

PT-DZ780 Series

• PT-DZ780B/LB • PT-DZ780W/LW • PT-DW750B/LB • PT-DW750W/LW
• PT-DX820B/LB • PT-DX820W/LW

1-Chip DLP™ Projectors

Available from Spring 2015

Whisper-Quiet 30 dB Operation at Full 7,000 lm Power



PT-DZ780 Series

	PT-DZ780	PT-DW750	PT-DX820
Brightness	7,000 lm		8,200 lm
Resolution	WUXGA	WXGA	XGA
Operation Noise	Normal Mode: 30 dB / Eco Mode: 28 dB		

Low Noise, High Image Quality

- Outputs 7,000 lm Brightness in WUXGA and WXGA Resolution (8,200 lm in XGA)
- Ultra-Low 30 dB Operation in Normal Mode (28 dB in Eco Mode)
- Dynamic RGB Booster Optimizes Brightness and Delivers Outstanding Color Reproduction
- Detail Clarity Processor 3 Adds Clarity and Texture to Details
- System Daylight View 2 for Enhanced Color Perception in Bright Rooms
- DICOM Simulation Mode for Medical Presentations and Training*¹
- Rec. 709 Mode for HDTV Projection

Easy Maintenance and Superior Reliability

- Lamp Life Extended to 4,000 Hours in Normal Mode (6,000 Hours in Eco Mode)*²
- Dust-Resistant Optical Block Allows Air Filter-less Design*³
- Dual-Lamp System Enables Continuous 24/7 Operation in Lamp Relay Mode
- Liquid Cooling System Ensures Safe Operation in Temperatures Up to 45°C*⁴
- Flexible Installation with 360° Vertical Cabinet Rotation
- Powered Horizontal/Vertical Lens Shift
- Backup Input Setting Safeguards Projection If Primary Signal is Disrupted

System Integration Flexibility

- Compatible with Art-Net DMX Lighting Control Protocol
- 3G-SDI (PT-DZ780 Only), DVI-D, HDMI, DIGITAL LINK Terminals
- Single-Cable DIGITAL LINK Transmits Video, Audio, and Control Signals for Up to 150 m in Long Reach Mode (1080/60p Signal Only. Up to 100 m for Other Signals Including WUXGA Video)
- 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) Featuring Geometry Manager Pro (PT-DZ780 Only)
- Supports Optional Auto Screen Adjustment Upgrade Kit (ET-CUK10*⁵, PT-DZ780 Only)
- Wide Selection of Optional Lenses Including Ultra-Short-Throw (ET-DLE030)

Specifications (Tentative)

Model	PT-DZ780/PT-DZ780L	PT-DW750/PT-DW750L	PT-DX820/PT-DX820L
Power supply	120 V AC, 8 A, 50/60 Hz, 220–240 V AC, 4.5 A, 50/60 Hz	120 V AC, 7.5 A, 50/60 Hz, 220–240 V AC, 4.3 A, 50/60 Hz	
Power consumption	120 V AC	TBD (0.3 W when STANDBY MODE set to ECO*1, 3 W when STANDBY MODE set to NORMAL)	
	220–240 V AC	TBD (0.3 W when STANDBY MODE set to ECO*1, 3 W when STANDBY MODE set to NORMAL)	
DLP™ chip	Panel size	17.0 mm (0.67 in) diagonal (16:10 aspect ratio)	17.8 mm (0.7 inches) 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
Lens	PT-DZ780: Powered zoom (throw ratio 1.7–2.4:1), powered focus, F 1.7–1.9, f 25.6–35.7 mm		PT-DW750/PT-DX820: Powered zoom (throw ratio 1.8–2.5:1), powered focus, F 1.7–1.9, f 25.6–35.7 mm
	PT-DZ780L/PT-DW750L/PT-DX820L: Optional powered zoom/focus lenses and fixed-focus lens		
Lamp	310 W UHM lamp × 2		
Screen size (diagonal)	1.27–15.24 m (50–600 in), 1.27–5.08 m (50–200 in) with the ET-DLE055, 16:10 aspect ratio		1.27–15.24 m (50–600 in), 1.27–5.08 m (50–200 in) with the ET-DLE055, 4:3 aspect ratio
Brightness*2	7,000 lm (dual-lamp, LAMP MODE: NORMAL)		8,200 lm (dual-lamp, LAMP MODE: NORMAL)
Center-to-corner uniformity*2	90 %		
Contrast*2	TBD		
Resolution	1920 × 1200 pixels	1280 × 800 pixels (Input signals that exceed this resolution will be converted to 1280 × 800 pixels.)	1024 × 768 pixels (Input signals that exceed this resolution will be converted to 1024 × 768 pixels.)
Scanning frequency	SDI	SMPTTE ST 424 compliant, [RGB 4:4:4 12-bit/10-bit] 1125 (1080)/60, 1125 (1080)/50, 1125 (1080)/25p, 1125 (1080)/24p, 1125 (1080)/24sF, 1125 (1080)/30p, [YPbPr 4:2:2 10-bit] 1125 (1080)/60p, 1125 (1080)/50p	
	HD-SDI	SMPTTE ST 292 compliant, [YPbPr 4:2:2 10-bit] 750 (720)/60p, 750 (720)/50p, 1125 (1035)/60i, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/25p, 1125 (1080)/24p, 1125 (1080)/24sF, 1125 (1080)/30p	
	SD-SDI	SMPTTE ST 259 compliant, [YCbCr 4:2:2 10-bit] 525i (480i), 625i (576i)	
	HDMI/DVI-D/DIGITAL LINK	Compatible with HDCP, 480i (525i), *3 576i (625i), *3 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*4 (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: 37.50 kHz, fV: 50 Hz [720 (750)/50p], fH: 27.00 kHz, fV: 24 Hz [1080 (1125)/24p], fH: 31.50 kHz, fV: 60 Hz [480p (525p)], fH: 33.75 kHz, fV: 60 Hz [1035/60i], fH: 27.00 kHz, fV: 48 Hz [1080 (1125)/24sF], fH: 15.63 kHz, fV: 50 Hz [576i (625i)], fH: 33.75 kHz, fV: 60 Hz [1080 (1125)/60i], fH: 33.75 kHz, fV: 50 Hz [1080 (1125)/30p], fH: 31.25 kHz, fV: 50 Hz [576p (625p)], fH: 28.13 kHz, fV: 50 Hz [1080 (1125)/50i], fH: 67.50 kHz, fV: 60 Hz [1080 (1125)/60p], fH: 45.00 kHz, fV: 60 Hz [720 (750)/60p], fH: 28.13 kHz, fV: 25 Hz [1080/25p], fH: 56.25 kHz, fV: 50 Hz [1080 (1125)/50p]		
V-Video	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*5	Vertical +50 %, -16 %; horizontal +30 %*, -10 %; powered	Vertical +60 %, -16 %; horizontal +30 %*, -10 %; powered	Vertical +50 %, -13 %; horizontal +30 %*, -10 %; powered
Keystone correction range	Vertical ±40 **7, horizontal ±15 **8		
Keystone correction range with the optional upgrade kit ET-UJK20	Vertical ±45 **, *9,10 horizontal ±40 **10,11		
Installation	Ceiling/floor, front/rear		
Terminals	SDI 1 IN	BNC × 1 (3G/HD/SD-SDI)	
	HDMI IN	HDMI 19-pin × 1 (Deep Color, compatible with HDCP) 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, VGA (640 × 480)–WUXGA (1920 × 1200), compatible with non-interfaced signals only, dot clock: 25–162 MHz	
	DVI-D IN	DVI-D 24-pin × 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only) 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, VGA (640 × 480)–WUXGA (1920 × 1200), compatible with non-interfaced signals only, dot clock: 25–162 MHz	
	RGB 1 IN	BNC × 5 (RGB/YPbPr/YCbCr × 1)	
	RGB 2 IN	D-sub HD 15-pin (female) × 1 (RGB/YPbPr/YCbCr × 1)	
	VIDEO IN	BNC × 1 (composite video)	
	S-VIDEO IN	Mini DIN 4-pin × 1 (S-Video)	
	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 (RS-232C compliant)	
	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 and DIGITAL LINK (video/network/serial control) connection, 100Base-TX, compatible with Art-Net, compliant with PLink™, Deep Color, compatible with HDCP	
Cabinet materials	Molded plastic		
Dimensions (W × H × D)	PT-DZ780/PT-DW750/PT-DX820: 498 × 175*12 × 521 mm (19 19/32" × 6 7/8"*12 × 20 1/2") with supplied lens PT-DZ780L/PT-DW750L/PT-DX820L: 498 × 175*12 × 508 mm (19 19/32" × 6 7/8"*12 × 20") without lens		
Weight*13	PT-DZ780/PT-DW750/PT-DX820: Approximately 17.6 kg (38.8 lbs) with supplied lens, PT-DZ780L/PT-DW750L/PT-DX820L: Approximately 16.8 kg (37.0 lbs) without lens		
Operation noise*2	Normal: 30 dB/Eco: 28 dB		
Operating environment	Operating temperature: 0–45 °C (32–113 °F)*14, operating humidity: 20–80 % (no condensation)		
Supplied accessories	Power cord, power cord secure lock, wireless/wired remote control unit, batteries (R6/AA type × 2), software CD-ROM (Logo Transfer Software, Multi Projector Monitoring & Control Software) × 1		

*1 When Standby Mode is set to Eco, network functions such as power on over LAN will not operate. Additionally, only certain commands can be received for external control using the serial terminal. *2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. *3 Only compatible with dot clock frequency of 27 MHz (pixel repetition signal). *4 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking). *5 Optical axis shift cannot be operated with the ET-DLE055, and the optical axis is fixed with the ET-DLE030. *6 +28 % with the ET-DLE085. *7 ±22 ° with the ET-DLE085/DLE055 and +5 ° with the ET-DLE030. *8 Cannot be operated with the ET-DLE030. *9 ±40 ° with the ET-DLE150/DLE250/supplied lens and ±22 ° with the ET-DLE085/DLE055. *10 Up to a total of ±55 ° during simultaneous horizontal and vertical correction. *11 ±15 ° with the ET-DLE085/DLE055. *12 With legs at shortest position. *13 Average value. May differ depending on the actual unit. *14 Operating temperature range is 0–40 °C (32 °F to 104 °F) in High Altitude Mode at altitudes of 1,400–2,700 m (4,593–8,858 ft) above sea level. If ambient temperature exceeds 40 °C (104 °F) or 35 °C (95 °F) in High Altitude Mode when projector is used with Lamp Select set to Dual and Lamp Power set to Normal, light output may be reduced approximately 20 % to protect the projector.

Optional accessories

- Fixed-Focus Lens
ET-DLE030 / ET-DLE055
- Geometry Manager Pro Upgrade Kit
ET-UJK20
- Early Warning Software
ET-SWA100
- High-Ceiling Mount Bracket
ET-PKD120H
ET-PKD130H
(Includes 6-axis adjustment mechanism)
- Low-Ceiling Mount Bracket
ET-PKD120S
- Zoom Lens
ET-DLE085 / ET-DLE150 /
ET-DLE250 / ET-DLE350 /
ET-DLE450
- Auto Screen Adjustment Upgrade Kit
ET-CUK10 (except in the United States)
- Digital Interface Box
ET-YFB100G
- Attachment for Ceiling Mount Bracket
ET-PKD130B