

RICOH High End Laser Projectors

RICOH
imagine. change.

RJ WUL6670
RJ WUL6680
RJ 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



Dust-Proof
Design



360°
installation



HDBaseT

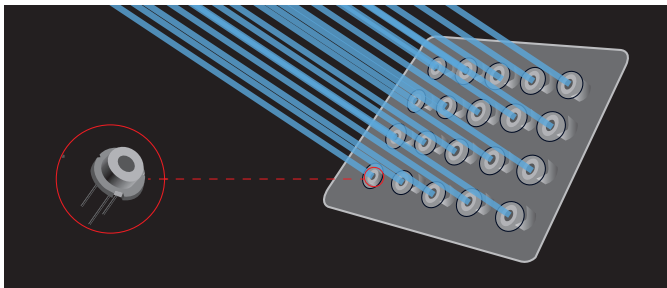


High Power for Larger Installations



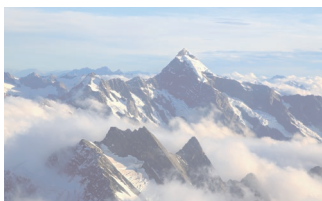
Multi-Laser Module Structure

The multi-module structure laser light source supports continuous 24/7 operation. The laser beam is produced by multiple laser diodes, increasing reliability.

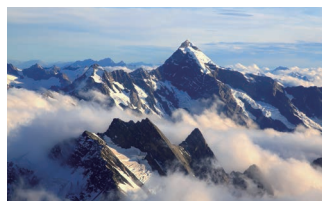


High Brightness

The RICOH PJ WUL6670, PJ WUL6680 and PJ WUL6690 models continuously and stably deliver brightness levels of 7,200lm, 8,500lm, and 9,600lm respectively. Clear, sharp images can be obtained even in bright environments, making these projectors suitable for applications in various fields such as large auditoriums, conference rooms, hotels, and large-scale exhibitions, among others.



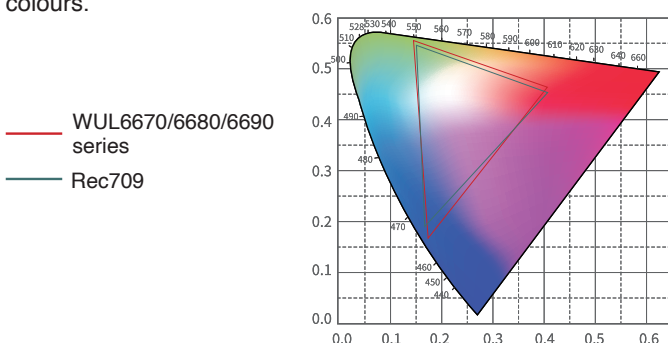
Low brightness projection in bright environments



High brightness projection in bright environments

High Image Quality and Wide Colour Gamut

Using a WUXGA chip to project widescreen, high-definition images, these DLP projectors combine RICOH's unique NCE natural colour gain technology, RGB advanced adjustment and GAMMA type selection to efficiently cover over 97% of the Rec.709 colour gamut range, delivering natural and realistic colours.



20,000-Hour Long Life

The laser light source has a long life of 20,000 hours, which is 6-7 times the life of a typical projector bulb source.

4K Signal Compatible Display

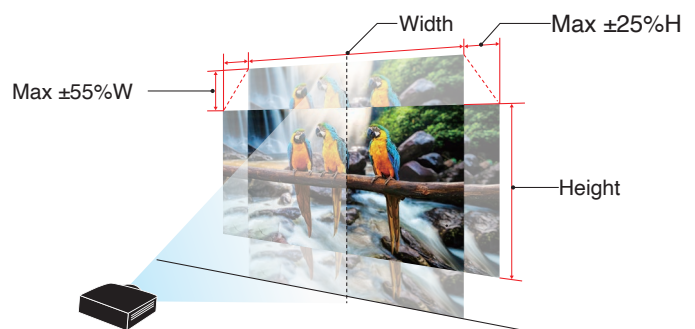
3840 x 2160Hz compatible, which means this device can directly play 4K resolution format audio and video content.

Multiple Remote Image Correction Functions

Supports $\pm 30^\circ$ horizontal and vertical keystone, four corners and grid image correction functions. The remote control enables easy geometric correction for projection onto surfaces such as spheres and curved screens.

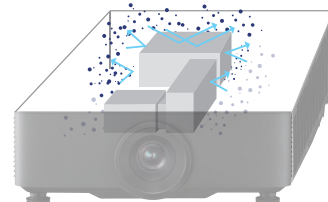
Remote, Electric Focus / Zoom / Lens shift

The wide $\pm 25\%$ horizontal and $\pm 55\%$ vertical image adjustment ranges of the electric lens shift, greatly increase freedom of installation position. This family of projectors supports remotely controlled motorised focus, high magnification zoom and image adjustment functions, without needing to move the projector.



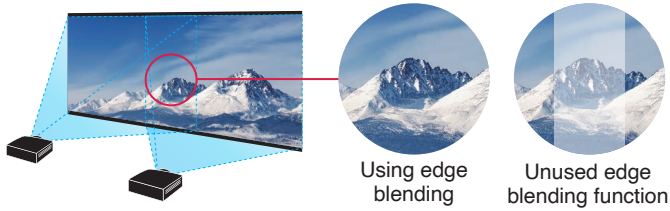
IP5X Dust-proof Design

Dust is a key factor affecting the lifespan of a projector. The key optical components of the PJ WUL6670, PJ WUL6680 and PJ WUL6690 models use a specially designed, sealed optical structure, achieving an IP5X dust-proofing level to prevent dust from damaging the unit.



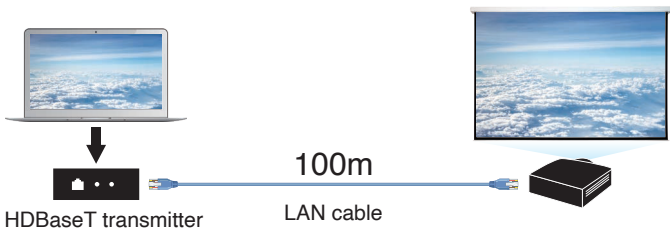
Edge Blending Function

Avoid additional edge-blending software costs thanks to the built-in edge-blending function. Multiple large images can be combined to produce a single, seamless, extremely large image. Excess brightness in overlapping parts can be eliminated by adjustment of the fusion band.



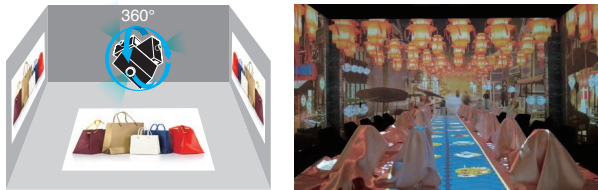
HDBaseT

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.



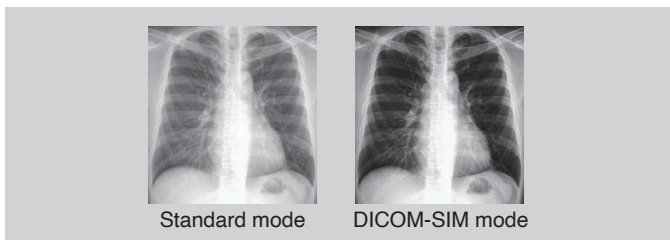
360-Degree Installation and Portrait Orientation Support

These models can be installed to project through 360 degrees, making them highly flexible, reducing installation limitations and greatly expanding the application range to include scenarios such as projection onto ceilings and floors, along with portrait orientation.



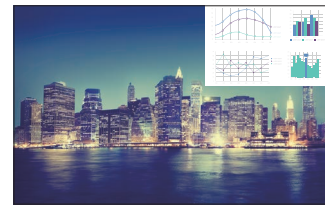
Supports DICOM SIM medical mode

Equipped with DICOM SIM (Digital Imaging and Communications in Medicine Simulation), these models are suitable for projecting monochromatic medical images, such as X-ray films, MRI, and tomography images. Details of medical images can be presented to a wider audience in a large, high-definition format, ideal for medical education environments.

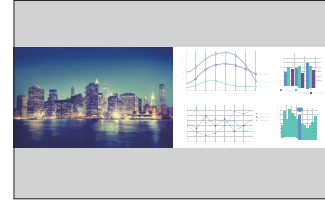


Picture in Picture and Picture By Picture

It is possible for a single projector to simultaneously project the content of two input sources on one screen, enabling the projection of multiple images, whether in PIP or PBP format.



Picture in picture



Picture by picture

Customisable ID Remote Control

Up to 99 projectors can be assigned a separate ID and individually controlled, one at a time.

Network Management, Remote Projector Monitoring Support

These projectors support various network protocols such as "Extron", "PJ Link", "AMX", "Telnet", and "Webserver" via an inbuilt application. This manages the status and operation of multiple network projectors such as power ON/OFF, and input source switching.

Interfaces

1. Screen Trigger terminal
2. Remote IN terminal
3. HDBaseT terminal
4. LAN terminal
5. HDMI2 terminal
6. HDMI 1 IN terminal
7. HDMI OUT terminal
8. Computer IN terminal
9. 3D Sync IN terminal
10. 3D Sync OUT terminal
11. DC 5V/1.5A terminal
12. Audio IN terminal
13. Audio OUT terminal
14. PC Control terminal
15. AC IN socket
16. Anti-theft lock hole (Kensington™ lock)



Mercury-free

The solid-state semiconductor laser light source used in these models contains no harmful mercury elements – unlike many bulb projectors, which use high voltage mercury lamps.

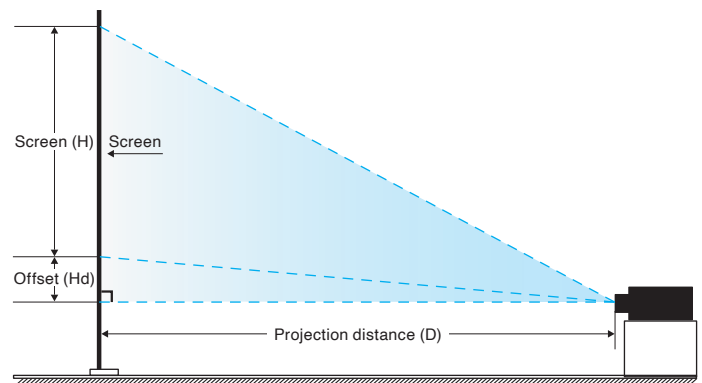
Specifications

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: 1.03-7.95m Tele: 1.30-9.96m	Wide: 0.78-8.22m Tele: 1.26-13.06m	Wide: 0.78-8.22m Tele: 1.26-13.06m	
Throw ratio		1.22~1.53	1.25~2.0	1.25~2.0	
Resolution		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 $\pm 25\%$ / Vertical $\pm 55\%$	Horizontal $\pm 25\%$ / Vertical $\pm 55\%$	Horizontal $\pm 25\%$ / Vertical $\pm 55\%$	
Keystone		+/-30°Horizontal +/-30°Vertical	+/-30°Horizontal +/-30°Vertical	+/-30°Horizontal +/-30°Vertical	
Four corners correction		Support	Support	Support	
Grid adjustment		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	36dB/27dB	
Dimension (WxDxH mm) -(without feet)		486 x 376 x 150mm	486 x 376 x 150mm	486 x 376 x 150mm	
Weight		About 12kg	About 13.5kg	About 13.5kg	
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 (inch)	Distance (D/m)		Offset (Hd/m)		Screen size (inch)	Distance (D/m)		Offset (Hd/m)	
	Wide	Tele	Min	Max		Wide	Tele	Min	Max
40	1.03	1.30	-0.57	0.03	30	0.78	1.26	-0.42	0.02
80	2.10	2.63	-1.13	0.05	80	2.15	3.44	-1.13	0.05
100	2.63	3.30	-1.42	0.07	100	2.71	4.32	-1.41	0.07
110	2.89	3.63	-1.56	0.07	110	2.98	4.75	-1.56	0.07
180	4.76	5.96	-2.54	0.12	180	4.91	7.81	-2.54	0.12
200	5.29	6.63	-2.82	0.13	200	5.46	8.69	-2.83	0.13
300	7.95	9.96	-4.24	0.20	300	8.22	13.06	-4.24	0.20



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- * This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)
- * This product includes software written by Tim Hudson (tjh@cryptsoft.com)