# **Panasonic**

SPEC FILE

Product Number: PT-JX200FWU/JX200FBU

PT-JX200FWE/JX200FBE PT-JX200FWK/JX200FBK

Product Name : DLP™Projector

## PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

#### **Specifications**

Main unit

Power supply PT-JX200FWU/JX200FBU : AC 120V 50/60Hz

PT-JX200FWE/JX200FBE/JX200FWK/JX200FBK: AC 100 - 240V 50/60Hz

Power consumption PT-JX200FWU/JX200FBU: 240W(2.3A)

PT-JX200FWE/JX200FBE/JX200FWK/JX200FBK : 240W(2.7 - 1.1A) Standby: 0.4W[FWU/FBU] 0.5W[FWE/FBE/FWK/FBK] in Eco mode Standby: 0.5W[FWU/FBU] 0.7W[FWE/FBE/FWK/FBK] in Network mode,

Standby: 12 W in Normal mode (when fan is stopped)

DLP® chip 0.55 (For screen aspect ratio of 4:3)

DLP® chip x1, DLP® method 786,432 pixels (equivalent to XGA)

Lens Powered zoom (1.3 - 2.9:1), Powered focusing method

F=2.0 - 2.7, f=15.2 mm - 32.7 mm

Laser Diode (Maximum output: 36W x 2, Wavelength: 452 - 458 nm,

Laser class: Class 1\*) \*Class 3R for North America. Luminance life for set: 20,000 hours at half luminance 0.76–5.08 m (30–200 inches) (4:3 aspect ratio)

Screen size 0.76–5.08 m (30–20 Brightness\*1 2,000 lumens (ANSI)

Center-to-corner uniformity\*1 809

Contrast\*1 1,000:1 (Full white / Full black)

Scanning frequency (HDMI input) 525i(480i): fH 15.7kHz; fV 59.9Hz; fclk 27.0MHz 625i(576i): fH 15.6kHz; fV 50.0Hz; fclk 27.0MHz

525p(480p): fH 31.5kHz; fV 59.9Hz; fclk 27.0MHz 625p(576p): fH 31.3kHz; fV 50.0Hz; fclk 27.0MHz fH 45.0KHz; fV 60.0Hz; fclk 74.3MHz 750(720)/60p: 750(720)/50p: fH 37.5KHz; fV 50.0Hz; fclk 74.3MHz 1125(1080)/60i; fH 33.8kHz; fV 60.0Hz; fclk 74.3MHz 1125(1080)/50i; fH 33.8kHz: fV 50.0Hz: fclk 74.3MHz 1125(1080)/60p; fH 67.5kHz; fV 60.0Hz; fclk 148.5MHz 1125(1080)/50p; fH 56.3kHz; fV 50.0Hz; fclk 148.5MHz 640x480(VGA60); fH 31.5kHz; fV 59.9Hz; fclk 25.2MHz 800x600(SVGA56): fH 35.2kHz; fV 56.3Hz; fclk 36.0Mhz 800x600(SVGA60): fH 37.9kHz; fV 60.3Hz; fclk 40.0MHz

800x600(\$VGA60): fH 37.9kHz; fV 60.3Hz; fclk 40.0MHz
1024x768(XGA60): fH 48.4KHz; fV 60.0Hz; fclk 65.0MHz
1280x1024(\$XGA60): fH 64.0kHz; fV 60.0Hz; fclk 108.0MHz
1280x720/50: fH 37.1kHz; fV 49.8Hz; fclk 60.5MHz
1280x720/60: fH 44.8kHz; fV 59.9Hz; fclk 74.5MHz
1280x768/50: fH 39.6kHz; fV 49.9Hz; fclk 65.3MHz
1280x768/60: fH 47.8kHz; fV 59.9Hz; fclk 79.5MHz

1280x800/50: fH 41.3kHz; fV 50.0Hz; fclk 68.0MHz 1280x800/60: fH 49.7kHz; fV 59.8Hz; fclk 83.5MHz 1600x900/50: fH 46.4kHz; fV 49.9Hz; fclk 96.5MHz 1600x900/60: fH 56.0kHz; fV 59.9Hz; fclk 118.3MHz

Optical axis shift Vertical: Fixed at 33% (1:2)

Keystone correction range Vertical: Max. ±40°, Horizontal: Max. ±40°

(Max. values in each direction only)

With corner keystone function (Correction within above range)

Installation Front/Rear (Vertical flip display can be turned on or off using "Vertical Flip")

Terminals HDMI IN HDMI 19-pin ×1, Compatible with HDCP, Audio signal: linear PCM

(sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)

AUDIO OUT M3 × 1 (monitor out, stereo)

0-2.0 Vrms, variable, output impedance: 2.2 kilohms or less

LAN RJ-45 x 1 for network connection 10Base-T/100Base-TX, PJLink™

DC OUT USB Type A × 1, for power supply (DC5 V, max 2A)

# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FB

Wireless LAN Compliance

PT-JX200FWU/JX200FBU

Mirroring mode IEEE802.11b/g/n:2.412GHz-2.462GHz

IEEE802.11a/n:5.180GHz-5.240GHz, 5.745GHz-5.805GHz

M-Direct/Simple mode IEEE802.11b/g/n:2.412GHz-2.462GHz

IEEE802.11a/n:5.180GHz-5.240GHz, 5.745GHz-5.825GHz

User mode IEEE802.11b/g/n:2.412GHz-2.462GHz

IEEE802.11a/n: 5.180GHz-5.240GHz, 5.260GHz-5.320GHz

5.500GHz-5.700GHz(except 5.600GHz-5.650GHz)

5.745GHz-5.825GHz

PT-JX200FWE/JX200FBE

Mirroring mode IEEE802.11b/g/n:2.412GHz-2.462GHz IEEE802.11a/n:5.18GHz-5.240GHz

PT-JX200FWK/JX200FBK

Mirroring mode IEEE802.11b/g/n: 2.412GHz-2.462GHz

IEEE802.11a/n : 5.180GHz-5.220GHz, 5.745GHz-5.805GHz

 $\label{eq:modemode} \mbox{M-Direct/Simple mode} \quad \mbox{IEEE802.11b/g/n} \ \vdots \ 2.412\mbox{GHz-} 2.472\mbox{GHz}$ 

IEEE802.11a/n : 5.180GHz-5.220GHz, 5.745GHz-5.805GHz

User mode IEEE802.11b/g/n: 2.412GHz-2.472GHz

IEEE802.11a/n: 5.180GHz-5.320GHz, 5.745GHz-5.805GHz

Wireless channels used

PT-JX200FWU/JX200FBU

Mirroring mode IEEE802.11b/n/g:1-11 channel

IEEE802.11a/n:36/40/44/48/149/153/157/161 channel

M-Direct/Simple mode IEEE802.11b/n/g:1-11 channel

IEEE802.11a/n:36/40/44/48/149/153/157/161/165 channel

User mode IEEE802.11b/n/g:1-11 channel(Active scanning)

IEEE802.11a/n:36/40/44/48 channel(Active scanning) 52/56/60/64 channel(Passive scanning)

100/104/108/112/116/132/136/140 channel(Passive scanning)

149/153/157/161/165 channel(Active scanning)

PT-JX200FWE/JX200FBE

PT-JX200FWK/JX200FBK

Mirroring mode IEEE802.11b/n/g: 1-11 channel

IEEE802.11a/n: 36/40/44/149/153/157/161 channel

M-Direct/Simple mode IEEE802.11b/n/g: 1-13 channel

IEEE802.11a/n: 36/40/44/149/153/157/161 channel

User mode IEEE802.11b/n/g: 1-13 channel

IEEE802.11a/n: 36-64, 149-161 channel

Transmission distance Approx. 30 m (However, varies depending on the operating environment

SD card slot x 1 (SDHC memory card compatible)

Operation checked for Panasonic SD memory cards up to 2 GB capacity

and Panasonic SDHC memory cards up to 32 GB capacity

Cabinet materials Molded plastic

Dimensions Projection Unit (a x I) a170 x 278.8 mi

Power Unit (L x H x D) 343.4 x 60.8 x 84 mm (13-17/32 x 2-13/32 x 3-5/16 inches)

Weight Approx. 4.6Kg (10.1lbs)

Operating temperature\*2 0-40°C (32-104°F) (Less than 1,000m (3,281 ft) above sea level)

0-35°C (32-95°F) (From 1,000m (3,281 ft) to 2,700m (8,858 ft) above sea level)

33 dB (Light source: in Normal mode) 30 dB (Light source: in ECO mode)

Operating humidity 10%-80% (no condensation)

**Remote control unit** Power supply 3 V DC (R03/LR03/AAA type battery  $\times$  2)

Operation range Approx. 7 m (22 ft 12 in) when operated from directly in front of the signal receptor

Dimensions (W  $\times$  H  $\times$  D) 44  $\times$  105  $\times$  20.5 mm (1-23/32  $\times$  4-1/8  $\times$  13/16inches)

Weight Approx. 63 g (2.2 oz) (including batteries)

Supplied accessories Wireless remote control unit (x 1) Batteries for remote control (R03/AAA or LR03/AAA type x 2)

Card slot cap (x 1) HDMI terminal cap (x 1) L
Allen wrench (x 1) Connector secure lock (x 1)

\*1 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards.

Card slot

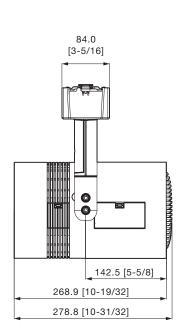
Operation noise

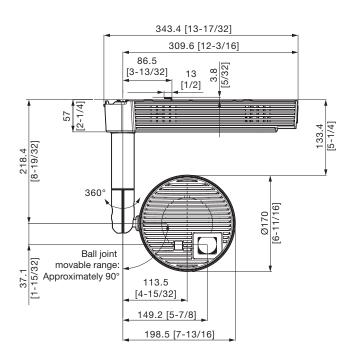
Operating environment

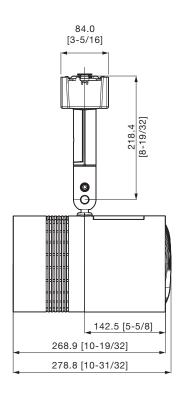
<sup>\*2</sup> Limits the luminance when used in locations from 0m to 1,000m (0ft to 3,281ft) above sea level at ambient temperatures of 35°C (95°F) or higher, or from 1,000m to 2,700m (3,281ft to 8,858ft) above sea level at ambient temperatures of 30°C (86°F) or higher.

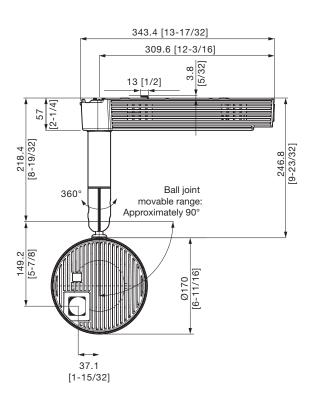
# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

#### **Dimensions**



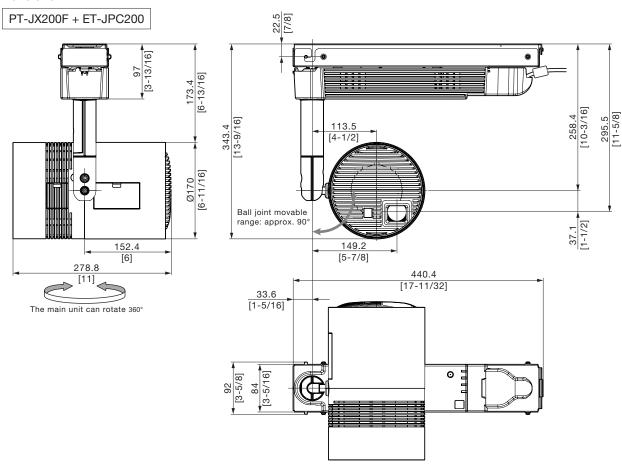


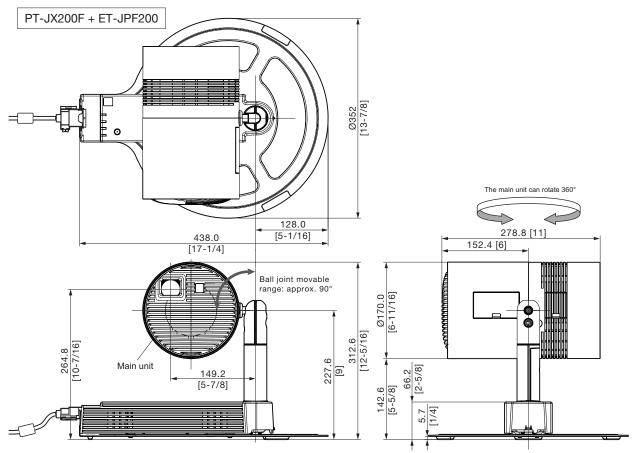




# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

### **Dimensions**

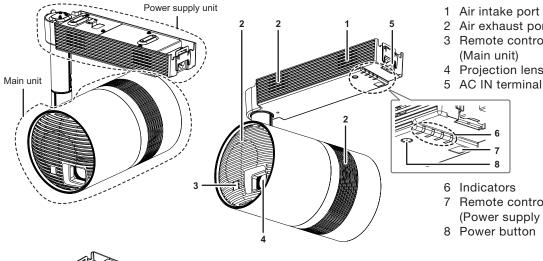




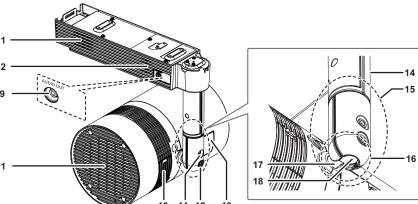
# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

### Name of Parts

### Projector body

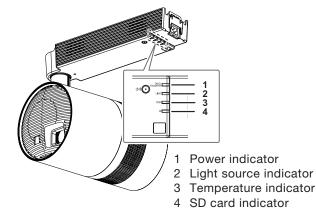


- 1 Air intake port
- 2 Air exhaust port
- Remote control signal receiver (Main unit)
- Projection lens
- Remote control signal receiver (Power supply unit)

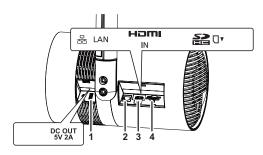


- 9 AUDIO OUT terminal
- 10 DC OUT terminal cover
- 11 Ball joint fixing screw
- 12 Ball joint stopper
- 13 Connecting terminals cover
- 14 Pole
- 15 Shaft holder
- 16 Ball joint movable part
- 17 Shaft
- 18 Ball joint

### Indicators



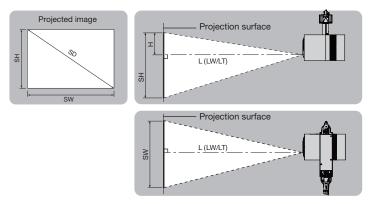
Terminals



- 1 DC OUT terminal
- 2 LAN terminal
- 3 HDMI IN terminal
- 4 SD card slot

# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

#### **Projection dimension diagrams**



L(LW/LT)*	Projection distance (Distance from surface of projection lens to projection surface) (m)
SH	Image height (m)
SW	Image width (m)
SD	Diagonal screen size (m)
Н	Distance from the lens center to the image upper end (m)

This illustration is not drawn to scale.

#### NOTE:

- To maintain performance and ensure safety, the work of installing the projector to a ceiling should be carried out by the place of purchase or a properly-qualified technician.
- Install to a wiring duct which is directly installed to a horizontal ceiling and which can bear the full weight of the projector.

### Projection distance for 4:3 aspect ratio screen

unit: meters (feet)

	Projection size		Projection	distance	Distance from the lens center
diagonal [m] [in]	height [SH]	width [SW]	Min [LW]	Max [LT]	to the image upper end [H]
0.76 / 30	0.46 (1.5)	0.61 (2.0)	0.79 (2.6)	1.75 (5.7)	0.15 (0.5)
1.02 / 40	0.61 (2.0)	0.81 (2.7)	1.06 (3.5)	2.35 (7.7)	0.20 (0.7)
1.27 / 50	0.76 (2.5)	1.02 (3.3)	1.34 (4.4)	2.94 (9.6)	0.25 (0.8)
1.52 / 60	0.91 (3.0)	1.22 (4.0)	1.62 (5.3)	3.54 (11.6)	0.31 (1.0)
1.78 / 70	1.07 (3.5)	1.42 (4.7)	1.89 (6.2)	4.14 (13.6)	0.36 (1.2)
2.03 / 80	1.22 (4.0)	1.63 (5.3)	2.17 (7.1)	4.73 (15.5)	0.41 (1.3)
2.29 / 90	1.37 (4.5)	1.83 (6.0)	2.45 (8.0)	5.33 (17.5)	0.46 (1.5)
2.54 / 100	1.52 (5.0)	2.03 (6.7)	2.72 (8.9)	5.92 (19.4)	0.51 (1.7)
3.05 / 120	1.83 (6.0)	2.44 (8.0)	3.28 (10.8)	7.12 (23.4)	0.61 (2.0)
3.81 / 150	2.29 (7.5)	3.05 (10.0)	4.10 (13.5)	8.90 (29.2)	0.76 (2.5)
5.08 / 200	3.05(10.0)	4.06 (13.3)	5.48 (18.0)	11.88 (39.0)	1.02 (3.3)

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

#### 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 projection distance L = (diagonal screen size in meters) × 1.0907 – 0.0507 L = (diagonal screen size in meters)  $\times$  2.3468 – 0.0379 Maximum projection distance

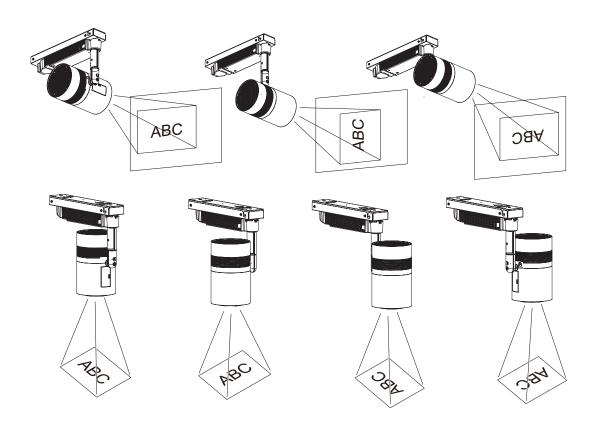
### NOTE:

• Distances calculated with the above equations will include slight deviations.

# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

### **Projection direction**

The diagrams below show examples with "Projection method" set to "Front" and "Flip Vertical" set to "Off".



### List of compatible signals

Following are the HDMI input image signals which this projector is able to project.

Display mode	Display	Scanning	Scanning frequency		Plug and Play*
	resolution (dots)	H (kHz)	V (Hz)	frequency (MHz)	
525 (480) /60i	1440(720) x 480	15.7	59.9	_ _ 27.0	-
625 (576) /50i	1440(720) x 576	15.6	50.0		_
525p (480) /60p	720 × 483	31.5	59.9		
625p (576) /50p	720 × 576	31.3	50.0	_	
750 (720) /60p	- 1280 × 720 —	45.0	60.0		1
750 (720) /50p	1280 x 720 —	37.5	50.0		
1125 (1080) /60i		33.8	60.0		
1125 (1080) /50i	1000 - 1000	28.1	50.0		
1125 (1080) /60p	- 1920 × 1080 –	67.5	60.0	_ 148.5	1
1125 (1080) /50p	_	56.3	50.0		<b>√</b>
640 x 480	640 × 480	31.5	59.9	25.2	✓
800 x 600		35.2	56.3	36.0	1
800 X 600	800 × 600 —	37.9	60.3	40.0	<b>√</b>
1024 x 768	1024 × 768	48.4	60.0	65.0	1
1280 x 720	1000 700	37.1	49.8	60.5	-
1200 X 720	1280 × 720 —	44.8	59.9	74.5	_
1280 x 768	1280 × 768 —	39.6	49.9	65.3	_
1280 X 768		47.8	59.9	79.5	_
1280 x 800	1280 × 800 —	41.3	50.0	68.0	_
1200 X 000		49.7	59.8	83.5	1
1280 x 1024	1280 × 1024	64.0	60.0	108.0	-
1000 000	1000 000	46.4	49.9	96.5	_
1600 x 900	1600 × 900 —	56.0	59.9	118.3	_

<sup>\*</sup> Signals with a 🗸 in the Plug and play columns are signals described in EDID (extended display identification data) of the projector. If a signal has no 🗸 in the Plug and play columns but has an entry in the Format column, it can be input. For signals without a 🗸 in the Plug and play columns, there are instances when resolution cannot be selected on the computer even though the projector supports them.

For some types of image signal, the image processing which is carried out may cause deterioration in the projected images.

# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

### Images that can be played back by the memory viewer function

This projector can play back the following still images and video files.

	Extension	Format	Limitations
Still images	jpg/jpeg		Resolution: Max. 8000 x 8000 (Max. 4096 x 4096 for progressive format) YUV format: Only compatible with YUV444, YUV422 and YUV411. Color mode: Only compatible with RGB
	bmp		Resolution: Max. 2000 x 2000 (Compatible with 1-bit, 8-bit, 16-bit, 24-bit, 32-bit) The following formats are not compatible with this projector. Run-length encoding, bit field, top-down, transparent data

	Extension	Co	dec	Limitations	
	LATERISION	Images	Audio	Images	Audio
Video	mov	H.264/MPEG-4 AVC Motion JPEG	AAC Linear PCM	Resolution:	Sampling rate:
	avi	H.264/MPEG-4 AVC Motion JPEG MPEG-4	Motion JPEG Layer-3 (MP3) AAC		Max. 48 kHz (Max. 16 kHz for linear PCM) Channels:
	mp4 H.264/MPEG-4 AVC AAC Motion MPEG-4 AAC MPEG-4 AAC		AAC MPEG-4 AAC-LC	Bit rate: Bit rate:	
	mpg/mpeg	MPEG-2	MPEG-1/2 Audio Layer-2	Max. 40 Mbps	Max. 384 Kbps
	wmv	WMV9	WMA		

- The following video files are not compatible with this projector.

  Image codec is WMV7, WMV8, DivX or Xvid

  Uncompressed images

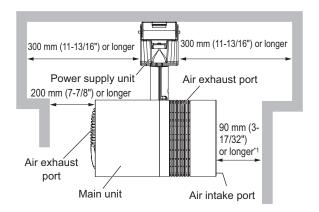
  Multi-angle images

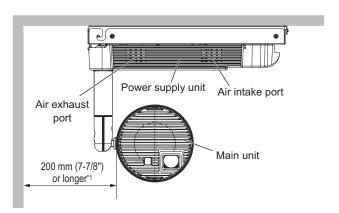
  Profile is Advanced Simple Profile @ Level 0 or Advanced Simple Profile @ Level 1

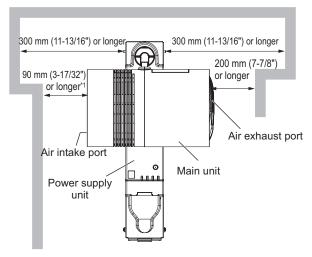
# PT-JX200FWU/JX200FBU/JX200FWE/JX200FBE/JX200FWK/JX200FBK

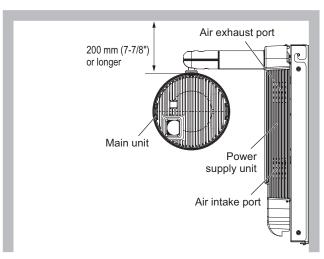
#### Notes on projector placement and operation

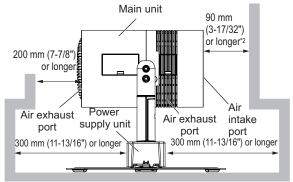
- •Do not block the ventilation ports (intake and exhaust) of the projector.
- · Prevent hot and cool air from the air conditioning system to blow directly to the ventilation ports (intake and exhaust) of the projector.

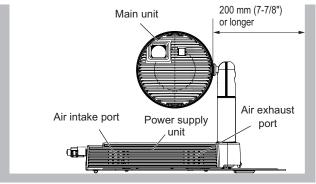












- \*1 Distance from the wall or ceiling surface which will block the whole air intake & Air exhaust port
- \*2 Distance from the wall or floor surface which will block the whole air intake port
- · Do not install the projector in a confined space. When installing the projector in a confined space, provide air conditioning or ventilation separately. Exhaust heat may accumulate when the ventilation is not enough, triggering the protection circuit of the projector.