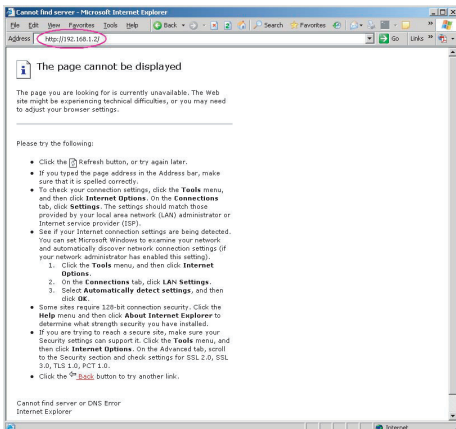
Settings

Tools

6. Click Use the following IP address and fill in the IP address and Subnet mask, then press OK.



7. Press the Menu button on the projector.
- 8-1. Select OSD → Tools → PC Control → LAN.
- 8-2. Select OSD → Tools → LAN Setting. Press "Enter" key.
9. After getting into "LAN Setting," input the following:
- ▶ IP Address: 192.168.1.2
 - ▶ Subnet Mask: 255.255.255.0
 - ▶ Gateway: 0.0.0.0
 - ▶ DNS Server: 0.0.0.0
10. Press Apply (Enter) to confirm settings.
11. Open a web browser (for example, Microsoft Internet Explorer).



Simple Menu / Tools

Useful functions for projection of images and video.

Source

Settings

Tools

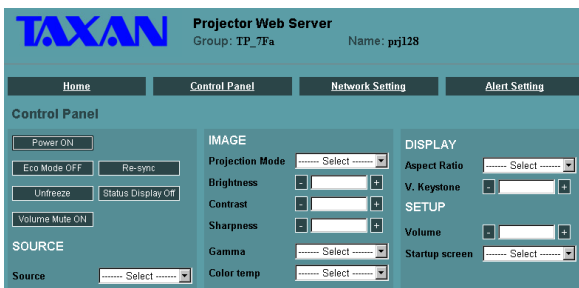
12. In the Address bar, input the IP address: 192.168.1.2.

13. Press Enter.

The projector is setup for remote management. The LAN/RJ45 function displays as follows.



14. Click Control Panel to display projector settings.



Simple Menu / Tools

Useful functions for projection of images and video.

Source

Settings

Tools

Preparing Email Alerts

1. Make sure that user can access the homepage of LAN RJ45 function by web browser (for example, Microsoft Internet Explorer v6.01/v7.0).
2. From the Homepage of LAN/RJ45, click Alert Setting.



3. By default, these input boxes in Alert Setting are blank.

 A screenshot of the 'Alert Setting' web form. It has a teal header with navigation tabs: 'Home', 'Control Panel', 'Network Setting', and 'Alert Setting'. Below the header, the form is divided into three columns:

- Email Setting:** Four input fields labeled 'To', 'Cc', 'Subject', and 'From', all of which are empty.
- SMTP Setting:** One input field labeled 'Server', which is empty.
- Alert Condition:** Three checkboxes, all of which are checked: 'Over Temperature', 'Lamp-Door Open', and 'Lamp Fail'. Below these are two buttons: 'Submit' and 'Email Alert Test'.

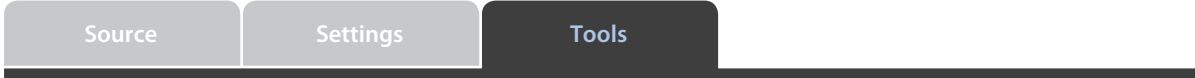
4. The "To" field is the recipients email address (for example, projector administrator). This is a required field.
The "Cc" field sends a carbon copy of the alert to the specified email address. This is an optional field (for example, assistant of projector administrator). This "Cc" field is optional input.
The "Subject" field is the subtitle for email. This is a required field.
The "From" field is the sender's email address (for example, projector administrator). This is a required field.
The "SMTP" field is the mail server for sending out email (SMTP protocol). This is a required field.
Select the alerting conditions by checking the desired boxes.
See the example below:

 A screenshot of the 'Alert Setting' web form, identical in layout to the previous one, but with example data filled in:

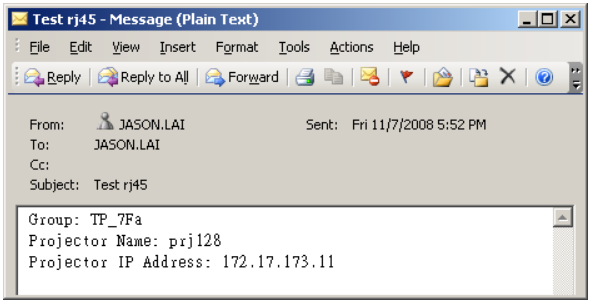
- Email Setting:** 'To' is 'Jason.Lai@comp.com', 'Cc' is empty, 'Subject' is 'TestRJ45', and 'From' is 'Jason.Lai@comp.com'.
- SMTP Setting:** 'Server' is '172.16.1.121'.
- Alert Condition:** The same three checkboxes are checked: 'Over Temperature', 'Lamp-Door Open', and 'Lamp Fail'. The 'Submit' and 'Email Alert Test' buttons are visible.

Simple Menu / Tools

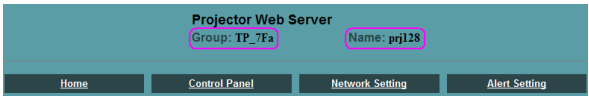
Useful functions for projection of images and video.



- 5. When the above necessary input fields correct, then press "Email Alert Test" button. In a few seconds, the specified mailbox receives a test email as shown below:



"Group" and "Projector Name" identify the alerting projector and are located at the top of the LAN RJ45 web page as shown below:



! Note

How does Email Alerting work?
Once all the required fields are completed and the alert test is successful, email alerts are automatically sent to the specified email address(es) when the selected Alert Conditions are met.
Projectors only alert when alert boxes are checked and the recipients email details are correct.

Advanced Menu / Image

This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)

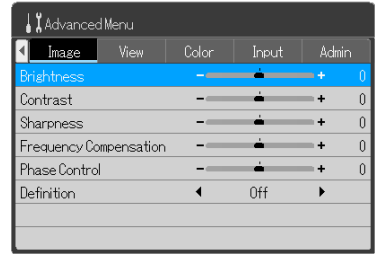


Brightness / Contrast / Sharpness

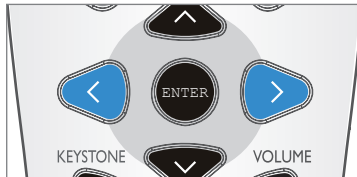
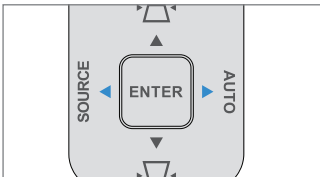
These functions allow various video adjustments to be made in conjunction with the projected environment.

- Align the cursor with the various item names and adjust with the cursor buttons (◀▶).

Item Name	◀	▶
Brightness	Darker	Lighter
Contrast	Image becomes less dense	Image becomes more dense
Sharpness	Image becomes softer	Image becomes more distinct



* **Sharpness** can be used only with **Video/S-Video** input.



Advanced Menu / Image

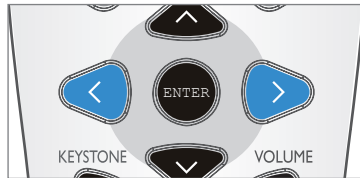
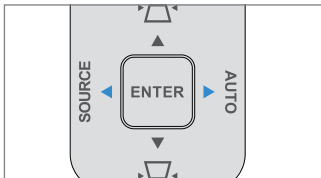
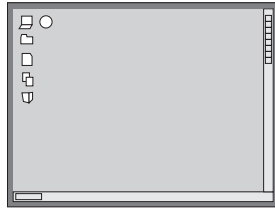
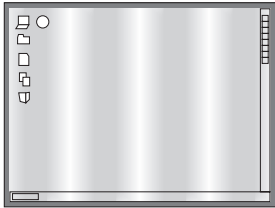
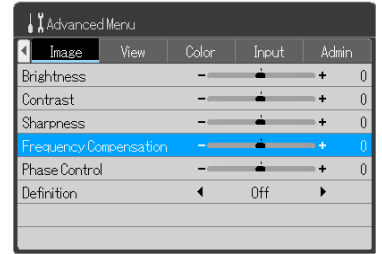
This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



Frequency Compensation

This performs an adjustment when light and dark vertical bands appear on the screen. Usually, an automatic adjustment is performed at the time of source input detection; however, when automatic adjustment is not satisfactory, please adjust as described below.

- Align the cursor with the **Frequency Compensation** item name and adjust with the cursor buttons (◀▶).
- While viewing the screen, set the adjustment value at which the brightness becomes uniform.



Note

Frequency Compensation is performed only at the time of Analog RGB signal input.

Advanced Menu / Image

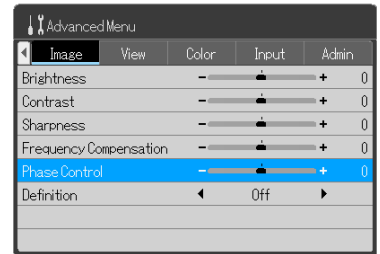
This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



Phase Control

This performs an adjustment when there is a screen color shift or flicker. Usually, an automatic adjustment is performed at the time of source input detection; however, when automatic adjustment is not satisfactory, please adjust as described below.

- Align the cursor with the **Phase Control** item name and adjust with the cursor buttons (◀▶).
- While viewing the screen, adjust so that the color shift or flicker no longer stands out.



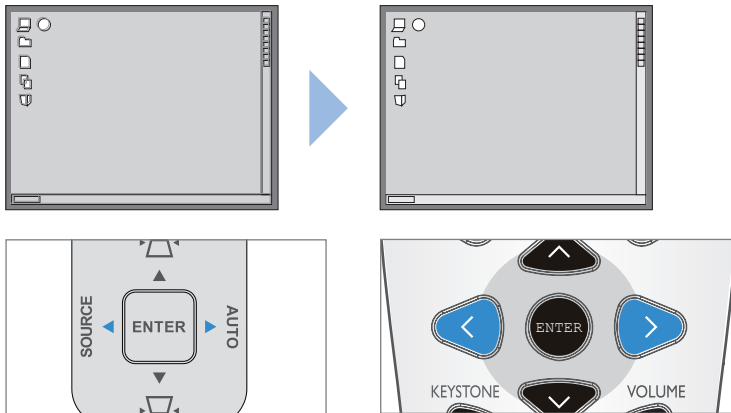
Technical Point

What is phase?

Phase indicates the timing of the video signal. When a shift occurs in the timing of the video signal between the equipment that outputs the video and the projector, a color shift or flicker will be produced. By adjusting the timing with **Phase Control** in the projector, proper video can be projected.

Note

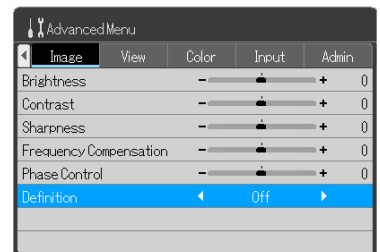
Phase Control is performed only at the time of Analog RGB signal input.



Definition

This adjusts the definition when an input signal is adjusted to the resolution of this projector and an enlarged or reduced display is produced.

- Align the cursor with the **Definition** item name and adjust with the cursor buttons (◀▶).
- Setting **Definition** to **Off** will result in a soft image, and moire patterns and other effects will no longer stand out. On the other hand, setting **Definition** to **On** will result in a sharp image, and fine lines will appear distinct.



Advanced Menu / View

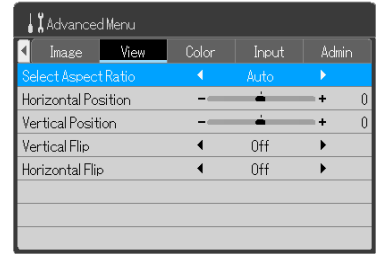
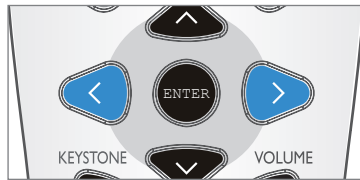
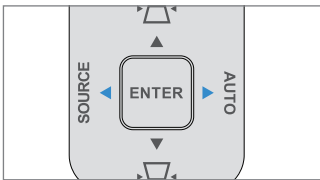
This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



Select Aspect Ratio

This sets the aspect ratio of the input image.

- Align the cursor with the **Select Aspect Ratio** item name and adjust with the cursor buttons (◀▶).



For Computer Input

Auto: Automatically enlarges or reduces the input signal to a 4:3 screen, and projects to fill the screen.

Direct: Projects the image at the maximum displayable size while maintaining the aspect ratio of the input signal.

Real: Projects the input signal without converting the pixels.

Input Signal	Auto	Direct	Real
When higher than the display resolution of the projector			
When lower than the display resolution of the projector			

Advanced Menu / View

This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



For Video Signals and Component Signals

Auto: Project to fill the screen so that no portion protrudes from the screen while maintaining the aspect ratio. (The top and bottom of a 16:9 video will be black.)

Wide: Project all to fill the screen width in a 16:9 screen. This is used to project a squeezed screen at the proper aspect ratio.

Zoom: Projects so as to fill the screen at 16:9, or only the 4:3 portion inside letterbox. (The protruding portion will be cut.)

KG-PH1001X

Select Aspect Ratio	Auto	Wide	Zoom
4:3 Screen			
16:9 Screen			

KG-PH1002WX

Select Aspect Ratio	Auto	Wide	Zoom
4:3 Screen			
16:9 Screen			

Advanced Menu / View

This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)

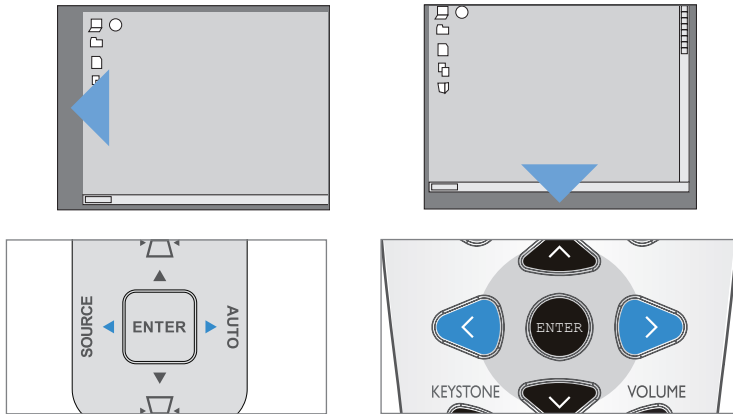
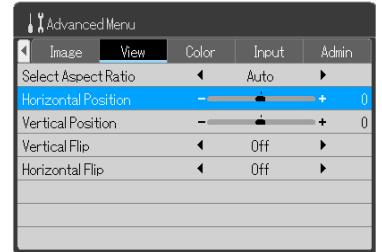


Horizontal Position / Vertical Position

Adjusts the position when the screen picture is shifted vertically or horizontally. Usually, an automatic adjustment is performed at the time of source input detection; however, when automatic adjustment is not satisfactory, please adjust as described below.

- Align the cursor with the **Horizontal Position**, or **Vertical Position** item name and adjust with the cursor buttons (◀▶).

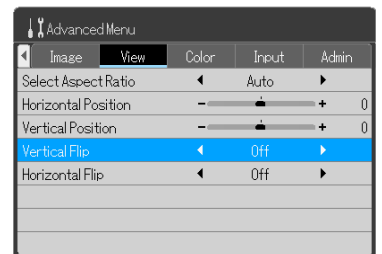
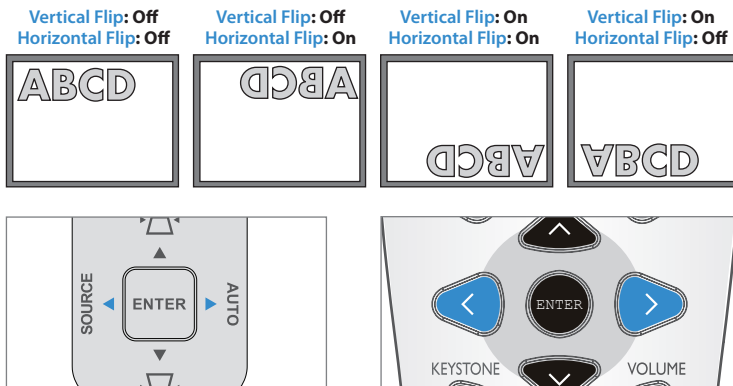
*Horizontal Position / Vertical Position can be used only with Analog RGB signal.



Vertical Flip / Horizontal Flip

Use this when the projector is installed suspended from the ceiling, or is in a rear projection setup.

- Align the cursor with the **Vertical Flip**, or **Horizontal Flip** item name and make the setting with the cursor buttons (◀▶).



Note

If you intend to mount your projector on the ceiling, we strongly recommend that you use a proper fitting Taxan projector ceiling mount kit and that you ensure it is securely and safely installed.

If you use a non-Taxan brand projector ceiling mount kit, there is a safety risk that the projector may fall from the ceiling due to an improper attachment through the use of the wrong gauge or length screws.

Recommend purchase TAXAN ceiling mount kit (kit mode KG-BR001, order code 601-596).

Advanced Menu / Color

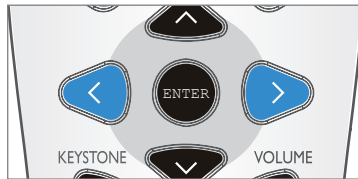
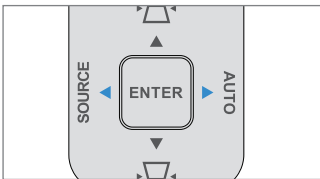
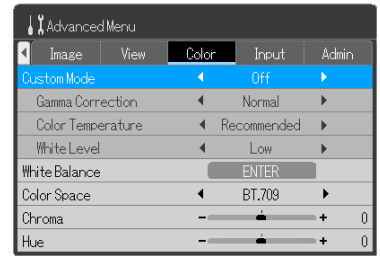
This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



Custom Mode

This can set an original projection mode different from the preset projection modes.

- Align the cursor with the **Custom Mode** item name and switch the function **On** or **Off** with the cursor buttons (◀▶).
- * When **Custom Mode** is set to **On**, **Custom** will be selected for **Projection Mode**. When **Custom Mode** is set to **Off**, **Standard** will be selected for **Projection Mode**.
- Only when the setting is **On**, **Custom Mode** can be adjusted using **Gamma Correction**, **Color Temperature**, and **White Level**. When the setting is **Off**, the item name will be displayed in gray, and selection and adjustment will not be possible.



Gamma Correction

This corrects the proportion of the change of the dark portion from the bright portion of the input signal.

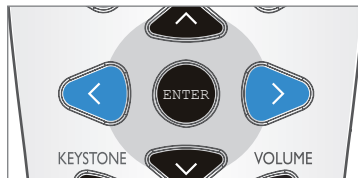
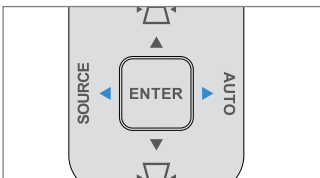
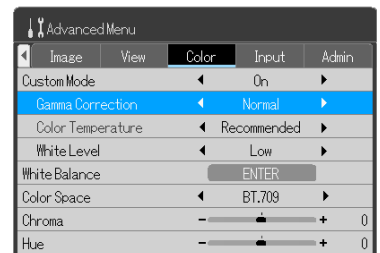
This is used when reproducing natural color tones, and when projecting personal computer images distinctly in a bright meeting room, etc.

- Align the cursor with the **Gamma Correction** item name and select the setting content with the cursor buttons (◀▶).

Normal: Performs a standard correction.

Natural: Corrects so as to result in a natural color tone.

Real: Performs a correction with emphasis on brightness.



Note

When **Off** is set in **Custom Mode**, the **Gamma Correction**, **Color Temperature**, and **White Level** items will be displayed in gray, and selection and adjustment will not be possible.

Advanced Menu / Color

This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



Color Temperature

The screen is affected by illumination and other colors of external light. This function adjusts the white color which is the basic color of the video equipment, and raises the reproducibility of the color.

It can also produce video with importance given to skin tones.

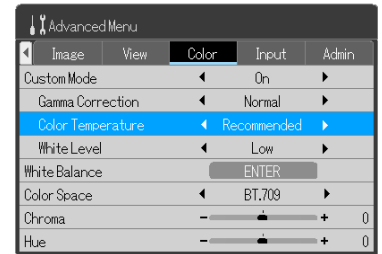
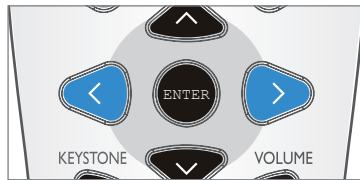
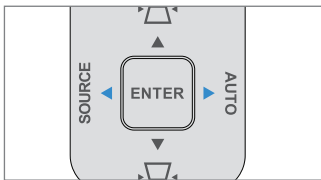
- Align the cursor with the **Color Temperature** item name and select the setting content with the cursor buttons (◀▶).

Low: Creates a warm white. (Reddish tone)

Middle: Creates a warm white. (Yellowish tone)

Recommended: Creates the white of sunlight.

High: Creates a cool white. (Bluish tone)



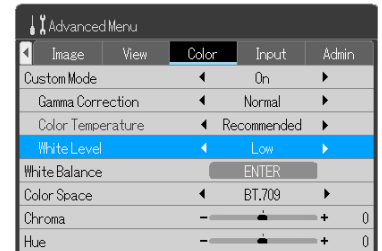
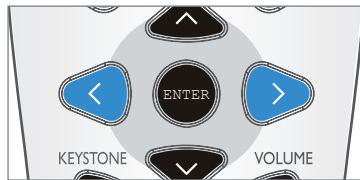
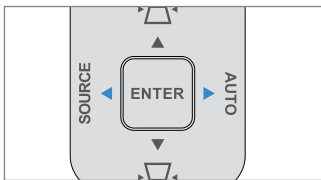
Note

When Off is set in Custom Mode, the **Gamma Correction**, **Color Temperature**, and **White Level** items will be displayed in gray, and selection and adjustment will not be possible.

White Level

This can project text or diagrams from a personal computer and emphasize the white.

- Align the cursor with the **White Level** item name and select the setting content with the cursor buttons (◀▶).
- Select the desired white level from among **Low**, **Middle**, and **High**.



Note

When Off is set in Custom Mode, the **Gamma Correction**, **Color Temperature**, and **White Level** items will be displayed in gray, and selection and adjustment will not be possible.

Advanced Menu / Color

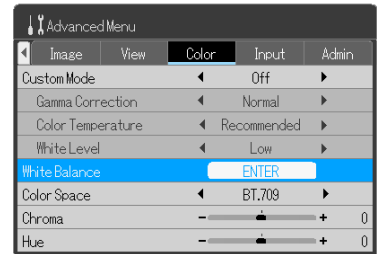
This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



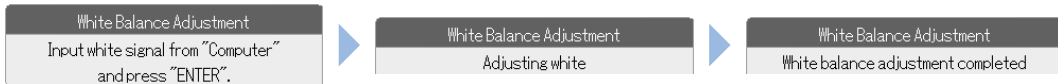
White Balance

This function automatically adjusts the black and white level of the signal that was input from COMPUTER IN so that it suits the personal computer. This adjustment raises the reproducibility of the color.

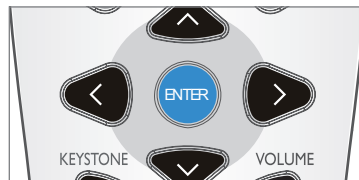
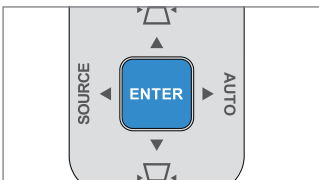
1. Align the cursor with the **White Balance** item name and press the ENTER button. This message will be displayed: Input black signal from "COMPUTER IN" and press "ENTER".
2. Set the connected personal computer screen to black.
3. A press of the ENTER button will display the "Adjusting black" message, and the black level will be adjusted.



4. When the adjustment of the black level is completed, this message will be displayed: Input white signal from "COMPUTER IN" and press "ENTER".
5. Set the connected personal computer screen to white.
6. A press of the ENTER button will display the "Adjusting white" message, and the white level will be adjusted.



The "White balance adjustment completed" message will be displayed for a while and the adjustment will be completed.



*White Balance can be used only with Analog RGB signal.

Technical Point

How to set the personal computer screen to black or white?

By using Microsoft Office PowerPoint the screen can easily display white or black. Start any PowerPoint file and run a slideshow display. Press "W" on the keyboard during the slideshow display and the screen will become white. (Press another key and the screen will return to the original condition.) Similarly, pressing "B" on the keyboard will result in the screen turning black.

Advanced Menu / Color

This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)

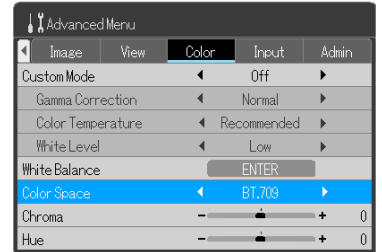
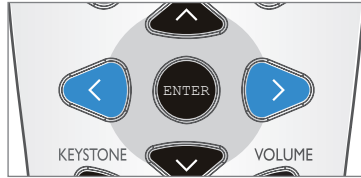
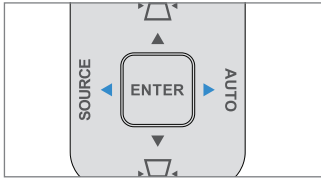


Color Space

This function can adjust the color tone when the image is projected with a reddish or greenish quality at the time of a component signal input.

- Align the cursor with the **Color Space** item name and use the cursor buttons (◀▶) to select a Color Space that will result in a normal image.
- There are two types of selection content: **BT.709** and **SMPTE240**.

*Color Space can be used only with Component signal.



Note

- When the component signal is undergoing conversion processing to RGB, which is the video expression of the projector, the correct colors cannot be expressed unless a system is used that is compatible with the color-difference conversion system of the input signal. **Color Space** serves to select the system.
- Only HDTV/SDTV can adjust **Color Space**.

Chroma

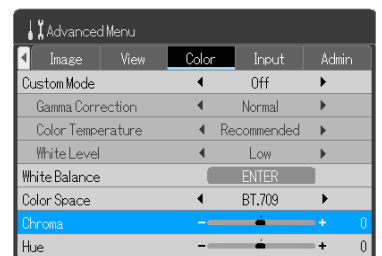
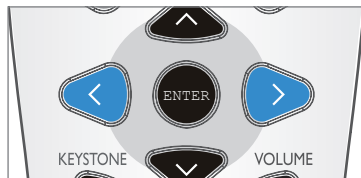
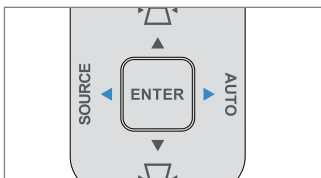
This function can adjust the chroma of the projected image.

- Align the cursor with the **Chroma** item name and adjust with the cursor buttons (◀▶).

◀: Color becomes less dense

▶: Color becomes more dense

* **Chroma** can be used only with **Video/S-Video/Component** input.



Advanced Menu / Color

This permits fine video settings to be made. (Operate while the image that you would like to adjust or set is being projected.)



Hue

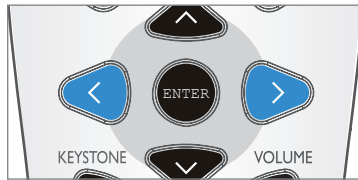
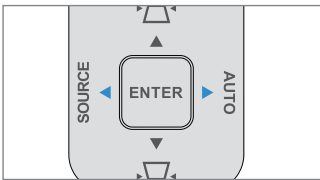
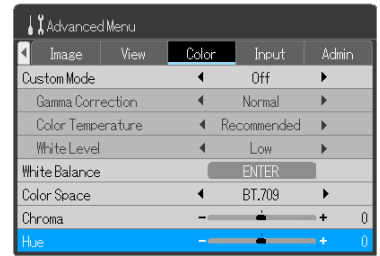
This function can adjust the hue of the projected image.

- Align the cursor with the **Hue** item name and adjust with the cursor buttons (◀▶).

◀: Reddish

▶: Greenish

* **Hue** can be used only with **Video/S-Video/Component** input.



Advanced Menu / Input

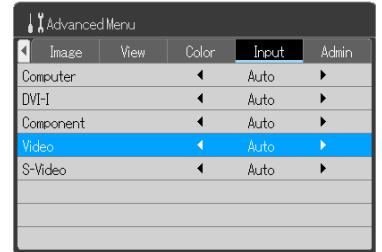
This function is used in setting the input signals of the input connectors.



Usually, this should be set to **Auto**. See Page E-51.

Only when identification is not possible with **Auto**, should the **Input** setting be made.

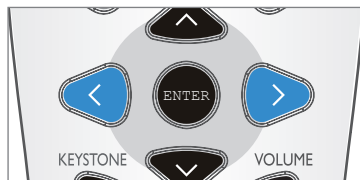
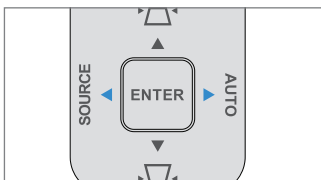
- Align the cursor with one of the various item names and make the setting with the cursor buttons (◀▶).



Input Signal	Selection Item	Selection Content
Analog RGB/ Digital RGB/ Component	Auto	Automatically detects the signal.
	Computer	Fixed to the RGB signal.
	Component	Fixed to the component signal.
Video/S-Video	Auto	Automatically detects the signal.
	NTSC	Fixed to the NTSC system.
	PAL	Fixed to the PAL system.
	SECAM	Fixed to the SECAM system.
	NTSC 4.43	Fixed to the NTSC 4.43 system.
	PAL M	Fixed to the PAL M system.
	PAL N	Fixed to the PAL N system.
	PAL 60	Fixed to the PAL 60 system.

Note

The projector supports SOG signal input for COMPUTER IN, DVI-I IN, and COMPONENT. It is recommended that only one source employs SOG input at a time.



Advanced Menu / Admin

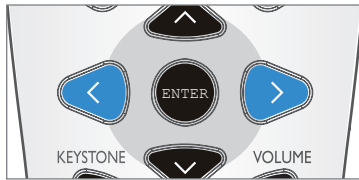
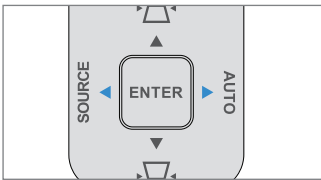
This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.



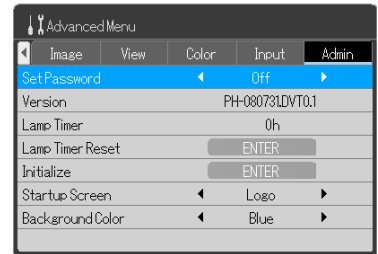
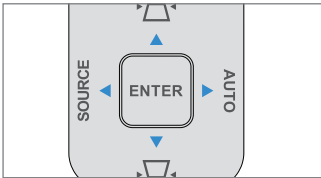
Set Password

A password can be set to restrict startup to avoid tampering with the projector or unauthorized use.

- Align the cursor with the **Set Password** item name and set the setting content to **On** with the cursor buttons (◀▶). The menu screen will disappear and the password setting screen will be displayed.



- Make the setting using the cursor buttons (▲▼◀▶) of the remote control or the projector control panel. Be sure to enter 4 digits.



Note

The password that has been entered will not be displayed; therefore, be sure to make a memo of the set content and keep it where you will be able to find it.

* Use the supplied security sheet and security labels.

Continued on next page →

Advanced Menu / Admin

This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.

Image

View

Color

Input

Admin

Example: Set password ◀▼▼▲

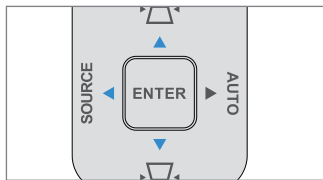
1. A press of cursor button "◀" will result in an asterisk "*" being placed in the first digit space. Continue by pressing the "▼" "▼" "▲" cursor buttons and asterisks "*" will be placed in all 4 digit spaces.



2. When the password setting entry has been completed, the check entry will continue. Again, entering "◀" "▼" "▼" "▲" will place "*" in the 4 digits of the check entry.



When the password is incorrect at the time of the check entry, a message will be displayed and the "*" will disappear. Repeat the procedure again from the setting entry.



* To delete the setting at the time of password entry, press the MENU button. The asterisks "*" will disappear and the system will return to wait for the setting entry. To quit the password setting, press the MENU button one more time. The password setting screen will disappear and the menu screen will be displayed.

This completes the password setting. The next time the power is turned on, the password entry screen will be displayed.

Advanced Menu / Admin

This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.

Image

View

Color

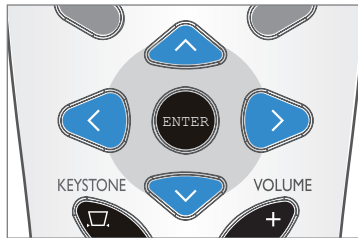
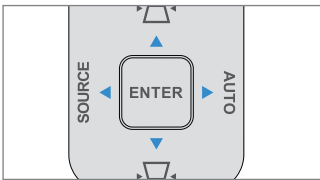
Input

Admin

When the Power Is Turned On, "Please enter the password." Will Be Displayed

When performing **Set Password** and the power is turned on, the password entry screen will be displayed. This screen will continue to be displayed unless the password that was set is entered. In the next step, enter the password that has been set.

- Enter the password using the entry buttons (cursor buttons). Be sure to enter the 4 digits that have been set.

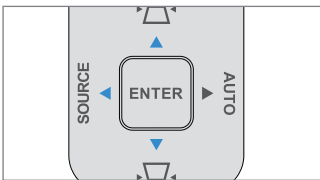


Example: Enter password ◀▼▼▲

A press of cursor button "◀" will result in an asterisk "*" being placed in the first digit space.



Continue by pressing the "▼" "▼" "▲" cursor buttons and asterisks "*" will be placed in all 4 digit spaces. If the password matches, the display will disappear and the projector will enter a usable state.



Continued on next page →

This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.

Image

View

Color

Input

Admin

Canceling a Password / Changing a Password

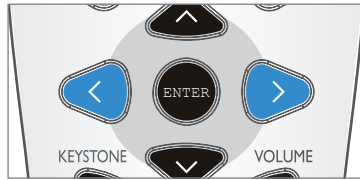
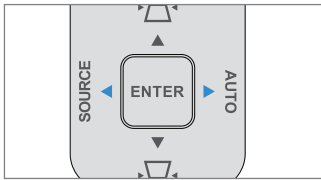
An operation with the menu is required to cancel or change a password.

Canceling a password

1. Align the cursor with the **Set Password** item name and set the setting content to **Off** with the cursor buttons (◀▶).
2. This will set **Set Password** to **Off**. The password entry display will not be displayed the next time the projector is started.

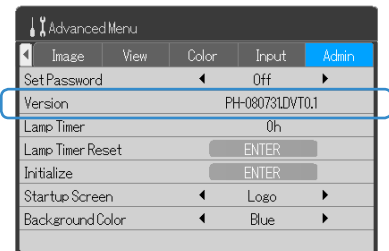
Changing a password

1. After **Set Password** has been set to **Off** with the aforementioned operation, we will set it to **On** again.
2. The menu screen will close and the password setting screen will be displayed.
3. Please set a new password. (For information about setting, see Page E-83.)



Version

This displays the version information of the projector.



Advanced Menu / Admin

This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.

Image

View

Color

Input

Admin

Lamp Timer

This displays the usage time of the lamp. The service life of the lamp will differ in standard mode and Eco mode.

When used only in standard mode: Approximately 2,000 hours

When used only in Eco mode: Approximately 3,000 hours

- When both modes are used alternately, the lamp service life will fluctuate.

When the Lamp Has Reached the End of Its Service Life

“Replace the lamp cartridge.” will be displayed on the screen for 10 seconds in 1 minute intervals. Replace the lamp with a new one. See “Replacing the Lamp Cartridge” for information about the lamp replacement method. See Pages E-95 to E-97.

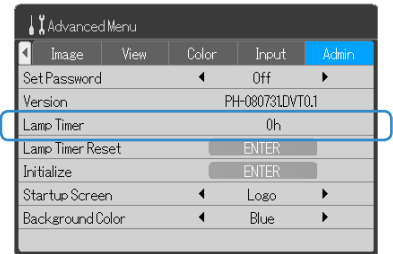
Replace the lamp cartridge.

When More than Hours Have Elapsed After Reaching the Lamp Service Life

“Turning power off – Replace the lamp cartridge.” will be displayed on the screen for 10 seconds, then the power will be switched off by the projector. When this condition has been reached, even pressing the POWER/STANDBY button will not turn on the power. Replace the lamp with a new one.

Turning power off

Replace the lamp cartridge.



Advanced Menu / Admin

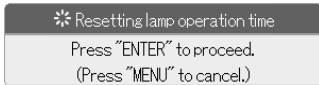
This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.



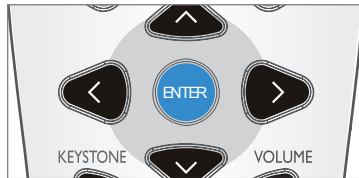
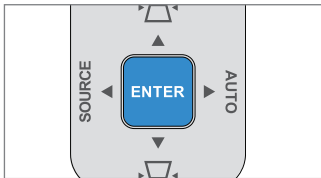
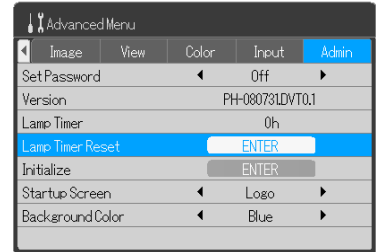
Lamp Timer Reset

This resets the lamp timer. Be sure to perform the lamp timer reset operation when the lamp is replaced.

- Align the cursor with the **Lamp Timer Reset** item name and press the ENTER button. This message will be displayed on the screen: Resetting lamp operation time – Press "ENTER" to proceed. (Press "MENU" to cancel.)



- Pressing the ENTER button again will return the lamp timer to **0**.
- * To cancel **Lamp Timer Reset**, press the MENU button and there will be a return to the menu screen.



Advanced Menu / Admin

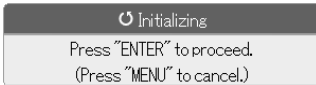
This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.



Initialize

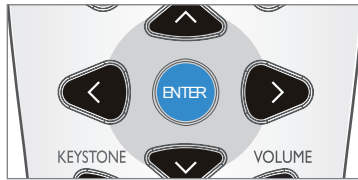
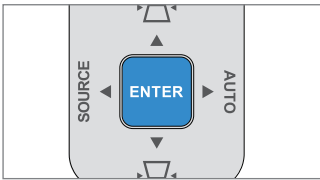
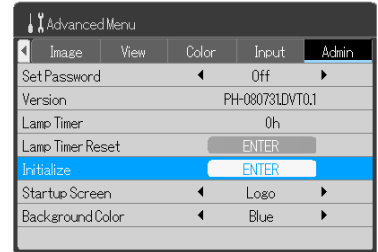
This function returns to the standard value (default shipping setting) the content that has been set or adjusted with the various items.

- Align the cursor with the **Initialize** item name and press the ENTER button. This message will be displayed on the screen: Initializing – Press "ENTER" to proceed. (Press "MENU" to cancel.)



- Press the ENTER button again to initialize.
- * To cancel **Initialize**, press the MENU button and there will be a return to the menu screen.
- Even when the following items are initialized, the settings will remain.

Vertical Flip, Horizontal Flip, Language Setting, Lamp Timer, Set Password



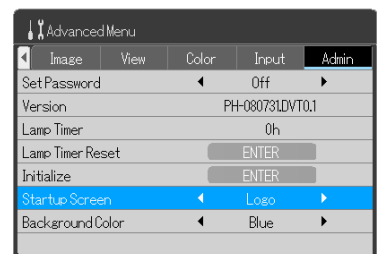
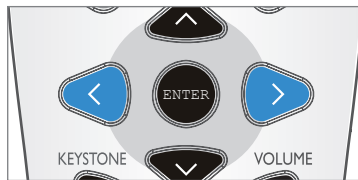
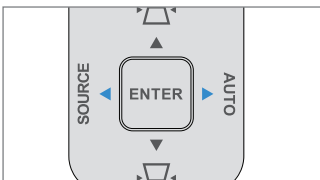
Startup Screen

This switches the display/no display status of the logo screen that is displayed when the projector is starting.

- Align the cursor with the **Startup Screen** item name and switch between **Logo** and **None** with the cursor buttons (◀▶).

Logo: The logo (TAXAN) is displayed.

None: The logo is not displayed.



Advanced Menu / Admin

This function can be used to make a security password setting or perform a check/reset of the lamp timer, etc.



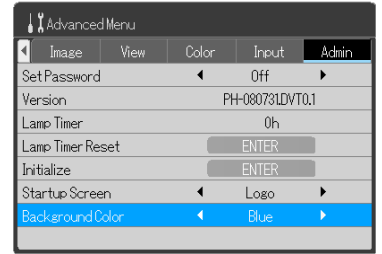
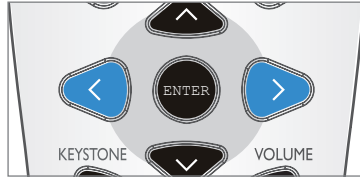
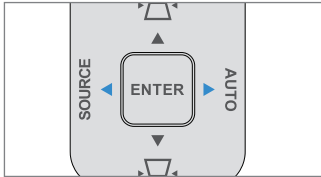
Background Color

This function can set the screen color when **Blank/Mute** or other operations are performed.

- Align the cursor with the **Background Color** item name and make the setting with the cursor buttons (◀▶).


















Blue: The background color will be a blue screen.

Black: The background color will be a black screen.



When an indicator is lit or flashing

The LAMP/HEAT indicator will be lit or flashing to notify of problems as described in the table below.

Indicator Status			Details of the Problem
POWER/STANDBY button	HEAT	LAMP	
 Orange: Lit			The projector is now standby.
 Blue: Flashing			The projector now is powering on. Warm up (Splash logo) flashing (0.5 sec on/off).
 Blue: Lit			The projector now is ready. Power on (Normal operation).
 Green: Lit			The projector now is in ECO mode. Power on (ECO mode - Energy saving operation).
 Blue: Flashing			The projector now is powering off. Power-off cooling flashing (0.5 sec on/off).
		 Red: Lit	It is time to replace the lamp. Replace the lamp with a new one. See Page E-95.
 Red: Flashing		 Red: Flashing	The lamp has reached the end of its service life. The power will no longer turn on. The lamp has been used for more than 100 hours after reaching its service life. Replace the lamp with a new one. See Page E-95.
 Red: Lit	 Red: Lit		The temperature is abnormally high. <ul style="list-style-type: none"> The thermal protector is activated. When the room temperature is high, move the projector to a cool place. When the internal temperature of the projector is high, check the cooling fan ventilation holes. If clogged, clean the filter. When the temperature protector is activated, the power will turn off, and it might not come back on even when the power is turned on immediately. In this case, wait about 90 seconds, then turn the power back on again.
 Red: Lit	 Red: Flashing		The lamp cover is open. The Lamp Cover is not attached properly. Attach it properly. See page E-96 and E-97.
 Red: Lit		 Red: Lit	The lamp will not light. Wait at least 90 seconds, then turn the power on again. If the problem persists, unplug the power cable and contact the dealer or TAXAN customer service center.
 Red: Lit	 Red: Flashing	 Red: Flashing	Other Hardware Faults Unplug the power cable, and request repair service from a dealer or a TAXAN customer service center.

When the indicator is lit/flashes when the projector is in a normal condition, or in a condition other than described above, unplug the power cable and contact the dealer or a TAXAN customer service center.

Thermal Protector

If the internal temperature of the projector becomes abnormally high, the thermal protector will be activated and will turn off the power of the projector.

If this occurs, please take the following actions.

1. Disconnect the power plug from the wall outlet.

2. Check the following matters and take the required measures.

When the projector is being used in a location having a high ambient temperature, set it up again in a cool place. Check the exhaust vents, and the ventilation slots. If clogged, clean them.

3. Wait about 60 minutes until the temperature of the projector drops.

If after having performed the above matters, the problem persists, contact the dealer or a TAXAN customer service center.

At a time such as this...

Check the following matters before requesting servicing.

Problem	Check	Reference Page
Power does not turn on	<ul style="list-style-type: none"> Is the power cord plugged into a power outlet? Is the lamp cover properly mounted? Is the projector's temperature high? To protect the projector, the power cannot be turned on when the projector's temperature is abnormally high. Has the lamp reached the end of its service life? Depending on the timing of when the power cable is inserted (i.e., when the power is turned On), the indicator (LED) of the POWER/STANDBY might not light and the power might not come on; however, this is not a breakdown of the projector. If this occurs, once again unplug the power cable and then insert it. 	<p>E-34 E-96, 97 E-91 E-91 —</p>
No image is produced	<ul style="list-style-type: none"> Is a connected input selected? Is the cable properly connected to the input terminal? When a computer is connected, are signals being output from the computer? Does the signal being input have a frequency usable with this projector? Is the Brightness of the Image, or the Contrast set to the minimum? Is the LAMP/HEAT indicator red and lit steadily or flashing? When the component signal of a DVD player is connected to the Y PbPr/CbCr connector, and the video does not appear, is the Input of the Y PbPr/CbCr connector properly selected? 	<p>E-40 E-27-33 E-28 E-100 E-71 E-91 E-82</p>
Image is distorted	<ul style="list-style-type: none"> Is the projector properly installed? For trapezoidal (keystone) distortion, perform keystone adjustment. Please note that depending on the projected picture and the projection conditions, it may not be possible to eliminate keystone distortion completely. 	<p>E-37 E-43, 54</p>
Image is out of focus	<ul style="list-style-type: none"> Is the lens properly focused? Are the screen and projector installed at the proper distance? Does the projection distance exceed the focusing range? Is there condensation on the lens, etc.? If the projector is moved from a cool storage area to a warm place and the power is turned on, condensation may form on the lens or internal optical parts. If this happens, wait until the condensation has evaporated before using the projector. 	<p>E-38 E-25, 26 E-25, 26 —</p>
Image is not in proper position and is not displayed properly	<ul style="list-style-type: none"> In the case of Computer input, have the horizontal position and the vertical position been adjusted properly? Does the input signal have a compatible resolution and frequency? Check the computer's resolution. 	<p>E-76 E-100</p>
Video image is crushed	<ul style="list-style-type: none"> If the image is crushed in the horizontal or vertical direction or if it is not displayed over the entire screen, select a different aspect ratio. 	E-74
Colors of the overall image are strange	<ul style="list-style-type: none"> When a component signal is being input, is the color space setting proper? For composite input, is the adjustment of the color tone shifted? 	<p>E-80 E-81</p>
Characters flicker or colors are offset for RGB inputs	<ul style="list-style-type: none"> Adjust the Frequency Compensation, and Phase Control items under Image of the Advanced Menu. 	E-72, 73
Cannot select the menu name	<ul style="list-style-type: none"> Some of the functions cannot be selected unless a signal is input to the projector and video or an image is being projected. 	—

At a time such as this...

Problem	Check	Reference Page
Remote control unit does not operate	<ul style="list-style-type: none"> • Are the remote control unit's batteries worn? Replace with new batteries. • Is there an obstacle between the remote control unit and the projector's remote control signal sensor? • Is the remote control unit outside of range? • Are you pointing the remote control unit's transmitter towards the projector's remote control signal sensor? • Is the projector located near fluorescent lighting? 	<p>E-19, 20 E-20 E-20 E-20 E-20</p>
LAMP/HEAT indicator is lit red or flashing red	<ul style="list-style-type: none"> • See "When an indicator is lit or flashing". 	E-91
Even when the power is turned on, only the display of "Please enter the password" is shown.	<ul style="list-style-type: none"> • The password is set. Please enter the correct password. 	E-83-86

Cleaning

- Be certain to disconnect the power plug from the power outlet before cleaning.
- Do not apply insecticide or other volatile chemicals to the projector or lens. Also, do not allow rubber or vinyl products or the like to remain in contact with the projector for a long period. This will cause deterioration or peeling of the coating, etc.

Cleaning a Soiled Projector Main Unit

- Wipe with a lint-free, soft, dry cloth. When very dirty, wipe with a cloth that has been moistened with a diluted neutral detergent, then finish with a dry cloth. If a chemically-treated cloth is going to be used, please follow any written warnings.
- Do not wipe with thinner, benzene, or other solvents. Doing so could cause them to undergo qualitative changes or the coatings may peel, etc.
- When removing the dust of the outflow and intake holes, use the brush attachment on a vacuum cleaner to clean out the dust. Avoid using the vacuum directly without attaching the adapter as well as the use of a nozzle adapter.
- Do not scratch or otherwise hit the projector body with your nails or other hard object, since this will cause scratches.

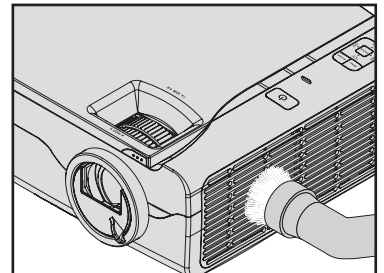
Dirty Lens

- Clean using the same method you would use to clean a camera lens: Use a commercial blower for camera use or cleaning paper for eye glasses. Be careful not to scratch the lens at this time.

Dust of the Intake and Outflow Holes

Dust that collects in the intake and outflow holes will obstruct the ventilation and cause the internal temperature to rise which could cause damage. Clean this area carefully. As a guideline, clean at least every 100 hours of usage.

- Turn off the power and check that the indicator of the POWER/STANDBY has changed so that it is lit in orange, and then disconnect the power cable.
- Vacuum from the outside with an electric vacuum cleaner. Use a brush-tipped adapter with the vacuum cleaner. Note that use of a vacuum without an adapter, or use of an adapter without a brush should be avoided.



Cleaning the Inside of the Projector

- Cleaning of the inside of the projector is required about once a year. Failure to clean over a long period while dust has collected inside the projector could cause a fire or breakdown. Do not clean the inside of the projector by yourself. Please be sure to contact your dealer.

Replacing the Lamp Cartridge

- The lamp that is used in the light source of the projector has a service life. The rated service life of the lamp is approximately 2,000 hours (when used only in normal mode), and approximately 3,000 hours for **Eco Mode**. Note that the lamp service life may be shortened due to usage conditions and other factors. The service life will be extended when the Eco mode is used proportionately longer (than the normal mode).

(Rated service life means the average value of service life of lamps that were manufactured over a long period, and it depends on the manufacturer's test conditions. The rated service life is an average value that depends on the manufacturer's test conditions; it is not a guaranty of operation up to this time.)

- When the service life of the lamp is exceeded, the indicator of the POWER/STANDBY will light in blue, the LAMP indicator will light in red, and the message "Replace the lamp cartridge." will be displayed on the screen. In this case, it is time to replace the lamp cartridge. Replace the lamp cartridge according to the procedure on the next page. See Page E-96.
- When the lamp has been used for more than 100 hours after reaching its service life, the projector will enter the standby mode and it will no longer be possible to turn on the power.
- Replacement lamps can be obtained at dealers. When ordering, please specify the replacement lamp for projector **KG-PH1001X** (lamp model **KG-LA001** / order code **601-602**) / **KG-PH1002WX** (lamp model **KG-LA002** / order code **602-418**).



CAUTION

- Replacement of the lamp cartridge is performed after switching off the power, waiting for the cooling fan to stop, disconnecting the power plug from the power outlet, and then leaving the projector for about 45 minutes before replacement is started. Replacement of the lamp cartridge during operation or immediately after operation stops will cause burns because of the high temperature.
- Do not loosen any screws other than those specified.
- Do not touch the lamp with bare hands. Doing so could shorten the life of the lamp.
- If lamp has reached the end of its usable life, the lamp bulb may shatter. When this happens, an explosive sound can be heard and pieces of glass may be scattered in the lamp cartridge. Do not touch them as the pieces of glass may cause injury. If this happens, contact your dealer or the store the projector was purchased.

Replacing the Lamp Cartridge

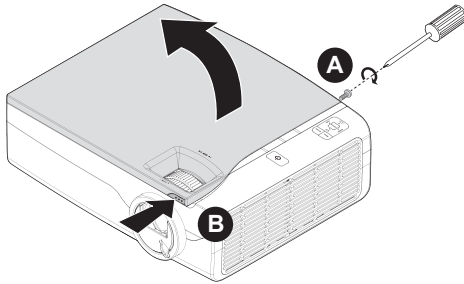
1 Unplug the power cable.

2 Turn down the projector.

Lay down a soft cloth or other material, and place the projector on top of it to aid in lamp replacement. After replacement, return the projector to its original condition.

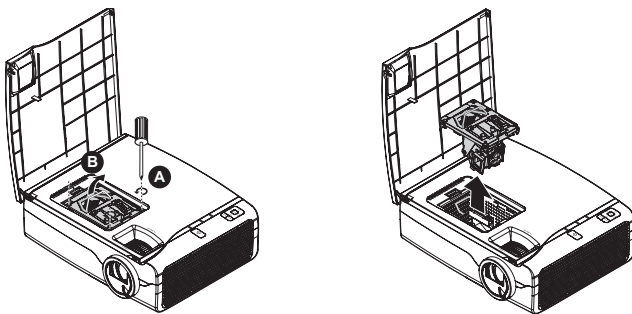
3 Remove the lamp cover.

Loosen lamp cover screw **(A)**. Press the cover release button **(B)** and lift the cover.



4 Remove the lamp cartridge.

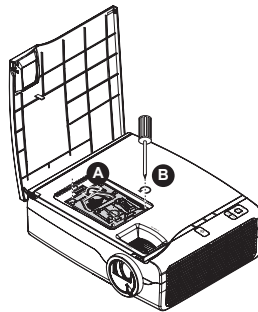
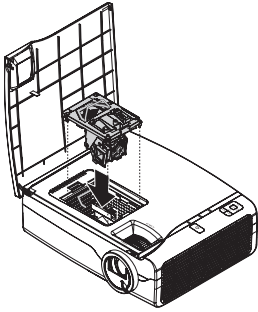
Loosen the 3 captive screws **(A)** on the lamp cartridge and lift the handle **(B)** to remove the lamp cartridge.



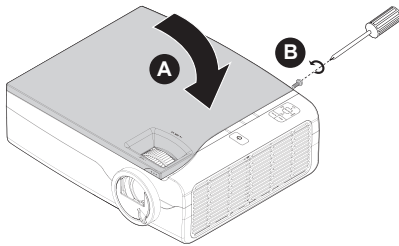
Replacing the Lamp Cartridge

5 Install the new lamp cartridge.

- (1) Align the lamp cartridge with the screw holes and the connectors. Press down firmly to secure.
- (2) Put the handle down (A). Tighten the 3 captive screws (B) on the lamp cartridge as shown.



- (3) Press the lamp cover down firmly (A). Tighten the single securing screw (B) as shown.



Note

When the lamp has been used for more than 100 hours after reaching its service life, the power will no longer turn on.

Replacement lamps can be obtained at dealers. When ordering, please specify the replacement lamp for projector **KG-PH1001X** (lamp model **KG-LA001** / order code **601-602**) / **KG-PH1002WX** (lamp model **KG-LA002** / order code **602-418**).

6 Reset the Lamp Timer.

Connect the power cable, turn on the power, then reset. Select **Admin** under **Advanced Menu** ► **Lamp Timer Reset**, and then press the ENTER button. There will be a change to the initialization verification display. Now press the ENTER button. See "Lamp Timer Reset" for details on Page E-88.

Specifications List

Model	KG-PH1001X
Optical	
Method of projection	DLP® (single DLP® chip)
DLP® chip	0.7 inches 1024 × 768 dots
Lamp	280 W high pressure mercury lamp
Projection lens	Manual zoom (× 1.15), F = 2.6 - 2.81, f = 26.01 - 29.84 mm
Image size	Minimum 23.4 inch (at projection distance of 1m / 3.28 feet telephoto) Maximum 300 inch (at projection distance of 12.8m / 41.9 feet wide)
Light Output	Standard mode: 4200 lm *1
Contrast Ratio	2300:1 (Full on/off) *1
Electrical	
Inputs	Video (NTSC/NTSC4.43/PAL/PAL-N/PAL-M/PAL60/SECAM/YCbCr(NTSC, PAL)/YPbPr(480p, 576p, 1080i, 720p)): (automatic or manual switching) RGB (Horizontal: 15, 31 to 90 kHz, Vertical: 50 to 85 Hz) Full color (16,770,000 colors)
Color Reproduction	
Resolution	VGA (640 × 480), S-VGA (800 × 600) expansion XGA (1024 × 768) true, S-XGA (1280 × 1024), SXGA+ (1400 × 1050) compression
Input Current	3.5 A
Power Requirement	100 - 240 V AC, 50/60 Hz
Power Consumption	350 watts (290 watts in eco mode)
Mechanical	
Dimensions Excluding Stand	312 mm (W) × 100 mm (H) × 250 mm (D) (when stored, not including projecting parts) 12.3 in. (W) × 3.9 in. (H) × 9.8 in. (D) (when stored, not including projecting parts)
Weight	Approximately 3.6 Kg / 7.9 lbs
Operational Temperatures	Data projector: 5° to 35°C (41° to 95°F), 10 to 85% humidity

• Specifications and design are subject to change without notice.

*1 ISO 21118 conformance: Indicates the average value of mass produced articles, and the lower limit values at the time of shipping are 80% of the indicated values.

Specifications List

Model	KG-PH1002WX
Optical	
Method of projection	DLP® (single DLP® chip)
DLP® chip	0.65 inches 1280 × 800 dots
Lamp	280 W high pressure mercury lamp
Projection lens	Manual zoom (× 1.15), F=2.6 - 2.81, f=26.01 - 29.84mm
Image size	Minimum 26.37 inch (at projection distance of 1m / 3.28 feet telephoto) Maximum 300 inch (at projection distance of 11.37m / 37.3 feet wide)
Light Output	Standard mode: 3700 lm *1
Contrast Ratio	2300:1 (Full on/off) *1
Electrical	
Inputs	Video (NTSC/NTSC4.43/PAL/PAL-N/PAL-M/PAL60/SECAM/YCbCr(NTSC, PAL)/YPbPr(480p, 576p, 1080i, 720p)): (automatic or manual switching) RGB (Horizontal: 15, 31 to 90 kHz, Vertical: 50 to 85 Hz) Full color (16,770,000 colors)
Color Reproduction	
Resolution	VGA (640 × 480), S-VGA (800 × 600), XGA (1024 × 768) expansion, WXGA (1280 × 800) true, S-XGA (1280 × 1024), SXGA+ (1400 × 1050) compression
Input Current	3.5 A
Power Requirement	100 - 240 V AC, 50/60 Hz
Power Consumption	350 watts (290 watts in eco mode)
Mechanical	
Dimensions Excluding Stand	312 mm (W) × 100 mm (H) × 250 mm (D) (when stored, not including projecting parts) 12.3 in. (W) × 3.9 in. (H) × 9.8 in. (D) (when stored, not including projecting parts)
Weight	Approximately 3.6 Kg / 7.9 lbs
Operational Temperatures	Data projector: 5° to 35°C (41° to 95°F), 10 to 85% humidity

• Specifications and design are subject to change without notice.

*1 ISO 21118 conformance: Indicates the average value of mass produced articles, and the lower limit values at the time of shipping are 80% of the indicated values.

Table of Supported Frequency

The projector automatically identifies the signal input from the computer and selects the optimum resolution as shown on the table below.

Manual adjustments may be required for some input signals. See "Frequency Compensation"/"Phase Control"/"Horizontal Position / Vertical Position" on page E-72, 73, 76.

Signal	Resolution	Frequency		Video S-Video	Component	RGB (Analog)	DVI (Digital)
		Horizontal (kHz)	Vertical (Hz)				
VIDEO(NTSC)	—	15.734	60.0	○	—	—	—
VIDEO(PAL/SECAM)	—	15.625	50.0	○	—	—	—
	720 × 400	37.9	85.0	—	—	○	○
	640 × 480	31.5	60.0	—	—	○	○
	640 × 480	37.9	72.8	—	—	○	○
	640 × 480	37.5	75.0	—	—	○	○
	640 × 480	43.3	85.0	—	—	○	○
	800 × 600	35.2	56.3	—	—	○	○
	800 × 600	37.9	60.3	—	—	○	○
	800 × 600	46.9	75.0	—	—	○	○
	800 × 600	48.1	72.2	—	—	○	○
	800 × 600	53.7	85.1	—	—	○	○
	1024 × 768	48.4	60.0	—	—	○	○
	1024 × 768	56.5	70.1	—	—	○	○
	1024 × 768	60.0	75.0	—	—	○	○
	1024 × 768	68.7	85.0	—	—	○	○
	1280 × 800	49.7	59.8	—	—	○	○
	1280 × 800	62.8	74.9	—	—	○	○
	1280 × 800	71.6	84.8	—	—	○	○
	1280 × 1024	64.0	60.0	—	—	○	○
	1280 × 1024	80.0	75.0	—	—	○	○
	1280 × 1024	91.1	85.0	—	—	○	○
	1440 × 900	55.9	60.0	—	—	○	○
	1400 × 1050	65.3	60.0	—	—	○	○
	1600 × 1200	75.0	60.0	—	—	○	○
Apple Macintosh	640 × 480	35.0	66.7	—	—	○	○
	832 × 624	49.7	74.5	—	—	○	○
	1024 × 768	60.2	74.9	—	—	○	○
	1152 × 870	68.7	75.1	—	—	○	○
SDTV	576i	15.625	50.0	—	○	—	—
	480i	15.734	60.0	—	○	—	—
EDTV	576p	31.3	50.0	—	○	—	—
	480p	31.5	60.0	—	○	—	—
HDTV	720p	37.5	50.0	—	○	—	—
	720p	45.0	60.0	—	○	—	—
	1080i	33.8	60.0	—	○	—	—
	1080i	28.1	50.0	—	○	—	—

• The projector does not support the ADC connector on Apple Macintosh.

○ : Supported frequency

— : Not supported frequency

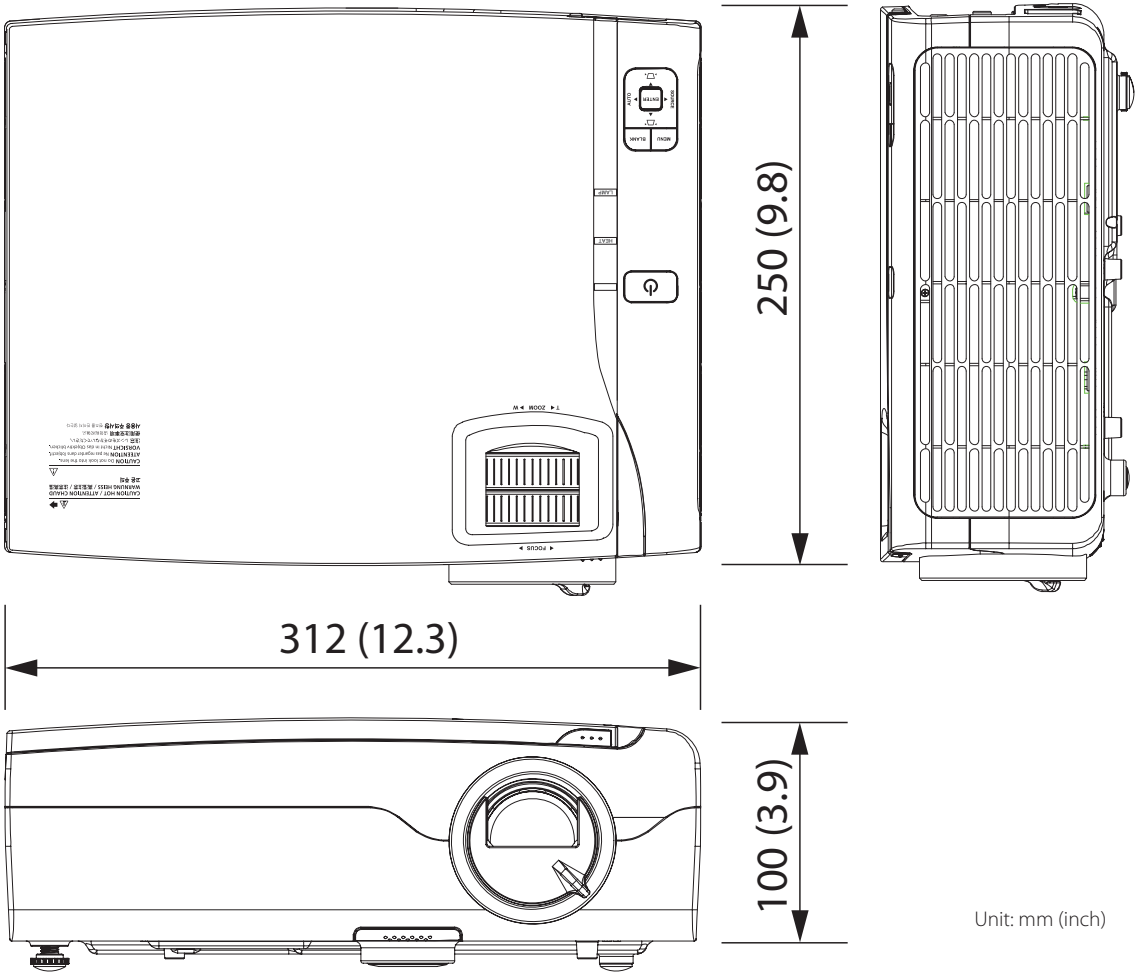
KG-PH1001X

The display resolution is 1024 × 768 dots. When displaying a signal with resolutions other than 1024 × 768 dots such as 1280 × 1024, sizes of characters or lines may be uneven.

KG-PH1002WX

The display resolution is 1280 × 800 dots. When displaying a signal with resolutions other than 1280 × 800 dots such as 1280 × 1024, sizes of characters or lines may be uneven.

Cabinet Dimensions



Unit: mm (inch)

Table of RS232 Command Code

Baud Rate : 9600
 Data Bits : 8
 Parity : None
 Stop Bits : 1
 Flow Control : None

Operation Command				
Operation	Action	232 ASCII code	HEX	Response
Power On	Turn on power	~PN<CR>	7Eh 50h 4Eh 0Dh	P/N
Power Off	Turn off power	~PF<CR>	7Eh 50h 46h 0Dh	P/N
Auto Image	[Source]>[Auto Detect] On /Off	~AI<CR>	7Eh 41h 49h 0Dh	P/N
Lamp Hour Reset	[Admin]>[Lamp Timer Reset]	~RL<CR>	7Eh 52h 4Ch 0Dh	P/N
Input Select RGB	[Source]>[Computer]	~SR<CR>	7Eh 53h 52h 0Dh	P/N
Input Select RGB2	[Source]>[DVI-A]	~SG<CR>	7Eh 53h 47h 0Dh	P/N
Input Select DVI	[Source]>[DVI]	~SD<CR>	7Eh 53h 44h 0Dh	P/N
Input Select Video	[Source]>[Video]	~SV<CR>	7Eh 53h 56h 0Dh	P/N
Input Select S-Video	[Source]>[S-Video]	~SS<CR>	7Eh 53h 53h 0Dh	P/N
Input Select Component	[Source]>[Component]	~SY<CR>	7Eh 53h 59h 0Dh	P/N
Input Select HDMI	[Source]>[HDMI]	~SH<CR>	7Eh 53h 48h 0Dh	P/N
RS232 9600bps	9600bps	~CE<CR>	7Eh 43h 45h 0Dh	P/N
RS232 115.2Kbps	115.2Kbps	~CH<CR>	7Eh 43h 48h 0Dh	P/N
RS232 19.2Kbps	19.2Kbps	~CL<CR>	7Eh 43h 4Ch 0Dh	P/N
Remote Command				
Button's name		232 ASCII code	HEX	Response
UP arrow	As the same IR key "up" press	~rU<CR>	7Eh 72h 55h 0Dh	P/N
DOWN arrow	As the same IR key "down" press	~rD<CR>	7Eh 72h 44h 0Dh	P/N
LEFT arrow	As the same IR key "left" press	~rL<CR>	7Eh 72h 4Ch 0Dh	P/N
RIGHT arrow	As the same IR key "right" press	~rR<CR>	7Eh 72h 52h 0Dh	P/N
POWER	As the same IR key "power" press	~rP<CR>	7Eh 72h 50h 0Dh	P/N
SOURCE	As the same IR key "source" press	~rI<CR>	7Eh 72h 49h 0Dh	P/N
AUTO	As the same IR key "auto" press	~rA<CR>	7Eh 72h 41h 0Dh	P/N
KEystone+	As the same IR key "keystone+" press	~rK<CR>	7Eh 72h 4Bh 0Dh	P/N
KEystone-	As the same IR key "keystone-" press	~rJ<CR>	7Eh 72h 4Ah 0Dh	P/N
MENU	As the same IR key "menu" press	~rM<CR>	7Eh 72h 4Dh 0Dh	P/N
STATUS	As the same IR key "status" press	~rS<CR>	7Eh 72h 53h 0Dh	P/N
ZOOM+	As the same IR key "zoom+" press	~rZ<CR>	7Eh 72h 5Ah 0Dh	P/N
ZOOM-	As the same IR key "zoom-" press	~rY<CR>	7Eh 72h 59h 0Dh	P/N
BLANK / MUTE	As the same IR key "blank" press	~rB<CR>	7Eh 72h 42h 0Dh	P/N
FREEZE	As the same IR key "freeze" press	~rF<CR>	7Eh 72h 46h 0Dh	P/N
VOLUME+	As the same IR key "volume+" press	~rV<CR>	7Eh 72h 56h 0Dh	P/N
VOLUME-	As the same IR key "volume-" press	~rW<CR>	7Eh 72h 57h 0Dh	P/N
ENTER	As the same IR key "enter" press	~rN<CR>	7Eh 72h 4Eh 0Dh	P/N
Query Command				
ITEM		232 ASCII code	HEX	Response Message Examples
Software Version	[Admin]>[Version]	~qV<CR>	7Eh 71h 56h 0Dh	DP3510-YAXX-DPE01
Power State	Power status query	~qP<CR>	7Eh 71h 50h 0Dh	On / Off
Input Select	Input Select query	~qS<CR>	7Eh 71h 53h 0Dh	RGB / DVI / Video / S-Video / Component / HDMI
Brightness	[Image]>[Brightness] value query	~qB<CR>	7Eh 71h 42h 0Dh	50 ~ -50
Contrast	[Image]>[Contrast] value query	~qC<CR>	7Eh 71h 43h 0Dh	50 ~ -50
Saturation(Chroma)	[Color]>[Chroma] value query	~qR<CR>	7Eh 71h 52h 0Dh	50 ~ -50

Table of RS232 Command Code

Baud Rate : 9600
 Data Bits : 8
 Parity : None
 Stop Bits : 1
 Flow Control : None

Query Command					
ITEM		232 ASCII code	HEX	Response Message Examples	
Tine(Hue)	[Color]>[Hue] value query	~qN<CR>	7Eh 71h 4Eh 0Dh	50 ~ -50	
SHARPNESS	[Image]>[Sharpness] value query	~qH<CR>	7Eh 71h 48h 0Dh	50 ~ -50	
Scaling(Aspect Ratio)	[View]>[Select AspectRatio] status query	~qA<CR>	7Eh 71h 41h 0Dh	Auto / Direct / Wide / Zoom / Real	
Color Temperature	[Color]>[Color Temperature] status query	~qT<CR>	7Eh 71h 54h 0Dh	Recommend / High / Low / Middle	
Projection Mode	[Settings]>[Projection Mode] status query	~qJ<CR>	7Eh 71h 4Ah 0Dh	Standard / Graphics / Presentation / Blackboard / Movie / Custom	
Volume	[Tools]>[Volume] value query	~qM<CR>	7Eh 71h 4Dh 0Dh	0 ~ 100	
Freeze Status	[Tools]>[Freeze] status query	~qZ<CR>	7Eh 71h 5Ah 0Dh	On / Off	
Mute Status	[Tools]>[Blank/Mute] status query	~qU<CR>	7Eh 71h 55h 0Dh	On / Off	
Error Status	Error Status query	~QE<CR>	7Eh 51h 45h 0Dh	No Error / Lamp hour warn / Lamp hour over / Lamp lit fail / Fan lock / CW stop / Lamp cover open / DAD2000 over temperature	
Lamp Hours (Hexadecimal)	[Admin]>[Lamp Timer] status query (H)	~QU<CR>	7Eh 51h 55h 0Dh	Return 0~ffffff<CR>	
Lamp Hours (Decimal)	[Admin]>[Lamp Timer] status query (D)	~Qu<CR>	7Eh 51h 75h 0Dh	Return 0~999999<CR>	
Eco Mode	[Settings]>[Eco Mode] status query	~qE<CR>	7Eh 71h 45h 0Dh	On / Off	
Status Display	[Settings]>[Status Display] status query	~qY<CR>	7Eh 71h 59h 0Dh	On / Off	
KeyStone	[Settings]>[Keystone] value query	~qW<CR>	7Eh 71h 57h 0Dh	50 / -50	
Gamma Correction	[Color]>[GAMMA Correction] status query	~qG<CR>	7Eh 71h 47h 0Dh	Normal/ Natural/ Real	
STARTUP_SCREEN	[Admin]>[Startup Screen] status query	~qO<CR>	7Eh 71h 4Fh 0Dh	None/ LOGO	
Set Value Command					
ITEM		232 ASCII code	HEX	Data Range	Source
Brightness	[Image]>[Brightness] value set	~sB ?<CR>	7Eh 73h 42h 20h ?h 0Dh	0~100	ALL
Contrast	[Image]>[Contrast] value set	~sC ?<CR>	7Eh 73h 43h 20h ?h 0Dh	0~100	ALL
Saturation(Chroma)	[Color]>[Chroma] value set	~sR ?<CR>	7Eh 73h 52h 20h ?h 0Dh	0~100	Video / S-Video / Component
[Color]>[Hue] value set	[Color]>[Hue] value set	~sN ?<CR>	7Eh 73h 4Eh 20h ?h 0Dh	0~100	Video / S-Video / Component
Scaling(Aspect Ratio)	[View]>[Select AspectRatio] status set	~sA ?<CR>d	7Eh 73h 41h 20h ?h 0Dh	0 : <Auto> 1 : <Direct> 2 : <Wide> 3 : <Zoom> 4 : <Real>	RGB: Auto, Direct, Read Video: Auto, Wide, Zoom
Color Temperature	[Color]>[Color Temperature] status set	~sT ?<CR>	7Eh 73h 54h 20h ?h 0Dh	0:<Recommend> 1 : <High> 2 : <Low> 3 : <Middle>	ALL(Custom Mode On)

Table of RS232 Command Code

Baud Rate : 9600
 Data Bits : 8
 Parity : None
 Stop Bits : 1
 Flow Control : None

Set Value Command					
ITEM		232 ASCII code	HEX	Data Range	Source
Projection Mode	[Settings]>[Projection Mode] status set	~sJ ?<CR>	7Eh 44h 4Ah 20h ?h 0Dh	0 : <Standard> 1 : <Graphics> 2 : <Presentation> 3 : <Blackboard> 4 : <Movie> 5 : <Custom>	RGB: Standard, Graphics, Presentation, Blackboard, Custom Video: Standard, Movie, Blackboard, Custom
SHARPNESS	[Image]>[Sharpness] value set	~sH ?<CR>	7Eh 73h 48h 20h ?h 0Dh	1~31	Video / S-Video
STARTUP_SCREEN	[Admin]>[Startup Screen] status set	~sO ?<CR>	7Eh 73h 4Fh 20h ?h 0Dh	0 : <None> 1 : <LOGO>	ALL
E_NRM_Eco_Mode	[Settings]>[Eco Mode] status set	~sE ?<CR>	7Eh 73h 45h 20h ?h 0Dh	0 : <ON> 1 : <OFF>	ALL
GAMMA_CORRECTION	[Color]>[GAMMA Correction] status set	~sG ?<CR>	7Eh 73h 47h 20h ?h 0Dh	0 : <Normal> 1 : <Natural> 2 : <Real>	ALL(Custom Mode On)

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