Panasonic

SPEC FILE

Product Number : PT-**RZ12K**

Product Name : 3-Chip DLP™ Projector

Specifications

Main unit

Power supply		AC 100–240 V 50/60 Hz
Power consumption		1,200 W (1,280 VA) (0.3 W with STANDBY MODE set to ECO.*1 4 W with STANDBY MODE set to NORMAL.), Average power consumption NORMAL: 800W ECO: 680W LONG LIFE1: 620W LONG LIFE 2: 590W LONG LIFE 3: 550W *Operating Temperature: 25 °C (77 °F), Altitude: 700m (22 ft 12 in), ICE627087: 2008 Broadcast contents, Picture mode: Dynamic, Dynamic Contrast3
BTU value		Max 4,096 BTU
DLP™ chip	Panel size	24.4 mm (0.96 inches) diagonal (16:10 aspect ratio)
	Display method	DLP™ chip × 3 (R, G, B), DLP™ projection system
	Pixels	2,304,000 (1,920 × 1,200) × 3, total of 6,912,000 pixels
Lens		Optional powered zoom/focus lenses
Light source		Laser Diode (Laser class: Class 1) Luminance life for set: 20,000 hours at half luminance (normal)/ 24,000 hours at half luminance (Eco) * Temperature: 35°C (95°F), Altitude 700m (22ft 12in), Dust: 0.15mg/m^3 43,800 hours at constant luminance (Longlife1) 61,320 hours at constant luminance (Longlife2) 87,600 hours at constant luminance (Longlife3)
Screen size		1.78–25.4 m (70–1,000 inches) (16:10 aspect ratio) 1.78–15.24 m (70–600 inches) with the ET-D75LE8 (16:10 aspect ratio) 3.05–15.24 m (120–600 inches) with the ET-D75LE90 (16:10 aspect ratio)
Brightness*2		12,000 lumens
Center-to-corner uniformity*2		90%
Contrast*2		20,000:1 (full on/full off, in Dynamic Contrast 3 mode)
Resolution		1,920 × 1,200 pixels (Input signals that exceed this resolution will be converted to 1,920 × 1,200 pixels.)
Scanning frequency	SDI	SD-SDI signal (YCBCR 4:2:2 10-bit): SMPTE ST 259 compliant: 525i(480i), 625i(576i) Single-link HD-SDI signal (YPBPR 4:2:2 10-bit): SMPTE ST 292 compliant: 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 Dual-link HD-SDI signal (RGB 4:4:4 12-bit/10-bit): SMPTE ST 372 compliant: 1125(1080)/60i, 1125(1080)/50i, 1125(1080)/25p, 1125(1080)/24p, 1125(1080)/24sF, 1125(1080)/30p 2048 × 1080/24p, 2048 × 1080/24sF, Dual-link HD-SDI signal (X´Y´Z´ 4:4:4 12-bit): SMPTE ST 372 compliant: 2048 × 1080/24p, 2048 × 1080/24sF, 3G-SDI signal (YPBPR 4:2:2 10-bit): SMPTE ST 424 compliant: 1125(1080)/60p, 1125(1080)/50p 3G-SDI signal (RGB 4:4:4 12-bit/10-bit): SMPTE ST 424 compliant: 1125(1080)/60i, 1125(1080)/50i, 1125(1080)/25p, 1125(1080)/24p, 1125(1080)/24sF, 1125(1080)/30p Dual-link 3G-SDI signal (YPBPR 4:4:4 12-bit/10-bit): SMPTE ST 425 compliant: 1125(1080)/60i, 1125(1080)/50i, 2048 × 1080/48p, 2048 × 1080/50p, 2048 × 1080/60p Dual-link 3G-SDI signal (RGB 4:4:4 12-bit/10-bit): SMPTE ST 425 compliant: 1125(1080)/60i, 1125(1080)/50i, 2048 × 1080/48p, 2048 × 1080/50p, 2048 × 1080/60p
	HDMI/DVI-D	Horizontal: 15 kHz–100 kHz, vertical: 24 Hz – 120 Hz, dot clock: 25 MHz – 162 MHz
	RGB	Horizontal: 15 kHz–100 kHz, vertical: 24 Hz – 120 Hz, dot clock: 162 MHz or less

Scanning frequency	$Y P_B P_R$ ($Y C_B C_R$)	525i (480i): f_H 15.73 kHz; f_V 59.94 Hz, 625i (576i): f_H 15.63 kHz; f_V 50 Hz, 525p (480p): f_H 31.47 kHz; f_V 59.94 Hz, 625p (576p): f_H 31.25 kHz; f_V 50 Hz, 750 (720)/60p: f_H 45.00 kHz; f_V 60 Hz, 750 (720)/50p: f_H 37.50 kHz; f_V 50 Hz, 1125 (1035)/60i: f_H 33.75 kHz; f_V 60 Hz, 1125 (1080)/60i: f_H 33.75 kHz; f_V 60 Hz, 1125 (1080)/50i: f_H 28.13 kHz; f_V 50 Hz, 1125 (1080)/25p: f_H 28.13 kHz; f_V 25 Hz, 1125 (1080)/24p: f_H 27.00 kHz; f_V 24 Hz, 1125 (1080)/24sF: f_H 27.00 kHz; f_V 48 Hz, 1125 (1080)/30p: f_H 33.75 kHz; f_V 30 Hz, 1125 (1080)/60p: f_H 67.50 kHz; f_V 60 Hz, 1125 (1080)/50p: f_H 56.25 kHz; f_V 50 Hz
	Video/YC	f_H: 15.73 kHz, f_V: 59.94 Hz [NTSC/NTSC4.43/PAL-M/PAL60] f_H: 15.63 kHz, f_V: 50 Hz [PAL/PAL-N/SECAM]
Optical axis shift	Vertical	±55% (±44% with the ET-D75LE6), (+73-78% with the ET-D75LE90), from center of screen, powered
	Horizontal	±20% (±15% with the ET-D75LE6), (±6% with the ET-D75LE90), from center of screen, powered

NOTE: Optical axis shift function cannot be operated when used with the ET-D75LE50.

Keystone correction range

Projection lens Model No.	Standard status				When using the optional Upgrade Kit (Model No.: ET-UK20)			
	Only [KEYSTONE] used		[KEYSTONE] and [CURVED] used together		Only [KEYSTONE] used		[KEYSTONE] and [CURVED] used together	
	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal
ET-D75LE6	±28	±15	±10	±10	±28	±15	±10	±10
ET-D75LE8	±40	±15	±20	±15	±45	±40	±20	±15
ET-D75LE10	±40	±15	±20	±15	±40	±40	±20	±15
ET-D75LE20	±40	±15	±20	±15	±40	±40	±20	±15
ET-D75LE30	±40	±15	±20	±15	±45	±40	±20	±15
ET-D75LE40	±40	±15	±20	±15	±45	±40	±20	±15
ET-D75LE50	±22	±15	±8	±8	±22	±15	±8	±8
ET-D75LE90	+5/-0	0	-	-	+5/-0	0	-	-

Installation		Ceiling/floor, front/rear
Terminals	SDI IN 1	BNC × 2, (3G/HD/SD-SDI, Dual-link HD-SDI, Dual-link 3G-SDI) Dual-link 3G-SDI signal: SMPTE ST 425 compliant 3G-SDI signal: SMPTE ST 424 compliant Dual-link HD-SDI signal: SMPTE ST 372 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, **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
	RGB 1 IN	BNC × 5
	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, P_B, P_R (Y, C_B, C_R)	Y: 1.0 Vp-p (including sync signal), P_B/P_R(C_B/C_R): 0.7 Vp-p, 75 ohms
	Video in	BNC ×1, 1.0 Vp-p 75 ohms Y/C Y: 1.0 Vp-p (including sync signal), C: 0.286 Vp-p, 75 ohms
	RGB 2 IN	D-sub HD 15-pin (female) × 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
	Y, P_B, P_R (Y, C_B, C_R)	Y: 1.0 Vp-p (including sync signal), P_B/P_R (C_B/C_R): 0.7 Vp-p, 75 ohms

	3D SYNC 1 IN/OUT	BNC × 1, 1.0 Vp-p, 75 ohms Input: TTL, high impedance. Output: TTL, max. 10 mA
	3D SYNC 2 OUT	BNC × 1, 1.0 Vp-p, 75 ohms, TTL, max. 10 mA
	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 × 1 for external control (parallel)
	DIGITAL LINK/LAN	RJ-45 Network connection / digital link connection (video/network/serial control) compliant with PJLink,100base-tx, Art-Net compatible
Power cord length		3.0 m (9 ft 10 in)
Cabinet materials		Molded plastic
Dimensions (W × H × D):		578 × 323.5*4 × 740 mm (22-3/4 × 12-23/32*4 × 29-1/8 inches) (without lens)
Weight*5		44 kg (97.0 lbs) (without lens)
Operation noise*2		43 dB
Operating temperature		Normal The operating temperature range is 0°C to 50°C (32 °F to 122 °F). (Brightness is limited at operating temperatures of 35°C (95°F) or more at altitudes from 700 m to 2,700 m (2,297 ft to 8,858 ft) above sea level, and at operating temperatures of 25°C (77°F) or more at altitudes from 2,700 m to 4,200 m (8,858 ft to 13,780 ft) above sea level.) Eco/Long life 1/2/3 The operating temperature range is 0°C to 45°C (32 °F to 113 °F). (Brightness is limited at operating temperatures of 35°C (95°F) or more at altitudes up to 2,700 m (8,858 ft) above sea level. The projector cannot be used at altitudes of 2,700 m (8,858 ft) or more above sea level.) When the projector is used with a Smoke Cut Filter The operating temperature range is 0°C to 40°C (32 °F to 104 °F). (The projector cannot be used at altitudes of 1,400 m (4,593 ft) or more above sea level.) * The brightness of the light source may drop depending on the operating temperature range. The higher the temperture, the greater the drop in the brightness of the light source will be.
Operating humidity		10%–80% (no condensation)

Remote control unit

Power supply	3 V DC (AA/R6 type battery × 2)
Operation range*6	Approx. 30 m (98 ft 5 in) when operated from directly in front of the signal receptor
Dimensions (W × H × D)	47.5 × 181.5 × 27.5 mm (1-7/8 × 7-5/32 × 1-3/32 inches)
Weight	Approx. 150 g (5.3 oz) (including batteries)

Supplied accessories

Power cord (×1) (x2 for PT-RZ12KE)
Wireless/wired remote control unit (× 1)
Batteries for remote control (AA/R6 type × 2)
Lens drop-prevention screw (× 1)
Software CD-ROM (Logo Transfer Software, Multi Monitoring & Control Software) (× 1)

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 Up to a total of ±55° during simultaneous horizontal and vertical correction.**

***4 With legs at shortest position.**

***5 Average value (excluding the optional lens). May differ depending on models.**

***6 Operation range differs depending on environments.**

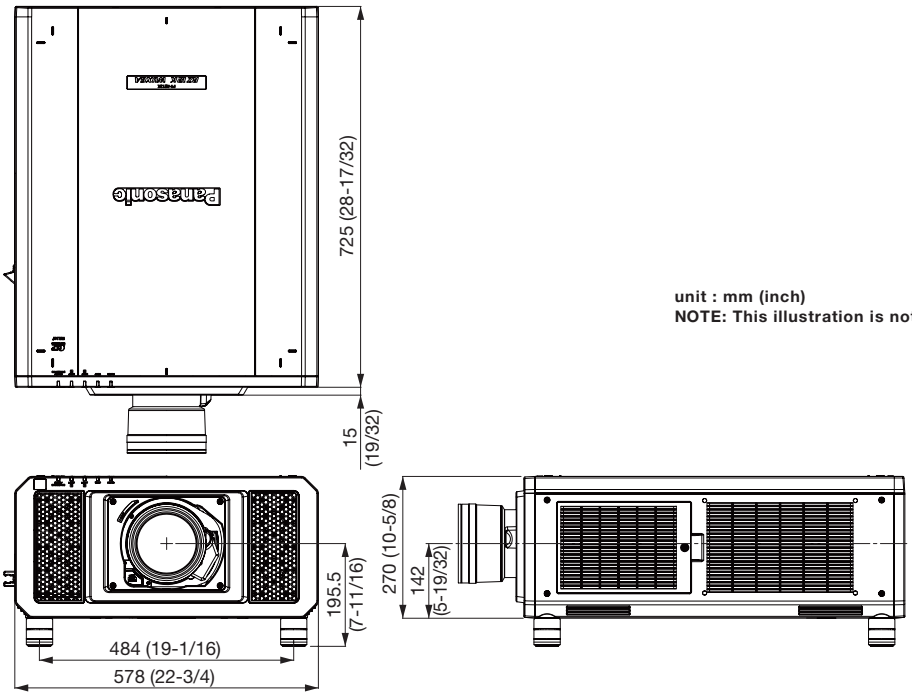
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Optional accessories

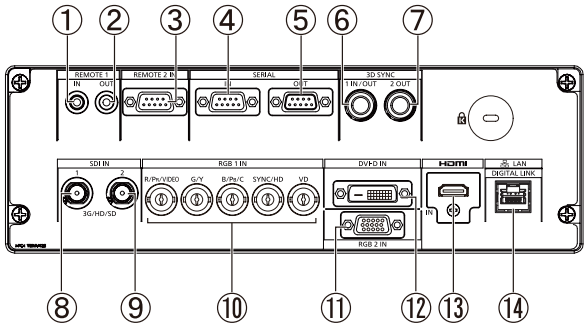
Zoom lens (0.9–1.1:1)	ET-D75LE6	Zoom lens (1.3–1.7:1)	ET-D75LE10
Zoom lens (1.7–2.4:1)	ET-D75LE20	Zoom lens (2.4–4.7:1)	ET-D75LE30
Zoom lens (4.6–7.4:1)	ET-D75LE40	Zoom lens (7.3–13.8:1)	ET-D75LE8
Fixed-focus lens (0.7:1)	ET-D75LE50	Fixed-focus lens (0.36:1)	ET-D75LE90
Lens motor cover	ET-D75MC1		
Ceiling mount bracket (for high ceilings)	ET-PKD520H	Ceiling mount bracket (for low ceilings)	ET-PKD520S
Projector mount bracket	ET-PAD520B	Frame	ET-PFD510
Smoke cut filter	ET-SFR330		
Upgrade kit	ET-UK20	Auto sreen adjustment upgrade kit	ET-CUK10
Early Warning Software	ET-SWA100		
Digital interface box	ET-YFB100G	Digital LINK Switcher	ET-YFB200G
Replacement filter unit	ET-EMF330		

Dimensions



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

Terminals

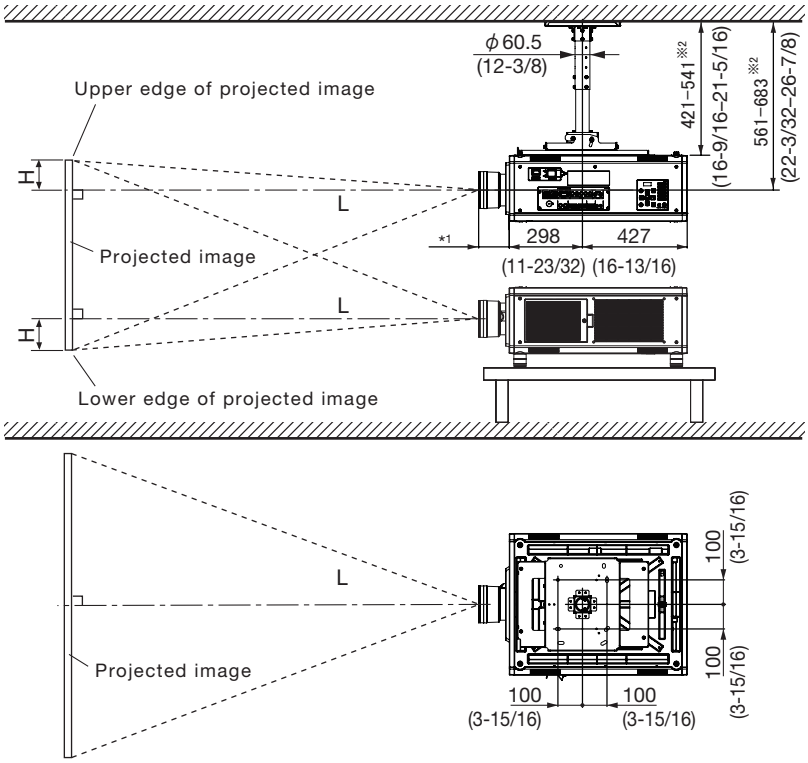


1 Remote 1 input
2 Remote 1 output
3 Remote 2 input
4 Serial input
5 Serial output
6 3D sync 1 input/output
7 3D sync 2 output
8 SDI 1 input
9 SDI 2 input
10 RGB 1 input
11 RGB 2 Input
12 DVI-D input
13 HDMI input
14 LAN/DIGITAL LINK connector

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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-PKD520H/ET-PKD520B and an optional lens.This illustration is not drawn to scale.

If the ET-D75LE90 is attached, refer to the projection system dimension drawing and the projection distance table for ET-D75LE90 specifications.

Caution:
- All construction work should be done by a qualified technician.
- When mounting to the ceiling, use the special mounting bracket.
  Furthermore, in order to prevent it from falling down from the ceiling, use the supplied wire on the mounting bracket.

Projection distance for 16:10 aspect ratio screen

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

Unit: meters

Screen size (diagonal)	Distance to screen (L)													Height from the edge of screen to center of lens (H)		
	Zoom												Fixed-focus	Zoom lenses		Fixed-focus lens
	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	Except ET-D75LE6	ET-D75LE6	
[m] / [in]	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.				
1.78 / 70	1.35	1.62	1.90	2.46	2.46	3.58	3.56	6.94	6.87	11.05	10.78	20.56	1.01	-0.05 – 0.99	0.06 – 0.89	0.47
2.03 / 80	1.56	1.86	2.19	2.83	2.83	4.11	4.08	7.96	7.88	12.65	12.38	23.55	1.16	-0.05 – 1.13	0.07 – 1.01	0.54
2.29 / 90	1.76	2.10	2.47	3.20	3.19	4.64	4.61	8.98	8.88	14.25	13.97	26.54	1.32	-0.06 – 1.27	0.07 – 1.14	0.61
2.54 / 100	1.96	2.34	2.76	3.56	3.55	5.17	5.13	9.99	9.88	15.85	15.57	29.53	1.47	-0.07 – 1.41	0.08 – 1.27	0.67
3.05 / 120	2.36	2.82	3.32	4.30	4.28	6.22	6.18	12.03	11.89	19.05	18.76	35.51	1.78	-0.08 – 1.70	0.10 – 1.52	0.81
3.81 / 150	2.96	3.55	4.18	5.40	5.37	7.81	7.75	15.08	14.90	23.85	23.54	44.47	2.24	-0.10 – 2.12	0.12 – 1.90	1.01
5.08 / 200	3.97	4.75	5.60	7.24	7.19	10.45	10.38	20.17	19.93	31.86	31.52	59.41	3.01	-0.14 – 2.83	0.16 – 2.53	1.35
6.35 / 250	4.98	5.96	7.02	9.07	9.01	13.09	13.00	25.25	24.95	39.86	39.49	74.36	3.78	-0.17 – 3.53	0.20 – 3.16	1.68
7.62 / 300	5.99	7.17	8.44	10.91	10.82	15.73	15.62	30.34	29.97	47.87	47.47	89.30	4.56	-0.20 – 4.24	0.24 – 3.80	2.02
10.16 / 400	8.00	9.58	11.28	14.58	14.46	21.01	20.86	40.51	40.01	63.87	63.42	119.19	6.10	-0.27 – 5.65	0.32 – 5.06	2.69
12.70 / 500	10.01	11.99	14.12	18.25	18.09	26.29	26.11	50.68	50.05	79.88	79.37	149.08	7.64	-0.34 – 7.07	0.40 – 6.33	3.37
15.24 / 600	12.03	14.40	16.96	21.93	21.73	31.58	31.35	60.85	60.09	95.89	95.32	178.96	9.18	-0.40 – 8.48	0.49 – 7.59	4.04
17.78 / 700	14.04	16.82	19.80	25.60	25.36	36.86	36.60	71.02	70.13	111.90	111.27	–	10.72	-0.47 – 9.90	0.57 – 8.86	4.71
20.32 / 800	16.06	19.23	22.64	29.27	29.00	42.14	41.84	81.19	80.17	127.91	127.23	–	12.27	-0.54 –11.31	0.65 –10.12	5.39
22.86 / 900	18.07	21.64	25.48	32.94	32.63	47.42	47.09	91.36	90.21	143.92	143.12	–	13.81	-0.61 –12.72	0.73 –11.39	6.06
25.40 /1000	20.08	24.06	28.33	36.61	36.27	52.70	52.33	101.53	100.25	159.93	159.13	–	15.35	-0.67 –14.14	0.81 –12.65	6.73

Unit: feet

Screen size (diagonal)	Distance to screen (L)													Height from the edge of screen to center of lens (H)		
	Zoom												Fixed-focus	Zoom lenses		Fixed-focus lens
	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	Except ET-D75LE6	ET-D75LE6	
[m] / [in]	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.				
1.78 / 70	4.4	5.3	6.2	8.1	8.1	11.7	11.7	22.8	22.5	36.2	35.4	67.5	3.3	-0.2 – 3.2	0.2 – 2.9	1.6
2.03 / 80	5.1	6.1	7.2	9.3	9.3	13.5	13.4	26.1	25.8	41.5	40.6	77.3	3.8	-0.2 – 3.7	0.2 – 3.3	1.8
2.29 / 90	5.8	6.9	8.1	10.5	10.5	15.2	15.1	29.5	29.1	46.7	45.8	87.1	4.3	-0.2 – 4.2	0.2 – 3.7	2.0
2.54 / 100	6.4	7.7	9.0	11.7	11.7	16.9	16.8	32.8	32.4	52.0	51.1	96.9	4.8	-0.2 – 4.6	0.3 – 4.2	2.2
3.05 / 120	7.7	9.3	10.9	14.1	14.0	20.4	20.3	39.5	39.0	62.5	61.5	116.5	5.8	-0.3 – 5.6	0.3 – 5.0	2.7
3.81 / 150	9.7	11.6	13.7	17.7	17.6	25.6	25.4	49.5	48.9	78.3	77.2	145.9	7.3	-0.3 – 7.0	0.4 – 6.2	3.3
5.08 / 200	13.0	15.6	18.4	23.7	23.6	34.3	34.0	66.2	65.4	104.5	103.4	194.9	9.8	-0.4 – 9.3	0.5 – 8.3	4.4
6.35 / 250	16.3	19.6	23.0	29.8	29.5	42.9	42.6	82.8	81.8	130.8	129.6	244.0	12.3	-0.6 –11.6	0.7 –10.4	5.5
7.62 / 300	19.6	23.5	27.7	35.8	35.5	51.6	51.2	99.5	98.3	157.0	155.7	293.0	14.9	-0.7 –13.9	0.8 –12.5	6.6
10.16 / 400	26.2	31.4	37.0	47.8	47.4	68.9	68.5	132.9	131.3	209.6	208.1	391.0	20.0	-0.9 –18.6	1.1 –16.6	8.8
12.70 / 500	32.9	39.3	46.3	59.9	59.4	86.3	85.7	166.3	164.2	262.1	260.4	489.1	25.1	-1.1 –23.2	1.3 –20.8	11.0
15.24 / 600	39.5	47.3	55.6	71.9	71.3	103.6	102.9	199.6	197.1	314.6	312.7	587.1	30.1	-1.3 –27.8	1.6 –24.9	13.3
17.78 / 700	46.1	55.2	65.0	84.0	83.2	120.9	120.1	233.0	230.1	367.1	365.1	–	35.2	-1.5 –32.5	1.9 –29.1	15.5
20.32 / 800	52.7	63.1	74.3	96.0	95.1	138.3	137.3	266.4	263.0	419.6	417.4	–	40.2	-1.8 –37.1	2.1 –33.2	17.7
22.86 / 900	59.3	71.0	83.6	108.1	107.1	155.6	154.5	299.7	296.0	472.2	469.5	–	45.3	-2.0 –41.7	2.4 –37.4	19.9
25.40 /1000	65.9	78.9	92.9	120.1	119.0	172.9	171.7	333.1	328.9	524.7	522.1	–	50.4	-2.2 –46.4	2.7 –41.5	22.1

- **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.**

NOTE: When the ET-D75LE50 is mounted, the optical lens shift function cannot be used.

Projection distance for 16:9 aspect ratio screen

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

Unit: meters

Screen size (diagonal)	Distance to screen (L)													Height from the edge of screen to center of lens (H)		
	Zoom												Fixed-focus	Zoom lenses		Fixed-focus lens
	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	Except ET-D75LE6	ET-D75LE6	
[m] / [in]	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.				
1.78 / 70	1.39	1.66	1.96	2.53	2.53	3.68	3.66	7.14	7.07	11.36	11.09	21.14	1.04	-0.09 – 0.96	0.00 – 0.87	0.44
2.03 / 80	1.60	1.91	2.25	2.91	2.91	4.23	4.20	8.19	8.10	13.00	12.73	24.22	1.20	-0.10 – 1.10	0.00 – 1.00	0.50
2.29 / 90	1.81	2.16	2.54	3.29	3.28	4.77	4.74	9.23	9.13	14.65	14.37	27.29	1.36	-0.11 – 1.23	0.00 – 1.12	0.56
2.54 / 100	2.01	2.41	2.83	3.67	3.65	5.31	5.28	10.28	10.16	16.29	16.01	30.36	1.51	-0.13 – 1.37	0.00 – 1.25	0.62
3.05 / 120	2.43	2.90	3.42	4.42	4.40	6.40	6.36	12.37	12.23	19.58	19.29	36.50	1.83	-0.15 – 1.64	0.00 – 1.49	0.75
3.81 / 150	3.05	3.65	4.29	5.55	5.52	8.03	7.97	15.50	15.32	24.52	24.21	45.72	2.31	-0.19 – 2.06	0.00 – 1.87	0.93
5.08 / 200	4.08	4.89	5.76	7.44	7.39	10.74	10.67	20.73	20.48	32.75	32.40	61.08	3.10	-0.25 – 2.74	0.00 – 2.49	1.25
6.35 / 250	5.12	6.13	7.22	9.33	9.26	13.46	13.36	25.96	25.64	40.97	40.60	76.44	3.89	-0.31 – 3.42	0.00 – 3.11	1.56
7.62 / 300	6.15	7.37	8.68	11.21	11.13	16.17	16.06	31.18	30.80	49.20	48.80	91.79	4.68	-0.37 – 4.11	0.00 – 3.74	1.87
10.16 / 400	8.22	9.85	11.60	14.99	14.86	21.60	21.45	41.64	41.12	65.65	65.19	122.51	6.29	-0.50 – 5.48	0.00 – 4.98	2.49
12.70 / 500	10.29	12.33	14.52	18.76	18.60	27.03	26.84	52.09	51.44	82.11	81.59	153.23	7.85	-0.62 – 6.85	0.00 – 6.23	3.11
15.24 / 600	12.36	14.81	17.44	22.54	22.33	32.46	32.23	62.54	61.76	98.56	97.98	183.95	9.44	-0.75 – 8.22	0.00 – 7.47	3.74
17.78 / 700	14.43	17.29	20.36	26.31	26.07	37.89	37.62	73.00	72.09	115.02	114.38	–	11.02	-0.87 – 9.59	0.00 – 8.72	4.36
20.32 / 800	16.50	19.77	23.28	30.09	29.81	43.31	43.01	83.45	82.45	131.47	130.77	–	12.61	-1.00 –10.96	0.00 – 9.96	4.98
22.86 / 900	18.57	22.25	26.20	33.86	33.54	48.74	48.40	93.90	92.73	147.92	147.17	–	14.19	-1.12 –12.33	0.00 –11.21	5.60
25.40 /1000	20.64	24.73	29.12	37.64	37.28	54.17	53.79	104.36	103.05	164.38	163.56	–	15.78	-1.25 –13.70	0.00 –12.45	6.23

Unit: feet

Screen size (diagonal)	Distance to screen (L)													Height from the edge of screen to center of lens (H)		
	Zoom												Fixed-focus	Zoom lenses		Fixed-focus lens
	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	Except ET-D75LE6	ET-D75LE6	
[m] / [in]	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.				
1.78 / 70	4.6	5.5	6.4	8.3	8.3	12.1	12.0	23.4	23.2	37.3	36.4	69.4	3.4	-0.3 – 3.2	0.0 – 2.9	1.4
2.03 / 80	5.2	6.3	7.4	9.6	9.5	13.9	13.8	26.9	26.6	42.7	41.8	79.4	3.9	-0.3 – 3.6	0.0 – 3.3	1.6
2.29 / 90	5.9	7.1	8.3	10.8	10.8	15.6	15.5	30.3	30.0	48.1	47.1	89.5	4.4	-0.4 – 4.1	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	52.5	99.6	5.0	-0.4 – 4.5	0.0 – 4.1	2.0
3.05 / 120	8.0	9.5	11.2	14.5	14.4	21.0	20.8	40.6	40.1	64.2	63.3	119.8	6.0	-0.5 – 5.4	0.0 – 4.9	2.5
3.81 / 150	10.0	12.0	14.1	18.2	18.1	26.3	26.2	50.9	50.3	80.4	79.4	150.0	7.6	-0.6 – 6.7	0.0 – 6.1	3.1
5.08 / 200	13.4	16.0	18.9	24.4	24.2	35.2	35.0	68.0	67.2	107.4	106.3	200.4	10.2	-0.8 – 9.0	0.0 – 8.2	4.1
6.35 / 250	16.8	20.1	23.7	30.6	30.4	44.1	43.8	85.2	84.1	134.4	133.2	250.8	12.8	-1.0 – 11.2	0.0 – 10.2	5.1
7.62 / 300	20.2	24.2	28.5	36.8	36.5	53.1	52.7	102.3	101.1	161.4	160.1	301.2	15.4	-1.2 – 13.5	0.0 – 12.3	6.1
10.16 / 400	27.0	32.3	38.0	49.2	48.8	70.9	70.4	136.6	134.9	215.4	213.9	401.9	20.6	-1.6 – 18.0	0.0 – 16.3	8.2
12.70 / 500	33.8	40.4	47.6	61.6	61.0	88.7	88.0	170.9	168.8	269.4	267.7	502.7	25.8	-2.0 – 22.5	0.0 – 20.4	10.2
15.24 / 600	40.6	48.6	57.2	73.9	73.3	106.5	105.7	205.2	202.6	323.4	321.5	603.5	31.0	-2.5 – 27.0	0.0 – 24.5	12.3
17.78 / 700	47.4	56.7	66.8	86.3	85.5	124.3	123.4	239.5	236.5	377.3	375.3	–	36.2	-2.9 – 31.5	0.0 – 28.6	14.3
20.32 / 800	54.1	64.8	76.4	98.7	97.8	142.1	141.1	273.8	270.5	431.3	429.0	–	41.4	-3.3 – 36.0	0.0 – 32.7	16.3
22.86 / 900	60.9	73.0	85.9	111.1	110.0	159.9	158.8	308.1	304.2	485.3	482.8	–	46.6	-3.7 – 40.4	0.0 – 36.8	18.4
25.40 /1000	67.7	81.1	95.5	123.5	122.3	177.7	176.5	342.4	338.1	539.3	536.6	–	51.8	-4.1 – 44.9	0.0 – 40.9	20.4

- **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.**

NOTE: When the ET-D75LE50 is mounted, the optical lens shift function cannot be used.

Calculation of the projection distance

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

Aspect ratio 16:10

Zoom lenses

ET-D75LE6	minimum	L (m) = (diagonal screen size in inches) × 0.0201 – 0.0566
	maximum	L (m) = (diagonal screen size in inches) × 0.0241 – 0.0736
ET-D75LE10	minimum	L (m) = (diagonal screen size in inches) × 0.0284 – 0.0857
	maximum	L (m) = (diagonal screen size in inches) × 0.0367 – 0.1085
ET-D75LE20	minimum	L (m) = (diagonal screen size in inches) × 0.0364 – 0.0832
	maximum	L (m) = (diagonal screen size in inches) × 0.0528 – 0.1162
ET-D75LE30	minimum	L (m) = (diagonal screen size in inches) × 0.0524 – 0.1131
	maximum	L (m) = (diagonal screen size in inches) × 0.1017 – 0.1765
ET-D75LE40	minimum	L (m) = (diagonal screen size in inches) × 0.1004 – 0.1577
	maximum	L (m) = (diagonal screen size in inches) × 0.1601 – 0.1615
ET-D75LE8	minimum	L (m) = (diagonal screen size in inches) × 0.1595 – 0.3862
	maximum	L (m) = (diagonal screen size in inches) × 0.2989 – 0.3598

Fixed-focus lens

ET-D75LE50		L (m) = (diagonal screen size in inches) × 0.0154 – 0.0713

Aspect ratio 16:9

Zoom lenses

ET-D75LE6	minimum	L (m) = (diagonal screen size in inches) × 0.0207 – 0.0566
	maximum	L (m) = (diagonal screen size in inches) × 0.0248 – 0.0736
ET-D75LE10	minimum	L (m) = (diagonal screen size in inches) × 0.0292 – 0.0857
	maximum	L (m) = (diagonal screen size in inches) × 0.0377 – 0.1085
ET-D75LE20	minimum	L (m) = (diagonal screen size in inches) × 0.0374 – 0.0832
	maximum	L (m) = (diagonal screen size in inches) × 0.0543 – 0.1162
ET-D75LE30	minimum	L (m) = (diagonal screen size in inches) × 0.0539 – 0.1131
	maximum	L (m) = (diagonal screen size in inches) × 0.1045 – 0.1765
ET-D75LE40	minimum	L (m) = (diagonal screen size in inches) × 0.1032 – 0.1577
	maximum	L (m) = (diagonal screen size in inches) × 0.1645 – 0.1615
ET-D75LE8	minimum	L (m) = (diagonal screen size in inches) × 0.1640 – 0.3862
	maximum	L (m) = (diagonal screen size in inches) × 0.3072 – 0.3598

Fixed-focus lens

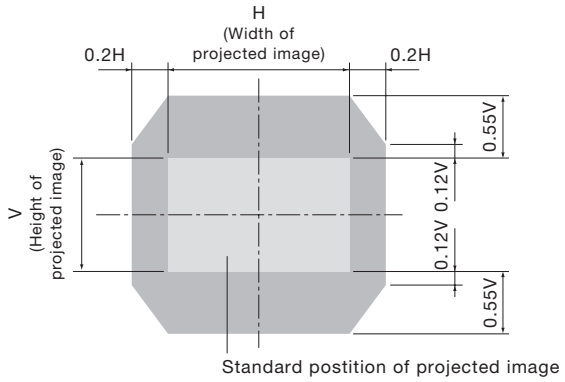
ET-D75LE50		L (m) = (diagonal screen size in inches) × 0.0159 – 0.0713

- **Distances calculated with the above equations will include slight deviations.**

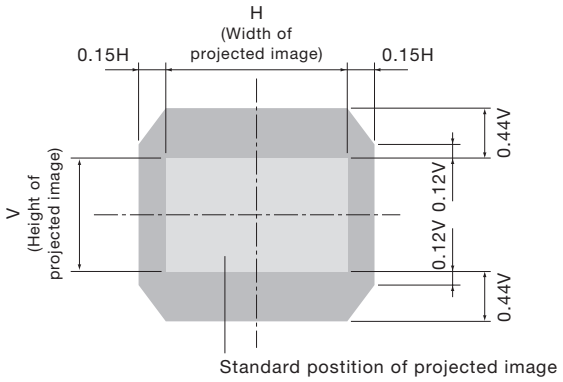
Shift range

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**

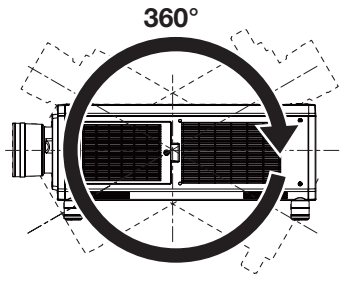


NOTE: Because the ET-D75LE50 is a fixed short-throw lens, the lens shift function cannot be used with it.

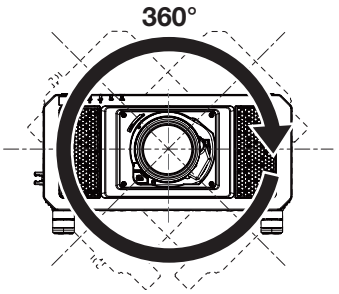
Installable angle

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

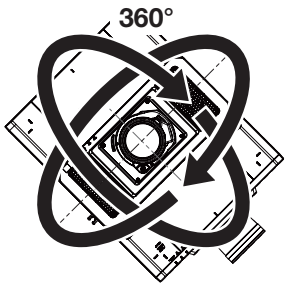
FULL 360-degree projection



Vertical 360-deg.



Horizontal 360-deg.



**Tilting 360-deg.
(V&H combination)**

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 × 1,200 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 resolution (dots)*1	Scanning frequency H (kHz)	Scanning frequency V (kHz)	Dot clock frequency (MHz)	Format
NTSC/NTSC4.43/PAL-M/PAL60	720 × 480i	15.7	59.9	–	VIDEO/Y/C
PAL/PAL-N/SECAM	720 × 576i	15.6	50.0	–	
525i (480i)	720 × 480i	15.7	59.9	13.5	SDI*3/RGB/YCBCR
625i (576i)	720 × 576i	15.6	50.0	13.5	
525i (480i)	720(1440) × 480i *2	15.7	59.9	27.0	HDMI/DVI-D
625i (576i)	720(1440) × 576i *2	15.6	50.0		
525p (480p)	720 × 483	31.5	59.9	27.0	HDMI/DVI-D/
625p (576p)	720 × 576	31.3	50.0		RGB/YCBCR
750 (720)/60p	1280 × 720	45.0	60.0	74.3	SDI*3/HDMI/DVI-D/
750 (720)/50p		37.5	50.0		RGB/YPBPR
1125 (1080)/60i	1920 × 1080i	33.8	60.0		
1125 (1080)/50i		28.1	50.0		
1125 (1080)/25p	1920 × 1080	28.1	25.0		
1125 (1080)/24p		27.0	24.0		
1125 (1080)/24sF	1920 × 1080i	27.0	48.0		
1125 (1080)/30p	1920 × 1080	33.8	30.0		
1125 (1080)/60p		67.5	60.0	148.5	SDI*3/HDMI/DVI-D/
1125 (1080)/50p		56.3	50.0		RGB/YPBPR
2K/24p	2048 × 1080	27.0	24.0	74.3	SDI*4
2K/24sF					
2K/48p		54.0	48.0	148.5	SDI*5
2K/50p		56.3	50.0		
2K/60p		67.5	60.0		
640 × 400	640 × 400	31.5	70.1	25.2	HDMI/DVI-D/RGB
		37.9	85.1	31.5	
640 × 480	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	
800 × 600	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	
832 × 624	832 × 624	49.7	74.6	57.3	
1024 × 768	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	
1152 × 864	1152 × 864	53.7	60.0	81.6	
		64.0	70.0	94.2	
		67.5	74.9	108.0	
		76.7	85.0	121.5	
1152 × 870	1152 × 870	68.7	75.1	100.0	

***1 The "i" appearing after the resolution indicates an interlaced signal.**
***2 Pixel repetition signal only.**
***3 For single-link connection only.**
***4 Dual link HD-SDI-compliant.**
***5 Dual link 3G-SDI-compliant.**

NOTE: DIGITAL LINK and HDMI inputs share the same compatible signal.

Display mode	Display resolution (dots)	Scanning frequency H (kHz)	Scanning frequency V (kHz)	Dot clock frequency (MHz)	Format
1280 × 720	1280 × 720	37.1	49.8	60.5	HDMI/DVI-D/RGB
		44.8	59.9	74.5	
		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*	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*	49.3	59.9	71.0	
	1280 × 800	62.8	74.9	106.5	
		71.6	84.9	122.5	
1280 × 960	1280 × 960	60.0	60.0	108.0	
1280 × 1024	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	
		39.6	49.9	69.0	
1400 × 1050	1400 × 1050	54.1	50.0	99.9	
		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	
1440 × 900	1440 × 900	55.9	59.9	106.5	
		46.3	49.9	86.8	
1600×900	1600 × 900	46.4	49.9	96.5	
		55.9	60.0	119.0	
1600 × 1200	1600 × 1200	61.8	49.9	131.5	
		75.0	60.0	162.0	
1680 × 1050	1680 × 1050	65.3	60.0	146.3	
		54.1	50.0	119.5	
1920×1080	1920 × 1080	55.6	49.9	141.5	
	1920 × 1080*	66.6	59.9	138.5	
	1920 × 1080	67.2	60.0	173.0	RGB
1920 × 1200	1920 × 1200	61.8	49.9	158.3	HDMI/DVI-D/RGB
	1920 × 1200*	74.0	60.0	154.0	
	1920 × 1200	74.6	59.9	193.3	RGB

* **Compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).**

List of simultaneous input 2D compatible signals

The following table specifies the simultaneous input (2D) compatible video signals that the projector can project.

2D compatible signal	Display resolution (dots)	Scanning frequency H (kHz)	Scanning frequency V (kHz)	Dot clock frequency (MHz)	Format
1080/50p	1920 × 1080	56.3	50.0	148.5	
1080/60p		67.5	60.0		
1366×768	1366 × 768	39.6	49.9	69.0	
		47.7	59.8	85.5	
1400×1050	1400 × 1050	54.1	50.0	99.9	HDMI/DVI
		65.3	60.0	121.8	
1920×1080	1920 × 1080	55.6	49.9	141.5	
		66.6	59.9	138.5	
1920×1200	1920 × 1200	61.8	49.9	158.3	
		74.0	60.0	154.0	

List of compatible 3D signals

The 3D signals that can be input to this projector are shown in the table below.

Display mode	Display resolution (dots)*1	Scanning frequency H (kHz)	Scanning frequency V (kHz)	Dot clock frequency (MHz)	HDMI Frame packing	HDMI Side by side*2	HDMI Top and bottom	HDMI Frame sequential	DVI Side by side*2	DVI Top and bottom	DVI Line by line	DVI Frame sequential
750 (720)/60p	1280 × 720	45.0	60.0	74.3	Yes	Yes	Yes	–	Yes	Yes	Yes	–
750 (720)/50p		37.5	50.0	74.3								
1125 (1080)/60i	1920 × 1080i	33.8	60.0	74.3			–				–	
1125 (1080)/50i		28.1	50.0	74.3								
1125 (1080)/25p	1920 × 1080	28.1	25.0	74.3	–	–						
1125 (1080)/24p		27.0	24.0	74.3	Yes	Yes	Yes					
1125 (1080)/24sF	1920 × 1080i	27.0	48.0	74.3	–	–	–					
1125 (1080)/30p	1920 × 1080	33.8	30.0	74.3								
1125 (1080)/60p		67.5	60.0	148.5		Yes	Yes					
1125 (1080)/50p		56.3	50.0	148.5								
640 × 480	640 × 480	31.5	59.9	25.2		–	–			–		
800 × 600	800 × 600	37.9	60.3	40.0								
1024 × 768	1024 × 768	39.6	50.0	51.9								
		48.4	60.0	65.0								
		81.4	100.0	113.3				Yes	–			Yes
		98.8	120.0	139.1								
1152 × 864	1152 × 864	53.7	60.0	81.6				–	Yes			–
1280 × 720	1280 × 720	37.1	49.8	60.5								
		44.8	59.9	74.5								
		76.3	100.0	131.8				Yes	–			Yes
		92.6	120.0	161.6								
1280 × 768	1280 × 768	39.6	49.9	65.3				–	Yes			–
		47.8	59.9	79.5								
	1280 × 768 *3	47.4	60.0	68.3								
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 × 960	1280 × 960	60.0	60.0	108.0								
1280 × 1024	1280 × 1024	52.4	50.0	88.0								
		64.0	60.0	108.0								
1366 × 768	1366 × 768	47.7	59.8	85.5								
		39.6	49.9	69.0								
1400 × 1050	1400 × 1050	54.1	50.0	99.9								
		64.0	60.0	108.0								
		65.2	60.0	122.6								
		65.3	60.0	121.8								
1440 × 900	1440 × 900	55.9	59.9	106.5								
		46.3	49.9	86.8								
1600 × 900	1600 × 900	46.4	49.9	96.5								
		55.9	60.0	119.0								
1600 × 1200	1600 × 1200	61.8	49.9	131.5								
		75.0	60.0	162.0								
1680 × 1050	1680 × 1050	65.3	60.0	146.3								
		54.1	50.0	119.5								
1920 × 1080	1920 × 1080	55.6	49.9	141.5								
	1920 × 1080 *3	66.6	59.9	138.5								
1920 × 1200	1920 × 1200	61.8	49.9	158.3								
	1920 × 1200 *3	74.0	60.0	154.0							Yes	

***1 The "i" appearing after the resolution indicates an interlaced signal.**
***2 Compatible with half-resolution signals.**
***3 Compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).**

3-Chip DLP™ Projector

PT-RZ12K

Display mode	Display resolution (dots)*1	Scanning frequency H (kHz)	Scanning frequency V (kHz)	Dot clock frequency (MHz)	RGB1/RGB2				SDI1/SDI2			HDMI & DVI	RGB1 & RGB2	SDI1 & SDI2	3G-SDI Level B
					Side by side*2	Top and bottom	Line by line	Frame sequential	Side by side*2	Top and bottom	Line by line	Simultaneous	Simultaneous	Simultaneous	Simultaneous
750 (720)/60p	1280 × 720	45.0	60.0	74.3	Yes	Yes	Yes	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
750 (720)/50p		37.5	50.0	74.3											
1125 (1080)/60i	1920 × 1080i	33.8	60.0	74.3			–				–				
1125 (1080)/50i		28.1	50.0	74.3											
1125 (1080)/25p	1920 × 1080	28.1	25.0	74.3											
1125 (1080)/24p		27.0	24.0	74.3											
1125 (1080)/24sF	1920 × 1080i	27.0	48.0	74.3											
1125 (1080)/30p	1920 × 1080	33.8	30.0	74.3											
1125 (1080)/60p		67.5	60.0	148.5										–	–
1125 (1080)/50p		56.3	50.0	148.5											
640 × 480	640 × 480	31.5	59.9	25.2		–			–	–		–	–		
800 × 600	800 × 600	37.9	60.3	40.0											
1024 × 768	1024 × 768	39.6	50.0	51.9											
		48.4	60.0	65.0											
		81.4	100.0	113.3	–			Yes							
		98.8	120.0	139.1											
1152 × 864	1152 × 864	53.7	60.0	81.6	Yes			–							
1280 × 720	1280 × 720	37.1	49.8	60.5											
		44.8	59.9	74.5											
		76.3	100.0	131.8	–			Yes							
		92.6	120.0	161.6											
1280 × 768	1280 × 768	39.6	49.9	65.3	Yes			–							
		47.8	59.9	79.5											
	1280 × 768 *3	47.4	60.0	68.3											
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 × 960	1280 × 960	60.0	60.0	108.0											
1280 × 1024	1280 × 1024	52.4	50.0	88.0											
		64.0	60.0	108.0											
1366 × 768	1366 × 768	47.7	59.8	85.5											
		39.6	49.9	69.0											
1400 × 1050	1400 × 1050	54.1	50.0	99.9								Yes	Yes		
		64.0	60.0	108.0											
		65.2	60.0	122.6											
		65.3	60.0	121.8											
1440 × 900	1440 × 900	55.9	59.9	106.5								–	–		
		46.3	49.9	86.8											
1600 × 900	1600 × 900	46.4	49.9	96.5											
		55.9	60.0	119.0											
1600 × 1200	1600 × 1200	61.8	49.9	131.5											
		75.0	60.0	162.0											
1680 × 1050	1680 × 1050	65.3	60.0	146.3											
		54.1	50.0	119.5											
1920 × 1080	1920 × 1080	55.6	49.9	141.5											
	1920 × 1080 *3	66.6	59.9	138.5											
1920 × 1200	1920 × 1200	61.8	49.9	158.3								Yes	Yes		
	1920 × 1200 *3	74.0	60.0	154.0			Yes								

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