



maxell Laser Light Source Projector User Manual

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MP-WU8801W

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Specifications

Model name		MP-WU8801W (White)	MP-WU8701W (White)
		MP-WU8801B (Black)	
Display system		3LCD	
Display device	Size of effective display area	0.76" × 3 aspect ratio 16 : 10	
	Number of pixels	2,304,000 pixels (1,920 horizontal × 1,200 vertical)	
		Optional (All the projection lenses are sold separately.)	
	Zoom	Motorized (except for the option lens FL-720 / FL-701)	

Lens	Focus	Motorized	
	Lens shift	Motorized (V, H)	
Light source		Laser diode	
Screen size		30 ~ 600 inch (100 ~ 350 inch for the ultra short throw fixed lens FL-720, 60 ~ 600 inch for the ultra short throw lens USL-701)	
Light output (Brightness)*1		8,000 lm	7,000 lm
Contrast ratio (full white / full black)*1		2,500,000 : 1	
Displayable scanning frequency	Horizontal	15 ~ 106 kHz	
	Vertical	50 ~ 120 Hz	
Display Resolution	Computer	WUXGA*2 (max.) *Native resolution is WUXGA.	
	Video	4096 × 2160*3 (max.) *Native resolution is WUXGA.	
	COMPUTER IN	Mini D-sub 15-pin connector × 1	
	MONITOR OUT	Mini D-sub 15-pin connector × 1	
	VIDEO IN	RCA connector × 1	

Terminals	HDMI IN	HDMI connector × 2 (HDCP compliant)	
	HDMI OUT	HDMI connector × 1 (HDCP compliant)	
	3G-SDI	BNC Connector × 1	—
	HDBaseT	RJ-45 connector × 1	
	DisplayPort	DisplayPort × 1	
	AUDIO IN	3.5mm (stereo) mini connector × 1, RCA connector (L, R) × 1	
	AUDIO OUT	3.5mm (stereo) mini connector × 1	
	CONTROL IN (RS-232C)	D-sub 9-pin connector × 1	
	LAN	RJ-45 connector × 1	
	WIRELESS	USB type A × 1 (The separately sold USB wireless adapter is necessary for this function.)	
	REMOTE CONTROL IN	3.5mm (stereo) mini connector × 1	
	REMOTE CONTROL OUT	3.5mm (stereo) mini connector × 1	
Network	Wired	100BASE-TX / 10BASE-T	

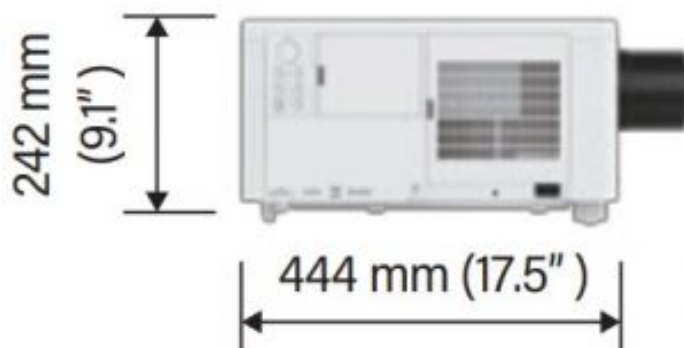
	Wireless (Option*4)	IEEE 802.11a/b/g/n/ac	
Operating temperature		0 ~ 45 °C (32 ~ 113 °F) at altitudes form 0 to 1,600 m (0 to 5,249 ft)*5 The brightness of light source may be reduced automatically over 35 °C (95 °F).	
Operating humidity		10 – 80%RH (non-condensing)	
Power requirements		AC 100 V – 120V (50/60Hz), 5.9 A AC 220 V – 240V (50/60Hz), 3.0 A	AC 100 V – 120 V(50/60Hz), 5.4 A AC 220 V – 240 V(50/60Hz), 2.7 A
Power consumption		AC 100 V – 120 V : 580 W AC 220 V – 240 V : 560 W	AC 100 V – 120 V : 520 W AC 220 V – 240 V : 500 W
Standby mode power consumption		Less than 0.5W at saving mode*6	
Standard outside dimensions (W × H × D)		585 mm × 242 mm × 444 mm (23.0" × 9.5" × 17.5") (Including protruding parts), 582 mm × 215 mm × 431mm (22.9" × 8.5" × 17.0") (Excluding protruding parts)	
Weight		Approx. 18.2 kg (40.1 lbs.) (Excluding lens)	
Accessories		Remote control with two AA batteries, Power cord, Computer cable, User's manual, Security label, Lens hole cover, Terminal cover, Cable tie	
	USB wireless adapter	USB-WL-5G*7	
	Air filter	UX43481	

Optional parts	Optional lens			FL-720 (Ultra short throw fixed lens) ML-713 (Middle throw lens) USL-701 (Ultra short throw lens) LL-704 (Long throw lens) FL-701 (Fixed short throw lens) UL-705 (Ultra long throw lens) SL-712 (Short throw lens)	
	Mounting accessories			HAS-9110 (Bracket for fixing mount), HAS-104S (Slim adapter for fixing mount), HAS-204L (Standard adapter for fixing mount), HAS-304H (Long adapter for fixing mount) HAS-404U (Ceiling mount with 6-axis adjustment)*8	

- When PICTURE MODE is set to DYNAMIC, DYNAMIC BLACK is OFF and LIGHT OUTPUT is set to Normal 100 %, attached projection lens is ML-713, zoom position is WIDE (max.), and the lens shift position is center.
- WUXGA (60 Hz) Reduced Blanking only.
- 4096 x 2160 (24/25/30/50/60) is supported on the HDMI IN 1 and HDBaseT terminals. 4096 x 2160(24/25/30) is supported on the DisplayPort terminal.
- Optional wireless adapter is needed.
- 0 – 40 ° C (32 ~104 ° F) at altitude from 1,600 m to 3,048 m (5,249 to 10,000 ft).
- SAVING mode disables the functions of MONITOR OUT, AUDIO OUT, speaker sound, network communication, RS-232C control except POWER ON command, etc. in standby.
- The availability of the USB-WL-5G varies depending on the country and the region.
- HAS-404U is used with a projector that the ultra short throw fixed lens FL-720 is attached to when it is installed at the ceiling mounting position.

Dimensions

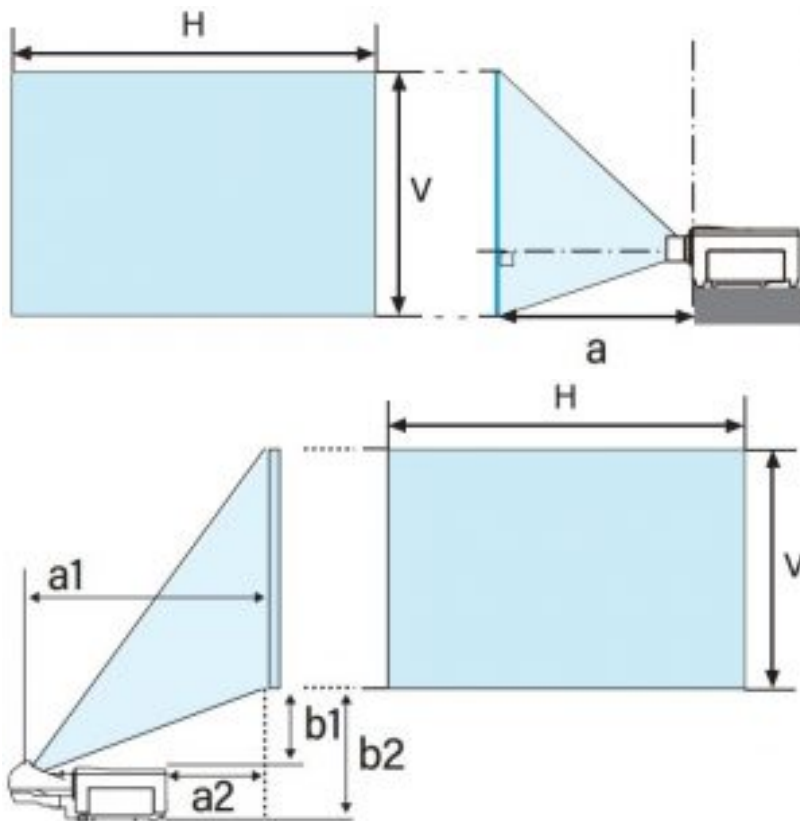
- [Side view]



- [Front view]



Projection Distance



(Ultra short throw fixed lens FL-720)

- **H × V** : Screen size
- **a** : Projection distance (from the projector's front panel to screen.)(±10%)
- **H × V** : Screen size
- **a1**: Reflecting mirror surface to screen,
- **a2**: Projector end to screen
- **b1**: Projector top to screen edge (**closer edge to projector**)
- **b2**: Projector bottom to screen edge (**closer edge to projector**)

*The figures are not drawn to scale.

16 : 10 screen (1,920 × 1,200)(±10%)

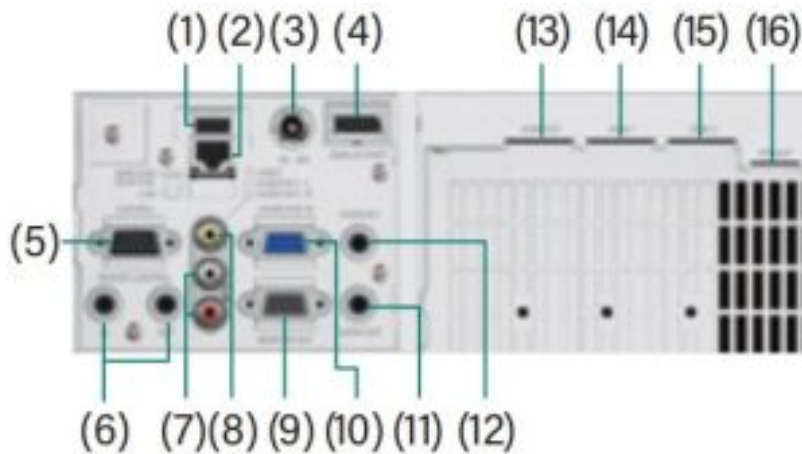
meter													
Screen size			USL-701		FL-701	SL-712		ML-713		LL-704		ULb705	
Type	H	V	a min.	a max.	Fixed	a min.	a max.	a min.	a max.	a min.	a max.	a min.	a max.
80	1.7	1.1	1.4	1.8	1.4	2.0	3.1	3.0	5.0	4.9	8.3	8.3	14.1
100	2.2	1.3	1.7	2.2	1.8	2.5	3.8	3.7	6.3	6.1	10.3	10.3	17.6
120	2.6	1.6	2.0	2.6	2.1	3.0	4.6	4.4	7.5	7.3	12.4	12.3	21.0
150	3.2	2.0	2.5	3.3	2.6	3.8	5.7	5.6	9.4	9.1	15.5	15.4	26.2
300	6.5	4.0	5.0	6.5	5.2	7.6	11.4	11.1	18.8	18.2	31.1	30.5	52.2
500	10.8	6.7	8.3	10.8	8.6	12.6	19.0	18.4	31.3	30.4	51.9	50.6	86.9

inch													
Screen size			USL-701		FL-701	SL-712		ML-713		LL-704		UL-705	
Type	H	V	a min.	a max.	Fixed	a min.	a max.	a min.	a max.	a min.	a max.	a min.	a max.
80	68	42	54	70	56	80	121	117	198	192	325	328	555
100	85	53	67	87	69	100	151	146	248	240	407	407	691
120	102	64	80	104	83	120	181	175	297	287	489	486	828
150	127	79	100	129	103	150	226	219	371	359	611	605	1032
300	254	159	197	256	205	298	450	435	740	718	1225	1200	2056
500	424	265	326	424	340	497	749	725	1232	1196	2044	1992	3421

meter						
Screen size			FL-720			
Type	H	V	a1	a2	b1	b2
100	2.2	1.3	0.819	0.100	0.423	0.669
120	2.6	1.6	0.965	0.246	0.517	0.763
150	3.2	2.0	1.185	0.465	0.658	0.905
300	6.5	4.0	2.281	1.561	1.365	1.611
350	7.5	4.7	2.646	1.927	1.600	1.847

inch						
Screen size			FL-720			
Type	H	V	a1	a2	b1	b2
100	85	53	32	4	17	26
120	102	64	38	10	20	30
150	127	79	47	18	26	36
300	254	159	90	61	54	63
350	297	185	104	76	63	73

Terminals



1. WIRELESS
2. LAN
3. 3G-SDI (MP-WU8801W/B only)
4. DisplayPort
5. CONTROL
6. REMOTE CONTROL IN/OUT
7. AUDIO IN 2 (L,R)
8. VIDEO
9. MONITER OUT
10. COMPUTER IN
11. AUDIO OUT
12. AUDIO IN1
13. HDMI OUT
14. HDMI 1
15. HDMI 2
16. HDBaseT

Environment

- Compliance with EU Directive RoHS*1
- Long Life mode
- No use of mercury lamp

RoHS is the acronym of "Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Design and specifications are subject to change without notice

- The projected images and comparison photos in this catalog are simulations.
- LCD panels, polarizers and other optical components and cooling fans may need replacement after prolonged usage. For more details, please consult a sales representative.
- Do not use in places where there is a lot of water, dampness, steam, dust, soot or tobacco smoke. This may

result in fire or malfunction.

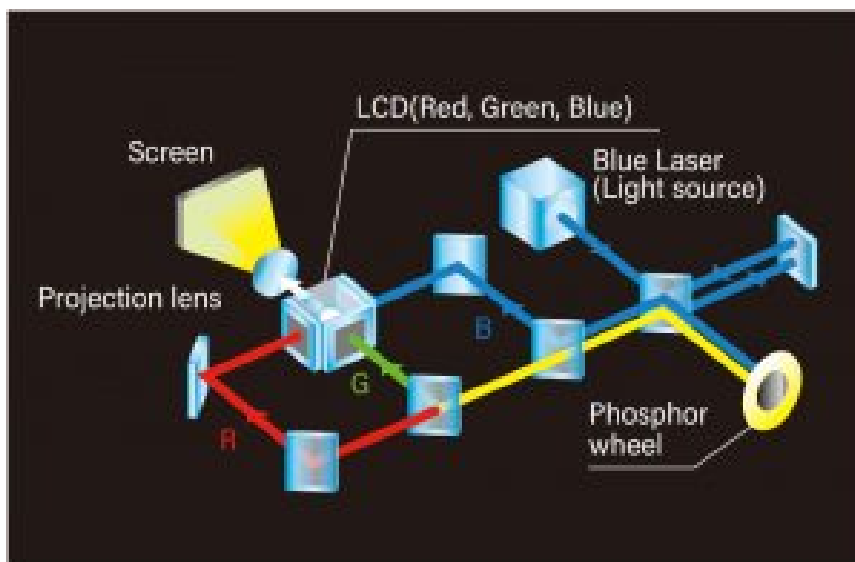
- Optical components (light source, LCD panel, polarizing plate, PBS **[polarizer beam splitter]**) have limited service lives. They must be repaired or replaced if they are used for a long period of time.
- During use and immediately after use, do not touch anywhere near the vents as these parts are extremely hot.
- Optical components other than the light source: If the projector is used for six hours or more per day, they may need to be replaced in less than a year.
- LCD panel: If the projector is used continuously for six hours or more, its replacement cycle may be shortened.
- Each product may have differences of color, brightness and focus due to manufacture variation.
- Blu-ray Disc™ and Blu-ray™ are trademarks of Blu-ray Disc Association.
- Crestron® and Crestron RoomView® are registered trademarks of Crestron Electronics, Inc. in the United States and other countries.
- DICOM is the registered trademark of the National Electrical Manufacturers Association for its standards publications relating to digital communications of medical information.
- HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.
- Extron® is registered trademark of RGB Systems, Incorporated. · All other trademarks are the properties of their respective owners.

High Reliability and Stability



Long Life 20,000 hour Laser Light Source

Maxell's laser light source projectors have 20,000 hours*1 of light source life. Use for 50,000 hours*1 can be achieved in LONG LIFE 2 mode. Also, users may select their desired operation mode. Furthermore, in addition to the light source, the phosphor wheel is also dust resistant, suppressing brightness level reduction by preventing dust from coming into contact with the optical parts. Users can enjoy using the projector for long periods of time while maintaining its brightness. Additionally, though the MP-WU8801W/B is a 8,000 lm projector, it has achieved a low noise of 34 dB. This is a suitable feature for presentations and seminars.



1. For laser light source. The value is an estimate and may vary depending on the use environment or use condition.
2. These are reference values and may vary depending on products.
3. The values are an estimate and may vary depending on the usage environment or use condition.
4. Reference values when used in an ambient temperature of 23 °C. The noise level varies by the projector model, installation environment, and use condition.

Brightness Deterioration Comparison between Light Output Modes

LIGHT OUTPUT	Brightness*2		Light source life*3	Noise*4	
	MP-WU8801W MP-WU8801B	MP-WU8701W		MP-WU8801W MP-WU8801B	MP-WU8701W
NORMAL	8,000 lm	7,000 lm	20,000 hours		
LONG LIFE 1	6,000 lm	5,250 lm	30,000 hours	34 dB	32 dB
LONG LIFE 2	4,000 lm	3,500 lm	50,000 hours		
WHISPER	4,000 lm	3,500 lm	20,000 hours	26 dB	26 dB



This is for illustrative purposes only.

High Image Quality

ACCENTUALIZER and HDCR

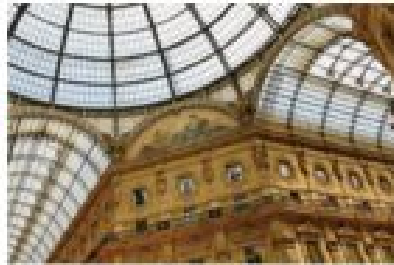
ACCENTUALIZER makes pictures look more real by enhancing shade, sharpness, and gloss to make pictures clearer. The HDCR function corrects blurred images caused by room lighting or outside light sources, and creates

an effect similar to increasing contrast resulting in clear images even in bright rooms.

- Comparison photos are simulations.

HDCR OFF

HDCR ON



Dark parts are obscure.

Dark parts become clear.

DICOM® Simulation Mode

This mode is suitable for viewing gray scale medical images, such as X-rays, for training and educational purposes.

- This projector is not a medical device and is not compliant with the DICOM® standard, and neither the projector nor the DICOM® Simulation Mode should be used for medical diagnosis.
- Comparison photos are simulations.



Normal Mode



DICOM® Simulation Mode

LINEUP

1. **The lens of the projector is sold separately.**
2. **Local availability may be limited.**

- **MP-WU8801W (WUXGA 8,000 lm)**



- MP-WU8801B (WUXGA 8,000 lm)



- MP-WU8701W (WUXGA 7,000 lm)



Installability and System Features

Warping

This function is possible from your computer by using the specialized application. Projection is possible on spherical surfaces and surfaces with corners, as well as conventional flat screens.

1. Spherical object



2. Corner wall



3. Curved screen



4. Curved screen



4K Signal Input Capability *3

The projectors allow 4K signal input on HDMI1, HDBaseT, and DisplayPort input terminals. You can enjoy much better viewing experience with a 4K Ultra HD Blu-ray™ player or other devices.

- 3 HDMI 1 and HDBaseT supports 4K@24/25/30/50/60 signals. DisplayPort support 4K@24/25/30 signals.

HDMI OUT








Transfers the input signal on the HDMI1 or HDBaseT terminal to another device. It allows to connect the projectors*4 in series in order to project the same images simultaneously without using an HDMI splitter or switcher product.

- 4 Up to 4 projectors can be connected in series for the HDMI OUT terminal of the projector. The number of devices that can be connected varies depending on HDCP version, the restriction of the number of devices for HDCP repetition of source device, and the quality of a cable.



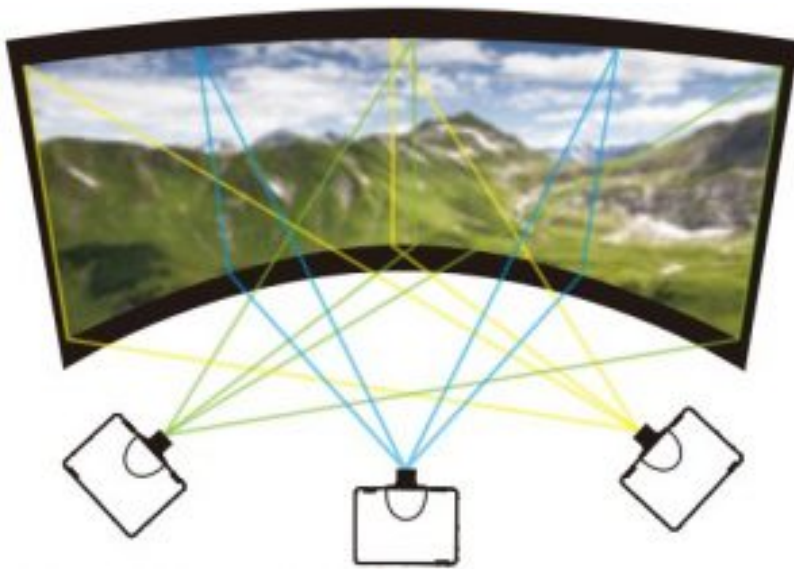
Interchangeable Lenses Options *

*Local availability may be limited.

Lens type			Zoom ratio	Throw ratio	Screen size (Diagonal)	Weight	Lens shift	
							Up / Down	Left / Right
	FL-720	Ultra short throw fixed lens	1.0	0.38	100" - 350"	3.1kg	+82% ~ +88%	-5% ~ +5%
	USL-701	Ultra short throw lens	1.3	0.74 - 0.98	60" - 600"	1.8kg	-16.7% ~ +52.5%	-10% ~ +10%
	FL-701	Fixed short throw lens	1.0	0.8	30" - 600"	1.1kg	-6.9% ~ +6.9%	+4.3% ~ -4.3%
	SL-712	Short throw lens	1.5	1.2 - 1.8	30" - 600"	0.7kg	-16.7% ~ +52.5%	-10% ~ +10%
	ML-713	Middle throw lens	1.7	1.7 - 3.0	30" - 600"	0.9kg	-16.7% ~ +56.5%	-10% ~ +10%
	LL-704	Long throw lens	1.7	2.8 - 4.9	30" - 600"	1.5kg	-16.7% ~ +52.5%	-10% ~ +10%
	UL-705	Ultra long throw lens	1.7	4.9 - 8.3	30" - 600"	1.6kg	-16.7% ~ +52.5%	-10% ~ +10%

Edge Blending

The projectors are equipped with the Edge Blending function that achieves further seamless projection of one image using multiple projectors, and allow to project on a huge curved screen by using the warping simultaneously.



- Additional equipment may be required for this feature.
- This figure is not drawn to scale.

360° Projection

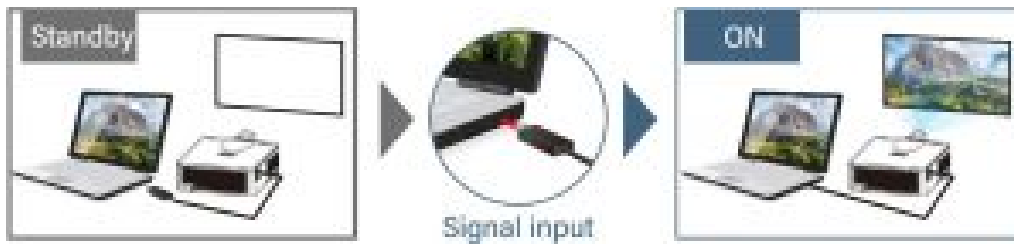
The projector provides great installation flexibility as it can be installed at various angle. By rotating the projector 90 degrees, you can project vertically long images (Portrait Projection).



- When the ultra long throw lens UL-705 is attached, the projector cannot be installed facing its projection lens upward or downward.

Auto Power ON *5

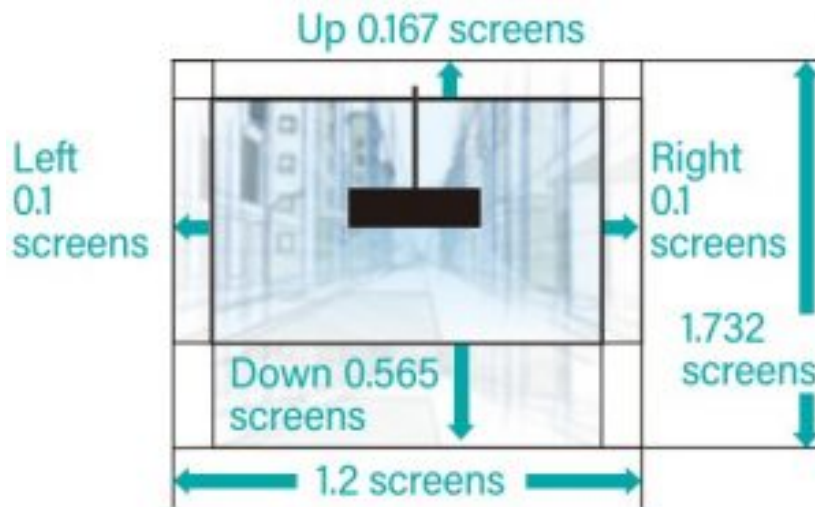
The projector can turn the power on to display the input image automatically when the input signal comes from connected devices.



*5 Supported input terminals are COMPUTER IN 1, HDMI 2 and VIDEO. This function is unavailable when STANDBY MODE is set to NETWORK (WOL) or SAVING. This function may work unintentionally by connected external device.

Lens shift area

The motorized lens shift lets you choose more convenient installation location, even for large spaces.



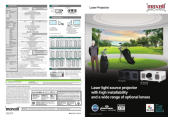
- This figure shows the lens shift range for the projector with the optional lens ML-713 at the ceiling mounting position.
- This figure is not drawn to scale.

Other Functions

- **[Image Quality]** : HDR*6 (High Dynamic Range) supporting PQ and HLG system
- **[Network]** : Projector Control, Easy Scheduling Setting, Network presentation
- **[Installability]** : Perfect Fit, Instant Stack
- **[Security]** : PIN lock, Key lock
- **[Usability]** : Direct Power On/Off, Magnify, PbyP / PinP, Remote ID, Quick Start.

(6 Only for HDMI 1)

Documents / Resources



[maxell Laser Light Source Projector](#) [pdf] User Manual
maxell, MP-WU8801W, MP-WU8701W, Laser Light Source Projector