

LCOS Power Projector WUX6000

■ Outline of Product

This device is a 3-plate LCOS projector adopting the 0.71-type Liquid Crystal on Silicon (LCOS). In addition to video footage, the projection of video data up to WUXGA size (1920 dots x 1200 dots) is possible.

*The "projection lens" for this product is sold separately. Please select and purchase the optimal projection lens suitable for your installation location and system.

■ Product specifications (Specifications and appearance may change without prior notice for reasons such as manufacturing and changes of components.)

Used power	AC100 - 240 V 50Hz/60Hz
Consumed power	Standard: 455W / Quiet: 360W, Standby (LAN-on): 0.7W / Standby (LAN-off): 0.3W
Picture element	0.71-type LCOS panel (aspect ratio 16:10) Number of pixels: 2304000 pixels (1920 dots x 1200 dots, WUXGA)
Projection lens	(Separately sold) *A lens is not provided with this device. <Standard zoom lens (RS-IL01ST)> Lens configuration: 11 groups, 14 elements, F value: 1.89 - 2.65, Focus distance: 23.0 - 34.5mm, Projection distance range: 1.3 - 29m, 100-inch projection distance: 3.2 - 4.8m, Zoom ratio: 1.5 x (electric), Focus: electric <Long zoom lens (RS-IL02LZ)> Lens configuration: 11 groups, 15 elements, F value: 1.99 - 2.83, Focus distance: 34.0 - 57.7mm, Projection distance range: 1.9 - 48.5m, 100-inch projection distance: 4.7 - 8.0m, Zoom ratio: 1.7 x (electric), Focus: electric <Fixed short focus lens (RS-IL03WF)> Lens configuration: 11 groups, 14 elements, F value: 2.0, Focus distance: 12.8mm, Projection distance range: 0.7 - 5.2m, 100-inch projection distance: 1.73m, Zoom ratio: 1.0 x, Focus: electric <Ultra Long Zoom Lens (RS-IL04UL)> Lens configuration: 11 groups, 16 elements, F value: 2.34-2.81, Focus distance: 53.4-105.6mm, Projection distance range: 4.6 - 89.0m, 100-inch projection distance: 3.2-4.8m, Zoom ratio: 1.95 x (electric), Focus: electric <Wide Zoom Lens (RS-IL05WZ)> Lens configuration: 11 groups, 15 elements, F value: 2.09-2.34, Focus distance: 15.6-23.3mm, Projection distance range: 0.9-19.5m, 100-inch projection distance: 2.2-3.2m, Zoom ratio: 1.5 x (electric), Focus: electric
Light source lamp	340-NSHA lamp (Output Standard : 340W / Quiet: 264W)
Projected image size	40 - 60-type (1.3m ~ 29.0m)
Light output*	Standard: 6000lm/Quiet: 4660lm
Peripheral contrast*	88%
Contrast ratio*	2000:1 (All white / All black)
Input signal resolution	WUXGA to VGA
Corresponding scanning frequency	See List of supported signals
lens shift	Standard zoom lens, Telephoto zoom lens: Up +55% to down +15% and left 10% to right 10% from screen center Fixed short focus lens: Up +5% to down +5% and left 2% to right 2% from screen center
Lens position	Position memory functions: Zoom, Focus, Lens shift, Keystone, Screen aspect, Screen color adjustment, Digital image shift
Keystone correction range	V ±20°, H ±20°
Projection method	Front ceiling / floor-mounted front / rear ceiling / floor-mounted rear
Video signal / Connection terminal	<Video signal> Analog PC input: WUXGA/UXGA/WSXGA+/SXGA+/WXGA+/WXGA/SXGA/XGA/SVGA/VGA Digital PC input: WUXGA/UXGA/WSXGA+/SXGA+/WXGA+/WXGA/SXGA/XGA/SVGA/VGA Digital video input: 1080p/1080i/720p/576p/480p Component video input: 1080p/1080i/720p/576p/576i/480p/480i <Connection terminal> DVI-I: Digital PC/AnalogPC input HDMI: Digital PC / Digital video input (supports Deep color) Mini D-sub 15: Analog PC/Component video input Mini jack x3: Audio input x 2, Audio output x 1, Mini jack x1: for connecting wired remote controller Dsub9: RS-232 connection RJ-45: 1000BASE-T / 100BASE-TX / 10BASE-T PJ link support
USB data transfer/ NMPJ image transfer	USB data transfer: JPEG still images; Network communications : NMPJ image transfer (Canon proprietary protocol)

* This indicates the overall average value of the product at the time of shipping, and it is listed in accordance with pattern for data projectors JIS X 6911:2003. The measurement method and measurement conditions are based on the Annex.

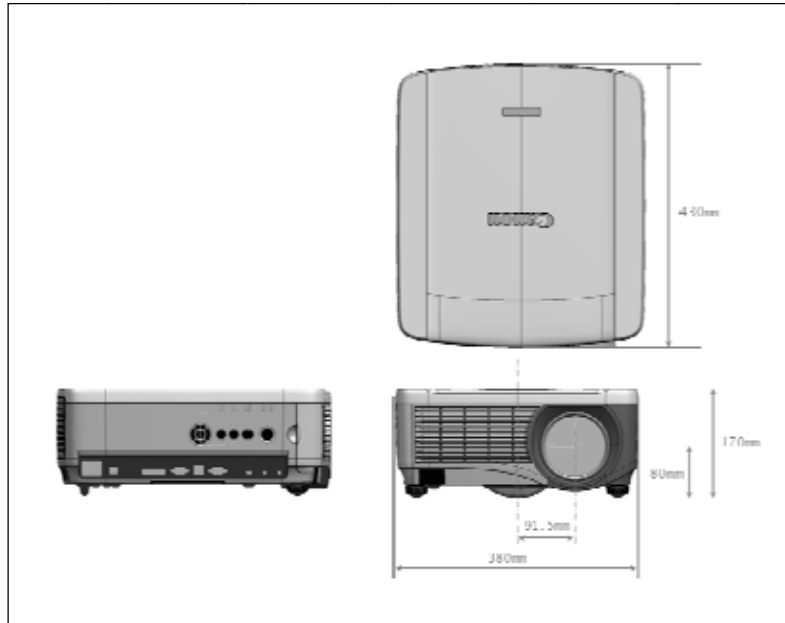
Cabinet	Molded plastic
External dimensions	Width 380mm Height 170mm (including extrusions) Depth 430mm (excluding lens)
Weight	About 8.5kg (excluding projection lens)*
Environmental conditions	Use environment: 0°C to 40°C
Supplied remote control	Storage environment: -30°C to 60°C Power supply used: DC 3V (2 AAA type batteries) Operation distance (for wireless): About 8m (receiver front ±25°), Supports 4 channels

* This is the average. It may vary for each product.

- Accessories ●Power cord ... 1 ●Computer connection cable (Mini Dsub 15-pin) ... 1
 ●Wireless remote connector (RS-RC04) ... 1 ●AAA size batteries ... 2
- Sold separately ●Ceiling mounting brackets (RS-CL11) ●Ceiling pipe [400 - 600mm] (RS-CL08) ●Ceiling pipe [600 - 1000mm] (RS-CL09) ● Remote controller (capable of connecting a wire) (RS-RC05)
- Replacement products ●Replacement-use lamp [Recommended replacement time; Standard 3000H/Quiet 4000H] (RS-LP09)
 ●Replacement air filter (RS-FL01)

* When it has a 50% survival rate and can maintain a 50% light retention ratio.

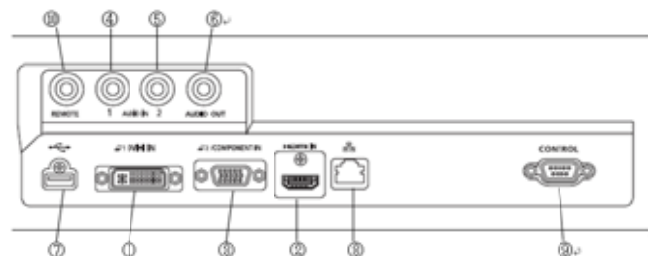
■ External dimensions diagram



(Note) This diagram is not drawn to scale.

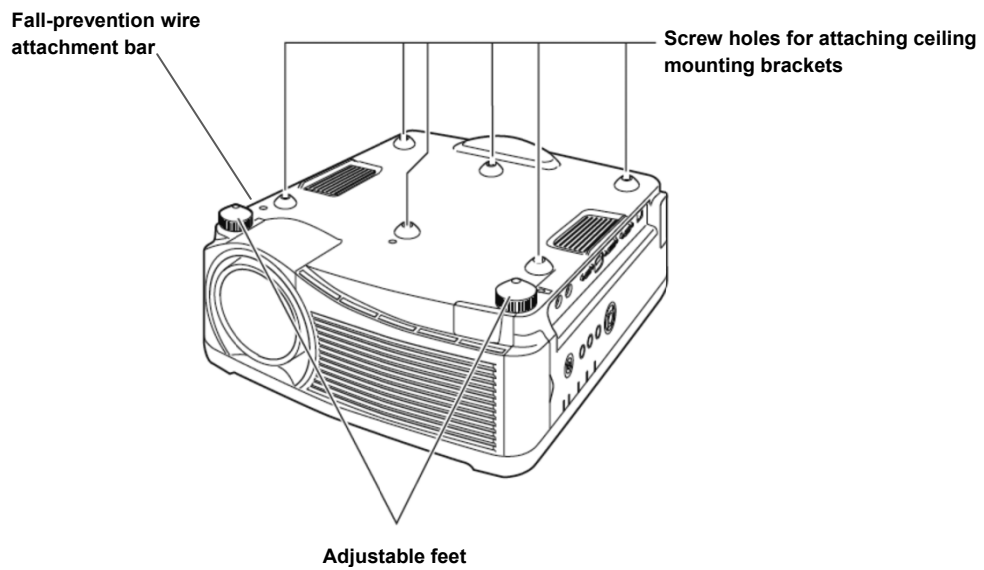
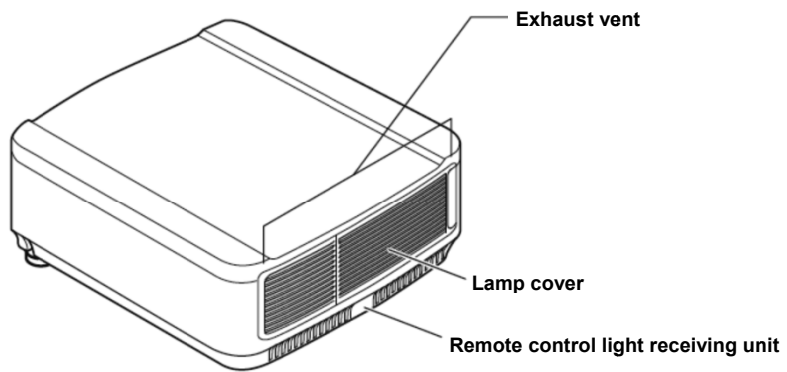
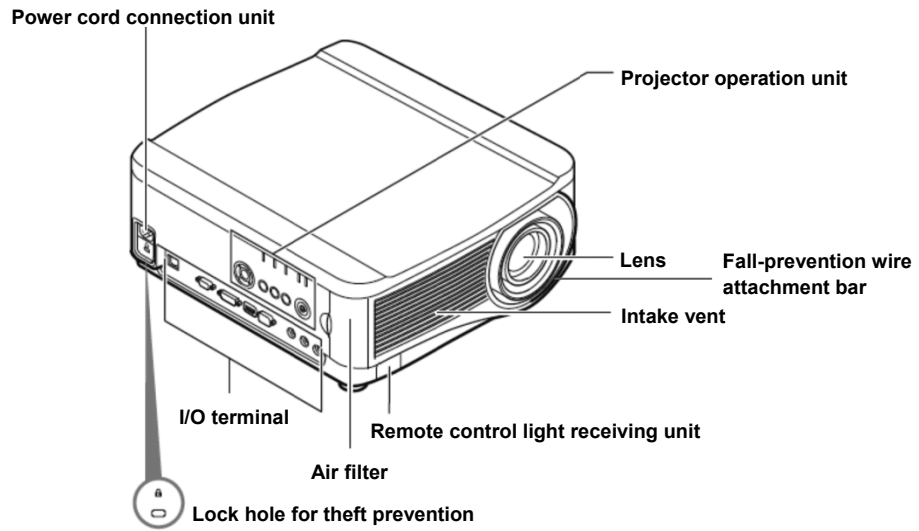
<Side terminals>

(Unit: mm)

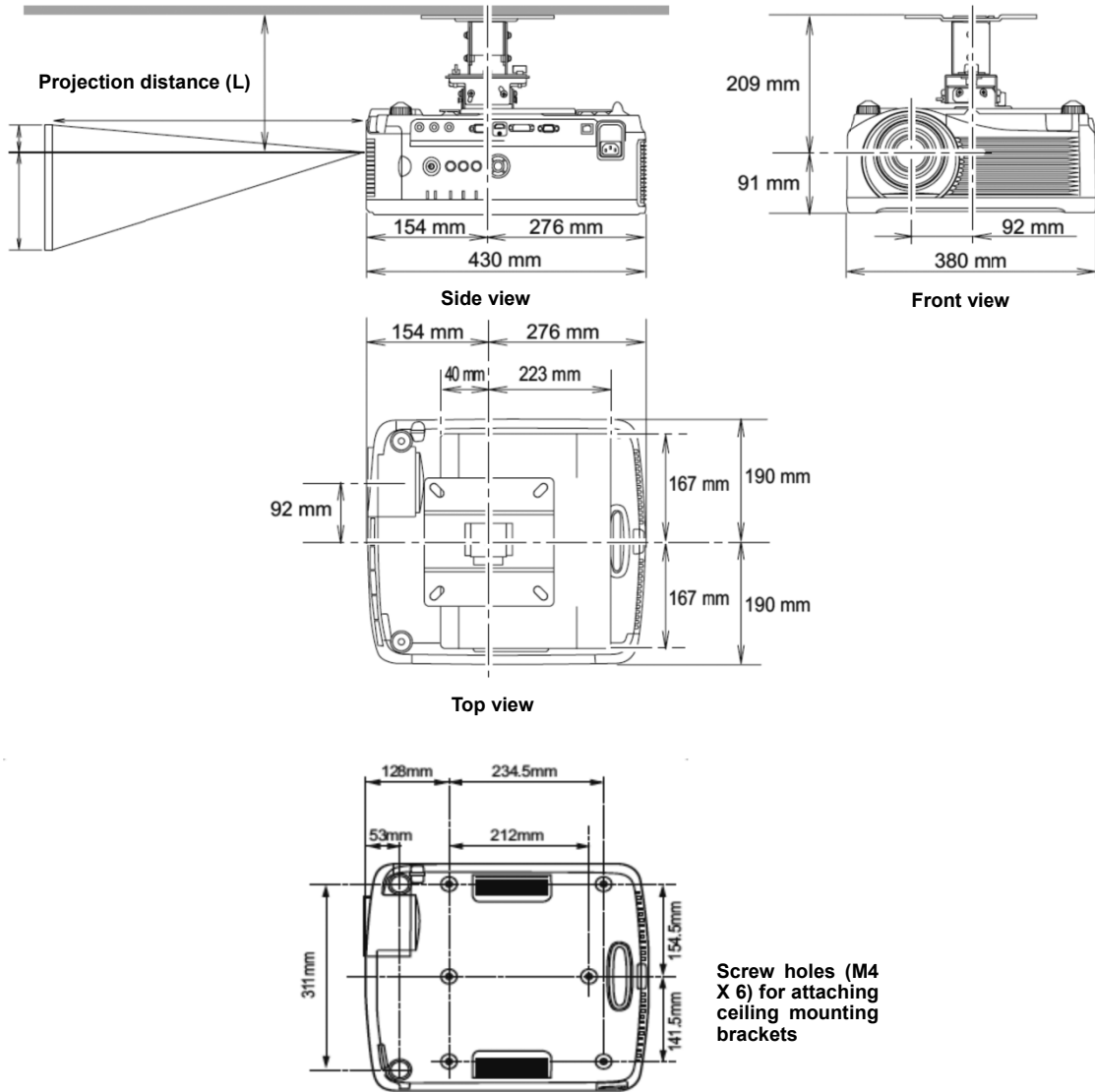


	Terminal	Signal
Video input	(1) DVI-I	Digital PC/Analog PC1
	(2) HDMI	HDMI (including audio input)
	(3) Mini Dsub 15-pin	Analog PC2/Component video
Audio input	(4) Mini jack	Stereo audio
	(5) Mini jack	Stereo audio
Audio output	(6) Mini jack	Stereo audio
Control	(7) USB type A	USB connection
	(8) RJ-45	1000BASE-T/100BASE-TX/10BASE-T
	(9) Dsub9	RS-232C connection
	(10) RJ-45	Wired remote connection

■ Names



■ Projection-related dimensions



(Note) This diagram is not drawn to scale.

<Request>

- Have the work done by technical experts.
- When attaching to the ceiling, use the dedicated mounting brackets. Also, to prevent swaying or falling, stretch the wire supplied with the projector between the ceiling mounting brackets and ceiling.

■ Projection distance per projection lens

(Unit: m)

Lens	100-type image	200-type image	300-type image	400-type image	500-type image	600-type image
RS-IL03WF	1.7	3.4	5.2			
RS-IL05WZ	2.2 - 3.2	4.3 - 6.5	6.5 - 9.7	8.6 - 13.0	10.8 - 16.3	12.9 - 19.5
RS-IL01ST	3.2 - 4.8	6.4 - 9.6	9.6 - 14.5	12.9 - 19.3	16.1 - 24.1	19.3 - 29.0
RS-IL02LZ	4.7 - 8.0	9.5 - 16.1	14.2 - 24.2	19.0 - 32.3	23.8 - 40.4	28.5 - 48.5
RS-IL04UL	7.6 - 14.9	15.2 - 29.8	22.7 - 44.6	30.2 - 59.4	37.7 - 74.2	45.2 - 89.0

Image size (16:10)			Projection distance (L)[Screen to lens tip]				
Type	Width	Height	Standard zoom lens(RS-IL01ST)		Telephoto zoom lens (RS-IL02LZ)		Fixed short focus lens (RS-IL03WF)
			Wide lens	Tele lens	Wide lens	Tele lens	
40	0.9	0.5	1.3	1.9	1.9	3.2	0.7
60	1.3	0.8	1.9	2.9	2.8	4.8	1.0
80	1.7	1.1	2.6	3.9	3.8	6.4	1.4
100	2.2	1.4	3.2	4.8	4.7	8.0	1.7
150	3.2	2.0	4.8	7.2	7.1	12.1	2.6
200	4.3	2.7	6.4	9.6	9.5	16.1	3.4
250	5.4	3.4	8.0	12.1	11.9	20.2	4.3
300	6.5	4.0	9.6	14.5	14.2	24.2	5.2
350	7.5	4.7	11.3	16.9	16.6	28.3	
400	8.6	5.4	12.9	19.3	19.0	32.3	
450	9.7	6.1	14.5	21.7	20.9	35.6	
500	10.8	6.7	16.1	24.1	23.8	40.4	
550	11.9	7.4	17.7	26.6	26.1	44.5	
600	12.9	8.1	19.3	29.0	28.5	48.5	

Image size (16:10)			Projection distance (L)[Screen to lens tip]			
Width	Height	Width	Standard zoom lens(RS-IL01ST)		Telephoto zoom lens (RS-IL02LZ)	
			Wide lens	Tele lens	Wide lens	Tele lens
40	0.9	0.5			0.9	1.3
60	1.3	0.8	4.6	9.0	1.3	1.9
80	1.7	1.1	6.1	12.0	1.7	2.6
100	2.2	1.4	7.6	14.9	2.2	3.2
150	3.2	2.0	11.4	22.3	3.2	4.9
200	4.3	2.7	15.2	29.8	4.3	6.5
250	5.4	3.4	18.9	37.2	5.4	8.1
300	6.5	4.0	22.7	44.6	6.5	9.7
350	7.5	4.7	26.4	52.0	7.5	11.4
400	8.6	5.4	30.2	59.4	8.6	13.0
450	9.7	6.1	34.0	66.8	9.7	14.6
500	10.8	6.7	37.7	74.2	10.8	16.3
550	11.9	7.4	41.5	81.6	11.8	17.9
600	12.9	8.1	45.2	89.0	12.9	19.5

* As for the value of L, a margin of error within $\pm 5\%$ may be generated depending on the projection lens. The numbers in the table are rounded approximations.

■ Adjustable range of optical axis shift

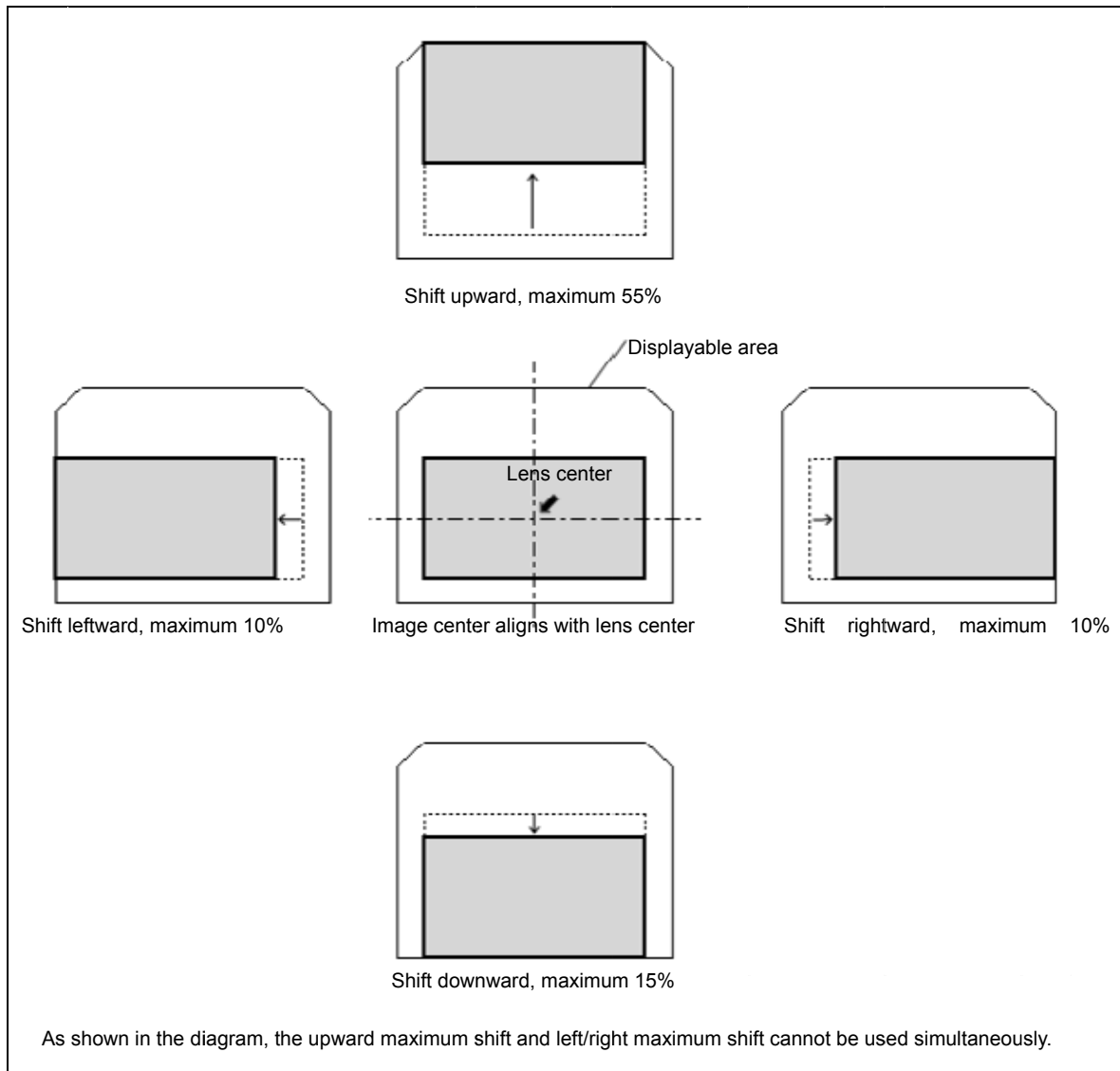
A motorized lens shift function that can shift the image position vertically and horizontally is installed on this product.

The lens shift specification per lens is as follows.

Lens	Standard zoom lens, Telephoto zoom lens	Fixed short focus lens
Vertical shift	3.5:6.5 to 10.5:-0.5	4.5:5.5 to 5.5:4.5
Horizontal shift	4:6 to 6:4	4.8:5.2 to 5.2:4.8
Displacement	Up 55% to Down 15% Left 10% to Right 10%	Up 5% to Down 5% Left 2% to Right 2%
Home position *	Up/Down 10:0, Left/Right 5:5	Up/Down 5:5, Left/Right 5:5

*Set the lens shift so that the keystone feature functions properly.

Examples of the Standard zoom lens and Telephoto zoom lens are shown below.

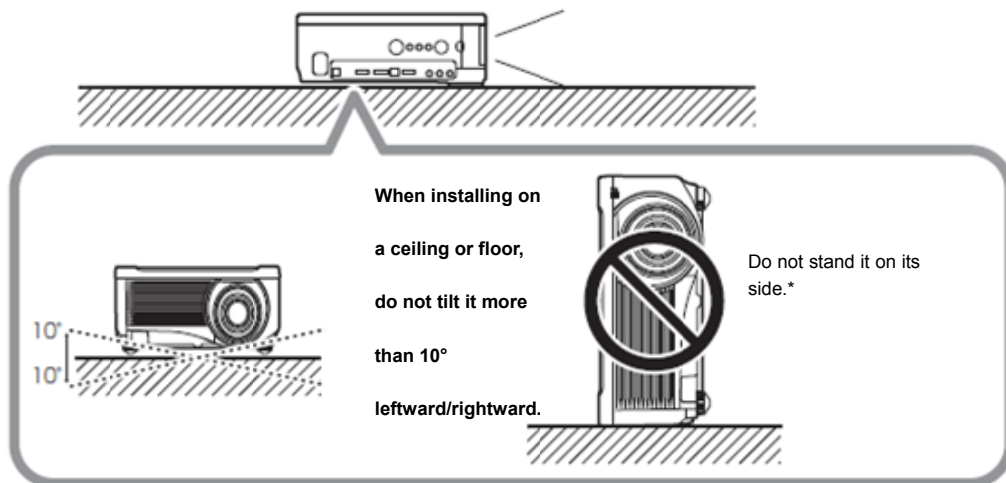


■ Installable angle



* This product can be installed to allow for free rotation in all directions of 360 degrees as shown in the diagram.

* When the projector is installed and used upward or downward, the lamp life may be shortened.



* The lamp may become damaged.

■ List of supported signals

The video signals that can be input in this product are described in the table below. They can be input in the range of the horizontal scanning frequency=15KHz to 75KHz, vertical scanning frequency=50Hz to 60Hz, and dot clock frequency=162MHz or less.

● DVI input (digital PC)

Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]	Dot clock [MHz]
640×480	31.469	59.940	25.175
720×480	31.469	59.940	27.000
720×576	31.250	50.000	27.000
800×600	37.879	60.317	40.000
848×480	31.020	60.000	33.750
960×600	37.212	59.635	45.250
1024×600	37.348	59.852	49.000
1024×768	48.363	60.004	65.000
1152×864	53.163	59.801	69.750
	53.783	59.959	81.750
1280×720	37.500	50.000	74.250
	45.000	60.000	74.250
1280×768	47.776	59.870	79.500
	47.396	59.995	68.250
1280×800	49.702	59.810	83.500
	49.306	59.910	71.000
1280×960	60.000	60.000	108.000
1280×1024	63.981	60.020	108.000
1360×768	47.720	59.799	84.750
	47.368	59.960	72.000
	47.712	60.015	85.500
1360×1024	63.606	59.836	115.000
	63.158	59.922	96.000
1366×768	47.712	59.790	85.500
1400×1050	63.981	60.020	108.000
	64.744	59.948	101.000
	65.317	59.978	121.750
1440×900	55.935	59.887	106.500
	55.469	59.901	88.750
1600×1024	63.675	59.901	135.500
	63.210	59.972	111.250
	74.537	59.869	161.000
1600×1200	74.006	59.924	130.250
	75.000	60.000	162.000
	64.674	59.883	119.000
1680×1050	65.290	59.954	146.250
	56.250	50.000	148.500
1920×1080	66.587	59.934	138.500
	67.500	60.000	148.500
	74.038	59.950	154.000

● HDMI input (digital PC, digital video)

Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]	Dot clock [MHz]
640×480	31.469	59.940	25.175
800×600	37.879	60.317	40.000
1024×768	48.363	60.004	65.000
1280×800	49.702	59.810	83.500
	49.306	59.910	71.000
1280×1024	63.981	60.020	108.000
1400×1050	64.744	59.948	101.000
	65.317	59.978	121.750
1440×900	55.935	59.887	106.500
	55.469	59.901	88.750
1600×1200	75.000	60.000	162.000
1680×1050	64.674	59.883	119.000
	65.290	59.954	146.250
1920×1200	74.038	59.950	154.000
480p	31.469	59.940	27.000
576p	31.250	50.000	27.000
720p	37.500	50.000	74.250
	45.000	60.000	74.250
1080i	56.250	50.000	74.250
	67.500	60.000	74.250
1080p	56.250	50.000	148.500
	67.500	60.000	148.500

● Analog PC input *1

Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]	Dot clock [MHz]
640×480	31.469	59.940	25.175
720×480	31.469	59.940	27.000
720×576	31.250	50.000	27.000
800×600	37.879	60.317	40.000
848×480	31.020	60.000	33.750
960×600	37.212	59.635	45.250
1024×600	37.348	59.852	49.000
1024×768	48.363	60.004	65.000
1152×864	53.163	59.801	69.750
	53.783	59.959	81.750
1280×720	37.500	50.000	74.250
	45.000	60.000	74.250
1280×768	47.776	59.870	79.500
	47.396	59.995	68.250
1280×800	49.702	59.810	83.500
	49.306	59.910	71.000
1280×960	60.000	60.000	108.000
1280×1024	63.981	60.020	108.000
1360×768	47.720	59.799	84.750
	47.368	59.960	72.000
	47.712	60.015	85.500
1360×1024	63.606	59.836	115.000
	63.158	59.922	96.000
1366×768	47.712	59.790	85.500
1400×1050	63.981	60.020	108.000
	64.744	59.948	101.000
	65.317	59.978	121.750
1440×900	55.935	59.887	106.500
	55.469	59.901	88.750
1600×1024	63.675	59.901	135.500
	63.210	59.972	111.250
1600×1200	74.537	59.869	161.000
	74.006	59.924	130.250
	75.000	60.000	162.000
1680×1050	64.674	59.883	119.000
	65.290	59.954	146.250
1920×1080	56.250	50.000	148.500
	66.587	59.934	138.500
*2	67.500	60.000	148.500
1920×1200	74.038	59.950	154.000

● Component video input

Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]	Dot clock [MHz]
480i	15.734	59.940	13.500
480p	31.469	59.940	27.000
576i	15.625	50.000	13.500
576p	31.250	50.000	27.000
720p	37.500	50.000	74.250
	45.000	60.000	74.250
1080i	28.125	50.000	74.250
	33.750	60.000	74.250
1080p	56.250	50.000	148.500
	67.500	60.000	148.500

*1 If the analog PC signal of the dot clock is greater than 162MHz, the images are not projected correctly.

*2 24Hz (24P) is not supported.

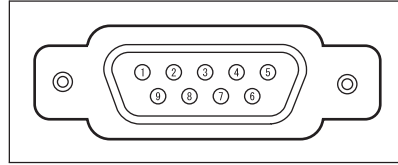
■ List of supported signals

The serial terminals conform to RS-232C. To control the projector with a PC, prepare communication software and input data based on the following communication conditions and basic format.

<Serial input terminals>

- Pin array

Pin number	Signal
1	OPEN
2	RxD
3	TxD
4	OPEN
5	GND
6	OPEN
7	INTERNAL
8	OPEN
9	OPEN



- Communication format

Communication method: RS-232-C asynchronous half-duplex communication

Communication speed: 19200bps

Character length: 8-bit

Stop bit: 2-bit

Parity: No

Flow control: No

- List of control commands (continues on next page)

Command type		ASCII notation	Binary notation
Power supply	Power ON	POWER ON<CR>	50h 4Fh 57h 45h 52h 20h 4Fh 4Eh 0Dh
	Power OFF	POWER OFF<CR>	50h 4Fh 57h 45h 52h 20h 4Fh 46h 46h 0Dh
Power supply status acquisition		GET POWER<CR>	47h 45h 54h 20h 50h 4Fh 57h 45h 52h 0Dh
Input source	DigitalPC	INPUT=D-RGB<CR>	49h 4Eh 50h 55h 54h 3Dh 44h 2Dh 52h 47h 42h 0Dh
	DigitalVideo	INPUT=HDMI<CR>	49h 4Eh 50h 55h 54h 3Dh 48h 44h 4Dh 49h 0Dh
	AnalogPC	INPUT=A-RGB<CR>	49h 4Eh 50h 55h 54h 3Dh 41h 2Dh 52h 47h 42h 0Dh
	Component	INPUT=COMP<CR>	49h 4Eh 50h 55h 54h 3Dh 43h 4Fh 4Dh 50h 0Dh
Input source acquisition		GET INPUT<CR>	47h 45h 54h 20h 49h 4Eh 50h 55h 54h 0Dh
Image mode	STANDARD	IMAGE=STANDARD<CR>	49h 4Dh 41h 47h 45h 3Dh 53h 54h 41h 4Eh 44h 41h 52h 44h 0Dh
	PRESENTATION	IMAGE=PRESENTATION<CR>	49h 4Dh 41h 47h 45h 3Dh 50h 52h 45h 53h 45h 4Eh 54h 41h 54h 49h 4Fh 4Eh 0Dh
	VIVID PHOTO	IMAGE=VIVID_PHOTO<CR>	49h 4Dh 41h 47h 45h 3Dh 56h 49h 56h 49h 44h 5Fh 50h 48h 4Fh 54h 4Fh 0Dh
	PHOTO sRGB	IMAGE=PHOTO_SRGB<CR>	49h 4Dh 41h 47h 45h 3Dh 50h 48h 4Fh 54h 4Fh 5Fh 53h 52h 47h 42h 0Dh
	DYNAMIC	IMAGE=DYNAMIC<CR>	49h 4Dh 41h 47h 45h 3Dh 44h 59h 4Eh 41h 4Dh 49h 43h 0Dh
	VIDEO	IMAGE=VIDEO<CR>	49h 4Dh 41h 47h 45h 3Dh 56h 49h 44h 45h 4Fh 0Dh
	CINEMA	IMAGE=CINEMA<CR>	49h 4Dh 41h 47h 45h 3Dh 43h 49h 4Eh 45h 4Dh 41h 0Dh

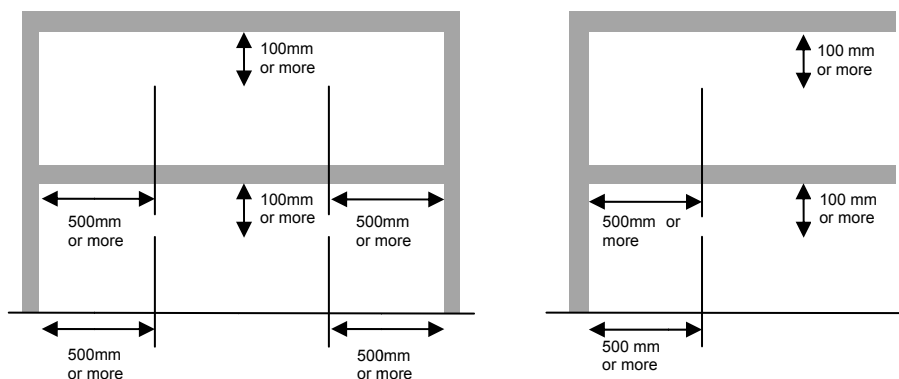
• List of control commands (continued)

Command type		ASCII notation	Binary notation
Image mode	USER1	IMAGE=USER_1<CR>	49h 4Dh 41h 47h 45h 3Dh 55h 53h 45h 52h 5Fh 31h 0Dh
	USER2	IMAGE=USER_2<CR>	49h 4Dh 41h 47h 45h 3Dh 55h 53h 45h 52h 5Fh 32h 0Dh
	USER3	IMAGE=USER_3<CR>	49h 4Dh 41h 47h 45h 3Dh 55h 53h 45h 52h 5Fh 33h 0Dh
	USER4	IMAGE=USER_4<CR>	49h 4Dh 41h 47h 45h 3Dh 55h 53h 45h 52h 5Fh 34h 0Dh
	USER5	IMAGE=USER_5<CR>	49h 4Dh 41h 47h 45h 3Dh 55h 53h 45h 52h 5Fh 35h 0Dh
Image mode acquisition		GET IMAGE<CR>	47h 45h 54h 20h 49h 4Dh 41h 47h 45h 0Dh
Brightness	Brightness value setting	BRI=< Numerical value><CR>	42h 52h 49h 3Dh < Numeric code> 0Dh
Brightness acquisition		GET BRI<CR>	47h 45h 54h 20h 42h 52h 49h 0Dh
Sharpness	Sharpness value setting	SHARP=< Numerical value><CR>	53h 48h 41h 52h 50h 3Dh < Numeric code> 0Dh
Sharpness acquisition		GET SHARP<CR>	47h 45h 54h 20h 53h 48h 41h 52h 50h 0Dh
Contrast	Contrast value setting	CONT=< Numerical value ><CR>	43h 4Fh 4Eh 54h 3Dh < Numeric code> 0Dh
Contrast acquisition		GET CONT<CR>	47h 45h 54h 20h 43h 4Fh 4Eh 54h 0Dh
Aspect	Auto	ASPECT=AUTO<CR>	41h 53h 50h 45h 43h 54h 3Dh 41h 55h 54h 4Fh 0Dh
	4:3	ASPECT=4:3<CR>	41h 53h 50h 45h 43h 54h 3Dh 34h 3Ah 33h 0Dh
	16:9	ASPECT=16:9<CR>	41h 53h 50h 45h 43h 54h 3Dh 31h 36h 3Ah 39h 0Dh
	Zoom	ASPECT=ZOOM<CR>	41h 53h 50h 45h 43h 54h 3Dh 5Ah 4Fh 4Fh 4Dh 0Dh
	Real	ASPECT=TRUE<CR>	41h 53h 50h 45h 43h 54h 3Dh 54h 52h 55h 45h 0Dh
	Full	ASPECT=FULL<CR>	41h 53h 50h 45h 43h 54h 3Dh 46h 55h 4Ch 4Ch 0Dh
Aspect acquisition		GET ASPECT<CR>	47h 45h 54h 20h 41h 53h 50h 45h 43h 54h 0Dh
Lamp mode	Standard	LAMP=NORMAL<CR>	4Ch 41h 4Dh 50h 3Dh 4Eh 4Fh 52h 4Dh 41h 4Ch 0Dh
	Quiet	LAMP=SILENT<CR>	4Ch 41h 4Dh 50h 3Dh 53h 49h 4Ch 45h 4Eh 54h 0Dh
Lamp mode acquisition		GET LAMP<CR>	47h 45h 54h 20h 4Ch 41h 4Dh 50h 0Dh
Blank	Execute	BLANK=ON<CR>	42h 4Ch 41h 4Eh 4Bh 3Dh 4Fh 4Eh 0Dh
	Cancel	BLANK=OFF<CR>	42h 4Ch 41h 4Eh 4Bh 3Dh 4Fh 46h 46h 0Dh
Blank acquisition		GET BLANK<CR>	47h 45h 54h 20h 42h 4Ch 41h 4Eh 4Bh 0Dh

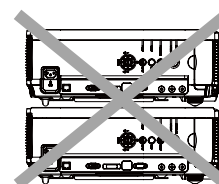
■ Precautions when installing/using

High wattage lamps are used in the projector, and it becomes very hot. Take care as follows.

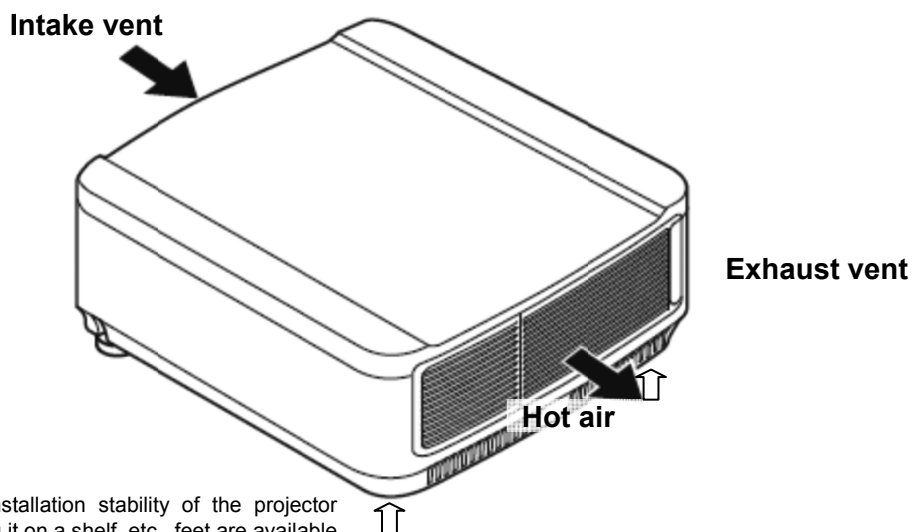
- (1) Do not set anything on top of the projector. Also do not project with projectors stacked directly on top of each other.
- (2) Secure space of at least 0.5 meter from the exhausts vents of the projector.
- (3) When using stack projection, secure the following space. Open up the lens side as shown below.
Secure the same space also when operating any one of them and stacking and installing one for backup.
- (4) Do not block the intake and exhaust vents of the projector.
Also, install the projector so that the intake and exhaust vents are not subjected directly to warm air and cold air of air conditioning.
- (5) When operating the projector inserted in a box, ensure that the ambient temperature within the box during operation is within the range of 5°C to 35°C. Also, do not block the intake and exhaust vents. Even when the ambient temperature is 35°C or lower, the protection circuit of the projector may function and shut down the projector due to internal retention of the exhaust heat. Sufficiently consider the ambient temperature environment when installing the projector.



Do not stack the projectors themselves on top of each other and use them.



■ Concerning the direction of intake/exhaust vents, attachment of optional 2 rear mounting feet



To improve installation stability of the projector when installing it on a shelf, etc., feet are available for installing in the 2 screw holes for attaching the ceiling mounting brackets at both ends of the rear of the projector. These feet are optional.