



1-Chip DLP™ Projectors

Available from Summer 2016 Tentative

# 10,000-lumen-class Goes Ultra-Compact with New 1-Chip DLP<sup>™</sup> Laser Phosphor Projectors



	PT-RZ97	0 Series	
	PT-RZ970	PT-RW930	PT-RX110
Resolution	WUXGA	WXGA	XGA
Brightness	10,000 lm (Center) 9,400 lm		10,400 lm (Center) 10,000 lm
Contrast	10,000:1		

## High Picture Quality and Long-Lasting Reliability

- Combines 1-Chip DLP<sup>™</sup> Imaging with Proprietary SOLID SHINE Laser Technology for Immersive Picture Quality at 10,000 Im\*1
- Dynamic Light Control for 10,000:1\*2 Contrast
- Accurate White Balance and Color Reproduction in Any Projection Mode
- Long-Lasting Picture Quality
- Detail Clarity Processor 3 Clarifies the Finest Details
- Daylight View 2 Ensures Sharp and Vivid Images in Bright Environments

### Consistently Stable and Reliable Performance

- Dust-Resistant Structure with Airtight Optical Block
- Dual-Drive Laser Optical Engine Ensures Reliable 24/7 Operation with Light Source Failover Protection
- Up to 20,000 hours of Continuous Maintenance-free Operation\*<sup>3</sup>
- Selectable Operational Modes Extend Service Life to Up to 10 Years\*4
- Efficient Cooling System for Stable Operation in Ambient Temperatures of Up to 45 °C (113 °F)\*5
- High-Speed Backup Input Switching

### Versatile System and Installation Flexibility

- Shares Optional Lenses with Panasonic 1-Chip DLP<sup>™</sup> Projector Family
- Compact Body and Free 360-degree Installation (Vertical and Horizontal)
- DIGITAL LINK Supports Transmission of Uncompressed Full HD Video, Audio, and Control Commands Through a Single CAT 5e or Higher STP Cable for Distances of Up to 150 m (492 ft)\*6
- Geometric Adjustment for Specially Shaped Screens
- Geometry Manager Pro\*7 and Optional Upgrade Kit (ET-UK20 Series)\*8
- Auto Screen Adjustment Upgrade Kit (ET-CUK10 Series)\*9

\*1 PT-R2970 and PT-RW930 features brightness of 10,000 lm (Center), PT-RX110 features 10,400 lm (Center). \*2 With Dynamic Contrast Mode set to 3. \*3 At 20,000 hours, projector brightness will have decreased to approximately half of its original level (Dynamic Contrast Mode: 3, Image Mode: Dynamic). Panasonic recommends cleaning or checkup at point of purchase after every 20,000-hour period (approximately). Light source lifetime may be reduced depending on environmental conditions. Replacement of parts other than the light source may be required in a shorter period. \*5 Light output may be reduced to protect the projector depending on environmental conditions. \*6 150 m (492 ft) transmission available in Long Reach Mode with the optional ET-YFB200G DIGITAL LINK Switcher only. Signal resolution is limited to 1080/60p (dot-clock frequency 148.5 MHz) and below. \*7 Geometry Manager Pro software is available only with PT-R2970. \*8 ET-UK20 Series is available only with PT-R2970. \*9 ET-CUK10 Series is available only with PT-R2970. \*8 ET-UK20 Series is available only with PT-R2970. \*9 ET-CUK10 Series is available only with PT-R2970.

### Specifications (Tentative)

Model		PT-RZ970	PT-RW930	PT-RX110		
Power supply		AC 100-240 V, 50/60 Hz				
Power consur	nption	TBD				
DLP™ chip	Panel size	17.0 mm (0.67 in) diagonal (16:10 aspect ratio)	16.5 mm (0.65 in) diagonal (16:10 aspect ratio)	17.8 mm (0.7 in) diagonal (4:3 aspect ratio)		
	Display method	DLP <sup>™</sup> chip × 1, DLP <sup>™</sup> projection system		·		
	Pixels	2,304,000 (1920 x 1200) pixels	1,024,000 (1280 x 800) pixels	786,432 (1024 x 768) pixels		
Lens		Powered zoom (throw ratio 1.7–2.4:1), powered focus F 1.7–1.9, f 25.6–35.7 mm	Powered zoom (throw ratio 1.8–2.5:1), powered focus F 1.7–1.9, f 25.6–35.7 mm			
light source		Laser diodes laser Class 1 (Class 3R for US models), light source life*1: 2	0,000 hours (Normal Mode) / 24,000 hours (Eco Mode). At this time the	brightness will have decreased to approximately half of its original level.		
Screen size (diagonal)		1.27-15.24 m (50-600 in), 1.27-5.08 m (50-200 in) with ET-DLE055, 2.54-8.89 m (100-350 in) with ET-DLE030, 16:10 aspect ratio (PT-RZ970/RW930), 4:3 aspect ratio (PT-RX110)				
Brightness		10,000 lm (Center)/9,400 lm*1 10,400 lm (Center)/10,000 lm*1				
Center-to-cor	ner uniformity* <sup>1</sup>	90 %				
Contrast*1		10,000:1 (Full On/Full Off, Dynamic Contrast Mode: ON)				
Resolution		1920 x 1200 pixels	1280 x 800 pixels	1024 x 768 pixels		
Scanning	SD-SDI	SMPTE ST 259 compliant, [YCsCR 4:2:2 10-bit] 480i (525), 576i (625)				
frequenčy	HD-SDI	SMPTE ST 292 compliant, I/PEPR 4:2:2 10-bit] 720 (750)/500, 720 (750)/500, 1080 (1125)/50i, 1080 (1125)/250, 1080 (1125)/24p, 1080 (1125)/24F,				
	3G-SDI	SMPTE ST 424 compliant, [R6B 4:4:4 12-bit/10-bit] 1080(1125)/600, 1080(1125)/500, 1080(1125)/250, 1080(1125)/246, 1080(1125)/2				
	HDMI/DVI-D/DIGITAL LINK	4801 (525) <sup>1/2</sup> , 5761 (625) <sup>1/2</sup> , 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/250i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24F, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p, VGA (640 x 480)-WUXGA'3 (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: 20-162 MHz				
	YPbPr (YCbCr)	H: 15.75 kHz, N: 60 Hz [480i (525i)], H: 15.63 kHz, N: 50 Hz [576i (625i)], H: 45.00 KHz, N: 60 Hz [720 (750)/60p], H: 33.75 kHz, N: 60 Hz [1035 (1125)/60i], H: 28.13 kHz, N: 50 Hz [1080 (1125)/50i], H: 27.00 KHz, N: 41 [1080 (1125)/24p], H: 33.75 kHz, N: 50 Hz [576i (625i)], H: 15.63 KHz, N: 50 Hz [1010 (1125)/52b], H: 31.50 KHz, N: 60 Hz [400 (1252)/54b], H: 31.50 KHz, N: 60 Hz [400 (1252)/54b], H: 31.50 KHz, N: 60 Hz [400 (125)/54b], H: 610 KZ (400 (125)/54b], H:				
	Video/YC	fH: 15.75 kHz, fV: 60 Hz (NTSC/NTSC4.43/PAL-M/PAL60), fH: 15.63 kHz, fV: 50 Hz (PAL/PAL-N/SECAM)				
	Vertical (from center of screen)	+50 %, -16 % (powered)	+60 %, -16 % (powered)	+50 %, -16 % (powered)		
axis shift* <sup>4</sup>	Horizontal (from center of screen)	+30 %, -10 % (+28 %, -10 % with ET-DLE085) (powered)				
Keystone correction range		Vertical: ±40 ° (±22 ° with ET-DLE085/DLE055, +5 ° with ET-DLE030), horizontal: ±15 ° (Cannot be operated with ET-DLE030)				
Keystone correction range with optional Upgrade Kit ET-UK20		Vertical: ±45 °(±40 ° with ET-DLE150/DLE250/supplied lens, ±22 ° with ET-DLE085/DLE055), horizontal: ±40 ° (±15 ° with ET-DLE085/DLE055), Up to a total of ±55 ° during simultaneous horizontal and vertical correction.		-		
Installation		Ceiling/floor, front/rear, free 360-degree installation				
Terminals	SDI IN	BNC x 1: 3G/HD/SD-SDI input (PT-R2970 only)				
	HDMI IN	HDMI 19-pin x 1 (Deep Color, compatible with HDCP)				
	DVI-D IN	DVI-D 24-pin × 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only)				
	RGB 1 IN	RGB × 1 (BNC × 5): RGB/YPBPR/VC6CR/YC/VIDEO				
	RGB 2 IN	D-sub HD 15-pin (female) × 1: RGB/YPBPR/YC8CR				
	SERIAL IN	D-sub 9-pin (female) × 1 for external control (RS-232C compliant)				
	SERIAL OUT	D-sub 9-pin (male) x 1 for link control				
	REMOTE 1 IN	M3 × 1 for wired remote control				
	REMOTE 1 OUT	M3 x 1 for link control (for wired remote 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™				
Cabinet materials		Molded plastic				
Dimensions (N	$W \times H \times D$ )	498 x 200* <sup>5</sup> x 581 mm (19 <sup>19</sup> / <sub>32</sub> " x 7 <sup>7</sup> / <sub>8</sub> "* <sup>5</sup> x 22 <sup>7</sup> / <sub>8</sub> ") (with supplied len: 498 x 200* <sup>5</sup> x 538 mm (19 <sup>19</sup> / <sub>32</sub> " x 7 <sup>7</sup> / <sub>8</sub> "* <sup>5</sup> x 21 <sup>3</sup> / <sub>16</sub> ") (without lens)	s)			
Weiaht* <sup>6</sup>		TBD				
weight	se*1	41 dB				
		Operating temperature: 0-45 °C (32-113 °F) <sup>-7</sup> , operating humidity: 10-80 % (no condensation)				
Operation nois		Operating temperature: 0-45 °C (32-113 °F)*7, operating humidity: 10-	- 80 % (no condensation)			
Operation nois Operating env Applicable sol	rironment	Operating temperature: 0–45 °C (32–113 °F)*7, operating humidity: 10– Logo Transfer Software, Multi Monitoring & Control Software, Early Warni		2UK10* <sup>10</sup> Auto Screen Adjustment Kit)		

1<sup>11</sup> Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. \*2 Only compatible with dot clock frequency of 27 MHz (bite repetition signal). \*3 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking). \*4 Optical axis shift is not supported on the ET-DLE055, and the optical axis is fixed with the ET-DLE030. \*5 With legs at shortest position. \*6 Average value. May differ depending on the actual unit. \*7 When used in locations from 0 m to 4,200 m (0 ft to 13,780 ff) above sea level in Normal mode, and from 0 m to 2,700 m (0 ft to 8,858 ft) above sea level in other modes. If the ambient temperature exceeds 35 °C (36 °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 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 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 0 m to 2,700 m (0 ft to 8,858 ft) above sea level, or fit exceeds 25 °C (77 °F) when used in locations from 0 m to 2,700 m (0 ft to 8,858 ft) above sea level, or fit exceeds 25 °C (77 °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 0 m to 4,200 m (0 ft to 13,780 ft) above sea level, or fit exceeds 25 °C (75 °F) when used in locations from 0 m to 2,700 m (0 ft to 8,858 ft) above sea level, or fit exceeds 25 °C (77 °F) when used in locations from 0 m to 2,700 m (0 ft to 8,858 ft) above sea level in optications from 0 m to 4,200 m (0 ft to 13,780 ft) above sea level, the light output may be reduced to protect the projector. \*8 Geometry Manager Pro software is available only with PT-R2970. \*9 ET-UK20 Series is available only with PT-R2970. \*9 ET-UK20 Series is available only with PT-R2970. \*9 ET-UK20 Series is available only with PT-R297

#### Optional Accessories

Fixed-Focus Lens ET-DLE030

Zoom Lens

ET-DLE085 / ET-DLE150 / ET-DLE250 / ET-DLE350 / ET-DLE450 / ET-DLE055

- Geometry Manager Pro Software Upgrade Kit (PT-RZ970 Only) ET-UK20 Series
- Auto Screen Adjustment Upgrade Kit (PT-RZ970 Only) ET-CUK10 Series (except in the United States)

Early Warning Software ET-SWA100 Series

- DIGITAL LINK Switcher
- ET-YFB200G
- Digital Interface Box ET-YEB100G
- Ceiling Mount Bracket ET-PKD130H (6-axis, for high ceiling) ET-PKD120H (for high ceiling) ET-PKD120S (for low ceiling)

Projector Mount Bracket FT-PKD130B

# Panasonic®

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations. DLP, DLP logo and DLP Medallion logo are trademarks or registered trademarks of Texas Instruments. HOMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HOMI Licensing LLC in the United States and other countries. The PJLink trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. All other trademarks are the property of their respective trademark owners. © 2016 Panasonic Corporation. All rights reserved.



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

All information included here is valid as of February 2016. PT-RZ970PRE1 Printed in Japan.