Panasonic
BUSINESS

PT-**RZ31K** Series

3-Chip DLP™ Projectors

PT-**RZ31K**
PT-**RS30K**

Evolution Reaches a New Peak

Worldwide Olympic Partner

Worldwide Paralympic Partner

PICTURE BY DLP A TEXAS INSTRUMENTS TECHNOLOGY

SOLID SHINE LASER

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OFFICIAL WORLDWIDE OLYMPIC PARTNER

Panasonic

Lighting Up the Rio 2016 Olympic Games Opening Ceremony

As Official Worldwide Olympic Partner, Panasonic supplied about 110 projectors—including a prototype PT-RZ31K Series SOLID SHINE Laser projector—to light up the Opening Ceremony at the Rio 2016 Olympic Games. Chosen for high brightness, brilliant color performance, and advanced mapping capabilities, the projectors performed flawlessly throughout the event.

BOOST PERFORMANCE, EFFORTLESSLY

The evolution of 3-Chip DLP™ SOLID SHINE Laser culminates in the PT-RZ31K Series, a flagship forged by end-user experience with 31,000-lumen (Center/High Mode)*1 of brightness for rental/staging events. Convenient on-site rigging and dust-resistant optics push service-free projection beyond 20,000 hours*2 in Normal Mode for permanent installations. In every detail, these flagships make elite performance last longer.

PT-RZ31K SERIES — 3-Chip DLP™ Projectors

	PT-RZ31K	PT-RS30K
Resolution	WUXGA	SXGA+
Brightness	31,000 lm (Center)*1/ 30,000 lm*3	
Contrast	20,000:1	

*1 Luminance measured at center of screen in High Mode. Operation in High Mode may reduce maintenance timing in comparison to use in Normal Mode. *2 At this time the brightness will have decreased to approximately 50 % of its original level (Normal Mode, Dynamic Contrast Mode: 3, Image Mode: Dynamic, IEC62087: 2008 Broadcast Content, dust density of 0.15 mg/m³). Optional Long Life Filter is required for continuous 20,000 hours operation. In High Mode, no maintenance required for 4,000 hours. *3 Luminance measured in High Mode. Operation in High Mode may reduce maintenance timing in comparison to use in Normal Mode.

Lenses sold separately.

SOLID SHINE Laser: World-beating Performance, Stability, and Stamina

Outstanding Picture Quality

Superior Brightness Meets True-to-Life Color Accuracy

Combining 3-Chip DLP™ imaging with original SOLID SHINE Laser Phosphor technology, the PT-RZ31K Series produces detail-rich and vividly colored pictures with best-in-class*1 31,000 lumens brightness (Center)*2 in High Mode. Dual solid-state laser light-sources and specially engineered heat-resistant phosphor wheels work together with three DLP™ modules (R/G/B) for outstanding brightness, color accuracy, and contrast in large venues.

*1 Claim for Laser Phosphor projectors in its class accurate as of October 2016.
*2 Luminance measured at center of screen in High Mode. Operation in High Mode may reduce maintenance timing in comparison to use in Normal Mode.

Operational Mode Brightness

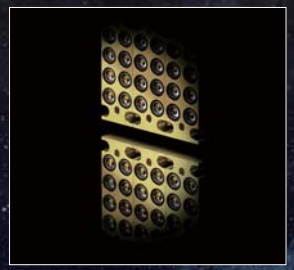
Operational Mode	Brightness	Operational Hours
High Mode	31,000 lm (Center)*2 / 30,000 lm	70 % brightness after 8,000 hours
Normal Mode	26,000 lm (Center) / 25,000 lm	50 % brightness after 20,000 hours

Note: Operational hours (time at which brightness decreases to approximately 50 %) in Normal Mode is 20,000 hours (Dynamic Contrast Mode: 3, Image Mode: Dynamic, IEC62087: 2008 Broadcast Content, dust density of 0.15 mg/m³). Optional Long Life Filter is required for 20,000 hours continuous operation. In High Mode, brightness will have decreased to approximately 70 % of its original level after 8,000 hours operation.

Stable, Reliable Operation

Dual-Laser Optical Engine Assures Failsafe Reliability

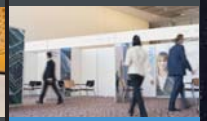
Dual-Drive Laser Optical Engine groups laser diodes into two discrete modules. A redundancy circuit works to minimize brightness- and color-uniformity loss should a laser diode fail, making the PT-RZ31K Series ideal for mission-critical applications where picture presentation must be maintained.



Dustproof Optics Extend Longevity

The PT-RZ31K Series has hermetically sealed laser modules, durable filtering, and a new air-intake system to extend life and maintain picture quality in dusty locations. SOLID SHINE Laser products are tested against more severe guidelines than other projectors for stable operation in environments containing 0.150 mg of dust per cubic meter*.

* Dustproof tests are conducted to confirm operational effectiveness under conditions with 0.15 mg/m³ of particulate matter (based on tests by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers [ASHRAE], and the Japanese Building Maintenance Association). Measurements are made using acceleration tests.

Clean Environment	WHO Europe Guideline for Dust Resistance	Japanese Building Maintenance Association ASHRAE
0.030 mg/m³	0.110 mg/m³	0.150 mg/m³
CLEAN		DUSTY
		
		Panasonic Dust Test Standard

Flexible Installation

Flexible 360-degree Installation

SOLID SHINE Laser enables free 360-degree installation through any axis. Together with powered lens shift and a wide range of optional lenses, the projector can be mounted in any way desired without picture distortion temporarily or in permanent applications.

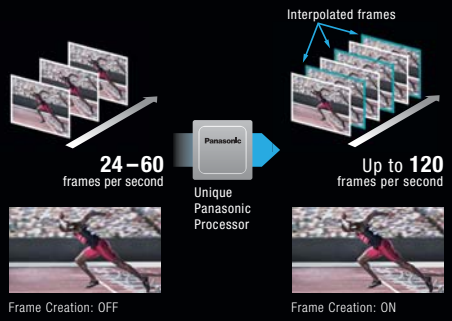
Quick Start, Quick Off

The laser light-source doesn't require any time to warm up, so images appear almost instantly with PT-RZ31K Series projectors. There's also no cool-down period when turning the power off at the mains—the projector can be turned on and off any time as necessary.

Next-Generation Systems Present Amazing Images

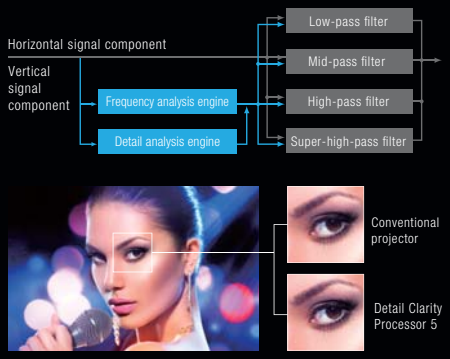
120 Hz*1 Drive Reduces Motion Blur

Real Motion Processor interpolates images for a 120 Hz*1 frame-rate. Smooth, stutter-free 120 Hz*1 reproduction is also possible using simultaneous inputs (two 3G-SDI inputs or DVI-D/HDMI combination). Together with a refined optical engine that enhances focus, Real Motion Processor delivers a better sense of resolution, contrast, and fluidity of motion, particularly with fast-paced scenes.



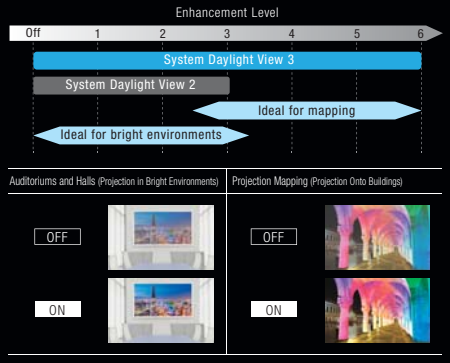
Detail Clarity Processor 5 Provides Pin-sharp Insight

Proprietary circuitry analyzes individual frames to clarify areas of the image containing fine details and textures. Algorithms pull information from the super-high, high, medium, and low frequency bands of the signal, sharpening outlines, correcting contours, and reducing ringing noise.



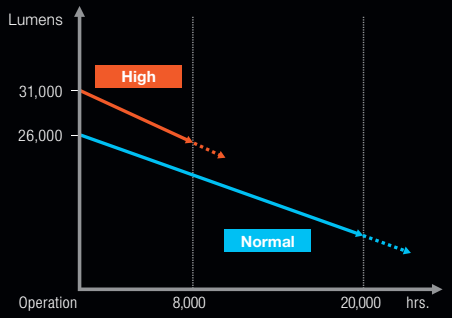
System Daylight View 3 Optimizes for Mapping and Bright Conditions

Panasonic's premium System Daylight View 3 stops pictures washing out in bright light and enhances impact in mapping and multi-projector applications. It uses sensor information to adjust sharpness, manipulate gamma curves, and correct colors to suit on-site conditions.



Selectable Operational Modes

Select your preferred operational mode to control brightness decline according to application. High Mode maintains 70 % brightness over 8,000 hours*2 with linear declination and minimal fluctuation. In Normal Mode, linear brightness decline is about 50 % over 20,000 hours*3 of continuous operation with no maintenance required.



Dynamic Contrast Adds to Depth and Realism

Digital frame-by-frame scene-linking modulation ensures precise laser light output adjustment for 20,000:1*4 contrast even when bright and dark scenes frequently interchange, all while reducing power consumption.

Leads the Class with 90 % Brightness Uniformity

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

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.

Efficient Cooling System Enhances Reliability

The light source's liquid-cooling system features a redesigned air intake and solid aluminum radiator to suppress temperature rises, allowing stable operation in temperatures up to 45 °C (113 °F)*5 and reducing noise to 49 dB.

Optional Long Life Filter for 20,000-hour*6 Service-free Operation

Long Life Filter includes an electrostatic Micro Cut Filter that collects minute dust particles with an ion effect. With dust-resistant cabinet, this enables 20,000 hours*6 of projection in Normal Mode with no maintenance.

Filter Replacement Period

Filter Type	Operational Mode: High	Operational Mode: Normal
Supplied Filter	2,000 hours	4,000 hours
Long Life Filter (Optional ET-EMFU330)	4,000 hours	20,000 hours

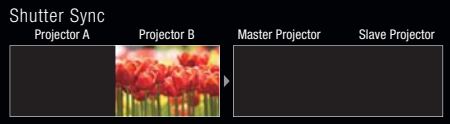
*1 Refresh-rate varies depending on vertical scanning frequency. *2 In High Mode. Filter replacement is required after 4,000 hours for optional Long Life Filter, and 2,000 hours for supplied filter. Measured in Dynamic Contrast Mode 3 with IEC62087: 2008 Broadcast Content and dust density of 0.15 mg/m³. Performance results may differ depending on environmental conditions. *3 In Normal Mode. Optional Long Life Filter required for continuous 20,000 hours operation. Filter replacement required after 4,000 hours for supplied filter/optional replacement filter (ET-EMF330). Measured in Dynamic Contrast Mode 3 with IEC62087: 2008 Broadcast Content and dust density of 0.15 mg/m³. Performance results may differ depending on environmental conditions. *4 With Dynamic Contrast Mode set to 3. *5 Light output may be reduced to protect certain projectors depending on environmental conditions. Please refer specification pages for individual projector models for details on operating temperatures in various conditions. *6 In Normal Mode. 4,000 hours for High Mode. When using supplied filter, 4,000 hours for Normal Mode and 2,000 hours for High Mode. Usage environment may affect filter replacement cycle.

Quick Installation, Easy Mapping, Simple Multi-screen Setup

Contrast Sync Function for Multi-screen Configurations

Contrast Sync function for multi-screen applications allows the dynamic contrast control to be synchronized for consistent picture quality across screens, while Shutter Sync 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.

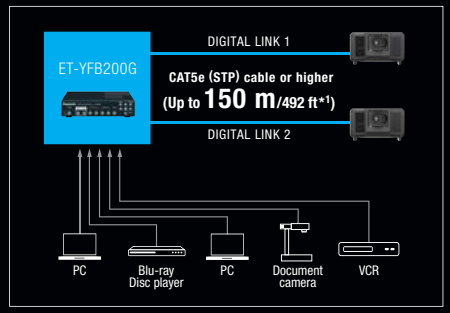


If shutter functions are not linked, shutter ON/OFF timing varies. When shutter functions of slave projectors are linked to a master, shutter ON/OFF timing is uniform*.

* Includes fade-in and fade-out effects. Projector shutter functions can be set to operate individually if desired.

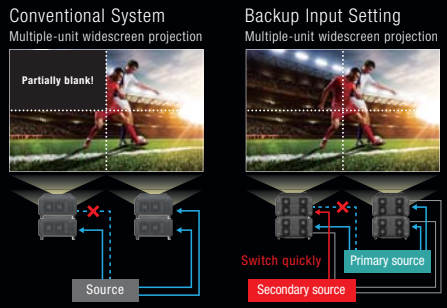
Single-Cable DIGITAL LINK Video and Control Connection

DIGITAL LINK transmits uncompressed Full HD video and control commands through a single CAT 5e or higher STP cable for distances of up to 150 m (492 ft)*1. Optional DIGITAL LINK Switcher or Digital Interface Box further simplifies installation, reduces cabling and associated costs, and enhances reliability.



Backup Input Setting Assures Reliability

Projectors smoothly switch to a backup input signal should the primary input signal be disrupted*2, enhancing reliability in mission critical control rooms and in applications such as projection mapping displays and staging events where image display must be maintained.

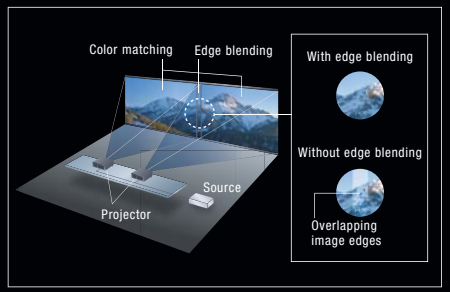


If the main input signal is disrupted, image display is cut off

If primary signal is disrupted, back-up signal smoothly engages to maintain image display

Multi-screen Support System Seamlessly Connects Multiple Screens

- **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)*3. Up to 100 units (10 x 10) can be edge-blended to create large multi-screen images



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 for long-term events.

Built-in Geo Adjustment for Unique Screen Surfaces

Geo Adjustment adapts images for projection onto specially shaped screens with fine-tuning via remote control. Enhanced with Multi-Screen Support System, Geo Adjustment makes creative mapping presentations easy.

Geometry Manager Pro Software and Upgrade Kits

Geo software expands image adjustment and simplifies multi-screen setup. The free software performs color matching, edge blending, and other functions via network. Optional upgrades and plug-ins further streamline and automate setup.

Common Lenses Cut Your Inventory Costs

The PT-RZ31K Series share optional lenses with Panasonic's 3-Chip DLP™ projector range, potentially reducing inventory for rental/staging professionals, while also supporting the ET-D75LE95 Ultra-Short Throw Lens.

Terminals for Every Application

Connect any source device to the PT-RZ31K Series via its array of terminals including 3G-SDI, DIGITAL LINK, DVI-D, and HDMI.

Active 3D Projection Capability

The PT-RZ31K Series is compatible with active 3D projection technology. It supports an external transmitter and active-shutter glasses, or an active filter and passive glasses*4 for viewing 3D images.

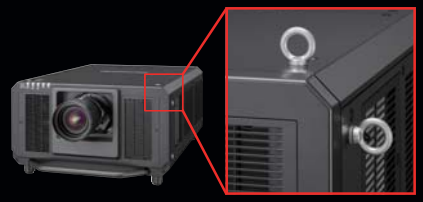
Supports Art-Net DMX, Crestron Connected™, and PJLink™

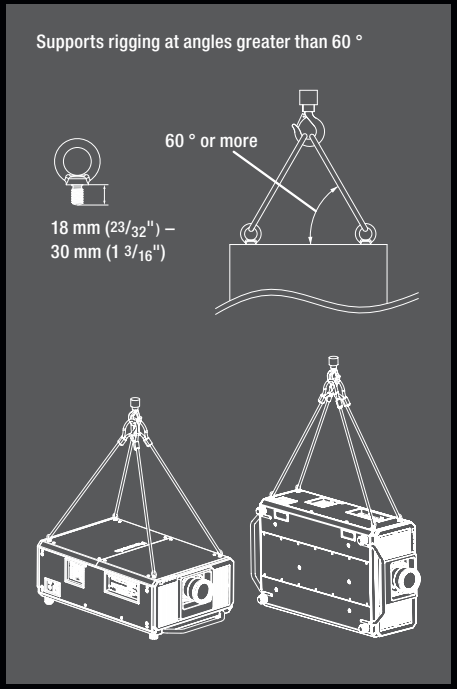
The PT-RZ31K Series supports Art-Net DMX protocol for lighting management. This enables connection with lighting consoles for added functionality and control options. Crestron Connected™ and PJLink™ (Class 1) also streamline integration into existing AV infrastructure.

*1 150 m (492 ft) transmission available only with ET-YFB200G DIGITAL LINK Switcher for signals up to 1080p. *2 Combination of primary/secondary input terminals is fixed. Supported combinations are DVI-D (primary) and HDMI (secondary) terminals, or SDI 1 (primary) and SDI 2 (secondary) terminals. The Backup Input Setting is enabled only when the input signal to the primary and secondary terminals is the same. *3 While the input resolution will not change, maintaining image quality is not possible for images enlarged horizontally and vertically via the digital zoom function. *4 Please contact your sales representative for further information.

Eyebolt-ready for Crane Installations

Eyebolts allow the PT-RZ31K Series to hang from a crane, simplifying rigging at large-scale events for rental/staging professionals.





Projection Distance

PT-RZ31K (16:10 aspect ratio)

PT-RS30K (4:3 aspect ratio)

Unit: meters (feet)

Diagonal image size	Throw distance (A)													
	ET-D75LE6		ET-D75LE10		ET-D75LE20		ET-D75LE30		ET-D75LE40		ET-D75LE8		ET-D75LE50
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	
1.78 [70"]	1.35 (4.4)	1.62 (5.3)	1.90 (6.2)	2.46 (8.1)	2.46 (8.1)	3.58 (11.7)	3.56 (11.7)	6.94 (22.8)	6.87 (22.5)	11.04 (36.2)	10.78 (35.4)	20.56 (67.5)	1.01 (3.3)
2.54 [100"]	1.96 (6.4)	2.34 (7.7)	2.76 (9.1)	3.56 (11.7)	3.55 (11.6)	5.17 (17.0)	5.13 (16.8)	9.99 (32.8)	9.88 (32.4)	15.85 (52.0)	15.57 (51.1)	29.53 (96.9)	1.47 (4.8)
3.05 [120"]	2.36 (7.7)	2.82 (9.3)	3.32 (10.9)	4.30 (14.1)	4.28 (14.0)	6.22 (20.4)	6.18 (20.3)	12.03 (39.5)	11.89 (39.0)	19.05 (62.5)	18.76 (61.5)	35.50 (116.5)	1.78 (5.8)
3.81 [150"]	2.96 (9.7)	3.55 (11.6)	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 (78.2)	23.54 (77.2)	44.47 (145.9)	2.24 (7.3)
5.08 [200"]	3.97 (13.0)	4.75 (15.6)	5.60 (18.4)	7.24 (23.8)	7.19 (23.6)	10.45 (34.3)	10.38 (34.1)	20.16 (66.1)	19.92 (65.4)	31.86 (104.5)	31.52 (103.4)	59.41 (194.9)	3.01 (9.9)
6.35 [250"]	4.98 (16.3)	5.96 (19.6)	7.02 (23.0)	9.07 (29.8)	9.00 (29.5)	13.09 (42.9)	13.00 (42.7)	25.25 (82.8)	24.95 (81.9)	39.86 (130.8)	39.49 (129.6)	74.36 (244.0)	3.78 (12.4)
7.62 [300"]	5.99 (19.7)	7.17 (23.5)	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)	47.47 (155.7)	89.30 (293.0)	4.56 (15.0)
10.16 [400"]	8.00 (26.2)	9.58 (31.4)	11.28 (37.0)	14.58 (47.8)	14.46 (47.4)	21.01 (68.9)	20.86 (68.4)	40.51 (132.9)	40.01 (131.3)	63.87 (209.5)	63.42 (208.1)	119.19 (391.0)	6.10 (20.0)
12.70 [500"]	10.01 (32.8)	11.99 (39.3)	14.12 (46.3)	18.25 (59.9)	18.09 (59.4)	26.29 (86.3)	26.11 (85.7)	50.68 (166.3)	50.05 (164.2)	79.88 (262.1)	79.37 (260.4)	149.08 (489.1)	7.64 (25.1)
15.24 [600"]	12.03 (39.5)	14.40 (47.2)	16.96 (55.6)	21.93 (71.9)	21.73 (71.3)	31.58 (103.6)	31.35 (102.9)	60.85 (199.6)	60.09 (197.1)	95.89 (314.6)	95.32 (312.7)	178.96 (587.1)	9.18 (30.1)
17.78 [700"]	14.04 (46.1)	16.82 (55.2)	19.80 (65.0)	25.60 (84.0)	25.36 (83.2)	36.86 (120.9)	36.60 (120.1)	71.02 (233.0)	70.13 (230.1)	111.90 (367.1)	111.27 (365.1)	- -	10.72 (35.2)
20.32 [800"]	16.06 (52.7)	19.23 (63.1)	22.64 (74.3)	29.27 (96.0)	29.00 (95.1)	42.14 (138.3)	41.84 (137.3)	81.19 (266.4)	80.17 (263.0)	127.91 (419.7)	127.23 (417.4)	- -	12.27 (40.3)
22.86 [900"]	18.07 (59.3)	21.64 (71.0)	25.48 (83.6)	32.94 (108.1)	32.63 (107.1)	47.42 (155.6)	47.09 (154.5)	91.36 (299.7)	90.21 (296.0)	143.92 (472.2)	143.18 (469.8)	- -	13.81 (45.3)
25.40 [1000"]	20.08 (65.9)	24.06 (78.9)	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 (524.7)	159.13 (522.1)	- -	15.35 (50.4)

Diagonal image size	Throw distance (A)													
	ET-D75LE6		ET-D75LE10		ET-D75LE20		ET-D75LE30		ET-D75LE40		ET-D75LE8		ET-D75LE50
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	
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 (37.0)	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)	5.28 (17.3)	5.24 (17.2)	10.21 (33.5)	10.10 (33.1)	16.19 (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)	6.36 (20.8)	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)	7.98 (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)	2.29 (7.5)
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)	25.35 (83.2)	32.54 (106.8)	32.40 (106.3)	61.08 (200.4)	3.08 (10.1)
6.35 [250"]	5.12 (16.8)	6.13 (20.1)	7.17 (23.5)	9.27 (30.4)	9.20 (30.2)	13.37 (43.9)	13.28 (43.6)	25.79 (84.6)	25.48 (83.6)	40.72 (133.6)	40.60 (133.2)	76.44 (250.8)	3.87 (12.7)
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)
10.16 [400"]	8.22 (27.0)	9.85 (32.3)	11.52 (37.8)	14.90 (48.9)	14.77 (48.5)	21.46 (70.4)	21.31 (69.9)	41.38 (135.8)	40.87 (134.1)	65.25 (214.1)	65.19 (213.9)	122.51 (401.9)	6.23 (20.4)
12.70 [500"]	10.29 (33.8)	12.33 (40.5)	14.42 (47.3)	18.65 (61.2)	18.48 (60.6)	26.86 (88.1)	26.67 (87.5)	51.77 (169.8)	51.12 (167.7)	81.60 (267.7)	81.59 (267.7)	153.23 (502.7)	7.80 (25.6)
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 (321.4)	97.98 (321.5)	183.95 (603.5)	9.38 (30.8)
17.78 [700"]	14.43 (47.3)	17.29 (56.7)	20.23 (66.4)	26.15 (85.8)	25.91 (85.0)	37.65 (123.5)	37.38 (122.6)	72.54 (238.0)	71.64 (235.0)	114.30 (375.0)	114.38 (375.3)	- -	10.96 (36.0)
20.32 [800"]	16.50 (54.1)	19.77 (64.9)	23.13 (75.9)	29.90 (98.1)	29.62 (97.2)	43.05 (141.2)	42.74 (140.2)	82.93 (272.1)	81.89 (268.7)	130.65 (428.6)	130.77 (429.0)	- -	12.53 (41.1)
22.86 [900"]	18.57 (60.9)	22.25 (73.0)	26.03 (85.4)	33.65 (110.4)	33.33 (109.4)	48.44 (158.9)	48.10 (157.8)	93.32 (306.2)	92.15 (302.3)	147.00 (482.3)	147.17 (482.8)	- -	14.11 (46.3)
25.40 [1000"]	20.64 (67.7)	24.73 (81.1)	28.93 (94.9)	37.40 (122.7)	37.05 (121.6)	53.84 (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)

PT-RZ31K (16:10 aspect ratio)

PT-RS30K (4:3 aspect ratio)

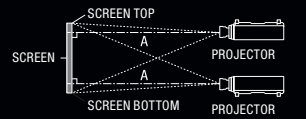
Unit: meters (feet)

Diagonal image size	ET-D75LE95							
	(A)	(B)	(C)	(D)	(E)		(F)	
					min.	max.	min.	max.
3.05 [120"]	0.94 (3.1)	0.97 (3.2)	0.68 (2.2)	-0.39 (-1.3)	0.17 (0.6)	0.33 (1.1)	0.59 (1.9)	0.75 (2.5)
3.81 [150"]	1.18 (3.9)	1.20 (3.9)	0.91 (3.0)	-0.16 (-0.5)	0.24 (0.8)	0.44 (1.5)	0.66 (2.2)	0.86 (2.8)
5.08 [200"]	1.56 (5.1)	1.59 (5.2)	1.30 (4.3)	0.23 (0.8)	0.37 (1.2)	0.63 (2.1)	0.79 (2.6)	1.05 (3.4)
6.35 [250"]	1.95 (6.4)	1.97 (6.5)	1.68 (5.5)	0.61 (2.0)	0.49 (1.6)	0.82 (2.7)	0.91 (3.0)	1.24 (4.1)
7.62 [300"]	2.33 (7.6)	2.36 (7.7)	2.07 (6.8)	1.00 (3.3)	0.62 (2.0)	1.02 (3.3)	1.03 (3.4)	1.43 (4.7)
8.89 [350"]	2.72 (8.9)	2.74 (9.0)	2.45 (8.0)	1.38 (4.5)	0.74 (2.4)	1.21 (4.0)	1.16 (3.8)	1.62 (5.3)
10.16 [400"]	3.10 (10.2)	3.13 (10.3)	2.84 (9.3)	1.77 (5.8)	0.86 (2.8)	1.40 (4.6)	1.28 (4.2)	1.81 (5.9)
12.70 [500"]	3.87 (12.7)	3.90 (12.8)	3.61 (11.8)	2.54 (8.3)	1.11 (3.6)	1.78 (5.8)	1.53 (5.0)	2.20 (7.2)
15.24 [600"]	4.64 (15.2)	4.67 (15.3)	4.38 (14.4)	3.31 (10.9)	1.36 (4.5)	2.16 (7.1)	1.78 (5.8)	2.58 (8.5)

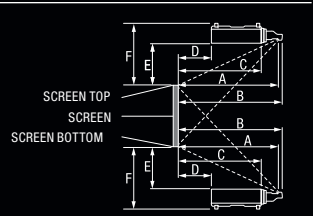
Diagonal image size	ET-D75LE95							
	(A)	(B)	(C)	(D)	(E)		(F)	
					min.	max.	min.	max.
3.05 [120"]	0.96 (3.1)	0.99 (3.2)	0.70 (2.3)	-0.37 (-1.21)	0.18 (0.6)	0.25 (0.8)	0.59 (1.9)	0.67 (2.2)
3.81 [150"]	1.20 (3.9)	1.23 (4.0)	0.94 (3.1)	-0.13 (-0.4)	0.25 (0.8)	0.34 (1.1)	0.67 (2.2)	0.76 (2.5)
5.08 [200"]	1.59 (5.2)	1.62 (5.3)	1.33 (4.4)	0.26 (0.9)	0.38 (1.2)	0.50 (1.6)	0.80 (2.6)	0.92 (3.0)
6.35 [250"]	1.99 (6.5)	2.01 (6.6)	1.72 (5.6)	0.65 (2.1)	0.50 (1.6)	0.66 (2.2)	0.92 (3.0)	1.08 (3.5)
7.62 [300"]	2.38 (7.8)	2.41 (7.9)	2.12 (7.0)	1.05 (3.4)	0.63 (2.1)	0.81 (2.7)	1.05 (3.4)	1.23 (4.0)
8.89 [350"]	2.77 (9.1)	2.80 (9.2)	2.51 (8.2)	1.44 (4.7)	0.76 (2.5)	0.97 (3.2)	1.18 (3.9)	1.39 (4.6)
10.16 [400"]	3.17 (10.4)	3.19 (10.5)	2.90 (9.5)	1.83 (6.0)	0.88 (2.9)	1.13 (3.7)	1.30 (4.3)	1.55 (5.1)
12.70 [500"]	3.95 (13.0)	3.98 (13.1)	3.69 (12.1)	2.62 (8.6)	1.14 (3.7)	1.44 (4.7)	1.56 (5.1)	1.86 (6.1)
15.24 [600"]	4.74 (15.6)	4.77 (15.6)	4.48 (14.7)	3.41 (11.2)	1.39 (4.6)	1.76 (5.8)	1.81 (5.9)	2.17 (7.1)

Dimension Definitions

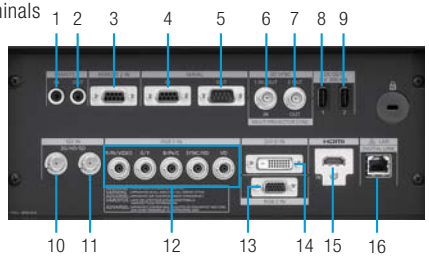
If using lens other than the ET-D75LE95



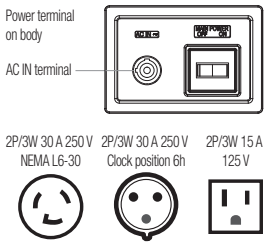
If using the ET-D75LE95



Terminals

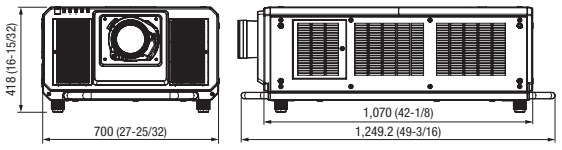


1. REMOTE 1 IN terminal
2. REMOTE 1 OUT terminal
3. REMOTE 2 IN terminal
4. SERIAL IN terminal
5. SERIAL OUT terminal
6. MULTI PROJECTOR SYNC IN/ 3D SYNC 1 IN/OUT terminal
7. MULTI PROJECTOR SYNC OUT/ 3D SYNC 2 OUT terminal
8. DC 1 OUT terminal
9. DC 2 OUT terminal
10. SDI 1 IN terminal
11. SDI 2 IN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



Dimensions

Unit: mm (inches)



Specifications

Model		PT-RZ31K	PT-RS30K
Power supply		AC 200–240 V, 50/60 Hz; AC 100–200 V, 50/60 Hz (brightness is restricted with lower voltage)	
Power consumption		2,870 W (0.3 W with Standby Mode set to Eco*1, 4 W with Standby Mode set to Normal) [2,870 VA, AC 200 V] Average Power Consumption: 2,310 W (High Mode), 1,890 W (Normal Mode), 1,040–1,680 W (Long Life 1 Mode), 924–1,580 W (Long Life 2 Mode), 794–1,460 W (Long Life 3 Mode) [Operating temperature: 25 °C (77 °F), altitude: 700 m (2,297 ft), IEC627087: 2008 Broadcast content, Image Mode: Standard, Dynamic Contrast Mode: 2]	
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 × 3, DLP™ projection system	
	Pixels	6,912,000 (1920 x 1200 x 3) pixels	4,410,000 (1400 x 1050 x 3) pixels
Refresh rate		120 Hz*2	
Lens		Optional (no lens included with this model)	
Light source		Laser diode (laser class: Class 1), Light-source life: 18,000 hours (High Mode, brightness decreases to approx. 50 %)*3, 20,000 hours (Normal Mode, brightness decreases to approx. 50 %), 43,800 hours (Long Life 1 Mode, consistent brightness), 61,320 hours (Long Life 2 Mode, consistent brightness), 87,600 hours (Long Life 3 Mode, consistent brightness) [IEC627087: 2008 Broadcast content, Image mode: Standard, Dynamic Contrast Mode: 3]	
Filter		With supplied filter: 4,000 hours (Normal Mode), 2,000 hours (High Mode), 20,000 hours (Long Life 1/2/3 Mode); With Long Life Filter: 20,000 hours (Normal Mode), 4,000 hours (High Mode), 40,000 hours (Long Life 1/2/3 Mode)	
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, 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, 4:3 aspect ratio 3.05–15.24 m (120–600 in) with the ET-D75LE95, 4:3 aspect ratio
Brightness		31,000 lm (Center)*4*6/30,000 lm*4*5 (High Mode), 26,000 lm (Center)*4*6/25,000 lm*4*5 (Normal Mode), 12,000 lm (Long Life 1 Mode), 10,000 lm (Long Life 2 Mode), 8,000 lm (Long Life 3 Mode)	
Center-to-corner uniformity*5		90 %	
Contrast*5		20,000:1 (Full On/Full Off, Dynamic Contrast Mode: 3)	
Resolution		1920 x 1200 pixels	1400 x 1050 pixels
Scanning frequency	SD-SDI	SMPTE ST 259 compliant, [YCBCR 4:2:2 10-bit] 480/60i, 576/50i	
	HD-SDI	SMPTE ST 292 compliant, [YPBPR 4:2:2 10-bit] 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p	
	Dual-link HD-SDI	SMPTE ST 372 compliant, [RGB 4:4:4 12-bit/10-bit] 1080/60i, 1080/50i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p, 2048 x 1080/24p, [X'Y'Z' 4:4:4 12-bit] 2048 x 1080/24p, 2048 x 1080/25p	
	3G-SDI	SMPTE ST 424 compliant, [RGB 4:4:4 12-bit/10-bit] 1080/60i, 1080/50i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p, 2048 x 1080/24p, 2048 x 1080/25p, 2048 x 1080/30p, [YPBPR 4:2:2 10-bit] 1080/60p, 1080/50p, 2048 x 1080/48p, 2048 x 1080/50p, 2048 x 1080/60p, [X'Y'Z' 4:4:4 12-bit] 2048 x 1080/24p, 2048 x 1080/25p, 2048 x 1080/30p	
	Dual-link 3G-SDI	SMPTE ST 425 compliant, [YPBPR 4:4:4 12-bit/10-bit] 1080/60p, 1080/50p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p, [RGB 4:4:4 12-bit/10-bit] 1080/60p, 1080/50p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p	
	HDMI/DVI-D/DIGITAL LINK	480/60i*7, 576/50i*7, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, 640 x 400–WUXGA*8 (1920 x 1200) (compatible with non-interlaced signals only), dot clock: 25–162 MHz	
	RGB	fH: 15–100 kHz, fV: 24–120 Hz, dot clock: 162 MHz or lower	
	YPBPR (YCBCR)	fH: 15.73 kHz, fV: 59.94 Hz [480/60i], fH: 15.63 kHz, fV: 50 Hz [576/50i], fH: 31.47 kHz, fV: 59.94 Hz [480/60p], fH: 31.25 kHz, fV: 50 Hz [576/50p], fH: 45.00 kHz, fV: 60 Hz [720/60p], fH: 37.50 kHz, fV: 50 Hz [720/50p], fH: 33.75 kHz, fV: 60 Hz [1080/60i], fH: 28.13 kHz, fV: 50 Hz [1080/50i], fH: 28.13 kHz, fV: 25 Hz [1080/25p], fH: 27.00 kHz, fV: 24 Hz [1080/24p], fH: 27.00 kHz, fV: 48 Hz [1080/24sF], fH: 33.75 kHz, fV: 30 Hz [1080/30p], fH: 67.50 kHz, fV: 60 Hz [1080/60p], fH: 56.25 kHz, fV: 50 Hz [1080/50p]	
	Video/YC	fH: 15.73 kHz, fV: 59.94 Hz (NTSC/NTSC4.43/PAL-M/PAL60), fH: 15.63 kHz, fV: 50 Hz (PAL/PAL-N/SECAM)	
Optical axis shift*9	Vertical (from center of screen)	±55 % (±44 % with ET-D75LE6, +68 % – +78 % with ET-D75LE95) (powered)	±50 % (±40 % with ET-D75LE6, +67 % – +71 % with ET-D75LE95) (powered)
	Horizontal (from center of screen)	±20 % (±15 % with ET-D75LE6, ±12 % with ET-D75LE95) (powered)	±30 % (±20 % with ET-D75LE6, ±8 % with ET-D75LE95) (powered)
Keystone correction range		Vertical: ±40 ° (± 22 ° with ET-D75LE50, ±28 ° with ET-D75LE6), Horizontal: ±15 °	
Keystone correction range with optional Upgrade Kit ET-UK20		Vertical: ±45 ° (± 40 ° with ET-D75LE10/20, ±22 ° with ET-D75LE50, ±28 ° with ET-D75LE6), Horizontal: ±40 ° (±15 ° with ET-D75LE50/6), Up to a total of ±55 ° during simultaneous horizontal and vertical correction	
Installation		Ceiling/floor, front/rear, free 360-degree installation	
Terminals	SDI 1 IN	BNC × 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link-A), Dual-link 3G-SDI (Link 1)	
	SDI 2 IN	BNC × 1: 3G/HD/SD-SDI input, Dual-link HD-SDI (Link-B), Dual-link 3G-SDI (Link 2)	
	HDMI IN	HDMI 19-pin × 1 (Deep Color, compatible with HDCP)	
	DVI-D IN	DVI-D 24-pin × 1 (single link, DVI 1.0 compliant, compatible with HDCP)	
	RGB 1 IN	RGB × 1 (BNC × 5): RGB/YPBPR/YCBCR/YC/VIDEO	
	RGB 2 IN	D-sub HD 15-pin (female) × 1: RGB/YPBPR/YCBCR	
	MULTI PROJECTOR SYNC IN/3D SYNC 1 IN/OUT	BNC × 1	
	MULTI PROJECTOR SYNC OUT/3D SYNC 2 OUT	BNC × 1	
	SERIAL IN	D-sub 9-pin (female) × 1 for external control (RS-232C compliant)	
	SERIAL OUT	D-sub 9-pin (male) × 1 for link control	
	REMOTE 1 IN	M3 × 1 for wired remote control	
	REMOTE 1 OUT	M3 × 1 for link control	
	REMOTE 2 IN	D-sub 9-pin (female) × 1 for external control (parallel)	
	LAN/DIGITAL LINK	RJ-45 × 1 for network, DIGITAL LINK connection, 100Base-TX, compatible with Art-Net, PJLink™ (Class 1), Deep Color, HDCP	
	DC OUT	USB Type A x 2 for power supply (DC 5 V, max 900 mA)	
Cabinet materials		Metal, molded plastic	
Dimensions (W × H × D)		700 mm x 418 mm*10 x 1,250 mm (27 25/32″ x 16 15/32″ x 49 7/32″) (including protruding parts); 700 mm x 373 mm*11 x 1,070 mm (27 9/16″ x 14 11/16″ x 42 1/8″) (not including protruding parts)	
Shipping dimensions (W x H x D)		PT-RZ31K/KUY: 914 mm x 625 mm x 1,488 mm (35 31/32″ x 24 19/32″ x 58 19/32″); PT-RZ31KE: 914 mm x 625 mm x 1,488 mm (35 31/32″ x 24 19/32″ x 58 19/32″)	
Weight*12		Approx. 79 kg (174 lbs.)	
Shipping weight		PT-RZ31K/KUY: 100.7 kg (222.0 lbs.), PT-RZ31KE: 97.5 kg (214.9 lbs.)	
Operation noise*5		49 dB	
Operating environment		Operating temperature: 0–50 °C (32–122 °F)*13 [altitude: up to 1,400 m (4,593 ft), High/Normal Mode]; 0–45 °C (32–113 °F)*13 [altitude: up to 4,200 m (13,780 ft), High/Normal/Standby/Eco/Long Life1/2/3 Mode]; 0–40 °C (32–104 °F) [altitude: up to 1,400 m (4,593 ft) with Smoke Cut Filter]; Operating humidity: 10–80 % (no condensation)	
Supplied accessories		Power cord x 2, wireless/wired remote control unit, batteries (R6/AA type x 2), lens drop-prevention screw, replacement filter units x 4 (ET-EMF330), lens hole cover, software CD-ROM (Logo Transfer Software, Multi Monitoring & Control Software)	

*1 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. *2 Refresh-rate varies depending on vertical scanning frequency. *3 Brightness will have decreased to approximately 70 % of its original level after 8,000 hours operation. *4 With lens other than ET-D75LE95 and power supply of AC 200 V. *5 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. *6 Measured at center area of projector screen. Measurement method is in compliance with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. *7 Only compatible with dot-clock frequency of 27 MHz (pixel repetition signal). *8 WUXGA resolution is supported when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking). *9 Optical axis shift is not supported on the ET-D75LE50. *10 With legs at shortest position. *11 Excluding legs. *12 Average value. May differ depending on the actual unit. *13 If ambient temperature exceeds 35 °C (95 °F) when used in locations from 0 m to 2,700 m (0 ft to 8,858 ft) above sea level, or if it exceeds 25 °C (77 °F) when used in locations from 2,700 m to 4,200 m (8,858 ft to 13,780 ft) above sea level, light output may be reduced to protect the projector.

Optional Accessories

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-D75LE50
Fixed-focus Lens

ET-D75LE95
Fixed-focus Lens

ET-EMF330
Replacement FIter Unit

ET-SFR330
Smoke Cut Filter

ET-EMFU330
Long-life Filter

ET-UK20
Geometry Manager Pro Upgrade Kit

ET-CUK10 Series
Auto Screen Adjustment Upgrade Kit
(Except in the United States)

ET-SWA100 Series
Early Warning Software

Note: Part number suffix may differ depending on the license type.

ET-YFB200G
DIGITAL LINK Switcher

ET-YFB100G
Digital Interface Box

Panasonic®

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Facebook – **www.facebook.com/panasonicprojector**
YouTube – **www.youtube.com/user/PanasonicProjector**

All information included here is valid as of October 2016.

PT-RZ31KG1 Printed in Japan.