Panasonic

PT-**DZ21K2** Series
3-Chip DLP™ Projectors

PT-**DZ21K2**
PT-**DS20K2**
PT-**DW17K2**
PT-**DZ16K2**

DIGITAL LINK™
SINGLE CABLE SOLUTION

POWER TO TRANSCEND

PICTURE BY
DLP™
A TEXAS INSTRUMENTS TECHNOLOGY

Worldwide Olympic Partner

The range-topping Panasonic PT-DZ21K2 Series guarantees breathtaking images and extremely reliable operation.
Each feature-laden model has creative capabilities to satisfy the demands of professional users.

Outstanding Brightness in a Lightweight Package

### Quad-Lamp System for 20,000 lm*[1] Images

A unique high-power UHM quad-lamp system has allowed Panasonic to dramatically reduce cabinet volume and weight while projecting images with up to an astounding 20,000 lm*[1] of brightness.
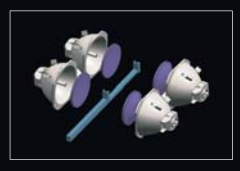
Lamp mode	Brightness (lumens)			Lamp Replacement Cycle (hours)*[2]
	DZ21K2 DS20K2	DW17K2	DZ16K2	DZ21K2 DW17K2 DS20K2 DZ16K2
Quad	20,000	17,000	16,000	3,000
Triple	15,000	12,750	12,000	3,900
Dual	10,000	8,500	8,000	6,000
Single	5,000	4,250	4,000	12,000

Dynamic Iris for a High 10,000:1*[3] Contrast Ratio

Panasonic's Dynamic Iris uses a scene-linking aperture mechanism to achieve a remarkable 10,000:1*[3] contrast without sacrificing brightness. This helps to reproduce deeper, richer blacks, and provides images with more textured and realistic details.
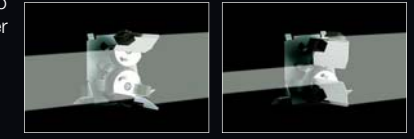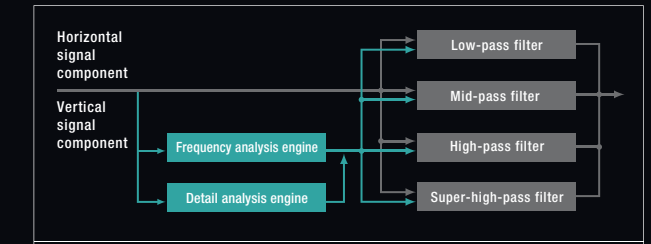
Active 3D Projection Capability (PT-DZ21K2/DS20K2)

Selected models in the PT-DZ21K2 Series are compatible with both passive and active 3D projection systems. It supports a separate, external 100/120/144 Hz drive, IR emitter, and active shutter glasses, or an active filter and passive glasses for viewing 3D images.

3D PROFESSIONAL

Detail Clarity Processor 5 Clarifies and Enhances Fine Details

This proprietary circuit analyzes each individual image frame by frame to clarify areas containing fine details and textures. A new processing algorithm pulls hidden information from the super high, high, medium, and low frequency bands, sharpening outlines, correcting contours, and reducing ringing noise to improve the sense of resolution and clarity of fine details.
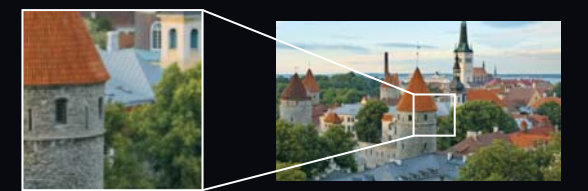
Horizontal signal component
Vertical signal component
Frequency analysis engine
Detail analysis engine
Low-pass filter
Mid-pass filter
High-pass filter
Super-high-pass filter

Conventional projector

Detail Clarity Processor 5
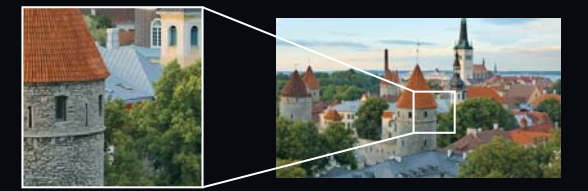
PT-**DZ21K2** | 20,000 lm | WUXGA   PT-**DS20K2** | 20,000 lm | SXGA+   PT-**DW17K2** | 17,000 lm | WXGA   PT-**DZ16K2** | 16,000 lm | Full HD

Original Panasonic Technology Reduces Motion Blur (PT-DZ21K2/DS20K2/DZ16K2)

Together with a unique high-speed Real Motion Processer chip, Panasonic has refined the PT-DZ21K2 Series' optical engine to enhance focus performance for a better sense of resolution, contrast, and fluidity. Real Motion Processor creates supplemental frames and interpolates for a fast 120 Hz[*4] frame-rate, resulting in incredibly smooth and realistic reproduction of motion. Further, 120 Hz[*4] images can be displayed with Dual-link 3G-SDI, DVI-D, and HDMI simultaneous inputs.

Interpolated frames

24 - 60 frames per second

Unique Panasonic processor

Up to 120 frames per second

Frame Creation: OFF

Frame Creation: ON
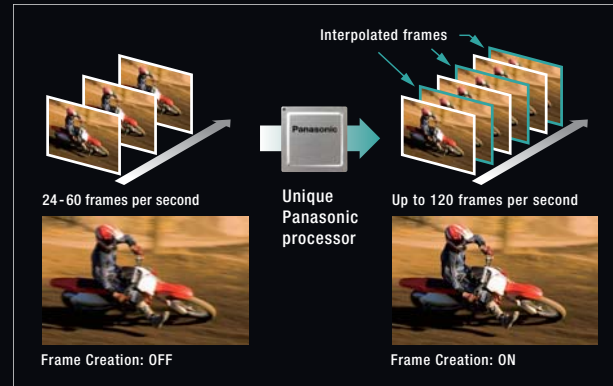
Waveform Monitor Function

When source device output level fluctuates due to the performance of the device or its cable connections, the original black and white levels of the image cannot be reproduced correctly. The PT-DZ21K2 Series displays the waveforms on screen where they can be adjusted either automatically or manually as preferred.

White Level Adjustment

Before   After

Black Level Adjustment

Before   After

System Daylight View 3 Improves Color Perception

This proprietary technology optimizes image quality to improve color perception of images projected onto external or internal walls and other surfaces or in environments with bright ambient light. With high brightness of up to 20,000 lm[*5], the PT-DZ21K2 Series delivers clear and comfortable viewing even with the lights on.

Enhancement Level

off   1   2   3   4   5   6

System Daylight View 3

System Daylight View 2

Ideal for mapping

Ideal for bright environments

Projection Mapping (Projection onto Buildings)

OFF   ON

Auditoriums and Halls (Projection in Bright Environments)

OFF   ON

DICOM Simulation Mode[*6]

This imaging mode is similar to the DICOM Part 14 medical imaging standard. It lends a film-like resolution to X-ray images, making the PT-DZ21K2 Series ideal for medical presentations and training.

Normal Mode   DICOM Simulation Mode

High Reliability and Low TCO with Easy Maintenance

Low TCO in an Eco-Friendly Design

PT-DZ21K2 Series projectors lower total cost of ownership (TCO) with an extended a lamp replacement cycle of up to 3,000 hours[*7]. Environmentally friendly design reduces power consumption to just 2,060 W.

Quad-Lamp System Enables Stable, Extended Operation

The quad-lamp system allows the projector to keep working even if a lamp should fail. Lamp Relay Mode alternates lamp operation to enable efficient and reliable 24/7 projection. Quad, Triple, Dual, and Single Lamp modes can also be used.

Easy Lamp Replacement

To simplify and expedite maintenance, lamps can be replaced from the rear. This makes it easy to replace a lamp while the projector is still in the mounting bracket or dual-stacked.

Liquid Cooling System Assures Reliable Operation

A newly designed liquid cooling system directly cools the DLP™ chips to stabilize performance in temperatures of up to 45 °C (113 °F)[*8] while producing just 46 dB of noise. It also reduces body bulk and weight, and as the system is hermetically sealed, the cooling liquid does not require replenishment.

Reservoir tanks

Embedded pumps

DLP™ chip

Large radiator
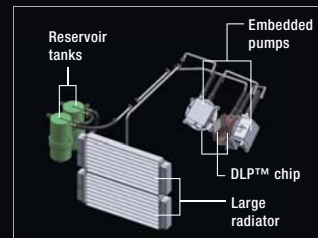
Eco Filter Extends Replacement to 12,000 Hours[*9]

The Eco Filter has an electrostatic Micro Cut Filter that collects minute dust particles with an ion effect. It combines with a dust-resistant cabinet to enable long-term use even in punishing conditions. A long maintenance cycle of up to 12,000 hours[*9] reduces hassle, and the eco-friendly washable filter can be reused, reducing cost and waste[*10].

System and Installation Flexibility with Diverse Functionality

Single-Cable DIGITAL LINK Connection

Transmit Video, Audio, and Control Signals Up to 150 m (492 ft) [*11]

DIGITAL LINK supports transmission of uncompressed HD digital video, audio, and control commands through a single cable (CAT 5e or higher STP cable) for distances of up to 150 m (492 ft)[*11]. Add an optional ET-YFB200G DIGITAL LINK Switcher or ET-YFB100G Digital Interface Box to further simplify installation complexity in large venues while reducing cost and improving reliability at the same time.

Dual-output Capability with Optional ET-YFB200G Switcher

The ET-YFB200G DIGITAL LINK Switcher unit incorporates two DIGITAL LINK terminals. Video, audio, and control signals can be output to two display devices individually or simultaneously. Sources can be easily switched using the projector remote controller or via PC and tablet, and multiple Switchers can be daisy-chained to integrate additional display devices.

Compatible with Other Device Brands

Panasonic developed DIGITAL LINK by adding original features to the HDBaseT™ communication standard formulated by HDBaseT Alliance. DIGITAL LINK works seamlessly with other brands' peripheral devices supporting HDBaseT™ protocol, allowing you to easily add Panasonic projectors to existing AV infrastructure.

Multi-Screen Support System Seamlessly Connects Multiple Screens

- Edge Blending: The edges of adjacent screens can be blended and their luminance controlled.
- Color Matching: This function corrects for slight variations in the color reproduction range of individual projectors. PC software assures easy, accurate control.
- Digital Image Enlarging: PT-DZ21K2 Series features a digital zoom function that allows images to be enlarged up to 10 times (horizontally and vertically)[*12]. Up to 100 units (10 x 10) can be edge-blended at a time to create large, multi-screen images.

Color matching

Projector

Edge blending

Overlapping image edges

Without edge blending

With edge blending
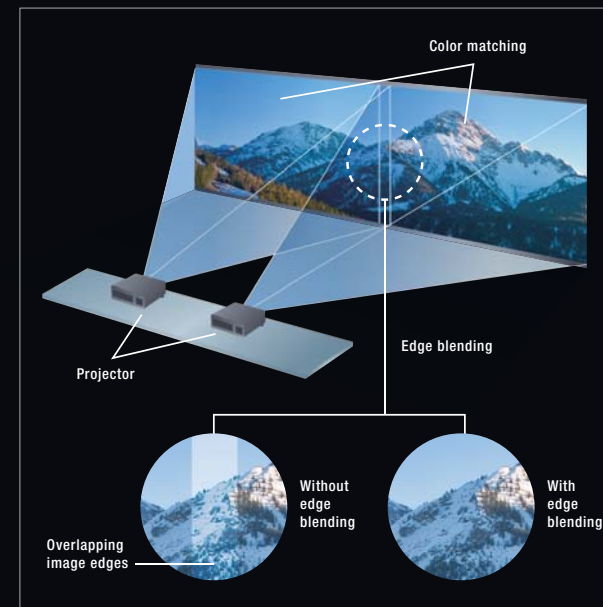
Geometric Adjustment for Specially Shaped Screens

This function adjusts the image for projection onto spherical, cylindrical, and other specially shaped screens. Adjustments can be easily made using only the remote control, with no external equipment needed. New 4-Corner Adjustment and Keep Aspect Off functions also simplify fine adjustment.

Optional Upgrade Kit (ET-UK20) Featuring Geometry Manager Pro (PT-DZ21K2/DS20K2)

New Geometry Manager Pro software included in Panasonic's optional upgrade kit (ET-UK20) supports color matching, edge blending, uniformity correction, and other useful functions for multi-projector setups up to a maximum of 64 units. It also enables creative masking using four lines or bitmap data. Its flexible yet sophisticated geometric adjustment capability suits a wide variety of screen shapes. Further, PT-DZ21K2/DS20K2 Series projectors support the optional ET-CUK10 Auto Screen Adjustment Upgrade Kit[*13].

Line Masking   Bitmap Masking

Note: Detailed masking is also possible with an image of up to 1920 x 1200 pixels for the PT-DZ21K2 and 1400 x 1050 pixels for the PT-DS20K2.

Create masking data

Use to overlap projected image

Image projected only in designated areas
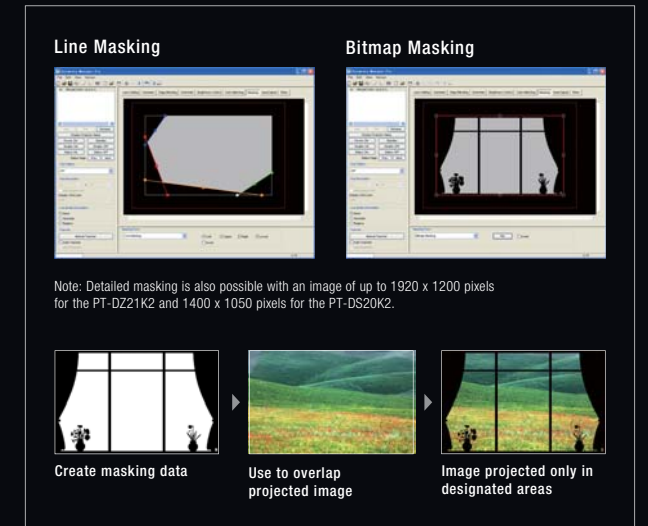
Multi Monitoring & Control Software

This software lets you control and monitor multiple projectors at the same time over wired LAN. If a problem occurs, an alert is sent to the monitoring/controlling PC. Terminal panel is LED illuminated and control panel buttons backlit for easy operation in the dark.

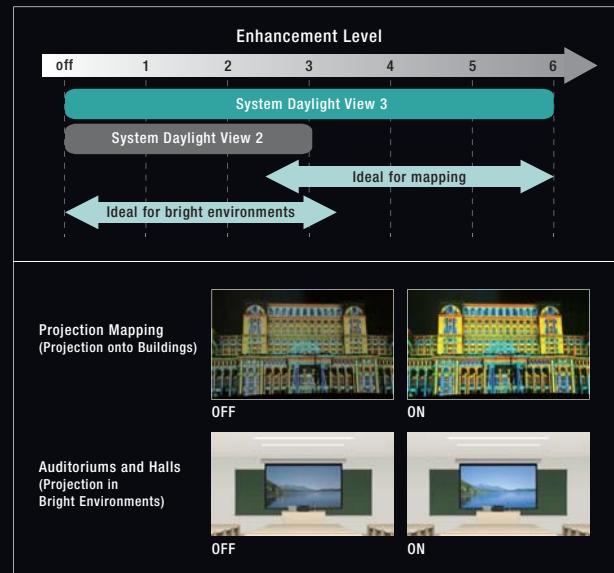*4 Frame rate varies depending on input signal frequency. PT-DW17K2 has a maximum 60 Hz playback capability. *5 PT-DW17K2 has 17,000 lm and PT-DZ16K2 has 16,000 lm of brightness. *6 This product is not a medical instrument. Do not use for actual medical diagnosis. *7 The values given for lamp replacement cycles are for landscape orientation. Usage environment affects lamp replacement cycle. *8 When the projector is used in Portrait Mode with ET-LAD520P/LAD520PF or used in locations from 1,400 m to 2,700 m (4,593 ft to 8,858 ft) above sea level, operating temperature range is 0 °C to 40 °C (32 °F to 104 °F). When used with Smoke Cut Filter, operating temperature range is 0 °C to 35 °C (32 °F to 95 °F), and the projector cannot be used in locations over 1,400 m (4,593 ft) above sea level. *9 Usage environment affects filter maintenance cycle. *10 Please follow the procedures listed in the operating instructions when washing the filter with water. Replacement is recommended after filter has been washed and reused twice, or if filter is not sufficiently clean after washing. *11 150 m (492 ft) transmission available only with ET-YFB200G switcher for signals up to 1080p. *12 While the input resolution will not change, maintaining image quality is not possible for images enlarged horizontally and vertically via the digital zoom function. *13 Available worldwide except in the United States.

Backup Input Setting Assures Reliability and Optimizes Performance

The Backup Input Setting allows the signal to be switched to the backup input signal as smoothly as possible should the primary input signal be disrupted*[14]. This function ensures high reliability and is ideal for mission-critical control rooms, projection mapping, staging, and other applications where image display should not be interrupted.

Conventional System
Multiple-unit widescreen projection

Backup Input Setting
Multiple-unit widescreen projection

Partially blank!

Switch quickly — Primary source

Source

Secondary source

If the main input signal is disrupted, image display is cut off

If primary signal is disrupted, back-up signal smoothly engages to maintain image display

Art-Net DMX Compatible

PT-DZ21K2 Series is compatible with Art-Net DMX protocol for lighting management. Art-Net compatibility lets you connect the projector to a lighting console and operate functions such as shutter on/off, input change, power on/off, etc., together with the light control.

Effective Lighting Management

Lighting Console

CAT5e (STP) cable or higher — DMX512

Projector (PT-DZ21K2 Series)

Various Lighting Equipment

Multi-Unit Brightness Control

This function automatically corrects brightness fluctuations that occur over time in individual projectors in a multi-screen system. Up to eight projectors connected by a hub can be controlled increasing to a maximum of 2,048 projectors with Multi Monitoring & Control Software.

Conventional Projector
At the time when the projectors are installed (A)

Projector 1   Projector 2

After a certain time has passed (B)

Projector 1   Projector 2

Multi-Unit Brightness Control "ON"
At the time when the projectors are installed (A')

Projector 1   Projector 2

After a certain time has passed (B')

Projector 1   Projector 2

Brightness

Image from projector 1

Image from projector 2

Brightness fluctuations

(A)   (B)   Time

Brightness

Preset brightness

Images from projector 1 and 2

(A')   (B')   Time

Flexible Installation

The supplied remote controller can be used to fine-tune image positioning on the projection surface via the wide-range powered vertical/horizontal lens shift function. The projector unit can also be rotated 360 ° vertically to accommodate specific installation requirements. The lens-centered design contributes to easy installation.

360°

Optional Portrait Mode Capability*[15] (PT-DZ21K2/DS20K2/DW17K2)

The PT-DZ21K2 Series features Portrait Mode capability when mounting the optional ET-LAD520P or ET-LAD520PF*[16] lamp unit. The PT-DZ21K2 Series can be installed in portrait orientation with its terminal side surface facing downward. Portrait Mode offers additional solutions for projection mapping, staging, and more.

Generous Connectivity

The PT-DZ21K2 Series has a wide array of terminals including DVI-D, HDMI, and two RGB inputs. The PT-DZ21K2, DS20K2 and DZ16K2 also feature a 3G-ready HD/SD-SDI input and 3D sync terminals (DZ21K2 and DS20K2) to connect an emitter for 3D projection.

Early Warning Software ET-SWA100 (Optional)

Early Warning Software monitors the status of projectors and displays connected to an intranet and informs you when an abnormality is detected or predicted, and when there are symptoms of trouble. This minimizes downtime to provide more stable operation.

Projection Distance

unit: meters (feet)

PT-DZ21K2 (16:10 aspect ratio)

Diagonal image size	ET-D75LE6 0.9–1.1:1 min.	max.	ET-D75LE10 1.3–1.7:1 min.	max.	ET-D75LE20 1.7–2.4:1 min.	max.	ET-D75LE30 2.4–4.7:1 min.	max.	ET-D75LE40 4.6–7.4:1 min.	max.	ET-D75LE8 7.3–13.8:1 min.	max.	ET-D75LE50 0.7:1
1.78 [70″]	1.35 (4.4)	1.62 (5.3)	1.90 (6.2)	2.46 (8.1)	2.46 (8.1)	3.58 (11.7)	3.56 (11.7)	6.94 (22.8)	6.87 (22.5)	11.04 (36.2)	10.78 (35.4)	20.56 (67.4)	1.01 (3.3)
2.54 [100″]	1.96 (6.4)	2.34 (7.7)	2.76 (9.0)	3.56 (11.7)	3.55 (11.6)	5.17 (16.9)	5.13 (16.8)	9.99 (32.8)	9.88 (32.4)	15.85 (52.0)	15.57 (51.1)	29.53 (96.8)	1.47 (4.8)
3.05 [120″]	2.36 (7.7)	2.82 (9.3)	3.32 (10.9)	4.30 (14.1)	4.28 (14.0)	6.22 (20.4)	6.18 (20.3)	12.03 (39.5)	11.89 (39.0)	19.05 (62.5)	18.76 (61.5)	35.50 (116.5)	1.78 (5.8)
3.81 [150″]	2.96 (9.7)	3.55 (11.6)	4.18 (13.7)	5.40 (17.7)	5.37 (17.6)	7.81 (25.6)	7.75 (25.4)	15.08 (49.5)	14.90 (48.9)	23.85 (78.2)	23.54 (77.2)	44.47 (145.9)	2.24 (7.4)
5.08 [200″]	3.97 (13.0)	4.75 (15.6)	5.60 (18.4)	7.24 (23.7)	7.19 (23.6)	10.45 (34.3)	10.38 (34.0)	20.16 (66.1)	19.92 (65.4)	31.86 (104.5)	31.52 (103.4)	59.41 (194.9)	3.01 (9.9)
7.62 [300″]	5.99 (19.6)	7.17 (23.5)	8.44 (27.7)	10.91 (35.8)	10.82 (35.5)	15.73 (51.6)	15.62 (51.2)	30.34 (99.5)	29.97 (98.3)	47.87 (157.0)	47.47 (155.7)	89.30 (292.9)	4.56 (14.9)
15.24 [600″]	12.03 (39.4)	14.40 (47.2)	16.96 (55.6)	21.92 (71.9)	21.73 (71.3)	31.58 (103.6)	31.35 (102.8)	60.85 (199.6)	60.09 (197.1)	95.89 (314.5)	95.32 (312.7)	178.96 (587.0)	9.18 (30.1)
25.40 [1000″]	20.08 (65.9)	24.06 (78.9)	28.33 (92.9)	36.61 (120.1)	36.27 (119.0)	52.70 (172.9)	52.33 (171.6)	101.53 (333.0)	100.25 (328.8)	159.93 (524.6)	159.13 (521.9)	— (—)	15.35 (50.3)

PT-DS20K2 (4:3 aspect ratio)

Diagonal image size	ET-D75LE6 1.0–1.2:1 min.	max.	ET-D75LE10 1.4–1.8:1 min.	max.	ET-D75LE20 1.8–2.6:1 min.	max.	ET-D75LE30 2.6–5.1:1 min.	max.	ET-D75LE40 5.0–8.0:1 min.	max.	ET-D75LE8 7.9–15.0:1 min.	max.	ET-D75LE50 0.8:1
1.78 [70″]	1.39 (4.6)	1.66 (5.5)	1.95 (6.4)	2.52 (8.3)	2.52 (8.3)	3.66 (11.9)	3.64 (11.9)	7.10 (23.3)	7.02 (23.0)	11.28 (37.0)	11.09 (36.4)	21.14 (69.3)	1.03 (3.4)
2.54 [100″]	2.01 (6.6)	2.41 (7.9)	2.82 (9.2)	3.64 (11.9)	3.63 (11.9)	5.28 (17.3)	5.24 (17.2)	10.21 (33.5)	10.10 (33.1)	16.19 (53.1)	16.01 (52.5)	30.36 (99.6)	1.50 (4.9)
3.05 [120″]	2.43 (8.0)	2.90 (9.5)	3.40 (11.1)	4.39 (14.4)	4.37 (14.3)	6.36 (20.9)	6.31 (20.7)	12.29 (40.3)	12.15 (39.9)	19.46 (63.8)	19.29 (63.3)	36.50 (119.7)	1.82 (6.0)
3.81 [150″]	3.05 (10.0)	3.65 (12.0)	4.27 (14.0)	5.52 (18.1)	5.49 (18.0)	7.98 (26.2)	7.92 (26.0)	15.41 (50.5)	15.23 (49.9)	24.37 (79.9)	24.21 (79.4)	45.72 (150.0)	2.29 (7.5)
5.08 [200″]	4.08 (13.4)	4.89 (16.0)	5.72 (18.8)	7.39 (24.2)	7.34 (24.1)	10.67 (35.0)	10.60 (34.8)	20.60 (67.6)	20.35 (66.8)	32.54 (106.7)	32.40 (106.3)	61.08 (200.3)	3.08 (10.1)
7.62 [300″]	6.15 (20.2)	7.37 (24.2)	8.62 (28.3)	11.14 (36.6)	11.06 (36.3)	16.07 (52.7)	15.96 (52.3)	30.99 (101.6)	30.61 (100.4)	48.89 (160.4)	48.80 (160.1)	91.79 (301.1)	4.65 (15.3)
15.24 [600″]	12.36 (40.6)	14.81 (48.6)	17.33 (56.8)	22.40 (73.5)	22.19 (72.8)	32.25 (105.8)	32.03 (105.0)	62.15 (203.9)	61.38 (201.3)	97.95 (321.4)	97.98 (321.4)	183.95 (603.3)	9.38 (30.8)
25.40 [1000″]	20.64 (67.7)	24.73 (81.1)	28.93 (94.9)	37.40 (122.7)	37.05 (121.5)	53.83 (176.6)	53.45 (175.3)	103.71 (340.2)	102.41 (335.9)	163.36 (535.8)	163.56 (536.5)	— (—)	15.68 (51.4)

PT-DW17K2 (16:9 aspect ratio)

Diagonal image size	ET-D75LE6 1.0–1.2:1 min.	max.	ET-D75LE10 1.4–1.9:1 min.	max.	ET-D75LE20 1.8–2.7:1 min.	max.	ET-D75LE30 2.7–5.2:1 min.	max.	ET-D75LE40 5.1–8.2:1 min.	max.	ET-D75LE8 8.2–15.4:1 min.	max.	ET-D75LE50 0.8:1
1.78 [70″]	1.56 (5.1)	1.87 (6.1)	2.18 (7.2)	2.82 (9.3)	2.82 (9.2)	4.10 (13.5)	4.07 (13.4)	7.94 (26.1)	7.86 (25.8)	12.62 (41.4)	12.43 (40.8)	23.65 (77.6)	1.16 (3.8)
2.54 [100″]	2.25 (7.4)	2.70 (8.8)	3.16 (10.3)	4.08 (13.4)	4.06 (13.3)	5.91 (19.4)	5.87 (19.3)	11.42 (37.5)	11.30 (37.1)	18.10 (59.4)	17.92 (58.8)	33.94 (111.3)	1.69 (5.5)
3.05 [120″]	2.72 (8.9)	3.25 (10.7)	3.80 (12.5)	4.92 (16.1)	4.89 (16.0)	7.11 (23.3)	7.07 (23.2)	13.74 (45.1)	13.59 (44.6)	21.75 (71.3)	21.58 (70.8)	40.80 (133.8)	2.04 (6.7)
3.81 [150″]	3.41 (11.2)	4.08 (13.4)	4.78 (15.7)	6.17 (20.3)	6.14 (20.1)	8.92 (29.3)	8.86 (29.1)	17.22 (56.5)	17.02 (55.8)	27.23 (89.3)	27.08 (88.8)	51.09 (167.6)	2.57 (8.4)
5.08 [200″]	4.56 (15.0)	5.47 (17.9)	6.40 (21.0)	8.27 (27.1)	8.21 (26.9)	11.93 (39.1)	11.85 (38.9)	23.03 (75.5)	22.75 (74.6)	36.36 (119.3)	36.23 (118.8)	68.25 (223.8)	3.45 (11.3)
7.62 [300″]	6.87 (22.5)	8.24 (27.0)	9.64 (31.6)	12.46 (40.9)	12.36 (40.5)	17.96 (58.9)	17.83 (58.5)	34.63 (113.6)	34.20 (112.2)	54.62 (179.2)	54.54 (178.9)	102.55 (336.4)	5.21 (17.1)
15.24 [600″]	13.80 (45.3)	16.55 (54.3)	19.36 (63.5)	25.02 (82.1)	24.80 (81.3)	36.03 (118.2)	35.78 (117.4)	69.43 (227.7)	68.56 (224.9)	109.40 (358.8)	109.47 (359.1)	205.46 (673.9)	10.48 (34.4)
25.40 [1000″]	23.04 (75.6)	27.63 (90.6)	32.32 (106.0)	41.78 (137.0)	41.38 (135.7)	60.13 (197.2)	59.71 (195.8)	115.83 (379.9)	114.38 (375.2)	182.44 (598.4)	182.70 (599.3)	— (—)	17.52 (57.5)

PT-DZ16K2 (16:9 aspect ratio)

Diagonal image size	ET-D75LE6 0.9–1.1:1 min.	max.	ET-D75LE10 1.3–1.7:1 min.	max.	ET-D75LE20 1.7–2.4:1 min.	max.	ET-D75LE30 2.4–4.7:1 min.	max.	ET-D75LE40 4.6–7.4:1 min.	max.	ET-D75LE8 7.3–13.8:1 min.	max.	ET-D75LE50 0.7:1
1.78 [70″]	1.40 (4.6)	1.67 (5.5)	1.96 (6.4)	2.53 (8.3)	2.53 (8.3)	3.68 (12.1)	3.66 (12.0)	7.14 (23.4)	7.07 (23.2)	11.36 (37.2)	11.16 (36.6)	21.28 (69.8)	1.04 (3.4)
2.54 [100″]	2.03 (6.7)	2.42 (7.9)	2.83 (9.3)	3.67 (12.0)	3.65 (12.0)	5.31 (17.4)	5.28 (17.3)	10.28 (33.7)	10.16 (33.3)	16.29 (53.4)	16.11 (52.8)	30.55 (100.2)	1.51 (5.0)
3.05 [120″]	2.44 (8.0)	2.92 (9.6)	3.42 (11.2)	4.42 (14.5)	4.40 (14.4)	6.40 (21.0)	6.35 (20.8)	12.37 (40.6)	12.23 (40.1)	19.58 (64.2)	19.41 (63.7)	36.73 (120.5)	1.83 (6.0)
3.81 [150″]	3.07 (10.1)	3.67 (12.0)	4.29 (14.1)	5.55 (18.2)	5.52 (18.1)	8.03 (26.3)	7.97 (26.1)	15.50 (50.8)	15.32 (50.3)	24.52 (80.4)	24.36 (79.9)	46.00 (150.9)	2.31 (7.6)
5.08 [200″]	4.11 (13.5)	4.92 (16.1)	5.75 (18.9)	7.44 (24.4)	7.39 (24.2)	10.74 (35.2)	10.67 (35.0)	20.73 (68.0)	20.48 (67.2)	32.75 (107.4)	32.61 (107.0)	61.46 (201.6)	3.10 (10.2)
7.62 [300″]	6.19 (20.3)	7.41 (24.3)	8.67 (28.5)	11.21 (36.8)	11.13 (36.5)	16.17 (53.0)	16.06 (52.7)	31.18 (102.3)	30.80 (101.0)	49.20 (161.4)	49.11 (161.1)	92.37 (303.0)	4.68 (15.4)
15.24 [600″]	12.44 (40.8)	14.90 (48.9)	17.44 (57.2)	22.54 (73.9)	22.33 (73.3)	32.46 (106.5)	32.23 (105.7)	62.54 (205.1)	61.76 (202.6)	98.56 (323.3)	98.60 (323.4)	185.10 (607.3)	9.44 (31.0)
25.40 [1000″]	20.77 (68.1)	24.88 (81.6)	29.12 (95.5)	37.63 (123.4)	37.28 (122.3)	54.17 (177.7)	53.79 (176.4)	104.36 (342.3)	103.05 (338.0)	164.38 (539.2)	164.59 (539.8)	— (—)	15.78 (51.8)

For throw distances with fixed-focus lens ET-D75LE90, please visit the Panasonic Projector Global Website.

Terminals

1. Remote 1 input/output
2. Remote 2 input
3. Serial input/output
4. 3D Sync input/output (PT-DZ21K2/DS20K2 only)
5. 3D Sync output (PT-DZ21K2/DS20K2 only)
6. SDI 1 input (PT-DZ21K2/DS20K2/DZ16K2 only) / SDI 2 input (PT-DZ21K2/DS20K2 only)
7. RGB 1 input
8. DVI-D input
9. RGB 2 input
10. HDMI input
11. LAN/DIGITAL LINK connector

Dimensions   PT-DZ21K2/DS20K2/DW17K2/DZ16K2

620 (24-13/32)

291 (11-15/32)

800 (31-1/2)

unit: mm (inches)

Optional Accessories

ET-D75LE6 Zoom lens
ET-D75LE10 Zoom lens
ET-D75LE20 Zoom lens
ET-D75LE30 Zoom lens
ET-D75LE40 Zoom lens
ET-D75LE8 Zoom lens
ET-D75LE50 Fixed-focus lens
ET-D75LE90 Fixed-focus lens
ET-D75MC1 Lens motor cover
ET-YFB200G DIGITAL LINK Switcher
ET-YFB100G Digital Interface Box

ET-PKD520H Ceiling mount bracket (for high ceiling)
ET-PKD520S Ceiling mount bracket (for low ceiling)
ET-PKD520B Projector mount bracket
ET-PFD510 Frame
ET-LAD520 Replacement lamp unit (one bulb)
ET-LAD520F Replacement lamp unit (a set of four bulbs)
ET-LAD520P Replacement lamp unit for portrait mode (one bulb)
ET-LAD520PF Replacement lamp unit for portrait mode (a set of four bulbs)
ET-EMF510 Replacement filter
Smoke cut filter (Available as service parts)
ET-UK20 Upgrade kit (Geometry Manager Pro included)
ET-CUK10 Auto Screen Adjustment Upgrade Kit (except in the United States)
ET-SWA100 Early Warning Software

Specifications

Model		PT-DZ21K2	PT-DS20K2	PT-DW17K2	PT-DZ16K2
Power supply		200–240 V AC, 50/60 Hz			
Power consumption		2,060 W (0.3 W with Standby Mode set to Eco*1, 4 W with Standby Mode set to Normal)			
Refresh rate		120 Hz*2		60 Hz*2	120 Hz*2
DLP™ chip	Panel size	24.4 mm (0.96˝) diagonal (16:10 aspect ratio)	24.1 mm (0.95˝) diagonal (4:3 aspect ratio)	21.6 mm (0.85˝) diagonal (16:9 aspect ratio)	24.1 mm (0.95˝) diagonal (16:9 aspect ratio)
	Display method	DLP™ chip x 3, DLP™ projection system			
	Pixels	2,304,000 (1920 x 1200) x 3, total of 6,912,000 pixels	1,470,000 (1400 x 1050) x 3, total of 4,410,000 pixels	1,049,088 (1366 x 768) x 3, total of 3,147,264 pixels	2,073,600 (1920 x 1080) x 3, total of 6,220,800 pixels
Lamp	Normal	UHM lamp x 4 (432 W), replacement cycle of up to 3,000 hours*3			
	Portrait	UHM lamp x 4 (432 W), replacement cycle of up to 1,000 hours			—
Lens		Optional powered zoom and fixed-focus lenses			
Screen size (diagonal)		1.78–25.4 m (70–1,000˝), 3.05–15.24 m (120–600˝) with ET-D75LE90, 1.78–15.24 m (70–600˝) with ET-D75LE8, 16:10 aspect ratio	1.78–25.4 m (70–1,000˝), 3.05–15.24 m (120–600˝) with ET-D75LE90, 1.78–15.24 m (70–600˝) with ET-D75LE8, 4:3 aspect ratio	1.78–25.4 m (70–1,000˝), 3.05–15.24 m (120–600˝) with ET-D75LE90, 1.78–15.24 m (70–600˝) with ET-D75LE8, 16:9 aspect ratio	
Brightness*4		20,000 lm (four-lamp)		17,000 lm (four-lamp)	16,000 lm (four-lamp)
Center-to-corner uniformity*4		90 %			
Contrast*4		10,000:1 (full on/off, with Dynamic Iris set to "3")			
Resolution		1920 x 1200 pixels	1400 x 1050 pixels (input signals that exceed this resolution will be converted to 1400 x 1050 pixels)	1366 x 768 pixels (input signals that exceed this resolution will be converted to 1366 x 768 pixels)	1920 x 1080 pixels (input signals that exceed this resolution will be converted to 1920 x 1080 pixels)
Scanning frequency	SDI — Dual-link 3G-SDI	SMPTE ST 425 compliant, [YPвPя 4:4:4 12bit/10bit] 1080/60p, 1080/50p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p, [RGB 4:4:4 12bit/10bit] 1080/60p, 1080/50p, 2048 x 1080/60p, 2048 x 1080/50p, 2048 x 1080/48p		—	—
	Dual-link HD-SDI	SMPTE ST 372 compliant, [RGB 4:4:4 12bit/10bit] 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p, 2048 x 1080/24p, 2048 x 1080/24sF, [X´Y´Z´ 4:4:4 12bit] 2048 x 1080/24p, 2048 x 1080/24sF		—	
	3G-SDI	SMPTE ST 424 compliant, [YPвPя 4:2:2 10bit] 1080/50p, 1080/60p, [RGB 4:4:4 12bit/10bit] 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p		—	SMPTE ST 424 compliant, [YPвPя 4:2:2 10bit] 1080/50p, 1080/60p, [RGB 4:4:4 12bit/10bit] 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
	HD-SDI	SMPTE ST 292 compliant, [YPвPя 4:2:2 10bit] 720/50p, 720/60p, 1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p		—	SMPTE ST 292 compliant, [YPвPя 4:2:2 10bit] 720/50p, 720/60p, 1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
	SD-SDI	SMPTE ST 259 compliant, [YCвCя 4:2:2 10bit] 480i, 576i		—	SMPTE ST 259 compliant, [YCвCя 4:2:2 10bit] 480i, 576i
	HDMI/DVI-D/ DIGITAL LINK	480p, 576p, 480i*5, 576i*5, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, VGA (640 x 480)–WUXGA*6 (1920 x 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			
	YPвPя (YCвCя)	fH: 15.73 kHz, fV: 59.94 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: 31.47 kHz, fV: 59.94 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)/24p], fH: 67.50 kHz, fV: 60 Hz [1080 (1125)/60p]			
	Video/Y/C	fH: 15.73 kHz, fV: 59.94 Hz [NTSC/NTSC4.43/PAL-M/PAL60], fH: 15.63 kHz, fV: 50 Hz [PAL/PAL-N/SECAM]			
Optical axis shift*7 (from center of screen)	Vertical	±55 % (±44 % with ET-D75LE6, +73 − +78 % with ET-D75LE90) (powered)	±50 % (±40 % with ET-D75LE6, +71 % (fixed) with ET-D75LE90) (powered)	±70 % (±60 % with ET-D75LE6, +78 − +96 % with ET-D75LE90) (powered)	±60 % (±50 % with ET-D75LE6, +75 − +88 % with ET-D75LE90) (powered)
	Horizontal	±20 % (±15 % with ET-D75LE6, ±6 % with ET-D75LE90) (powered)	±30 % (±20 % with ET-D75LE6, ±0 % (non-movable) with ET-D75LE90) (powered)	±30 % (±20 % with ET-D75LE6, -13 − +27 % [+: rightward] with ET-D75LE90) (powered)	±20 % (±15 % with ET-D75LE6, -12 − +14 % with ET-D75LE90) (powered)
Keystone correction range		Vertical: ±40 ° (± 22 ° with ET-D75LE50, ±28 ° with ET-D75LE6, +5 ° with ET-D75LE90), horizontal: ±15 °			
Keystone correction range with optional Upgrade Kit		Vertical: ±45 ° (±40 ° with ET-D75LE10/20, ±22 ° with ET-D75LE50, ±28 ° with ET-D75LE6), horizontal: ±40 ° (±15 ° with ET-D75LE50/6)		—	
Installation		Ceiling/floor, front /rear, portrait (portrait mode requires optional lamp units)			Ceiling/floor, front /rear
Terminals	SDI IN	BNC x 2 (3G/HD/SD-SDI)		—	BNC x 1 (3G/HD/SD-SDI)
	3D SYNC IN/OUT 3D SYNC OUT	BNC x 1 (3D timing signal) BNC x 1 (3D timing signal)		—	
	DVI-D IN HDMI IN RGB 1 IN RGB 2 IN SERIAL IN SERIAL OUT REMOTE 1 IN REMOTE 1 OUT REMOTE 2 IN LAN/DIGITAL LINK	DVI-D 24-pin x 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only) HDMI 19-pin x 1 (Deep Color, compatible with HDCP) BNC x 5 (RGB/YPвPя/YCвCя/VIDEO/YC x 1) D-sub HD 15-pin (female) x 1 (RGB/YPвPя/YCвCя x 1) D-sub 9-pin (female) x 1 for external control (RS-232C compliant) D-sub 9-pin (male) x 1 for link control M3 x 1 for wired remote control M3 x 1 for link control (for wired remote control) D-sub 9-pin (female) x 1 for external control (parallel) RJ-45 x 1 for network, DIGITAL LINK connection, 100Base-TX, compatible with Art-Net, PJLink™ (class 1), Deep Color, HDCP			
Cabinet materials		Molded plastic			
Dimensions (W x H x D)		620 x 255 x 730 mm (24 13/32˝ x 10 1/32˝ x 28 3/4˝) (optional lens, legs and lens cover not included)			
Weight*8		Approximately 41 kg (90.4 lbs) (optional lens not included)			
Operation noise*4		46 dB			
Operating environment		Operating temperature: 0–45 °C (32–113 °F)*9, operating humidity: 10–80 % (no condensation)			
Applicable software		Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro (ET-UK20 Upgrade Kit and ET-CUK10*10 Auto Screen Adjustment Kit)		Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software	
Supplied accessories		Power cord with secure lock, wireless/wired remote control unit, batteries (R6/AA type x 2), software CD-ROM (Logo Transfer Software, Multi Monitoring & Control Software)			

*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 Only compatible with dot clock frequency of 27 MHz (pixel repetition signal). *6 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking). *7 Optical axis shift is not supported on the ET-D75LE50. *8 Average value. May differ depending on the actual unit. *9 When the projector is used in Portrait Mode with ET-LAD520P/LAD520PF or used in locations from 1,400 m to 2,700 m (4,593 ft to 8,858 ft) above sea level, operating temperature range is 0 °C to 40 °C (32 °F to 104 °F). When used with Smoke Cut Filter, operating temperature range is 0 °C to 35 °C (32 °F to 95 °F), and the projector cannot be used in locations over 1,400 m (4,593 ft) above sea level. *10 Available worldwide except in the United States.

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All information included here is valid as of July 2015.

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