

# LCOS Projector WUX500

## 1. Main Features

### 1-1 Features newly developed image engine, with renewed image processing algorithm

The WUX500 is a follow-up model to the WUX450 series. It is a compact installation model featuring high resolution, high luminance, and high contrast.

Its size makes it easy to carry, and it will be able to output the maximum luminance among the WUXGA models equipped with an integrated projection lens.

### 1-2 Leading the industry with the highest level image quality

The high-performance AISYS optical system and image processor are inherited from the WUX450.

Superb optical technology and image processing technology provide high-quality image projections.

Moreover, the firmware has been modified to expand the way in which some of the functions can be used, such as enabling corner adjustment during edge blending.

### 1-3 Highly durable optical system

As one of the methods to achieve durability, the WUX500 uses durable optical parts proven in the WUX6000.

Starting from the reliable, new LCOS panel, the WUX500 employs a polarization conversion element whose waveplate is made of inorganic material and an optical construction that does not include plastic polarizing plate to provide high luminance and long-term reliability.

### 1-4 1.8x F2.8 projection lens & lens shift function

The incorporation of a high-magnification 1.8x zoom projection lens and a lens shift mechanism gives greater freedom in the installation position.

In addition, since the projection lens is designed so that the f-number is constant at 2.8 over the entire zoom region, there is little fluctuation in the image brightness even if the zoom position is changed. This is a key point in differentiating this product from the products of competitors.

### 1-5 HDBaseT input

The WUX500 will feature the first HDBaseT reception function. HDBaseT is a standard for transmitting image, audio, and control signals over long distances. Cabling can span up to 100 meters (\*1), which greatly improves convenience in system configuration.

\*1: HDBaseT uses CAT5e or better STP cables as specified by the Telecommunications Industry Association (TIA) of U.S.

The length includes patch cables and connectors. However, depending on the cable type and installation conditions, it may not be possible to achieve the performance at the required distance.

### 1-6 Wi-Fi function

In addition to wired LAN, a Wi-Fi function has been added to support wireless LAN connection.

This makes it possible to input image and audio signals wirelessly from a PC.

(The NMPJ function must be used to transfer data regardless of whether the connection is wired or wireless.)

### 1-7 Advanced USB presentation function

The USB presentation function, which projects images without a PC connection, has been improved.

The projector operability has been expanded with thumbnail-display, animation-display, and multi-lingual capabilities.

### 1-8 PC-free multi projection

Edge blending, which is used to project large images from multiple projectors, is possible without a PC.

When data is input from a USB device to a single projector, the data is projected as a single picture from multiple projectors (up to nine projectors).

## 2. Specifications

### 2-1. Basic specifications

Model	WUX500	
Type	Product type	Projector
	Imaging device, number	Reflective LCD panel (LCOS) ×3
LCOS panel	Number of pixels	1920×1200 (WUXGA)
	Size type, Aspect ratio	0.71type, 16:10
	Driving system	Active Matrix
Projection lens	Lens configuration	11 groups 13elements
	F number, Focal length	F2.8, 21.7 - 39.0 mm / 0.85in - 1.54in
	Zoom magnification	1.8 times
	Projection distance	1.2 - 16.2 m / 3.9 - 53.1 ft
	Distance for 100 type	3.0 - 5.4 m / 9.8 - 17.7 ft
	Throw ratio (*1)	1.39 - 2.51
	Operation	Zoom: manual, Focus: manual, Lens shift: manual
Light source	Type	250-NSHA
	Power (*2)	260/200 W
Images	Optical system	Dichroic mirror and PBS color separation-combination system
	Brightness (*2)	5000/3800 lm
	Marginal lumination ratio	90%
	Contrast ratio (*3)	2000:1
	Image size (16:10)	40 - 300 type
	Lens shift	V: 0% - 60%, H: ±10% (manual)
	Electronic zoom (for length)	12x maximum
Keystone correction	V ±20°, H ±20°	
Image signals	Analog PC input (*4)	WUXGA/UXGA/WSXGA+/SXGA+/WXGA+/FWXGA/WXGA/SXGA/XGA/SVGA/VGA
	Digital PC input (*4)	WUXGA/UXGA/WSXGA+/SXGA+/WXGA+/FWXGA/WXGA/SXGA/XGA/SVGA/VGA
	Digital video input	1080p/1080i/720p/576p/480p
	Component video input	1080p/1080i/720p/576p/576i/480p/480i
	HDbaseT input	Equivalent to the input signals of digital PC input and digital video input
	USB data transfer	JPEG still image
Network communication	NMPJ screen transfer (CANON original protocol)	
Terminals	DVI-I	Analog PC/Digital PC input
	HDMI	Digital PC/Digital video input (supporting Deep color)
	RJ-45 (HDBaseT)	HDbaseT input (Image, audio and control signal)
	Mini Dsub15	Analog PC / Component video input
	Mini jack x3	Audio input x2, Audio output x1
	Mini jack x1	Wired remote control connection
	Dsub9	RS-232C connection
	USB Type A	USB connection
RJ-45	Network connection (1000BASE-T / 100BASE-TX / 10BASE-T)	
Mechanisms	Adjustable feet	Bottom front : 2 places (Maximum elevation 6°)
	Built-in speaker	5 W , Monaural
	Dimensions [mm]	W: 337, H: 118, D: 362 (not including protrusion) W: 337, H: 136, D: 370 (including protrusion)
	Dimensions [inch]	W: 13.3, H: 4.6, D: 14.3 (not including protrusion) W: 13.3, H: 5.4, D: 14.6 (including protrusion)
	Mass	5.9 kg / 13.0 lb
Noise level (*2)	37/30 dB	
Others	Power supply	AC100 - 240 V : 50/60 Hz
	Power consumption (*2)	365/295 W
	Stand-by power consumption (*4)	1.3 / 0.6 / 0.2 W
	Operation environment	0°C ~ 40°C , 20%RH ~ 85%RH
	Storage environment	-10°C ~ 60°C

\*1: Calculated value for 100" image

\*2: Lamp mode is Full power/Power saver.

\*3: Brightness in Power saver mode is only a calculated value, and is not guaranteed as specification

\*4: HDBaseT only "ON" / Network only "ON" (Low-power) / HDBaseT "OFF" and Network "OFF"

## 2-2. Image Size and Projection distance

This product is suited to project pictures in size of 40 to 300 inches.  
 Projection distance to the corresponding picture size is as follows.  
 Note that zoom and focus operations on this product is manual.

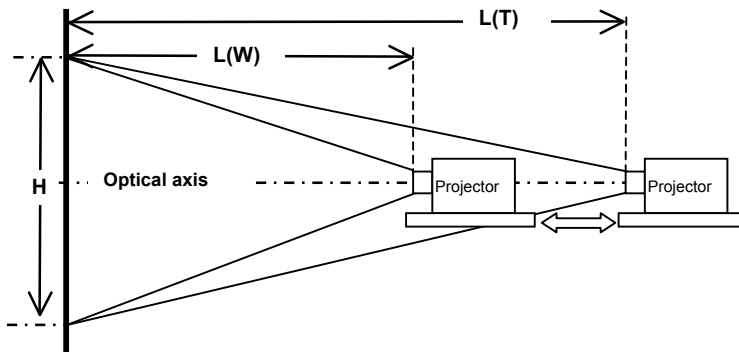


Image of height  $H$  is projected in the range from the shortest distance  $L(W)$  to the longest distance  $L(T)$ .

(W) means the wide end and (T) means the tele end.

This product allows the lens shift ratio to be varied.

The left figure shows an example of 1:1 and image is divided with the optical axis at the center.

### WUX500

Diag. [inch]	Image size (16:10)		Distance	
	Width [m/inch]	Height [m/inch]	L (W) [m/feet]	L (T) [m/feet]
40	0.86/33.86	0.54/21.26	1.2/3.94	2.2/7.22
50	1.08/42.52	0.67/26.38	1.5/4.92	2.7/8.86
60	1.29/50.79	0.81/31.89	1.8/5.91	3.2/10.5
70	1.51/59.45	0.94/37.01	2.1/6.89	3.8/12.47
80	1.72/67.72	1.08/42.52	2.4/7.87	4.3/14.11
90	1.94/76.38	1.21/47.64	2.7/8.86	4.9/16.08
100	2.15/84.65	1.35/53.15	3.0/9.84	5.4/17.72
110	2.37/93.31	1.48/58.27	3.3/10.83	5.9/19.36
120	2.58/101.57	1.62/63.78	3.6/11.81	6.5/21.33
130	2.80/110.24	1.75/68.9	3.9/12.8	7.0/22.97
140	3.02/118.90	1.88/74.02	4.2/13.78	7.6/24.93
150	3.23/127.17	2.02/79.53	4.5/14.76	8.1/26.57
160	3.45/135.83	2.15/84.65	4.8/15.75	8.6/28.22
170	3.66/144.09	2.29/90.16	5.1/16.73	9.2/30.18
180	3.88/152.76	2.42/95.28	5.4/17.72	9.7/31.82
190	4.09/161.02	2.56/100.79	5.7/18.7	10.3/33.79
200	4.31/169.69	2.69/105.91	6.0/19.69	10.8/35.43
210	4.52/177.95	2.83/111.42	6.3/20.67	11.3/37.07
220	4.74/186.61	2.96/116.54	6.6/21.65	11.9/39.04
230	4.95/194.88	3.10/122.05	6.9/22.64	12.4/40.68
240	5.17/203.54	3.23/127.17	7.2/23.62	13.0/42.65
250	5.38/211.81	3.37/132.68	7.5/24.61	13.5/44.29
260	5.60/220.47	3.50/137.8	7.8/25.69	14.0/45.93
270	5.82/229.13	3.63/142.91	8.1/26.57	14.6/47.9
280	6.03/237.4	3.77/148.43	8.4/27.56	15.1/49.54
290	6.25/246.06	3.90/153.54	8.7/28.54	15.7/51.51
300	6.46/254.33	4.04/159.06	9.0/29.53	16.2/53.15

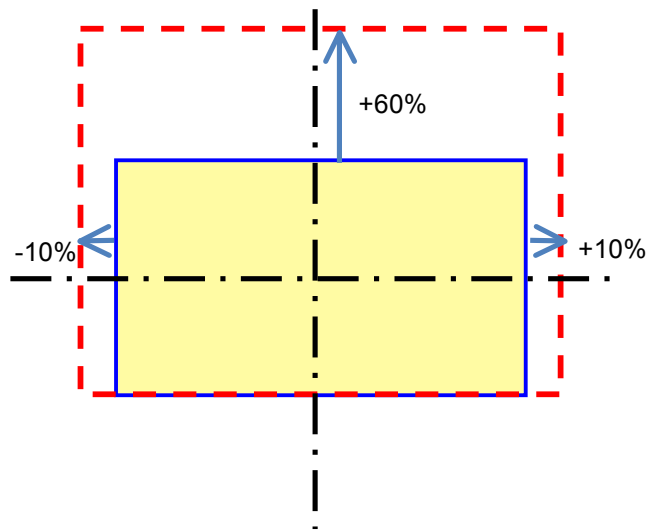
\* The distances listed on the table have been rounded off and are therefore approximate values.

### 2-3. Lens shift function and image position

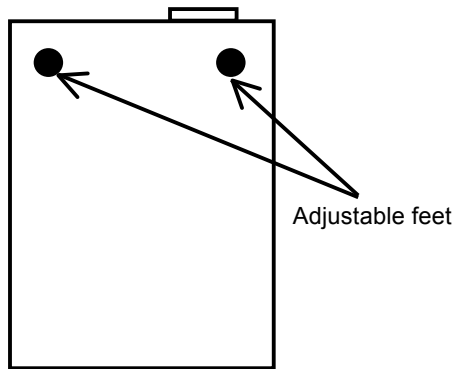
This product has a lens shift function (manual) that can move the image position vertically and horizontally. The followings are the lens shift specifications of the WUX500.

Model	WUX500 (WUXGA, 0.71 type)
Lens shift ratio	(V) 5:5 ~ 11:-1 (H) 4:6 ~ 6:4
Amount of Lens shift	(V) 0% ~ 60% (H) -10% ~ 10%

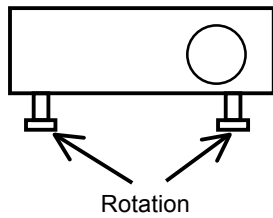
The following is the movable range of projection from this product.  
The cross center is the lenses' optical axes.



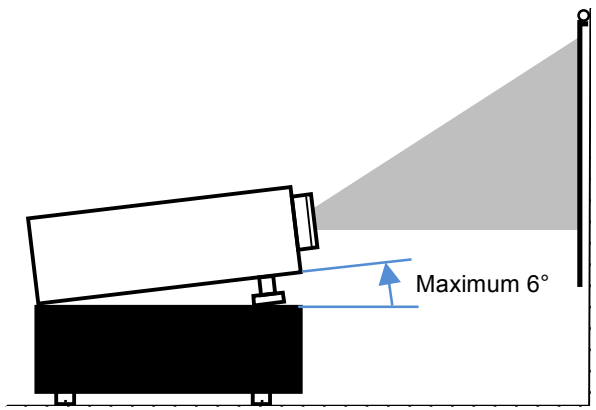
## 2-4. Adjustable feet



The main unit has two adjustment feet on the projection lens side of the bottom. Adjust these lengths to lift up the lens side of the projector so that the projection angle can be adjusted.



The length is adjusted by rotation the feet.



This product allows an elevation up to 6 degrees between the projection optical axis and the installation table.

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

### 3. Accessories

Main Supplied Accessories	Remote Control RS-RC06	Power supply: DC 3.0V (with two AAA battery) Communication range: approx. 8 m within ±25 degrees of the receiver
	Computer cable	mini Dsub15-mini Dsub15 This is used for connection with computer. This transmits analog PC signals.
	Power code	Connects the unit to a power source.
Optional Parts	Ceiling Attachment RS-CL14	This is used for ceiling mount. (*1)
	Option Foot RS-FT01	Attached to 4 points on the top side when the product is installed upside down. They can be used even when the product is not upside down, by attaching to 2 points on the bottom to adjust the inclination.
	Remote Control RS-RC06	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 (*2)
Replacement Parts	Lamp Assembly RS—LP08	250-NSHA Recommended lamp replacement time (*3) 3000H/5000H (Lamp mode: Full power / Power savor)
	Replacement air filter RS-FL02	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.

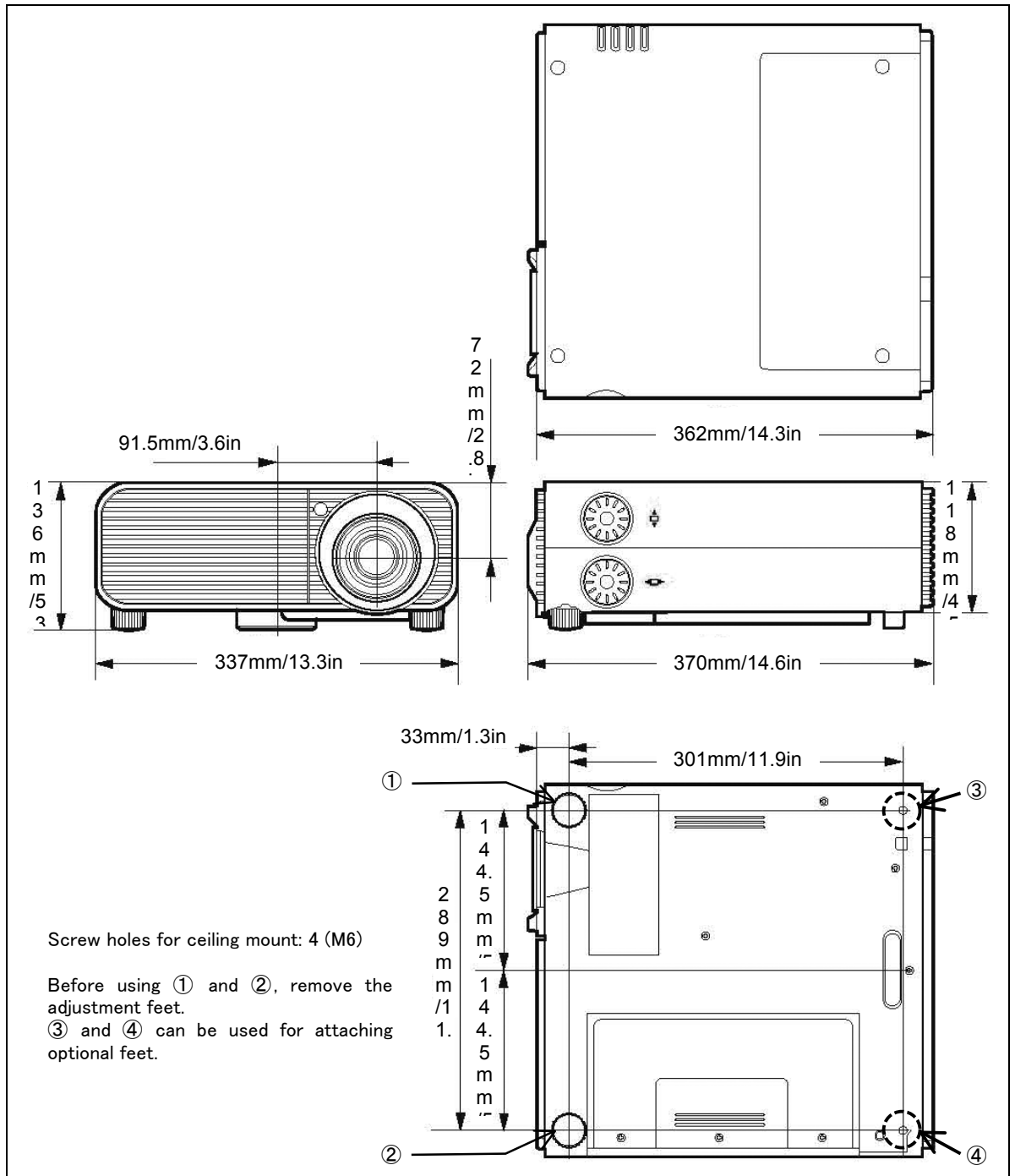
\*2: Uses a commercially available audio cable (3.5Φ stereo mini-plug) for cable connection.

\*3: This time guarantees a 50% survival rate and a 50% brightness-maintenance rate.

This value does not guarantee the service life of the lamp.

## 4. Product Appearance

### ●Outline Drawings



#### Dimensions:

W: 337 mm, H1: 136 mm, D1: 370 mm ( 13.3 x 5.3 x 14.6 inch ) \* including protrusion

W: 337 mm, H2: 118 mm, D2: 362 mm ( 13.3 x 4.6 x 14.3 inch ) \* not including protrusion

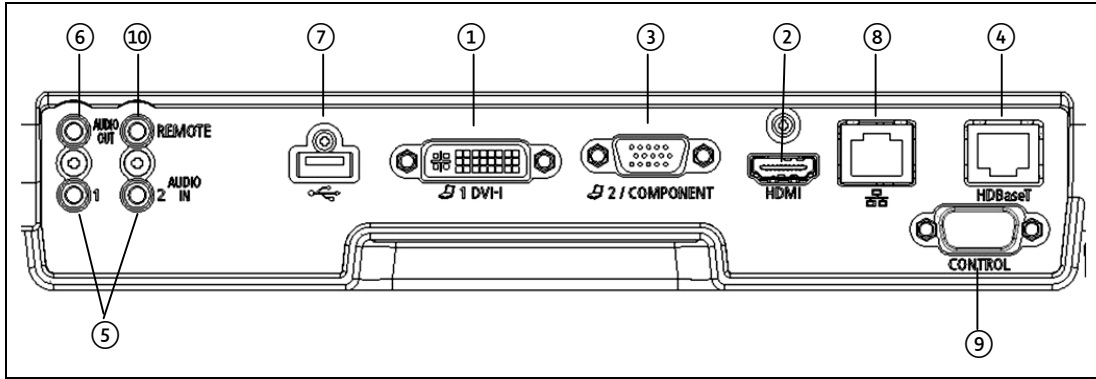
Lens center: 77.0 mm from the left side ('front' is the side where lens is attached.)

61.75 mm from the installed surface

MASS: 5.9 kg (13.0 lb)

**Canon**

•Terminals



	Terminal		Signal
Image input	①	DVI-I	Analog PC / Digital PC
	②	HDMI	HDMI (with audio, supporting Deep color)
	③	Mini Dsub15	Analog PC / Component video
	④	RJ-45 (HDBaseT)	HDBaseT
Audio input	⑤	Mini jack x2	Stereo audio x2
Audio output	⑥	Mini jack	Stereo audio
Control	⑦	USB type A	USB connection
	⑧	RJ-45	1000BASE-T/100BASE-TX / 10BASE-T
	⑨	Dsub9	RS-232C connection
	⑩	Mini jack	Wired remote control connection