

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



PT-RZ970 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™ Imaging with Proprietary SOLID SHINE Laser Technology for Immersive Picture Quality at 10,000 lm\*<sup>1</sup>
- Dynamic Light Control for 10,000:1\*<sup>2</sup> 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\*<sup>4</sup>
- Efficient Cooling System for Stable Operation in Ambient Temperatures of Up to 45 °C (113 °F)\*<sup>5</sup>
- High-Speed Backup Input Switching

### Versatile System and Installation Flexibility

- Shares Optional Lenses with Panasonic 1-Chip DLP™ 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)\*<sup>6</sup>
- Geometric Adjustment for Specially Shaped Screens
- Geometry Manager Pro\*<sup>7</sup> and Optional Upgrade Kit (ET-UK20 Series)\*<sup>8</sup>
- Auto Screen Adjustment Upgrade Kit (ET-CUK10 Series)\*<sup>9</sup>

\*<sup>1</sup> PT-RZ970 and PT-RW930 features brightness of 10,000 lm (Center), PT-RX110 features 10,400 lm (Center). \*<sup>2</sup> With Dynamic Contrast Mode set to 3. \*<sup>3</sup> 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. \*<sup>4</sup> With Operating Mode set to Long Life 3, in which mode brightness is lowered to 1,900 lm. 24 hours/day x 365 days/year x 10 years = 87,600 hours. Replacement of parts other than the light source may be required in a shorter period. \*<sup>5</sup> Light output may be reduced to protect the projector depending on environmental conditions. \*<sup>6</sup> 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. \*<sup>7</sup> Geometry Manager Pro software is available only with PT-RZ970. \*<sup>8</sup> ET-UK20 Series is available only with PT-RZ970. \*<sup>9</sup> ET-CUK10 Series is available only with PT-RZ970. Available worldwide except the United States.

Specifications (Tentative)

Model	PT-RZ970	PT-RW930	PT-RX110	
Power supply	AC 100–240 V, 50/60 Hz			
Power consumption	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™ chip × 1, DLP™ projection system		
	Pixels	2,304,000 (1920 × 1200) pixels	1,024,000 (1280 × 800) pixels	786,432 (1024 × 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			
Light source	Laser diodes laser Class 1 (Class 3R for US models), light source life*1: 20,000 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-corner uniformity*1	90 %			
Contrast*1	10,000:1 (Full On/Full Off, Dynamic Contrast Mode: ON)			
Resolution	1920 × 1200 pixels	1280 × 800 pixels	1024 × 768 pixels	
Scanning frequency	SD-SDI	SMPTE ST 259 compliant, [YCbCr 4:2:2 10-bit] 480i (525i), 576i (625i)		
	HD-SDI	SMPTE ST 292 compliant, [YPbPr 4:2:2 10-bit] 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sf, 1080 (1125)/30p		
	3G-SDI	SMPTE ST 424 compliant, [RGB 4:4:4 12-bit/10-bit] 1080(1125)/60i, 1080(1125)/50i, 1080(1125)/25p, 1080(1125)/24p, 1080(1125)/24sf, 1080(1125)/30p, 1080(1125)/50p		
	HDMI/DVI-D/DIGITAL LINK	480i (525i)*2, 576i (625i)*2, 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sf, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p, VGA (640 × 480)–WUXGA*3 (1920 × 1200) (compatible with non-interfaced signals only), dot clock: 25–162 MHz		
	RGB	fh: 15–100 kHz, fv: 24–120 Hz, dot clock: 20–162 MHz		
	YPbPr (YCbCr)	fh: 15.75 kHz, fv: 60 Hz [480i (525i)], fh: 15.63 kHz, fv: 50 Hz [576i (625i)], fh: 45.00 kHz, fv: 60 Hz [720 (750)/60p], fh: 33.75 kHz, fv: 60 Hz [1035 (1125)/60i], fh: 28.13 kHz, fv: 50 Hz [1080 (1125)/50i], fh: 27.00 kHz, fv: 24 Hz [1080 (1125)/24p], fh: 33.75 kHz, fv: 30 Hz [1080 (1125)/30p], fh: 56.25 kHz, fv: 50 Hz [1080 (1125)/50p], fh: 31.50 kHz, fv: 60 Hz [480p (525p)], fh: 31.25 kHz, fv: 50 Hz [576p (625p)], fh: 37.50 kHz, fv: 50 Hz [720 (750)/50p], fh: 33.75 kHz, fv: 60 Hz [1080 (1125)/60i], fh: 28.13 kHz, fv: 25 Hz [1080 (1125)/25p], fh: 27.00 kHz, fv: 48 Hz [1080 (1125)/24sf], fh: 67.50 kHz, fv: 60 Hz [1080 (1125)/60p]		
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]			
Optical axis shift*4	Vertical (from center of screen)	-50 %, -16 % (powered)	+50 %, -16 % (powered)	
	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 × 1: 3G/HD/SD-SDI input (PT-RZ970 only)		
	HDMI IN	HDMI 19-pin × 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/YCbCr/YC/VIDEO		
	RGB 2 IN	D-sub HD 15-pin (female) × 1: RGB/YPbPr/YCbCr		
	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 (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 (W × H × D)	498 × 200*5 × 581 mm (19 19/32" × 7 7/8" × 22 7/8") (with supplied lens) 498 × 200*5 × 538 mm (19 19/32" × 7 7/8" × 21 3/8") (without lens)		
Weight*6	TBD			
Operation noise*1	41 dB			
Operating environment	Operating temperature: 0–45 °C (32–113 °F)*7, operating humidity: 10–80 % (no condensation)			
Applicable software	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro*8 (ET-UK20*9 Upgrade Kit and ET-CUK10*10 Auto Screen Adjustment Kit)			
Supplied accessories	Power cord with secure lock, wireless/wired remote control unit, batteries (R03/AAA type x 2), software CD-ROM (Logo Transfer Software, Multi Monitoring & Control Software)			

\*1 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. \*2 Only compatible with dot clock frequency of 27 MHz (pixel 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 ft) 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 (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 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-RZ970. \*9 ET-UK20 Series is available only with PT-RZ970. \*10 ET-CUK10 Series is available only with PT-RZ970. Available worldwide except the United States.

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-YFB100G
- **Ceiling Mount Bracket**  
ET-PKD130H (6-axis, for high ceiling)  
ET-PKD120H (for high ceiling)  
ET-PKD120S (for low ceiling)
- **Projector Mount Bracket**  
ET-PKD130B



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