# DLP Projector LX-MU800Z/LX-MU600Z



### 1. Main Features

## 1-1. WUXGA, 8000/6800 lm, laser light source installation models

These products are high-brightness and high-resolution DLP projectors.

Since the projector is equipped with a laser light source with a long life(\*1) of 20,000 hours, it can maintain its brightness performance over a long period of time compared with products that use standard lamps.

This product can adjust the brightness about 20% to 25% of maximum output by adjusting laser power level .

\*1: Life based on an average value of usage time when the brightness of the laser light source drops to approximately 50% of what it was at the time of starting to use the projector.

The time until the brightness actually drops to half varies by each unit and operating conditions.

#### 1-2. Wide selection of interfaces

The projector is equipped with variety of input terminals including HDBaseT, 3G-SDI, HDMI, DVI-D, and 5BNC. Since the projector can be simultaneously connected to multiple input devices, a highly usable system can be configured.

#### 1-3. Geometry function which enables adjustment of various screen arrangements

The projector is equipped with the four functions of keystone correction, screen rotation adjustment, curved surface screen adjustment, and corner adjustment for performing digital image processing and optimal image display in accordance with the conditions on the screen.

# 1-4. Edge blend function which enables large screen projection using multiple projectors

The projector is equipped with a function that optimally processes the brightness at the edges of an image frame in order to link images of multiple projectors.

Since the projector can process all sides including top/bottom and left/right, an image can be theoretically linked for any number of projectors.

The large-screen image made of multiple times higher number of pixels of WUXGA makes a powerful impact on the viewers.

#### 1-5. 7 types of projection lenses

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# 2. Specifications

# 2-1. Basic specifications

Model		LX-MU800Z	LX-MU600Z					
Product type		Projector						
Туре	Imaging device, number	DMD x1						
DMD	Number of pixels	1920x1200 (WUXGA)						
DMD	Size, Aspect ratio	0.67type、16:10						
Light source	Туре	Blue laser diode,	yellow phosphor					
	Optical system	Time division f	our color display					
	Brightness (*1) (*2)	8000 lm	6800 lm					
	Marginal illumination ratio (*1)	90	%					
Imagaa	Contrast ratio (*1)	1050:1/10500:1 (Dyi	namic Black Off/On)					
Images	Image size (*1)	50 – 300 in	nch (16:10)					
	Amount of lens shift (*1)	V: 0% – 50%, H:	±10% (Powered)					
	Electrical zoom (by length)	N	0					
	Keystone correction range(*1)	V ±40°	H ±60°					
	Dsub15 (COMPUTER-1)	Analog PC / Comp	oonent video input					
	5BNC (COMPUTER-2)	Analog PC / Component video input						
	DVI-D	Digital PC / Digital video input						
	HDMI	Digital PC / Digital video input						
	BNC (3G-SDI IN)	3G-SDI (Digita	al video) input					
Terminals	RJ-45	HDBaseT input / Network connec	ction (100BASE-TX / 10BASE-T)					
	Dsub15 (MONITOR-OUT)	Image	output					
	BNC (3G-SDI OUT)	3G-SDI (Digita	l video) output					
	Dsub9 (CONTROL)	RS-232 ca	onnection					
	Mini jack (TRIGGER)	For pictur	re control					
	Mini jack (REMOTE)	Wired remote co	ntrol connection					
	Analog PC input	WUXGA/WSXGA+/UXGA/SXGA+/WX	(GA+/WXGA/SXGA/XGA/SVGA/VGA					
	Digital PC input	WUXGA/WSXGA+/UXGA/SXGA+/WXGA+/WXGA/SXGA/XGA/SVGA/VGA						
Image signal	Digital video input	1080p/1080i/720p/576p/480p						
	Component video input	1080p/1080i/720p/5	576p/480p/576i/480i					
	HDBaseT	Same as Digital PC input/ digital video input						
	Adjustable feet	Front: 2	, Rear:2					
	Built-in speaker	No						
Mechanics	Dimension	W: 500 mm, H: 216 mm, D: 594 mm						
	Weight	28.0 kg						
	Noise level (*2)	40/37 dB						
	Power supply	AC 100-240	0V, 50/60Hz					
Othors	Maximum power consumption	890/845 W (100/240 V)	725/695 W (100/240 V)					
Others	Standby power consumption (*3)	6.0/0.5 W						
	Operation environment	5	40					

<sup>\*1:</sup> When using a Standard Zoom Lens (LX-IL03ST)
\*2: Power mode of LASER is Normal/Eco (6-3 LASER > Power mode)
\*3: Standby power is ON/OFF (6-5 CONTROL > Network > Standby Power)

# 2-2. Specification of projection lens (Option)

Projection lens	F number	Focal length	Zoom ratio	Image size	Throw ratio (*1)	Lens shift
LX-IL01UW	1.96-2.3	11.3-14.1 mm	1.25x	40-500 inch (*2)	0.75-0.93:1	V 0 - 50% H ±6.7%
LX-IL02WZ	1.85-2.5	18.7-26.5 mm	1.41x	40-500 inch (*2)	1.25-1.79:1	V 0 - 50% H ±10%
LX-IL03ST	1.7-1.9	26-34 mm	1.3x	40-500 inch (*2)	1.73-2.27:1	V 0 - 50% H ±10%
LX-IL04MZ	1.86-2.48	32.9-54.2 mm	1.65x	40-500 inch (*2)	2.22-3.67:1	V 0 - 50% H ±10%
LX-IL05LZ	1.85-2.41	52.8-79.1 mm	1.5x	40-500 inch (*2)	3.58-5.38:1	V 0 - 50% H ±10%
LX-IL06UL	1.85-2.48	78.5-121.9 mm	1.55x	40-500 inch (*2)	5.31-8.26:1	V 0 - 50% H ±10%
LX-IL07WF	1.85	11.6 mm	(Fixed)	40-500 inch (*2)	0.76:1	V 0% H 0%

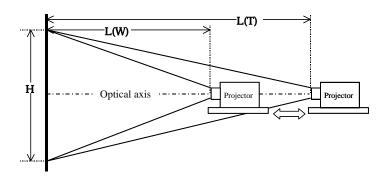
<sup>\*1:</sup> Calculated value for 80-inch image \*2: Indicates focus ability range in this chart. Optical feature guaranteed range is: 50-300 inches.

## 2-3. Installation Specifications

## • Image Size and Projection distance

The product LX-MU800Z/LX-MU600Z is a projector with interchangeable lenses, and as of this writing (January 2016), 7 types of projection lenses are available.

Relationship between projection distance and picture is described below.



Picture of the height (H) is projected at between the shortest distance L (W) and L (T).

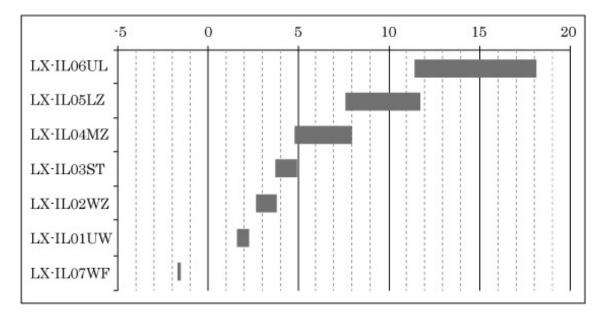
(W) denotes wide end, and (T) tele

The lens shift ratio can be changed on this projector.

The figure left denotes an example of 1:1 ratio, and the picture is divided into two making the optical axis as its center.

The figure indicates a case where a zoomable projection lens is used. For a projection lens with no optical zoom feature, the projection distance is indicated by L.

The relationship between picture size and projection distance varies according to the projection lens mounted. The graph below denotes the projection distances for 100-inch image.



As seen above, projection lens is to be chosen according to the projection distance. Detailed projection distances are listed in the next page.

# Projection distance

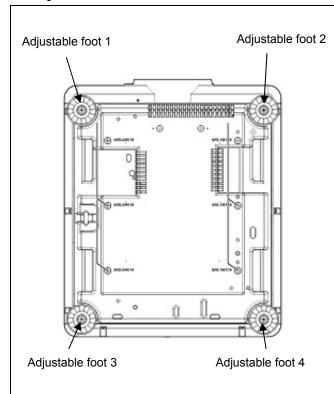
Image	Image size (16:10)		LX-IL01UW		LX-IL02WZ		LX-IL03ST		LX-IL04MZ	
Diagonal [type]	Width [cm]	Height [cm]	L(W) [m]	L(T) [m]	L(W) [m]	L(T) [m]	L(W) [m]	L(T) [m]	L(W) [m]	L(T) [m]
40	86	54	0.62	0.79	1.05	1.52	1.45	1.93	1.87	3.15
50	108	67	0.79	1	1.33	1.92	1.83	2.42	2.36	3.96
60	129	81	0.96	1.2	1.6	2.31	2.21	2.92	2.85	4.77
80	172	108	1.29	1.62	2.16	3.09	2.97	3.92	3.82	6.39
100	215	135	1.62	2.04	2.71	3.88	3.73	4.92	4.8	8
120	258	162	1.96	2.45	3.26	4.66	4.49	5.91	5.78	9.62
150	323	202	2.46	3.08	4.09	5.84	5.63	7.41	7.24	12.04
180	388	242	2.96	3.7	4.92	7.02	6.77	8.9	8.7	14.47
200	431	269	3.29	4.12	5.47	7.81	7.53	9.9	9.68	16.08
300	646	404	4.96	6.2	8.23	11.73	11.34	14.9	14.56	24.16
400	862	538	6.63	8.28	10.99	15.66	15.14	19.87	19.44	32.25
500	1077	673	8.3	10.36	13.75	19.59	18.94	24.85	24.32	40.33

Image size (16:10)		LX-IL05LZ		LX-IL06UL		LX-IL07WF	
Diagonal [type]	Width [cm]	Height [cm]	L(W) [m]	L(T) [m]	L(W) [m]	L(T) [m]	L [m]
40	86	54	3.01	4.6	4.42	7.05	0.64
50	108	67	3.8	5.78	5.59	8.89	0.81
60	129	81	4.59	6.96	6.77	10.73	0.98
80	172	108	6.16	9.33	9.13	14.4	1.32
100	215	135	7.73	11.7	11.48	18.07	1.66
120	258	162	9.31	14.06	13.84	21.75	2.01
150	323	202	11.67	17.61	17.37	27.26	2.52
180	388	242	14.03	21.16	20.91	32.77	3.03
200	431	269	15.6	23.53	23.26	36.44	3.37
300	646	404	23.47	35.36	35.04	54.81	5.08
400	862	538	31.34	47.19	46.82	73.18	6.79
500	1077	673	39.21	59.02	58.6	91.54	8.5

 $<sup>^{\</sup>star}$  The distances listed on the table have been rounded off and are therefore approximate values.

<sup>\*</sup> Indicates projection ability range in this chart. Optical feature guaranteed range is: 50-300 inches.

# 2-4. Adjustable foot

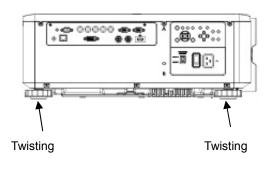


The figure on the left is a schematic diagram of the bottom of the projector.

As shown in the figure, there are four adjustable feet.

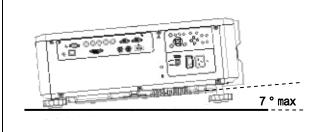
Adjusting the lengths of Adjustable feet 1 and 2 raises the projection direction while adjusting the length of Adjustable feet 3 and 4 lowers the projection direction.

Each adjustable foot can be used to make fine adjustments to the horizontal slant of the projector.



The figure on the left is a schematic diagram of the side of the projector.

All adjustable feet are a screw-type and their heights can be adjusted by twisting.



The projector can be set up at an angle of elevation of up to 7 degrees between itself and the surface it is placed on.

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

# 2-5. Supported image signal type

Signal Type	Resolution	Hotizontal fecuency (KHz)	Vertical frequency (Hz)	Clock fectuency (MHz)	BNC - RGBHV	BNC - YUV	HD15- ROBHV	HD15- YUV	DVI-D	HDMI RGB	HDMI YUV	HDBaseT	3DFS Support
	640*480-60	31.47	59.93	25.175	V	-	V	-	V	V	-	V	V
	640*480-75	37.5	75	31.5	V	-	V	-	V	V	-	V	-
	640*480-85	43.27	85.01	36	V	-	V	-	V	V	-	V	-
	800*600-60	37.88	60.32	40	V	-	V	-	V	V	-	V	V
	800*600-75	46.88	75	49.5	V	-	V	-	V	V	-	V	-
	800*600-85	53.67	85.06	56.25	V	-	V	-	V	V	-	V	-
	848*480-60	31.02	60	33.75	V	-	V	-	V	V	-	V	V
	1024*768-60	48.36	60	65	V	-	V	-	V	V	-	V	V
	1024*768-75	60.02	75.03	78.75	V	-	V	-	V	V	-	V	-
	1024-768-85	68.88	85.03	94.5	V	-	V	-	V	V	-	V	-
	1280*720-60	44.69	59.91	74.37	V	-	V	-	V	V	-	V	V
PC	1280*768-60	47.8	59.87	79.5	V	-	V	-	V	V	-	V	V
	1280*800-60	49.702	59.81	83.5	V	-	V	-	V	V	-	V	V
	1280*960-60	60	60	108	V	-	V	-	V	V	-	V	V
	1280*1024-60	63.98	60.02	108	V	-	V	-	V	V	-	V	V
	1280*1024-75	79.98	75.02	135	V	-	V	-	V	V	-	V	-
	1280*1024-85	91.15	85.02	157.5	V	-	V	-	V	V	-	V	-
	1366*768-60	47.71	59.79	85.5	V		V		V	V		V	V
	1440*900-60	55.935	59.887	106.5	V	-	V	-	V	V	-	V	V
	1400X1050-60	65.517	59.98	121.75	V	-	V	-	V	V	-	V	V
	1600*1200-60	75	60	162	V	-	V	-	V	V	-	V	V
	1680*1050-59.94	65.179	59.94	146	V	-	V	-	V	V	-	V	V
	1920*1200RB-60	74.04	59.95	154	V	-	V	-	V	V	-	V	V
	1440x480i	15.73	60	27	-	-	-	-	-	V	V	V (HDMI)	
	1440x576i	15.62	50	27	-	-	-	-	-	V	V	V (HDMI)	-
SDTV	480i	15.734	59.94	13.5	-	V	-	V	-	-	-	-	-
	576i	15.625	50	13.5	-	V	-	V	-	-	-	-	-
	480p	31.47	59.94	27	V	V	V	V	V	V	V	V	-
	576p	31.25	50	27	V	V	V	V	V	V	V	V	-
	1080i	28.13	50	74.25	-	V	-	V	V	V	V	V	-
	1080i	33.75	60	74.25	-	V	-	V	V	V	V	V	
	720p	37.5	50	74.25	V	V	V	V	V	V	V	V	V
	720p	45	60	74.25	V	V	V	V	V	V	V	V	V
EDTV	1080p	27	24	74.25	V	V	V	V	V	V	V	V	-
	1080p	28.13	25	74.25	V	V	V	V	V	V	V	V	-
	1080p	33.72	29.97	74.175	V	V	V	V	V	V	V	V	-
	1080p	33.75	30	74.25	V	V	V	V	V	V	V	V	-
	1080p	56.25	50	148.5	V	V	V	V	V	V	V	V	V
	1080p	67.5	60	148.5	V	V	V	V	V	V	V	V	V

# 3. Accessories

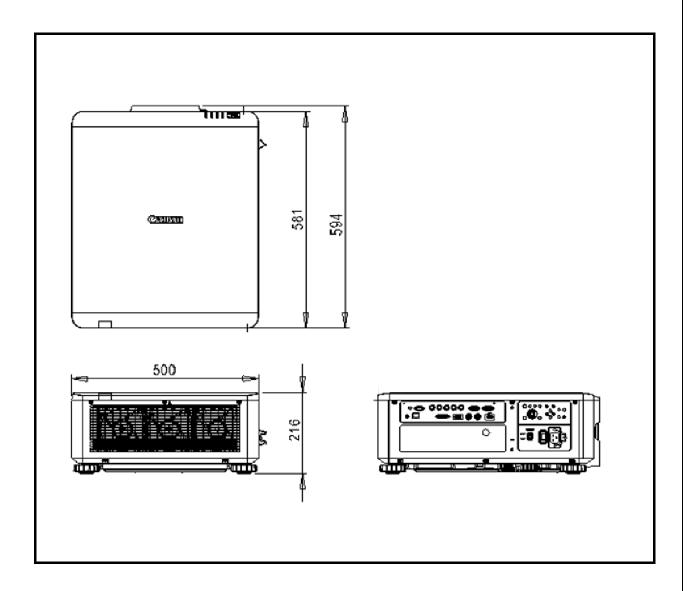
\*Only the items relevant to using the product have been extracted from a list of items.

		Power supply: DC 3.0V (AA Battery x 2, included)					
	Remote control LX-RC01	Communication range: approx.10 m within ±30 degrees of the receiver					
	Power Cord	Connects the unit to a power source.					
Main Supplied Accessories	Computer cable	Mini Dsub15-Mini Dsub15 This is used for connection with computer. This transmits analog PC signals.					
	Anti-theft screw for lens	M4 x 0.7 x 70 mm Used to prevent the mounted projection lens from easily being removed.					
	Dust Cap	Prevents dust from entering the projector from the lens mount opening while no projection lens is mounted to the projector.					
Optional Part	Remote control LX-RC01	Same as the supplied remote					
Optional Fait	Ceiling Attachment (*1) RS-CL15	Used to suspend the projector from ceiling.					
	Ultra Short Zoom Lens LX-IL01UW	Zoom ratio : 1.25x Projection distance : 11.3-14.1 mm F number : 1.96-2.3					
	Short Zoom Lens LX-IL02WZ	Zoom ratio : 1.41x Projection distance : 18.7-26.5 mm F number : 1.85-2.5					
	Standard Zoom Lens LX-IL03ST	Zoom ratio : 1.3x Projection distance : 26-34 mm F number : 1.7-1.9					
Projection lens	Medium-range Zoom Lenz LX-IL04MZ	Zoom ratio : 1.65x Projection distance : 32.9-54.2 mm F number : 1.86-2.48					
	Long Zoom Lens LX-IL05LZ	Zoom ratio : 1.5x Projection distance : 52.8-79.1 mm F number : 1.85-2.41					
	Ultra Long Zoom Lens LX-IL06UL	Zoom ratio : 1.55x Projection distance : 78.5-121.9 mm F number 1.85-2.48					
	Short Fixed Lens LX-IL07WF	Zoom ratio : (No optical zoom) Projection distance : 11.6 mm F number : 1.85					

<sup>\*1:</sup> Since the size and weight varies according to the projector, be sure to use the specified fittings. Consult a professional for mounting position and installation.

# 4. Product Appearance

# 4-1. Outline Drawings



Dimensions	W: 500 mm, H: 216 mm, D: 594 mm (19.7 x 8.5 x 23.4 inch)
Mass	28.0 kg (61.7 lbs)

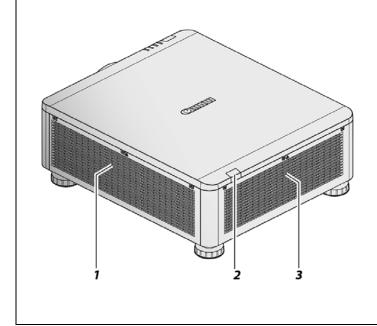
# 4-2. Part Names

**Front View** 

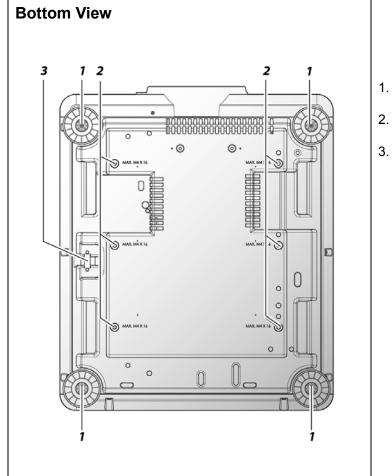
- 1. Terminals
- 2. Kensington Lock
- 3. Control Panel
- 4. Power Panel
- 5. Adjuster Foot
- 6. Air Intake Vent
- 7. Front IR Receiver
- 8. LED Indicators
- 9. Lens Release Button
- 10. Lens

10

# **Rear View**

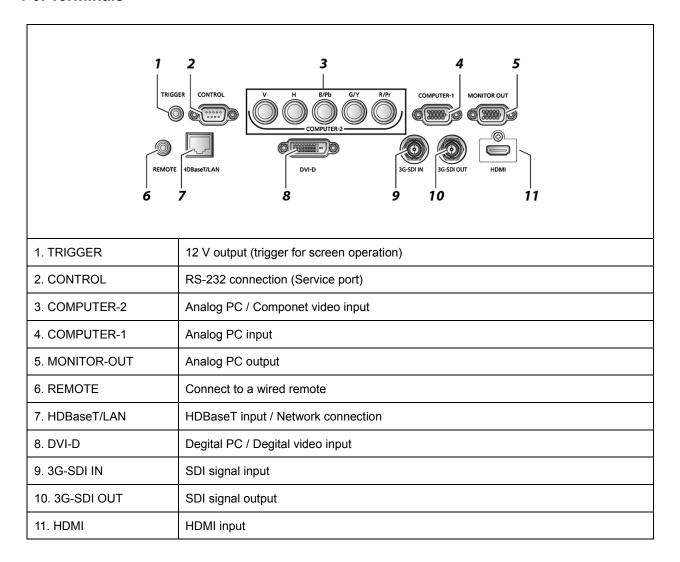


- 1. Air Intake Vent
- 2. Rear IR Receiver
- 3. Exhaust Vent

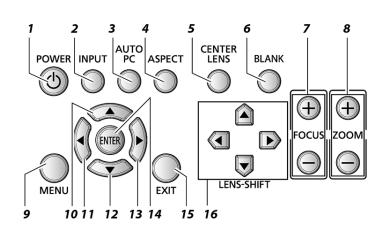


- 1. Adjusting Foots
- 2. Fixture screw holes
- 3. Security bar

# 4-3. Terminals



#### 4-4. Control area



① 【POWER】 button

Turns on and off the power.

②【INPUT】button

Selects the input source.

③【AUTO PC】button

Automatically adjusts the projector to the optimal projection condition.

(4) [ASPECT] button

Changes the aspect ratio mode.

(5) 【CENTER LENS】 button

Sets the lens to the default center position.

(6) [BLANK] button

Turns on and off the laser light source.

7 [FOCUS] button

Adjusts focusing.

(8) 【ZOOM】 button

Adjusts zooming.

(9) [MENU] button

Shows the menu screen.

(10) 【 ▲ 】 button

Moves the cursor up on the menu screen, etc.

(11) 【 ◀ 】 button

Moves the cursor left on the menu screen, etc.

(12) 【 ▼ 】 button

Moves the cursor down on the menu screen, etc.

③【ENTER】button

Sets an item you selected on the menu screen, etc.

(14) 【 ▶ 】 button

Moves the cursor right on the menu screen, etc.

(15) 【EXIT】 button

Cancels functions such as menu display and returns to the image display.

16 【LENS-SHIFT】 button

Moves the picture position, down, left, or right.

## 5. Precautions For Use

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

The projector emits concentrated strong 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. Heated objects may melt and adhere to the projector.

• Do not block the air vent while the projector is running.

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

•When in household use, take countermeasures for electromagnetic interference when necessary.

This product is not intended for household use (\*1), and it may cause electromagnetic interference depending on how it is installed.

\*1: VCCI Council, the Japanese body governing electromagnetic interference standards, defines the two sets of self-imposed regulations for the industry, namely "Class A Information Technology Equipment (ITE)" and "Class B Information Technology Equipment (ITE)".

Class B is the standard intended for household use whereas Class A is a relaxed standard than the former.

This product is a Class A ITE.

VCCI members indicate the standard compiled to the users in the method specified by VCCI Council.