LCOS Projector WUX5800Z/WUX6600Z/WUX7000Z

1. Main Features

< Product lineup >

- WUX 5800Z: WUXGA resolution , 5800 lm , laser light source
- WUX 6600Z: WUXGA resolution , 6600 lm , laser light source
- WUX 7000Z: WUXGA resolution , 7000 lm , laser light source

< Common specifications to all three models >

- ●Integration of AISYS illumination optical processor, image processor, and LCOS panel system technologies
- ●Support for numerous interfaces including HDMI, DisplayPort, HDBaseT, and DVI-I
- ●Improved video visibility
- ●Supports service apps (Canon Service Tool for PJ)
  - ･iOS application is used to establish a Wi-Fi connection with the projector, and enables remote control operations and projector status management easily.
- ●Built-in RTC(Real-Time Clock)
  - ･Scheduler function that can be configured to perform actions, such as starting or shutting down the projector at specified times.
  - ･Improved information accessibility through log information linking
- ●Low-delay playback with no more than 1.0 frame of delay
- ●Low noise at 29 dB
- ●sRGB coverage 99% or higher
- ●Laser light source
  - ･20,000 hours or longer maintenance-free operation (normal mode)
  - ･No installation limitations other than those related to intake and exhaust panels
  - ･Quick startup (about 2 seconds)
  - ･Quiet mode 1/2: 32/29 dB (for CH destination 33/32dB)
  - ･High operation guarantee temperature
  - ･High contrast mode (dynamic contrast 20000:1 or higher)
  - ･Keep brightness mode
  - ･Rotatable menu GUI
  - ･Completely dark blank
- ●Spigot lens mount
  - ･A new single-action replaceable projection lens mount to ensure expandability for future projection lens with new functions

2. Specifications

2-1. Basic specifications

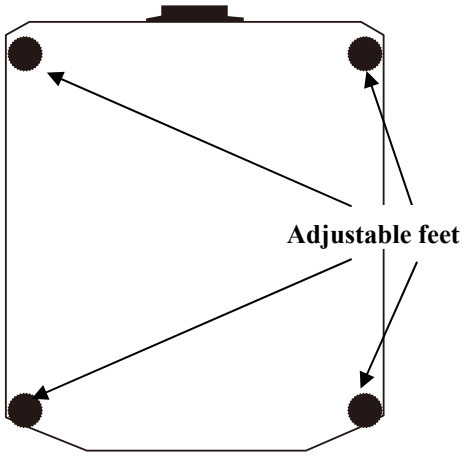
1.Product classification	
Item name	Projector
Image device, number	Reflective LCD panel (LCOS), 3 panels
Projection lens	Detachable
2.Image device	
Number of pixels	1920×1200 (WUXGA)
Display size	0.71 type
Aspect ratio	16:10
3.Light source	
Type	8BLD (Blue Laser Diode) module x4 Yellow phosphor wheel
4.Images	
Optical system	Dichroic mirror and PBS color separation-combination system
Light output	* When the image mode is set to presentation * When standard type is used for the projection lens WUX5800Z: 5800/4060/2900 lm WUX6600Z: 6600/4620/3300 lm WUX7000Z: 7000/4900/3500 lm ** Changed with the light source mode setting Normal / Quiet 1/ Quiet 2 The luminance values for modes other than Normal are calculated and are not guaranteed as specifications
Marginal lumination ratio	* When standard type is used for the projection lens 90%
Contrast ratio	* All white : all black * When standard type is used for the projection lens
Native	4000:1 **When the iris function is set to “Close 9”.
Electronic zoom	Maximum 12x (for length)
Keystone correction	Vertical direction ± 20° Horizontal direction ± 20°

5.Terminals and I/O signals (1)	
DVI-I	
Digital PC input	WUXGA,UXGA,WSXGA+,SXGA+,WXGA+,FWXGA,WXGA,SXGA ,XGA,SVGA,VGA
Analog PC input	WUXGA,UXGA,WSXGA+,SXGA+,WXGA+,FWXGA,WXGA,SXGA ,XGA,SVGA,VGA
HDMI	
Digital PC input	WUXGA,UXGA,WSXGA+,SXGA+,WXGA+,FWXGA,WXGA,SXGA ,XGA,SVGA,VGA
Digital video input	1080p,1080i,720p,576p,480p **Audio input supported
DisplayPort	Equivalent to the HDMI terminal * The details of digital PC signals are different between DVI-I and HDMI/DisplayPort.
Mini Dsub15	
Analog PC input	WUXGA,UXGA,WSXGA+,SXGA+,WXGA+,FWXGA,WXGA,SXGA ,XGA,SVGA,VGA
Component video input	1080p,1080i,720p,576p,576i,480p,480i
RJ-45	*Switched automatically between HDBaseT and general network
HDBaseT input	Image, audio, control and network (100BASE-TX) ** Equivalent to the image and audio of HDMI/DisplayPort
Network connection	Network (100BASE-TX) NMPJ screen transfer (CANON original protocol)
USB Type A	
USB data transmission	JPEG still image Firmware version up
6. Terminals and I/O signals (2)	
Mini jack	Audio input
Mini jack	Audio output
Mini jack	Wired remote connection
Dsub9	
RS-232 connection	User command Firmware version up

7.Mechanics	
Lens shift	Electric powered Amount of lens shift ** When standard type is used for the projection lens ** When the lens shift mode is set to normal Vertical direction +55%/-15% Horizontal direction +10%/-10%
Lens mount	Spigot type
Adjustable feet	Four locations on the bottom, detachable Extension length: 14.6 mm, maximum angle of inclination: ±1.8 ° The screw holes in the projector are also used to install suspension fittings.
Dimensions	W: 480 mm, H: 196 mm, D: 545 mm
Weight	Approx. 17 kg
Noise level	WUX5800Z: 35/32/29 dB(for CH destination 35/33/32dB) WUX6600Z: 36/32/29 dB(for CH destination 36/33/32dB) WUX7000Z: 36/32/29 dB(for CH destination 36/33/32dB) ** Changed with the light source mode setting Normal / Quiet 1/ Quiet 2
8.Others	
Infra-red receiver	One in the front and one in the back
Built-in speaker	Monaural audio: 1 W
Power supply	AC100－240 V, 50/60 Hz
Power consumption	WUX5800Z: 470W WUX6600Z: 520W WUX7000Z: 540W ** Changed according to the settings of the light source function
Standby power	1.6～0.28 W ** Changed with the network and other settings
Operation environment	0℃ － 45℃ , 20%RH - 85%RH
Storage environment	-20℃ － 60℃

2-2. Installation Specifications

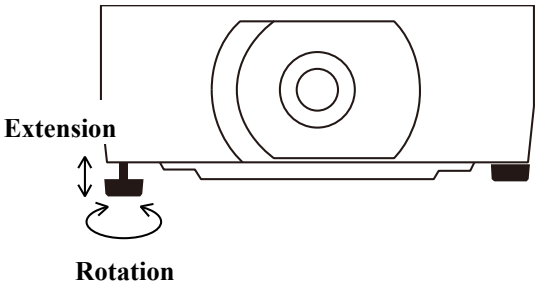
(1) Adjustable feet



Four adjustable feet are provided on the bottom of the product.

The length of these feet can be adjusted to minimize the horizontal tilt of the image projected on the screen.

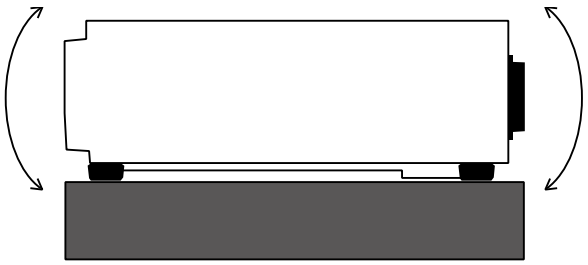
The adjustable feet are detachable, and the screw holes for them are also used to install suspension fittings.



Rotate the adjustable feet to adjust their lengths.

The maximum extension length of each leg is 14.6 mm.

Note that if the adjustable feet are turned beyond the extension length, they come off.



The front-to-back angle of this product can be adjusted in the range of ±1.8 degrees relative to the surface that the product is placed on.

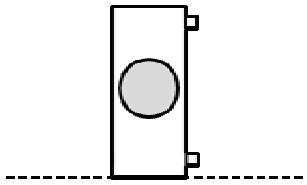
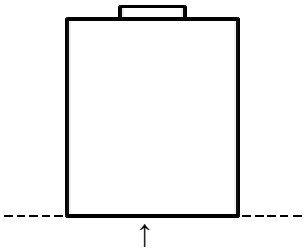
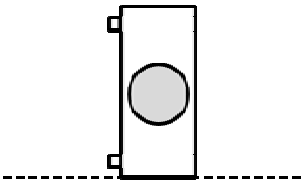
** The figure is for explanation only and different from the actual product shape.

(2) Installation direction

●Omnidirectional projection

Typical projectors with discharge lamps are limited in their installation orientation due to the operating principles of the lamps.
These products do not have such limitation because they use laser diode light sources.
They can be installed to face any direction.

However, because there are terminals and intake and exhaust ports on the panels, the installation surface need to be considered so as not to block their functionality.

Right panel facing down	Back panel facing down	Left panel facing down
		
Do not block the intake port.	Do not block the exhaust port.	Do not block the terminal port.

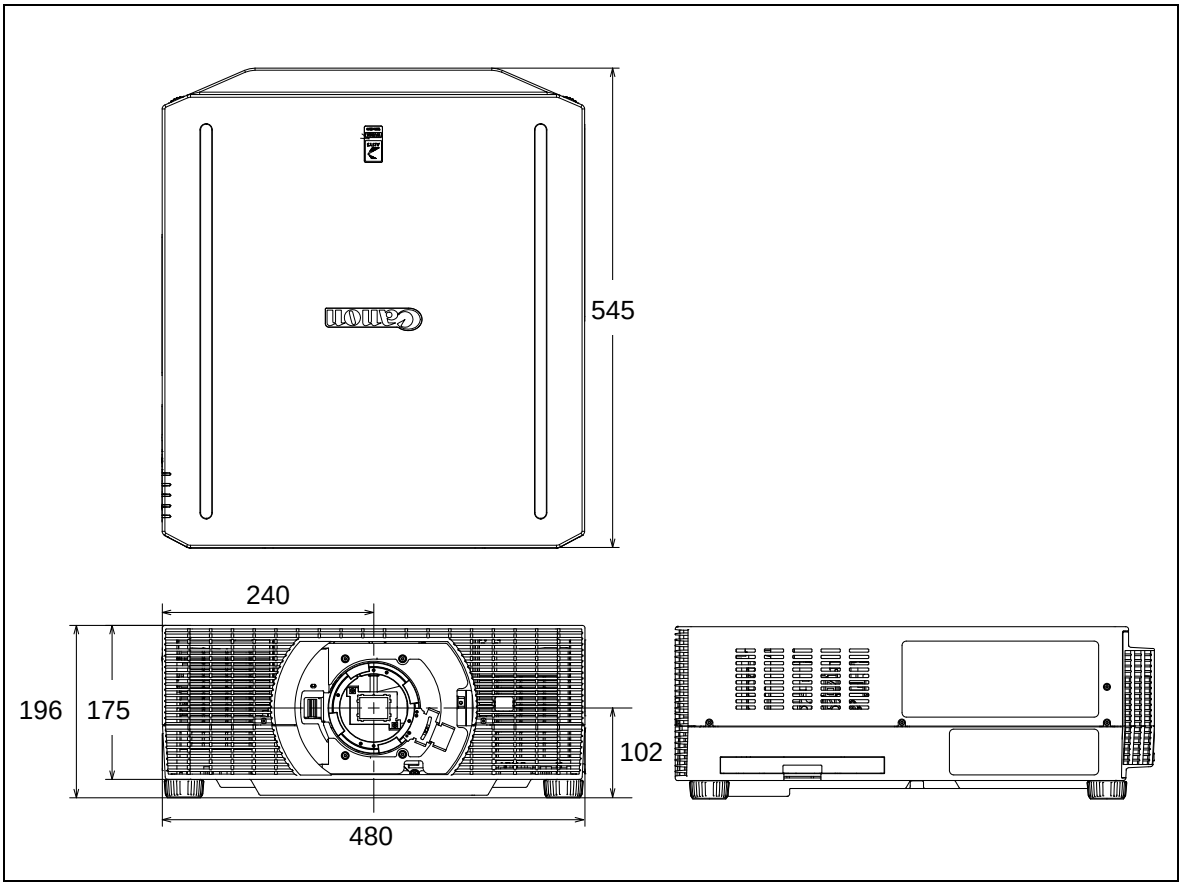
If the product is to be installed in a special orientation, a safe and stable installation method needs to be considered by a specialist.

These products can only be installed on an installation surface using the adjustable feet or fixed in place with the screw holes for suspension fittings.

In particular, installing the projector on one side or one corner would cause the load to be concentrated at one spot. Such installation is not allowed because it can cause a malfunction.

3. Product Appearance

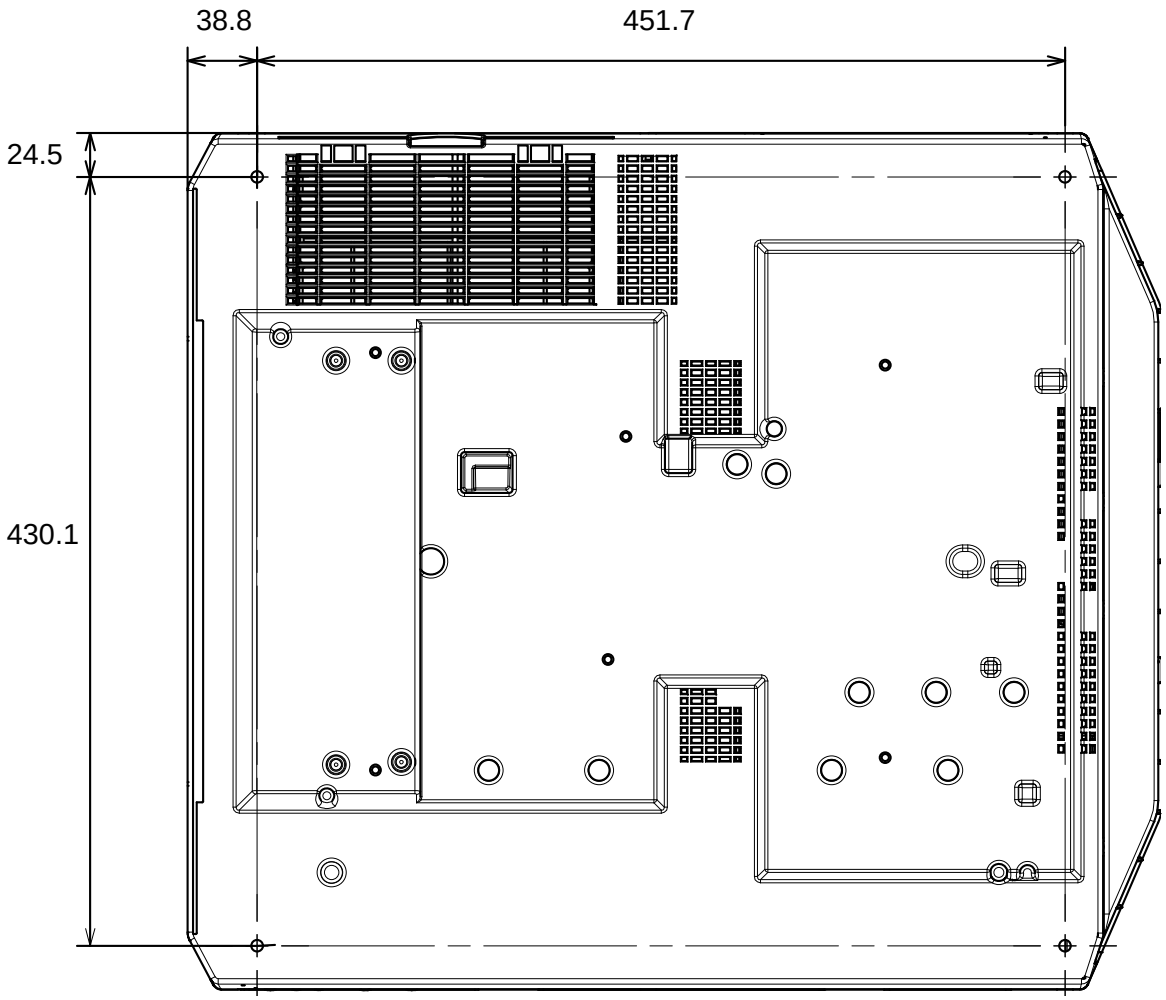
3-1. Outline Drawings



Dimensions	W: 480 mm, H: 196 mm, D: 545 mm (18.9 x 7.7 x 21.5 inch)
Lens center	240 mm from the left side (*1) 102 mm from the installed surface
Weight	Approx. 17 kg (37.5 lbs)

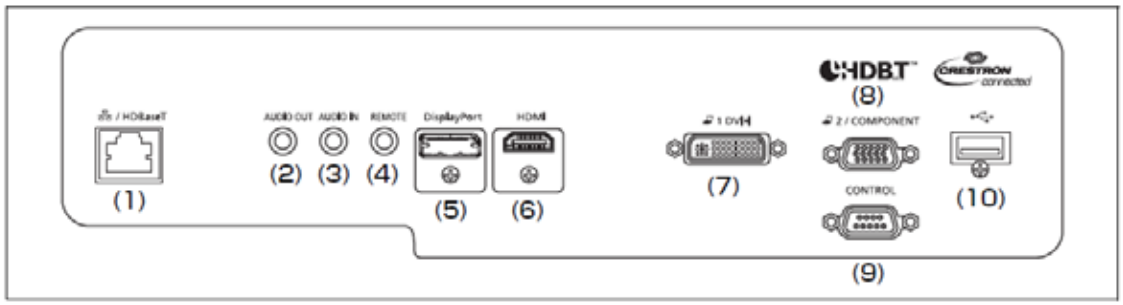
*1: The panel that a lens is mounted on is considered the front panel.
(The figure above shows the top, front, and left views.)

3-2. Screw holes for ceiling mount: 4 (M4)



These screw holes normally have adjustable feet attached to them. If the product is to be suspended from the ceiling, the adjustable feet need to be removed.

3-3. Terminals



	Terminal		Signal
Image input	⑤	DisplayPort	Digital PC / Digital video
	⑥	HDMI	Digital PC / Digital video
	⑦	DVI-I	Digital PC / Analog PC1
	⑧	Mini Dsub15	Analog PC2 / Component video
	①	RJ-45	HDBaseT/network
	⑩	USB type A	USB connection
Audio input	③	Mini jack	Stereo audio
Audio output	②	Mini jack	Stereo audio
Control	⑨	Dsub9	RS-232 connection
	④	Mini jack	Wired remote control connection

●Wireline connection for the remote

The unit can be operated by a wired remote RS-RC05 (option).
When a cable is connected to the unit's remote terminal, the unit switches to a mode in which no infrared signal is accepted, so that the unit would not respond to other remote.
In addition, when a cable is connected to the wireline connection terminal on the remote, the remote also switches to a mode in which no infrared signal is transmitted.
When the remote is wired, the user does not have to make the channel settings on the unit or the remote.

**Note:
If the cable connecting the unit and the remote breaks, the unit will become inoperable from any remote.

4. Image signal

4-1. Supported image signal type

This product can display the following image signals.

●DVI input

Signal Type	H freq. [kHz]	V freq. [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
1024×768	48.363	60.004	65.000
1280×720	37.500	50.000	74.250
	45.000	60.000	74.250
1280×800	49.702	59.810	83.500
	49.306	59.910	71.000
1280×1024	63.981	60.020	108.000
1366×768	47.712	59.790	85.500
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
1600×900	60.000	60.000	108.000
1600×1200	75.000	60.000	162.000
1680×1050	64.674	59.883	119.000
	65.290	59.954	146.250
1920×1080	27.000	24.000	74.250
	56.250	50.000	148.500
	67.500	60.000	148.500
1920×1200	74.038	59.950	154.000
1920×1080 PsF	27.000	24.000	74.25
	28.125	25.000	74.25
	33.750	30.000	74.25

●HDMI input, DisplayPort input

Signal Type	H freq. [kHz]	V freq. [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
1366×768	47.712	59.790	85.500
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
1600×900	60.000	60.000	108.000
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	28.125	50.000	74.250
	33.750	60.000	74.250
1080p	27.000	24.000	74.250
	56.250	50.000	148.500
	67.500	60.000	148.500

●HDBaseT input

The same resolutions and frequencies indicated for HDM/DisplayPortI input in the above table can be displayed.

●Analog PC input (1, 2)

Signal Type	H freq. [kHz]	V freq. [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
1024×768	48.363	60.004	65.000
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
1366×768	47.712	59.790	85.500
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
1600×900	60.000	60.000	108.000
1600×1200	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
	67.500	60.000	148.500
1920×1200	74.038	59.950	154.000

●Component video input

Signal Type	H freq. [kHz]	V freq. [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
1080PsF	27.000	24.000	74.25
	28.125	25.000	74.25
	33.750	30.000	74.25

** If the dot clock of the analog PC signal is higher than 162MHz, image will not be projected properly.

●USB image input (for still images only)

When a USB memory containing image data is inserted to the USB terminal, the unit can project the image data as an image.

File type	JPEG
Format	Baseline DCT
Maximum pixels	10912x8640

Image data other than JPEG format cannot be used, and the maximum number of pixel for a picture is 10912x8640.
The unit supports only the most commonly-used format, and other formats are not supported, as shown below:

Support	Format
Yes	Baseline DCT
No	Extended Sequential DCT
No	Progressive DCT
No	Lossless DPCM Spatial

** Digital zoom cannot be controlled on the screen for selecting the picture.

To set the slide show view of the USB image input, use the image setup menu.
To display the image of the USB image input, use the USB file browser.

●NMPJ and network image input (for still images only)

Network multi projection (NMPJ) is a function that enables the projector to receive computer screen information over a network and project it.
This function can be used by installing the NMPJ program in the computer.

･Obtaining NMPJ

The program is provided for free.
The method to obtain the program varies depending on the country or region, but it is mainly downloaded from the service webpage.

･NMPJ operation

When NMPJ is executed on a computer, the screen information is sent as data consisting of consecutive still images to the projector over a network using Canon's original protocol.
The resolution of the still image data is converted to match the number of pixels of the projector's image device (LCOS) before the data is output.

･Image quality setting of NMPJ

Select whether to prioritize image quality or frame rate.

High	Image quality is prioritized by reducing the frame rate. The image is sent without compression (by maintaining the image quality).
Middle	A standard setting in which a balance between image quality and frame rate is taken into account.
Low	Frame rate is prioritized by reducing the image quality. Use this setting when you want to reduce the network bandwidth being used.

・Modes of NMPJ

Four modes are available. Each mode is different in the number of computers and projectors that can be connected and the functions that can be used.

Mode	PC	PJ
Direct	1	1
Meeting	10	6
Classroom	10	6
Broadcast	1	12

・Version of NMPJ

Because there are different versions, check the NMPJ manual for compatibility issues.

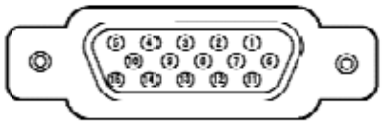
●Precautions when inputting analog PC signals.

If inputting analog PC signals, it is necessary to take the following precautions.

①This product does not support image signals with a dot clock of over 162MHz due to hardware restrictions.

②Normally, image output equipment, such as computers, automatically read the EDID information from the projector, and output image signals that can be displayed by the projector.

③However, depending on the cable that is used, there may be cases where conduction lines for communicating EDID information are not installed in the cable.
The following is the pin layout for a Dsub15 connector.



1	R	9	+5 V power
2	G	10	Ground (Verlical sync.)
3	B	11	Monitor ID0
4	Monitor ID2	12	DDC data
5	Ground (Horizontal sync.)	13	Horizontal sync.
6	Ground (R)	14	Verlical sync.
7	Ground (G)	15	DDC clock
8	Ground (B)		

A cable with conduction lines for Nos. 9, 12, and 15 is necessary.
Unless there are conductions lines for these pins, the image output equipment will not be able to obtain EDID information from the projector, and will output image signals that cannot be displayed by the projector.

④Even if a 5BNC cable is used, EDID information is not communicated, and settings must be specified on the output equipment side so that image signals that can be displayed by this product are output.

●HDCP

This product is an HDCP compliant image device.
The digital image signals for HDCP contents that are encrypted and sent from digital devices connected to the HDMI terminal, DisplayPort terminal and DVI terminal can be displayed.
It can also be displayed in image signals transmitted through HDBaseT.

・The product's HDCP version

The version is 1.4 for HDMI and DVI and 1.3 for DisplayPort.
HDBaseT is supported up to version 1.4.

4-2. Wireless specification

⑴ Main specification

Transmission standards	IEEE 802.11b IEEE 802.11g IEEE 802.11n
Transmission distance	About 25 m When no electric wave interference from the perimeter and when clear viewing to the access point
Wi-Fi certification	Acquired
WPS	Support: Push button method (PBC), PIN code method (PIN)
Encryption	Open WEP WPA-PSK TKIP WPA-PSK AES WPA2-PSK TKIP WPA2-PSK AES
Connection mode	Infrastructure mode PjAP mode

⑵ Connection modes and Functions

Mode	Infrastructure	PjAP
Conection method	WPS (PBC, PIN)/ manual	Manual
Usable	NMPJ User command Control with the browser Mail	NMPJ User command Control with the browser
Not usable	SNMP PJLink / AMX / Crestron RoomView Firmware update	Mail SNMP PJLink/AMX/Crestron RoomView Firmware update

⑶ Auto Search

When wireless communication is already configured, this product operates in the following manner depending on the connection mode.

Mode	Infrastructure	PjAP
Working (*1)	Connected with the last connection destination and earlier destinations (*2)	The product starts operating as an access point according to the set profile (SSID and the like).

*1: (1) When the projector is started with the wireless network function set to “On”.
(2) When the wireless network function is set to “on” in the projector operating.

*2: This document omits the details of the search scope and procedure.

5. Accessories

Main Supplied Accessories	Remote Control RS-RC07	Power supply: DC 3.0V (with two AAA battery) Communication range: approx. 8 m within ±25 degrees of the receiver
	Power code	Connects the unit to a power source.
	Computer cable (only for J destination)	mini Dsub15-mini Dsub15 This is used for connection with computer. This transmits analog PC signals.
Optional Parts	Ceiling Attachment RS-CL15 (*1)	This is used for ceiling mount.
	Ceiling Attachment Arm RS-CL17 (*2)	This is used for ceiling mount.
	Ceiling Pipe 400-600mm RS-CL08	The RS-CL08 is used in combination with the RS-CL15 to suspend the projector at a distance below the ceiling.
	Ceiling Pipe 600-1000mm RS-CL09	The RS-CL09 is used in combination with the RS-CL15 to suspend the projector at a distance below the ceiling.
	Remote Control RS-RC07	Same as the supplied remote.
	Remote Control RS-RC05	Power supply: DC 3.0V (with two AA battery) Communication range: approx. 8 m within ±25 degrees of the receiver Allows for wireline connection (*3)
Replacement Parts	Replacement air filter RS-FL05	This filter is installed at the air intake to prevent dust from entering.

*1: Do not attach a difference model's attachment. The size and the weight of a product are different from other modes. Consult a building professional before attempting to mount the projector to a ceiling.

*2: RS-CL15 and RS-CL17 are used together to mount this projector on a ceiling.

*3: Uses a commercially available audio cable (3.5Φ stereo mini-plug) for cable connection.

6. Precautions For Use

●Do not look into the projection lens while it is projecting.

The projector emits very bright light, which may damage your vision.

●Do not place objects in front of the lens while projecting.

Objects may heat up and burn if exposed to the concentrated light of the projector for long periods.

●Do not block the vent (intake air & exhaust) while the projector is running.

Allowing heat to build up inside the unit may lead to malfunctions or risk of fire.

●In highlands(*1) with low atmospheric pressure, use with the following setting(*2)

To prevent internal overheat, set the High-Altitude function “On”.

*1: 2300m or more above sea level

●When inputting an analog PC signal, it is recommended to use a cable that is capable of communicating EDID information.

If EDID information is not acquired by the output equipment, image signals that are not supported by this product may be output from the output equipment.
If this occurs, replace the cable with one that is capable of communicating EDID information, or change the settings on the output equipment so that the output image signal is one where the dot clock is 162MHz or less, which is supported by this product.

●About images and audio when NMPJ is used

Depending on the performance of the PC or network, the following phenomena may occur, but they do not signify a projector malfunction.

- The image is not played back smoothly.
- Irregular misalignment occurs between the image and audio.

●In addition to the precautions to be taken during normal usage, be careful not to accidentally expose yourself directly to the laser beam.

This product has safety measures to keep the laser from oscillating during component replacement and other such tasks, but when handling the product, follow the service manual, and avoid direct exposure to the laser beam. (*2)

*2: The following table shows the Japanese standard that the product complies with and the international standard that the Japanese standard is based on.

Japan	JIS C6802:2014	Safety of laser products	Class 1 laser product
Europe	EN60825-1:2014	Safety of laser products	Class 1 laser product
international	IEC60825-1:2007	Safety of laser products	Class 3R laser product