

Canon LCOS Projector SX6000

■ Outline of Product

This device is a 3-plate LCOS projector adopting the 0.7-type Liquid Crystal on Silicon (LCOS). In addition to video footage, the projection of video data up to SXGA+ size (1,400 dots x 1,050 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	435W, Standby: 1.7W / Standby (LAN-off): 0.35W
Picture element	0.72-type LCOS panel (aspect ratio 4:3) Number of pixels: 1,470,000 pixels (1,400 dots x 1,050 dots, SXGA+) (Separately sold) *A lens is not provided with this device.
Projection lens	<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 - 48.3m, 100-inch projection distance: 4.7 - 8.0m, Zoom ratio: 1.7 x (electric), Focus: electric <Short Fixed Lens (RS-IL03WF)> Lens configuration: 11 groups, 14 elements, F value: 2.0, Focus distance: 12.8mm, Projection distance range: 0.7 - 5.5m, 100-inch projection distance: 1.72m, Zoom ratio: 1.0 x (electric), Focus: electric <Ultra Long Zoom Lens (RS-IL04UL)> Lens configuration: 11 groups, 16 elements, F value: 2.34 - 2.81, Focus distance: 53.6 - 105.6mm, Projection distance range: 4.6 - 88.6m, 100-inch projection distance: 7.6 - 14.9m, 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: 15.56 - 23.44mm, Projection distance range: 0.9 - 19.9m, 100-inch projection distance: 2.2 - 3.2m, Zoom ratio: 1.5 x (electric), Focus: electric
Light source lamp	330-NSHA lamp (Output 336W)
Projected image size	40-inch (0.81m x 0.61m) - 600-inch (12.1m x 9.1m) (4 : 3)
Light output*	6000lm
Peripheral contrast*	88%
Contrast ratio*	1000:1 (All white / All black)
Input signal resolution	UXGA to VGA
Corresponding scanning frequency	DVI input time (digital PC): (horizontal) 31KHz - 75KHz (vertical) 50Hz - 60Hz (dot clock) 162MHz or less HDMI input time (digital PC): (horizontal) 31KHz - 75KHz (vertical) 59Hz - 60Hz (dot clock) 162MHz or less HDMI input time (digital video): (horizontal) 31.469KHz (vertical) 59.940Hz [480p] (horizontal) 31.250KHz (vertical) 50.000Hz [576p] (horizontal) 37.500KHz/45.000KHz (vertical) 50.000Hz/60.000Hz [720p] (horizontal) 56.250KHz/67.500KHz (vertical) 50.000Hz/60.000Hz [1080i] (horizontal) 56.250KHz/67.500KHz (vertical) 50.000Hz/60.000Hz [1080p] Analog RGB input time: (horizontal) 31KHz to 75KHz (vertical) 50Hz to 60Hz (dot clock) 162MHz or less Component video input time: (horizontal) 15.734KHz (vertical) 59.940Hz [480i] (horizontal) 31.469KHz (vertical) 59.940Hz [480p] (horizontal) 15.625KHz (vertical) 50.000Hz [576i] (horizontal) 31.250KHz (vertical) 50.000Hz [576p] (horizontal) 37.500KHz/45.000KHz (vertical) 50.000Hz/60.000Hz [720p] (horizontal) 28.125KHz/33.750KHz (vertical) 50.000Hz/60.000Hz [1080i] (horizontal) 56.250KHz/67.500KHz (vertical) 50.000Hz/60.000Hz [1080p]
lens shift	Standard Zoom Lens, Long Zoom Lens, Ultra Long Zoom Lens, Wide Zoom Lens: Up +50% to down +12% and left 10% to right 10% from screen center Short Fixed Lens: Up +5% to down +5% and left 2% to right 2% from screen center V ±20°, H ±20°
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: UXGA/WSXGA+/SXGA+/WXGA+/WXGA/SXGA/XGA/SVGA/VGA Digital PC input: 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 input / HDMI: Digital PC / Digital video input (supports Deep color) Mini D-sub 15: Analog PC/Component video input Mini jack x4: Audio input x 2, Audio output x 1, Wired remote controller connection x 1 Dsub9: RS-232 connection, RJ-45: 100BASE-TX / 10BASE-T, PJ link support

* 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 (with legs at minimum height) Depth 430mm (excluding lens)
Weight	About 8.5kg (excluding projection lens)*
Environmental conditions	Use environment: 5°C to 35°C Storage environment: -10°C to 60°C, 5%RH to 90%RH
Supplied remote control	Power supply used: DC 3V (2 AA type batteries) Operation distance (for wireless): About 8m (receiver front ±25°), Supports 4 channels

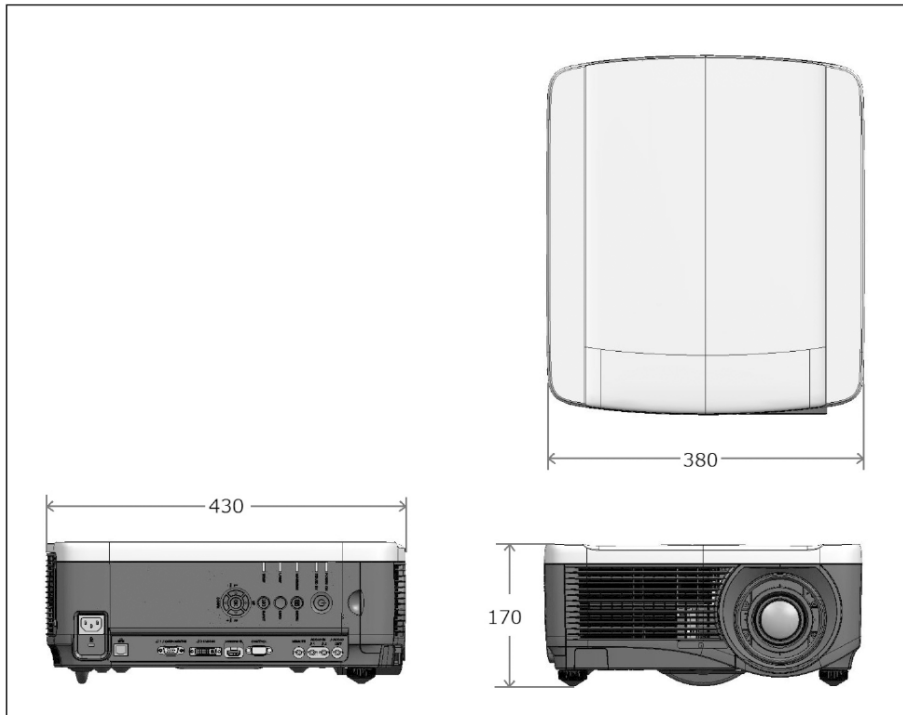
* This is the average. It may vary for each product.

- Accessories ●Power cord ... 1 ●Computer connection cable (Mini Dsub 15-pin) ... 1
 ●Wireless/Wired remote connector ... 1 ●AA size batteries ... 2
 Sold separately ●Ceiling mounting brackets (RS-CL11) ●Ceiling pipe [400 - 600mm] (RS-CL08) ●Ceiling pipe [600 - 1000mm] (RS-CL09)
 Replacement products ●Replacement-use lamp [1 light, Recommended replacement time;3000H] (RS-LP06)
 ●Replacement air filter (RS-FL01)

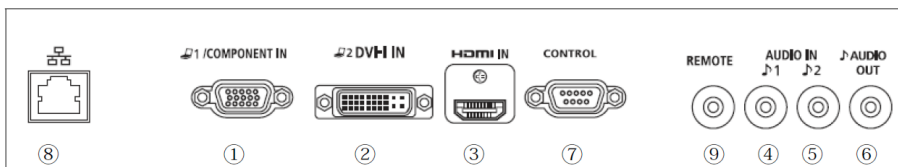
* When it has a 50% survival rate and can maintain a 50% light retention ratio.

External dimensions diagram

(Unit : mm)

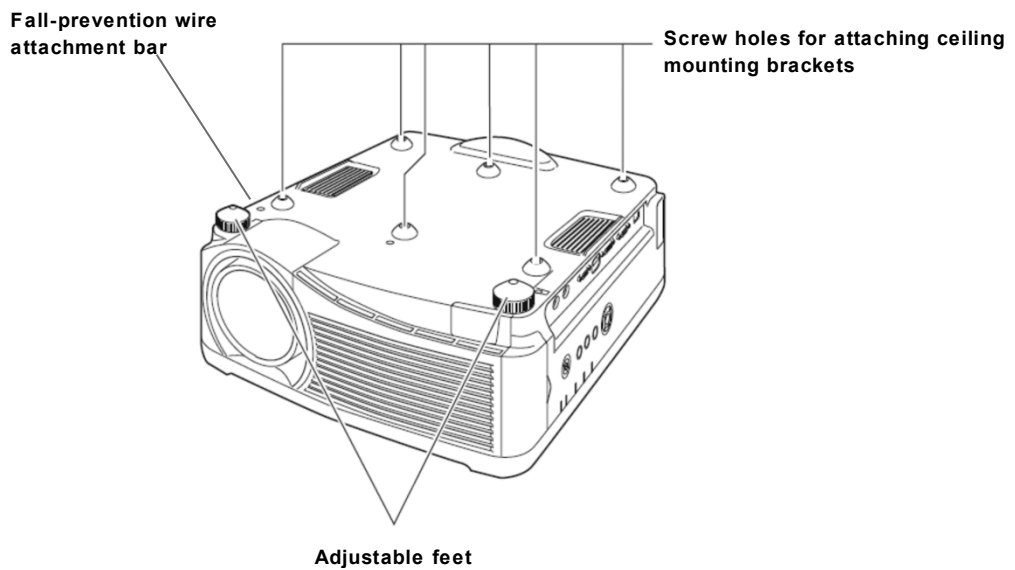
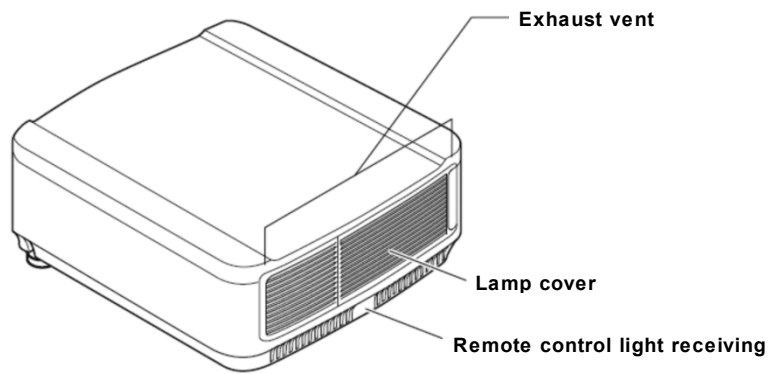
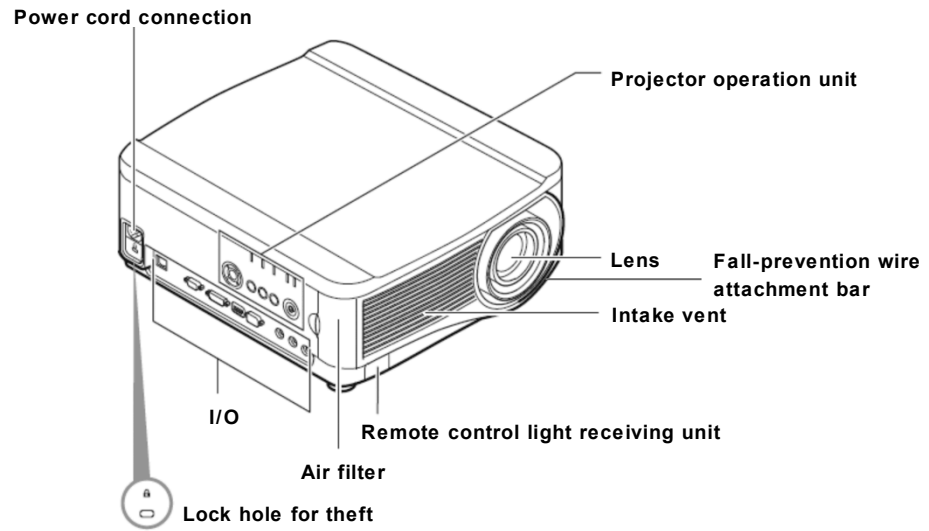


<Side terminals>

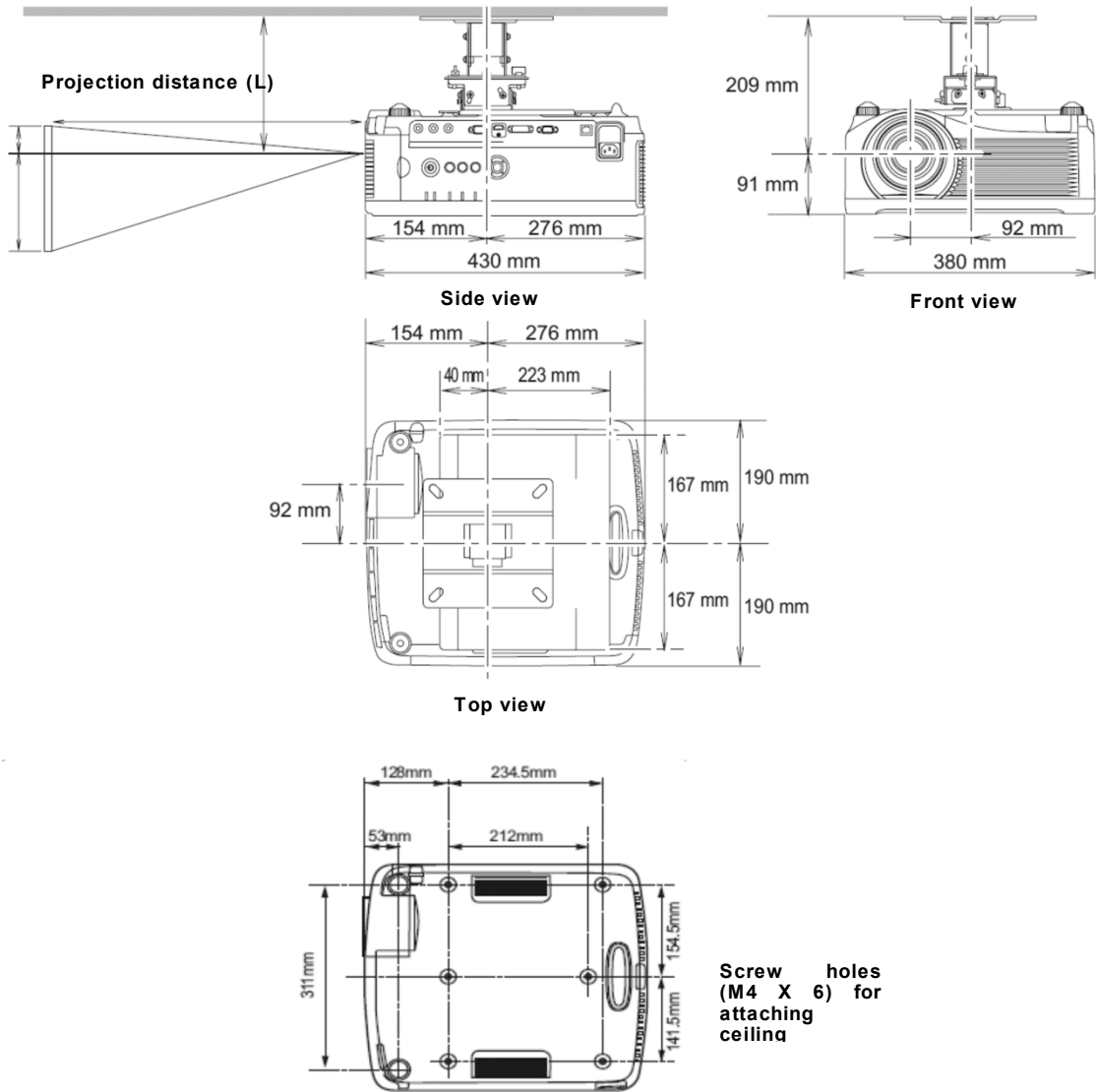


	Terminal	Signal
Video input	(1) Mini Dsub 15-pin	Analog PC/ Component video
	(2) DVI-I	Analog PC/Digital PC
	(3) HDMI	HDMI(with audio signals , supports Deep color)
Audio input	(4) Mini jack	Stereo audio: Corresponds to video input (1)
	(5) Mini jack	Stereo audio: Corresponds to video input (3)
Audio output	(6) Mini jack	Stereo audio
Control	(7) Dsub9	RS-232C connection (supports AMX Device Discovery)
	(8) RJ-45	100BASE-TX/10BASE-T
	(9) Mini jack	Wired remote controller 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

Obtain the projection distance by the following formula.

○ When screen aspect ratio is 4:3

Projection lens product number	Projection distance (L) calculation formula	
Standard Zoom Lens (RS-IL01ST)	Wide lens	$L(m) = \text{Projection screen size [Type]} - 0.4579) \div 31.1950$
	Tele lens	$L(m) = \text{Projection screen size [Type]} - 0.3053) \div 20.7967$
Long Zoom Lens (RS-IL02LZ)	Wide lens	$L(m) = \text{Projection screen size [Type]} - 0.8733) \div 21.1025$
	Tele lens	$L(m) = \text{Projection screen size [Type]} - 0.5280) \div 12.4195$
Short Fixed Lens (RS-IL03WF)	(Fixed)	$L(m) = \text{Projection screen size [Type]} - (-0.2782)) \div 58.3651$
Ultra Long Zoom Lens (RS-IL04UL)	Wide lens	$L(m) = \text{Projection screen size [Type]} - (-1.6926)) \div 13.3683$
	Tele lens	$L(m) = \text{Projection screen size [Type]} - (-0.8517)) \div 6.7828$
Wide Zoom Lens (RS-IL05WZ)	Wide lens	$L(m) = \text{Projection screen size [Type]} - (-0.0311)) \div 46.6563$
	Tele lens	$L(m) = \text{Projection screen size [Type]} - 0.0207) \div 31.0881$

* The values obtained by the above formula have a slight margin of error.

■ Projection distance per projection lens

(Unit: m)

Image size (4:3)			Projection distance (L)[Screen to lens tip]								
Type	Width	Height	Standard Zoom Lens (RS-IL01ST)		Long Zoom Lens (RS-IL02LZ)		Short Fixed Lens (RS-IL03WF)	Ultra Long Zoom Lens (RS-IL04UL)		Wide Zoom Lens (RS-IL05WZ)	
			Wide lens	Tele lens	Wide lens	Tele lens		Wide lens	Tele lens	Wide lens	Tele lens
40	0.8	0.6	1.3	1.9	1.9	3.2	0.69	-	-	0.9	1.3
45	0.9	0.7	1.4	2.1	2.1	3.6	0.78	-	-	1.0	1.4
50	1.0	0.8	1.6	2.4	2.3	4.0	0.86	-	-	1.1	1.6
55	1.1	0.8	1.7	2.6	2.6	4.4	0.95	-	-	1.2	1.8
60	1.2	0.9	1.9	2.9	2.8	4.8	1.03	4.6	9.0	1.3	1.9
65	1.3	1.0	2.1	3.1	3.0	5.2	1.12	5.0	9.7	1.4	2.1
70	1.4	1.1	2.2	3.4	3.3	5.6	1.20	5.4	10.4	1.5	2.3
75	1.5	1.1	2.4	3.6	3.5	6.0	1.29	5.7	11.2	1.6	2.4
80	1.6	1.2	2.5	3.8	3.7	6.4	1.38	6.1	11.9	1.7	2.6
85	1.7	1.3	2.7	4.1	4.0	6.8	1.46	6.5	12.7	1.8	2.7
90	1.8	1.4	2.9	4.3	4.2	7.2	1.55	6.9	13.4	1.9	2.9
95	1.9	1.4	3.0	4.6	4.5	7.6	1.63	7.2	14.1	2.0	3.1
100	2.0	1.5	3.2	4.8	4.7	8.0	1.72	7.6	14.9	2.1	3.2
105	2.1	1.6	3.4	5.0	4.9	8.4	1.80	8.0	15.6	2.3	3.4
110	2.2	1.7	3.5	5.3	5.2	8.8	1.89	8.4	16.3	2.4	3.5
115	2.3	1.8	3.7	5.5	5.4	9.2	1.98	8.7	17.1	2.5	3.7
120	2.4	1.8	3.8	5.8	5.6	9.6	2.06	9.1	17.8	2.6	3.9
125	2.5	1.9	4.0	6.0	5.9	10.0	2.15	9.5	18.6	2.7	4.0
130	2.6	2.0	4.2	6.2	6.1	10.4	2.23	9.9	19.3	2.8	4.2
135	2.7	2.1	4.3	6.5	6.4	10.8	2.32	10.2	20.0	2.9	4.3
140	2.8	2.1	4.5	6.7	6.6	11.2	2.40	10.6	20.8	3.0	4.5
145	2.9	2.2	4.6	7.0	6.8	11.6	2.49	11.0	21.5	3.1	4.7
150	3.0	2.3	4.8	7.2	7.1	12.0	2.57	11.3	22.2	3.2	4.8
155	3.1	2.4	5.0	7.4	7.3	12.4	2.66	11.7	23.0	3.3	5.0
160	3.3	2.4	5.1	7.7	7.5	12.8	2.75	12.1	23.7	3.4	5.1
165	3.4	2.5	5.3	7.9	7.8	13.2	2.83	12.5	24.5	3.5	5.3
170	3.5	2.6	5.4	8.2	8.0	13.6	2.92	12.8	25.2	3.6	5.5
175	3.6	2.7	5.6	8.4	8.3	14.0	3.00	13.2	25.9	3.8	5.6
180	3.7	2.7	5.8	8.6	8.5	14.5	3.09	13.6	26.7	3.9	5.8
185	3.8	2.8	5.9	8.9	8.7	14.9	3.17	14.0	27.4	4.0	6.0
190	3.9	2.9	6.1	9.1	9.0	15.3	3.26	14.3	28.1	4.1	6.1
195	4.0	3.0	6.2	9.4	9.2	15.7	3.35	14.7	28.9	4.2	6.3
200	4.1	3.0	6.4	9.6	9.4	16.1	3.43	15.1	29.6	4.3	6.4
205	4.2	3.1	6.6	9.8	9.7	16.5	3.52	15.5	30.3	4.4	6.6
210	4.3	3.2	6.7	10.1	9.9	16.9	3.60	15.8	31.1	4.5	6.8
215	4.4	3.3	6.9	10.3	10.1	17.3	3.69	16.2	31.8	4.6	6.9
220	4.5	3.4	7.0	10.6	10.4	17.7	3.77	16.6	32.6	4.7	7.1
225	4.6	3.4	7.2	10.8	10.6	18.1	3.86	17.0	33.3	4.8	7.2
230	4.7	3.5	7.4	11.0	10.9	18.5	3.95	17.3	34.0	4.9	7.4
235	4.8	3.6	7.5	11.3	11.1	18.9	4.03	17.7	34.8	5.0	7.6
240	4.9	3.7	7.7	11.5	11.3	19.3	4.12	18.1	35.5	5.1	7.7
245	5.0	3.7	7.8	11.8	11.6	19.7	4.20	18.5	36.2	5.3	7.9
250	5.1	3.8	8.0	12.0	11.8	20.1	4.29	18.8	37.0	5.4	8.0
255	5.2	3.9	8.2	12.2	12.0	20.5	4.37	19.2	37.7	5.5	8.2
260	5.3	4.0	8.3	12.5	12.3	20.9	4.46	19.6	38.5	5.6	8.4
265	5.4	4.0	8.5	12.7	12.5	21.3	4.55	19.9	39.2	5.7	8.5
270	5.5	4.1	8.6	13.0	12.8	21.7	4.63	20.3	39.9	5.8	8.7
275	5.6	4.2	8.8	13.2	13.0	22.1	4.72	20.7	40.7	5.9	8.8
280	5.6	4.2	9.0	13.4	13.2	22.5	4.80	21.1	41.4	6.0	9.0
285	5.8	4.3	9.1	13.7	13.5	22.9	4.89	21.4	42.1	6.1	9.2
290	5.9	4.4	9.3	13.9	13.7	23.3	4.97	21.8	42.9	6.2	9.3
295	5.9	4.5	9.4	14.2	13.9	23.7	5.06	22.2	43.6	6.3	9.5
300	6.0	4.6	9.6	14.4	14.2	24.1	5.14	22.6	44.4	6.4	9.6

* 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.

(Unit: m)

Image size (4:3)			Projection distance (L)[Screen to lens tip]								
Type	Width	Height	Standard Zoom Lens (RS-IL01ST)		Long Zoom Lens (RS-IL02LZ)		Short Fixed Lens (RS-IL03WF)	Ultra Long Zoom Lens (RS-IL04UL)		Wide Zoom Lens (RS-IL05WZ)	
			Wide lens	Tele lens	Wide lens	Tele lens		Wide lens	Tele lens	Wide lens	Tele lens
305	6.2	4.6	9.8	14.7	14.4	24.5	-	22.9	45.1	6.5	9.8
310	6.3	4.7	9.9	14.9	14.6	24.9	-	23.3	45.8	6.6	10.0
315	6.4	4.8	10.1	15.1	14.9	25.3	-	23.7	46.6	6.8	10.1
320	6.5	4.9	10.2	15.4	15.1	25.7	-	24.1	47.3	6.9	10.3
325	6.6	5.0	10.4	15.6	15.4	26.1	-	24.4	48.0	7.0	10.5
330	6.7	5.0	10.6	15.9	15.6	26.5	-	24.8	48.8	7.1	10.6
335	6.8	5.1	10.7	16.1	15.8	26.9	-	25.2	49.5	7.2	10.8
340	6.9	5.2	10.9	16.3	16.1	27.3	-	25.6	50.3	7.3	10.9
345	7.0	5.3	11.0	16.6	16.3	27.7	-	25.9	51.0	7.4	11.1
350	7.1	5.3	11.2	16.8	16.5	28.1	-	26.3	51.7	7.5	11.3
355	7.2	5.4	11.4	17.1	16.8	28.5	-	26.7	52.5	7.6	11.4
360	7.3	5.5	11.5	17.3	17.0	28.9	-	27.1	53.2	7.7	11.6
365	7.4	5.6	11.7	17.5	17.3	29.3	-	27.4	53.9	7.8	11.7
370	7.5	5.6	11.8	17.8	17.5	29.7	-	27.8	54.7	7.9	11.9
375	7.6	5.7	12.0	18.0	17.7	30.2	-	28.2	55.4	8.0	12.1
380	7.7	5.8	12.2	18.3	18.0	30.6	-	28.6	56.1	8.1	12.2
385	7.8	5.9	12.3	18.5	18.2	31.0	-	28.9	56.9	8.3	12.4
390	7.9	5.9	12.5	18.7	18.4	31.4	-	29.3	57.6	8.4	12.5
395	8.0	6.0	12.6	19.0	18.7	31.8	-	29.7	58.4	8.5	12.7
400	8.1	6.1	12.8	19.2	18.9	32.2	-	30.0	59.1	8.6	12.9
405	8.2	6.2	13.0	19.5	19.2	32.6	-	30.4	59.8	8.7	13.0
410	8.3	6.2	13.1	19.7	19.4	33.0	-	30.8	60.6	8.8	13.2
415	8.4	6.3	13.3	19.9	19.6	33.4	-	31.2	61.3	8.9	13.3
420	8.5	6.4	13.4	20.2	19.9	33.8	-	31.5	62.0	9.0	13.5
425	8.6	6.5	13.6	20.4	20.1	34.2	-	31.9	62.8	9.1	13.7
430	8.7	6.5	13.8	20.7	20.3	34.6	-	32.3	63.5	9.2	13.8
435	8.8	6.6	13.9	20.9	20.6	35.0	-	32.7	64.3	9.3	14.0
440	8.9	6.7	14.1	21.1	20.8	35.4	-	33.0	65.0	9.4	14.2
445	9.0	6.8	14.3	21.4	21.0	35.8	-	33.4	65.7	9.5	14.3
450	9.1	6.9	14.4	21.6	21.3	36.2	-	33.8	66.5	9.6	14.5
455	9.2	6.9	14.6	21.9	21.5	36.6	-	34.2	67.2	9.8	14.6
460	9.3	7.0	14.7	22.1	21.8	37.0	-	34.5	67.9	9.9	14.8
465	9.4	7.1	14.9	22.3	22.0	37.4	-	34.9	68.7	10.0	15.0
470	9.6	7.2	15.1	22.6	22.2	37.8	-	35.3	69.4	10.1	15.1
475	9.7	7.2	15.2	22.8	22.5	38.2	-	35.7	70.2	10.2	15.3
480	9.8	7.3	15.4	23.1	22.7	38.6	-	36.0	70.9	10.3	15.4
485	9.9	7.4	15.5	23.3	22.9	39.0	-	36.4	71.6	10.4	15.6
490	10.0	7.4	15.7	23.5	23.2	39.4	-	36.8	72.4	10.5	15.8
495	10.1	7.5	15.9	23.8	23.4	39.8	-	37.2	73.1	10.6	15.9
500	10.2	7.6	16.0	24.0	23.7	40.2	-	37.5	73.8	10.7	16.1
505	10.3	7.7	16.2	24.3	23.9	40.6	-	37.9	74.6	10.8	16.2
510	10.4	7.8	16.3	24.5	24.1	41.0	-	38.3	75.3	10.9	16.4
515	10.5	7.8	16.5	24.7	24.4	41.4	-	38.7	76.1	11.0	16.6
520	10.6	7.9	16.7	25.0	24.6	41.8	-	39.0	76.8	11.1	16.7
525	10.7	8.0	16.8	25.2	24.8	42.2	-	39.4	77.5	11.3	16.9
530	10.8	8.1	17.0	25.5	25.1	42.6	-	39.8	78.3	11.4	17.0
535	10.9	8.2	17.1	25.7	25.3	43.0	-	40.1	79.0	11.5	17.2
540	11.0	8.2	17.3	26.0	25.5	43.4	-	40.5	79.7	11.6	17.4
545	11.1	8.3	17.5	26.2	25.8	43.8	-	40.9	80.5	11.7	17.5
550	11.2	8.4	17.6	26.4	26.0	44.2	-	41.3	81.2	11.8	17.7
555	11.3	8.5	17.8	26.7	26.3	44.6	-	41.6	82.0	11.9	17.9
560	11.4	8.5	17.9	26.9	26.5	45.0	-	42.0	82.7	12.0	18.0
565	11.5	8.6	18.1	27.2	26.7	45.5	-	42.4	83.4	12.1	18.2
570	11.6	8.7	18.3	27.4	27.0	45.9	-	42.8	84.2	12.2	18.3
575	11.7	8.8	18.4	27.6	27.2	46.3	-	43.1	84.9	12.3	18.5
580	11.8	8.8	18.6	27.9	27.4	46.7	-	43.5	85.6	12.4	18.7
585	11.9	8.9	18.7	28.1	27.7	47.1	-	43.9	86.4	12.5	18.8
590	12.0	9.0	18.9	28.4	27.9	47.5	-	44.3	87.1	12.6	19.0
595	12.1	9.1	19.1	28.6	28.2	47.9	-	44.6	87.8	12.8	19.1
600	12.2	9.1	19.2	28.8	28.4	48.3	-	45.0	88.6	12.9	19.3

* 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.

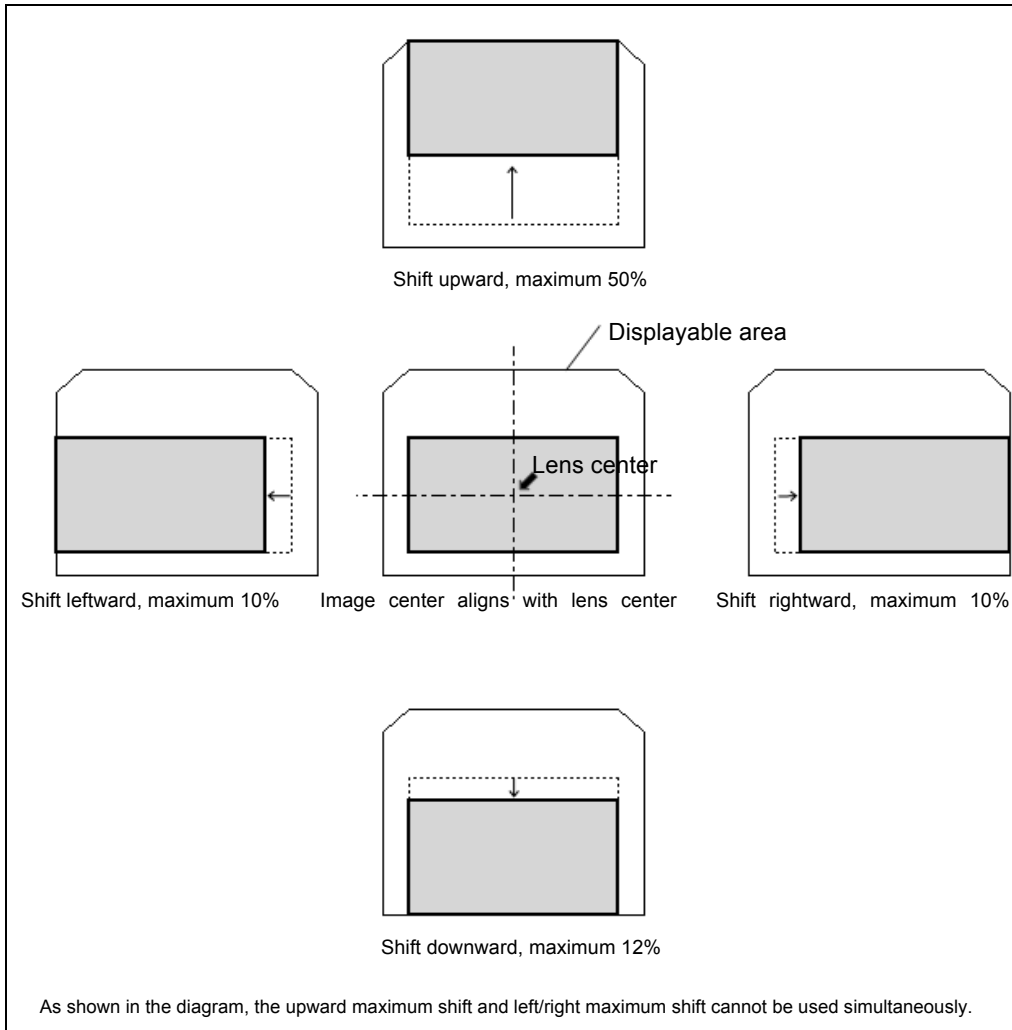
■ Adjustable range of optical axis shift

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.

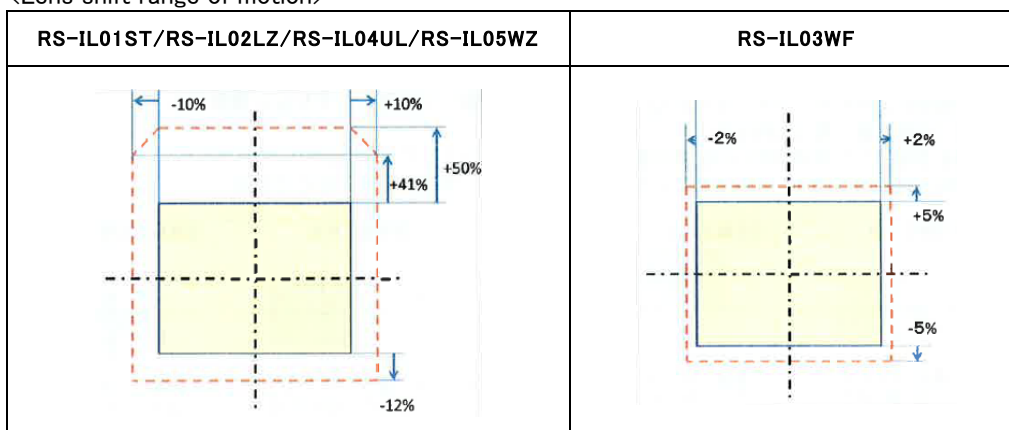
Lens	Standard Zoom Lens, Long Zoom Lens, Ultra Long Zoom Lens, Wide Zoom Lens	Short Fixed Lens
Lens shift amount	Vertical -12% to 50% , Vertical -10% to 10%	Vertical -5% to 5% , Vertical -2% to 2%
Lens shift ratio	Vertical 3.2:6.8 to 10:0 , Horizontal 6:4 to 4:6	Vertical 4.5:5.5 to 5.5:4.5 Horizontal 5.2:4.8 to 4.8:5.2
Home position *	Vertical 50%(10:0) , Horizontal 0%(5:5)	Vertical 0%(5:5) , Horizontal 0%(5:5)

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

Examples of the Standard Zoom Lens, Long Zoom Lens, Ultra Long Zoom Lens, Wide Zoom Lens are shown below.



<Lens shift range of motion>

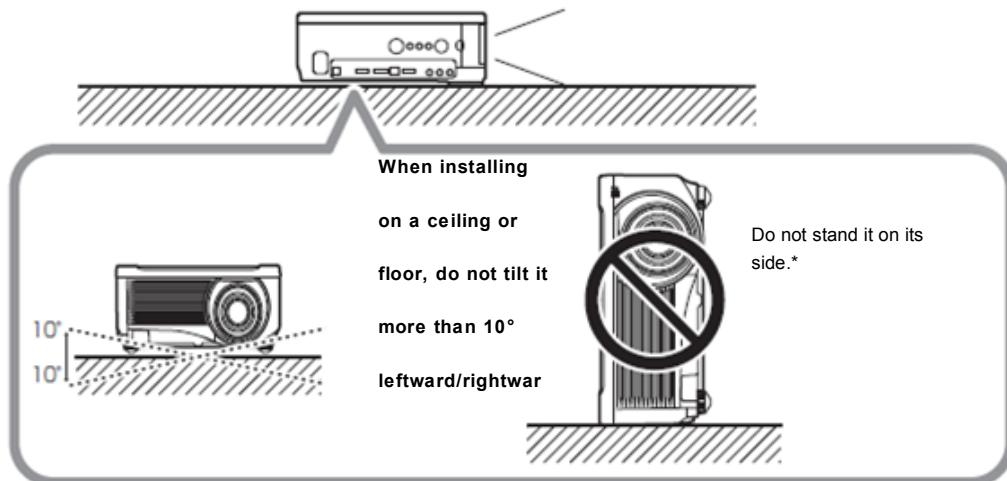


■ Installable angle



* 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.

● Analog RGB input *1

Resolution [dots]	Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]
640 × 480	VGA	31.469	59.940
720 × 480	-	31.469	59.940
720 × 576	-	31.250	50.000
800 × 600	SVGA	37.879	60.317
848 × 480	-	31.020	60.000
1024 × 768	XGA	48.363	60.004
1280 × 720	-	37.500	50.000
		45.000	60.000
1280 × 768	WXGA	47.776	59.870
		47.396	59.995
49.702		59.810	
49.306		59.910	
1280 × 800			
1280 × 960	MAC	60.000	60.000
1280 × 1024	SXGA	63.981	60.020
1360 × 768	-	47.712	60.015
1366 × 768	-	47.712	59.790
1440 × 1050	SXGA+	64.744	59.948
		65.317	59.978
1440 × 900	WXGA+	55.935	59.887
		55.469	59.901
1600 × 1200	UXGA	75.000	60.000
1680 × 1050	WSXGA+	64.674	59.883
		65.290	59.954
1920 × 1080	-	56.250	50.000
		67.500	60.000
1920 × 1200	WUXGA	74.038	59.950

● HDMI input <Digital PC>

Resolution [dots]	Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]
640 × 480	VGA	31.469	59.940
800 × 600	SVGA	37.879	60.317
1024 × 768	XGA	48.363	60.004
1280 × 800	WXGA	49.702	59.810
		49.306	59.910
1280 × 1024	SXGA	63.981	60.020
1400 × 1050	SXGA+	64.744	59.948
		65.317	59.978
1440 × 900	WXGA+	55.935	59.887
		55.469	59.901
1600 × 1200	UXGA	75.000	60.000
1680 × 1050	WSXGA+	64.674	59.883
		65.290	59.954
1920 × 1200	WUXGA	74.038	59.950

<Digital video>

Resolution	Horizontal frequency [KHz]	Vertical frequency [Hz]	Vertical frequency [Hz]
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

●DVI input (digital PC)

Resolution [dots]	Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]
640 × 480	D-VGA	31.469	59.940
720 × 480	-	31.469	59.940
720 × 576	-	31.250	50.000
800 × 600	D-SVGA	37.879	60.317
1024 × 768	D-XGA	48.363	60.004
1280 × 720	-	37.500	50.000
		45.000	60.000
1280 × 800	D-WXGA	49.702	59.810
		49.306	59.910
1280 × 1024	D-SXGA	63.981	60.020
1400 × 1050	D-SXGA+	64.744	59.948
		65.317	59.978
1440 × 900	D-WXGA+	55.935	59.887
		55.469	59.901
1600 × 1200	D-UXGA	75.000	60.000
1680 × 1050	D-WSXGA+	64.674	59.883
		65.290	59.954
1920 × 1080	-	56.250	50.000
		67.500	60.000
1920 × 1200	74.038	74.038	59.950

● Component video input

Resolution [dots]	Signal format	Horizontal frequency [KHz]	Vertical frequency [Hz]
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.

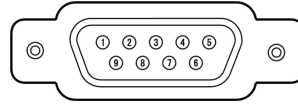
■ List of supported signals

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	OPEN
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

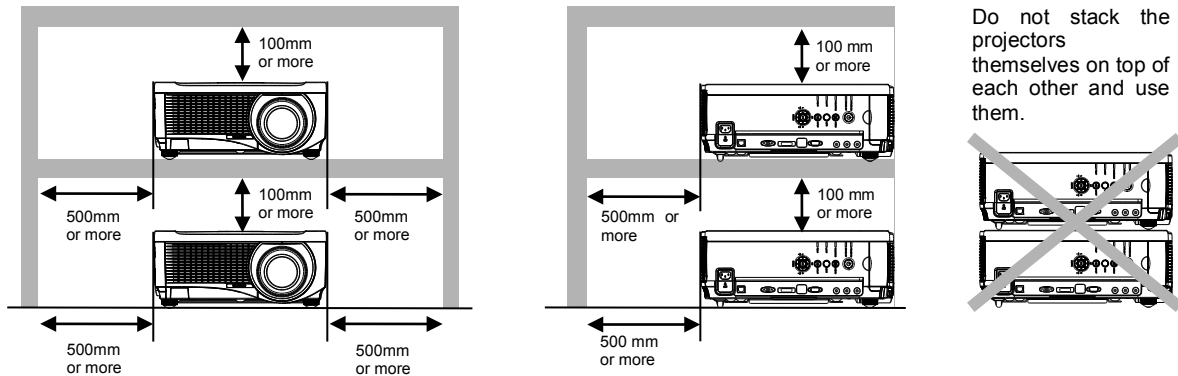
• List of control commands (continued)

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		LAMP=NORMAL<CR>	4Ch 41h 4Dh 50h 3Dh 4Eh 4Fh 52h 4Dh 41h 4Ch 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

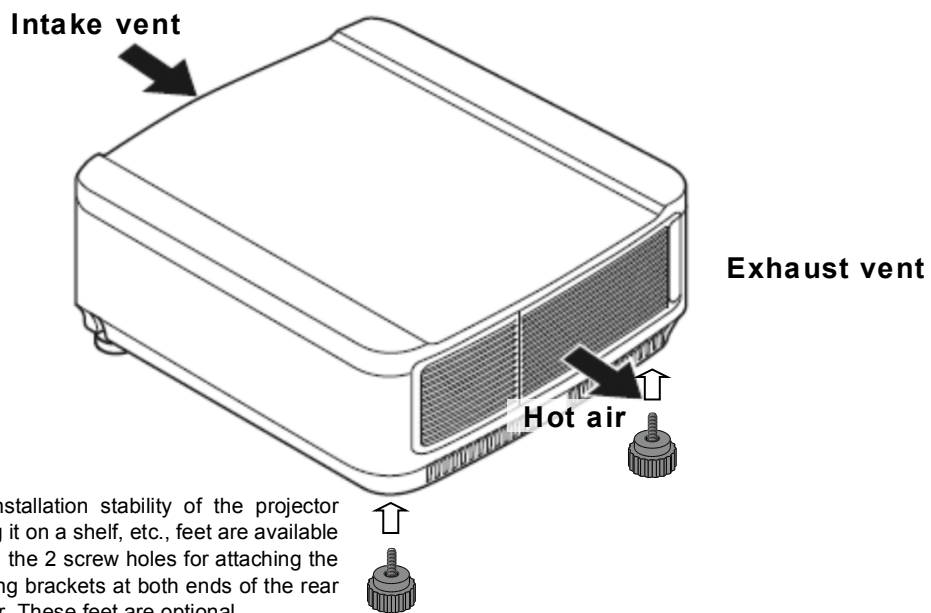
■ Precautions when installing/using

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.



■ 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.