

# 10 000 lumens-class laser projector designed for long-lasting stable brightness in events and staging

PT-RQ13

Designed for long-lasting stable brightness in events and staging. Laser light source, 3-chip DLP, 10 000 lumens, 4K+ resolution projector.



## KEY FEATURES

- Laser 3-chip DLP, 10000 lumens, 4K+
- 5K pixel performance with a quad pixel drive system on a WQXGA chipset
- 240Hz high frame rate for superb and sharp motion pictures
- Lamp-free laser projection and dust resistant liquid cooling system with 20000 hours of free maintenance
- 20,000:1 contrast ratio

- Quad Pixel Drive produces industry's first beyond 4K screen resolution
- Real Motion Processor combines Frame-Creation and 240 Hz High-Speed Processing for fluid motion reproduction
- Impressive 10,000 lm of brightness
- Dynamic Contrast achieves 20,000:1<sup>1</sup> contrast ratio by controlling laser light
- Next-generation Detail Clarity Processor gives natural texture to the finest details
- System Daylight View 3 for enhanced color perception in bright rooms and mapping applications
- DICOM Simulation mode for medical presentations and training\*2

- Rec. 709 Mode reproduces colors accurately for HDTV projection

## SPECIFICATIONS

<b>Brightness</b>	10,000 lumens
<b>Lamp</b>	3-Chip DLP Laser
<b>Resolution</b>	5,120 x 3,200 pixels (Quad Pixel Drive: ON)
<b>Power Supply</b>	AC 100-240 V, 50/60 Hz (Note: Brightness may decrease depending on power conditions)
<b>Power Consumption</b>	1,270 W (0.3 W with STANDBY MODE set to ECO. 4 W with STANDBY MODE set to NORMAL.), Average power consumption NORMAL: 913W ECO: 782W LONG LIFE1: 531-732W LONG LIFE 2: 477-702W LONG LIFE 3: 423-665W *Operating Temperature: 25 °C (77 °F), Altitude: 700m (22 ft 12 in), ICE627087: 2008 Broadcast contents, Picture mode: Dynamic, Dynamic Contrast3
<b>DLP™ Chip   Panel Size</b>	22.9 mm (0.9 inches) diagonal (16:10 aspect ratio)
<b>DLP™ Chip   Display Method</b>	DLP™ chip x 3 (R, G, B), DLP™ projection system
<b>DLP™ Chip   Pixels</b>	4,096,000 (2,560 x 1,600) x 3, total of 12,288,000 pixels 49,152,000 (12,288,000 x 4) pixels when Quad Pixel Drive set to ON
<b>Refresh Rate</b>	240 Hz
<b>Lens</b>	Optional powered zoom/focus lenses
<b>Light Source</b>	Laser Diode (Laser class: Class 1)*Class 3R for North America. Luminance life for set: 20,000 hours at half luminance (normal)/ 24,000 hours at half luminance (Eco) * Temperature: 35 °C (95 °F), Altitude 700m (22ft 12in), Dust: 0.15mg/m <sup>3</sup> 43,800 hours at constant luminance (Longlife1) 61,320 hours at constant luminance (Longlife2) 87,600 hours at constant luminance (Longlife3)
<b>Screen Size</b>	1.78-25.4 m (70-1,000 inches) (16:10 aspect ratio) 1.78-15.24 m (70 - 600 inches) with the ET-D75LE8 (16:10 aspect ratio) 3.05-15.24 m (120 - 600 inches) with the ET-D75LE90 (16:10 aspect ratio)
<b>Center-to-Corner Uniformity</b>	90%
<b>Contrast</b>	20,000:1 (full on/full off, in Dynamic Contrast 3 mode)
<b>Scanning Frequency   SDI</b>	SD-SDI signal SMPTE ST 259 compliant (YCBCR 4:2:2 10-bit): 480i, 576i Single-link HD-SDI signal SMPTE ST 292 compliant (YPBPR 4:2:2 10-bit): 720/60p, 720/50p, 1035/60i, 1080/60i, 1080/50i, 1080/25p, 1080/25sF, 1080/24p, 1080/24sF, 1080/30p, 1080/30sF Single-link 3G-SDI signal SMPTE ST 424 compliant (YPBPR 4:2:2 10-bit): 1080/60p, 1080/50p, 2048 x 1080/48p, 2048 x 1080/50p, 2048 x 1080/60p, (RGB 4:4:4 12-bit/10-bit, YPBPR 4:4:4 12-bit/10-bit): 1080/60i, 1080/50i, 1080/25p, 1080/25sF, 1080/24p, 1080/24sF, 1080/30p, 1080/30sF, (RGB 4:4:4 12-bit/10-bit, YPBPR 4:4:4 12-bit/10-bit, X'Y'Z' 4:4:4 12-bit): 2048 x 1080/24p, 2048 x 1080/24sF, 2048 x 1080/25p, 2048 x 1080/25sF, 2048 x 1080/30p, 2048 x 1080/30sF Dual-link HD-SDI signal SMPTE ST 372 compliant (YPBPR 4:2:2 10-bit): 1080/50p, 1080/60p, (RGB 4:4:4 12-bit/10-bit, YPBPR 4:4:4 12-bit/10-bit): 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/25sF, 1080/30p, 1080/30sF, 2048 x 1080/24p, 2048 x 1080/24sF, 2048 x 1080/25p, 2048 x 1080/25sF, 2048 x 1080/30p, 2048 x 1080/30sF, (X' Y' Z' 4:4:4 12-bit*3): 2048 x 1080/24p, 2048 x 1080/24sF, 2048 x 1080/25p, 2048 x 1080/25sF, 2048 x 1080/30p, 2048 x 1080/30sF Dual-link 3G-SDI signal SMPTE ST 425 compliant (YPBPR 4:4:4 12-bit/10-bit): 1080/50p, 1080/60p, 2048 x 1080/48p, 2048 x 1080/50p, 2048 x 1080/60p, (RGB 4:4:4 12-bit/10-bit) : 1080/50p, 1080/60p, 2048 x 1080/48p, 2048 x 1080/50p, 2048 x 1080/60p, (YPBPR 4:2:2 10-bit): 3840 x 2160/24p, 3840 x 2160/25p, 3840 x 2160/30p, 4096 x 2160/24p, 4096 x 2160/25p, 4096 x 2160/30p Quad-link HD-SDI signal (YPBPR 4:2:2 10-bit) : 3840 x 2160/24sF, 3840 x 2160/24p, 3840 x 2160/25sF, 3840 x 2160/25p, 3840 x 2160/30sF, 3840 x 2160/30p, 4096 x 2160/24sF, 4096 x 2160/24p, 4096 x 2160/25sF, 4096 x 2160/25p, 4096 x 2160/30sF, 4096 x 2160/30p Quad-link 3G-SDI signal SMPTE ST 425 compliant (YPBPR 4:2:2 10-bit)☐ 3840 x 2160/60p, 3840 x 2160/50p, 4096 x 2160/60p, 4096 x 2160/50p, (YPBPR 4:2:2 12-bit, YPBPR 4:4:4 10-bit/12-bit, RGB 10-bit/12-bit) 3840 x 2160/24sF, 3840 x 2160/24p, 3840 x 2160/25sF, 3840 x 2160/25p, 3840 x 2160/30sF, 3840 x 2160/30p, 4096 x 2160/24sF, 4096 x 2160/24p, 4096 x 2160/25sF, 4096 x 2160/25p, 4096 x 2160/30sF, 4096 x 2160/30p SDI1/SDI2 Simultaneous inputs (2 x speed): 1080/60p, 1080/50p

	(1st FRAME: SDI1, 2nd FRAME: SDI2) SDI1/SDI2/SDI3/SDI4 Simultaneous inputs (4 x speed): 1080/60p, 1080/50p (1st FRAME: SDI1, 2nd FRAME: SDI2, 3rd FRAME: SDI3, 4th FRAME: SDI4) DIGITAL LINK: Movie signal resolution : 480i/576i - 4096 x 2160, Still picture signal resolution : 640 x 400 - 2560 x 1600 (non-interlace), Dot clock frequency: 25 MHz - 297 MHz
<b>Keystone Correction Range</b>	Vertical: $\pm 40^\circ$ ( $\pm 22^\circ$ with the ET-D75LE50, $\pm 28^\circ$ with the ET-D75LE6, $+5^\circ$ with the ET-D75LE90), horizontal: $\pm 15^\circ$ ( $0^\circ$ with the ET-D75LE90)
<b>Optical Axis Shift   Vertical</b>	$\pm 59\%$ ( $\pm 44\%$ with the ET-D75LE6), (+74-84% with the ET-D75LE90), from center of screen, powered
<b>Optical Axis Shift   Horizontal</b>	$\pm 29\%$ ( $\pm 19\%$ with the ET-D75LE6), (-12-16% with the ET-D75LE90), from center of screen, powered NOTE: Optical axis shift function cannot be operated when used with the ET-D75LE50.
<b>Installation</b>	Ceiling/floor, front/rear
<b>Terminals   SDI In 1</b>	BNC x 1, 3G/HD/SD-SDI input, Dual-link input (LINK-A) , Quad-link input SD-SDI signal SMPTE ST 259 compliant HD-SDI signal SMPTE ST 292 compliant 3G-SDI signal SMPTE ST 424 compliant Dual-link HD-SDI signal SMPTE ST 372 compliant Dual-link 3G-SDI signal SMPTE ST 425 compliant Quad-link HD-SDI signal Quad-link 3G-SDI signal SMPTE ST 425 compliant
<b>Terminals   SDI In 2</b>	BNC x 1, 3G/HD/SD-SDI input, Dual-link input (LINK-B) , Quad-link input SD-SDI signal SMPTE ST 259 compliant HD-SDI signal SMPTE ST 292 compliant 3G-SDI signal SMPTE ST 424 compliant Dual-link HD-SDI signal SMPTE ST 372 compliant Dual-link 3G-SDI signal SMPTE ST 425 compliant Quad-link HD-SDI signal Quad-link 3G-SDI signal SMPTE ST 425 compliant
<b>Terminals   SDI In 3</b>	BNC x 1, 3G/HD/SD-SDI input, Dual-link input (LINK-A) , Quad-link input SD-SDI signal SMPTE ST 259 compliant HD-SDI signal SMPTE ST 292 compliant 3G-SDI signal SMPTE ST 424 compliant Dual-link HD-SDI signal SMPTE ST 372 compliant Dual-link 3G-SDI signal SMPTE ST 425 compliant Quad-link HD-SDI signal Quad-link 3G-SDI signal SMPTE ST 425 compliant
<b>Terminals   SDI In 4</b>	BNC x 1, 3G/HD/SD-SDI input, Dual-link input (LINK-B) , Quad-link input SD-SDI signal SMPTE ST 259 compliant HD-SDI signal SMPTE ST 292 compliant 3G-SDI signal SMPTE ST 424 compliant Dual-link HD-SDI signal SMPTE ST 372 compliant Dual-link 3G-SDI signal SMPTE ST 425 compliant Quad-link HD-SDI signal Quad-link 3G-SDI signal SMPTE ST 425 compliant
<b>Terminals   Frame Sync In/Out</b>	BNC x 1, (frame-synchronizing timing signal)
<b>Terminals   Frame Sync Out</b>	BNC x 1, (frame-synchronizing timing signal)
<b>Terminals   Serial In</b>	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)
<b>Terminals   Serial Out</b>	D-sub 9-pin (male) x 1 for link control
<b>Terminals   Remoter 1 In/Out</b>	M3 x 1 for link control (for wired remote control)
<b>Terminals   Remote 2 In</b>	D-sub 9-pin (female) x 1 for external control (parallel)
<b>Terminals   DIGITAL LINK/LAN</b>	RJ-45 x 1 (for network, DIGITAL LINK connection (HDBaseT™ compatible), 100Base-TX, compatible with Art-Net, PLink™ (class 1), Deep Color, HDCP2.2)
<b>Terminals   Expansion Slot</b>	x 2 (SLOT 1, SLOT 2), SLOT NX (Compatible with Optional Board)
<b>Power Cord Length</b>	3.0 m (9 ft 10 in)
<b>Cabinet Materials</b>	Molded plastic

<b>Dimensions (W x H x D)</b>	578 x 323.5 x 740 mm (22-3/4 x 12-23/32 x 29-1/8 inches) (with projections) 578 x 270 x 725 mm (22-3/4 x 10-5/8 x 28-17/32 inches) (without lens, feet or projections)
<b>Weight</b>	49 kg (108.0 lbs) (without lens)
<b>Operating Noise</b>	46 dB
<b>Operating Temperature</b>	<p>Ambient operating temperature: 0°C to 45°C (32 °F to 113 °F).            Ambient operating humidity: 10% - 80% (no condensation)            When the operating mode is set to "Normal", the operating temperature range is 0°C to 45°C (32 °F to 113 °F), and at altitudes from 1,400 m to 4,200 m (4,593 ft to 13,780 ft) it is 0°C to 40°C (32 °F to 104 °F).            When the operating mode is set to "Eco", or "Long Life 1/2/3", the operating temperature range is 0°C to 40°C (32 °F to 104 °F).            When the projector is used with a Smoke Cut Filter, the operating temperature range is 0°C to 35°C (32 °F to 95 °F).            Furthermore, when the operating mode is set to "Eco", or "Long Life 1/2/3", the projector cannot be used at altitudes above 2700 m (8,858 ft). In addition, when the projector is used with a Smoke Cut Filter, it cannot be used at altitudes above 1,400 m (4,593 ft). The brightness of the light source may drop depending on the operating environment and the operating temperature range in order to protect the projector.</p>
<b>Applicable Software</b>	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro (ET-UK20 series Upgrade Kit and ET-CUK10 series Auto Screen Adjustment Kit)
<b>Technology</b>	3-chip DLP Laser

URL: <https://business.panasonic.co.uk/visual-system/pt-rq13-0>

## CONTACT

Web: <https://business.panasonic.co.uk/visual-system/contact-us>