

# Panasonic CONNECT

## PT-RQ22K/PT-RZ21K Series

3-Chip DLP™ Projectors

PT-RQ22K  
PT-RZ21K/RS20K



\* PT-RQ22K only  
Resolution 5120 x 3200 Pixels  
(QUAD PIXEL DRIVE: ON)



# MAKE YOUR AUDIENCE GO WILD.



Lenses sold separately.

Introducing the PT-RQ22K/PT-RZ21K Series.  
Panasonic's dynamic new showstopping laser projector for large venues.

## Panasonic CONNECT

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YouTube – [www.youtube.com/user/PanasonicProjector](https://www.youtube.com/user/PanasonicProjector)

*Note: Following the shift of the Panasonic Group to a holding company system, the Connected Solutions Company of the Panasonic Corporation has changed to Panasonic Connect Co., Ltd. as of April 1, 2022.*

All information included here is valid as of April 2022.

PT-RQ22K/PT-RZ21Kseries\_G3 Printed in Japan.



Graphic is simulated.

# Explore New Possibilities with the World's Smallest and Lightest 20,000-lm-class Laser Phosphor Projectors\*1

The PT-RQ22K/PT-RZ21K Series gives staging innovators an edge where the limits of projection are routinely tested. As the world's smallest and lightest 20,000-lm-class laser projector\*1, the RZ21K series can be easily handled by just two people and realizes 20,000 hours\*2 of maintenance-free projection thanks to hermetically sealed optics and filterless heat-pipe-based cooling. And now, Panasonic unveils the groundbreaking PT-RQ22K, the world's smallest and lightest 20,000-lm-class 4K+ laser projector\*3. It shares the same maintenance-free design while delivering unassailable 4K+ image-quality. Together with a lens lineup that's compatible with all large-venue projectors, the PT-RQ22K/PT-RZ21K Series makes world-class projection smooth and cost-effective.

\*1 As of May, 2019. Among the laser projectors in 20,000-lumen class or higher. \*2 Around this time, light output will have decreased by approximately 50%. IEC62087:2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [3], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Panasonic recommends cleaning or checkup at point of purchase after every 20,000-hour period (approximately). Estimated maintenance time varies depending on environment. \*3 As of May, 2019. Among 20,000-lumen-class projectors with 4K resolution or higher.

## 3-Chip DLP™ Projector

	PT-RQ22K	PT-RZ21K Series	
		PT-RZ21K	PT-RS20K
Resolution	4K+	WUXGA	SXGA+
Light output	20,000 lm* / 21,000 lm (Center)**		
Contrast	20,000 : 1***		

\* Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118:2012 international standards. Value is average of all products when shipped.

\*\* Average light-output value of all shipped products measured at center of screen in NORMAL Mode.

\*\*\* Full On/Full Off. With Dynamic Contrast Mode set to 3.

World's smallest and lightest\*1

PT-RQ22K	PT-RZ21K/RS20K
54 kg (119 lbs)	49 kg (108 lbs)

Lenses sold separately.



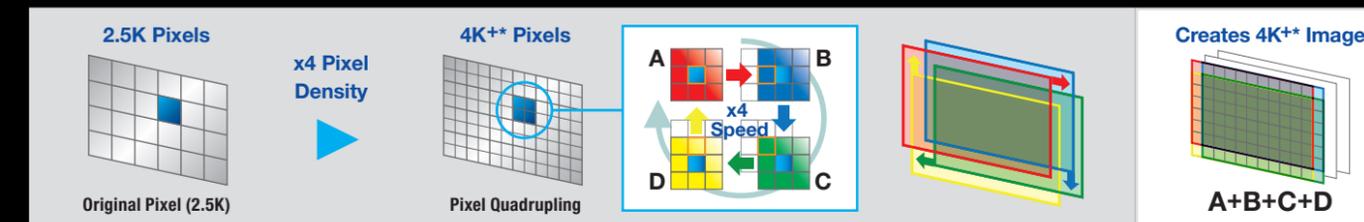
## Inside the 4K+ Image

### Achieving 4K+ with Original Pixel Quadrupling Technology PT-RQ22K ONLY

Better-than-4K resolution is achieved by employing a high-speed 2560 x 1600-pixel (WQXGA) DMD chip that shifts each pixel vertically and horizontally, quadrupling the pixel-count. Working in concert with Real Motion Processor 240 Hz frame-creation, Quad Pixel Drive technology produces film-like 5120 x 3200-pixel (4K+/16:10) images. As well as silk-smooth video, this powerful processing engine renders text in the finest detail for lectures and presentations.

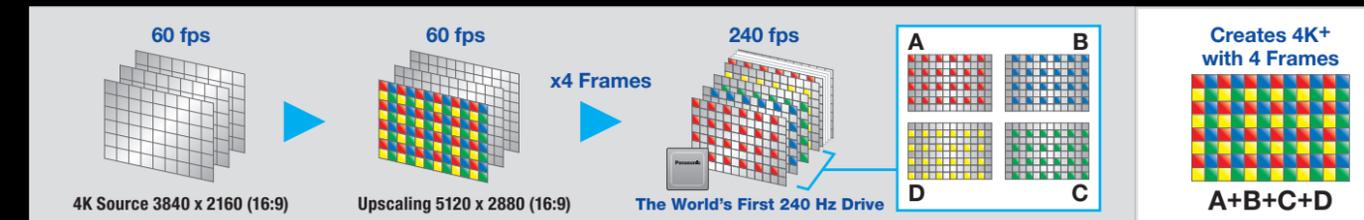
### Pixel Quadrupling Technology

Shifting pixels vertically and horizontally creates ultra-high-resolution pictures that exceed standard Ultra HD resolution.



### Real Motion Processor

High-speed 240 Hz frame creation supports images up to 5120 x 3200 pixels (16:10) resolution\*.



### Synchronize

Screen Resolution

# 4K+

Beyond Ultra HD

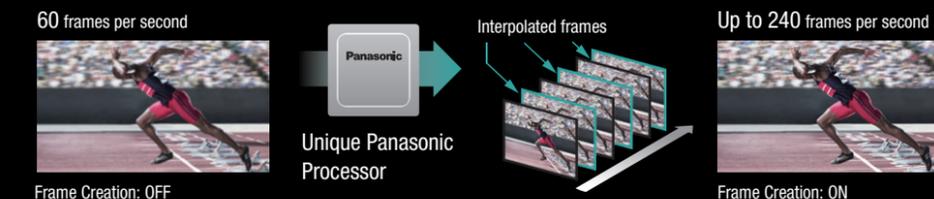
5120 x 3200\*

\* Maximum physical resolution.

### Real Motion Processor Reduces Motion Blur PT-RQ22K ONLY

Real Motion Processor uses sophisticated algorithms to create three additional frames for each image, boosting native 60 fps footage to 240 frames per second\*. The result is smooth and realistic motion rendering, particularly useful for the broadcast of sporting events and other fast-paced video. Further, images can be displayed with SDI, DVI-D, and HDMI simultaneous inputs\*1. A refined optical engine enhances focus performance for a lifelike sense of resolution, contrast, and fluidity.

\* Refresh-rate varies depending on vertical scanning frequency. Note that 240 Hz frame-rate is down-sampled to 60 Hz when projecting at 4K+ resolution. PT-RZ21K/PT-RS20K boosts frame-rate to a maximum of 120 Hz.



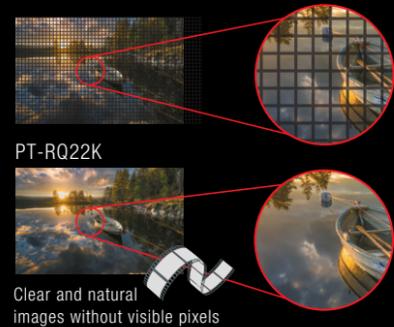
\*1 HDMI and DVI-D terminals available only on optional SLOT NX boards. Geometric Adjustment and Upgrade Kit functions are not supported with simultaneous video signal input.

# Innovating Class-beating Picture Quality in Permanent or Staging Installations

## Delivering Film-like 4K+ Projection at Higher Brightness

**PT-RQ22K ONLY**

The PT-RQ22K projects bright, film-like 4K+ (5120 x 3200) images without visible pixels for video reproduction that's extremely clear and natural. Quad Pixel Drive teams with huge laser brightness for an ultra-high-resolution experience that will blow your audience away.



PT-RQ22K

Clear and natural images without visible pixels

## Supports BT.2020 Emulation and HDR

The PT-RQ22K/PT-RZ21K Series has emulation for BT.2020. It reproduces a wider color gamut than conventional standards. Additionally, the projectors support HDR (High Dynamic Range). Image reproduction is stunning, from deepest black to sparkling highlights.

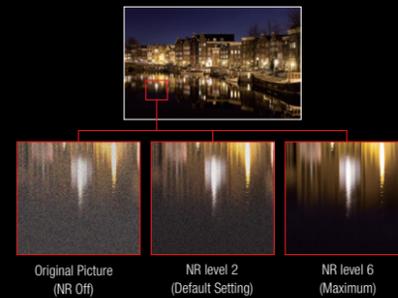
## Auto Gamma and Color Space Select Functions

**PT-RQ22K ONLY**

When HDR video is input via HDMI<sup>®</sup>\*1 or DIGITAL LINK, the projector parses the signal's metadata and selects the optimal gamma and color-space modes for natural HDR image projection. Video is projected at best quality without requiring manual configuration.

## New Noise-Reduction Function Enhances HDR Reproduction

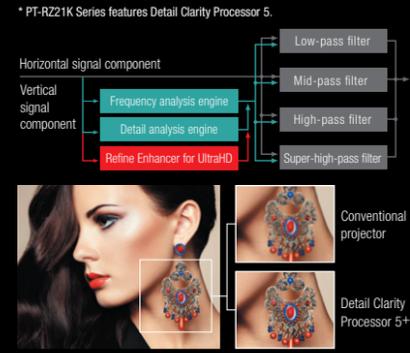
Visible noise in dark areas of the video image can be eliminated with Panasonic's new digital noise-reduction technology. The six-step optimizer is effective with video featuring expanded dynamic range by suppressing noise artifacts in shadowy areas while preserving the original high quality and brightness of lighter areas.



## Experience True-to-Life Imaging with Detail Clarity Processor 5+

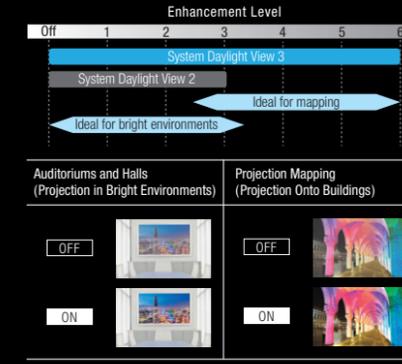
**PT-RQ22K ONLY**

New-generation circuitry analyzes images frame by frame to clarify areas containing fine textures. Algorithms extract information from four bands, sharpening outlines, correcting contours, and reducing ringing noise. Exclusive Refine Enhancer further enhances the subtlest details in 4K+ images.



## Peak Optimization for Mapping and Daylight Projection

This premium technology stops pictures washing out in bright light and assures dramatic impact for mapping and multi-projector applications. It uses sensor information to correct sharpness, gamma curves, and colors to suit on-site conditions.



## Contrast and Shutter Sync Functions

Contrast Sync allows Dynamic Contrast Control to be synchronized for consistent picture quality across multiple screens. Shutter Sync, meanwhile, synchronizes shutter on/off timing.

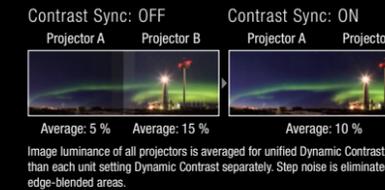


Image luminance of all projectors is averaged for unified Dynamic Contrast, rather than each unit setting Dynamic Contrast separately. Step noise is eliminated in edge-blended areas.



If shutter functions are not linked, shutter ON/OFF timing varies. When shutter functions of slave projectors are linked to a master, shutter ON/OFF timing is uniform\*. \*Includes fade-in and fade-out effects. Projector shutter functions can be set to operate individually if desired.

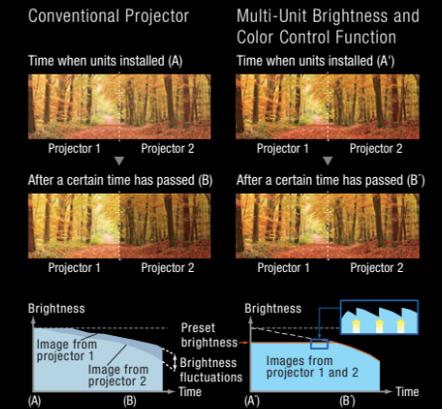
## 90 % Brightness Uniformity

SOLID SHINE Laser delivers superior brightness uniformity thanks to accurate white balance control. Brightness uniformity is greater than 90 % when measured at screen corners, edges, and center.



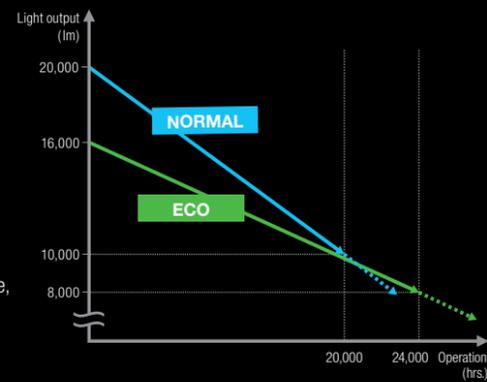
## Multi-unit Brightness and Color Control

Sensors detect color and brightness apparent on screen. Projectors automatically calibrate for a uniform multi-screen image, adding a layer of convenience and cost saving both in short-term and long-term events.



## Lower TCO in NORMAL and ECO Modes

The PT-RQ22K/PT-RZ21K Series is engineered to operate for 20,000 hours\*2 without maintenance, with no filter or light-source replacement required even in challenging operating conditions. In applications where maximum brightness isn't necessary, such as in surveillance, control, or simulation rooms, or in darkened museums or planetariums, ECO Mode extends continuous operation out to about 24,000 hours\*2. In this mode, color consistency is maintained with a flatter brightness ramp preserving high picture quality for longer while reducing total cost of ownership.



## Free 360-degree Orientation

SOLID SHINE Laser enables free 360-degree installation through any axis. Together with powered lens shift and wide range of optional lenses, the PT-RQ22K/PT-RZ21K Series projectors can be installed in any orientation without picture distortion.

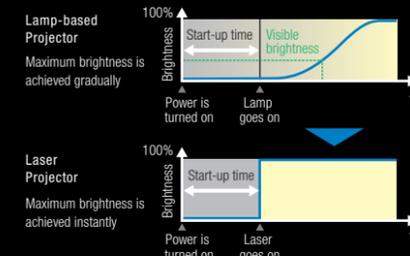
## Power Management Reduces Downtime

Auto power management compensates for voltage fluctuations. Image display is maintained at a reduced brightness even if voltage drops below specified requirements, rather than shutting the projector off.

\*1 Requires the optional ET-MDNHM10 Interface Board. \*2 Around this time, light output will have decreased by approximately 50%. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [3], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Panasonic recommends cleaning or checkup at point of purchase after every 20,000-hour period (approximately). Estimated maintenance time varies depending on environment.

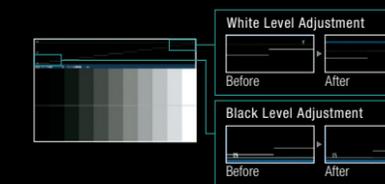
## Quick Start and Quick Off

No warm-up or cool-down period is required when operating PT-RQ22K/PT-RZ21K Series projectors. Images appear almost instantly, and the projector can be switched on and off whenever desired.



## Waveform Monitor for Black/White Level Adjustment

If the output levels of the media source device fluctuate, the original black and white levels contained in the image can't be reproduced correctly. Panasonic projectors with Waveform Monitor function allow you to view this information on screen and make adjustments accordingly.



## Supports Art-Net DMX, Crestron Connected™, and PJLink™

Art-Net DMX protocol for lighting management enables connection with lighting consoles for added functionality and control options. Crestron Connected™ and PJLink™ (Class 2) streamline integration into existing AV infrastructure.

## Electrical Convergence Adjustment Function

**PT-RQ22K ONLY**

To expedite calibration, the PT-RQ22K's Electrical Convergence Adjustment Function\*1 can adjust pixels 0.25p vertically and horizontally. This is invaluable when optical image convergence isn't practical.

## Frame Delay Adjustment for Multi-projection

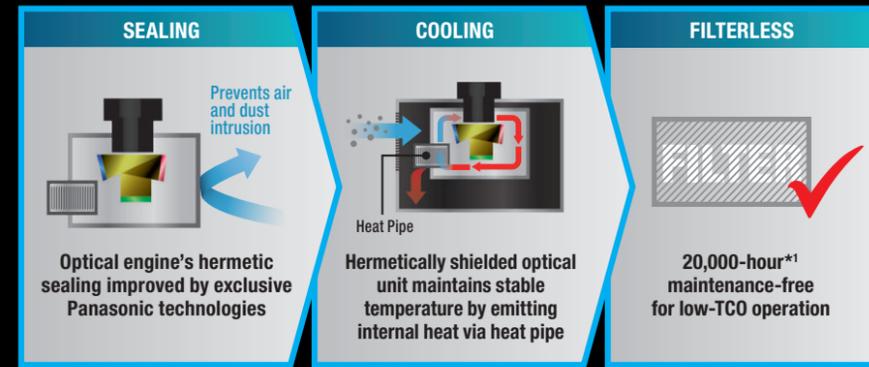
Frame synchronization may be fine-tuned with the PT-RQ22K/PT-RZ21K Series. Users can adjust frame delay in 1/100th millisecond increments for perfectly synchronized video. This improves multi-projection compatibility with projectors such as the PT-DZ21K2.

\*1 Supported with Quad Pixel Drive set to ON or OFF, in single or simultaneous input mode, and with geometric correction enabled. 4K image is rescaled to 2320 x 2400 pixels. Image sharpness is reduced following adjustment. The PT-RZ21K and PT-RS20K feature similar functionality with minor specification differences. Please consult your sales representative for further details.

## Over-Engineered for Consistently Bright, Dependable, and Efficient Projection

### Filterless Laser Design Delivers 20,000-hour\*<sup>1</sup> Maintenance-free Operation

The Panasonic PT-RQ22K/PT-RZ21K Series is the world's first 20,000-lm-class laser projector lineup\*<sup>2</sup> to eliminate air filters from its design, enabling maintenance-free operation for 20,000 hours\*<sup>1</sup>. This is achieved with hermetically sealed optics and unique heat-pipe-based cooling with one-way airflow. The projector can operate continuously for long periods without regular maintenance, saving operators time and money. With no filters to replace and controlled brightness ramp, the PT-RQ22K/PT-RZ21K Series saves you real money.



### Dual-Drive Laser with Dustproof Optics

These projectors are virtually dustproof to preserve the stunning brightness delivered by dual solid-state laser modules, which feature redundancy circuitry. Hermetically sealed optical block helps prevent failures and extends brightness. Exceeding the toughest standards for operation in dusty environments, these projectors stay brighter for longer.

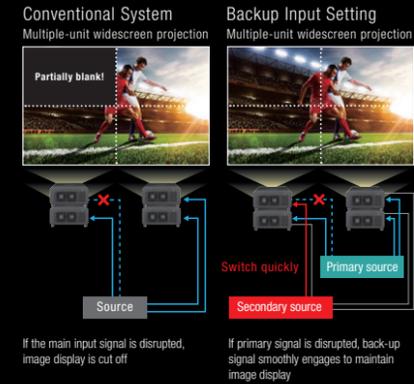
Clean Environment	WHO Europe Guideline for Dust Resistance	Japanese Building Maintenance Association ASHRAE*
0.030 mg/m <sup>3</sup>	0.110 mg/m <sup>3</sup>	0.150 mg/m <sup>3</sup>
<b>CLEAN</b>		<b>DUSTY</b>

\* American Society of Heating, Refrigerating, and Air-Conditioning Engineers.

### Backup Input Guarantees Picture Display

Projectors switch instantly to a backup input\*<sup>3</sup> should the primary signal be disrupted, so display is maintained in situations where projection must not be interrupted. No screen-blanking occurs during backup input switching.

Note: Primary and secondary signals must be the same.



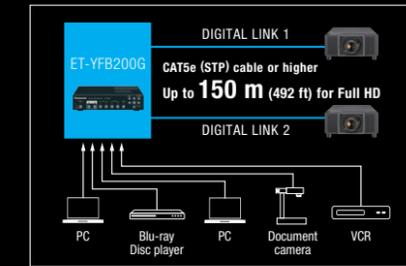
## Projector Management and Control Flexibility

### Single-Cable DIGITAL LINK Video and Control Connection

DIGITAL LINK transmits video and control commands through a single CAT 5e or higher STP cable for distances of up to 150 m (492 ft) for Full HD video and 50 m (164 ft) for 4K\*<sup>1</sup> video\*<sup>2</sup>. Optional DIGITAL LINK Switcher further simplifies installation and reduces cabling and associated costs.

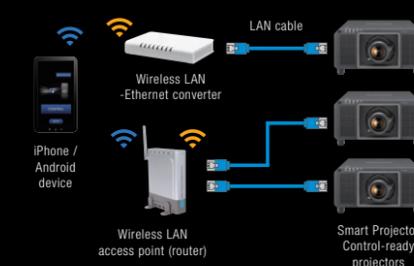


PT-RQ22K only



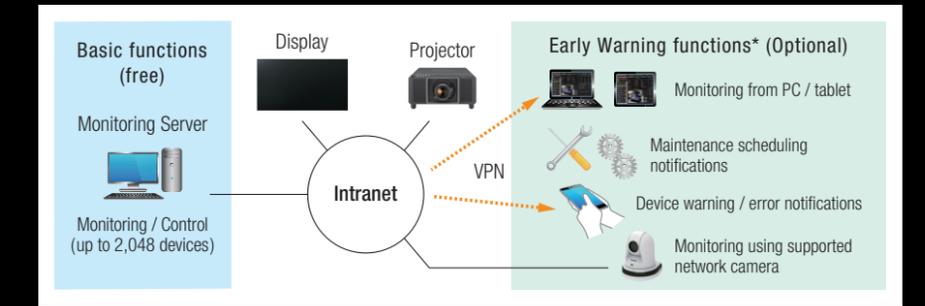
### Smart Projector Control

Smart Projector Control is a powerful smartphone app that enables remote operation of supported Panasonic projectors. Install Smart Projector Control on your iPhone or Android™ phone or tablet, connect to your compatible Panasonic projectors via Wi-Fi (LAN), and control a variety of functions including lens adjustment, input switching, status monitoring, and more.



### Multi Monitoring & Control Software

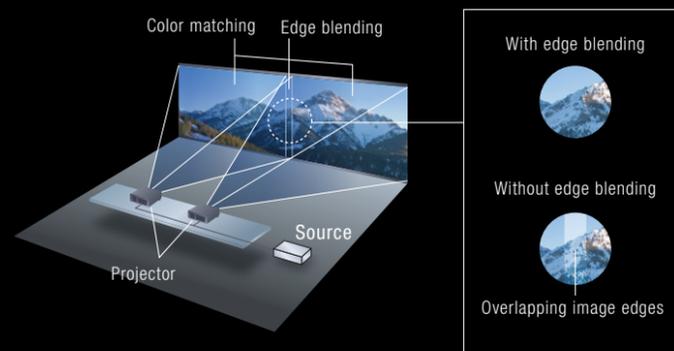
Panasonic Multi Monitoring & Control Software supports up to 2,048 devices over LAN and features system map visualization or auto-search of devices to be registered. The free software is available with Early Warning functions (automatic free 90-day trial available). These advanced functions enable real-time monitoring, abnormality detection, and notification before servicing is required. Administrators can achieve seamless control and real-time monitoring while preventing potential problems, saving time, and enhancing system reliability.



### Multi-screen Support System

This system optimizes multiple screens with edge blending, color matching, and digital image enlargement functions.

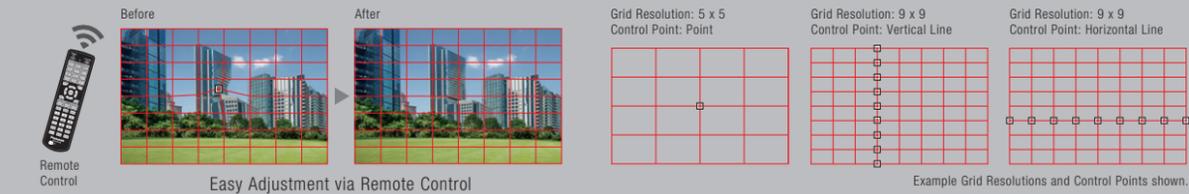
- **Edge Blending:** Edges of adjacent screens can be blended and their luminance controlled.
- **Color Matching:** Corrects color reproduction variations of each projector via PC control software.
- **Digital Image Enlarging:** Digital zoom up to 10x (H/V)\*<sup>4</sup>, and up to 100 units (10 x 10) can be edge-blended to create large multi-screen images.



\*<sup>1</sup> Around this time, light output will have decreased by approximately 50%. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [3], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Panasonic recommends cleaning or checkup at point of purchase after every 20,000-hour period (approximately). Estimated maintenance time varies depending on environment. \*<sup>2</sup> As of October 2017 (PT-RZ21K Series). \*<sup>3</sup> Combination of primary/secondary input terminals is fixed. Switching to secondary input (or primary input) occurs automatically when the input signal for primary input (or secondary input) is disrupted. The Backup Input Setting is enabled only when the input signal to primary and secondary terminals is the same. \*<sup>4</sup> While input resolution will not change, maintaining image quality is not possible for images enlarged.

### Geometric Adjustment with Free Grid Correction via Remote Control

Panasonic has added a new Free Grid function to existing Geometric Adjustment that enables convenient grid-based image adjustment using the projector's remote controller. Grid resolutions of 2 x 2, 3 x 3, 5 x 5, 9 x 9, or 17 x 17 can be projected and areas of the image reshaped or geometrically altered to compensate for screen distortions. This correction is easily performed by adjusting control points located at grid-line intersections. Move freely between grid resolutions to achieve the desired level of granularity without losing work progress. This clever data-saving function allows technicians to smoothly create a distortion-free projection in a wide range of installation situations.



Note: Free Grid requires the latest firmware. Register your projector at PASS to update firmware, get free Geometry Manager Pro software for PC, obtain activation keys for ET-UK20 and ET-CUK10, and download a plug-in for ET-CUK10. Compatible cameras for ET-CUK10 comprise Panasonic AW-HE70/AW-UE70 and Nikon D5200/D5300/D5500/D5600. Visit PASS at <https://panasonic.net/cns/projector/pass> for more information.

\*<sup>1</sup> PT-RQ22K only. \*<sup>2</sup> ET-YFB200G/YFB100G is not compatible with 4K signals. 150 m (492 ft) transmission available only with ET-YFB200G DIGITAL LINK Switcher for signals up to 1080p in Long Reach Mode.

## Optional Accessories

**ET-D3LEW50\***  
Fixed-focus Lens



**ET-D3LEW60\*\***  
Zoom Lens



**ET-D3LEW10\*\***  
Zoom Lens



**ET-D3LES20\*\***  
Zoom Lens



**ET-D3LET30\*\***  
Zoom Lens



**ET-D3LET40\*\***  
Zoom Lens



**ET-D3LET80\*\***  
Zoom Lens



**ET-D3LEF70\***  
Fisheye Lens



**ET-D75LE95**  
Fixed-focus Lens



**ET-D75LE6**  
Zoom Lens



**ET-D75LE10**  
Zoom Lens



**ET-D75LE20**  
Zoom Lens



**ET-D75LE30**  
Zoom Lens



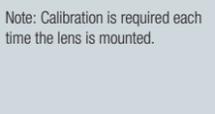
**ET-D75LE40**  
Zoom Lens



**ET-D75LE8**  
Zoom Lens



**ET-D75MKS10**  
Stepping Motor Kit



Note: Calibration is required each time the lens is mounted.

\* This lens is equipped with Auto Lens Identification Function. \*\* This lens is equipped with Auto Lens Identification Function and Stepping Motor.

**ET-YFB200G**  
DIGITAL LINK Switcher



Note: ET-YFB200G is not compatible with 4K signals.

**ET-YFB100G**  
Digital Interface Box



Note: ET-YFB100G is not compatible with 4K signals.

**ET-MDNV10\***  
Interface Board for DVI-D 2 Input



**ET-MDNHM10\***  
Interface Board for HDMI 2 Input



**ET-MDN12G10\***  
Interface Board for 12G-SDI (Input x 2, Input/Output x 2)



**TY-TBN03G\*\***  
Interface Board for 3G-SDI (Input x 2, Output x 2)



**ET-MDNDP10\*\***  
Interface Board for DisplayPort™ 2 Input



\* PT-RQ22K only. \*\* PT-RQ22K only. Requires the latest firmware. Register your projector at PASS to update firmware. Visit PASS at <https://panasonic.net/cns/projector/pass> for more information.

**ET-PKD520H**  
Ceiling Mount Bracket for High Ceilings



**ET-PKD520S**  
Ceiling Mount Bracket for Low Ceilings



**ET-PKD520B**  
Projector Mount Bracket



Note: ET-PKD520B Projector Mount Bracket can optionally be used with an existing ET-PKD510H/PKD510S Projector Mount Bracket.

**ET-PFD510**  
Frame

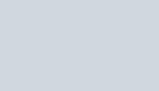


Note: This frame cannot be used when the separately sold ET-D75LE95 Fixed-Focus Lens is attached to the projector. Please contact your sales representative for information on portrait orientation.

**ET-UK20**  
Geometry Manager Pro Software Upgrade Kit



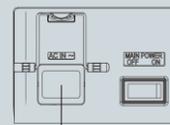
**ET-CUK10 / ET-CUK10P**  
Auto Screen Adjustment Upgrade Kit



**ET-SWA100 Series**  
Early Warning Software

Note: Part number suffix may differ depending on the license type. Multi Monitoring & Control Software Ver. 2.0 or later is required. Please download from the following website:  
<https://panasonic.net/cns/projector/download/application/>

## AC IN terminal

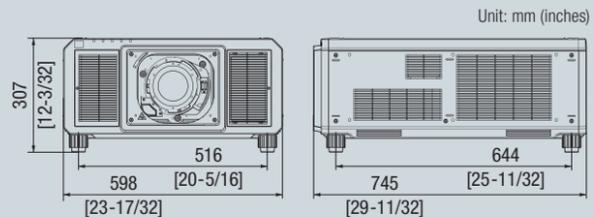


AC IN terminal

## Power outlets that can be used



## Dimensions



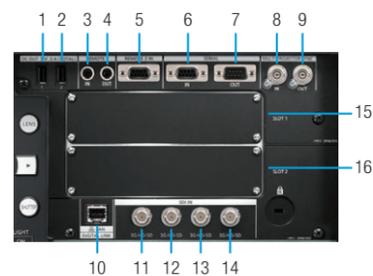
## Projection Distance

Diagonal image size	Throw distance (A)														Unit: meters (feet)	
	Zoom Lens														Fixed-focus Lens	
	ET-D75LE6		ET-D75LE10		ET-D75LE20		ET-D75LE30		ET-D75LE40		ET-D75LE8		ET-D3LEW50			
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.		
1.78 [70"]	1.46 (4.8)	1.75 (5.7)	2.05 (6.7)	2.65 (8.7)	2.64 (8.7)	3.85 (12.6)	3.82 (12.5)	7.45 (24.4)	7.37 (24.2)	11.85 (38.9)	11.65 (38.2)	22.20 (72.8)	1.09 (3.6)			
2.54 [100"]	2.11 (6.9)	2.53 (8.3)	2.96 (9.7)	3.83 (12.6)	3.81 (12.5)	5.51 (18.2)	5.20 (17.4)	10.72 (34.8)	10.60 (34.8)	16.99 (55.7)	16.81 (55.2)	31.86 (104.5)	1.58 (5.2)			
3.05 [120"]	2.55 (8.4)	3.05 (10.0)	3.57 (11.7)	4.61 (15.1)	4.59 (15.1)	6.67 (21.9)	6.63 (21.8)	13.92 (45.3)	13.90 (45.3)	20.42 (67.0)	20.25 (66.4)	38.31 (125.7)	1.91 (6.3)			
3.81 [150"]	3.20 (10.5)	3.83 (12.6)	4.48 (14.7)	5.79 (19.0)	5.76 (18.9)	8.37 (27.5)	8.32 (27.3)	16.17 (53.1)	16.15 (53.1)	25.98 (85.9)	25.41 (83.4)	47.97 (157.4)	2.41 (7.9)			
5.08 [200"]	4.29 (14.1)	5.13 (16.8)	6.00 (20.0)	7.76 (25.5)	7.76 (25.5)	11.60 (38.1)	11.12 (36.5)	21.62 (70.9)	21.36 (70.1)	34.14 (112.0)	34.01 (111.6)	64.08 (210.2)	3.23 (10.6)			
7.62 [300"]	6.46 (21.2)	7.73 (25.4)	9.05 (29.7)	11.70 (38.4)	11.60 (38.1)	16.86 (55.3)	16.74 (54.9)	32.51 (106.7)	32.12 (105.4)	51.30 (168.3)	51.21 (168.0)	96.31 (316.0)	4.89 (16.0)			
15.24 [600"]	12.97 (42.6)	15.53 (51.0)	18.18 (59.6)	23.50 (77.1)	23.29 (76.4)	33.84 (111.0)	33.60 (110.2)	65.21 (213.9)	64.39 (211.3)	102.75 (337.1)	102.80 (337.3)	192.97 (633.1)	9.84 (32.3)			
25.40 [1000"]	21.66 (71.1)	25.94 (85.1)	30.35 (99.6)	39.24 (128.7)	38.86 (127.5)	56.48 (185.3)	56.08 (184.0)	108.79 (356.9)	107.43 (352.5)	171.36 (562.2)	171.59 (563.0)	—	16.45 (54.0)			
<b>PT-RQ22K (16:10 aspect ratio)</b>																
1.78 [70"]	1.46 (4.8)	1.75 (5.7)	1.99 (6.5)	2.73 (9.0)	2.64 (8.7)	3.85 (12.6)	3.82 (12.5)	7.45 (24.4)	7.37 (24.2)	11.85 (38.9)	11.65 (38.2)	22.20 (72.8)	1.09 (3.6)			
2.54 [100"]	2.11 (6.9)	2.53 (8.3)	2.96 (9.7)	3.83 (12.6)	3.81 (12.5)	5.51 (18.2)	5.20 (17.4)	10.72 (34.8)	10.60 (34.8)	16.99 (55.7)	16.81 (55.2)	31.86 (104.5)	1.58 (5.2)			
3.05 [120"]	2.55 (8.4)	3.05 (10.0)	3.57 (11.7)	4.61 (15.1)	4.59 (15.1)	6.67 (21.9)	6.63 (21.8)	13.92 (45.3)	13.90 (45.3)	20.42 (67.0)	20.25 (66.4)	38.31 (125.7)	1.91 (6.3)			
3.81 [150"]	3.20 (10.5)	3.83 (12.6)	4.48 (14.7)	5.79 (19.0)	5.76 (18.9)	8.37 (27.5)	8.32 (27.3)	16.17 (53.1)	16.15 (53.1)	25.98 (85.9)	25.41 (83.4)	47.97 (157.4)	2.41 (7.9)			
5.08 [200"]	4.29 (14.1)	5.13 (16.8)	6.00 (20.0)	7.76 (25.5)	7.76 (25.5)	11.60 (38.1)	11.12 (36.5)	21.62 (70.9)	21.36 (70.1)	34.14 (112.0)	34.01 (111.6)	64.08 (210.2)	3.23 (10.6)			
7.62 [300"]	6.46 (21.2)	7.73 (25.4)	9.05 (29.7)	11.70 (38.4)	11.60 (38.1)	16.86 (55.3)	16.74 (54.9)	32.51 (106.7)	32.12 (105.4)	51.30 (168.3)	51.21 (168.0)	96.31 (316.0)	4.89 (16.0)			
15.24 [600"]	12.97 (42.6)	15.53 (51.0)	18.18 (59.6)	23.50 (77.1)	23.29 (76.4)	33.84 (111.0)	33.60 (110.2)	65.21 (213.9)	64.39 (211.3)	102.75 (337.1)	102.80 (337.3)	192.97 (633.1)	9.84 (32.3)			
25.40 [1000"]	21.66 (71.1)	25.94 (85.1)	30.35 (99.6)	39.24 (128.7)	38.86 (127.5)	56.48 (185.3)	56.08 (184.0)	108.79 (356.9)	107.43 (352.5)	171.36 (562.2)	171.59 (563.0)	—	16.45 (54.0)			
<b>PT-RZ21K (16:10 aspect ratio)</b>																
1.78 [70"]	1.36 (4.5)	1.63 (5.3)	1.90 (6.2)	2.46 (8.1)	2.46 (8.1)	3.58 (11.7)	3.56 (11.7)	6.94 (22.5)	6.87 (22.5)	11.04 (36.2)	10.85 (35.6)	20.69 (67.9)	1.01 (3.3)			
2.54 [100"]	1.97 (6.5)	2.35 (7.7)	2.76 (9.1)	3.56 (11.7)	3.55 (11.6)	5.17 (16.8)	5.13 (16.8)	9.22 (30.4)	9.18 (30.4)	15.05 (51.4)	14.88 (51.4)	29.71 (97.5)	1.47 (4.8)			
3.05 [120"]	2.38 (7.8)	2.84 (9.3)	3.32 (10.9)	4.30 (14.1)	4.28 (14.1)	6.22 (20.3)	6.18 (20.3)	12.03 (39.5)	11.89 (39.0)	18.88 (61.9)	18.88 (61.9)	35.73 (117.2)	1.78 (5.8)			
3.81 [150"]	2.98 (9.8)	3.57 (11.7)	4.18 (13.7)	5.40 (17.7)	5.37 (17.6)	7.81 (25.6)	7.75 (25.4)	15.08 (49.5)	14.90 (48.9)	23.85 (77.7)	23.69 (77.7)	44.75 (146.8)	3.01 (9.9)			
5.08 [200"]	4.00 (13.1)	4.78 (15.7)	5.60 (18.4)	7.24 (23.8)	7.19 (23.6)	10.45 (34.3)	10.38 (34.1)	19.92 (66.1)	19.92 (66.1)	31.86 (104.5)	31.72 (104.1)	59.79 (196.2)	3.01 (9.9)			
7.62 [300"]	6.02 (19.8)	7.21 (23.7)	8.44 (27.7)	10.91 (35.8)	10.82 (35.5)	15.73 (51.6)	15.62 (51.2)	30.34 (99.5)	29.97 (98.3)	47.87 (157.1)	47.77 (156.7)	89.86 (294.8)	4.56 (15.0)			
15.24 [600"]	12.10 (39.7)	14.49 (47.5)	16.96 (55.6)	21.92 (71.9)	21.73 (71.9)	31.58 (103.6)	31.35 (103.6)	60.85 (199.6)	60.09 (197.1)	95.89 (314.6)	95.92 (314.7)	180.08 (590.8)	9.18 (30.1)			
25.40 [1000"]	20.21 (66.3)	24.21 (79.4)	28.33 (92.9)	36.61 (120.1)	36.27 (119.0)	52.70 (172.9)	52.33 (171.7)	101.53 (333.1)	100.25 (328.9)	159.93 (525.4)	160.13 (525.4)	—	15.35 (50.4)			
<b>PT-RS20K (4:3 aspect ratio)</b>																
1.78 [70"]	1.39 (4.6)	1.66 (5.4)	1.95 (6.4)	2.52 (8.3)	2.52 (8.3)	3.66 (12.0)	3.64 (11.9)	7.10 (23.3)	7.02 (23.0)	11.28 (37.1)	11.09 (36.4)	21.14 (69.4)	1.03 (3.4)			
2.54 [100"]	2.01 (6.6)	2.41 (7.9)	2.82 (9.3)	3.64 (11.9)	3.63 (11.9)	5.24 (17.2)	5.23 (17.2)	10.23 (33.5)	10.10 (33.1)	16.10 (53.1)	16.01 (52.5)	30.36 (99.6)	1.50 (4.9)			
3.05 [120"]	2.43 (8.0)	2.90 (9.5)	3.40 (11.2)	4.39 (14.4)	4.37 (14.3)	6.31 (20.9)	6.31 (20.7)	12.29 (40.3)	12.15 (39.9)	19.46 (63.8)	19.29 (63.3)	36.50 (119.8)	1.82 (6.0)			
3.81 [150"]	3.05 (10.0)	3.65 (12.0)	4.27 (14.0)	5.52 (18.1)	5.49 (18.0)	7.92 (26.2)	7.92 (26.0)	15.41 (50.6)	15.23 (50.0)	24.37 (80.0)	24.21 (79.4)	45.72 (150.0)	3.08 (10.1)			
5.08 [200"]	4.08 (13.4)	4.89 (16.0)	5.72 (18.8)	7.39 (24.2)	7.34 (24.1)	10.67 (35.0)	10.60 (34.8)	20.60 (67.6)	20.35 (66.8)	32.56 (106.8)	32.40 (106.3)	61.08 (200.4)	3.75 (12.1)			
7.62 [300"]	6.15 (20.2)	7.37 (24.2)	8.62 (28.3)	11.14 (36.5)	11.06 (36.3)	16.07 (52.7)	15.96 (52.4)	30.99 (101.7)	30.61 (100.4)	48.89 (160.4)	48.80 (160.1)	91.79 (301.1)	4.65 (15.3)			
15.24 [600"]	12.36 (40.6)	14.81 (48.6)	17.33 (56.9)	22.40 (73.5)	22.19 (72.8)	32.25 (105.8)	32.03 (105.1)	62.15 (203.9)	61.38 (201.4)	97.95 (321.5)	97.98 (321.5)	183.95 (603.5)	9.38 (30.8)			
25.40 [1000"]	20.64 (67.7)	24.73 (81.1)	28.93 (94.9)	37.40 (122.7)	37.05 (122.7)	53.83 (176.6)	53.45 (175.4)	103.71 (340.3)	102.41 (336.0)	163.36 (536.0)	163.56 (536.6)	—	15.68 (51.4)			
<b>PT-RS20K (4:3 aspect ratio)</b>																
1.78 [70"]	1.39 (4.6)	1.66 (5.4)	1.89 (6.2)	2.60 (8.5)	2.52 (8.3)	3.66 (12.0)	3.62 (11.9)	7.09 (23.3)	7.01 (23.0)	11.32 (37.1)	11.19 (36.4)	21.14 (69.4)	1.03 (3.4)			
2.54 [100"]	2.01 (6.6)	2.41 (7.9)	2.74 (9.0)	3.76 (12.3)	3.73 (12.3)	5.24 (17.3)	5.22 (17.3)	10.08 (33.5)	9.97 (33.1)	15.08 (51.4)	14.98 (51.4)	30.36 (99.6)	1.50 (4.9)			
3.05 [120"]	2.43 (8.0)	2.90 (9.5)	3.40 (11.2)	4.37 (14.4)	4.37 (14.3)	6.31 (20.9)	6.31 (20.7)	12.29 (40.3)	12.15 (39.9)	19.46 (63.8)	19.29 (63.3)	36.50 (119.8)	1.82 (6.0)			
3.81 [150"]	3.05 (10.0)	3.65 (12.0)	4.27 (14.0)	5.52 (18.1)	5.49 (18.0)	7.92 (26.2)	7.92 (26.0)	15.41 (50.6)	15.23 (50.0)	24.37 (80.0)	24					

# PT-RQ22K

## Specifications

## Terminals



1. DC OUT 1 terminal
2. DC OUT 2 terminal
3. REMOTE 1 IN terminal
4. REMOTE 1 OUT terminal
5. REMOTE 2 IN terminal
6. SERIAL IN terminal
7. SERIAL OUT terminal
8. MULTI PROJECTOR SYNC IN terminal
9. MULTI PROJECTOR SYNC OUT terminal
10. DIGITAL LINK/LAN terminal
11. SDI IN 1 terminal
12. SDI IN 2 terminal
13. SDI IN 3 terminal
14. SDI IN 4 terminal
15. SLOT 1\*
16. SLOT 2\*

\* SLOT NX-compatible slots accommodate optional interface boards internally.

## Specifications

Model	PT-RQ22K	
Projector type	3-Chip DLP™ projector	
DLP™ chip	Panel size	22.9 mm (0.9 in) diagonal (16:10 aspect ratio)
	Display method	DLP™ chip x 3
	Pixels	4,096,000 (2560 × 1600) × 3, total of 12,288,000 pixels, 49,152,000 (12,288,000 x 4) pixels when Quad Pixel Drive set to ON
Refresh rate	240 Hz*1	
Light source	Laser Diode	
Light output	20,000 lm*2 / 21,000 lm (Center)*3	
Time until light output declines to 50 %*4	20,000 hours (NORMAL) / 24,000 hours (ECO)	
Resolution	4K+ (5120 x 3200) (Quad Pixel Drive: ON)	
Contrast*2	20,000:1 (Full On/Full Off, Dynamic Contrast Mode: 3)	
Screen size (diagonal)	1.78–25.4 m (70–1,000 in) with 16:10 aspect ratio, 1.78–15.24 m (70–600 in) with the ET-D75LE8 / ET-D3LET80, 16:10 aspect ratio, 3.05–15.24 m (120–600 in) with the ET-D75LE95, 16:10 aspect ratio	
Center-to-corner uniformity*2	90 %	
Lens	Optional (no lens included with this model)	
Lens shift*5	Vertical (from center of screen)	±59 % (±56 % with ET-D75LE6 / ET-D3LEW60, +69 % – +84 % with ET-D75LE95) (powered)
	Horizontal (from center of screen)	±29 % (±19 % with ET-D75LE6 / ET-D3LEW60, ±21 % with ET-D75LE95) (powered)
Keystone correction range	Vertical: ±40° (±22° with ET-D3LEW50, ±28° with ET-D75LE6 / ET-D3LEW60, +5° with ET-D75LE95), Horizontal: ±15° (0° with ET-D75LE95)	
Keystone correction range with optional ET-UK20 Upgrade Kit	Vertical: ±45° (±40° with ET-D75LE10 / ET-D3LEW10, ET-D75LE20 / ET-D3LES20, ±22° with ET-D3LEW50, ±28° with ET-D75LE6 / ET-D3LEW60, +5° with ET-D75LE95), Horizontal: ±40° (±15° with ET-D3LEW50, ET-D75LE6 / ET-D3LEW60, 0° with ET-D75LE95) When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding total of 55°.	
Installation	Horizontal/vertical, free 360-degree installation	
Terminals	SDI 1 IN	BNC x 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link A), Dual-link 3G-SDI (Link 1), Quad-link HD-SDI (Link 1), Quad-link 3G-SDI (Link 1)
	SDI 2 IN	BNC x 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link B), Dual-link 3G-SDI (Link 2), Quad-link HD-SDI (Link 2), Quad-link 3G-SDI (Link 2)
	SDI 3 IN	BNC x 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link A), Dual-link 3G-SDI (Link 1), Quad-link HD-SDI (Link 3), Quad-link 3G-SDI (Link 3)
	SDI 4 IN	BNC x 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link B), Dual-link 3G-SDI (Link 2), Quad-link HD-SDI (Link 4), Quad-link 3G-SDI (Link 4)
	MULTI PROJECTOR SYNC IN	BNC x 1
	MULTI PROJECTOR SYNC OUT	BNC x 1
	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)
	SERIAL OUT	D-sub 9-pin (male) x 1 for link control (RS-232C compliant)
	REMOTE 1 IN	M3 stereo mini-jack x 1 for wired remote control
	REMOTE 1 OUT	M3 stereo mini-jack x 1 for link control
	REMOTE 2 IN	D-sub 9-pin (female) x 1 for external control (parallel)
	DIGITAL LINK/LAN	RJ-45 x 1 for network, DIGITAL LINK connection (HDBaseT™ compliant), 100Base-TX, compatible with Art-Net, PjLink™ (Class 2), Deep Color, HDCP 2.2
	DC OUT	USB Type A x 2 (for power supply DC 5 V total of 2 A)
Expansion Slot	SLOT 1 / SLOT 2 (total two terminals, vacant) for interface boards, SLOT NX compatible	
Power supply	AC 200 V–240 V, 8.5 A, 50/60 Hz (Light output will decrease to approximately 50 % when using the projector with AC 100 V to AC 120 V [9.8 A])	
Power consumption	1,650 W (0.3 W with Standby Mode set to ECO*6, 4 W with Standby Mode set to NORMAL)	
Cabinet materials	Molded plastic	
Operation noise*2	46 dB	
Dimensions (W x H x D)	600 mm x 307 mm*7 x 745 mm (23 5/8" x 12 3/32" x 29 11/32") (including protruding parts); 598 mm x 270 mm*8 x 725 mm (23 17/32" x 10 5/8" x 28 17/32") (not including protruding parts)	
Weight*9	54.0 kg (119 lbs)	
Operating environment	Operating temperature: 0–45 °C (32–113 °F)*10; operating humidity: 10–80 % (no condensation)	
Applicable software	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro (ET-UK20 Upgrade Kit, ET-CUK10 Auto Screen Adjustment Kit), Smart Projector Control for iOS/Android™	

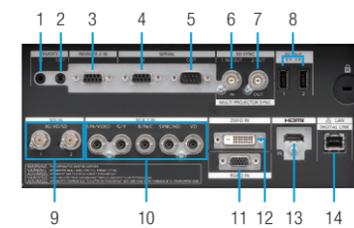
\*1 Refresh rate varies depending on scanning frequency. \*2 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. \*3 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. \*4 Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [3], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Estimated time until light output declines to 50 % varies depending on environment. \*5 Lens shift is not supported on the ET-D3LEW50. \*6 When Standby Mode is set to ECO, network functions such as power on over LAN will not operate. Additionally, only certain commands can be received for external control using the serial terminal. \*7 With legs at shortest position. \*8 Excluding legs. \*9 Average value. May differ depending on the actual unit. \*10 Operating temperature is 0–45 °C (32–104 °F) when used in locations from 1,400 m to 4,200 m (4,593 ft to 13,779 ft) above sea level. When operating in ECO or NORMAL mode at elevations between 0–2,700 m (0–8,858 ft) in ambient temperatures exceeding 40 °C (104 °F), or at elevations between 2,700–4,200 m (8,858–13,780 ft) in ambient temperatures exceeding 25 °C (77 °F), light output may be reduced to protect the projector.

# PT-RZ21K

# PT-RS20K

## Specifications

## Terminals



1. REMOTE 1 IN terminal
2. REMOTE 1 OUT terminal
3. REMOTE 2 IN terminal
4. SERIAL IN terminal
5. SERIAL OUT terminal
6. MULTI PROJECTOR SYNC IN 3D SYNC 1 IN/OUT terminal
7. MULTI PROJECTOR SYNC OUT 3D SYNC 2 OUT terminal
8. DC OUT 1/DC OUT 2 terminal
9. SDI IN 1/SDI IN 2 terminal
10. RGB 1 IN terminal
11. RGB 2 IN terminal
12. DVI-D IN terminal
13. HDMI IN terminal
14. DIGITAL LINK/LAN terminal

## Specifications

Model	PT-RZ21K	PT-RS20K	
Projector type	3-Chip DLP™ projector		
DLP™ chip	Panel size	24.4 mm (0.96 inches) diagonal (16:10 aspect ratio)	24.1 mm (0.95 inches) diagonal (4:3 aspect ratio)
	Display method	DLP™ chip x 3	
	Pixels	2,304,000 (1920 × 1200) × 3, total of 6,912,000 pixels	1,470,000 (1400 × 1050) × 3, total of 4,410,000 pixels
Refresh rate	120 Hz*1		
Light source	Laser Diode		
Light output	20,000 lm*2 / 21,000 lm (Center)*3		
Time until light output declines to 50 %*4	20,000 hours (NORMAL) / 24,000 hours (ECO)		
Resolution	1920 x 1200 pixels	1400 x 1050 pixels	
Contrast*2	20,000:1 (Full On/Full Off, Dynamic Contrast Mode: 3)		
Screen size (diagonal)	1.78–25.4 m (70–1,000 in) with 16:10 aspect ratio, 1.78–15.24 m (70–600 in) with the ET-D75LE8 / ET-D3LET80, 16:10 aspect ratio, 3.05–15.24 m (120–600 in) with the ET-D75LE95, 16:10 aspect ratio	1.78–25.4 m (70–1,000 in) with 4:3 aspect ratio, 1.78–15.24 m (70–600 in) with the ET-D75LE8 / ET-D3LET80, 4:3 aspect ratio, 3.05–15.24 m (120–600 in) with the ET-D75LE95, 4:3 aspect ratio	
Center-to-corner uniformity*2	90 %		
Lens	Optional (no lens included with this model)		
Lens shift*5	Vertical (from center of screen)	±55 % (±44 % with ET-D75LE6 / ET-D3LEW60, +68 % – +78 % with ET-D75LE95) (powered)	±50 % (±40 % with ET-D75LE6 / ET-D3LEW60, +67 % – +71 % with ET-D75LE95) (powered)
	Horizontal (from center of screen)	±20 % (±15 % with ET-D75LE6 / ET-D3LEW60, ±12 % with ET-D75LE95) (powered)	±30 % (±20 % with ET-D75LE6 / ET-D3LEW60, ±8 % with ET-D75LE95) (powered)
Keystone correction range	Vertical: ±40° (±22° with ET-D3LEW50, ±28° with ET-D75LE6 / ET-D3LEW60, +5° with ET-D75LE95), Horizontal: ±15° (0° with ET-D75LE95)		
Keystone correction range with optional Upgrade Kit ET-UK20	Vertical: ±45° (±40° with ET-D75LE10 / ET-D3LEW10, ET-D75LE20 / ET-D3LES20, ±22° with ET-D3LEW50, ±28° with ET-D75LE6 / ET-D3LEW60, +5° with ET-D75LE95), Horizontal: ±40° (±15° with ET-D3LEW50, ET-D75LE6 / ET-D3LEW60, 0° with ET-D75LE95) When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding total of 55°.		
Installation	Horizontal/vertical, free 360-degree installation		
Terminals	SDI IN 1	BNC x 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link A), Dual-link 3G-SDI (Link 1)	
	SDI IN 2	BNC x 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link B), Dual-link 3G-SDI (Link 2)	
	HDMI IN	HDMI x 1 (Deep Color, compatible with HDCP)	
	DVI-D IN	DVI-D 24-pin x 1 (DVI 1.0 compliant, compatible with HDCP) (Single-link only)	
	RGB 1 IN	RGB x 1 (BNC x 5): RGB/Y/PbPr/Y/CbCr/YC/VIDEO	
	RGB 2 IN	D-sub HD 15-pin (female) x 1: RGB/Y/PbPr	
	MULTI PROJECTOR SYNC IN / 3D SYNC 1 IN/OUT	BNC x 1	
	MULTI PROJECTOR SYNC OUT / 3D SYNC 2 OUT	BNC x 1	
	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)	
	SERIAL OUT	D-sub 9-pin (male) x 1 for link control (RS-232C compliant)	
	REMOTE 1 IN	M3 stereo mini-jack x 1 for wired remote control	
	REMOTE 1 OUT	M3 stereo mini-jack x 1 for link control	
	REMOTE 2 IN	D-sub 9-pin (female) x 1 for external control (parallel)	
DIGITAL LINK/LAN	RJ-45 x 1 for network, DIGITAL LINK connection, 100Base-TX, compatible with Art-Net, PjLink™ (Class 2), Deep Color, HDCP		
DC OUT	USB Type A x 2 (for power supply DC 5 V total of 2 A)		
Power supply	AC 200 V–240 V, 7.7 A, 50/60 Hz (Light output will decrease to approximately 50 % when using the projector with AC 100 V to AC 120 V [9.6 A])		
Power consumption	1,510 W (0.3 W with Standby Mode set to ECO*6, 4 W with Standby Mode set to NORMAL)		
Cabinet materials	Molded plastic		
Operation noise*2	46 dB		
Dimensions (W x H x D)	600 mm x 307 mm*7 x 745 mm (23 5/8" x 12 3/32" x 29 11/32") (including protruding parts); 598 mm x 270 mm*8 x 725 mm (23 17/32" x 10 5/8" x 28 17/32") (not including protruding parts)		
Weight*9	49.0 kg (108 lbs)		
Operating environment	Operating temperature: 0–50 °C (32–122 °F)*10; Operating humidity: 10–80 % (no condensation)		
Applicable software	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro (ET-UK20 Upgrade Kit, ET-CUK10 Auto Screen Adjustment Kit), Smart Projector Control for iOS/Android™		

\*1 Refresh rate varies depending on scanning frequency. \*2 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. \*3 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. \*4 Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [3], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Estimated time until light output declines to 50 % varies depending on environment. \*5 Lens shift is not supported on the ET-D3LEW50. \*6 When Standby Mode is set to ECO, network functions such as power on over LAN will not operate. Additionally, only certain commands can be received for external control using the serial terminal. \*7 With legs at shortest position. \*8 Excluding legs. \*9 Average value. May differ depending on the actual unit. \*10 Operating temperature is 0–45 °C (32–113 °F) when used in locations from 1,400 m to 4,200 m (4,593 ft to 13,779 ft) above sea level. When operating in ECO or NORMAL mode at elevations between 0–2,700 m (0–8,858 ft) in ambient temperatures exceeding 35 °C (95 °F), or at elevations between 2,700–4,200 m (8,858–13,780 ft) in ambient temperatures exceeding 25 °C (77 °F), light output may be reduced to protect the projector.