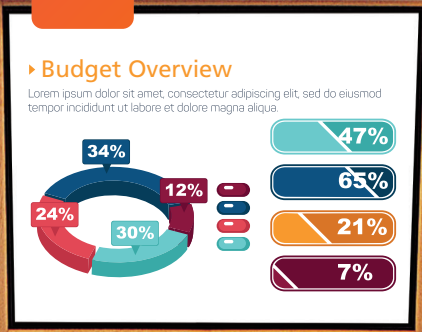


RICOH HIGH-END LASER PROJECTOR

RICOH
imagine. change.

PJ WUL6670
PJ WUL6680
PJ WUL6690

- ✓ 7,200lm/8,500lm/9,600lm high brightness
- ✓ 20,000h maintenance free
- ✓ High image quality and wide color gamut
- ✓ Multiple image adjustment functions



- Motorized lens shift**
Icon: A lens with a circular arrow indicating movement.
- Dust-Proof Design**
Icon: A lens with a protective mesh and dust particles being blocked.
- 360° installation**
Icon: A lens with a circular arrow indicating rotation.
- HDBaseT**
Icon: A lens with a cable and a distance marker of 100m.

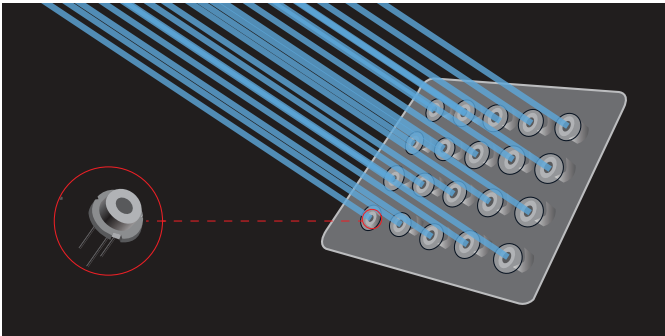
Laser Projector

Professional Performance for Immersive Impact



Multi-Module Laser Light Source

By utilizing a multi-module design, the laser beam originates from several laser diodes. This configuration ensures that even if one diode experiences a malfunction, the overall brightness remains relatively unaffected. This design significantly reduces the likelihood of abrupt loss of projection light sources during crucial presentations, resulting in enhanced stability and reliability.



High lumen output

RICOH's PJ WUL6670/WUL6680/WUL6690 models incorporate advanced laser light source technology, ensuring a consistent projection of 7,200/8,500/9,600lm respectively. This technology enables crisp and vivid visuals even in well-lit surroundings, making them ideal for diverse settings like lecture halls, conference rooms, and other large venues.



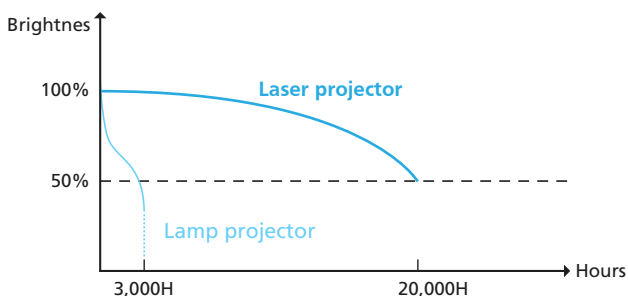
Low brightness projection in bright environments



High brightness projection in bright environments

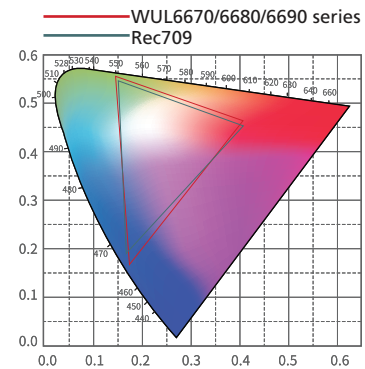
20,000h long life light source

Utilizing a laser light source enables a maintenance-free operation for up to 20,000 hours, significantly reducing maintenance time and costs in comparison to conventional lamp projectors.



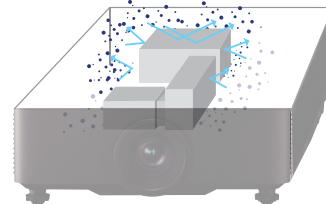
High image quality

Employing a WUXGA chip for widescreen high-definition projection, the laser light source exhibits a pure texture, covering more than 97% of the Rec.709 color gamut range. RICOH's unique NCE natural gain technology, advanced RGB adjustment, and selectable GAMMA types allow for lifelike color reproduction to fit the needs of the environment.



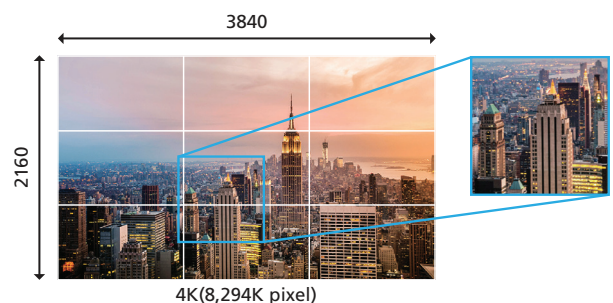
Fully sealed dust-proof design

Dust is a key factor affecting the lifespan of projectors. The key optical components of PJ WUL6670/WUL6680/WUL6690 use a specially designed sealing optical structure, achieving IP5X dust proof level. Even in dusty environments, RICOH projectors provide you with long-lasting, stable, and reliable demonstration applications.



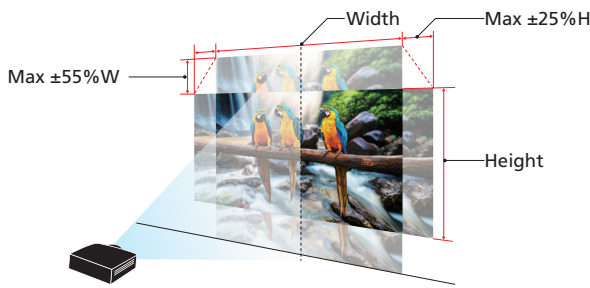
4K signal compatible display

Supporting 3840x2160 50/60HZ, equivalent to 4K resolution input, the RICOH PJ WUL6670/WUL6680/WUL6690 allows for direct playback of audio and video content in 4K resolution format.



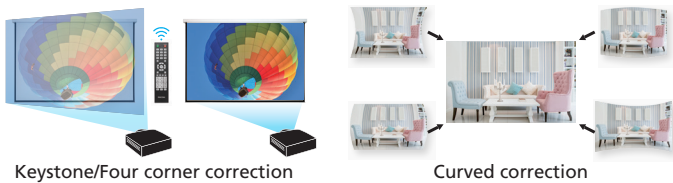
Motorized focus / zoom / lens shift

With a wide horizontal shift of $\pm 25\%$ and vertical shift of $\pm 55\%$, the motorized lens adjustment allows for more flexibility after installation. Eliminate the need to physically adjust the projector with motorized focusing and high-magnification zoom capabilities.



Multiple image adjustment functions

Achieve seamless projection on curved surfaces with $\pm 30^\circ$ horizontal and vertical keystone correction, four corner correction, and grid correction. Effortlessly perform geometric correction using just a remote control.



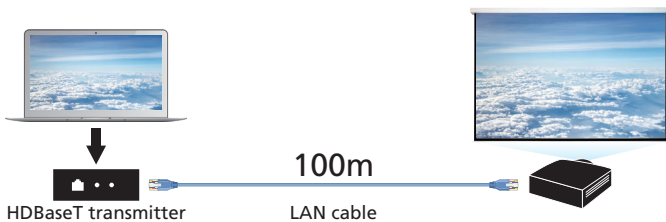
Built-in edge blending function

Built in edge-blending functions allow for seamless multi-projection of large images, eliminating the need for specialized software. This feature dynamically adjusts the fusion band width to eliminate excessive brightness in overlapping areas.



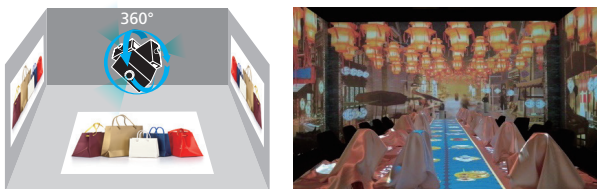
HDBaseT

HDBaseT technology is a multi signal transmission system that uses a single fiber optic cable. High-definition video and document data can be transmitted uncompressed through LAN cable, with a maximum transmission distance of up to 100M by using HDBaseT technology.



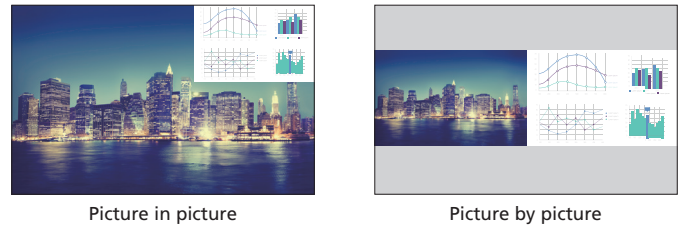
360 degree installation and portrait projection

This projector series supports both 360-degree installation and portrait projection, making it suitable for a wide range of applications like ceiling, floor, or portrait-oriented projection.



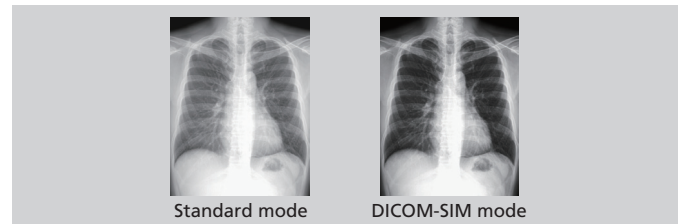
Supporting PIP and PBP

Use one projector to simultaneously project the content of two input sources on one screen.



DICOM-SIM Mode

Effortlessly project high-definition medical images in a variety of environments with DICOM-SIM mode. The RICOH PJ WUL6670/WUL6680/WUL6690 is optimized for displaying monochromatic medical images like X-Ray film, MRI scans, and tomography images.



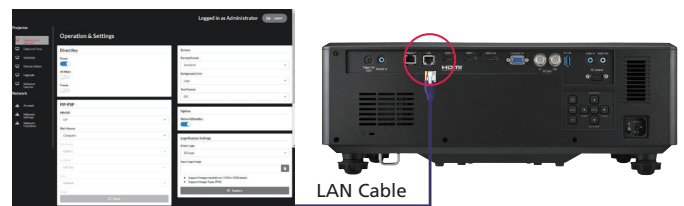
Remote Control ID set-up

By using the remote control numbering function, up to 99 projectors can be set with different remote control numbers. The remote controller can control the corresponding projectors by switching different IDs, avoiding simultaneous control of multiple adjacent projectors when using the remote controller.



Network management, supporting remote monitoring of projectors

Compatible with various network protocols such as Extron, PJ Link, AMX, Telnet, and Webserver. Manage the status and operation of multiple projectors over network.



Interfaces

- | | | |
|----------------------------|--------------------------|---|
| 1. Screen Trigger terminal | 7. HDMI Out terminal | 13. Audio Out terminal |
| 2. Remote In terminal | 8. Computer In terminal | 14. PC Control terminal |
| 3. HDBaseT terminal | 9. 3D Sync In terminal | 15. AC In socket |
| 4. LAN terminal | 10. 3D Sync Out terminal | 16. Anti-theft lock hole (Kensington™ lock) |
| 5. HDMI 2 terminal | 11. DC 5V/1.5A terminal | |
| 6. HDMI 1 terminal | 12. Audio In terminal | |



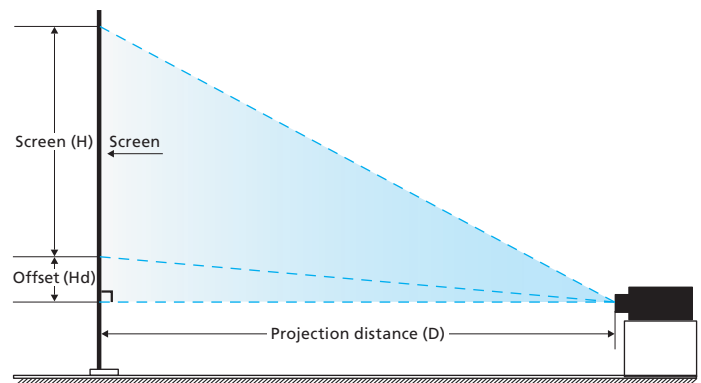
Specifications

Model name		PJ WUL6670	PJ WUL6680	PJ WUL6690	
Projection system		DLP	DLP	DLP	
Chip size		0.67inch	0.67inch	0.67inch	
Brightness		7,200lm	8,500lm	9,600lm	
Contrast ratio		3,380,000:1	3,380,000:1	3,380,000:1	
Aspect ratio		16:10	16:10	16:10	
Light source		Laser	Laser	Laser	
Light source life time		20,000h(*)	20,000h(*)	20,000h(*)	
Projection size		40-300inch	30-300inch	30-300inch	
Projection distance		Wide: 3.38-26.08 feet Tele: 4.27-32.68 feet	Wide: 2.56-26.97 feet Tele: 4.13-42.85 feet	Wide: 2.56-26.97 feet Tele: 4.13-42.85 feet	
Throw ratio		1.22-1.53	1.25-2.0	1.25-2.0	
Resolution (native)		1,920 x 1,200 (WUXGA)	1,920 x 1,200 (WUXGA)	1,920 x 1,200 (WUXGA)	
Color reproduction		1,073,000,000	1,073,000,000	1,073,000,000	
Focus		Motorized	Motorized	Motorized	
Zoom ratio		1.25x (Motorized)	1.6x (Motorized)	1.6x (Motorized)	
Lens shift		Horizontal ±25%/ Vertical ±55%	Horizontal ±25%/ Vertical ±55%	Horizontal ±25%/ Vertical ±55%	
Keystone		+/-30°Horizontal +/-30°Vertical	+/-30°Horizontal +/-30°Vertical	+/-30°Horizontal +/-30°Vertical	
Four corners correction		Support	Support	Support	
Curved correction		Support	Support	Support	
Dust-proof		IP5X	IP5X	IP5X	
Interfaces	Input	Computer In	MiniD-SUB15pin x1	Mini D-SUB15pin x1	Mini D-SUB15pin x1
		HDMI1	HDMI(2.0) x1	HDMI(2.0) x1	HDMI(2.0) x1
		HDMI2	HDMI(1.4) x1	HDMI(1.4) x1	HDMI(1.4) x1
		HDBaseT	HDBaseT	HDBaseT	HDBaseT
		3D Sync In	BNC x1	BNC x1	BNC x1
		Audio In	3.5mm mini jack x1	3.5mm mini jack x1	3.5mm mini jack x1
	Out put	Wired IR	3.5mm mini jack (Blue) x1	3.5mm mini jack (Blue) x1	3.5mm mini jack (Blue) x1
		HDMI Out	HDMI(2.0) x1	HDMI(2.0) x1	HDMI(2.0) x1
		3D Sync Out	BNC x1	BNC x1	BNC x1
		USB typeA	5V/1.5A x1	5V/1.5A x1	5V/1.5A x1
		Audio Out	3.5mm mini jack x1	3.5mm mini jack x1	3.5mm mini jack x1
		12V Power Trigger	Phone jack x1	Phone jack x1	Phone jack x1
	Control	Computer Control (RS232C)	D-SUB9pin x1	D-SUB9pin x1	D-SUB9pin x1
		Wired LAN	RJ45 x1	RJ45 x1	RJ45 x1
		Noise(standard/ eco)	30dB/25dB	34dB/27dB	34dB/27dB
Dimension (WxDxH mm) -(without feet)		486 x 376 x 150mm	486 x 376 x150mm	486 x 376 x 150mm	
Weight		26.46lbs	29.76lbs	29.76lbs	
Environment condition		Temperature: 0°C-40°C Humidity: 10%~85%	Temperature: 0°C-40°C Humidity: 10%~85%	Temperature: 0°C-40°C Humidity: 10%~85%	
Power supply voltage		100-240V 50/60HZ	100-240V 50/60HZ	100-240V 50/60HZ	
Maximum power consumption(standard/Eco)		470W/235W	620W/310W	620W/310W	
Stand by power consumption		< 0.5W	< 0.5W	< 0.5W	
High altitude mode		Support	Support	Support	
Speaker		10W x2	10W x2	10W x2	

(*)Running time until the initial brightness reduces to 50%.
(Life time varies depending on usage conditions and environment.)

Projection distance

PJ WUL6670 Projection distance					PJ WUL6680/WUL6690 Projection distance				
Screen size (inches)	Distance (feet)		Offset (feet)		Screen size (inches)	Distance (feet)		Offset (feet)	
	Wide	Tele	Min	Max		Wide	Tele	Min	Max
40	3.38	4.27	-1.87	0.10	30	2.56	4.13	-1.38	0.07
80	6.89	8.63	-3.71	0.16	80	7.05	11.29	-3.71	0.16
100	8.63	10.83	-4.66	0.23	100	8.89	14.17	-4.63	0.23
110	9.48	11.91	-5.12	0.23	110	9.78	15.58	-5.12	0.23
180	15.62	19.55	-8.33	0.39	180	16.11	25.62	-8.33	0.39
200	17.36	21.75	-9.25	0.43	200	17.91	28.51	-9.28	0.43
300	26.08	32.68	-13.91	0.66	300	26.97	42.85	-13.91	0.66



Precautions

- 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.
- To avoid injury, please keep the machine and attachments out of the reach of children.
- Ensure the machine is only connected to a power supply within the specified voltage range to prevent damage.
- 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.
- In case of smoke, odors, or unusual behaviors, please power off the machine immediately, and disconnect the power cord from the outlet. Please contact your service representative and report the problem.
- 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.

- 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.
- To avoid injury or suffocation, please keep plastic bags and other packaging materials out of reach of small children.
- The above appearances and specifications are subject to change without notice.
- All rights reserved for the company names, product names and logo mark included in this brochure.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)
- This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)
- This product includes software written by Tim Hudson (tjh@cryptsoft.com)
- Stated lumen ratings are based on ANSI standard.