

Specifications

Main unit

Power supply		AC100-240 V 50 Hz/60 Hz
Power consumption		Normal : 320W Eco : 240W 0.5W when Standby mode set to Eco*, 1.0W when Standby mode set to Network, 8W when Standby mode set to Normal, 24W When Standby mode is set to Normal, and In Standby Mode is set to On
LCD panel	Panel size	16.0 mm (0.63 inches) diagonal (4:3 aspect ratio)
	Display method	Transparent LCD panel (× 3, R/G/B)
	Pixels	786,432 (1,024 × 768) × 3, total of 2,359,296 pixels
	Pixel configuration	Stripe
Lens		Manual zoom (1.6×), manual focus F 1.60–1.9, f 15.31–24.64 mm
Throw ratio		1.2–1.9:1
Lamp		240 W UHM lamp
Screen size		0.76–7.62 m (30–300 inches) diagonally, 4:3 aspect ratio
Colors		Full color (16,777,216 colors)
Brightness*2		4,500 lm (LAMP POWER: NORMAL, Picture mode: Dynamic [input signals: PC], IRIS:OFF, Daylight View: Off, Auto Power Save: Off)
Center-to-corner uniformity*2		85%
Contrast*2		20,000:1 (full on/off, LAMP POWER: NORMAL, Picture mode: Dynamic [input signals: PC], Iris: On, Daylight View: Off, Auto Power Save: Off)
Resolution		1,024 × 768 pixels (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)
Scanning frequency	HDMI	f _H : 15–91.1 kHz, f _V : 24–100 Hz, dot clock: 162 MHz or lower 480i (525i)*3, 576i (625i)*3, 480p (525p)*3, 576p (625p)*3, 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sF, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p VGA (640×480) – WUXGA*4 (1920×1200), dot clock: 162 MHz or lower
	RGB	f _H : 15–91.1 kHz, f _V : 24–100 Hz, dot clock: 162 MHz or lower (Signals exceeding the dot clock rate of 140 MHz are downsampled.)
	YPbPr (YCbCr)	480i (525i): f _H 15.75 kHz; f _V 59.94 Hz, 576i (625i): f _H 15.63 kHz; f _V 50 Hz, 480p (525p): f _H 31.47 kHz; f _V 59.94 Hz, 576p (625p): f _H 31.25 kHz; f _V 50 Hz, 720 (750)/60p: f _H 45.00 kHz; f _V 60 Hz, 720 (750)/50p: f _H 37.50 kHz; f _V 50 Hz, 1080 (1125)/60i: f _H 33.75 kHz; f _V 60 Hz, 1080 (1125)/25p: f _H 28.13 kHz; f _V 25 Hz, 1080 (1125)/24p: f _H 27.00 kHz; f _V 24 Hz, 1080 (1125)/24sF: f _H 27.00 kHz; f _V 48 Hz, 1080 (1125)/30p: f _H 33.75 kHz; f _V 30 Hz, 1080 (1125)/60p: f _H 67.50 kHz; f _V 60 Hz, 1080 (1125)/50p: f _H 56.25 kHz; f _V 50 Hz, 1080 (1125)/50i: f _H 28.13 kHz; f _V 50 Hz
	Video	f _H : 15.75/15.63 kHz, f _V : 60/50 Hz [NTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAM]
Optical axis shift		9:1 (fixed)
Keystone correction range		Vertical: ±35°, horizontal: ±35° (Vertical: ±30° [realtime keystone]) Curved Screen Correction Corner Keystone Correction
Installation		Ceiling/desk, front/rear (menu selection)
Built-in speaker	Size	4 cm (1-9/16 inches) (round) × 1
	Output power	10 W (monaural)
Terminals	HDMI IN	HDMI 19-pin × 2, HDCP and Deep color compatible
	COMPUTER (RGB) 1 IN	D-sub HD 15-pin (female) × 1
	R, G, B	G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) NOTE: SYNC/HD and VD terminals do not accept tri-level sync signals.
	Y, Pb (Cb), Pr (Cr)	Y: 1.0 Vp-p (including sync signal); Pb (Cb), Pr (Cr): 0.7 Vp-p, 75 ohms
S-VIDEO		Y: 1.0 Vp-p; C: 0.286 Vp-p, 75 ohms

Terminals	COMPUTER (RGB) 2IN/1OUT R, G, B	D-sub HD 15-pin (female) × 1 (input/output selectable using on-screen menu) G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative)
	VIDEO IN	Pin jack × 1, 1.0 Vp-p, 75 ohms
	AUDIO IN 1	M3 (L, R) × 1, 0.5 Vrms
	AUDIO IN 2	M3 (L, R) × 1, 0.5 Vrms
	AUDIO IN 3	Pin jack × 2 (L/R × 1), 0.5 Vrms
	AUDIO OUT	M3 (L, R) × 1 (monitor out: 0–2.0 Vrms, variable)
	SERIAL IN	D-sub 9-pin (male) × 1, for external control (RS-232C compliant)
	LAN	RJ-45 × 1, for network connection, 100Base-TX/10Base-T, compliant with PLink™
	USB A USB B	USB type-A (for the Memory Viewer/Wireless Module [WML100]) × 1 USB type-B (for the USB Display) × 1
Power cord length		2 m (6 ft 6.7 in)
Cabinet materials		Molded plastic
Dimensions (W × H × D)		352 × 98 ^{*5} × 279 ^{*6} mm (13-27/32 × 3-27/32 ^{*5} × 10-31/32 ^{*6} inches)
Weight ^{*7}		Approx. 3.3 kg (7.3 lbs)
Operation noise ^{*2}		37 dB (Lamp power: Normal), 29 dB (Lamp power: Eco)
Operating temperature		0–40 °C (32°–104°F) (At altitudes less than 1400 m, High altitude mode: OFF) 0–30 °C (32°–86°F) (At altitudes of 1400 m to 2000 m, High altitude mode: HIGH1) 0–30 °C (32°–86°F) (At altitudes of 2000 m to 2700 m, High altitude mode: HIGH2)
Operating humidity		20%–80% (no condensation)

Remote control unit

Power supply	3 V DC (R03/AAA OR LR03/AAA type battery × 2)
Operation range ^{*8}	Approx. 7 m (23 ft) when operated from directly in front of the signal receptor
Dimensions (W × H × D)	44 × 105 × 20.5 mm (1-23/32 × 4-1/8 × 13/16 inches)
Weight	Approx. 63 g (2.22 oz) (including batteries)

Supplied accessories

	Power cord with security lock (× 1) Wireless remote control unit (× 1) Batteries for remote control (R03/AAA OR LR03/AAA type × 2) VGA cable (× 1) Lens cap (× 1)
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Optional accessories

Replacement lamp unit	ET-LAV300
Replacement filter unit	ET-RFV300
Ceiling mount bracket	ET-PKL100H (for high ceilings)
Ceiling mount bracket	ET-PKL100S (for low ceilings)
Bracket assembly	ET-PKV400B
Early Warning Software	ET-SWA100 series
Wireless Module	ET-WML100
D-SUB - S-Video conversion cable	ET-ADSV

Applicable software

Multi Monitoring & Control Software
Logo Transfer Software
Presenter Light for Windows
Wireless Projector App for iOS
Wireless Projector App for Android™

Weights and dimensions shown are approximate. Specifications 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. 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 Only compatible with dot clock frequency of 27 MHz (pixel repetition signal)

*4 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).

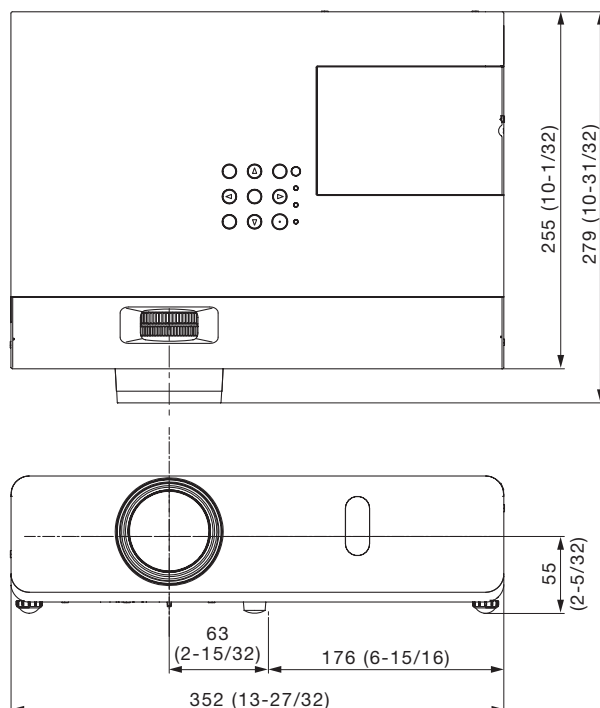
*5 With legs at shortest position.

*6 Include protruding parts.

*7 Average value. May differ depending on models.

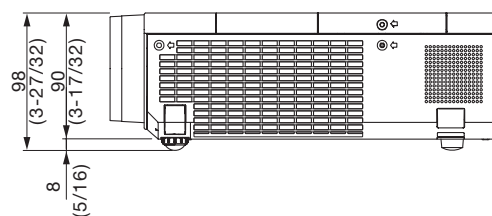
*8 Operation range differs depending on environments.

Dimensions

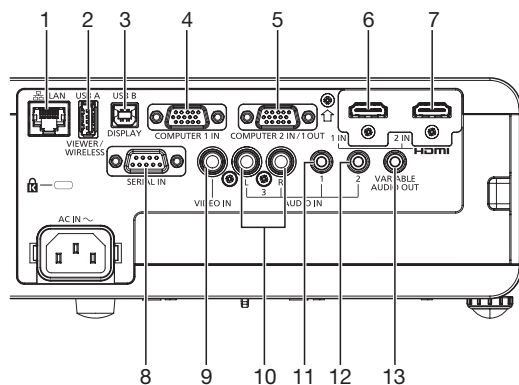


unit : mm (inch)

NOTE: This illustration is not drawn to scale.

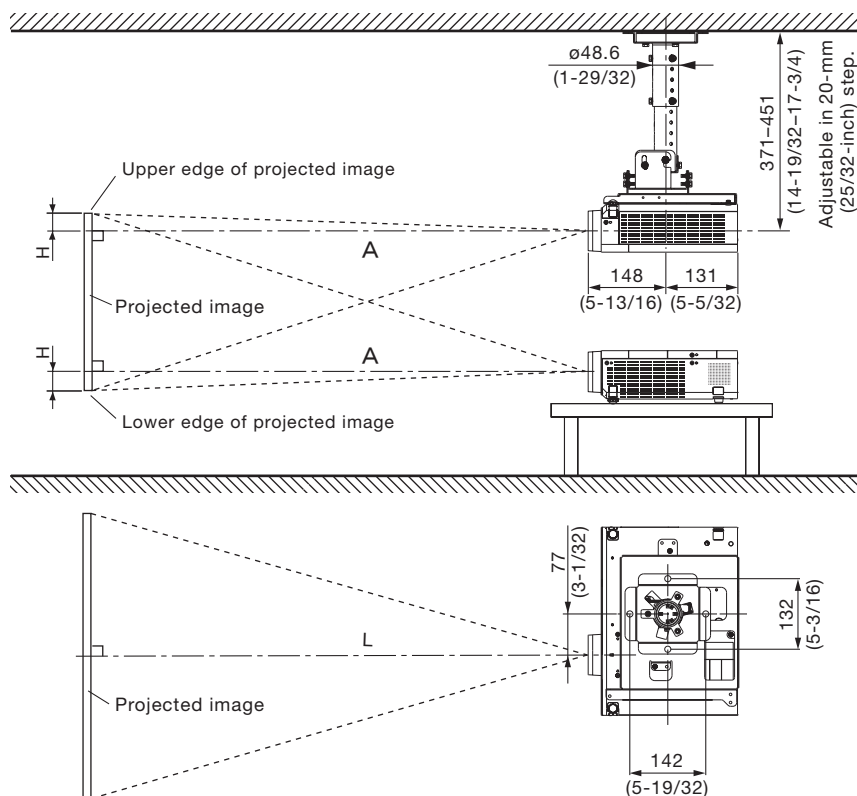


Terminals



- 1 LAN connector
- 2 USB A connector / Memory Viewer / Wireless Module
- 3 USB B connector / USB Display
- 4 Computer 1 input
- 5 Computer 2 input / Computer 1 output
- 6 HDMI 1 input
- 7 HDMI 2 input
- 8 Serial input
- 9 Video input
- 10 Audio 3 input
- 11 Audio 1 input
- 12 Audio 2 input
- 13 Audio output

Standard setting-up position



NOTE:

Illustrations show the projector installed using optional ceiling mount bracket ET-PKL100H and bracket assembly ET-PKV400B.

This illustration is not drawn to scale.

unit : mm (inch)

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.

Projection distance for 4:3 aspect ratio screen

unit: meters (feet)

Projection size [diagonal]	Projection distance [L]		Height from the edge of screen to center of lens [H]
	Min [wide]	Max [telephoto]	
0.76 m / 30"	0.69 (2.26)	1.14 (3.74)	0.046 (0.151)
1.02 m / 40"	0.94 (3.08)	1.54 (5.05)	0.061 (0.200)
1.27 m / 50"	1.17 (3.84)	1.92 (6.30)	0.076 (0.249)
1.52 m / 60"	1.41 (4.63)	2.30 (7.55)	0.091 (0.299)
1.78 m / 70"	1.65 (5.41)	2.70 (8.86)	0.107 (0.351)
2.03 m / 80"	1.89 (6.20)	3.08 (10.10)	0.122 (0.400)
2.29 m / 90"	2.14 (7.02)	3.48 (11.42)	0.137 (0.449)
2.54 m / 100"	2.37 (7.78)	3.87 (12.70)	0.152 (0.499)
3.05 m / 120"	2.86 (9.38)	4.65 (15.26)	0.183 (0.600)
3.81 m / 150"	3.58 (11.75)	5.81 (19.06)	0.229 (0.751)
5.08 m / 200"	4.78 (15.68)	7.76 (25.46)	0.305 (1.001)
6.35 m / 250"	5.98 (19.62)	9.70 (31.82)	0.381 (1.250)
7.62 m / 300"	7.18 (23.56)	11.65 (38.22)	0.457 (1.499)

NOTE:

- The value for L (distance to screen) varies slightly depending on the zoom lens characteristics.
- At the shortest projection distance, the zoom lens characteristics may cause slight image distortion.

Calculation of the projection distance

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

Aspect ratio 4:3

minimum $L(m) = (\text{diagonal screen size in inches}) \times 0.0240 - 0.0295$

maximum $L(m) = (\text{diagonal screen size in inches}) \times 0.0389 - 0.0272$

NOTE:

Distances calculated with the above equations will include a slight error.

Installable angle

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

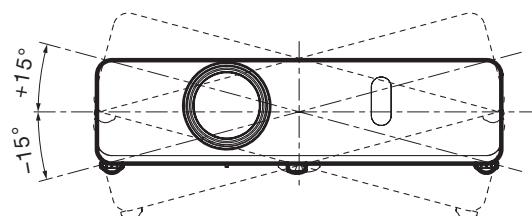
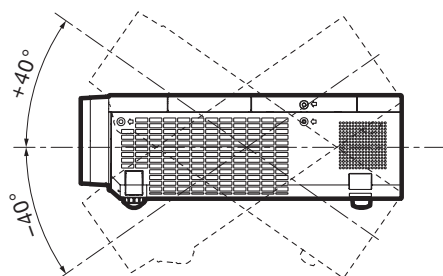
• Vertical direction

The projector may be installed at a vertical angle of 40°.

• Horizontal direction

The projector may be installed at a horizontal angle of 15°.

*The vertical keystone correction angle is within $\pm 35^\circ$



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 91.1kHz(15 kHz to 100 kHz for RGB signals), vertical scanning frequencies of 24 Hz to 100Hz (24 Hz to 100 Hz for RGB signals), and a dot clock of 162MHz maximumimum for RGB signals)can be input.

NOTE: The native resolution of this projector is 1,024 × 768 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 (Hz)	Dot clock frequency (MHz)	Format
NTSC/NTSC4.43/PAL-M/PAL60	720 × 480i	15.7	59.9	–	VIDEO
PAL/PAL-N/SECAM	720 × 576i	15.6	50.0	–	
480i(525i)	720 × 480i	15.7	59.9	13.5	Y·C/RGB
576i(625i)	720 × 576i	15.6	50.0	13.5	
480i(525i)	720(1440) × 480i*2	15.7	59.9	27.0	HDMI
576i(625i)	720(1440) × 576i*2	15.6	50.0	27.0	
480p(525p)	720 × 483	31.5	59.9	27.0	HDMI/YPbPr/YCbCr/RGB
576p(625p)	720 × 576	31.3	50.0	27.0	
720(750)/60p	1280 × 720	45.0	60.0	74.3	
720(750)/50p		37.5	50.0	74.3	
1080(1125)/60i*3	1920 × 1080i	33.8	60.0	74.3	
1080(1125)/50i		28.1	50.0	74.3	
1080(1125)/24p	1920 × 1080	27.0	24.0	74.3	
1080(1125)/24sF	1920 × 1080i	27.0	48.0	74.3	
1080(1125)/25p	1920 × 1080	28.1	25.0	74.3	
1080(1125)/30p		33.8	30.0	74.3	
1080(1125)/60p		67.5	60.0	148.5	
1080(1125)/50p		56.3	50.0	148.5	
640 × 400	640 × 400	37.9	85.1	31.5	HDMI/RGB
		31.5	70.1	25.2	
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	
1152 × 864	1152 × 864	53.7	60.0	81.6	
		67.5	75.0	108.0	
		77.1	85.0	119.7	
1152 × 870	1152 × 870	68.7	75.1	100.0	
1280 × 720	1280 × 720	37.1	50.0	60.5	
		44.8	60.0	74.5	

*1 The “i” appearing after the resolution indicates an interlaced signal.

*2 Only compatible with dot clock frequency of 27 MHz (pixel repetition signal)

*3 When a 1125 (1035)/60i signal was input, it is displayed as a 1125 (1080)/60i signal.

Display mode	Display resolution (dots)*1	Scanning frequency		Dot clock frequency (MHz)	Format
		H (kHz)	V (Hz)		
1280 × 768	1280 × 768	60.3	74.9	102.3	HDMI/RGB
		68.6	84.8	117.5	
1280 × 800	1280 × 800	62.8	74.9	106.5	
		71.6	84.9	122.5	
		41.3	50.0	68.0	
1280 × 960	1280 × 960	60.0	60.0	108.0	
1280 × 1024	1280 × 1024	64.0	60.0	108.0	
		80.0	75.0	135.0	
		91.1	85.0	157.5	
1366 × 768	1366 × 768	39.6	49.9	69.0	
		47.7	59.8	85.5	
1400 × 1050	1400 × 1050	65.3	60.0	121.8	
		65.2	60.0	122.6	
		82.3	74.9	156.0	
1440 × 900	1440 × 900	55.9	59.9	106.5	
1600 × 900	1600 × 900	46.3	50.0	97.0	
		55.9	60.0	119.0	
1600 × 1200	1600 × 1200	75.0	60.0	162.0	
1680 × 1050	1680 × 1050	54.1	50.0	119.5	
		65.3	60.0	146.3	
1920 × 1080	1920 × 1080*2	55.6	49.9	141.5	
	1920 × 1080	66.6	59.9	138.5	
1920 × 1200	1920 × 1200*2	61.8	49.9	158.3	
	1920 × 1200	74.0	60.0	154.0	

*1 The "i" appearing after the resolution indicates an interlaced signal.

*2 VESA CVT-RB (Reduced Blanking)-compliant.

NOTE:

When interlaced signals are connected, flicker may occur on the projected image.

Even the above signals exist, some image signals recorded in special method may not be displayed.