

Service Training

Praesepe-PJ1





Product Overview

Models are there in the Series

Code name	Product name	Resolution	Brightness(lm)
Praesepe-PJ1ewu	PJ WUC4650	WUXGA	3600
Praesepe-PJ1ew	PJ WXC4660	WXGA	4000
Praesepe-PJ1ex	PJ CX4660	XGA	4200

*No option lens.

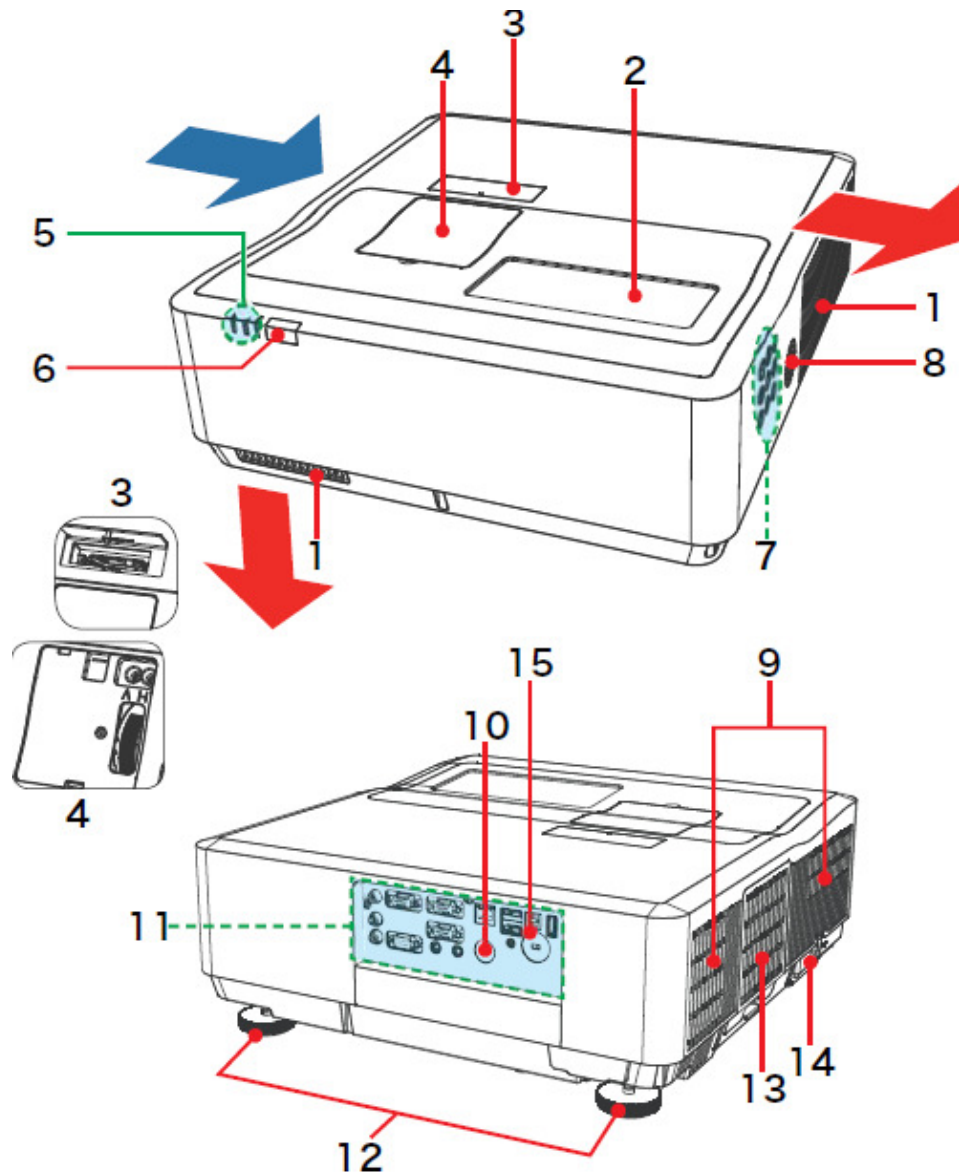


Main Specification

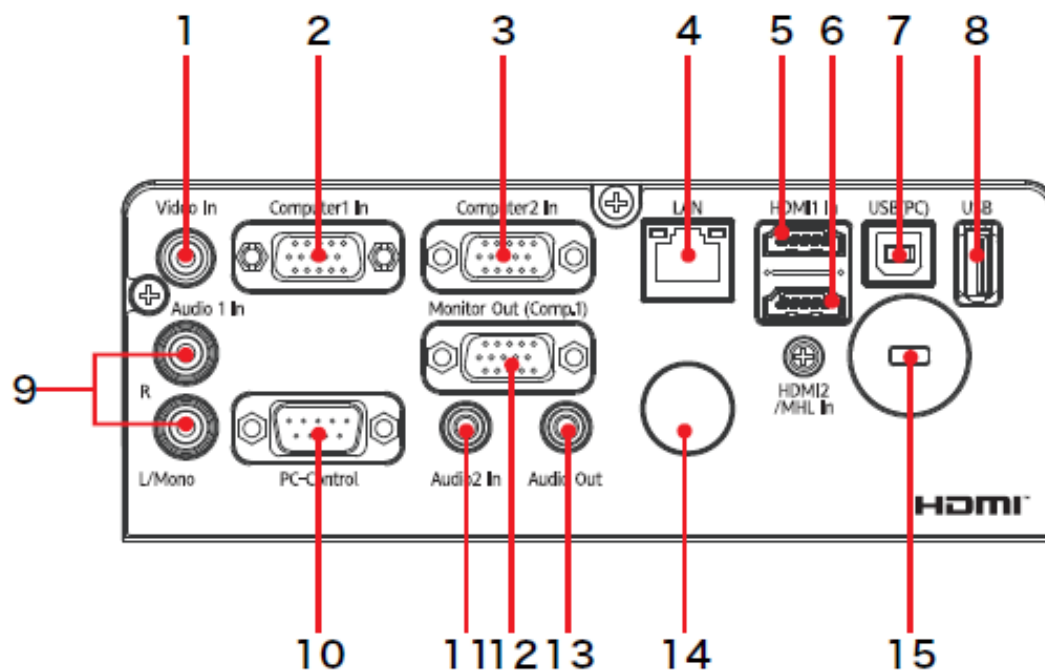
Item	RICOH PJ WXC4660	RICOH PJ WUC4650
LCD system	0.76" TFT Active matrix type	0.76" TFT Active matrix type
Display Resolution	1280x800	1920x1200
Projection lens	F#1.78-1.83, f=4.92-5.18mm, 1.05x ZOOM lens	
Projection distance (Focus Range)	<ul style="list-style-type: none"> • <Wide> 410-759mm • <Tele> 432-799mm 	<ul style="list-style-type: none"> • <Wide> 410-759mm • <Tele> 432-799mm
Throw ratio	0.27-0.29	
Dimensions	449x425x151mm(without Feet) 449x425x153mm(with Feet)	
Weight	Approx. 10.9 kg	
Terminal Interface	<ul style="list-style-type: none"> • Video In • Computer 1 In • Computer 2 In • Monitor Out(Comp.1) • LAN • USB • USB(PC) • HDMI 2/MHL In 	<ul style="list-style-type: none"> • HDMI 1 In • Monitor Out • Audio 1 In • Audio 2 In • Audio OUT • Mono (R/L) • PC-Control
Speaker	10W (8ohm) x 2	
Light source life	20000 hours	
Noise	<ul style="list-style-type: none"> • Full: Typ 37.5dB(A) • ECO: Typ 33.5dB(A) 	
Operating environment	<ul style="list-style-type: none"> • Operating temperature: 0°C~40°C Humidity 0~85%RH(non-condensing) • Storage temperature: -20°C~60°C Humidity 0~85%RH(non-condensing) 	
Power consumption	<ul style="list-style-type: none"> • ECO : 295W(Typ) @ 110Vac 288W(Typ) @ 220Vac • Normal: 427W(Typ) @ 110Vac 410W(Typ) @ 220Vac • Max: 455W 	<ul style="list-style-type: none"> • ECO : 307W(Typ) @ 110Vac 294W(Typ) @ 220Vac • Normal: 439W(Typ) @ 110Vac 425W(Typ) @ 220Vac • Max: 462W
Standby Power	0.5W or less	

- This product can be installed by users, except when mounted on a ceiling or wall.
- This product is designed for maintenance free.
- LEDs show the machine status and symptoms for troubleshooting.
- Service mode is available.

Product Overview

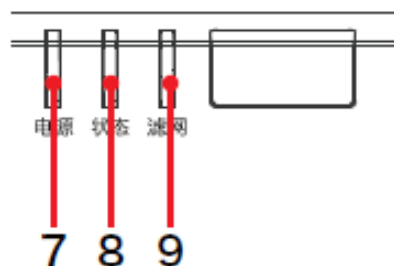
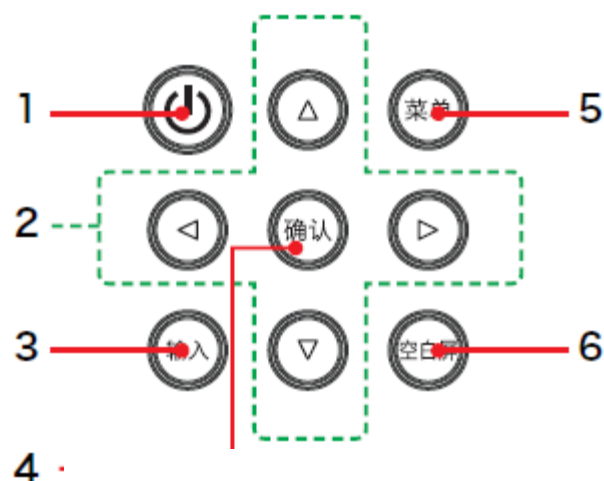


Connection Ports



- | | |
|--------------------------|---|
| 1. Video In terminal | 9. Audio 1 In (R/L) terminal |
| 2. Computer1 In terminal | 10. PC-Control terminal |
| 3. Computer2 In terminal | 11. Audio2 In terminal |
| 4. LAN terminal | 12. Monitor Out (Comp.1) terminal |
| 5. HDMI1 In terminal | 13. Audio Out terminal |
| 6. HDMI2/MHL In terminal | 14. Remote Receiver (rear) |
| 7. USB (PC) terminal | 15. Anti-theft lock hole (Kensington™ lock) |
| 8. USB terminal | |























































Control Panel and Indications



1	Power	Refer to the "Power On/Off the Projector" section. (See pages 30~31)
2	Four Directional Select Keys	Use ▲ or ▼ or ◀ or ▶ to select items or make adjustments to your selection.
3	Input	Select the input source.
4	Enter button	Select or confirm settings.
5	Menu	Press "Menu" to launch the on screen display (OSD), or go back to the previous menu. (See page 38)
6	AV Mute	Pause the audio and video.
7	Power indicator	Indicate the projector's power status.
8	Status indicator	Indicate the projector's status.
9	Filter indicator	Indicate the projector's filter maintenance status.

LED indicator

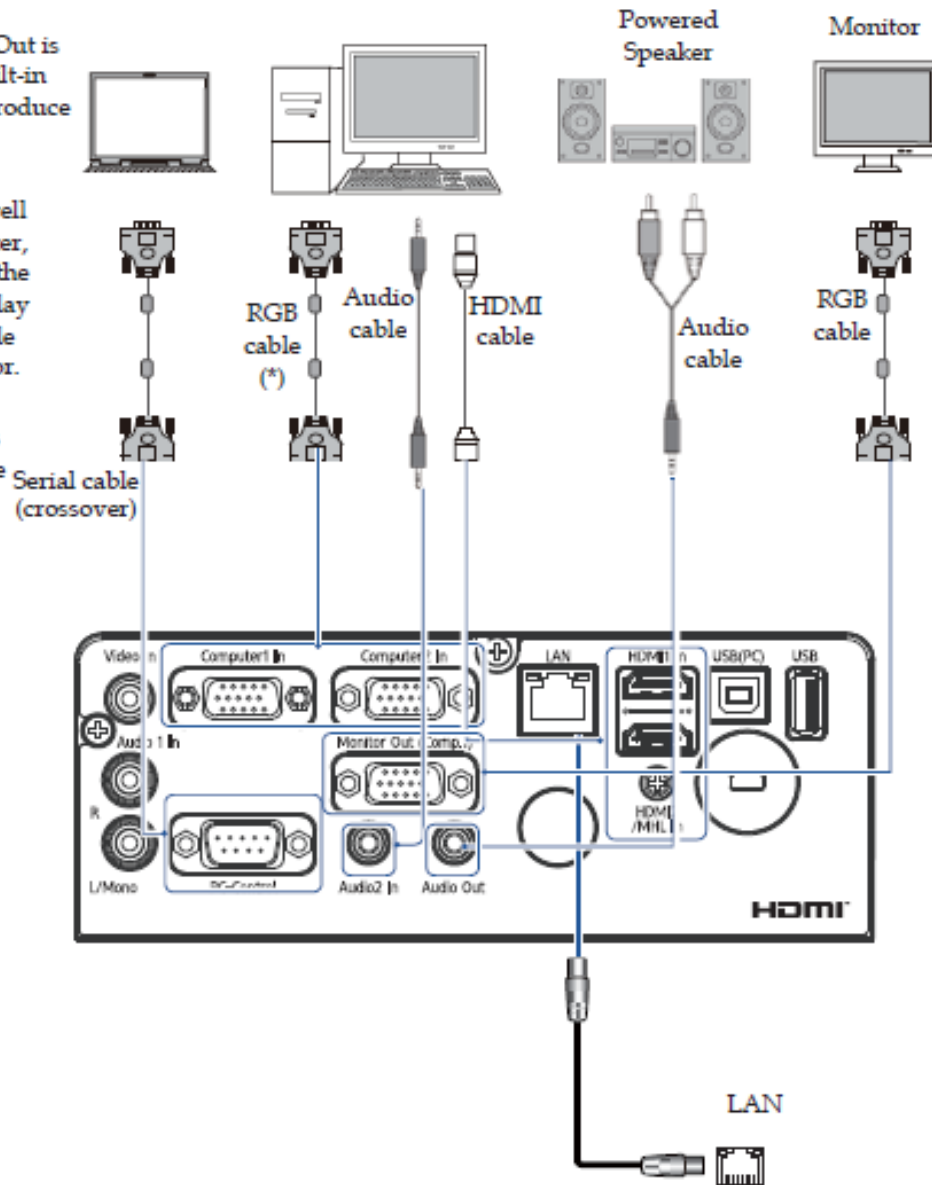
-  ...Green
-  ...Blinks green
-  ...Red
-  ...Blinks red
-  ...Lit up
-  ...Blinks
-  ...Off

LED			Protector Status
Power Green/Red	Status	Filter	
			The projector is off. (No AC power supply is connected.)
			The projector is in standby mode. Press the On/Standby button to start the projector.
			The projector is operating properly.
			The projector is entering the standby mode or projector light source are cooling down. Wait until the light source has fully cooled down. Turn on the projector after power indicator stop blinking.
			The projector is in light off mode.
			The projector cannot be turned on when detecting a fan error. Unplug the AC power cable. Re-connect it and turn on the projector.
	 0.5s		The projector cannot be turned on when detecting an error of the main board. Unplug the AC power cable. Re-connect it and turn on the projector.
	 1s		The projector cannot be turned on when detecting an LCD error. Unplug the AC power cable. Re-connect it and turn on the projector.
	 2s		The projector cannot be turned on when detecting an HDMI exception. Unplug the AC power cable. Re-connect it and turn on the projector.
			The projector cools down when detecting an LED error.
			The projector enters the standby mode when detecting an LED error.
 0.5s	 1s		The projector cannot be turned on when the internal temperature is excessively high. After the projector fully cools down and the temperature restores to a normal value, the power indicator is red and lit up. The projector can now be turned on.
	 1s		When the internal temperature is excessively high, the projector enters the standby mode.
 0.5s	 0.5s		The projector cannot be turned on when the external temperature is excessively high. After the projector fully cools down and the temperature restores to a normal value, the power indicator is red and lit up. The projector can now be turned on.
	 0.5s		When the external temperature is excessively high, the projector enters the standby mode.
 0.5s	 2s		The projector cannot be turned on when the light source temperature is excessively high. After the projector fully cools down and the temperature restores to a normal value, the power indicator is red and lit up. At this moment, you can turn on the projector.
	 2s		When the light source temperature is excessively high, the projector enters the standby mode.
			The filter needs to be cleaned.

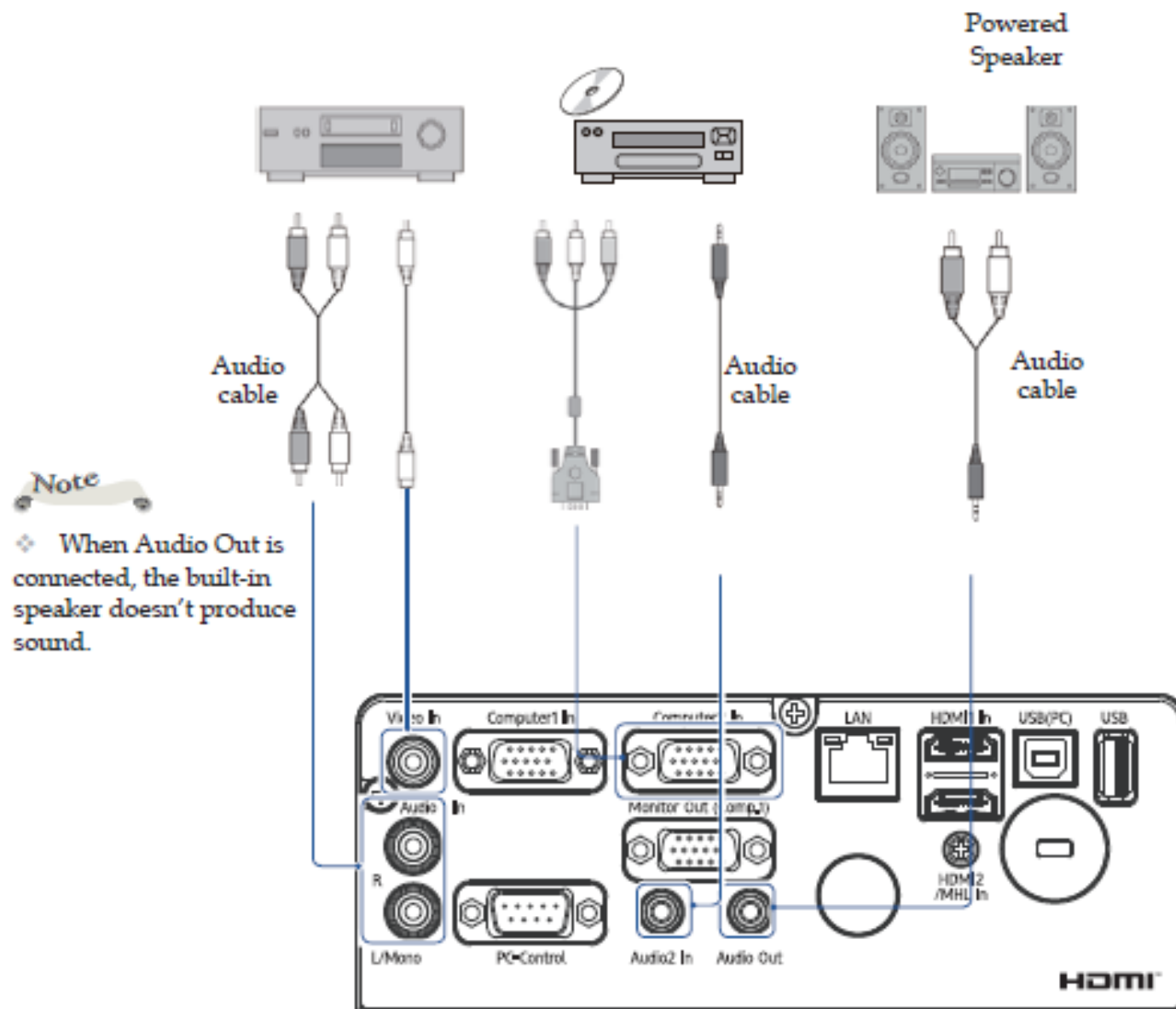
Connecting a Computer

Note

- ❖ When Audio Out is connected, the built-in speaker doesn't produce sound.
- ❖ To ensure the projector works well with your computer, please make sure the timing of the display mode is compatible with your projector. (See pages 81~83)
- ❖ Use the cables that come with the projector. (*)



Connecting a Video Device



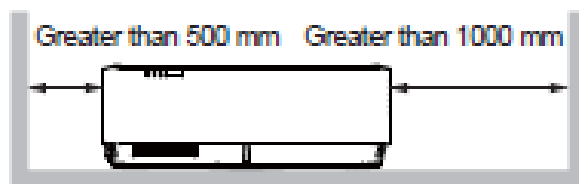


Installation

- This production is designed for customer installation
- Please read the Users Manual carefully. Some customer may need help.

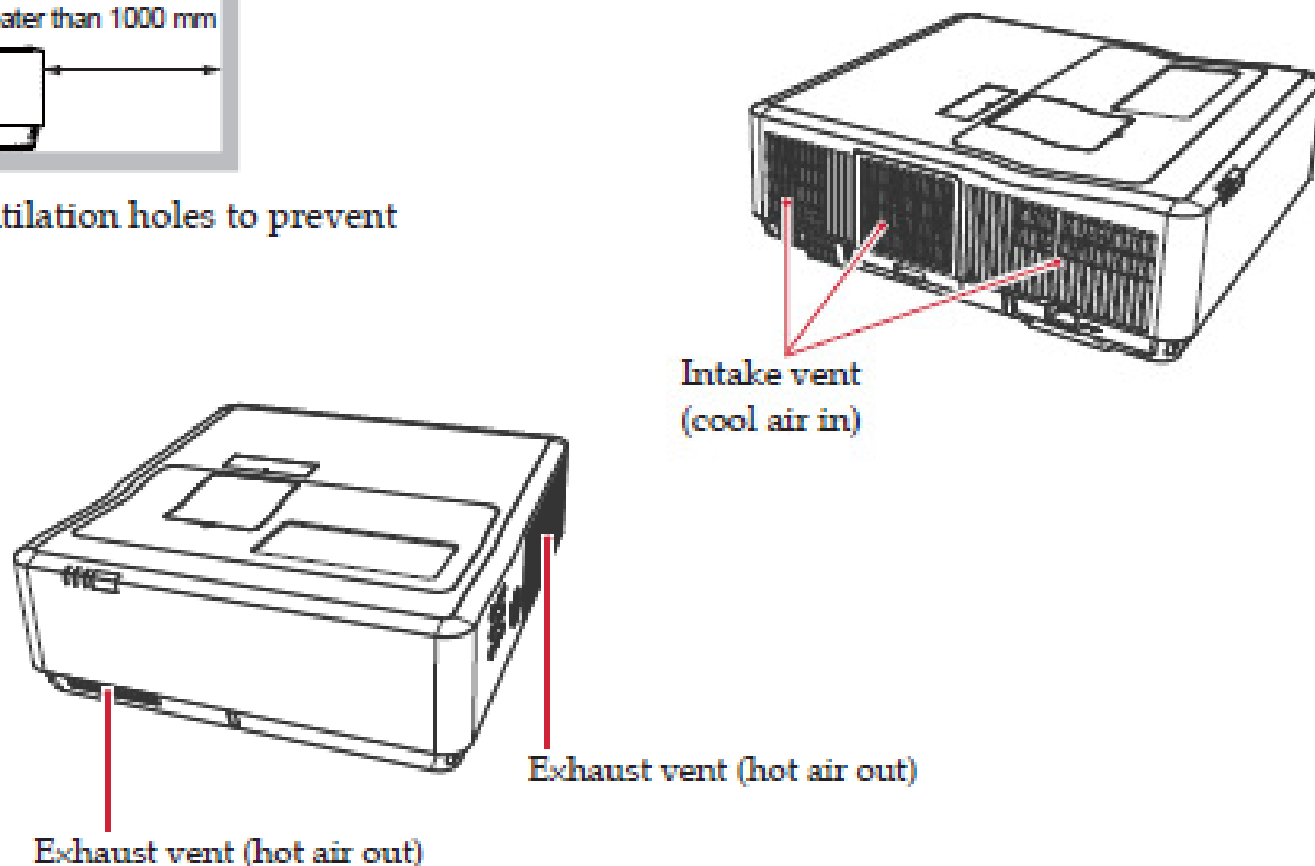
Installation notice

- **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.



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

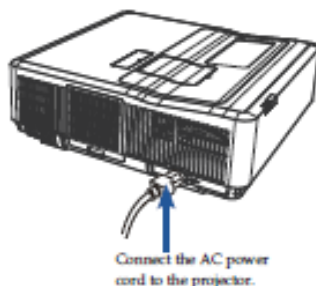
Read all precautions in users manual carefully.



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 turn red.



- 2 Turn on the lamp by pressing the "Power" button on the control panel or the "O" button on the remote control. The Power indicator will flash green.
The startup screen will display and the Power indicator will turn 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.

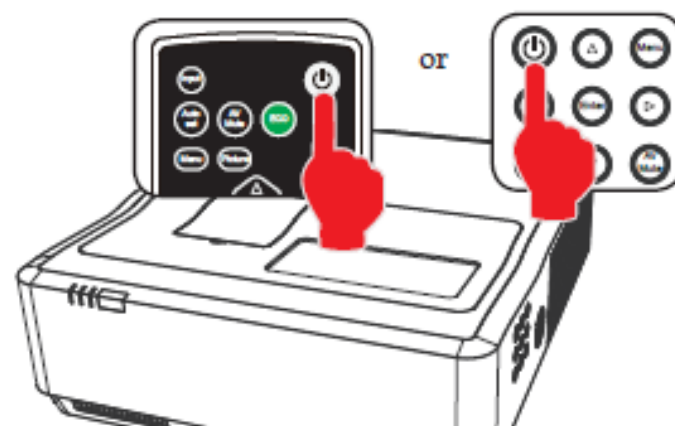
Make sure that the "Auto Source" has been set to "On".

Note

- ❖ Make sure that the power plug is fully inserted into both the projector AC inlet and the wall outlet.
- ❖ The AC outlet must be near this equipment and must be easily accessible.

Note

- ❖ If you connect multiple sources at the same time, press "Input" to switch inputs.



CAUTION:



- Do not look into the lens while the light source is on. The strong light from the lamp 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, the lamp cover or the bottom of the unit. Doing so could result in injury and/or damage the object.

Note

- ❖ Turn on the projector first and then the signal sources.





Turn off the projector

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



Note

❖ When the power indicator flashes red, 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.

2. Press the  or  button again. The projector will shut down.
 - The power indicator will turn red.
3. Unplug the power cord out of the socket and projector connector.

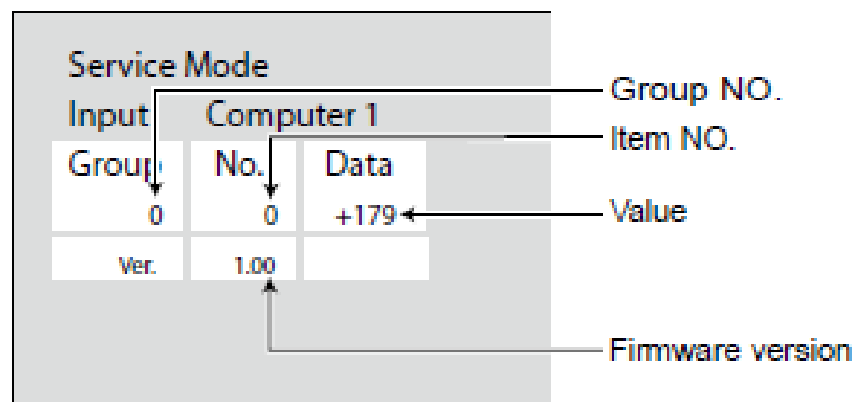


Basic Points About Service

How to access service mode

1) Enter service mode

Press the Menu and ▼ button for more than 3 seconds. Then the service mode menu will display to enter to the service mode shown as follows.



2) Adjust the data on the service mode

Press the Menu button to adjust the items, Press ▲ or ▼ button to change the value.

✓ Note:

You can refer to the Service adjustment data table for detailed description about the group, item and value.

3) Exit service mode

Press the ⏻ button to exit service mode.



Adjustment after replacing parts

● : Adjustmen ○ : Check

		Remove / Replace parts						
		LCD/ Prism	Condenser lens(OUT)	Polarizing			POWER board	MAIN board
				R	G	B		
Optical adjustment	Optical center adjustment	○	●					
Electrical adjustment	ADC adjustment							●
	Fan voltage adjustment							●
	Check and set the screen type	○						●
	Anti-voltage adjustment							●
	Keystone adjustment							●

✓ **Note:**

* 1 When adjusting the EEPROM data transmission, the following data will be transferred from the original data to the new board:

- Service adjustment data (fan voltage regulator / flicker frequency adjustment)
- Uneven color correction data
- Gamma correction data



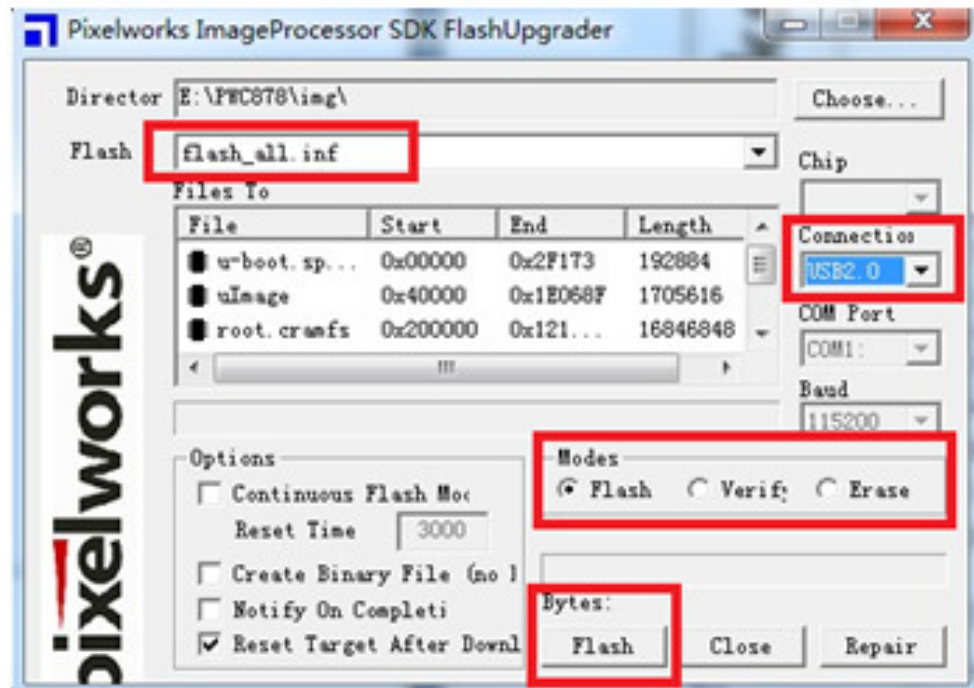
Firmware update



Main firmware

Step 1: Connect Computer(USB-A Port) and Projector(micro USB Port) with USB-A to micro USB cable.

Step 2: Run "FlashUpgrader.exe"(Location: img\)



Flash: flash_all.inf

Connection: USB 2.0

Modes: Flash

Step 3: Press Flash button and wait...

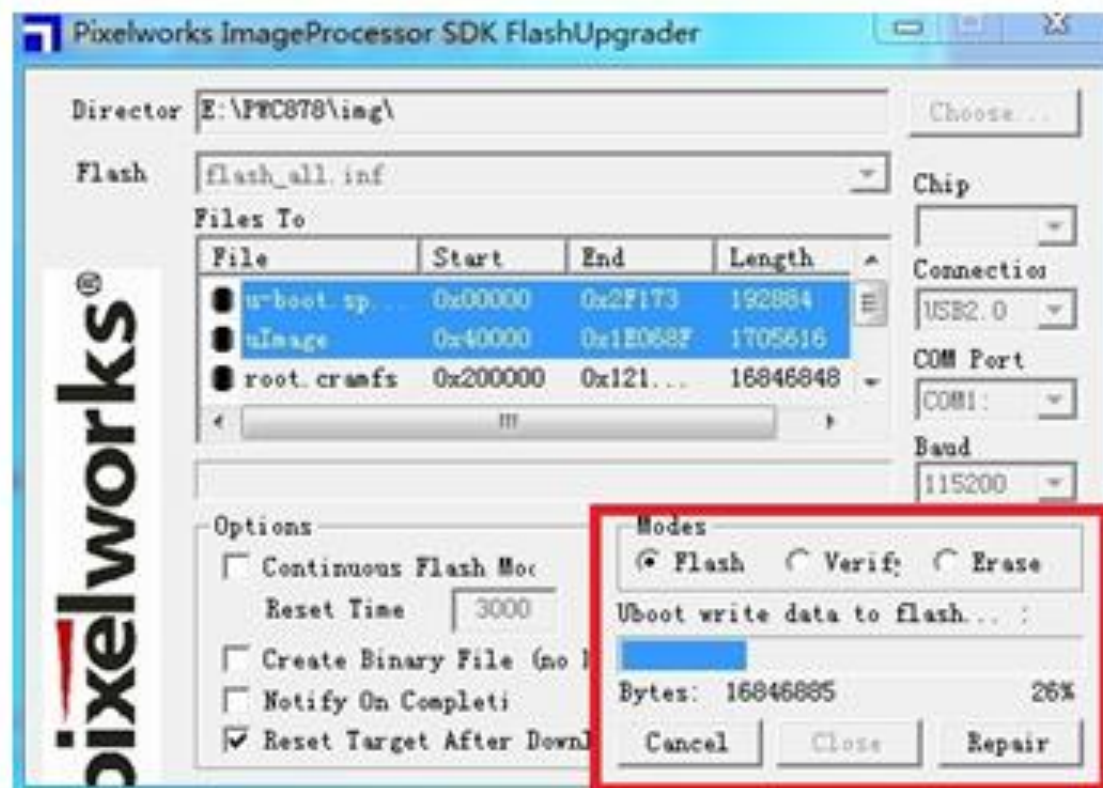
Step 4: Keep pressing **【POWER】** and **【UP】** key in keyboard and plug AC power cord, until POWER LED blink red and WARNING LED on, then release **【POWER】** and **【UP】** key.

Main firmware

Step 5: You need install USB driver if you run FlashUpgrader at the first time.(driver location: FlashUpgrader\Windows-Side usb driver\), you should seen LibUSB-win32 Devices in device manager after driver installed.



Step 6: Start Upgrading..., the process should last in 6~7minutes.

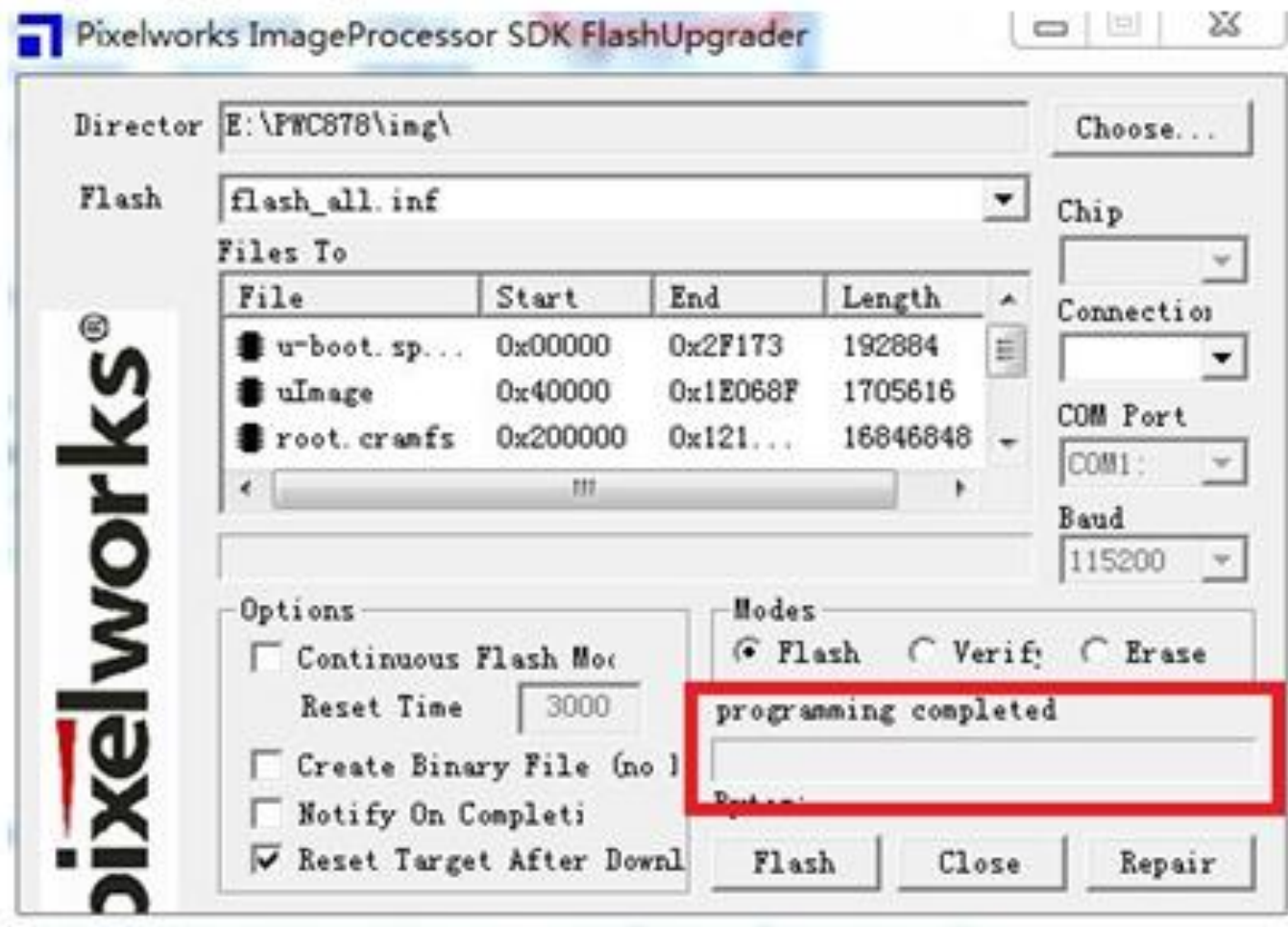


Notice: The progress bar shows 1% ~ 100% information. After the downloading and burning are finished, the progress bar does NOT display anything.



Main firmware

Step 7: Upgrading finished



RICOH
imagine. change.

