PT-CMZ50

Specifications
Main unit

Power supply			AC 100 V–240 V, 50 Hz/60 Hz	
Power consumption[1]	Maximum power consumption		325 W (3.4-1.4 A) (330 VA) (Power consumption is 310 W at 200-240 V)	
	On-mode power consumption (Light power)	[NORMAL]	290 W (100-120 V), 280 W (200-240 V)	* Operating Temperature: 25 ℃ (77 ℉), Altitude: 700 m (2,297 ft)
		[ECO]	215 W (100-120 V), 205 W (200-240 V)	
		[QUIET]	210 W (100-120 V), 200 W (200-240 V)	
	Standby mode power consumption	[NORMAL]	18 W When [QUICK STARTUP] function is disabled, [IN STANDBY MODE] of [AUDIO SETTING] is set to [OFF], No device is connected to \<DIGITAL LINK/LAN\> terminal, and \<USB (VIEWER/WIRELESS/DC OUT)\> terminal is not in use.	
		[ECO]	0.5 W	
BTU value			Max 1,110 BTU	
LCD panel	Size		16.3 mm [0.64 in] diagonal (16:10 aspect ratio)	
	Display system		Transparent LCD panel (x 3, R/G/B)	
	Number of pixels		2,304,000 (1920 x 1200) pixels	
Refresh rate			60 Hz Refresh rate varies depending on scanning frequency.	
Light source			Laser diode	
Light output[1]	Light Power	[NORMAL]	5,200 lm When [PICTURE MODE] is set to [DYNAMIC], [LIGHT POWER] is set to [NORMAL], and [SYSTEM DAYLIGHT VIEW] is set to [OFF].	
		[ECO/QUIET]	3,640 lm	
Time until light output declines to 50%[2]	Light Power	[NORMAL/QUIET]	20,000 hours	
		[ECO]	24,000 hours	
Filter Replacement Cycle			20,000 hours (Under the dust conditions of 0.08mg/m³) 10,000 hours (Under the dust conditions of 0.15mg/m³) Filter cleaning cycle varies depending on environment. Filter can be washed and reused up to two times.	
Resolution			WUXGA (1920 x 1200 pixels)	
Contrast ratio[1]			3,000,000:1 (Full On/Full Off) (When [PICTURE MODE] is set to [DYNAMIC] and [DYNAMIC CONTRAST] is set to [1].)	
Screen size			2.03-3.05 m [80-120 in], 16:10 aspect ratio	
Center to corner zone ratio[1]			85%	
Lens			Fixed zoom, powered focus lens, F=1.7, f = 2.81 mm, throw ratio: 0.235:1	
Digital Zoom Extender[3]			0.235-0.288:1 (aspect ratio 16:10)[4]	
Keystone correction range			Vertical ±3 ° (Manual), Horizontal ±3 ° (Manual)	
Installation			Ceiling/desk, front/rear, free 360-degree installation	
Built-in speaker			10 W (monaural)	
Compatible Signal	COMPUTER signal input		Video signal resolution: 480i (525i), 576i (625i), 480/60p to 1080/60p Computer signal resolution: 640 x 480 to 1920 x 1200 (non-interlace) Dot clock frequency: 13.5 MHz to 162 MHz	
	HDMI™ signal input		Video signal resolution: 480/60p, 576/50p to 4096 x 2160/30p Computer signal resolution: 640 x 480 to 3240 x 1080 (non-interlace) Dot clock frequency: 25 MHz to 297 MHz	
	DIGITAL LINK signal input		Video signal resolution: 480/60p, 576/50p to 4096 x 2160/30p Computer signal resolution: 640 x 480 to 3240 x 1080 (non-interlace) Dot clock frequency: 25 MHz to 297 MHz	
Terminals	HDMI™ IN 1/ IN 2		HDMI™ 19pin x 2 Deep Color, compatible with HDCP 1.4, 4K/30p signal input[5], CEC supported[6] Audio Signal: Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)	
	HDMI™ OUT		HDMI™ 19pin x 2 Deep Color, compatible with HDCP 1.4, 4K/30p signal input[5], CEC not supported Audio Signal: Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)	
	COMPUTER IN		D-sub 15pin (female) x 1	
		RGB	0.7 V [p-p], 75 ohms (1.0 V [p-p], 75 ohms for sync on G) HD/SYNC, VD: TTL, high impedance, positive/negative automatic	
		YP$_B$P$_R$	Y: 1.0 V [p-p], including sync signal, P$_B$/P$_R$ (C$_B$/C$_R$): 0.7 V [p-p], 75 ohms	
	AUDIO IN		M3 stereo mini-jack x 1 0.5 V [rms], input Impedance 22 k Ohms and more	

Terminals	AUDIO OUT	M3 stereo mini-jack x 1 0 V [rms] to 2.0 V [rms] variable, output Impedance 2.2 k ohms and less
	SERIAL IN	D-sub 9-pin (female) x 1 for computer control (RS-232C compliant)
	LAN	RJ-45 x 1 for network connection, PJLink™ (Class 2) compatible, 10Base-T/100Base-TX
	DIGITAL LINK/LAN	RJ-45 x 1 for network and DIGITAL LINK connection, HDBase-T™ compliant, 100Base-TX, compatible with PJLink™ (Class 2), HDCP 1.4, Deep Color, 4K/30p signal input[6]
	USB (VIEWER/WIRELESS/DC OUT)	USB connector (Type A) x 1 for Memory Viewer function, optional Wireless Module AJ-WM50, power supply (DC 5 V, maximum 2 A)
Supported Internet protocol version		IPv4, IPv6[7]
Power cord length		India: 3.0 m [118 1/8 in] Other countries or regions: 2.0 m [78 3/4 in]
Cabinet materials		Molded plastic
Dimensions (W x H x D)		495 x 160 x 421 mm [19 1/2 x 6 19/64 x 16 37/64 in] (excluding feet and protrusions), 495 x 176 x 421 mm [19 1/2 x 6 15/16 x 16 37/64] (with feet at shortest position)
Weight with supplied lens[8]		Approx. 9.5 kg (20.9 lbs)
Operating noise[1]		34 dB (NORMAL/ECO), 25 dB (QUIET)
Laser Classification	Laser Class	Class 1 (IEC/EN 60825-1:2014)
	Risk Group	Risk Group 2 (IEC 62471-5:2015)
Operating environment	Operating environment temperature	0-45 °C (32-113 °F)[9]
	Operating environment humidity	20%-80% (no condensation)

Remote control unit

Power supply	3V DC (AAA/R03/LR03 battery x 2)
Operation range	Within Approx. 6 m [19 ft 8 in] (when operated directly in front of signal receptor)
Dimensions (W x H x D)	48 x 145 x 27 mm [1 7/8 x 5 23/32 x 1 1/16 in]
Weight[8]	Approx. 102 g (3.60 ozs.) including batteries

Supplied accessories

Wireless remote control unit (x 1)
Power cord (x 2 for Europe & Asia model/ x 1 for other countries)
Batteries for remote control (R03/AAA type x 2)

Other Applications

Multi Monitoring & Control Software (for Windows)
Projector Network Setup Software (for Windows)
Logo Transfer Software (for Windows)
Presenter Light Software (for Windows)[10]
Wireless Projector App (for iOS/Android)[11]

Supported services of Control via LAN

PJLink™ (Class2)
Crestron Connected™
AMX Device Discovery

Optional accessories

Ceiling Mount Bracket	for high ceiling	ET-PKD120H
	for highCeiling (6Axis adjustment)	ET-PKD130H
	for low ceiling	ET-PKD120S
Projector Mount Bracket for ceiling mount bracket		ET-PKE301B
Wall Mount Bracket		ET-WBC100
Replacement Filter Unit		ET-RFV500
DIGITAL LINK switcher		ET-YFB200G
Digital Interface Box		ET-YFB100G
Wireless Module		AJ-WM50 Series Note: product availability may vary by country or region. The suffix at the end of the model number is omitted. Operating Temperature: 0-40 °C (32-104 °F).
Early Warning Software		ET-SWA100 series Note: part number suffix may differ depending on the license type.
Wireless Presentation System PressIT		TY-WPS1 (basic set) Note: visit https://panasonic.net/cns/prodisplays/pressit/for more information.

Weights and dimensions shown are approximate. Specifications subject to change without notice.
1   Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 international standards. Value is average of all products when shipped.
2   Around this time, light output will have decreased to approximately 50 % of its original level ([PICTURE MODE]: [DYNAMIC], [DYNAMIC CONTRAST] set to [2], temperature 30 °C (86 °F), elevation 700 m (2,297 ft) with 0.15 mg/m³ of particulate matter). Estimated time until light output declines to 50 % varies depending on environment.
3   Resolution decreases when using this function.
4   When the screen aspect ratio is 16:10 and [DIGITAL ZOOM EXTENDER] is set to [80%].
5   4K signals are converted to the projector's resolution upon projection.
6   Depending on the connected CEC command-compatible device, the link control may not operate normally.
7   Main version of the firmware must be 2.00 or higher. Optional wireless module AJ-WM50 does not support IPv6.
8   Average value. May dier depending on the actual unit.
9   Light output is limited at operating temperatures higher than 30 °C (86 °F), and projectors cannot be operated at altitudes higher than 2,700 m (8,858 ft) above sea level.
    When optional AJ-WM50 Series Wireless Module is attached, operating temperature range becomes 0-40 °C (32-104 °F).
10 When using Presenter Light Software, images are projected with 1280 x 800 dots or 1024 x 768 dots onto the screen. Also, your PC display resolution may be forcibly changed, and audio playback disrupted or become noisy, while images and sound are being transmitted.
11 When using the Wireless Projector app, display resolution diers depending on your iOS/Android™ device and the display device.
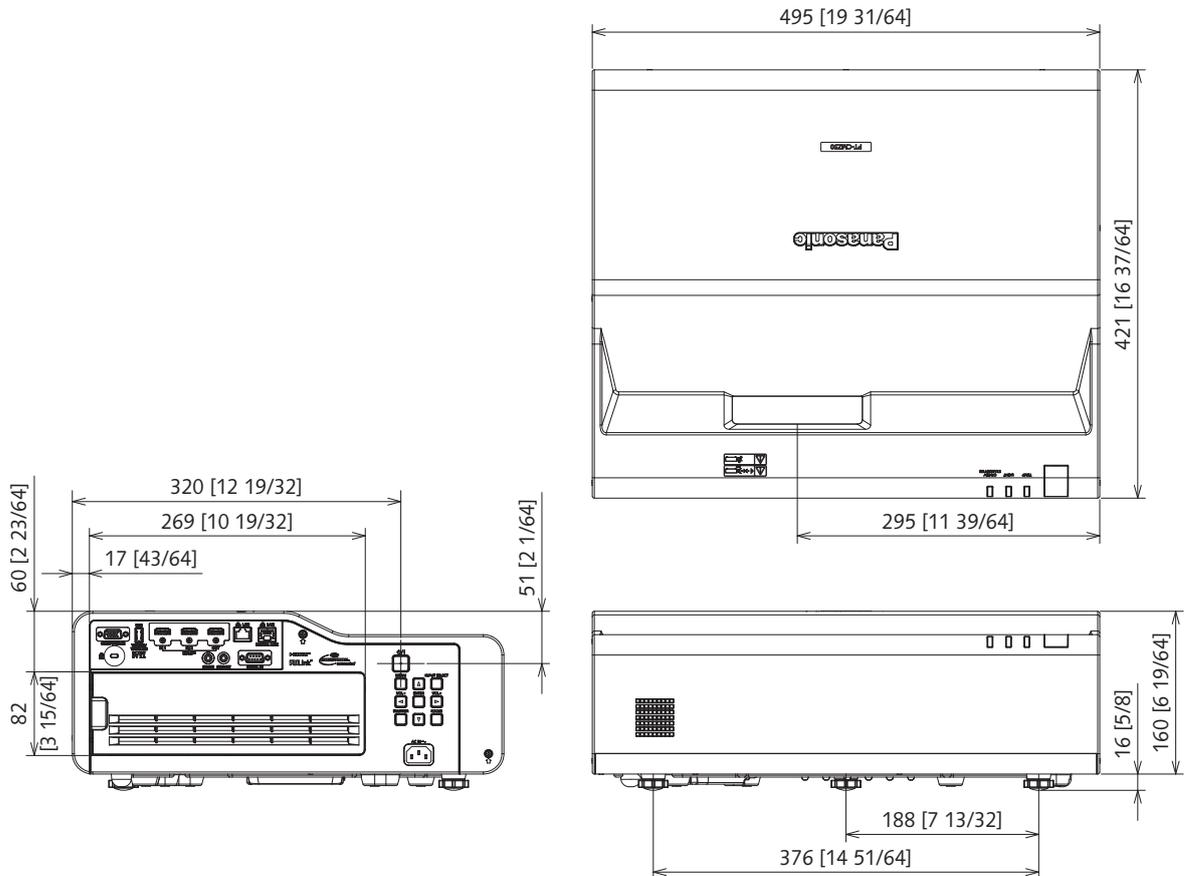   The maximum supported display resolution is WXGA (1280 x 800).

Terminals
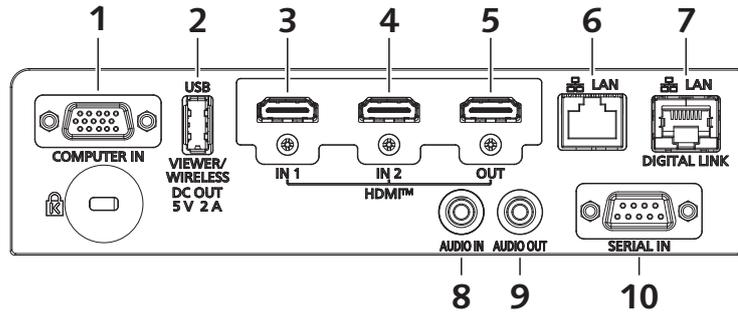
| 1	COMPUTER IN	6	LAN
2	USB (VIEWER/WIRELESS DC OUT 5V 2A)	7	LAN/DIGITAL LINK
3	HDMI™ IN 1	8	AUDIO IN
4	HDMI™ IN 2	9	AUDIO OUT
5	HDMI™ OUT	10	SERIAL IN

Dimensions

unit : mm [inch]
NOTE: This illustration is not drawn to scale.

Projected image and throw distance

Install the projector referring to the projected image size and projection distance. Image size and image position can be adjusted in accordance with the screen size and screen position.
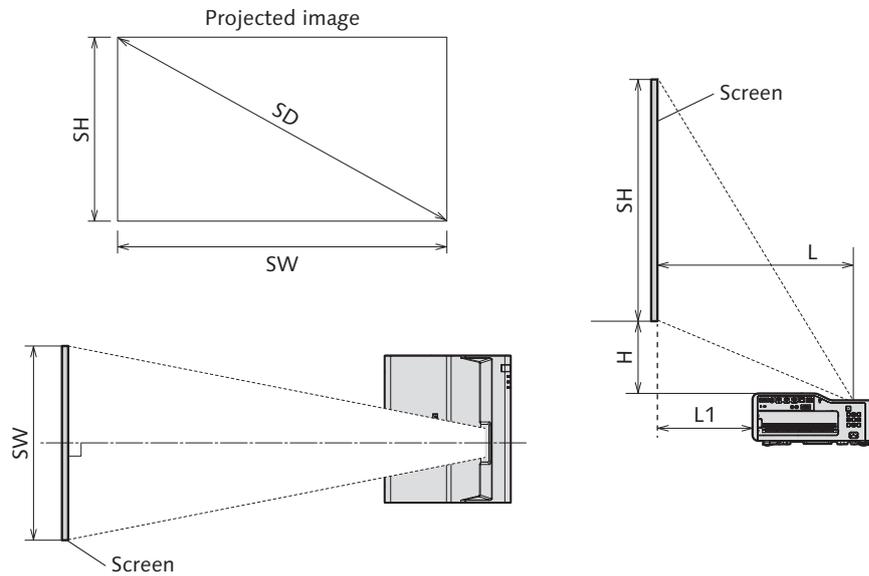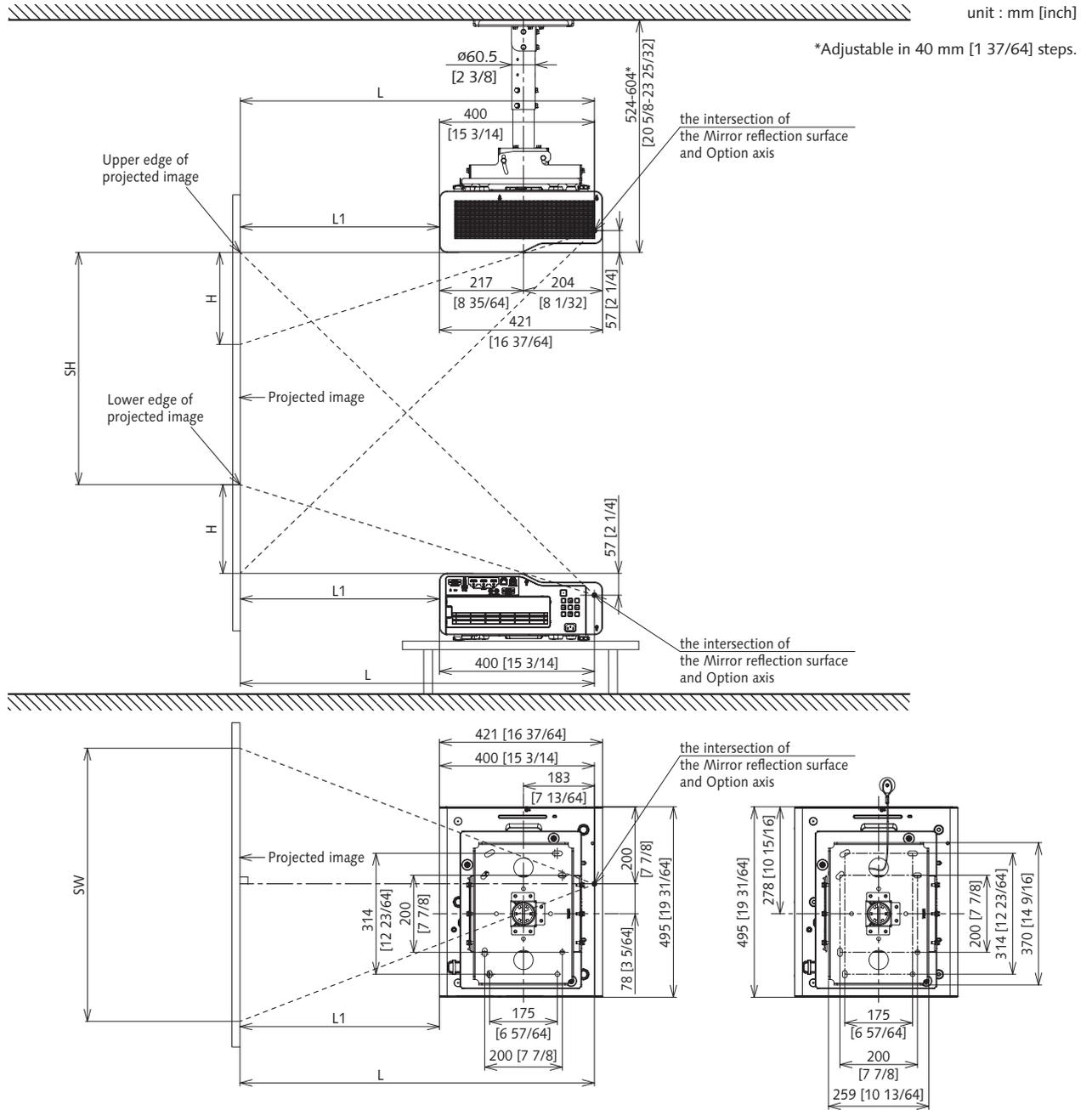

Note

- This illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.
- This illustration is not drawn to scale.

SH	Projected image height
SW	Projected image width
SD	Projected image size
L	Projection distance (distance from the screen surface to the mirror reflection surface[1])
L1	Distance from the screen surface to the back surface of the projector
H	Distance from the bottom edge of the screen to the top surface of the projector

1 The mirror reflection surface cannot be seen from the outside because it is located inside the projector.

Standard setting position

Illustrations show the projector installed using optional ceiling mount bracket ET-PKD120H and projector mount bracket ET-PKE301B.

unit : mm [inch]

*Adjustable in 40 mm [1 37/64] steps.

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.

Note

- This illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.
- This illustration is not drawn to scale.
- The values are approximate.

Illustrations show the projector installed using optional ceiling mount bracket ET-PKD120S and projector mount bracket ET-PKE301B.
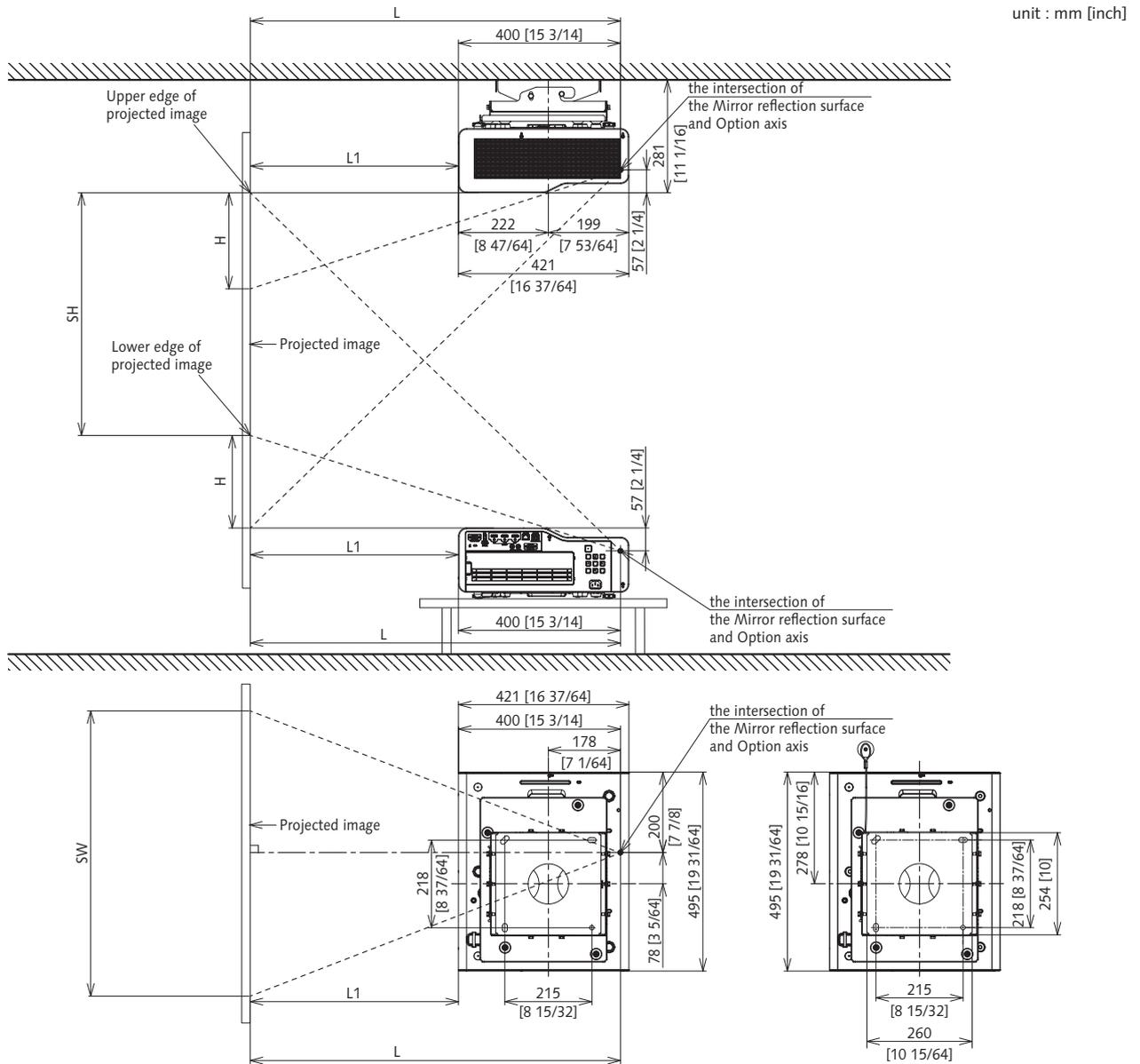
unit : mm [inch]

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.

Note

- This illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.
- This illustration is not drawn to scale.
- The values are approximate.

Illustrations show the projector installed using optional ceiling mount bracket ET-PKD130H and projector mount bracket ET-PKE301B.
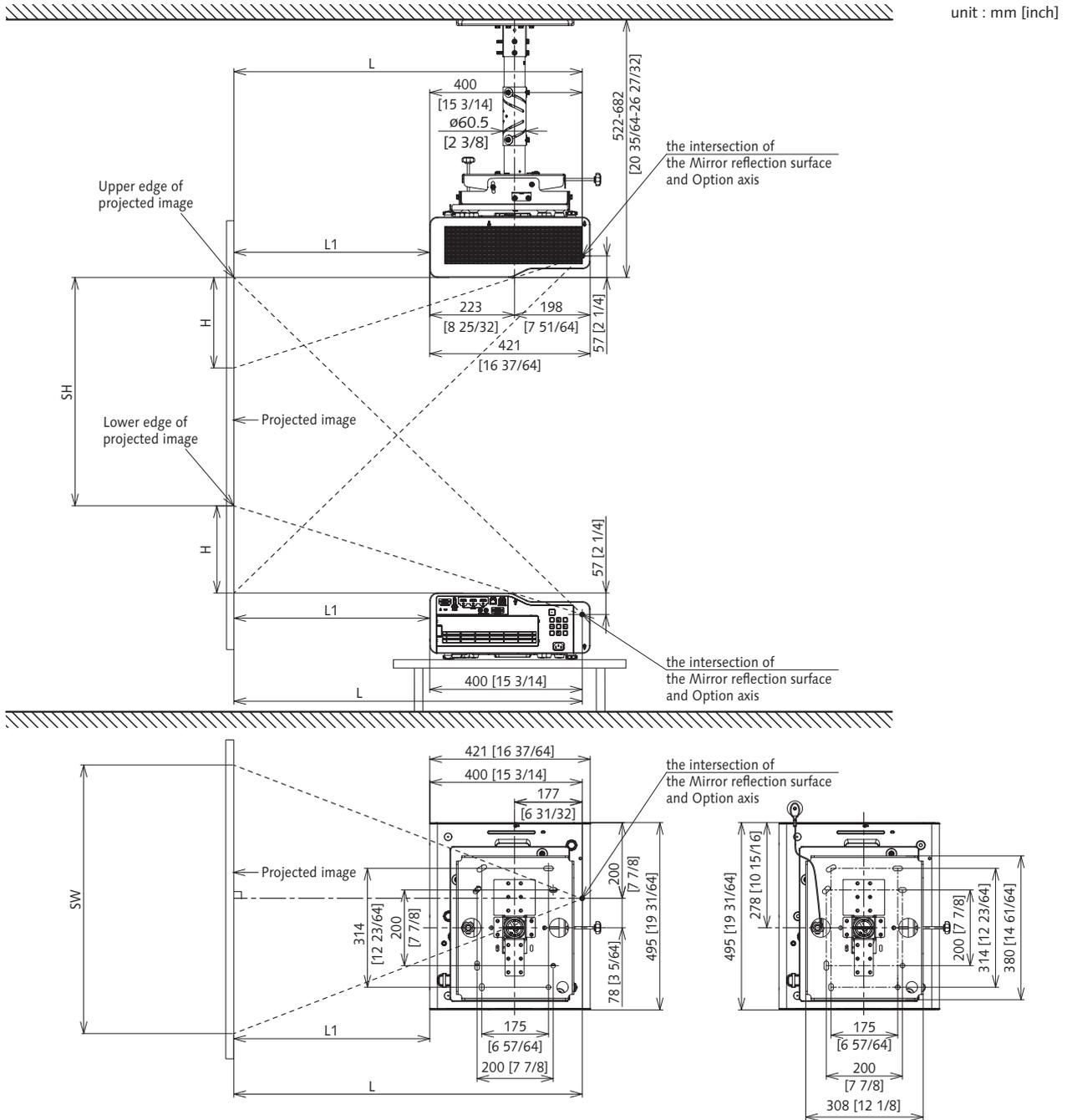
unit : mm [inch]

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.

Note

- This illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.
- This illustration is not drawn to scale.
- The values are approximate.

PT-CMZ50

Projection distance

A ±5 % error in listed projection distances may occur.
When [SCREEN ADJUSTMENT] is used, distance is corrected to become smaller than the specified image size.

Screen aspect ratio 16:10 — Unit: meters

Throw ratio		0.235:1			Digital Zoom Extender[1]	
					0.235-0.288:1	
Screen diagonal (SD)		Projection distance (L)	Distance from screen surface to projector back surface (L1)	Distance from bottom edge of screen to projector top surface (H)	Projection distance (L)	Distance from screen surface to projector back surface (L1)
[60 in]	1.52	-	-	-	-	-
[65 in]	1.65	-	-	-	0.42	0.016
[70 in]	1.78	-	-	-	0.44	0.044
[75 in]	1.91	-	-	-	0.47	0.072
[80 in]	2.03	0.41	0.010	0.13	0.50	0.10
[85 in]	2.16	0.43	0.033	0.15	0.53	0.13
[90 in]	2.29	0.46	0.055	0.16	0.56	0.16
[95 in]	2.41	0.48	0.078	0.17	0.59	0.19
[100 in]	2.54	0.50	0.10	0.18	0.61	0.21
[110 in]	2.79	0.55	0.15	0.20	-	-
[120 in]	3.05	0.59	0.19	0.23	-	-

1 When Digital Zoom Extender is set to 80%.

Screen aspect ratio 16:10 — Unit: feet

Throw ratio		0.235:1			Digital Zoom Extender[1]	
					0.235-0.288:1	
Screen diagonal (SD)		Projection distance (L)	Distance from screen surface to projector back surface (L1)	Distance from bottom edge of screen to projector top surface (H)	Projection distance (L)	Distance from screen surface to projector back surface (L1)
[60 in]	1.52	-	-	-	-	-
[65 in]	1.65	-	-	-	1.38	0.05
[70 in]	1.78	-	-	-	1.44	0.14
[75 in]	1.91	-	-	-	1.54	0.24
[80 in]	2.03	1.35	0.03	0.43	1.64	0.33
[85 in]	2.16	1.41	0.11	0.49	1.74	0.43
[90 in]	2.29	1.51	0.18	0.52	1.84	0.52
[95 in]	2.41	1.57	0.26	0.56	1.94	0.62
[100 in]	2.54	1.64	0.33	0.59	2.00	0.69
[110 in]	2.79	1.80	0.49	0.66	-	-
[120 in]	3.05	1.94	0.62	0.75	-	-

1 When Digital Zoom Extender is set to 80%.

Screen aspect ratio 16:9   Unit: meters

Throw ratio		0.234:1			Digital Zoom Extender[1]	
					0.234–0.287:1	
Screen diagonal (SD)		Projection distance (L)	Distance from screen surface to projector back surface (L1)	Distance from bottom edge of screen to projector top surface (H)	Projection distance (L)	Distance from screen surface to projector back surface (L1)
[60 in]	1.52	-	-	-	-	-
[65 in]	1.65	-	-	-	0.43	0.026
[70 in]	1.78	-	-	-	0.46	0.055
[75 in]	1.91	-	-	-	0.48	0.084
[80 in]	2.03	0.42	0.020	0.19	0.51	0.11
[85 in]	2.16	0.44	0.043	0.21	0.54	0.14
[90 in]	2.29	0.47	0.067	0.23	0.57	0.17
[95 in]	2.41	0.49	0.090	0.24	0.60	0.20
[100 in]	2.54	0.51	0.11	0.26	-	-
[110 in]	2.79	0.56	0.16	0.29	-	-
[120 in]	3.05	0.61	0.21	0.32	-	-

1 When Digital Zoom Extender is set to 80%.

Screen aspect ratio 16:9   Unit: feet

Throw ratio		0.234:1			Digital Zoom Extender[1]	
					0.234–0.287:1	
Screen diagonal (SD)		Projection distance (L)	Distance from screen surface to projector back surface (L1)	Distance from bottom edge of screen to projector top surface (H)	Projection distance (L)	Distance from screen surface to projector back surface (L1)
[60 in]	1.52	-	-	-	-	-
[65 in]	1.65	-	-	-	1.41	0.09
[70 in]	1.78	-	-	-	1.51	0.18
[75 in]	1.91	-	-	-	1.57	0.28
[80 in]	2.03	1.38	0.07	0.62	1.67	0.36
[85 in]	2.16	1.44	0.14	0.69	1.77	0.46
[90 in]	2.29	1.54	0.22	0.75	1.87	0.56
[95 in]	2.41	1.61	0.30	0.79	1.97	0.66
[100 in]	2.54	1.67	0.36	0.85	-	-
[110 in]	2.79	1.84	0.52	0.95	-	-
[120 in]	3.05	2.00	0.69	1.05	-	-

1 When Digital Zoom Extender is set to 80%.

Screen aspect ratio 4:3 — Unit: meters

Throw ratio		0.279:1			Digital Zoom Extender[1]	
					0.279-0.342:1	
Screen diagonal (SD)		Projection distance (L)	Distance from screen surface to projector back surface (L1)	Distance from bottom edge of screen to projector top surface (H)	Projection distance (L)	Distance from screen surface to projector back surface (L1)
[60 in]	1.52	-	-	-	0.43	0.032
[65 in]	1.65	-	-	-	0.46	0.064
[70 in]	1.78	0.41	0.007	0.13	0.50	0.096
[75 in]	1.91	0.43	0.032	0.14	0.53	0.13
[80 in]	2.03	0.46	0.058	0.16	0.56	0.16
[85 in]	2.16	0.48	0.083	0.17	0.59	0.19
[90 in]	2.29	0.51	0.11	0.19	0.62	0.22
[95 in]	2.41	0.54	0.13	0.20	-	-
[100 in]	2.54	0.56	0.16	0.21	-	-
[110 in]	2.79	0.61	0.21	0.24	-	-
[120 in]	3.05	-	-	-	-	-

1 When Digital Zoom Extender is set to 80%.

Screen aspect ratio 4:3 — Unit: feet

Throw ratio		0.279:1			Digital Zoom Extender[1]	
					0.279-0.342:1	
Screen diagonal (SD)		Projection distance (L)	Distance from screen surface to projector back surface (L1)	Distance from bottom edge of screen to projector top surface (H)	Projection distance (L)	Distance from screen surface to projector back surface (L1)
[60 in]	1.52	-	-	-	1.41	0.10
[65 in]	1.65	-	-	-	1.51	0.21
[70 in]	1.78	1.35	0.02	0.43	1.64	0.31
[75 in]	1.91	1.41	0.10	0.46	1.74	0.43
[80 in]	2.03	1.51	0.19	0.52	1.84	0.52
[85 in]	2.16	1.57	0.27	0.56	1.94	0.62
[90 in]	2.29	1.67	0.36	0.62	2.03	0.72
[95 in]	2.41	1.77	0.43	0.66	-	-
[100 in]	2.54	1.84	0.52	0.69	-	-
[110 in]	2.79	2.00	0.69	0.79	-	-
[120 in]	3.05	-	-	-	-	-

1 When Digital Zoom Extender is set to 80%.

Formula for calculating the projection distance

To use a projected image size not listed in this manual, check the projected image size SD (m) and use the respective formula to calculate the value.

The unit of all the formulae is m. (Values obtained by the following calculation formulae contain a slight error.)

When calculating the value using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula.
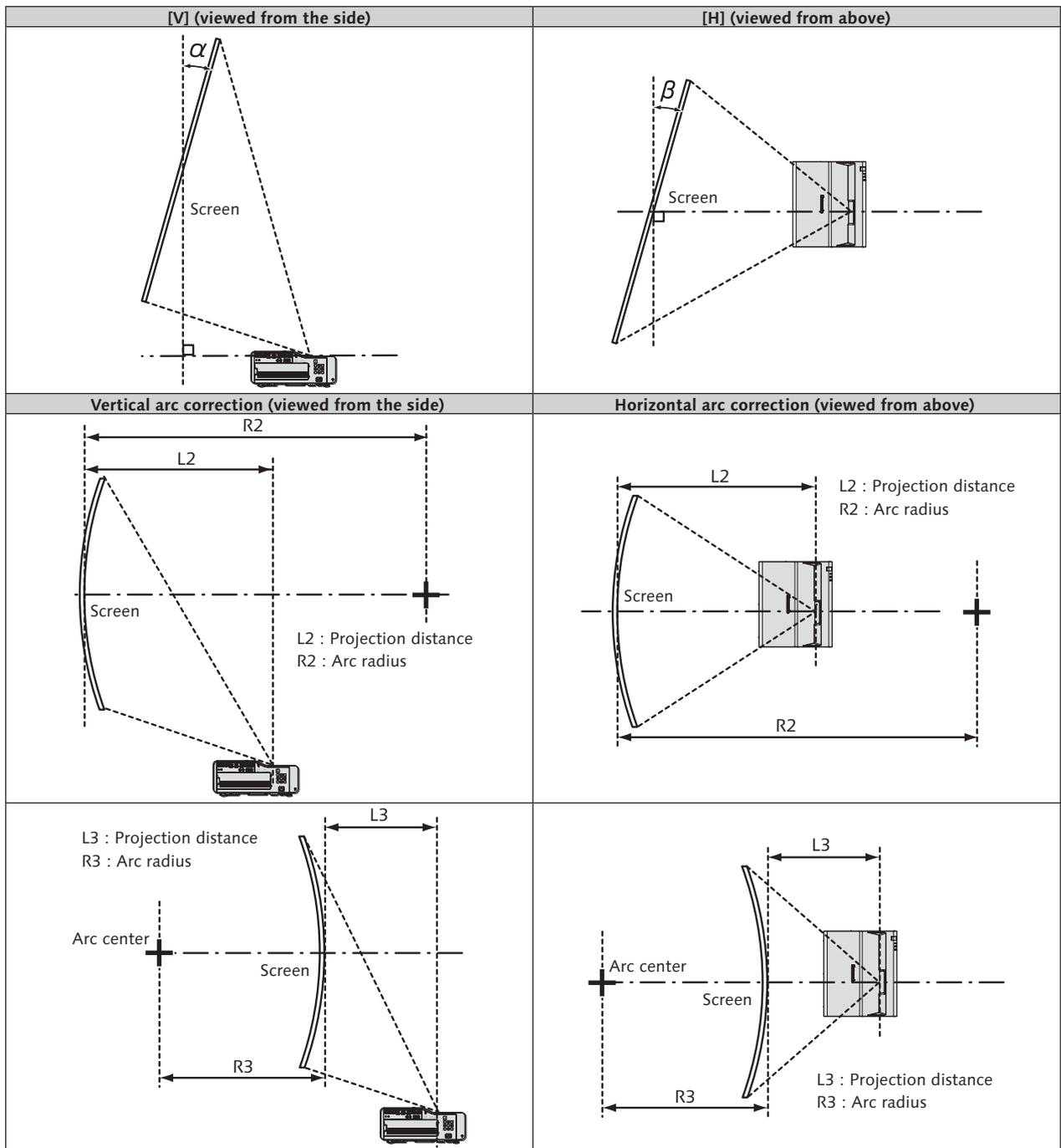
Unit: meters

Aspect ratio	16 : 10	16 : 9	4 : 3
Screen height (SH)	=0.530 x SD	=0.490 x SD	=0.6 x SD
Screen width (SW)	=0.848 x SD	=0.872 x SD	=0.8 x SD
Projection distance (L)[1]	=0.1782 x SD/X + 0.0485	=0.1831 x SD/X + 0.0485	=0.2017 x SD/X + 0.0485
Distance from screen surface to projector back surface (L1)	=0.0100+(L-0.4105)		
Distance from bottom edge of screen to projector top surface (H)	=0.0933 x SD - 0.0562	=0.1231 x SD - 0.0562	=0.1056 x SD - 0.0562

1 X in the formulas represents the setting value of [DIGITAL ZOOM EXTENDER] (100%=1.00, 99%=0.99, ...).

Note

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

[SCREEN ADJUSTMENT] projection range

[V] (viewed from the side)	[H] (viewed from above)
Vertical arc correction (viewed from the side)	Horizontal arc correction (viewed from above)

| Only [KEYSTONE] used		[KEYSTONE] and [CURVED CORRECTION] used together				Only [CURVED CORRECTION] used	
Vertical keystone correction angle α (°)	Horizontal keystone correction angle β (°)	Vertical keystone correction angle α (°)	Horizontal keystone correction angle β (°)	Min. value of R2/L2	Min. value of R3/L3	Min. value of R2/L2	Min. value of R3/L3
±3	±3	±3	±3	27.47	29.28	33.83	33.91

Note

• When [SCREEN ADJUSTMENT] is used, the focus may not be able to match the whole screen as correction increases.
• The curved screen should be in the shape of a circular arc part of a perfect circle.
  Note that even if image distortion caused by projecting onto a curved surface is corrected using [CURVED CORRECTION], part of the image will not be displayed in the aspect ratio of the image due to uneven stretching and shrinking of the image from the center to the border of the projection screen.

Installable angle

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

FULL 360-degree projection

360° vertically

360° horizontally

360° tilted
(combination of vertical and horizontal)
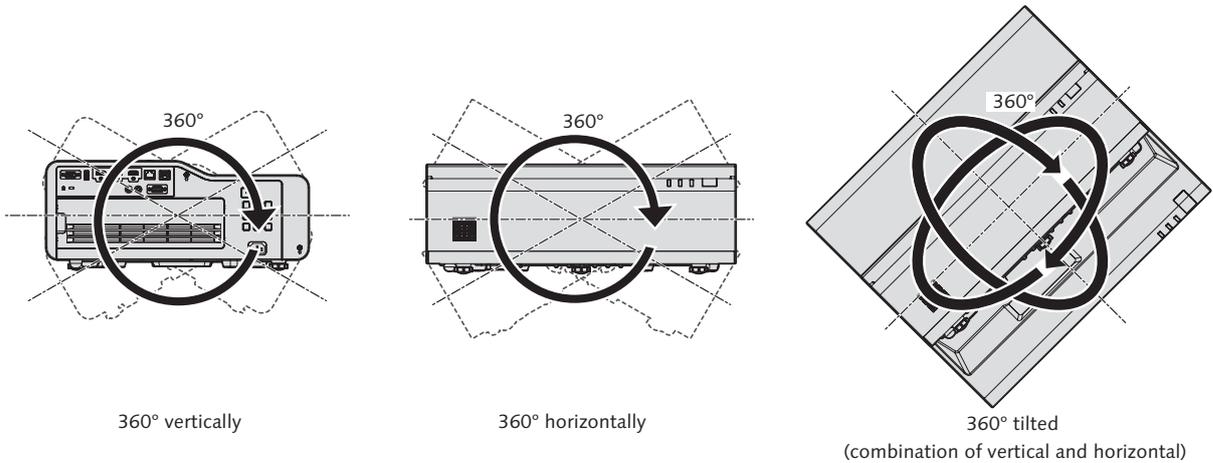
Cautions when setting the projectors

- Use the adjustable feet only for the floor standing installation and for adjusting the angle. Using them for other purposes may damage the projector.
- When installing the projector with a method other than the floor installation using the adjustable feet or the installation using the ceiling / wall mount bracket, use the four screw holes for ceiling / wall mount (as shown in the figure) to fix the projector.
  In such case, make sure that there is no clearance between the screw holes to fix the projector on the projector bottom and the setting surface by inserting spacers (metallic) between them.
- Use a torque screwdriver or Allen torque wrench to tighten the fixing screws to their specified tightening torques.Do not use electric screwdrivers or impact screwdrivers.
  (Screw diameter: M6, tapping depth inside the projector: 12 mm [15/32 in], torque: 4 ± 0.5 N·m)

Adjustable feet

Screw holes to fix the projector (M6)
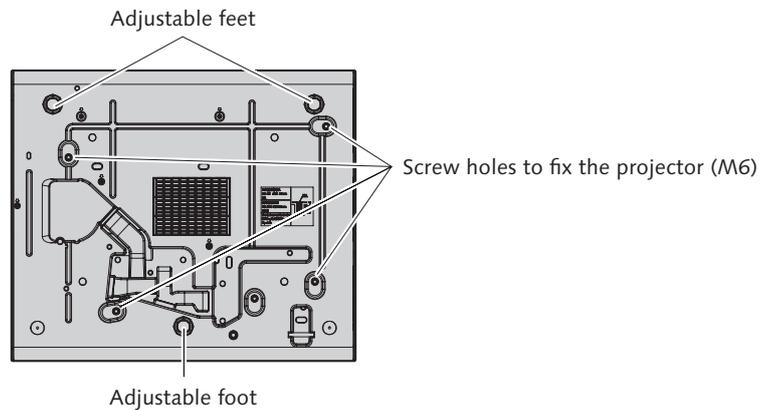
Adjustable foot

Positions of adjustable feet and screw holes to fix the projector

- Do not block the intake and exhaust vents of the projector.
- Avoid heating and cooling air from the air conditioning system directly blow to the intake and exhaust vents of the projector.

500 mm [19 11/16 in] or longer

1000 mm [39 3/8 in] or longer

Air intake side

Exhaust side
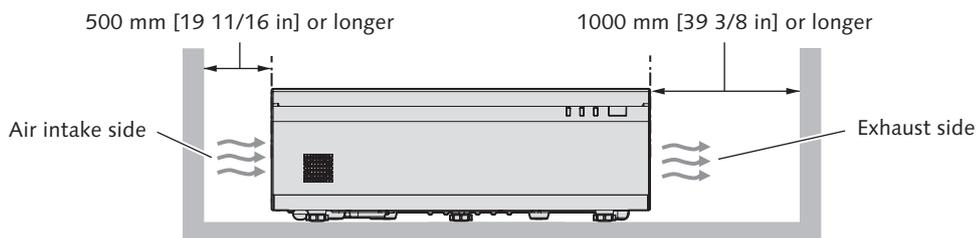
- When installing two or more projectors in parallel, provide at least 1200 mm [47 1/4 in] of space between the projectors.

1200 mm [47 1/4 in] or longer
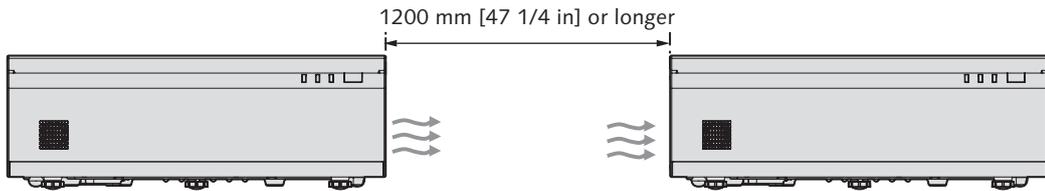
If 1200 mm [47 1/4 in] of space cannot be secured, install a partition between the projectors to block heat from the exhaust vent.
The partition should exceed the projector by about 20 mm [25/32 in] in height and depth, and should be installed at least 300 mm [11 13/16 in] away from the intake and exhaust vents of the projector.

300 mm [11 13/16 in] or longer   300 mm [11 13/16 in] or longer
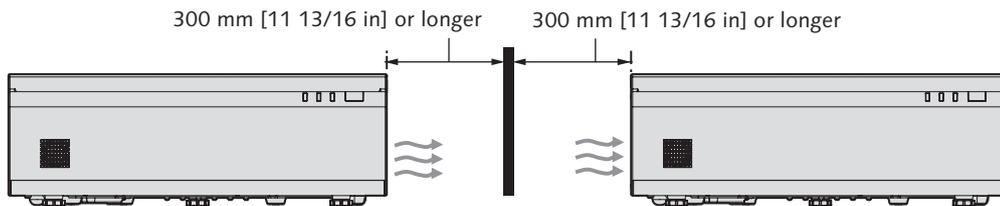
- Do not install the projector in a confined space.
  When placing the projector in a confined space, a ventilation and/or air conditioning system is required. Exhaust heat may accumulate when the ventilation is not enough, triggering the protection circuit of the projector.
- Panasonic Connect Co., Ltd. takes no responsibility for any damage to the product caused by an inappropriate choice of location for installing the projector, even if the warranty period of the product has not expired.

LCD Projector

PT-CMZ50

List of compatible signals

The following table specifies the type of signals compatible with the projector.

This projector supports the signal with ✓ in the compatible signal column.

Signal type	Signal name	Resolution (Display Resolution)	Scanning freq.		Dot clock freq. (MHz)	compatible signal		
			Horizontal (kHz)	Vertical (Hz)		COMPUTER	DIGITAL LINK	HDMI™
Video Signal	480i (525i)	712 x 483i	15.7	59.9	13.5	✓	—	—
	576i (625i)	702 x 575i	15.6	50.0	13.5	✓	—	—
	480/60p	720 x 480	31.5	59.9	27.0	✓	✓	✓
	576/50p	720 x 576	31.3	50.0	27.0	✓	✓	✓
	720/60p	1280 x 720	45.0	60.0[1]	74.3	✓	✓	✓
	720/50p	1280 x 720	37.5	50.0	74.3	✓	✓	✓
	1080/60i	1920 x 1080i	33.8	60.0[1]	74.3	✓	✓	✓
	1080/50i	1920 x 1080i	28.1	50.0	74.3	✓	✓	✓
	1080/24p	1920 x 1080	27.0	24.0[1]	74.3	✓	✓	✓
	1080/24sF	1920 x 1080i	27.0	48.0[1]	74.3	✓	✓	✓
	1080/25p	1920 x 1080	28.1	25.0	74.3	✓	✓	✓
	1080/30p	1920 x 1080	33.8	30.0[1]	74.3	✓	✓	✓
	1080/60p	1920 x 1080	67.5	60.0[1]	148.5	✓	✓	✓
	1080/50p	1920 x 1080	56.3	50.0	148.5	✓	✓	✓
	3840 x 2160/24p	3840 x 2160	54.0	24.0[1]	297.0	—	✓	✓
	3840 x 2160/25p	3840 x 2160	56.3	25.0	297.0	—	✓	✓
	3840 x 2160/30p	3840 x 2160	67.5	30.0[1]	297.0	—	✓	✓
	4096 x 2160/24p	4096 x 2160	54.0	24.0[1]	297.0	—	✓	✓
	4096 x 2160/25p	4096 x 2160	56.3	25.0	297.0	—	✓	✓
	4096 x 2160/30p	4096 x 2160	67.5	30.0[1]	297.0	—	✓	✓
Computer Signal	640 x 480/60	640 x 480	31.5	59.9	25.2	✓	✓	✓
	800 x 600/60	800 x 600	37.9	60.3	40.0	✓	✓	✓
	1024 x 768/50	1024 x 768	39.6	50.0	51.9	✓	✓	✓
	1024 x 768/60	1024 x 768	48.4	60.0	65.0	✓	✓	✓
	1024 x 768/70	1024 x 768	56.5	70.1	75.0	✓	✓	✓
	1024 x 768/75	1024 x 768	60.0	75.0	78.8	✓	✓	✓
	1152 x 864/75	1152 x 864	67.5	75.0	108.0	✓	✓	✓
	1152 x 864/85	1152 x 864	77.1	85.0	119.7	✓	✓	✓
	1280 x 720/60	1280 x 720	44.8	59.9	74.5	✓	✓	✓
	1280 x 768/60	1280 x 768	47.8	59.9	79.5	✓	✓	✓
	1280 x 800/50	1280 x 800	41.3	50.0	68.0	✓	✓	✓
	1280 x 800/60	1280 x 800	49.7	59.8	83.5	✓	✓	✓
	1280 x 800/75	1280 x 800	62.8	74.9	106.5	✓	✓	✓
	1280 x 800/85	1280 x 800	71.6	84.9	122.5	✓	✓	✓
	1280 x 960/60	1280 x 960	60.0	60.0	108.0	✓	✓	✓
	1280 x 1024/60	1280 x 1024	64.0	60.0	108.0	✓	✓	✓
	1280 x 1024/75	1280 x 1024	80.0	75.0	135.0	✓	✓	✓
	1280 x 1024/85	1280 x 1024	91.1	85.0	157.5	✓	✓	✓
	1366 x 768/60	1366 x 768	47.7	59.8	85.5	✓	✓	✓
	1400 x 1050/60	1400 x 1050	65.3	60.0	121.8	✓	✓	✓
	1400 x 1050/75	1400 x 1050	82.2	75.0	155.9	✓	✓	✓
	1440 x 900/60	1440 x 900	55.9	59.9	106.5	✓	✓	✓
	1600 x 900/60	1600 x 900	55.9	60.0	119.0	✓	✓	✓
	1600 x 1200/60	1600 x 1 200	75.0	60.0	162.0	✓	✓	✓
	1680 x 1050/60	1680 x 1 050	65.3	60.0	146.3	✓	✓	✓
	1920 x 1080/50	1920 x 1080	55.6	49.9	141.5	✓	✓	✓
	1920 x 1200/50	1920 x 1200	61.8	49.9	158.3	✓	✓	✓
	1920 x 1200/60RB	1920 x 1200[3]	74.0	60.0	154.0	✓	✓	✓
	1920 x 720/60	1920 x 720	46.0	60.0	95.0	—	✓	✓
	1920 x 810/60	1920 x 810	51.7	60.0	107.0	—	✓	✓
	2048 x 1536/60	2048 x 1536	95.5	60.0	267.3	—	✓	✓
	2560 x 1080/60RB	2560 x 1080	66.6	60.0	181.3	—	✓	✓
	3240 x 1080/60	3240 x 1080	69.0	60.0	237.1	—	✓	✓

1 It also supports signals with vertical scanning frequency of 1 / 1.001 times.
2 VESA CVT-RB (Reduced Blanking)-compliant

Note

• A signal with a different resolution is converted to the number of display dots. 1920 x 1200
• The "i" at the end of the resolution indicates an interlaced signal.
• When interlaced signals are connected, flickering may occur on the projected image.
• Even the above signals exist, some image signals recorded in special method may not be displayed.