

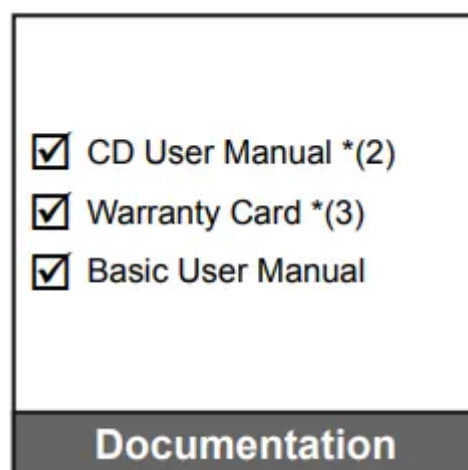
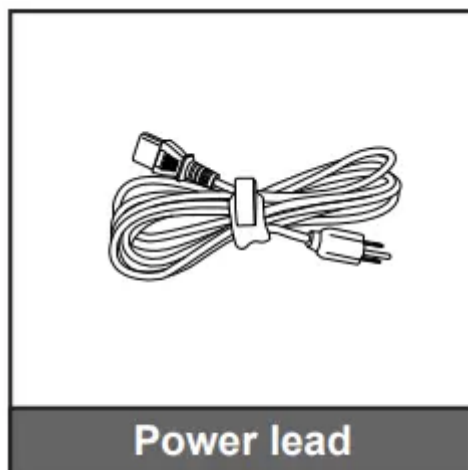
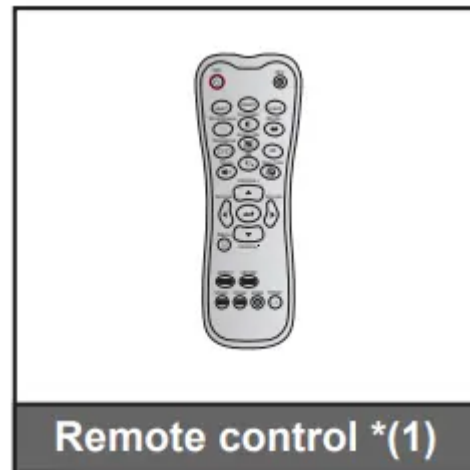
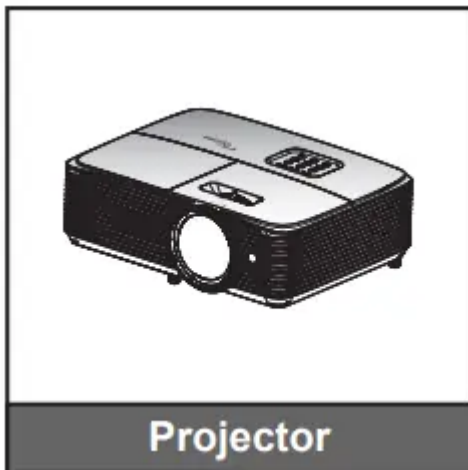
## INTRODUCTION

### 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

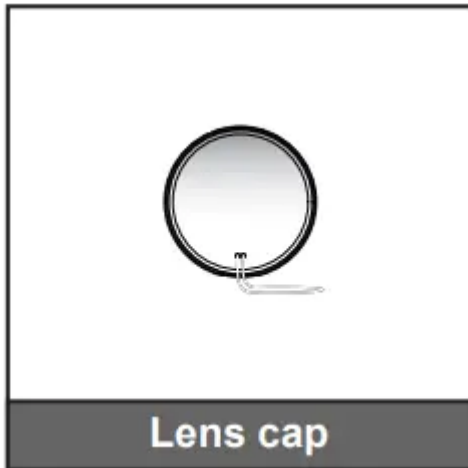
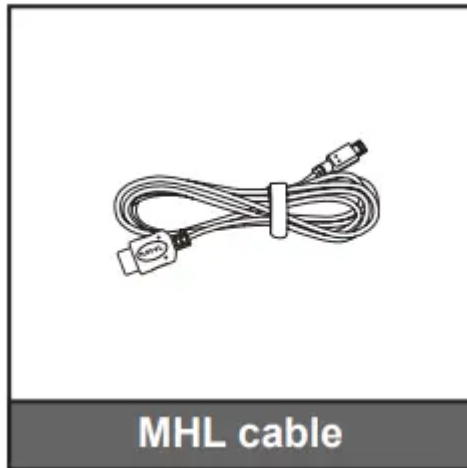
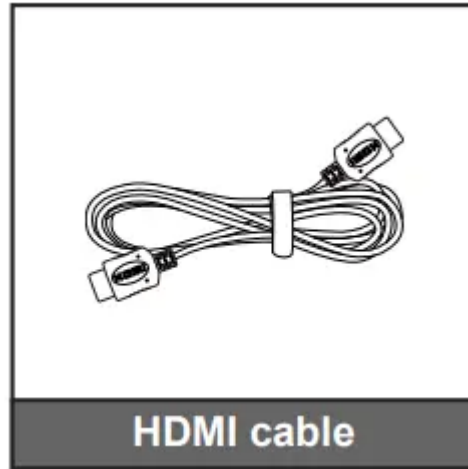


Note:

- The remote control is shipped with the battery/batteries.
- \*(1) The actual remote control may vary depending on the region.

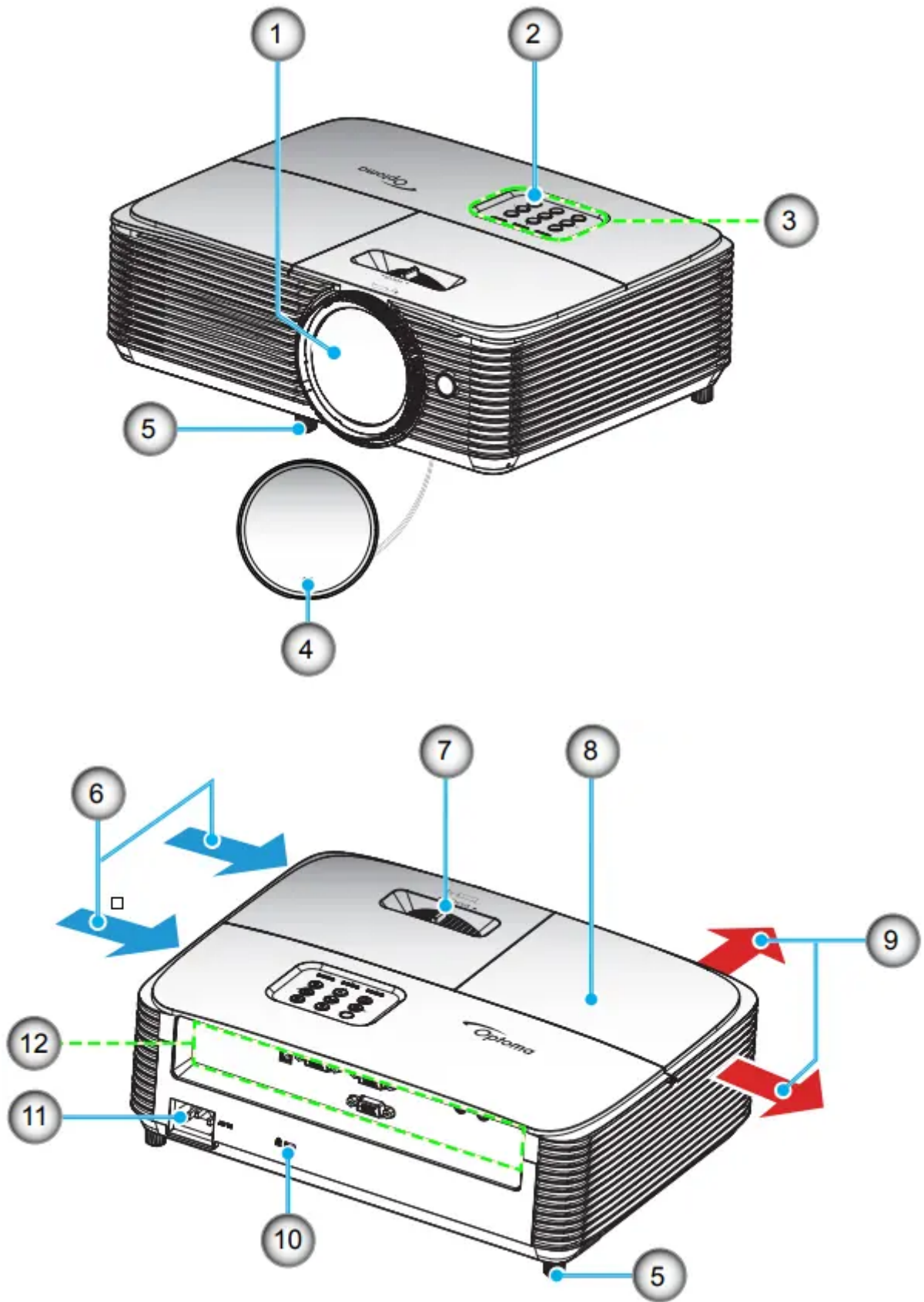
- \*(2) For European User Manual please visit [www.optomaeurope.com](http://www.optomaeurope.com).
- \*(3) For European warranty information please visit [www.optomaeurope.com](http://www.optomaeurope.com).

## Optional accessories



**Note:** Optional accessories vary depending on model, specification and region.

## Product Overview

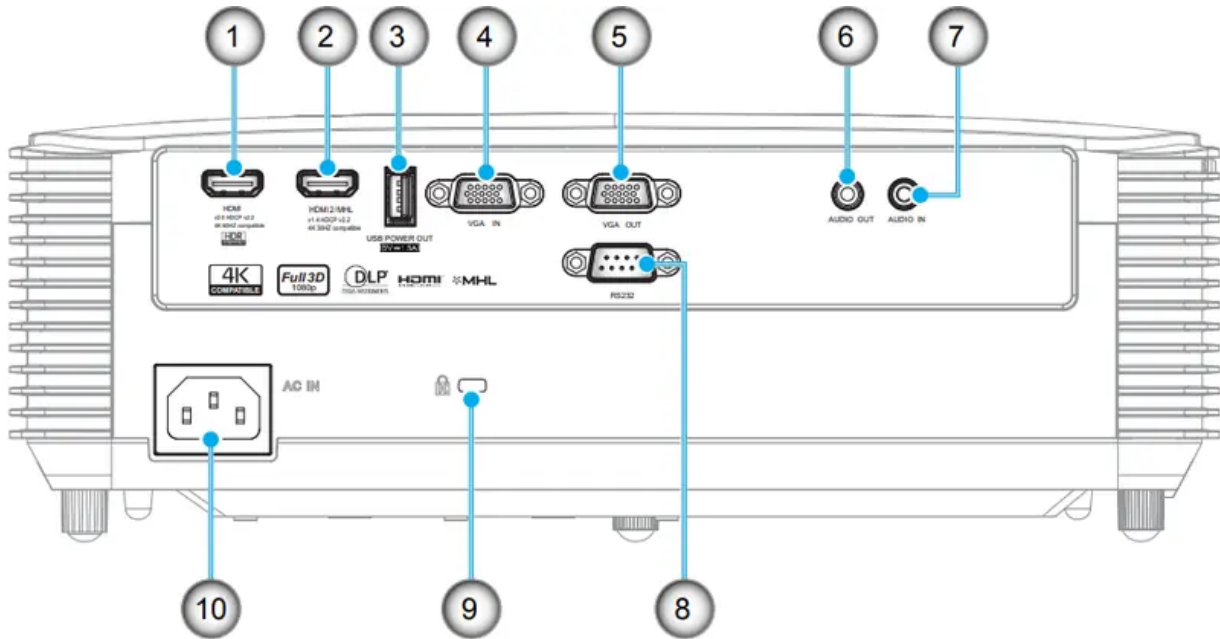


**Note:** Keep a minimum distance of 20 cm between the “inlet” and “outlet” labels.

No	Item
1.	Lens
2.	IR Receiver
3.	Keypad
4.	Lens Cap
5.	Tilt-Adjustment Foot
6.	Ventilation (inlet)

No	Item
7.	Focus Lever
8.	Lamp Cover
9.	Ventilation (outlet)
10.	Kensington™ Lock Port
11.	Power Socket
12.	Input / Output

## Connections



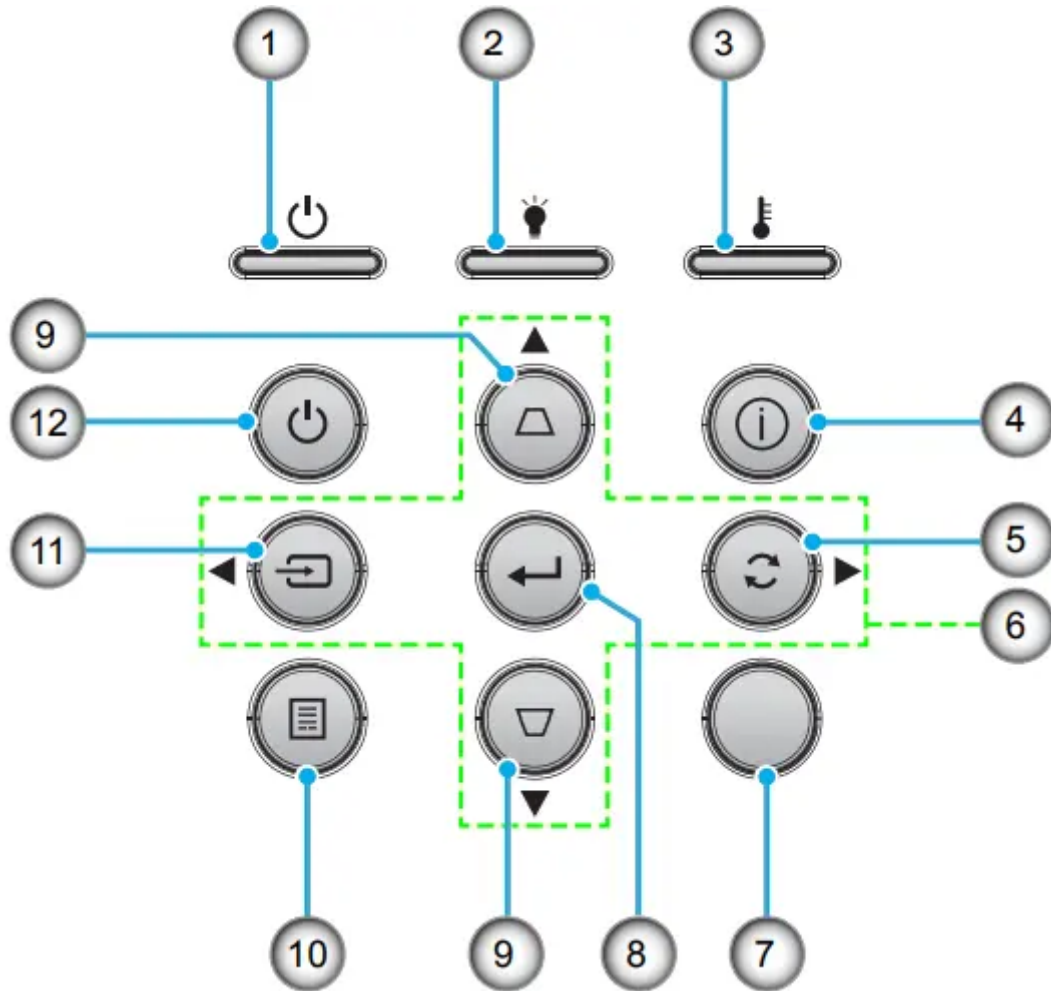
No	Item
1.	HDMI Connector *
2.	HDMI 2 / MHL Connector **
3.	USB Power Out (5V 1.5A) Connector / MOUSE / SERVICE Connector
4.	VGA IN Connector
5.	VGA OUT Connector

No	Item
6.	AUDIO OUT Connector
7.	AUDIO IN Connector
8.	RS232 Connector
9.	Kensington™ Lock Port
10.	Power Socket

### Note:

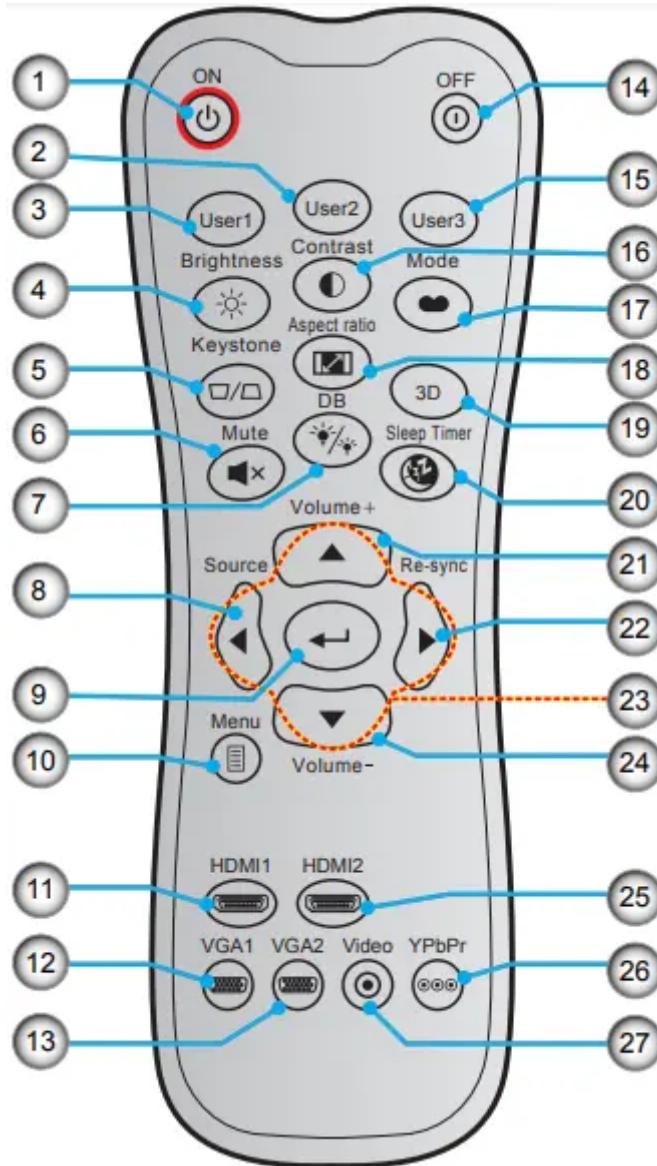
- To ensure the best image quality and avoid connection errors, we recommend the use of High Speed or Premium Certified HDMI cables up to 5 meters.
- Remote mouse requires special remote control.
- \* HDMI 1 supports 4K 60HZ and HDR.
- \*\* HDMI 2 supports 4K 30HZ, not support HDR.

## Keypad



No	Item	No	Item
1.	On/Standby LED	7.	IR Receiver
2.	Lamp LED	8.	Enter
3.	Temp LED	9.	Keystone Correction
4.	Information	10.	Menu
5.	Re-Sync	11.	Source
6.	Four Directional Select Keys	12.	Power

# Remote control 1

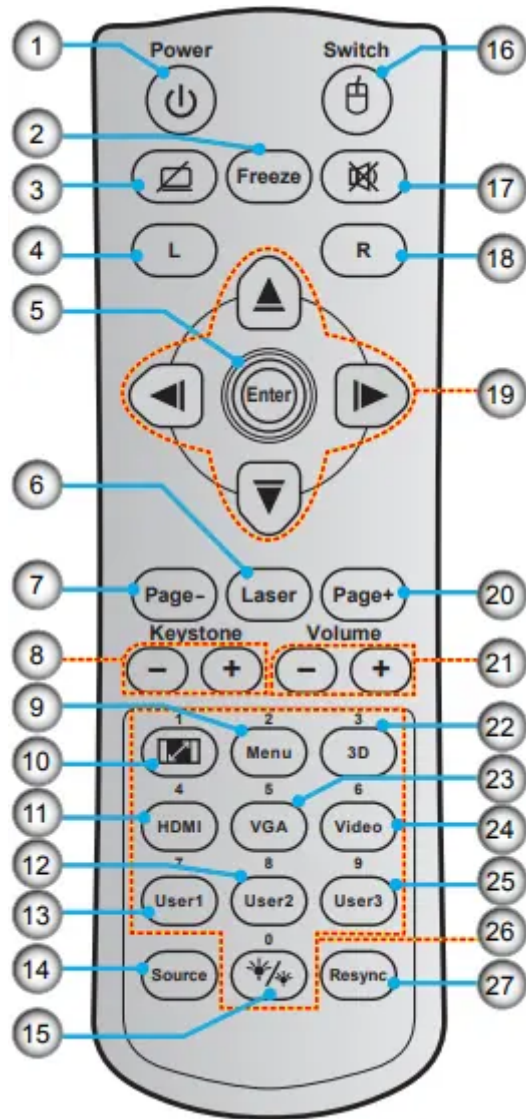


No	Item	No	Item
1.	Power On	15.	User 3
2.	User 2	16.	Contrast
3.	User 1	17.	Display Mode
4.	Brightness	18.	Aspect Ratio
5.	Keystone	19.	3D Menu On / Off
6.	Mute	20.	Sleep Timer
7.	DB (Dynamic Black)	21.	Volume +
8.	Source	22.	Re-Sync
9.	Enter	23.	Four Directional Select Keys
10.	Menu	24.	Volume -
11.	HDMI1	25.	HDMI2
12.	VGA1	26.	YPbPr (not supported)
13.	VGA2 (not supported)	27.	Video (not supported)
14.	Power Off		

Note:

- The actual remote control may vary depending on the region.
- Some keys may have no function for models that do not support these features.

## Remote control 2



No	Item	No	Item
1.	Power On / Off	15.	Brightness Mode
2.	Freeze	16.	Mouse On / Off
3.	Display Blank / Audio Mute	17.	Mute
4.	Mouse Left Click	18.	Mouse Right Click
5.	Enter	19.	Four Directional Select Keys
6.	Laser	20.	Page +
7.	Page -	21.	Volume - / +
8.	Keystone - / +	22.	3D Menu On / Off
9.	Menu	23.	VGA
10.	Aspect Ratio	24.	Video (not supported)
11.	HDMI	25.	User 3
12.	User 2	26.	Numeric Keypad (0-9)
13.	User 1	27.	Resync
14.	Source		

Note:

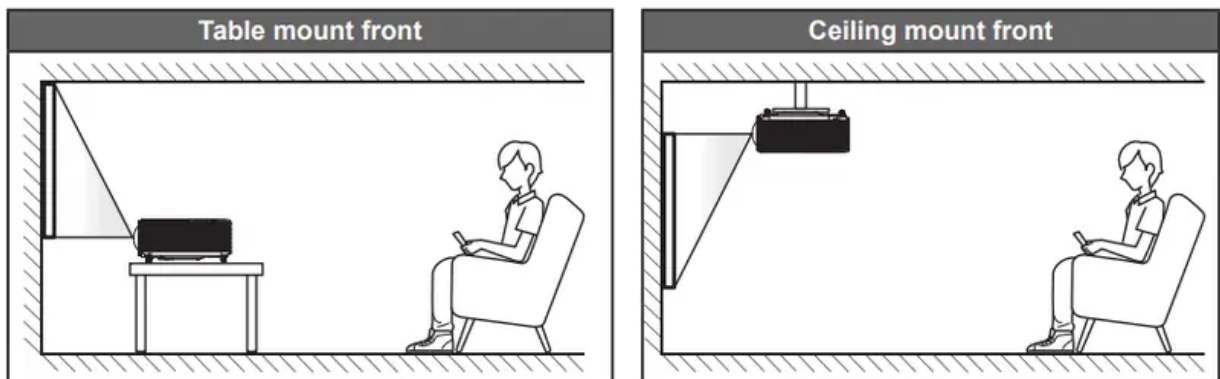
- The actual remote control may vary depending on the region.
- Some keys may have no function for models that do not support these features.

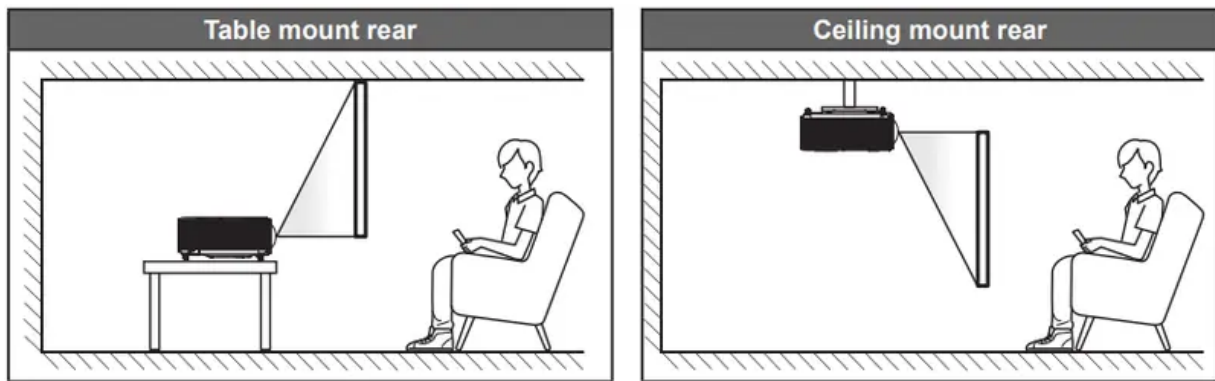
## SETUP AND INSTALLATION

### Installing the projector

Your projector is designed to be installed in one of four possible positions.

Your room layout or personal preference will dictate which installation location you select. Take into consideration the size and position of your screen, the location of a suitable power outlet, as well as the location and distance between the projector and the rest of your equipment.





Projector should be placed flat on a surface and 90 degrees / perpendicular to the screen.

- How to determine projector location for a given screen size, please refer to distance table on page 46.
- How to determine screen size for a given distance, please refer to distance table on page 46.

**Note:** The further away the projector is placed from the screen the projected image size increases and vertical offset also increases proportionally.

### IMPORTANT!

Do not operate the projector in any orientation other than table top or ceiling mount. The projector should be horizontal and not tilted either forwards/backwards or left/right. Any other orientation will invalidate the warranty and may shorten the lifetime of the projector lamp or the projector itself. For non standard installation advise please contact Optoma.

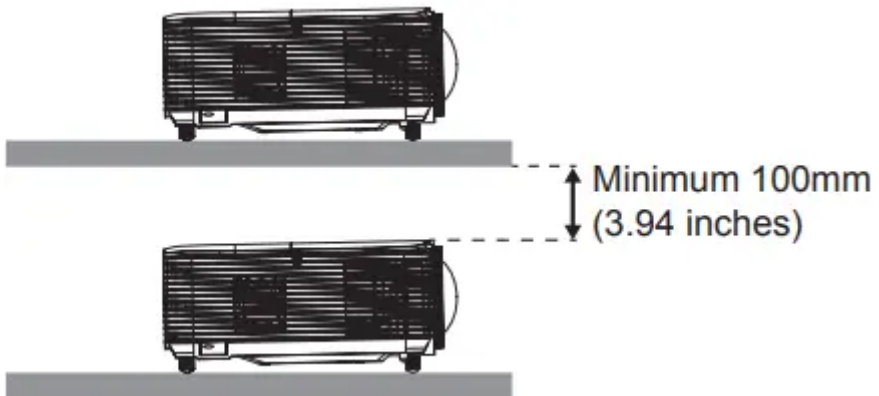
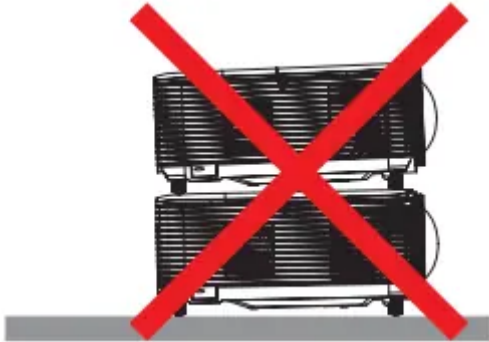
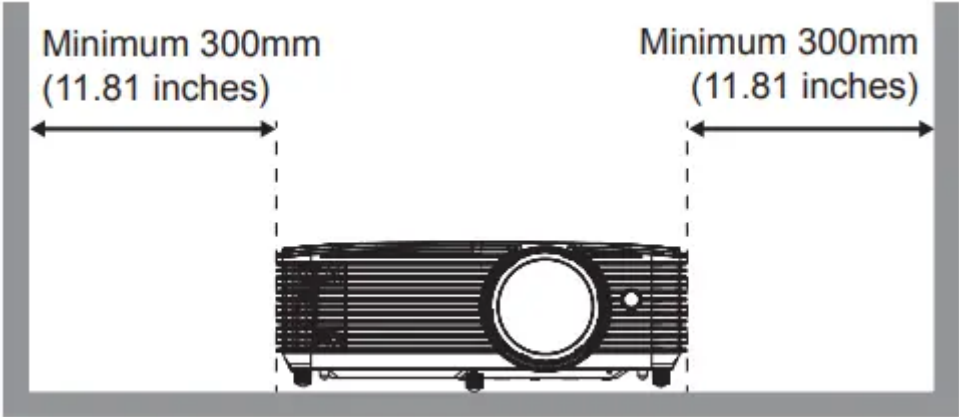
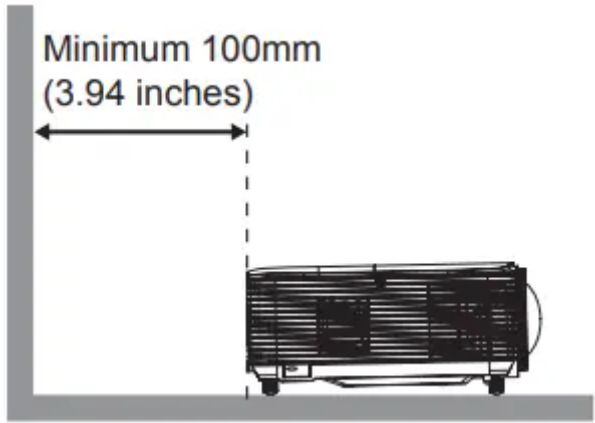
Projector installation notice

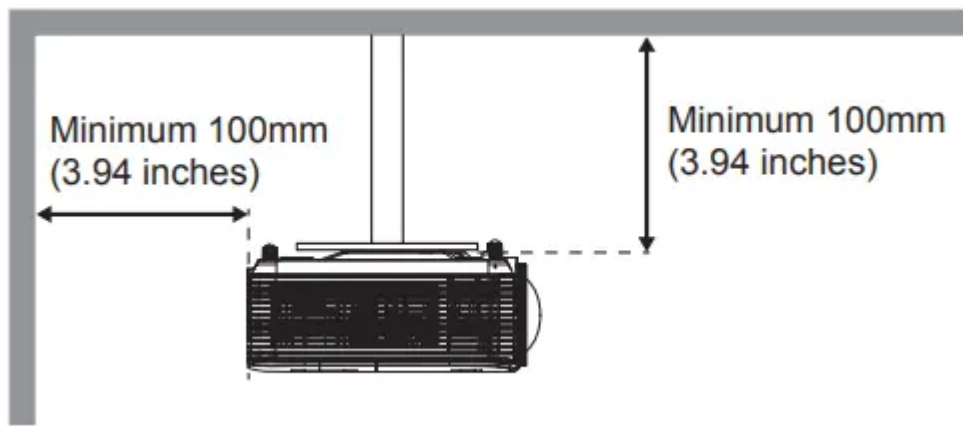
- Place the projector in a horizontal position.

**The tilt angle of the projector should not exceed 15 degrees**, nor should the projector be installed in any way other than the desktop and ceiling mount, otherwise lamp life could decrease dramatically, and may lead to other **unpredictable damages**.



- Allow at least 30 cm clearance around the exhaust vent.

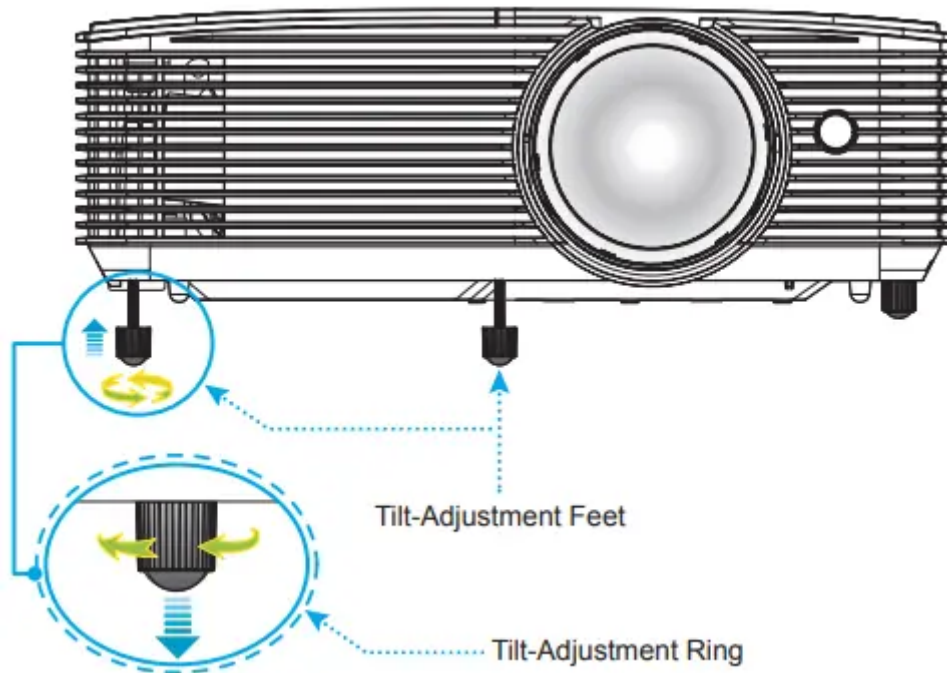




- Ensure that the intake vents do not recycle hot air from the exhaust vent.
- When operating the projector in an enclosed space, ensure that the surrounding air temperature within the enclosure does not exceed operation temperature while the projector is running, and the air intake and exhaust vents are unobstructed.
- All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air, as this may cause the device to shutdown even if the enclosure temperature is within the acceptable operation temperature range.

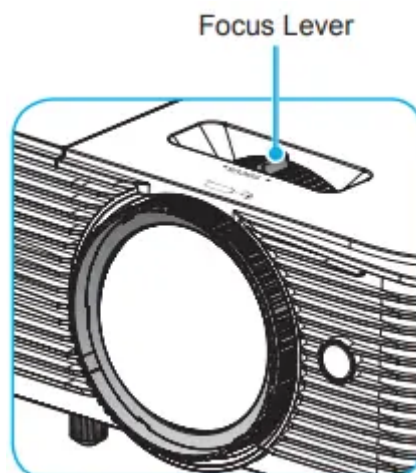


2. Rotate the adjustable foot clockwise or counterclockwise to raise or lower the projector.



### Focus

To adjust the focus, turn the focus lever clockwise or counterclockwise until the image is sharp and legible.

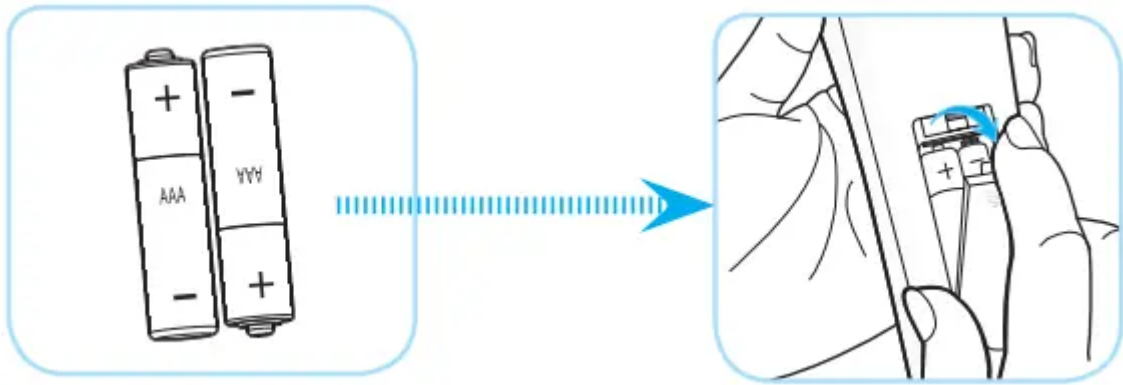


**Note:** The projector will focus at a distance of 1m to 10m.

### 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 they 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.

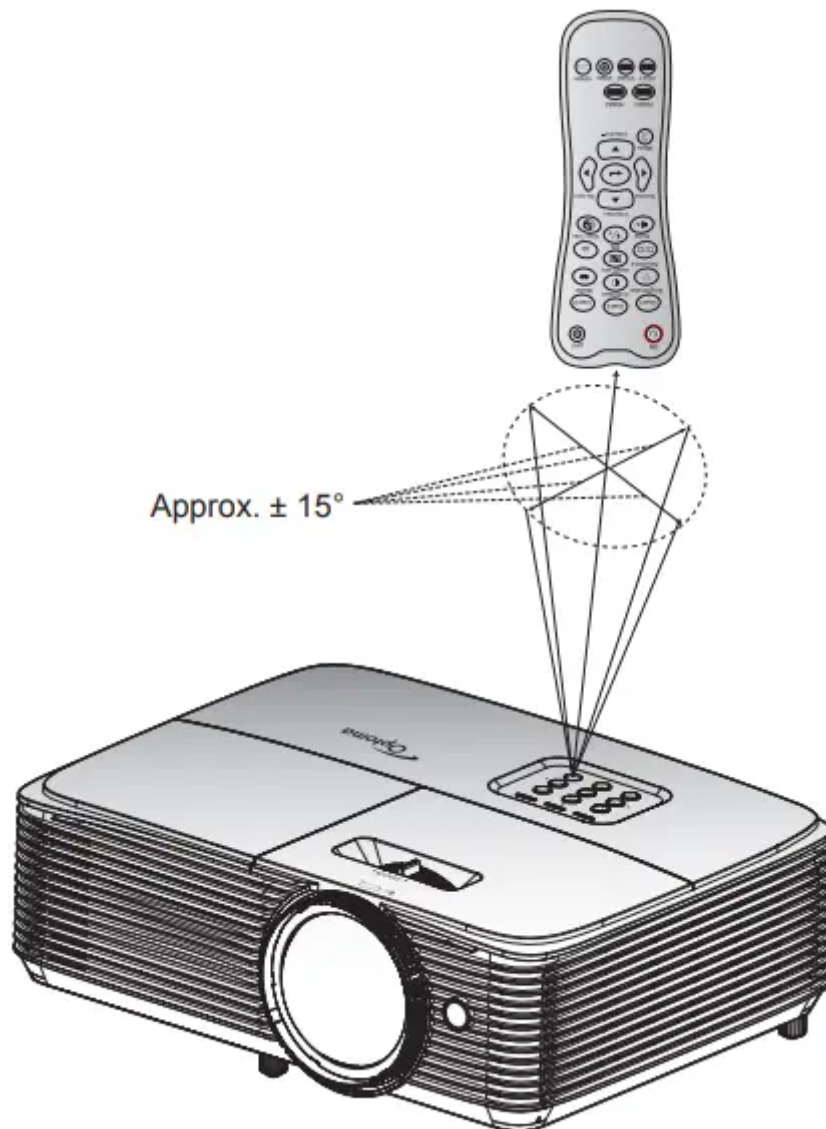
## Effective range

Infra-Red (IR) remote control sensor is located on top of the projector. Ensure to hold the remote control at an angle within 30 degrees perpendicular to the projector's top IR remote control sensor to function correctly. The distance between the remote control and the sensor should not be longer than 6 meters (~ 20 feet).

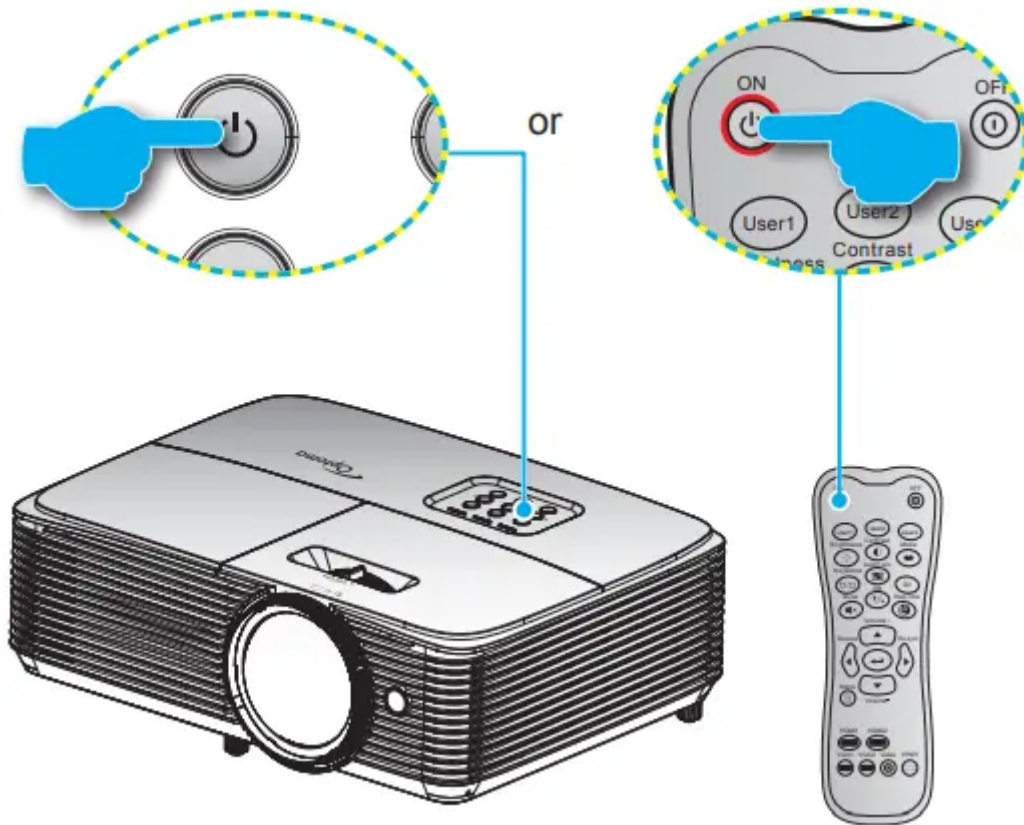
**Note:** When pointing the remote control directly (0 degrees angle) on the IR sensor, the distance between the remote control and the sensor should not be longer than 8 meters (~ 26 feet).

- 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 meters or the remote controller might become malfunction.
- If the remote control is close 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 6 meters 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.



## Powering on / off the projector



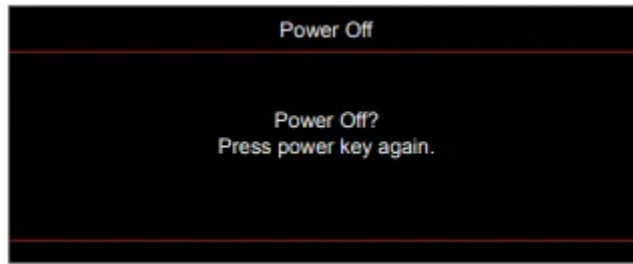
### Powering on

1. Securely connect the power lead and signal/source cable. When connected, the On/ Standby LED will turn red.
2. Turn on the projector by pressing the "⏻" either on the projector keypad or the remote control.
3. A start up screen will display in approximately 10 seconds and the On/Standby LED will be flashing green or flashing blue.

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 the "⏻" either on the projector keypad or the remote control.
2. The following message will be displayed:



3. Press the "⏻" again to confirm, otherwise the message will disappear after 15 seconds. When you press the "⏻" button for the second time, the projector will shut down.

4. The cooling fans will continue to operate for about 10 seconds for the cooling cycle and the On/ Standby LED will flash green or flash blue. When the On/Standby LED turns solid red, this indicates the projector has entered standby mode. If you wish to turn the projector back on, you must wait until the cooling cycle has finished and the projector has entered standby mode. When the projector is in standby mode, simply press the "⏻" button again to turn on the projector.

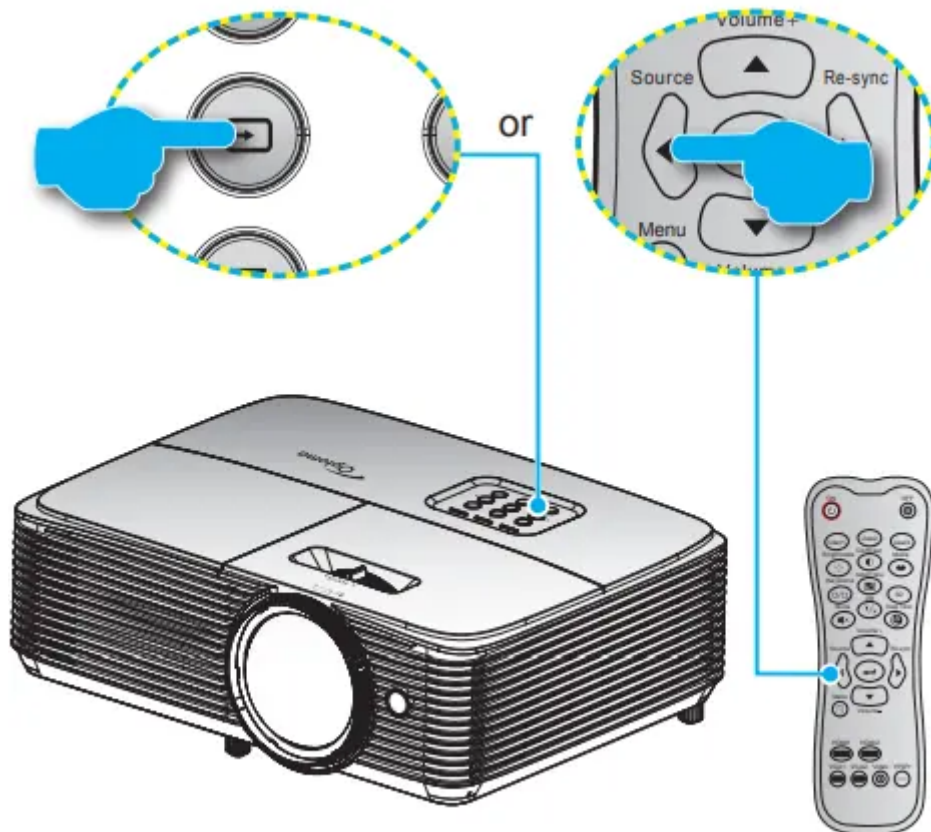
5. Disconnect the power lead from the electrical outlet and the projector.

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

## USING THE PROJECTOR
















### Selecting an input source

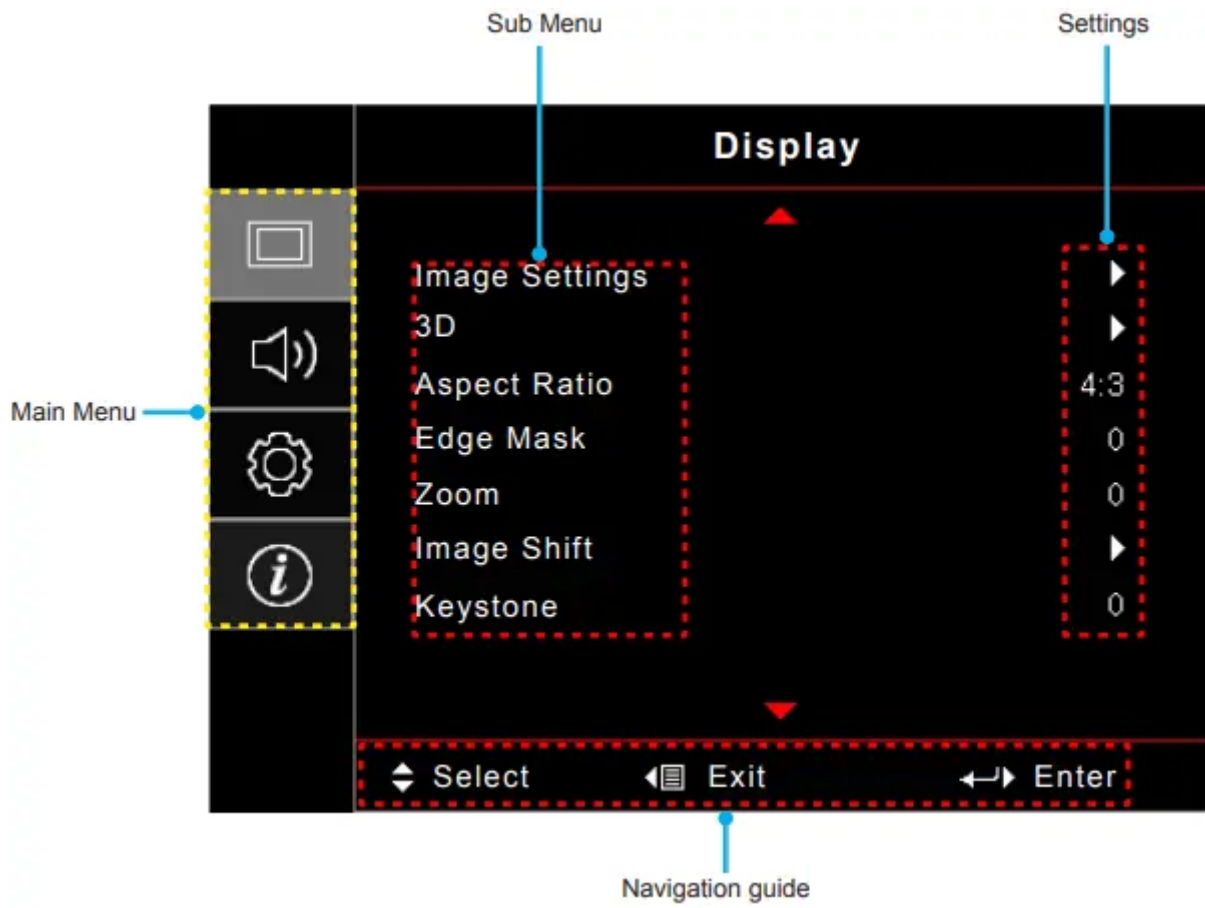
Turn on the connected source that you want to display on the screen, such as computer, notebook, video player, etc. The projector will automatically detect the source. If multiple sources are connected, push the source button on the projector keypad or the remote control to select the desired input.



### 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  on the remote control or the projector keyboard.
2. When OSD is displayed, use   keys to select any item in the main menu. While making a selection on a particular page, press  or  key to enter sub menu.
3. Use   keys to select the desired item in the sub menu and then press  or  key to view further settings. Adjust the settings by using   keys.
4. Select the next item to be adjusted in the sub menu and adjust as described above.
5. Press the  or  to confirm, and the screen will return to the main menu.
6. To exit, press the  or  again. The OSD menu will close and the projector will automatically save the new settings.



## OSD Menu tree

Main Menu	Sub Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Values
Display	Image Settings	Display Mode			Cinema
					Film
					HDR
					HDR SIM.
					Vivid
					Game
					Reference
					Bright
					User
					3D
					ISF Day
					ISF Night
					ISF 3D
				Wall Color	
					Blackboard
					Light Yellow
					Light Green
					Light Blue
					Pink
		Dynamic Range	HDR		Off
					Auto [Default]



	HDR Picture Mode		Bright
			Standard [Default]
			Film
			Detail
Brightness			-50~50
Contrast			-50~50
Sharpness			1~15
Gamma	Film		
	Video		
	Graphics		
	Standard(2.2)		
	1.8		
	2.0		
	2.4		
	HDR		
Color Settings	BrilliantColorTM		1~10
	Color Temperature		Standard
			Cool
Color Settings	Color Matching	Color	R [Default]
			G
			B
			C





		Y
		M
		W
	Hue	-50~50 [Default: 0]
	Saturation	-50~50 [Default: 0]
	Gain	-50~50 [Default: 0]
	Reset	Cancel [Default]
		Yes
	Exit	
RGB Gain/Bias	Red Gain	-50~50
	Green Gain	-50~50
	Blue Gain	-50~50
	Red Bias	-50~50
	Green Bias	-50~50
	Blue Bias	-50~50
	Reset	Cancel [Default]
		Yes
Exit		
Color Space [Not HDMI Input]		Auto [Default]
		RGB

			YUV
	Color Space [HDMI Input]		Auto [Default]
			RGB(0~255)
			RGB(16~235)
			YUV
Signal	Automatic		Off
			On [Default]
	Frequency		-50 ~ 50 (depends on signal) [Default: 0]
	Phase		0~31 (depends on signal) [Default: 0]
	H. Position		-50 ~ 50 (depends on signal) [Default: 0]
	V. Position		-50 ~ 50 (depends on signal) [Default: 0]
	Exit		
Enhanced Gaming			Off [Default]
			On
Brightness Mode			Bright
			Eco.
			Dynamic

				Eco+
	Reset			
3D	3D Mode			Off
				On [Default]
	3D Tech.			DLP-Link [Default]
				3D Sync
	3D → 2D			3D [Default]
				L
				R
	3D Format			Auto [Default]
				Side by Side
				Top and Bottom
				Frame Sequential
				Frame Packing
	3D Sync Invert			On
				Off [Default]
Reset			Cancel [Default]	
			Yes	
Aspect Ratio			4:3	
			16:9	
			LBX	



				Native	
				Auto	
	Edge Mask			0~10 [Default: 0]	
	Zoom			-5~25 [Default: 0]	
	Image Shift			-100~100 [Default: 0]	
				-100~100 [Default: 0]	
	Keystone			-40~ 40 [Default: 0]	
Audio	Mute			Off [Default]	
				On	
	Volume			0-10 [Default: 5]	
	Audio Input	HDMI1			Audio 1
					Audio 2
					Default [Default]
		HDMI2/ MHL			Audio 1
					Audio 2
					Default [Default]
	VGA			Audio 1	
			Audio 2		
Setup	Projection				

				Front  [Default]
				Rear 
				Ceiling-top 
				Rear-top 
Lamp Settings	Lamp Reminder			Off
				On [Default]
	Lamp Reset			Cancel [Default]
				Yes
Filter Settings	Filter Usage Hours			(Read only)
	Optional Filter Installed			Yes
				No
	Filter Reminder			Off
				300hr
				500hr [Default]
				800hr
			1000hr	
Filter Reset			Cancel [Default]	
			Yes	

Power Settings	Direct Power On			Off [Default]	
				On	
	Signal Power On			Off [Default]	
				On	
	Auto Power Off (min.)			0~180 (5 min increments) [Default: 20]	
	Sleep Timer (min.)	Sleep Timer (min.)			0~990 (30 min increments) [Default: 0]
			Always On		No [Default]
					Yes
	Quick Resume				Off [Default]
					On
	Power Mode (Standby)				Active
					Eco [Default]
	USB Power				Off [Default]
					On
					Auto
Security				Off	
				On	
Security	Security Timer		Month		
			Day		
			Hour		




	Change Password				
HDMI Link Settings	HDMI Link			Off	
				On	
	Inclusive of TV			No	
				Yes	
	Power On Link			Mutual	
				PJ --> Device	
				Device --> PJ	
	Power Off Link			Off	
				On	
	Test Pattern				Green Grid
				Magenta Grid	
				White Grid	
				White	
				Off	
Remote Settings [depends on remote]	IR Function			On	
				Off	
	User1				HDMI 2
					Test Pattern
					Brightness
					Contrast
					Sleep Timer
					Color Matching



		Color Temp
		Gamma
		Projection
		Lamp Settings
		Zoom
		Freeze
		MHL
User2		HDMI 2
		Test Pattern
		Brightness
		Contrast
		Sleep Timer
		Color Matching
		Color Temp
		Gamma
		Projection
		Lamp Settings
User3		HDMI 2
		Test Pattern

			Brightness
			Contrast
			Sleep Timer
			Color Matching
			Color Temp
			Gamma
			Projection
			Lamp Settings
			Zoom
			Freeze
			MHL
Projector ID			00~99
Options	Language		English [Default]
			Deutsch
			Français
			Italiano
			Español
			Português
			Polski
			Nederlands
			Svenska
			Norsk/Dansk

				Suomi
				ελληνικά
				繁體中文
				简体中文
				日本語
				한국어
				Русский
				Magyar
				Čeština
				عربي
				ไทย
				Türkçe
				فارسی
				Tiếng Việt
				Bahasa Indonesia
				Română
				Slovenčina
Options	Menu Settings	Menu Location	Top left	
			Top right	

			Center  [Default]
			Bottom left 
			Bottom right 
	Menu Timer		Off
			5sec
			10sec [Default]
Auto Source			Off [Default]
			On
Input Source			HDMI1
			HDMI2/MHLt]
			VGA
Input Name	HDMI1		Default [Default]
			Custom
	HDMI2/MHL		Default [Default]
			Custom
	VGA		Default [Default]
			Custom
			Off [Default]

	High Altitude			On
	Display Mode Lock			Off [Default]
				On
	Keypad Lock			Off [Default]
				On
	Information Hide			Off [Default]
				On
	Logo			Default [Default]
				Neutral
				User
	Background Color			None [Default for Video]
				Blue [Default for Data model/Pro-AV]
				Red
				Green
				Gray
				Logo
		Reset	Reset OSD	
				Yes
Reset to Default				Cancel [Default]
				Yes

	Info	Regulatory			
		Serial Number			
		Source			
Resolution					00x00
Refresh Rate					xxHz
Display Mode					
Power Mode (Standby)					
Lamp Hours		Bright			0 hr
		Eco			0 hr
		Dynamic			0 hr
	Eco+			0 hr	
	Total				
Brightness Mode					
FW Version	System				
	MCU				

## Display menu

### Display image settings menu

#### Display Mode

There are many factory presets optimized for various types of images.

- Cinema: Provides the best colors for watching movies.
- Film: Select to display the purest color settings for home theatre.

- **HDR:** Decodes and displays High Dynamic Range (HDR) content for the deepest blacks, brightest whites, and vivid cinematic color using REC.2020 color gamut. This mode will be automatically enabled if HDR is set to ON (and HDR Content is sent to projector – 4K UHD Blu-ray, 1080p/4K UHD HDR Games, 4K UHD Streaming Video). While HDR mode is active, other display modes (Cinema, Reference, etc.) cannot be selected as HDR delivers color that is highly accurate, exceeding the color performance of the other display modes.
- **HDR SIM.:** Enhances non-HDR content with simulated High Dynamic Range (HDR). Choose this mode to enhance gamma, contrast, and color saturation for non-HDR content (720p and 1080p Broadcast/Cable TV, 1080p Blu-ray, non-HDR Games, etc). This mode can ONLY be used with nonHDR content.
- **Vivid:** In this mode, the color saturation and brightness are well-balanced. Choose this mode for playing games.
- **Game:** Select this mode to increase the brightness and response time level for enjoying video games.
- **Reference:** This mode is intended to reproduce as close as possible the image the way the movie director intended. Color, color temperature, brightness, contrast and gamma settings are all configured to standard reference levels. Select this mode to watch a video.
- **Bright:** Maximum brightness from PC input.
- **User:** Memorize user's settings.
- **3D:** To experience the 3D effect, you need to have 3D glasses. Make sure your PC/portable device has a 120 Hz signal output quad buffered graphics card and a 3D Player installed.
- **ISF Day:** Optimize the image with the ISF Day mode to be perfectly calibrated and high picture quality.
- **ISF Night:** Optimize the image with the ISF Night mode to be perfectly calibrated and high picture quality.
- **ISF 3D:** Optimize the image with the ISF 3D mode to be perfectly calibrated and high picture quality.

Note: For access and calibration of ISF daytime and night viewing modes, please contact your local dealer.

### **Wall Color**

Use this function to obtain an optimized screen image according to the wall color. Select between off, blackboard, light yellow, light green, light blue, pink, and gray.

### **Dynamic Range**

Configure the High Dynamic Range (HDR) setting and its effect when displaying video from 4K Blu-ray players and streaming devices.

Note: HDMI2 and VGA do not support Dynamic Range.

► HDR

- Off: Turn off HDR Processing. When set to Off, the projector will NOT decode HDR content.
- Auto: Auto detect HDR signal.

► HDR Picture Mode

- Bright: Choose this mode for brighter more saturated colors.
- Standard: Choose this mode for natural looking colors with a balance of warm and cool tones.
- Film: Choose this mode for improved detail and image sharpness.
- Detail: The signal comes from OETF conversion to achieve the best color matching.

**Brightness**

Adjust the brightness of the image.

**Contrast**

The contrast controls the degree of difference between the lightest and darkest parts of the picture.

**Sharpness**

Adjust the sharpness of the image.

**Gamma**

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

- Film: For home theater.
- Video: For video or TV source.
- Graphics: For PC / Photo source.
- Standard(2.2): For standardized setting.
- 1.8/ 2.0/ 2.4: For specific PC / Photo source.

Note: If the Display Mode setting is set to HDR, user can only select HDR for Gamma setting.

**Color Settings**



Configure the color settings.

- BrilliantColor™: This adjustable item utilizes a new color-processing algorithm and enhancements to enable higher brightness while providing true, more vibrant colors in picture.
- Color Temperature: Select a color temperature from Standard, Cool, or Cold.
- Color Matching: Select the following options:
  - Color: Adjust the red (R), green (G), black (B), cyan (C), yellow (Y), magenta (M), and white (W) level of the image.
  - Hue: Adjust the color balance of red and green.
  - Saturation: Adjust a video image from black and white to fully saturated color.
  - Gain: Adjust the image brightness.
  - Reset: Return the factory default settings for color matching.
  - Exit: Exit the “Color Matching” menu.
- RGB Gain/Bias: This settings allows to configure the brightness (gain) and contrast (bias) of an image.
  - Reset: Return the factory default settings for RGB gain/bias.
  - Exit: Exit the “RGB Gain/Bias” menu.
- Color Space (non-HDMI input only): Select an appropriate color matrix type from the following: AUTO, RGB, or YUV.
- Color Space (HDMI input only): select an appropriate color matrix type from the following: Auto, RGB(0-255), RGB(16-235), and YUV.

## **Signal**

Adjust the signal options.

- Automatic: Configure automatically the signal (the frequency and phase items are grayed out). If automatic is disabled, the frequency and phase items will appear for tuning and saving the settings.
- Frequency: Change the display data frequency to match the frequency of your computer’s graphic card. Use this function only if the image appears to flicker vertically.
- Phase: Synchronize the signal timing of the display with the graphic card. If the image appears to be unstable or flickers, use this function to correct it.
- H. Position: Adjust the horizontal positioning of the image.
- V. Position: Adjust the vertical positioning of the image.
- Exit: Exit the “Signal” menu.

Note: This menu is only available if the input source is RGB/Component.

## **Enhanced Gaming**

Enable this feature to reduce response times (input latency) during gaming to 16ms and 8.4ms.  
Note: 16ms for 1080p 60Hz; 8.4ms for 1080p 120Hz.

## **Brightness Mode**

Adjust the brightness mode settings for lamp-based projectors.

- Bright: Choose “Bright” to increase the brightness.
- Eco.: Choose “Eco.” to dim the projector lamp which will lower power consumption and extend the lamp life.
- Dynamic: Choose “Dynamic” to dim the lamp power which will be based on brightness level of the content and adjust lamp power consumption between 100% and 30% dynamically. The lamp life will be extended.
- Eco+: When Eco+ mode is activated, the brightness level of the content is automatically detected to significantly reduced lamp power consumption (up to 70%) during periods of inactivity.

## **Reset**

Return the factory default settings for color settings.

## **Display 3D menu**

### **3D Mode**

Use this option to disable or enable the 3D function.

- Off: Select “Off” to turn off 3D mode.
- On: Select “On” to turn on 3D mode.

### **3D Tech.**

Use this option to select 3D technology.

- DLP-Link: Select to use optimized settings for DLP 3D Glasses.
- 3D Sync: Select to use optimized settings for IR, RF or polarized 3D Glasses. 34 English

### **3D → 2D**

Use this option to specify how the 3D content should appear on the screen.

- 3D: Display 3D signal.
- L (Left): Display the left frame of 3D content.
- R (Right): Display the right frame of 3D content.

Note: When changing the input source from 3D to 2D, make sure the 3D Mode setting is set to Off. Otherwise, 2D input source will appear distorted (dual image).

### 3D Format

Use this option to select the appropriate 3D format content.

- Auto: When a 3D identification signal is detected, the 3D format is selected automatically.
- Side by Side: Display 3D signal in “Side-by-Side” format.
- Top and Bottom: Display 3D signal in “Top and Bottom” format.
- Frame Sequential: Display 3D signal in “Frame Sequential” format.
- Frame Packing: Display 3D signal in “Frame Packing” format.

### 3D Sync Invert

Use this option to enable/disable the 3D sync invert function.

### Reset

Return the factory default setting for 3D settings.

- Cancel: Select to cancel Reset.
- Yes: Select to return the factory default settings for 3D.

### Display aspect ratio menu

#### Aspect Ratio

Select the aspect ratio of the displayed image between the following options:

- 4:3: This format is for 4:3 input sources.
- 16:9: This format is for 16:9 input sources, like HDTV and DVD enhanced for Wide screen TV.
- LBX: This format is for non-16x9, letterbox source and if you use external 16x9 lens to display 2.35:1
- aspect ratio in full resolution.
- Native: This format displays the original image without any scaling.
- Auto: Automatically selects the appropriate display format.

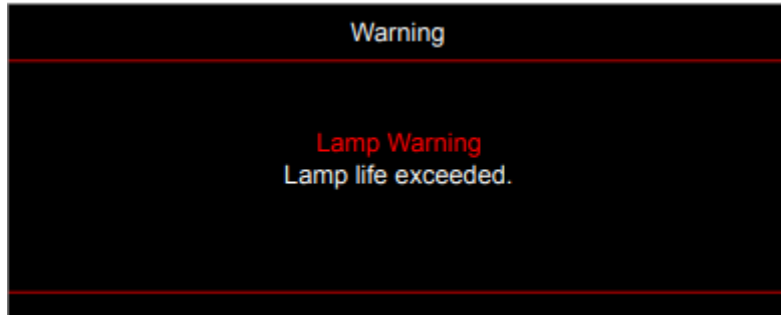
### 1080p scaling table

16:9 screen	480i/p	576i/p	1080i/p	720p	PC
4x3	Scale to 1440x1080.				
16x9	Scale to 1920x1080.				
LBX	Scale to 1920x1440, then get the central 1920x1080 image to display.				
Native mode	-1:1 mapping centered. -No scaling will be made; the image is displayed with the resolution based on input source.				

# MAINTENANCE

## Replacing the lamp

The projector automatically detects the lamp life. When the lamp life is nearing the end of use, a warning message will appear on the screen.



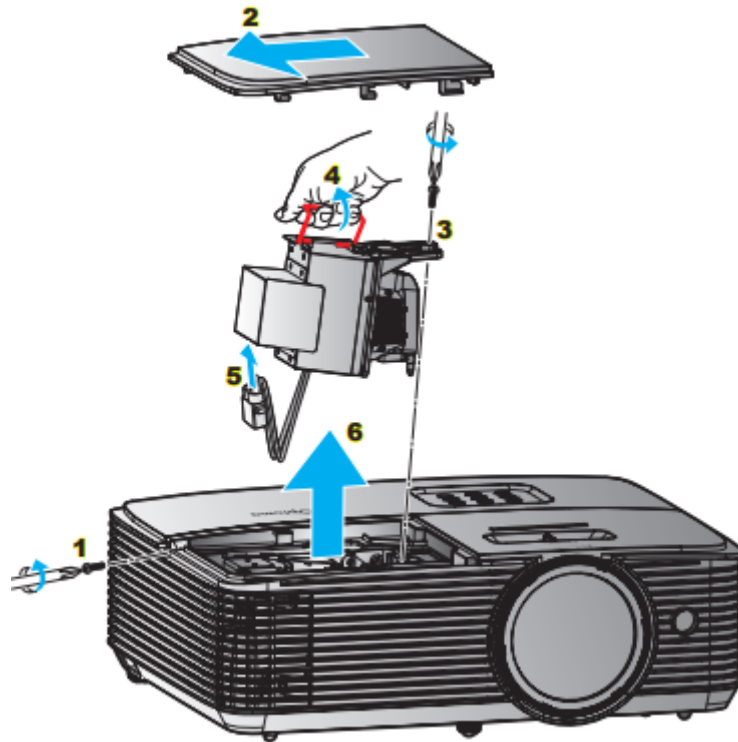
When you see this message, please contact your local reseller or service center to change the lamp as soon as possible. Make sure the projector has been cooled down for at least 30 minutes before changing the lamp.

**Warning:** If ceiling mounted, please use caution when opening the lamp access panel. It is recommended to wear safety glasses if changing the bulb when ceiling mounted. Caution must be used to prevent any loose parts from falling out of projector.

**Warning:** Lamp compartment is hot! Allow it to cool down before changing lamp!

**Warning:** To reduce the risk of personal injury, do not drop the lamp module or touch the lamp bulb. The bulb may shatter and cause injury if it is dropped.

## Replacing the lamp (continued)



### Procedure:

1. Switch off the power to the projector by pressing the " " button on the remote control or the projector keypad.
2. Allow the projector to cool down for at least 30 minutes.
3. Disconnect the power cord.
4. Unscrew the screw on the cover. 1
5. Remove the cover. 2
6. Unscrew the screw on the lamp module. 3
7. Lift up the lamp handle. 4
8. Remove the lamp cord. 5
9. Remove the lamp module carefully. 6
10. To replace the lamp module, reverse the previous steps.
11. Turn on the projector and reset the lamp timer.
12. Lamp Reset: (i) Press "Menu" → (ii) Select "Setup" → (iii) Select "Lamp Settings" → (iv) Select "Lamp Reset" → (v) Select "Yes".

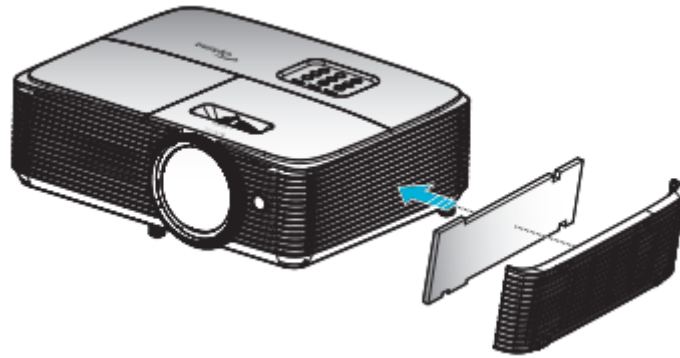
### Note:

- The screw on the lamp cover and the lamp cannot be removed.
- The projector cannot be turned on if the lamp cover has not been placed back on the projector.

- Do not touch the glass area of the lamp. Hand oil can cause the lamp shatter. Use a dry cloth to clean the lamp module if it was accidentally touched.

## Installing and cleaning the dust filter

### Installing the dust filter



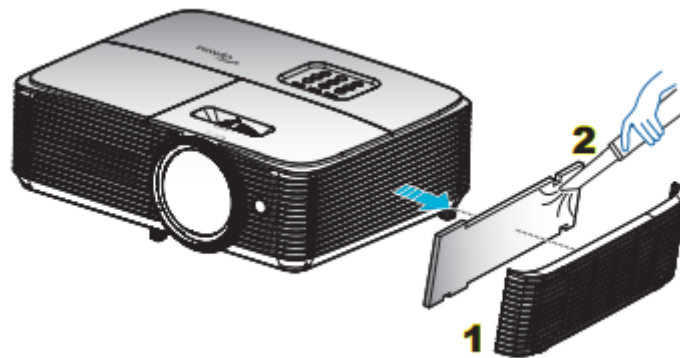
**Note:** Dust filters are only required/supplied in the selected regions with excessive dust.

### Cleaning the dust filter

We recommend you to clean the dust filter every three months. Clean it more often if the projector is used in a dusty environment.

#### Procedure:

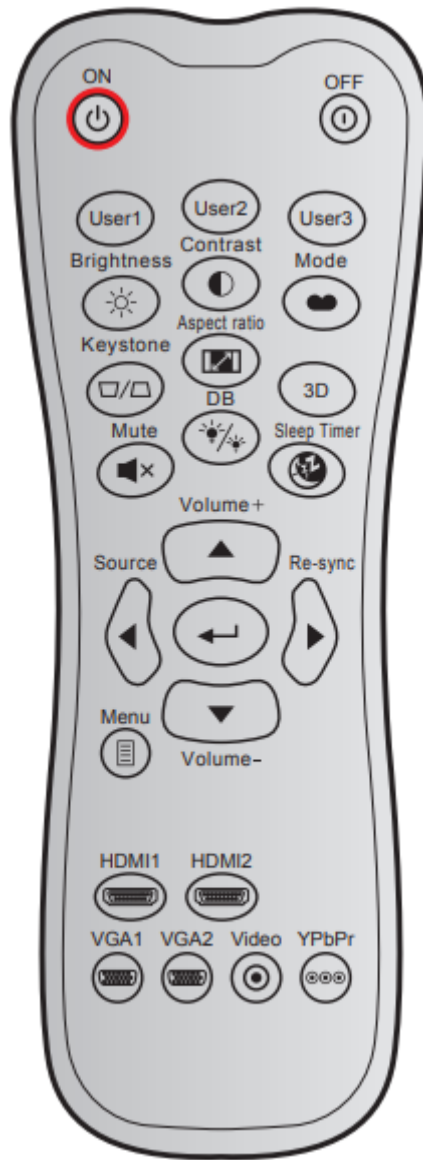
1. Switch off the power to the projector by pressing the "⏻" button on the remote control or the projector keypad.
2. Disconnect the power cord.
3. Remove the dust filter carefully. 1
4. Clean or replace the dust filter. 2
5. To install the dust filter, reverse the previous steps.

















# REMOTE CONTROL

IR remote control 1 codes

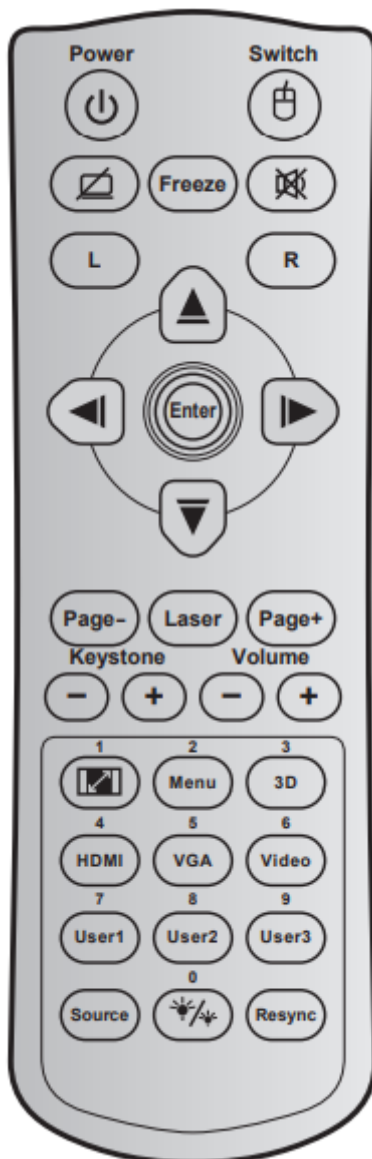

















Key		Custom code		Data code	Printing-key definition	Description
		Byte 1	Byte 2	Byte 3		
Power on		32	CD	02	ON	Press to turn on the projector.
Power off		32	CD	2E	OFF	Press to turn off the projector.
User 1		32	CD	36	User1	User defined keys. Please see page 38 to setup.
User 2		32	CD	65	User2	
User 3		32	CD	66	User3	
Brightness		32	CD	41	Brightness	Adjust the brightness of the image.
Contrast		32	CD	42	Contrast	Control the degree of difference between the lightest and darkest parts of the picture.
Display mode		32	CD	05	Mode	Select a display mode for optimized settings for different applications. Please see page 31.
Keystone		32	CD	07	Keystone	Adjust image distortion caused by tilting the projector.
Aspect ratio		32	CD	64	Aspect ratio	Press to change aspect ratio of a displayed image.
3D		32	CD	89	3D	Manually select a 3D mode that matches your 3D content.

Volume +		32	CD	09	Volume +	Adjust to increase volume.
Four direction keys		32	CD	11	▲	Use ▲, ◀, ▶, or ▼ to select items or make adjustments to your selection.
		32	CD	10	◀	
		32	CD	12	▶	
		32	CD	14	▼	
Source		32	CD	18	Source	Press "Source" to select an input signal.
Enter key		32	CD	0F		Confirm your item selection.
Re-sync		32	CD	04	Re-sync	Automatically synchronizes the projector to the input source.
Volume -		32	CD	0C	Volume -	Adjust to decrease volume.
Menu		32	CD	0E	Menu	Display or exit the on-screen display menus for projector.
HDMI 1		32	CD	16	HDMI1	Press "HDMI1" to choose source from HDMI connector.
HDMI 2		32	CD	30	HDMI2	Press "HDMI2" to choose source from HDMI 2 / MHL connector.
VGA 1		32	CD	1B	VGA1	Press "VGA1" to choose source from VGA IN connector.
VGA 2		32	CD	1E	VGA2	No function
Video		32	CD	1C	Video	No function
YPbPr		32	CD	17	YPbPr	No function

## IR remote control 2 codes



Key	Key code	Printing-key definition	Description	
Power		81	Power on/off	Press to turn on / off the projector.
Switch		3E	Switch	Press to switch the USB mouse on / off.
Display blank / audio mute		8A		Press to hide / unhide the screen picture and turn off / on audio.
Freeze		8B	Freeze	Press to freeze the projector image.
Mute		92		Press to momentarily turn off / on the audio.
Mouse left click	L	CB	L	Use as mouse left click.
Mouse right click	R	CC	R	Use as mouse right click.
Four directional select keys		C6	Up arrow	Use ▲ ▼ ◀ ▶ to select items or make adjustments to your selection.
		C8	Left arrow	
		C9	Right arrow	
		C7	Down arrow	
Enter		C5	Enter	Confirm your item selection.
		CA	Enter	
Page -		C2	Page-	Press to page down.
Laser		N/A	Laser	Use as laser pointer.
Page +		C1	Page+	Press to page up.
Keystone		85	Keystone+	Press to adjust image distortion caused by tilting the projector.
		84	Keystone-	
Volume		8C	Volume +	Press to adjust to increase / decrease the volume.
		8F	Volume -	
Aspect ratio / 1		98	 / 1	<ul style="list-style-type: none"> <li>Press to change aspect ratio of a displayed image.</li> <li>Use as numeric keypad number "1".</li> </ul>
Menu / 2		88	Menu/2	<ul style="list-style-type: none"> <li>Press to display or exit the on-screen display menus for projector.</li> <li>Use as numeric keypad number "2".</li> </ul>
3D / 3		93	3D/3	<ul style="list-style-type: none"> <li>Press to manually select a 3D mode that matches your 3D content.</li> <li>Use as numeric keypad number "3".</li> </ul>
HDMI / 4		86	HDMI/4	<ul style="list-style-type: none"> <li>Press to choose HDMI source.</li> <li>Use as numeric keypad number "4".</li> </ul>
VGA / 5		D0	VGA/5	<ul style="list-style-type: none"> <li>Press to choose VGA source.</li> <li>Use as numeric keypad number "5".</li> </ul>
Video / 6		D1	Video/6	Use as numeric keypad number "6".
User1 / 7; User2 / 8; User3 / 9		D2	User 1/7	<ul style="list-style-type: none"> <li>User defined keys. Please see page 38 to setup.</li> <li>Use as numeric keypad numbers "7", "8", and "9" accordingly.</li> </ul>
		D3	User 2/8	
		D4	User 3/9	
Source		C3	Source	Press to select an input signal.
Brightness mode / 0		96	 / 0	<ul style="list-style-type: none"> <li>Press to automatically adjust the picture brightness to give an optimum contrast performance.</li> <li>Use as numeric keypad number "0".</li> </ul>
Re-sync		C4	Re-Sync	Press to automatically synchronize the projector to the input source.

# 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.
- Check if the projection lamp has been securely installed. Please refer to the "Replacing the Lamp" section.
- Ensure that the "Mute" feature is not turned on.

### ◆ Image is out of focus

- Adjust the focus by using the focus lever.
- Make sure the projection screen is between the required distance from the projector. (Please refer to page 46).

### ◆ The image is stretched when displaying 16:9 DVD title

- When you play anamorphic DVD or 16:9 DVD, the projector will show the best image in 16: 9 format on projector side.
- If you play the LBX format DVD title, please change the format as LBX in projector OSD.
- If you play 4:3 format DVD title, please change the format as 4:3 in projector OSD.
- Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player.

### ◆ Image is too small or too large

- Adjust the image size by using the zoom lever (only for standard lens model).
- Move the projector closer to or further from the screen.
- Press "Menu" on the projector panel, go to "Display 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 "Display → Keystone" from the OSD to make an adjustment.

### ◆ Image is reversed

- Select "Setup → Projection" from the OSD and adjust the projection direction.

#### ◆ **Blurry double image**

- Press "3D" button and switch to "Auto" to avoid normal 2D image is blurry double image.

#### ◆ **Two images, side-by-side format**

- Press "3D" button and switch to "Side by Side" for input signal is HDMI 1.3 2D 1080i side-by-side.

#### ◆ **Image does not display in 3D**

- Check if the battery of 3D glasses is drained.
- Check if the 3D glasses is turned on.
- When the input signal is HDMI 1.3 2D (1080i side-by-side half), press "3D" button and switch to "Side by Side".

#### **Other problems**

##### ◆ **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.

##### ◆ **Lamp burns out or makes a popping sound**

- When the lamp reaches its end of life, it will burn out and may make a loud popping sound. If this happens, the projector will not turn on until the lamp module has been replaced. To replace the lamp, follow the procedures in the "Replacing the Lamp" section on pages 41-42.

#### **Remote control problems**

##### ◆ **If the remote control does not work**

- Check the operating angle of the remote control is pointed within  $\pm 15^\circ$  to the IR receiver on the projector.
- Make sure there are not any obstructions between the remote control and the projector. Move to within 6 m (20 ft) of the projector.
- Make sure batteries are inserted correctly.
- Replace batteries if they are exhausted.

#### **Warning indicators**





When the warning indicators (see below) light up or flash, the projector will automatically shutdown:

- "LAMP" LED indicator is lit red and if "On/Standby" indicator flashes red.
- "TEMP" LED indicator is lit red and if "On/Standby" indicator flashes red. This indicates the projector has overheated. Under normal conditions, the project can be switched back on.

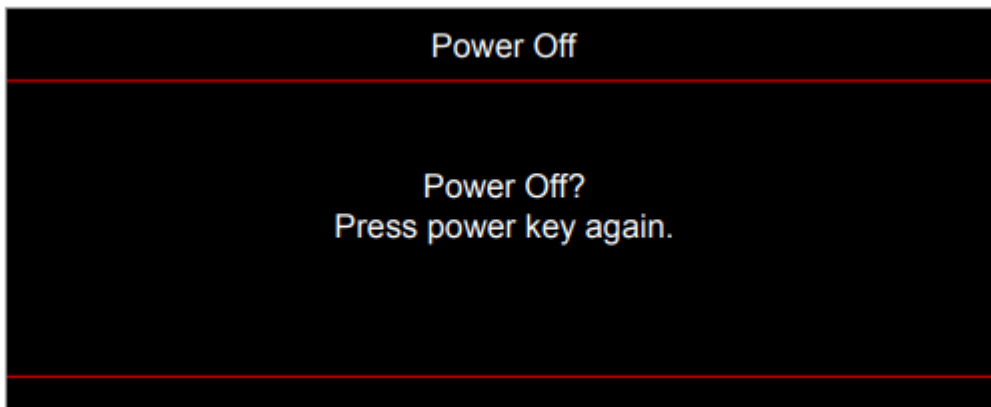
- "TEMP" LED indicator flashes red and if "On/Standby" indicator flashes red.

Unplug the power cord from the projector, wait for 30 seconds and try again. If the warning indicator light up or flash, please contact your nearest service center for assistance.

### LED lightning messages

Message	 Power LED	 Power LED	 Temp-LED	 Lamp-LED
	(Red)	(Green or Blue)	(Red)	(Red)
Standby state (Input power cord)	Steady light			
Power on (Warming)		Flashing (0.5 sec off / 0.5 sec on)		
Power on & Lamp lighting		Steady light		
Power off (Cooling)		Flashing (0.5 sec off / 0.5 sec light). Back to red steady light when cooling fan turns off.		
Quick Resume (100 secs)		Flashing (0.25 sec off / 0.25 sec on)		
Error (Lamp fail)	Flashing			Steady light
Error (Fan failure)	Flashing		Flashing	
Error (Over Temp)	Flashing		Steady light	

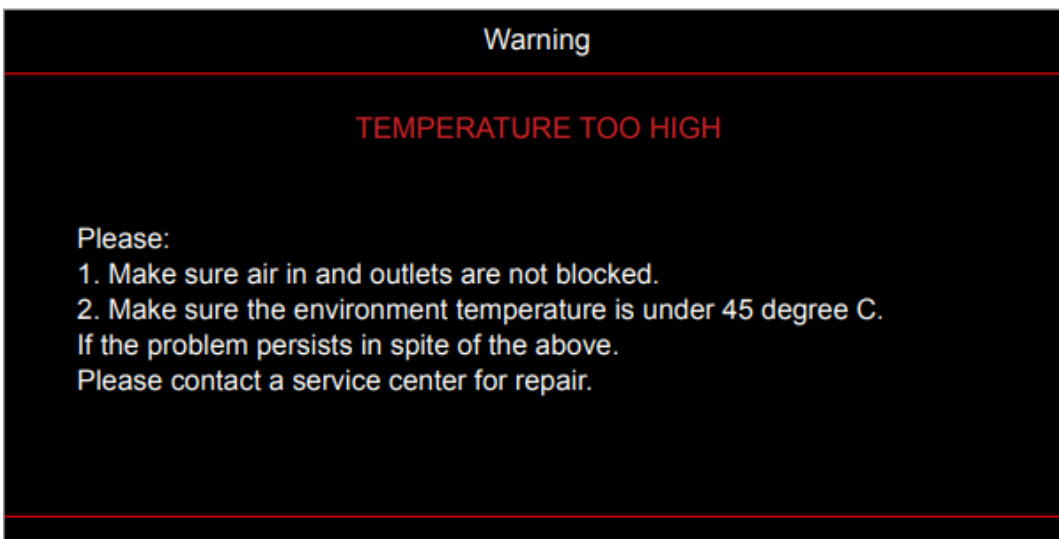
Power off:



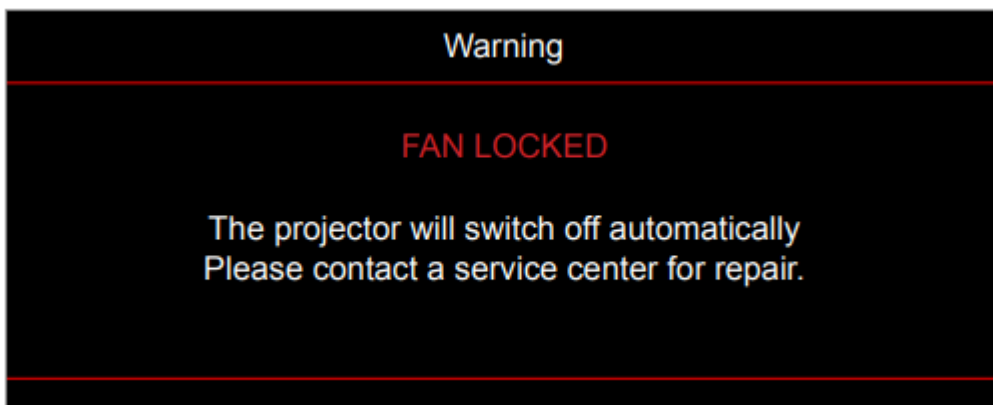
Lamp warning:



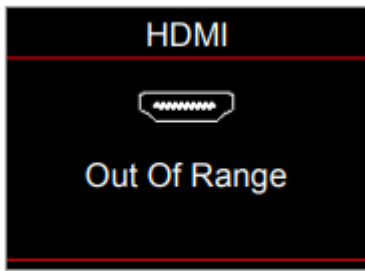
Temperature warning:



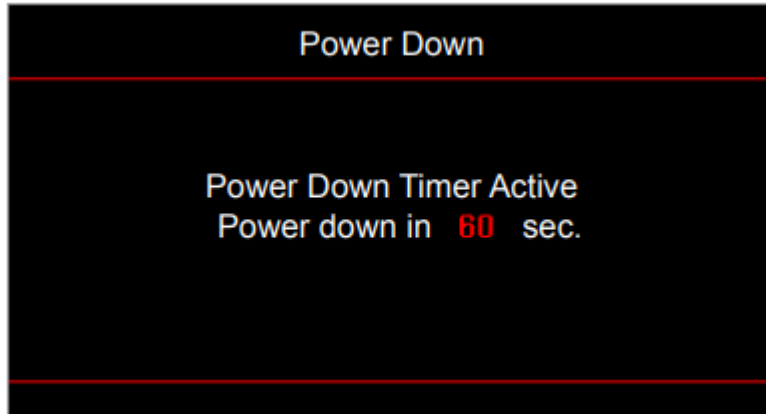
Fan failed:



Out of display range:



Power down warning:



Security timer alarm:



## SPECIFICATION

Optical	Description
Native resolution	1080p
Maximum resolution	3840 x 2160 (60Hz)
Lens	Manual focus
Image size (diagonal)	36.2"~316.8" with optimized @ 89.1"
Projection distance	1m ~ 10m with optimized @ 1.493m

Electrical	Description
Inputs	<ul style="list-style-type: none"> <li>- HDMI v2.0</li> <li>- HDMI/MHL v1.4</li> <li>- USB2.0 USB-A for 5V PWR 1.5A</li> <li>- VGA IN</li> <li>- Audio In 3.5mm</li> <li>- RS232C male (9-pin D-SUB)</li> </ul>
Outputs	<ul style="list-style-type: none"> <li>- Audio Out 3.5mm</li> <li>- VGA Out</li> </ul>
Control	USB type A for mouse / service
Color reproduction	1073.4 Million color
Scan rate	<ul style="list-style-type: none"> <li>- Horizontal scan rate: 15.375~91.146 KHz</li> <li>- Vertical scan rate: 50~ 85 Hz (120Hz for 3D feature projector)</li> </ul>
Sync compatibility	Separate Sync
Built-in speaker	Yes, 10W
Power requirement	100 - 240V AC 50/60Hz
Input current	3.3A
Power Consumption	Bright: <ul style="list-style-type: none"> <li>- Typical 230W MAX 253W @ 110VAC</li> <li>- Typical 225W MAX 248W @ 220VAC</li> </ul> Eco: <ul style="list-style-type: none"> <li>- Typical 190W MAX 209W @ 110VAC</li> <li>- Typical 187W MAX 206W @ 220VAC</li> </ul>

Mechanical	Description
Installation orientation	Front, Rear, Ceiling - Top, Rear - Top
Dimensions	<ul style="list-style-type: none"> <li>- 316 mm (W) x 243.5 mm (D) x 98 mm (H) (without feet)</li> <li>- 316 mm (W) x 243.5 mm (D) x 115 mm (H) (with feet)</li> </ul>
Weight	3.0 ±0.5kg
Environmental conditions	Operating in 5 ~ 40°C , 10% to 85% humidity (non-condensing)

### Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.