LCOS Projector WUX5800/WUX6700/WUX7500

1. Main Features

< Product lineup >

- WUX 5800: WUXGA resolution , 5800 lm , lamp light source
- WUX 6700: WUXGA resolution , 6700 lm , lamp light source
- WUX 7500: WUXGA resolution , 7500 lm , lamp light source

< Common specifications to all three models >

- ●Integration of AISYS illumination optical processor, Chalcedony 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 27 dB
- ●sRGB coverage 90% or higher
- ●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	Super high pressure lamp for projectors
Power consumption	WUX5800: 343/300/262 W WUX6700: 386/300/262 W WUX7500: 430/300/262 W ** Changed with the lamp mode setting Full power / power saver 1 / power saver 2
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 WUX5800: 5800/5200/4500 lm WUX6700: 6700/5200/4500 lm WUX7500: 7500/5200/4500 lm ** Changed with the lamp mode setting Full power / power saver 1 / power saver 2 The luminance values for modes other than Full power 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	Not disclosed
Lamp control “On”	2000:1 (The lamp light is decreased at all black display.)
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 Extension length: 14.6 mm Maximum angle of inclination: ±1.8°
Dimensions	W: 480 mm, H: 196 mm, D: 515 mm
Weight	Approx. 13 kg
Noise level	WUX5800: 35/29/27 dB WUX6700: 37/29/27 dB WUX7500: 40/29/27 dB ** Changed with the lamp mode setting Full power / power saver 1 / power saver 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	WUX5800: 455/385/350 W WUX6700: 495/390/355 W WUX7500: 555/390/355 W ** Changed with the lamp mode setting Full power / power saver 1 / power saver 2
Standby power	1.6～0.28 W ** Changed with the network and other settings
Operation environment	0℃ － 40℃ , 20%RH - 85%RH
Storage environment	-20℃ － 60℃

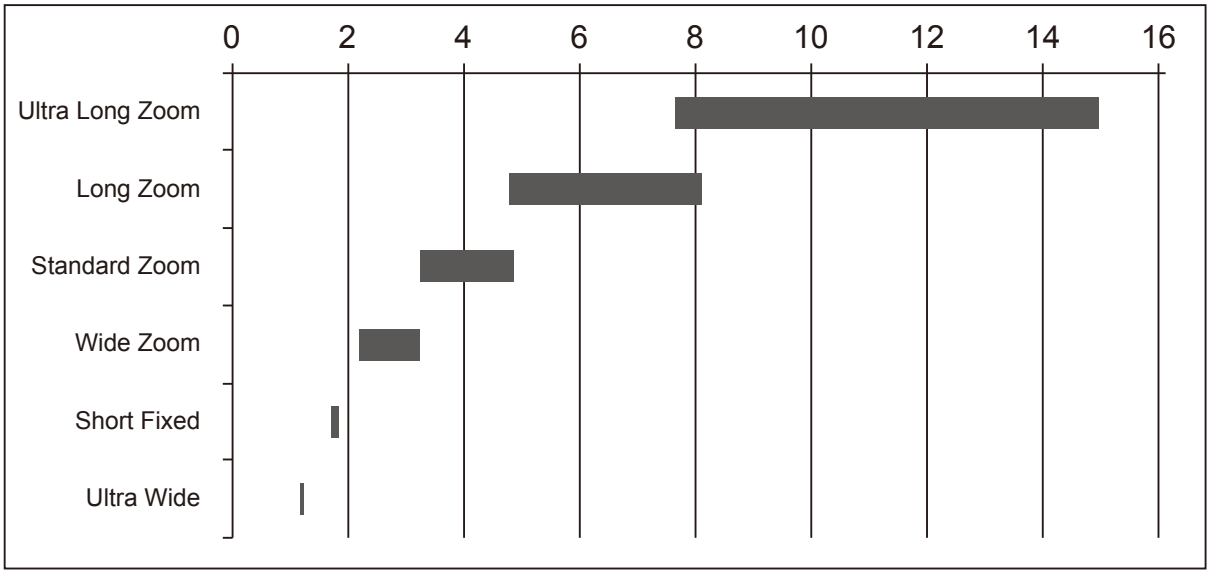
2-2. Installation Specifications

(1) Projection specifications

These products can handle different projection conditions by changing the projection lens.
The projection specifications for using the different projection lenses are detailed in a separate document.
This document will only provide an outline.

The following figure shows the projection distances when the projection lens is changed.

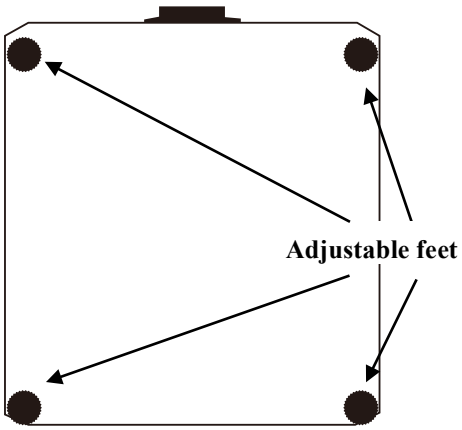
** For the product names of the projection lenses, refer to the name assignment notification.
** Use this information with caution because the release period may vary depending on the projection lens



The unit of the horizontal axis is meter. The projection lens projects 100-inch images in the indicated range. Optical zoom is possible with the top four lenses. The bottom two lenses have a fixed focal length, without optical zoom.

Projection lens	Image [inches]	Projection distance［m］
Ultra Long Zoom	60－600	4.6－89.0
Long Zoom	40－600	1.9－48.5
Standard Zoom	40－600	1.3－29.0
Wide Zoom	40－600	0.9－19.5
Short Fixed	40－300	0.69－5.17
Ultra Wide	40－300	0.45－3.51

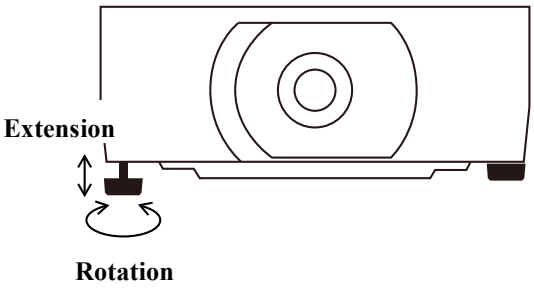
(2) Adjustable feet



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.

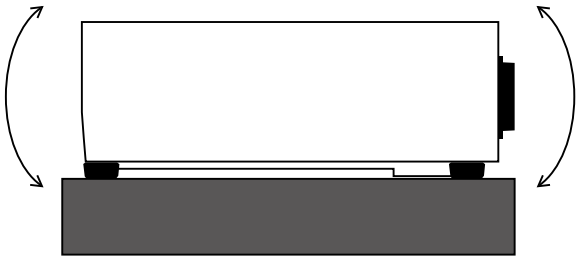
The adjustable feet are detachable, and the screw holes for them are also used to install suspension fittings.



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.

(3) Lens shift system

This product has a lens shift system that can move the image position vertically and horizontally.
It is electrically driven through buttons on the projector or remote.
The lens shift range is as follows:

●Lens shift mode: Normal

Projection lens	Direction	Amount of lens shift	Lens shift ratio
Ultra Long Zoom Long Zoom Standard Zoom Wide Zoom	Vertical Horizontal	55% / -15% 10% / -10%	10.5:-0.5 / 3.5:6.5 4:6 / 6:4
Short Fixed	Vertical Horizontal	11.3% / -11.3% 4.6% / -4.6%	6.13:3.87 / 3.87:6.13 4.54:5.46 / 5.46:4.54
Ultra Wide	Vertical Horizontal	75% / -15% 30% / -30%	1.25:-2.5 / 3.5:6.5 8:2 / 2:8

Moving to the maximum positions in both vertical and horizontal directions will cause the guaranteed optical performance range to be exceeded.
This product is a system that only allows the lens to be shifted within the guaranteed optical performance range.
The range of movement (guaranteed optical performance range) is illustrated later in a figure.

●Lens shift mode: Expanded

Projection lens	Direction	Amount of lens shift	Lens shift ratio
Ultra Long Zoom Long Zoom Standard Zoom Wide Zoom Short Fixed Ultra Wide	Vertical Horizontal	90% / -90% 30% / -30%	14:-4 / -4:14 8:2 / 2:8

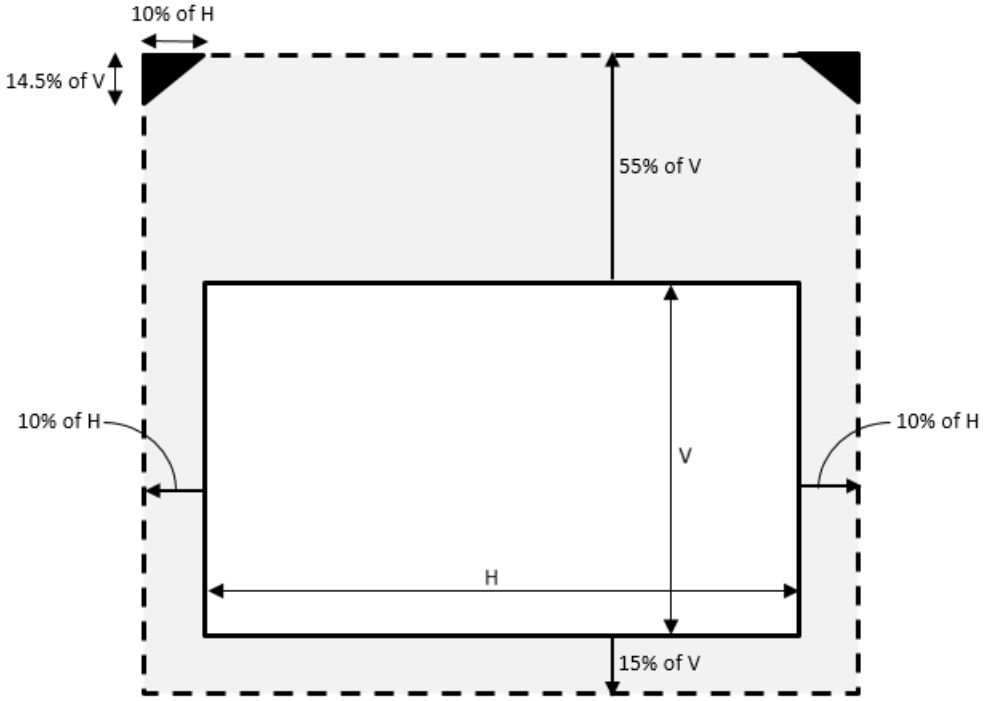
With this setting, the lens can be shifted to the maximum positions vertically and horizontally, ignoring the guaranteed optical performance range.

** Amount of lens shift is an approximate calculated value.

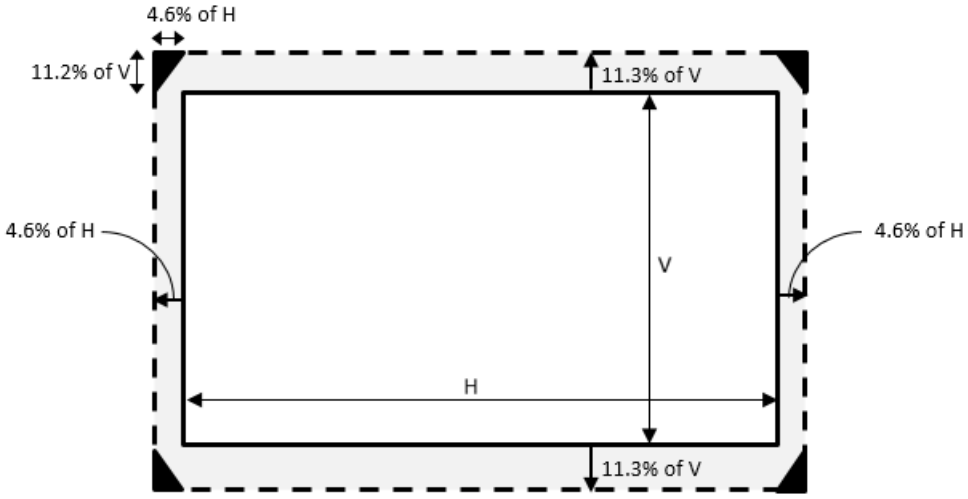
●Area in which the image can be moved (Lens shift mode: Normal)）

The following figure shows the area in which the image can be moved (guaranteed optical performance range) of this product.
The light gray area excluding the four corners is the guaranteed optical performance range.

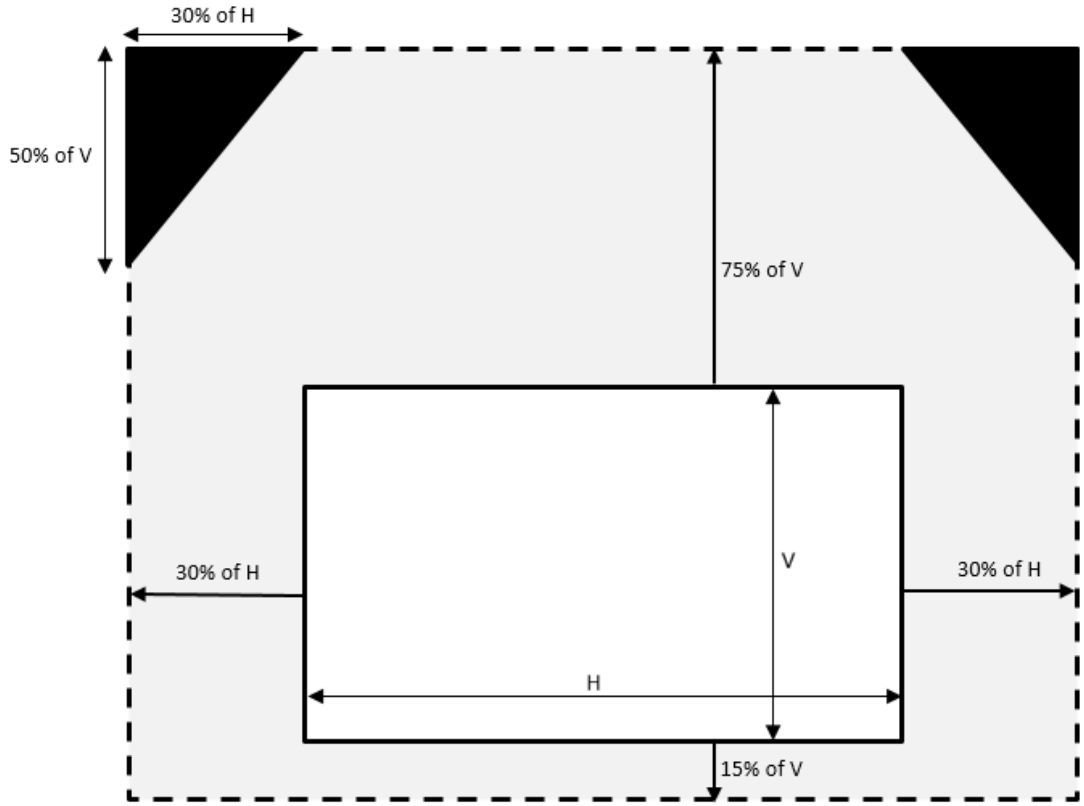
○RS-SL01ST（Standard Zoom Lens）、RS-SL02LZ（Long Zoom Lens）、RS-SL04UL（Ultra Long Zoom Lens）、RS-SL05WZ（Wide Zoom）



○RS-SL03WF（Short Fixed Lens）



○**RS-SL06W（Ultra Wide Lens）**



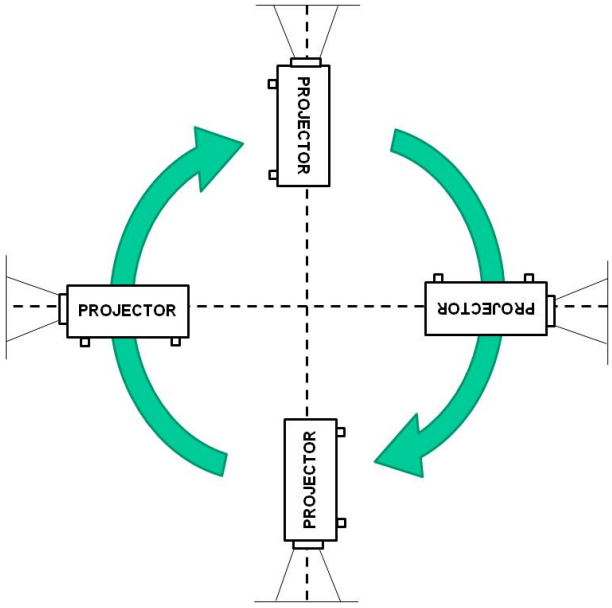
●Notes (Lens shift mode: Expanded)

Moving the image outside the guaranteed optical performance range may cause shade to appear in the corner area of the image.
We recommend that you do not use the product in this manner but rather adjust the installation position so that the image is within the guaranteed range.

2-5. Installation direction

●360°projection

This product is free to install at any of the 360 degrees in the direction of rotation shown in the figure.
In other words, the product supports projection right above or below for digital signage.



○ Installation orientation that is not allowed

The product cannot be installed with the side panel facing down as shown in figure A.

Fig. A Not allowed

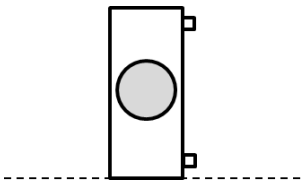
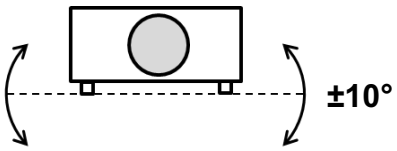


Fig. B Allowed



Products that use discharge lamps for their light source have limitations in how they can be installed. This is because discharge lamps by their nature have certain orientations that they cannot be used in. Using this product in the orientation shown in figure A can cause the lamp to malfunction.

The product must be used within the range shown in figure B.

2-6. Image signal

(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.

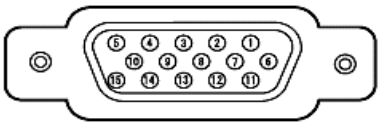
●Precautions when inputting analog PC signals.

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 (Vertical sync.)
3	B	11	Monitor ID0
4	Monitor ID2	12	DDC data
5	Ground (Horizontal sync.)	13	Horizontal sync.
6	Ground (R)	14	Vertical 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.

（2） Internal functions

●HDCP

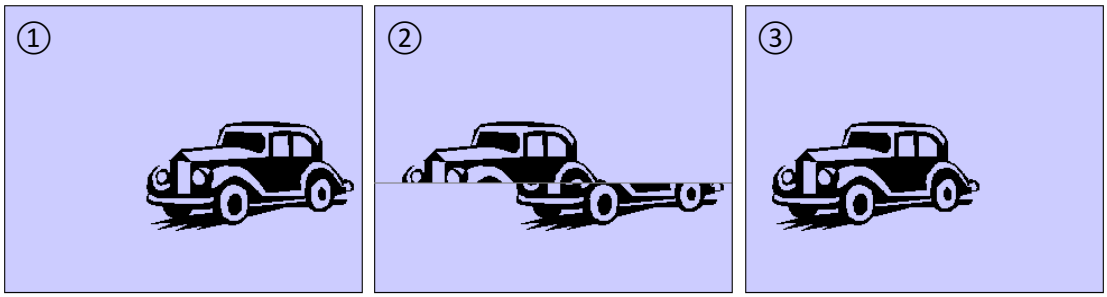
This product is an HDCP compliant image device.
The digital image signals for HDCP contents that are encrypted and sent from digital devices connected to the HDMI terminal, DisplayPort terminal and DVI terminal can be displayed.
It can also be displayed in image signals transmitted through HDBaseT.

・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.

● Frame lock function

Depending on the input signal's frequency, commonly-used display devices may not be able to synchronize the input signal's frame with LCD's frame, thereby showing a mixture of successive 2 frames.
The following illustrates how this mixture of frames (image shift) occurs. Numbers ① to ③ indicates the order in which these images appeared.



In this example, a composite image ② appeared when an object moved from right to left, which is a combination of the frames before and after the movement.
This function synchronizes the LCD's frame with that of input signal to prevent this kind of frame mixture, and it is effective for input signals of 23 to 31 Hz and 47 to 62 Hz.
For frequencies other than these ranges, a different process takes effect in place of Frame Lock (synchronization) to ensure that a single frame appears in the entire LCD. Therefore, composite image like ② would not appear even in those cases.

2-7. States of this product

（1）States

The product states can be categorized as follows:

State (*1)	Outline
No Power	No power is being supplied from outside. The projector does not operate at all.
Off (Standby)	Power is being supplied from outside. However, the circuit is only partially live and the projector itself is not active. Depending on the Network function setting, this status can be categorized into 3 modes.
Projection (On)	A status where the projector is used normally. Power is being supplied to the entire circuit. The lamp is lit, and image is projected.
Lamp Off	Power is supplied to the entire circuit except panel circuit. The lamp is unlit and the cooling fan is operating. Some action changes the projector to the projection state. However, the lamp on time is the same as actual activation.
Error	Power is being from outside but the projector cannot be activated. To use the projector, action should be taken according to the contents of the error type.
Pre-warning High temperature	If the temperature becomes almost abnormal, the projector displays the warning of high temperature. .This state is cleared when the temperature goes down.
Pre-warning Lamp replacement	If the lamp replacement conditions are almost satisfied, the projector displays the warning of the lamp replacement. This state is cleared when the lamp counter for replacement is reset.

（2）Type of Error

Each error state is defined as below.

Error name	Outline
Temperature abnormality	・The internal temperature is abnormally high. ・The outside air temperature is higher than specified. ・Malfunction of thermal sensor
Faulty lamp	・The lamp is out of life. ・The lamp drive circuit is faulty.
Faulty lamp cover	・The lamp cover is not closed.
Faulty air filter unit	・No air filter is attached.
Faulty cooling fan	・The cooling fan does not operate normally.
Faulty power supply	・The supply voltage is abnormal. ・Other abnormal is occurred.
Faulty lens	・The lens unit is not connected correctly.

** Each error state may be caused by a fault other than the above.

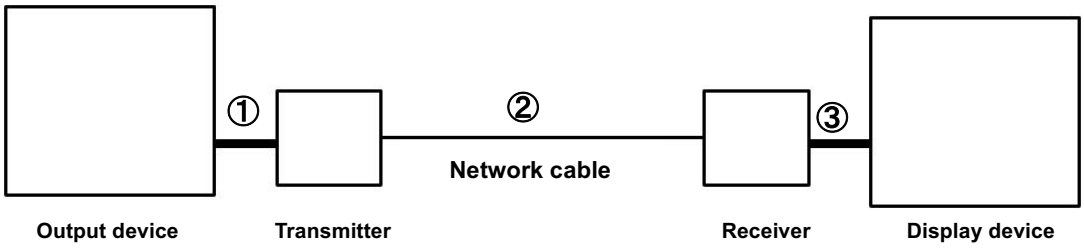
2-8. HDBaseT specificqation

This product's HDBaseT supports transmission of image signals and network data.
In addition, as a general standard of HDBaseT, these can be transmitted simultaneously.
Many of the transmitters sold in the market are equipped with HDMI input terminals and network input terminals.

（1）Outline

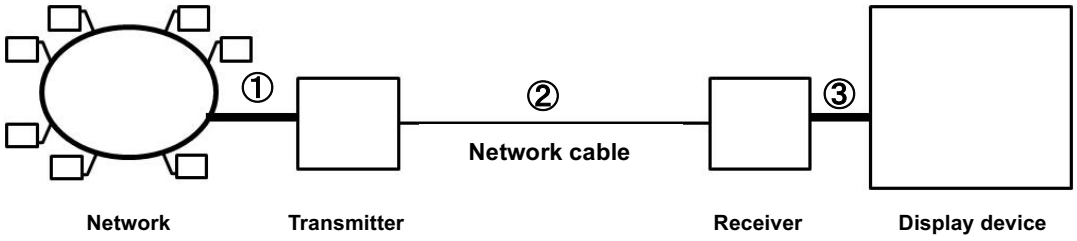
An HDBaseT connection is typically achieved in the following form.

●Image signals (When connection ① uses an HDMI cable)



(1) Image signal is applied from an output device to a transmitter.
(2) The transmitter converts the image signal into HDBaseT and outputs it.
(3) A receiver receives the HDBaseT signal, converts it into HDMI, and outputs it.
(4) A display device displays the HDMI signal.

●Network communication (When connection ① uses a network cable)



(1) Network data is applied from the network (*1) to a transmitter.
(2) The transmitter converts the network data into HDBaseT and outputs it.
(3) A receiver receives the HDBaseT signal, converts it into network data, and outputs it.
(4) Likewise, network data from the display device is transmitted to the output device through an opposite path.

*1: Use in a secure network environment.

One of the features of this product is the built-in receiver. Therefore, there is no need to have a separate receiver.

●Compatibility with transmitters

If the compatibility between this product and the HDBaseT transmitter is not sufficiently ensured, use the product with the standby power set to "Normal".

(2) Cables and Transmission Distance

HDBaseT connections may be subject to transmission distance limitations depending on the type of network cables and transmitters used.
Below is an actual example of what happened when a certain transmitter was used.

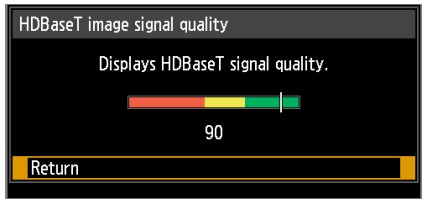
Band width (example of signal)	1.65Gbps or more (1080p/60 @12bit)		Under 1.65Gbps (1080p/60@8bit,1080p/24@12bit)	
Cable type	CAT5e	CAT6／CAT7	Cable type	CAT5e
Transmitting distance	70m	100m	Transmitting distance	70m

As shown here, adequate transmission distance for handling signals with large amount of data may not be attainable depending on the combination of the equipment and cable used. We recommend that shielded cables be used.

(3) Image Signal Quality

Because of the structural nature of the network cable, an HDBaseT signal is transmitted in parallel over four physically separated transmission lines.
Each transmission line has a stability index value [dB]. This product detects the four values and calculates the total.
Based on this value, the product judges the quality as follows.

Index	Display (color)	Judgment
100-60	Green	Use recommended
59-40	Yellow	Use not recommended
39-0	Red	Not usable



(4) Network via HDBaseT

There is essentially no difference in the communication quality as compared to a normal network.
NMPJ can be used in the same manner.

(5) Settings and stand-by power consumption

The standby power varies depending on the settings of serial communication, standby power setting and network settings as follows:

Wired network	Standby power setting	Serial communication	Standby power
On	Normal	Service port	(Not disclosed)
		HDBaseT	(Not disclosed)
	Low power	Service port	1.6 W
		HDBaseT	1.6 W
Off	-	Service port	0.28 W
		HDBaseT	1.5 W

** When wireless network is set to “On”, the standby power is set to “Normal”.

2-9. Wireless specification

(1) 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

(2) 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

(3) 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.

3. 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	Lamp Assembly RS—LP12	Super High Pressure Lamp for projectors Recommended lamp replacement time (*4)
	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.

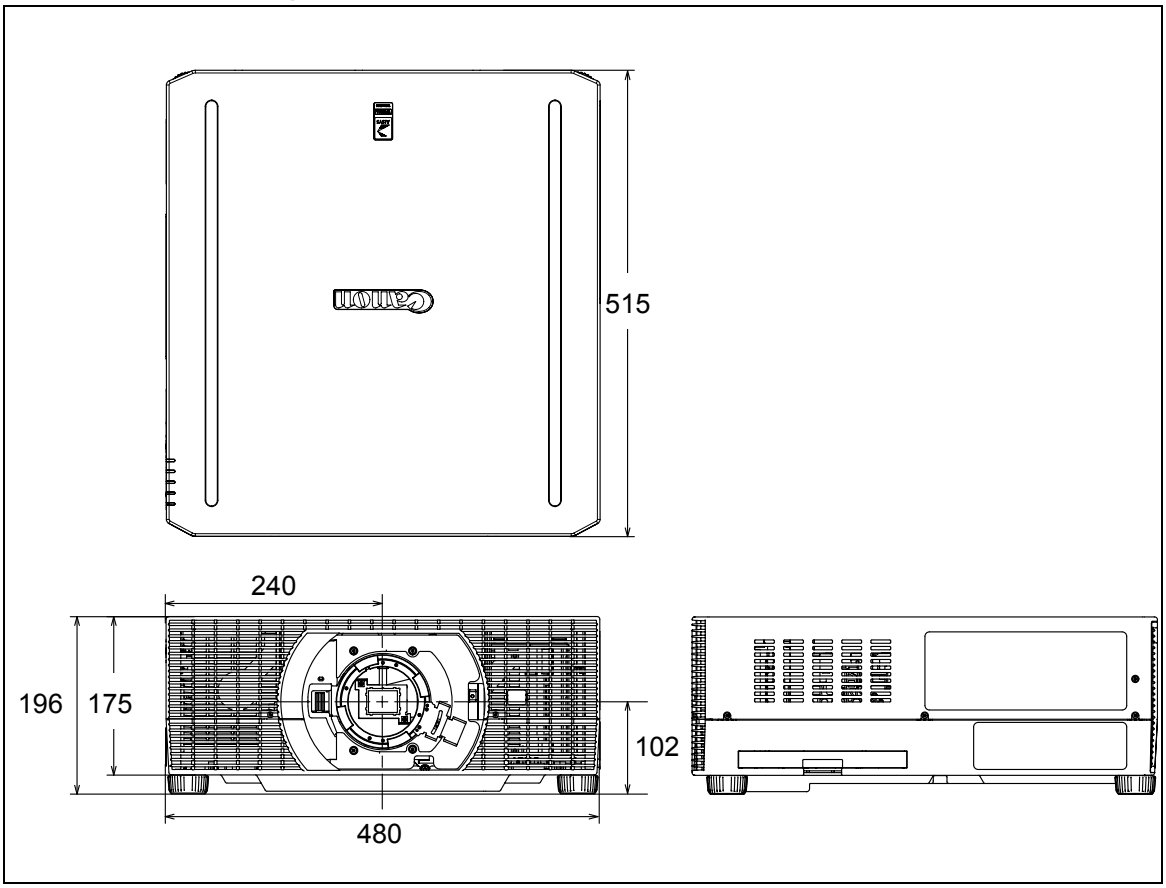
*3: Uses a commercially available audio cable (3.5Φ stereo mini-plug) for cable connection.

Projection lens	Ultra Long Zoom Lens RS-SL04UL	Focal length 53.6 – 105.6 mm Zoom ratio 1.95x Distance for 100 type 7.64 – 14.94 m
	Long Zoom Lens RS-SL02LZ	Focal length 34.0 – 57.7 mm Zoom ratio 1.7x Distance for 100 type 4.72 – 8.05 m
	Standard Zoom Lens RS-SL01ST	Focal length 23.0 – 34.5 mm Zoom ratio 1.5x Distance for 100 type 3.21 – 4.82 m
	Wide Zoom Lens RS-SL05WZ	Focal length 15.56 – 23.34 mm Zoom ratio 1.5x Distance for 100 type 2.15 – 3.23 m
	Short Fixed Lens RS-SL03WF	Focal length 12.8 mm Zoom ratio No optical zoom Distance for 100 type 1.73 m
	Ultra Wide Lens RS-SL06WZ	Focal length 8.39 mm Zoom ratio No optical zoom Distance for 100 type 1.16 m

** For the product names of the projection lenses, refer to the name assignment notification.
** Use this information with caution because the release period may vary depending on the projection lens.

4. Product Appearance

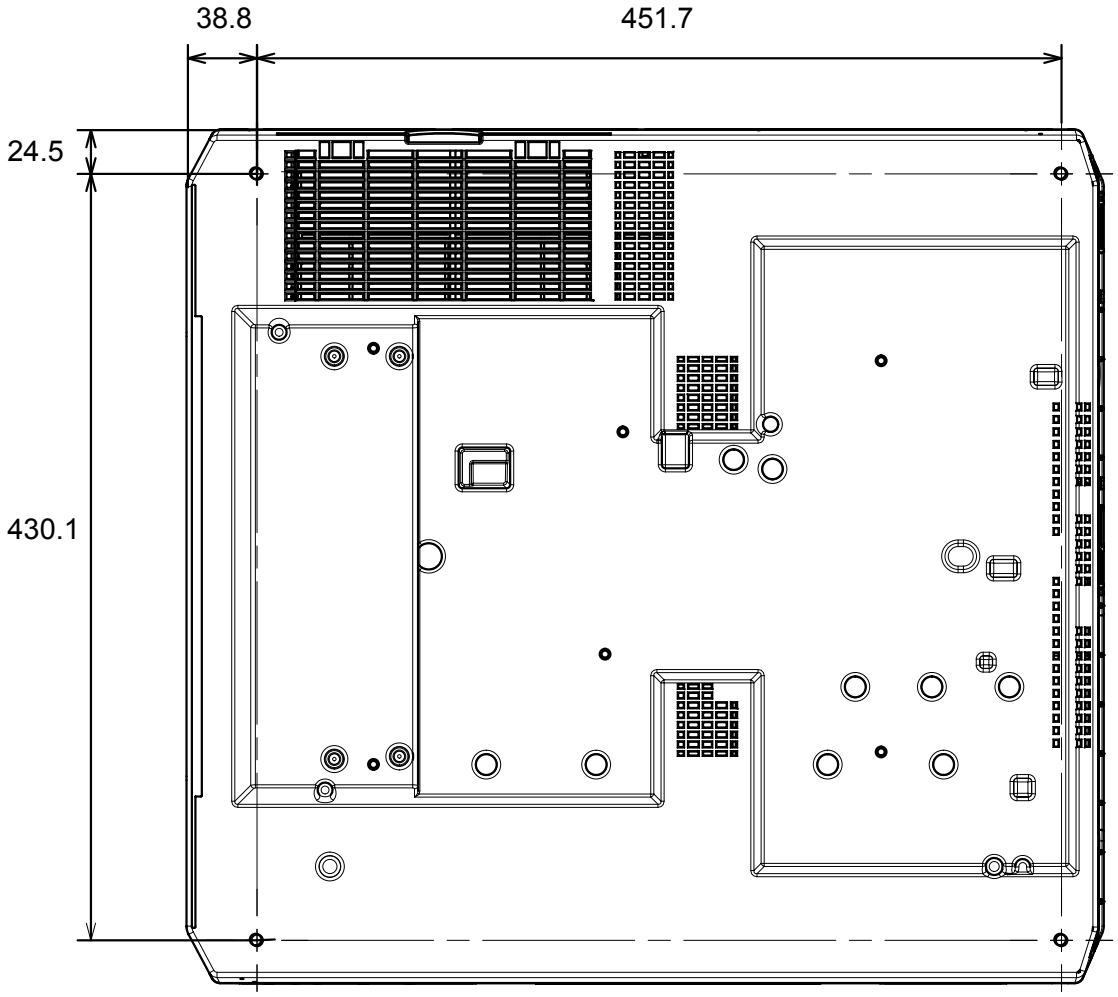
4-1. Outline Drawings



Dimensions	W: 480 mm, H: 196 mm, D: 515 mm (18.9 x 7.7 x 20.3 inch)
Lens center	240 mm from the left side (*1) 102 mm from the installed surface
Weight	Approx. 13 kg (28.6 lbs)

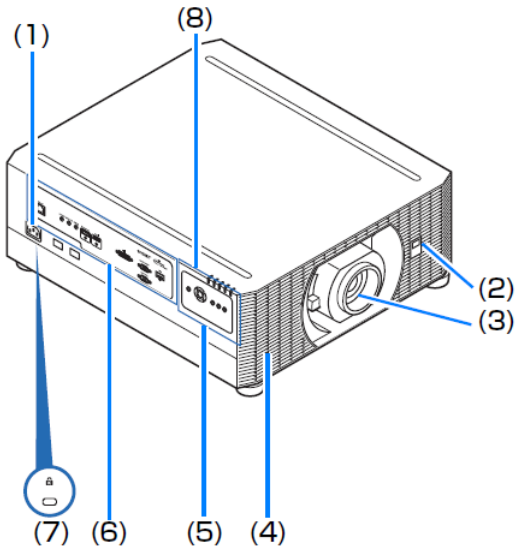
*1: The panel that a lens is mounted on is considered the front panel.
(The figure above shows the top, front, and left views.)

●**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.

4-2. Part Names



①Power cord connector

②Infrared remote receiver

③Lens unit

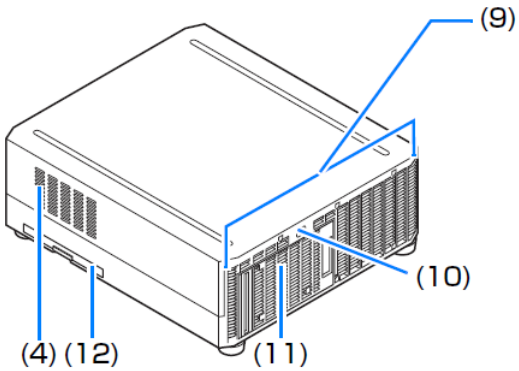
④Air filter frame

⑤Side control

⑥Terminals and connectors

⑦Anti-theft lock hole

⑧LED indicator

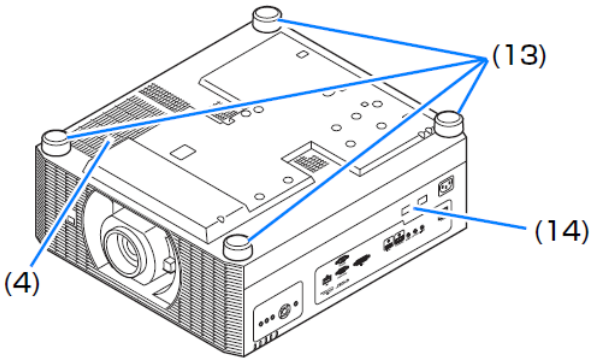


⑨Exhaust vent

⑩Infrared remote receive

⑪Lamp cover

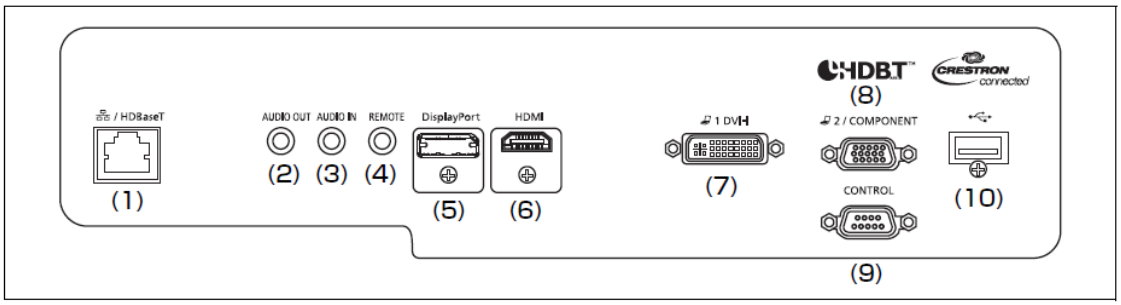
⑫Air filter frame



⑬Adjustable feet

⑭Security bar

4-3. 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

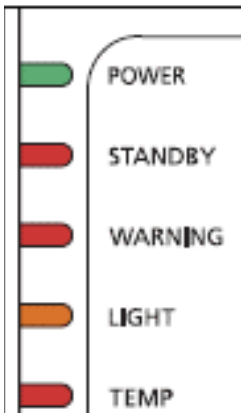
●Wireline connection for the remote

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.

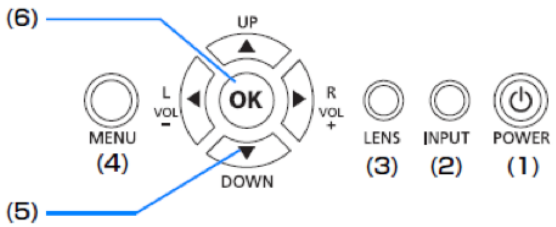
4-4. Indicators and Control buttons

Illuminate to indicate the projector state.

	POWER ON (Green)	Lit	Projection state
		Blinking	Initializing (Off → On), lamp-off state
		Off	Other than above
	STAND BY (Red)	Lit	Off state
		Blinking	Shutting down (Off → Off) , lamp-off state
		Off	Other than above
	WARNING (Red)	Lit	Error state
		Blinking	Error state
		Off	No error state
	LIGHT (Orange)	Lit	Light source error (*1)
		Blinking	(Not available)
		Off	Other than above
	TEMP (Red)	Lit	Temperature error (*1)
		Blinking	When a temperature error condition is imminent
		Off	Other than above

By the combination of indicator states, various other states are indicated.
For details, refer to the user's manual.
*1: [Warning] lights together.

Control the projector by button operation.



①	POWER	Turns the power supply on or off.
②	INPUT	Displays a select screen of input signal for projection.
③	LENS	Changes the display to the focus, zoom, or lens shift adjustment screen each time the button is pressed.
④	MENU	Displays a menu screen.
⑤	Direction / VOL	Adjust the volume. (Right and left only) Move the pointer vertically or horizontally on a menu screen or other
⑥	OK	Confirms a state selected on a menu screen or other.

4-5. Remote Control

The supplied remote RS-RC05can be used either through wired or wireless (infrared signal) connection.

●Same operations as the unit operations

[POWER]	Power (On/Off)
[INPUT]	Changing of input signal
[MENU]	Menu
[←] [→] [↑] [↓]	Direction (Moving)
[VOL (+ -)]	Volume adjustment
[OK]	OK

●Operations available only on the remote

[D.ZOOM]	Digital zoom
[1]～[9]	Input numbers
[MUTE]	Mute
[Fn]	The split screen function can be assigned.
[FOCUS]	Focus/Marginal focus
[ZOOM]	Zoom adjustment
[LENS SHIFT]	Lens shift adjustment
[EXIT]	Clears a temporary condition Closes menu screen
[INPUT (A,B,C)]	Specific input signals can be assigned.
[KEYSTONE]	H-V keystone Corner adjustment
[Ch]	Channel setting of remote
[FREEZE]	Freeze
[BLANK]	Blank

●Operations also available from the menu screen on the unit

[ASPECT]	Aspect selection
[TEST PATTERN]	Test pattern
[SPLIT]	Split screen
[AUTO PC]	Auto PC execution
[IMAGE]	Image mode selection

Channel settings on the remote

Ch1	Press and hold [Ch] and [1] buttons for 3 seconds at the same time
Ch2	Press and hold [Ch] and [2] buttons for 3 seconds at the same time
Ch3	Press and hold [Ch] and [3] buttons for 3 seconds at the same time
Ch4	Press and hold [Ch] and [4] buttons for 3 seconds at the same time
Independent	Press and hold [Ch] and [0] buttons for 3 seconds at the same time

A remote set to “Independent ” can control any projector ignoring the projectors’ channel settings.

5. 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.

●Replace the lamp as soon as possible if the lamp burns out or if the replacement time is reached.

The projector uses a high-pressure mercury lamp as its light source. This lamp degrades over time and becomes dimmer as it is used. Furthermore, the possibility of the lamp bursting as it is used is extremely high.
If the lamp should burst, return the projector to your local service center to have the lamp replaced and the unit inspected.

** There is a less than half probability of the lamp bursting before the lamp replacement time is reached. Normally it is most likely that the lamp will not burst before the replacement time. Even if the lamp does burst, the number of hours the lamp can be used before that happens varies depending on each lamp. Although extremely minute flaws that may occur during production have been suspected as the cause of the individual differences in the hours of use before a lamp bursts, there is no way to predict this period with accuracy.

●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.