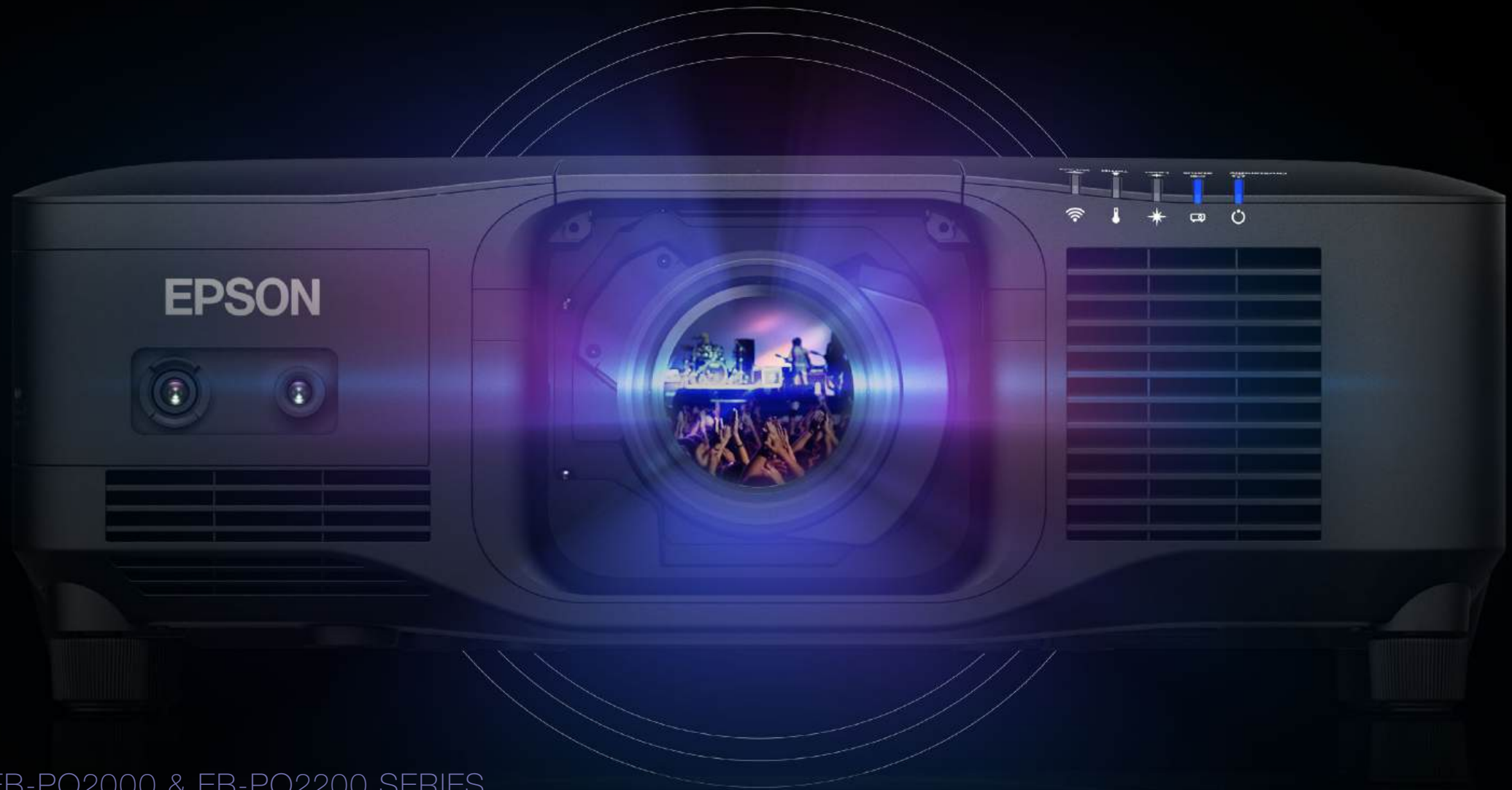


EPSON®



PRO SERIES | 4K

Premium Large Venue 4K Projectors | 8,000 – 20,000 Lumens



EB-PQ2000 & EB-PQ2200 SERIES

Interchangeable Lens 4K Projectors



All projected images in this brochure are simulated. Cover photo shown with optional camera.



IMMERSIVE





COMPACT, PREMIUM LARGE VENUE 4K PROJECTORS

Leveraging Epson's exclusive 4K Crystal Motion technology, the PQ2000 / PQ2200 Series deliver stunning 4K resolution on-screen. Available at 8,000 to 20,000 lumens¹, these projectors combine advanced installation features with bright, detailed imagery. The series also feature the world's smallest and lightest 10,000- and 20,000-lumen 4K projectors^{2,3}—producing captivating visuals in extraordinary detail from a compact and energy-efficient design.

- Incredible color with Epson 3-chip 3LCD technology
- 4K Crystal Motion technology, new generation panel and double micro-lens array for crystal clear image quality that fully realizes 4K resolution on screen
- Virtually maintenance-free 20,000-hour laser light source⁴
- High native contrast ratio for deep blacks; frame interpolation for fast moving objects; HDR support and scene adaptive gamma correction
- Optional powered lenses (sold separately) including ultra short throw .35 throw lens with a unique zero offset design for installation flexibility
- Optional attachable PixAlign™ camera provides access to powerful automated tools including auto color calibration⁵, edge blending assist and stacking assist function⁶—with or without a connected PC and router
- Enhanced connectivity with HDMI® two in and one out, 12G-SDI in/out for daisy chaining on select models and signal monitoring



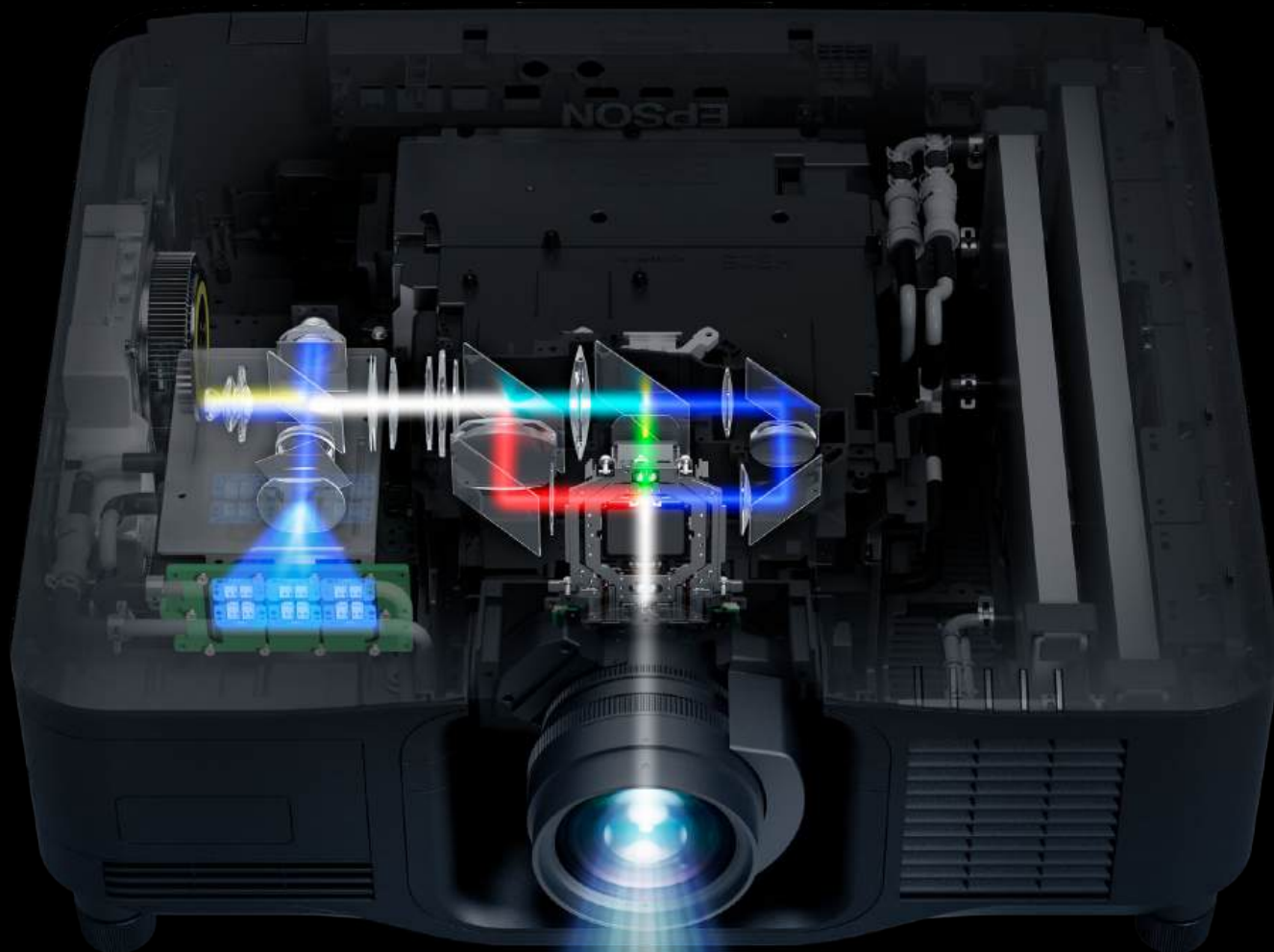


3 CHIPS FOR BRIGHTER COLORS

3-Chip 3LCD Technology and Laser Light Source

Epson is the first projector manufacturer to combine inorganic 3LCD panels with an inorganic phosphor wheel engineered to achieve higher brightness and reliability. Featuring a lamp-free laser light source, PQ2000 / PQ2200 Series projectors offer numerous advantages:

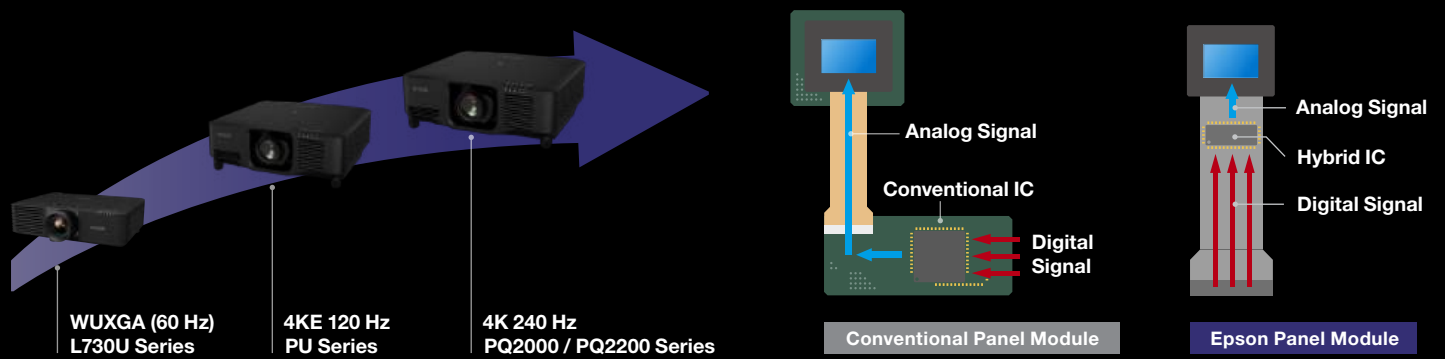
- Virtually maintenance-free solid-state laser light source lasting up to 20,000 hours⁴
- 3-chip architecture assigns one chip to process each primary color continuously, unlike single-chip technology that delivers color sequentially
- Accurate, high-color-brightness images for performance you can count on for an array of applications
- High-speed contrast control, a dynamic contrast ratio of over 5,000,000:1 and a wide color gamut for a brilliant, color-rich performance



HIGH-SPEED PANEL DRIVE TECHNOLOGY

Epson developed its own Hybrid IC drive technology and was able to increase the panel’s video response speed to 240 Hz*. This technology achieves 4K resolution by optimizing the newly-equipped drive circuit and signal transmission path in the PQ2000 / PQ2200 Series (approximately four times the speed of the 60 Hz image refresh rate in previous commercial models.)

* 4K resolution refresh rate on the projection screen is 60 Hz.



HIGH-PERFORMANCE IMAGE PROCESSING CHIP



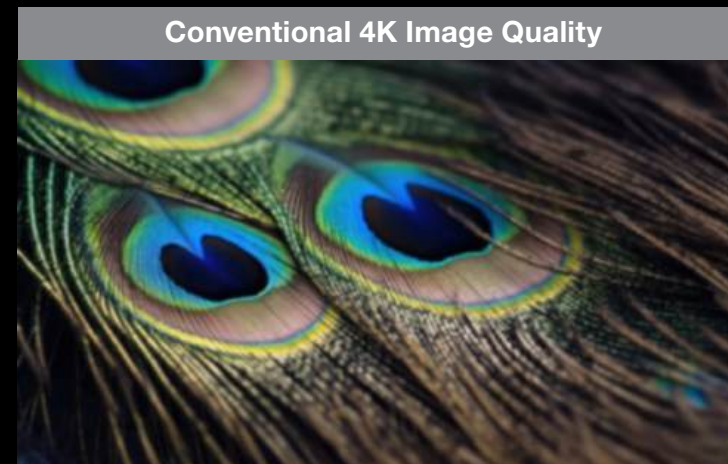
A new high-performance graphic chip has been incorporated in the system design. The operating frequency, memory bandwidth and data transmission speed have been significantly upgraded over previous models to enable an exceptional 4K video experience.

PQ2000 / PQ2200 Series	Specification Improvements	Benefits
Operating Frequency	Approx. 2 times vs. PU Series chip	Contributes to panel high-speed drive and 4K at 120 Hz image input/output support
Memory Bandwidth	Approx. 3 times vs. PU Series chip	Geometry Correction functions available with 4K Resolution
Image Transmission	Approx. 3 times vs. PU Series chip	Contributes to high 4K image quality

4K CRYSTAL MOTION TECHNOLOGY



Epson's new 4K Crystal Motion technology realizes 4K resolution on-screen with extraordinary detail and color brightness. From intimate showcases to massive productions, projection needs vary depending on applications, environment, lighting conditions and more. The new EB-PQ Series was built with this in mind, offering a range of high-brightness options and powerful features set in a compact chassis.

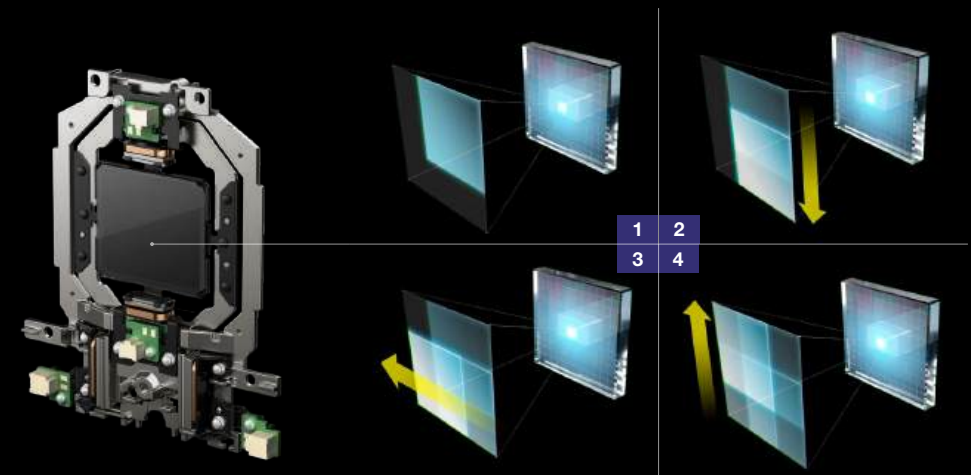


* Images simulated.

HIGH-PRECISION DUAL-AXIS SHIFT DEVICE

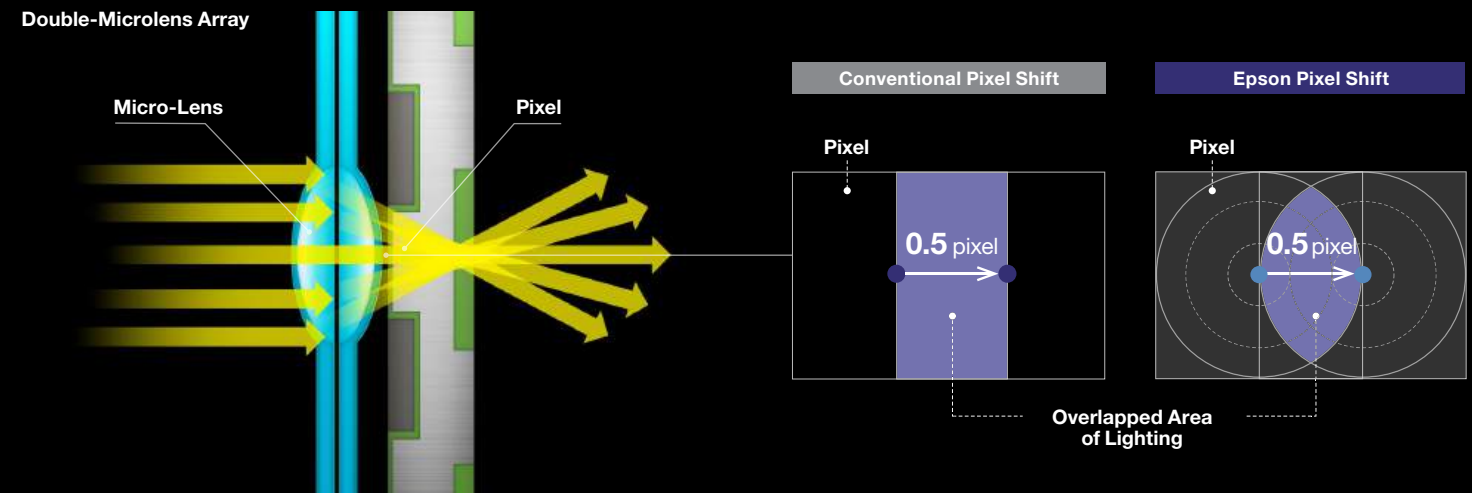


Epson's dual-axis shift device, which was developed in-house, enables crystal clear 4K resolution on-screen. The action of the shift device is exceptionally fast while also providing extremely high precision, which is essential to resolving high spatial detail.



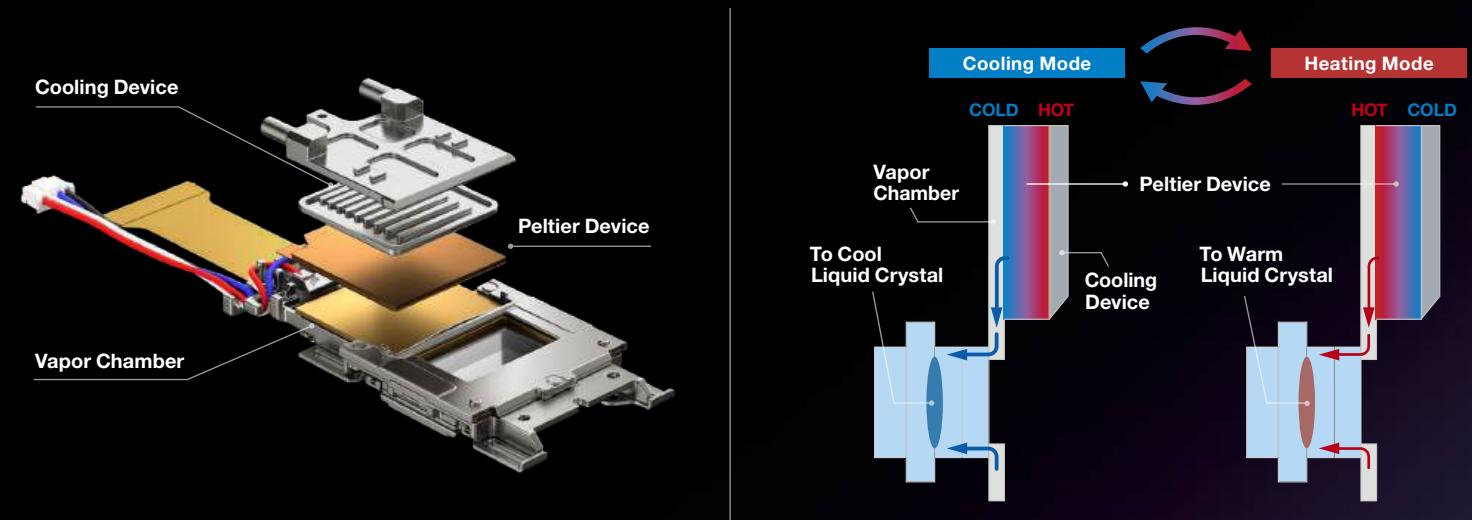
MULTI-LENS ARRAY TECHNOLOGY

Epson double-microlens array technology places two lenses facing each other for each panel pixel. This helps to increase not only the light utilization efficiency but also the sense of resolution, because the light condensing action of the double microlenses narrows the optical path of the light that passes through the panel aperture.



DIRECT, ACTIVE TYPE OF THERMO-CONTROL PANEL

Epson newly developed the direct and active type of thermo-control panel for the PQ2200 Series. This new technology incorporates a high thermal conductivity vapor chamber and peltier element into the liquid crystal panel. It is now possible to quickly switch between cooling and heating the liquid crystal to maintain a stable operating temperature which helps to increase the resolution and brightness of the projector.



FAST SETUP WITH NFC TECHNOLOGY

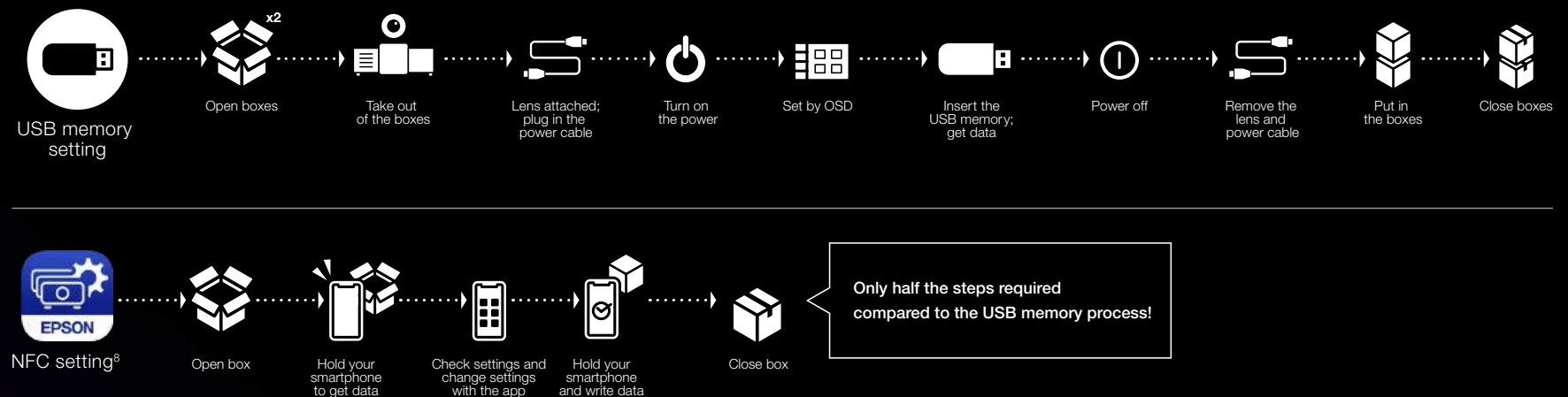
Epson Projector Configuration Tool⁷

NFC technology⁸ allows for communication between PQ2000 / PQ2200 Series projectors and a mobile device even when the projector is off, making it easy to manage and check settings from the Epson Projector Configuration Tool app⁷ for iOS® and Android®. Initial settings* can be preset at the warehouse before delivery, thus helping to reduce the labor involved in commissioning a large number of projectors.



* Some settings are not supported; please refer to User's Guide for details.

Initial Setting Comparison of Using USB Memory vs. Epson Projector Configuration Tool App⁷ in Warehouse

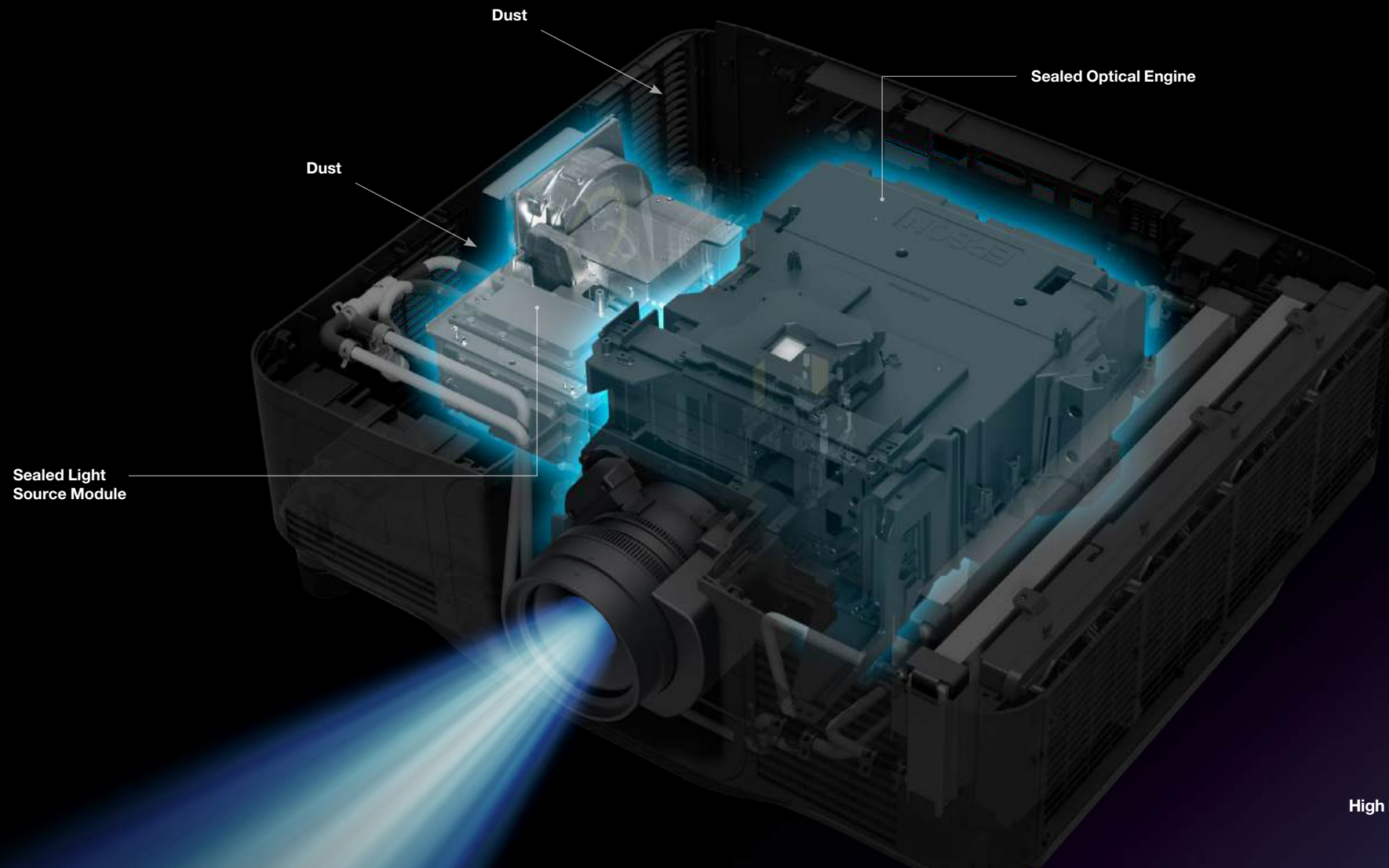


HIGH RELIABILITY DESIGN

Exceptional Durability with IP5X-Certified⁹ Optical Engine and Laser Light Source Module
The PQ2200 Series is equipped with IP5X-certified⁹ optical engines and laser light source modules¹⁰, offering outstanding dust protection. These two key components are hermetically sealed to maintain their performance, even in dusty environments.

Designed for Hassle-Free Maintenance

In addition to sealed main components, circuit boards found to be at risk of dust-related short-circuits during testing are coated and protected. Thanks to this dust-resistant construction, the PQ2200 Series is filter-free, eliminating the need for filter changes¹¹.



OPTIONAL PIXALIGN CAMERA PROVIDES POWERFUL TOOLS

Create bright, beautiful and seamless displays. The optional PixAlign camera provides access to an advanced toolset that makes previously time-consuming and complex applications quick and simple.

- **Geometry Assist for Blending⁶**—project one large image by blending up to two projectors without a PC and up to 15 projectors with a PC using the Epson Projector Professional Tool (EPPT) application¹²
- **Geometry Assist for Stacking⁶**—project one large image by stacking up to two projectors without a PC and up to six projectors with a PC using the EPPT application¹²
- **Screen Matching⁵**—use to automatically adjust color and brightness inconsistencies across multiple projectors; this tool is also helpful for edge blends
- **Auto Color Calibration⁵**—color and brightness adjustment of a single projector
- **Remote Camera Capture**—great for remote tech support
- **Simultaneous Stacking and Blending⁶**—achieve a super bright, blended image
- **Curved Screen⁶**—concave and convex screen support with up to 15 projectors

The PixAlign camera (ELPEC01) also supports the ELPLX02S ultra short throw lens by attaching to the top of the lens.

PIXALIGN™



Optional camera mounted to front of projector.

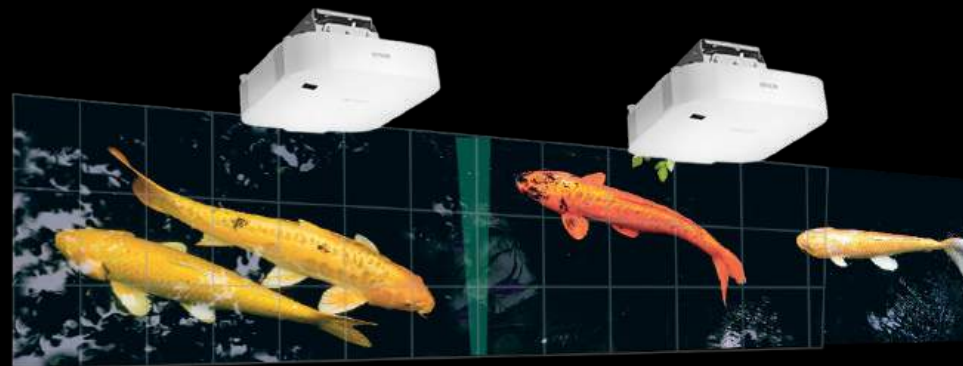


Optional camera mounted to ultra short throw lens.

SCREEN MATCHING AND AUTO COLOR CALIBRATION



GEOMETRY CORRECTION ASSIST FOR BLENDING



GEOMETRY CORRECTION ASSIST FOR STACKING



Before Geometry Correction
Assist for Stacking⁶



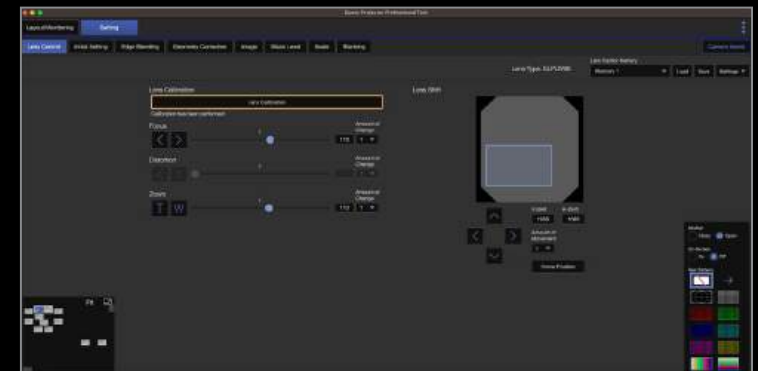
With Geometry Correction
Assist for Stacking⁶

EPSON PROJECTOR PROFESSIONAL TOOL

Easily manage the setup of multiple Epson networked projectors in a single, large space with the EPPT¹² application. This intuitive application makes adjustment simple. Easily access advanced tools like Geometry Correction and edge blending. EPPT supports wired and wireless networks and takes advantage of the power of the PixAlign camera. The application can be downloaded at no charge from Epson's website. Available for Windows® and macOS®.



Geometry Correction



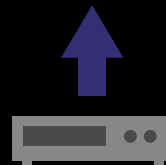
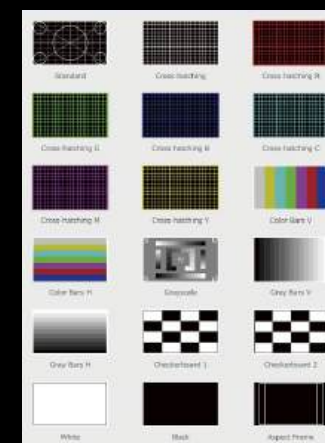
Lens Control

FREEZE CAPTURE FUNCTION

With the Freeze Capture function, you can capture a test pattern input from an external device and use the captured video as a test pattern even without that device.

Test Pattern Save

External test pattern can be saved for later use.



Media Server

HIGH DYNAMIC RANGE SUPPORT

PQ2000 / PQ2200 Series projectors support HDR-encoded content (HDR10¹³ and Hybrid Log-Gamma) for dynamic output over a broad tonal range with minimal white or black spotting.

SDR (standard dynamic range).



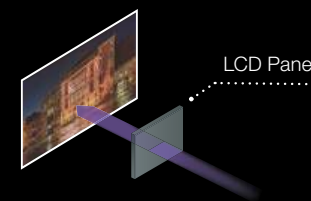
HDR (high dynamic range).



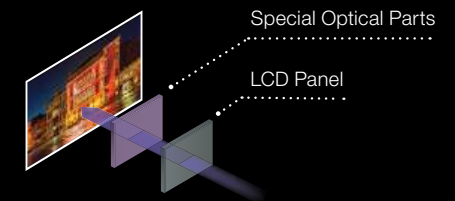
HIGH CONTRAST

A unique optical device that adjusts polarization and newly-developed panel achieves high contrast image projection; a 50 percent improvement over the already high native contrast ratio found in the Epson EB-PU Series.

Without special optical parts.



With special optical parts.



SCENE ADAPTIVE GAMMA CORRECTION

Image quality is adjusted according to the content with Epson's scene adaptive gamma correction, which analyzes images frame by frame and automatically adjusts the gamma level to project at the optimum contrast. Natural-looking images are achieved by controlling crushed blacks in dark scenes and clipped whites in bright scenes.

All images in this brochure are simulated.



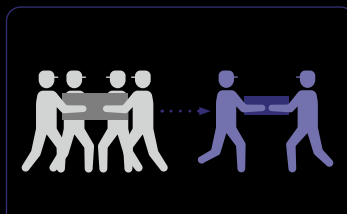
EFFICIENT AND COMPACT DESIGN

World's Smallest and Lightest 10,000- and 20,000-Lumen 4K Projectors^{2,3}
Epson achieved this compact size by developing and designing key components in-house.

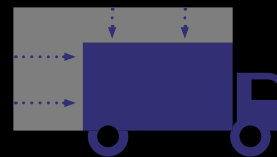


Benefits of Being Smaller

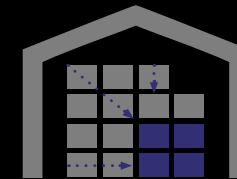
The PQ2000 / PQ2200 Series' compact size and reduced weight allow for greater ease of transport and warehousing. These features, plus flexible installation options, help deliver potential cost savings.



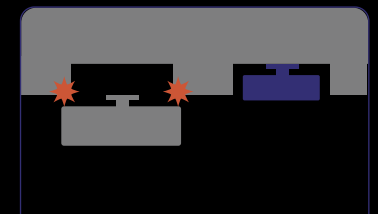
Labor Cost



Delivery Cost



Warehouse Cost

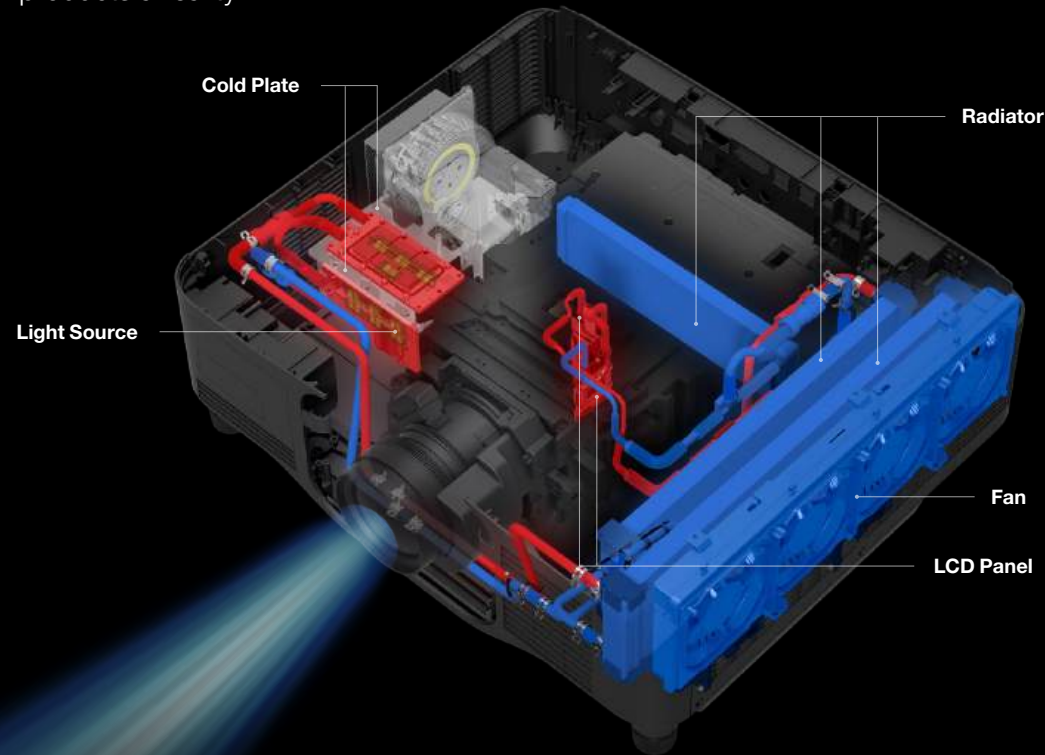


Install in Limited Spaces

ADVANCED TECHNOLOGY FOR A COMPACT DESIGN

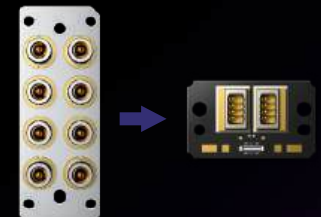
Sophisticated Liquid Cooling System

PQ2000 / PQ2200 Series succeeds the sophisticated liquid-cooling structure of the PU2100 / PU2200 Series, drawing on more than a decade of research and development and professional industry knowledge. Using a unique liquid-cooling system to cool the optical engines and laser light source units helps make more compact products a reality.



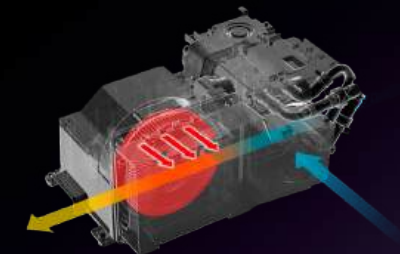
Compact Laser Light Source and Independent Laser Element Structure

This new laser is one-third the size of a conventional laser bank—while still delivering the same brightness as the previous generations. It also incorporates an independent structure for the laser element and the drive circuit—even if one light source unit fails, it will not affect the surrounding laser sources.



Compact Heat Exchange System

Epson developed its own stator vane heat exchange system to significantly enhance the cooling performance of the phosphor. The newly developed system is highly compact and features a light source unit that's 69% smaller than in the Epson Pro L12000Q 4K projector.



ENHANCED CONNECTIVITY

Connect with Virtually Any System

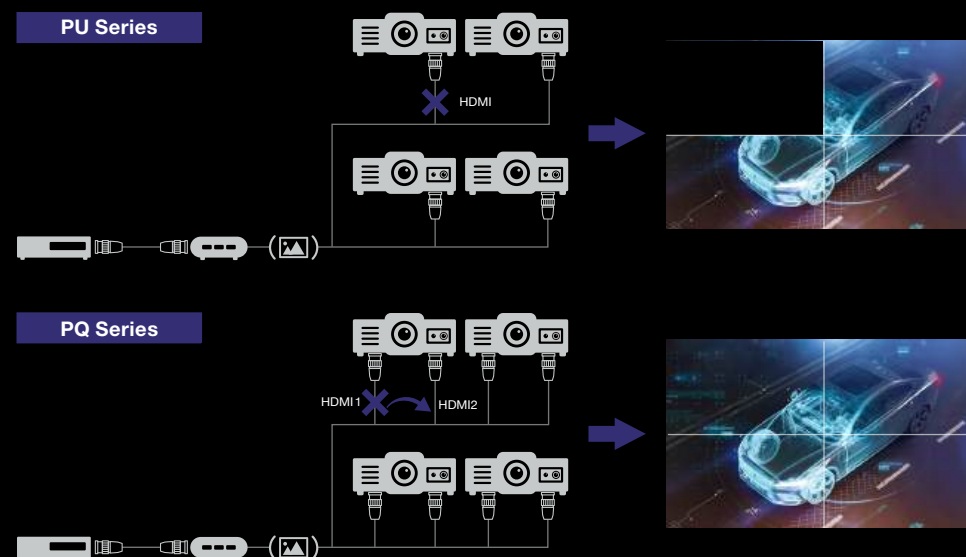
The PQ2000 / PQ2200 Series includes HDMI two in and one out for daisy chaining, automatic input switching when input signal is disrupted and 12G-SDI* in/out to support 4K resolution.



* 12G SDI not available with the EB-PQ2008B and EB-PQ2008W projector. PQ2200 Series shown.

BACKUP SOURCE FUNCTION

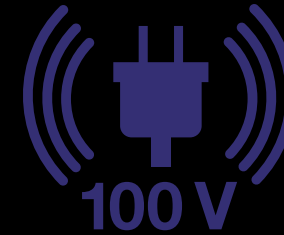
If the source signal is lost during the live event, the source can be quickly switched to the backup source with the Backup Source function equipped in the PQ2000 / PQ2200 Series. 12G-SDI, HDMI2, and HDBaseT® can be specified as the backup source.



SIMPLIFIED INSTALLATION

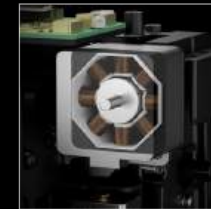
Operation From Standard 120 V Power

For additional installation flexibility, the 16,000-lumen EB-PQ2216 can operate at 15,500 lumens with standard 120 V power, while the 20,000-lumen EB-PQ2220 can operate at 16,000 lumens.



FAST AND PRECISE LENS ADJUSTMENT FEATURES

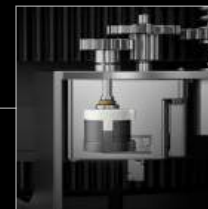
Smooth and accurate lens shift, zoom, and focus are enabled by advanced lens design technology.



Usage of the Stepper Motor
Adopting a stepper motor system that allows for precise stop position control can help produce finer lens shift adjustments.



No-Backlash Gear Structure
The use of no-backlash gears that have virtually no space between them reduces the error when stopping lens shift.



High Sensor Detection Accuracy
Accurate focus and zoom adjustments are achieved via software processing based on the accurate capture and output of voltages by a sensor built into the lens mechanism. The number of steps needed to reach the final target focus value is meticulously engineered.

WIDE SELECTION OF POWERED LENSES



Single Lens Family

The PQ2000 / PQ2200 Series is compatible with Epson’s existing single-lens family that supports projectors from 6,000 to 20,000 lumens. Thoughtfully engineered, these lenses were created to support different Epson projector lineups and are 4K capable.

Up to 10 Lenses to Choose From

The PQ2000 / PQ2200 Series offer increased installation flexibility that allows users to choose the motorized lens best suited for their environment. Choose from a variety of lenses ranging from ultra short throw to long throw. A tool-free, quick-release lever enables fast, easy lens exchange.

For details, visit epson.com/projectorlenses

Lens	Part Number	Product Code	Wide – Tele	Throw Ratio Range									
				1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
Ultra Short*	ELPLX02S	V12H004X0B	0.34	<div></div>									
Short #1	ELPLU03S	V12H004UA3	0.46 – 0.56	<div></div>									
Short #2	ELPLU04	V12H004U04	0.62 – 0.75	<div></div>									
Wide #1	ELPLW05	V12H004W05	0.74 – 1.04	<div></div>									
Wide #2	ELPLW06	V12H004W06	1.15 – 1.57	<div></div>									
Wide #3	ELPLW08	V12H004W08	0.83 – 1.17	<div></div>									
Middle #2	ELPLM15	V12H004M0F	1.52 – 2.47	<div></div>									
Middle #3	ELPLM10	V12H004M0A	2.34 – 3.59	<div></div>									
Middle #4	ELPLM11	V12H004M0B	3.42 – 5.23	<div></div>									
Long	ELPLL08	V12H004L08	5.09 – 7.16	<div></div>									

* Also available in white (ELPLX02WS).

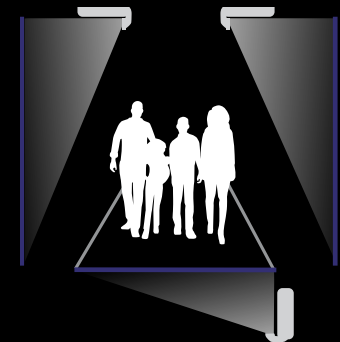
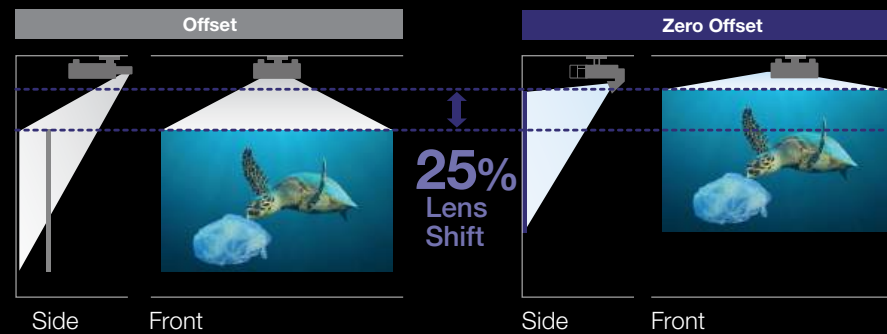
ZERO-OFFSET ULTRA SHORT THROW LENS

This lens is especially useful in environments with extremely limited lens-to-screen distances. The ultra short throw ratio of 0.34 with zero-offset lets you project onto large screens from just inches away, and the steep angle of light from the lens accommodates close interaction with the display and minimizes shadows.

- Ideal for space-constrained environments—projects large images from a short distance away
- Easy installation in narrow spaces and rear-projection applications—0.34 throw ratio
- Positioning flexibility—wide lens shift for more options when installing the projector
- Large-screen projection—up to 1,000"



UST lens available to match projector cabinet.



Front projection from above and rear projection from below the floor surface create an immersive experience.

CURVED LENS STRUCTURE

The curved shape makes it possible to consider stealth installations. Epson ultra short throw lenses eliminate the distraction of a projector body so that visitors can enjoy a more immersive visual experience.



PQ2000 / PQ2200 SERIES PRODUCT SPECIFICATIONS

MODEL	EB-PQ2008B	EB-PQ2008W	EB-PQ2010B	EB-PQ2010W	EB-PQ2213B	EB-PQ2216B	EB-PQ2216W	EB-PQ2220B
Product Code	V11HB01820	V11HB01920	V11HB02820	V11HB02920	V11HB03820	V11HB04820	V11HB04920	V11HB05820
Case Color	Black	White	Black	White	Black	Black	White	Black
Lens Included	No							
Limited Warranty	3-year							
General Features								
Color Brightness ¹	8,000 lumens	8,000 lumens	10,000 lumens	10,000 lumens	13,000 lumens	16,000 lumens	16,000 lumens	20,000 lumens
White Brightness ¹	8,000 lumens	8,000 lumens	10,000 lumens	10,000 lumens	13,000 lumens	16,000 lumens	16,000 lumens	20,000 lumens
Native Resolution	1080p with 4K Crystal Motion							
Resolution on Screen	4K UHD (3840 x 2160)							
Aspect Ratio	16:9							
(Dynamic) Contrast Ratio	Over 5,000,000:1							
Illumination Technology	Laser Phosphor							
Light Source Life ⁴	20,000 hours							
Mechanical Shutter	No	No	No	No	Yes	Yes	Yes	Yes
Simple Stacking/Blending ⁵	Yes							
Sealed Optical Engine	No	No	No	No	Yes	Yes	Yes	Yes
Weight (Without Lens)	41 lb	41 lb	41.4 lb	41.4 lb	63.4 lb	64.3 lb	64.3 lb	64.3 lb
Power Consumption	522 W	522 W	640 W	640 W	951 W	1,114 W	1,114 W	1,431 W
Power Requirement	100 V – 120 V AC	100 V – 120 V AC	100 V – 120 V AC	100 V – 120 V AC	100 V – 120 V AC	200 V – 240 V AC	200 V – 240 V AC	200 V – 240 V AC
LAN Networking and Control								
Wired	RJ-45 (content over IP)							
Wireless	USB Type-A for wireless LAN adapter (optional)							
Compatible Control Systems	Extron, Crestron® Connected V2 and XiO, AMX, DMX/Art-Net							
Message Broadcasting ¹⁴	Yes							
Epson iProjection™ ¹⁵	Yes							
Connections								
HDMI 2 In/1 Out (HDCP2.3/HDMI2.1)	Yes							
HDBaseT	Yes							
12G-SDI In/Out	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Variable Audio Out	Mini Stereo x 1							
USB Connectors	Type-B x 1, Type-A x 1 for wireless				Type-B x 1 (for service, clone), Type-A x 3 (for wireless, FW update, clone, camera)			
Serial Control	Serial: RS-232c x 1							
Recommended Accessory 1	PixAlign Camera (ELPEC01)							
Recommended Accessory 2	Ceiling Mount (ELPMB67)							
Recommended Accessory 3	Wireless LAN Module (ELPAP11)							

DIMENSIONS



SELECT ACCESSORIES





EPSON BUSINESS SOLUTIONS

Driven by a relentless pursuit of innovation and market leadership, Epson empowers organizations to achieve their unique goals through a wide breadth of precision-engineered solutions. With a full suite of efficient and compact products ranging from printers to projectors and robots to microdevices, Epson is uniquely positioned to provide enduring partnerships and world-class expertise to those we serve every step of the way.

Discover how Epson can help you work toward the future at www.epson.com/forbusiness



Epson America, Inc.
3131 Katella Ave., Los Alamitos, CA 90720

Epson Canada Limited
185 Renfrew Drive, Markham, Ontario L3R 6G3

epson.com/largevenue
epson.ca/largevenue

Caution: Class 2 laser product. Do not stare into the beam.

- 1 Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118.
- 2 Comparison based on 4K projectors rated at 10,000 lumens. Lumens, resolution, size and weight based on the manufacturers' online specifications and industry-available data as of October 2023.
- 3 Comparison based on 4K projectors rated at 20,000 lumens. Lumens, resolution, size and weight based on the manufacturers' online specifications and industry-available data as of October 2023.
- 4 No required maintenance for the light source for up to 20,000 hours. Approximate time until brightness decreases 50% from first usage. Measured by acceleration test assuming use of 0.04 - 0.20 mg/m³ of particulate matter. Time varies depending on usage conditions and environment. Replacement of parts other than the light source may be required in a shorter period.
- 5 Using separate camera for each projector.
- 6 Requires Epson external camera for each projector and may require Epson Projector Professional Tool app.
- 7 Epson Projector Configuration Tool app for Android and iOS. Internet connection required for download; data usage fee may apply.
- 8 NFC requires use of a device that includes NFC and may require additional software.
- 9 IP5X-certified optical engine and laser light source module in accordance with IEC standard 60529.
- 10 JIC C 0920 compliant in Japan.
- 11 Operation is not guaranteed in all environments. Use of an enclosure is recommended in environments where smoke containing oil, moisture, or salt is in use.
- 12 Mac® and PC only.
- 13 HDR performance available with select third-party devices. For more information, see www.epson.com/hdrcompatibility
- 14 Works only with Epson projectors that support presentation over the network capability.
- 15 For wireless functionality, including via the Epson iProjection App, the projector must be configured on a network, either through the Ethernet port on the projector (check model specifications for availability) or via a wireless connection. Check your owner's manual to determine if a wireless LAN module must be purchased separately to enable a wireless connection. Not all Epson projectors are able to be networked. The Epson iProjection App does not support all files and formats. See www.epson.com for details.

Specifications and terms are subject to change without notice. EPSON is a registered trademark and Epson iProjection is a trademark of Seiko Epson Corporation. PixAlign is a trademark of Epson America, Inc. Mac and macOS are trademarks of Apple Inc., registered in the U.S. and other countries. Android is a registered trademark of Google LLC. Windows is a trademark of the Microsoft group of companies. All other product and brand names are trademarks and/or registered trademarks of their respective companies. Epson disclaims any and all rights in these marks. Copyright 2024 Epson America, Inc. CPD-64228R1 9/24