LCD Projectors

PT-LB306

Specifications

Main unit

Power supply		AC100-240 V, 50 Hz/60 Hz
Power consumption		300 W 6W when Standby mode set to Normal, 0.5W when Standby mode set to Eco*¹ *Operating Temperature: 25°C (77°F), Altitude: 700m (2,297 ft), IEC62087: 2008 Broadcast contents, Picture mode: Dynamic
BTU value		Max 1,024BTU
LCD panel	Panel size	16.0 mm (0.63 inches) diagonal (4:3 aspect ratio)
	Display method	Translucent screen LCD panel 3 panels, 3 primary color system
	Pixels	786,432 pixels (1024 x 768 dots) x 3 panels
	Colors	Full color (16,777,216 colors)
Lens	Manual zoom	1.2 x
	Manual focus	F = 2.1-2.24, f = 19.11 mm-22.94 mm
Throw ratio		1.47-1.77:1
Light source		230 W UHM lamp
Lamp replacement cycle		Normal: 10,000hrs / Eco: 20,000hrs / Quiet: 10,000hrs
Light output*²		3,100 lm (When [PICTURE MODE] is set to [DYNAMIC], [LAMP POWER] is set to [NORMAL], [AUTO POWER SAVE] is set to [OFF], and [DAYLIGHT VIEW] is set to [OFF])
Filter replacement cycle*³		Normal: 5,000hrs / Eco: 6,000hrs / Quiet: 10,000hrs
Center-to-corner uniformity*²		85%
Resolution		1024 x 768 pixels (Input signals that exceed this resolution will be converted to 1024 x 768 pixels.)
Contrast ratio*²		20,000:1 (When [PICTURE MODE] is set to [DYNAMIC], [LAMP POWER] is set to [NORMAL], [IRIS] is set to [ON], [AUTO POWER SAVE] is set to [OFF], and [DAYLIGHT VIEW] is set to [OFF])
Screen size		0.76-7.62 m (30-300 inches) diagonally, 16:10 aspect ratio
Installation		[FRONT/DESK], [FRONT/CEILING], [REAR/DESK], [REAR/CEILING]
Keystone correction range*⁴		Vertical:±30 ° (Manual)
Compatible signals	Video signal	Horizontal : 15.73 kHz, Vertical : 59.94 Hz Horizontal : 15.63 kHz, Vertical : 50.00 Hz
	Y/C signal	Horizontal : 15.73 kHz, Vertical : 59.94 Hz Horizontal : 15.63 kHz, Vertical : 50.00 Hz
	RGB signal	Displayable resolution: 640 x 400 to 1920 x 1200
		Dot clock frequency: 162 MHz or less
	YC_BC_R/YP_BP_R signal	Displayable resolution: 480i/576i to 1920 x 1080
		Dot clock frequency: 148.5 MHz or less
	HDMI signal	Displayable resolution for movie-based signals: 480i/576i* to 1920 x 1080 Displayable resolution for still image signals: 640 x 400 to 1920 x 1200 (non-interlaced) *Pixel-Repetition signal (dot clock frequency 27.0 MHz) only
		Dot clock frequency: 25 MHz to 162 MHz
Terminals	COMPUTER 1 IN	1 (High-density D-sub 15 pin female)

	R, G, B	0.7 V [p-p] 75 Ω
		    HD/SYNC TTL high impedance, automatic positive/negative polarity compatible
		    VD TTL high impedance, automatic positive/negative polarity compatible
		    (HD/SYNC and VD do not support 3 value SYNC.)

	Y, P_B (C_B), P_R (C_R)	Y: 1.0 V [p-p] including synchronization signal, P_B (C_B), P_R (C_R): 0.7 V [p-p] 75 Ω
	Y/C signal	Y: 1.0 V [p-p] C: 0.286 V [p-p] 75 Ω S1 signal compatible
	MONITOR OUT	1 (High-density D-sub 15 pin female)

	R, G, B	0.7 V [p-p] 75 Ω
		    HD/SYNC TTL high impedance, automatic positive/negative polarity compatible
		    VD TTL high impedance, automatic positive/negative polarity compatible
		    (HD/SYNC and VD do not support 3 value SYNC.)

	Y, P_B (C_B), P_R (C_R)	Y: 1.0 V [p-p] including synchronization signal, P_B (C_B), P_R (C_R): 0.7 V [p-p] 75 Ω
	VIDEO IN	1 (Pin jack 1.0 V [p-p] 75 Ω
	HDMI IN	1 (HDMI 19 pin, HDCP and Deep color compatible)
	Audio signal	Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
	AUDIO IN 1	1 (M3 stereo mini jack, 0.5 V [rms], input impedance 22 kΩ and more)
	AUDIO IN 2	1 (Pin jack x 2 (L-R), 0.5 V [rms], input impedance 22 kΩ and more)
	AUDIO OUT	1 (M3 stereo mini jack, stereo monitor output compatible, 0 V [rms] to 2.0 V [rms] variable, output impedance 2.2 kΩ and less)

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Terminals	USB	USB connector (type B x 1), for service use
	SERIAL IN	1 (D-sub 9 pin, RS-232C compliant, for computer control use)
Built-in speaker		2 W (monaural) x 1
Power cord length		1.8 m (70-7/8 inches)
Cabinet		Molded plastic
Dimensions		Width:335 mm (13-3/16 inches), Height:96*[5] mm (3-25/32 inches), Depth:252 mm (9-29/32 inches)
Weight*[6]		Approx. 2.8 kg (6.17 lbs.)
Operation noise*[2]		Normal:38dB / Eco:35dB / Quiet:30dB
Operating environment temperature*[7]		5°C-40°C (41°F-104°F) [at less than 700 m (2,296 ft.); [High Altitude Mode]:[off]
		5°C-40°C (41°F-104°F) [at 700 m to 1,400 m (2,296 ft. to 4,593 ft.); [High Altitude Mode]:[High 1]
		5°C-35°C (41°F-95°F) [at 1,400 m to 2,700 m (4,593 ft. to 8,858 ft.); [High Altitude Mode]:[High 2]
Operating environment humidity		20%-80% (No condensation)

Remote control unit

Power supply	DC 3 V (AAA/R03/LR03 battery x 2)
Operation range*[8]	Approx. 7 m (23 ft) when operated from directly in front of the signal receptor
Dimensions	Width:44 mm (1-23/32 inches), Length:105 mm (4-1/8 inches), Height:20.5 mm (13/16 inches)
Weight*[5]	63 g (2.22 ozs) (including batteries)

Supplied accessories
Wireless remote control unit x 1

Power cord (Number and size of cords depends on region)

Batteries for remote control (AAA/R03/LR03 x 2)

Optional accessories

Ceiling Mount Bracket	ET-PKL100H (for high ceilings)
Ceiling Mount Bracket	ET-PKL100S (for low ceilings)
Projector Mount Bracket	ET-PKL420B
Replacement Lamp Unit	ET-LAL510
Replacement Filter Unit	ET-RFL300
D-sub/S-VIDEO Conversion Cable	ET-ADSV

Compatible Software
Logo Transfer Software

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/IEC 21118:2020 international standards.
*3   Usage environment affects the duration of filter.
*4   For PT-LB306, keystone correction in the horizontal direction is not supported. If the projector is tilted horizontally, horizontal trapezoidal distortion cannot be corrected.
*5   With legs at shortest position.
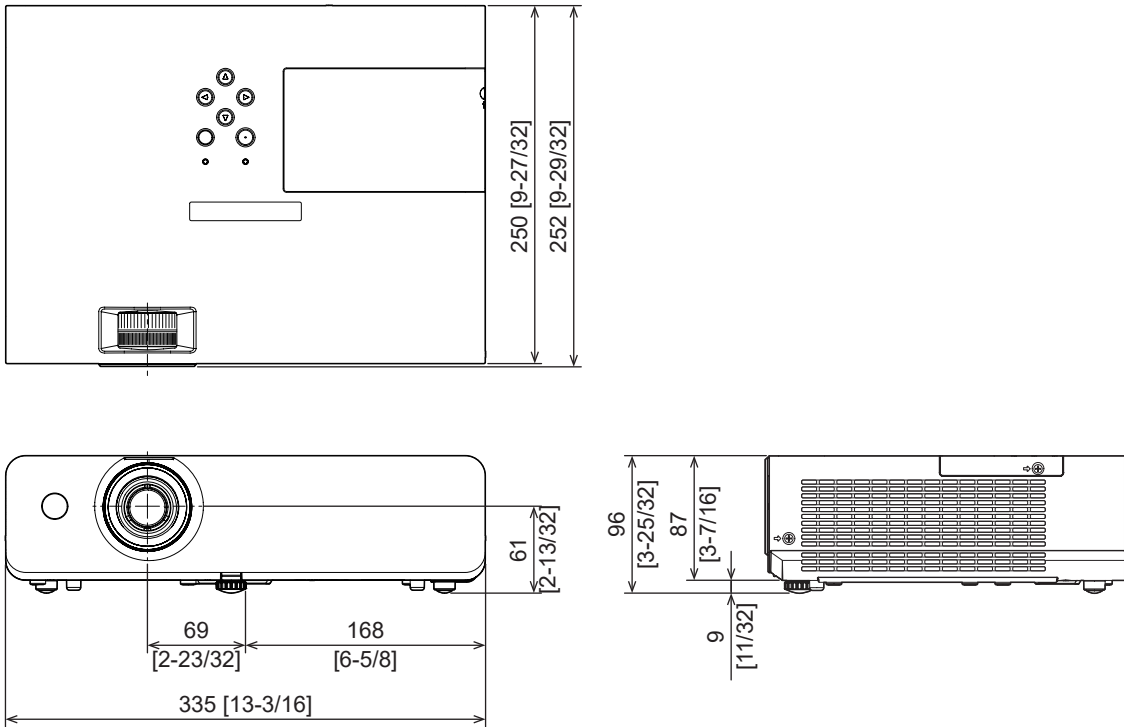*6   Average value. May differ depending on models.
*7   When the projector is operated at an elevation of 1,400 m (4,593 ft) or less, if the ambient temperature exceeds 35 °C (95 °F), [Lamp Control] will be switched to [Eco] automatically to protect the projector. When the projector is operated at an elevation between 1,400 m (4,593 ft) and 2,700 m (8,858 ft), if the ambient temperature exceeds 30 °C (86 °F), [Lamp Control] will be switched to [Eco] automatically to protect the projector.
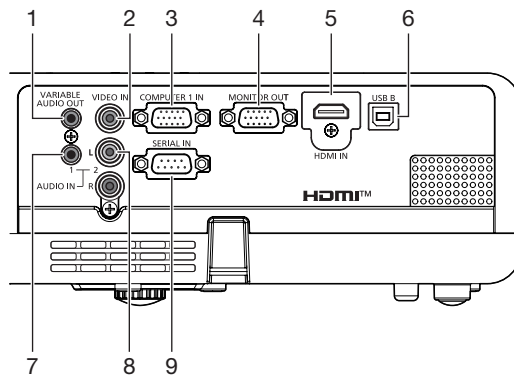*8   Operation range differs depending on environments.

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Dimensions

unit : mm [inch]

This illustration is not drawn to scale.

250 [9-27/32]
252 [9-29/32]

61 [2-13/32]

69 [2-23/32]   168 [6-5/8]

335 [13-3/16]

96 [3-25/32]   87 [3-7/16]

9 [11/32]

Terminals

1	Audio output	6	USB B connector *For service only
2	Video input	7	Audio input 1
3	Computer 1 input	8	Audio input 2
4	Monitor out	9	Serial input
5	HDMI input		

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Standard setting-up position

unit : mm [inch]

Illustrations show the projector installed using optional Ceiling Mount Bracket ET-PKL100H and Projector Mount Bracket ET-PKL420B. This illustration is not drawn to scale.

ø48.6 [1-29/32]

367–447 [14-7/16–17-19/32] Adjustable in 20 [25/32-inch] step.

Upper edge of projected image

L

157 [6-3/16]   95 [3-3/4]

Screen

SH

H

L

Lower edge of projected image

68.5 [2-11/16]

66 [2-19/32]

132 [5-3/16]

66 [2-19/32]

SH

L

Screen

71 [2-25/32]   71 [2-25/32]

142 [5-19/32]
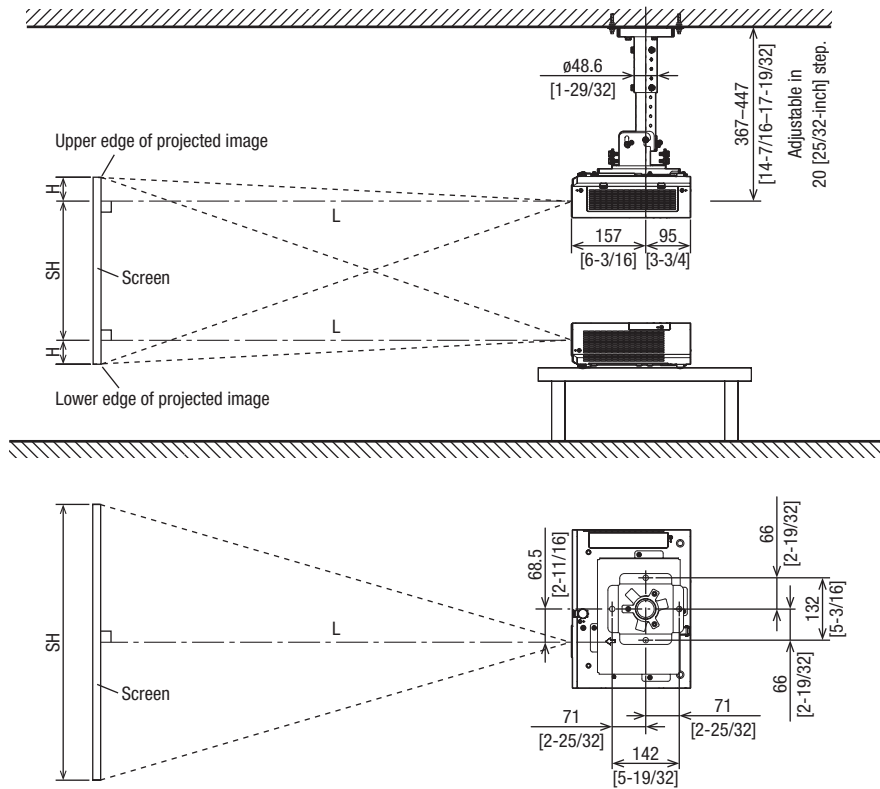
Caution

● 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 Projector Mount Bracket between the Projector Mount Bracket and the ceiling.

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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 4:3   Unit: meters [feet]

Projection size	Projection distance (L)		Height from the edge of screen to center of lens (H)
Screen diagonal	Minimum distance	Maximum distance	
0.76 m / 30″	0.9 [2.9]	1.1 [3.5]	0.065 [0.214]
1.02 m / 40″	1.2 [3.9]	1.4 [4.7]	0.087 [0.286]
1.27 m / 50″	1.5 [4.9]	1.8 [5.9]	0.109 [0.357]
1.52 m / 60″	1.8 [5.9]	2.2 [7.1]	0.131 [0.429]
1.78 m / 70″	2.1 [6.9]	2.5 [8.3]	0.152 [0.500]
2.03 m / 80″	2.4 [7.9]	2.9 [9.5]	0.174 [0.571]
2.29 m / 90″	2.7 [8.9]	3.3 [10.7]	0.196 [0.643]
2.54 m / 100″	3.0 [9.9]	3.6 [11.9]	0.218 [0.714]
3.05 m / 120″	3.6 [11.9]	4.4 [14.3]	0.261 [0.857]
3.81 m / 150″	4.5 [14.9]	5.5 [17.9]	0.327 [1.071]
5.08 m / 200″	6.1 [19.9]	7.3 [23.9]	0.435 [1.429]
6.35 m / 250″	7.6 [24.9]	9.1 [29.9]	0.544 [1.786]
7.62 m / 300″	9.1 [29.9]	10.9 [35.9]	0.653 [2.143]

Calculatoin 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

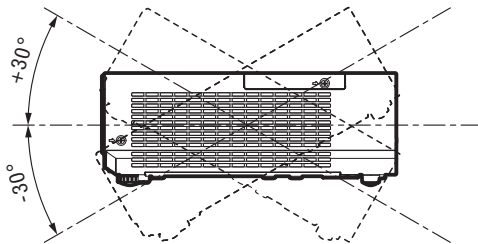|	
minimum	L (m) = (diagonal screen size in inches) x 0.0303 - 0.0233
maximum	L (m) = (diagonal screen size in inches) x 0.0364 - 0.0237

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

Installable angle

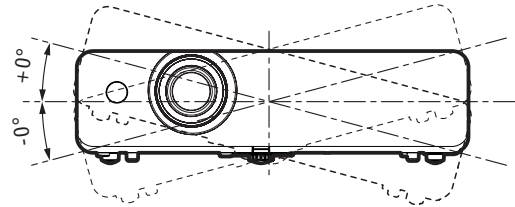Install the projector at an angle within the range shown below.

Vertical direction

The projector may be installed at a vertical angle of 30°.

Horizontal direction

The projector may be installed at a horizontal angle of 0°.

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List of compatible signals

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

• Symbols that indicate formats are as follows.

  -V: Video, Y/C

  -R: RGB (analog)

  -Y: YC_BC_R/YP_BP_R (analog)

  -H: HDMI

• Input corresponding to each item in the plug and play column is as follows.

  -COMPUTER: COMPUTER input

  -HDMI: HDMI input

Mode	Display resolution (dots)	Scanning frequency		Dot clock frequency (MHz)	Format	PnP*[1]	
		Horizontal (kHz)	Vertical (Hz)			COMPUTER	HDMI
NTSC/NTSC4.43/ PAL-M/PAL60	720 x 480i	15.7	59.9	–	V	–	–
PAL/PAL-N/SECAM	720 x 576i	15.6	50.0	–	V	–	–
480/60i	720 x 480i	15.7	59.9	13.5	R/Y	–	–
576/50i	720 x 576i	15.6	50.0	13.5	R/Y	–	–
480/60i	720 (1440) x 480i*[2]	15.7	59.9	27.0	H	–	–
576/50i	720 (1440) x 576i*[2]	15.6	50.0	27.0	H	–	–
480/60p	720 x 480	31.5	59.9	27.0	R/Y/H	–	✓
576/50p	720 x 576	31.3	50.0	27.0	R/Y/H	–	✓
720/60p	1280 x 720	45.0	60.0*[5]	74.3	R/Y/H	–	✓
720/50p	1280 x 720	37.5	50.0	74.3	R/Y/H	–	✓
1080/60i*[3]	1920 x 1080i	33.8	60.0*[5]	74.3	R/Y/H	–	✓
1080/50i	1920 x 1080i	28.1	50.0	74.3	R/Y/H	–	✓
1080/24p	1920 x 1080	27.0	24.0*[5]	74.3	R/Y/H	–	✓
1080/24sF	1920 x 1080i	27.0	48.0*[5]	74.3	R/Y/H	–	–
1080/25p	1920 x 1080	28.1	25.0	74.3	R/Y/H	–	–
1080/30p	1920 x 1080	33.8	30.0*[5]	74.3	R/Y/H	–	–
1080/60p	1920 x 1080	67.5	60.0*[5]	148.5	R/Y/H	–	✓
1080/50p	1920 x 1080	56.3	50.0	148.5	R/Y/H	–	✓
640 x 400/70	640 x 400	31.5	70.1	25.2	R/H	–	–
640 x 400/85	640 x 400	37.9	85.1	31.5	R/H	–	–
640 x 480/60	640 x 480	31.5	59.9	25.2	R/H	✓	✓
640 x 480/67	640 x 480	35.0	66.7	30.2	R/H	–	–
640 x 480/73	640 x 480	37.9	72.8	31.5	R/H	✓	✓
640 x 480/75	640 x 480	37.5	75.0	31.5	R/H	✓	✓
640 x 480/85	640 x 480	43.3	85.0	36.0	R/H	–	–
800 x 600/56	800 x 600	35.2	56.3	36.0	R/H	✓	✓
800 x 600/60	800 x 600	37.9	60.3	40.0	R/H	✓	✓
800 x 600/72	800 x 600	48.1	72.2	50.0	R/H	✓	✓
800 x 600/75	800 x 600	46.9	75.0	49.5	R/H	✓	✓
800 x 600/85	800 x 600	53.7	85.1	56.3	R/H	–	–
832 x 624/75	832 x 624	49.7	74.6	57.3	R/H	✓	✓
1024 x 768/50	1024 x 768	39.6	50.0	51.9	R/H	–	–
1024 x 768/60	1024 x 768	48.4	60.0	65.0	R/H	✓	✓
1024 x 768/70	1024 x 768	56.5	70.1	75.0	R/H	✓	✓
1024 x 768/75	1024 x 768	60.0	75.0	78.8	R/H	✓	✓
1024 x 768/82	1024 x 768	65.5	81.6	86.0	R/H	–	–
1024 x 768/85	1024 x 768	68.7	85.0	94.5	R/H	–	–
1024 x 768/100	1024 x 768	81.4	100.0	113.3	R/H	–	–
1152 x 864/60	1152 x 864	53.7	60.0	81.6	R/H	–	–
1152 x 864/75	1152 x 864	67.5	75.0	108.0	R/H	–	–
1152 x 864/85	1152 x 864	77.1	85.0	119.7	R/H	–	–
1152 x 870/75	1152 x 870	68.7	75.1	100.0	R/H	✓	✓
1280 x 720/50	1280 x 720	37.1	49.8	60.5	R/H	–	–
1280 x 720/60	1280 x 720	44.8	59.9	74.5	R/H	–	–
1280 x 768/60	1280 x 768	47.8	59.9	79.5	R/H	–	–
1280 x 768/75	1280 x 768	60.3	74.9	102.3	R/H	–	–
1280 x 768/85	1280 x 768	68.6	84.8	117.5	R/H	–	–
1280 x 800/50	1280 x 800	41.3	50.0	68.0	R/H	–	–
1280 x 800/60	1280 x 800	49.7	59.8	83.5	R/H	–	–
1280 x 800/75	1280 x 800	62.8	74.9	106.5	R/H	–	–
1280 x 800/85	1280 x 800	71.6	84.9	122.5	R/H	–	–
1280 x 960/60	1280 x 960	60.0	60.0	108.0	R/H	–	–

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Mode	Display resolution (dots)	Scanning frequency		Dot clock frequency (MHz)	Format	PnP*1	
		Horizontal (kHz)	Vertical (Hz)			COMPUTER	HDMI
1280 x 1024/60	1280 x 1024	64.0	60.0	108.0	R/H	–	–
1280 x 1024/75	1280 x 1024	80.0	75.0	135.0	R/H	–	–
1280 x 1024/85	1280 x 1024	91.1	85.0	157.5	R/H	–	–
1366 x 768/50	1366 x 768	39.6	49.9	69.0	R/H	–	–
1366 x 768/60	1366 x 768	47.7	59.8	85.5	R/H	–	–
1400 x 1050/60	1400 x 1050	65.3	60.0	121.8	R/H	–	–
1400 x 1050/60	1400 x 1050	65.2	60.0	122.6	R/H	–	–
1400 x 1050/75	1400 x 1050	82.3	74.9	156.0	R/H	–	–
1440 x 900/60	1440 x 900	55.9	59.9	106.5	R/H	–	–
1600 x 900/50	1600 x 900	46.3	50.0	97.0	R/H	–	–
1600 x 900/60	1600 x 900	55.9	60.0	119.0	R/H	–	–
1600 x 1200/60	1600 x 1200	75.0	60.0	162.0	R/H	✓	✓
1680 x 1050/50	1680 x 1050	54.1	50.0	119.5	R/H	–	–
1680 x 1050/60	1680 x 1050	65.3	60.0	146.3	R/H	–	–
1920 x 1080/50	1920 x 1080	55.6	49.9	141.5	R/H	–	–
1920 x 1080/60*4	1920 x 1080	66.6	59.9	138.5	R/H	–	–
1920 x 1200/50	1920 x 1200	61.8	49.9	158.3	R/H	–	–
1920 x 1200/60*4	1920 x 1200	74.0	60.0	154.0	R/H	–	–

*1 Where marked " ✓ " signals indicates in Plug and Play is compatible with EDID of projector. Unmarked signals in Plug and Play may also be compliant if input terminals are written in the format list. Where Plug and Play is unmarked and nothing is written in the format list, difficulties in projecting image may occur even when computer and projector appear to have same resolution.
*2 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only.
*3 When a 1125 (1035)/60i signal was input, it is displayed as a 1125 (1080)/60i signal.
*4 VESA CVT-RB (Reduced Blanking)-compliant.
*5 The signal with 1/1.001x vertical scanning frequency is also supported.

Note

● The number of display dots is 1024 x 768.
● A signal with a different resolution will be projected after converting the resolution to match the projector display.
● "i" added to the resolution value indicates an interlaced signal.
● When interlaced signals are connected, flicker may occur on the projected image.
● The image may not be displayed in full screen according to the computer output setting.