



User Manual

020-001986-02

# APS Series



LWU560-APS/LWU600-APS/LWU660-  
APS/LWU700-APS/LWU700-4K-APS/LWU800-  
APS/LWU800-4K-APS/LWU890-APS

**CHRISTIE®**

## NOTICES

### COPYRIGHT AND TRADEMARKS

Copyright © 2025 Christie Digital Systems USA, Inc. All rights reserved.

All brand names and product names are trademarks, registered trademarks or trade names of their respective holders.

### GENERAL

Every effort has been made to ensure accuracy, however in some cases changes in the products or availability could occur which may not be reflected in this document. Christie reserves the right to make changes to specifications at any time without notice. Performance specifications are typical, but may vary depending on conditions beyond Christie's control such as maintenance of the product in proper working conditions. Performance specifications are based on information available at the time of printing. Christie makes no warranty of any kind with regard to this material, including, but not limited to, implied warranties of fitness for a particular purpose. Christie will not be liable for errors contained herein or for incidental or consequential damages in connection with the performance or use of this material. Our centers of excellence for manufacturing in Kitchener, Ontario, Canada and in Shenzhen, China are ISO 9001:2015 Quality Management System-certified.

Christie is committed to making our documents free from language bias; however, we are not responsible for the language used on any linked or third-party documentation.

For the most current technical documentation and office contact information, visit [www.christiedigital.com](http://www.christiedigital.com).

### WARRANTY

Products are warranted under Christie's standard limited warranty, the details of which are available at <https://www.christiedigital.com/help-center/warranties/> or by contacting your Christie dealer or Christie.

### PREVENTATIVE MAINTENANCE

Preventative maintenance is an important part of the continued and proper operation of your product. Failure to perform maintenance as required, and in accordance with the maintenance schedule specified by Christie, voids the warranty. For preventative maintenance schedules, refer to [www.christiedigital.com](http://www.christiedigital.com).

### REGULATORY (if applicable)


The product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. The product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's own expense. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAN ICES-3 (A) / NMB-3 (A)

이 기기는 업무용(A급)으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

### ENVIRONMENTAL



The product is designed and manufactured with high-quality materials and components some of which can be recycled and reused. This symbol  means electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, separate collection systems are for used electrical and electronic products.

If printing this document, consider printing only the pages you need and select the double-sided option.

Please help us to conserve the environment we live in!

### NOTATION

Learn the hazard and information symbols used in the product documentation.



Danger! If not avoided, the following could result in death or serious injury.



Warning! If not avoided, the following could result in death or serious injury.



Caution! If not avoided, the following could result in minor or moderate injury.



Notice. If not avoided, the following could result in property damage.



Information messages provide additional information, emphasize or provide a useful tip.

# Content

<b>Introduction.....</b>	<b>6</b>
Models .....	6
Projector overview .....	6
Contact your dealer .....	6
Key features and functions .....	7
List of components .....	7
Product documentation .....	8
Related documentation .....	9
Technical support.....	9
Screen size .....	9
<b>Installation and setup.....</b>	<b>12</b>
Site requirements .....	12
Physical operating environment .....	12
Power connection .....	12
Projector components.....	13
Top control panel and indicators .....	13
Built-in keypad.....	18
Connecting to ports .....	20
IR remote keypad .....	23
Determining the remote control operating range.....	26
Placing the projector correctly.....	27
Air ventilation .....	27
Positioning the display.....	29
Powering on the projector .....	31
Entering a password (PIN) .....	31
Powering off the projector.....	32
Indicator statuses .....	32
Status indicators .....	32
Shutter LED indicators.....	33
<b>Adjusting the size and position.....</b>	<b>47</b>
Adjusting the picture size and position .....	47
Adjusting the projector focus function .....	48

Adjusting the projector zoom function.....	49
Adjusting the projector lens shift function.....	50
Adjusting pads .....	51
Keystone adjustment.....	53
<b>Menu items.....</b>	<b>54</b>
Display menu .....	54
Adjusting the fine sync, position, and size. ....	54
Adjusting fine sync for PC signal input only.....	54
Adjusting H position for PC signal input only .....	55
Adjusting H size for PC signal input only.....	55
Modifying the image to fit the screen.....	55
Setting the projection direction.....	55
Changing the menu position.....	56
Adjusting the background color.....	56
Matching the resolution of the input signal .....	56
Determining signal formats .....	57
Color adjust menu.....	58
Selecting the image mode.....	58
Adjusting the color.....	59
Making advanced color adjustments (LWU600-APS only) .....	59
Setting menu .....	60
Setting the power mode .....	60
Setting power consumption for Standby mode .....	61
Adjusting for altitude.....	61
Setting the fan cooling speed .....	61
Setting closed captions (LWU600-APS only).....	62
Locking the control panel and remote control.....	62
Optimizing contrast (LWU560-APS, LWU660-APS, LWU700-APS, and LWU800-APS only).....	62
Changing light source brightness .....	63
Changing sound .....	63
Determining HDMI setup.....	63
Expand menu .....	64
Setting the language.....	64
Running Auto setup .....	64
Setting keystone .....	65
Correcting horizontal or vertical keystone.....	65

Correcting four corner distortion in images .....	65
Selecting the screen logo and lock setup .....	69
Setting projector security .....	70
Managing projector power consumption .....	70
Setting filter counter .....	70
Selecting a test pattern .....	71
Network .....	71
Preparing the network .....	71
Operating the projector .....	72
Resetting to the factory default .....	72
Memory Viewer menu .....	72
Playing slides .....	73
Setting the slide's playback .....	73
Setting the slide's order .....	73
Rotating slides .....	74
Determining the best fit of the image for the screen .....	74
Setting slide repetition .....	74
Applying slide changes .....	74
Info. menu .....	75
<b>Signal connectivity specifications .....</b>	<b>76</b>
<b>Network control operation .....</b>	<b>82</b>
Preparing the computer .....	82
Operating the projector with the computer .....	82
Enabling WiFi .....	83
Setting up the wireless network .....	83
Entering through a web browser .....	83
<b>Wake on LAN operation .....</b>	<b>85</b>

# Introduction

This manual is intended for Christie-qualified installers and trained operators of the projector. For complete APS Series product documentation and technical support, go to [www.christiedigital.com](http://www.christiedigital.com). This projector is intended for use in a non-cinema environment.

The illustrations in this manual are for illustrative purposes. They may differ slightly from your projector.

## Models

The following models are supported for the APS Series.

- LWU560-APS
- LWU600-APS
- LWU660-APS
- LWU700-APS
- LWU700-4K-APS
- LWU800-APS
- LWU800-4K-APS
- LWU890-APS

## Projector overview

Thank you for purchasing this projector. The APS Series is a 3LCD laser projector featuring a long throw lens and new-generation, laser-driven liquid crystal light source technology. It offers brightness levels of 5,000 lumens (LWU560-APS, LWU600-APS), 6,000 lumens (LWU660-APS, LWU700-APS, and LWU700-4K-APS), 6,500 lumens (LWU800-APS), 7,200 lumens (LWU800-4K-APS), or 8,000 lumens (LWU890-APS), along with a rated lamp life of up to 20,000 hours, maintaining consistent brightness throughout its lifespan. It is equipped with multimedia features and uses LCD display (LCD) technology with its color depth up to 1.07 billion color. In addition, mute design makes our product with the perfect user experience.

## Contact your dealer

Record the information about the projector and keep this information with your records to assist with the servicing of the projector. If you encounter a problem with your Christie projector, contact your dealer.

Purchase record
Dealer:
Dealer or Christie Sales/Service contact phone number:
Projector serial number: The serial number can be found on the license label located on the display panel

Purchase date:
Installation date:

Ethernet settings	
Default gateway	
Projector IP address	
Projector IP address	

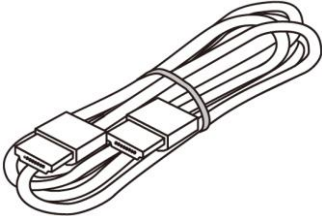
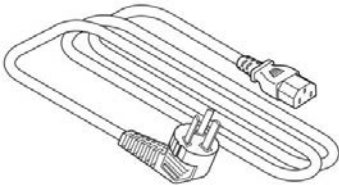
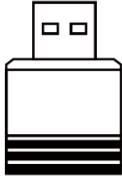

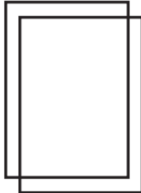
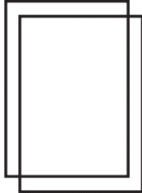



## Key features and functions

Understand the important features of the projector.

- Understand the important features of the projector.
- 20,000H hours of real time with the new light source laser
- WUXGA 0.64" 1920 x 1200 resolution
- Two types of 1.6x lenses for your choice
- Focus/zoom function and lens shift function
- HDBaseT function and wireless display function are optional
- Silent design using a sealed structure with no fan noise even in a quiet conference room or classroom
- Perfect combination of high brightness and color
- Logo function (Logo select, Capture, Logo PIN code lock and Logo PIN code change)
- Blank design—Select the BLANK button, the projector switches to a blank screen status immediately to prevent information leaks
- Various projection modes for your choice
- On and off instantly
- Logo PIN code lock and Kensington lock to anti-theft function
- Abnormal log management and troubleshooting function

## List of components

This projector comes with all the items listed below. Check to make sure your package is complete. If anything is missing, contact your dealer.

HDMI cable	Power cord	Wifi dongle (optional, LWU890-APS)
		
Product Safety guide (LWU560-APS and LWU660-APS only)	Quick Start guide (LWU700-APS, LWU800-APS, LWU890-APS, and LWU600-APS only)	Warranty card
		
Remote control (including batteries AA*2) LWU560-APS, LWU600-APS, LWU660-APS, LWU700-APS, LWU800-APS, and LWU890-APS	Remote control (including batteries AAA*2) LWU700-4K-APS and LWU800-4K-APS	Certification card
		

# Product documentation

For installation, setup, and user information, see the product documentation available on the Christie website. Read all the instructions before using or servicing this product.

1. Access the documentation from the Christie website:  
Go to this URL: <https://bit.ly/3yJZLh> or <https://www.christiedigital.cn/products/projectors/all-projectors/APS/>

Scan the QR code using a QR code reader app on a smartphone or tablet.





2. On the product page, select the model and switch to the Downloads tab.

## Related documentation

Additional information on the projector is available in the following documents.

- APS Series Product Safety Guide (P/N: 020-001984-XX)
- APS Series Installation and Setup Guide (P/N: 020-001985-XX)
- APS Series Service Guide (P/N: 020-001987-XX)
- APS Series Serial API Commands Technical Reference (P/N: 020-103593-XX)

## Technical support

Technical support for Christie Enterprise products is available at:

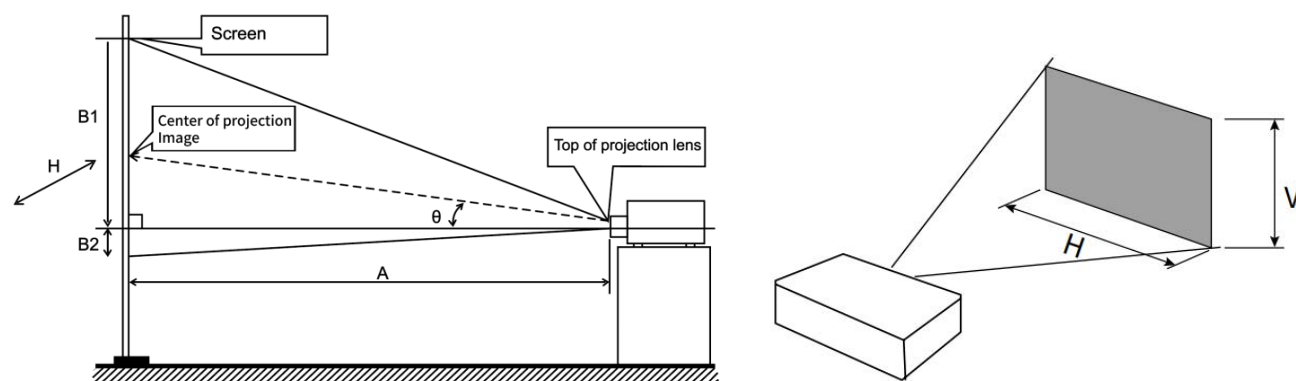
- North and South America: +1-800-221-8025 or [Support.Americas@christiedigital.com](mailto:Support.Americas@christiedigital.com)
- Europe, Middle East, and Africa: +44 (0) 1189 778111 or [Support.EMEA@christiedigital.com](mailto:Support.EMEA@christiedigital.com)
- Asia Pacific ([support.apac@christiedigital.com](mailto:support.apac@christiedigital.com)):
  - China: +86 10 6561 0240
  - India: +91 (80) 6708 9999
  - Japan: 81-3-3599-7481
  - Singapore: +65 6877-8737
  - South Korea: +82 2 702 1601

## Screen size

**Lens type for 0.64" WUXGA (LWU560-APS/LWU660-APS/LWU700-APS/LWU800-APS/LWU600-APS).**

Lens type	Throw ratio	Projection lens	Zoom ratio	Throw distance
Manual	1.23-1.97	Standard throw zoom	1.6X	0.765 – 7.964 (m)

- Ambient brightness may affect your projection image quality. For the optimal image effect, Christie recommends to control brightness in your environment.
- The values shown in figure below are approximates only. They may differ from the actual ones.
- The further the projector is away from the screen, the larger the projection size is.
- Use the following table to install the projector in the best position from the screen. The values provided are for reference only.



LWU560-APS, LWU600-APS, LWU660-APS, LWU700-APS, LWU800-APS, and LWU890-APS

16:10 perspective (native)				
Screen size (inches)	Width(H) (m)	Height(V) (m)	Wide (m)	Tele (m)
30	0.646	0.404	0.765	1.258
40	0.862	0.538	1.031	1.689
60	1.292	0.808	1.564	2.550
70	1.508	0.942	1.831	2.981
80	1.723	1.077	2.098	3.411
90	1.939	1.212	2.364	3.842
100	2.154	1.346	2.631	4.273
120	2.585	1.615	3.164	5.134
150	3.231	2.019	3.964	6.426
200	4.308	2.392	5.297	8.579
250	5.385	3.365	6.631	10.732
300	6.462	4.039	7.964	12.885

LWU700-4K-APS and LWU800-4K-APS

16:9 perspective (native)				
Screen size (inches)	Width(H) (m)	Height(V) (m)	Wide (m)	Tele (m)
30	0.664	0.374	0.786	1.293
40	0.886	0.498	1.060	1.736
60	1.328	0.747	1.608	2.621
70	1.550	0.872	1.882	3.064

16:9 perspective (native)				
Screen size (inches)	Width(H) (m)	Height(V) (m)	Wide (m)	Tele (m)
80	1.771	0.996	2.156	3.506
90	1.992	1.121	2.430	3.949
100	2.214	1.245	2.704	4.392
120	2.657	1.494	3.252	5.277
150	3.321	1.868	4.075	6.605
180	3.985	2.241	4.897	7.933
200	4.428	2.491	5.445	8.818
250	5.535	3.113	6.815	11.031
300	6.641	3.736	8.186	13.244

LWU560-APS, LWU600-APS, LWU660-APS, LWU700-APS, LWU800-APS, and LWU890-APS

16:10 perspective (native)				
Screen size (inches)	Width(H) (m)	Height(V) (m)	Wide (m)	Tele (m)
30	0.646	0.404	0.992	1.626
40	0.862	0.538	1.335	2.180
60	1.292	0.808	2.020	3.287
70	1.508	0.942	2.363	3.840
80	1.723	1.077	2.706	4.394
90	1.939	1.212	3.048	4.947
100	2.154	1.346	3.391	5.501
120	2.585	1.615	4.077	6.608
150	3.231	2.019	5.105	8.269
180	3.877	2.423	6.133	9.930
200	4.308	2.692	6.819	11.037
250	5.385	3.365	8.533	13.804
300	6.462	4.039	10.246	16.572

# Installation and setup

Learn how to install, connect, and optimize the projector display.

## Site requirements

To safely install and operate the projector, the installation location must have restricted access for authorized personnel only and meet these minimum requirements.

## Physical operating environment

This provides specifications for the operating environment.

Item	Specification
Ambient temperature (operating)	<ul style="list-style-type: none"> <li>LWU560-APS, LWU660-APS and LWU600-APS: 0 to 40°C (32 to 104°F).</li> <li>LWU700-APS and LWU800-APS: 5 to 40°C (41 to 104°F).</li> <li>LWU700-4K-APS, LWU890-APS, and LWU800-4K-APS: 0 to 40°C (32 to 104°F) for an altitudes 1,700 to 3,000 m (1,577.4 to 9,842.5 feet); 0 to 50°C (32 to 122°F) for altitudes 0 to 1,700 m (0 to 1,577.4 feet).</li> </ul>
Storage temperature range	-10 to 50°C (14 to 122°F)
Humidity range	20% to 80%
Storage humidity rang	10% to 85%
Operating altitude	<ul style="list-style-type: none"> <li>LWU560-APS, LWU660-APS, LWU700-APS, and LWU800-APS: 3,200 meters (10,498.69 feet) maximum.</li> <li>LWU700-4K-APS, LWU890-APS, LWU800-4K-APS, and LWU600-APS: 3,000m (9,843 feet) maximum.</li> </ul>

## Power connection

The projector uses an AC power system allowing the projector to operate at full brightness with a power supply of 100 to 240 VAC. Operating the device outside of the voltage range may cause unsatisfactory operation or damage to the projector. To ensure safety operation, only use the AC power cord provided with the product recommended by Christie.

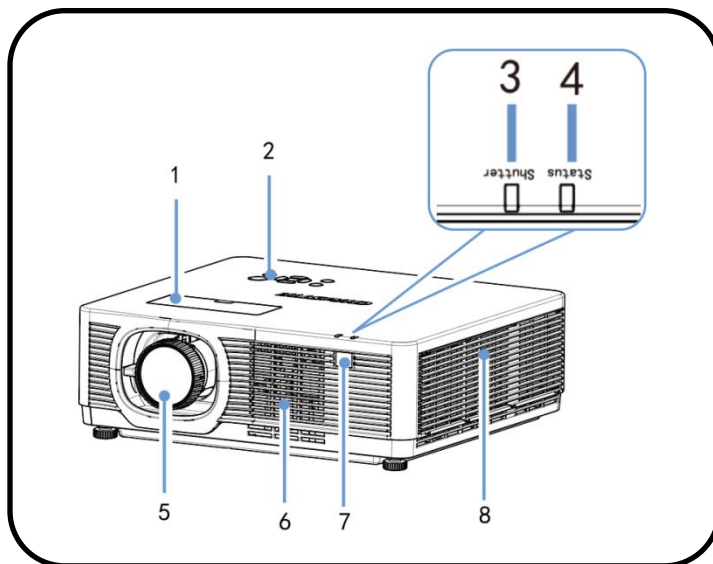
Model name	Power requirements
LWU560-APS, LWU660-APS, LWU700-4K-APS, LWU700-APS, LWU800-APS, LWU890-APS, and LWU800-4K-APS	100-240 VAC, 50/60 Hz, 4.5 A maximum
LWU600-APS	100-240 VAC, 50/60 Hz, 3.3 A

## Projector components

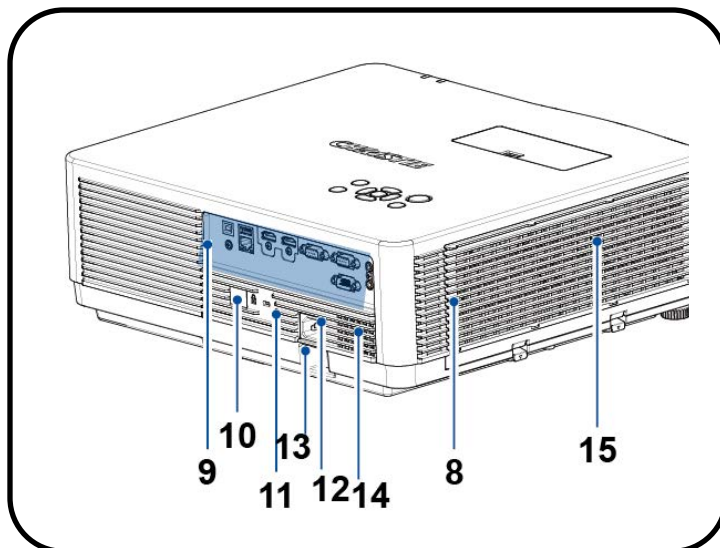
Identify the main components of the projector.

### Top control panel and indicators

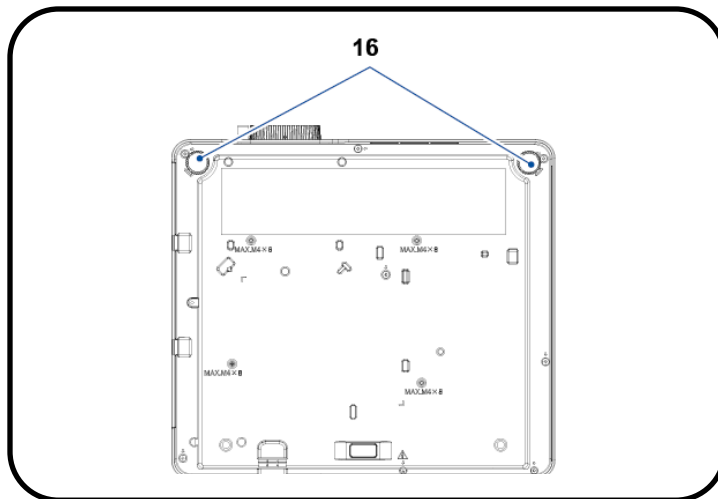
LWU560-APS and LWU660-APS



- 1—Lens shift
- 2—Keypad
- 3—Shutter indicator
- 4—Status indicator
- 5—Projection lens
- 6—Air intake grille
- 7—Remote receiver (front)
- 8—Air outlet grille

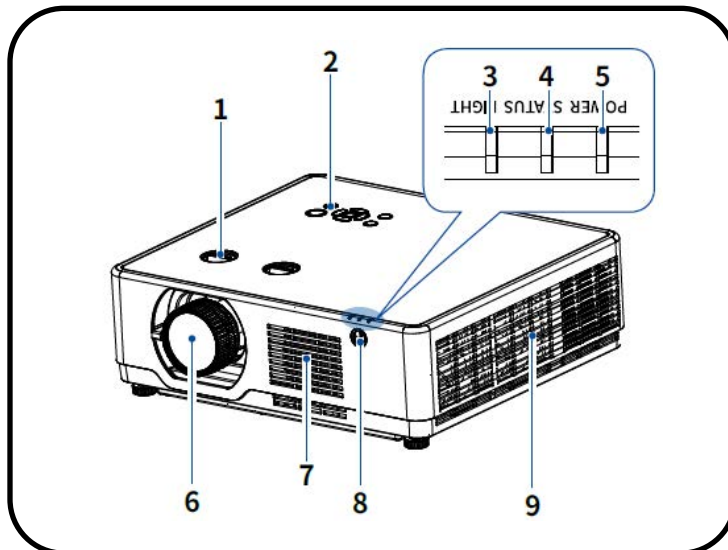


- 9—Terminal
- 10—Remote receiver (back)
- 11—Security hole
- 12—AC power cord port
- 13—Security chain opening. Attach an anti-theft device. The security chain opening accepts security wires or chains up to 4.6 mm (0.18 inch) in diameter.
- 14—Speaker
- 15—Filter

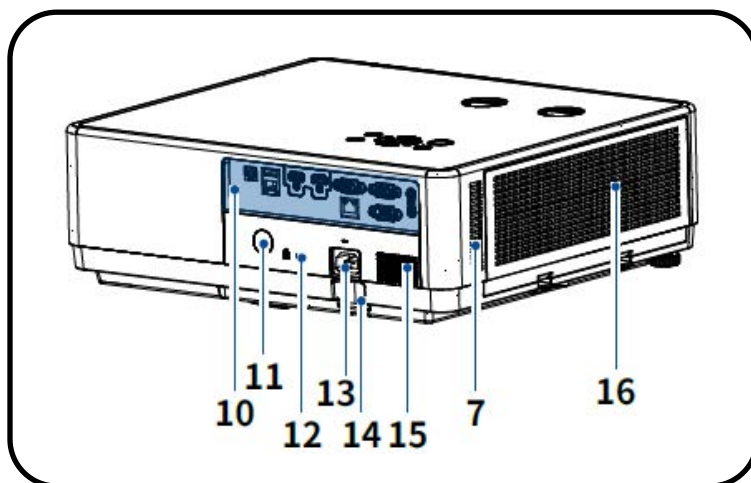


16—Adjustment pad

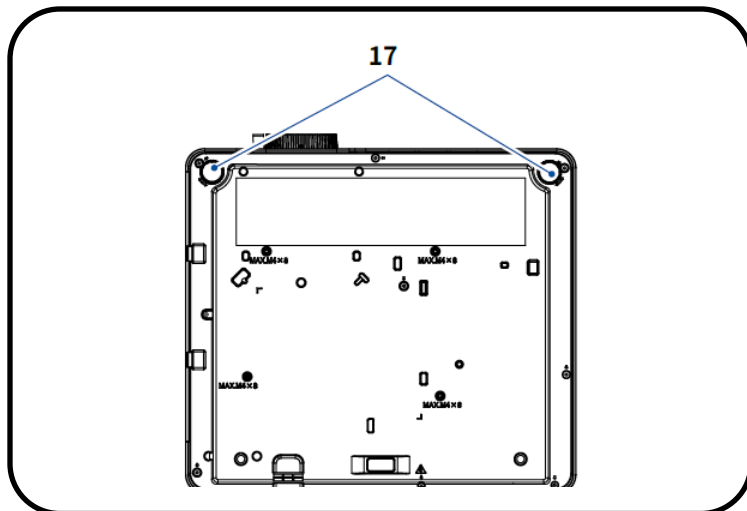
LWU700-APS and LWU800-APS



- 1—Lens shift
- 2—Keypad
- 3—Light indicator
- 4—Status indicator
- 5—Power indicator
- 6—Projection lens
- 7—Air intake grille
- 8—Remote receiver (front)
- 9—Air outlet grille

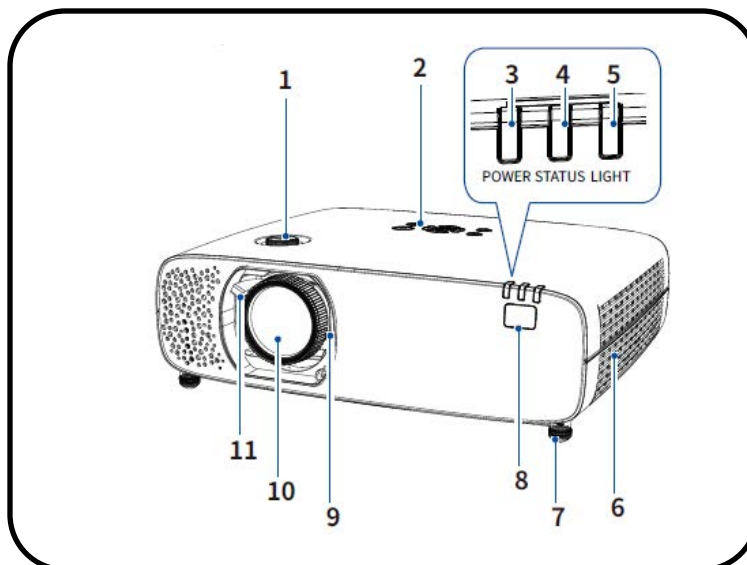


- 10—Terminal
- 11—Remote receiver (back)
- 12—Security hole
- 13—AC power cord port
- 14—Security chain opening. Attach an anti-theft device. The security chain opening accepts security wires or chains up to 4.6 mm (0.18 inch) in diameter.
- 15—Speaker
- 16—Filter

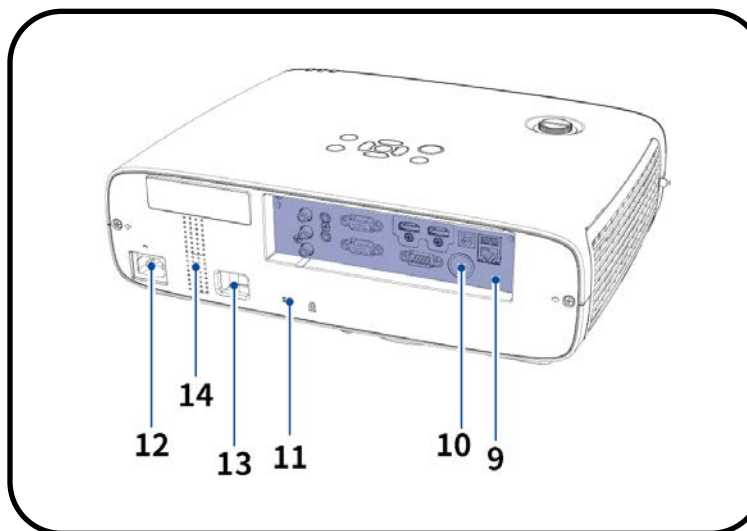


17—Adjustment pad

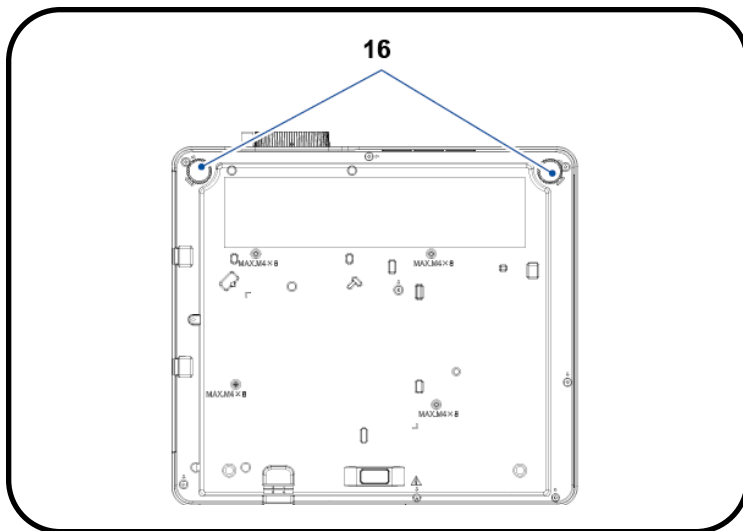
# LWU600-APS



- 1—Lens shift
- 2—Keypad
- 3—Power indicator
- 4—Status indicator
- 5—Light indicator
- 6—Air outtake grille
- 7—Adjustment pad
- 8—Remote receiver (front)
- 9—Focus ring
- 10—Projection lens
- 11—Zoom lever

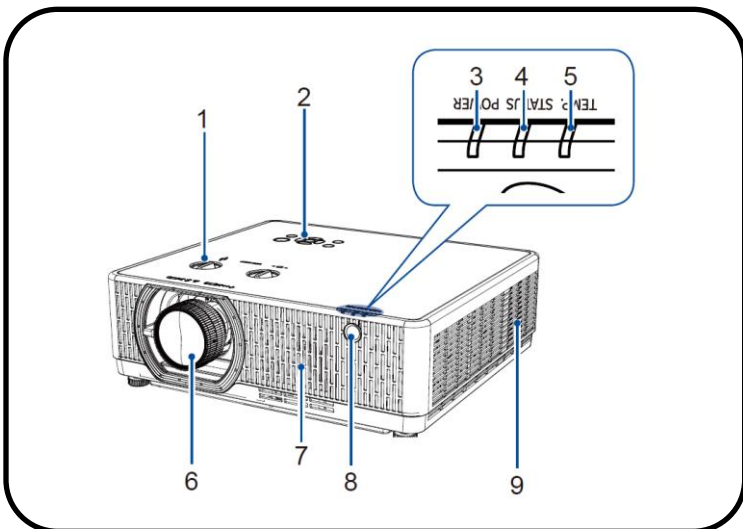


- 9—Terminal
- 10—Remote receiver (back)
- 11—Security hole
- 12—AC power cord port
- 13—Security chain opening. Attach an anti-theft device. The security chain opening accepts security wires or chains up to 4.6 mm (0.18 inch) in diameter.
- 14—Speaker

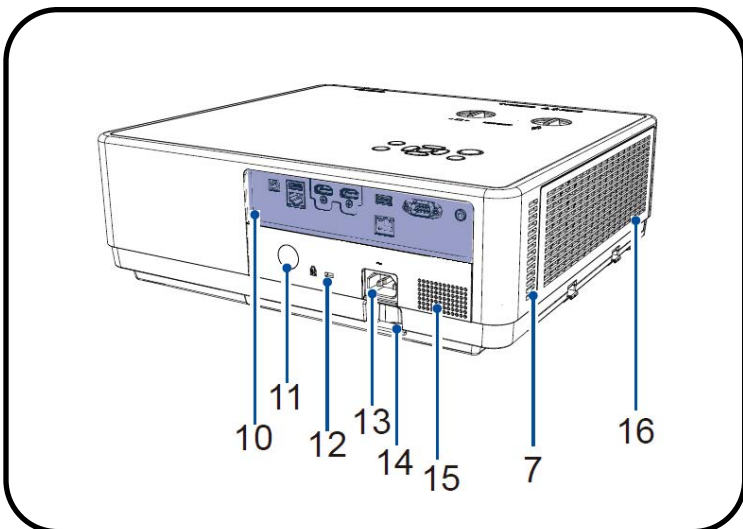


16—Adjustment pad

# LWU800-4K-APS and LWU890-APS

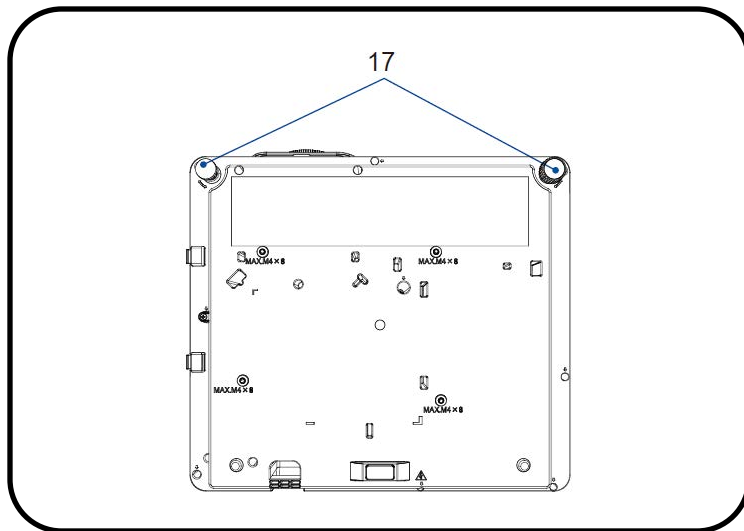


- 1—Lens shift
- 2—Keypad
- 3—Power indicator
- 4—STATUS indicator
- 5—TEMP indicator
- 6—Projection lens
- 7—Air intake grille
- 8—Remote Receiver (front)
- 9—Air outlet grille



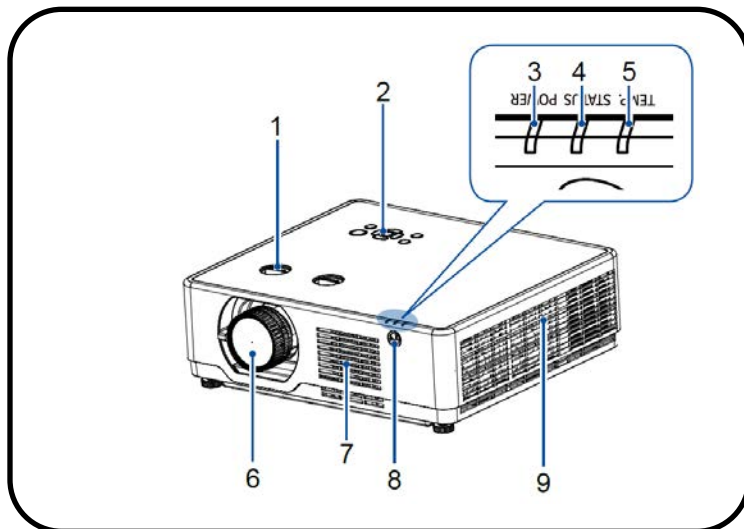
- 10—Terminal
- 11—Remote Receiver (back)
- 12—Security hole
- 13—AC power cord port
- 14—Security chain opening
- Attach an anti-theft device.
- The security chain opening accepts security wires or chains up to 4.6 mm (0.18 inch) in diameter.
- 15—Speaker
- 16—Filter



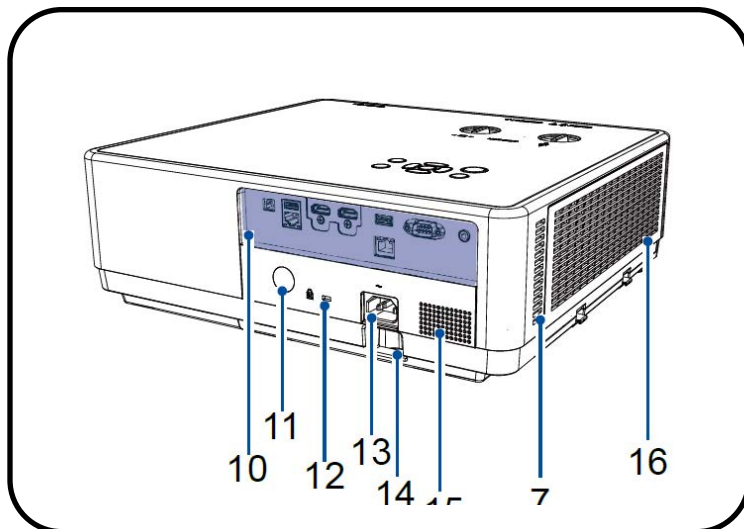


17—Adjustment pad

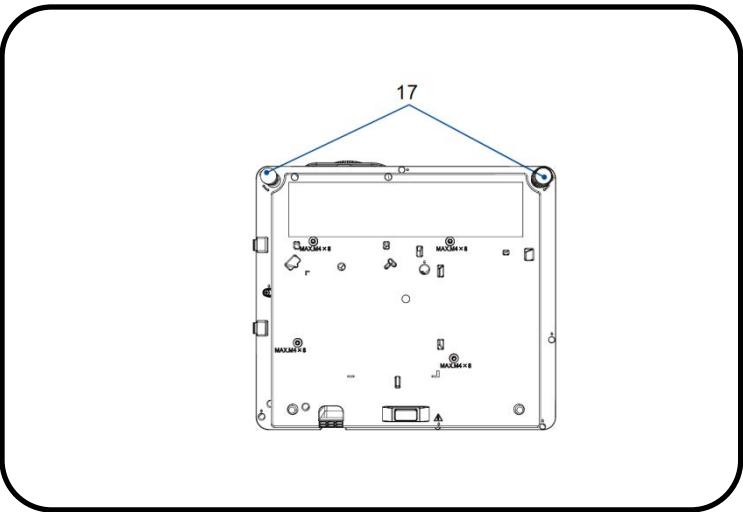
# LWU700-4K-APS



- 1—Lens shift
- 2—Keypad
- 3—Power indicator
- 4—STATUS indicator
- 5—TEMP indicator
- 6—Projection lens
- 7—Air intake grille
- 8—Remote Receiver (front)
- 9—Air outlet grille



- 10—Terminal
- 11—Remote Receiver (back)
- 12—Security hole
- 13—AC power cord port
- 14—Security chain opening
- Attach an anti-theft device.
- The security chain opening accepts security wires or chains up to 4.6 mm (0.18 inch) in diameter.
- 15—Speaker
- 16—Filter



17 Adjustment pad

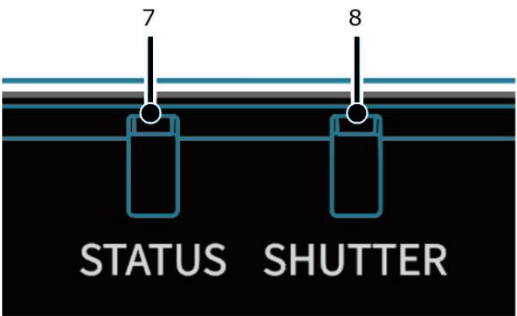
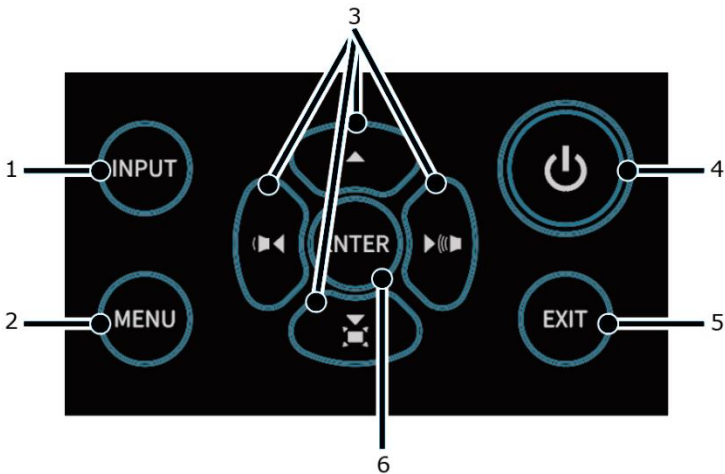


- Notice. If not avoided, the following could result in property damage.
- Do not place your hands or other objects near the vent.
  - PERSONAL INJURY OR PDOCUT DAMAGE HAZARD! Vents shed heat. Do not place your hands, face, or thermolabile objects near the outlets. Maintain at least a distance of 1 m (39.4 inches) away.

Built-in keypad

Basic information on the top shell keyboard and status lights.

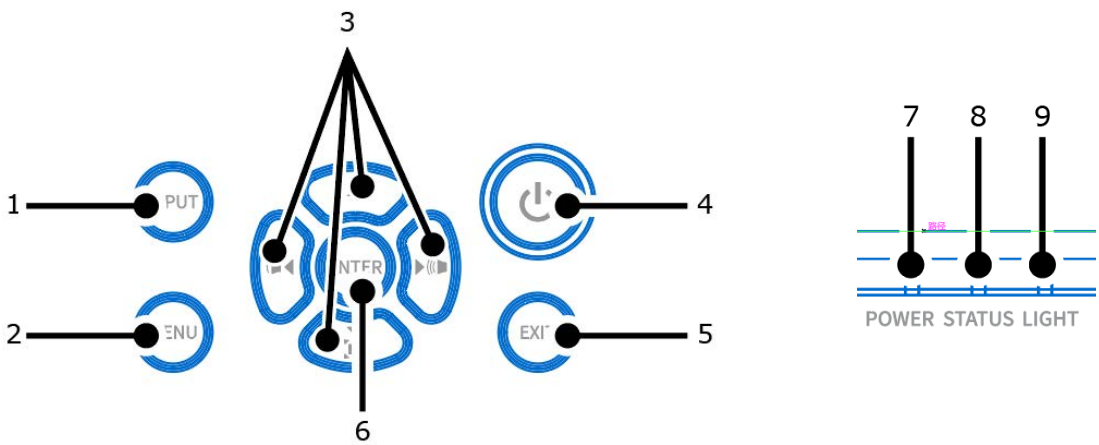
LWU560-APS and LWU660-APS



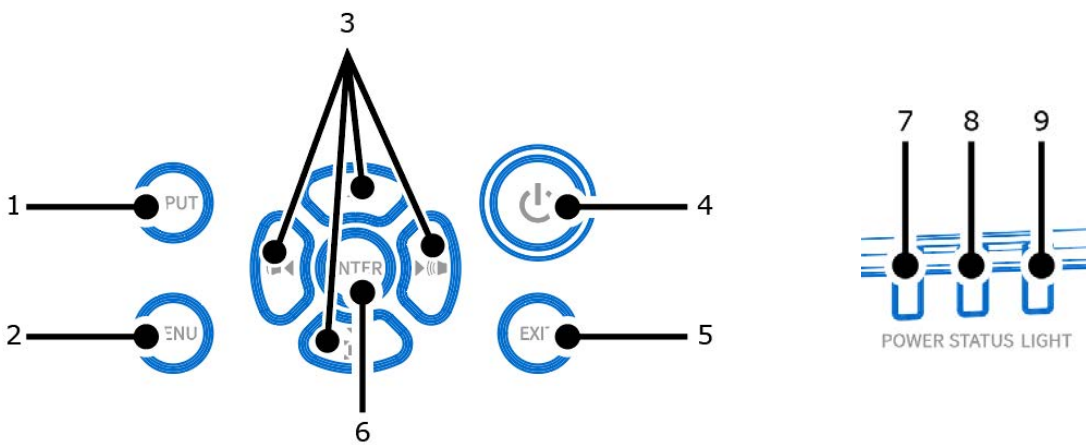
ID	Part name	Description
1	NPUT	Open or close the INPUT menu.
2	MENU	Open or close the on-screen display (OSD) menu.
3	Arrow▲▼◀▶ /Volume +/- /Keystone▼	<ul style="list-style-type: none"><li>• Select items or adjust the data in the on-screen display (OSD) menu.</li><li>• Adjusts volume or makes keystone modification.</li><li>• Requires a password.</li></ul>

ID	Part name	Description
4	POWER	Open or close the projector.
5	EXIT	Esc or return to the previous menu.
6	ENTER	<ul style="list-style-type: none"><li>Enter the on-screen display (OSD) menu</li><li>Select options in the on-screen display (OSD) menu.</li></ul>
7	STATUS indicator	Lights up/flashes when a button is selected with the CONTROL PANEL LOCK enabled, or when an error occurs in the projector.
8	SHUTTER indicator	Displays the power status of the projector.

LWU700-APS and LWU800-APS



LWU600-APS, LWU700-4K-APS, LWU890-APS, and LWU800-4K-APS



ID	Part name	Description
1	INPUT	Open or close the INPUT menu.
2	MENU	Open or close the on-screen display (OSD) menu.
3	Arrow▲▼◀▶ /Volume +/- /Keystone▼	<ul style="list-style-type: none"><li>Select items or adjust the data in the on-screen display (OSD) menu.</li><li>Adjusts volume or makes keystone modification.</li></ul>

ID	Part name	Description
		<ul style="list-style-type: none"><li>Requires a password.</li></ul>
4	POWER	Open or close the projector.
5	EXIT	Returns to the previous menu.
6	ENTER	<ul style="list-style-type: none"><li>Enter the on-screen display (OSD) menu.</li><li>Select options in the on-screen display (OSD) menu.</li></ul>
7	POWER indicator	Displays the power status of the projector.
8	STATUS indicator	Lights up flashes when a button is selected with the CONTROL PANEL LOCK enabled, or when an error occurs in the projector.
9	LIGHT indicator	Displays the status and used time of light source.

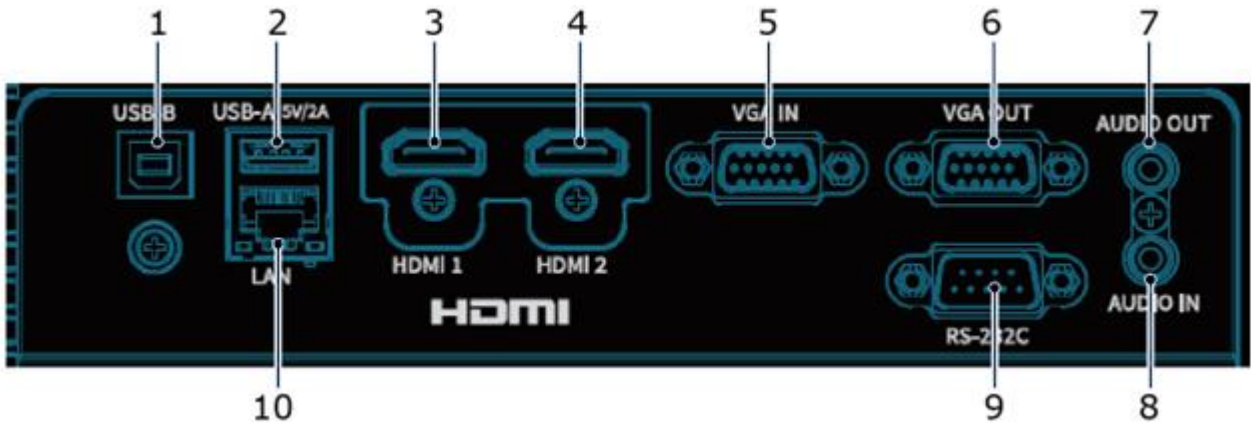
Connecting to ports

The following is the introduction of some functions of the terminal board of this projector device.

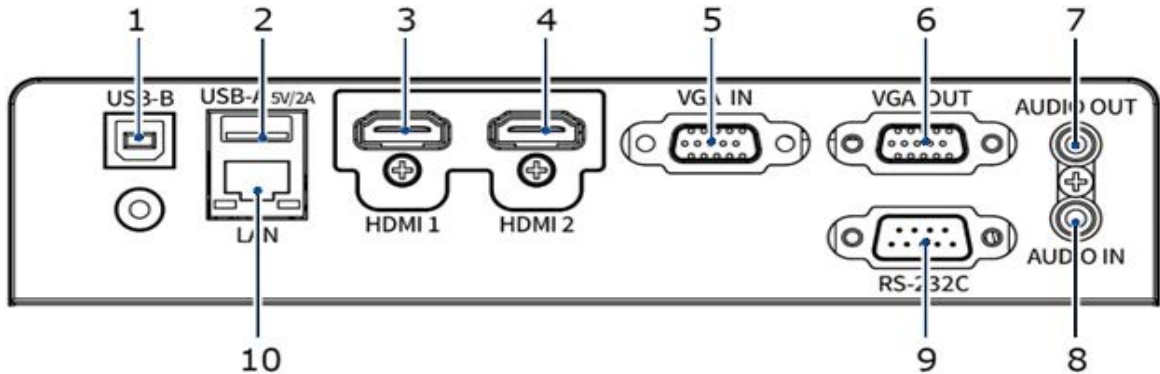


- Use the cables with straight plugs (not the L-shaped ones) as the input ports of the projector are recessed.
- Only the signal input from the COMPUTER IN1 can be output from the COMPUTER IN2/MONITOR OUT port. It is only available when the MONITOR OUT is selected for the COMPUTER IN2.

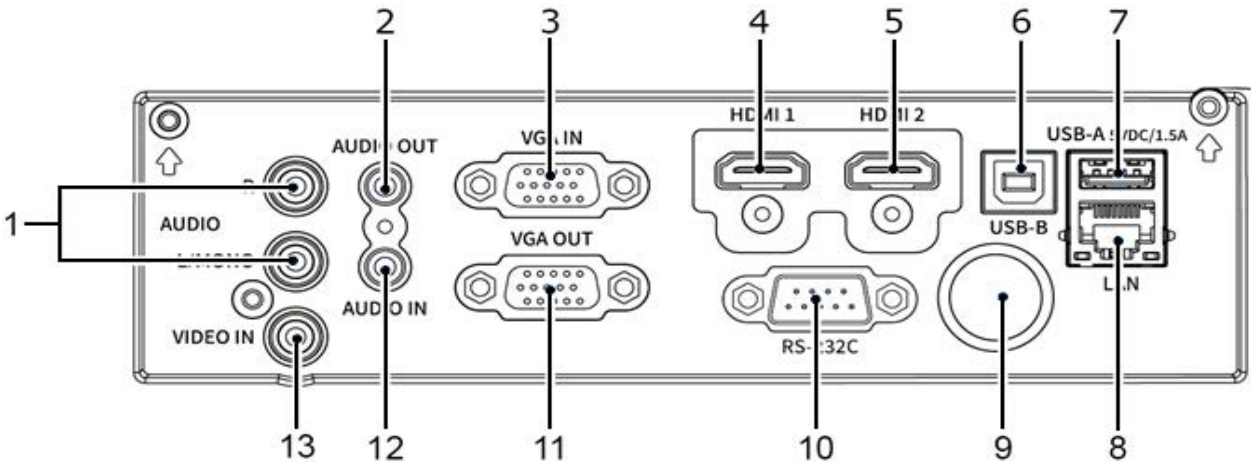
LWU560-APS and LWU660-APS



LWU700-APS and LWU800-APS



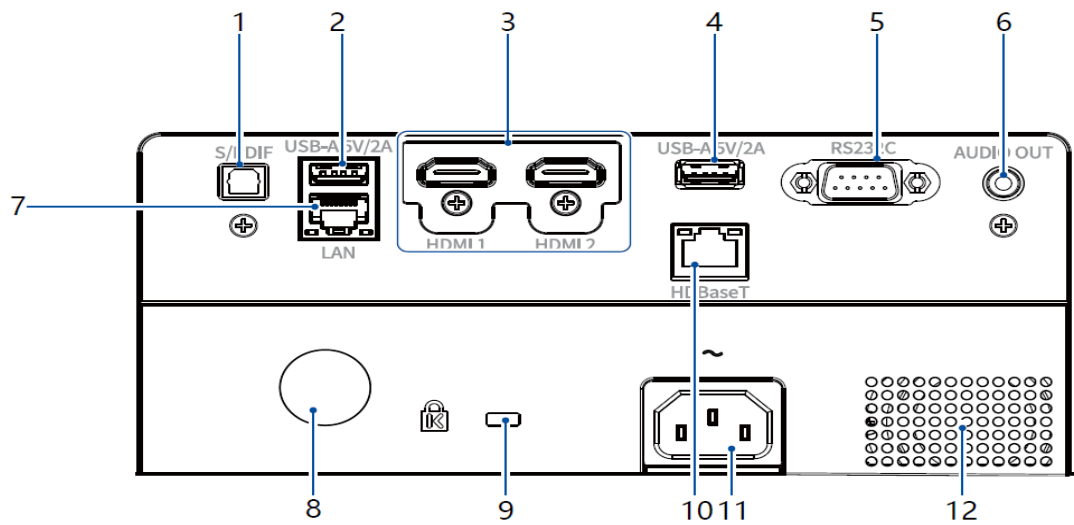
ID	Name	ID	Name
1	USB-B	6	VGA OUT
2	USB-A	7	AUDIO OUT
3	HDMI1	8	AUDIO IN
4	HDMI2	9	RS-232C
5	VGA IN	10	LAN



LWU600-APS

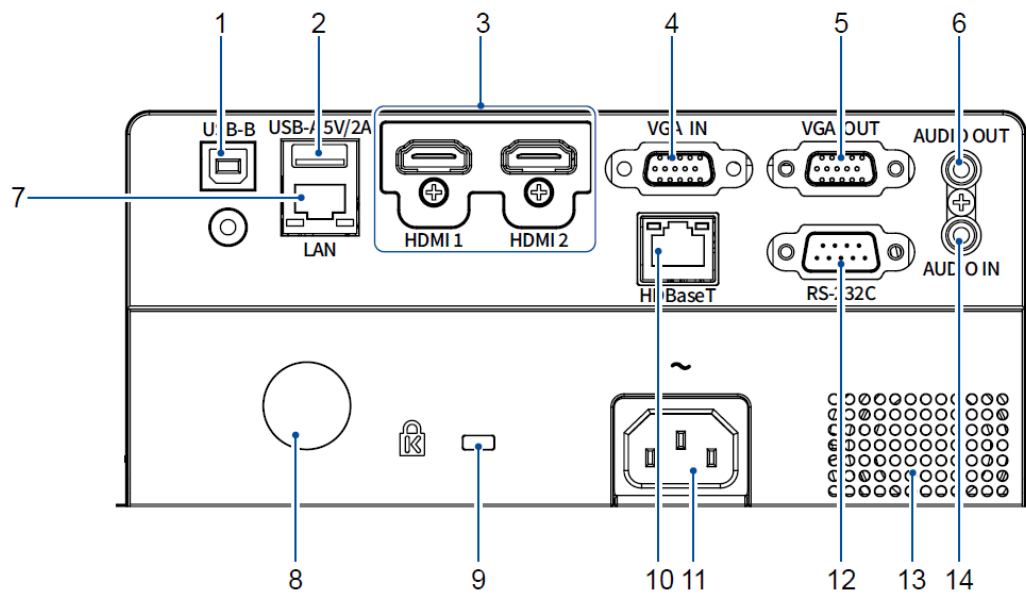
ID	Name	ID	Name
1	MONO (L/R)	8	LAN
2	AUDIO OUT	9	Remote receiver (back)
3	VGA IN	10	RS-232C
4	HDMI 1	11	VGA OUT
5	HDMI 2	12	AUDIO IN
6	USB-B	13	VIDEO IN
7	USB-A		

LWU700-4K-APS and LWU800-4K-APS



ID	Name	ID	Name
1	S/PDIF	7	LAN
2	USB-A	8	Remote receiver (rear)
3	HDMI1/HDMI2	9	Security slot (🔒)
4	USB-A	10	HDBaseT (optional)
5	RS-232C	11	AC power cord
6	AUDIO OUT	12	Speaker

LWU890-APS



ID	Name	ID	Name
1	USB-B	8	Remote receiver (rear)
2	USB-A	9	Security slot (R)
3	HDMI1/HDMI2	10	HDBaseT (optional)
4	VGA IN	11	AC power cord
5	VGA OUT	12	RS-232C
6	AUDIO OUT	13	Speaker
7	LAN	14	AUDIO IN



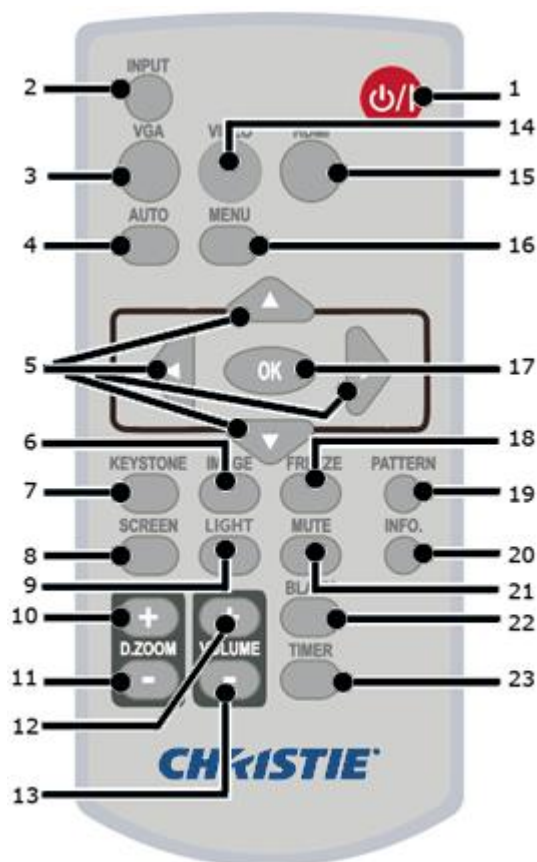
Notice. If not avoided, the following could result in property damage.

- Both ends of the ninth PIN of the VGA cable must be connected first and not connected to the GND PIN.
- The ninth PIN of the source device is required to be VCC.

## IR remote keypad

The IR remote keypad communicates with the projector by way of wireless communications.

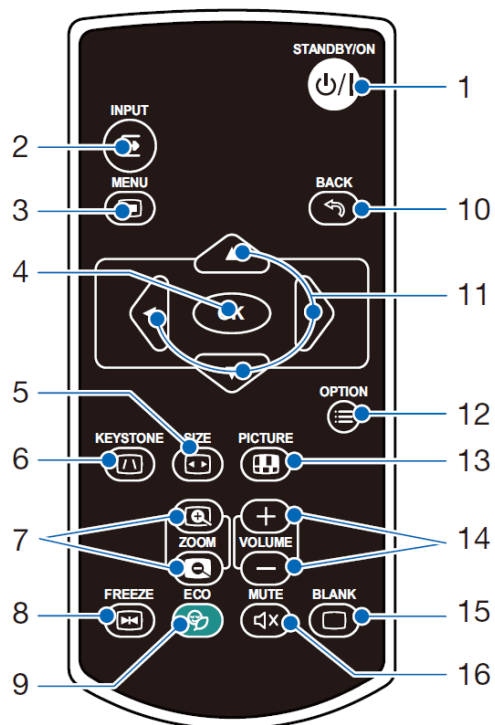
LWU560-APS, LWU600-APS, LWU660-APS, LWU700-APS, LWU800-APS, and LWU890-APS



ID	Button	Description
1	POWER	Power on or off the projector.
2	INPUT	Open or close the INPUT menu.
3	VGA	Select VGA input source.
4	AUTO	Enter auto adjustment mode.
5	Arrow▲▼◀▶	<ul style="list-style-type: none"> <li>Select items or adjust data in the on-screen display (OSD) menu.</li> <li>Select display area in digital zoom+ mode.</li> </ul>
6	IMAGE	Select image mode.
7	KEystone	Select Keystone calibration.
8	SCREEN	Enter the screen size adjustment menu.
9	LIGHT	Select LIGHT mode.
10	D.ZOOM +	Zoom in the projected image.
11	D.ZOOM -	Zoom out the projected image.
12	VOLUME +	Increase volume.
13	VOLUME -	Decrease volume.
14	VIDEO	N/A—This button does not work on this series of projectors.
15	HDMI	Select HDMI 1/HDMI 2 input source.
16	MENU	Open or close the on-screen display (OSD) menu.
17	OK	Enter the on-screen display (OSD) menu or select options in it.
18	FREEZE	Freeze projected images.
19	PATTERN	Select built-in test pattern of the projector.
20	INFO.	Display current status info of the projector.
21	MUTE	Turn off the sound temporarily.
22	BLANK	Dark out screen images temporarily.
23	TIMER	Enable the timer function.



## LWU700-4K-APS and LWU800-4K-APS



ID	Button	Description
1	<STANDBY/ON>button	Turn on or off the projector.
2	<INPUT>button	Switch input modes.
3	<MENU>button	Enter the menu interface.
4	<OK>button	Set the selected or adjusted items on the menu.
5	<SIZE>Button	Switch screen size.
6	<KEYSTONE>button	Enter trapezoidal correction mode.
7	<ZOOM (+/-)>button	Enlarge/reduce a certain part of an image.
8	<FREEZE>button	Make the image still.
9	<ECO>button	Reduce cooling fan noise.
10	<BACK>button	Exit the menu screen.
11	< ▲/▼/ ◀/ ▶ > button	Select and adjust menu items.
12	<OPTION>button	Edit files or set the way files are displayed/arranged on a USB channel.
13	<PICTURE>button	Select the appropriate image.
14	14.<VOLUME +/->button	Adjust the speaker volume.

ID	Button	Description
15	<BLANK>Button	Temporarily show a black screen.
16	<MUTE> button	Temporarily turn off sound.



Caution! If not avoided, the following could result in minor or moderate injury.

- The PATTERN button on the remote control is invalid when selecting USB Display, Memory Viewer and Network as input signal.
- The VIDEO button is invalid. Select this button to display X on the screen.

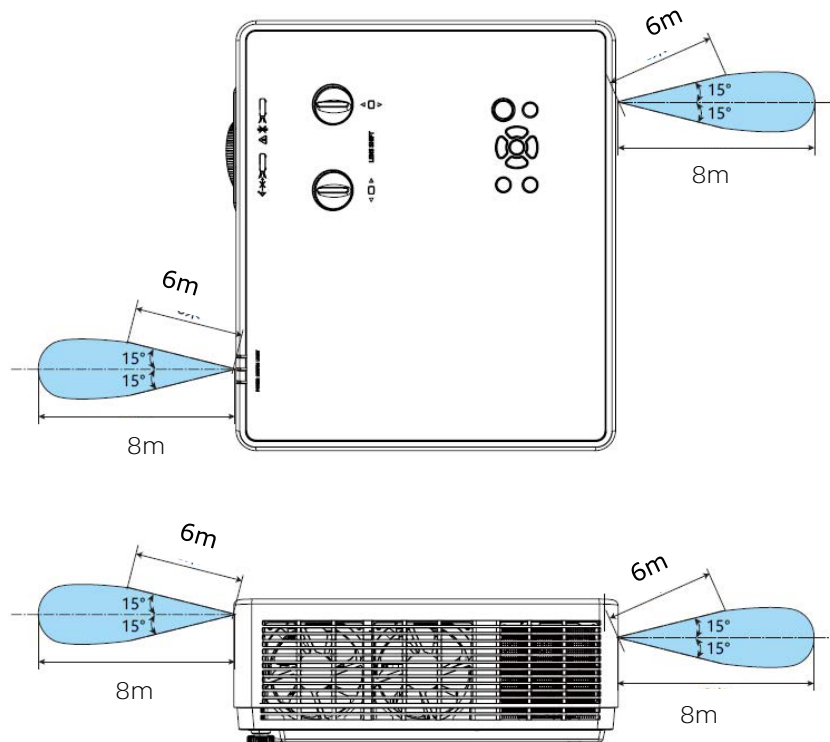
## Determining the remote control operating range

Point the remote control at the remote control sensing windows (front and rear) on the projector.

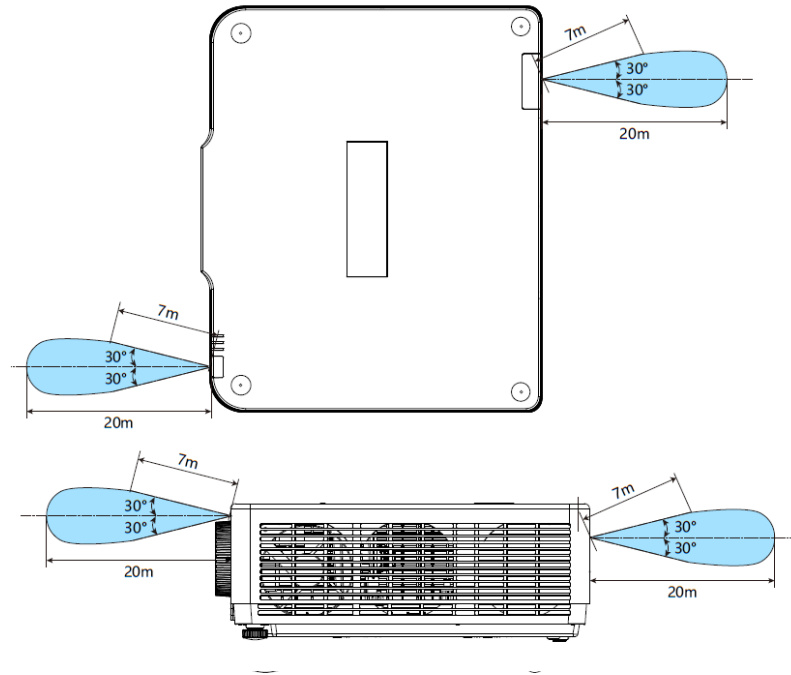
When the remote control is pointed at the signal receiver on the projector, the effective range of the remote control is an area of radius 7 meters (23 feet) or about 20 meters (65.6 feet) in straight line from the receiver.

The remote control is effective within vertical and horizontal  $\pm 30^\circ$  to the receiving direction of the remote control signal receiver. When the angle exceeds this range, the effective control distance is reduced.

LWU560-APS, LWU660-APS, LWU700-4K-APS, LWU890-APS, and LWU800-4K-APS



LWU600-APS, LWU700-APS, and LWU800-APS



## Placing the projector correctly

Use your projector at specified location in correct way. Invalid projector location may shorten light source's lifecycle or even lead to severe incidents or fire.

## Air ventilation

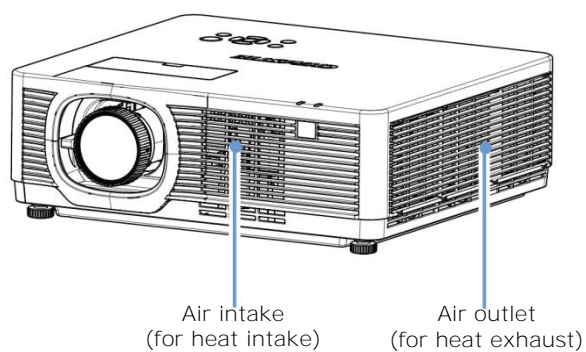
Openings in the casing are designed for ventilation and overheating prevention. Do not block or cover these openings to keep the projector in normal operation and from overheating.



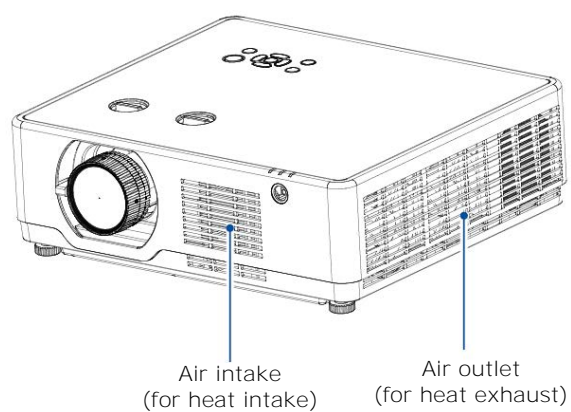
Caution! If not avoided, the following could result in minor or moderate injury.

- Do not place flammable materials or sprayers near the projector.
- Keep the air outlet one meter away from other objects.
- Do not touch the area close to the air outlet especially the metal components (for example, screws). This area and parts get hot once the projector starts operating.
- Do not place any object atop the projector as they may be damaged but also lead to fire after being overheated.
- Cooling fans are designed for cooling the projector. Fan speed is auto adjusted subject to internal temperature of the projector.

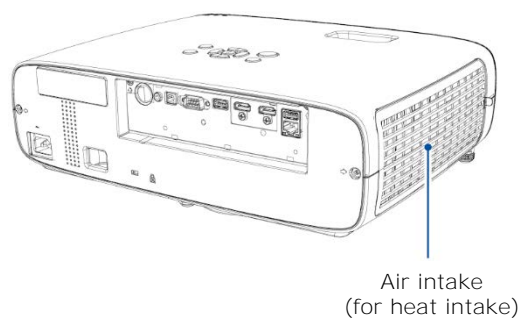
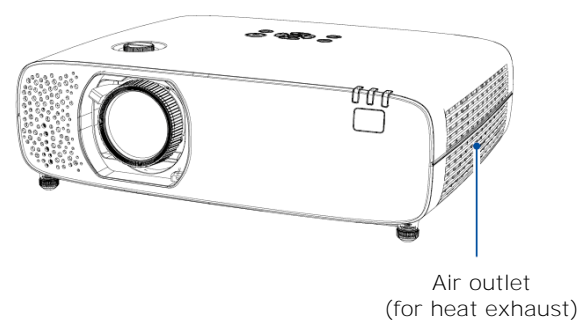
## LWU560-APS and LWU660-APS



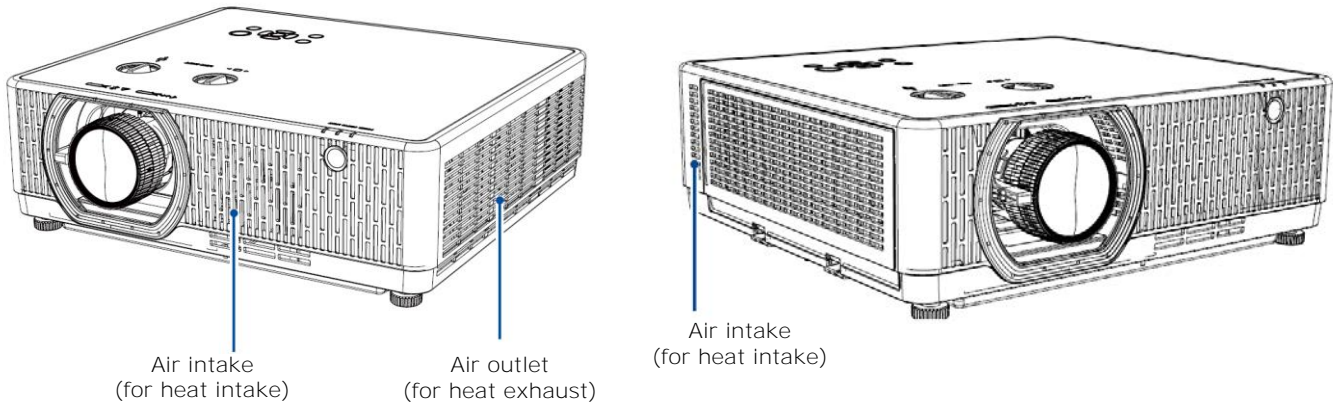
## LWU700-APS and LWU800-APS



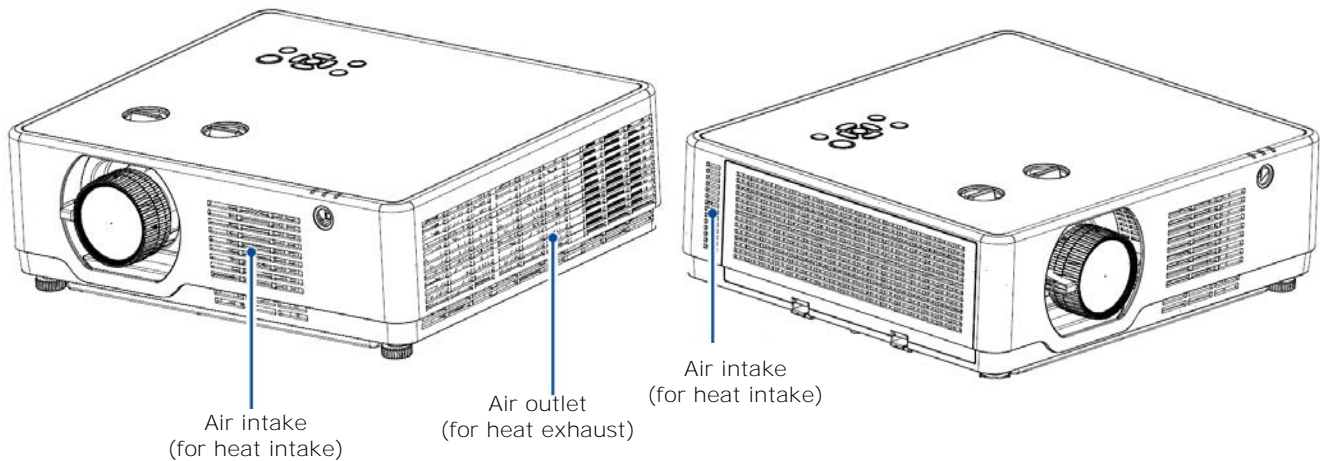
## LWU600-APS



### LWU800-4K-APS and LWU890-APS



### LWU700-4K-APS



## Positioning the display

When you select a position for the projector, consider the size and shape of your screen, the location of your power outlets, and the distance between the projector and the rest of your equipment.

Follow these general guidelines:

- Position the projector on a flat surface at a right angle to the screen. The projector (with the standard lens) must be at least 1.3 m (4.3 feet) from the projection screen.
- Position the projector to the required distance from the screen. The distance from the lens of the projector to the screen, the zoom setting, and the video format determine the size of the projected image.
- Determine the lens throw ratio.
- 360 degree free orientation operation.
- Vertical 360°



LWU560-APS and LWU660-APS



Vertical 360°

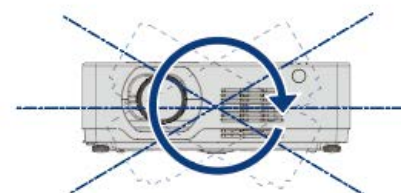


Horizontal 360°



Vertical and horizontal 360°

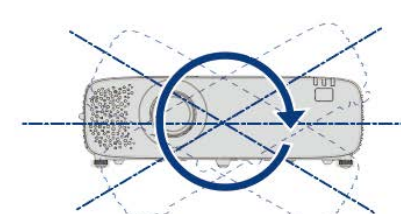
LWU700-APS, LWU700-4K-APS, and LWU800-APS



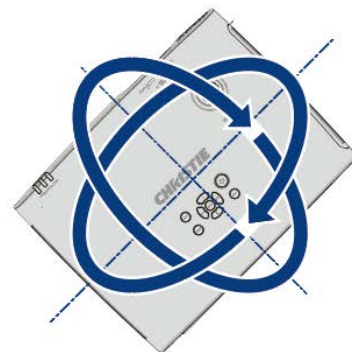
LWU600-APS



Vertical 360°

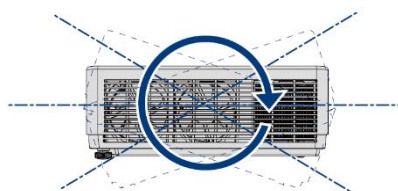


Horizontal 360°

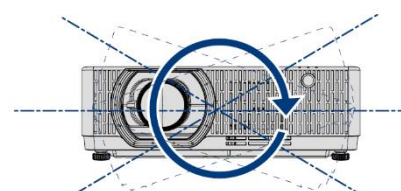


Vertical and horizontal 360°

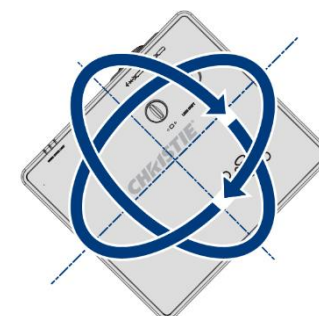
LWU800-4K-APS and LWU890-APS



Vertical 360°



Horizontal 360°



Vertical and horizontal 360°

## Powering on the projector

To use the projector correctly and prevent unnecessary risks, complete the following steps.

1. Connect all external equipment to the projector (for example, computer or camera) before powering it on.
2. Connect the AC power cord of the projector to an AC power socket.

The Power indicator turns red.

3. Select Power on the top control panel or the remote control.

The Power indicator turns green, and the cooling fan starts running. If the projector is password protected, the password dialog displays.

4. Enter your password.



Notice. If not avoided, the following could result in property damage.

- If the Logo Select option is set to OFF, no welcome image is displayed on the screen.
- You can only power off the projector when the welcome image is displaying.

## Entering a password (PIN)

A password (PIN) is an ID code for identifying people who can operate the projector. A password (PIN) setting may help preventing the projector from unauthorized use.

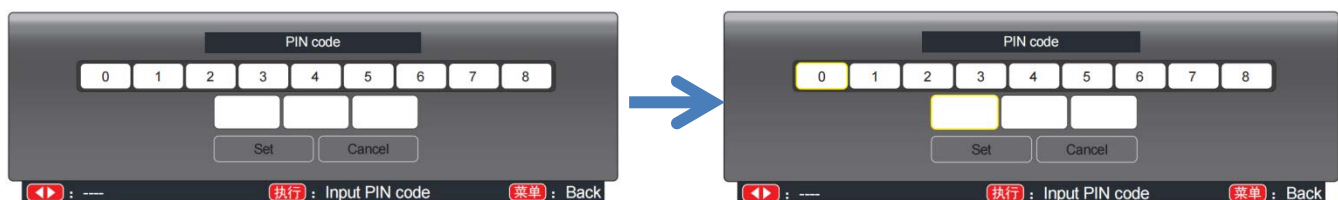


You cannot operate a password (PIN) protected projector without the correct password (PIN). Set up a new password (PIN) and keep the User manual in a safe place. If the password (PIN) is lost or forgotten, call your dealer or service center.

1. Select ▲▼ to select a number.
  2. Select ► to enter it and move the cursor.
- The number typed is displayed as a space.
3. To edit the number you entered, select the ◀ to move the cursor to the number you want to change and select ▲▼ to select the correct one.
  4. Repeat steps 1 to 3 to type in a three-digit number.
  5. Move the cursor to set after typing the three-digit number.
  6. Select the Set button, you can now use the projector.

If the password is invalid, the password displayed as a space is in red.

7. Try again with a valid password.



Move the cursor to the **Set** button, then select the **OK**.

## Powering off the projector

To maintain the life of the light source, follow these steps to turn off the projector.



Notice. If not avoided, the following could result in property damage.

- To maintain the life cycle of the HLD light, power off the projector after it has been on for at least five minutes.
- Do not use the projector without stops as it may impact the life cycle of the HLD light source. Power off the projector at least once every 24 hours and have it break for an hour.
- If the Direct on start function is set to On, the projector powers on once it is connected to an AC power socket.
- The speed of the cooling fan varies with internal temperature of the projector.
- Do not place the projector in any box before it has fully cooled down.
- If the POWER indicator flashes or turns red, refer to the Light indicator status for instructions.
- The POWER indicator flashes when the light source is cooling down. Do not power on the projector at this time. Power on the projector only after the POWER indicator turns red.
- Unplug the power cord after the projector has been turned off and the fan stops running.

1. Select Power at the top control panel or the remote control.
2. After the Power Off prompt appears, select Power again within four seconds.

The POWER indicator flashes red while the cooling fan continues running. You can set up the noise level and speed of the fan while it is cooling down.

3. Unplug the power cord once the fan stops running.

Failure to unplug the cord may shorten the life of the projector, lead to power on failures, or lead to operation abnormalities.

## Indicator statuses

When the temperature inside the projector is high, the cooling fan stops rotating, or loss of power occurs, the projector shuts down automatically.

## Status indicators

Identify the LED state colors and meaning.

LWU560-APS and LWU660-APS

LED status		Projector state
Off		AC power is off (without AC plugged in).
Green	Flashing	Projector is starting up.
	Solid	System is operating normally.
Blue	Flashing	Projector is cooling down.
	Flashing	Projector is in standby mode.
Yellow	Flashing	A problem exists with the projector that does not cause it to shut down. Examples of warnings include: filter needs changing, one of the pumps is damaged, or a fan is operating at full speed due to over temperature of laser diode (LD) driver.
	Solid	The end user is turning off the projector while it is in a warning state.


















LED status		Projector state
Red	Flashing	An error with the projector exists causing it to shut down. Examples of errors include: fan failure, over temperature, wrongly installed filter, or color wheel (CW) failure.
	Solid	The user is turning off the projector while it is in an error state.




























## Shutter LED indicators




























Identify the shutter LED state colors and meaning.










LED status	Projector state
Off	Projector is on and an image is displayed. Shutter is open.
Magenta (solid)	Projector is on and the image is blank. Shutter is closed

LWU560-APS, LWU660-APS, LWU700-APS, and LWU800-APS

Power	Status	Light	Projector state
 Off	 Off	 Off	Power is off
 Orange (Blink* <sup>2</sup> )	 Off	 Off	Standby (ECO)
 Orange	 Off	 Off	Standby (Network)
 Orange (Blink* <sup>1</sup> )	 Off	 Off	Standby (Normal)
 Blue	 Off	 Green (Blink* <sup>3</sup> )	Light source on (ECO ON)

Power	Status	Light	Projector state
 Blue	 Off	 Green	Light source on (ECO OFF)
 Green (Blink* <sup>4</sup> )	 Off	 Off	Cooling status
 Green	 Off	 Off	Standby (ECO)
 Off	 Orange	 Off	Press the key when key lock is activated
 Red (Blink* <sup>4</sup> )	 Green	 Red	When the LD-Driver current value is too low
 Red (Blink* <sup>4</sup> )	 Green (Blink* <sup>4</sup> )	 Red	LED driver SPI communication error
 Red (Blink* <sup>4</sup> )	 Green	 Red (Blink* <sup>4</sup> )	LD driver 55V abnormal
 Red (Blink* <sup>4</sup> )	 Green (Blink* <sup>1</sup> )	 Red	LD driver 13V abnormal
 Red (Blink* <sup>4</sup> )	 Green	 Red (Blink* <sup>1</sup> )	LD driver output current is abnormal

Power	Status	Light	Projector state
 Red (Blink*4)	 Green (Blink*3)	 Red	LD driver setting status abnormal
 Red (Blink*4)	 Green	 Red (Blink*3)	LD driver other errors
 Red (Blink*4)	 Off	 Off	Temperature error
 Red	 Orange	 Off	Fan 1 error
 Red	 Orange (Blink*4)	 Off	Fan 2 error
 Red	 Off	 Orange (Blink*4)	Fan 3 error
 Red	 Orange (Blink*1)	 Off	Fan 4error
 Red	 Off	 Orange (Blink*1)	Fan 5 error
 Red	 Orange (Blink*3)	 Off	Fan 6 error

Power	Status	Light	Projector state
 Red	 Red (Blink*4)	 Off	Power supply error
 Red (Blink*4)	 Red (Blink*4)	 Off	Color wheel error
 Red	 Red (Blink*3)	 Off	Filter timeout warning
















\*1 Repetition to light on for 1.5 no spaces around forward slashes 1.5 seconds.




























\*2 Repetition to light on for 1.5 no spaces around forward slashes for 7.5 seconds.




























\*3 Repetition to light on for 2.5 no spaces around forward slashes 0.5 seconds.




























\*4 Repetition to light on for 0.5 no spaces around forward slashes 0.5 seconds.




#### LWU600-APS

Power	Status	Light	Projector status
 Off	 Off	 Off	Power is off
 Orange	 Off	 Off	Standby (Normal)
 Orange (Blink*1)	 Off	 Off	Standby (Network)
 Orange (Blink*2)	 Off	 Off	Standby (ECO)
 Orange (Blink*0)	 Off	 Off	Warm up

Power	Status	Light	Projector status
 Off	 Orange	 Off	Keylock/RC ID mismatch
 Green	 Off	 Green (Blink*1)	Light source on (ECO ON)
 Green	 Off	 Green	Light source on (ECO OFF)
 Green	 Off	 Orange (Blink*1)	Light source timer waring
 Green	 Off	 Orange (Blink*2)	Light source timer error
 Green	 Red (Blink*1)	 Off	Filter timer waring
 Green	 Red (Blink*2)	 Off	Filter check waring
 Green (Blink*0)	 Off	 Off	Power save standby mode
 Red (Blink*0)	 Off	 Off	Cooling status






















Power	Status	Light	Projector status
 Red (Blink* <sup>2</sup> )	 Off	 Off	Cooling status (Standby mode without signal)
 Red	 Red (Blink* <sup>1</sup> )	 Off	P sensor abnormality (poor contact)
 Red	 Red (Blink* <sup>2</sup> )	 Off	Temp error
 Red	 Orange (Blink* <sup>1</sup> )	 Off	Fan 1 error
 Red	 Orange (Blink* <sup>2</sup> )	 Off	Fan 2 error
 Red	 Orange (Blink* <sup>3</sup> )	 Off	Fan 3 error
 Red	 Orange (Blink* <sup>4</sup> )	 Off	Fan 4 error
 Red	 Orange (Blink* <sup>5</sup> )	 Off	Fan 5 error
 Red	 Red (Blink* <sup>1</sup> )	 Orange	Color wheel IO exception

Power	Status	Light	Projector status
 Red	 Red (Blink* <sup>2</sup> )	 Orange	FG error (Failed to detect FG)
 Red	 Red (Blink* <sup>3</sup> )	 Orange	Color wheel speed is too high
 Red	 Red (Blink* <sup>4</sup> )	 Orange	Color wheel speed is too low
 Red	 Red (Blink* <sup>1</sup> )	 Red	LD overcurrent protection
 Red	 Red (Blink* <sup>2</sup> )	 Red	LD overvoltage protection
 Red	 Red (Blink* <sup>3</sup> )	 Red	Communication abnormality
 Red	 Red (Blink* <sup>4</sup> )	 Red	Main RX ACK error
 Red	 Red	 Red	Cover switch abnormal
 Red	 Red	 Off	High altitude error


































Power	Status	Light	Projector status
 Orange	 Orange	 Orange	Initialization



















- \* 0 The indicator lights on for 0.5 seconds and off for 0.5 seconds, then repeat.
- \* 1 The indicator flashes once and off two seconds, then repeat.
- \* 2 The indicator flashes twice and off two seconds, then repeat.
- \* 3 The indicator flashes three times and off two seconds, then repeat.
- \* 4 The indicator flashes four times and off two seconds, then repeat.
- \* 5 The indicator flashes five times and off two seconds, then repeat.

#### LWU700-4K-APS

Power	Status	Light	Projector status
 Off	 Off	 Off	Power is off
 Orange	 Off	 Off	Standby (Normal)
 Orange (Blink <sup>*3</sup> )	 Off	 Off	Standby (Network)
 Green	 Off	 Green (Blink <sup>*2</sup> )	Light source on (Normal mode)
 Green	 Off	 Green	Light source on (ECO mode)
 Red (Blink <sup>*1</sup> )	 Off	 Off	Cooling
 Red	 Red (Blink <sup>*2</sup> )	 Off	PSENSER abnormal (poor contact or temperature out of range)



Power	Status	Light	Projector status
 Red	 Red (Blink* <sup>4</sup> )	 Off	TempC Error
 Red	 Orange (Blink* <sup>2</sup> )	 Off	Fan 1 error
 Red	 Orange (Blink* <sup>3</sup> )	 Off	Fan 2 error
 Red	 Orange (Blink* <sup>4</sup> )	 Off	Fan 3 error
 Red	 Orange (Blink* <sup>5</sup> )	 Off	Fan 4 error
 Red	 Orange (Blink* <sup>6</sup> )	 Off	Fan 5 error
 Red	 Orange (Blink* <sup>7</sup> )	 Off	Fan 6 error
 Red	 Red (Blink* <sup>2</sup> )	 Orange	Color wheel IO abnormality
 Red	 Red (Blink* <sup>4</sup> )	 Orange	Color wheel speed too high
 Red	 Red (Blink* <sup>5</sup> )	 Orange	Color wheel speed too low
 Red	 Red (Blink* <sup>1</sup> )	 Red	LD other abnormalities (cannot be specified)

Power	Status	Light	Projector status
 Red	 Red (Blink* <sup>2</sup> )	 Red	LD current anomaly (overcurrent protection, low current anomaly)
 Red	 Red (Blink* <sup>3</sup> )	 Red	LD voltage abnormality (overvoltage protection, low voltage abnormality)
 Red	 Red (Blink* <sup>4</sup> )	 Red	Abnormal communication
 Red	 Red (Blink* <sup>6</sup> )	 Red	LD temperature abnormality
 Red	 Red (Blink* <sup>7</sup> )	 Red	LD status abnormal
 Red	 Red	 Off	High altitude error

\*1 On for 0.5 seconds, off for 0.5 seconds

\*2 Flashes once and turns off for two seconds

\*3 Flashes twice and turns off for two seconds







\*4 Flashes 3 times and turns off for two seconds






























\*5 Flashes 4 times and turns off for two seconds



















\*6 Flashes 5 times and turns off for two seconds

\*7 Flashes 6 times and turns off for two seconds













#### LWU890-APS





































Power	Status	Light	Projector status	Procedure
 Off	 Orange	 Off	A button has been selected while the KEY LOCK is activated.	The projector's keys are locked. The setting must be canceled to operate the projector.
 Red (Blink* <sup>4</sup> )	 Green	 Red	LD driver current value is too low	Contact your dealer or service personnel.

























Power	Status	Light	Projector status	Procedure
 Red (Blink*4)	 Green (Blink*4)	 Red	LD-driver SPI communication error	Contact your dealer or service personnel.
 Red (Blink*4)	 Green	 Red (Blink*4)	LD-driver 55V error	Contact your dealer or service personnel.
 Red (Blink*4)	 Green (Blink*1)	 Red	LD-driver 13V error	Contact your dealer or service personnel.
 Red (Blink*4)	 Green	 Red (Blink*1)	Current output of the LD driver abnormal	Contact your dealer or service personnel.
 Red (Blink*4)	 Green (Blink*3)	 Red	LD drive setting abnormal	Contact your dealer or service personnel.
 Red (Blink*4)	 Green	 Red (Blink*3)	LD drive other errors	Contact your dealer or service personnel.
 Red (Blink*4)	 Off	 Off	Temperature error	Ambient temperature is out of the operation temperature. Check if any obstruction stays near the exhaust vent.
 Red	 Orange	 Off	Fan 1 error	Contact your dealer or service personnel.
 Red	 Orange (Blink*4)	 Off	Fan 2 error	Contact your dealer or service personnel.
 Red	 Off	 Orange (Blink*4)	Fan 3 error	Contact your dealer or service personnel.

Power	Status	Light	Projector status	Procedure
 Red	 Orange (Blink* <sup>1</sup> )	 Off	Fan 4 error	Contact your dealer or service personnel.
 Red	 Off	 Orange (Blink* <sup>1</sup> )	Fan 5 error	Contact your dealer or service personnel.
 Red	 Orange (Blink* <sup>3</sup> )	 Off	Fan 6 error	Contact your dealer or service personnel.
 Red	 Red (Blink* <sup>4</sup> )	 Off	Power error	Contact your dealer or service personnel.
 Red (Blink* <sup>4</sup> )	 Red (Blink* <sup>4</sup> )	 Off	Color wheel status error	Contact your dealer or service personnel.
 Red	 Red (Blink* <sup>3</sup> )	 Off	Filter overtime warning	Contact your dealer or service personnel.

## LWU800-4K-APS

Power	Status	Light	Projector status
 Off	 Off	 Off	Power is off
 Orange	 Off	 Off	Standby (Normal)
 Orange (Blink* <sup>3</sup> )	 Off	 Off	Standby (Network)
 Green	 Off	 Green (Blink* <sup>2</sup> )	Light source on (Normal mode)

Power	Status	Light	Projector status
 Green	 Off	 Green	Light source on (ECO mode)
 Red (Blink*1)	 Off	 Off	Cooling
 Red	 Red (Blink*2)	 Off	PSENSER abnormal (poor contact or temperature out of range)
 Red	 Red (Blink*4)	 Off	TempC error
 Red	 Orange (Blink*2)	 Off	Fan 1 error
 Red	 Orange (Blink*3)	 Off	Fan 2 error
 Red	 Orange (Blink*4)	 Off	Fan 3 error
 Red	 Orange (Blink*5)	 Off	Fan 4 error
 Red	 Orange (Blink*6)	 Off	Fan 5 error
 Red	 Orange (Blink*7)	 Off	Fan 6 error
 Red	 Red (Blink*2)	 Orange	Color wheel IO abnormality
 Red	 Red (Blink*4)	 Orange	Color wheel speed too high

Power	Status	Light	Projector status
 Red	 Red (Blink*5)	 Orange	Color wheel speed too low
 Red	 Red (Blink*1)	 Red	LD other abnormalities (cannot be specified)
 Red	 Red (Blink*2)	 Red	LD current anomaly (overcurrent protection, low current anomaly)
 Red	 Red (Blink*3)	 Red	LD voltage abnormality (overvoltage protection, low voltage abnormality)
 Red	 Red (Blink*4)	 Red	Abnormal communication
 Red	 Red (Blink*6)	 Red	LD temperature abnormality
 Red	 Red (Blink*7)	 Red	LD status abnormal
 Red	 Red	 Off	High altitude error

\*1 On for 0.5 seconds, off for 0.5 seconds

\*2 Flashes once and turns off for two seconds

\*3 Flashes twice and turns off for two seconds

\*4 Flashes 3 times and turns off for two seconds

\*5 Flashes 4 times and turns off for two seconds

\*6 Flashes 5 times and turns off for two seconds

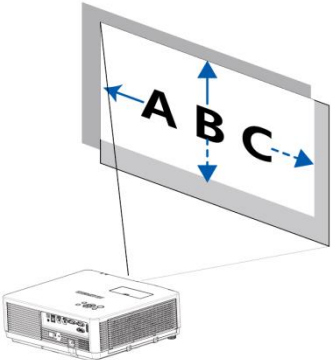
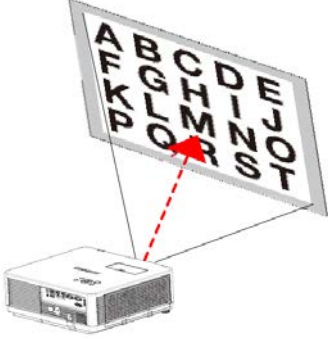
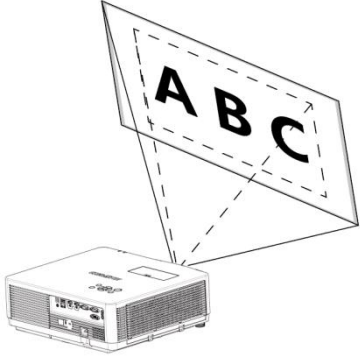
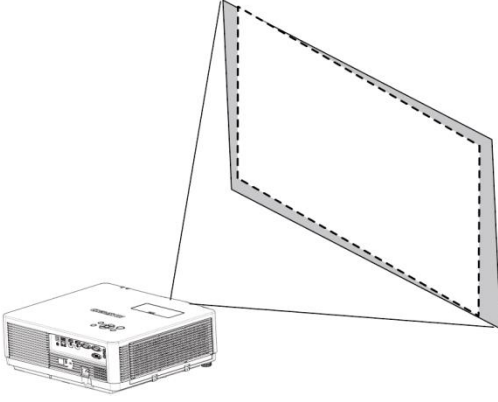
\*7 Flashes 6 times and turns off for two seconds

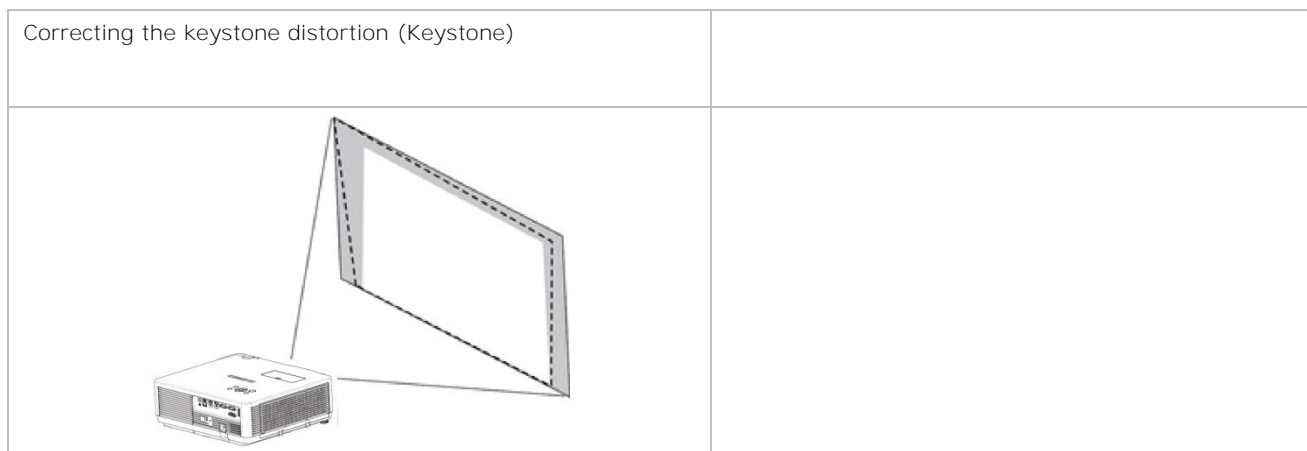
# Adjusting the size and position

Adjust the projector's size and position. Christie recommends warming the lens before completing these procedures as focus may change as the lens warms.

## Adjusting the picture size and position

Use the lens shift button, the adjustable foot, the zoom lever/zoom ring and the focus ring to adjust the picture size and position. In this section drawings and cables are omitted for clarity.

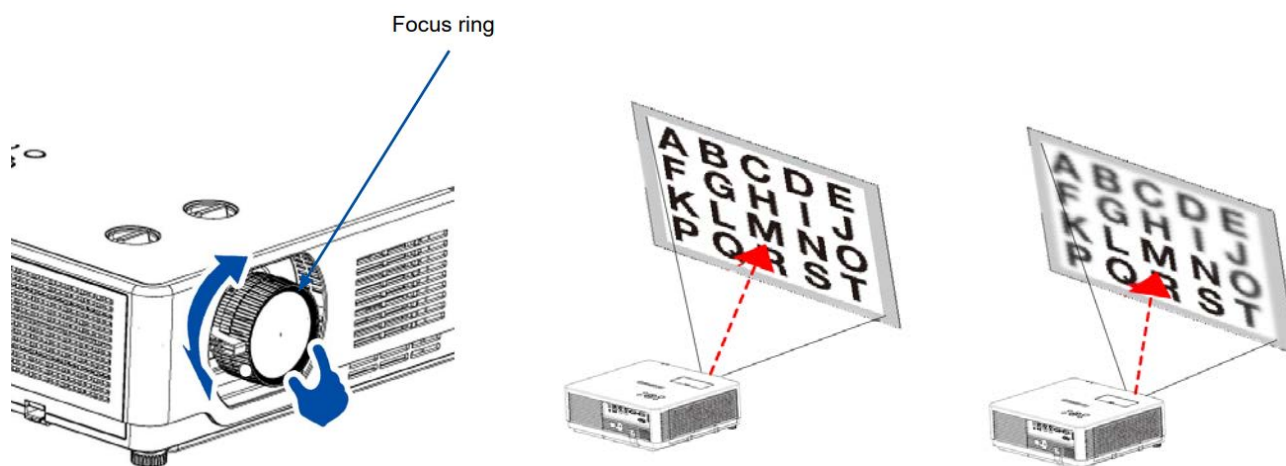
<b>Adjusting the projected image's vertical and horizontal position (Lens shift)</b>	<b>Adjusting the focus (Focus ring)</b>
	
<b>Finely adjusting the size of an image (Zoom lever)</b>	<b>Adjusting the projected image's height and horizontal tilt (Adjustment pad)</b>
	



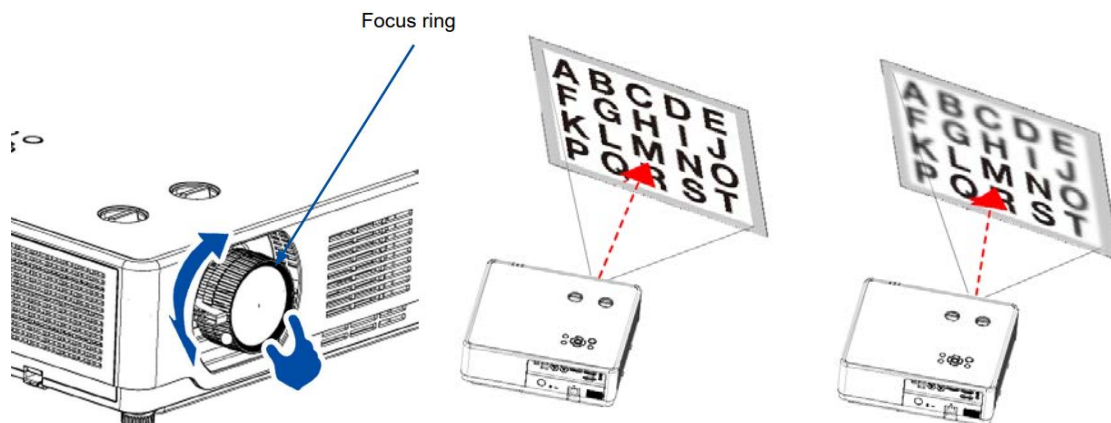
## Adjusting the projector focus function

Use the focus ring to obtain the best focus.

LWU560-APS and LWU660-APS

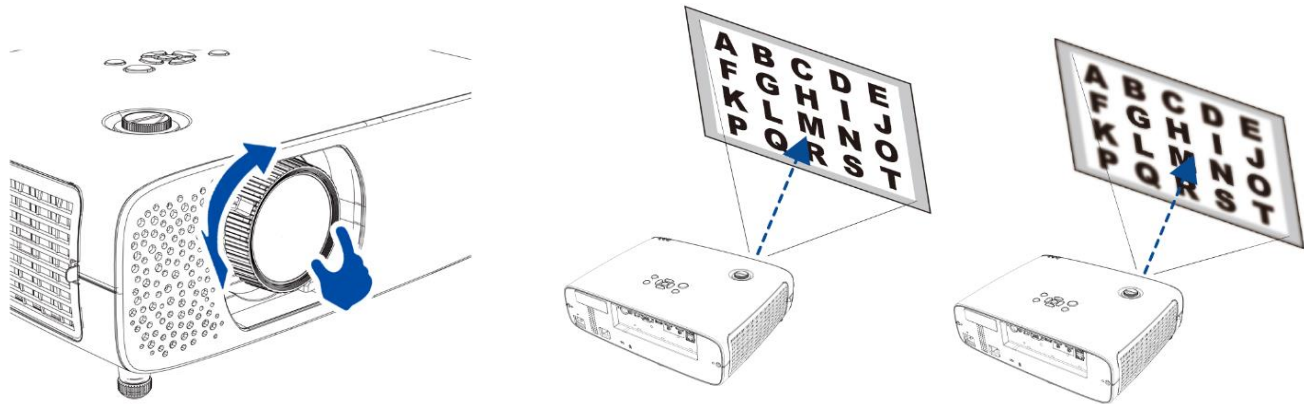


LWU700-APS, LWU700-4K-APS, LWU800-APS, LWU800-4K-APS, and LWU890-APS





## LWU600-APS

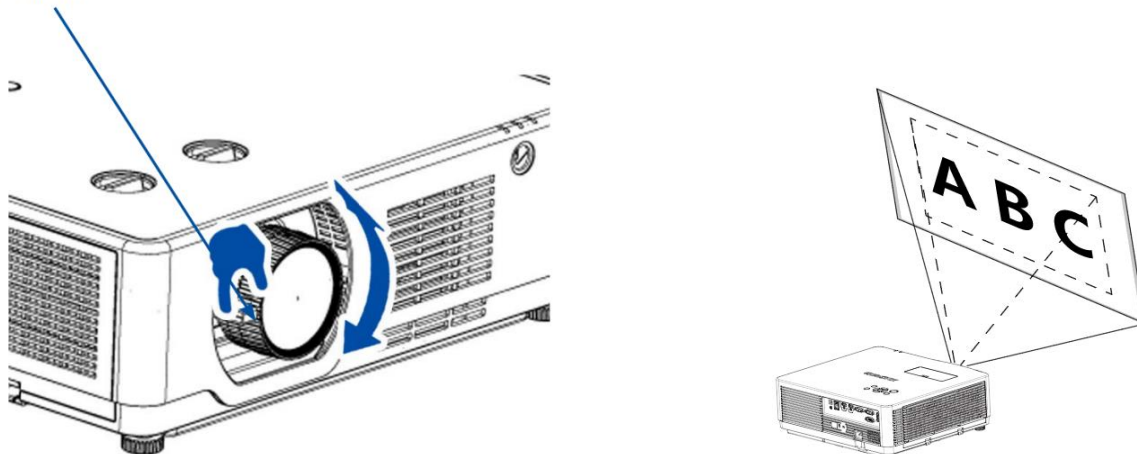


## Adjusting the projector zoom function

Turn the zoom lever clockwise and counterclockwise.

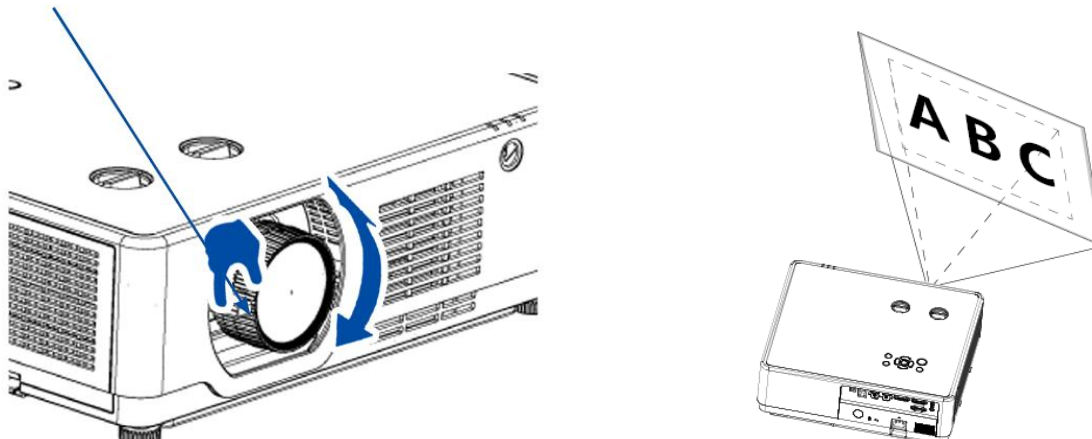
LWU560-APS, LWU660-APS, LWU700-4K-APS, LWU890-APS, and LWU800-4K-APS

Zoom lever

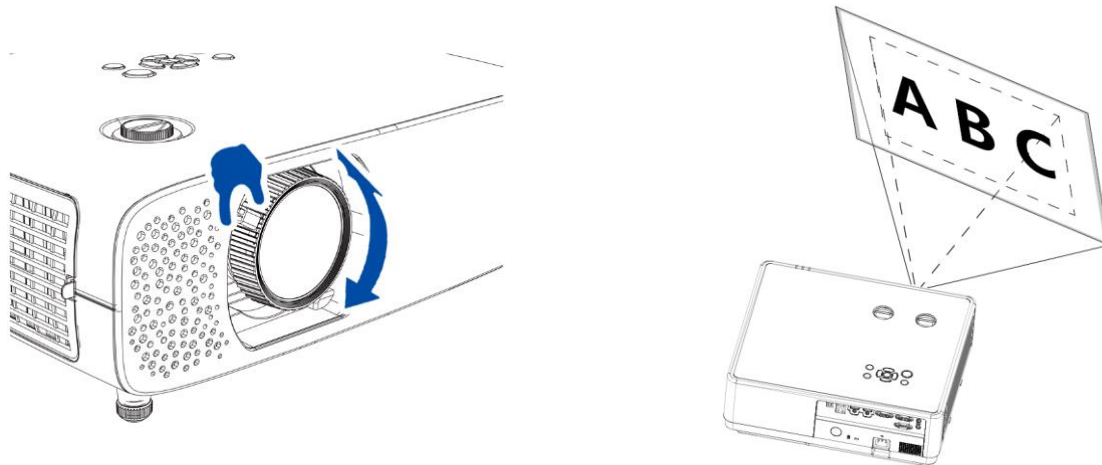


LWU700-APS and LWU800-APS

Zoom lever



LWU600-APS



## Adjusting the projector lens shift function

Follow these steps to use the Lens shift function.



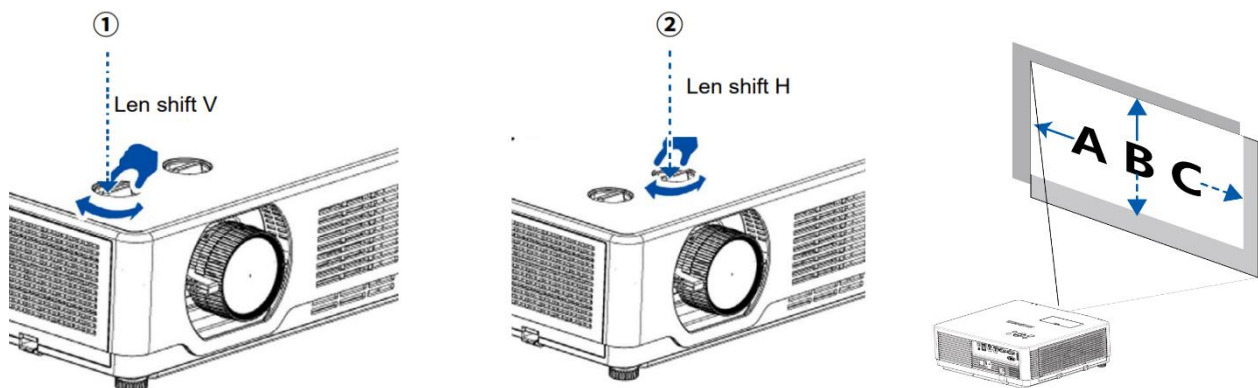
- The button can be turned more than one full turn, but the projection position cannot be moved more than the range indicated on the following page. Do not force to turn the button. Doing so may damage the button.
- If the lens is shifted to the maximum in the diagonal direction, the edges of them are dark or shaded.

The vertical shift adjustment must be finished with an image shifted upward. If you finish the vertical shift adjustment with an image shifted down, the zoom/focus adjustments or strong shaking may cause a projected image to slightly shift down.

LWU560-APS, LWU660-APS, LWU700-APS, LWU700-4K-APS, LWU800-APS, LWU800-4K-APS, and LWU890-APS

Rotate ① and ② buttons to make the Lens shift adjustment manually.

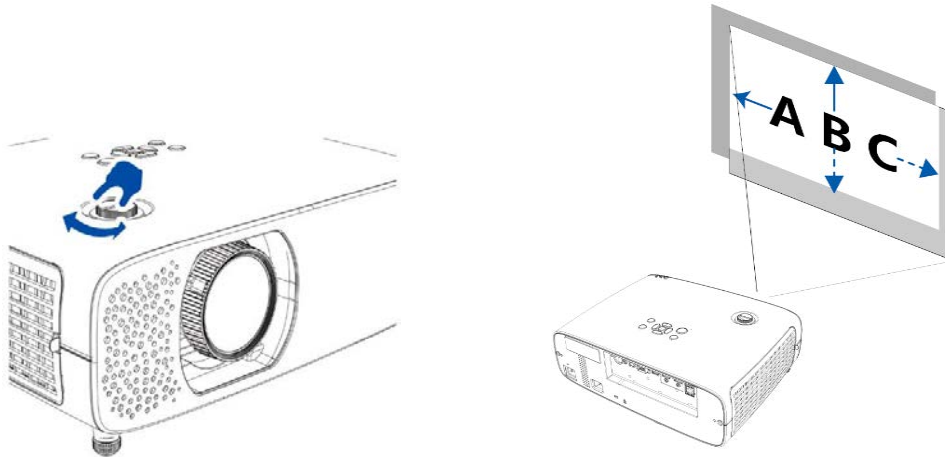
1. Rotate ① button and then you can move upward and downward the image with a distance up to +60% (WUXGA) between the upper and lower range of the image.
2. Rotate ② button and then you can move rightward and leftward the image with a distance up to 29% (WUXGA) of the width of the image.



## LWU600-APS

1. Rotate the lens shift buttons to make the Lens shift adjustment manually.

You can move upward the image upward with a distance of +60% between the upward range of the images.



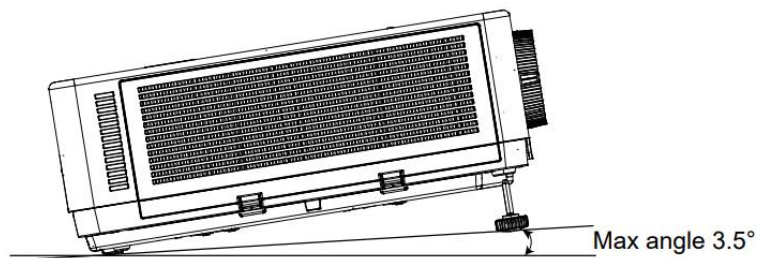
## Adjusting pads

Adjusting the left and right tilt.

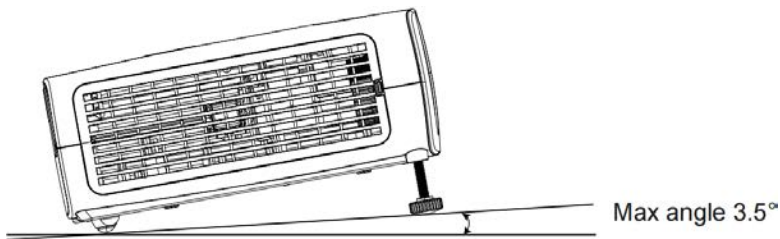
1. Place the projector perpendicular to the screen.
2. Turn the left and right tilt feet to adjust.

Use the adjustment pad to raise the projector up to 1.0 degree (shown in the images below).

LWU660-APS, LWU700-APS, LWU800-APS, LWU800-4K-APS, LWU890-APS, and LWU700-4K-APS



LWU560-APS and LWU600-APS



- Rotate the adjustable pad and tilt the projector to the required height whose maximum height is up to 18 mm (0.7 inches) (shown in the image below).

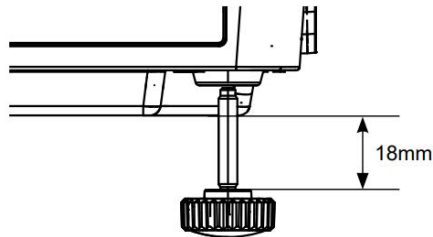
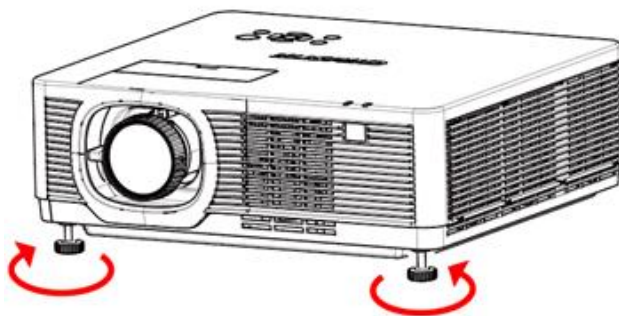


Image (2)

- Turn the pad to tilt the projector to the required height (shown in the image below). Turn both pads clockwise to raise the projector, while turning both pads counterclockwise to lower down the projector or close the pad.

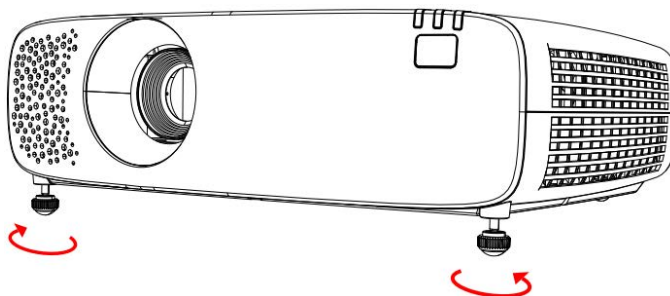
LWU560-APS, LWU700-4K-APS, LWU800-4K-APS, LWU890-APS, and LWU660-APS



LWU700-APS and LWU800-APS



LWU600-APS



# Keystone adjustment

When the projector is not perpendicular to the screen, keystone distortion occurs. For correcting this distortion, use the Keystone function, a digital technology that can adjust for keystone-type distortion, resulting in a crisp, square image.

Follow the steps below to manually correct the trapezoid image.

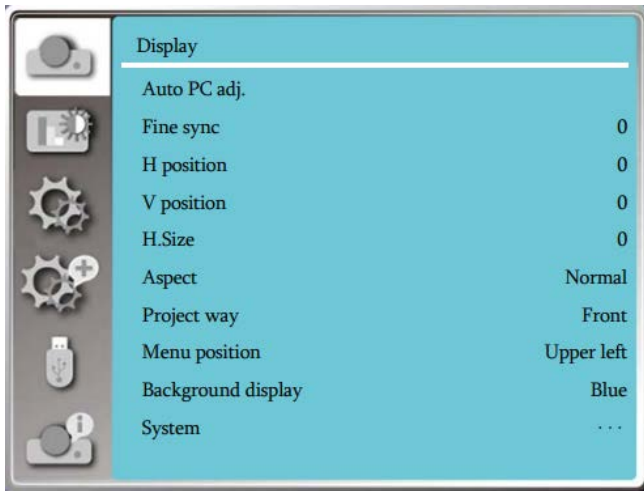
1. Select Menu > Expand > Keystone.
2. Select ▲▼◀▶ to adjust keystone distortion and select OK on the remote control or select ENTER to select.
  - H/V Keystone—Adjust the projected image when the projector is on the horizontal or vertical keystone distortion.
  - 4-Corner correction—Adjust the projected image when the projector is keystone distortion of four corners.
  - 6-Corner correction—Adjust the projected image when the projector is keystone distortion of four corners.
  - Curved correction—Adjust the projected image when the projector linearity is uneven or the projected images bent vertically and horizontally.
  - Grid Image Tune—Adjust the local points of the projected image.
  - Reset value—The correction values are restored to the factory defaults.
3. Select OK.

# Menu items

Detailed descriptions about on-screen display (OSD) menu are introduced to let users have a better understanding about this product.

## Display menu

Learn about projector display menu operations.



## Adjusting the fine sync, position, and size.

Select Auto PC Adj. function to adjust Fine sync, H position, V position, and H size to be compatible with the computer automatically.

1. Select Menu > Auto PC Adj.
2. Select OK.

## Adjusting fine sync for PC signal input only

Adjust the image to the best state when the image jitters or the image outline dims.



- The projector performs Auto PC Adjustment function automatically, when its signal is input for the first time.
- Auto PC Adjustment function may fail to work if computer models are not compatible with the input signal.
- Auto PC Adjustment function may fail to work if you select the following system signal format: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p, or signals from the HDMI terminal.

1. Select ▲▼ to select [Fine sync] menu.
2. Select OK.
3. Select ▲▼ to adjust Fine sync.

Adjustment range is from 0 to +31.

4. Adjust to the least interference state.

## Adjusting H position for PC signal input only

If the relative position of both projector and the screen are set up right, move the image horizontal position, if the position of the projected image on the screen is deviated.

1. Select ▲▼ to select [H position] menu.
2. Select OK.
3. Select ▲▼ to adjust image H position.

Adjustment range is from -5 to +5.

## Adjusting H size for PC signal input only

Adjust and reduce the interference caused by patterns of the projected vertical stripes. The following projected patterns may cause a circular pattern (noise). Adjust the amount of interference to the minimum. Users can point the clock to adjust images.

1. Select ▲▼ to select [H size] menu.
2. Select OK.
3. Select ▲▼ to adjust H size level.

Adjustment range is from -15 to +15.

## Modifying the image to fit the screen

Adjust the image to fit the screen size, while keeping aspect of input signals unchanged.



When the projector is in digital focusing state, the aspect ratio is displayed as DZOOM IN.

1. Select ▲▼ to select the Aspect menu.
2. Select OK.
3. Select ▲▼ to select the required item.
  - Normal—Use the maximum size to project while keeping the aspect of input signals unchanged.
  - Full—Project images to the maximum.
  - 4:3—Project images at the aspect of 4:3.
  - 16:10—Project images to the maximum.

## Setting the projection direction

Select this function to set the projection way. Change the projection way, if the on-screen display (OSD) displays inversely or reversely.

1. Select ▲▼ to select the Project way menu.
2. Select OK.



3. Select ▲▼ to switch
  - Front—Projector is installed on the table and projected in front of the screen.
  - Rear—Projector is installed on the table and projected in rear of the screen (using translucent screen).
  - Ceiling/Front—Using the bracket to lift the projector (optional) in front of the screen.
  - Ceiling/Rear—Using the bracket to lift the projector (optional) in rear of the screen (using translucent screen).
  - Auto ceiling/Front—Projector is projected in front of the screen.
  - Auto ceiling/Rear—Projector is projected in rear of the screen.

## Changing the menu position

Select this function to set the Menu position on the screen.

1. Select ▲▼ to select the Menu position menu.
2. Select OK.
3. Select ▲▼ to change menu position.
  - Upper left—Displays the menu on the upper left corner of the screen.
  - Upper right—Displays the menu on the upper right corner of the screen.
  - Center—Displays the menu in the center of the screen.
  - Lower left—Displays the menu on the lower left corner of the screen.
  - Lower right—Displays the menu on the lower right corner of the screen.

## Adjusting the background color

Select this function to adjust background color.



This function is invalid once you select the input signal as USB Display, Memory Viewer, and Network.

1. Select ▲▼ to select that Background display menu.
2. Select OK.
3. Select to select required item.
  - Blue — The projection area displays blue.
  - Black — The projection area displays black.

## Matching the resolution of the input signal

Set to match the resolution of the computer input signal.

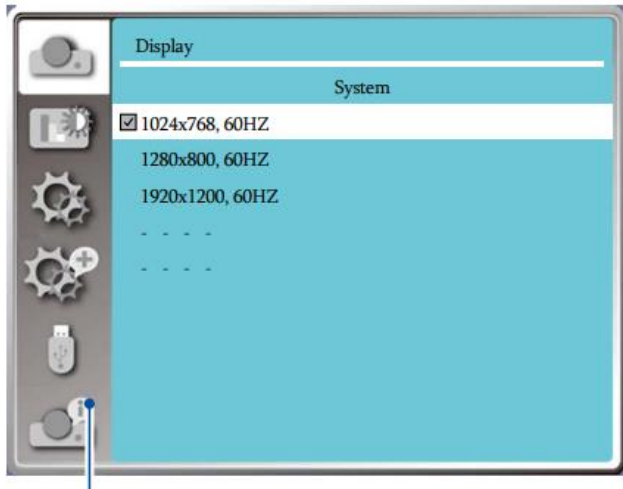
1. Select ▲▼ to select the System menu.
2. Select OK.
3. Select the Point ▲▼ to select your required system signal format.



4. Select OK.
5. Select ▲▼ to select required item.

## Determining signal formats

The scanning system and auto computer adjustment function may detect scores of signal format. If a PC is selected as the input signal source, the projector detects and adapts to its signal format automatically. The correct image can be displayed without any setup operation.



The video displays in the PC system menu.

1. Select ▲▼ to select the System menu.
2. Select OK.
3. Select the Point ▲▼ to select the system signal format.
4. Select OK.
5. Select ▲▼ to select the required item.
  - Auto—If the projector failed to identify signals not shown in the signals format table, the Auto message displays in the System Signal Format menu. The Auto PC Adjusting function makes necessary adjustments to the projector to project valid images. If images are displayed incorrectly, adjust it manually.
  - Dashes (-----)—No PC signals detected. Check the connection between PC and the projector.

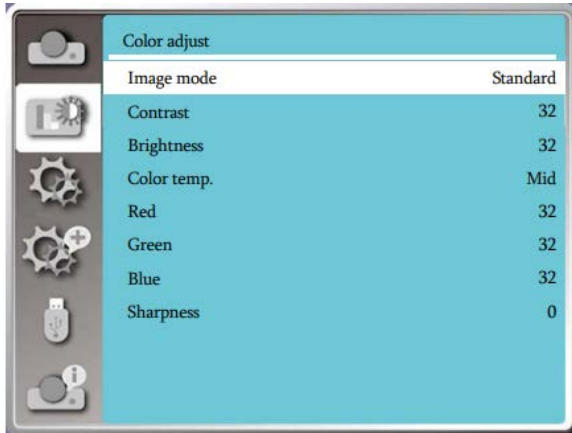


The computer system menu is disabled once HDMI 1, HDMI 2, Memory Viewer, Network, and USB Display are selected.

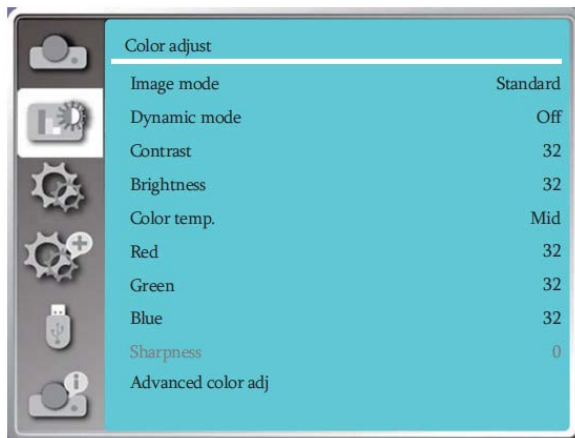
## Color adjust menu

Select Color Adjust to set the image mode and adjust the quality of the projected image.

LWU560-APS, LWU660-APS, LWU700-APS, LWU700-4K-APS, LWU890-APS, LWU800-4K-APS, and LWU800-APS



LWU600-APS



## Selecting the image mode

To directly operate, Select Image Select on the remote control to select the required image mode. To operate using the menu, complete the following steps:

1. Select Menu > Color adjust menu.
2. Select OK.
3. Select ▲▼ to select required item.
  - Dynamic
  - DICOM SIM
  - Standard
  - Cinema
  - Blackboard (Green)

- Colorboard

## Adjusting the color

Select this function to adjust the quality of the projection image.



When adjusting Red, Green, or Blue, the Color temp. option changes to Use.

1. Select ▲▼ to select the required item.
2. Select OK.
3. Select ▲▼ to select the required item.
  - Contrast
  - Brightness
  - Color temp.
  - Red
  - Blue
  - Sharpness

## Making advanced color adjustments (LWU600-APS only)

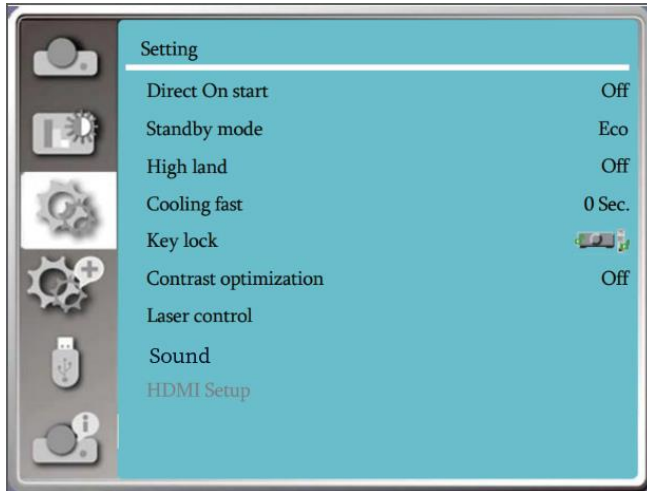
Select this function to adjust the quality of the projection image.

1. Select ▲▼ to select required item.
2. Select OK.
3. Select ▲▼ to select required color.
  - Hue
  - Luminance
  - Saturation
4. Select OK.
  - Red
  - Yellow
  - Green
  - Cyan
  - Blue
  - Magenta
  - Reset

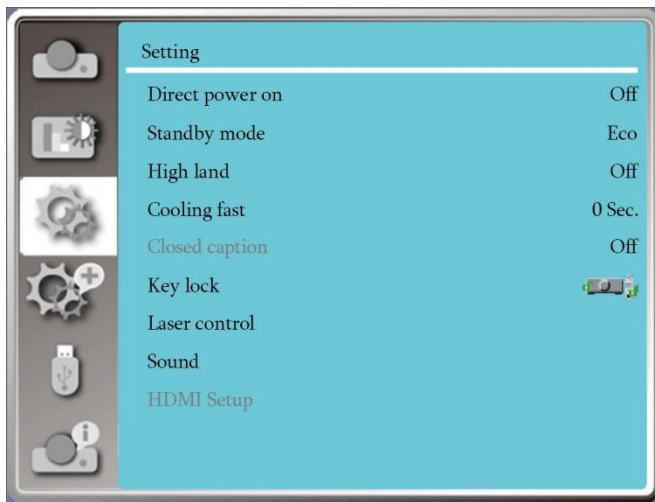
## Setting menu

Setting function, you can select other functions as described below.

LWU560-APS, LWU660-APS, LWU700-APS, LWU700-4K-APS, LWU800-APS, LWU800-4K-APS, and LWU890-APS



LWU600-APS



1. Select Menu > Setting menu.
2. Select ▲▼ to select required item.
3. Select OK.
4. Select ▲▼ to set options.

## Setting the power mode

Set the power mode ON, when the power cord is connected to a power outlet.

1. Select ▲▼ to select the Direct On start menu.
2. Select OK.

3. Select ▲▼ to select required item.
  - Off—Get into Standby mode.
  - On—After entering the standby mode, select Power to power on.

## Setting power consumption for Standby mode

Set different power consumption during standby, whenever the projector is operated through the network.

1. Select ▲▼ to select the Standby mode menu.
2. Select OK.
3. Select ▲▼ to adjust levels.
  - ECO mode
  - Network
  - Normal

## Adjusting for altitude

This projector provides fan control through the Settings menu. Change the setting to control the speed of the cooling fan according to the altitude the projector is operating at.



Set the High land option to ON when operating the projector at an altitude of 1700 to 3200 meters.

1. Select ▲▼ to select the High land menu.
2. Select OK.
3. Select ▲▼ to select required menu.
  - Off—Normal speed. Set this option if the altitude is not high when operating the projector.
  - On—Faster speed. Set this option when operating the projector in high altitudes.

## Setting the fan cooling speed

After the projector is powered off, select the cooling fan speed to shorten the cooling time .



- When setting this option to zero (0) seconds, you cannot restart the projector immediately after turning off.
- Sometimes, the light source may take longer time to start again than usual time during the high temperature.

1. Select ▲▼ to select the Cooling fast menu.
2. Select OK.
3. Select ▲▼ to switch required menu.
  - Normal—Runs normally.
  - 30 seconds—Runs faster than Normal mode with shorter time but a louder sound.
  - 0 seconds—Allows you to unplug the AC power directly after the shutdown, without waiting for the projector to cool off.

## Setting closed captions (LWU600-APS only)

Closed caption is used for displaying the show's sound or other information on the screen. Select this function to switch channels with input signal of closed caption.



- If the Closed caption function is invalid, this option displays grey.
- When the on-screen display (OSD) menu and Timer display on the screen, the Closed caption function is invalid.

1. Select ▲▼ to select the Closed caption menu.
2. Select OK.
3. Select ▲▼ to switch required menu.
  - Off—No closed caption.
  - CC1—Displays CC1 data.
  - CC2—Displays CC2 data.
  - CC3—Displays CC3 data.
  - CC4—Displays CC4 data.

## Locking the control panel and remote control

Select this function to lock and unlock the control panel or remote control keypad.



If locking the top of the control panel without a remote control or If something is wrong with the remote control, contact your dealer or service center.

1. Select ▲▼ to select the Key lock menu.
2. Select OK.
3. Select ▲▼ to switch required menu.
  - Off—The control panel or remote control keypad is effective.
  - Projector—Control panel keypad is invalid.
  - Remote control—Remote control keypad is invalid.

## Optimizing contrast (LWU560-APS, LWU660-APS, LWU700-APS, and LWU800-APS only)

Select this function to optimize and compensate signal automatically based on the image, to get the best contrast image.

1. Select ▲▼ to select the Contrast optimization menu.
2. Select OK.
3. Select ▲▼ to adjust.
  - Off—No optimization.
  - Projector—Optimize contrast.

## Changing light source brightness

Change light source brightness according to the environment and aim the projector operating

1. Select ▲▼ to select the Laser control menu.
2. Select OK.
3. Select ▲▼ to switch required menu.
  - Normal—Normal brightness.
  - ECO.1/ECO.2—Lower the brightness and reduce energy consumption, prolonging the light source service life.
  - Full normal—Brightness is the same as normal mode but is not adjustable.

## Changing sound

Select this function to adjust the sound.

1. Select ▲▼ to select the Sound menu.
2. Select OK.
3. Select ▲▼ to switch required menu.
  - Volume—Select ▼ to increase volume, range from 0 to +25. Select ▲ to decrease volume, range from 0 to +25.
  - Mute—Select button to switch the Mute function on or off.  
 On: No audio output  
 Off: Audio output

## Determining HDMI setup

When the external device is connected to the HDMI terminal of the projector and the images cannot be projected normally, switch on the Image setting. When the sound cannot be output normally, switch on the Audio input setting.

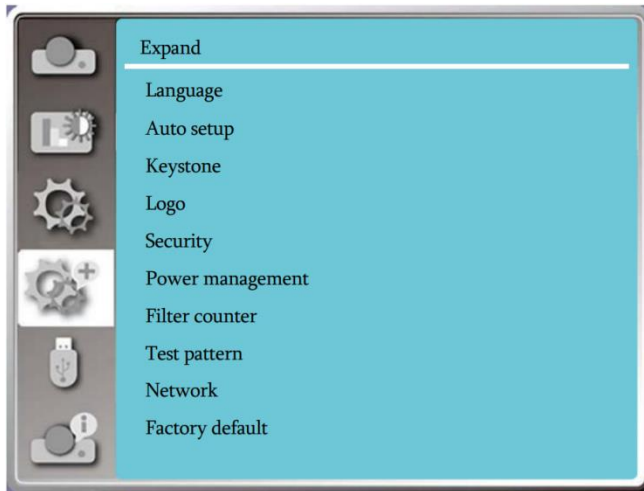


HDMI option can be chosen only on HDMI 1 and HDMI 2 channel.

1. Select ▲▼ to select the HDMI setup menu.
2. Select OK.  
 Display HDMI Setup instantly
3. Select ▲▼ to select Image or Sound.
4. Select OK.

## Expand menu

The projector has Expand function, select other functions as described below.



1. Select Menu > Expand menu.
2. Select ▲▼ to select required item.
3. Select OK.
4. Select ▲▼ to set options.
5. Select OK.

## Setting the language

Users can select the language displayed on the screen.

1. Select ▲▼ to select the Language menu.
2. Select OK.
3. Select ▲▼ to switch required language.
4. Select OK.

The name of menus, setting, the OSD, button, and so on, can be displayed by the selected language. The projector comes with Chinese and English language support. You may select required one from them.

## Running Auto setup

Select AUTO on your remote control to execute the following functions: Input search and Auto PC adj.



- One of Input search or Auto PC Adj. must be set to On.
- When Input search option is set to On, the projector automatically searches the signal.

1. Select ▲▼ to select the Auto setup menu.
2. Select OK.
3. Select ▲▼ to select required items.



- Input search—Select this function to detect the signal, then project images and input signals automatically.
- Auto PC adj.—Select this function to adjust [Fine sync], [H Position], [V Position] and [H Size] automatically, when projector input analog signals.

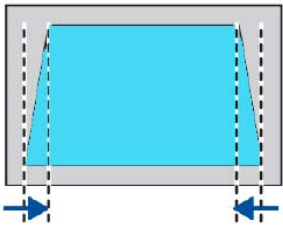
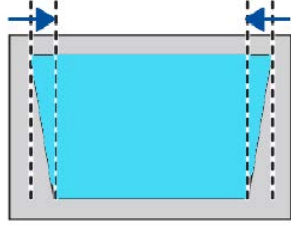
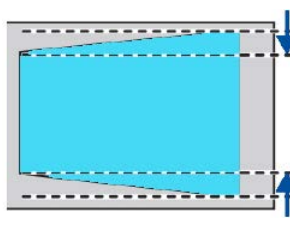
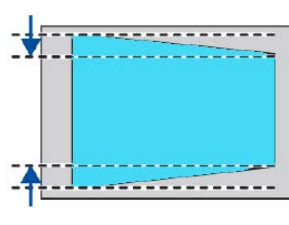
## Setting keystone

Select this function to store or reset the keystone or related setting after unplugging the AC power.

1. Select ▲▼ to select the Keystone menu.
2. Select OK.
3. Select ▲▼ to select required item.
4. Select OK.
  - Keystone—Select this function to store and reset Keystone after closing the projector or unplugging the AC power.
  - Store—Stores the Keystone after closing the projector or unplugging the AC power cord.
  - Reset value—Cancels the Keystone after closing the projector or unplugging the AC power.



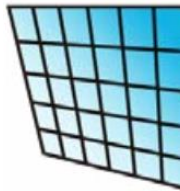
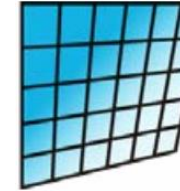
## Correcting horizontal or vertical keystone

Select this function to correct the projected images horizontally or vertically.

Select ▲ to reduce bottom width	Select ▼ to reduce top width	Select ◀ to reduce left width	Select ▶ to reduce right width
			

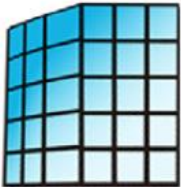



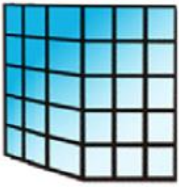

## Correcting four corner distortion in images

Select this function to correct the projected images of four distorted corners.

Upper left	Upper right	Bottom left	Bottom right
			

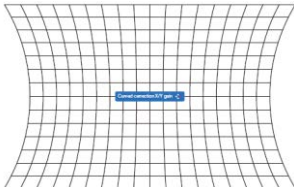
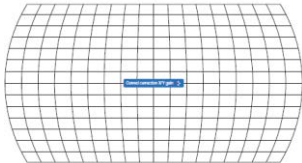
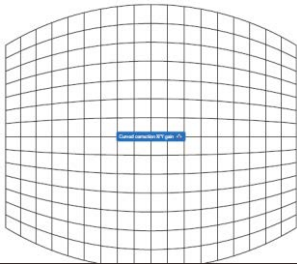
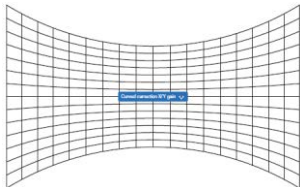
# Correcting six corner distortion in images

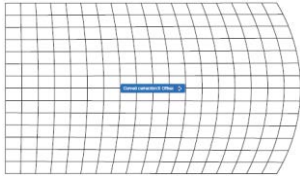
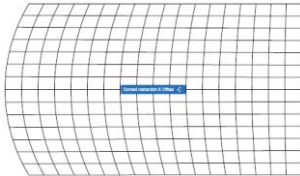
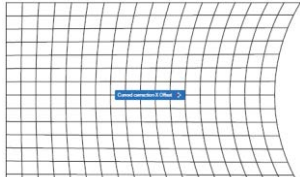
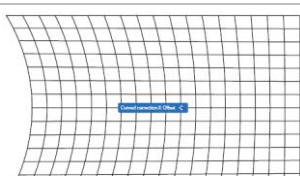
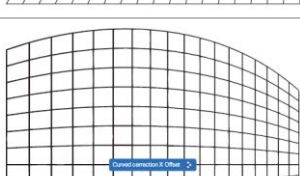
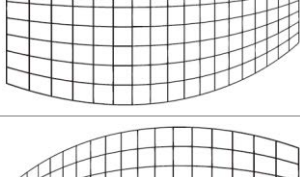
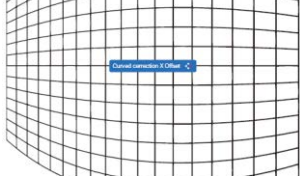
Select this function to correct the projected images of four distorted corners.

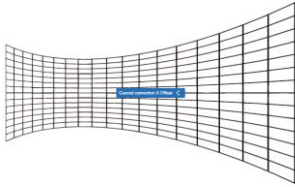
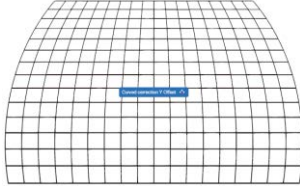
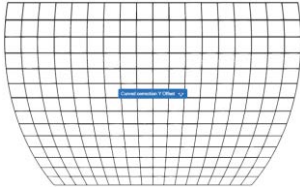
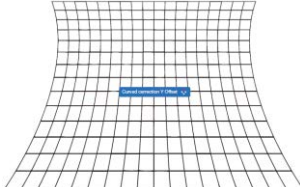
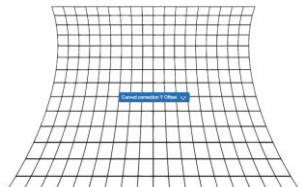
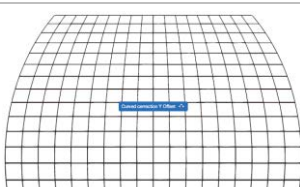
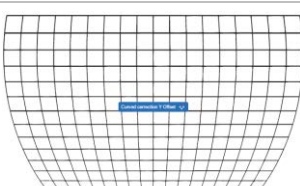
Conner correction					
Upper left	Upper right	Upper middle	Bottom middle	Bottom left	Bottom right
					

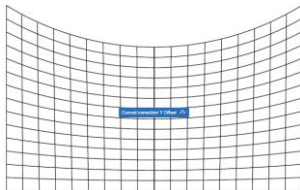
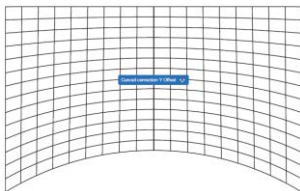
# Correcting curves in images

Select this function to correct the projected images with linearity uneven or vertical and horizontal bending deformation.

Item	Operation	Adjustment	
Curved correction X/Y gain	Select ►	Sag left and right vertically	
	Select ◀	Extend left and right vertically	
	Select ▲	Reach up and down horizontally	
	Select ▼	Sag up and down horizontally	

Item	Operation	Adjustment	
Curved correction X offset	Select ◀	Correct the vertical lines on the left. Expand the top and bottom while maintaining the central area.	
	Select ▶	Correct the vertical lines on the right. Expand the top and bottom while maintaining the central area	
	Select ◀	Correct the horizontal line on the left. Expand the top and bottom while maintaining the central area.	
	Select ▶	Correct the horizontal line on the right. Expand the top and bottom while maintaining the central area.	
	Select ◀	Correct the horizontal line on the left. Expand the top and bottom while maintaining the central area.	
	Select ▶	Correct the horizontal line to the right. Expand the top and bottom while maintaining the central area.	
	Select ◀	Correct the horizontal line on the left. Expand the top and bottom while maintaining the central area.	

Item	Operation	Adjustment	
	Select ►	Correct the horizontal line to the right. Expand the top and bottom while maintaining the central area.	
Curved correction Y offset	Select ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions	
	Select ▲	Correct vertical lines on both sides. Expand the top corners while maintaining the central and upper regions	
	Select ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions	
	Select ▲	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions	
	Select ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions	
	Select ▲	Correct vertical lines on both sides. Expand the top corners while maintaining the central and upper regions	

Item	Operation	Adjustment	
	Select ▼	Correct vertical lines on both sides. Expand the lower corners while maintaining the central and upper regions.	
	Select ▲	Correct vertical lines on both sides. Expand the upper corner while keeping the central and lower regions unchanged.	



- After adjusting values about H/V Keystone, if users adjust Conner correction, values for H/V Keystone are reset. After adjusting values about Conner correction, if users adjust for H/V Keystone, values about Conner correction are also reset.
- Curved correction X compensation and curved correction Y compensation cannot be adjusted individually. Adjust Curved correction X compensation and curved correction Y compensation after adjusting the X/Y Curved correction.
- Maximum Keystone range up to  $\pm 30^\circ$  vertically and  $\pm 30^\circ$  horizontally. However, the image quality does deteriorate and becomes more difficult to focus. Install the projector with the minimal correction value.
- The screen size is changed with various H/V Keystone adjustments.
- Keystone may influence image aspect.
- The Aspect of the image size may vary just for lens shift.

## Adjusting local point of an image

Select this function to adjust the local points of the projected image.

1. Select ▲▼◀▶ to select the Grid image tune option.
2. Select OK.

## Resetting to factory default

Select this function to make adjustment value back to the factory default.

1. Select ▲▼◀▶ to select the Reset value option.
2. Select OK. to release Keystone mode.

## Selecting the screen logo and lock setup

Use this function to select the Logo screen, Logo PIN Code lock, change the power on password, and set up the default logo screen.

1. Select ▲▼ to select the Logo menu.
2. Select OK.
3. Select ▲▼ to select required items.
  - Logo Select

- Capture
- Logo PIN code lock
- Logo PN code change

## Setting projector security

Set a password to lock the control panel or remote control keypad to prevent unauthorized personnel from operating the projector. Once the projector is on, the Enter Logo Password screen is displayed.

1. Select ▲▼ to select the Security menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - Logo PIN Code lock
  - Reset password
  - Logo PIN Code Change
  - To Cancel the Password

## Managing projector power consumption

To reduce power consumption and maintain life cycle of light source, the power management function turns off the projection light source if the projector has no signals for a period.



- Factory default for standby time: Five minutes.
- Count down for ready mode: Five minutes.

1. Select ▲▼ to select the Power management menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - Ready
  - Power Off
  - Off
  - Timer
  - Ready Countdown

## Setting filter counter

Set this function to reset the filter usage time and set up warning display.

1. Select ▲▼ to select the Filter counter menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - Filter—Displays the filter usage time.
  - Timer—Set the time to display a warning icon.

- Filter counter reset—Reset filter counter.

When the projector reaches the user-set cleaning time, filter warning icon appears on the screen to notify the user to clean the projector filter. Make sure to select the initial state and set the timer after cleaning it. Once the filter counter is reset, filter warning icon is closed.

## Selecting a test pattern

Select this function to display the projector's built-in test pattern.

Location, size, and other factors cannot be reflected in the test pattern. Make sure to display the input signal before performing various adjustments.

1. Select ▲▼ to select Test pattern menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - Grayscale 1
  - Grayscale 2
  - Grayscale 3
  - Grayscale 4
  - Color bar
  - Red
  - Green
  - Blue
  - Cross hatch
  - White
  - Black
  - Raster gray: Use

The on-screen display (OSD) menu to display the test pattern. Choose the test mode to help you make a series of adjustments easily.

## Network

This function is designed to allow the computer to control the projector remotely using the intranet.

## Preparing the network

Follow these steps to prepare the network.

1. Gather the required equipment: projector, computer, and network cable.
2. Make the connection.

Connect the projector to a router or switch in the LAN with normal or jumper network cable. In case a normal network cable failed to connect successfully, use a jumper cable.

3. Turn on the computer.

The LAN port on computer and projector are flashing after power on the projector

## Operating the projector

Follow these steps to operate the projector.

1. Power on the projector.
2. Acquire the IP address, with DHCP set to on and auto IP allocation set to On.  
You can set DHCP to Off and set up the IP address manually if you are familiar with networking.
3. Enter the network setup menu.
  - a. Select MENU on remote control or top of the control panel, select the button to select network icon.
  - b. Select ▲▼ select network settings and select OK to enter.
    - MAC address—Display the MAC address of wired network.
    - IP address—Display the IP address of wired network.
  - c. Select ▲▼ to set DHCP On to obtain an IP address, subnet, gateway, and DNS automatically, and select OK to confirm.
  - d. Select ▲▼ to set DHCP Off, then select OK button to enter an IP address, then select ▼ to select subnet, gateway and DNS automatically and select OK to confirm.

## Resetting to the factory default

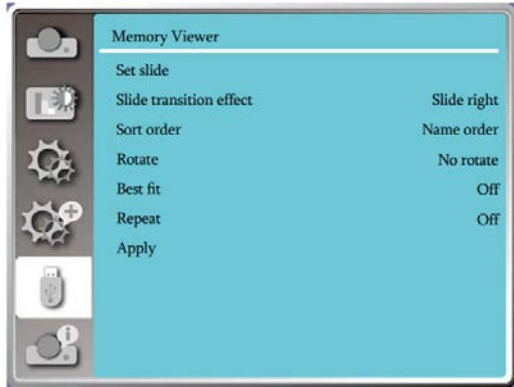
Reset all your settings to factory default.

1. Select ▲▼ to select the Factory default menu.
2. Select OK.
3. Select ▲▼ to select YES.
4. Select OK.

## Memory Viewer menu

Select the Memory Viewer function can project images stored in USB memory, when you insert the USB memory into the projector.





1. Select Menu > Memory Viewer menu.
2. Select ▲▼ to select required item.
3. Select OK.
4. Select ▲▼ to set option.
5. Select OK.

## Playing slides

Select this function to play slides.

1. Select ◀▶ to select a file.
2. Select ▲▼ to select Set slide menu.
3. Select OK.
  - Full screen display
  - Press to return the thumbnail.

## Setting the slide's playback

Select this function to set the slide's playback, when switching slides.

1. Select ▲▼ to select the Slide Transition effect menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - Slide down—Switches slides from the upper to the lower.
  - Slide right—Switches slides from left to the right.

## Setting the slide's order

Select this function to set the slide's order.

1. Select ▲▼ to select the Sort order menu.
2. Select OK.
3. Select ▲▼ to switch required item.

- Expand order—Sorts by expand names of file or folder.
- Size order—Sorts by size of file or folder.
- Time order—Sorts by the time of file or folder.
- Name order—Sorts by names of file or folder.

## Rotating slides

Select this function to set the rotation.

1. Select ▲▼ to select the Rotate menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - No rotate—Rotation is invalid.
  - 270 degrees rotate—Rotates counterclockwise by 270 degrees.
  - 180 degrees rotate—Rotates clockwise by 180 degrees.
  - 90 degrees rotate—Rotates clockwise by 90 degrees.

## Determining the best fit of the image for the screen

Set the image to be compatible with projection screen.

1. Select ▲▼ to select the Best fit menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - On—Display images by the aspect ratio of the screen.
  - Off—Display image by the normal pixels.

## Setting slide repetition

Select this function to play slides repeatedly.

1. Select ▲▼ to select the Repeat menu.
2. Select OK.
3. Select ▲▼ to switch required item.
  - On—Replay the first document, after playing the last one.
  - Off—Return to the thumbnail display screen, after playing the last one.

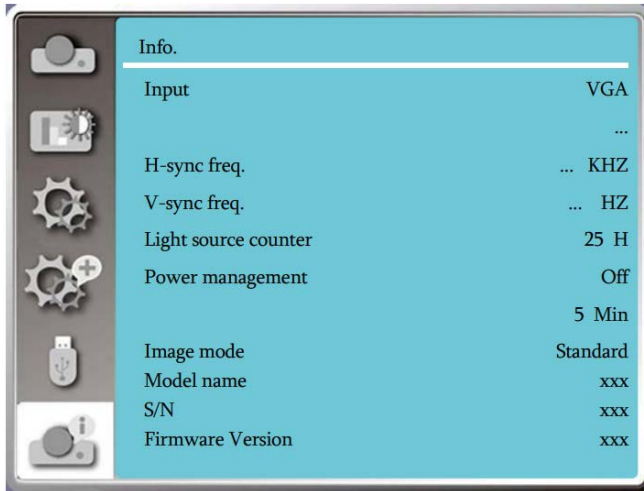
## Applying slide changes

Only be used in playing slides.

1. Select ▲▼ to select the Apply menu.
2. Select OK.

# Info. menu

Select Info. function to detect the projected image signal and the projector operating status.



1. Select Menu > Info. menu.
2. Select ▲▼ to select required item.
3. Select OK.
  - Input
  - V-sync freq.
  - H-sync freq.
  - Light source counter
  - Power management
  - Image mode
  - Model name
  - S/N
  - Firmware Version

# Signal connectivity specifications

The projector is designed to accept every computer signal below Dot Clock 160MHz. See table below for details on resolution and relevant frequency.



- Check the jack type, signal level, timing, and resolution before connecting the projector to a PC.
- Some PCs may have multiple display screen modes. Use of some of these modes is not possible with this projector.
- Depending on the input signal, full-size display may not be possible in some cases. Refer to the number of display pixels above.
- **The signal is converted to the projector's panel resolution before being displayed. The best display performance is achieved if the resolutions of the input signal and projector panel are identical.**
- Automatic adjustment may not function correctly with some input signals.
- The image may not be displayed correctly when the input sync signal is a composite sync.

LWU560-APS, LWU600-APS, and LWU660-APS

No	OSD display	Source			Specification			
		VGA	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
1	720x480i, 60 Hz	○	—	—	720x480i	15.734	59.940	13.500
2	720x480i, 60 Hz	—	○	○	720 (1440) x480i	15.734	59.940	27.000
3	720x576i, 50 Hz	○	—	—	720x576i	15.625	50.000	13.500
4	720x576i, 50 Hz	—	○	○	720 (1440) x576i	15.625	50.000	27.000
5	720x480, 60 Hz	○	○	○	720x483 (480P)	31.469	59.940	27.000
6	720x576, 50 Hz	○	○	○	720x576 (576P)	31.250	50.000	27.000
7	1280x720p, 60 Hz	○	○	○	1280x720p	45.000	60.000	74.250
						44.955	59.940	74.176
8	1280x720p, 50 Hz	○	○	○		37.500	50.000	74.250
9	1920x1080i, 60 Hz	○	○	○	1920x1080i	33.750	60.000	74.250
						33.716	59.940	74.176
10	1920x1080i, 50 Hz	○	○	○		28.125	50.000	74.250
11	1920x1080p, 24 Hz	○	○	○	1920x1080p	27.000	24.000	74.250
						26.970	23.980	74.176
12	1920x1080p, 60 Hz	○	○	○	1920x1080p	67.500	60.000	148.500
12	1920x1080p, 60 Hz	○	○	○	1920x1080p	67.433	59.940	148.352

No	OSD display	Source			Specification			
		VGA	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
13	1920x1080p, 50 Hz	○	○	○		56.250	50.000	148.500
14	2560X1080, 60 Hz	—	○	○	2560x1080p	66.000	59.940	198.000
15	3840x2160, 30 Hz	—	○	—	3840x2160p	67.500	30.000	297.000
16	640x480, 60 Hz	○	○	○	640x480	31.469	59.940	25.175
17	640x480, 67 Hz	○	○	○		35.000	66.667	30.240
18	640x480, 72 Hz	○	○	○		37.861	72.809	31.500
19	640x480, 75 Hz	○	○	○		37.500	75.000	31.500
20	640x480, 85 Hz	○	○	○		43.269	85.008	36.000
21	800x600, 56 Hz	○	○	○	800x600	35.156	56.250	36.000
22	800x600, 60 Hz	○	○	○		37.879	60.317	40.000
23	800x600, 72 Hz	○	○	○		48.077	72.188	50.000
24	800x600, 75 Hz	○	○	○		46.875	75.000	49.500
25	800x600, 85 Hz	○	○	○		53.674	85.061	56.250
26	832x624, 75 Hz	○	○	○	832x624	49.725	74.550	57.283
27	1024x768, 60 Hz	○	○	○	1024x768	48.363	60.004	65.000
28	1024x768, 70 Hz	○	○	○		56.476	70.069	75.000
29	1024x768, 75 Hz	○	○	○		60.023	75.029	78.750
30	1024x768, 85 Hz	○	○	○		68.678	84.997	94.500
31	1152x864, 70 Hz	○	○	○	1152x864	63.995	70.020	94.200
32	1152x864, 75 Hz	○	○	○		67.500	75.000	108.000
33	1280x720, 60 Hz	○	○	○	1280x720	44.772	59.855	74.500
34	1280x768, 60 Hz	○	○	○	1280x768	47.776	59.870	79.500
35	1280x768, 75 Hz	○	○	○		60.289	74.893	102.250
36	1280x768, 85 Hz	○	○	○		68.630	84.840	117.500
37	1280x800, 60 Hz	○	○	○	1280x800	49.702	59.810	83.500
38	1280x800, 75 Hz	○	○	○		62.795	74.934	106.500
39	1280x800, 85 Hz	○	○	○		71.554	84.880	122.500
40	1280x960, 60 Hz	○	○	○	1280x960	60.000	60.000	108.000
41	1280x1024, 60 Hz	○	○	○	1280x1024	63.981	60.020	108.000

No	OSD display	Source			Specification			
		VGA	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
42	1280x1024, 72 Hz	○	○	○		78.16	71.97	135.060
43	1280x1024, 75 Hz	○	○	○	1280x1024	79.976	75.025	135.000
44	1280x1024, 85 Hz	○	○	○		91.146	85.024	157.500
45	1366x768, 60 Hz	○	○	○	1366x768	47.720	59.799	84.750
46	1400x1050, 60 Hz	○	○	○	1400x1050	65.317	59.978	121.750
47	1400x1050, 75 Hz	○	○	○		82.278	74.867	156.000
48	1440x900, 60 Hz	○	○	○	1440x900	55.935	59.887	106.500
49	1600x900, 60 Hz	○	○	○	1600x900	55.920	60.000	118.998
50	1600x1200, 60 Hz	○	○	○	1600x1200	75.000	60.000	162.000
51	1680x1050, 60 Hz	○	○	○	1680x1050	65.290	59.954	146.250
52	1920x1080, 60 Hz	○	○	○	1920x1080	66.587	59.934	138.500
53	1920x1200, 60 Hz	○	○	○	1920x1200	74.038	59.950	154.000

**Note:**

- Shows input signal source support this format.
- Shows input signal source DO NOT support.

## LWU700-APS, LWU800-APS, and LWU890-APS

No	OSD display	Source			Specification			
		VGA	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
1	720x480i, 60 Hz	○	—	—	720x480i	15.734	59.940	13.500
2	720x480i, 60 Hz	—	○	○	720 (1440) x480i	15.734	59.940	27.000
3	720x576i, 50 Hz	○	—	—	720x576i	15.625	50.000	13.500
4	720x576i, 50 Hz	—	○	○	720 (1440) x576i	15.625	50.000	27.000
5	720x480, 60 Hz	○	○	○	720x483 (480P)	31.469	59.940	27.000
6	720x576, 50 Hz	○	○	○	720x576 (576P)	31.250	50.000	27.000
7	1280x720p, 60 Hz	○	○	○	1280x720p	45.000	60.000	74.250
						44.955	59.940	74.176
8	1280x720p, 50 Hz	○	○	○		37.500	50.000	74.250
9	1920x1080i, 60 Hz	○	○	○	1920x1080i	33.750	60.000	74.250
						33.716	59.940	74.176

No	OSD display	Source			Specification			
		VGA	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
10	1920x1080i, 50 Hz	○	○	○	1920x1080p	28.125	50.000	74.250
11	1920x1080p, 24 Hz	○	○	○		27.000	24.000	74.250
						26.970	23.980	74.176
12	1920x1080p, 60 Hz	○	○	○		67.500	60.000	148.500
						67.433	59.940	148.352
13	1920x1080p, 50 Hz	○	○	○	56.250	50.000	148.500	
14	2560X1080, 60 Hz	—	○	○	2560x1080p	66.000	59.940	198.000
15	3840x2160, 30 Hz	—	○	—	3840x2160p	67.500	30.000	297.000
16	3840x2160, 60 Hz	—	○	—		135.000	60.000	594.000
17	640x480, 60 Hz	○	○	○	640x480	31.469	59.940	25.175
18	640x480, 67 Hz	○	○	○		35.000	66.667	30.240
19	640x480, 72 Hz	○	○	○		37.861	72.809	31.500
20	640x480, 75 Hz	○	○	○		37.500	75.000	31.500
21	640x480, 85 Hz	○	○	○		43.269	85.008	36.000
22	800x600, 56 Hz	○	○	○	800x600	35.156	56.250	36.000
23	800x600, 60 Hz	○	○	○		37.879	60.317	40.000
24	800x600, 72 Hz	○	○	○		48.077	72.188	50.000
25	800x600, 75 Hz	○	○	○		46.875	75.000	49.500
26	800x600, 85 Hz	○	○	○		53.674	85.061	56.250
27	832x624, 75 Hz	○	○	○	832x624	49.725	74.550	57.283
28	1024x768, 60 Hz	○	○	○	1024x768	48.363	60.004	65.000
29	1024x768, 70 Hz	○	○	○		56.476	70.069	75.000
30	1024x768, 75 Hz	○	○	○		60.023	75.029	78.750
31	1024x768, 85 Hz	○	○	○		68.678	84.997	94.500
32	1152x864, 70 Hz	○	○	○	1152x864	63.995	70.020	94.200
33	1152x864, 75 Hz	○	○	○		67.500	75.000	108.000
34	1280x720, 60 Hz	○	○	○	1280x720	44.772	59.855	74.500
35	1280x768, 60 Hz	○	○	○	1280x768	47.776	59.870	79.500
36	1280x768, 75 Hz	○	○	○		60.289	74.893	102.250
37	1280x768, 85 Hz	○	○	○		68.630	84.840	117.500

No	OSD display	Source			Specification			
		VGA	HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
38	1280x800, 60 Hz	○	○	○	1280x800	49.702	59.810	83.500
39	1280x800, 75 Hz	○	○	○		62.795	74.934	106.500
40	1280x800, 85 Hz	○	○	○		71.554	84.880	122.500
41	1280x960, 60 Hz	○	○	○	1280x960	60.000	60.000	108.000
42	1280x1024, 60 Hz	○	○	○	1280x1024	63.981	60.020	108.000
43	1280x1024, 72 Hz	○	○	○		78.16	71.97	135.060
44	1280x1024, 75 Hz	○	○	○		79.976	75.025	135.000
45	1280x1024, 85 Hz	○	○	○		91.146	85.024	157.500
46	1366x768, 60 Hz	○	○	○	1366x768	47.720	59.799	84.750
47	1400x1050, 60 Hz	○	○	○	1400x1050	65.317	59.978	121.750
48	1400x1050, 75 Hz	○	○	○		82.278	74.867	156.000
49	1440x900, 60 Hz	○	○	○	1440x900	55.935	59.887	106.500
50	1600x900, 60 Hz	○	○	○	1600x900	55.920	60.000	118.998
51	1600x1200, 60 Hz	○	○	○	1600x1200	75.000	60.000	162.000
52	1680x1050, 60 Hz	○	○	○	1680x1050	65.290	59.954	146.250
53	1920x1080, 60 Hz	○	○	○	1920x1080	66.587	59.934	138.500
54	1920x1200, 60 Hz	○	○	○	1920x1200	74.038	59.950	154.000

**Note:**

- Shows input signal source support this format.
- Shows input signal source DO NOT support.

## LWU700-4K-APS and LWU800-4K-APS

No	OSD display	Source		Specification			
		HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
1	640X480p, 60 Hz	○	○	640X480P	31.500	60.000	25.200
2	720X480p, 60 Hz	○	○	720X480P	31.470	59.940	27.000
3	720X480p, 60 Hz	○	○		31.500	60.000	27.030
4	480i, 60 Hz	○	○	720 (1440) X480i	15.750	60.000	27.030
5	576i, 50 Hz	○	○	720 (1440) X576i	15.630	50.000	27.000
6	720X576p, 50 Hz	○	○	720X576P	31.250	50.000	27.000



No	OSD display	Source		Specification			
		HDMI	HDBT	Resolution	H-freq (KHz)	V-freq (Hz)	Pixel clock (MHz)
7	1280X720p, 24 Hz	o	o	1280X720P	18.000	24.000	59.400
8	1280X720p, 30 Hz	o	o		22.500	30.000	74.250
9	1280X720p, 50 Hz	o	o		37.500	50.000	74.250
10	1280X720p, 60 Hz	o	o		45.000	60.000	74.250
11	1920X1080i, 50 Hz	o	o	1920X1080i	28.130	50.000	74.250
12	1920x1080i, 60 Hz	o	o		33.750	60.000	74.250
13	1920X1080p, 24 Hz	o	o	1920X1080P	27.000	24.000	74.250
14	1920X1080p, 30 Hz	o	o		33.750	30.000	74.250
15	1920X1080p, 50 Hz	o	o		56.250	50.000	148.500
16	1920X1080p, 60 Hz	o	o		67.500	60.000	148.500
17	3840X2160, 24 Hz	o	-	3840X2160P	54.000	24.000	297.000
18	3840X2160, 25 Hz	o	-		56.250	25.000	297.000
19	3840X2160, 30 Hz	o	-		67.500	30.000	297.000
20	3840X2160, 60 Hz	o	-		135.000	60.000	594.000
21	4096X2160, 24 Hz	o	-	4096X2160P	54.000	24.000	297.000
22	4096X2160, 30 Hz	o	-		67.500	30.000	297.000
23	4096X2160, 50 Hz	o	-		112.500	50.000	594.000
24	4096X2160, 60 Hz	o	-		135.000	60.000	594.000

**Note:**

- Shows input signal source support this format.
- Shows input signal source DO NOT support.

# Network control operation

This function is designed to achieve remote control by computers connected to the same LAN.

## Preparing the computer

Check all parts for damage and make preparations.

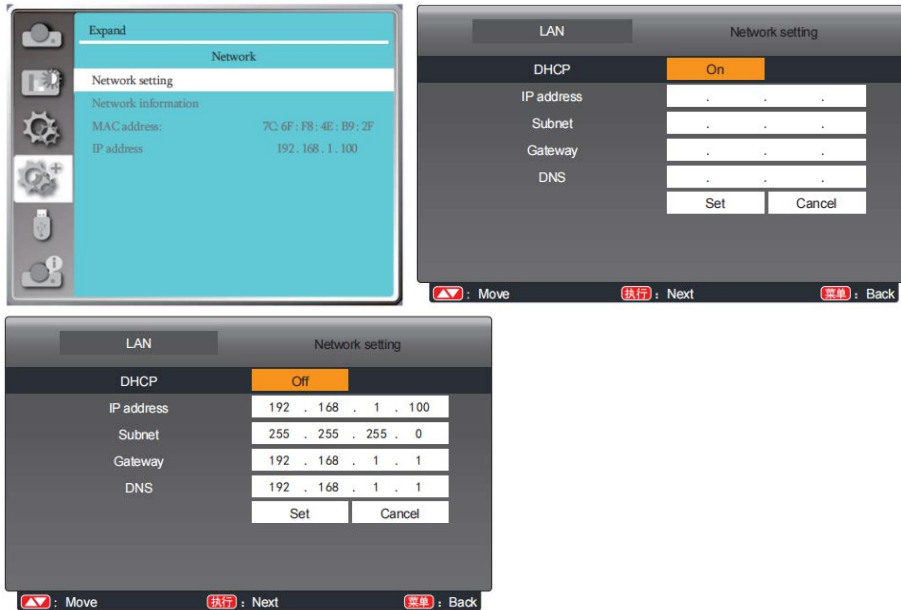
1. Make sure you have the required equipment: projector, computer, network cable connection.
2. Connect the projector to a router or switch in the LAN with a normal or jumper network cable.  
In case a normal network cable fails to connect successfully, use a jumper cable instead.
3. Turn on the computer.

The LAN port on computer and projector flash after the projector is powered on.

## Operating the projector with the computer

To ensure the correct use of the network control function, follow the steps below.

1. Power on the projector.
2. Acquire the IP address, set DHCP to On and auto IP allocation to On.  
You can set DHCP to Off and set up IP address manually if you are familiar with networking.
3. Enter the network setup menu:
  - a. To select network icon, select MENU on the remote controller or on the top of the control panel, select ▲▼.
  - b. To display the Network menu, select ENTER or ►.
  - c. Select ▲▼ to select network settings and select ENTER to confirm.
  - d. To set DHCP On, select ▲▼ and select OK to confirm.
  - e. To select Set, select ▲▼.
  - f. Select OK and wait until the message disappears.



## Enabling WiFi

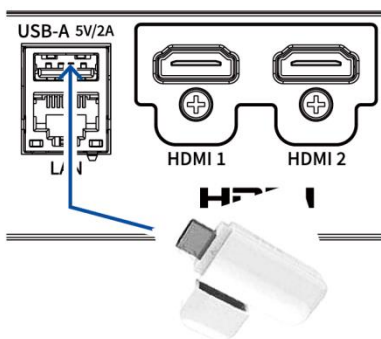
Wi-Fi display enables a projector to connect a PC wirelessly to realize high-speed transmission between devices, allowing users to enjoy high-definition video display without using cables.

## Setting up the wireless network

To ensure you can connect to the wireless network correctly, choose a suitable Wi-Fi dongle and follow the procedures below.

1. Insert the supplied Wi-Fi dongle into the USB-A port.

For this function, users must purchase the Wi-Fi dongle separately from your suppliers.



2. Find Network Display in the Open Network and Sharing Center.
3. Select Connect to connect the Wi-Fi.

## Entering through a web browser

To ensure successful access using a web browser, follow these steps:

1. Start the computer's web browser.
2. Enter the IP address on the projector set in the URL input field of the web browser.
3. Enter the password in the Password field and select Login.


The factory default setting is the user's name, admin (administrator privileges), and the password is admin.

4. Select the Login.



- Users can click on the top right corner of the web browser screen to select the display language.
- Do not start multiple web browser settings or control. Do not use more than one computer set or control the projector.
- Change your password.
- If the network does not appear on screen controls, consult your network administrator for description of each option

For PwPresenter Software, when the input signal source is chosen as the network, the network is used to project computer images.

5. After entering the IP address of the projector in the web page to the main interface, select Download and download the corresponding PwPresenter software with the projector.
6. Select  to enter PwPresenter software.

# Wake on LAN operation

The Wake on LAN function enables you to wake up the projector on LAN.

1. Connect the projector to the computer with a network cable.
2. Set the network configuration on the computer.
3. Change the adapter settings in the Control Panel Network and Sharing Center.
4. Set the IP address.
  - a. Right-click Ethernet.
  - b. Set the IP to be in the same network segment as the IP on the projector (DHCP is set to Off in the projector's network settings).
5. Open the Wake On LAN\_2.11.11.0 tool.
6. Select File > New Host > Display Properties > Name tab and customize a name.
7. On the WakeUp tab in the MAC address field, enter the MAC address of the projector.
8. Enter the computer name.
9. Select the IPV4 information as the one set on the computer.
10. Return to the Display Properties tab and select OK.
11. On the projector, change the Standby mode to Network standby.
12. Shut down the projector.
13. Power on the projector.
14. Once the projector enters into Standby mode, right-click on the group and select Wake up.