RICOH

RICOH PJ WUL5A50
RICOH PJ WUL5A40ST

User's Manual

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Precautions in this manual before using the machine.

Notes

- RICOH PJ WUL5A50 and RICOH PJ WUL5A40ST differ only in the appearance of the lens. Unless they involve the introduction of lens-related functions, the drawings of other projector cabinets are shown with RICOH PJ WUL5A50 as an example.

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Table of Contents

Precautions

Follow all warnings, precautions and maintenance as recommended in this user's guide to maximize the life of your unit.

■ Warning- *Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.*

■ Caution- *Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.*

■ Warning- Do not use flammable sprays or solvents in the vicinity of this machine. Also, avoid placing these items in the vicinity of this machine. Doing so could result in fire or electric shock.

■ Warning- Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers holding water or any other liquids, on or close to this machine. Fire or electric shock could result from spillage or if such objects or substances fall inside this machine.

■ Warning- Keep the machine and attachments out of the reach of children. If the machine is near children, it may cause injury.

■ Warning- Plastic bags can be dangerous, please do not leave near babies and young children. To avoid the threat of suffocation, please keep away from their nose and mouth.

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

■ Warning- Do not damage, break, or modify the power cord. Also, do not place heavy objects on the power cord, or pull the cord or bend it severely. Doing so could result in fire or electric shock.

■ Warning- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.

■ Warning- The supplied power cord is for use with this machine only. Do not use it with other appliances. Also, do not use power cord other than the one supplied with this

machine. Doing so could result in fire or electric shock.

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

■ Warning- Be sure to disconnect the plug from the wall outlet at least once a year and check for the following:
  ■ There are burn marks on the plug.
  ■ The prongs on the plug are deformed.
  If any of the above conditions exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.

■ Warning- Be sure to disconnect the power cord from the wall outlet at least once a year and check for the following:
  ■ The power cord's inner wires are exposed, broken,etc.
  ■ The power cord's coating has a crack or dent.
  ■ When bending the power cord, the power turns off and on.
  ■Part of the power cord becomes hot.
  ■The power cord is damaged.
  If any of the above conditions exist, do not use the power cord and consult your dealer or service representative. Use of the power cord could result in fire or electric shock.

■ Warning- Do not use the connection cable if it is deformed, cracked, or damaged. Doing so could result in fire or electric shock. If the connection cable is deformed, cracked, or damaged, contact your service representative to request a replacement cable.

■ Warning- When using an extension cord or power strip, only connect equipment whose total power consumption is within the power rating for the extension cord or power strip. If the power rating is exceeded, it may cause heat buildup and result in fire.

■ Warning- If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

■ Warning- If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service

representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

■ Warning- Never operate this unit on AC power during a thunderstorm. If you see lightning or hear thunder, never touch the unit, cables and/or peripherals. An electric surge caused by the storm, may result in an electrical shock or damage to the unit.

■ Warning- If the machine topples, or if a cover or other part gets broken, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

■ Warning- Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

■ Warning- Do not remove any covers or screws. There are high voltage components inside the machine that may cause electric shock. Contact your service representative if any of the machine's internal components require maintenance, adjustment, or repair.

■ Warning- Do not disassemble or modify the machine. Doing so may cause injury or malfunction.

■ Warning- Installing the Projector on a Wall or Ceiling:
a) Do not attempt to clean or replace parts for a machine that is installed in a high location on a wall or ceiling. Doing so may cause it to fall down, resulting in an injury.
b) Contact your sales or service representative to clean or replace parts for a machine that is installed on a wall or ceiling.
c) If a machine 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 machine on a wall or ceiling.
d) Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.
e) For users, do not install the projector by yourself. Contact your sales or service representative if you want to install the projector on a wall or ceiling.
f) For sales or service representatives:
- Use brackets that are strong enough to support the projector. RICOH PJ WUL5A50 Series weights about

5.2kg. RICOH PJ WUL5A40ST Series weights about 5.5kg.
- The projector must be installed in a location that is sturdy enough to support the full weight of the projector and brackets.
- Use only the M4 screws for fixing to the brackets. Use all four of the projector's screw holes to the brackets. Make sure the screws are tightened.
g) Do not use the projector in oil-mist or smoke environment. Doing so may cause the projector case to crack and fall from its ceiling mount. This may cause serious injury.

■ Caution-   Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

■ Caution-   Do not place any objects on the machine. Doing so may cause the machine to topple over, possibly resulting in injury.

■ Caution-   Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.

■ Caution-   Do not place the machine or use it in an environment where it might get wet such as from snow, rain, or being near water. Doing so could result in fire or electric shock.

■ Caution-   Do not put your face or hand near the exhaust vents. Doing so could result in burns or an accident due to hot air coming from the exhaust vents.

■ Caution-   Do not use the machine on soft material such as paper or cloth that might get sucked into the intake vents. Doing so may cause heat buildup inside the machine, resulting in malfunction, burns, or fire.

■ Caution-   Do not place the machine in a location where air flow is poor. Doing so may cause fire due to internal components becoming overheated.

■ Caution-   Do not place or store the machine in a location where direct sunlight or heat generation might occur. The heat may deform or wear out the exterior parts or negatively affect internal parts. Doing so could result in fire.

■ 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 machine or an accident.

■ Caution-   Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

■ Caution-   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- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

■ 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.

■ Caution- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

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

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

■ Caution- The machine may be very hot after it is turned off, especially the vents.

■ Caution- Do not place the machine on other equipment or vice versa. Doing so may cause heat buildup inside the machine or cause the other equipment to malfunction.

■ Caution- 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.

■ Caution- If the machine's interior is not cleaned regularly, dust will accumulate. Fire and breakdown can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.

■ Caution- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.

■ Caution- Do not use attachments not recommended by RICOH. Use of an incompatible attachments could cause hazards or damage to the product.

■ Caution- Unplug this product from the wall outlet and take the product to qualified service personnel if you
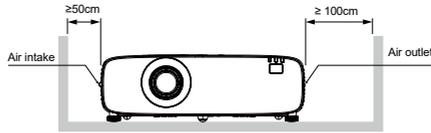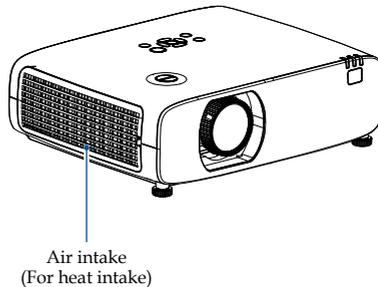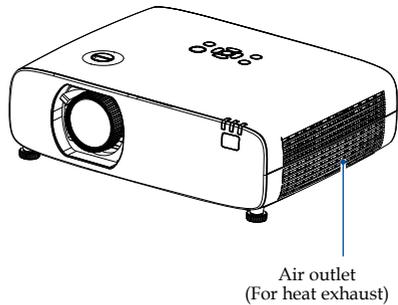
encounter any of the following conditions:
a) The power supply cord or plug is damaged.
b) Liquid has been spilled, or objects have fallen into the product.
c) The product has been exposed to rain or water.
d) The product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions.
e) The product has been dropped or damaged in any way. (If the cabinet should break, please handle with care to avoid injury.)

■ Caution- This product incorporates glass components, including a lens. If this should break, please handle with care to avoid injury and contact your sales representative for repair service. Avoid any broken pieces of glass since they may cause injury.

■ Caution- Do not place anything in front of the lens while the projector is operating. Things placed in front of the lens may overheat and burn or start a fire.If you want to temporarily block the projection, use the "AV mute" function of the remote control or the control panel.

■ Caution- Unauthorized substitutions may result in fire, electric shock, or other hazards.
Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to verify that the product is in proper operating condition.

■ Caution- Do not use the product in a closed installation location. Do not place the product in a box or in any other closed installation location. Otherwise it may overheat, which could result in a risk of fire.

■ Warning- 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- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

■ Caution- 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.

■ Caution-   Be sure to reserve proper space at the top, sides, and rear of the shell for ventilation and projector cooling. The following figure shows minimum distances to be reserved. If the projector is placed in a cabinet or an enclosed environment, the requirements for minimum distances must be satisfied.

≥50cm   ≥ 100cm
Air intake   Air outlet

≥ 100cm

■ Caution-   Do not block the ventilation holes to prevent overheating.

Air outlet
(For heat exhaust)

Air intake
(For heat intake)

Remote Control Battery

Warning

• Never throw batteries into a fire.

Using the batteries improperly may cause them to explode or leak and may result in serious injury. If battery-leaking fluid contacts skin, wash the fluid off immediately with clean water and consult a doctor. If the fluid spills on an instrument, avoid contact and wipe it off using tissue paper. Then dispose of the used tissue paper as flammable garbage after moistening the tissue with water.

• Keep new and used batteries away from children.

If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Notes

• Be sure to use AAA/R03 size batteries.

• Dispose of batteries in a designated disposal area.

• Attention should be drawn to the environmental aspects of battery disposal.

• If the remote control does not operate correctly, or if the operating range becomes reduced, replace the batteries.

• Avoid contact with water or liquid.

• Do not expose the remote control to moisture or heat.

• Do not drop the remote control.

• If the batteries have leaked in the remote control, carefully wipe the case clean and install new batteries.

• Dispose of used batteries according to the instructions.

• The remote control may fail to operate if the infrared remote sensor is exposed to bright sunlight or fluorescent lighting.

Important:

• Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, special, incidental, or consequential damage as a result of handing or operating this product.

Laser safety caution

⚠️ WARNING
• The laser module is equipped in this product. Use of controls or adjustments of procedures other than those specified herein may result in hazardous radiation exposure.

- This product is classified as Class 1 of IEC 60825-1 Second edition (2007)/IEC 60825-1 Third edition (2014) and RG2 of IEC/EN62471-5 First edition. Obey the laws and regulations of your country in relation to the installation and management of the device.

- Regarding the installation and management of the equipment, please comply with the relevant laws and regulations of your country.

- Outline of laser emitted from the built-in light module:
  Wavelength: 455 nm
  Maximum power: 88W

- Radiation pattern from the protective housing:
  Wavelength: 455 nm
  Maximum laser output: : 333mW

- The laser module is equipped in this product. Use of controls or adjustments of procedures other than those specified herein may result in hazardous radiation exposure.
Laser beam will emit from this window.
Do not stare directly at the laser transmitting window or aim the window at human body, to avoid any physical injury.
Laser aperture warning
-CLASS 1 LASER PRODUCT

Light Module

• A light module containing multiple laser diodes is equipped in the product as the light source.

• hese laser diodes are sealed in the light module. No maintenance or service is required for the performance of the light module.

• End user is not allowed to replace the light module.

• Contact qualified distributor for light module replacement and further information.

Laser Information

The caution and the explanatory labels are stuck on the below indicated positions.

Laser beam will emit from this window.
Do not stare directly at the laser transmitting window or aim the window at human body, to avoid any physical injury.
Laser aperture warning
-CLASS 1 LASER PRODUCT
Radiation pattern from the protective housing:
Wavelength : 455 nm
Maximum laser output:333mW

Warning labels

1. Do not place anything in front of the projection window while the projector is operating. Things placed in front of the projection window may overheat and burn or start a fire. If you want to temporarily stop the projected image, use the AV mute on the remote control.

2. CLASS 1 LASER PRODUCT - RISK GROUP 2 IEC62471-5:2015. Do not look into the projection window while the light source is on. The strong light from the light source may cause damage to your eyesight.

3. Do not remove any screws. Do not block or cover the vents.

1

RICOH PJ WUL5A50

RICOH PJ WUL5A40ST

2
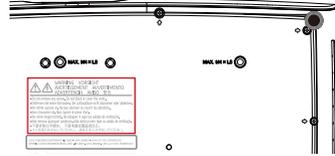
RG 2

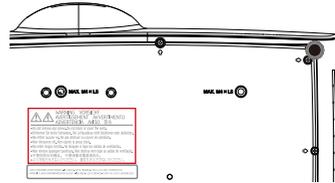RICOH PJ WUL5A50

RICOH PJ WUL5A40ST

3

WARNING   VORSICHT
AVERTISSEMENT   AVVERTIMENTO
ADVERTENCIA   AVISO   警告

- Do not remove any screws. Do not block or cover the vents.
- Entfernen Sie keine Schrauben. Die Luftauslässe nicht blockieren oder abdecken.
- Ne retirer aucune vis, Ne pas obstruer ou couvrir les aérations,
- Non rimuovere viti, Non coprire le prese d'aria,
- No retire ningún tornillo, No bloquee ni tape las salidas de ventilación,
- Não remova quaisquer parafusos, Não obstrua nem tape as saídas de ventilação,
- 不要拆除任何螺丝。 不要堵塞或覆盖通风孔。
- ネジを取り外さないでください。 通気孔をふさがないでください。

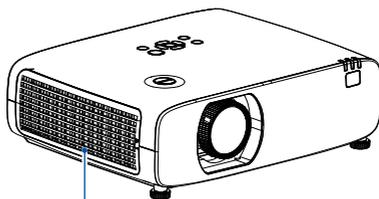### RICOH PJ WUL5A50

RICOH PJ WUL5A40ST

Air ventilation

Openings in the casing are designed for ventilation and over-heating prevention. DO NOT block or cover these openings to keep your projector in normal operation and from overheating.
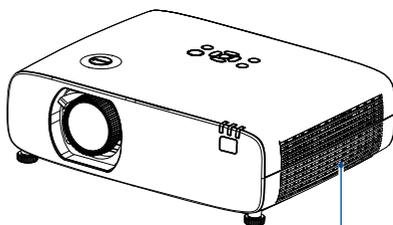
⚠️ Note:

Heat exhaust at the air outlet Keep the following in mind when using or installing your projector:
- DO NOT place flammable materials or sprayers near your projector.
- Keep the air outlet one meter away from other objects.
- DO NOT touch the area close to the air outlet especially the metal components, e.g. screws. This area and parts will get very hot once your projector starts operating.
- DO NOT place any object atop your projector. They may not only be damaged but also lead to fire after being overheated.

Air intake
(For heat intake)

Air outlet
(For heat exhaust)

Place your projector correctly

Use your projector at specified location in correct way. Invalid projector location may shorten light source 's life-cycle or even lead to severe incidents or fire.

Power Switch Symbols

The meaning of the symbols for the switches on this machine as follows:

⏻   : On/Standby (Off)

Usage Notice

Regulation & Safety Notices

This appendix lists the general notices of your Projector.

Notice: Users in the United States of America FCC notice

MODEL NAME: RICOH PJ WUL5A50/WUL5A40ST

TRADE NAME: PROJECTOR
MODEL NAME: RICOH PJ WUL5A50/WUL5A40ST
Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and

2. This device must accept any interference received, including interference that may cause undesired operation.

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

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

■ Caution-   Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RESPONSIBLE PARTY: PFU America, Inc.
3900 Freedom Circle, Suite 240, Santa Clara, CA 95054, USA
Telephone number: (408)992-2900

Notice: Shielded cables
All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Caution
Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.

Notes to Users in the State of California

Perchlorate Material - special handling may apply,

See www. dtsc.ca.gov/hazardouswaste/perchlorate.

Usage Notice

Notice to Users in EEA Countries and the UK

Manufacturer:

Ricoh Co., Ltd.
3-6 Nakamagome 1-chome, Ohta-ku, Tokyo. 143-8555, Japan

Importer(CE marking):

PFU (EMEA) LIMITED Viale Monza 259, 20126 Milano (MI) Italy

Importer(UKCA marking):

PFU (EMEA) LIMITED Belmont, Belmont Road, Uxbridge
UB8 1HE England

Declaration of Conformity

Notice to Users in EEA Countries:

This product complies with the essential requirements and provisions of Directive 2014/53/EU.
The CE/UKCA Declaration of Conformity is available by accessing the URL:
https://www.ricoh.com/products/ce_doc2/
and selecting the product applicable.

User Information on Electrical and Electronic Equipment

Users in the countries where this symbol shown in this section has been specified in national law on collection and treatment of E-waste.

Our Products contain high quality components and are designed to facilitate recycling.

Our products or product packaging are marked with the symbol below.

This product contains substances which are harmful to humans and the environment.

The symbol indicates that the product must not be treated as municipal waste. It must be disposed of separately via the appropriate return and collection systems available. By following these instructions you ensure that this product is treated correctly and help to reduce potential impacts on the environment and human health, which could otherwise result from inappropriate handling. Recycling of products helps to conserve natural resources and protect the environment.

For more detailed information on collection and recycling systems for this product, please contact the shop where you purchased it, your local dealer or sales/service representatives.

Notice: Users in Turkey

AEEE Yönetmeliğine Uygundur.

Bu sistem sarf malzemeleri ve yedek parçaları da dahil olmak üzere AEEE Yönetmeliğine Uygundur.

All Other Users

If you wish to discard this product, please contact your local authorities, the shop where you bought this product, your local dealer or sales/service representatives.

Laser Notice

IEC 60825-1:2014: CLASS 1 LASER PRODUCT - RISK GROUP 2.

The product's intended use as a consumer laser product and

compliant with EN 50689:2021.

<div align="right">

CLASS 1 CONSUMER LASER PRODUCT

EN 50689:2021

</div>

Usage Notice

Notice: Users in the EU and the UK
Note for the Battery and/or Accumulator Symbol

In accordance with the Battery Directive 2006/66/EC Article 20 Information for end-users Annex II, the above symbol is printed on batteries and accumulators. This symbol means that in the European Union, used batteries and accumulators should be disposed of separately from your household waste. In the EU, there are separate collection systems for not only used electrical and electronic products but also batteries and accumulators. Please dispose of them correctly at your local community waste collection/recycling centre.

COMMISION REGULATION (EU) 2019/2020

The light source of this product is not intended for applications other than image projection.

Other Information

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

Introduction

Package Overview

The projector is provided with the following accessories. Make sure that everything is included in the package. If anything is missing, contact your dealer immediately.

RICOH PJ WUL5A50   RICOH PJ WUL5A40ST

Remote control &   Power cord
(AAA/R03 battery x2)

Note

❖ Models for Europe are packed with two different codes, one for EU and one for UK.

HDMI cable

Documents:

☐ Quick start guide

Product Overview

Front/Top/Side
RICOH PJ WUL5A50

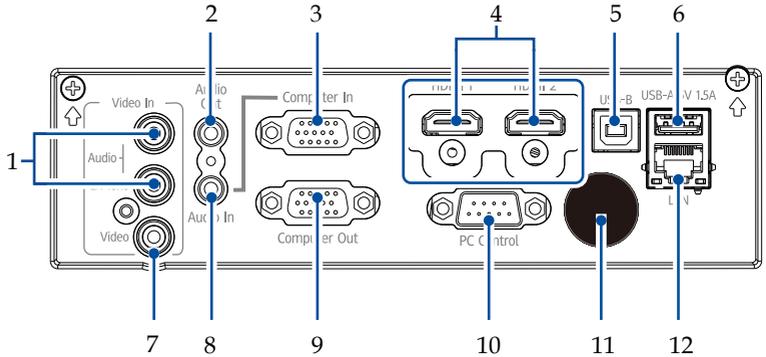|	
1. Lens shift dial	7. Air outlet
2. Control panel	8. Air intake
3. Indicator	
4. Adjustment feet	
5. Projection window	
6. Front Remote Sensor	

Introduction

RICOH PJ WUL5A40ST

1. Focus ring
2. Control panel
3. Indicator
4. Adjustment feet
5.   Projection window
6. Front Remote Sensor

7. Air outlet
8. Air intake

Introduction

Rear

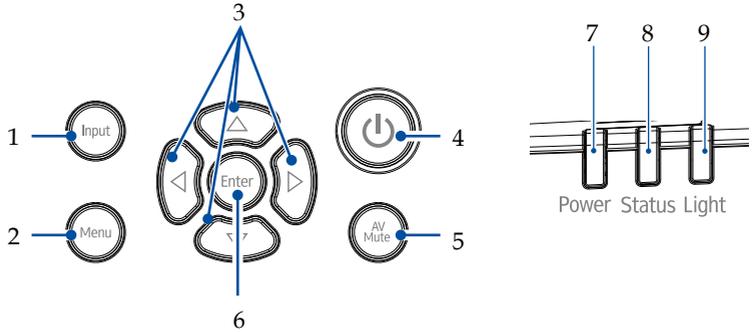|	
1. AC power cord port	4. Terminal
2. Speaker (16W*1)	5. Built-in Security Slot(🔒)
3. Safety bar	6. Rear Remote Sensor
(for fixing with wire)	

Connection Ports

1. Audio In (L/R) terminal
2. Audio Out terminal
3. Computer In terminal (VGA)
4. HDMI1/HDMI2 terminal
5. USB-B terminal
6. USB-A terminal
7. Video In terminal
8. Audio In terminal
9. Computer Out terminal (VGA)
10. PC Control terminal (RS-232C)
11. Remote Receiver(Rear)
12. LAN terminal

Introduction

Control Panel and Indicators

Power Status Light

❖ For detail indicator, please see page 90.

1	Input	Select the input source.
2	Menu	Press "Menu" to launch the on screen display (OSD), or go back to the previous menu. (See page 54)
3	Four directional key	Use ▲ , ▼ , ◀ or ▶ to select items or make adjustments to your selection.
4	Power ⏻	Refer to the "Power On/Off the Projector" section. (See page 42~44)
5	AV Mute	Mute the audio and video
6	Enter button	Select or confirm settings.
7	Power indicator	This indicator informs the power status of the projector.
8	Status indicator	This indicator lights/blinks when a button is pressed while the key lock function is utilized, or while performing the specific operations.
9	Light indicator	This indicator informs the state of light source, used time of the light source.

Introduction

Remote Control

1	Input	Press "Input" to choose your desired input source.
2	Auto set	Automatically synchronize the projector to the input source.
3	AV Mute	Momentarily turn off/on the audio and video.
4	Menu	Press "Menu" to launch the On Screen Display (OSD), back to the top level of OSD for the OSD main menu operation. (See page 54)
5	Picture	Select the preset picture mode.
6	HDMI	Press "HDMI" to choose HDMI1 and HDMI2 terminal.

7	Computer	Press "Computer" to choose Computer terminal.
8	USB	Enter the input name of "Connection Ports". to choose USB terminal.
9	YPBPR	This button is not supported with this machine.
10	Volume +/-	Increase or decrease speaker volume.
11	Magnify +/-	- Zoom in or out the projector display image. - Magnified area can be moved by four directional keys.
12	Status	Display the projector status.
13	Keystone	Adjust the image to compensate for distortion caused by tilting the projector.
14	Network	This button is not supported with this machine.
15	Aspect	Use this function to choose your desired aspect ratio.
16	Freeze	Pause the screen image. Press again to resume the screen image.
17	Video	Press "Video" to choose Video In.
18	Four Directional Select Keys	Use ▲, ▼, ◄ or ► to select items or make adjustments to your selection.
19	Enter	Confirm your section of items in sub menu operation.
20	ECO	Use this function to choose your desired Light Source Power Mode. (See page 70)
21	Power	Refer to the "Power On/Off the Projector" section. (See page 42)

Introduction
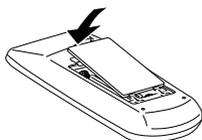
Installation of Remote Control Batteries

1 Push the clip to release the battery cover.

2 Install new batteries (AAA). Ensure that you have the batteries' polarity (+/–) aligned correctly.

3 Close the battery cover and press it down until it clicks into place. Do not mix different types of batteries or new and old batteries.
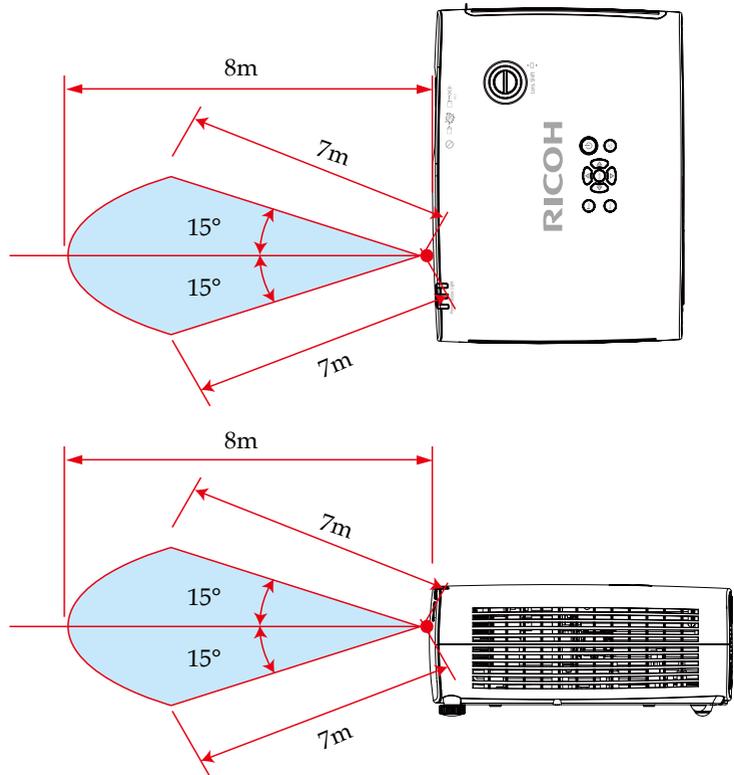
⚠ For safe operation, note the following precautions:

• Use two AAA batteries.

• Keep the remote control away from water or other liquid.

• Do not place the remote control in an overly hot or humid place.

• Do not drop the remote control.

• Do not use a new battery and a used one at the same time.

• Using a different battery than specified in this manual may cause an explosion.

• Handle used batteries according to instructions on the battery or local regulations or guide.

• Remove the batteries when the remote control will not be used for a long time.

• An infrared remote control may not work if it is exposed to strong light or fluorescent light.

• If battery liquid leaks in the remote control, carefully clean the battery holder before installing new batteries.

• Keep batteries out of the reach of children. (Children may swallow or choke on the batteries. If this happens, contact a doctor immediately.)

Remote Control Operating Range

Point the remote control at the remote control sensing windows (front and rear) on the projector.
When the remote control is pointed at the signal receiver on the projector, the effective range of the remote control is an area of radius 6 meters or about 8 meters in straight line from the receiver.
The remote control is effective within vertical and horizontal ±15° to the receiving direction of the remote control signal receiver. When the angle exceeds this range, the effective control distance will be reduced.

Introduction

Angle sensor

The installation angle range that the built-in angle sensor of the projector can detect is shown in the figure below.
STD series

When selecting [Auto ceiling /
Front] or [Auto ceiling / Rear] as
projection way, the projector will
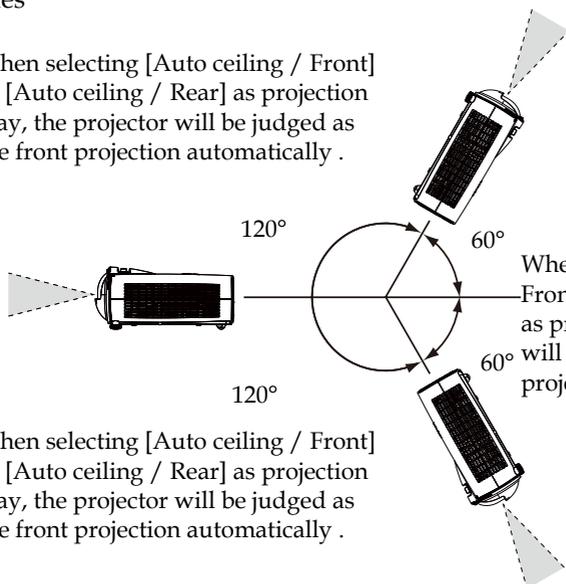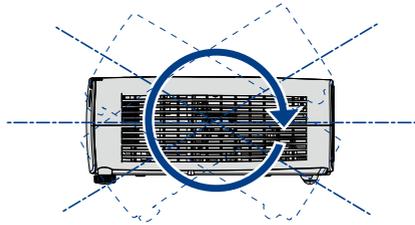be judged as the front projection
automatically .

120°

60°

60°

120°

When selecting [Auto ceiling /
Front] or [Auto ceiling / Rear]
as projection way, the projextor
will be judged as the ceiling
projection automatically .

When selecting [Auto ceiling / Front]
or [Auto ceiling / Rear] as projection
way, the projector will be judged as
the front projection automatically .

ST series

When selecting [Auto ceiling / Front]
or [Auto ceiling / Rear] as projection
way, the projector will be judged as
the front projection automatically .

120°

60°

60°

120°

When selecting [Auto ceiling /
Front] or [Auto ceiling / Rear]
as projection way, the projextor
will be judged as the ceiling
projection automatically .

When selecting [Auto ceiling / Front]
or [Auto ceiling / Rear] as projection
way, the projector will be judged as
the front projection automatically .
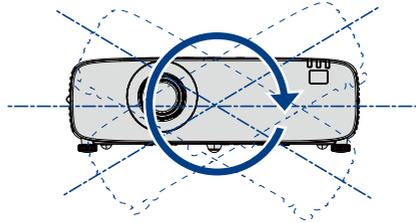
Introduction

Installing the Projector

When you select a position for the projector, consider the size and shape of your screen, the location of your power outlets, and the distance between the projector and the rest of your equipment. Follow these general guidelines:
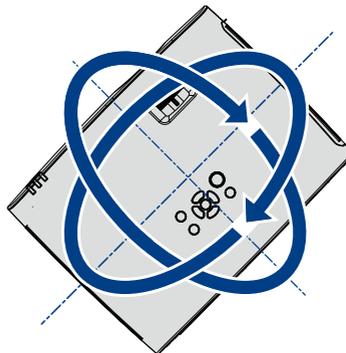
Note

❖ When using a LAN, use the network separated by a firewall to prevent unauthorized access from the Internet.

❖ Pay careful attention to the installation location, management of the devices, and the network device to which the device is connected, in order to prevent malicious third parties from viewing the communication data.

❖ Pay careful attention to the installation location and management of the devices, in order to prevent unauthorized tampering by a malicious third party who can operate the devices.

Vertical 360°

Horizontal 360°

Vertical & Horizontal 360°

Basic Operations
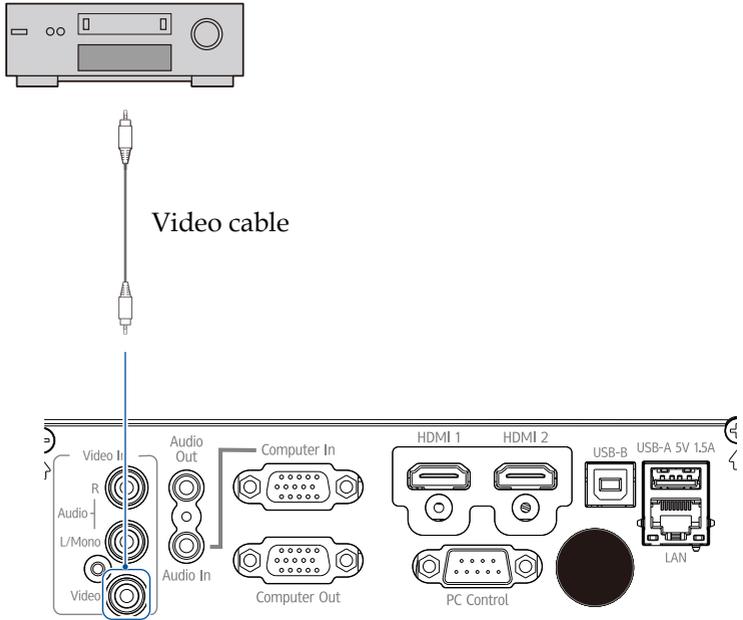
Connecting a Computer (Connect to Computer/Notebook)

RGB cable

RGB cable

HDMI cable

Video In
Audio Out
Computer In
HDMI 1   HDMI 2
USB-B   USB-A 5V 1.5A
R
Audio
L/Mono
Audio In
Video
Computer Out
PC Control
LAN

serial cable (Cross Type)

Connect to Video equipment

Video cable

Basic Operations

Connect to Audio equipment

Audio cable   Audio cable   Audio cable

Video In
R
Audio
L/Mono
Video
Audio Out
Audio In
Computer In
Computer Out
HDMI 1
HDMI 2
USB-B
USB-A 5V 1.5A
PC Control
LAN

Connect to USB, LAN and Wireless card (USB-A and USB-B)

USB A-B
cable(*)

USB
Memory(*)

Video In
Audio
Out
Computer In
HDMI 1
HDMI 2
USB-B
USB-A 5V 1.5A

R
Audio
L/Mono
Audio In
Video
Computer Out
PC Control
LAN

CAUTION:
• When connecting to a LAN, be sure to read and understand the
  security risks described in the manual and use the unit as safe as
  possible.

Basic Operations

Powering On/Off the Projector

Powering on the Projector

1. Ensure that the power cord and signal cable are securely connected. The Power indicator will flash orange.

Connect included AC power cord to your projector.

2. Turn on the projector by pressing the "⏻" button on the control panel or the "⏻" button remote control. The Power indicator will flash orange when standby power is set to "ECO".
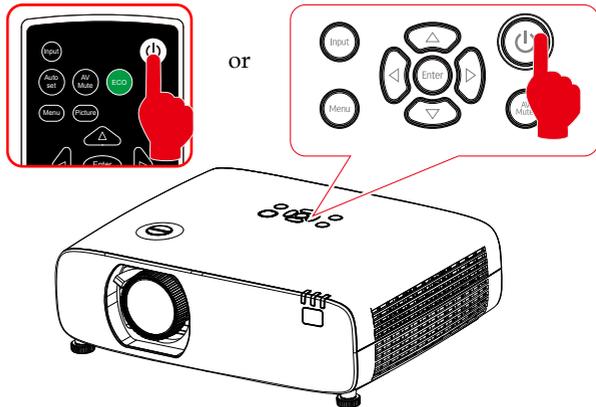
    The startup screen will display and the Power indicator will turn blue and the Light indicator will turn or blink green.

3. The first time you use the projector, you will be asked to select the preferred language. Turn on your source (computer, notebook, video player, etc.) The projector will detect your source automatically.

    Make sure that the "Auto Source" has been set to "On".

or

CAUTION:
- Do not look into the lens while the light source is on. The strong light from the lens may cause damage to your eyesight.
- Do not block the air intake or exhaust. Doing so could cause a fire due to internal overheating.
- Do not place your hands, face, or other objects near the air exhaust. Doing so could result in injury and/or damage the object.

Basic Operations

Power off the projector

1. Press the "⏻"button on the control panel or the "⏻ " button on the remote control. The following dialog box will pop up.

> **ⓘ Notify**
>
> Power off?

2. Press the "⏻"or "⏻ "button again. The projector will shut down.
   ● The Power indicator will blink orange when the projector goes to standby mode.
3. Unplug the power cord out of the socket and projector terminal.

Note

❖ When the Power indicator flashes green, the light source is cooling down, and the projector cannot be turned on at this moment. When the Power indicator glows red steadily, the projector can be turned on again.
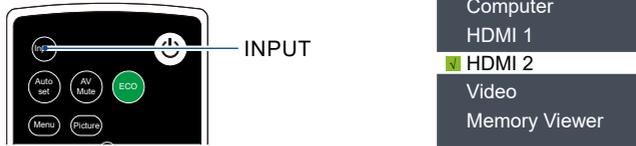
Input Source Signal Selection

Basic Operations
Press the Input button on the remote control or the control panel and choose Computer, HDMI1, HDMI2, Video, or Memory viewer as the input source.

Menu operation
1) Press the Input [Input] button on the remote control to enter the input source menu.
2) Press ▲▼ buttons to choose Computer, HDMI1, HDMI2, Video or Memory viewer and press Enter to select the input source.

INPUT

Computer
HDMI 1
√ HDMI 2
Video
Memory Viewer

Computer

If the input source is a computer that connects to Computer In port with a RGB cable, choose "Computer".

HDMI1

If the input source is a device that connects to the HDMI 1 In terminal with an HDMI cable, choose "HDMI 1".

HDMI 2

If the input source is a device that connects to the HDMI 2 In terminal with an HDMI cable, choose "HDMI 2".

Video

If the input source is a device that connects to the Video In terminal with a Video cable, choose Video.

Memory Viewer

If the input source is a device that connects to the USB terminal, choose Memory Viewer.
To use Memory Viewer, see page 76 for instruction.
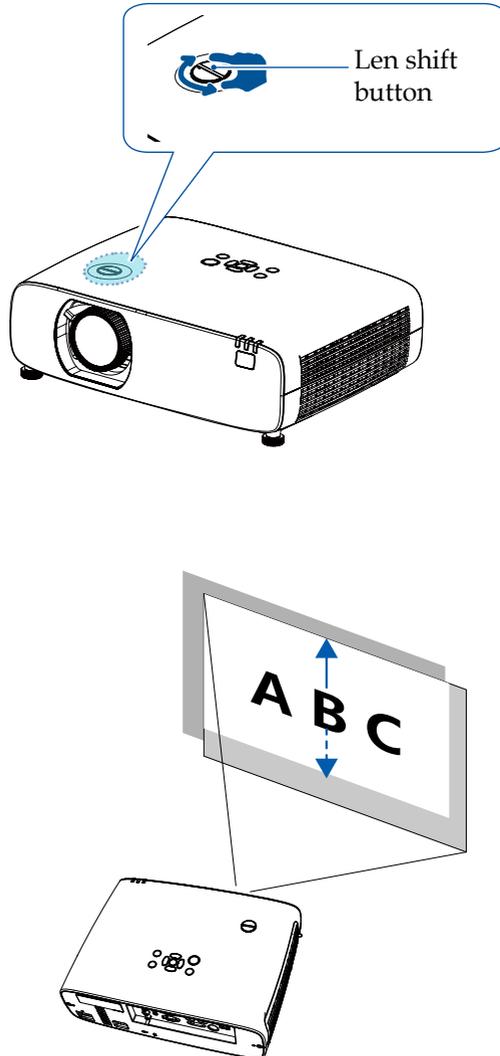
Lens shift function

Manual lens shift adjustment by rotating the knob.
When the button is rotated, the screen can deviate up and down from the center axis of the lens movement by 0%~60% of the projection height.

RICOH PJ WUL5A50

Note

❖ After turning the lens shift dial to align the projection position, turn the lens shift dial slightly to the opposite side to loosen it.

❖ If the lens shift dial is stopped at the aligned position, the lens shift position may drift due to vibrations or environmental temperature.

❖ Keep hands away from the lens mounting portion while performing a lens shift. Failure to do so could result in fingers being pinched by the moving lens.
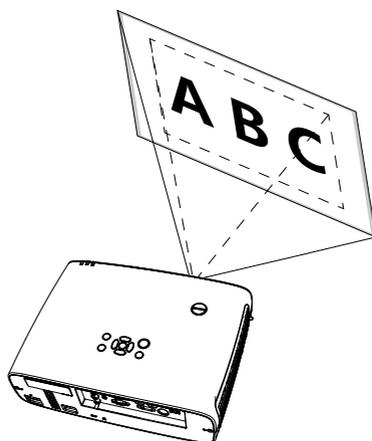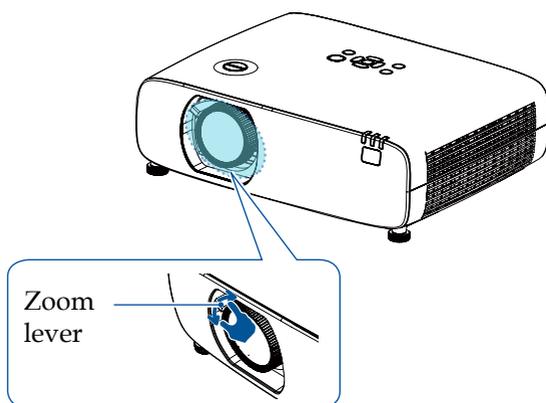
Len shift button

A B C

Zoom adjustment

Rotate the zoom ring left or right to resize the projected image.

RICOH PJ WUL5A50
The rotating zoom ring is used to resize the projected image.

Zoom
lever

A B C

Focus adjustment

Rotate the focus ring to adjust the focus of the image, and adjust it to be clear according to the content displayed on the screen.

RICOH PJ WUL5A50

Note

❖   The image is not stable immediately after the projector is turned on. Adjust the image at least 30 minutes after the projector is turned on.

❖   The projected image becames unsharp when Keystone correction is enabled. This is a limitation of digital correction.

Focus ring

Basic Operations

RICOH PJ WUL5A40ST

Focus
ring

A B C D E
F G H I J
K L M N O
P Q R S T

A B C D E
F G H I J
K L M N O
P Q R S T

Basic Operations

Adjust the projected image

Adjust the position of the projected image

1. Place the projector so that it is perpendicular to the screen.
2. Rotate the adjustable feet and tilt the projector to an appropriate height, the max height will up to 20mm, just as follow Image ①.
3. To raise the projector, rotate the two feet clockwise. To lower the projector or retract the adjustable feet, rotate the two feet counterclockwise, just as follow Image ②.
4. Using the adjustable feet, you can adjust the projection angle up to 3.5 degrees, just as follow Image ③.

Max angle 3.5°

Image ①

18mm

Image ②

Image ③

Adjust the screen size

▸ Projection size (diagonal):

RICOH PJ WUL5A50

16:10 Perspctive						
Diagonal Size (inch)	Width H (m)	Height V (m)	Wide A (m)	Tele A (m)	B2(MAX) (m)	B2(MIN) (m)
30	0.646	0.404	0.765	1.258	0.202	0.040
40	0.862	0.538	1.031	1.689	0.269	0.054
60	1.292	0.808	1.564	2.550	0.404	0.081
70	1.508	0.942	1.831	2.981	0.471	0.094
80	1.723	1.077	2.098	3.411	0.538	0.108
90	1.939	1.212	2.364	3.842	0.606	0.121
100	2.154	1.346	2.631	4.273	0.673	0.135
120	2.585	1.615	3.164	5.134	0.808	0.162
150	2.231	2.019	3.964	6.426	0.101	0.202
200	4.308	2.692	5.297	8.579	0.135	0.269
250	5.385	3.365	6.631	10.732	0.168	0.337
300	6.462	4.039	7.964	12.885	0.202	0.404

RICOH PJ WUL5A40ST

16:10 Perspctive				
Diagonal Size (inch)	Width H (m)	Height V (m)	Height B2 (m)	Wide A (m)
55	1.185	0.740	0.007	0.514
60	1.292	0.808	0.008	0.568
70	1.508	0.942	0.009	0.668
80	1.723	1.077	0.011	0.769
90	1.939	1.212	0.012	0.869
100	2.154	1.346	0.014	0.969
130	2.800	1.750	0.018	1.265
150	3.231	2.019	0.022	1.468

On Screen Display (OSD)

The Projector has a multilingual On Screen Display that allows you to make image adjustments and change a variety of settings.

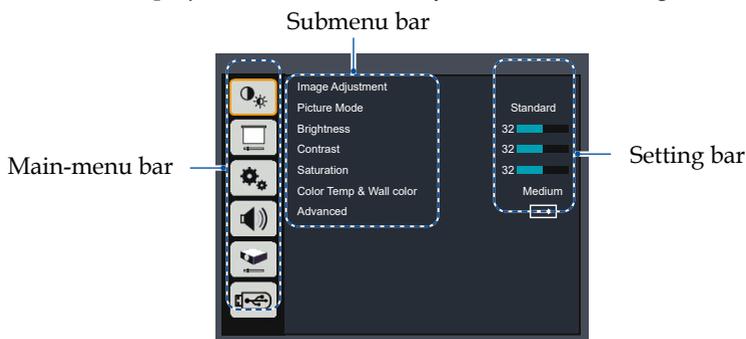### How to operate the OSD

1. To open the OSD, press "Menu" on the Control Panel or Remote Control.
2. When OSD is displayed, use ▲ ▼ keys to select any item in the main menu. While making a selection on a particular page, press ▶ or "Enter" key to enter sub menu.
3. Use ▲ ▼ keys to select the desired item in the sub menu and press "Enter" key to view further settings. Adjust the settings by using ◀▶ key or ▲ ▼ key.
4. Select the next item to be adjusted in the sub menu and adjust as described above.

    ● When there is no next menu in the submenu, press the ◀▶ buttons to set related options.

    ● When there is a next menu in the submenu, the screen will display the icon ▭▶. Press the ▲ ▼ buttons to set related options. If the next submenu contains option settings, press the "ENTER" button to proceed with the next submenu option setting (as above).
5. Press the "MENU" button to return to the previous menu setting.
6. Press the ◀▶ buttons to change or adjust the setting and press "ENTER" button to confirm the change.
7. After exiting, press the "MENU" button again, the OSD will close, and the projector will automatically save the new settings.

Submenu bar

Main-menu bar

Setting bar

Image Adjustment	
Picture Mode	Standard
Brightness	32
Contrast	32
Saturation	32
Color Temp & Wall color	Medium
Advanced	

Image adjustment

Picture Mode

There are factory presets optimized for various types of images. The available options:

▶ Bright: Mode for emphasizing brightness.

▶ Standard: Mode for optimizing the balance between brightness and color reproduction.

▶ Natural: Images suitable for natural portraits.

▶ DICOM SIM.: This mode is suitable for projecting a monochrome medical image such as an X ray radiography, MRI, etc.

Brightness

Adjust the brightness of the image.

▶ Press the ◀ key to darken image.

▶ Press the ▶ key to lighten the image.

Contrast

The contrast controls the degree of difference between the

lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

Contrast	32

▸ Press the ◀ key to decrease the contrast.

▸ Press the ▶ key to increase the contrast.

Saturation

Adjust the color saturation of the image.

Saturation	32

▸ Press the ◀ key to decrease the amount of color in the image.

▸ Press the ▶ key to increase the amount of color in the image.

Color temp & wall color

Use this function to set the color temperature of the image or to obtain an optimized screen image according to the wall color. The available options: low/medium/high/dark green/light yellow/light blue.

Color temp. & Wall color

Low	Medium	High	Dark Green	Light Yellow	Light Blue

Advanced

Adjust the white balance of the image.

Advanced

R-level	0
G-level	0
B-level	0
Auto Dim	Off

Select ⬍	Set Enter	Exit Menu

▸ R-level: press the ◀ button to decrease the red level.
 Press the ▶ button to increase the red level.

R-level   0

▸ G-level: press the ◀ button to decrease the green level.
 Press the ▶ button to increase the green level.

G-level   0

▸ B-level: press the ◀ button to decrease the blue level.
 Press the ▶ button to increase the blue level.

B-level   0

▸ Auto Dim: Set the option to "On" to optimize contrast.
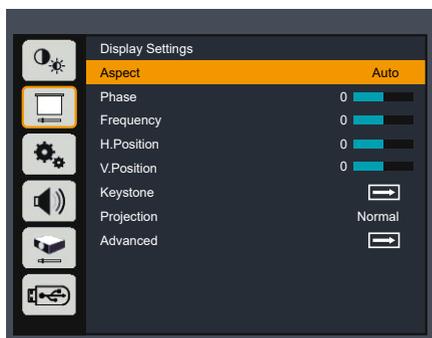 Set the option to "Off" to off contrast function.
 Auto Dim is only valid for the following settings.
 1) picture mode = Bright.
 2) Laser mode = Normal.

Auto Dim

 Off   On

Display Settings
Aspect   Auto
Phase   0
Frequency   0
H.Position   0
V.Position   0
Keystone   →
Projection   Normal
Advanced   →

Display Setting

Aspect

Use this function to choose your desired aspect ratio.

Aspect	Auto	4:3	16:9	16:10

▸ Auto: Automatically selects the appropriate display format.

▸ 4:3: Displays 4:3 aspect ratio.

▸ 16:9: Displays 16:9 aspect ratio.

▸ 16:10: Displays 16:10 aspect ratio.

Phase

Eliminate flicker from the image displayed. Use the ◀ or ▶ key to adjust the value.

Phase	0

Frequency

This function is used to adjust or diminish the disruption from patterns formed by projected vertical stripes.

Frequency	0

Note

❖ "Phase" and "Frequency" functions are only supported under Computer Signal source.

H. Position (Horizontal Position)

Shift the projected image position horizontally.

H. Position	0

▸ Press the ◀ key to move the image left.

▸ Press the ▶ key to move the image right.

V. Position (Vertical Position)

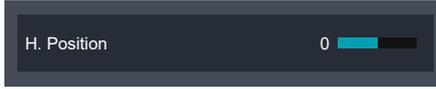Shift the projected image position vertically.

V. Position	0

▸ Press the ◀ key to move the image down.

▸ Press the ▶ key to move the image up.

Keystone

Adjust image distortion caused by tilting the projector.

Keystone	
H/V Keystone	➡
Auto Keystone	On
Four Corners	➡
Six points	➡
Curved Screen	➡
Grid Adjustment	➡
Reset	➡
Select ⬍ Set Enter Exit Menu	

▸ H/V keystone: Adjust the keystone of projected images in horizontal and vertical directions.

H/V Keystone	◀▲▼▶

Horizontal keystone correction
- Press the ◀ key to adjust the left.
- Press the ▶ key to adjust the right.

Vertical keystone correction
- Press the ▲ key to adjust the top.
- Press the ▼ key to adjust the bottom.

▸ Auto keystone: Press the ◀ or ▶ key to turn on or turn off the auto keystone function.

User Settings

Note

❖ White arrow means no correction.

❖ Red arrow indicates the corrected direction and will disappear when the maximum value is reached.

Note

❖ H/V Keystone", "Four Corner" and "Six points" cannot be applied at the same time. One of these, "Curved Screen" and "Grid adjustment" can be applied at the same time.

Note

❖ In "Curved Screen", each time the [Enter] button is pressed, it switches between "X/Y gain" → "X offset" → "Y offset".

Auto Keystone

On   Off

▸ Four Corner: Compensate for image distortion by adjusting one corner at a time.

Press the Enter key to select the corner and press the ▲ ▼ ◀ ▶ key for adjustment.

▸ Six points: Compensate for image distortion by adjusting one corner at a time.

Press the Enter key to select the corner and press the ▲ ▼ ◀ ▶ keys for adjustment.

▸ Curved Screen: For uneven linearity or bending deformation of projected images in vertical/horizontal directions.

X/Y Gain

Press ▲ ▼ key to enter the "Curved Screen" option and press the ▲ ▼ ◀ ▶ keys for adjustment.
--- X/Y gain
  ● Press the ▶ key: stretch the vertical line leftward/right ward.
  ● Press the ◀ key: indent the vertical line leftward/right-ward.

  ● Press the ▲ key: stretch the horizontal line upward/downward.
  ● Press the ▼ key: indent the horizontal line upward/downward.

--- X offset

- Press the ▶ key: correct the vertical line on the right, and leave the center area unchanged while expanding the top and bottom.
- Press the ◀ key: correct the vertical line on the left, and leave the center area unchanged while expanding the top and bottom.
- Press the ▲ key: correct the vertical line on both sides, and leave the center area above unchanged while expanding the lower corners.
- Press the ▼ key: correct the vertical line on both sides, and leave the center area above unchanged while expanding the upper corners.

--- Y offset

- Press the ▶ key: correct the horizontal line on the right, and keep the center area unchanged while expanding the top and bottom.
- Press the ◀ key: correct the horizontal line on the left, and leave the center area unchanged while expanding the top and bottom.

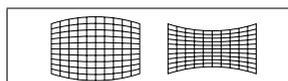- Press the ▲ key: correct the horizontal lines on both sides, and keep the center area and area above unchanged while expanding the lower corners.
- Press the ▼ key: correct the horizontal lines on both sides, and keep the center area and area below unchanged while expanding the upper corners.

▷ Grid adjustment: Select this function to adjust the local points of the projected image .

User Settings

Press ▲ ▼ key to enter the "Grid adjustment" option and press the ▲ ▼ ◀▶ keys for adjustment.

▸ Reset: Restore all modified parameters to the factory settings.

Projection

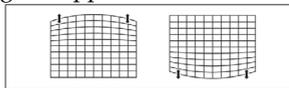Use this function to select the projector mode, depending upon how the projector is mounted.

Projection	Normal	Rear	Ceiling	Rear Ceiling

▸ Normal: This is the default selection. The image is projected directly onto the screen.

▸ Ceiling: When selected, the image will appear upside down.

▸ Rear: When selected, the image will appear reversed.

▸ Rear Ceiling: When selected, the image will appear reversed in upside down position.

Advanced

Preset advanced screen setting.

Advanced	
Auto ceiling	Off
Screen Capture	⟶
Startup Screen	Off
Background Color	Blue
RGB Input Range	Full Range
Test Pattern	Off
Select ▲▼ Set [Enter] Exit [Menu]	

▸ Auto ceiling: Press the ◀ or ▶ key to turn on/of the ceiling function.

Auto ceiling	On	Off

▸ Screen Capture: This function is used to capture the projected image and set it as the startup screen picture.

Press ENTER to capture

Yes   No

Select ◀▶   OK Enter   Back Menu

▸ Startup Screen: Use this function to choose your desired startup screen.

Startup Screen   Logo   Off

- Logo: Display logo on the start-up screen.

- Off: Display an empty start-up screen.

▸ Background Color: Use this function to choose your desired background color between Logo, User logo, Blue, and Black.

Background Color   Logo   User logo   Blue   Black

▸ RGB input range: Adjust the RGB aberration range in the HDMI input source.

RGB Input Range   Auto   Limited Range   Full Range

- Auto: Automatically detect RGB range.

- Full Range: Select this mode when computer signal or full range signal from AV equipment is input.

- Limited Range: Process the input image with a limited RGB range.

▸ Test pattern: Display the test patterns built in the projector. Position, size and other element settings are not reflected in the patterns. Make sure that the input signal has been displayed before all types of adjustments are done. Select the mode of the needed patterns: off, grid, color bar, white and black. Select "Off" to cancel this function.

Test Pattern   Off   Grid   Color bar   White   Black

Default Settings
 Language   English
Auto Power Off (min)   20
Auto Power Off mode   Off
Cooling time   0 sec
Security   ⟶
Network Settings   ⟶
Network Function   ⟶
Reset All   ⟶

Default settings

Language

This function is used for multi-language switch. Enter "Default settings" > "Language", press "ENTER" to enter the sub-menu, and press the ▲ or ▼ key to select the language. Press "ENTER" again for confirmation.

Language

English	Polski
Deutsch	Türkçe
Français	Tiếng Việt
Italiano	한글
Español	日本語
Português	ภาษาไทย
Nederlands	中文(繁體字)
Svenska	中文(简体字)
Norsk	Bahasa Indonesia
Dansk	

Select ▲▼   Set Enter   Exit Menu

Auto Power Off (min)

Set the time interval of screen countdown. The projector will enter the state of countdown when there is no signal input. Auto Power Off is activated when the set time interval is due. The light source will turn off to cool down, and enter the standby mode.
The adjustable range is 1-120 min.

Auto Power Off (min)   20

Note

❖ Default value of "Auto Power Off (min)" is 20 min.

Auto Power Off mode

This function is to set power off method of the auto power off function.

Auto Power Off mode		
Off	Standby	Light off>Standby

▷ Off: Disable the auto power-off function.

▷ Standby: Enter standby mode when input become no signal and set time has elapsed.

▷ Light off **>** Standby: Enter Light Off mode for one hour when input become no signal and set time has elapsed. In this mode, the power indicator light become twinkling green and the Light turn On again when input signal is detected or Any key.

Cooling Time

After your projector is powered off, select cooling fan speed to shorten the cooling time .

60 sec: Running faster than in normal mode with shorter time but a louder sound.

5 sec: Select this function allow you to wait five seconds after shutdown before unplugging the AC power.

Cooling Time	60 sec	5 sec

Security

Configure the security settings.

Security	
Key Lock	Off
Security	Off
Change Password	⟶
Select ⬍	Set Enter Exit Menu

▷ Key Lock: This function disables keys on the control panel or remote control to avoid undesired operation.

● Off: The key on the control panel or remote control is operable

● Keypad: The key on the control panel is not operable.

● Remote control: the key on the remote control is not operable.

‣ Security: Select "On" to use the security verification when the turning on the projector. Select "Off" to be able to switch on the projector without security verification.

Enter a password.
0 1 2 3 4 5 6 7 8 9
Set   Cancel
◄► OK Enter   Back Menu

‣ Change password

You may change the password into 3 digits as needed, press the indicator ◄► key, and select "Password change". After the password prompt box displays, press the indicator ◄► key and enter the correct password.   "New password" prompt box disappears. Set new password.

Enter a password.
0 1 2 3 4 5 6 7 8 9
Set   Cancel
◄► OK Enter   Back Menu

Network Settings

Configure the network settings.

LAN	Network setting
DHCP	On Off
IP address	192 . 168 . 1 . 100
Subnet	255 . 255 .255. 0
Gateway	192 . 168 . 1 . 1
DNS	192 . 168 . 1 . 1
Apply	⟹
Status	192 . 168 . 1 . 100
MAC Address	54 : 10 : EC : 2A : 18 : 9E
Select ▲▼	Set Enter Exit Menu

‣ DHCP: Select "On" to allow the projector to obtain an IP address automatically from your network. Select "Off" to manually assign IP, Subnet Mask and Gateway configuration.

‣ IP Address: Set an IP address.

*

▸ Subnet: Set subnet mask.

▸ Gateway: Set default gateway.

▸ DNS: Set DNS address.

▸ Apply: Apply all settings.

▸ Status: Display the current IP address.

▸ MAC address: Display the projector's MAC address.

Network Function

Configure some network functions.

Network Function	
Web Server	On
PJLink	On
PJLink Notification	▭

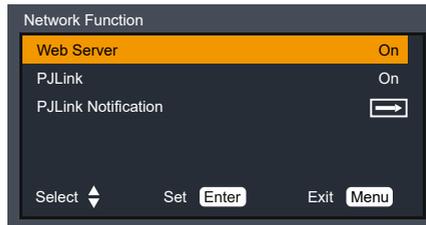| Select ⬍ | Set Enter | Exit Menu |

▸ Web Server: Set the option to "On" to enable web server function.

  Set the option to "Off" to disable web server function.

| Web Server | On | Off |

▸ PJLink: Set the option to "On" to enable PJLink function.

  Set the option to "Off" to disable PJLink function.

| PJLink | On | Off |

▸ PJLink Notification: You can manually set the IP address of the computer currently communicating with the projector.

PJLink Notification	
IP Address	10 . 11 . 1 . 20

| Select ⬍ | Set Enter | Exit Menu |

Reset all

Return the adjustments and settings to the factory default values.(not including the language and Security setting) Choose "Select" to return the display parameters on all

menus except Language to the factory default settings.

Reset All	
Select ▶	
Cancel ▶	

| Select ⬍ | Set Enter | Exit Menu |

Audio

Mute

Disable audio temporarily.

Mute	On	Off

▶ Select "On" to disable audio.
▶ Select "Off" to output audio.

Volume

Adjust the volume

Volume	12

▶ Press the ◀ button to turn down the volume.
▶ Press the ▶ button to turn up the volume.

HDMI Audio Input

You can connect an external device to the <HDMI 1 In>/<HDMI 2 In > or Audio In terminal of the projector to output the audio.

HDMI Audio Input	HDMI	Audio In

▶ When HDMI is selected, audio from the "HDMI 1 In" and "HDMI 2 In" terminal will be output.
▶ When Audio In is selected, audio input into the "Audio In " terminal will be output.

Options
Auto Source   On
Input Source   ➡
Laser settings   ➡
Filter settings   ➡
High Altitude Mode   Off
Power Settings   ➡
Information   ➡

Options

Auto Source

When this function is turned "On", the projector will search for other signals if the current input signal is lost. When this function is turned "Off", it will only search a specified connection terminal.

Auto Source

            On   Off

Input Source

Use this option to enable/disable input sources. Press the ► key to enter the sub menu and select which sources you require. Press "Enter" to finalize the selection. The projector will only search for inputs that are enabled.

Input Source
Computer   √
HDMI 1   √
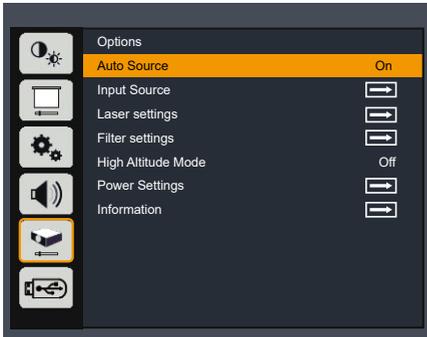HDMI 2   √
Video   √

Select ↕   Set Enter   Exit Menu

Laser settings

This function is used to set the laser mode.

Laser Settings
Laser Power   Normal
Laser Adjust   100%

Select ↕   Set Enter   Exit Menu

> Laser Power: Select "Normal" mode and the machine displays normal brightness. Select "ECO 1/ECO 2" mode, the machine display low brightness, reduce the electric power consumption of the light source, thus extending the service life of the light source.

Laser Power

Normal   ECO1   ECO2

> Laser Adjust: Press the ◄► key to adjust the brightness of the light source.

Laser Adjust   50 ▮▮▮▮ 100%

Filter Settings

Use this option to view the filter status and configure the filter settings. Press the ► key to enter the sub menu and configure the desired settings.

Filter setting
Filter Hours Used   0
Filter Reminder   1000
Reset Filter Timer
Select   Enter [Enter]   Exit [Menu]

> Filter Hours Used: Displays the use duration of the filter.
> Filter Reminder: You can specify the maximum use duration of the filter (that is, specify the cleaning cycle for the filter).

Filter Reminder   100 ▮▮▮

If the [Filter Reminder] is specified and the use duration exceeded the specified maximum value, the screen displays an alert and a message, until any key is pressed.

Filter warning

Filter warning. Please clean or replace the filter.

▸ Reset Filter Timer: Resets the count of filter hours used.

Filter counter reset ?

Yes   No

Move ◂▸   Select Enter   Back Menu

High Altitude Mode

If the projector is used at altitudes below 1400m, select [Off]. If the projector is used at altitudes from 1400m to 3000m, select [On].

High Altitude Mode

On   Off

Power Settings

Use this option to configure the power settings. Press the ► key to enter the sub menu and configure the desired settings.
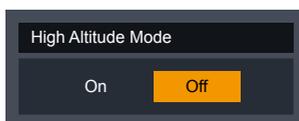If changes are made, they will take effect the next time the projector is powered on.

Power Settings
Direct Power On   Off
Network Standby   Off

Select ▲▼   Set Enter   Exit Menu

▸ Direct Power On: When it is set to [On], the projector is automatically powered on when an AC power supply is connected. Wait at least 30 seconds before connecting the power code again, after disconnecting the power cord.

▸ Network Standby: Specify the standby mode.

Direct Power On

off   on

Network Standby

off   on

Direct Power On   Network Standby

Information

Displays information related to the projector. Detects projected image signals and operating status of the projector.

▶ Source: Displays selected input source.

▶ Resolution: Displays the resolution of input signals in the unit of Hz. And displays [----] when no input signal is detected.

▶ Filter Hours Used: Display the used hours of the filter.

▶ Laser Power: Displays the mode of the laser light source.

▶ Total Time: Displays the number of hours the light source has been used.

▶ Firmware Version: Displays the firmware versions of the system and MCU.

▶ License: Displays open source software license.

USB Memory
Slideshow
Display Interval   5
Sort Order   Name
Rotate   Off
Repeat   Off
Apply

USB Memory

Note

❖   Be sure to select [Apply] after changing the [Display Interval], [Sort Order], [Rotate], and [Repeat] settings. If you exit the [USB Memory] menu without selecting [Apply], the contents of each item will return to the state before the change.

Note

❖   "USB memory" function is available when [Memory Viewer] input is selected.

USB Memory setting

Here are some option settings for USB Memory.

Slideshow

Select [Slideshow] and press the [Enter] button to start a slideshow that projects the images in the folder in order.

Switch the input to [Memory Viewer] in advance and move to the folder containing the file you want to display.

Display Interval

If you want to project a slide show of images, you can specify the slide switching interval.

Display Interval   5 ▮▭▭▭

Sort Order

Set the order for displaying icons and projecting a slide show.

Sort Order   Name   Time

▸ Name: Displays by file name and folder name.
▸ Time: Displays by file time and folder time.

Rotate

You can specify the rotation mode for images.

| Rotate | Off | 90 Degree | 180 Degree | 270 Degree |

▸ Off: Disable rotation.

▸ 90 Degree: Rotates the image 90 Degree to the right.

▸ 180 Degree: Rotates the image 180 Degree.

▸ 270 Degree: Rotates the image 270 Degree to the right.

Repeat

You can specify whether to repeat display slides.

| Repeat | On | Off |

▸ Off: Returns to the thumbnail display after the last file is displayed.

▸ On: Displays the first file again after the last file is displayed.

Apply

Apply the settings in [USB Memory].

Viewing via USB Memory

When a USB memory device is inserted into the projector, the Memory Viewer function enables the projector to project images stored in the USB memory device.

Content Supported by Memory Viewer

	Extension	Format	Description
Image	JPG/JPEG	Baseline encoded, 24-bit Non-interlaced RGB, 24-bit	Maximum image resolution: 10000x10000 pixels Maximum display resolution: WUXGA

Note

❖ USB HDD is not supported.

❖ Connecting with USB hub is not supported.

For USB memory requirement

1. Format and Memory size

Format	Memory Size	File Size
FAT	4GB	2GB
FAT32	32GB	4GB

2. Supported USB Version : USB 2.0

3. Maximum number of folders/files that can be displayed is 500.

Displaying the Memory Viewer Screen

1. Press the [Input] button on the remote control or the [Input] button on the rear control panel, and select [memory viewer] from [Input Source].

2. Directly insert a USB memory device into the <USB > terminal.

   ● The projector displays the standby screen "please press RC ENTER ■ ".

   please press RC ENTER ■

3. Press the <Enter> button.

   ● The root directory of the USB memory device is displayed in thumbnail mode.

4. Press the ▲ ▼ ◀ ▶ buttons to select a file.
5. Press the **<Enter>** button.

    ● Images are displayed.
6. Press the ▶ button to switch to next image, and press the ◀ button to return to the previous image.
7. Press the **<Enter>** button.

    ● The screen returns to the thumbnail display.

Unplug the USB memory

1. Press the ▲ ▼ ◀ ▶ buttons on the remote control to select the thumbnail on the top left.
2. Press the **<Enter>** button .

    ● The projector displays the standby screen [please press RC Enter ▣].
3. The USB memory can be removed from the projector.

LAN Control

Controlling this Device with Web Browser

You can control this device from a PC by using a web browser.

Connecting to the device

1. Confirmation of the IP address of the device

    Select the "Default Settings" → "Network settings" in the menu of this device, and verify the IP address. (See pages 66).

LAN	Network setting
DHCP	On Off
IP address	192 . 168 . 1 . 100
Subnet	255 . 255 .255. 0
Gateway	192 . 168 . 1 . 1
DNS	192 . 168 . 1 . 1
Apply	⟹
Status	192 . 168 . 1 . 100
MAC Address	54 : 10 : EC : 2A : 18 : 9E
Select ⬍	Set [Enter] Exit [Menu]

2. **Connection**

    Enter the IP address that was verified by opening the web browser.

    For example, enter http://192.168.1.100/ if the IP address is displayed as shown above.

Note

❖ To control with web browser, set to "ON" of Network Function>Web Server in the menu of this device.

Access from the Web Browser

Login

Open the network control page.

Enter the password in [New Password] and [Confirm Password] field, and click [OK].

* The password setting screen will be displayed when you start up for the first time. Please set a password to use the web page.

Enter the password in [Password] field, and click [Login].

When you log in, a navigation bar for setting the projector will be displayed on the left side of the home screen.

System Status

The current status of the projector is displayed.
You can check information such as firmware version number of the projector and IP address.

General Setup

You can change the password for the projector.

And you can control the Power and Input Source of the projector.

▸ Enter Old password: Enter the current password.
▸ Enter New password: Enter a new password.
▸ Confirm New password: Enter the new password again for confirmation.
▸ Apply: Updates the settings.

▸ Power: Switches the power of the projector between On

 and Off.
▸ Source Select: Switches the input source of the projector.

Picture Setup

You can change the values to adjust the projected image.

‣ Brightness: Adjust the brightness of the projected image.
‣ Contrast: Adjust the contrast of the projected image.
‣ Saturation: Adjust the saturation of the projected image.
‣ Advanced: Adjust the white balance of the image.
　R-level: Adjust the red level.
　G-level: Adjust the green level.
　B-level: Adjust the blue level.

LAN Control

Image Setup

‣ Aspect: Switch the aspect ratio of the projected image.

‣ Phase: Adjust the phase of the projected image.

‣ H Position: Adjust the horizontal position of the projected image.

‣ V Position: Adjust the vertical position of the projected image.

‣ Frequency: Adjust the frequency of the projected image.

‣ Freeze: Switches the image freezing function between on and off.

‣ V Keystone: Adjust the vertical keystone distortion.

‣ H Keystone: Adjust the horizontal keystone distortion.

‣ Corner correction: Adjust the position of each point for four corner correction.

Network Setup

‣ LAN Setup:
   If you want to enable the DHCP, select [Obtain the IP address automatically].
   IP address: If no DHCP is used, enter the IP address.
   Subnet: If no DHCP is used, enter the subnet.

Gateway: If no DHCP is used, enter the default gateway IP address.
DNS: If no DHCP is used, enter the DNS server IP address.
Supported characters: Digits (0-9) .

▶ PJLink Setup:
If you want to setup the Password, select [Password Enable].
Input password: Input the PJLink password.
Confirm password: Input the PJLink password once again and confirm.

▶ Apply
Updates the settings.

Control the Projector via the 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 10 (32-bit/64-bit version)

  • Windows 11

• Memory size

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

• Display resolution

  800 × 600 pixels or more

Register projectors

1. Registers the projectors with Auto search

-Click [**Register Projector**] button.

-Click [**Auto Search**] button.

-List of projectors which support PJLink are displayed in the window. Projector name is displayed as "********" until authorization if password is enable.

-Select the desired projector and click [**Register**] button. Password authorization is required if password of the projector is set to enable.

-Click [**OK**] button to return to the original screen.

2. Directly specifies the IP address and registers the projector.

-Enter IP address of the desired projector and click [Confirm] button then the projector name will be displayed. After confirming the projector name, click [Register] button.

Control the projector with the projector Management Utility

Click [**Remote Control**] tab and select the desired projector in the list. You can control the selected projector by clicking control buttons in the bottom of the window.

[Power] button

Turn "On/Off" the power of the projectors or groups selected from the Projector (/Group) List.

[Input] button

Switches the input source of the projectors or groups selected from the Projector (/Group) List.

Input source will not be changed if the projector doesn't support the selected input source.

A Table of input source name in the projector and the projector management utility.

[RICOH PJ WUL5A50/WUL5A40ST)

The projector	The projector Management Utility
Computer	RGB 1
HDMI1	DIGITAL 1
HDMI2	DIGITAL 2
Video	VIDEO 1
Memory Viewer	STORAGE 1

Detail Information] button

Show detail information of the selected projector.

Troubleshooting

If you experience trouble with the projector, refer to the following information. If the problem persists, please contact your local dealer or service center.

- Ensure that the projector is correctly connected to the peripheral device.
- Ensure that all devices are connected to an AC power socket and the power supply is connected.
- If the projector fails to project an image from the computer connected to it, restart the computer.

Problem**:** Image cannot be displayed

- ▸ Check whether the projector is correctly connected to the computer or the video device and the power supply is normally connected.
- ▸ Check whether the computer input signal is correct. When the projector is connected with some portable computers, the display output settings usually need to be changed. For details on the settings, see the user manual for the computer.
- ▸ Images can be displayed only 10s after the projector is turned on.
- ▸ Check the input signal, color system, video system, or computer system modes.
- ▸ Check whether the temperature exceeds the specified operating temperature.
- ▸ Images cannot be displayed when the [Mute] button is enabled. You need topress the [Mute] button or other related buttons on the remote control.

Problem: Image is displayed partially, incorrectly, or in rolling mode

- ▸ Press [Auto Set] on the remote control.
- ▸ Adjust the display settings of the computer. Ensure that the resolution is set to less than or equal to 1600x1200 pixels. View the operating system help file.

Problem: Image is blurred

- ▸ Adjust the focus of the projector.

‣ Adjust the projection distance appropriately.

‣ Check whether the projection window is free from dust.

‣ Ensure that there is no condensation in the projection window. For example, if the projector is moved from a cool environment to a warmer environment, there might be condensation on the projection lens or projection window. If this happens, wait until the condensation disappears before turning on the projector.

Problem: Image is not bright enough

‣ Check whether the contrast or brightness is appropriate.

‣ Check whether an appropriate image mode is specified.

‣ Ensure that the projection screen is within the required projection range.

Problem: Image is deformed or disappears

‣ Press the [Aspect] button on the remote control, or on the OSD menu, choose [Image Adjustment] **>** [Image Mode], and specify an appropriate display aspect ratio.

Problem: Projected image is too small or too big

‣ Check if the projector is placed perpendicular to the screen.

‣ Adjust the distance between the projector and the projection screen.

‣ Press the [Aspect] button on the remote control, or on the OSD menu, choose [Display Settings] **>** [Aspect], and specify an appropriate display aspect ratio.

Problem: Projected image rotated upside down.

‣ Press the [Menu] button on the control or on the remote control, then choose [Display Settings] **>** [Projection].

Problem: Indicators lights up or blinks

Troubleshooting

Problem: Indicators lights up or blinks

POWER	STATUS	LIGHT	Projector status
Off	Off	Off	Power is off
Orange	Off	Off	Standy(Normal)
Orange (Blink*1)	Off	Off	Standy(Network)
Orange (Blink*2)	Off	Off	Standy(ECO)
Orange (Blink*0)	Off	Off	Warm Up
Off	Orange	Off	Keylock/RC ID dismatch
Green	Off	Green (Blink*1)	Lamp ON(ECO ON)
Green	Off	Green	Lamp ON(ECO OFF)
Green	Off	Orange (Blink*1)	Lamp Timer Waring

Troubleshooting

POWER	STATUS	LIGHT	Projector status
Green	Off	Orange (Blink*2)	Lamp Timer Error
Green	Red (Blink*1)	Off	Filter Timer Waring
Green	Red (Blink*2)	Off	Filter Check Waring
Green (Blink*0)	Off	Off	Power Save Standy
Red (Blink*0)	Off	Off	After Cooling
Red (Blink*2)	Off	Off	Power Save Cooling(No signal standby mode)
Red	Red (Blink*1)	Off	PSENSER abnormality (poor contact)
Red	Red (Blink*2)	Off	Temp Error
Red	Orange (Blink*1)	Off	Fan1 Error

POWER	STATUS	LIGHT	Projector status
Red	Orange (Blink*2)	Off	Fan2 Error
Red	Orange (Blink*3)	Off	Fan3 Error
Red	Orange (Blink*4)	Off	Fan4 Error
Red	Orange (Blink*5)	Off	Fan5 Error
Red	Red (Blink*1)	Orange	Color wheel IO exception
Red	Red (Blink*2)	Orange	FG ERR (Failed to detect FG)
Red	Red (Blink*3)	Orange	Color wheel speed is too high
Red	Red (Blink*4)	Orange	Color wheel speed is too low
Red	Red (Blink*1)	Red	LD overcurrent protection

POWER	STATUS	LIGHT	Projector status
Red	Red (Blink*2)	Red	LD overvoltage protection
Red	Red (Blink*3)	Red	Communication abnormality (tx, rx abnormality, poor switch contact after lighting)
Red	Red (Blink*4)	Red	Main RX ACK ERR
Red	Red	Red	Cover Switch abnormal
Red	Red	Off	High Altitude Error
Orange	Orange	Orange	initialization

Before Maintenance

Before maintaining or replacing a component, ensure that the power is turned off. For details, see the section of "Turn off the projector".

Clean casing of your projector

Gently wipe the casing with clean and soft cloth dampened with small amount of neutral detergent to remove heavy dirt. Do not over apply cleaner to the casing. Abrasive cleaner, solution, or other rough chemical may scratch the casing surface.
Place your projector in proper container after use to protect it from dirt and dust and being scratched.

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Clean the projection window

Wipe the lens with clean cloth dampened with non-abrasive camera lens cleaner or clean it with lens cleaning paper or air blower.
Do not over apply cleaner to the lens. Abrasive cleaner, solution, or other rough chemical may scratch the lens.

RICOH PJ WUL5A50   RICOH PJ WUL5A40ST

Cleaning the filter

1. Turn off the projector and unplug the AC power supply from the power socket.

2. Push button to release the filter cover and pull it out.

RICOH PJ WUL5A50   RICOH PJ WUL5A40ST

dust filter   dust filter

Filter Cleaning and Replacement

In the following cases, maintain the filter and reset the number of hours the filter is used:

● When the filter hours used reaches the filter timer value;

● When the indicator shows filter warning (See page 71) or filter warning message is displayed at power on (See page 91).

Cleaning the filter

1. Turn off the projector and unplug the AC power supply from the power socket.

2. Push button to release the filter cover and pull it out.

Button

Cleaning the case & lens

3. Remove the filter.
   ● Remove the filter from the filter cover.

4. Remove dust from the filter and the filter cover.
   ● Clean both outside and inside.

Filter cover

Filter

Note

❖ Whenever you dust the filter, use the soft brush attachment to dust. This is to avoid damage to the filter.
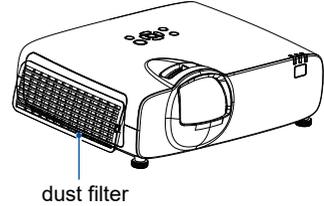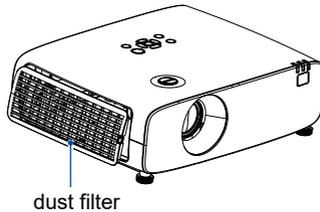
❖ Do not wash the filter with water. Doing so can result in filter clogging.

Replacing the filter

1. Attach the filter to the projector.

Note

❖ When installing the filter, please make sure that the catch of the filter is facing outwards, otherwise the installation is reversed.

2. Put the filter cover back to the projector cabinet.
   Insert the two catches of the side of the filter cover into the groove of the cabinet, and then push the A button to close the filter cover.
   ● Push the filter cover until it clicks into place.

Catch

A

Reset the Filter timer

Plug the power cord into the wall outlet, and then turn on the projector.

 From the menu, select [Options] → [Filter Settings]→ [Reset Filter Timer]. (See page 72)

The interval time to clean the filter is set to [1000H] at time of ship-ment. When using the projector as it is, you do not clear the filter usage.

Appendices

List of Compatible Signals

A. RGB Signal					
(1) Computer Input					
Mode	Resolution	V frequency (Hz)	H frequency (kHz)	Clock (MHz)	Note
VGA	640x480	59.9	31.5	25.2	
	640x480	66.7	35.0	30.2	
	640x480	72.8	37.9	31.5	
	640x480	75.0	37.5	31.5	
	640x480	85.0	43.3	36.0	
SVGA	800x600	56.3	35.2	36.0	
	800x600	60.3	37.9	40.0	
	800x600	72.2	48.1	50.0	
	800x600	75.0	46.9	49.5	
	800x600	85.1	53.7	56.3	
Mac	832x624	74.6	49.7	57.3	
XGA	1024x768	60.0	48.4	65.0	
	1024x768	70.1	56.5	75.0	
	1024x768	75.0	60.0	78.8	
	1024x768	85.0	68.7	94.5	
MAC	1152x864	70.0	64.0	94.2	
	1152x864	75.0	67.5	108.0	
SXGA	1280x1024	60.0	64.0	108.0	
	1280x1024	72.0	78.2	135.1	
	1280x1024	75.0	80.0	135.0	
	1280x1024	85.0	91.1	157.5	
QVGA	1280x960	60.0	60.0	108.0	
SXGA+	1400x1050	60.0	65.3	121.8	
	1400x1050	74.9	82.3	156.0	
UXGA	1600x1200	60.0	75.0	162.0	
	1920x1080	66.6	59.9	138.5	
WUXGA	1920x1200(RB)	60.0	74.0	154.0	

Appendices

(2) Extended Wide Timing					
WXGA	1280x720	59.9	44.8	74.5	
	1280x800	59.8	49.7	83.5	
	1280x800	74.9	62.8	106.5	
WXGA	1280x800	84.9	71.6	122.5	
	1366x768	59.8	47.7	84.8	
	1440x900	59.9	55.9	106.5	
WSXGA+	1680x1050	60.0	65.3	146.3	
(3) Component Signal					
480i	720x480	59.9	15.7	13.5	
576i	720x576	50.0	15.6	13.5	
480p	720x480	59.9	31.5	27.0	
576p	720x576	50.0	31.3	27.0	
720p	1280x720	60.0	45.0	74.3	
	1280x720	59.9	45.0	74.2	
	1280x720	50.0	37.5	74.3	
1080i	1920x1080	60.0	33.8	74.3	
	1920x1080	59.9	33.7	74.2	
	1920x1080	50.0	28.1	74.3	
1080p	1920x1080	24.0	27.0	74.3	
	1920x1080	24.0	27.0	74.2	
	1920x1080	60.0	67.5	148.5	
	1920x1080	59.9	67.4	148.4	
	1920x1080	50.0	56.3	148.5	
B. HDMI Input					
(1) Computer input signal					
VGA	640 x 480	60	31.5	25.2	
	640 x 480	67	35	26.8	
	640 x 480	72	37.9	31.5	
	640 x 480	75	37.5	31.5	
	640 x 480	85	43.3	36	

SVGA	800 x 600	56	35.1	36	
	800 x 600	60	37.9	40	
	800 x 600	72	48.1	50	
	800 x 600	75	46.9	49.5	
	800 x 600	85	53.7	56.3	
MAC	832 x 624	75	49.1	57.3	
XGA	1024 x 768	60	48.4	65	
	1024 x 768	70	56.5	75	
	1024 x 768	75	60	78.8	
	1024 x 768	85	68.7	94.5	
MAC	1152 x 864	75	67.5	108	
SXGA	1280 x 1024	60	64	108	
	1280 x 1024	72	77	133	
	1280 x 1024	75	80	135	
QVGA	1280 x 960	60	60	101.3	
SXGA+	1400 x 1050	60	65.3	121.8	
UXGA	1600 x 1200	60	75	162	
	1920 x 1080	60	67.5	148.5	
WUXGA	1920x1200(RB)	60	74	154	
4K	3840 x 2160	30	67.5	297	
(2) Extended Wide Timing					
WXGA	1280x720	60	44.8	74.2	
	1280x800	60	49.6	83.5	
	1366x768	60	47.7	84.8	
	1440x900	60	59.9	106.5	
WSXGA+	1680x1050	60	65.3	146.3	

C. Memory Viewer

		Description	
		RICOH PJ WUL5A50	RICOH PJ WUL5A40ST
Display Resolution		1920X1200	
Format		jpeg	
Maximum Image Size	pixel	10000 x 10000	
	MB	2048MB	

Appendices

Configurations of Terminals

Computer Out terminal(D-sub 15)				
	1	Red (Input/output)	9	-----
	2	Green(Input/output)	10	Grounding(field synchronizing)
	3	Blue(Input/output)	11	Grounding
	4	-----	12	DDC data
	5	Grounding(line synchronizing)	13	Horizontal synchronizing (compound sync.)input/output
	6	Grounding(red)	14	Vertial synchronizing input/output
	7	Grounding(green)	15	DDC Clock
	8	Grounding(blue)		
PC Control terminal (D-SUB-9)				
	1	-----	6	-----
	2	RXD	7	-----
	3	TXD	8	-----
	4	-----	9	-----
	5	GND		
LAN Terminal				
	1	TX +	5	-----
	2	TX -	6	RX -
	3	RX +	7	-----
	4	-----	8	-----
HDMI Terminal (HDMI Type A 19)				
	1	TMDS Data2+	11	TMDS Clock Shield
	2	TMDS Date2 Shield	12	TMDS Clock-
	3	TMDS Date2-	13	CEC
	4	TMDS Date1+	14	Reserved(N.C. on device)
	5	TMDS Datel Shield	15	SCL
	6	TMDS Datel-	16	SDA
	7	TMDS Date0+	17	DDC/CEC Ground
	8	TMDS Date0 Shield	18	+5V Power
	9	TMDS Date0-	19	Hot Plug Detect
	10	TMDS Clock+		

Computer In terminal				
	1	Red input	9	VCC
	2	Green input	10	Grounding(field synchronizing)
	3	Blue input	11	Grounding
	4	-----	12	DDC data
	5	Grounding(line synchronizing)	13	Horizontal synchronizing (compound sync.)input
	6	Grounding(red)	14	Vertial synchronizing input
	7	Grounding(green)	15	DDC clock
	8	Grounding(blue)		
USB-A Terminal(USB terminal(Type A X1))				
	1	VBUS	5	-----
	2	D-	6	-----
	3	D+	7	-----
	4	GND	8	-----
USB-BTerminal(USB terminal(Type B X1))				
	1	VBUS	6	-----
	2	D-	7	-----
	3	D+	8	-----
	4	ID	9	-----
	5	GND	10	-----

Appendices

Specifications

■ List of general Specifications

Item	RICOH PJ WUL5A50	RICOH PJ WUL5A40ST
Optical		
LCD system	3x0.64"	
Display Resolution	1920x1200	
Light source life	Normal: 20,000h, ECO1/ECO2: 30,000h	
Projection lens	RICOH Lens	
F	1.5~2.08	1.6
f	17.2~27.7mm	6.39mm
Throw Ratio	1.2（wide)-2.0（tele)	0.44:1
Zoom Ratio	1.6	N/A
Zoom	Manual	N/A
Focus	Manual	
Lens shift	V: +60%~-0%	N/A
Throw Distance(m)	0.765m~7.964m (Wide) 1.258m~12.885m (Tele)	0.514m~1.468m
Image Size(inch)	30"~300"	55"~150"
Electrical		
Terminal Interface	• Audio In (L/R) terminal • Audio Out terminal • Computer IN terminal (VGA) • HDMI1/HDMI2 terminal • USB-B terminal • USB-A terminal	• Video In terminal • Audio In terminal • Computer Out terminal (VGA) • PC Control terminal • LAN terminal
Speaker	1×16 W (monaural)	
Power consumption	Normal : 290W(100V)/288W(110V)/275W(220V)/273W(240V) ECO1:200W(100V)/198W(110V)/191W(220V)/190W(240V) ECO2: 180W(100V)/178W(110V)/172W(220V)/171W(240V) Maximum: ≤360W Standby: ≤0.5W Network Standby: ≤2W	

Appendices

Rating Current(A)	3.0A-1.1A (100-240V~ 50/60Hz)	
Noise	Normal: Typ 37dB(A) ECO 1/ECO 2: Typ 30/28dB(A)	
Mechanical		
Keystone	H: ± 30° V: ± 30°	H: ± 15° V: ± 15°
Adjust feet	Max 3.5°	
Dimensions(WxDxH)	390 mm (W)×294mm (D)×116 mm(H) (Not including feet)	390 mm (W)×319mm (D)×132 mm(H) (Not including feet)
Net. Weight (KG)	Approx. 5.2kg	Approx. 5.5kg
Gross. Weight (KG)	Approx. 6.7kg	Approx. 7.0kg
Environment	• Operating temperature: 5℃~40℃ (0-1400m Altitude)/ 5℃~30℃ (1400-3000m Altitude) Operating Humidity: 20~80%RH (non-condensing) • Storage temperature: -10℃~50℃ Storage Humidity: 10~85%RH (non-condensing)	

Note
• This model complies with the above specifications.
• Designs and specifications are subject to change without notice.
• This model may not be compatible with features and/or specifications that may be added in the future.

■ **Separately sold product**
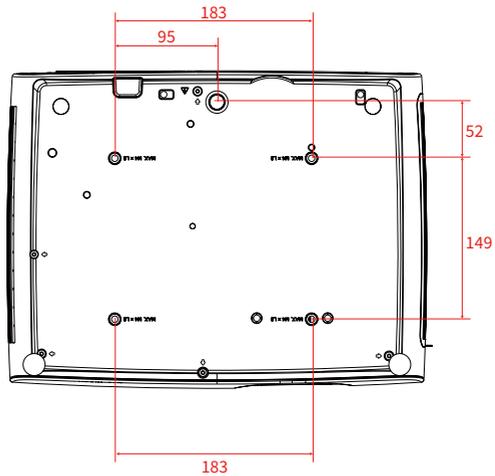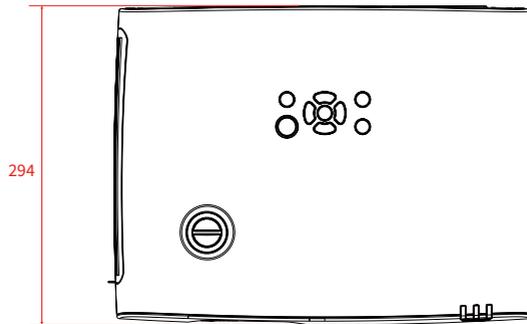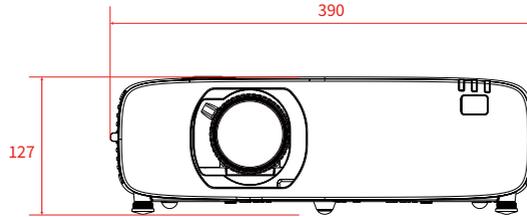 Replacement Air Filter Type 18.

Appendices

External Dimensions

Tapped holes used for ceiling installation.
Screw: M4
Depth: 8mm

RICOH PJ WUL5A50

Appendices

Tapped holes used for ceiling installation.
Screw: M4
Depth: 8mm

RICOH PJ WUL5A40ST

390

143

319.5

294

183

95

52

149

183

Appendices

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