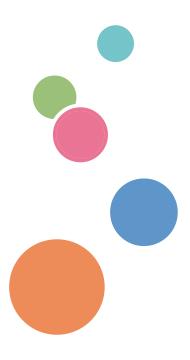


# RICOH PJ X3340N/WX3340N/ X4240N/WX4240N

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# Introduction

### Copyrights to Images

When projecting images using the projector, be careful not to infringe the copyright of protected materials.

The following are examples that may infringe the copyright of protected materials.

- Broadcasting images or movies for commercial purposes
- Modifying images or movies using functions such as freeze, magnify, or zoom to broadcast images for commercial purposes or public viewing
- Varying the aspect ratio of images or movies using a function that changes the screen size to broadcast images for commercial purposes or public viewing

### **Important**

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

# Notes to Users Viewing 3D Images

Pay attention to the following points when viewing images using 3D glasses with the projector:

- You need 3D glasses to view 3D images. The projector uses DLP Link technology to synchronize
  with 3D glasses. You need to use the optional 3D glasses that support DLP Link (RICOH PJ 3D
  Glasses Type 2).
- · How 3D images are viewed may vary according to the individual.
- Do not use 3D glasses for viewing any material other than 3D images.
- Before viewing 3D images, make sure to read the manuals provided with your 3D glasses and 3D compatible content.
- Avoid viewing 3D images for a long period of time. Take a break of 15 minutes or longer after every hour of viewing.
- If you feel sick while viewing 3D images, stop viewing them. If you continue to feel sick, consult a
  doctor.

- When viewing 3D images in a room where an LED lighting system or fluorescent lights are used, you may feel that the light in the room flickers. If this is the case, dim the lights until you do not notice any flickers, or turn off the lights.
- If you or any member of your family has a history of light-sensitive seizures, consult a doctor before viewing 3D images.
- To view 3D images, sit in front of the screen so that your eyes are parallel and level with the screen.
- Viewing 3D images from a place that is too close to the screen may result in eye strain. The distance between the screen and you should be at least three times the height of the screen.
- Adult supervision is required for children using 3D glasses.
- Viewing 3D images is not recommended for children under 6 years old. It may negatively affect development of their vision. Consult a doctor before using 3D glasses.

# Manuals Provided with the Projector

# Manuals for the Projector

Read this manual carefully before you use the projector.

Refer to the manuals that are relevant to what you want to do with the projector.



- The manuals are provided in various formats.
- Adobe<sup>®</sup> Acrobat<sup>®</sup> Reader<sup>®</sup>/Adobe Reader must be installed in order to view the manuals as PDF files.

### Read This First

Provides information about safe usage of the projector.

To avoid injury and prevent damage to the projector, be sure to read the section of this manual entitled Safety Information.

### Start Guide

Provides basic information about how to install the projector and how to project images. Since the contents of this manual are a summary of Operating Instructions, see Operating Instructions for detailed information.

# Operating Instructions

Provide information about how to install the projector, how to project images using the projector, and how to configure the projector. It also provides information about troubleshooting and maintenance.

The CD-ROM includes only the English manual. For other languages, download the latest version from the Web site.



The following software products are referred to using general names:

Product name	General name
RICOH JPEG Conversion Tool Type A	JPEG Conversion Tool

# How to Read This Manual

## **Symbols**

This manual uses the following symbols:



Indicates points to pay attention to when using the projector.



Indicates supplementary explanations of the projector's functions, and instructions on resolving user errors.

[]

Indicates the names of buttons on the control panel and remote control. It also indicates items displayed on the menu screens.

Region A (mainly Europe and Asia)

Region B (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see page 10 "Model-Specific Information".

### **Notes**

Contents of this manual are subject to change without prior notice.

Two kinds of size notation are employed in this manual.

Some illustrations in this manual might be slightly different from the machine.

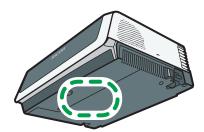
Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

# **Model-Specific Information**

This section explains how you can identify the region your projector belongs to.

There is a label on the bottom of the projector, located in the position shown below. The label contains details that identify the region your projector belongs to. Read the label.



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The following information is region-specific. Read the information under the symbol that corresponds to the region of your projector.

Region A (mainly Europe and Asia)

If the label contains the following, your projector is a region A model:

- CODE XXXX -27
- Region B (mainly North America)

If the label contains the following, your projector is a region B model:

• CODE XXXX -17



 Dimensions in this manual are given in two units of measure: metric and inch. If your projector is a Region A model, refer to the metric units. If your projector is a Region B model, refer to the inch units.

# 1. Preparations for Using the Projector

This chapter explains the names and functions of the different parts of the projector and remote control, and how to use them. It also explains how to position the projector and how to connect it to other equipment.

# **Main Functions**

The projector features the following functions that you can use.

### Auto eco function

The projector switches the lamp power automatically by detecting the brightness of the projecting location and image signals. This function is useful for energy saving.

### Quick on

The projector starts projection automatically if the image signals are input even while in standby.

### Auto keystone function

The projector automatically adjusts the shape of the projected image according to the angle at which the projector is positioned.

### Automatic focus function (RICOH PJ X3340N/WX3340N only)

The projector automatically adjusts the focus when you turn on the projector and reposition it.

### AV Mute/Freeze

Pressing the [AV Mute] button mutes the sound and blanks the screen. Pressing the [Freeze] button freezes the image temporarily.

### Magnify/Zoom

Pressing the [Magnify] button enlarges the projected image. Pressing the [Zoom] button reduces the projected image.

### Timer function

Pressing the [Timer] button displays the countdown timer on the projection screen. You can check the elapsed time on the projection screen.

### Wall color mode

You can adjust the hue of the image in accordance with the color of the wall on which it is projected.

### Password setting/Key lock

You can specify a password for the projector to limit the people that can use it. The buttons on the control panel can be disabled with the key lock setting to prevent misoperation.

### Administrator authentication

Enable administrator authentication so that only the administrator can change the security settings. This improves the security of the projector because general users cannot change the settings.

### User logo function

The projector can project a registered logo or image when there is no signal or when it is starting up.

### Presentations without a computer

The projector can project JPEG and MPEG files stored on a USB memory device or a digital camera.

It is possible to convert PowerPoint materials to JPEG format using JPEG Conversion Tool and then project them using the projector.

### Mouse remote control (RICOH PJ X3340N/WX3340N/WX4240N only)

You can operate the mouse pointer on a computer by using the remote control provided with the projector.

### **QuickProjection**

QuickProjection is an application that is provided with the projector and is used for connecting the projector and a computer to project images.

# **Checking the Accessories**

The projector is provided with the following accessories. Make sure that everything is included in the package.

If anything is missing or damaged, contact your sales representative or service representative.

Read This First Start Guide	
Remote control AAA battery LRO3	
CD-ROM	
RGB cable	
Power cord	
Warranty card	
Mouse remote control receiver (RICOH PJ X3340N/WX3340N/WX4240N only)	
Carrying bag (RICOH PJ X3340N/WX3340N only)	

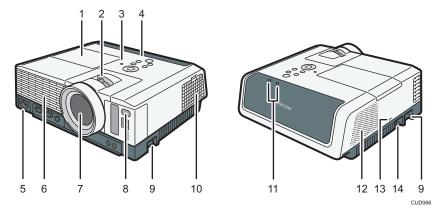


- The bundled accessories may vary depending on the location that this product was purchased.
- Use only the RGB cable and power cord provided with the projector.
- The various applications are on the provided CD-ROM. For instructions about using the
  applications, see page 56 "How to Use JPEG Conversion Tool", page 68 "How to Use
  QuickProjection", and page 133 "Managing the Projector Using Projector Management Utility".

# **Projector Parts and Their Functions**

### **Exterior**

The illustrations below depict the RICOH PJ X3340N/WX3340N.



### 1. Lamp cover

Remove to replace the lamp.

### 2. Zoom lever/Focus lever

- Zoom lever (RICOH PJ X3340N/WX3340N)
   Adjusts the size of the projected image.
- Focus lever (RICOH PJ X4240N/WX4240N)
   Adjusts the focus of the projected image.

### 3. Illuminance sensor

Measures the brightness of the projecting location.

### 4. Control panel

See page 17 "Control Panel".

### 5. AC In socket

For connecting the power cord set provided with the projector.

#### 6. Exhaust vents

Releases hot air from inside the projector.

### 7. Lens

Enlarges and projects the image (light).

### 8. Remote control receiver

Receives the signal from the remote control.

### 9. Adjustable feet

Adjusts the angle of the projection. Adjustable feet are located on the left and right sides on the projector.

#### 10. Intake vents

For circulating air from the outside to cool the projector.

### 11. LED indicators

You can confirm the status of the projector by referring to the LED indicators. The left LED shows the status of the lamp, and the right LED shows the temperature inside the projector. For details, see page 115 "Indicator Display List".

### 12. Speaker

Outputs the audio input from an external device.

### 13. Security slot

For connecting an anti-theft cable.

### 14. Security bar

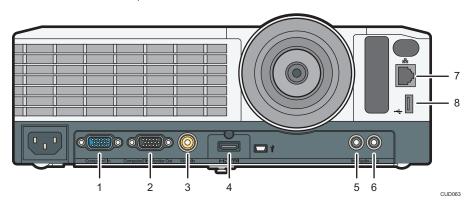
For connecting an anti-theft cable or chain.



The top of the projector is covered with a protective film when it is shipped. Remove the film before
using the projector.

# Ports on the Projector

The illustrations below depict the RICOH PJ X3340N/WX3340N.



### 1. Computer 1 In port (Y/Pb/Pr)

For inputting RGB signals from a computer or component image signals (Y/Pb/Pr) from a video player.

### 2. Computer2 In/Monitor Out port

For inputting RGB signals, or outputting the image signals input into the "Computer 1 In port" to an external display device. You can switch the purpose of this port in [Computer 2 Terminal] under [Default Settings 1].

### 3. Video In port

For inputting image signals from a video player.

### 4. HDMI port

For inputting HDMI signals from a computer or video player.

### 5. Audio In port

For inputting audio signals from a computer or video player.

### 6. Audio Out port

For outputting audio signals to an external speaker.

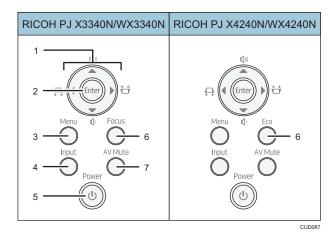
### 7. LAN port

For connecting an Ethernet cable.

### 8. USB port

For connecting a USB memory device or USB device cable.

### **Control Panel**



#### 1. Arrow buttons

Used to operate the menu screen and the value bar. The  $[\P]$  and  $[\P]$  buttons are used to adjust the keystone distortion. The  $[\P]$  and  $[\P]$  buttons are used to adjust the volume.

### 2. [Enter] button

Enters the selected item or mode.

### 3. [Menu] button

Displays the menu screen. Press it again to close the menu screen.

### 4. [Input] button

Switches the signal input. The input signal changes each time the button is pressed.

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### 5. [Power] button

Turns the projector on and off. You can confirm the status of the projector with the indicator.

- On: Power is on.
- Off: Power is off.
- Flashing at 1 or 3 second intervals: Standby.
- Flashing at short intervals: Starting up or cooling.

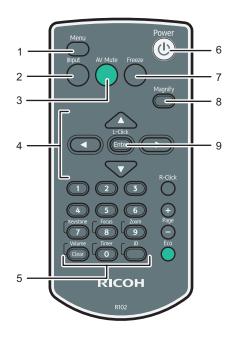
### 6. [Focus] button/[Eco] button

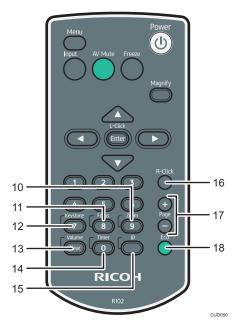
- [Focus] button (RICOH PJ X3340N/WX3340N)
   Adjusts the focus manually. Press it, and then adjust the focus using the [◄] and [▶] buttons.
- [Eco] button (RICOH PJ X4240N/WX4240N)
   Displays the [Energy Saving Settings] screen. On the [Energy Saving Settings] screen, you can specify the energy saving settings for the lamp.

### 7. [AV Mute] button

Temporarily blanks the screen and mutes the audio. The button lights up blue when the projector is muted.

# **Remote Control Parts and Their Functions**





### 1. [Menu] button

Displays the menu screen. Press it again to close the menu screen.

### 2. [Input] button

Switches the signal input. The input signal changes each time the button is pressed.

### 3. [AV Mute] button

Temporarily blanks the screen and mutes the audio. For details, see page 47 "Temporarily Blanking the Image and Muting the Audio".

### 4. Arrow buttons

Used to operate the menu screen and the value bar.

### 5. Number buttons

Used to enter numbers.

### 6. [Power] button

Turns the projector on and off.

### 7. [Freeze] button

Temporarily freezes the image. For details, see page 48 "Freezing the Image".

### 8. [Magnify] button

Displays the magnification ratio bar. Press it, and then specify the magnification ratio using the [◀] and [▶] buttons. For details, page 46 "Enlarging the Image".

### 9. [Enter] button

Enters the selected item or mode.

### 10. [Zoom] button

Displays the digital zoom bar. Press it, and then adjust the size of the projected image using the [◀] and [▶] buttons. For details, see page 42 "Reducing the size of the projected image".

### 11. [Focus] button

RICOH PJ X3340N/WX3340N

Adjusts the focus manually. Press it, and then adjust the focus using the  $[\P]$  and  $[\P]$  buttons. For details, see page 43 "Adjusting the focus of RICOH PJ X3340N/WX3340N".

RICOH PJ X4240N/WX4240N

This button is not used.

### 12. [Keystone] button

Displays the keystone adjustment bar. Press it, and then adjust the keystone distortion using the [◀] and [▶] buttons. For details, page 44 "Adjusting for Keystone Distortion".

### 13. [Volume] button

Displays the volume control bar. Press it, and then adjust the volume of the speaker using the [◀] and [▶] buttons. For details, see page 46 "Adjusting the Volume of the Speaker".

### 14. [Timer] button

Displays the presentation timer. For details, see page 49 "Using the Presentation Timer".

#### 15. [ID] button

Registers the remote control ID. For details, see page 25 "Operating Multiple Projectors with the Remote Control".

### 16. [R-Click] button

RICOH PJ X3340N/WX3340N/WX4240N

Used to operate the computer with the remote control. It is the same as the right-click button on a mouse. This button can be used when the mouse remote control receiver is connected to a computer.

RICOH PJ X4240N

This button is not used.

### 17. [Page] buttons

RICOH PJ X3340N/WX3340N/WX4240N

Changes the image while projecting images from a USB device or a projection server. Press [+] to go to the next page. Press [-] to go to the previous page.

When the mouse remote control receiver is connected to a computer, these buttons can be used to change slides, such as in a PowerPoint presentation.

RICOH PJ X4240N

Changes the image while projecting images from a USB device or a projection server. Press [+] to go to the next page. Press [-] to go to the previous page.

## 18. [Eco] button

Displays the [Energy Saving Settings] screen. On the [Energy Saving Settings] screen, you can specify the energy saving settings for the lamp. For details, see page 48 "Specifying the Lamp Settings".

# How to Use the Remote Control

You can use the remote control to turn the projector on and off, and to change the signal of the image being input and projected. You can also enlarge or reduce the image and mute the audio.

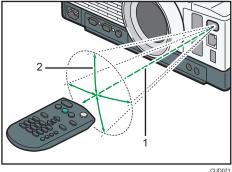
Note the following precautions when using the remote control:

- Do not drop or hit the remote control.
- Do not place the remote control in a place that is very hot or very humid.
- Do not get the remote control wet. Also, do not place it on anything that is wet.
- Do not dismantle the remote control.

# Effective Range of the Remote Control

Point the remote control at the remote control receiver on the projector to use it.

The effective range of the remote control is about 5 meters (16.4 feet) from the receiver and at an angle of about 15 degrees to the remote control receiver on the projector.



CU

- 1. Distance: up to 5 meters (16.4 feet)
- 2. Angle: within 15 degrees



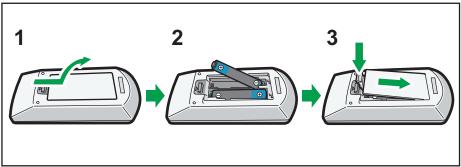
- The remote control may not be effective in some areas and in some conditions. If this happens, point the remote control at the projector and try it again.
- The remote control may not work if the remote control receiver on the projector is exposed to sunlight, fluorescent light, or strong light.
- You can use the remote control from behind the projector by reflecting the signal off of the screen. However, the effective range may change depending on the shape and material of the screen.

П

# Loading Batteries into the Remote Control

# **MARNING**

- For safe operation, follow the warnings below regarding the batteries used in the remote control. If you use the batteries incorrectly, it may result in fire or injury due to batteries leaking or exploding.
  - Do not use batteries other than the ones specified.
  - Do not mix and use batteries that are different types or that are new and old.
  - Correctly insert batteries according to the polarity (+/-).
  - Do not charge non-rechargeable batteries.
  - Do not heat or throw the batteries into fire or water.
  - Do not connect the positive and negative terminals on a battery with a wire.
  - Remove the batteries from the remote control that are past their suggested use period or that are depleted.
  - Remove the batteries when they will not be used for extended periods.
  - Keep the batteries out of the reach of children. Children may swallow or choke on the batteries. If this happens, contact a doctor immediately.



CUD092

- 1. Remove the battery cover from the remote control.
- 2. Insert the batteries.

Note the direction of the positive and negative terminals when inserting the batteries.

3. Close the battery cover.



 Replace the batteries if the remote control does not work or if the effective distance becomes too narrow.

### **Inputting Text**

Use the keyboard that is displayed on screen to input text on the setting screen.

Use the [♠], [▼], [◄], and [▶] buttons on the remote control to select a character on the screen.

The selected character is highlighted in orange.



2. Press the [Enter] button.

The selected character appears in the text area.

- 3. After inputting all the characters, select [OK].
- 4. Press the [Enter] button.

The text is input.



You can also use the number buttons on the remote control to input numbers.

# Operating a Computer with the Remote Control

You can operate a computer using the projector's remote control. This function can be used when the mouse remote control receiver is connected to a computer.

This function is available with RICOH PJ X3340N/WX3340N/WX4240N.

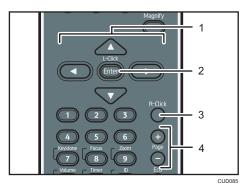
A computer with a USB port that supports USB 2.0 can be used. Supported operating systems are Windows XP, Vista, and 7.



- Connect the mouse remote control receiver to a computer only when operating the computer with
  the remote control. When operating the projector with the remote control while the mouse remote
  control receiver is connected to the computer, the pointer on the computer screen also moves
  according to the key operations of the remote control.
- 1. Connect the mouse remote control receiver to the computer.

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### 2. Point the remote control at the mouse remote control receiver and press the buttons.



#### 1. Arrow buttons

Moves the mouse pointer. Press the button that corresponds to the direction you want to move the pointer.

### 2. [Enter] button

Left clicks.

### 3. [R-Click] button

Right clicks.

### 4. [Page] buttons

The [+] and [-] buttons change the pages in a PowerPoint presentation.



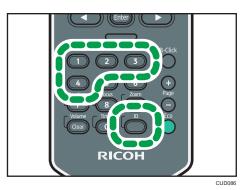
- Some computers cannot be operated using the projector's remote control.
- The remote control may not work if the mouse remote control receiver is exposed to sunlight, fluorescent light, or strong light. If this happens, change the position or orientation of the mouse remote control receiver.
- To drag-and-drop, hold down the [Enter] button while moving the pointer with the arrow buttons, and then release the button at the targeted location.

## **Operating Multiple Projectors with the Remote Control**

You can operate multiple projectors with a single remote control. It is possible to operate a maximum of four projectors.

You need to specify an ID number to assign to each projector in [Remote Control ID] under [Default Settings 2] in advance.

1. Press and hold the [ID] button and then press a number button from 1 to 4 for at least three seconds.



The ID number assigned to the remote control is changed to the number you pressed.

2. Operate the projector.



- The remote control cannot operate a projector unless the ID on the remote control is the same as the controller ID specified in [Default Settings 2].
- The ID number specified in the remote control is effective until a different ID number is specified.
- The ID number in the remote control must be specified again if the batteries are changed.

# Positioning the Projector

When positioning the projector, place it so that the projector's lens faces the screen. Make sure the projector and the screen are parallel to each other.

Adjust the distance between the projector and the screen according to the size of the projected image. For details, see page 28 "Relationship Between the Projection Distance and the Screen Size".

## **Projection Mode**

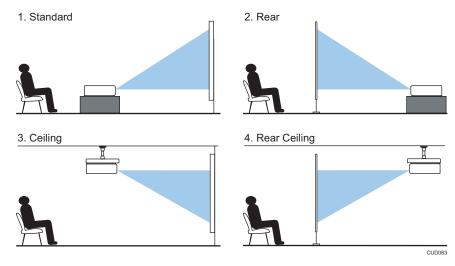


## **⚠ WARNING**

- If a projector is incorrectly installed on a wall or ceiling, it may fall down and cause an injury. Contact your sales or service representative if you want to install a projector on a wall or ceiling.
  - Use brackets that are strong enough to support the projector. The projector weighs about 3.1 kg (6.9 lb.).
  - The projector must be installed in a location that is sturdy enough to support the full weight of the projector and brackets.

You can position the projector in one of four ways.

Select the setting according to the position of the projector in [Projection Mode] under [Default Settings 2]. For details, see page 95 "Default Settings 2 Menu".



### 1. Standard

The projector is placed in front of a screen onto which the images are projected.

### 2. Rear

The projector is placed behind a screen onto which the images are projected.

### 3. Ceiling

The projector is mounted on the ceiling in front of a screen onto which the images are projected.

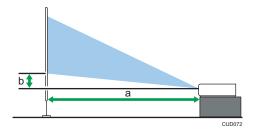
### 4. Rear Ceiling

The projector is mounted on the ceiling behind a screen onto which the images are projected.

# Relationship Between the Projection Distance and the Screen Size

The size of the projected image varies according to the distance from the projector to the screen.

Refer to the following tables to position the projector in a suitable position. The projection sizes presented in tables are for a full size image without keystone adjustment. The projection distance becomes shortest when the zoom lever is at the end of the wide side, and longest when the zoom lever is at the end of the tele side.



### **RICOH PJ X3340N**

Projection size	a Projection distance		b Projection height
	Shortest	Longest	
30 inches	0.68 m (2.22 feet)	1.05 m (3.45 feet)	4 cm (1 inch)
40 inches	0.92 m (3.02 feet)	1.41 m (4.64 feet)	5 cm (2 inches)
60 inches	1.40 m (4.58 feet)	2.13 m (6.99 feet)	7 cm (3 inches)
80 inches	1.87 m (6.12 feet)	2.86 m (9.38 feet)	10 cm (4 inches)
100 inches	2.34 m (7.68 feet)	3.58 m (11.75feet)	12 cm (5 inches)
120 inches	2.82 m (9.24 feet)	4.31 m (14.12 feet)	14 cm (6 inches)
150 inches	3.54 m (11.60 feet)	5.39 m (17.67 feet)	18 cm (7 inches)
200 inches	4.73 m (15.50 feet)	7.20 m (23.61 feet)	24 cm (9 inches)

### **RICOH PJ WX3340N**

Projection size	a Projection distance		b
	Shortest	Longest	Projection height
40 inches	0.77 m (2.53 feet)	1.20 m (3.94 feet)	3 cm (1 inch)
60 inches	1.18 m (3.87 feet)	1.80 m (5.92 feet)	5 cm (2 inches)
80 inches	1.58 m (5.18 feet)	2.42 m (7.92 feet)	6 cm (2 inches)
100 inches	1.98 m (6.50 feet)	3.03 m (9.94 feet)	8 cm (3 inches)
120 inches	2.39 m (7.84 feet)	3.65 m (11.98 feet)	9 cm (4 inches)
150 inches	2.99 m (9.81 feet)	4.57 m (14.98 feet)	11 cm (4 inches)
200 inches	4.00 m (13.12 feet)	6.10 m (20.01 feet)	15 cm (6 inches)
240 inches	4.81 m (15.79 feet)	7.33 m (24.06 feet)	18 cm (7 inches)

## **RICOH PJ X4240N**

Projection size	a Projection distance	b Projection height
50 inches	0.59 m (1.94 feet)	6 cm (2 inches)
60 inches	0.72 m (2.36 feet)	7 cm (3 inches)
70 inches	0.85 m (2.78 feet)	8 cm (3 inches)
80 inches	0.97 m (3.20 feet)	10 cm (4 inches)
90 inches	1.10 m (3.62 feet)	11 cm (4 inches)
100 inches	1.23 m (4.04 feet)	12 cm (5 inches)
110 inches	1.36 m (4.46 feet)	13 cm (5 inches)
120 inches	1.49 m (4.88 feet)	14 cm (6 inches)

Projection size	a Projection distance	b Projection height
60 inches	0.61 m (2.00 feet)	5 cm (2 inches)
70 inches	0.72 m (2.35 feet)	5 cm (2 inches)
80 inches	0.83 m (2.71 feet)	6 cm (2 inches)
90 inches	0.94 m (3.07 feet)	7 cm (3 inches)
100 inches	1.04 m (3.43 feet)	8 cm (3 inches)
110 inches	1.15 m (3.78 feet)	8 cm (3 inches)
120 inches	1.26 m (4.14 feet)	9 cm (4 inches)
140 inches	1.48 m (4.85 feet)	11 cm (4 inches)

# Connecting Equipment to the Projector

# **ACAUTION**

• Do not place the power cord and connection cable in a way that might cause someone to trip and fall. The product might fall over and cause an injury.

Various equipments can be connected to the projector.

Turn off the power to any equipment before connecting it to the projector. Be sure to read the manual for the applicable equipment before connecting it to the projector.

### Connecting a Computer



Some computers cannot be connected to the projector. Before connecting a computer to the
projector, check the output terminals and signal compatibility.

## Using an RGB cable

Connect an RGB cable to the Computer1 In port of the projector and to the RGB output of a computer. To output audio from the speaker on the projector, connect an audio cable to the Audio In port of the projector and to the audio output of a computer.





- Use the RGB cable provided with the projector.
- You can also use the Computer 2 In/Monitor Out port to input RGB signals if [Computer 2 Terminal] in [Default Settings 1] is specified as [Input].

### Using an HDMI cable

Connect an HDMI cable to the HDMI ports of the projector and the computer.



### Using a DVI-to-HDMI cable

To input a DVI signal to the projector, connect a DVI-to-HDMI cable to the HDMI port of the projector and to the DVI output of a computer. To output audio from the speaker on the projector, connect an audio cable to the Audio In port of the projector and to the audio output of a computer.





You can use a DVI-to-HDMI conversion adapter instead of a DVI-to-HDMI cable.

### Using an Ethernet cable

Connect an Ethernet cable to the Ethernet interface of the projector and to a network device such as a hub. To use the projector via a network, you must specify settings such as the IP address. For details, see page 62 "Connecting the Projector to a Network".





• Use an Ethernet cable that is shielded.

### Using a wireless LAN

The RICOH PJ X3340N/WX3340N/WX4240N are equipped with a wireless connectivity function. To use the projector via a network, you must specify settings such as the IP address. For details, see page 62 "Connecting the Projector to a Network".







# **Connecting AV Equipment**

Use a cable that supports the signal being input when connecting AV equipment.

### Using an HDMI cable

Connect an HDMI cable to the HDMI ports of the projector and the AV equipment.





- Some devices may not operate properly when connected using HDMI.
- Use only an HDMI cable that has the HDMI logo. To input 1080p image signals, use a high-speed HDMI cable. A conventional HDMI cable may not work properly.

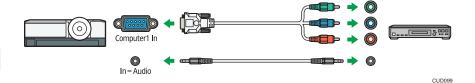
### Using a video cable

Connect a video cable to the Video In port of the projector and to the video output of AV equipment. To output audio from the speaker on the projector, connect an audio cable to the Audio In Port of the projector and to the audio output of AV equipment.



### Using a D-sub to component video cable

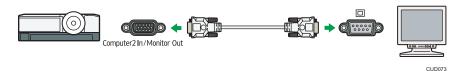
Connect a D-sub to component video cable to the Computer1 In port of the projector and to the Y/Pb/Pr output of the AV equipment. To output audio from the speaker on the projector, connect an audio cable to the Audio In Port of the projector and to the audio output of AV equipment.



### Connecting an External Display Device

You can display the projected image on another display simultaneously by connecting the projector and the external display device. The image signals input into the Computer 1 In port can be displayed on an external display device.

To connect an external display, specify [Computer 2 Terminal] to [Output]. Then connect an RGB cable to the Computer 2 In/Monitor Out port of the projector and the RGB input of an external display device.





- Only the image input from a computer or AV equipment is displayed on the external display
  device. Images generated by the projector, such as menu screens, are not displayed on the
  external display device.
- Use the external display device's settings to adjust its display.

# Connecting an External Speaker

You can output the audio signal to an external speaker. To connect an external speaker, connect an audio cable to the Audio Out port of the projector and the audio input of an external speaker.





- There is no sound output from the projector's speaker when an external speaker is connected.
- You can adjust the sound output from the external speaker by using the [Volume] button.

# 2. Projecting an Image

This chapter explains the procedure for projecting an image.

# **Precautions for Using the Projector**

## **<b>∴** WARNING

• Do not use any power sources other than those that match the specifications shown. Doing so could result in fire or electric shock.

## **WARNING**

• Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.

### **WARNING**

The supplied power cord is for use with this machine only. Do not use it with other appliances.
 Doing so could result in fire or electric shock.

## **MARNING**

 It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

## **<b>MARNING**

• Do not place the power cord and connection cable in front of the lens or exhaust vents when the product is turned on. Doing so may result in fire.

## **MARNING**

Do not look into the lens or vent when the product is on. The bright light may damage your
eyes. Be especially careful in an environment with children.

## **CAUTION**

Do not place low heat resistant material near the exhaust vents. Hot air may come from the
exhaust vents, resulting in damage to the product or an accident.

## **ACAUTION**

Do not place the power cord and connection cable in a way that might cause someone to trip
and fall. The product might fall over and cause an injury.

## **ACAUTION**

Push the power plug all the way into the power outlet. Do not use a power outlet with a loose
connection. Doing so may result in heat buildup. Plug the power cord in the correct direction
into the base. If they are not plugged in correctly, it could result in smoke, fire, or electric shock.

## **CAUTION**

When disconnecting the power cord from the wall outlet, always pull the plug, not the cord.
 Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

### **ACAUTION**

- Do not block the projection light when it is on. If you do so, the part that is blocking the
  projection light may get quite hot and deform, deteriorate or cause a burn or fire. The reflected
  light may make the lens hot and cause a product failure. To temporarily suspend projection,
  select the mute function. To suspend longer, turn off the product.
- Power Source
  - Region A (mainly Europe and Asia)
     RICOH PJ X3340N/WX3340N: 220–240 V, 1.6 A or more, 50/60Hz
     RICOH PJ X4240N/WX4240N: 220–240 V, 1.7 A or more, 50/60Hz
  - Region B (mainly North America)
     RICOH PJ X3340N/WX3340N: 120 V, 3.4 A or more, 60Hz

RICOH PJ X4240N/WX4240N: 120 V, 3.7 A or more, 60Hz

Please be sure to connect the power cord to a power source as above.

## **Basic Operations**

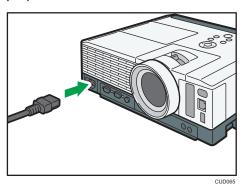
Position the projector squarely in front of the screen and connect the projector and equipment before using the projector. For details, see page 27 "Positioning the Projector" and page 31 "Connecting Equipment to the Projector".



- If [Key Lock] in [Default Settings 2] is specified as [On], you cannot operate the projector from its control panel. Use the remote control.
- If you press a button that is disabled, the projector beeps and an error icon appears on the screen.
- If [Beep] in [Default Settings 1] is specified as [Off], the projector does not beep.

#### **Projecting an Image**

1. Insert the connector of the power cord set into the AC In socket on the lens side of the projector.



2. Insert the power plug into a power outlet.

When [Power On Method] in [Default Settings 2] is specified as [Auto.], the projector turns on in this step. Proceed to Step 4.

3. Press the [Power] button.

#### Power



The projector beeps and the indicator flashes blue.

The start-up screen is displayed.

4. Turn on the equipment that is connected to the projector.

The input signal is detected automatically and the image is projected.

To project the image of a video player, press the play button on the video player.

To project a laptop computer's screen, switch the computer's image output. For details, see page 39 "When projecting the screen of a laptop computer".

5. If the projected image is not the one that you wanted to project, press the [Input] button to switch the input signal.

The input signal changes each time the [Input] button is pressed.



- Do not place anything near the power outlet.
- The password input screen is displayed if a password for the projector is specified in [Startup Password] under [Default Settings 2]. Enter a password.
- Specify the display language and network settings on the start menu the first time you turn on the projector after you purchase it. For details, see page 38 "When the start menu is displayed".
- The start-up screen closes shortly after appearing. You can specify that the start-up screen not appear in [Start-up Screen] under [Default Settings 1].
- In Step 5, the input signal selection screen appears if [Off] is specified for [Auto Input Search] in [Default Settings 1]. Select a signal that is compatible with the equipment that is connected.
- The standby screen for the network input is displayed if the signal is lost or there is no signal being
  input from the connected equipment. Check that the equipment is turned on and that it is properly
  connected to the projector.
- If the projector does not support the input signal, a "Unsupported signal" message is displayed.
- The motion of images in videos projected using the DVD software on a computer may seem unnatural.
- The projector's focus may shift slightly if the temperature in the room changes or during the first 30 minutes after the projector is turned on. Readjust the focus if this happens. The focus is more stable when the temperature is stable.
- The brightness of the image may vary temporarily because the lamp may automatically adjust to maintain its condition.

#### When the start menu is displayed

When the projector is turned on for the first time after it is purchased, specify the display language and network settings.

- 1. Select the display language, and then press the [Enter] button.
- 2. Specify the network settings on the [Network Setting Wizard] screen.

To skip the network settings, select [Cancel]. For details about how to use the [Network Setting Wizard] screen, see page 62 "Connecting the Projector to a Network".



- The display language can also be changed in the menu screen. For details, see page 95 "Default Settings 2 Menu".
- You can also open the [Network Setting Wizard] screen in the menu screen. For details, see page 99 "Network Settings Menu".

#### When projecting the screen of a laptop computer

When connecting a laptop computer to the projector, switch the computer's image output.

In Windows operating systems, the image output can be switched with a function key. While pressing and holding the [Fn] key, press the  $\checkmark$  key, the  $\bigcirc$  key, or the LCD/VGA function key.

#### **Examples of various computers**

Computer brand	Key combination
MSI	[Fn] + [F2]
Everex, Mitsubishi, NEC, Panasonic, Sotec	[Fn] + [F3]
Gateway, HP	[Fn] + [F4]
acer, Sharp, Sotec, Toshiba	[Fn] + [F5]
Hitachi, IBM, lenovo, Sony	[Fn] + [F7]
Asus, Dell, Epson, Hitachi	[Fn] + [F8]
Fujitsu	[Fn] + [F10]



Depending on the computer, the image may not be projected properly if it is displayed on the
computer's LCD display while being projected onto the screen by the projector. If this happens, turn
off the computer's LCD display. For details about switching the display, see the manual provided
with the computer.

## **Turning Off the Projector**



- Unplug the power cord if the projector will not be used for an extended period of time.
- After disconnecting the power cord, wait at least 1 second before connecting the power cord again. Not doing so may result in a malfunction.

1. Press the [Power] button.

#### Power



The confirm screen appears.

2. Press the [Power] button.

The projector beeps and enters the standby mode.

3. Disconnect the power cord.



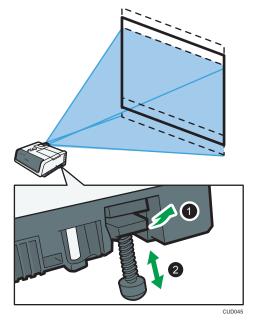
- After turning the lamp off, wait about five minutes for the lamp to cool before turning the lamp on again. The lamp may not light if it is very hot.
- The projector turns off as soon as the power cord is disconnected (direct power off).
- You can specify the settings for saving energy in standby mode in [Energy Saving Settings]. For details, see page 90 "Energy Saving Settings Menu".

# Adjusting the Projected Image

## Adjusting the Angle of the Projection

You can adjust the height of the projected image by using the adjustable feet to change the angle of the projector.

- 1. Lift the lens side of the projector.
- While holding the lever (●), adjust the length of the adjustable feet (●).
   Adjust the height of the right and left adjustable feet so the projector is level.



**U** Note

• The projector automatically adjusts the projected image for keystone distortion according to the projection angle. If [Auto Keystone] in [Display Settings] is specified as [Off], manually adjust for keystone distortion. For details, see page 44 "Adjusting for Keystone Distortion".

## Changing the Size of the Projected Image

If the size of the projected image does not fit the screen, you can change the size of the projected image.

#### Reducing the size of the projected image

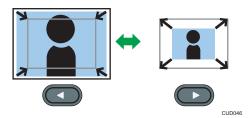
The image can be reduced by 80 to 100% using the digital zoom function.

1. Press the [Zoom] button.



The value bar appears at the bottom of the screen.

2. Adjust the size of the projected image using the [⁴] and [▶] buttons.



Press the [◀] button to reduce the size of the projected image. Press the [▶] button to enlarge the size of the projected image. The image is enlarged until it reaches the original size.



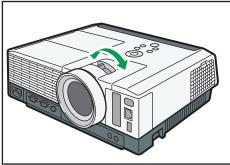
• The image may sometimes be disrupted while it is reduced.

### Enlarging the size of the projected image

The image can be enlarged by 100 to 150% using the optical zoom function.

The optical zoom function is available with RICOH PJ X3340N/WX3340N.

1. Move the zoom lever to adjust the size of the projected image.



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## **Adjusting the Focus**

Adjust the focus of the projected image.

#### Adjusting the focus of RICOH PJ X3340N/WX3340N

The focus is automatically adjusted by the automatic focus function. The automatic focus function works when you turn on the projector, move the zoom lever, and reposition the projector.

The effective range of the automatic focus function is the following:

- RICOH PJ X3340N: 0.92 to 5.39 m (3.02 to 17.67 feet)
- RICOH PJ WX3340N: 0.77 to 4.57 m (2.53 to 14.98 feet)

When projecting an image beyond the effective range of the automatic focus function or the focus is not adjusted for some other reason, adjust the focus manually.

1. Press the [Focus] button.



2. Adjust the focus using the [◀] and [▶] buttons.

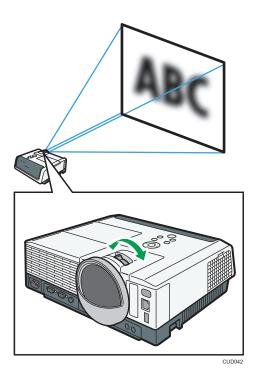


- The automatic focus function may not work correctly for the following types of screens:
  - · Highly reflective screen such as a whiteboard
  - Black matte screen

#### Adjusting the focus of RICOH PJ X4240N/WX4240N

1. Move the focus lever to adjust the focus.

The shape of the projected image changes slightly when the focus lever is moved.



## **Adjusting for Keystone Distortion**

If the projector is placed at an angle, the projected image will be distorted. This is called keystone distortion.

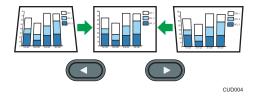
If [Auto Keystone] in [Display Settings] is specified as [Off], manually adjust for keystone distortion.

1. Press the [Keystone] button.



The value bar appears at the bottom of the screen.

2. Adjust the keystone distortion using the [⁴] and [▶] buttons.



Press the  $[\P]$  button to decrease the width of the bottom of the projected image. Press the  $[\P]$  button to decrease the width of the top of the projected image.



- Some data may be lost or the image quality may be degraded depending on the degree of the keystone adjustment and the type of the image.
- You can manually adjust for keystone distortion even if [Auto Keystone] is specified as [On]. However, if you change the angle of the projector, it is automatically adjusted again.
- The keystone adjustment level stays registered even if the projector is turned off. We recommend that you specify [Auto Keystone] to [Off] if the projector and screen are permanently installed.
- You can also adjust the keystone distortion from the control panel on the projector.

# **Operations while Projecting Images**

## Adjusting the Volume of the Speaker



- Do not increase the volume unless you are listening while increasing the volume. Also, lower
  the volume before turning off the power, because a loud sound may be emitted when the
  power is turned on and cause hearing damage.
- 1. Press the [Volume] button.



The value bar appears at the bottom of the screen.

2. Adjust the volume using the [◀] and [▶] buttons.



Press the [◀] button to decrease the volume. Press the [▶] button to increase the volume.



• You can also adjust the volume of the speaker from the control panel on the projector.

## **Enlarging the Image**

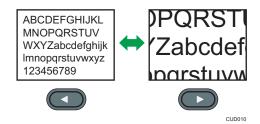
Enlarges and displays a part of the image. The image can be enlarged in a range of 100 to 200%. The enlarged image becomes grainy due to the digital processing.

1. Press the [Magnify] button.



The value bar appears at the bottom of the screen.

2. Adjust the magnification ratio using the [⁴] and [▶] buttons.



Press the [◀] button to decrease the magnification ratio. Press the [▶] button to increase the magnification ratio.

- 3. Press the [Enter] button.
- Move the display position using the [▲], [▼], [◄], and [▶] buttons.



To change the magnification ratio, press the [Enter] button, and then repeat Step 2.

5. To cancel this function, press the [Magnify] button again.



- The Magnify function is canceled automatically if any operation is performed.
- The image may sometimes be disrupted while it is enlarged or while moving the enlarged portion.

## Temporarily Blanking the Image and Muting the Audio

Temporarily blanks the screen and mutes the audio.

This is useful when projecting images from another projector or an OHP.

1. Press the [AV Mute] button.



The image blanks and the audio mutes.

2. To cancel this function, press the [AV Mute] button again.

**U**Note

- An icon appears on the screen when mute is used.
- The mute function is canceled automatically if any button on the control panel is pressed.
- You can also use the [AV Mute] button on the projector's control panel.

#### Freezing the Image

Freezes the video or moving image that is being projected.

1. Press the [Freeze] button.

Freeze

The image freezes.

2. To unfreeze the image, press the [Freeze] button again.



- An icon appears on the screen when freeze is used.
- The Freeze function is canceled automatically if any operation is performed.
- When the [Freeze] button is pressed, the image that is being projected at that time is stored in memory, and that image is projected. Because of this, even though the projector has paused the image, the equipment continues to play the video.

## Specifying the Lamp Settings

Specify the lamp settings to save energy or to make images brighter according to how you use the projector. You can select the following modes in [Eco Mode]:

#### On (Auto)

Select this mode to save energy. In this mode, the following settings are automatically specified:

- Lamp Power: [Auto]
- Lamp Pwr on No Signal: [Eco]
- Image Eco: [On]

#### On (Detailed)

Select this mode to specify [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco] manually.

#### Off

Select this mode to make images brighter. In this mode, the following settings are automatically specified:

- Lamp Power: [Maximum]
- Lamp Pwr on No Signal: [Std.]
- Image Eco: [Off]

For details about [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco], see page 90 "Energy Saving Settings Menu".

1. Press the [Eco] button.



- 2. In [Eco Mode], select [On (Auto)], [On (Detailed)], or [Off].
- 3. If you selected [On (Detailed)] in Step 2, specify [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco] manually.
- 4. Press the [Eco] button.



- You can also change the lamp settings with [Energy Saving Settings]. For details, see page 90
  "Energy Saving Settings Menu".
- The image may flicker, depending on the characteristics of the lamp, when the power is cut by the Eco Mode. If this happens, disable the Eco Mode.

## **Using the Presentation Timer**

Displays the timer on the projection screen. This function is useful for time management when you are giving a presentation.

1. Press the [Timer] button.



2. Specify the time period from 1 to 99 minutes using the number buttons.

You can also use the [▲] and [▼] buttons to specify the time period.

Select [Start (Small Size)] or [Start (Large Size)], and then press the [Enter] button.

You can use two types of timer.

- Small size: A small timer is displayed in the lower right corner of the projection screen.
- Large size: A large timer is displayed in the center of the projection screen.

To stop the countdown, press the [Timer] button.

After the time countdown is finished, a message appears and the projector beeps.



• The projector does not beep if [Beep] in [Default Settings 1] is specified as [Off].

# 3. Projecting Images from a USB Memory Device or Digital Camera

This chapter explains how to project images from a USB memory device or digital camera.

# Requirements for Projecting Images from a USB Device



- It is recommended to back up the data saved to a USB device before using it. The manufacturer is not responsible for any damage due to the loss of data.
- Do not disconnect the power plug while the USB device is being accessed. Doing so may cause malfunction or data loss.
- The USB devices must support USB 2.0.
- The projector supports FAT16 or FAT32 format USB devices. Other forms of USB device are not compatible.

The projector can project still images and videos stored on a USB memory device or a digital camera. The following still images and videos are supported by the projector:

#### Still images

ltem	Requirement
File extensions	jpg, jpeg, JPG, JPEG
File size	Less than 10 MB
Number of pixels	2 × 2 to 5120 × 5120 pixels
File format	Baseline format

#### **Videos**

ltem	Requirement
File extensions	mpg, mpeg, MPG, MPEG, m2ts, m2t, M2TS, M2T, m2p, M2P
File size	Less than 2 GB (FAT16) or 4 GB (FAT32)
Number of pixels	320 × 240 to 1280 × 720 pixels
Video compression format	MPEG2

ltem	Requirement
Audio compression format	MPEG1/2-Audio Layer2, Linear PCM
Container format	MPEG2-PS, MPEG2-TS
Frame rate	Less than 30 fps
Bit rate	Less than 15 Mbps (recommended)

## **U** Note

- The maximum number of files that can be displayed in the list is 512 per folder.
- Characters that can be used for file names and folder names are single-byte letters and numbers
  and characters used in the language specified in [Language] under [Default Settings 2]. If
  characters for languages other than the language specified are used, the file name or folder name
  will not be displayed properly.
- If the total number of characters in the file name and the path exceeds 255, the file cannot appear on the list.
- Data in a folder that is stored six levels or more into a hierarchy cannot be accessed.
- Depending on the file type, the projector may not be able to project the image.
- The projector may not be able to project a file whose compression ratio is low.
- Depending on the type of USB memory device, it may not be usable with the projector. USB memory devices with passwords cannot be used.
- For information about which digital cameras can be used with the projector, contact your sales representative or service representative.

# How to Project Images from USB Memory Device

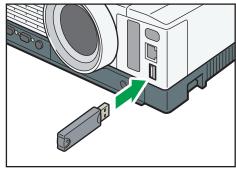
## Connecting the USB Device

Connect the USB memory device or digital camera to the projector.

The USB device can be connected even if the projector is already on.

1. Connect the USB device to the USB port on the projector.

Check the port orientation before connecting.



CUD07



- If the projector does not recognize the USB device when it is connected, disconnect and reconnect the USB device.
- The provided mouse remote control receiver, and commercially available mouse controllers and USB hubs cannot be connected.
- If [Auto Start Slideshow] in [USB Settings] is specified as [On], the slide show starts automatically with the files in the root directory as soon as the USB device is connected.

## Projecting Images from a USB Memory Device

Connect the USB memory device or digital camera to the projector. For details, see page 53 "Connecting the USB Device".

1. Press the [Input] button to switch the input signal to [USB Memory].



The files within the root directory are displayed.





- When a file is selected
   If you select a JPEG file, its image is projected. If you select an MPEG file, the video plays.
- When [Slideshow] is selected
   A slide show starts with the files in the current folder.
- When a folder is selected
   The file list within the folder is displayed. Repeat Step 2 until the file you want to project is displayed.



- You can also control the projected images using the control panel on the projector.
- Images are displayed in the numerical and alphabetical order of their file name headers.
- You can specify the slide show switching interval for still images in [Display Interval (sec.)] under [USB Settings].
- If a video file is in a folder that has been selected for a slide show, the entire video plays. When the video finishes, the next file is displayed.
- You can switch the display format of the file list. Select [To Thumbnail] to switch to thumbnail display, or select [To List Display] to switch to file name list display.

## Controlling the Projected Image

Use the remote control to control a projected still image or video.

#### How to control a still image

- [Enter] button: Starts the slide show from the projected image. Stops the slide show that is in progress.
- [\*] button: Displays the next image.
- [4] button: Displays the previous image.

- [A] button: Rotates the image 90° to the right.
- [▼] button: Rotates the image 90° to the left.
- [Menu] button: Returns to the [USB File Projection] screen.

#### How to control a video

- [Enter] button: Pauses or restarts the video.
- [ button: Fast forwards the video. If a video is paused, displays the next image.
- [4] button: Rewinds the video. If a video is paused, displays the previous image.
- [A] button: Increases the volume.
- [▼] button: Decreases the volume.
- [Menu] button: Returns to the [USB File Projection] screen.



- You can also control the projected videos from the control panel on the projector.
- The rewind and fast forward speed increases three levels each time the button is pressed. To reduce the speed to its original, press the [Enter] button.
- If any operation except for volume adjustment is performed during the slide show, the slide show stops.

## Disconnecting the USB Device

1. Press the [Menu] button if an image is projected.

The [USB File Projection] screen is displayed.

2. Select [Remove USB Mem.] on the [USB File Projection] screen.

The confirmation screen is displayed.

- 3. Select [OK].
- 4. Disconnect the USB device.



• A USB device can be disconnected by selecting [Remove USB Mem.] in [USB Settings].

# Converting Presentation Files to JPEG Files Using JPEG Conversion Tool

Microsoft PowerPoint presentation files can be converted to JPEG files, which are compatible with the projector.

You can do presentations without a computer if you save converted JPEG files to a USB memory device and then display the slides using the projector.

The converted files can also be transferred to a server.

#### How to Use JPEG Conversion Tool

JPEG Conversion Tool is included on the supplied CD-ROM.

JPEG Conversion Tool operating environment is described below.

- Supported operating system
  - Windows XP Professional, Home Edition, SP3 or later (32-bit version)
  - Windows XP Professional x64 Edition SP2 or later (64-bit version)
  - Windows Vista Ultimate, Business, Home Premium, Home Basic, SP2 or later (32-bit and 64-bit versions)
  - Windows 7 Home Premium, Professional, Ultimate, Enterprise (32-bit and 64-bit versions)
  - Windows 8, Pro, Enterprise (32-bit and 64-bit versions)
- Memory size

Recommended memory size for the operating system of the computer you are using

- 1. Insert the CD-ROM in the CD-ROM drive of your computer.
- 2. Specify a language.

The launcher screen appears.

- 3. Click [JPEG Conversion Tool Type A].
- 4. Specify a destination to save the application.

The "RICOH JPEG Conversion Tool Type A" folder is copied to the computer.

- 5. To create a shortcut icon on the desktop, click [OK].
- 6. Close the screen.

To start JPEG Conversion Tool, double-click the shortcut icon on the desktop or "RICOH JPEG Conversion Tool TypeA.exe" in the folder.



- You can also use JPEG Conversion Tool by dragging and dropping the "RICOH JPEG Conversion Tool Type A" folder that is on the provided CD-ROM to the computer. JPEG Conversion Tool is copied to the computer.
- To delete JPEG Conversion Tool, delete the JPEG Conversion Tool folder that was copied to the computer.

## Converting Presentation Files to JPEG Files

1. Double-click the "JPEG Conversion Tool" icon.

JPEG Conversion Tool starts.

Drag and drop the PowerPoint file to be converted into the "JPEG Conversion Tool" dialog box.

To manually specify the file, enter the file name in [File Location:].

- 3. Select the resolution of the converted file in the [Resolution] drop-down list.
- 4. To maintain the aspect ratio of the original file, select [Maintain Aspect Ratio of Conversion Source Image].
- 5. Specify the destination to which you want to save the converted file.

To save to a computer, select [Local PC], and then specify where to save the file.

To save to a server, select [Server], and then select the server to which you want to save the file.

- 6. Click [Convert&Save].
- 7. Click [OK].



- To convert PowerPoint files, Microsoft PowerPoint 2003, 2007, 2010, or 2013 must be installed on the computer to you are using.
- JPEG Conversion Tool is compatible with still images that have a ".ppt" or ".pptx" extension. Animations and audio are not compatible.
- To convert PowerPoint files with the ".pptx" extension, Microsoft PowerPoint 2007 or later must be installed on the computer you are using.
- The number of JPEG files created is equivalent to the number of slides. The file name after conversion is "slide + File Number + .jpg".
- For the settings method when saving converted files to the server, refer to the JPEG Conversion Tool Help.

# 4. Using the Projector via a Network

This chapter explains the settings for using the projector via a network. This chapter also explains the operations that use QuickProjection.

## **Before Connecting to a Network**

The supported network interface differs depending on the model.

	Wired LAN	Wireless LAN
RICOH PJ X3340N	Supported	Supported
RICOH PJ WX3340N	Supported	Supported
RICOH PJ X4240N	Supported	Not supported
RICOH PJ WX4240N	Supported	Supported

The projector does not support the Windows Vista and Windows 7 Network Projector function. Use QuickProjection, which is the application provided with the projector for projecting images via a network. For details about QuickProjection, see page 68 "Projecting a Computer's Screen via a Network".

## Connecting an Ethernet Cable

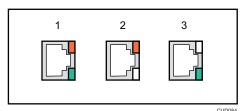
## **ACAUTION**

Do not place the power cord and connection cable in a way that might cause someone to trip
and fall. The product might fall over and cause an injury.

The projector is compatible with 10BASE-T, 100BASE-TX, and 1000BASE-T Ethernet interfaces.

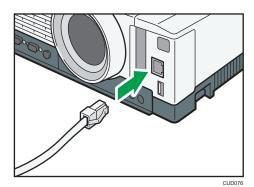
#### Status of the network connection

You can confirm the status of the network connection by the patterns in which the LEDs on the Ethernet interface light up. If the projector is not connected to a network, no LEDs light up.



1. When 1000BASE-T is active (orange and green LEDs light up)

- 2. When 100BASE-TX is active (orange LED lights up)
- 3. When 10BASE-T is active (green LED lights up)
- 1. Insert the Ethernet cable into the Ethernet interface.



Connect the other end of the Ethernet cable to a network device such as a hub.



Use an Ethernet cable that is shielded.

### Precautions for Using a Wireless LAN



#### **⚠ WARNING**

 Do not use a wireless LAN if there is electromagnetic interference from other equipment. Doing so may cause an accident due to the other equipment malfunctioning from the electromagnetic interference.

Wireless uses radio waves to exchange information instead of an Ethernet cable. The wireless LAN radio waves pass through barriers such as walls within a fixed area, so the following problems may occur:

#### Leak of Personal Information

 Information such as IDs, passwords, credit card numbers, and the contents of e-mails, etc., may be stolen by a third party.

#### Illegal Access to the Network

- Data and systems may be corrupted or manipulated by a virus.
- An imposter may access information illegally.
- Confidential information may be accessed illegally.

To minimize the possibility of these problems occurring, it is recommended to check the functions built into the wireless LAN devices, such as the projector and wireless LAN access points, and to specify security settings.



- If the wireless network reception is poor, the connection may be interrupted or disabled. If the wireless reception of the projector and access points is poor, try the following:
  - Move the projector and access points closer to each other.
  - Make sure there is a clear line of sight between the access point and the projector.
  - Make sure the access point and projector are close to each other, and move devices that emit radio signals such as microwave ovens further away.
- The projector supports 40 MHz channels only in the 5 GHz band.

## Connecting the Projector to a Network

To connect the projector to a network, you must specify network settings such as an IP address. The required settings differ depending on the network environment and how you use the projector.

You can configure the required settings easily by using the network setting wizard.

#### To connect to a wired LAN

Connect an Ethernet cable to the projector, and then configure the network settings in [Wired LAN] on the [Network Setting Wizard] screen. For details about how to configure the wired LAN network settings, see page 63 "Configuring the Wired LAN Settings".

#### To connect to a wireless LAN in infrastructure mode

In infrastructure mode, the projector can communicate with networks in which both wireless and wired LAN devices are connected via a wireless LAN access terminal. It is necessary to user greater security since all communication is via a network. Use infrastructure mode in environments in which a wireless LAN has already been configured.

Configure the network settings in [Wireless LAN (Infrastructure)] on the [Network Setting Wizard] screen. The setting method differs depending on the network environment.

- Configuring the settings by Simple Wireless LAN Setup If the access point is compliant with the simple wireless LAN setup function, you can configure the network settings easily. This function acquires the wireless LAN settings registered in the access point, and configures those settings for the projector automatically. You can configure the settings without entering the SSID and the network key manually. For details, see page 64 "Configuring the settings by Simple Wireless LAN Setup".
- · Configuring the settings manually

You can configure the network settings by selecting the network to connect to from the available network list. Up to 10 networks are displayed in the list in radio field intensity order.

If you want to connect to a network that is not displayed in the list or is not broadcasting its SSID, enter the SSID manually. For details, see page 65 "Configuring the settings manually".

#### To connect to a wireless LAN in ad hoc mode

In ad hoc mode, the projector can communicate with the computer directly, and not via an access point. No other equipment is required, so this mode is suited for locations that have no network environment. As the radio wave range is limited, use an office or conference room with a good line of sight.

Configure the network settings in [Wireless LAN (Adhoc)] on the [Network Setting Wizard] screen. For details about how to configure the network settings for a wireless LAN in ad hoc mode, see page 67 "Configuring the Wireless LAN Settings for Ad Hoc Mode".

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## Opening the [Network Setting Wizard] Screen

You can open the [Network Setting Wizard] screen on the menu screen.

- 1. Press the [Menu] button.
- 2. Select the [Network/USB Settings] menu.
- 3. Select [Network Settings].
- 4. Select [Setup Wizard].
- 5. Select [Network Setting Wizard].

The [Network Setting Wizard] screen appears. RICOH PJ X3340N/WX3340N/WX4240N



#### RICOH PJ X4240N



## **Configuring the Wired LAN Settings**

Connect an Ethernet cable to the projector before configuring the settings.

Contact your network administrator for the information required for configuring network settings.

Select [Wired LAN] on the [Network Setting Wizard] screen.
 RICOH PJ X3340N/WX3340N/WX4240N



#### RICOH PJ X4240N



Select [Disable DHCP (Manual Settings)] or [Enable DHCP (Auto Settings)].
 If you select [Enable DHCP (Auto Settings)], proceed to Step 6.

- 3. Specify the projector's IP address.
- 4. Specify the subnet mask.
- 5. Specify the default gateway.
- 6. Select [OK] on the confirmation screen.

To project the image from a computer, see page 68 "Projecting a Computer's Screen via a Network".

## Configuring the Wireless LAN Settings for Infrastructure Mode

#### Configuring the settings by Simple Wireless LAN Setup

The projector supports the following simple wireless LAN setup method. Contact your network administrator for the available simple wireless LAN setup method in your network environment and the information required for configuring network settings.

#### Setup Method

Using push buttons

Press the projector and access point keys or buttons to get them to connect to each other and register the settings.

- Enter the access point's PIN code in the projector
  - Enter the PIN code that was generated by the access point in the projector to get them to connect to each other and register the settings. The access point's PIN code must be registered in the PIN code field of the projector.
- Select [Wireless LAN (Infrastructure)] on the [Network Setting Wizard] screen.



- 2. Select [Perform Simple Wireless LAN Setup].
- 3. Select either [Connect by PIN] or [Connect by Push].
- 4. If [Connect by PIN] is selected, enter the PIN code generated by the access point in the projector, and then proceed to Step 6.

You must preconfigure the access point's simple wireless LAN setup function.

- 5. If [Connect by Push] is selected, press the access point push button.
- Select [Disable DHCP (Manual Settings)] or [Enable DHCP (Auto Settings)].
   If you select [Enable DHCP (Auto Settings)], proceed to Step 10.
- 7. Specify the projector's IP address.
- 8. Specify the subnet mask.
- 9. Specify the default gateway.
- 10. Select [OK] on the confirmation screen.

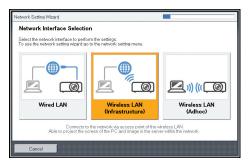
The wireless LAN setup is complete.

To project the image from a computer, see page 68 "Projecting a Computer's Screen via a Network".

#### Configuring the settings manually

Contact your network administrator for the information required for configuring network settings, such as the SSID and the network key.

1. Select [Wireless LAN (Infrastructure)] on the [Network Setting Wizard] screen.



The list of wireless LAN networks that can be connected is displayed.

2. Select a wireless LAN network or [Manually Enter SSID].



- 3. If you select [Manually Enter SSID] in Step 2, enter the SSID.
- 4. Enter the network key.

When connecting to a network for which a network key is not set, the network key input screen is not displayed. Proceed to Step 5.

5. Select [Disable DHCP (Manual Settings)] or [Enable DHCP (Auto Settings)].

If you select [Enable DHCP (Auto Settings)], proceed to Step 9.

- 6. Specify the projector's IP address.
- 7. Specify the subnet mask.
- 8. Specify the default gateway.
- 9. Select [OK] on the confirmation screen.

To project the image from a computer, see page 68 "Projecting a Computer's Screen via a Network".

## Configuring the Wireless LAN Settings for Ad Hoc Mode

1. Select [Wireless LAN (Adhoc)] on the [Network Setting Wizard] screen.



The network settings are configured automatically.

2. Select [OK] on the confirmation screen.

To project the image from a computer, see page 68 "Projecting a Computer's Screen via a Network".

# Projecting a Computer's Screen via a Network

To project images via a network, use QuickProjection. You can project a live image of your computer's screen.

### How to Use QuickProjection

QuickProjection is included on the supplied CD-ROM.

QuickProjection operating environment is described below.

- Supported operating system
  - Windows XP Professional, Home Edition, SP3 or later (32-bit version)
  - Windows Vista Ultimate, Business, Home Premium, Home Basic, SP2 or later (32-bit and 64-bit versions)
  - Windows 7 Home Premium, Professional, Ultimate, Enterprise (32-bit and 64-bit versions)
  - Windows 8, Pro, Enterprise (32-bit and 64-bit versions)
- Memory size

Recommended memory size for the operating system of the computer you are using

- 1. Insert the CD-ROM in the CD-ROM drive of your computer.
- 2. Specify a language.

The launcher screen appears.

- 3. Click [QuickProjection].
- 4. Specify a destination to save the application.

The "QuickProjection.exe" is copied to the computer.

- 5. To create a shortcut icon on the desktop, click [OK].
- 6. Close the screen.

To start QuickProjection, double-click the shortcut icon on the desktop or "QuickProjection.exe".



- You can download the latest Windows or Mac OS version of QuickProjection from our Web site.
   Access the URL displayed on the standby screen for [Network PC] input.
- You can also use QuickProjection by dragging and dropping the "QuickProjection.exe" that is on the provided CD-ROM into the computer or a USB memory device.
- To delete QuickProjection, delete "QuickProjection.exe" and the "QuickProjection" folder in "%appdata%\RICOH". For details about how to delete Quick Projection, see QuickProjection Help.

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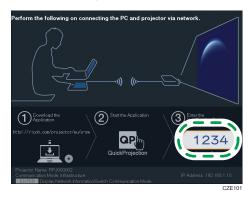
## **Projecting Images Using QuickProjection**

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- To project images by ad hoc wireless communication, log in to the computer with administrator privileges.
- Depending on the settings of the computer, the password input screen is displayed when you start QuickProjection. Enter an administrator's password.

Before projecting images using QuickProjection, connect the projector to a network. For details about how to connect the projector to a network, see page 62 "Connecting the Projector to a Network".

- 1. Turn the projector on.
- Press the [Input] button to switch the input signal to [Network PC].
   The standby screen for [Network PC] input appears.
- 3. Check the 4-digit number (identification code) on the projection screen.



- 4. Double-click the "QuickProjection" icon on the computer.
- 5. Enter the identification code on the QuickProjection dialog.
  The projector's name or IP address can also be entered instead of the identification code.
- Click [Projection].The computer screen is projected.



- To close QuickProjection, click [X].
- For detailed QuickProjection operating methods, refer to the QuickProjection Help.
- If the display resolution of the computer screen and the projector matches, the image quality is better. We recommend setting the resolution of the computer screen to the following:
  - RICOH PJ X3340N/X4240N: 1024 × 768
  - RICOH PJ WX3340N/WX4240N: 1280 × 800

# **Using the Server Function**

The projector can access the projection server and the DLNA-compatible devices via a network to project files stored on them. The projector can project still images by using its server function. The projector can also project videos stored on DLNA-compatible devices if DLNA certification mode is disabled. The supported file types for the projection server and the DLNA-compatible devices are shown below:

#### Still images (Projection server/DLNA-compatible devices)

Item	Requirement
File extensions	jpg, jpeg, JPG, JPEG
File size	Less than 10 MB
Number of pixels	2 × 2 to 5120 × 5120 pixels
File format	Baseline format

#### Videos (DLNA-compatible devices)

ltem	Requirement
File extensions	mpg, mpeg, MPG, MPEG, m2ts, m2t, M2TS, M2T, m2p, M2P
Number of pixels	320 × 240 to 1280 × 720 pixels
Video compression format	MPEG2
Audio compression format	MPEG1/2-Audio Layer2, Linear PCM
Container format	MPEG2-PS, MPEG2-TS
Frame rate	Less than 30 fps
Bit rate	Less than 15 Mbps (recommended)

To project a file on the server, you must configure the required settings for the projector and the server. For details about the settings for using the projection server function, see page 71 "Using the Projection Server Function". For details about the settings for using the DLNA server function, see page 73 "Using the DLNA Server Function".

## **U** Note

- The supported video file types are compliant with the projector's own specifications. They are not compliant with the DLNA 1.5 guidelines.
- The maximum number of files that can be displayed in the list is 512 per folder.

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- Characters that can be used for file names and folder names are single-byte letters and numbers
  and characters used in the language specified in [Language] under [Default Settings 2]. If
  characters for languages other than the language specified are used, the file name or folder name
  will not be displayed properly.
- If the total number of characters in the file name and the path exceeds 255, the file cannot appear
  on the list.
- Data in a folder that is stored six levels or more into a hierarchy cannot be accessed.

### **Using the Projection Server Function**

The projector accesses the network server to project JPEG files saved on the server.

You do not need to carry a storage device or computer that has the files to be used. Therefore, it is useful to protect information.

Accessing folders on the server can be controlled by registering an access number.

### Configuring the network server

A network server on which IIS (Internet Information Services) is installed can be used as a projection server.

The operating environment of the projection server function is described below:

- Windows Server 2003 R2 Standard (32-bit version) SP2 and IIS 6
   IIS 6 is not provided with a URL rewrite module. Use a URL rewrite module provided by a third party.
- Windows Server 2008 R2 Standard (64-bit version) SP1 and IIS 7
   Install the URL Rewrite Module that can be downloaded from Microsoft Download Center. If the ASP (Active Server Pages) Execution Environment is not available on the network server, install the ASP module.

The following settings are required on the network server that is used as a projection server:

### Creating a virtual directory

Create a directory (virtual directory) that the projector accesses on the network server.

Register the alias name and directory path of the virtual directory by following the wizard instructions. For detailed procedures, see the Microsoft website.

- Alias name
  - An alias name is required when the projector accesses the virtual directory.
  - The settings must be configured in [Projection Server Settings] under [Network Application Settings]. For details, see page 72 "Connecting the projector to the projection server".
- Directory path

This is a path for the directory in which files projected by the projector are stored.

To store files converted by JPEG Conversion Tool on the network server, register the directory path. For details, see JPEG Conversion Tool Help.

If you restrict access to the projection server with an access number, create a folder whose name is the number that you specify as the access number. After this, store the files to be projected in the folder. To project the files stored in the folder, enter the access number when accessing the projection server.

### Storing the folder management file for the projection server

The folder management file for the projection server is stored in the "Projection Server" folder on the supplied CD-ROM. Copy the folder management file to the virtual directory on the network server.

### Registering a URL rewrite rule

Using a URL rewrite module, register a rule to rewrite "original characters" to "rewritten characters":

- Original characters: ^alias name of the virtual directory/(.\*)
- Rewritten characters: /alias name of the virtual directory/name of the folder management file

If you use IIS 7, and if the alias name is "ABC" and the folder management file name is "xyz.asp", the characters become the following:

- Original characters: ^ABC/(.\*)
- Rewritten characters: /ABC/xyz.asp

### Connecting the projector to the projection server

Configure the settings for the projection server in [Projection Server Settings] under [Network Application Settings] beforehand.

Server URL

Enter the projection server URL and the alias name of the virtual directory in the following format:

Projection server URL/alias name/{n}

If the projection server URL is "http://hostname" and the alias name is "document", enter "http://hostname/document".

An IP address can be used as the projection server URL.

If you select [Access No.] in [Access Restriction Type], add " $/{n}$ " at the end of the Server URL.

Specify other settings in [Projection Server Settings], if necessary.



- To use the projection server function, you must specify the network settings in advance. For details, see page 62 "Connecting the Projector to a Network".
- For details about how to change the settings, see page 81 "Using the Menu Screen". For details
  about the setting items, see page 107 "Network Application Settings Menu".

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### **Using the DLNA Server Function**

The projector is compatible with DLNA. DLNA is the guideline for sharing content on a network. Therefore, the projector can access DLNA-compatible devices such as file servers, tablet computers, or smartphones and project JPEG files stored on them.

To access to DLNA-compatible devices from the projector, the projector and the DLNA-compatible devices must be connected to a network. For details about how to connect the projector to a network, see page 62 "Connecting the Projector to a Network".

To project files on the DLNA-compatible device, you must configure the file sharing settings on the device. For details about how to use DLNA-compatible devices, see the manuals provided with the DLNA-compatible devices.



- The projector is certified to DLNA 1.5 guidelines for still images. If [DLNA Certification Mode] in [Network Application Settings] is specified as [Enable], the projector works as a DLNA-certified device and video playback is restricted. If this setting is specified as [Disable], the projector can also project MPEG files.
- Depending on the device used for this function, you may need to install a DLNA application on the
  device.

### Projecting Files that Are Stored on the Server

For basic operations, such as how to turn on the projector or adjust the focus, see page 35 "Projecting an Image".

### **Projecting files**

- 1. Turn the projector on.
- 2. Press the [Input] button to switch the input signal to [Server].



The list of projection servers and DLNA servers is displayed.

3. Select the server that has the files to be projected.

The list of files in the root directory is displayed.

If [Access Restriction Type] in [Network Application Settings] is specified as [Access No.], the access number input screen is displayed after the projection server is selected. Contact your server administrator for your access number.

If [DLNA Certification Mode] in [Network Application Settings] is specified as [Enable], some video files do not appear in the file list. For details, see page 107 "Network Application Settings Menu".

- 4. Select the file, [Slideshow], or folder, and then press the [Enter] button.
  - When a file is selected
     If you select a JPEG file, its image is projected. If you select an MPEG file, the video plays.
  - When [Slideshow] is selected

A slide show starts with the files in the current folder.

When a folder is selected
 The file list within the folder is displayed. Repeat this step until the file you want to project is displayed.



- Images are displayed in the numerical and alphabetical order of their file name headers.
- You can specify the slide show switching interval for still images in [Display Interval (sec.)] in [Server] under [Network Application Settings].
- If a video file is in a folder that has been selected for a slide show, the entire video plays. When the video finishes, the next file is displayed.

### Controlling the projected image

### How to control a still image

- [Enter] button: Starts the slide show from the projected image. Stops the slide show that is in progress.
- [ ] button: Displays the next image.
- [◀] button: Displays the previous image.
- [A] button: Rotates the image 90° to the right.
- [♥] button: Rotates the image 90° to the left.
- [Menu] button: Returns to the file list screen.

### How to control a video

- [Enter] button: Pauses or restarts the video.
- [▶] button: Fast forwards the video. If a video is paused, displays the next image.
- [4] button: Rewinds the video. If a video is paused, displays the previous image.
- [\*] button: Increases the volume.
- [▼] button: Decreases the volume.
- [Menu] button: Returns to the file list screen.



- The rewind and fast forward speed increases three levels each time the button is pressed. To reduce the speed to its original, press the [Enter] button.
- If any operation except for volume adjustment is performed during the slide show, the slide show stops.

# Projecting Images Using DLNA-Compatible Devices

The projector can project still images and videos transmitted from DLNA-compatible devices.



For details about the supported file types for this function, see page 70 "Using the Server Function".

### **Preparation**

To project files transmitted from DLNA-compatible devices, specify the following settings:

- Connect the projector to a network using [Network Settings]
- Select [Enable] in [Remote Projection Control] under [Network Application Settings]

For details, see page 99 "Network Settings Menu" and page 107 "Network Application Settings Menu".

The DLNA-compatible devices also must be connected to a network. For details about how to use DLNA-compatible devices, see the manuals provided with the DLNA-compatible devices.



Depending on the device used for this function, you may need to install a DLNA application on the
device.

### Projecting Images from DLNA-Compatible Devices

For basic operations, such as how to turn on the projector or adjust the focus, see page 35 "Projecting an Image".

The procedure of the DLNA-compatible device described below is an outline of the basic flow. The detailed procedure varies depending on the device and application. For details, see the manuals provided with the device and application.

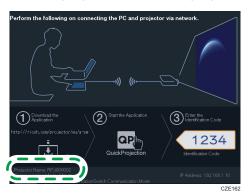
- 1. Turn the projector on.
- 2. Press the [Input] button to switch the input signal to [Network PC].

Input

The standby screen for [Network PC] input appears.

4

3. Check the projector name on the projection screen.



- 4. On the DLNA-compatible device, select the projector name checked in Step 3 as a destination device.
- On the DLNA-compatible device, select the file you want to project.The selected file is projected.

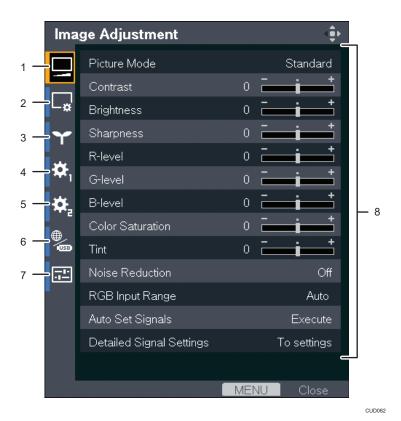


For details about how to control the projected image and quit the projection, see the manuals
provided with the DLNA-compatible devices and applications.

# 5. Changing the Projector Settings

This chapter explains the settings on the menu screen and how to change the settings.

# Viewing the Menu Screen



### 1. Image Adjustment menu tab

Adjusts the settings for the projected image, such as contrast and brightness.

For the Image Adjustment menu settings, see page 84 "Image Adjustment Menu".

### 2. Display Settings menu tab

Specifies the settings for how to display the image, such as auto keystone correction and aspect. For the Display Settings menu settings, see page 87 "Display Settings Menu".

### 3. Energy Saving Settings menu tab

Specifies the settings for energy saving.

For the Energy Saving Settings menu settings, see page 90 "Energy Saving Settings Menu".

### 4. Default Settings 1 menu tab

Specifies the settings for the beep sound, user logo, etc.

For the Default Settings 1 menu settings, see page 93 "Default Settings 1 Menu".

### 5. Default Settings 2 menu tab

Specifies the settings for the display language, startup password, etc.

For the Default Settings 2 menu settings, see page 95 "Default Settings 2 Menu".

### 6. Network/USB Settings menu tab

The Network/USB Settings menu tab includes the USB Settings menu, Network Settings menu, and Network Application Settings menu.

• USB Settings menu

Specify the settings for USB file projection.

For the USB Settings menu settings, see page 97 "USB Settings Menu".

• Network Settings menu

Specify the network settings, such as an IP address.

For the Network Settings menu settings, see page 99 "Network Settings Menu".

• Network Application Settings menu

Specify the settings for PJLink, Projection Server, etc.

For the Network Application Settings menu settings, see page 107 "Network Application Settings Menu".

### 7. Display Status tab

Enables information such as input signals and lamp usage time, etc., to be displayed.

For item that can be displayed, see page 113 "Display Status".

### 8. Settings

The settings and information for each menu can be displayed.

# Using the Menu Screen

1. Press the [Menu] button.



2. Select the menu tab using the [▲] and [▼] buttons.



If you select the Display Status tab, you can confirm the information in this step.

- 3. Press the [▶] button.
- 4. Select the item to be changed using the [▲] and [▼] buttons.
- 5. Press the [Enter] button.

If [To settings] is displayed on the right, the item has a submenu. Select an item on the submenu, and then press the [Enter] button.

If [Execute] is displayed to the right of the item you select, the function is executed in this step.

- 6. Change the settings.
  - Adjusting values using the values bar
     Change the value using the [◄] and [▶] buttons, and then press the [Enter] button.



• Selecting the value from a list

Change the value using the  $[^{\blacktriangle}]$ ,  $[^{\blacktriangledown}]$ , and  $[^{\blacktriangleright}]$  buttons, and then press the [Enter] button.



Inputting numbers

Use the number buttons on the remote control to input numbers.



Inputting text

Use the keyboard that is displayed on screen to input text. You can also use the number buttons on the remote control to input numbers.





- The control panel on the projector can be used for operations, but numbers for settings cannot be inputted.
- A confirmation screen appears before some functions are executed or some settings are changed.
- The Network/USB Settings menu tab includes the USB Settings menu, Network Settings menu, and Network Application Settings menu. Open the menu according to the settings you want to change, and then go to Step 2 to change the settings.
- Changes to the settings are automatically applied when you close the menu screen. You do not need to press the [Enter] button.
- Settings in the Network/USB Settings menu are not applied until you select [Reflect] on the confirmation screen.

# Restoring Settings to Their Default Settings

1. Press the [Menu] button.



2. Select the Default Settings 2 menu tab, and then press the [▶] button.



- 3. Select [Reset All], and then press the [Enter] button.
- 4. Select [OK] in the confirm screen, and then press the [Enter] button.



- The language selection screen and the [Network Setting Wizard] screen appear after [Reset All] is
  executed. Select the display language, and then specify the network settings. If you want to skip the
  network settings, select [Cancel] on the [Network Setting Wizard] screen. For details about the
  [Network Setting Wizard] screen, see page 62 "Connecting the Projector to a Network".
- The following settings cannot be reset with this function:
  - [User Logo] in [Default Settings 1]
     To reset the registered user logo, select [Reset Logo] in [Default Settings 1].
  - [Startup Password] in [Default Settings 2]
  - [Administrator Password] in [Network Application Settings]
     To reset the registered passwords, contact your service representative.

# Image Adjustment Menu

ltem	Default
Picture Mode	Standard
Select the picture mode.	
This function is not available when you select [On] in [3D Projection] under [Display Settings] or [On] in [Interactive Mode] under [Default Settings 1].	
Bright	
This image mode makes it easier to see the projection in bright locations.	
Standard	
This is the standard image mode.	
Natural	
Photos appear more natural in this mode.	
DICOM Sim. Mode	
In this image mode, the images are adjusted to simulate the DICOM format. DICOM is a global standard for storing and transmitting medical images. DICOM is used for computer tomography (CT), magnetic resonance imaging (MRI), and endoscope images. However, this mode only simulates these formats, so the image may be projected differently from the original DICOM format. Use this mode only for education. It should not be used for actual diagnoses.	
Contrast	0
Adjust the image contrast. The greater the value, the stronger the image contrast.	
Brightness	0
Adjust the image brightness. The greater the value, the brighter the image.	
Sharpness	0
Adjust the sharpness of the image. The greater the value, the sharper the image.	
R-level	0
Adjust the level of red in the image. The greater the value, the stronger the color red is in the image.	

ltem	Default
G-level	О
Adjust the level of green in the image. The greater the value, the stronger the color green is in the image.	
B-level	О
Adjust the level of blue in the image. The greater the value, the stronger the color blue is in the image.	
Color Saturation	0
Adjust the color saturation of the image. The greater the value, the richer the image.	
This function is available when you select [Y/Pb/Pr] or [Video] as an input signal.	
Tint	0
Adjust the tint of the image.	
This function is available when you select [Y/Pb/Pr], [HDMI] (Y/Pb/Pr signals), or [Video] as an input signal.	
Noise Reduction	Off
Specify whether or not to use the function to reduce the Y/Pb/Pr (480i/576i) or video signal noise.	
This function is available when you select [Y/Pb/Pr] (480i/576i) or [Video] as an input signal.	
RGB Input Range	Auto
Select the RGB input range.	
This function is available when you select [HDMI] (RGB signals) as an input signal.	
• Auto	
The projector switches RGB input range according to the settings of the connected equipment.	
Standard	
Select this mode when the color black in the image is light.	
• Full	
Select this mode when dark parts in the image are too dark.	

ltem	Default
Auto Set Signals	-
Automatically adjust the items in [Detailed Signal Settings].	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	
Detailed Signal Settings > Phase	0 to 31 <sup>*</sup> 1
Adjust to eliminate image flicker.	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	
Detailed Signal Settings > Frequency	0
Adjust to eliminate moiré patterns and flicker when you project images with thin vertical-stripes.	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	
Detailed Signal Settings > H-position	0
Adjust the horizontal position of the image.	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	
Detailed Signal Settings > V-position	0
Adjust the vertical position of the image.	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	
Detailed Signal Settings > Clamp Pulse 1	0 to 255 <sup>*</sup> 1
Adjust the clamp pulse position.	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	
Detailed Signal Settings > Clamp Pulse 2	0 to 255*1
Adjust the clamp pulse width.	
This function is available when you select [Computer 1] or [Computer 2] as an input signal.	

<sup>\*1</sup> The default of [Phase], [Clamp Pulse 1], and [Clamp Pulse 2] is variable because the projector automatically adjusts these settings according to the input signal.

# **Display Settings Menu**

ltem	Default
Auto Keystone	On
Specify whether or not to implement keystone correction automatically depending on the angle of the projector's position.	
Zoom	100%
Reduce the size of the image if the projected image is larger than the screen. The image can be reduced in a range of 80 to 100% using the digital zoom function.	
Aspect	Normal
Select the aspect ratio of the image.	
This function is not available when you select [USB Memory] or [Server] as an input signal.	
• Normal	
Display in full screen without changing the input signal aspect ratio.  • 16:9	
Display using 16:9 aspect ratio.	
<ul> <li>RICOH PJ X3340N/X4240N: 1024 × 576 resolution</li> </ul>	
<ul> <li>RICOH PJ WX3340N/WX4240N: 1280 × 720 resolution</li> </ul>	
• Full	
Display using full size resolution.	
<ul> <li>RICOH PJ X3340N/X4240N: 1024 × 768 resolution</li> </ul>	
<ul> <li>RICOH PJ WX3340N/WX4240N: 1280 × 800 resolution</li> </ul>	
Native	
Display the image without changing the resolution of the input signal.	
<ul> <li>Zoom (RICOH PJ WX3340N/WX4240N only)</li> </ul>	
Display the image width as the projection screen width while maintaining the input signal aspect ratio.	

ltem	Default
Display Position	-
Move the image if the projected image is smaller or larger than the screen size. You can move the image using the $[^{\blacktriangle}]$ , $[^{\blacktriangledown}]$ , and $[^{\blacktriangleright}]$ buttons.	
This function is not available when you select [Network PC], [USB Memory], or [Server] as an input signal.	
Wall Color Mode	Off
Select the image hue according to the projection surface when the image is being projected on something other than a screen.	
• Off	
<ul> <li>Whiteboard</li> </ul>	
Beige	
• Gray	
Blackboard (Green)	
3D Projection > 3D Projection	Off
Specify whether or not to use 3D projection.	
The image will be slightly darker if this is set to [On].	
3D projection and interactive mode cannot be enabled simultaneously. If you change this setting to [On], [Interactive Mode] in [Default Settings 1] is switched to [Off].	
3D Projection > L/R Reverse	Normal
Specify whether or not to reverse left and right in a 3D image.	
<ul> <li>Normal</li> </ul>	
• Reverse	

Item	Default
3D Projection > 3D Format	Auto
Select a 3D format.	
Select [Auto] when the 3D signals are input through HDMI. If the image does not project in 3D even if [Auto] is selected, change the setting to match the 3D format of the signal being input.	
Auto	
Frame Sequential	
Side by Side	
Top and Bottom	
Frame Packing	
Closed Caption	Off
The projector supports closed captioning, which allows subtitles to be displayed at the bottom of the picture. This is pursuant to the regulations set forth by the US Federal Communications Commission (FCC).	
Select [CC-1] to [CC-4] to display the dialogue and narration of TV programs and videos that are closed captioned.	
This function is available when you select [Video] as an input signal.	
• Off	
• CC-1	
• CC-2	
• CC-3	
• CC-4	

# **Energy Saving Settings Menu**

ltem	Default
Eco Mode	On (Auto)
Specify the lamp settings to save energy or to make images brighter.	
• On (Auto)	
Select this mode to save energy. In this mode, the following settings are automatically specified:	
Lamp Power: [Auto]	
Lamp Pwr on No Signal: [Eco]	
• Image Eco: [On]	
On (Detailed)	
You can specify [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco] manually.	
• Off	
Select this mode to make images brighter. In this mode, the following settings are automatically specified:	
Lamp Power: [Maximum]	
Lamp Pwr on No Signal: [Std.]	
Image Eco: [Off]	

ltem	Default
Lamp Power	Auto
Select the lamp power level.	
[Auto] is selectable when you select [Standard] or [Rear] in [Projection Mode] under [Default Settings 2]. If you select [Auto], the lamp power level switches automatically depending on the brightness of the projecting location. Make sure that the illuminance sensor on the top of the projector is not blocked. This function may not work correctly depending on the positioning of the projector.	
When you select [Maximum], the image is brightest but the power consumption is highest. When you select [Low], the power consumption is lowest but the image brightness is lowest.	
The lamp power reaches maximum regardless of this setting when [DICOM Sim. Mode], [3D Projection], or [Interactive Mode] is enabled.	
Auto	
Maximum	
• High	
Medium	
• Low	
Lamp Pwr on No Signal	Eco
Specify whether or not to lower the lamp power when there is no input signal. If you select [Eco], the projector lowers the lamp power thirty seconds after the input signal disappears.	
• Eco	
• Std.	
Image Eco	On
Specify whether or not to switch the lamp power automatically depending on the brightness of the image.	
This function does not work when [DICOM Sim. Mode], [3D Projection], or [Interactive Mode] is enabled.	

Item	Default
Power Off on No Signal	20 min.
Select the amount of time from the last input signal or operation until the projector enters standby mode.	
• Off	
• 5 min.	
• 10 min.	
• 20 min.	
• 30 min.	
Power on Standby	Eco
Specify whether or not to save energy while in standby.	
• Eco	
You can save energy while in standby, but start-up time is slower.	
• Q'ck On	
You can turn on the projector quickly, and the projector starts projection automatically if the image signals are input even while in standby. However, the standby energy level is higher.	
NW Settings on Standby	Wired LAN
Select a network function to be enabled while in standby. You can save energy by disabling the network function.	
This function is available when you select [Eco] in [Power on Standby].	
Do not Use	
Disable the wired LAN and the wireless LAN while in standby to save energy. To use the wired LAN or the wireless LAN, press the [Power] button to turn on the projector.	
Wired LAN	
You can turn on the projector from standby mode via a wired LAN.	
<ul> <li>Wired/Wireless LAN (RICOH PJ X3340N/WX3340N/ WX4240N only)</li> </ul>	
You can turn on the projector from standby mode via a wired LAN or wireless LAN.	

# Default Settings 1 Menu

Item	Default
Auto Input Search	On
Specify whether or not to only select inputs with signals when switching input signals.	
Interactive > Interactive Mode	Off
When the interactive kit is connected to the projector, you can specify whether or not to enable the interactive mode. For details about the interactive mode, see the manual provided with the interactive kit.	
The interactive mode and 3D projection cannot be enabled simultaneously. If you change this setting to [On], [3D Projection] in [Display Settings] is switched to [Off].	
Interactive > PC Adapter Registration	-
Register the computer USB adapter to the projector to use the interactive mode. For details about how to register the computer USB adapter, see the manual provided with the interactive kit.	
This function is not available when you select [Video] as an input signal.	
Computer 2 Terminal	Input
Select the purpose of Computer2 In/Monitor Out port.	
• Input	
You can use Computer2 In/Monitor Out port for inputting RGB signals.	
Output	
You can use Computer2 In/Monitor Out port for outputting RGB signals and Y/Pb/Pr signals.	
Веер	On
Specify whether or not to beep during use.	
Background on No Signal	Logo
Select the image display when there is no input signal.	
• Logo	
• Blue	
• None	

Item	Default
Display Guidance	On
Specify whether or not to display the guidance for operating the projector.	
Start-up Screen	On
Specify whether or not to display the start-up screen when the projector is turned on.	
User Logo > Register Logo	-
Register a user logo. Project the image to be registered as a user logo, and then execute this function. User logos can be displayed in the start-up screen or as the background when there are no input signals.	
User logos can be registered up to the following resolutions:	
• RICOH PJ X3340N/X4240N: 1024 × 768 pixels	
<ul> <li>RICOH PJ WX3340N/WX4240N: 1280 × 800 pixels</li> </ul>	
This function is available when you select [Computer 1], [Computer 2], [HDMI] (RGB signals), or [Network PC] as an input signal.	
User Logo > Confirm Logo	-
Display the registered user logo.	
User Logo > Reset Logo	-
Delete the registered user logo.	
Auto Focus (RICOH PJ X3340N/WX3340N only)	On
Specify whether or not to enable the automatic focus function.	

# **Default Settings 2 Menu**

Item	Default
Language	English
Select the display language.	
Available languages are as follows:	
English, Japanese, Spanish, Russian, French, Portuguese, German, Italian, Dutch, Polish, Czech, Swedish, Finnish, Hungarian, Norwegian, Danish, Romanian, Greek, Turkish, Arabic, Thai, Indonesian, Simplified Chinese, Traditional Chinese, Korean.	
Projection Mode	Standard
Select the projection method according to how the projector is positioned.	
When you select [Ceiling] or [Rear Ceiling], you cannot select [Auto] in [Lamp Power] under [Energy Saving Settings].	
If you change this setting to [Ceiling] or [Rear Ceiling] when [Lamp Power] is [Auto], [Lamp Power] is switched to [Maximum].	
Standard	
Select this mode when the projector is placed in front of a screen.	
• Rear	
Select this mode when the projector is placed behind a screen.	
Ceiling	
Select this mode when the projector is mounted on the ceiling in front of a screen.	
Rear Ceiling	
Select this mode when the projector is mounted on the ceiling behind a screen.	
Remote Control ID	1
Select the projector remote control ID. Specify the ID for each projector when operating multiple projectors using one remote control.	
• 1	
• 2	
• 3	
• 4	

ltem Default
Manual
on method of the projector.
ector on when the [Power] button is pressed.
y turn on the projector when the power cord is
Off
or not to increase the speed of the fan.
or rotations is high when set to [On]. Select [On] only ojector at an altitude of more than 1,500 meters not select [On] when the altitude is less than 1,500 et).
Off
or not to lock the buttons on the control panel. You can g to [Off] by pressing the [AV Mute] button on the I panel for 10 seconds.
-
their defaults.
ot restore the default settings of [User Logo] in [Default up Password] in [Default Settings 2], and [Administrator twork Application Settings].
Register Password 000000
ssword. The current password is required to change the
Password Protect Off
or not to enter a password when the projector is turned ed, a password must be entered when the projector is e power cord has been unplugged. However, a equired when turning the projector on from the standby
equired when turning the projector on from the standby quired to change this setting.

# **USB Settings Menu**

This section explains the items in USB Settings menu under the Network/USB Settings menu tab.

You can also specify and check the items in the USB Settings menu using Web Image Monitor. However, the following items are available only on the menu screen.

- [Remove USB Mem.] in [Settings]
- [USB Memory Free Space (KB)] and [USB Memory Access Status] in [Display Status]

On Web Image Monitor, you can check [Network/USB Func. Firmware Version] and [Energy Saving IO Firmware Version] on the top page.

For details about Web Image Monitor, see page 136 "Managing the Projector Using Web Image Monitor".

### Settings

### Still Image

ltem	Default
Display Effect	None
Select the display effect for switching the image.	
• None	
• Push	
The current image is pushed off by the next image.	
• Wipe	
The current image is wiped off by the next image.	
• Fade	
The current image fades out and the next image fades in.	
Display Interval (sec.)	5 seconds
Enter the slide show switching interval from 5 to 999 seconds.	

### **Moving Image**

ltem	Default
Repeat	Off
Specify whether or not to repeat video playback.	

### Common

Item	Default
Auto Start Slideshow	Off
Specify whether or not to start a slide show automatically when the projector is connected to the USB device.	
Remove USB Mem.	-
The USB device can be removed when this command is executed.	

# Display Status

### **USB Memory**

ltem	Default
USB Memory Free Space (KB)	-
Display the space available on the USB device (Displayed in KB).	
USB Memory Access Status	-
Display whether or not the USB device can be accessed.	

### Firmware Version

ltem	Default
Network/USB Func. Firmware Version  Display the firmware version of the network and USB functions.	-
Energy Saving IO Firmware Version  Display the energy-saving IO firmware version.	-

5

# **Network Settings Menu**

This section explains the items in Network Settings menu under the Network/USB Settings menu tab.

You can also specify and check the items in the Network Settings menu using Web Image Monitor. However, the following items are available only on the menu screen.

- [Simple Wireless LAN Setup] and [Reset Wireless LAN Settings] in [Wireless LAN]
- [Import Device Certificate] and [Certificate List] in [LAN Common]
- [Network Setting Wizard] in [Setup Wizard]

On Web Image Monitor, you can check [Network/USB Func. Firmware Version] and [Energy Saving IO Firmware Version] on the top page.

For details about Web Image Monitor, see page 136 "Managing the Projector Using Web Image Monitor".

### Wired LAN

### Wired LAN Settings

ltem	Default
Transmission Speed	Auto-Negotiation
Select a wired LAN speed that matches your network environment. It is recommended that [Auto-Negotiation] be selected.	
Auto-Negotiation	
10BASE-T Full Duplex	
10BASE-T Half Duplex	
100BASE-TX Full Duplex	
100BASE-TX Half Duplex	

### **TCP/IP Settings**

ltem	Default
DHCP	Enable
Specify whether to enable or disable DHCP.	
The IP address is allocated automatically from the DHCP server when [Enable] is selected. When [Disable] is selected, enter the IP address, subnet mask, and default gateway manually.	

ltem	Default
IP Address	0.0.0.0
Enter the projector's IP address.	
Subnet Mask	0.0.0.0
Enter the subnet mask.	
Default Gateway	0.0.0.0
Enter the default gateway.	

### Wireless LAN (RICOH PJ X3340N/WX3340N/WX4240N only)

### Simple Settings

ltem	Default
Simple Wireless LAN Setup	-
Acquire the wireless LAN settings registered in the access point, and specify infrastructure mode wireless LAN settings for the projector automatically.	
This function may not work depending on the access point.	

### Wireless LAN Settings

ltem	Default
Communication Mode	Adhoc
Select the wireless LAN communication mode.	
Infrastructure	
Select this mode when you want to connect the projector to a wireless LAN network. You need to specify [SSID] and items in [Security] and [TCP/IP Settings] in this mode.	
• Adhoc	
Select this mode when you want to connect the projector and the computer directly. The projector specifies [SSID] and items in [Security] and [TCP/IP Settings] automatically in this mode.	

ltem	Default
SSID	(blank)
Enter the SSID to connect to a wireless LAN network when [Infrastructure] is selected. Enter up to 32 characters.	
Channel	11
Select the channel to use when [Adhoc] is selected.	
Select the channel that matches the type of wireless LAN being used.	
The channels available might differ depending on the country.	
• 2.4 GHz: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	

### Security

ltem	Default
Authentication Method	Open System
Select the wireless LAN authentication method.	
Open System	
WEP Shared Key	
• WPA-PSK	
WPA2-PSK	
Encryption Method	No Encryption
Select the wireless LAN encryption method.	
If you select [No Encryption], the communication is not encrypted. [No Encryption] is selectable only when you select [Open System] in [Authentication Method].	
Select [WEP] when you select [Open System] or [WEP Shared Key] in [Authentication Method].	
Select [TKIP] or [CCMP] when you select [WPA-PSK] or [WPA2-PSK] in [Authentication Method].	
No Encryption	
• WEP	
• TKIP	
• CCMP	

ltem	Default
Transmission WEP Key Number	1
Select the Key number used to authenticate and encrypt transmissions when you select [WEP] in [Encryption Method].	
• 1	
• 2	
• 3	
• 4	
Network Key	(blank)
Enter the WEP key when you select [WEP Shared Key] or [Open System] in [Authentication Method] and select [WEP] in [Encryption Method].	
When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to 5 characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.	
Enter PSK when [WPA-PSK] or [WPA2-PSK] is selected in [Authentication Method].	
When using a PSK, up to 64 characters can be used for hexadecimal and 8 to 63 characters for ASCII.	

### **TCP/IP Settings**

ltem	Default
DHCP	Disable
Specify whether to enable or disable DHCP.	
The IP address is allocated automatically from the DHCP server when [Enable] is selected. If you select [Disable], manually enter the IP address, subnet mask, and default gateway.	
IP Address	0.0.0.0
Enter the projector's IP address.	
Subnet Mask	0.0.0.0
Enter the subnet mask.	

ltem	Default
Default Gateway	0.0.0.0
Enter the default gateway.	

### **Reset Wireless LAN Settings**

ltem	Default
Reset Wireless LAN Settings	-
Restore all the wireless LAN settings to their defaults.	

### LAN Common

Specify the wired LAN and wireless LAN settings.

### Network Interface (RICOH PJ X3340N/WX3340N/WX4240N)

Item	Default
Network Interface	Wired LAN Priority
Select the network interface to be used.	
Wired LAN	
Wireless LAN	
Wired LAN Priority	
Give priority to wired LAN if connected to the network via an Ethernet cable. Disconnect the Ethernet cable when using a wireless LAN.	
• Disable	

### Network Interface (RICOH PJ X4240N)

Item	Default
Network Interface	Wired LAN
Specify whether to enable or disable the wired LAN.	
Wired LAN	
Disable	

# Primary DNS Server Address Enter the IP address of the primary DNS server. Secondary DNS Server Address Enter the IP address of the secondary DNS server. Host Name Display the projector's host name. The [Projector Name] in [Projector ID] is used as the projector's host name. Domain Name Enter the projector's domain name. Enter up to 63 characters.

### **Projector Search Settings**

ltem	Default
Projector Search	Enable
Specify whether or not to search for the projector automatically when the projector and the device connected to the projector are on the same network.	

### **HTTP Client Settings**

ltem	Default
HTTP Proxy Server Port	80
Enter an HTTP proxy server port that is between 1 and 65535.	
HTTP Proxy Server Name	(blank)
Enter an HTTP proxy server name that is up to 128 characters.	
HTTP Proxy User Name	(blank)
Enter an HTTP proxy user name that is up to 31 characters.	
HTTP Proxy Password	(blank)
Enter an HTTP proxy password that is up to 31 characters.	

### **HTTP Server Settings**

Item	Default
HTTP Port	80
Enter an HTTP port that is between 1 and 65535.	

### Manage Certificate

ltem	Default
Import Device Certificate	-
Import the device certificate saved on the USB memory device to the projector.	
Insert the USB memory device into the USB port on the projector to display the file list. Select the device certificate to be imported from the file list.	
Certificate List	-
The list of device certificates is displayed. You can confirm details about the device certificate or delete it in this screen.	

# Projector ID

ltem	Default
Projector Name	RPJxxxxxx*1
Enter an ID to identify the projector on the network. Enter up to 16 characters. You can use alphanumeric characters, hyphens, and periods for projector names. Only a letter can be used for the first character of the projector's name. Hyphens and periods cannot be entered consecutively and cannot be used for the last character of the projector's name.	
Identification Code	0000 to 9999*2
Enter the 4-digit identification code for connecting the projector and the computer using QuickProjection.	

- $^{\star}$  ] xxxxxx is the last six digits of the wired LAN's MAC address.
- \*2 Each projector has a unique identification code as the default setting.

### Setup Wizard

ltem	Default
Network Setting Wizard	-
Open the [Network Setting Wizard] screen. For details about the [Network Setting Wizard] screen, see page 62 "Connecting the Projector to a Network".	

### Display Status

### Wired LAN

ltem	Default
Current wired LAN settings are displayed. You can confirm the following items:	-
Connection Status, MAC Address, Transmission Speed, IP Address, Subnet Mask, Default Gateway	

### Wireless LAN (RICOH PJ X3340N/WX3340N/WX4240N only)

ltem	Default
Current wireless LAN settings are displayed. You can confirm the following items:	-
Connection Status, Radio Field Intensity, MAC Address, Access Point BSSID, Communication Mode, Transmission Speed, Channel, SSID, Authentication Method, Encryption Method, IP Address, Subnet Mask, Default Gateway	

### Firmware Version

ltem	Default
Network/USB Func. Firmware Version  Display the firmware version of the network and USB functions.	-
Energy Saving IO Firmware Version  Display the energy-saving IO firmware version.	-

5

# 5

# **Network Application Settings Menu**

This section explains the items in the Network Application Settings menu under the Network/USB Settings menu tab.

You can also specify and check the items in the Network Application Settings menu using Web Image Monitor. However, the following items are available only on the menu screen.

- [Crestron WebUI User Auth.], [Crestron WebUI User Password], [Crestron WebUI Admin. Auth.],
   [Crestron WebUI Admin. Password], [Control System IP Address], [Control System IP ID], and
   [Control System Port] in [Administration Tools]
- [DLNA Certification Mode] in [Server]
- [@Remote: Firmware Updating] in [Firmware Update]

On Web Image Monitor, you can check [Network/USB Func. Firmware Version] and [Energy Saving IO Firmware Version] on the top page.

For details about Web Image Monitor, see page 136 "Managing the Projector Using Web Image Monitor".

#### **Administration Tools**

#### Web Image Monitor

ltem	Default
Web Image Monitor	Enable
Specify whether or not to allow the projector settings to be changed and checked using a web browser. To enable this setting, you must restart Web Image Monitor after making the change. For details about Web Image Monitor, see page 136 "Managing the Projector Using Web Image Monitor".	

#### **AMX Device Discovery**

Item	Default
AMX Device Discovery	Disable
Specify whether or not to allow the projector to be controlled and monitored by AMX Device Discovery. To use this function, an AMX controller is required in your network environment. For details about AMX Device Discovery, see the AMX LLC website.	

## Crestron RoomView

ltem	Default
Crestron RoomView  Specify whether or not to allow the projector to be controlled and monitored by Crestron RoomView. For details about Crestron RoomView, see page 139 "Controlling and Monitoring the Projector Using Crestron RoomView".	Disable
Crestron WebUI User Auth.  Specify whether or not to restrict access to Crestron WebUI with a password.	Off
Crestron WebUI User Password  Enter the password for Crestron WebUI user authentication up to 26 characters.	(blank)
Crestron WebUI Admin. Auth.  Specify whether or not to restrict access to the tools screen on Crestron WebUI with a password.	Off
Crestron WebUI Admin. Password  Enter the password for Crestron WebUI administrator authentication up to 26 characters.	(blank)
Control System IP Address  Enter the IP address of Crestron Control System.	0.0.0.0
Control System IP ID  Enter the IP ID to connect to Crestron Control System.	3
Control System Port  Enter the port number for communicating to Crestron Control System.	41794

## **PJLink**

Item	Default
PJLink Authentication	Off
Specify whether or not to set PJLink authentication.	

ltem	Default
PJLink Password	(blank)
Enter a password used when setting the PJLink authentication that is up to 32 characters.	

# Security

ltem	Default
Administrator Authentication	Off
Specify whether or not to set administrator authentication. A administrator password is required to change this setting.	
If administrator authentication is set, a password is required for the following operations:	
<ul> <li>Changing [Transmission WEP Key Number], [Network Key],         [Crestron WebUI User Auth.], [Crestron WebUI User Password],         [Crestron WebUI Admin. Auth.], [Crestron WebUI Admin.         Password], [PJLink Authentication], and [PJLink Password]</li> </ul>	
<ul> <li>Using the simple wireless LAN setup function and the [Network Setting Wizard] screen</li> </ul>	
<ul> <li>Importing or deleting device certificates</li> </ul>	
Executing [@Remote: Firmware Updating]	
<ul> <li>Turning the projector on or off via a network</li> </ul>	
<ul> <li>Changing the settings using Web Image Monitor</li> </ul>	
Administrator Password	(blank)
Enter the administrator password up to 32 characters. The current password is required to change the administrator password.	

# Server

# **Remote Projection Control**

ltem	Default
Remote Projection Control	Enable
Specify whether or not to enable the Remote Projection Control function. The Remote Projection Control function allows you to project images from a tablet computer or a smartphone via a network.	
For details about how to project images using this function, see page 76 "Projecting Images Using DLNA-Compatible Devices".	

# **Projection Server Settings**

Item	Default
Server URL  Enter the root URL of the server on which the files to be projected using the projection server functions are saved. Enter up to 128 characters.	(blank)
Index File  Enter the name of the index file on the projection server. Enter up to 31 characters.	(blank)
HTTP Proxy Server Usage Specify whether or not to use a proxy server.	No
Access Restriction Type  Specify whether or not to display the access number input screen when you access the projection server.  Select [Access No.] if access to the projection server is restricted by an access number.  • None  • Access No.	None

# Still Image

ltem	Default
Display Effect	None
Select the display effect for switching the image.	
• None	
Push	
The current image is pushed off by the next image.	
• Wipe	
The current image is wiped off by the next image.	
• Fade	
The current image fades out and the next image fades in.	
Display Interval (sec.)	5 seconds
Enter the slide show switching interval from 5 to 999 seconds.	

# **Moving Image**

ltem	Default
Repeat	Off
Specify whether or not to repeat video playback.	
DLNA Certification Mode  Specify whether the projector works as a DLNA-certified device. The projector is certified to DLNA 1.5 guidelines for still images. For details about the supported file types, see page 70 "Using the Server Function".  • Enable  The projector works as a DLNA-certified device. Of the video files sent from the DLNA server, those files that are not DLNA compatible are shown on the file list of the Server Projection screen.  • Disable  The projector works according to its own specifications. It does	Disable
not work as a DLNA-certified device. All the video files delivered from the DLNA server appear in the file list of the Server Projection screen.	

# Firmware Update

The following items are available only for users who sign up for the @Remote service.

ltem	Default
@Remote: Notify Firmware Update	Yes
Specify whether or not to display a message for firmware update notification.	
@Remote: Firmware Updating	-
Execute firmware update via the @Remote service.	

# **Display Status**

# **PJLink**

ltem	Default
PJLink Class	-
Display the PJLink class.	

# Firmware Version

ltem	Default
Network/USB Func. Firmware Version	-
Display the firmware version of the network and USB functions.	
Energy Saving IO Firmware Version	-
Display the energy-saving IO firmware version.	

#### 5

# **Display Status**

#### Item

#### Input

Displays the selected input signals.

#### Resolution

Displays the resolution.

This item appears when you select [Computer 1], [Computer 2], or [HDMI] as an input signal.

## Frequency

Displays the synchronous frequency.

This item appears when you select [Computer 1], [Computer 2], or [HDMI] as an input signal.

## Sync

Displays the synchronous signal polarity.

This item appears when you select [Computer 1] or [Computer 2] as an input signal.

# Signal Format

Displays the Y/Pb/Pr signal format.

This item appears when you select [Y/Pb/Pr] or [HDMI] (Y/Pb/Pr signals) as an input signal.

#### Video Mode

Displays the video signal color format.

This item appears when you select [Video] as an input signal.

#### **Lamp Time**

Displays the lamp usage time.

#### **Lamp Reset Count**

Displays the number of lamp replacements.

#### **Total Time**

Displays the projector usage time.

#### **Total CO2 Reduction**

Displays the total reduction in  $CO_2$  caused by setting the lamp to the eco mode.

#### Item

#### **Eco Time Ratio**

Displays the ratio of the time the lamp power was not set to maximum to the total time used. Using eco mode saves electricity.

#### **Main FW Version**

Displays the version of the firmware on the main board.

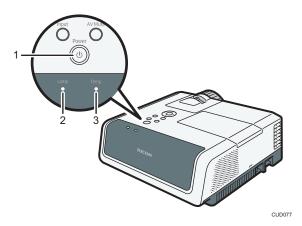
# 6. Troubleshooting

This chapter explains the basic problems and troubleshooting methods when an indicator light is lit.

# **Indicator Display List**

The projector uses the [Power] button, indicators, and beeps to notify you if a malfunction occurs. Check the indicator's status, and implement the following measures.

#### **Indicator location**



- 1. [Power] button
- 2. Lamp indicator
- 3. Temp indicator

<sup>&</sup>quot; means the indicator is flashing.

Status	Causes	Solutions
The projector does not turn on.  Lamp Temp	The projector has malfunctioned.	Disconnect the power cord, and contact your service representative.
"Hardware Error" was displayed, and the projector turned off during operation.  Lamp Temp	The projector has malfunctioned.	Disconnect the power cord, wait a while, and then turn on the projector again.  If the problem cannot be resolved, contact your service representative.

Status	Causes	Solutions
The lamp turned off during operation, or it does not turn on  Lamp Temp	<ul> <li>The lamp has overheated and cannot turn on.</li> <li>The lamp's service life has expired.</li> <li>The projector has malfunctioned.</li> </ul>	<ul> <li>Disconnect the power cord, wait a while, and then turn on the projector again.</li> <li>If the lamp burns out, replace it with a new lamp. For details of how to replace the lamp, see page 127 "Replacing the Lamp".</li> </ul>
The lamp does not turn off.  Lamp Temp  Temp  Flashing interval: 2 seconds	The projector has malfunctioned.	Disconnect the power cord, wait a while, and then turn on the projector again.  If the problem cannot be resolved, contact your service representative.
The projector turned off during operation, or it does not turn on.  Lamp Temp  Flashing interval: 1 second	The lamp cover is not installed correctly.	Disconnect the power cord, and reinstall the lamp cover correctly. For details of how to install the lamp cover, see page 127 "Replacing the Lamp".
"Temperature Error" was displayed, and the projector turned off during operation.  Lamp Temp	<ul> <li>The interior has overheated.</li> <li>The projector is being used in a high-temperature environment.</li> </ul>	Place the projector so that the intake and exhaust vents are not blocked.  Disconnect the power cord, wait a while, and then turn on the projector again.
"Fan Error" was displayed, and the projector turned off during operation.  Lamp Temp	The cooling fan in the projector has malfunctioned.	Disconnect the power cord, and contact your service representative.

# **Common Problems**

If you think a malfunction has occurred, check the following before contacting your service representative.

Problem	Solutions
Power does not turn on.	<ul> <li>Make sure the power plug or connector is connected correctly.</li> <li>Make sure the lamp cover is mounted correctly.</li> <li>For details, see page 127 "Replacing the Lamp".</li> </ul>
Power turns off during use.	<ul> <li>Make sure the environment in which the projector is being used is within the acceptable temperature range.</li> <li>Make sure the vents are not blocked.</li> </ul>
No image.	Make sure the input signal is switched correctly if [Auto Input Search] in [Default Settings 1] is set to [Off].
	For details, see page 93 "Default Settings 1 Menu".
	Make sure the mute function is not turned on.
	For details, see page 47 "Temporarily Blanking the Image and Muting the Audio".
	Check the settings of [Brightness] in [Image Adjustment].
	For details, see page 84 "Image Adjustment Menu".
	<ul> <li>Make sure the computer or AV equipment is connected to the projector correctly.</li> </ul>
	For details, see page 31 "Connecting Equipment to the Projector".
	Make sure the computer's image output is switched correctly.
	For details, see page 39 "When projecting the screen of a laptop computer".
	Make sure the computer or AV equipment is working properly.

Problem	Solutions
No sound.	Press the [Input] button.
	For details, see page 37 "Basic Operations".
	Make sure the mute function is not turned on.
	For details, see page 47 "Temporarily Blanking the Image and Muting the Audio".
	Check the speaker's volume adjustment.
	For details, see page 46 "Adjusting the Volume of the Speaker".
	<ul> <li>Make sure the computer or AV equipment is connected to the projector correctly.</li> </ul>
	For details, see page 31 "Connecting Equipment to the Projector".
	<ul> <li>Make sure the computer or AV equipment is working properly.</li> </ul>
Image is not projected normally.	Make sure the input signal is compatible with the projector.
	For details, see page 149 "List of Compatible Signals".
	Check the status of the video tape or other video source.
	Execute [Auto Set Signals] in [Image Adjustment].
	For details, see page 84 "Image Adjustment Menu".
	<ul> <li>Check the settings of the computer's graphics driver. For details, see the manual provided with the computer.</li> </ul>

Problem	Solutions
Image is blurred.	Make sure the lens is clean.
Image is partially out of focus.	For details, see page 125 "Cleaning the Lens".
	Check the focus adjustment.
	For details, see page 43 "Adjusting the Focus".
	<ul> <li>Make sure the projection distance is within the projector's range.</li> </ul>
	For details, see page 28 "Relationship Between the Projection Distance and the Screen Size".
	Check the installation angles of the projector and screen.
	For details, see page 41 "Adjusting the Angle of the Projection".
	<ul> <li>Check the settings of [Sharpness] and [Phase] in [Image Adjustment].</li> </ul>
	For details, see page 84 "Image Adjustment Menu".
Image is dark.	Check the settings of [Brightness] and [Contrast] in [Image Adjustment].
	For details, see page 84 "Image Adjustment Menu".
	Make sure the lamp is not near the end of its service life.
	For details, see page 113 "Display Status".
	<ul> <li>Check the settings of [RGB Input Range] in [Image Adjustment].</li> </ul>
	For details, see page 84 "Image Adjustment Menu".
	<ul> <li>Make sure [3D Projection] in [Display Settings] is set to [Off].</li> </ul>
	For details, see page 87 "Display Settings Menu".

Problem	Solutions
Color is faded. Tint is poor.	<ul> <li>Check the settings of [Color Saturation], [R-level], [G-level], and [B-level] in [Image Adjustment].</li> <li>For details, see page 84 "Image Adjustment Menu".</li> <li>Make sure the screen is clean.</li> <li>Check the settings of [Wall Color Mode] in [Display Settings].</li> <li>For details, see page 87 "Display Settings Menu".</li> <li>Make sure the lamp is not near the end of its service life.</li> <li>For details, see page 113 "Display Status".</li> </ul>
The projector's operation keys do not respond.	Make sure [Key Lock] in [Default Settings 2] is not set to [On].  For details, see page 95 "Default Settings 2 Menu".
The remote control does not respond.	<ul> <li>Make sure the ID assigned to the remote control and in the settings of [Remote Control ID] in [Default Settings 2] are the same.</li> <li>For details, see page 95 "Default Settings 2 Menu".</li> <li>Make sure the batteries in the remote control are not dead.</li> <li>Make sure the batteries are correctly loaded into the remote control.</li> <li>For details, see page 23 "Loading Batteries into the Remote Control".</li> <li>Make sure the remote control is inside its effective range. For details, see page 22 "Effective Range of the Remote Control".</li> <li>Make sure there is nothing placed between the remote control and the projector.</li> <li>Make sure the remote control receiver is not exposed to strong light.</li> </ul>
Display language is unknown.	Press the [Menu] button, and then select the display language in [Language / XXX] (XXX indicates the current display language) on the [ tab.  For details, see page 95 "Default Settings 2 Menu".

Problem	Solutions
No images from USB devices.	Make sure the USB memory device is connected correctly.
	<ul> <li>Make sure the connected USB memory device is compatible with the projector.</li> </ul>
	<ul> <li>Make sure there are JPEG or MPEG files saved on the USB memory device.</li> </ul>
	<ul> <li>Make sure the compression format, file size, and other conditions are compatible with the projector.</li> </ul>
	For details, see page 51 "Requirements for Projecting Images from a USB Device".
Wired LAN is disabled.	Check the settings of [Wired LAN Settings] in [Network Settings] under [Network/USB Settings].
	For details, see page 99 "Network Settings Menu".
Wireless LAN is disabled.	Check the settings of [Wireless LAN Settings] in [Network Settings] under [Network/USB Settings].
	For details, see page 99 "Network Settings Menu".
	<ul> <li>Make sure there is nothing placed between the computer and the projector.</li> </ul>
	<ul> <li>Make sure the operating system of the computer is compatible with QuickProjection.</li> </ul>
	For details, see page 68 "How to Use QuickProjection".
	<ul> <li>To project images by ad hoc wireless communication, log in to the computer with administrator privileges.</li> </ul>
	Make sure that the projector is not in standby.

# Accessing the Online Knowledge Base

If you have any questions about the projector, refer to the knowledge base. Visit our global Web site listed below, and then access a knowledge base page in your language.

http://www.ricoh.com/support/

You can search the knowledge base by product name or keyword.

# 7. Maintenance

This chapter explains the operating precautions and maintenance for the projector.

# **Operating Precautions**

# **ACAUTION**

- The product's light uses a mercury vapor lamp that becomes high pressure when it is turned on.
   The lamp has the following characteristics, so be sure to handle it with care after understanding the contents.
  - Deterioration or shock can cause the lamp's life span to end or the lamp to explode. If the lamp explodes, it may make a big noise.
  - The time that it takes for the lamp to reach its life span or explode depends on each individual lamp and its operating conditions. It is possible that it might explode the first time it is used.
  - If you use the lamp past its replacement period, the possibility of explosion increases.
  - If the lamp explodes, broken glass pieces may be scattered around the inside of the product and ejected from the vent or other opening.
  - If the lamp explodes, a very small amount of mercury vapor in the lamp tube and broken glass pieces may be ejected from the vents or other opening.

# **ACAUTION**

- · What to do if a lamp has exploded
  - If the lamp explodes, remove the power cord from the product, leave the room while making sure it is thoroughly ventilated.
  - If the lamp explodes and you think that you have gotten glass particles or mercury vapor in your eyes or have inhaled either, contact a doctor immediately.
  - Clean up the area around the product completely while being careful not to get injured from any broken glass pieces.
  - Throw away any food that was near the product.
  - Ask your service representative to replace the lamp and inspect the product.

Pay attention to the following points when using the projector:

- When you carry the projector by hand, hold it with both hands and keep it in a horizontal position.
   If you hold the projector with one hand, its covers may come off or you may drop it.
- If moving the projector under conditions including vibration and shock, use both the packing case
  and included carrying bag. Transporting the projector using the carrying bag only may damage it

- due to shock or vibration. Further, transporting the projector in a damaged packing case may damage the projector, so use a packing case that is in good condition.
- Do not apply volatile substances such as insecticide to the projector. Also, do not bring the projector into long-term contact with rubber or vinyl products. Doing so may cause discoloration or the paint to peel.
- The projector is not intended for long-term continuous operation. Further, remove the projector from
  the packing case before using. If a malfunction occurs when using the projector under these
  conditions, a fee is charged for repair even if the warranty is still in effect.
- Do not use locations that may be hot, such as near a heater. Doing so may cause the projector to malfunction or reduce the service life.
- Avoid locations that may become smoky. Particulates may adhere to the optical parts, reducing the service life and causing the image to darken.
- Using the projector close to a television or radio may adversely affect the images and sound. If this happens, move the projector away from the television or radio.
- Moving the projector from a low-temperature location to a high-temperature location may cause
  water droplets to form on the projector lens and parts due to condensation. Continued use under
  such conditions may cause malfunction, so do not use the projector until the water droplets have
  evaporated.
- The air is thin at high elevations, so the cooling efficiency of the projector is reduced. Select [On] in [High Altitude Mode] before using.
- Do not use the projector in an extremely inclined position (±20° or greater). Doing so may cause malfunction or reduce the service life.
- Do not use benzene or paint thinners. Doing so may cause the projector to warp, discolor, or the paint to peel. Further, do not use cleaning cloths that contain chemicals.

## 7

# Cleaning the Projector

## **WARNING**

- Do not remove any covers or screws that are not mentioned in this manual. There are high
  voltage components inside the product that may cause electric shock. Contact your service
  representative if any of the product's internal components require maintenance, adjustment, or
  repair.
- Do not disassemble or modify the product. Doing so may cause injury or malfunction.

# **MARNING**

- Contact your sales or service representative to clean or replace parts for a projector that is
  installed on a wall or ceiling.
  - Do not attempt to clean or replace parts for a projector that is installed in a high location on a wall or ceiling. Doing so may cause it to fall down, resulting in an injury.
  - Do not open the lamp cover of a projector that is installed on a wall or ceiling. Doing so
    may cause the lamp cover to fall down. If the lamp is broken, pieces of glass may fall and
    cause an injury.

# **CAUTION**

 When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

# Cleaning the Lens

When cleaning the lens, make sure to do the following:

- Use a commercially available blower or cloth for cleaning glass, cleaning paper, plastic lens cleaner, etc.
- The lens surface scratches easily, so do not rub or tap it with a hard object.

# **Cleaning the Projector**

When cleaning the projector, make sure to do the following:

- Disconnect the power plug before cleaning.
- Gently wipe any dirt from the projector using a soft cloth. Using a damp cloth may cause water to seep inside the projector and cause electric shock or malfunction.

/

• Do not use benzene or paint thinners. Doing so may cause the projector to warp, discolor, or the paint to peel. Further, do not use cleaning cloths that contain chemicals.

## 7

# Replacing the Lamp

# **WARNING**

- Before replacing the lamp, turn off the power and wait at least one hour to allow the product to
  cool completely. If it is not completely cool, you may burn or injure yourself due to the inside of
  the product and lamp unit being hot. If you replace the lamp without unplugging the power
  cord from the power outlet, electric shock or explosion may occur.
- Be careful when handling the used lamp so that it does not break. If it breaks, it may cause injury.

# **MARNING**

- Contact your sales or service representative to clean or replace parts for a projector that is
  installed on a wall or ceiling.
  - Do not attempt to clean or replace parts for a projector that is installed in a high location on a wall or ceiling. Doing so may cause it to fall down, resulting in an injury.
  - Do not open the lamp cover of a projector that is installed on a wall or ceiling. Doing so
    may cause the lamp cover to fall down. If the lamp is broken, pieces of glass may fall and
    cause an injury.

# **CAUTION**

• Be sure to always use a dedicated replacement lamp that is new when replacing the lamp. If you use a lamp that is not dedicated, it may result in an explosion and injury.

# **CAUTION**

- The product's light uses a mercury vapor lamp that becomes high pressure when it is turned on.
   The lamp has the following characteristics, so be sure to handle it with care after understanding the contents.
  - Deterioration or shock can cause the lamp's life span to end or the lamp to explode. If the lamp explodes, it may make a big noise.
  - The time that it takes for the lamp to reach its life span or explode depends on each individual lamp and its operating conditions. It is possible that it might explode the first time it is used.
  - If you use the lamp past its replacement period, the possibility of explosion increases.
  - If the lamp explodes, broken glass pieces may be scattered around the inside of the product and ejected from the vent or other opening.
  - If the lamp explodes, a very small amount of mercury vapor in the lamp tube and broken glass pieces may be ejected from the vents or other opening.

- What to do if a lamp has exploded
  - If the lamp explodes, remove the power cord from the product, leave the room while making sure it is thoroughly ventilated.
  - If the lamp explodes and you think that you have gotten glass particles or mercury vapor in your eyes or have inhaled either, contact a doctor immediately.
  - Clean up the area around the product completely while being careful not to get injured from any broken glass pieces.
  - Throw away any food that was near the product.
  - Ask your service representative to replace the lamp and inspect the product.



- The lamp is a glass product. Do not touch the glass surface with bare hands, hit it forcefully, or damage it.
- This projector's lamp contains trace amounts of environmentally harmful inorganic mercury. Be careful not to break used lamps, and dispose of them in accordance with local regulations or contact your sales representative or service representative.

When the lamp is due for replacement, the message "The lamp is reaching the end of its life. Please change it." is displayed. Change the lamp as instructed.

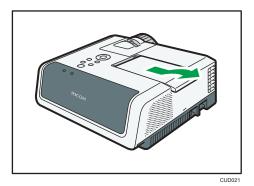
When [Lamp Power] in [Energy Saving Settings] is specified as [Maximum], replace the lamp after approximately 3,500 hours. When the setting is [Low], replace it after approximately 5,000 hours. However, depending on the characteristics of the lamp and how the lamp is used, the image may become dim or the lamp may go out before the message is displayed. We recommend preparing a spare lamp, just in case.

Do not repeatedly turn off the projector immediately after the lamp is lit, or turn on the projector immediately after turning it off. Doing so may damage the lamp or shorten its life.

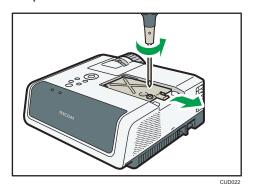
Furthermore, if the lamp is used for an extended period of time, the image may darken or the lamp may burn out. If this happens, replace the lamp with a new one.

You need a Phillips screwdriver to replace the lamp.

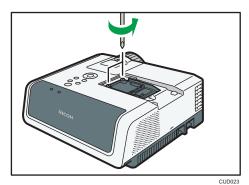
1. Slide the outer lamp cover to the right to remove it.



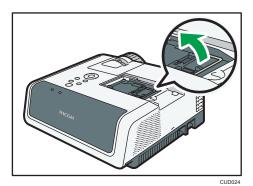
2. Loosen the screw on the right side of the inner lamp cover, and then remove the inner lamp cover.



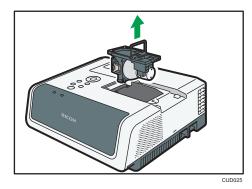
3. Loosen the two screws on the left side of the lamp unit.



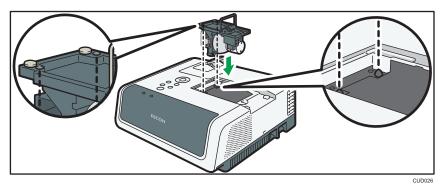
## 4. Raise the metal handle.



5. Hold the handle, and then pull the lamp unit out of the projector.



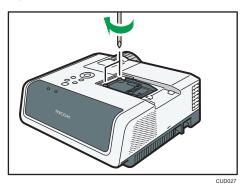
# 6. Insert a new lamp unit.



Make sure that the small projections inside the projector are inserted into the holes of the lamp unit properly.

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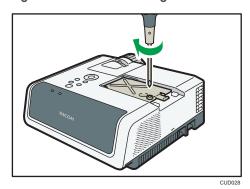
## 7. Tighten the two screws on the left side of the lamp unit.



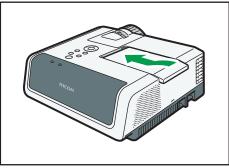
8. Attach the inner lamp cover by sliding it from the right.

Make sure the inner lamp cover is inserted into the slits inside the projector.

9. Tighten the screw on the right side of the inner lamp cover.



10. Put the outer lamp cover on the projector, and then slide it to the left.



CUD029

Make sure the projections on the left edge of the outer lamp cover are inserted into the holes on the projector properly.

Correctly install the outer lamp cover. Incorrect installation may prevent the lamp or projector from turning on.

# 11. Reset the lamp time.

For the reset method, see the manual provided with the lamp.



- The lamp's service life can be verified using [Lamp Time] in [Display Status].
- The lamp may stop working before it reaches its approximate service life or before the replacement message is displayed.

#### /

# Managing the Projector Using Projector Management Utility

Projector Management Utility conforms to the PJLink class 1 standards, and is compatible with all class 1 commands.

A maximum of 100 projectors connected to the network can be managed using one computer.

Projector Management Utility operating environment is described below.

- Supported operating system
  - Windows XP Professional, Home Edition, SP3 or later (32-bit version)
  - Windows Vista Ultimate, Business, Home Premium, Home Basic, SP2 or later (32-bit and 64-bit versions)
  - Windows 7 Home Premium, Professional, Ultimate, Enterprise (32-bit and 64-bit versions)
  - Windows 8, Pro, Enterprise (32-bit and 64-bit versions)
  - Windows Server 2008 Standard SP2 or later (32-bit and 64-bit versions)
  - Windows Server 2008 R2 Standard SP1 or later (64-bit version)
- Memory size

Recommended memory size for the operating system of the computer you are using

Display resolution

800 × 600 pixels or more



• This software is to control and monitor projectors manufactured by our company. The software may not work properly when used to control other projectors.

# **Installing Projector Management Utility**

Projector Management Utility is included on the supplied CD-ROM.

Log in to the computer with administrator privileges to install or uninstall utilities.

- 1. Close all applications.
- 2. Insert the CD-ROM in the CD-ROM drive of your computer.
- 3. Specify a language.

The launcher screen appears.

- 4. Click [Projector Management Utility].
- 5. Install the application by following the on-screen instruction.

A shortcut icon is created on the desktop.



 To uninstall Projector Management Utility, use the program delete function in [Control Panel] to delete "RICOH Projector Management Utility".

## Settings Required to Use Projector Management Utility

Prepare the network so the projector can be connected. Specify the settings either in [Wireless LAN] or [Wired LAN].

Specify the following settings to control the projector using Projector Management Utility:

- [Projector ID] in [Network Settings]
- [PJLink] items in [Network Application Settings]

For details, see page 99 "Network Settings Menu" and page 107 "Network Application Settings Menu".



• [PJLink Password] is not specified by factory defaults. It is recommended to register a password as soon as possible. If you forget the password, register a new password. The new password is valid.

# **Starting Projector Management Utility**

Projector Management Utility acquires the projector registration information from the configuration file, when it is launched.

The following information can be obtained:

- Projector status (power on and off, input signal, Av mute on and off, lamp status, error status)
- Projector information (product name, manufacturer, available input ports, other information)

The functions that can be operated from Projector Management Utility are power on and off, input signal switching, and mute. Settings cannot be changed if the function specified by the projector is not compatible.

Double-click the "Projector Management Utility" icon on the desktop.
 The information for the projectors detected by the application is displayed.



 If using Projector Management Utility with Windows Vista or Windows 7, log in using administrator privileges.

- The projector must be registered in advance. For details, see the Projector Management Utility Help.
- Depending on the setting in [NW Settings on Standby], the projector does not respond even if the projector is in standby mode. Press the [Power] button, or change the setting in [NW Settings on Standby].
- If a communications error prevents the projector from being detected, "?" is displayed. If the connection failed due to an incorrect password or other reason, "x" is displayed.
- The details displayed in the Projector Management Utility "Input" and the corresponding projector input signals are described below:

Projector input signal	PJLink input name
Computer 1	RGB1
Y/Pb/Pr	RGB2
Computer 2	RGB3
HDMI	DIGITAL1
Video	VIDEO1
Network PC	NETWORK1
Server	NETWORK2
USB Memory	STORAGE1

• See the Projector Management Utility Help for how to use Projector Management Utility.

# Managing the Projector Using Web Image Monitor

Using Web Image Monitor, you can check the projector status and change settings.

To use this function, specify the following settings:

- Connect the projector to a network using [Network Settings]
- Select [Enable] in [Web Image Monitor] under [Network Application Settings]
   To enable this setting after you change it, you must restart Web Image Monitor.

For details, see page 99 "Network Settings Menu" and page 107 "Network Application Settings Menu".

The following web browsers are recommended for Web Image Monitor:

• Windows:

Internet Explorer 8.0 or higher

Firefox 20 or higher

Chrome 26 or higher

Mac OS

Safari 5.0 or higher

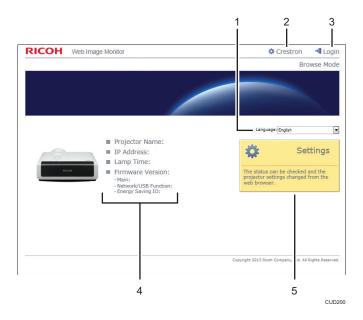


- Display and operation problems can occur if you are using a non-recommended web browser.
- You must enable JavaScript and cookies on your web browser to use Web Image Monitor.
- If you use Internet Explorer, you must enable native XMLHTTP support to use Web Image Monitor.
- You can access Web Image Monitor more quickly by registering the projector's URL as a bookmark.

# Displaying Web Image Monitor

- 1. Start your web browser.
- 2. Enter "http://(projector's IP address)/" in your web browser's URL bar.

Top Page of Web Image Monitor appears.



#### 1. Language

Select the display language for Web Image Monitor.

Available languages are as follows:

English, French, German, Spanish, Italian, Dutch, Japanese, Simplified Chinese.

#### 2. Crestron

Displays Crestron WebUI. For details about Crestron WebUI, see page 139 "Controlling and Monitoring the Projector Using Crestron RoomView".

This item appears when [Crestron RoomView] in [Network Application Settings] is set to [Enable].

#### 3. Login/Logout

To enter edit mode, click [Login], and then enter the administrator password. To leave edit mode, click [Logout].

This item appears when [Administrator Authentication] in [Network Application Settings] is set to [On].

#### 4. Status area

You can check the projector name, IP address, lamp time, and firmware version.

#### 5. Settings

Displays the settings screen. On the settings screen, you can specify and check the items in the USB Settings menu, Network Settings menu, and Network Application Settings menu. For details about each setting, see page 97 "USB Settings Menu", page 99 "Network Settings Menu", or page 107 "Network Application Settings Menu".

## About Browse Mode and Edit Mode

When [Administrator Authentication] in [Network Application Settings] is set to [On], there are two modes available with Web Image Monitor: browse mode and edit mode.

#### **Browse Mode**

This mode requires no user login.

In browse mode, you can check the projector status and settings, but you cannot change the projector settings.

#### **Edit Mode**

The administrator password is required for the user to log in to the edit mode.

In edit mode, you can check the projector status and settings, and also change the projector settings.



When [Administrator Authentication] in [Network Application Settings] is set to [Off], you can use
 Web Image Monitor in edit mode without entering a password.

# Login to Edit Mode

- 1. On Top Page, click [Login].
- 2. Enter the administrator password, and then click [Login].

Enter the password that is specified in [Administrator Password] under [Network Application Settings].



• Depending on the configuration of your web browser, the password might be saved. If you do not want to save the password, configure your web browser's settings so that this information is not saved.

## /

# Controlling and Monitoring the Projector Using Crestron RoomView

The projector supports Crestron RoomView. Crestron RoomView is a system developed by Crestron Electronics for controlling and monitoring multiple devices on a network. For more information, see the Crestron Electronics Web site.

#### What you can do with Crestron RoomView

- Controlling and monitoring the projector using a web browser
   Using Crestron WebUI, you can control and monitor the projector from your computer. For details, see page 139 "Displaying Crestron WebUI" and page 140 "Using Crestron WebUI".
- Controlling and monitoring the projector using Crestron software
   Using the Crestron RoomView Express/Crestron RoomView Server Edition, software supplied
   by Crestron Electronics, you can monitor the projector, communicate with the help desk, and
   send emergency messages. For details, see the Crestron Electronics Web site.

To use this function, specify the following settings:

- Connect the projector to a network using [Network Settings]
- Select [Enable] in [Crestron RoomView] under [Network Application Settings]
- Specify other items in [Crestron RoomView] as required

For details, see page 99 "Network Settings Menu" and page 107 "Network Application Settings Menu".

# **Displaying Crestron WebUI**



- To use Crestron WebUI, Adobe Flash® Player must be installed on your computer.
- 1. Start your Web browser
- Enter "http://(projector's IP address)/" in your Web browser's URL bar.
   The top screen of Web Image Monitor appears.
- 3. Click [Crestron] at the top right on Web Image Monitor.

The top screen of Crestron WebUI appears.



• If [Crestron WebUI User Auth.] under [Network Application Settings] is enabled, a password is required to access Crestron WebUI.

# **Using Crestron WebUI**

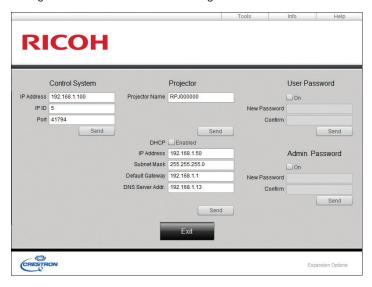
#### Top screen

This screen is displayed when you access Crestron WebUI, or click [Exit] on the tools screen or information screen. You can switch the input signal, adjust the image and the volume of the speaker, and turn off the projector on this screen.



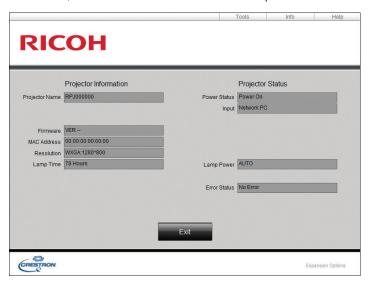
#### **Tools screen**

You can display the tools screen by clicking the [Tools] tab. You can specify the projector's network settings and Crestron RoomView settings on this screen.



#### Information screen

You can display the information screen by clicking the [Info] tab. You can check the projector's information, such as the firmware version and lamp status on this screen.



#### Help desk window

You can display the help desk window by clicking the [Help] tab. You can send and receive a message to administrators who are using Crestron RoomView Express in this window.



• If [Crestron WebUI Admin. Auth.] under [Network Application Settings] is enabled, a password is required to access the tools screen.

# Consumables

Lamp unit
 RICOH PJ Replacement Lamp Type9



• Contact your sales or service representative for information about consumables.

# 8. Appendix

This chapter explains the projector's specifications and compatible signals. This chapter also explains where to inquire about the projector and related services.

# **Specifications for the Projector**

Component	Specifications	
Power consumption  Power consumption (Standby mode)	<ul> <li>RICOH PJ X3340N/WX3340N Standard mode: 289 W Eco mode: 204 W</li> <li>RICOH PJ X4240N/WX4240N Standard mode: 316 W Eco mode: 204 W</li> <li>RICOH PJ X3340N/WX3340N Regular standby mode: 0.28 W Network standby mode (Wired LAN): 0.58 W Network standby mode (Wired/Wireless LAN): 0.91 W</li> <li>RICOH PJ X4240N Regular standby mode: 0.30 W Network standby mode (Wired LAN): 0.60 W</li> <li>RICOH PJ WX4240N Regular standby mode: 0.30 W</li> </ul>	
	Network standby mode (Wired LAN): 0.60 W  Network standby mode (Wired/Wireless LAN): 0.94 W	
Weight	Approx. 3.1 kg (6.9 lb.)	
External dimensions (not including protruding parts)	297 × 235 × 100 mm (11.7 × 9.3 × 4.0 inches)	
Operating environment	Temperature: 5 to 35°C (73 to 95°F), Humidity: 30 to 70%	

Component	Specifications
Power requirements	<ul> <li>Region A (mainly Europe and Asia)</li> <li>RICOH PJ X3340N/WX3340N: 220–240 V, 1.6 A, 50/60Hz</li> <li>RICOH PJ X4240N/WX4240N: 220–240 V, 1.7 A, 50/60Hz</li> <li>Region B (mainly North America)</li> <li>RICOH PJ X3340N/WX3340N: 120 V, 3.4 A, 60Hz</li> <li>RICOH PJ X4240N/WX4240N: 120 V, 3.7 A, 60Hz</li> </ul>
Display element	<ul> <li>Display method         Single-chip DLP®</li> <li>Panel size         RICOH PJ X3340N/X4240N: 0.55 inches         RICOH PJ WX3340N/WX4240N: 0.65 inches         <ul> <li>Pixels</li> <li>RICOH PJ X3340N/X4240N: 786,432 pixels (1,024 H × 768 V)</li> <li>RICOH PJ WX3340N/WX4240N: 1,024,000 pixels (1,280 H × 800 V)</li> </ul> </li> </ul>
Projection method	RICOH PJ X3340N/WX3340N: 1.5x zoom lens RICOH PJ X4240N/WX4240N: Short-focus lens
Lamp	<ul> <li>RICOH PJ X3340N/WX3340N</li> <li>230 W high-pressure mercury lamp</li> <li>RICOH PJ X4240N/WX4240N</li> <li>250 W high-pressure mercury lamp</li> </ul>
Projection screen size	RICOH PJ X3340N: 30 to 200 inches  RICOH PJ WX3340N: 40 to 240 inches  RICOH PJ X4240N: 50 to 120 inches  RICOH PJ WX4240N: 60 to 140 inches

Component	Specifications
Projection distance	RICOH PJ X3340N: 0.68 to 7.20 m (2.22 to 23.61 feet)  RICOH PJ WX3340N: 0.77 to 7.33 m (2.53 to 24.06 feet)  RICOH PJ X4240N: 0.59 to 1.49 m (1.49 to 4.88 feet)  RICOH PJ WX4240N: 0.61 to 1.48 m (2.00 to 4.85 feet)
Speaker	10 W (Mono)
Connection ports	<ul> <li>Computer1 In port Mini D-SUB15 × 1</li> <li>Computer2 In/Monitor Out port Mini D-SUB15 × 1</li> <li>HDMI port (HDCP compliant)* HDMI × 1</li> <li>Video In port RCA_1pin × 1</li> <li>Audio In port Mini Jack × 1</li> <li>Audio Out port Mini Jack × 1</li> <li>Control port USB-TYPE-minB × 1</li> <li>USB port TYPE-A × 1 USB 2.0 High-speed Output voltage: DC 5 V Supply current: 500 mA</li> <li>LAN port RJ-45 10BASE-T/100BASE-TX/1000BASE-T</li> </ul>
Wireless LAN	RICOH PJ X3340N/WX3340N/WX4240N only     Based on IEEE 802.11a/b/g/n

<sup>\*</sup> HDCP (High-bandwidth Digital Content Protection) is a copyright protection method to encrypt digital signals across the DVI/HDMI interface and prevent unauthorized copying. The HDCP specification was developed

and is licensed by Digital Content Protection, LLC. The HDMI port on this projector is HDCP compliant and can project digital video content protected by HDCP. Updates to the HDCP specification may void this compliance and prevent access to protected data. If this occurs, it is not caused by the projector.

# **List of Compatible Signals**

Set the computer and AV equipment output signals so that they match the input signals compatible with the projector.

If resolutions or signal frequencies that are not compatible with the projector are input, the image may flicker or become blurred. Further, the image may not be displayed.



- Images with a resolution greater than the following are compressed when displayed, so some of the information may be lost or the image may deteriorate.
  - RICOH PJ X3340N/X4240N: 1024 × 768 resolution
  - RICOH PJ WX3340N/WX4240N: 1280 × 800 resolution

### Video Input

#### Compatible mode

NTSC, PAL, SECAM, PAL-M, PAL-N, PAL60, NTSC4.43

#### Y/Pb/Pr Input

#### Compatible mode

480i (525i), 480p (525p), 576i (625i), 576p (625p), 720/50p, 720/60p, 1080/50i, 1080/60i, 1080/50p, 1080/60p

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Mode	Resolution		Frequency		
Mode	Horizontal (pixel)	Vertical (pixel)	Vertical (Hz)	Horizontal (kHz)	Clock (MHz)
			59.940	31.469	25.175
			72.809	37.861	31.500
640 × 480	640	480	75.000	37.500	31.500
			85.008	43.269	36.000
720 × 400	720	400	85.039	37.927	35.500
			56.250	35.156	36.000
			60.317	37.879	40.000
800 × 600	800	600	72.188	48.077	50.000
			75.000	46.875	49.500
			85.061	53.673	56.250
832 × 624	832	624	74.550	49.725	57.283
848 × 480	848	480	60.000	31.020	33.750
			60.004	48.363	65.000
			70.069	56.476	75.000
1024 × 768	1024	768	75.029	60.023	78.750
			84.997	68.678	94.500
			74.700	60.134	79.857
1152 × 864	1152	864	75.000	67.500	108.000
1152 × 870	1152	870	75.062	68.682	100.001
1280 × 720	1280	720	60.000	45.000	74.250
		768	59.995	47.396	68.250
			59.870	47.776	79.500
1280 × 768	1280		74.893	60.289	102.250
			84.837	68.633	117.500
			59.910	49.306	71.000
			59.810	49.702	83.500
1280 × 800	1280	800	74.934	62.795	106.500
			84.880	71.554	122.500
			60.000	60.000	108.000
1280 × 960	1280	960	75.019	75.019	126.032
			85.002	85.937	148.500
			60.020	63.981	108.000
1280 × 1024	1280	1024	75.025	79.976	135.000
			85.024	91.146	157.500
1360 × 768	1360	768	60.015	47.712	85.500
1000	4000		60.000	48.000	72.000
1366 × 768	1366	768	59.790	47.712	85.500
			59.948	64.744	101.000
1400 × 1050	1400	1050	59.978	65.317	121.750
			74.867	82.278	156.000
			59.901	55.469	88.750
4440 000	1440	000	59.887	55.935	106.500
1440 × 900	1440	900	74.984	70.635	136.750
			84.842	80.430	157.000
1600 × 900	1600	900	60.000	60.000	108.000
1600 × 1200	1600	1200	60.000	75.000	162.000
			59.883	64.674	119.000
1680 × 1050	1680	1050	59.954	65.290	146.250

# **HDMI** Input

Mode	Resol	ution		Frequency	
Wode	Horizontal (pixel)	Vertical (pixel)	Vertical (Hz)	Horizontal (kHz)	Clock (MHz)
480i (525i)	720	242.5	59.940	15.734	13.500
576i (625i)	720	288	50.000	15.625	13.500
480p (525p)	720	483	59.940	31.469	27.000
576p (625p)	720	576	50.000	31.250	27.000
720 / 50p	1280	720	50.000	37.500	74.250
720 / 60p	1280	720	60.000	45.000	74.250
1080 / 50i	1920	540	50.000	28.125	74.250
1080 / 60i	1920	540	60.000	33.750	74.250
1080 / 24p	1920	1080	24.000	27.000	74.250
1080 / 30p	1920	1080	30.000	33.750	74.250
1080 / 50p	1920	1080	50.000	56.250	148.500
1080 / 60p	1920	1080	60.000	67.500	148.500
			59.940	31.469	25.175
640 × 480	640	480	72.809	37.861	31.500
040 400	040	400	75.000	37.500	31.500
			85.008	43.269	36.000
			56.250	35.156	36.000
			60.317	37.879	40.000
800 × 600	800	600	72.188	48.077	50.000
			75.000	46.875	49.500
			85.061	53.673	56.250
832 × 624	832	624	74.550	49.725	57.283
848 × 480	848	480	60.000	31.020	33.750
			60.004	48.363	65.000
			70.069	56.476	75.000
1024 × 768	1024	768	75.029	60.023	78.750
			84.997	68.678	94.500
			74.700	60.134	79.857
1152 × 864	1152	864	75.000	67.500	108.000
1152 × 870	1152	870	75.062	68.682	100.001
1280 × 720	1280	720	60.000	45.000	74.250
			59.995	47.396	68.250
1280 × 768	1280	768	59.870	47.776	79.500
			74.893	60.289	102.250
			84.837	68.633	117.500
			59.910	49.306	71.000
1280 × 800	1280	800	59.810	49.702	83.500
			74.934	62.795	106.500
			84.880	71.554	122.500
1000	4000		60.000	60.000	108.000
1280 × 960	1280	960	75.019	75.019	126.032
			85.002	85.937	148.500
4000 1004	4000	4004	60.020	63.981	108.000
1280 × 1024	1280	1024	75.025	79.976	135.000
1200 × 700	1000	760	85.024	91.146	157.500
1360 × 768	1360	768	60.015	47.712	85.500
1366 × 768	1366	768	60.000	48.000	72.000
			59.790	47.712	85.500
1400 × 1050	1400	1050	59.948 59.978	64.744 65.317	101.000
1400 × 1050	1400	1050			121.750
			74.867	82.278	156.000
		-	59.901	55.469	88.750
1440 × 900	1440	900	59.887	55.935	106.500
		-	74.984	70.635	136.750
1000 × 000	1000	000	84.842	80.430	157.000
1600 × 900	1600	900	60.000	60.000	108.000
1000 - 000			59.883	64.674	119.000

## **3D Format**

O: Supported

X: Not Supported

## Computer input

Mode	Frequ	uency	3D format		
Wode	Vertical (Hz)	Clock (MHz)	Frame Sequential	Side by Side	Top and Bottom
640 × 480	59.940	25.175	0	0	0
800 × 600	60.317	40.000	0	0	0
1024 × 768	60.004	65.000	0	0	0
1280 × 960	60.000	108.000	0	0	0
1280 × 1024	60.020	108.000	0	0	0
1360 × 768	60.015	85.500	0	0	0
1366 × 768	60.000	72.000	0	0	0
1300 ^ 700	59.790	85.500	0	0	0
1440 × 900	59.901	88.750	0	0	0
1440 × 900	59.887	106.500	0	0	0
1600 × 900	60.000	108.000	0	0	0
1600 × 1200	60.000	162.000	0	0	0
1680 × 1050	59.883	119.000	0	0	0
1000 × 1050	59.954	146.250	0	0	0

## Y/Pb/Pr input

Mode	3D format			
Wode	Frame Sequential	Side by Side	Top and Bottom	
480i (525i)	0	0	0	
576i (625i)	0	0	0	
480p (525p)	×	0	0	
576p (625p)	×	0	0	
720 / 60p	×	0	0	
1080 / 60i	×	0	0	
1080 / 60p	×	0	0	

## Video input

Mode	3D format			
Wode	Frame Sequential	Top and Bottom		
NTSC	0	×	×	
PAL	0	×	×	

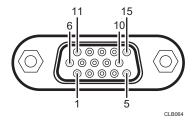
## **HDMI** input

	Freq	uency		3D fo	rmat	
Mode	Vertical (Hz)	Clock (MHz)	Frame Sequential	Side by Side	Top and Bottom	Frame Packing
640 × 480	59.940	25.175	0	0	0	×
800 × 600	60.317	40.000	0	0	0	×
1024 × 768	60.004	65.000	0	0	0	×
1280 × 960	60.000	108.000	0	0	0	×
1280 × 1024	60.020	108.000	0	0	0	×
1360 × 768	60.015	85.500	0	0	0	×
4000 700	60.000	72.000	0	0	0	×
1366 × 768	59.790	85.500	0	0	0	×
	59.901	88.750	0	0	0	×
1440 × 900	59.887	106.500	0	0	0	×
1600 × 900	60.000	108.000	0	0	0	×
1600 × 1200	60.000	162.000	0	0	0	×
	59.883	119.000	0	0	0	×
1680 × 1050	59.954	146.250	0	0	0	×
480i (525i)	59.940	13.500	0	0	0	×
576i (625i)	50.000	13.500	0	0	0	×
480p (525p)	59.940	27.000	×	0	0	×
576p (625p)	50.000	27.000	×	0	0	×
720 / 60p	60.000	74.250	×	0	0	×
1080 / 60i	60.000	74.250	×	0	0	×
1080 / 60p	60.000	148.500	×	0	0	×
720 / 50p (Frame Packing)	50.000	148.500	×	×	×	0
720 / 60p (Frame Packing)	59.940/60.000	148.350/148.500	×	×	×	0
1080 / 24p (Frame Packing)	23.976/24.000	148.350/148.500	×	×	×	0
1080 / 50i (Side by Side)	50.000	74.250	×	0	×	×
1080 / 60i (Side by Side)	59.940/60.000	74.176/74.250	×	0	×	×
720 / 50p (Top and Bottom)	50.000	74.250	×	×	0	×
720 / 60p (Top and Bottom)	59.940/60.000	74.176/74.250	×	×	0	×
1080 / 24p (Top and Bottom)	23.976/24.000	74.176/74.250	×	×	0	×

# **Specifications for Ports**

## Computer 1 In Port and Computer 2 In/Monitor Out Port

### Pin assignment



	Pin description		
Pin No.	During RGB input	During Y/Pb/Pr input (Computer 1 In port only)	
1	Video signal (R)	Color difference signal (Pr)	
2	Video signal (G)	Luminance signal (Y)	
3	Video signal (B)	Color difference signal (Pb)	
4	N.C	-	
5	GND	-	
6	GND (R)	GND (Pr)	
7	GND (G)	GND (Y)	
8	GND (B)	GND (Pb)	
9	N.C	-	
10	GND	-	
11	N.C	-	
12	I <sup>2</sup> C Data	-	
13	Horizontal sync signal	-	
14	Vertical sync signal	-	

	Pin description		
Pin No.	During RGB input	During Y/Pb/Pr input (Computer 1 In port only)	
15	I <sup>2</sup> C CLOCK	-	

### **Input Signal**

• RGB input

RGB signals: 0.7V (p-p), 75  $\Omega$ 

Horizontal sync signal: TTL level (Pos/neg polarity)
Vertical sync signal: TTL level (Pos/neg polarity)

• Y/Pb/Pr input (Computer 1 In port only)

Y signal: 1.0V (p-p), 75  $\Omega$  Pb/Pr signals: 0.7V (p-p), 75  $\Omega$ 

## **Control Port**

#### Interface format

Communication method	RS-232C, 115,200bps, No Parity, Data Length: 8 bits; Stop Bit Length: 1 bit
Communication format	#(23h)' + Command + CR (0Dh) Only 1 command valid per communication. For the available commands, see "Main commands".
Data format	For input commands, only ASCII-compliant all-uppercase alphanumeric characters supported.
Replies	<ul> <li>Acknowledge (Aborted)         '=(3Dh)' + Command(3byte) + ':(3Ah)' + 'E(45h)' + 'R(52h)' + 'O(30h)' + CR(0Dh)         No acknowledge         '=(3Dh)' + 'E(45h)' + 'R(52h)' + 'O(30h)' + CR(0Dh)         For details of Acknowledge (Normally ended), see "Main commands".</li> </ul>

#### Main commands

ltem	Command	Acknowledge (Normally ended) *
Power on	PON	=PON:SC0
Power off	POF	=POF:SC0
Guidance display on	ICN:1	=ICN:1
Guidance display off	ICN:0	=ICN:0
Auto setting (RGB input)	PAT	=PAT:SCO
Status display on	DON	=DON:SC0
Status display off	DOF	=DOF:SC0
Computer1 input	INP:1	=INP:1
HDMI input	INP:5	=INP:5
Network PC input	INP:12	=INP:12

<sup>\*</sup> CR is added to the end of "Acknowledge (Normally ended)".



- The control port is for service representatives or administrators of the projector.
- A USB driver must be installed to control the projector using the control port. For details, contact your service representative.

# Information

#### Copyrights

This product uses open source and/or third party software. To check the information about software copyrights, see the documents in the "Copyrights" folder on the supplied CD-ROM.

#### Updating the Firmware

You can update the projector's firmware as explained below.

#### Online update

You can download the latest firmware from our Web site. There are two types of firmware; the RICOH PJ X3340N/X4240N firmware and the RICOH PJ WX3340N/WX4240N firmware. Use the firmware that is supported by your projector. For details about how to update the firmware, see the manual downloaded with the firmware.

#### Updating the firmware using the @Remote service

If you sign up with the @Remote service, a message is projected on the screen indicating that an update is available. When a message is displayed, execute the [@Remote: Firmware Updating] in [Network Application Settings].



- You can check the current firmware version on the menu screens of the projector.
  - Main FW Version: Display Status menu
  - Network/USB Func. Firmware Version, Energy Saving IO Firmware Version: Network/USB Settings menu ⇒ Network Settings ⇒ Display Status

#### Where to Inquire

Contact your sales or service representative for further information about topics covered in this manual or to inquire about topics not covered in this manual.

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