3-Chip DLP™ Projector
PT-RQ32K

Graphic is simulated.
Lenses sold separately.

Panasonic CONNECT

Anything’s Possible at 4K+

Resolution 5120 x 3200 Pixels
QUAD PIXEL DRIVE: ON
GAME-CHANGING 4K+ PROJECTION

The PT-RQ32K gives resellers and staging professionals a unique opportunity to upgrade their service quality while reducing total cost of ownership. Our 3-Chip DLP™ SOLID SHINE Laser flagship is unique, maintaining image consistency for longer with huge output power and less maintenance in a unit that weighs a fraction of competitive projectors. Deliver absolute immersion in temporary or permanent installations in single or multi-projection layouts. We’ve reimagined 4K projection so your business can set a new standard for quality.
How SOLID SHINE Laser Can Transform Your Business

Superior Picture Quality

High Brightness and Processing Power
Combining SOLID SHINE Laser Phosphor with 3-Chip DLP™ R/G/B processing, the PT-RQ32K produces 27,000 lumens** of brightness with spectacularly vivid color performance. Output brilliance is matched by class-leading color uniformity across the image, which is crucial for lifelike multi-screen displays, as well as uncommonly accurate white balance uniformity to ensure pictures are reproduced without unnatural tinting or casting.

Absolute Dependability

Dual-Laser Optical Engine
Laser diodes are grouped into two discrete modules. A redundancy circuit works to maintain brightness- and color-uniformity loss should a laser diode fail, making the PT-RQ32K ideal for mission-critical applications.

Dustproof Optics Extend Longevity
Hemispheric sealed laser modules, durable filtering, and refined air-intake maintains brightness and extends life in dusty locations. Product testing against severe guidelines assures stable operation in environments containing 0.150 mg of dust per cubic meter**.

Simple Installation

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-RQ32K projector can be installed in any orientation without picture distortion.

Quick Start, Quick Off
By virtue of laser design, no warm-up or cool-down is required when operating PT-RQ32K projectors. Images appear almost instantly from start-up, and the projector can be switched off from the mains.

Inside the 4K+ Image

Achieving 4K+ with Original Pixel-Quadrupling Technology
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.

Real Motion Processor Reduces Motion Blur
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**. A refined optical engine enhances focus performance for a lifelike sense of resolution, contrast, and fluidity.

Screen Resolution

Beyond UltraHD 5120 x 3200**

* Luminance measured at center of screen in High Mode. Operation in High Mode may reduce maintenance timing in comparison to use in Normal Mode.

*1 Refresh rate varies depending on vertical scanning frequency. Note that 240 Hz frame rate is downsampled back to 60 Hz when projecting at 4K+ resolution. *2 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.

Inside the 4K+ Image

Achieving 4K+ with Original Pixel-Quadrupling Technology

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.

Real Motion Processor Reduces Motion Blur
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**. A refined optical engine enhances focus performance for a lifelike sense of resolution, contrast, and fluidity.

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.
Harness Next-Generation Imaging Technology

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

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

System Daylight View 3, Panasonic’s flagship daylight projection optimization technology, stops pictures washing out in bright light and boosts impact in mapping and multi-projector applications. Sensor information is analyzed to enhance sharpness, gamma curves, and color gamut.

Choose Your Preferred Balance of Brightness and System Longevity

Selectable operational modes control the rate of brightness decline according to application. High Mode maintains 70% brightness over 8,000 hours1 with linear declination and minimal fluctuation. In Normal Mode, linear brightness decline is about 50% over 20,000 hours2, of continuous operation with no maintenance required.

Multi-Unit Brightness and Color Control Function

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

Supports BT.2020 and HDR for Latest 4K Standard

PT-RQ32K has emulation for BT.2020, a 4K color-space standard. It reproduces a wider color gamut than conventional Rec. 709 standard. Additionally, PT-RQ32K supports HDR (High Dynamic Range), creating a wider range of images from deepest blacks to sparkling bright highlights.

Dynamic Contrast Adds Depth and Realism

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

Class Leader with 90% Brightness Uniformity

SOLID SHINE Laser Phosphor 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.

Efficient Cooling System Enhances Reliability

The light source’s liquid-cooling system features a redesigned air intake and solid aluminum radiator to suppress temperature rise, allowing stable operation in temperatures up to 45 °C (113 °F)3 and reducing noise to 49 dB.

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

Optional Long Life Filter includes an electrostatic Micro Cut Filter that collects minute particles with an ion effect. With dust-resistant cabinet, this enables 20,000 hours*4 of projection in Normal Mode with no maintenance.

Filter Replacement Period

Supplied Filter: 2,000 hours (High Mode), 4,000 hours (Normal Mode)
Long Life Filter: 4,000 hours (High Mode), 20,000 hours (Normal Mode)

*1 In High Mode. Filter replacement is required after 4,000 hours for optional Long Life Filter, and 8,000 hours for supplied (electrostatic) replacement filter (ET-EMF330). Measured in Dynamic Contrast Mode 3 with ECD8267: 2018 Broadcast Content and dust density of 0.15 mg/m³. Performance results may differ depending on environmental conditions. *2 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 ECD8267: 2018 Broadcast Content and dust density of 0.15 mg/m³. Performance results may differ depending on environmental conditions. *3 Wall Dynamic Contrast Mode sets 3. *4 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.

1. "Enhancement Level"
2. "Lumens"
Fast and Simple Multi-mapping Installation

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.

<table>
<thead>
<tr>
<th>Contrast Sync: OFF</th>
<th>Contrast Sync: ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projector A</td>
<td>Projector B</td>
</tr>
<tr>
<td>Average 10%</td>
<td>Average 15%</td>
</tr>
</tbody>
</table>

If shutter functions are not linked, shutter ON/OFF timing varies. When shutter functions are linked, shutter ON/OFF timing is uniform.

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 video. Optional DIGITAL LINK Switcher further simplifies installation and reduces cabling and associated costs.

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.

Backup Input Setting Guarantees Image Display

Projectors switch to a backup input signal instantly, without screen blanking, should the primary input signal be disrupted. This assures reliability in mission-critical control-room roles and in applications such as projection mapping where image display must be maintained.

Multi-screen Support System Integrates 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)*1. Up to 100 units (10 x 10) can be edge-blended to create large multi-screen images

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 partners 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-RQ32K shares optional lenses with Panasonic’s 3-Chip DLP™ projector range, potentially reducing inventory for rental/staging professionals, as well as supporting the ET-D75LE95 Ultra-Short-Throw Lens.

Multi Monitoring & Control Software

This free Panasonic software offers monitoring and control of up to 2,048 devices over a LAN network from a single PC. For monitoring, status for individual devices can be listed in groups, with more detailed information shown separately. Control functions include power ON/OFF, input switching, scheduling, and command inputs.

Common Terminal Functions

- Power ON/OFF
- Input switching
- Scheduling
- Remote control

Terminals for Every Application

The PT-RQ32K features four built-in 3G-SDI inputs and a DIGITAL LINK terminal. The projector also features Panasonic’s SLOT™ MX to accommodate optional terminal boards that offer a range of connections including HDMI and DVI*2.
Eyebolts allow the PT-RQ32K to hang from a crane, simplifying rigging at large-scale events for rental/staging professionals.

**Case Studies**

- **Kennedy Center's Washington National Opera (USA)**
- **Colosseum Light Messages (Italy)**
- **Queensland University of Technology (Australia)**
- **Orbi Osaka (Japan)**

For more case studies, please visit: [https://panasonic.net/cns/projector/casestudies/](https://panasonic.net/cns/projector/casestudies/)

### Projection Distance

**PT-RQ32K (16:10 aspect ratio)**

<table>
<thead>
<tr>
<th>Image size</th>
<th>ET-D75LE95</th>
<th>ET-D75LE92</th>
<th>ET-D75LE65</th>
<th>ET-D75LE62</th>
<th>ET-D75LE58</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.78 (72&quot;)</td>
<td>110</td>
<td>93.0</td>
<td>70.7</td>
<td>56.0</td>
<td>46.2</td>
</tr>
<tr>
<td>2.03 (80&quot;)</td>
<td>130</td>
<td>112.0</td>
<td>86.0</td>
<td>69.0</td>
<td>59.0</td>
</tr>
<tr>
<td>2.39 (92&quot;)</td>
<td>150</td>
<td>131.0</td>
<td>103.0</td>
<td>82.0</td>
<td>69.0</td>
</tr>
<tr>
<td>2.54 (100&quot;)</td>
<td>157</td>
<td>134.0</td>
<td>107.0</td>
<td>86.0</td>
<td>72.0</td>
</tr>
<tr>
<td>3.05 (120&quot;)</td>
<td>180</td>
<td>152.0</td>
<td>126.0</td>
<td>100.0</td>
<td>82.0</td>
</tr>
<tr>
<td>3.81 (160&quot;)</td>
<td>200</td>
<td>170.0</td>
<td>145.0</td>
<td>115.0</td>
<td>96.0</td>
</tr>
<tr>
<td>5.08 (220&quot;)</td>
<td>250</td>
<td>203.0</td>
<td>184.0</td>
<td>147.0</td>
<td>118.0</td>
</tr>
<tr>
<td>6.25 (250&quot;)</td>
<td>300</td>
<td>240.0</td>
<td>215.0</td>
<td>170.0</td>
<td>138.0</td>
</tr>
<tr>
<td>7.62 (300&quot;)</td>
<td>350</td>
<td>278.0</td>
<td>257.0</td>
<td>200.0</td>
<td>160.0</td>
</tr>
<tr>
<td>8.89 (350&quot;)</td>
<td>400</td>
<td>324.0</td>
<td>296.0</td>
<td>238.0</td>
<td>188.0</td>
</tr>
<tr>
<td>10.16 (400&quot;)</td>
<td>450</td>
<td>366.0</td>
<td>338.0</td>
<td>278.0</td>
<td>220.0</td>
</tr>
<tr>
<td>12.7 (500&quot;)</td>
<td>600</td>
<td>533.0</td>
<td>486.0</td>
<td>394.0</td>
<td>320.0</td>
</tr>
<tr>
<td>15.24 (600&quot;)</td>
<td>700</td>
<td>655.0</td>
<td>606.0</td>
<td>513.0</td>
<td>432.0</td>
</tr>
<tr>
<td>19.56 (800&quot;)</td>
<td>1000</td>
<td>991.0</td>
<td>923.0</td>
<td>765.0</td>
<td>660.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Image size</th>
<th>Unit: meters (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.05 (120&quot;)</td>
<td>0.90 (2.95)</td>
</tr>
<tr>
<td>3.81 (160&quot;)</td>
<td>1.26 (4.15)</td>
</tr>
<tr>
<td>5.08 (220&quot;)</td>
<td>1.67 (5.49)</td>
</tr>
<tr>
<td>6.25 (250&quot;)</td>
<td>2.04 (6.69)</td>
</tr>
<tr>
<td>7.62 (300&quot;)</td>
<td>2.52 (8.27)</td>
</tr>
<tr>
<td>8.89 (350&quot;)</td>
<td>3.30 (10.83)</td>
</tr>
<tr>
<td>10.16 (400&quot;)</td>
<td>3.86 (12.69)</td>
</tr>
<tr>
<td>12.7 (500&quot;)</td>
<td>5.05 (16.57)</td>
</tr>
<tr>
<td>15.24 (600&quot;)</td>
<td>6.20 (20.37)</td>
</tr>
<tr>
<td>19.56 (800&quot;)</td>
<td>9.84 (32.21)</td>
</tr>
</tbody>
</table>

### Dimension Definitions

- **ET-D75LE95**
- **ET-D75LE92**
- **ET-D75LE65**
- **ET-D75LE62**
- **ET-D75LE58**

**If using lens other than the ET-D75LE95**

**If using the ET-D75LE95**

---

**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 N: compatible inputs include accommodating optional interface boards internally.
Specifications

Model PT-RQ32K

**Power supply**
AC 100–120 V (12 A) / AC 200–240 V (16 A), 50/60 Hz (brightness restricted with voltage lower than 200 V)

**Power consumption**
2,580 W (High) with Standby Mode set to Eco1, 4,088 W (High) (with Standby Mode set to Normal) [240 V/AC, 0.95 PFC], average Power Consumption: 2,450 W (High Mode), 2,100 W (Normal Mode), 1,350–1,790 W (Long Life 1 Mode), 1,050–1,490 W (Long Life 2 Mode), 850–1,250 W (Long Life 3 Mode) (Operating temperature: 23 °C (77 °F), altitude: 700 m (2,300 ft), ET-RD50B/50CH. 2008 Broadcast content, Image Mode: Standard, Dynamic Contrast Mode: 2)

**DLP™ chip**
Panel size: 22.9 mm (0.9 in) diagonal (7610 aspect ratio)
Display method: DLP™ chip or a DLP™ projection system
Pixels: 19,452,000 (12,288 x 2 x 1,024 x 4) pixels when Quad Pixel Drive set to ON, 4,086,002 (2,160 x 1,024 x 2) x, total of 12,288,002 pixels when Quad Pixel Drive set to OFF

**Refresh rate**
240 Hz2

**Lens**
Optional (no lens included with this model)

**Light source**
Laser diodes (Class 1), Light-source life: 8,000 hours (High Mode, brightness decreases to approx. 70 %), 18,000 hours (High Mode, brightness decreases to approx. 50 %), 20,000 hours (Normal Mode, brightness decreases to approx. 50 %, 43,800 hours (Long Life Mode, consistent brightness), 61,200 hours (Long Life Mode, consistent brightness), 87,600 hours (Long Life Mode, consistent brightness) (ET-RD50B/50CH. 2018 Broadcast content, Dynamic Contrast Mode: 2, Image Mode: Standard)

**Filter**
With supplied filter: 4,000 hours, Normal Mode, 2,000 hours, Long Life Mode, 1,000 hours, Long Life Filter: 20,000 hours, Normal Mode, 4,000 hours, High Mode, 40,000 hours, Long Life 1/2/3 Mode

**Screen size (plagued)**
1.78–25.4 m (70–100 in) with 16:10 aspect ratio, 1.78–25.4 m (70–100 in) with 16:9 aspect ratio

**Brightness**
27,000 lm (Center)* 4/26,000 lm* 5 [High Mode], 22,500 lm (Center)* 4/21,600 lm* 5 [Normal Mode], 12,000 lm [Long Life 1 Mode], 10,000 lm [Long Life 2 Mode], 8,000 lm [Long Life 3 Mode]

**Contrast**
2048 x 1080/30p, [X’Y’Z’ 4:4:4 12-bit] 2048 x 1080/24p, 2048 x 1080/25p, 2048 x 1080/30p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p (YP BPR 4:2:2 10-bit) 3840 x 2160/60p, 3840 x 2160/50p, 4096 x 2160/50p, 4096 x 2160/25p, 4096 x 2160/30p, 1080/60p, 1080/50p

**Power supply**
100–240 V (10 A) (Center)* 7, 1080/60p, 1080/50p (1st frame: SDI 1, 2nd frame: SDI 2)

**Panel size**
Approx. 83 kg (183.0 lbs)

**Cabinet materials**
Metal (Partly Plastic Mold)

**Dimensions**
Width (W) x Height (H) x Depth (D)
700 x 418* 9 x 1,250 mm (27 9/16˝ x 16 15/32˝*9 x 49 7/32˝) including protruding parts; 700 x 373* 10 x 1,070 mm (27 9/16˝ x 14 11/16˝*10 x 42 1/8˝) not including protruding parts

**Weight**
Approx. 133.6 lbs

**Operating environment**
Temperature: 0–45 °C (32–113 °F) (altitude: up to 1,490 m (4,890 ft)), 0–30 °C (32–86 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–25 °C (77 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–19 °C (66 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–14 °C (57 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–9 °C (48 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–4 °C (39 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–3 °C (37 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–2 °C (35 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–1 °C (30 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode), 0–0 °C (32 °F) (altitude: up to 2,700 m (8,858 ft), Long Life Mode)

**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

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

**Optional Accessories**
- ET-DF510 Zoom Lens
- ET-DF511 Zoom Lens
- ET-DL504 Fixed-focus Lens
- ET-DF605 Fixed-focus Lens
- ET-MF130 Smoke Cut Filter
- ET-MF135 Smoke Cut Filter
- ET-MNDV10 Interface Board for DVI Input (Input x 2)
- ET-SR330 Smoke Cut Filter
- TY-TBN03G Interface Board for 3G-SDI Input x 2, Output x 2
- ET-UK20 Geometry Manager Pro Upgrade Kit
- ET-SWA100 EWS Early Warning Software
- ET-CUK10 Auto Screen Adjustment Upgrade Kit (PC)
- ET-YBF200G DIGITAL LINK Switcher
- ET-YF8100G DIGITAL LINK Interface Box

---

1. When Standby Mode is set to Eco, network functions such as power on LAN will not operate. Additionally, only certain commands can be received for external controlling with the serial terminal. 2. Refresh rate varies depending on vertical scanning frequency. 3. With less than 0.5% nonuniformity of output. 4. With lens other than ET-D75LE7. 5. With lens other than ET-D75LE7 and 4K signals. 6. Measured consumption in Standard, Dynamic Contrast Mode: 2, Image Mode: Standard. 7. Measured consumption in Standard, Dynamic Contrast Mode: 2, Image Mode: Standard. 8. Measurement, measuring conditions, and method of calculation all comply with ISO/IEC 21118:2012 international standards. Value is averaged of all products when shipped. 9. Geometric Adjustment and Upgrade Kit functions are not supported with simultaneous video signal input. 10. Only supported with clock frequency of 27 MHz. 11. With lens other than ET-D75LE7. 12. With lens other than ET-D75LE7 and 4K signals. 13. Measured consumption in Standard, Dynamic Contrast Mode: 2, Image Mode: Standard. 14. Measured consumption in Standard, Dynamic Contrast Mode: 2, Image Mode: Standard.