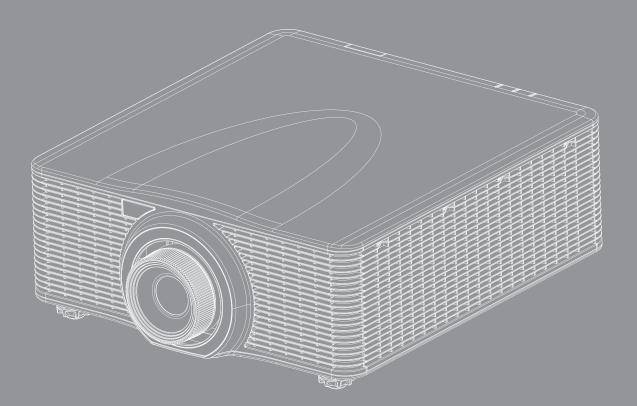


# **DLP<sup>®</sup> Projector**

ZU750, ZU600SA, ZU700SA, ZU800SA, ZU900SA





НЭШ

**User manual** 

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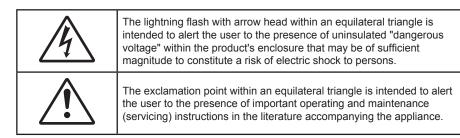
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## SAFETY



Please follow all warnings, precautions and maintenance as recommended in this user's guide.

### **Important Safety Instruction**

- Do not block any ventilation openings. To ensure reliable operation of the projector and to protect from over heating, it is recommended to install the projector in a location that does not block ventilation. As an example, do not place the projector on a crowded coffee table, sofa, bed, etc. Do not put the projector in an enclosure such as a book case or a cabinet that restricts air flow.
- To reduce the risk of fire and/or electric shock, do not expose the projector to rain or moisture. Do not install near heat sources such as radiators, heaters, stoves or any other apparatus such as amplifiers that emits heat.
- Do not let objects or liquids enter the projector. They may touch dangerous voltage points and short out parts that could result in fire or electric shock.
- Do not use under the following conditions:
  - In extremely hot, cold or humid environments.
    - (i) Ensure that the ambient room temperature is within  $5^{\circ}C \sim 40^{\circ}C$
    - (ii) Relative humidity is 10% ~ 85%
  - In areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.
- Do not use the unit if it has been physically damaged or abused. Physical damage/abuse would be (but not limited to):
  - Unit has been dropped.
  - Power supply cord or plug has been damaged.
  - Liquid has been spilled on to the projector.
  - Projector has been exposed to rain or moisture.
  - Something has fallen in the projector or something is loose inside.
- Do not place the projector on an unstable surface. The projector may fall over resulting in injury or the projector may become damaged.
- Do not block the light coming out of the projector lens when in operation. The light will heat the object and cause melt, burns or start a fire.
- Please do not open or disassemble the projector as this may cause electric shock.
- Do not attempt to service the unit yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please call Optoma before you send the unit for repair.
- See projector enclosure for safety related markings.
- The unit should only be repaired by authorized service personnel.
- Only use attachments/accessories specified by the manufacturer.
- Do not look into straight into the projector lens during operation. The bright light may harm your eyes.
- When switching the projector off, please ensure the cooling cycle has been completed before disconnecting power. Allow 90 seconds for the projector to cool down.
- Turn off and unplug the power plug from the AC outlet before cleaning the product.

- Use a soft dry cloth with mild detergent to clean the display housing. Do not use abrasive cleaners, waxes or solvents to clean the unit.
- Disconnect the power plug from AC outlet if the product is not being used for a long period of time.
- Do not setup the projector in places where it might be subjected to vibration or shock.
- Do not touch the lens with bare hands.
- Remove battery/batteries from remote control before storage. If the battery/batteries are left in the remote for long periods, they may leak.
- Do not use or store the projector in places where smoke from oil or cigarettes may be present, as it can adversely affect the quality of the projector performance.
- Please follow the correct projector orientation installation as non standard installation may affect the projector performance.
- Use a power strip and or surge protector. As power outages and brown-outs can KILL devices.

### Laser Radiation Safety Information

This product is classified as CLASS 1 LASER PRODUCT - RISK GROUP 2 of IEC 60825-1 : 2014 and also complies with 21 CFR 1040.10 and 1040.11 as a Risk Group 2, LIP (Laser Illuminated Projector) as defined in IEC 62471:2006 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

According to IEC 60825-1:2014 and IEC 62471:2006, this projector may become CLASS 1 LASER PRODUCT - RISK GROUP 3 product when installed with A13 lens (throw ratio 2.90-5.50).

#### **Laser Safety Precautions**

To ensure safety operation and prevent personal injuries, read laser safety precautions before installatation and operation.



#### Failure to comply with the following could result in death or serious injury.

- This projector uses extremely high brightness laser. Never attempt to look directly into the lens or at the laser beam. The bright light may result in permanent eye damage.
- Possibly hazardous optical radiation emitted from this product.
- This projector has a built-in Class 4 laser module. Never attempt to disassemble or modify the laser module.
- Any operation or adjustment not specifically instructed in the User manual creates the risk of hazardous laser radiation exposure.
- Do not stare into beam when the projector is on. When turning on the projector, make sure no one within projection range is looking into the lens.
- Follow the control, adjustment, or operation procedures to avoid damage or injury from exposure of laser radiation.
- The instructions for the assembly, operation, and maintenance include clear warnings concerning precautions to avoid possible exposure to hazardous laser radiation.

#### **Light Intensity Hazard Distance**

This projector may become CLASS 1 LASER PRODUCT - RISK GROUP 3 when installed with A13 lens (throw ratio 2.90-5.50). Permanent eye injury is possible when exposed to the high intensity laser beam within the hazard distance.

Lens	Throw Ratio	Classification and Requirements for Laser Illuminated Projectors (LIPs)			
A 12 2 00 5 50		IEC 60825-1:2014	IEC 62471:2006		
A13	2.90-5.50	CLASS 1	<b>RISK GROUP 3</b>	Hazard Distance: 2.15 meters	

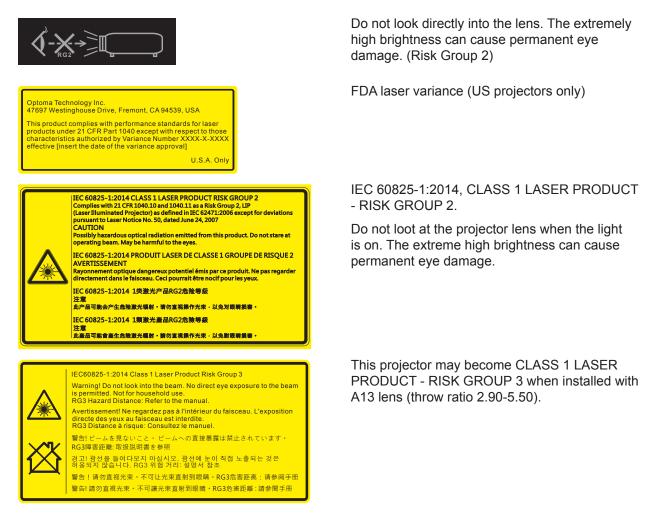
Follow the precautions to avoid light intensity hazard.

#### Failure to comply with the following could result in death or serious injury.

- NEVER look into the lens! High intensity laser beam.
- Permanent eye injury is possible when exposed to the high intensity laser light within the hazard distance.
- Do not place any refelective objects in the light path of the projector.

#### Laser Labels

Learn about the laser labels used on the projectors.



### Copyright

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### Disclaimer

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### **Trademark Recognition**

Kensington is a U.S. registered trademark of ACCO Brand Corporation with issued registrations and pending applications in other countries throughout the world.

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

DLP<sup>®</sup>, DLP Link and the DLP logo are registered trademarks of Texas Instruments and BrilliantColor<sup>™</sup> is a trademark of Texas Instruments.

HDBaseT<sup>™</sup> and the HDBaseT Alliance logo are trademarks of the HDBaseT Alliance.

All other product names used in this manual are the properties of their respective owners and are Acknowledged.

### FCC

This device 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 in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

#### Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

#### Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.

#### **Operation Conditions**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and

2. This device must accept any interference received, including interference that may cause undesired operation.

#### Notice: Canadian users

This Class A digital apparatus complies with Canadian ICES-003.

Remarque à l'intention des utilisateurs canadiens

Cet appareil numerique de la classe A est conforme a la norme NMB-003 du Canada.

### **Declaration of Conformity for EU countries**

- EMC Directive 2014/30/EU (including amendments)
- Low Voltage Directive 2014/35/EU
- Radio Equipment Directive 2014/53/EU (if product has RF function)
- RoHS Directive 2011/65/EU

### WEEE



#### **Disposal instructions**

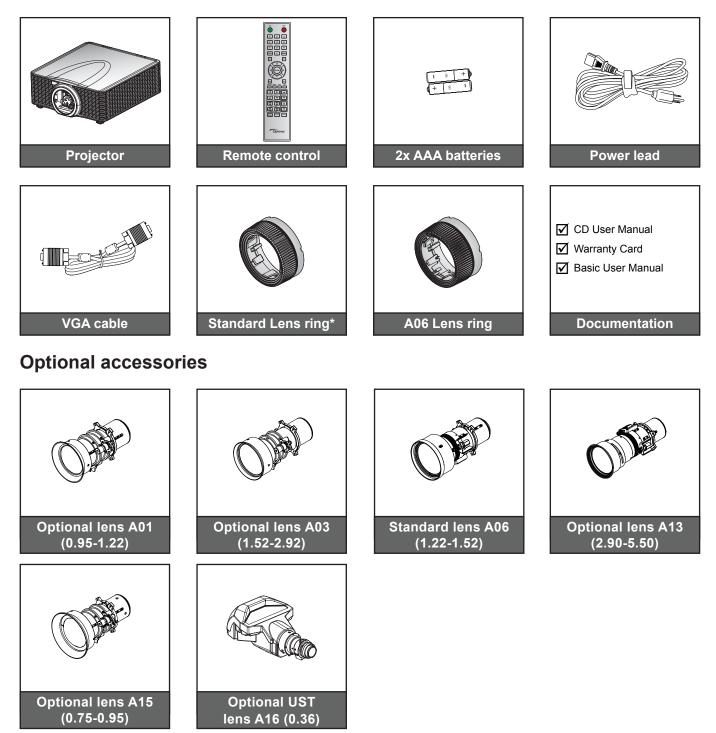
Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.

### **Package Overview**

Carefully unpack and verify that you have the items listed below under standard accessories. Some of the items under optional accessories may not be available depending on the model, specification and your region of purchase. Please check with your place of purchase. Some accessories may vary from region to region.

The warranty card is only supplied in some specific regions. Please consult your dealer for detailed information.

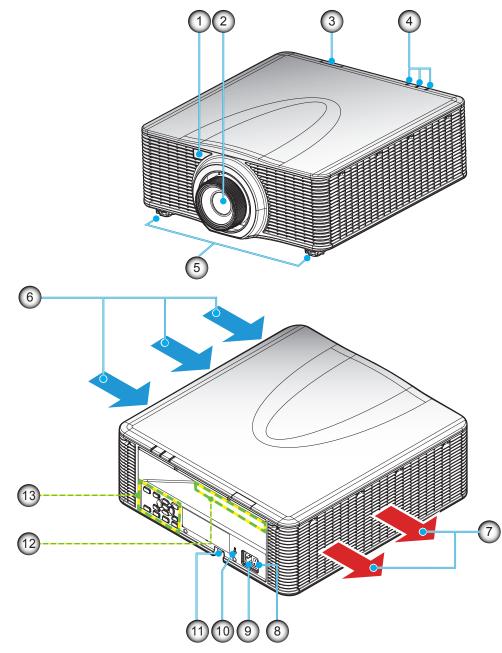
### **Standard accessories**



#### Note:

- Optional accessories vary depending on model, specification and region.
- \*For A01, A03, and A13 lens.

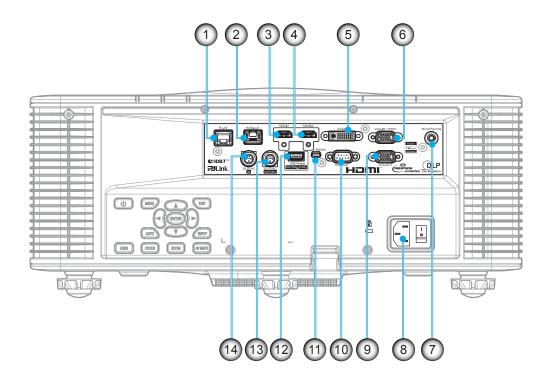
### **Product Overview**



Note: Do not block projector inlet or outlet air vents. (\*) optional accessory varies depending on model, specification, and region.

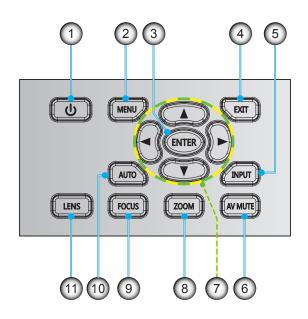
No	Item	No	Item
1. F	Front IR Receiver	8.	Power Switch
2. L	Lens	9.	Power Socket
З. Т	Top IR Receiver	10.	Kensington <sup>™</sup> Lock Port
4. L	LED Status Indicators	11.	Security Bar
5. T	Tilt-Adjustment Feet	12.	Input / Output
6. \	Ventilation (inlet)	13.	Keypad
7. \	Ventilation (outlet)		

### Connections



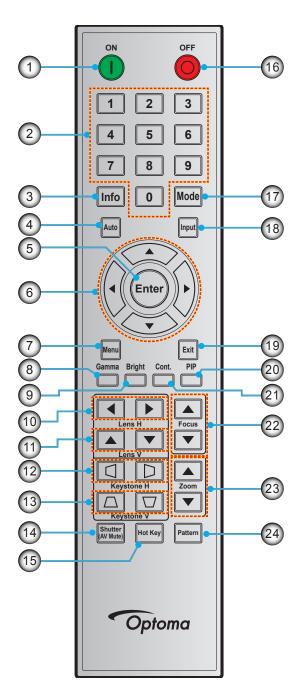
No	ltem	No	ltem
1.	LAN Connector	8.	Power Socket
2.	HDBaseT Connector	9.	VGA-OUT Connector
3.	HDMI-1 Connector	10.	RS232-C Connector
4.	HDMI-2 Connector	11.	Mini USB (Service)
5.	DVI-D Connector	12.	USB Type A (Power out 5V, 0.5A)
6.	VGA-IN/YPbPr Connector	13	3D SYNC OUT(5V)
7	Wired Remote Connector	14	3D SYNC IN

### Keypad



No	ltem	No	Item
1.	Power	7.	Four Directional Select Keys
2.	Menu	8.	Zoom
3.	Enter	9.	Focus
4.	Exit	10.	Auto
5.	Input	11.	Lens
6.	AV Mute		

### **Remote control**



No	ltem
1.	Power On
2.	Number Keys
3.	Info
4.	Auto
5.	Enter
6.	Four Directional Select Keys
7.	Menu
8.	Gamma

No	ltem	No	
9.	Bright	17.	Mode
10.	Lens H	18.	Input
11.	Lens V	19.	Exit
12.	Keystone H	20.	PIP
13.	Keystone V	21.	Cont
14.	Shutter (AV Mute)	22.	Focu
15.	Hot Key	23.	Zoon
16.	Power Off	24.	Patte

No	ltem
17.	Mode
18.	Input
19.	Exit
20.	PIP
21.	Cont.
22.	Focus
23.	Zoom
24.	Pattern

### Installing the projection lens

Before setting up the projector, install the projection lens on the projector.

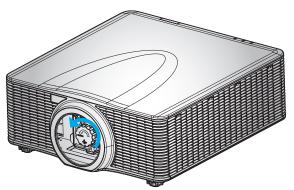


#### **IMPORTANT!**

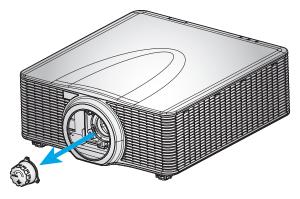
- Make sure the projector is properly turned off before installing the lens.
- During lens installation, do not adjust the lens shift, zoom, or focus either using the remote control or the projector keypad.

#### Procedure:

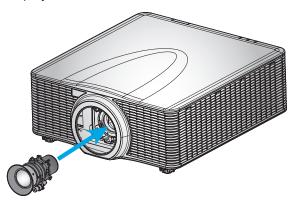
1. Rotate the lens cap counterclockwise.



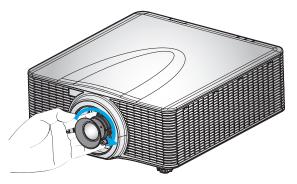
2. Remove the lens cap.



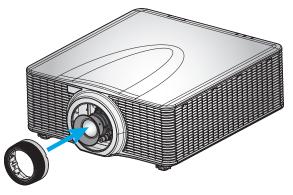
3. Install the lens onto the projector.



4. Rotate the lens clockwise to lock the lens in place.



5. Firmly install the lens ring onto the lens.

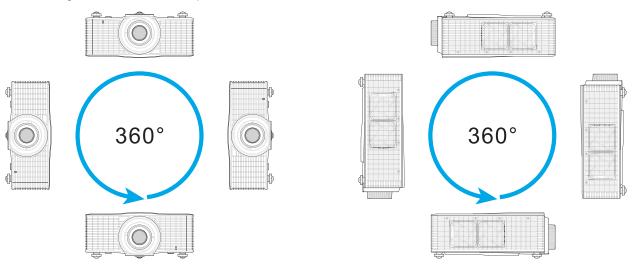


**Note:** The lens ring is compatible with the following lens modules: A01 (0.95-1.22), A03 (1.53-2.92), and A13 (2.90-5.50).

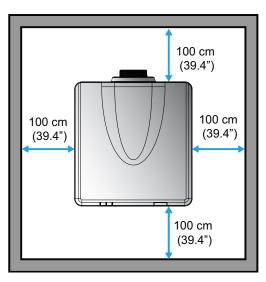
### Adjusting the projector position

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:

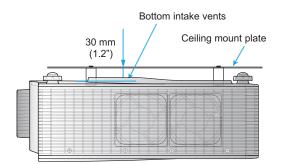
- Position the projector on a flat surface at a right angle to the screen. The projector (with the standard lens) must be at least 4.3 feet (1.3 m) from the projection screen.
- Position the projector to the desired distance from the screen. The distance from the lens of the
  projector to the screen, the zoom setting, and the video format determine the size of the projected
  image.
- For the fixed short lens, the image exits at a default angle. However, the lens shift feature makes the image offset variable.
- 360 degree free orientation operation



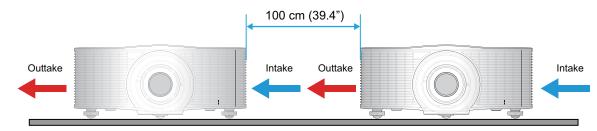
- Allow proper space around the projector is critical for air circulation and cooling. The dimensions shown below indicate the minimum space required for different installations.
  - For 360° installations, keep the projector at least 100 cm (39.4") away from the wall or floor.



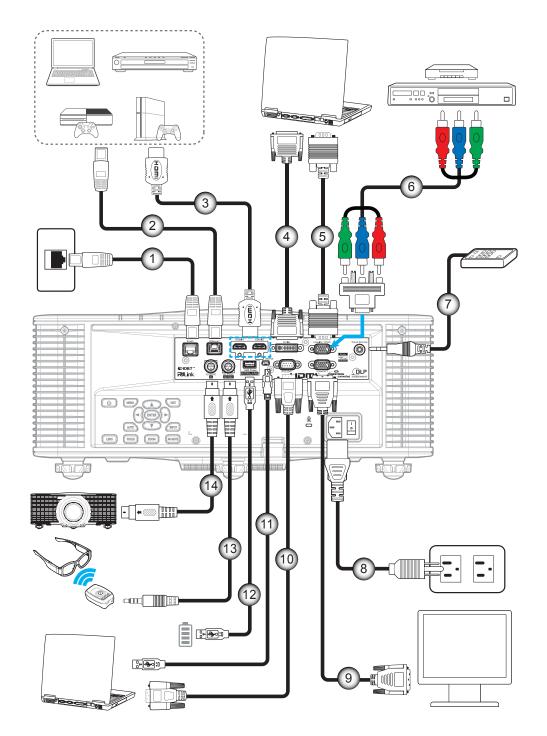
 For ceiling mount installations, make sure to leave 30 mm (1.2") between the ceiling mount and the bottom intake vents of the projector.



When installing multiple projectors, keep at least 100 cm (39.4") space between the adjacent projectors.



### Connecting sources to the projector



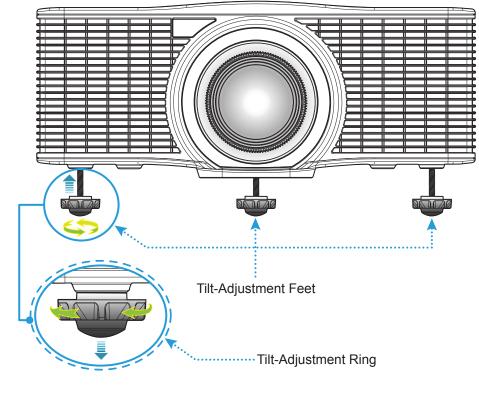
No	Item	No	Item
1.	RJ-45 Cable	8.	Power Cord
2.	CAT5e/6/6A Cable	9.	VGA-Out Cable
3.	HDMI Cable	10.	RS-232C Cable
4.	DVI-D Cable	11.	Mini USB Cable
5.	VGA-In Cable	12.	USB Type A Cable (5V, 0.5A)
6.	RCA Component Cable	13.	3D Emitter Cable
7.	Wired Remote-In Cable (~30m)	14.	3D Sync Cable

### Adjusting the projector image

#### Image height

The projector is equipped with elevator feet for adjusting the image height.

- 1. Locate the adjustable foot you wish to adjust on the underside of the projector.
- 2. Rotate the adjustable foot clockwise or counterclockwise to raise or lower the projector.

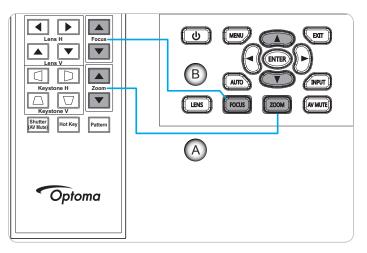


Warning:

The feet of projector are not removable. Please do not screw out the feet of projector. The adjustable height of the elevator feet could be raised up to 40mm.

#### Zoom and focus

- To adjust the image size, press the Zoom button (A) to increase or decrease the projected image size.
- To adjust the focus, press the **Focus** button (B) until the image is sharp and legible.

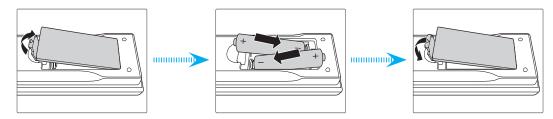


### **Remote setup**

#### Installing / replacing the batteries

Two AAA size batteries are supplied for the remote control.

- 1. Remove the battery cover on the back of the remote control.
- 2. Insert AAA batteries in the battery compartment as illustrated.
- 3. Replace back cover on remote control.



Note: Replace only with the same or equivalent type batteries.

#### CAUTION

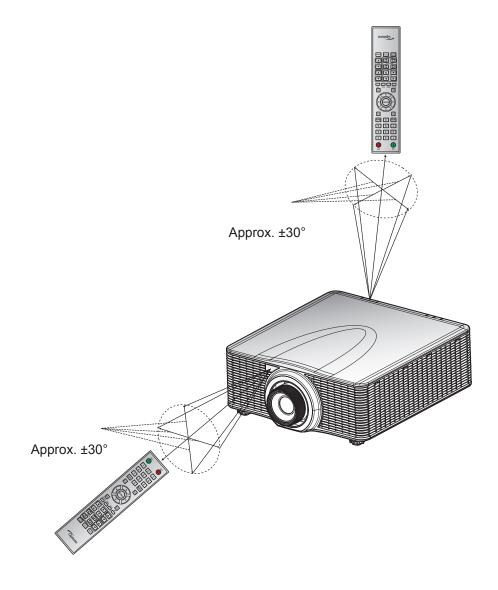
Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as the are depleted. Chemicals that leak from batteries that come in contact with skin can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control for an extended period of time, remove the batteries.
- When you dispose of the batteries, you must obey the law in the relative area or country.

#### Effective range

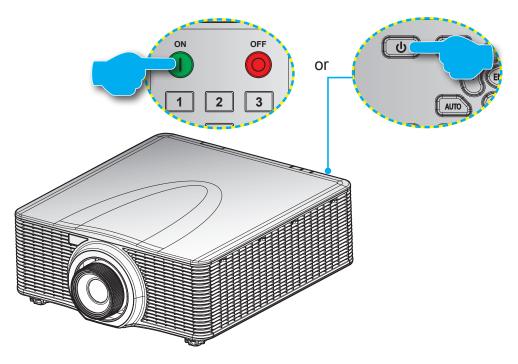
Infra-Red (IR) remote control sensors are located on the front and top sides of the projector. Ensure to hold the remote control at an angle within  $\pm 30^{\circ}$  (horizontally or vertically) to the projector's IR remote control sensor to function correctly. The distance between the remote control and the sensor should not be longer than 10 meters (32.8 feet).

- Make sure that there are no obstacles between the remote control and the IR sensor on the projector that might obstruct the infra-red beam.
- Make sure the IR transmitter of the remote control is not being shined by sunlight or fluorescent lamps directly.
- Please keep the remote controller away from fluorescent lamps for over 2 m or the remote controller might become malfunction.
- If the remote control is closed to Inverter-Type fluorescent lamps, it might become ineffective from time to time.
- If the remote control and the projector are within a very short distance, the remote control might become ineffective.
- When you aim at the screen, the effective distance is less than 5 m from the remote control to the screen and reflecting the IR beams back to the projector. However, the effective range might change according to screens.



# **USING THE PROJECTOR**

### Powering on / off the projector

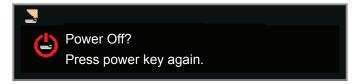


#### Powering on

- 1. Securely connect the power lead and signal/source cable.
- 2. Set the **Power** switch to the "ON" position.
- 3. Turn on the projector by pressing "●" on the remote control or pressing "●" on the projector keypad. The Status LED is Orange with a long blink.
- **Note:** The first time the projector is turned on, you will be prompted to select the preferred language, projection orientation, and other settings.

#### Powering off

1. Turn off the projector by pressing "**U**" on the projector keypad or pressing "**O**" on the remote control. A warning message will appear on the displayed image.

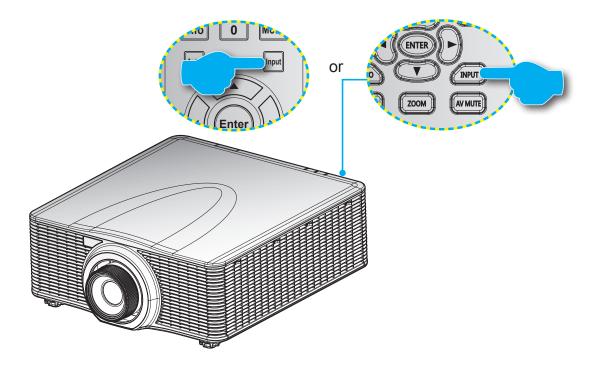


- 2. Press "**U**" on the projector keypad or press "**O**" on the remote control again to confirm, otherwise the warning message will disappear after 10 seconds. When you press "**U**" on the projector keypad or press "**O**" on the remote control for the second time, the projector will shut down.
- 3. Set the **Power** switch to the "OFF" position.
- 4. Disconnect the power lead from the electrical outlet and the projector.

**Note:** It is not recommended that the projector is turned on immediately, right after a power off procedure.

### Selecting an input source

Turn on the connected source that you want to display on the screen, such as computer, notebook, video player, etc. The projector will automatically detect the source. If multiple sources are connected, press the **Input** button on the projector keypad or the remote control to select the desired input.



### Menu navigation and features

The projector has multilingual on-screen display menus that allow you to make image adjustments and change a variety of settings. The projector will automatically detect the source.

- 1. To open the OSD menu, press "Menu" on the remote control or the projector keypad.
- 2. When OSD is displayed, use  $\blacktriangle \forall \blacktriangleleft \triangleright$  to navigate within the menu and adjust a setting up or down.
- 3. Press "Enter" to enter the submenu or confirm the selection/setting.
- 4. Press "Exit" to return to the previous menu or exit menus if at top level.

Main Men	u				
		Picture			
Sub Menu	Display Mode Wall Color Brightness Contrast Sharpness Color Tint Gamma White Peaking Color Temp. Color Wheel Speed HSG Adjustment Contrast Enhancement Color Space Save to User		Presentation White 50 50 5 50 50 Video 50 Bright 3× Off Auto Off Auto	Kenu	– Settings

### **OSD Menu tree**

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
		Bright			
		Presentation			
		Movie		_ _ Depends on signal	
	Display Mode	sRGB	_	type and selected	
		Blending		Color Mode.	
		DICOM SIM.		-	
		User		-	
		White			
	Wall color	Gray 130		- White	
	Brightness			Depends on Color	0 ~ 100
				Mode. Depends on Color	
	Contrast			Mode.	0 ~ 100
	Sharpness			5	0 ~ 10
	Color			For VGA component signal only.	0 ~ 100
	Tint			For VGA component signal only.	0 ~ 100
		Video			
		Film		_	
	Gamma	Bright		Depends on Color Mode.	
Picture		CRT			
Picture		DICOM		-	
	White Peaking				0 ~ 100
		Warm			
	Color Temp.	Normal		Normal	
		Cool		-	
	Color Wheel	2x			
	Speed	3x			- 3X
			Hue		1~199
		Red	Saturation		0 ~ 199
			Gain		1 ~ 199
			Hue		1~199
		Green	Saturation		0 ~ 199
			Gain		1 ~ 199
			Hue		1~199
	HSG Adjustment	Blue	Saturation		0 ~ 199
			Gain		1 ~ 199
			Hue		1~199
		Cyan	Saturation		0 ~ 199
			Gain		1 ~ 199
			Hue		1~199
		Magenta	Saturation		0 ~ 199
			Gain		1 ~ 199

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
			Hue		1~199
		Yellow	Saturation		0 ~ 199
			Gain		1 ~ 199
	HSG Adjustment		Red		
	,	White Gain	Green		1~199
			Blue		
		Reset to Default			
Picture		Off			
	Contrast	Dynamic Black		Off	
	Enhancement	Extreme Black		•	
		Auto			
		RGB (0-255)			
	Color Space	RGB (16-235)		Auto	
		YUV		-	
	Save to User	Yes / No			
		Auto			
		4:3			
	Aspect Ratio	16:9			
		16:10			
		Native			
	Pixel Phase			Analog signal only.	0 ~ 100
	Pixel Track			Analog signal only.	0 ~ 100
	Horz Position			Analog signal only.	0 ~ 100
	Vert Position			Analog signal only.	0 ~ 100
	Digital Horz Zoom	100% to 200%		0	0 ~ 10
	Digital Vert Zoom	100% to 200%		0	0 ~ 10
	Digital Horz Shift			50	0 ~ 100
Caraan	Digital Vert Shift			50	0 ~ 100
Screen		Off			
	Ceiling Mount	On		Auto	
		Auto			
	Rear Projection	Off / On		Off	
		H. Keystone		20	0 ~ 40
		V. Keystone		20	0 ~ 40
			Top Left Horz Adjust		
	Geometric		Top Left Vert Adjust		
	Correction	4-Corner	Top Right Horz Adjust		
			Top Right Vert Adjust		
			Bottom Left Horz Adjust		

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
			Bottom Left Vert Adjust		
		4-Corner	Bottom Right Horz Adjust		
	Geometric Correction		Bottom Right Vert Adjust		
		Grid Color	Purple / Green	Green	
		Reset	Yes / No		
		PC mode	Off / On	Off	
			Off		
		PIP / PBP Enable	PBP	Off	
			PIP		
			VGA		
			HDMI-1		
		Main Source	HDMI-2	Current source.	
			DVI		
			HDBaseT		
			VGA		
			HDMI-1	-	
	PIP-PBP	Sub Source	HDMI-2	Depends on current source.	
			DVI		
			HDBaseT		
Screen		Layout	Top Left	- Top Left	
			Top Right		
			Bottom Left		
			Bottom Right		
			Small		
		Size	Medium	Medium	
			Large		
		Swap			
		Change Sources			
	Source key	List all Sources			
		Auto Source			
		Normal			
	Auto Image	Wide		Wide	
		Active Source			
		Signal Format			
		Aspect Ratio			
		Resolution			
	Source Info	Vert Refresh			
		Horz Refresh			
		Pixel Clock			
		Sync Type			
		Color Space			

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
		PIP/PBP (When PIP/PBP is active)			
Screen Source	Source Info	<pip pbp="" source<br="">lines&gt; (When PIP/ PBP is active)</pip>			
		English			
		Simplified Chinese			
		French			
		German			
		Italian			
	Language	Japanese		English	
		Korean			
		Russian			
		Spanish			
		Portuguese			
		Indonesian		-	
		Dutch			
		Left Top 💾			
		Right Top 📒			
	Menu Location	Center		Left Top	
		Left Bottom		-	
Settings		Right Bottom		-	
5		0.5W mode			
	Standby Power Mode	Communication mode		0.5W mode	
		None			
		Grid		-	
		White		1	
	Test Pattern	Black		None	
		Checkerboard		-	
		Color Bars		-	
	Direct Power On	Off / On		Off	
	Signal Power On	Off / On		Off	
		Blank Screen			
		Aspect Ratio			
	Hot-Key settings	Freeze Screen		Blank Screen	
		Projector Info			
	Reset to Default	Yes / No			
	Service				
		Constant Power			
	Light Source Mode	Constant Intensity		Constant Power	
Light source		ECO mode		1	
Light Source	Constant Power	0 to 99		99	0 to 99 (30% to 100%)
	Light Source Info	LD Hours			

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
		Logo			
	Background	Blue		-	
	color	Black		Default Value	
		White		-	
	Auto shutdown			0	0~120 (one step: 5 mins)
	Sleep Timer			0	0~990 (one step: 10 mins)
					Focus in - motor go step
		Focus	Command		Focus out - motor go step
					Zoom in - motor go step
		Zoom	Command		Zoom out - motor go step
					Left shift up - motor go step
			Common d		Left shift down - motor go step
	Lens Function	Lens Shift	Command		Left shift right - motor go step
					Left shift left - motor go step
			Apply Position		Record 1 ~ 5
		Lens Memory	Save Current Position		Record 1 ~ 5
		Lock Lens	Off / On	Off	
		Lens Calibration	Command		
Options	High Altitude	Off / On		Off	
	PIN	PIN protect	Off /On	Off	
	PIN	Change PIN			
		Тор	Off / On	On	
	Remote Settings	Front	Off / On	On	
	I temole Settings	HDBaseT	Off / On	On	
		Projector Address	0 ~ 99	0	
	Show message	Off / On		Off	
		Keypad LED	Always On	Always On	
			Always Off	Aiways On	
	LED Settings		Always On	_	
		Status LED	Always Off	Always On	
			Warnings/Errors Only		
		Model Name			
		Serial Number			
		Native Resolution			
		MCU FW			
	Information	DDP FW			
		M9813 FW			
		Motor FW			
		ext flash FW			
		Main Input			

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
		Main Signal Format			
		Main Pixel Clock			
		Main Sync Type			
		Main Horz Refresh			
		Main Vert Refresh			
		PIP/PBP Input			
		PIP/PBP Signal Format			
		PIP/PBP Pixel Clock			
		PIP/PBP Sync Type			
Options	Information	PIP/PBP Horz Refresh			
		PIP/PBP Vert Refresh			
		Light Source Power			
		Total Projector Hours			
		Light Source Hours			
		Standby Mode			
		Lens Lock Settings			
		IP Address			
		DHCP			
		System Temperature			
	20	Auto		Auto	
	3D	On		Auto	
	3D Invert	Off / On		Off	
		Frame Packing		Depends on input	
	3D Format	Side-by-Side (Half)		signal. If an HDMI source is detected with AVINFO	
	3D Format	Top and Bottom		then 3D mode	
3D		Frame Sequential		is switched on automatically.	
	3D avrag gytt	To Emitter		To Emitter	
	3D sync out	To Next Projector			
	Frame Delay				1~200
	I /D Deference	1ST Frame		19T Eromo	
	L/R Reference	Field GPIO		1ST Frame	
	DLP Link	Off / On		Off	

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Default Value	Range
		DHCP			
		IP Address			
	LAN	Subnet Mask		By set.	
		Default Gateway		by set.	
		MAC Address		_	
		Apply	Command		
		Projector Name		_	
		Show Network	On		
	Network	Messages	Off	By set.	
		Network Factory Reset	Command		
Communications		1200			
		2400			
		4800			
		9600			
	Serial Port Baud Rate	14400		19200	
		19200			
		38400			
		57600			
		115200			
	Serial Port Echo	Off / On		Off	
	Serial Port Path	RS232		- RS232	
		HDBaseT		1.02.02	

### Picture menu

	Picture				
Display Mode Wall Color Brightness Contrast Sharpness Color Tint Gamma White Peaking Color Temperature Color Wheel Speed HSG Adjustment Contrast Enhancement Color Space Save to User		Presenta White 50 50 50 Video 50 Normal 3x Off Auto	ation		
Select 🔶	Enter	E	Exit	Menu	

#### **Display Mode**

Optimize the projector for displaying images under certain conditions.

- Bright: Maximum brightness from PC input.
- **Presentation**: This mode is suitable for showing PowerPoint presentations when the projector is connected to the PC.
- **Movie**: This mode is suitable for watching video.
- **sRGB**: This color mode matches the REC709 color standard as closely as possible.
- **Blending**: When using multiple projectors, this mode can eliminate the visible banding and create a single bright, high resolution image across the screen.
- **DICOM SIM**: This mode can project a monochrome medical image such as an X ray radiography, MRI, etc.
- User: Apply customized picture setting.

#### Wall Color

Set the wall color so that the projector can enhance the color performance customized for a specific wall. Available options include White and Gray 130.

#### **Brightness**

Adjust the brightness of your projector's light source.

#### Contrast

Adjust the degree of difference between the lightest and darkest parts of the image and change the amount of black and white in the image.

#### <u>Sharpness</u>

Adjust the degree of edge definition in the image.

#### <u>Color</u>

Change a black and white video image to fully saturated color.

#### <u>Tint</u>

Adjust the mount of red and green in an image.

#### <u>Gamma</u>

Set up gamma curve type. After the initial setup and fine tuning is completed, utilize the gamma adjustment steps to optimize your image output.

- Video: For video or TV source.
- Film: For home theater.
- Bright: For emphasizing brightness.
- CRT: For CRT monitor.
- **DICOM**: For simulated DICOM.

#### White Peaking

Increase the brightness of whites near 100%.

#### Color Temperature

Adjust the color temperature as measured using the Kelvin scale.

#### **Color Wheel Speed**

Select the color wheel speed from 2x or 3x. The color wheel speed defines the delay between the color wheel and the DMD.

- 2x: Increase the lifetime of the projector and reduce the noise level.
- **3x**: Eliminate the rainbow phenomenon to achieve best image quality.

#### HSG Adjustment

For more information on HSG adjustment, refer to page 33.

#### **Contrast Enhancement**

Enable or disable the contrast enhancement function. Enable this function to raise the contrast ratio.

- **Off**: Disable contrast enhancement function.
- **Dynamic Black**: Auto adjust the contrast ratio for video contents.
- **Extreme Black**: Auto increase contrast when a blank (black) image is displayed.

#### **Color Space**

Select a color space specifically tuned for the input signal. Only useful for analog signals and certain digital sources. The available options include Auto, RGB (0-255), RGB (16-235), and YUV.

#### Save to User

Save the current picture settings.

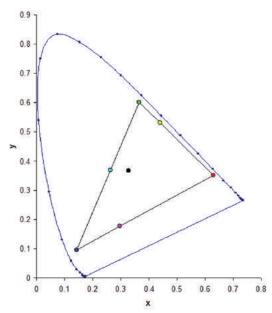
#### HSG Adjustment menu

HSG Adjustment		
•	Red	
Hue	0	
Saturation	50	
Gain	15	
Reset to Default		1
Select 🔶	Adjust	🔶 Exit 🗰

#### <u>Hue</u>

Note the following about adjusting hue:

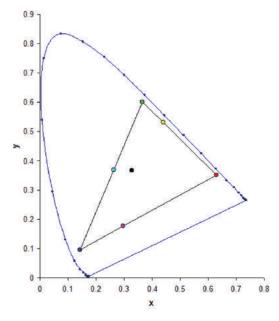
- Adjust the hue independently for each color (R,G,B,C,M, and Y).
- White does not have a hue input.
- A negative hue input provides a clockwise rotation of the color's hue.
- A positive hue input provides a counter-clockwise rotation of the color's hue.
- A zero input does not change the hue of the color.



#### **Saturation**

Note the following about adjusting saturation:

- The saturation can be adjusted independently for each color (R,G,B,C,M, and Y).
- A saturation level of 0 removes all color from that region.
- A saturation level of 254 sets the color region to have maximum color.
- A saturation level of 127 does not change the saturation.



#### <u>Gain</u>

Note the following about adjusting gain:

- The gain can be adjusted independently for each color (R,G,B,C,M,Y, and W).
- The range of input is 0 to 254.
- The gain changes the intensity level of the respective color.
- A gain level of 127 disables the HSG controls for that color.
- A gain level less than 127 darkens the respective color.
- A gain level of 254 sets the color region to have maximum gain; however, clipping occurs on the signal.
- A gain of 127 is the nominal setting.
- White provides three gain level controls, one each for the R,G,B component of white.

#### Reset to Default

Reset all the HSG adjustments to the factory defaults.

### Screen menu

		Screen			
	Aspect Ratio		Auto		
	Pixel Phase		50		
	Pixel Track		50		
	Horz Position		50		
	Vert Position		50		
	Digital Horz Zoom		0		
	Digital Vert Zoom		0		
	Digital Horz Shift		50		
	Digital Vert Shift		50		
	Ceiling Mount		Auto		
30	Rear Projection		Off		
	Geometric Correction		î		
222	PIP-PBP		î		
	Source Key		Change	e Source	es
	Auto Image		Wide		
	Source Info		Î		
	Select 🔶	Enter		Exit	Menu

#### Aspect Ratio

Display an image with the detected size, or resize the image by maximizing either the height, width, both, or resize to the maximum size possible while keeping the original aspect ratio.

- **Auto**: Display with the detected size.
- 4:3: Retain 4:3 aspect ratio.
- **16:9**: Retain 16:9 aspect ratio.
- **16:10**: Retain 16:10 aspect ratio.
- **Native**: This format displays the original image without any scaling.

#### **Pixel Phase**

Adjust the pixel phase when the image shows shimmer or noise after pixel tracking is optimized. Pixel phase can adjust the phase of the pixel-sampling clock relative to the incoming signal. (Analog RGB signals only.)

#### **Pixel Track**

Ensure that the image quality is consistent across the screen, the aspect ratio is maintained, and the pixel phase can be optimized. Steady flickering or several soft vertical stripes or bands across the entire image indicates poor pixel tracking. (Analog RGB signals only).

#### Horz Position

Move the image right or left within the area of available pixels.

#### Vert Position

Move the image up or down within the area of available pixels.

#### **Digital Horz Zoom**

Change the size of projector's display area horizontally. If the display area has been resized by this setting, it can be moved by changing the Digital Horz Shift.

### **Digital Vert Zoom**

Change the size of projector's display area vertically. If the display area has been resized by this setting, it can be moved by changing the Digital Vert Shift settings.

### **Digital Horz Shift**

Move the display area horizontally if its size has been changed by the Digital Horz Zoom setting.

### **Digital Vert Shift**

Move the display area vertically if its size has been changed by the Digital Vert Zoom setting.

### **Ceiling Mount**

Turn the image upside down for ceiling-mounted projection.

### **Rear Projection**

Reverse the image so that you can project from behind a translucent screen.

#### **Geometric Correction**

Provide several ways for warping control.

For more information on geometry correction, refer to page 38.

- **H. Keystone**: Adjust the keystone horizontally and make a more square image.
- **V. Keystone**: Adjust the keystone vertically and make a more square image.
- **4-Corner**: Allow the image to be squeezed to fit an area defined by moving each of the four corners' x and y position.
- **Grid Color**: Choose the color of 4 corner, green or purple.
- **Reset**: Restore the settings to its default value.
- **PC mode**: Use the PC app tool to perform warping and blending.

### <u>PIP-PBP</u>

Display an image with two sources in PIP mode or PBP mode.

For more information on PIP/PBP, refer to page 39.

### Source Key

List or change the sources. The available options include Change Sources, List all Sources, and Auto Source.

### Auto Image

Force the projector to reacquire and lock to the input signal. This is useful when signal quality is marginal.

- **Normal**: Supports all of the 4:3 input sources.
- Wide: Supports all of the 16:9 input source and most of the 4:3 input sources.
   Note: For the 4:3 input sources not recognized by Wide mode (for example, 1400x1050), perform Auto Image using Normal mode.

### Source Info

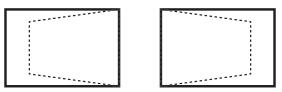
Display the current source settings. (Read-only).

#### **Geometric Correction menu**

Geometric Co	rrectio	on	
H. Keystone			0
V. Keystone			0
4 - corner			<b>→</b>
Grid Color			Green
Reset			1
Select	\$	Enter	Exit Menu

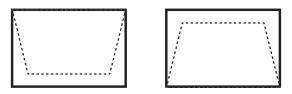
#### H. Keystone

Adjust image distortion horizontally and make a squarer image. Horizontal keystone is used to correct a keystoned image shape in which the left and right borders of the image are unequal in length. This is intended for use with horizontally on-axis applications.



### V. Keystone

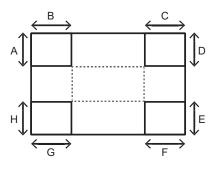
Adjust image distortion vertically and make a squarer image. Vertical keystone is used to correct a keystoned image shape in which the top and bottom are slanted to one of the sides. This is intended when for use with vertically on-axis applications.



### 4-Corner

Allow the image to be squeezed to fit an area defined by moving each of the four corners' x and y position.

- **Top Left Horz Adjust (B) / Top Left Vert Adjust (A)**: Top left corner can move in to squeeze the image by maximum 120 pixels horizontally and 80 pixels vertically.
- **Top Right Horz Adjust (C) / Top Right Vert Adjust (D)**: Top right corner can move in to squeeze the image by maximum 120 pixels horizontally and 80 pixels vertically.
- Bottom Left Horz Adjust (G) / Bottom Left Vert Adjust (H): Bottom left corner can move in to squeeze the image by maximum 120 pixels horizontally and 80 pixels vertically.
- Bottom Right Horz Adjust (F) / Bottom Right Vert Adjust (E): Bottom right corner can move in to squeeze the image by maximum 120 pixels horizontally and 80 pixels vertically.



#### **PIP/PBP** menu

PIP-PBP				
PIP / PBP Enable		(	Off	
Main Source			VGA	
Sub Source			VGA	
Layout			Top Left	
Size		Ş	Small	
Swap			t	
Select 🔶	Enter	►	Exit	Henu

#### **PIP / PBP Enable**

Toggle between displaying two sources at once (Main and PIP/PBP images) or one source only.

- Off: Display image from the main source only.
- **PBP**: Display images from two sources by separating the screen into two parts. One source is displayed on the main screen and another source is displayed in an inset window.
- **PIP**: Display images from two sources by separating the screen into half. One source is displayed on the left side of the screen and the other source on the right side of the screen. For layout, refer to page 40.

#### Main Source

Select an active input to be used as the main image. The available inputs include VGA, HDMI-1, HDMI-2, DVI, and HDBaseT.

#### Sub Source

Select an active input to be used as the sub image. The available inputs include VGA, HDMI-1, HDMI-2, DVI, and HDBaseT.

#### <u>Layout</u>

Set the location of the PIP/PBP image on the screen. Refer to page 40.

#### <u>Size</u>

Select the PIP/PBP size to small, medium, or large.

#### <u>Swap</u>

Change the main image to PIP/PBP, and the PIP/PBP to main image.

**Note:** Swapping is available only when PIP/PBP is enabled.

### **PIP/PBP Matrix**

PIP/PBP compatibility table as described below:

PIP/PBP Matrix	VGA	DVI-D	HDMI-2	HDMI-1	HDBaseT
VGA	—	V	V	V	V
DVI-D	V	—	V	—	—
HDMI-2	V	V	—	V	V
HDMI-1	V	—	V	_	—
HDBaseT	V	—	V	_	—

#### Note:

- 1. Flashing lines may occur if the bandwidth of both inputs are too high, please try to reduce the resolution.
- 2. Frame tearing may occur due to a difference in frame rate between the Main and the Sub picture, please try to match the frame rate for each input.

### Layout and Size

A P indicates the primary source region (lighter color):

		PIP Size	
PIP Layout	Small	Medium	Large
PIP, Bottom Right	P	P	P
PIP, Bottom Left	P	P	P
PIP, Top Left	P	P	P
PIP, Top Right	P	P	P

PBP Layout		PBP Size	
PDP Layoul	Small	Medium	Large
PBP, Main Left	-	-	Ρ
PBP, Main Right	_	_	Р

### Settings menu



#### <u>Language</u>

Select an available language for the on-screen display. The available options include English, Simplified Chinese, French, German, Italian, Japanese, Korean, Russian, Spanish, Portuguese, Indonesian, and Dutch.



### Menu Location

Set up the on-screen display menu location. The available options include Left Top, Right Top, Center, Left Bottom, and Right Bottom.

Menu Location	
---------------	--

### Standby Power Mode

Set the standby power mode setting.

- **0.5W mode**: The projector is in standby mode when connected to AC power. (<0.5W).
- Communication mode: The projector can be controlled via the LAN terminal during power standby.

### Test Pattern

Choose the required internal test pattern to display. The available options include None, Grid, White, Black, Checkerboard, and Color Bars.

### **Direct Power On**

Choose On to activate Direct Power On. The projector will automatically turn on after being connected to a power source. The available options inlcude On and Off.

### Signal Power On

Choose On to activate Signal Power On. The projector will automatically turn on after detecting HDMI input source. The available options inlcude On and Off.

### Hot-Key Settings

Assign a different function to the hot key on the IR remote keypad by highlighting the function in the list and pressing **Enter**. Choose a function that does not already have a dedicated button, and assign the hot key to that function, allowing you to quickly and easily use the chosen function. The available options include Blank Screen, Aspect Ratio, Freeze Screen, and Projector Info.

### Reset to Default

Restore all settings to their default value. It does not reset network but it resets RS232.

### Light source menu



### Light Source Mode

Set the light source mode. The available options include Constant Power, Constant Intensity, ECO mode.

### **Constant Power**

Set the value of the laser diode power.

### Light Source Info

Display the total hours of the projector, the total hours of the laser diode that have been used and information on light sensor calibration.

### **Options menu**

		Options	
	Background Color	Logo	
	Auto Shutdown	20	
	Sleep Timer	0	
	Lens Function	Ì	
	High Altitude	Off	
	PIN	1	
	Remote Settings	Î	
	Show message	Off	
	LED settings		
	Information	Ē	
30			
	Select 🔶	Enter 🕨	Exit Menu

### **Background Color**

Use this feature to display a Logo, Blue, Black, or White screen when no signal is available.

#### Auto Shutdown

Automatically turn the projector off after no signals are detected for a preset number of minutes. If an active signal is received before the projector powers down, the image is displayed.

#### **Sleep Timer**

Allow the projector to automatically power off after it has been on for a specified amount of time.

#### Lens Function

Adjust the lens parameters.

- **Focus**: Adjust the focus point of the image.
- **Zoom**: Adjust the zoom of the image in or out.
- Lens Shift: Shift the lens up and down, or left and right.
- **Lens Memory**: Save the current lens position after doing lens shift. Apply lens position to the chosen set of lens memory. The lens memory can save up to five locations.
- **Lens Lock**: Prevent all lens motors from moving. It disables the Zoom, Focus, Horizontal, and Vertical Position settings, effectively locking out any changes and overriding all other lens features. This is particularly useful to prevent accidental lens position changes in multi-projector installations.
- Lens Calibration: Calibrate to move the lens back to center.

Lens Function				
Focus			→	
Zoom			<b>→</b>	
Lens Shift			Ť	
Lens Lock		C	n	
Lens Calibration			Ť	
Select 🔶	Enter		Exit	Menu

### High Altitude

Enable or disable high altitude mode.

- **On**: Enable high altitude mode for altitudes ≥ 5000m. The fan operates at high speed to ensure sufficient air flow for high altitudes.
- Off: Disable high altitude mode. For altitudes below 5000m.

### <u>PIN</u>

Protects your projector with a PIN code. Once enabled, you must enter the PIN code before you can project an image.

- **PIN Protect**: Set to On to enable the function.
- Change PIN: Set a new PIN code.

PIN					
PIN protect	ct		Off		
Change P	IN		Î		
Select	\$	Enter	►	Exit	Menu

### **Remote Settings**

Enable or disable remote receivers, and configures Remore ID setting.

- **Top Receiver**: Enable or disbale the top remote receiver.
- Front Receiver: Enable or disbale the front remote receiver.
- **HDBaseT**: Choose On to set the HDBaset terminal as the remote receiver.
- **Projector Address:** Set remote ID to address multiple projectors. See page 22 for more information.

#### Show Message

Hide or display projector settings.

#### LED Settings

Control the keypad LED and status LED.

#### **Information**

Display the projector settings. (Read-only).

### 3D menu



### <u>3D</u>

Enable 3D content detection.

### <u>3D Invert</u>

Invert the 3D sync signal when using a single projector.

### 3D Format

Set the 3D format. Supports mandatory 3D formats and frame sequential 3D@120Hz. The available options include Frame Packing, Side-by-Side (Half), Top and Bottom, and Frame Sequential.

### 3D Sync Out

Transmit a 3D sync signal by the 3D sync output corrector to the emitter or to the next projector for 3D blending purposes.

### Frame Delay

Correct asynchronous displaying of images under 3D blending.

### L/R Reference

Source of the left or right reference.

- **1ST Frame**: This is used for single 3D projector.
- Field GPIO: Select Field GPIO to make the first 3D output signal the same for multiprojectors application.

### DLP Link

Select to use optimized settings for DLP 3D Glasses.

### **Communications menu**



### <u>LAN</u>

Determine the communication settings.

- **DHCP**: Turn the DHCP on or off.
- IP Address: Assign the network IP address.
- Subnet Mask: Assign the network subnet mask.
- Default Gateway: Assign the network default gateway.
- **MAC Address**: Display the network MAC address value.
- **Apply**: Apply the LAN configuration when the setting is changed or added.

#### <u>Network</u>

Determine the network settings.

- **Projector Name**: Display the projector name.
- Show Network Messages: Turn network messages on or off.
- **Network Factory Reset...**: Performs factory reset on the network settings. The Projector Name, IP Address (LAN), Start IP and End IP, and SNMP settings can be reset.

#### Serial Port Baud Rate

Select the serial port and baud rate. The available options include 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, and 115200.

#### Serial Port Echo

Control whether the serial port echoes characters.

#### Serial Port Path

Sets the serial port path to RS232 or HDBaseT.

### How to use web browser to control your projector

- 1. Turn "On" the DHCP option on projector to allow a DHCP server to automatically assign an IP address.
- Open the web browser in your PC and type in the projector's IP address ("SETUP: Communications > LAN > IP Address").

Note: The steps in this section is based on Windows 7 operating system.

### Making a direct connection from your computer to the projector\* (For Windows 7 or higher)

- 1. Turn "Off" the DHCP option on the projector.
- 2. Configure the IP address, Subnet Mask, and Gateway on projector. Refer to page 46.
- 3. Open <u>*Network and Sharing Center*</u> page on your PC, and assign the identical network parameters to your PC as set on projector. Click "OK" to save the parameters.
  - **Note:** The last group (ex: 100) of the IP address should be different from the projector. Make sure the network parameters (i.e. other groups of the IP address and the Subnet mask) are similar to those shown in the OSD menu.

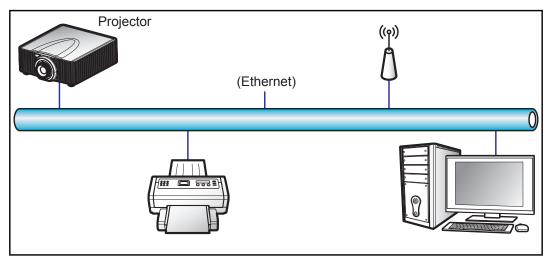
Local Area Connection 2 Properties	×			
Networking				
Connect using:		Internet Protocol Version 4 (TC	P/IPv4) Properties	<u>?</u> ×
Atheros AR8151 PCI-E Gigabit Ethernet Controller (NDIS 6		General		
, <u>Configure</u> This connection uses the following items:			automatically if your network support eed to ask your network administrator	
Client for Microsoft Networks		C Obtain an IP address auton	natically	
<ul> <li>Boos Packet Scheduler</li> <li>File and Printer Sharing for Microsoft Networks</li> </ul>		Use the following IP address	s:	
<ul> <li>File and Printer Sharing for Microsoft Networks</li> <li>Internet Protocol Version 6 (TCP/IPv6)</li> </ul>		IP address:	192.168.0.100	
Internet Protocol Version 4 (TCP/IPv4)		Subnet mask:	255 . 255 . 255 . 0	
<ul> <li>✓ Link-Layer Topology Discovery Mapper I/O Driver</li> <li>✓ Link-Layer Topology Discovery Responder</li> </ul>		Default gateway:	192.168.0.251	
		C Obtain DNS server address	automatically	
Install Uninstall Properties		• Use the following DNS serve	er addresses:	- 1
Description		Preferred DNS server:	192.168.0.251	
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication		<u>A</u> lternate DNS server:	1 . 0 . 0 . 0	
across diverse interconnected networks.		Vaļidate settings upon exit	Ad <u>v</u> anced.	
OK Cancel			OK Can	cel

4. Open the web browser on your computer and type the projector IP address into the URL field, then press "Enter".

### Setup network control settings menu

### LAN\_RJ45 function

For simplicity and ease of operation, the projector provides diverse networking and remote management features. The LAN / RJ45 function of the projector through a network, such as remotely manage: Power On / Off, Brightness and Contrast settings. Also you can view the projector status information, such as: Video- Source, etc.



### Wired LAN terminal functionalities

This projector can be controlled by using a PC (laptop) or other external device via RJ-45 connector and compatible ith Crestron / Extron / AMX (Device Discovery) / PJLink.

- Crestron is a registered trademark of Crestron Electronics, Inc. of the United States.
- Extron is a registered trademark of Extron Electronics, Inc. of the United States.
- AMX is a registered trademark of AMX LLC of the United States.
- PJLink applied for trademark and logo registration in Japan, the United States of America, and other countries by JBMIA.

The projector is supported by the specified commands of the Crestron Electronics controller and related software, for example RoomView<sup>®</sup>.

http://www.crestron.com/

- This projector is compliant to support Extron device(s) for reference. http://www.extron.com/
- This projector is supported by AMX (Device Discovery). http://www.amx.com/

This projector supports all commands of PJLink Class1 (Version 1.00). http://pjlink.jbmia.or.jp/english/

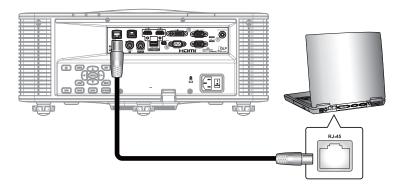
For more detailed information about the various types of external devices which can be connected to the LAN / RJ45 port and remote control the projector, as well as the supported commands for these external devices, please contact the Support-Service directly.

LAN control settings:

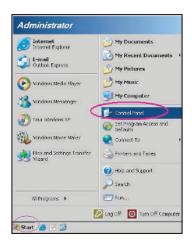
LAN Control	Port
AMX	9131
Crestron	41794
PJ-Link	4352
Telnet	3023
Http	80

### LAN RJ45 (For Windows XP)

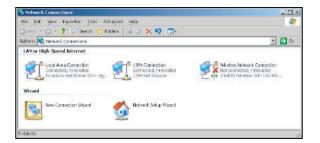
1. Connect an RJ45 cable to RJ-45 connector on the projector and the PC (laptop).



2. On the PC (Laptop), select Start > Control Panel > Network Connections.



3. Right-click on the Local Area Connection, and select Property.



4. In the Properties window, select the General tab, and select Internet Protocol (TCP / IP).



5. Click "Properties".

Connect using:		
Bioadcom Ne	00reme 57xx Gigabit Cc	Configure
his connection use	s the following items:	
🗹 🜉 QoS Packe		1
Retwork M		
🗷 🐨 İnlənei Di		
4		1.1
instal		Properties
Description	-	ett.
wide area network	tral Protocol/Internet Pro k protocol that provides o erconnected networks	
Z. Changing in such	blication area when conr	rected
on one store in the		

6. Type in the IP address and Subnet mask, then press "OK".

	d automatically if your nativork supports eed to ask your network administrator for
C Obtain an Pladdress auto	matically
Use the following P address	93
JP address:	10 . 10 . 10 . 98
Sybret mask;	255.255.255.0
Default gate way:	
C OpenDI(C server adder	e purch water in
Use the following DNS set	iver addresses:
Energeneed DNS cerves	25 (4) (4)
Alternate DNS server	
	Advanced

- 7. Press the "Menu" button on the projector.
- 8. Select **Communications** > **LAN**.
- 9. Enter the following connection parameters:
  - DHCP: Off
  - IP Address: 10.10.10.10
  - Subnet Mask: 255.255.255.0
  - Default Gateway: 0.0.0.0
- 10. Press "Enter" to confirm settings.
- 11. Open a web browser, for example Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher installed.
- 12. In the Address bar, input the projector's IP address: 10.10.10.10.



13. Press "Enter".

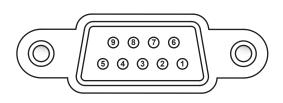
The projector is setup for remote management. The LAN / RJ45 function displays as follows:

	Main pag	е		Ne	twork Setting	page
Main Network Setting Configurations Information	Control Power Main Source Sub Source PIP/PBP AV Mute Freeze Key Left	VGA VGA Off ON ®	OFF	Main Network Setting Configurations Information	IP Address Subnet Mask Default Gateway	Proj@123456 Execute set Execute ON OFF 192.168.000.100 255.255.255.000 192.168.000.254 01:23:45:67:89:AB Apply
Co	onfiguration	s page			Crestron Control Sy Control System IP IPID Port	192 . 168 . 000 . 002 5 41794 Apply
Main Network Setting Configurations Information	Image Settings Color Brightness Sharpness Contrast Configurations Display mode Ceiling Mount Standby Mode Light Source Setti Light Source Mod Constant Power Test Partern Test Pattern	-		Main Network Setting Configurations Information	FW Version Scaler MCU LAN Other Model Name Serial Number Light Source Hours	A00.27 A02.25 DAZULUU 0

### **RS232 by Telnet Function**

There is alternative RS232 command control way, in projector so called "RS232 by TELNET" for LAN / RJ45 interface.

#### **RS232 Pin Assignments**



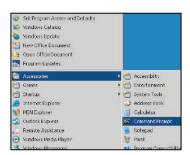
Pin No.	Signal
1	N/A
2	RXD
3	TXD
4	N/A
5	GND
6	N/A
7	N/A
8	N/A
9	N/A

### Quick Start-Guide for "RS232 by Telnet"

- Check and get the IP address on OSD of the projector.
- Make sure that the PC / laptop can access the web-page of the projector.
- Make sure that "Windows Firewall" setting is set disabled in case of "TELNET" function filtering out by PC / laptop.



1. Select Start > All Programs.> Accessories > Command Prompt.



- 2. Input the command format as follows:
  - telnet ttt.xxx.yyy.zzz 3023 ("Enter" key pressed)
  - (ttt.xxx.yyy.zzz: IP-Address of the projector)
- 3. If Telnet-Connection ready, and user can have RS232 command input, then "Enter" key pressed, the RS232 command will be workable.

### Specification for "RS232 by TELNET":

- 1. Telnet: TCP.
- 2. Telnet port: 3023 (for more detail, kindly please get contact with the service agent or team).
- 3. Telnet utility: Windows "TELNET.exe" (console mode).
- 4. Disconnection for RS232-by-Telnet control normally: Close
- 5. Windows Telnet utility directly after TELNET connection ready.
  - Limitation 1 for Telnet-Control: there is less than 50 bytes for successive network payload for Telnet-Control application.
  - Limitation 2 for Telnet-Control: there is less than 26 bytes for one complete RS232 command for Telnet-Control.
  - Limitation 3 for Telnet-Control: Minimum delay for next RS232 command must be more than 200 (ms).

### **Compatible resolutions**

### Timing Table

Signal Type	Resolution	Frame rate (Hz)	VGA	HDMI1 / HDMI2	DVI	HDBaseT
	640x480	60	V	V	V	V
	640x480	72	V	V	V	V
	640x480	75	V	V	V	V
	640x480	85	V	V	V	V
	720x400	60	V	V	V	V
	720x400	85	V			
	800x600	60	V	V	V	V
	800x600	72	V	V	V	V
	800x600	75	V	V	V	V
	800x600	85	V	V	V	V
	848x480	50		V	V	V
	848x480	60		V	V	V
	848x480	75		V	V	V
	848x480	85		V	V	V
	1024x768	60	V	V	V	V
	1024x768	75	V	V	V	V
	1024x768	85	V	V	V	V
	1024x768	120	V	V	V	V
	1152x720	50		V	V	V
	1152x720	60		V	V	V
	1152x720	75		V	V	V
	1152x720	85		V	V	V
PC	1152x864	60	V	V	V	V
FC	1152x864	70	V	V	V	V
	1152x864	75	V	V	V	V
	1152x864	85	V	V	V	V
	1280x720	50		V	V	V
	1280x720	60	V	V	V	V
	1280x720	75	V	V	V	V
	1280x720	85	V	V	V	V
	1280x720	120		V	V	V
	1280x768	60	V	V	V	V
	1280x768	75	V	V	V	V
	1280x768	85	V	V	V	V
	1280x800	50	V	V	V	V
	1280x800	60	V	V	V	V
	1280x800	75	V	V	V	V
	1280x800	85	V	V	V	V
	1280x960	50		V	V	V
	1280x960	60	V	V	V	V
	1280x960	75	V	V	V	V
	1280x960	85	V	V	V	V
	1280x1024	50		V	V	V
	1280x1024	60	V	V	V	V
	1280x1024	75	V	V	V	V
	1280x1024	85	V	V	V	V

Signal Type	Resolution	Frame rate (Hz)	VGA	HDMI1 / HDMI2	DVI	HDBaseT
	1360x768	50		V	V	V
	1360x768	60		V	V	V
	1360x768	75		V	V	V
	1360x768	85		V	V	V
	1366x768	60	V	V	V	V
	1400x1050	50		V	V	V
	1400x1050	60		V	V	V
	1400x1050	75	V	V	V	V
	1440x900	60	V	V	V	V
	1440x900	75		V	V	V
	1600x900	60		V	V	V
	1600x1200	50		V	V	V
	1600x1200	60	V	V	V	V
	1680x1050	60	V	V	V	V
	1920X1080	50		V	V	V
	1920X1080	60	V	V	V	V
	1920X1200RB	60	V	V	V	V
	1920X1200RB	50	V	V	V	V
0.5.77.4	480i	60	V	V	V	V
SDTV	576i	50	V	V	V	V
	480p	60	V	V	V	V
EDTV	576p	50	V	V	V	V
	1080i	25	V	V	V	V
	1080i	29	V	V	V	V
	1080i	30	V	V	V	V
	720p	50	V	V	V	V
	720p	59	V	V	V	V
	720p	60	V	V	V	V
	1080p	23	V	V	V	V
HDTV	1080p	24	V	V	V	V
	1080p	25	V	V	V	V
	1080p	29	V	V	V	V
	1080p	30	V	V	V	V
	1080p	50	V	V	V	V
	1080p	59	V	V	V	V
	1080p	60	V	V	V	V
	Frame Packing 1080p	24		V	V	V
	Frame Packing 720p	50		V	V	V
	Frame Packing 720p	60		V	V	V
Mandatory 3D	Side by Side 1080i	50		V	V	V
	Side by Side 1080i	60		V	V	V
	Top and Bottom 720p	50		V	V	V
	Top and Bottom 720p	60		V	V	V
	Top and Bottom 1080p	24		V	V	V

Signal Type	Resolution	Frame rate (Hz)	VGA	HDMI1 / HDMI2	DVI	HDBaseT
	1024x768	120		V	V	V
Frame sequential 3D	1280x720	120		V	V	V
ooquonita ob	1920X1200RB	60		V	V	V

Note: "RB" means "reduced blanking".

### EDID Table

Established Timing:	Standard Timing:	Detail Timing:
720 x 400 @ 88 Hz	1440 x 900 @ 75 Hz	1920 x 1080 @ 60 Hz
640 x 480 @ 60 Hz	1280 x 800 @ 75 Hz	1920 x 1200 @ 60 Hz
640 x 480 @ 67 Hz	1280 x 1024 @ 60 Hz	
640 x 480 @ 72 Hz	1360 x 765 @ 60 Hz	
640 x 480 @ 75 Hz	1440 x 900 @ 60 Hz	
800 x 600 @ 56 Hz	1400 x 1050 @ 60 Hz	
800 x 600 @ 60 Hz	1600 x 1200 @ 60 Hz	
800 x 600 @ 72 Hz	1680 x 1050 @ 60 Hz	
800 x 600 @ 75 Hz		
832 x 624 @ 75 Hz		
1024 x 768 @ 60 Hz		
1024 x 768 @ 70 Hz		
1024 x 768 @ 75 Hz		
1280 x 1024 @ 75 Hz		
1152 x 870 @ 75 Hz		

	WUXGA / DVI-D	
Established Timing:	Standard Timing:	Detail Timing:
720 x 400 @ 70 Hz	1024 x 168 @ 120 Hz	1360 x 768 @ 60 Hz
720 x 400 @ 88 Hz	1280 x 800 @ 75 Hz	1366 x 768 @ 60 Hz
640 x 480 @ 60 Hz	1280 x 1024 @ 60 Hz	1920 x 540 @ 60 Hz
640 x 480 @ 67 Hz	1360 x 765 @ 60 Hz	720 x 480 @ 60 Hz
640 x 480 @ 72 Hz	1440 x 900 @ 60 Hz	1920 x 540 @ 50Hz
640 x 480 @ 75 Hz	1400 x 1050 @ 60 Hz	
800 x 600 @ 56 Hz	1600 x 1200 @ 60 Hz	
800 x 600 @ 60 Hz	1680 x 1050 @ 60 Hz	
800 x 600 @ 72 Hz		
800 x 600 @ 75 Hz		
832 x 624 @ 75 Hz		
1024 x 768 @ 60 Hz		
1024 x 768 @ 70 Hz		
1024 x 768 @ 75 Hz		
1280 x 1024 @ 75 Hz		
1152 x 870 @ 75 Hz		

## Image size and projection distance

Platform							W	UXGA (16	:10)					
DMD								0.67"						
Projection	Lens		A16	AC	1	A	06	A(	A03 A13			A	A15	
Throw Rat	io		0.361 (120") 0.95-1.22 1.22-1.52 1.52-2.92		2.92	2.90-5.50		0.75-0.95						
Zoom Rat	io		N/A	1.2	8X	1.2	25X	1.9	ж	1.9X 1		1.2	6X	
Throw Dis	tance		0.96- 3.01m	1.01-1:	3.33m	1.29-1	6.58m	1.61-3	1.70m	3.18-57.86m 0.79-1		0.79-1	0.38m	
Projection	screen si	ize					Proje	ction dista	nce (m)					
Throw Rat	io		0.361 (120")	0.95	1.22	1.22	1.52	1.52	2.92	2.90	5.50	0.75	0.95	
Diagonal (inch)	Height (m)	Width (m)	(m)	Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)	
50	0.67	1.08	-	1.01	1.31	1.29	1.62	1.61	3.12	3.18	5.89	0.79	1.01	
60	0.81	1.29	-	1.22	1.57	1.56	1.95	1.94	3.76	3.78	7.05	0.96	1.22	
70	0.94	1.51	-	1.43	1.84	1.82	2.29	2.27	4.39	4.39	8.20	1.12	1.43	
80	1.08	1.72	-	1.63	2.11	2.09	2.62	2.60	5.03	5.00	9.36	1.28	1.64	
90	1.21	1.94	-	1.84	2.38	2.35	2.95	2.94	5.66	5.61	10.51	1.45	1.85	
100	1.35	2.15	-	2.05	2.64	2.62	3.28	3.27	6.30	6.21	11.67	1.61	2.05	
110	1.48	2.37	-	2.26	2.91	2.89	3.62	3.60	6.93	6.82	12.82	1.78	2.26	
120	1.62	2.58	0.96	2.47	3.18	3.15	3.95	3.94	7.57	7.43	13.98	1.94	2.47	
130	1.75	2.80	1.04	2.67	3.44	3.42	4.28	4.27	8.20	8.04	15.13	2.10	2.68	
140	1.88	3.02	1.11	2.88	3.71	3.69	4.61	4.60	8.84	8.65	16.29	2.27	2.89	
150	2.02	3.23	1.18	3.09	3.98	3.95	4.95	4.94	9.47	9.25	17.44	2.43	3.09	
160	2.15	3.45	1.26	3.30	4.24	4.22	5.28	5.27	10.11	9.86	18.60	2.60	3.30	
170	2.29	3.66	1.33	3.51	4.51	4.48	5.61	5.60	10.74	10.47	19.75	2.76	3.51	
180	2.42	3.88	1.40	3.72	4.78	4.75	5.94	5.93	11.38	11.08	20.91	2.92	3.72	
190	2.56	4.09	1.48	3.92	5.05	5.02	6.27	6.27	12.01	11.69	22.06	3.09	3.93	
200	2.69	4.31	1.55	4.13	5.31	5.28	6.61	6.60	12.65	12.29	23.22	3.25	4.13	
250	3.37	5.38	1.91	5.17	6.65	6.61	8.27	8.27	15.82	15.33	28.99	4.07	5.17	
300	4.04	6.46	2.28	6.21	7.98	7.95	9.93	9.93	19.00	18.37	34.77	4.89	6.21	
350	4.71	7.54	2.65	7.25	9.32	9.28	11.59	11.60	22.17	21.41	40.54	5.71	7.26	
400	5.38	8.62	3.01	8.29	10.66	10.61	13.25	13.26	25.35	24.45	46.31	6.53	8.30	
450	6.06	9.69	-	9.33	11.99	11.94	14.92	14.93	28.52	27.49	52.09	7.35	9.34	
500	6.73	10.77	-	10.37	13.33	13.27	16.58	16.59	31.70	30.53	57.86	8.17	10.3	

### Powered lens shift range

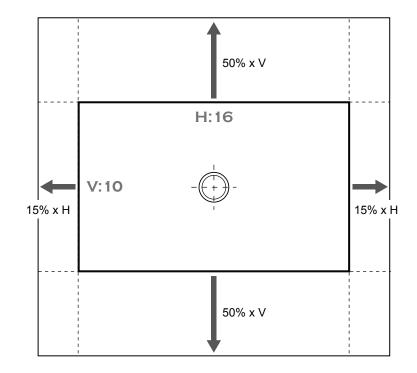
Based on the screen size, the horizontal shift range is up to +/-15%, and the vertical shift range is up to 50%.

Projection Lens	Н	V	▲H	۸V
A01, A03, A13	15%	50%	-	-
A06	15%	50%	10%	40%
A15	15%	50%	1%	25%

### Projection Lens: A01 / A03 / A13

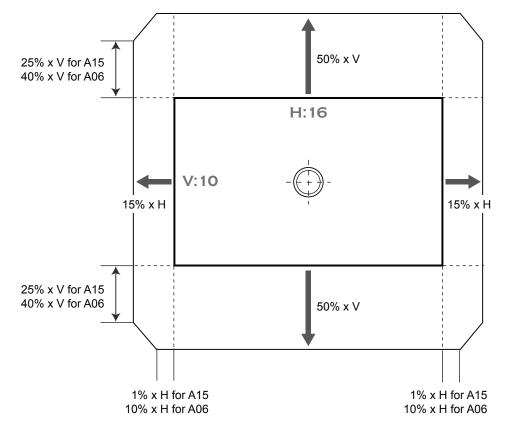
Projected image

- V: Height of the projected image
- H: Width of the projected image



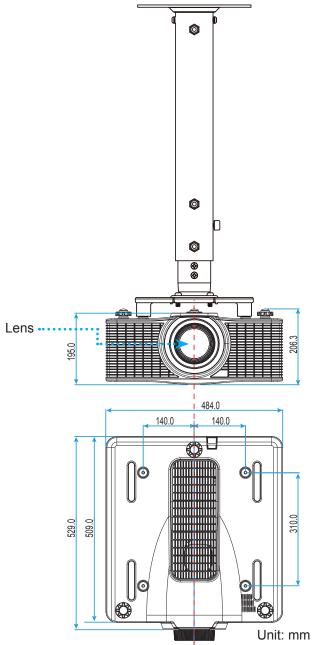
#### Projection Lens: A06 / A15

- Projected image
- V: Height of the projected image
- $\ensuremath{\textbf{H}}\xspace$  : Width of the projected image



### Projector dimensions and ceiling mount installation

- 1. To prevent damage to your projector, please use the Optoma ceiling mount.
- 2. If you wish to use a third party ceiling mount kit, please ensure the screws used to attach a mount to the projector meet the following specifications:
- Screw type: M6 4pcs
- Minimum screw length: 10mm







- If you buy a ceiling mount from another company, please be sure to use the correct screw size. Screw size will vary depending on the thickness of the mounting plate.
- Be sure to keep at least 30mm (3cm) gap between the ceiling and the bottom of the projector.
- Avoid installing the projector near a heat source.

### **IR remote codes**



	Key	Repeat	Add	ress	Data		
Key Legend	Position	Format	Byte 1	Byte 2	Byte 3	Byte 4	Description
ON ( <b>1</b> )	1	F1	32	CD	02	FD	Press to turn on the projector.
OFF (O)	2	F1	32	CD	2E	D1	Press to turn off the projector.
1	3	F1	32	CD	72	8D	Use as numeric keypad number "1".
2	4	F1	32	CD	73	8C	Use as numeric keypad number "2".
3	5	F1	32	CD	74	8B	Use as numeric keypad number "3".
4	6	F1	32	CD	75	8A	Use as numeric keypad number "4".
5	7	F1	32	CD	77	88	Use as numeric keypad number "5".

Key LegendKey PositionRepeat FormatAddressDataDescription68F132CD78Byte 4Description68F132CD7887Use as numeric keypad number "6".79F132CD7986Use as numeric keypad number "7".810F132CD807FUse as numeric keypad number "8".911F132CD817EUse as numeric keypad number "9".Info12F132CD827DPress to display source image information.013F132CD05FAPress to select the preset display mode.Mode14F132CD04FBPress to automatically synchronize the projector the input source.Input16F132CD18E7Press to select an input signal.	
79F132CD7986Use as numeric keypad number "7".810F132CD807FUse as numeric keypad number "8".911F132CD817EUse as numeric keypad number "9".Info12F132CD827DPress to display source image information.013F132CD25DAUse as numeric keypad number "0".Mode14F132CD05FAPress to select the preset display mode.Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
810F132CD807FUse as numeric keypad number "8".911F132CD817EUse as numeric keypad number "9".Info12F132CD827DPress to display source image information.013F132CD25DAUse as numeric keypad number "0".Mode14F132CD05FAPress to select the preset display mode.Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
911F132CD817EUse as numeric keypad number "9".Info12F132CD827DPress to display source image information.013F132CD25DAUse as numeric keypad number "0".Mode14F132CD05FAPress to select the preset display mode.Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
Info12F132CD827DPress to display source image information.013F132CD25DAUse as numeric keypad number "0".Mode14F132CD05FAPress to select the preset display mode.Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
013F132CD25DAUse as numeric keypad number "0".Mode14F132CD05FAPress to select the preset display mode.Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
Mode14F132CD05FAPress to select the preset display mode.Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
Auto15F132CD04FBPress to automatically synchronize the projector the input source.	
Auto 15 F1 32 CD 04 FB the input source.	
Input 16 E1 22 CD 19 E7 Dress to select an input signal	or to
Input 16 F1 32 CD 18 E7 Press to select an input signal.	
UP (▲) 17 F1 32 CD 0F F0 Press to select items or make adjustments to o selection.	our
LEFT ( <b>I</b> ) 18 F1 32 CD 11 EE Press to select items or make adjustments to o selection.	our
Enter     19     F1     32     CD     14     EB     Press to confirm your item selection.	
RIGHT (►)     20     F1     32     CD     10     EF     Press to select items or make adjustments to o selection.	our
DOWN (▼)21F132CD12EDPress to select items or make adjustments to o selection.	our
Menu22F132CD0EF1Press to display the on-screen display menus for projector.	or
Exit23F132CD2AD5Press to return to previous level or exit menus is top level.	if at
Gamma    24    F1    32    CD    2B    D4    Press to adjust mid-range levels	
Bright         25         F1         32         CD         28         D7         Press to adjust amount of light in the image.	
Cont. 26 F1 32 CD 29 D6 Press to adjust difference between dark and lig	jht.
PIP         27         F1         32         CD         43         BC         Press to turn on/off the PIP/PBP function.           Lens H◀         28         F1         32         CD         41         BE	
Lens H ◀28F132CD41BELens H ▶29F132CD42BD	ontally.
Focus ▲     30     F1     32     CD     86     79     Press to adjust focus to improve image clarity a desired.	as
Lens V ▲ 31 F1 32 CD 34 CB Press to adjust the position of the image vertical	ally.
Lens V ▼ 32 F1 32 CD 32 CD Press to adjust the position of the image vertice	ally.
Focus ▼33F132CD26D9Press to adjust focus to improve image clarity a desired.	as
Keystone □34F132CD8778Press to adjust the vertical keystone.	
Keystone □35F132CD51AEPress to adjust the vertical keystone.	
Zoom  A 36 F1 32 CD 52 AD Press to adjust zoom to achieve a desired image size.	ge
Keystone37F132CD53ACPress to adjust the horizontal keystone.	
Keystone38F132CD54ABPress to adjust the horizontal keystone.	
Zoom ▼ 39 F1 32 CD 55 AA Press to adjust zoom to achieve a desired image size.	ge
Shutter (AV Mute)40F132CD56A9Press to hide/unhide the screen picture.	
Hot Key         41         F1         32         CD         57         A8         Press to select your preset keys quickly.	
Pattern     42     F1     32     CD     58     A7     Press to display a test pattern.	

### **Remote control ID setup**

The IR remote allows individual addressing of projectors. The projector can be set with a specific number from "1" to "99" as its address, and it only responds to the IR remote set to the same ID code. ID code "0" is the default value of the IR remote, and all projectors will respond to the IR remote set to "0".

Follow below methods to set up the IR remote:

ID Code	Change method	Customer code
1	Press "Hot Key" for 3 seconds, and press "0" then "1" within 2 seconds.	0010
2	Press "Hot Key" for 3 seconds, and press "0" then "2" within 2 seconds.	0011
3	Press "Hot Key" for 3 seconds, and press "0" then "3" within 2 seconds.	0012
10	Press "Hot Key" for 3 seconds, and press "1" then "0" within 2 seconds.	0019
11	Press "Hot Key" for 3 seconds, and press "1" then "1" within 2 seconds.	001A
98	Press "Hot Key" for 3 seconds, and press "9" then "8" within 2 seconds.	0071
99	Press "Hot Key" for 3 seconds, and press "9" then "9" within 2 seconds.	0072

To have the IR remote return to default state where all projectors can be controlled, press "Hot Key" for "3" seconds, and press "0" twice within 2 seconds.

## Troubleshooting

If you experience a problem with your projector, please refer to the following information. If a problem persists, please contact your local reseller or service center.

### Image problems

### No image appears on-screen

- Ensure all the cables and power connections are correctly and securely connected as described in the "Installation" section.
- Ensure the pins of connectors are not crooked or broken.
- Ensure that the "Shutter (AV Mute)" feature is not turned on.

### Image is out of focus

- Press the **Focus** ▲ or **Focus** ▼ button on the remote control to adjust the focus until the image is sharp and legible.
- Make sure the projection screen is between the required distance from the projector. (Please refer to page 57).

The image is stretched when displaying 16:10 DVD title

- When you play anamorphic DVD or 16:10 DVD, the projector will show the best image in 16:10 format on projector side.
- If you play 4:3 format DVD title, please change the format as 4:3 in projector OSD.
- Please setup the display format as 16:10 (wide) aspect ratio type on your DVD player.

### Image is too small or too large

- Press the **Zoom** ▲ or **Zoom** ▼ button on the remote control to increase or decrease the projected image size.
- Move the projector closer to or further from the screen.
- Press "Menu" on the projector panel, go to "Screen > Aspect Ratio". Try the different settings.
- Image has slanted sides:
  - If possible, reposition the projector so that it is centered on the screen and below the bottom of the screen.
  - Use "Screen > Geomteric Correction > V. Keystone or H. Keystone" from the OSD to make an adjustment.

Image is reversed

• Select "Screen > Rear Projection > On" from the OSD to reverse the image so you can project from behind a translucent screen.

### Other problems

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- The projector stops responding to all controls
  - If possible, turn off the projector, then unplug the power cord and wait at least 20 seconds before reconnecting power.

### **Remote control problems**

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- If the remote control does not work
- Check the operating angle of the remote control is pointed within ±30° (horizontally or vertically) to the IR receivers on the projector.
- Make sure there are not any obstructions between the remote control and the projector. Move to within 10 m (32.8 ft) of the projector.
- Make sure batteries are inserted correctly.
- Replace batteries if they are exhausted.

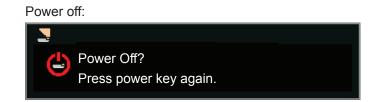
### Warning indicators

### LED status indicators

The LED status indicators are located on the rear of the projector. Each LED is defined below.

Message	Light		Status		AV Mute			
	Green	Orange	Red	Green	Orange	Red	Green	Orange
Standby State								
Power on (Warm up)					Flashing			
Power on &Laser diode on	Steady			Steady			Steady	
Power off (Cooling down)					Flashing			
AV mute is off (Image is displayed)	Steady			Steady			Steady	
AV mute is on (Image is black)	Steady			Steady				Steady
Projector communication	Steady			Flashing			Steady	
Firmware upgrade				Flashing	Flashing			
Laser diode time has expired		Steady						
Unit loses over 60% initial luminance			Flashing					
Error (Over temperature)						Steady		
Error (Fan failure)						Flashing		

Note: Power key of the keypad is in steady red light when the projector enters standby mode.



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## **Specifications**

Optical		Description		
Resolution	Native Resolution: WUXGA (1920x1200)			
	Supported Resolution: Up to WUXGA@60Hz (Reduced Blanking)			
Lens	Power Zoom/Focus and full lens shift			
Laser Diode (x 2)	Min. 85W @ 3A/Tm 25°C			
Image size (diagonal)	e size (diagonal) 50~500"			
Projection distance	Please refer to "Image size and	Please refer to "Image size and projection distance" table on page 57.		
Electrical	Description			
	2 x HDMI In (version1.4) (with locking screw)			
	1 x DVI-D (only support digital signal)			
Inputs	1 x VGA In (D-Sub 15pin) (Computer In or Component)			
	1 x HDBaseT			
	1 x 3D SYNC In			
Outputs	1 x VGA Out (Support VGA loops through to monitor) (Monitor Out)			
Oulpuis	1 x 3D SYNC Out			
	1 x RS232 (D-sub 9 pin) (PC Control)			
	1 x Wired in (3.5mm phone jack) (Remote In)			
Control port	1 x USB type A (only USB power out)			
	1 x Mini USB (for FW upgrade) (Service)			
	1 x RJ45 (LAN)			
	2 x IR Receiver (On the Front side and Top side)			
Power requirement	AC 100V - 240V, 7A, 50/60Hz			
Power consumption	Normal brightness mode:	550W (min.) / 745W (max.) @110V		
		525W (min.) / 710W (max.) @220V		
	ECO brightness mode:	265W (min.) / 360W (max.) @110V		
		255W (min.) / 345W (max.) @220V		

Mechanical	Description
Installation orientation	Table Top, Ceiling Mount, Portrait
Dimensions	484 (W) x 509 (D) x 185 (H) mm (w/o lens, w/o elevators)
Weight	N.W. 17.3 kg (without lens)
Environmental conditions	Operating: 5~40°C, 10~85%RH, non-condensing

Note: All specifications are subject to change without notice.

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