Specifications

Model name		MP-WU8101W (White)	MP-WU8101B (Black)
Display system		3LCD	
Display device	Size of effective display area	0.76" aspect ratio 16 : 10	
	Number of pixels	2,304,000 pixels H : 1,920 × V : 1,200 (WUXGA)	
Lens		Optional (All the projection lenses are sold separately.)	
	Zoom	Motorized (except for the option lens FL-720 / FL-701)	
	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	10,000 lm	
	Center lm*2	10,500 lm	
Contrast ratio (full white / full black)*1		3,000,000 : 1	
Displayable scanning frequency	Horizontal	15 – 106 kHz	
	Vertical	50 – 120 Hz	
Display Resolution	Computer	WUXGA*3 (max.) *Native resolution is WUXGA.	
	Video	4096 × 2160*4 (max.) *Native resolution is WUXGA.	
Terminals	COMPUTER IN	Mini D-sub 15-pin connector × 1	
	MONITOR OUT	Mini D-sub 15-pin connector × 1	
	VIDEO IN	RCA connector × 1	
	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*5)	IEEE 802.11a / b / g / n / ac	
Operating temperature		0 – 45°C (32 – 113°F) at altitudes from 0 – 1,600 m (0 – 5,249 ft)*6	
		The brightness of light source may be reduced automatically over 35°C (95°F).	
Operating humidity		10 – 80% (non-condensing)	
Power requirements		AC 100V – 120V (50 / 60 Hz), 7.3A, AC 220V – 240V (50 / 60 Hz), 3.6A	
Power consumption		AC 100V – 120V : 720W, AC 220V – 240V : 680W	
Standby mode power consumption		Less than 0.5W at saving mode*7	
Standard outside dimensions (W x H x D)		585 mm × 242 mm × 444 mm (23.0" × 9.5" × 17.5") (Including protruding parts),	
		582 mm × 215 mm × 431 mm (22.9" × 8.5" × 17.0") (Excluding protruding parts)	
Weight		Approx. 18.6 kg (41.0 lbs.) (Excluding lens)	
Accessories		Remote control with two AA batteries, Power cord, User's manual,	
		Security label, Lens hole cover, Terminal cover	
Optional parts	USB wireless adapter	USB-WL-5G*8	
	Air filter	UX43482	
	Option 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)*9	

*1 : When PICTURE MODE is set to DYNAMIC, DYNAMIC BLACK is ON 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. *2 : It is a value calculated using the brightness measured in the center of the screen. The measurement conditions are as follows. LIGHT OUTPUT is set to NORMAL 100 %, PICTURE MODE is set to DYNAMIC, DYNAMIC BLACK is ON, attached projection lens is ML-713, zoom position is WIDE (max.), and the lens shift position is center. *3 : WUXGA (60 Hz) Reduced Blanking only. *4 : Supported on the HDMI®1, HDBaseT™, and DisplayPort™ terminal. *5 : Optional wireless adapter is needed. *6 : 0 – 40°C (32 – 104°F) at altitude from 1,600 m to 3,048 m (5,249 ft to 10,000 ft). *7 : SAVING mode disables the functions of MONITOR OUT, AUDIO OUT, speaker sound, network communication, RS-232C control except POWER ON command, etc. in standby. *8 : The availability of the USB-WL-5G varies depending on the country and the region. *9 : HAS-404U is used on a projector with the ultra short throw fixed lens FL-720 is attached to when it is installed at the ceiling mounting position.

Environment
- ▶ Long Life mode
- ▶ No use of mercury lamp

Dimensions
* Image with Standard Lens ML-713 mounted.

[Side view]
242 mm (9.5")
444 mm (17.5")

[Front view]
585 mm (23.0")

Projection Distance

H × V : Screen size
ⓐ : Projection distance
(from the projector's front panel to screen.)

*The figures are not drawn to scale.

Ultra short throw fixed lens FL-720
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)

16 : 10 screen (1,920 × 1,200)

meter

Screen size			USL-701		FL-701	SL-712		ML-713		LL-704		UL-705	
Type	H	V	ⓐ min.	ⓐ max.	Fixed	ⓐ min.	ⓐ max.	ⓐ min.	ⓐ max.	ⓐ min.	ⓐ max.	ⓐ min.	ⓐ 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	ⓐ min.	ⓐ max.	Fixed	ⓐ min.	ⓐ max.	ⓐ min.	ⓐ max.	ⓐ min.	ⓐ max.	ⓐ min.	ⓐ 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							inch						
Screen size			FL-720				Screen size			FL-720			
Type	H	V	a1	a2	b1	b2	Type	H	V	a1	a2	b1	b2
100	2.2	1.3	0.819	0.100	0.423	0.669	100	85	53	32	4	17	26
120	2.6	1.6	0.965	0.246	0.517	0.763	120	102	64	38	10	20	30
150	3.2	2.0	1.185	0.465	0.658	0.905	150	127	79	47	18	26	36
300	6.5	4.0	2.281	1.561	1.365	1.611	300	254	159	90	61	54	63
350	7.5	4.7	2.646	1.927	1.600	1.847	350	297	185	104	76	63	73

* The values may be different slightly.

Terminals

(1) WIRELESS (2) LAN (3) 3G-SDI (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 IN 1
(13) HDMI® OUT (14) HDMI®1 (15) HDMI®2 (16) HDBaseT™
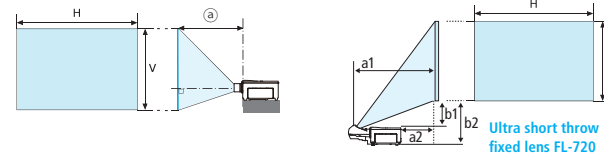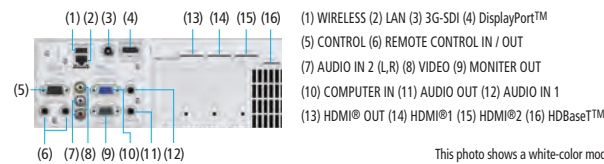
This photo shows a white-color model

⚠ CAUTION RG2

LASER RADIATION
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
Wavelength : 449-461 nm
Max. Output : 130 mW
IEC 60825-1:2007

RAYONNEMENT LASER
ÉVITER D'EXPOSER
DIRECTEMENT LES YEUX
PRODUIT LASER DE CLASSE 3R
Longueur D'onde : 449-461 nm
Sortie max. : 130 mW
IEC 60825-1:2007

雷射輻射
避免眼睛受到直接照射
3R類雷射產品
波長：449-461 nm
最大輸出：130 mW
IEC 60825-1:2007

This projector may become RG3 when an interchangeable lens with throw ratio greater than 2.8 is installed. Refer to the manual for the lens list and hazard distance before operation.
Such combinations of projector and lens are intended for professional use only, and are not intended for consumer use.
Ce projecteur peut se transformer en RG3 si un objectif interchangeable ayant un ratio de projection supérieur à 2.8 est installé. Consultez le manuel pour la liste des objectifs et la distance à risque avant toute utilisation. De telles combinaisons de projecteur et d'objectif sont destinées à un usage professionnel uniquement et ne sont pas destinées au grand public.
Dieser Projektor kann zu RG3 werden, wenn ein Wechselobjektiv mit einem Throw-Ratio größer als 2,8 installiert wird. Vor Inbetriebnahme siehe Objektivliste und Sicherheitsabstand. Derartige Kombinationen von Projektor und Objektiv sind nur für professionellen Gebrauch vorgesehen und sind nicht für Verbraucherverwendung gedacht.

QL59392

LASER ENERGY – EXPOSURE NEAR-APERTURE MAY CAUSE BURNS
ÉNERGIE LASER – L'EXPOSITION PRÈS DE L'OUVERTURE PEUT PROVOQUER DES BRÛLURES
LASERENERGIE – AUSSETZUNG IM BEREICH DER ÖFFNUNG KANN VERBRENNUNGEN VERURSACHEN
雷射能量－暴露於光圈附近可能會導致燙傷

CLASS 1 LASER PRODUCT
PRODUIT LASER DE CLASSE 1
LASERPRODUKT DER KLASSE 1
1類雷射產品
IEC/EN 60825-1:2014

LASER APERTURE
OUVERTURE LASER
LASERÖFFNUNG
雷射窗口

maxell

Maxell, Ltd. Yokohama Business Park North Square III, 134 Godocho, Hodogaya-ku Yokohama-shi Kanagawa , 240-0005, Japan

http://proj.maxell.com/en/

January 2021

MHP-E029 012021

---

maxell
Within the Future

Laser Projector

MP-WU8101B

MP-WU8101W

Pursuit of detail in image quality and better visibility 10,000 lm 3LCD Laser Projector

AMX DEVICE DISCOVERY

CRESTRON connected

Extron XTP CERTIFIED

3LCD

LASER Light Source

*Projected images are simulations

LINEUP

MP-WU8101W — WUXGA 10,000 lm

MP-WU8101B — WUXGA 10,000 lm

3LCD — LASER Light Source

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. Also, this model includes a hybrid filter that requires less maintenance and cleaning, making 20,000 hours of continuous operation possible. Users can enjoy using the projector for long periods of time while maintaining its brightness. Additionally, though the MP-WU8101W / B is a 10,000 lm projector, it has achieved a low noise of 38 dB. This is an 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.

Screen — LCD(Red, Green, Blue) — Blue Laser (Light source)
Projection lens — R G B — Phosphor wheel

LIGHT OUTPUT	Brightness*2	Light source life*3	Noise*4
NORMAL	10,000 lm	20,000 hours	38 dB
LONG LIFE 1	7,500 lm	30,000 hours	
LONG LIFE 2	5,000 lm	50,000 hours	
WHISPER	5,000 lm	20,000 hours	33 dB

*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

Brightness (normalized) — 100% — 50 — 0

NORMAL WHISPER 20,000 hours
LONG LIFE 1 30,000 hours
LONG LIFE 2 50,000 hours

0 — 10,000 — 20,000 — 30,000 — 40,000 — 50,000 hours

* This is for illustrative purposes only.

High Image Quality

Contrast Optimizer

This is Maxell's original technology that enhances the contrast according to the brightness of the input image and improves visibility.
The dynamic range of each part of the image is stretched to display an image with a wider range of expression of blackouts and bright areas of the image.

* This function is disabled when the EDGE BLENDING function or the PbyP / PinP function is enabled.
* This function is disabled when HDR DETECT is enabled and HDR signal is input.
* Even if this function is set to ON, this function may be disabled depending on the PICTURE MODE setting.

Dark scene — OFF / ON   **Bright scene** — OFF / ON

* Comparison photos are simulations.

HDR Detect

Receives the 4K HDR signals*5 and expresses rich tones in dark and bright areas of the scene.

* Comparison photos are simulations.
* 5 Supports 4K HDR signals : Converted to WUXGA (1920 × 1200) resolution size. 4K signals can be received from HDMI®1, HDBaseT™, and DisplayPort™.

Conventional — HDR
Conventional — HDR

* Comparison photos are simulations.

Installability and System Features

Edge Blending & Warping

The multiple projectors allow to project one image on a huge curved screen by using the geometry correction and the edge blending functions simultaneously.
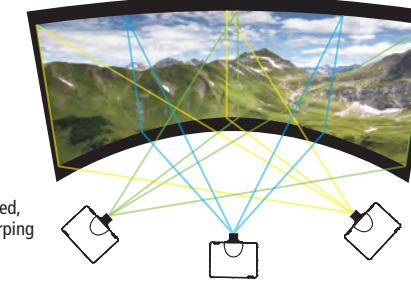
* Additional equipment may be required for this feature.
* If geometry correction is required, please download Projector Warping Tool from the website (https://proj.maxell.co.jp/en/).

4K Ready *6

The projectors allow 4K signal input on HDMI®1, HDBaseT™, and DisplayPort™ input terminals. You can enjoy much better viewing experiences with a 4K Ultra HD Blu-ray™ player or other devices.

HDMI® OUT

Transfers the input signal on the HDMI®1 or HDBaseT™ terminal to another device. It allows to connect the projectors*4 in series in order to project the same image simultaneously without using an HDMI® splitter or switcher product.

*6 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 the HDCP version, the restriction of the number of devices for HDCP repetition of the source device, and the quality of the cable.

Blu-ray™ player

Projector Blending Tool 3 (Application)

Capable of projecting smooth blended images using up to 12 projectors with an external camera unit.

Camera — PC
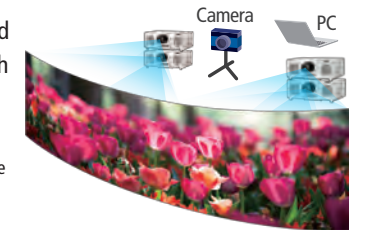
* The application can be downloaded from the website (https://proj.maxell.co.jp/en/).
* This figure is not drawn to scale.

Multi Screen Mode

When projecting the screens of multiple projectors side by side or edge blending, this function allows to reduce differences of color tone and brightness between them.

360° Projection

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

360°
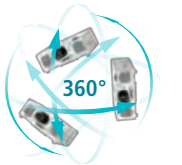
* When the ultra long throw lens UL-705 is attached, the projector cannot be installed facing its projection lens upward or downward.

Auto Power ON *7

The projector power can be turned on to display the input image automatically when the input signal comes from connected devices.
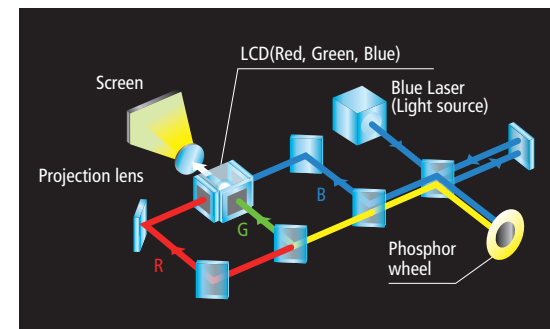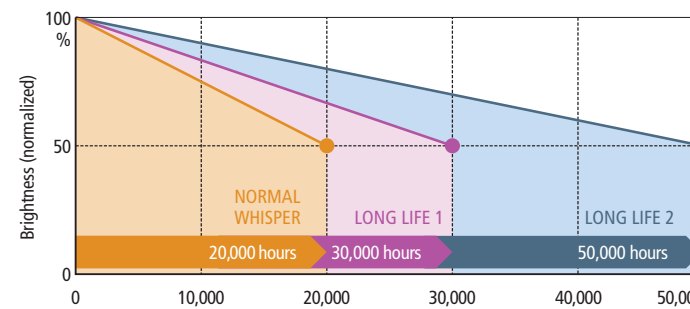
Standby → Signal input → ON

*7 Supported input terminals are COMPUTER IN, 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 devices.
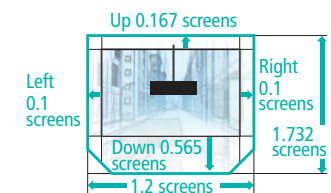
Interchangeable Lenses Options   *Local availability may be limited.

Lens type		Zoom ratio	Throw ratio	Screen size (Diagonal)	Weight	Lens shift Up / Down	Lens shift Left / Right
FL-720	Ultra short throw fixed lens	1.0	0.38	100" – 350"	3.1 kg*8	+82% ~ +88%	-5% ~ +5%
USL-701	Ultra short throw lens	1.3	0.74 – 0.98	60" – 600"	1.8 kg	-16.7% ~ +52.5%	-10% ~ +10%
FL-701	Fixed short throw lens	1.0	0.8	30" – 600"	1.1 kg	-6.9% ~ +6.9%	-4.3% ~ +4.3%
SL-712	Short throw lens	1.5	1.2 – 1.8	30" – 600"	0.7 kg	-16.7% ~ +52.5%	-10% ~ +10%
ML-713	Middle throw lens	1.7	1.7 – 3.0	30" – 600"	0.9 kg	-16.7% ~ +56.5%	-10% ~ +10%
LL-704	Long throw lens	1.7	2.8 – 4.9	30" – 600"	1.5 kg	-16.7% ~ +52.5%	-10% ~ +10%
UL-705	Ultra long throw lens	1.7	4.9 – 8.3	30" – 600"	1.6 kg	-16.7% ~ +52.5%	-10% ~ +10%

*8 Excluding support metal.

Lens shift area

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

Up 0.167 screens
Left 0.1 screens — Right 0.1 screens
Down 0.565 screens
1.2 screens — 1.732 screens

* 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

[Network] : Projector Control, Easy Scheduling Setting, Network presentation [Installability] : Perfect Fit, Instant Stack [Security] : PIN lock, Key lock [Usability] : Auto Power On, Direct Power On / Off, Magnify, PbyP / PinP, Remote ID, Quick Start, DICOM® Simulation Mode*9

*9 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.