

PT-RZ970/770/660 Series

1-Chip DLP™ Projectors

Available from Summer 2016

Extraordinary SOLID SHINE Power from Compact and Versatile 1-Chip DLP™ Laser Projectors



PT-RZ970/770/660 Series

	PT-RZ970	PT-RZ770	PT-RZ660	PT-RW930	PT-RW730	PT-RW620	PT-RX110
Resolution	WUXGA			WXGA		XGA	
Brightness	10,000 lm (Center) 9,400 lm*	7,200 lm (Center) 7,000 lm*	6,200 lm (Center) 6,000 lm*	10,000 lm (Center) 9,400 lm*	7,200 lm (Center) 7,000 lm*	6,200 lm (Center) 6,000 lm*	10,400 lm (Center) 10,000 lm*
Contrast	10,000:1						

* Measured according to strict international ISO 21118 standards

Radiant Picture Quality and Long-Lasting Reliability

- Up to 10,400 lm*¹ Brightness in a Compact and Lightweight Design
- 1-Chip DLP™ Imaging and SOLID SHINE Laser Technology Deliver Superior White-balance and Color Accuracy
- Dynamic Light Control for 10,000:1*² Contrast
- Consistent Long-Lasting Picture Quality
- Detail Clarity Processor 3 Improves Image Clarity, Detail, and Depth
- System Daylight View 3 Ensures Crisp Images for Projection Mapping and Brightly Lit Indoor Environments

Consistently Stable Performance

- Filterless Dust-Resistant Optical Drive
- Up to 20,000 hours of Continuous Maintenance-free Operation*³
- Selectable Operational Modes Extend Service Life to Up to 10 Years*⁴
- Dual-Drive Laser Optical Engine Ensures Reliable 24/7 Operation with Light-source Failover Protection Circuitry
- Efficient Cooling System for Stable Operation and Low 35 dB*⁵ Noise Levels
- Backup Input Setting Maintains Image Display for Mission-Critical Applications

Easy System Integration and Installation Flexibility

- Contrast Sync and Shutter Sync Function for Multiple-unit Projection
- 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
- Quick Start*⁷/Quick Off with No Cool-down or Warm-up Required
- Compatible with Art-Net Lighting-control Protocol
- Geometric Adjustment for Curved and Specially Shaped Screens
- Geometry Manager Pro*⁸ and Optional Upgrade Kit (ET-UK20 Series)*⁹

¹ PT-RZ970 and PT-RW930 features 10,000 lm (Center), PT-RX110 10,400 lm (Center), PT-RZ770 and PT-RW730 7,200 lm (Center), PT-RZ660 and PT-RW620 6,200 lm (Center) of brightness. ² With Dynamic Contrast Mode set to 3. ³ At 20,000 hours, projector brightness decreases to about half of its original level (Dynamic Contrast Mode: 3, Image Mode: Dynamic). Panasonic recommends cleaning or checkup at point of purchase after 20,000 hours (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. ⁴ With Operating Mode set to Long Life 3, 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. ⁵ PT-RZ660/RW620: 35 dB (tentative), PT-RZ770/RW730: 37 dB (tentative), PT-RZ970/RW930/RX110: 41 dB. ⁶ 150 m (492 ft) transmission available only in Long Reach Mode with optional ET-YFB200G DIGITAL LINK Switcher for signals up to 1080/60p (dot-clock frequency 148.5 MHz). Transmission distance is up to 100 m (328 ft) in other cases. ⁷ When Quick Startup is activated, projection starts about one second after the power button is pressed. Quick Startup mode resets to OFF if the projector has not been switched on for more than 90 minutes to reduce power consumption. ⁸ Geometry Manager Pro software is available only with PT-RZ970/RZ770/RZ660. ⁹ ET-UK20 Series is available only with PT-RZ970/RZ770/RZ660.

Specifications (Tentative)

Model	PT-RZ970/RZ770/RZ660	PT-RW930/RW730/RW620	PT-RX110
Power supply	AC 100–240 V, 50/60 Hz		
Power consumption	PT-RZ970/RW930/RX110: Normal: 1050 W, Eco: 770 W, Long Life 1: 480 W, Long Life 2: 440 W, Long Life 3: 390 W, Shutter: 82 W (Operating temperature 25 °C [77 °F], altitude 700 m [2,297 ft], IEC62087: 2008 Broadcast Content, Picture Mode: Standard, Dynamic Contrast: 2), 0.3 W with Standby Mode set to ECO, 3 W with Standby Mode set to Normal Other Models: TBD		
DLP™ chip	Panel size	17.0 mm (0.67 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 x 1200) pixels	1,024,000 (1280 x 800) 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 (except PT-RX110), 4:3 aspect ratio (PT-RX110)		
Brightness	PT-RZ970: 10,000 lm (Center) / 9,400 lm**1 PT-RZ770: 7,200 lm (Center) / 7,000 lm**1 PT-RZ660: 6,200 lm (Center) / 6,000 lm**1	PT-RW930: 10,000 lm (Center) / 9,400 lm**1 PT-RW730: 7,200 lm (Center) / 7,000 lm**1 PT-RW620: 6,200 lm (Center) / 6,000 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 x 1200 pixels	1280 x 800 pixels	1024 x 768 pixels
Scanning frequency	SD-SDI	SMPTIE ST 259 compliant, [YCbCr 4:2:2 10-bit] 480i (525i), 576i (625i)	—
	HD-SDI	SMPTIE 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	SMPTIE 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, [YPbPr 4:2:2 10-bit] 1080(1125)/60p, 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)/50p, VGA (640 x 480)—WUXGA**3 (1920 x 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: 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/VC	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 %, -13 % (+45 %, -13 % with ET-DLE085) (powered)
	Horizontal (from center of screen)	-30 %, -10 % (+28 %, -10 % with ET-DLE030) (powered)	
Keystone correction range	Vertical: ±40 ° (±22 ° with ET-DLE085/DLE055, +5 ° with ET-DLE030), horizontal: ±15 ° (Cannot be operated with ET-DLE030)		Vertical: ±40 ° (±30 ° 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	—
	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 x 200**5 x 581 mm (19 19/32" x 7 7/8" x 22 7/8") (with supplied lens) 498 x 200**5 x 538 mm (19 19/32" x 7 7/8" x 21 9/16") (without lens)		
Weight*6	PT-RZ970/RW930/RX110/RZ770/RW730: Approx. 23.2 kg (51.1 lbs.) (with supplied lens), Approx. 22.4 kg (49.4 lbs.) (without lens) PT-RZ660/RW620: Approx. 22.7 kg (50.0 lbs.) (with supplied lens), Approx. 21.9 kg (48.3 lbs.) (without lens)		
Operation noise*1	PT-RZ970/RW930/RX110: 41 dB, PT-RZ770/RW730: 37 dB (tentative), PT-RZ660/RW620: 35 dB (tentative)		
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)		
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/RZ770/RZ660. *9 ET-UK20 Series is available only with PT-RZ970/RZ770/RZ660.

Optional Accessories

- Fixed-Focus Lens
ET-DLE030
- Geometry Manager Pro Software Upgrade Kit (PT-RZ970/RZ770/RZ660 Only)
ET-UK20 Series
- DIGITAL LINK Switcher
ET-YFB200G
- Ceiling Mount Bracket
ET-PKD130H (6-axis, for high ceiling)
ET-PKD120H (for high ceiling)
ET-PKD120S (for low ceiling)
- Zoom Lens
ET-DLE085 / ET-DLE150 / ET-DLE250 / ET-DLE350 / ET-DLE450 / ET-DLE055
- Early Warning Software
ET-SWA100 Series
- Digital Interface Box
ET-YFB100G
- Projector Mount Bracket
ET-PKD130B