Panasonic

Spec File

Product Number: PT-DZ16K

Product Name: 3-Chip DLP™ Projector

Specifications

Main unit

DLP™ chip

Power supply 200-240 V AC, 12 A, 50/60 Hz (3-wire single-phase)

Power consumption 2,150 W (2,200 VA) (0.3 W with STANDBY MODE set to ECO.*1 9 W with

STANDBY MODE set to NORMAL.),

max. 7,338 BTU (without light output: 7,127 BTU)
Panel size 24.1 mm (0.95 inches) diagonal (16:9 aspect ratio)

Display method DLPTM chip \times 3 (R, G, B), DLPTM projection system Pixels 2,073,600 (1,920 \times 1,080) \times 3, total of 6,220,800 pixels

Lens Optional powered zoom/focus lenses
Lamp 420 W UHM lamps (x 4) (four lamp system)

Screen size 1.78-25.4 m (70-1,000 inches) (1.78-15.24 m (70-600 inches) with

the ET-D75LE8 tele), (1.78-7.62 m(70 - 300 inches) with the ET-D75LE5,

16:9 aspect ratio

Brightness*2 16,000 lumens (four lamp)

Center-to-corner uniformity*2 90%

Contrast*2 10,000:1 (full on/full off, in dynamic iris 3 mode)

Resolution 1,920 \times 1,080 pixels (Input signals that exceed this resolution will be

converted to 1,920 \times 1,080 pixels.)

Scanning frequency SDI 3G-SDI signal (YPBPR 4:2:2 10-bit):

SMPTE ST 424 compliant: 1080/50p, 1080/60p,

(RGB4:4:4 12bit/10bit):

SMPTE ST 424 compliant: 1080/50i, 1080/60i, 1080/25p, 1080/24p

1080/24sF, 1080/30p

Single-link HD-SDI signal (YPBPR 4:2:2 10-bit):

SMPTE ST 292 compliant: 720/50p, 720/60p, 1035/60i, 1080/50i,

1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p

SD-SDI signal (YCBCR 4:2:2 10-bit):

SMPTE ST 259 compliant: 480i, 576i

480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/25p,

1080/24p, 1080/24sF, 1080/30p, 1080/60p, 1080/50p,

VGA (640 \times 480)-WUXGA (1,920 \times 1,200), compatible with

non-interlaced signals only, dot clock: 25-162 MHz

HDMI/DVI-D/RGB Horizontal: 15-100 kHz, vertical: 24-120 Hz,

dot clock: 162MHz or less (HDMI/DVI-D: 25 MHz-162MHz)

YPBPR (YCBCR) 480i (525i): fh 15.73 kHz; fv 59.94 Hz,

576i (625i): fh 15.63 kHz; fv 50 Hz, 480p (525p): fh 31.47 kHz; fv 59.94 Hz, 576p (625p): fh 31.25 kHz; fv 50 Hz, 720 (750)/60p: fh 45.00 kHz; fv 60 Hz, 720 (750)/50p: fh 37.50 kHz; fv 50 Hz, 1035/60i: fh 33.75 kHz; fv 60 Hz, 1080 (1125)/60i: fh 33.75 kHz; fv 60 Hz,

1080 (1125)/50i: fH 28.13 kHz; fv 50 Hz, 1080/25p: fH 28.13 kHz; fv 25 Hz, 1080/24p: fH 27.00 kHz; fv 24 Hz,

1080/24sF: fH 27.00 kHz; fv 48 Hz, 1080/30p: fH 33.75 kHz; fv 30 Hz, 1080/60p: fH 67.50 kHz; fv 60 Hz, 1080/50p: fH 56.25 kHz; fv 50 Hz

Video/S-Video 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]

PT-DZ16k

Optical axis shift Vertical ±60% (±50% with the EI-D/5LE6) from center of screen, powered	Optical axis shift	Vertical	±60% (±50% with the ET-D75LE6) from center of screen, powere	d
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 $\pm 20\%$ ($\pm 15\%$ with the ET-D75LE6) from center of screen, powered Horizontal NOTE: Optical axis shift function cannot be operated when used with the

ET-D75LE50.

Keystone correction range Vertical ±40°, horizontal ±15°

> (vertical ±40° and horizontal ±15° with the ET-DLE1/2/10/20, vertical ±22° and horizontal ±15° with the ET-D75LE5/50, vertical ±28° and horizontal ±15° with the ET-D75LE6)

Keystone correction range when using both the Keystone and Curved correction of the Geometric Adjustment function

Vertical ±20°, horizontal ±15°

(vertical ±8° and horizontal ±8° with the ET-D75LE5/50, vertical ±10° and horizontal ±10° with the ET-D75LE6

Installation

Ceiling/floor, front/rear

Terminals SDI IN BNC \times 1,

> 3G-SDI signal: SMPTE ST 424 compliant HD-SDI signal: SMPTE ST 292 compliant SD-SDI signal: SMPTE ST 259 compliant

HDMI IN HDMI 19-pin × 1, Deep Color, compatible with HDCP,

> 480i, 576i, 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p

VGA $(640 \times 480) - WUXGA^{*3} (1,920 \times 1,200),$

dot clock: 25-162 MHz

NOTE: Compatible with non-interlaced signals only.

DVI-D IN DVI-D 24-pin × 1, DVI 1.0 compliant, HDCP compatible,

for 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 $(640 \times 480) - WUXGA^{*3} (1,920 \times 1,200),$

dot clock: 25-162 MHz

NOTE: Compatible with non-interlaced signals only.

RGB 1 IN BNC × 5

R: 0.7 Vp-p, 75 ohms, R, G, B

G: 0.7 Vp-p (G: 1.0 Vp-p for sync on G), 75 ohms,

B: 0.7 Vp-p, 75 ohms

HD, VD/SYNC: TTL, high impedance, positive/negative automatic NOTE: SYNC/HD and VD terminals do not accept tri-level sync signals.

Y, PB, PR (Y, CB, CR)

Y: 1.0 Vp-p (including sync signal), PB/PR (CB/CR): 0.7 Vp-p, 75 ohms

S-Video signal

Y: 1.0 Vp-p, C: 0.286 Vp-p, 75 ohms

RGB 2 IN D-sub HD 15-pin (female) x 1

R, G, B R: 0.7 Vp-p, 75 ohms,

G: 0.7 Vp-p (G: 1.0 Vp-p for sync on G), 75 ohms,

B: 0.7 Vp-p, 75 ohms

HD, VD/SYNC: TTL, high impedance, positive/negative automatic NOTE: SYNC/HD and VD terminals do not accept tri-level sync signals.

Y, PB, PR (Y, CB, CR) Y: 1.0 Vp-p (including sync signal), PB/PR (CB/CR): 0.7 Vp-p, 75 ohms

VIDEO IN BNC \times 1, 1.0 Vp-p, 75 ohms

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 jack × 1 for wired remote control

REMOTE 1 OUT M3 jack × 1 for link control

REMOTE 2 IN D-sub 9-pin (female) × 1 for external control (parallel)

LAN RJ-45 × 1 for network connection, 100Base-TX/10Base-T, compliant

with PJLink™ (class 1)

PT-DZ16K

Power cord length 3.0 m (9 ft 10 in)
Cabinet materials Molded plastic

Dimensions (W \times H \times D): 620 \times 291*4 \times 800*5 mm

 $(24-7/16 \times 11-15/32^{*4} \times 31-1/2^{*5} \text{ inches})$ (without lens)

Weight*6 Approx. 43 kg (94.8 lbs) (without lens)

Operation noise*2 48 dB (quad lamp operation)
Operating temperature $0^{\circ}-45^{\circ}\text{C} (32^{\circ}-113^{\circ}\text{F})^{*7}$ Operating humidity 10%-80% (no condensation)

Remote control unit

Power supply 3 V DC (AA/R6 type battery \times 2)

Operation range*8 Approx. 30 m (98 ft 5 in) when operated from directly in front of the

signal receptor

Dimensions (W \times H \times D) 51 \times 176 \times 28 mm (2 \times 6-15/16 \times 1-3/32 inches)

Weight Approx. 134 g (4.7 oz) (including batteries)

Supplied accessories

Power cord with security lock (\times 1) Wireless/wired remote control unit (\times 1) Batteries for remote control (AA/R6 type \times 2)

Software CD-ROM (Logo Transfer Software, Multi Projector Monitoring

& Control Software) (x 1)

Optional accessories

Zoom lens (0.9-1.1:1) ET-D75LE6 Zoom lens (1.3-1.7:1) ET-D75LE10 Zoom lens (1.7-2.4:1) ET-D75LE20 Zoom lens (2.4-4.7:1) ET-D75LE30 Zoom lens (4.6-7.4:1) ET-D75LE40 ET-D75LE8 Zoom lens (7.3-13.8:1) Fixed-focus lens (0.7:1) ET-D75LE50 Lens motor cover ET-D75MC1

Ceiling mount bracket ET-PKD510H (for high ceilings) ET-PKD510S (for low ceilings)

Frame ET-PFD510 Smoke cut filter ET-SFR510

Replacement lamp unit ET-LAD510 (one bulb)

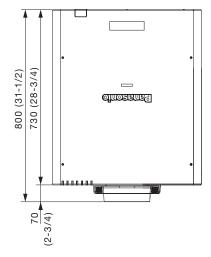
ET-LAD510F (a set of four bulbs)

Replacement filter unit ET-EMF510

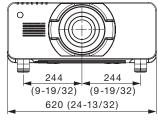
Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice.

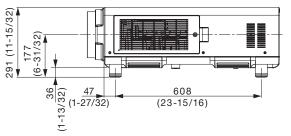
- *1 When the standby mode is set to eco, network functions such as power on over the LAN network will not operate, and the serial output terminal cannot be used. Also, only certain commands can be received for external control using the serial terminal.
- •2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
- *3 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).
- *4 With legs at shortest position.
- *5 Excluding the optional lens.
- *6 Average value (excluding the optional lens). May differ depending on models.
- *7 The operating temperature range is 0 °C to 40 °C (32 °F to 104 °F) when the FAN CONTROL is set to HIGH ALTITUDE MODE (for altitudes from 1,400 m to 2,700 m (4,593 ft to 8,858 ft) above sea level). When the projector is used with the ET-SFR510 Smoke Cut Filter, the operating temperature range is 0 °C to 35 °C (32 °F to 95 °F), and the projector cannot be used in places at high altitude.
- *8 Operation range differs depending on environments.

Dimensions

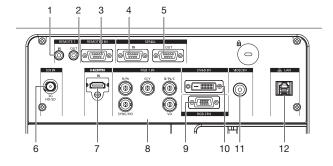


unit : mm (inch)
NOTE: This illustration is not drawn to scale.



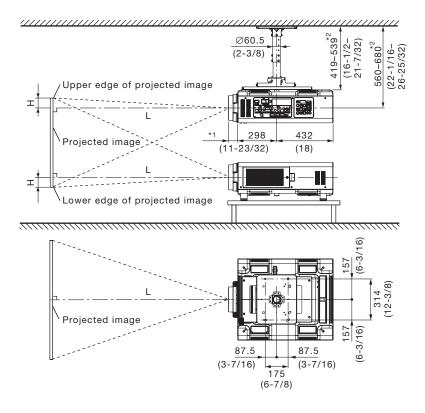


Terminals



- 1 Remote 1 input
- 2 Remote 1 output
- 3 Remote 2 input
- 4 Serial input
- 5 Serial output
- 6 SDI input
- 7 HDMI input
- 8 RGB 1 input
- 9 RGB 2 Input
- 10 DVI-D input
- 11 Video input
- 12 LAN connector

Standard setting-up position



- *1 When the lens protrudes to the maximum.
 - 212 mm (8-11/32) with the ET-D75LE6 125 mm (4-29/32) with the ET-D75LE10

 - 121 mm (4-3/4) with the ET-D75LE20 121 mm (4-3/4) with the ET-D75LE30
 - 124 mm (4-7/8) with the ET-D75LE40
 - 254 mm (10) with the ET-D75LE8 203 mm (8) with the ET-D75LE50
- *2 Adjustable in 40 mm (1-9/16) steps.

unit : mm (inch)

NOTE:

Illustrations show the projector installed using optional ceiling mount bracket ET-PKD510H and an optional lens.

This illustration is not drawn to scale.

Caution:

- All construction work should be done by a qualified technician.
- When mounting to the ceiling, use the special mounting bracket. To prevent the projector from swaying or dropping, attach the wire that is included with the projector between the mounting bracket and the ceiling.

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Projection distance for 16:9 aspect ratio screen

(ET-D75LE1/D75LE2/D75LE3/D75LE4/D75LE5)

Unit: meters

Screen				Height from the edge of screen									
(diagona	al)				Zo	oom				Fixed-focus	to center of lens (H)		
			75LE1 n lens		75LE2 1 lens		75LE3 n lens		75LE4 n lens	ET-D75LE5 Fixed-focus	Zoom lenses	Fixed- focus lens	
[m] /	[in]	min.	max.	min.	max.	min.	max.	min.	max.	– lens			
1.78/	70	2.08	2.79	2.82	4.24	4.25	7.14	7.15	11.45	1.03	-0.09 - 0.96	0.44	
2.03/	80	2.39	3.20	3.23	4.86	4.87	8.18	8.18	13.10	1.19	-0.10 - 1.10	0.50	
2.29/	90	2.70	3.61	3.65	5.48	5.49	9.21	9.22	14.74	1.35	-0.11 - 1.23	0.56	
2.54/	100	3.01	4.02	4.06	6.11	6.12	10.25	10.26	16.39	1.51	-0.12 - 1.37	0.62	
3.05/	120	3.63	4.85	4.89	7.35	7.36	12.33	12.33	19.69	1.82	-0.15 - 1.64	0.75	
3.81/	150	4.55	6.09	6.13	9.21	9.22	15.44	15.44	24.64	2.30	-0.19 - 2.05	0.93	
5.08/	200	6.10	8.15	8.20	12.32	12.33	20.63	20.63	32.89	3.10	-0.25 - 2.74	1.25	
6.35/	250	7.64	10.21	10.27	15.42	15.43	25.81	25.82	41.14	3.89	-0.31 - 3.42	1.56	
7.62/	300	9.18	12.27	12.34	18.53	18.54	31.00	31.01	49.39	4.69	-0.37 - 4.11	1.87	
8.89/	350	10.73	14.33	14.41	21.63	21.64	36.19	36.19	57.63	-	-0.44 - 4.79	2.49	
10.16/	400	12.27	16.40	16.48	24.74	24.75	41.37	41.38	65.88	-	-0.50 - 5.48	3.11	
12.70/	500	15.36	20.52	20.63	30.95	30.96	51.75	51.75	82.38	-	-0.62 - 6.85	3.74	
15.24/	600	18.44	24.64	24.77	37.16	37.17	62.12	62.13	98.87	-	-0.75 - 8.22	4.36	
25.40/ 1	000	30.79	41.14	41.33	62.01	62.02	103.62	103.62	164.86	-	-1.25 – 13.70	4.98	

Unit: feet

Screen				Height from the edge of screen to center of lens (H)									
(diagon	al)				Z	oom				Fixed-focus	to center or lens (n)		
			75LE1 n lens		75LE2 1 lens		75LE3 n lens		75LE4 n lens	ET-D75LE5 Fixed-focus	Zoom lenses	Fixed- focus lens	
[m] /	[in]	min.	max.	min.	max.	min.	max.	min.	max.	– lens			
1.78/	70	6.8	9.1	9.2	13.9	14.0	23.4	23.4	37.6	3.4	-0.3 - 3.1	1.4	
2.03/	80	7.9	10.5	10.6	16.0	16.0	26.8	26.8	43.0	3.9	-0.3 - 3.6	1.6	
2.29/	90	8.9	11.8	12.0	18.0	18.0	30.2	30.3	48.4	4.4	-0.4 - 4.0	1.8	
2.54/	100	9.9	13.2	13.3	20.0	20.1	33.6	33.7	53.8	4.9	-0.4 - 4.5	2.0	
3.05/	120	11.9	15.9	16.0	24.1	24.1	40.4	40.5	64.6	6.0	-0.5 - 5.4	2.5	
3.81/	150	14.9	20.0	20.1	30.2	30.3	50.7	50.7	80.8	7.5	-0.6 - 6.7	3.1	
5.08/	200	20.0	26.7	26.9	40.4	40.4	67.7	67.7	107.9	10.2	-0.8 - 9.0	4.1	
6.35/	250	25.1	33.5	33.7	50.6	50.6	84.7	84.7	135.0	12.8	-1.0 – 11.2	5.1	
7.62/	300	30.1	40.3	40.5	60.8	60.8	101.7	101.7	162.0	15.4	-1.2 – 13.5	6.1	
8.89/	350	35.2	47.0	47.3	71.0	71.0	118.7	118.7	189.1	-	-1.4 – 15.7	8.2	
10.16/	400	40.3	53.8	54.1	81.2	81.2	135.7	135.8	216.1	-	-1.6 – 18.0	10.2	
12.70/	500	50.4	67.3	67.7	101.5	101.6	169.8	169.8	270.3	-	-2.0 - 22.5	12.3	
15.24/	600	60.5	80.9	81.3	121.9	122.0	203.8	203.8	324.4	-	-2.5 – 27.0	14.3	
25.40/ 1	1000	101.0	135.0	135.6	203.4	203.5	339.9	340.0	540.9	_	-4.1 – 44.9	16.3	

- The value for L (distance to screen) varies slightly within ±5% depending on the zoom lens characteristics.
- $\bullet \ \ \, \text{At the shortest projection distance, the zoom lens characteristics may cause slight image distortion.}$
- . When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.

 $\label{eq:NOTE: When the ET-D75LE5} \textbf{ is mounted, the optical lens shift function cannot be used.}$

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Projection distance for 16:9 aspect ratio screen

(ET-D75LE6/D75LE10/D75LE20/D75LE30/D75LE40/D75LE8/D75LE50)

Unit: meters

Screen													Height from the edge of scre to center of lens (H)						
(diagon	al)								Zoom					Fixed-focus	to center or lens (n)				
			75LE6 n lens		5LE10 I lens		75LE20 n lens		75LE30 om lens		75LE40 m lens					ET-D75LE50 Fixed-focus	Except	lenses ET-D75LE6	
[m] /	[in]	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	- lens	ET-D75LE	0	lens		
1.78/	70	1.40	1.67	1.96	2.53	2.53	3.68	3.66	7.14	7.07	11.36	11.16	21.28	1.04	-0.09 - 0.9	6 0.00 - 0.87	0.44		
2.03/	80	1.61	1.92	2.25	2.91	2.91	4.23	4.20	8.19	8.10	13.00	12.81	24.37	1.20	-0.10 - 1.1	0 0.00 - 1.00	0.50		
2.29/	90	1.82	2.17	2.54	3.29	3.28	4.77	4.74	9.23	9.13	14.65	14.46	27.46	1.36	-0.11 – 1.2	3 0.00 - 1.12	0.56		
2.54/	100	2.03	2.42	2.83	3.67	3.65	5.31	5.28	10.28	10.16	16.29	16.11	30.55	1.51	-0.12 - 1.3	7 0.00 – 1.25	0.62		
3.05/	120	2.44	2.92	3.42	4.42	4.40	6.40	6.35	12.37	12.23	19.58	19.41	36.73	1.83	-0.15 - 1.6	4 0.00 - 1.49	0.75		
3.81/	150	3.07	3.67	4.29	5.55	5.52	8.03	7.97	15.50	15.32	24.52	24.36	46.00	2.31	-0.19 - 2.0	5 0.00 - 1.87	0.93		
5.08/	200	4.11	4.92	5.75	7.44	7.39	10.74	10.67	20.73	20.48	32.75	32.61	61.46	3.10	-0.25 - 2.7	4 0.00 - 2.49	1.25		
6.35/	250	5.15	6.17	7.21	9.33	9.26	13.46	13.36	25.96	25.64	40.97	40.86	76.91	3.89	-0.31 – 3.4	2 0.00 - 3.11	1.56		
7.62/	300	6.19	7.41	8.67	11.21	11.13	16.17	16.06	31.18	30.80	49.20	49.11	92.37	4.68	-0.37 – 4.1	1 0.00 - 3.74	1.87		
8.89/	350	7.23	8.66	10.13	13.10	12.99	18.88	18.75	36.41	35.96	57.43	57.35	107.82	5.48	-0.44 - 4.7	9 0.00 – 4.36	3 2.49		
10.16/	400	8.28	9.91	11.59	14.99	14.86	21.60	21.45	41.64	41.12	65.65	65.60	123.28	6.27	-0.50 - 5.4	8 0.00 - 4.98	3.11		
12.70/	500	10.36	12.40	14.51	18.76	18.60	27.03	26.84	52.09	51.44	82.11	82.10	154.19	7.85	-0.62 - 6.8	5 0.00 - 6.23	3.74		
15.24/	600	12.44	14.90	17.44	22.54	22.33	32.46	32.23	62.54	61.76	98.56	98.60	185.10	9.44	-0.75 - 8.2	2 0.00 - 7.47	4.36		
25.40/	1000	20.77	24.88	29.12	37.63	37.28	54.17	53.79	104.36	103.05	164.38	164.59	_	15.78	-1.25 – 13.7	0 0.00 – 12.45	4.98		

Unit: feet

Screen		e Distance to screen (L)											Height from the edge of screen				
(diagon	al)								Zoom					Fixed-focus	to center of lens (H)		
		ET-D75LE6 Zoom lens			5LE10 n lens		75LE20 m lens		ET-D75LE30 Zoom lens		ET-D75LE40 ET-D75LE8 Zoom lens Zoom lens			ET-D75LE50 Fixed-focus	Zoom	lenses ET-D75LE6	Fixed- focus
[m] /	[in]	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	- lens	ET-D75LE6		lens
1.78/	70	4.6	5.5	6.4	8.3	8.3	12.1	12.0	23.4	23.2	37.3	36.6	69.8	3.4	-0.3 - 3.1	0.0 - 2.9	1.4
2.03/	80	5.3	6.3	7.4	9.6	9.5	13.9	13.8	26.9	26.6	42.7	42.0	79.9	3.9	-0.3 - 3.6	0.0 - 3.3	1.6
2.29/	90	6.0	7.1	8.3	10.8	10.8	15.6	15.5	30.3	30.0	48.1	47.4	90.1	4.4	-0.4 - 4.0	0.0 - 3.7	1.8
2.54/	100	6.6	7.9	9.3	12.0	12.0	17.4	17.3	33.7	33.3	53.5	52.9	100.2	5.0	-0.4 - 4.5	0.0 - 4.1	2.0
3.05/	120	8.0	9.6	11.2	14.5	14.4	21.0	20.8	40.6	40.1	64.2	63.7	120.5	6.0	-0.5 - 5.4	0.0 - 4.9	2.5
3.81/	150	10.1	12.0	14.1	18.2	18.1	26.3	26.2	50.9	50.3	80.4	79.9	150.9	7.6	-0.6 - 6.7	0.0 - 6.1	3.1
5.08/	200	13.5	16.1	18.9	24.4	24.2	35.2	35.0	68.0	67.2	107.4	107.0	201.6	10.2	-0.8 - 9.0	0.0 - 8.2	4.1
6.35/	250	16.9	20.2	23.7	30.6	30.4	44.1	43.8	85.2	84.1	134.4	134.0	252.3	12.8	-1.0 – 11.2	0.0 - 10.2	5.1
7.62/	300	20.3	24.3	28.5	36.8	36.5	53.1	52.7	102.3	101.1	161.4	161.1	303.1	15.4	-1.2 – 13.5	0.0 - 12.3	6.1
8.89/	350	23.7	28.4	33.3	43.0	42.6	62.0	61.5	119.5	118.0	188.4	188.2	353.8	18.0	-1.4 – 15.7	0.0 - 14.3	8.2
10.16/	400	27.1	32.5	38.0	49.2	48.8	70.9	70.4	136.6	134.9	215.4	215.2	404.5	20.6	-1.6 – 18.0	0.0 - 16.3	10.2
12.70/	500	34.0	40.7	47.6	61.6	61.0	88.7	88.0	170.9	168.8	269.4	269.4	505.9	25.8	-2.0 - 22.5	0.0 - 20.4	12.3
15.24/	600	40.8	48.9	57.2	73.9	73.3	106.5	105.7	205.2	202.6	323.4	323.5	607.3	31.0	-2.5 – 27.0	0.0 - 24.5	14.3
25.40/	1000	68.2	81.6	95.5	123.5	122.3	177.7	176.5	342.4	338.1	539.3	540.0	-	51.8	-4.1 – 44.9	0.0 - 40.9	16.3

- The value for L (distance to screen) varies slightly within ±5% depending on the zoom lens characteristics.
- At the shortest projection distance, the zoom lens characteristics may cause slight image distortion.
- . When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.

 ${\bf NOTE:\ When\ the\ ET-D75LE50\ is\ mounted,\ the\ optical\ lens\ shift\ function\ cannot\ be\ used.}$

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Calculation of the projection distance

For a screen size different from the above, use the equation below to calculate the projection distance.

Aspect ratio 16:9

Zoom lenses

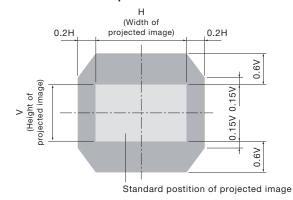
ET-D75LE1	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0309 - 0.0760 L (m) = (diagonal screen size in inches) \times 0.0412 - 0.1004
ET-D75LE2	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0414 - 0.0795 L (m) = (diagonal screen size in inches) \times 0.0621 - 0.1064
ET-D75LE3	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0621 - 0.0958 L (m) = (diagonal screen size in inches) \times 0.1037 - 0.1216
ET-D75LE4	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.1037 - 0.1158 L (m) = (diagonal screen size in inches) \times 0.1650 - 0.1013
ET-D75LE6	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0208 - 0.0566 L (m) = (diagonal screen size in inches) \times 0.0250 - 0.0736
ET-D75LE10	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0292 - 0.0857 L (m) = (diagonal screen size in inches) \times 0.0377 - 0.1085
ET-D75LE20	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0374 - 0.0832 L (m) = (diagonal screen size in inches) \times 0.0543 - 0.1162
ET-D75LE30	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.0539 - 0.1131 L (m) = (diagonal screen size in inches) \times 0.1045 - 0.1765
ET-D75LE40	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.1032 - 0.1577 L (m) = (diagonal screen size in inches) \times 0.1645 - 0.1615
ET-D75LE8	minimum maximum	L (m) = (diagonal screen size in inches) \times 0.1650 - 0.3862 L (m) = (diagonal screen size in inches) \times 0.3091 - 0.3598
Fixed-focus lens		
ET-D75LE5		L (m) = (diagonal screen size in inches) \times 0.0159 - 0.0835
ET-D75LE50		L (m) = (diagonal screen size in inches) \times 0.0159 - 0.0713

 $[\]bullet\,$ Distances calculated with the above equations will include slight deviations.

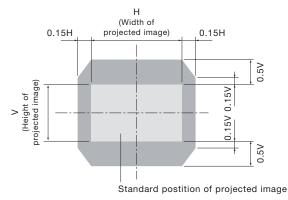
Shift range

Optical axis shift function allows to shift the position of a projected image as shown below.

• When the lens except the ET-D75LE6 is mounted



• When the ET-D75LE6 is mounted



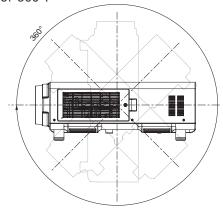
NOTE: Because the ET-D75LE50 is a fixed short-throw lens, the lens shift function cannot be used with it.

Installable angle

Install the projector at an angle within the range shown below.

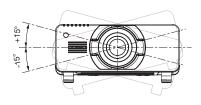
• Vertical direction

The projector may be installed at a vertical angle of 360°.



Horizontal direction

The projector may be installed at a horizontal angle of $\pm 15^{\circ}$.



List of compatible signals

The signals that can be input to this projector are shown in the table below. Horizontal scanning frequencies of 15 kHz to 100 kHz, vertical scanning frequencies of 24 Hz to 120 Hz, and a dot clock of 162 MHz maximum can be input.

NOTE: The native resolution of this projector is 1,920 x 1,080 pixels. If the display resolution of the input signal is different from the native resolution, image compression or expansion will be used to convert the input signal to a level within the native resolution.

Display mode	Display	Scanning fre	equency	Dot clock	Format
	resolution (dots)* ¹	H (kHz)	v (kHz)	frequency (MHz)	
NTSC/NTSC4.43/PAL-M/PAL60	720 × 480i	15.7	59.9	-	VIDEO/
PAL/PAL-N/SECAM	720 × 576i	15.6	50.0	-	Y/C(RGB1)
480i (525i)	720 × 480i	15.7	59.9	13.5	SDI/RGB1/RGB2
576i (625i)	720 × 576i	15.6	50.0		
480i (525i)	720(1440) × 480*	¹ 15.7	59.9	27.0	HDMI/DVI-D
576i (625i)	720(1440) × 480*	¹ 15.6	50.0	_	
480p (525p)	720 × 483	31.5	59.9	_	HDMI/DVI-D/RGB1
576p (625p)	720 × 576	31.3	50.0		RGB2
720/60p	1280 × 720	45.0	60.0	74.3	SDI/HDMI/DVI-D/
720/50p	1280 × 720	37.5	50.0	_	RGB1/RGB2
1080/60i* ²	1920 × 1080i	33.8	60.0		
1080/50i	1920 × 1080i	28.1	50.0	_	
1080/24p	1920 × 1080	27.0	24.0	_	
1080/24sF	1920 × 1080i	27.0	48.0	_	
1080/25p	1920 × 1080	28.1	25.0	_	
1080/30p	1920 × 1080	33.8	30.0	_	
1080/60p	1920 × 1080	67.5	60.0	148.5	-
1080/50p	1920 × 1080	56.3	50.0	_	
VESA400	640 × 400	31.5	70.1	25.2	HDMI/DVI-D/RGB1
		37.9	85.1	31.5	RGB2
VGA480	640 × 480	31.5	59.9	25.2	-
	_	35.0	66.7	30.2	-
	_	37.9	72.8	31.5	-
	_	37.5	75.0	31.5	-
		43.3	85.0	36.0	-
SVGA	800 × 600	35.2	56.3	36.0	-
		37.9	60.3	40.0	=
		48.1	72.2	50.0	=
		46.9	75.0	49.5	=
		53.7	85.1	56.3	=
MAC16	832 × 624	49.7	74.6	57.3	=
XGA	1024 × 768	39.6	50.0	51.9	=
		48.4	60.0	65.0	=
		56.5	70.1	75.0	-
		60.0	75.0	78.8	-
		65.5	81.6	86.0	-
		68.7	85.0	94.5	-
		81.4	100.0	113.3	-
		98.8	120.0	139.1	-
MXGA	1152 × 864	53.7	60.0	81.6	-
		64.0	70.0	94.2	-
		67.5	74.9	108.0	-
		77.1	85.0	119.7	-
MAC21	1152 × 870	68.7	75.1	100.0	-

^{*1} Pixel-Repetition signal(dot clock frequency 27.0MHz) only.

^{*2} When 1125(1035)/60i signal input, it displays as 1125(1080)/60i signals.

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Display mode	Display resolution	Scanning fro	equency V	Dot clock frequency	Format	
	(dots)	(kHz)	(kHz)	(MHz)		
1280 × 720	1280 × 720	37.1	49.8	60.5	HDMI/DVI-D/RGB1	
		44.8	59.9	74.5	RGB2	
		76.3	100.0	131.8	-	
	-	92.6	120.0	161.6	-	
1280 × 768	1280 × 768	39.6	49.9	65.3	-	
	_	47.8	59.9	79.5	-	
	1280 × 768*3	47.4	60.0	68.3	-	
	1280 × 768	60.3	74.9	102.3	-	
	-	68.6	84.8	117.5	-	
1280 × 800	1280 × 800	41.3	50.0	68.0	-	
	-	49.7	59.8	83.5	-	
	1280 × 800*3	49.3	59.9	71.0	-	
	1280 × 800	62.8	74.9	106.5	-	
	-	71.6	84.9	122.5	-	
MSXGA	1280 × 960	60.0	60.0	108.0	-	
SXGA	1280 × 1024	52.4	50.0	88.0	-	
	-	64.0	60.0	108.0	-	
	-	72.3	66.3	125.0	-	
	-	78.2	72.0	135.1	-	
	-	80.0	75.0	135.0	-	
	-	91.1	85.0	157.5	-	
1366×768	1366 × 768	47.7	59.8	85.5	-	
	1000 × 700	39.6	49.9	69.0	-	
SXGA+	1400 × 1050	54.1	50.0	99.9	-	
o/ta/ti	1400 × 1030	64.0	60.0	108.0	-	
	-	65.2	60.0	122.6	-	
	-	65.3	60.0	121.8	-	
	-	78.8	72.0	149.3	-	
	-	82.2	75.0	155.9	-	
WXGA+	1440 × 900	55.9	59.9	106.5	-	
· · · · · · · · · · · · · · · · · · ·	1440 × 900	46.3	49.9	86.8	-	
1600×900	1600 × 900	46.4	49.9	96.5	-	
1000×300	1000 x 900	55.9	60.0	119.0	-	
UXGA	1600 × 1200	75.0	60.0	162.0	-	
WSXGA+	1680 × 1050	65.3	60.0	146.3	-	
WOXUAT	1080 x 1030	54.1	50.0	119.5	-	
1920×1080	1920 × 1080	55.6	49.9	141.5	-	
1020 1000	1920 × 1080 1920 × 1080*3	66.6	59.9	138.5	-	
		67.2	60.0	173.0	RGB1/RGB2	
WUXGA	1920 × 1080*4			158.3	HDMI/DVI-D/RGB	
WUNGA	1920 × 1200	61.8	49.9	154.0	RGB2	
	1920 × 1200*3	74.0	60.0			
	1920 × 1200 *4	74.6	59.9	193.3	RGB1/RGB2	

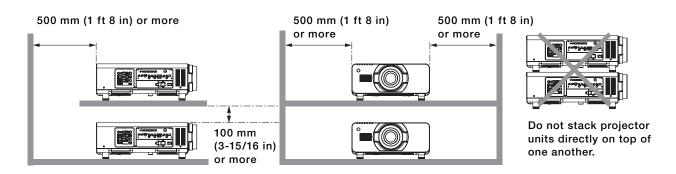
 $^{\,^{\}star3}\,$ Compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).

 $^{^{\}star 4}$ $\,$ Image resolution is reduced by the image processing circuit before projection.

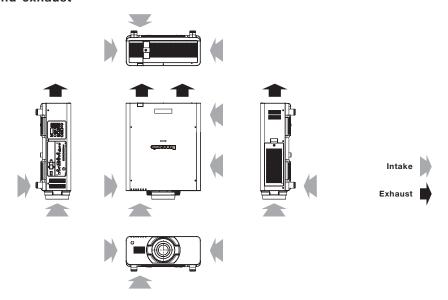
Notes on projector placement and operation

The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following precautions.

- 1. Never place objects on top of the projector while it is operating.
- 2. Make sure there is an unobstructed space of 500 mm (1 feet 8 inches) or more around the projector's exhaust openings.
- 3. Do not stack projector units directly on top of one another. If two units must be stacked for backup use in ordinary projection, use a method as shown below and provide ample space between the units to ensure that exhaust heat does not accumulate near the intake opening or around the units. Dual stacked projection is not recommended.
- 4. Make sure that nothing blocks the projector's air intake and exhaust openings. Also, install the projector so that cool or hot air from other air conditioning equipment does not flow directly toward the projector's air intake or exhaust openings.
- 5. Do not install the projector in an enclosed space. If it is necessary to install it in an enclosed space, add a separate ventilation system. If ventilation is insufficient, hot air will accumulate at the intake opening. This may cause the projector's protective circuit to interrupt projector operation.
- 6. If the projector is installed in an enclosed space, ensure that the temperature of the air surrounding the projector is between 0°C and 40°C (32°F and 104°F). Also make sure that the projector's intake and exhaust openings are not blocked. Even though the air surrounding the projector is 40°C (104°F) or less, if hot exhaust air accumulates inside the space, it may cause the projector's protective circuit to interrupt projector operation. Pay particular attention to the surrounding temperature conditions when planning the installation.
- 7. If the projector is not to be set on the floor using adjuster legs, install it by using the five ceilingmount screw holes (screw diameter: M6, length of each screw hole in the projector: 30 mm (1-3/16 inches)). Provide a space of 5 mm (3/16 inches) or more between the projector and the mounting surface by inserting metal spacers.



Direction of air intake and exhaust



Operating the projector continuously

- 1. If the projector is to be operated continuously one week, use the quad-lamp optical system's alternating lamp operation (lamp relay) function. The projector cannot be operated continuously one week in quadlamp mode. Allow a minimum of two hours per day of non-operation time for each lamp if the projector is to be operated continuously for more than one week.
- The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations.

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