Panasonic

PRELIMINARY BROCHURE
PT-DZ21k2, PT-DS20k2
PT-DW17k2, PT-DZ16k2

Panasonic

PT-DZ21K2 Series
3-Chip DLP™ Projector

Available from Summer 2015

Compact 20,000 lm Projector Delivers Stunning Picture Quality with High Frame-Rate

Specifications (Tentative)

Model		PT-DZ21K2	PT-DS20K2	PT-DW17K2	PT-DZ16K2
Power supply		200–240 V AC, 50/60 Hz			
Power consumption		<2300 W (TBD) (0.3 W with Standby Mode set to Eco*1, 4 W with Standby Mode set to Normal)			
DLP™ chip	Panel size	24.4 mm (0.96 in) diagonal (16:10 aspect ratio)	24.1 mm (0.95 in) diagonal (4:3 aspect ratio)	21.6 mm (0.85 in) diagonal (16:9 aspect ratio)	24.1 mm (0.95 in) diagonal (16:9 aspect ratio)
	Display method	DLP™ chip × 3, DLP™ projection system			
	Pixels	2,304,000 (1920 × 1200) × 3, total of 6,912,000 pixels	1,470,000 (1400 × 1050) × 3, total of 4,410,000 pixels	1,049,088 (1366 × 768) × 3, total of 3,147,264 pixels	2,073,600 (1920 × 1080) × 3, total of 6,220,800 pixels
Refresh Rate		120 Hz*2		60 Hz*2	120 Hz*2
Lens		Optional powered zoom and fixed-focus lenses			
Lamp	Normal	UHM lamp × 4, replacement cycle of up to 3,000 hours*3			
	Portrait	UHM lamp × 4, replacement cycle of up to 700 hours (TBD)			—
Screen size (diagonal)		1.78–25.4 m (70–1000 in), 1.78–7.62 m (70–300 in) with the ET-D75LE5, 3.05–15.24 m (120–600 in) with the ET-D75LE90, 16:10 aspect ratio	1.78–25.4 m (70–1000 in), 1.78–7.62 m (70–300 in) with the ET-D75LE5, 3.05–15.24 m (120–600 in) with the ET-D75LE90, 4:3 aspect ratio	1.78–25.4 m (70–1000 in), 1.78–7.62 m (70–300 in) with the ET-D75LE5, 3.05–15.24 m (120–600 in) with the ET-D75LE90, 16:9 aspect ratio	
Brightness*4		20,000 lm		17,000 lm	16,000 lm
Center-to-corner uniformity*4		90 %			
Contrast*4		10,000:1 (full on/off, with dynamic iris set to "3")			
Resolution		1920 × 1200 pixels	1400 × 1050 pixels	1366 × 768 pixels	1920 × 1080 pixels
Scanning frequency	SDI SD-SDI	SMPTE ST 259 compliant, [YCᴃCᴿ 4:2:2 10-bit] 480i, 576i	—	—	SMPTE ST 259 compliant, [YCᴃCᴿ 4:2:2 10-bit] 480i, 576i
	HD-SDI	SMPTE ST 292 compliant, [YCᴃCᴿ 4:2:2 10-bit] 720/50p, 720/60p, 1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p	—	—	SMPTE ST 292 compliant, [YCᴃCᴿ 4:2:2 10-bit] 720/50p, 720/60p, 1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
	3G-SDI	SMPTE ST 424 compliant, [YPᴃPᴿ 4:2:2 10-bit] 1080/50p, 1080/60p, [RGB 4:4:4 12-bit/10-bit] 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p	—	—	SMPTE ST 424 compliant, [YPᴃPᴿ 4:2:2 10-bit] 1080/50p, 1080/60p, [RGB 4:4:4 12-bit/10-bit] 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
	Dual link HD-SDI	SMPTE ST 372 compliant, [RGB 4:4:4 12-bit/10-bit] 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p, [X′Y′Z′ 4:4:4 12-bit] 2048 × 1080/24p, 2048 × 1080/24sF	—	—	—
	Dual link 3G-SDI	SMPTE ST 425 compliant, [YPᴃPᴿ 4:4:4 12-bit/10-bit] 1080/60p, 1080/50p, 2048 × 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p, [RGB 4:4:4 12-bit/10-bit] 1080/60p, 1080/50p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p	—	—	—
	HDMI/DVI-D/DIGITAL LINK	480p, 576p, 720/50p, 720/60p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, VGA (640 × 480)–WUXGA*5 (1920 × 1200), compatible with non-interlaced signals only, dot clock: 25–162 MHz			
	DVI-D/HDMI simultaneous input	1920 x 1200p, 1920 x 1080p, 1400 x 1050p, 1366 x 768p, 120 Hz/100 Hz			
	RGB	fH: 15–100 kHz, fV: 24–120 Hz, dot clock 13.5–162 MHz			
	YPᴃPᴿ (YCᴃCᴿ)	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 (1125)/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: 30 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 (1125)/25p], fH: 56.25 kHz, fV: 50 Hz [1080 (1125)/50p]			
	Video / Y/C	fH: 15.75 kHz/15.63 kHz, fV: 50 Hz/60 Hz [NTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAM]			
Optical axis shift*6	Vertical (from center of screen)	±55 % (±44 % with the ET-D75LE6, +73 – 78 % with the D75LE90) (powered)	±50 % (±40 % with the ET-D75LE6, +71 % [fixed] with the D75LE90) (powered)	±70 % (±60 % with the ET-D75LE6, +78 – 96 % with the D75LE90) (powered)	+60 % (±50 % with the ET-D75LE6, +75 – 88 % with the D75LE90) (powered)
	Horizontal (from center of screen)	±20 % (±15 % with the ET-D75LE6, ±6 % with the D75LE90) (powered)	±30 % (±20 % with the ET-D75LE6, ±0 % [non-movable] with the D75LE90) (powered)	±30 % (±20 % with the ET-D75LE6, -13 – +27 % [+: rightward] with the D75LE90) (powered)	±20 % (±15 % with the ET-D75LE6, -12 – +14 % with the D75LE90) (powered)
Keystone correction range		Vertical: ±40 °, horizontal: ±15 °			
Keystone correction range with the optional upgrade kit ET-UK20		Vertical: ±45 °, horizontal: ±40 °			—
Installation		Ceiling/floor, front/rear, portrait			Ceiling/floor, front/rear
Terminals	SDI IN	BNC × 2 (3G/HD/SD-SDI)	—	—	BNC x 1 (3G/HD/SD-SDI)
	DVI-D IN	DVI-D 24-pin × 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only)			
	HDMI IN	HDMI 19-pin × 1 (Deep Color, compatible with HDCP)			
	RGB 1 IN	BNC × 5 (RGB/YPᴃPᴿ/VIDEO/YC × 1)			
	RGB 2 IN	D-sub HD 15-pin (female) × 1 (RGB/YPᴃPᴿ × 1)			
	3D SYNC IN/OUT	BNC x 1 (3D timing signal)			
	3D SYNC OUT	BNC x 1 (3D timing signal)			—
	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™ (class 1), Deep Color, HDCP			
Cabinet materials		Molded plastic			
Dimensions (W × H × D)		620 × 255 × 730 mm (24 ³¹/₃₂″ × 10 ¹/₃₂″ × 28 ³/₄″) (optional lens, legs and lens cover not included)			
Weight*7		Approximately 43 kg (94.8 lbs) (optional lens not included)			
Operation noise*4		TBD			
Operating environment		Operating temperature: 0–45 °C (32–113 °F)*8, operating humidity: 10–80 % (no condensation)			
Applicable software		Logo Transfer Software, Multi Projector Monitoring & Control Software, Geometry Manager Pro (ET-UK20 Upgrade Kit and ET-CUK10*9 Auto Screen Adjustment Kit)		Logo Transfer Software, Multi Projector Monitoring & Control Software	
Supplied accessories		Power cord with 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 Refresh rate varies depending on scanning frequency. *3 This value (maximum, 50 % brightness) is calculated by continuously turning the lamp on for 2 hours and off for 0.25 hours. The lamp replacement cycle will decrease if the lamp is turned on/off more frequently, or if it is left on for longer intervals. *4 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. *5 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking). *6 Optical axis shift is not supported on the ET-D75LE50. *7 Average value. May differ depending on the actual unit. *8 Operating temperature range is 0–40 °C (32–104 °F) when Fan Control is set to High Altitude Mode for altitudes 1,400–2,700 m (4,593–8,858 ft) above sea level. With ET-LAD520P/LAD520PF mounted for Portrait Mode, operating temperature range is 0–40 °C (32–104 °F). *9 Available worldwide except in the United States.

Optional Accessories

Fixed-Focus Lens
ET-D75LE50 (Short Throw)
ET-D75LE90 (Ultra Short Throw)

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)

High-Ceiling Mount Bracket
ET-PKD520H

Low-Ceiling Mount Bracket
ET-PKD520S

Bracket Assembly
ET-PKD520B

Projector Frame
ET-PFD510

Replacement Lamp Unit
ET-LAD520 (one bulb)
ET-LAD520F (a set of four bulbs)
ET-LAD520P (for portrait mode, one bulb)
ET-LAD520PF (for portrait mode, a set of four bulbs)

Replacement Filter
ET-EMF510

Smoke Cut Filter
Available as Service Parts

Early Warning Software
ET-SWA100 Series

Digital Interface Switcher/Box
ET-YFB200G/100G

PT-DZ21K2 Series

	PT-DZ21K2	PT-DS20K2	PT-DW17K2	PT-DZ16K2
Brightness	20,000 lm	20,000 lm	17,000 lm	16,000 lm
Resolution	WUXGA	SXGA+	WXGA	Full HD
Contrast	10,000:1	10,000:1	10,000:1	10,000:1

Ultra-Bright and Detailed Images

- 20,000 lm Brightness (DW17K2: 17,000 lm, DZ16K2: 16,000 lm) for Large Venues
- Real Motion Processor Combines Frame-Creation and 120 Hz Processing for Fluid Motion Reproduction (PT-DZ21K2, DS20K2, DZ16K2)
- Next-Generation Detail Clarity Processor Delivers Crisp and Detailed Image Quality
- High 10,000:1*1 Contrast Ratio with Dynamic Iris
- System Daylight View 3 for Enhanced Color Performance in Bright Rooms and Mapping Applications
- Waveform Monitor Function for Easy Adjustment of Black/White Level
- DICOM Simulation Mode for Medical Presentations and Training*2
- Active 3D Projection Capability (PT-DZ21K2/DS20K2)

High Reliability and Low TCO

- Extended Lamp Replacement Cycle of 3,000 Hours*3
- Liquid Cooling with Highly Efficient Quad-Lamp System Reduces Operational Noise
- Stable Operation in Ambient Temperatures of up to 45 °C*4
- Quad-Lamp System Allows 24/7 Operation in Lamp Relay Mode
- Easy Lamp Replacement from Rear Side
- Eco Filter Requires No Maintenance for 12,000 Hours*5
- Durable, Precision-Tuned Optical Engine
- High Efficiency Lamps Reduce Power Consumption

Versatile Installation Flexibility

- Flexible Installation with 360 ° Vertical Cabinet Rotation
- Multi-Screen Support Seamlessly Joins Screens with Edge Blending, Color Matching, and Multi-Screen Processing
- Geometric Adjustment for Projection on Curved or Spherical Surfaces (PT-DZ21K2/DS20K2)
- Compatible with Optional Upgrade Kit (ET-UK20) Featuring Geometry Manager Pro (PT-DZ21K2/DS20K2)
- Multi-Unit Brightness Control
- Compatible with Panasonic Multi Projector Monitoring & Control Software
- Single-Cable DIGITAL LINK Connection Transmits Video and Control Signals for Up to 100 m
- Portrait Mode Capability with Optional Lamp Unit*6
- Abundant Terminals Including 3G-SDI Inputs (DZ21K2/DS20K2 Features Inputs x 2, DZ16K2 Input x 1)

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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 2015.

PT-DZ21K2PRE1 Printed in Japan.

*1 Full on/off, with Dynamic Iris set to "3". *2 This product is not a medical instrument. Do not use for actual medical diagnosis. *3 Usage environment affects lamp replacement cycle. *4 Operating temperature range is 0–40 °C (32–104 °F) when projector is used in Portrait mode or High Altitude Mode for altitudes 1,400–2,700 m (4,593–8,858 ft). Operating temperature range is 0–35 °C (32–95 °F) when projector used in Portrait mode in High Altitude Mode. *5 Usage environment affects filter replacement cycle. *6 Installation is possible only with the terminal side facing downward. Horizontal rotation and vertical rotation are both limited to 15 °. Additionally, lamp life is reduced to 700 hours depending on usage environment.