# Panasonic



PT-RQ13K/RZ12K Series

3-Chip DLP™ Projectors

Available from Autumn 2015 (RQ13K) Available from Summer 2015 (RZ12K/RS11K)

## Introducing the World's Lightest 3-Chip DLP™ Laser Projector with 4K<sup>+</sup> Resolution



#### PT-RQ13K / RZ12K Series

	PT-RQ13K	PT-RZ12K	PT-RS11K
Brightness	10,000 lm	12,000 lm	12,000 lm
Resolution	Beyond 4K	WUXGA	SXGA+
Contrast	20,000:1	20,000:1	20,000:1

### Immersive 4K<sup>+</sup> Image Quality

- Quad Pixel Drive Produces Industry's First Beyond 4K Screen Resolution (RQ13K Only)
- Real Motion Processor Combines Frame-Creation and High-Speed Processing for Fluid Motion Reproduction (Maximum Processing Rate: 240 Hz for RQ13K, 120 Hz for RZ12K/RS11K)
- Impressive 10,000 Im Brightness (RZ12K/RS11K: 12,000 Im)
- World's Lightest 3-Chip DLP<sup>™</sup> Projector at 43 kg (94.8 lbs)
- Dynamic Contrast Achieves 20,000:1\*1 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

#### Lower Running Costs, Greater Reliability

- Extremely Long 20,000-hour Light-Source Life\*3
- New Liquid Cooling System Enables Quiet Operation
- Stable Operation in Ambient Temperatures of Up to 45 °C (113 °F)\*4
- Consistent Color Reproduction With No Image Deterioration Over Time
- Laser Light-Source Engine Allows 24/7 Operation
- Dust-Resistant Optical Block
- Wide Powered Lens-Shift Range

#### System and Installation Flexibility

- Vertical, Horizontal and Tilting 360-Degree Projection Enabled by Laser Light Source
- Multi-Screen Support Seamlessly Joins Screens with Edge Blending, Color Matching, and Multi-Screen Processing

- Geometric Adjustment for Projection on Curved or Spherical Surfaces
- Compatible with Optional Upgrade Kit (ET-UK20) and Auto Screen Adjustment (ET-CUK10)\*5 Featuring Geometry Manager Pro
- Multi-Unit Brightness Control
- Compatible with Panasonic Multi Projector Monitoring & Control Software
- Single-Cable DIGITAL LINK Connection Transmits Video, Audio, and Control Signals for Up to 100 m
- Compatible with Art-Net DMX Lighting Control Protocol
- Abundant Terminals Including 3G-SDI, DIGITAL LINK, DVI-D, and HDMI (RQ13K Requires Optional Terminal Boards for DVI-D and HDMI)
- Shares Common Lenses (Including Ultra-Short Throw ET-D75LE90) with Panasonic 3-Chip DLP<sup>™</sup> Projector Range

<sup>\*1</sup> Full on/off, with Dynamic Contrast set to "3". \*2 This product is not a medical instrument. Do not use for actual medical diagnosis. \*3 Usage environment may affect lifespan of light source. \*4 Light output may be decreased to protect the projector depending on environmental conditions. \*5 Available worldwide except in the United States.

#### R Е Μ Ν А R As of February 2015

#### Specifications (Tentative)

Power supply	1		PT-RQ13K AC 200–240 V, 50/60 Hz	PT-RZ12K	PT-RS11K		
Power consu			TBD				
DLP™ chip	Panel si		22.9 mm (0.9 inches) diagonal (16:10 aspect ratio)	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 <sup>™</sup> chip × 3, DLP <sup>™</sup> projection system				
	Pixels		49,152,000 (12,288,000 x 4) pixels when Quad Pixel Drive set to ON, 12,288,000 (2560 x 1600 x 3) pixels when Quad Pixel Drive set to OFF	6,912,000 (1920 x 1200 x 3) pixels	4,410,000 (1400 x 1050 x 3) pixels		
Refresh rate			240 Hz*1	120 Hz*1			
ens			Optional (no lens included with this model), powered zoom, powered focu	US			
Light source			Dual-laser bank system, 50 % of brightness at 20,000 hours				
Screen size (			1.78-25.4 m (70-1000 in) with 16:10 aspect ratio.	1.78-25.4 m (70-1000 in) with 16:10 aspect ratio	1.78-25.4 m (70-1000 in) with 4:3 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-D75LE90, 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-D75LE90, 16:10 aspect ratio	1.78-15.24 m (70-600 in) with the ET-D75LE8, 4:3 aspect ratio		
Brightness*2			10,000 lm (AC 200-240 V)	12,000 lm (AC 200-240 V)			
Center-to-co	rner unifo	mity* <sup>2</sup>	90 %				
Contrast*2		,	20,000:1 (Full On/Full Off, with Dynamic Contrast On)				
Resolution			5120 x 2880 pixels (Quad Pixel Drive: ON,	1920 x 1200 pixels (with RGB signal input)	1400 x 1050 pixels (with RGB signal input)		
nooonation			with 3840 x 2160 RGB signal input)	····· ····· ····· ·····	·····		
Scanning	SDI	3G-SDI	SMPTE ST 424 compliant. [BGB 4:4:4 12-bit/10-bit] 1080/60i. 1080/50i.	1080/25p, 1080/24p, 1080/24sF, 1080/30p, [YPBPR 4:2:2 10-bit] 1080/6	60n. 1080/50n		
frequency	05.	HD-SDI	SMPTE ST 292 compliant, [YPBPR 4:2:2 10-bit] 720/60p, 720/50p, 1035/		sep, 1000,00p		
		SD-SDI	m Tc 51 22 complant, TC 54 42: 21 0-bit 400, 576				
		Dual link HD-SDI	MPTE ST 372 compliant, [RGB 4:4:4 12-bit/10-bit] 1080/60i, 1080/50i, 1080/25p, 1080/24p, 1080/24F, 1080/30p, [X'Y'Z' 4:4:4 12-bit] 2048 x 1080/24p, 2048 x 1080/24sF				
		Dual link 3G-SDI	SMPTE ST 425 compliant, [YPBPR 4:4:4 12-bit/10-bit] 1080/60p, 1080/ [RGB 4:4:4 12-bit/10-bit] 1080/60p, 1080/50p, 2048 x 1080/60p, 204	/50p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p, 8 x 1080/50p, 2048 x 1080/48p			
		Quad link HD-SDI	SMPTE ST 425 compliant		_		
		Quad link 3G-SDI	SMPTE ST 425 compliant		_		
	HDMI/D			Compatible with HDCP_480i*3_576i*3_480p_576p_720/60p_720/50	p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p,		
	nom/o	110	—	1080/60p, 1080/50p, VGA (640 x 480)–WUXGA* <sup>4</sup> (1920 x 1200) (compatible with non-interlaced signals only), dot clock: 25–162 MHz			
	RGB		_	H: 15–100 kHz, fV: 24–120 Hz, dot clock: 20–162 MHz			
	YPBPR (	(CBCB)		fH: 15.75 kHz, fV: 60 Hz [480i (525i)], fH: 15.63 kHz, fV: 50 Hz [576i	(625i)], fH: 31.50 kHz, fV: 60 Hz [480p (525p)], fH: 31.25 kHz, fV: 50 Hz		
	II DI N (	robon)	_	[576p (625p)], fH: 45.00 kHz, fV: 60 Hz [720 (750)/60p], fH: 37.50 kHz, fV: 50 Hz [720 (750)/50p], fH: 33.75 kHz, fV: 60 Hz [1035 (1125)/60			
				fH: 33.75 kHz, fV: 60 Hz [1080 (1125)/60i], fH: 28.13 kHz, fV: 50 Hz [	1080 (1125)/50i], fH: 28.13 kHz, fV: 25 Hz [1080 (1125)/25p], fH: 27.0		
				fV: 24 Hz [1080 (1125)/24p], fH: 27.00 kHz, fV: 48 Hz [1080 (1125)/2			
				fV: 60 Hz [1080 (1125)/60p], fH: 56.25 kHz, fV: 50 Hz [1080 (1125)/5			
	Video/Y		—	fH: 15.75 kHz/15.63 kHz, fV: 60 Hz/50 Hz [NTSC/NTSC4.43/PAL/PAL6			
Optical axis shift* <sup>5</sup>	Vertical	(from center of screen)	±68 % (±56 % with the ET-D75LE6, +74 % - +84 %	±55 % (±44 % with the ET-D75LE6, +73 % - +78 %	±50 % (±40 % with the ET-D75LE6, +73 % [fixed]		
	Horizontal (from center of screen)		with the ET-D75LE90) (powered) ±29 % (±19 % with the ET-D75LE6, +16 %12 %	with the ET-D75LE90) (powered) ±20 % (±15 % with the ET-D75LE6, ±6 %	with the ET-D75LE90) (powered) ±30 % (±20 % with the ET-D75LE6, fixed with the ET-D75LE90)		
	110112011	tal (ITUITI CEITIEL OF SCIERII)	with the ET-D75LE90) (powered)	with the ET-D75LE90) (powered)	(powered)		
Keystone cor	rection ra	nae	Vertical ±40 °*6, horizontal ±15 °/Vertical ±45 °, horizontal ±40 ° (with		$a$ , $\dots$ , $b$		
Installation		<b>5</b> .	Horizontal/vertical, free 360-degree installation				
Terminals	SDI 1 IN		BNC × 1: 3G/HD/SD-SDI input, Dual-link input (LINK-A),	BNC × 1: 3G/HD/SD-SDI input, Dual-link input (LINK-A)			
			Quad-link input (Sub Image)				
	SDI 2 IN		BNC × 1: 3G/HD/SD-SDI input, Dual-link input (LINK-B), Quad-link input (Sub Image 2)	BNC x 1: 3G/HD/SD-SDI input, Dual-link input (LINK-B)			
	SDI 3 IN		BNC × 1: 3G/HD/SD-SDI input, Dual-link input (LINK-A),				
			Quad-link input (Sub Image 3)	—			
	SDI 4 IN		BNC × 1: 3G/HD/SD-SDI input, Dual-link input (LINK-B),				
			Quad-link input (Sub Image 4)	—			
	HDMI IN		<ul> <li>(Optional board)</li> </ul>	HDMI 19-pin × 1 (Deep Color, compatible with HDCP)			
	DVI-D IN	1	<ul> <li>— (Optional board)</li> </ul>	DVI-D 24-pin × 1 (DVI 1.0 compliant, compatible with HDCP, compatib	le with single link only)		
	RGB 1 I	N	-	RGB × 1 (BNC × 5): RGB/Y•PB•PR/Y•C/VIDEO			
	RGB 2 II	N	—	D-sub HD 15-pin (female) × 1: RGB/Y•PB•PR			
	3D Syno	: IN/OUT	—	BNC × 1: 3D timing signal			
	3D Syno		_	BNC × 1: 3D timing signal			
		Sync IN/OUT	BNC × 1: frame-synchronizing timing signal				
		Sync OUT	BNC × 1: frame-synchronizing timing signal	_			
	SERIAL						
	SERIAL		>sub 9-pin (female) × 1 for external control (RS-232C compliant)				
	REMOTI		D-sub-9-pin (male) ×1 for link control				
			M3 × 1 for wired remote control, link control				
	REMOT		M3 × 1 for wired remote control, link control				
	REMOT		D-sub 9-pin (female) × 1 for external control (parallel)				
		ITAL LINK	RJ-45 x 1 for network, DIGITAL LINK connection, 100Base-TX, compatible with Art-Net, PJLink™ (class 1), Deep Color, HDCP				
	Expansi	on Slot	x 2 (SLOT 1, SLOT 2)		-		
Cabinet mate	erials		Molded plastic				
Dimensions (		))		truding parts (TBD) $578 \times 270 \times 710$ mm (22 $^{3}/_{4}$ × 10 $^{5}/_{8}$ × 27 $^{15}/_{16}$	5") without optional lens, legs, or protruding parts (TBD)		
Weight*8			Approximately 46 kg (101.4 lbs.) (optional lens not included) (TBD)	Approximately 43 kg (94.8 lbs.) (optional lens not included) (TBD)			
Operation no	ise*2		TBD	(TDD)			
Operating en			Operating temperature: 0-45 °C (32-113 °F)*9, operating humidity: 10-	- 80 % (no condensation)			
				Geometry Manager Pro (ET-UK20 Upgrade Kit and ET-CUK10*10 Auto Scree	n Adiustment (/ii)		
Applicable sc	oftware		Logo Transfer Software, Multi Projector Monitoring & Control Software, G				

<sup>11</sup> Refresh rate varies depending on scanning frequency. <sup>12</sup> Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. <sup>\*3</sup> Only compatible with dot clock frequency of 27 MHz (pixel repetition signal). <sup>\*4</sup> WUXGA resolution is supported on the tr-D75LE50. <sup>\*</sup>6 Vertical ±22 <sup>\*</sup> with ET-D75LE50. <sup>\*</sup>C Vertical ±20 <sup>\*</sup> with ET-D75LE50. <sup>\*</sup>C Vertical ±40 <sup>\*</sup> with ET-D75LE50. <sup>\*</sup>C Vertical ±20 <sup>\*</sup> with ET-D75LE50. <sup>\*</sup>C Vertical ±40 <sup>\*</sup>

#### **Optional Accessories**

- Fixed-Focus Lens ET-D75LE50 / ET-D75LE90 Zoom Lens ET-D75LE6 / ET-D75LE10 ET-D75LE20 / ET-D75LE30 ET-D75LE40 / ET-D75LE8
- Geometry Manager Pro Software Upgrade Kit
- ET-UK20 Auto Screen Adjustment Upgrade Kit ET-CUK10 (except in the United States)
- Early Warning Software ET-SWA100
- Digital Interface Switcher/Box ET-YFB200G/100G
- High-Ceiling Mount Bracket ET-PKD520H
  - Projector Frame
- Low-Ceiling Mount Bracket ET-PKD520S Replacement Filter ET-EMF330

  - Smoke Cut Filter (Replacement) ET-SFD330 (ET-SFR330)
  - DVI-D Input Board ET-MDNDV10
- HDMI Input Board ET-MDNHM10 SG-SDI Input Board
- TY-TBN03G

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Bracket Assembly

ET-PKD520B

FT-PED510

For more information about Panasonic projectors, please visit: Projector Global Website – panasonic.net/avc/projector Facebook – www.facebook.com/panasonicprojector YouTube - www.youtube.com/user/PanasonicProjector

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