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## **Safety Information**



The lightning flash with arrow head within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

#### Important Safety Instruction

- Do not block any ventilation openings. To ensure reliable operation of the projector and to protect from overheating, 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.
- 2. Do not use the projector near water or moisture. To reduce the risk of fire and/or electric shock, do not expose the projector to rain or moisture.
- 3. Do not install near heat sources such as radiators, heaters, stoves or any other apparatus such as amplifiers that emit heat.
- 4. Clean only with dry cloth.
- 5. Only use attachments/accessories specified by the manufacturer.
- 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.
- 7. See projector enclosure for safety related markings.
- 8. The unit should only be repaired by appropriate service personnel.

## **Precautions**

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

- Warning- Do not look into the projector's lens when the lamp is on. The bright light may hurt and damage your eyes.
- Warning- To reduce the risk of fire or electric shock, do not expose this projector to rain or moisture.
- Warning- Please do not open or disassemble the projector as this may cause electric shock.
- Warning- When replacing the lamp, please allow the unit to cool down. Follow instructions as described on pages 51-52.
- Warning- This projector detects lamp life. Please be sure to change the lamp when a warning message is displayed.
- Warning- 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.
- Warning- Not all projectors come with a lens cap. For your safety, if the projector is equipped with a lens cap please ensure to remove it before you turn on the projector.



When the lamp reaches the end of its life, the projector will not turn back on until the lamp module has been replaced. To replace the lamp, follow the procedures listed under "Replacing the Lamp" section on pages 51-52.



#### Do:

- 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.
- Disconnect the power plug from AC outlet if the product is not being used for a long period of time.
- Use room blinds to reduce ambient light in order to minimize lamp power.

#### Do not:

Block the projector inlet or outlet air vents.



- Use abrasive cleaners, waxes or solvents to clean the unit.
- Use under the following conditions:
  - In extremely hot, cold or humid environments.
    - Ensure that the ambient room temperature is within 5 - 40°C.
    - Relative Humidity is 5 40°C, 80% (Max.), non-condensing.
  - In areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.



## **Eye Safety Warnings**



- Avoid staring/facing directly into the projector beam at all times. Keep your back to the beam as much as possible.
- When projector is used in a classroom, ensure students do not look into the beam when they are asked to point something out on screen.

## **Product Features**

- 1080p (1920 x1080) Native resolution
- HD compatible 720p and 1080p supported
- BrilliantColor<sup>™</sup> Technology
- Kensington Lock
- RS232 control
- Rapid shutdown
- The Product Features shall be configured by the manufacturer as per practical conditions.



 Product features may vary depending on model.



## **Package Overview**

Unpack and inspect the contents to ensure all parts listed below are in the box. If something is missing, please contact your nearest customer service center.



 Due to different applications in each country, some regions may have different accessories.







Projector

Power Cord

HDMI Cable



IR Remote Control

Documentation:

- ✓ User's Manual
- Quick Start Card
- Safety/Warranty Booklet

English 6

## **Product Overview**

Main Unit





- The interface is subject to model's specifications.
- Do not block projector in/out air vents.
- 1. Ventilation (outlet)
- 2. IR Receiver (remove protective film)
- 3. Control Panel
- 4. Ventilation (inlet)
- 5. Focus Ring
- 6. Lens

- 7. Tilt-Adjustment Feet
- 8. Zoom Lever
- 9. Lamp cover
- 10. Kensington<sup>™</sup> Lock Port
- 11. Power Socket
- 12. Input / Output Connections

7

English

### **Control Panel**



- 1. On/Standby LED
- 2. Keystone Correction
- 3. Lamp LED
- 4. Temp LED
- 5. Help
- 6. Re-Sync
- 7. IR Receiver (remove protective film)
- 8. Enter
- 9. Four Directional Select Keys
- 10. Menu
- 11. Source
- 12. Power

English

## Input/Output Connections



- 1. HDMI2 Connector
- 2. HDMI1 Connector
- 3. USB Type A Connector
- 4. VGA IN Connector
- 5. VGA OUT Connector
- 6. 3D Sync Connector
- 7. Screen Trigger Connector
- 8. Audio Output Connector (3.5mm mini jack)
- 9. Audio Input Connector (3.5mm mini jack)
- subject to model's 10. RS232 Connector (9-pin)
- subject to mod specifications.
- 11. Kensington Lock
- 12. Power Socket



### **Remote Control**



- 1. AV Mute
- 2. Re-Sync
- 3. Four Directional Select Keys
- 4. Menu
- 5. Keystone +/-
- 6. Video
- 7. VGA
- 8. Page +/-
- 9. Mouse
- 10. Picture
- 11. IR LED
- 12. Power
- 13. Source
- 14. Enter
- 15. ECO
- 16. Volume +/-
- 17. Aspect
- 18. HDMI
- 19. Zoom +/-
- 20. Mute
- 21. Freeze

## **Connecting the Projector**

## **Connect to Computer/Notebook**

Computer / Notebook



Computer / Notebook

English

1	HDMI Cable
l	
2	USB Cable*
3	VGA-In Cable*
4	Audio Input Cable*
5	12V 200ma DC Jack*
6	Audio Output Cable*
7	
8	RS232 Cable*
9	VGA-out Cable*
10	Power Cord



- Due to the difference in applications for each country, some regions may have different accessories.
- (\*) Optional accessory
- USB has two functions: Service and Remote Mouse Control.
- The interface is subject to model's specifications.

### **Connect to Video Sources**





Due to the difference in applications for each country, some regions may have different accessories.

#### (\*) Optional accessory

 The interface is subject to model's specifications.

1	
2	
3	Audio Output Cable*
4	
5	Power Cord

## Powering the Projector On / Off

### **Powering On the Projector**

- 1. Securely connect the power cord and signal cable. When connected, the On/Standby LED will turn red.
- 2. Turn on the lamp by pressing the "也" button either on the remote control or the control panel. The On/Standby LED will now flash blue. 1

The startup screen will display in approximately 10 seconds. The first time you use the projector, you will be asked to select the preferred language and power saving mode.

- Turn on and connect the source that you want to display on the screen (computer, notebook, video player, etc). The projector will detect the source automatically. If not, press the "Menu" button and go to "Options".
   Make sure that the "Source Lock" has been set to "Off".
- If you connect multiple sources at the same time, press the "Source" button on the control panel or direct source keys on the remote control to switch between inputs.





### **Powering Off the Projector**

1. Press the "U" button on the remote control or the control panel to turn off the projector.

The following message will be displayed on the screen.



Press the " $\circlearrowright$ " button again to confirm otherwise the message will disappear after 10 seconds. The projector will shut down when the " $\circlearrowright$ " button is pressed for the second time.

 The fans will continue to operate for 10 seconds and the On/Standby LED will flash blue. During this period, the projector cannot be turned back on and the projector should not be unplugged.

Once the cooling cycle is complete the On/Standby LED will turn to solid red (standby mode). At this point, the projector can be turned back on by pressing the "U" button.

3. Disconnect the power cord from the electrical outlet and the projector.

### Warning Indicator

When the warning indicators (see below) come on, the projector will automatically shutdown:

- Lamp LED indicator is lit red and if the On/Standby LED flashes red. This indicates the projector lamp has failed.
- Temp LED indicator is lit red and if the On/Standby LED flashes red. This indicates the projector has overheated. Under normal conditions, the projector can be switched back on.
- Temp LED indicator flashes red and if the On/Standby LED flashes red. This indicates a fan failure.

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



Contact the nearest service center if the projector displays these symptoms. See page 49 for more information.

## Adjusting the Projected Image

### Adjusting the Projector's Height

The projector is equipped with tilt-adjustment feet for adjusting the image height.

- 1. Locate the tilt-adjustment foot you wish to modify on the underside of the projector.
- 2. Rotate the adjustable ring clockwise to raise the projector or counter clockwise to lower it. Repeat with the remaining feet as needed.







### Adjusting the Projector's Focus / Zoom

To focus the image, rotate the focus ring until the image is clear. You may turn the zoom lever to zoom in or out. The projector will focus at the distance 1.1m to 9.8m (optimized @ 1.95m).



### **Adjusting Projection Image Size**

Projection image size is from 28" to 301" (0.71m to 7.65m).



16:9	Hojaht	loight Width		\\/idth	Projection Distance				Offeet	
diagonal				Wide.	Tele	Wide	Tele	UII	Sel	
screen	(inches)	(inches)	(meters)	(meters)	(inches)	(inches)	(meters)	(meters)	(cm)	(inches)
28	13.7	24.4	0.35	0.62		2.98		1.00	5.58	2.20
50	24.5	43.6	0.62	1.11	4.08	5.33	1.63	1.79	9.96	3.92
60	29.4	52.3	0.75	1.33	4.90	6.39	1.95	2.15	11.95	4.71
70	34.3	61.0	0.87	1.55	5.71	7.46	2.28	2.51	13.95	5.49
80	39.2	69.7	1.00	1.77	6.53	8.52	2.60	2.87	15.94	6.28
90	44.1	78.4	1.12	1.99	7.35	9.59	2.93	3.23	17.93	7.06
100	49.0	87.2	1.25	2.21	8.16	10.66	3.25	3.59	19.92	7.84
120	58.8	104.6	1.49	2.66	9.80	12.79	3.91	4.30	23.91	9.41
150	73.5	130.7	1.87	3.32	12.25	15.98	4.88	5.38	29.89	11.77
180	88.2	156.9	2.24	3.98	14.69	19.18	5.86	6.46	35.86	14.12
200	98.1	174.3	2.49	4.43	16.33	21.31	6.51	7.17	39.85	15.69
250	122.6	217.9	3.11	5.53	20.41	26.64	8.14	8.97	49.81	19.61
301	147.6	262.3	3.75	6.66	24.57		9.80		59.97	23.61

## Control Panel & Remote Control Control Panel



Using the Control Panel					
ር	Refer to the "Powering the Projector On / Off" section on pages 13-14.				
÷	Select the input source.				
	Launch the on-screen display (OSD) menu. Press again to exit OSD menu.				
?	Help Menu (only available when OSD menu is not shown).				
3	Automatically synchronize the projector to the input source.				
┛	Confirm your item selection.				
Select	Use $\blacktriangle \lor \blacklozenge \lor$ to select items or make adjustments to your selection.				
▲ / ▼	Use $\blacksquare$ $\blacksquare$ to adjust image distortion caused by tilting the projector ±40 degrees.				
۲.	Indicates the projector's lamp status.				
Ē	Indicates the projector's temperature status.				
Ú	Indicates the projector's status.				
	rol Panel () () () () () () () () () ()				



### **Remote Control Battery Installation**

1. Push the clip to release the battery cover.



2. Install new batteries (AAA/R03). Ensure that you have the batteries' polarity (+/–) aligned correctly.



 Close the battery cover and press it down until it clicks into place. Do not mix different types of batteries or new and old batteries.



To ensure safe operation, please observe the following precautions :

- Use AAA/R03 type batteries.
- Avoid contact with water or liquid.
- > Do not expose the remote control to moisture or heat.
- Do not drop the remote control.
- If the batteries have leaked in the remote control, carefully wipe the case clean and install new batteries.
- There is a risk of explosion if the batteries are replaced with the wrong type.
- Dispose of used batteries according to the instructions.
- Remove the batteries from the remote control when not using for extended periods.
- The remote control may fail to operate if the infrared remote sensor is exposed to bright sunlight or fluorescent lighting.



### **Remote Control**

AV Mute
+     +       Keystone     Volume       -     -
VGA         Video         HDMI           1         2         3           Aspect         5         (+6)           Page         Freeze         (2000)           Mouse         Picture         Mute           0
InFocus

AV Mute	Turns off audio and video until pressed again.
Re-Sync	Automatically synchronizes the projector to the input source.
Four Directional Select Keys	Use ▲ ▼ ◀ ► to navigate the menu and make selections. Can be used as computer mouse navigation from USB-A with Mouse Function enabled.
Menu	Launch the on-screen display (OSD) menu. Press again to exit OSD menu.
Keystone +/-	Adjust the image to compensate for distortion caused by tilting the projector.
VGA	Press to choose VGA source.
Video	Press to choose Video source.
HDMI	Press to cycle through all HDMI sources.
Page +/-	Use to send Page Up and Page Down functions with Mouse Function enabled.
Mouse	Turn on and off the Mouse Function.
Picture	Display the Picture Mode menu.
Power	Refer to the "Powering the Projector On / Off" section on pages 13-14.
Source	Select the input source.
Enter	Confirm your OSD selection. Can be used as computer mouse left click from USB-A when Mouse Function is enabled.
ECO	Display the Lamp "Brightness Mode" menu.
Volume +/-	Increase and decrease audio volume.
Aspect	Display the Aspect Ratio menu.
Zoom +/-	Increase or decrease the image magnification ratio.
Mute	Turns off audio until pressed again.
Freeze	Pauses the video source until pressed again.

## Using the HELP button

The HELP function ensures easy setup and operation.

Press the ? button on the control panel to open the Help Menu.





If no input source is detected, these Help menu screens are displayed.



If an input source is detected, these Help menu screens are displayed.

VGA input signal:







Please refer to the "Troubleshooting" section on pages 45-48 for more details.



		Image has slanted s	sides			
•	<ul> <li>If possible, reposition the projector so that is centered on the screen and below the bottom of the screen.</li> <li>Press [Keystone +/-] button until the sides are vertical on the remote control.</li> </ul>					
Ð	[Keystone +/-] [EXIT]	_				
- 🗢	UpDown	← Select	Menu Exit			
		Image is too small or to	o large			
	Adjust the Zoom Ring o Move the projector clos Press [Menu] button on go to Display   Format a [DISPLAY   Format]	In the top of the projector er to or futher from the si the remote control or pro and try the different settin	creen. ojector panel, igs.			
	[EXII]					
	UpDown	🖵 Select	<mark>Henu</mark> Exit			
		Image is unstable or flig	ckering.			
•	Use [Phase / Frequency	y] to correct it. or setting on your compu	ıter.			
•	[Phase] [Frequency] [EXIT]	_				



## **On-screen Display Menus**

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.

### How to operate

- 1. To open the OSD menu, press "Menu" on the remote control or the control panel.
- When the 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.</li>
- Use ▲ ▼ keys to select the desired item and adjust the settings using ◀▶ key.
- 4. Select the next item to be adjusted in the sub menu and adjust as described above.
- 5. Press "Enter" to confirm, and the screen will return to the previous menu.
- To exit, press "Menu" again. The OSD menu will return to the previous menu and the projector will automatically save the new settings.



English 24

### Menu Tree

Main Menu	Sub Menu	Settings		
IMAGE	Picture Mode			Presentation/Bright/Movie/sRGB/Blackboard/ User/3D
	Brightness			-50~50
	Contrast			-50~50
	Sharpness			1~15
	Color <sup>*1</sup>			-50~50
	Tint <sup>*1</sup>			-50~50
	Advanced	Gamma		Film/Video/Graphics/Standard
		BrilliantColor™		1~10
		Color Temp.		Warm/Medium/Cold
		Color Settings	Red/Green/Blue/ Cyan/Magenta/ Yellow	Hue/Saturation/Gain
			White	Red/Green/Blue
			Reset	
			Exit	
		Color Space	Analog	AUTO/RGB/YUV
			HDMI	AUTO/RGB(0~255)/RGB(16~235)/YUV <sup>*2</sup>
		Signal <sup>*3</sup>	Automatic	On/Off
			Phase	0~31
			Frequency	-10~10
			H. Position	-5~5
			V. Position	-5~5
			Exit	
		Exit		
DISPLAY	Format			4:3, 16:9, LBX, Native, Auto
	Edge Mask			0~10
	Zoom			-5~25
	Image Shift	Н		-100~100
		V		-100~100
	V Keystone			-40~40
	3D	3D Mode		Off/DLP-Link/IR
		3D->2D		3D/L/R
		3D Format⁴		AUTO/SBS/Top and Bottom/Frame Sequential
		3D Sync. Invert <sup>*4</sup>		On/Off
		Exit		



Main Menu	Sub Menu	Settings			
SETUP	Language			English / Deutsch / Français / Svenska / Español / Português / Polski / Nederlands / Hindi / Norsk / Filipino / Malay /Romanian / 紫 禮中文 / 簡体中文 / Suomi / <b>한국어</b> / Русский / Magyar / Čeština / འ་-ִ་ / ไทย / Türkçe / Dansk / Vietnamese / Indonesian	
	Projection			)_»   <sup>¬</sup> » «)_ «) <sup>¬</sup>	
	Menu Location				
	Audio	Mute		On/Off	
	Settings	Volume		0~10	
		Audio Input		Default/AUDIO1	
	Advanced	Logo		Default/Neutral	
		Exit			
OPTIONS	Input Source			VGA/HDMI1/HDMI2	
	Source Lock			On/Off	
	High Altitude			On/Off	
	Information Hide			On/Off	
	Keypad Lock			On/Off	
	Test Pattern			Grid/White	
	IR Function			On/Off	
	Background Color			Black/Red/Blue/Green/White	
	12V Trigger			On/Off/Auto 3D	
	Advanced	Direct Power On		On/Off	
		Auto Power Off (min)		0~180	



Main Menu	Sub Menu	Settings			
OPTIONS	Advanced	Sleep Timer (min)		0~990	
		Quick Resume		On/Off	
		Power Mode (Standby)		Active/Eco.	
		Exit			
	Lamp	Lamp Hours			
	Settings	Lamp Reminder		On/Off	
		Brightness Mode		Bright/Eco/Dynamic	
		Lamp Reset		Yes/No	
		Exit			
	Optional Filter Settings	Optional Filter Installed		Yes/No	
		Filter Usage Hours		0~99999	
		Filter Reminder		Off/300Hr/500Hr/800Hr/1000Hr	
		Filter Reset		Yes/No	
		Exit			
	Reset			Yes/No	



Note Please note that the on-screen display (OSD) menus vary according to the signal type selected and the projector work is signal type selected and the projector model you are using.

English

- \*1 Supported only for YUV sources.
- \* \*2 Supported only for HDMI sources.
- \* \*3 Supported only for Analog VGA sources.
- \*4 Only available when 3D is enabled.

## IMAGE



#### Picture Mode

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

- Presentation: Good color and brightness from PC input.
- Bright: Maximum brightness from PC input.
- Movie: For home theater.
- sRGB: Standardized accurate color.
- Blackboard: This mode should be selected to achieve optimum color settings when projecting onto a blackboard (green).
- User: User's settings.
- ▶ 3D: Recommended setting for when 3D function is enabled.

#### Brightness

Adjust the brightness of the image.

- ▶ Press ▶ to lighten the image.

#### Contrast

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

- ▶ Press ◀ to decrease the contrast.
- ▶ Press ▶ to increase the contrast.

#### Sharpness

Adjust the sharpness of the image.

- ▶ Press ◀ to decrease the sharpness.
- ▶ Press ▶ to increase the sharpness.

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

Adjust a video image from black and white to fully saturated color.

- ▶ Press ◀ to decrease the amount of saturation in the image.
- ▶ Press ▶ to increase the amount of saturation in the image.

#### Tint

Adjust the color balance of red and green.

- ▶ Press ◀ to increase the amount of green in the image.
- ▶ Press ▶ to increase the amount of red in the image.



 "Color" and "Tint" are only supported for YUV sources.



## IMAGE | Advanced



#### Gamma

This allows you to choose a degamma table that has been fine-tuned to bring out the best image quality for the input.

- Film: for home theater.
- Video: for video or TV source.
- Graphics: for image source.
- Standard: for PC or computer source.

#### <u>BrilliantColor</u>™

This adjustment utilizes a new color-processing algorithm and system level enhancements to enable higher brightness while providing true, more vibrant colors in the projected image. The range is from "1" to "10". If you prefer a stronger enhanced image, adjust toward the maximum setting. For a smoother, more natural image, adjust toward the minimum setting.

#### Color Temp

Select Cold for a bluer image. Select Warm for a redder image.

#### Color Settings

Press  $\checkmark$  to enter the menu shown below. Use  $\blacktriangle$  or  $\blacktriangledown$  to select the color to be adjusted.

IMAGE	DISPLAY	SETUP	OPTIONS
IMAGE   ADV	ANCED   Color	Settings	
Red			
Green			
Blue			
Cyan			
Magenta			
Yellow			
White			
Reset			
Exit			
🔶 UpDown	🖊 Se	lect Mer	u Exit

Red/Green/Blue/Cyan/Magenta/Yellow: Use ▲ or ▼ to select the function. Use ◀ or ▶ to adjust.

	Red	
Hue		0
Saturation		0
Gain		0
Exit		

 $\blacktriangleright$  White: Use  $\blacktriangle$  or  $\blacktriangledown$  to select the function. Use  $\blacktriangleleft$  or  $\blacktriangleright$  to adjust.

	White	
Red		0
Green		0
Blue	]	0
Exit	4	

Reset: Choose "Yes" to return the factory default settings for color adjustments.



#### Color Space

Select an appropriate color matrix type from AUTO, RGB, RGB(0-255)<sup>(\*)</sup>, RGB(16-235)<sup>(\*)</sup> or YUV.



## IMAGE | Advanced | Signal



 "Signal" adjustments are only available for Analog VGA (RGB) sources.

#### **Automatic**

Automatically selects the signal. If this function is turned on the manual phase and frequency controls will be disabled. When this option is disabled manual controls will be enabled and automatically saved when the device is power cycled.

IMAGE

Automatic

Frequency

V. Position

Exi

Phase

IMAGE | ADVANCED | Signal

47

🕳 Select

Of

Menu Exit

10 10

10

10

#### Phase

Synchronize the signal timing of the display with the graphics card. If the image appears to be unstable or flickers, use this function to correct it.

#### Frequency

Change the display data frequency to match the frequency of your computer's graphics card. Use this function only if the image appears to flicker vertically.

#### H. Position

- ▶ Press ◀ to move the image left.
- ▶ Press ▶ to move the image right.

#### V. Position

- ▶ Press ◀ to move the image down.
- ▶ Press ▶ to move the image up.





IMAGE	DISPLAY	SETUP	
DISPLAY			
Format		۱ ا	Native
Edge Mask	Þ		
Zoom	٩		• • •
Image Shift			
V Keystone			
3D			
Exit			
🔶 UpDown	🚽 Se	lect	Menu Exit

#### Format

Use this function to choose your desired aspect ratio.

- ▶ 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.
- Native: This format displays the original image without any scaling.
- LBX: This format is for non-16x9, letterbox sources.
- AUTO: Automatically selects the appropriate display format.

#### Edge Mask

Edge mask function removes the noise in a video image. Edge mask the image to remove video encoding noise on the edge of video sources.

#### Zoom

- ▶ Press ◀ to reduce the size of an image.
- ▶ Press ▶ to magnify an image on the projection screen.



 Each I/O has different setting of "Edge Mask".



#### Image Shift

Press  $\checkmark$  to enter the menu then use  $\blacktriangle$  or  $\blacktriangledown$  to select the function.



H: Use ◀ or ► to shift the projected image position horizontally.

V: Use ◀ or ► to Shift the projected image position vertically.

#### V Keystone

Press  $\blacktriangleleft$  or  $\blacktriangleright$  to adjust image distortion vertically. If the image looks trapezoidal, this option can help make the image rectangular.



## DISPLAY | 3D



- Compatible 3D source, 3D content and active shutter glasses are required for 3D viewing.
- "3D Sync Invert" is only available for DLP Link glasses.
- See page 56 for supported 3D formats.

#### 3D Mode

- Off: Select to turn off 3D.
- DLP Link: To turn on 3D settings and synchronize DLP Link 3D glasses.
- IR: To turn on 3D settings and synchronize IR or RF 3D glasses.

#### <u>3D -> 2D</u>

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

#### 3D Format

- Auto : When a 3D identification signal is detected, the 3D format is selected automatically.
- SBS: Use this mode for "Side-by-side" format 3D content.
- Top and Bottom: Use this mode for "Top and Bottom" format 3D content.
- Frame Sequential: Use this mode for "Frame Sequential" format 3D content.

#### 3D Sync. Invert

- Press "On" to invert left and right frame contents.
- Press "Off" for default frame contents.



## SETUP

		OE		) (	
IMAGE	DISPLAY	SETI	JP	OPTIC	ONS
SETUP					
Language			Engl	ish	
Projection			_ا		
Menu Location					
Audio Settings					
Advanced					
🔶 UpDown	🕶 Se	lect	Uer	Exit	

#### Language

Choose the multilingual OSD menu. Press  $\blacktriangleleft$  or  $\triangleright$  to enter the "Language" menu then use  $\blacktriangle$  or  $\blacktriangledown$  to select your preferred language. Press "Enter" to finalize the selection.

SETUP I Langu	age	
English		Magyar
Deutsch		Čeština
Français	Malay	
	Romanian	ไทย <sub>ว</sub>
Español	繁體中文	Türkçe
Português	简体中文	Dansk
Polski	Suomi	Tiếng Việt
Nederlands	한국어	Bahasa Indonesia
Hindi	Русский	
🔶 UpDown	🛹 Select	Menu Exit



Rear-Desktop and Rear-Ceiling are

to be used with a

translucent screen.

36

#### Projection



#### Front-Desktop

This is the default selection. The image is projected straight on the screen.

🕺 💻 Rear-Desktop

When selected, the image will appear reversed.



Front-Ceiling

When selected, the image will turn upside down.



Rear-Ceiling

When selected, the image will appear reversed in upside down position.



Menu Location

Choose the menu location on the display screen.



## | SETUP Audio Settings



#### Mute

- Choose "On" to turn mute on.
- Choose "Off" to turn mute off.

#### Volume

- ▶ Press ◀ to decrease the volume.
- ▶ Press ▶ to increase the volume.

#### Audio Input

- > Default: Set audio input according to the current input source.
- AUDIO1: Audio In becomes the audio source for VGA and video inputs.





## SETUP | Advanced

#### Logo

Use this function to set the desired startup screen. If changes are made they will take effect the next time the projector is powered on.

- Default: The default startup screen.
- > Neutral: Logo is not displayed on startup screen.



## **OPTIONS**

IMAGE	DISPLAY	SETUP	OPTIONS
OPTIONS			
Input Source			
Source Lock			Off 🕨 🕨
High Altitude			Off 🕨 🕨
Information Hid	le		Off 🕨 🕨
Keypad Lock			Off 🕨 🕨
Test Pattern			
IR Function			Off 🕨 🕨
Background Co	blor		Red 🕨 🕨
12V Trigger			Off 🕨 🕨
Advanced			
Lamp Settings			
Optional Filter	Settings		
Reset			
🔶 UpDown	🚽 Se	lect 🛛	enu Exit

#### Input Source

Use this option to enable / disable input sources. Press  $\checkmark$  to enter the sub menu and select which sources you require. Press "Enter" to finalize the selection. The projector will not search for inputs that are not selected.

#### Source Lock

- On: The projector will only search the current input selection.
- Off: The projector will search for other signals if the current input signal is lost.

#### High Altitude

When "On" is selected, the fans will spin faster. This feature is useful in high altitude areas where the air is thin.

#### Information Hide

- On: Choose "On" to hide source message.
- Off: Choose "Off" to show source message.

#### Keypad Lock

When the keypad lock function is "On", the control panel will be locked however, the projector can be operated by the remote control. By selecting "Off", you will be able to use the control panel once more.



To turn off the keypad lock, press and hold "Enter" key on top of the projector for 5 seconds.



#### Test Pattern

Display a test pattern. There are grid and white patterns.

#### IR Function

On: The projector can be operated by the remote control. When you change the setting from "Off" to "On", it will display a warning message:



Off: You will only be able to use the control panel keys. When you change the setting from "On" to "Off", it will display a warning message:



#### Background Color

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

#### 12V Trigger

- On: Choose "On" to trigger 12V output.
- Off: Choose "Off" to stop 12V output.
- Auto 3D: 12V Trigger output when the 3D Mode setting is set to DLP-Link or IR. Stop 12V output when the 3D Mode setting is set "Off".

#### Reset

Choose "Yes" to return the display parameters on all menus to the factory default settings.

English

## OPTIONS | Advanced



#### Direct Power On

- On: The projector will automatically power on when AC power is applied.
- ▶ Off: The projector will turn on by pressing the "U" key on the remote or keypad.

#### Auto Power Off (min)

Sets the countdown time interval in minutes. The countdown timer will start, when there is no signal being sent to the projector. The projector will automatically power off when the countdown has finished.

#### Sleep Timer (min)

Sets the countdown time interval in minutes. The countdown timer will start, with or without a signal being sent to the projector. The projector will automatically power off when the countdown has finished.

#### Quick Resume

- On: If the projector is accidentally turned off, this feature allows the projector to be instantly powered on again, if selected within a period of 100 seconds.
- Off: The fan will start cooling the system immediately when the user turns off the projector.

#### Power Mode (Standby)

- Eco.: Sets standby power to <0.5W.</p>
- Active: VGA output function available in standby.

## | OPTIONS Lamp Settings

IMAGE	DISPLAY	SETUP	OPTIONS
OPTIONS   L	amp Settings		
Lamp Hours	Ť		1500
Lamp Reminde			Off 🕨 🕨
Brightness Mod	le	٤ ا	Bright
Lamp Reset			
EXIL			
🔶 UpDown	🖊 Se	elect	Menu Exit

#### Lamp Hours

Displays the lamp hours of the current lamp.

#### Lamp Reminder

Choose this function to show or to hide the warning message when the changing lamp message is displayed.

The message will appear 30 hours before suggested replacement of the lamp.

#### Brightness Mode

- Bright: Sets lamp to highest power for maximum brightness.
- Eco.: Decreases lamp power for less brightness and extended lamp life.
- Dynamic: Increases and decreases lamp power based on the video source. Power consumption will vary from maximum to 30%, extending lamp life.

#### Lamp Reset

Resets the Lamp Hours counter. Should be used after replacing the lamp.



When ambient temperature is over 40°C in operating, the projector will switch to Eco automatically.



## OPTIONS | Optional Filter Settings

		0=		
IMAGE	DISPLAY	SETU	JP	OPTIONS
OPTIONS   Op	tional Filter Set	tings		
Optional Filter	Installed		Nc	
Filter Usage Ho	ours		_)_	250
Filter Reminder			500	
Filter Reset Exit				
🔶 UpDown	🛶 S	elect	Men	Exit

#### **Optional Filter Installed**

Select "Yes" to display warning message after a specified number of hours. Select "No" to turn off warning message.

The default setting for Filter is "No". After assembling filter, please turn on the projector then press "Menu", go to "Options -> Optional Filter Settings -> Optional Filter Installed" and select "Yes".

#### Filter Usage Hours

Displays the filter hours.

#### Filter Reminder

Select the number of hours until the filter message is displayed. (Factory default is 500Hr).

#### Filter Reset

Reset the dust filter counter after replacing or cleaning the dust filter.

## 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.

No image appears on-screen

- Ensure all the cables and power connections are correctly and securely connected as described in the "Installation" section.
- Ensure all the pins of connectors are not bent or broken.
- Ensure that the "AV Mute" feature is not turned on.
- Check if the projection lamp has been securely installed. Please refer to the "Replacing the lamp" section.

Partial, scrolling or incorrectly displayed image

- Press "Re-SYNC" on the remote control or control panel.
- If you are using a PC:

For Windows:

- 1. From the "Control Panel" select "Displays".
- 2. Select "Change Display Settings".
- 3. Verify that the display resolution is smaller than or equal to 1080p (1920 x 1080).



- If you are using a laptop:
  - 1. First, follow the steps above to adjust resolution of the computer.
  - Press the appropriate keys listed below for your notebook manufacturer to send signal out from notebook to projector. Example: [Fn]+[F4]

Acer ⇔	[Fn]+[F5]	IBM/Lenovo ⇔	[Fn]+[F5]
Asus ⇔	[Fn]+[F8]	HP/Compaq ⇔	[Fn]+[F5]
Dell ⇔	[Fn]+[F8]	NEC ⇔	[Fn]+[F5]
Gateway ⇔	[Fn]+[F4]	Toshiba ⇔	[Fn]+[F5]
Mac Apple: System Prefe display	erence ⇔ Dis∣	play ⇔ Arrangemen	t ⇔ Mirror

- If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.
- The screen of the computer is not displaying your presentation
- If you are using a Notebook PC Some Notebook PCs may deactivate their own screens when a second display device is in use. Each has a different way to be reactivated. Refer to your computer's manual for detailed

Image is unstable or flickering

information.

- ▶ Use "Phase" to correct it. See page 32 for more information.
- Change the monitor color setting on your computer.

Image has vertical flickering bar

- Use "Frequency" to make an adjustment. See page 32 for more information.
- Check and re-configure the display mode of your graphic card to make it compatible with the projector.

### Image is out of focus

- ▶ Rotate the focus ring until the image is clear. See page 16.
- Make sure the projector screen is within the required distance for your model. See page 17.

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 when the projector display mode is set to 16:9 in the OSD.
- If you play 4:3 format DVD titles, please change the format to 4:3 in the projector OSD.
- If the image is still stretched, you will also need to adjust the aspect ratio by referring to the following:
- Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player.

#### Image is too small or too large

- Turn the zoom lever to zoom in or out. See page 16.
- Move the projector closer to or further from the screen.
- ▶ Press the "Menu" button on the remote control, go to "Display → Format" and try the different settings.

#### Image has slanted sides

- If possible, reposition the projector so that it is horizontally centered on the screen and below the bottom of the screen.
- Press the "Keystone +/-" button on the remote control until the sides are vertical.
- Use "Display → V Keystone" from the OSD to make an adjustment. Use the ▲ and ▼ keys to make the adjustment from the keypad.

Image is reversed

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



 Use of Keystone is not recommended.



The projector stops responding to all controls

- Check that "Keypad Lock" is not activated by trying to control the projector with the remote control.
- If possible, turn off the projector, then unplug the power cord and wait at least 60 seconds before reconnecting power.

### Blurry double image

Enter the 3D control menu to switch "Off" the 3D feature if normal 2D images are blurry or double images.

Two images, side-by-side format

Change 3D settings to "SBS", see page 35.

Image does not display in 3D

- Check if the 3D glasses are turned on.
- Make sure the batteries of the 3D glasses are not exhausted.
- Verify that 3D is set to DLP LINK and the correct 3D format is selected, see page 35.

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 51-52.

### LED indicators

Not lighted ⇔ ○ Lighted red ⇔ ● Lighted blue ⇔ ● Blinking red ⇔ ○ ● Blinking blue ⇔ ○ ●

	Ċ		¥
Message	On/Standby LED	Temp LED	Lamp LED
	(Blue/Red)	(Red)	(Red)
Standby State	•	0	0
Power on (Warming)	$\bigcirc ullet$	0	0
Lamp lighting		0	0
Power off (Cooling)	$\bigcirc ullet$	0	0
Error (Over Temp.)	$\bigcirc igodot$	•	0
Error (Fan fail)	$\bigcirc igodot$	$\bigcirc igodot$	0
Error (Lamp fail)	$\bigcirc igodot$	0	•



### On Screen Messages

Temperature warning:

Warning! TEMPERATURE TOO HIGH
Please:
1. Make sure air in and outlets are not blocked.
2. Make sure the environment temperature is under 45 degree C.
If the problem persists in spite of the above.
Please contact a service centre for repaiir.

Fan failed:



Lamp warning:



Out of display range:



If the remote control does not work

- Verify that the angle of the remote to the IR receiver is within ±20 degrees.
- Make sure there are not any obstructions between the remote control and the projector. Move to within 7m of the projector.
- Make sure the batteries are inserted correctly.
- Replace batteries if they are exhausted.
- > Turn off any fluorescent lights that are illuminating the IR receiver.
- Make sure that IR Function is turned "On" in the Options menu.

## **Replacing the Lamp**

The projector automatically detects the lamp life. When the lamp life is nearing the end of use, you will receive a warning message.



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 may be hot! Allow it to cool down before changing the 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.





- The screws 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. Skin oils can cause the lamp to shatter. Use a dry cloth to clean the lamp module if it was accidentally touched.



#### → Lamp Replacement Procedure: →

- 1. Switch off the power to the projector by pressing the "U" button.
- 2. Allow the projector to cool down for at least 30 minutes.
- 3. Disconnect the power cord.
- 4. Unscrew the one screw on the cover. 1
- 5. Lift up and remove the cover. 2
- 6. Lift up the lamp handle. 3
- 7. Press on the both sides then lift up and remove the lamp cord. 4
- 8. Unscrew the one screw on the lamp module. 5
- 9. Remove the lamp module slowly and carefully. 6

To replace the lamp module, reverse the previous steps.

10. Turn on the projector and reset the lamp timer.

 $\begin{array}{l} \text{Lamp Reset: (i) Press "Menu"} \rightarrow \text{(ii) Select "Options"} \rightarrow \text{(iii) Select} \\ \text{"Lamp Settings"} \rightarrow \text{(iv) Select "Lamp Reset"} \rightarrow \text{(v) Select "Yes".} \end{array}$ 

## Installing and Cleaning the Optional Dust Filter

### Installing the Dust Filter

Procedure:

- 1. Place the dust filter onto its compartment on the filter cover.
- 2. Install the filter cover onto its slot on the projector.
- Turn on the projector. Then press "Menu", go to "Options → Optional Filter Settings → Optional Filter Installed" and select "Yes".



 Dust filters are only required/ supplied in selected regions with excessive dust.



### **Cleaning the Dust Filter**

We recommend cleaning 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 "U" button.
- 2. Disconnect the power cord.
- 3. Remove the filter cover from the projector. 1
- 4. Remove the dust filter from the filter cover. 2
- 5. Clean or replace the dust filter. 3
- 6. To install the dust filter, reverse the previous steps.
- Reset the dust filter counter after replacing or cleaning the dust filter. Press "Menu", go to "Options → Optional Filter Settings → Filter Reset".

Turn on the projector, then press "Menu", "Options  $\rightarrow$  Optional Filter Settings  $\rightarrow$  Optional Filter Installed" and select "No" when you pull out the dust filter and do not reinstall it.



## **Compatibility Modes**

## Computer/Video/HDMI/Mac Compatibility



- For widescreen resolution, the compatibility support is dependent on Notebook/PC models.
- Please note that using resolutions other than native 1080p (1920 × 1080), may result in some loss of image clarity.
- 120Hz input signals may be dependent on graphic card's support.

Signal	Resolution	Refresh Rate (Hz)	Video	Analog	HDMI	Mac
NTSC	720 x 480	60	0	-	-	-
PAL/SECAM	720 x 576	50	0	-	-	-
	640 x 480	60	-	0	0	0
	640 x 480	67	-	0	-	-
VGA	640 x 480	72.8	-	0	-	0
	640 x 480	85	-	0	-	0
	800 x 600	56.3	-	0	-	-
	800 x 600	60.3	-	0	0	0
SVGA	800 x 600	72.2	-	0	0	0
	800 x 600	85.1	-	0	0	0
	800 x 600	120	-	0	0	-
	1024 x 768	48	-	0	0	
	1024 x 768	50	-	0	0	
	1024 x 768	60	-	0	0	0
XGA	1024 x 768	70.1	-	0	0	0
	1024 x 768	75	-	0	0	0
	1024 x 768	85	-	0	0	0
	1024 x 768	120	-	0	0	-
WSVGA	1024 x 600	60	-	-	0	-
	1280 x 720	50	0	0	0	-
HDTV (720p)	1280 x 720	60	0	0	0	0
	1280 x 720	120	-	0	0	-
	1280 x 1024	60	-	0	0	0
SXGA	1280 x 1024	75	-	0	0	0
	1280 x 1024	85	-	0	0	-
SXGA+	1400 x 1050	60	-	0	0	-
UXGA	1600 x1200	60	-	0	0	-
	1920 x 1080	24	0	0	0	-
	1920 x 1080	30	-	-	0	-
(1080p) או עח	1920 x 1080	50	0	0	0	-
	1920 x 1080	60	0	0	0	0
	1920 x 1080	50	0	-	0	-
HUTV (1080I)	1920 x 1080	60	0	-	0	-



Signal	Resolution	Refresh Rate (Hz)	Video	Analog	HDMI	Mac
	1920 x 1200	50	-	0	0	-
WUXGA	1920 x 1200	60	-	0	0	0
SDTV (576i)	720 x 576	50	0	-	0	-
SDTV (576p)	720 x 576	50	0	-	0	-
SDTV (480i)	720 x 480	60	0	-	0	-
SDTV (480p)	720 x 480	60	0	-	0	-

## 3D Input Video Compatibility

		Input Timing			
		1280 x 720p @ 50Hz	Top-and-Bottom		
		1280 x 720p @ 60Hz	Top-and-Bottom		
		1280 x 720p @ 50Hz	Frame packing		
	HDMI 1.4a 3D	1280 x 720p @ 60Hz	Frame packing		
	mpar	1920 x 1080i @ 50 Hz	Side-by-Side (Half)		
		1920 x 1080i @ 60 Hz	Side-by-Side (Half)		
		1920 x 1080p @ 24 Hz	Top-and-Bottom		
Innut		1920 x 1080p @ 24 Hz	Frame packing		
Input Resolution	HDMI 1.3 3D Content	1920 x 1080i @ 50Hz		While 3D Format is "SBS"	
		1920 x 1080i @ 60Hz	Side-by-Side (Half)		
		1280 x 720p @ 50Hz			
		1280 x 720p @ 60Hz			
		1920 x 1080i @ 50Hz		While 3D Format is "Top and Bottom"	
		1920 x 1080i @ 60Hz	Top-and-Bottom		
		1280 x 720p @ 50Hz			
		1280 x 720p @ 60Hz			
		480i	HQFS	While 3D Format is "Frame sequential"	



## RS232 Commands and Protocol Function List

### **RS232 Pin Assignments**



Pin no.	Spec. (from projector side)
1	N/A
2	RXD
3	TXD
4	N/A
5	GND
6	N/A
7	N/A
8	N/A
9	N/A



### **RS232 Protocol Function List**

Baud Rate:19200 Parity Bit: None Data Bit: 8 Stop Bit: 1 Lamp Ignition delay = 20s Power Down delay = 10s Source change delay = 8s Intercommand delay minumum = 5ms Intercharacter delay minumum = 2ms

Power		return code (ok)	
Status ?	(PWR?)	(0-1,n) n=0,1	
ON	(PWR1)		
OFF	(PWR0)		
ON & return	(PWR1!)	(0-1,1)	
OFF & return	(PWR0!)	(0-1,0)	
Blank Key		return code (ok)	
Status ?	(BLK?)	(0-1,n) n=0,1	
ON	(BLK1)		
OFF	(BLK0)		
ON & return	(BLK1!)	(0-1,1)	
OFF & return	(BLK0!)	(0-1,0)	
Source		return code (ok)	
Status ?	(SRC?)	(0-22,n) n=0-22	
Computer1	(SRC0)		
HDMI1	(SRC4)		
HDMI2	(SRC5)		
Computer1 & return	(SRC0!)	(0-22,0)	
HDMI1 & return	(SRC4!)	(0-22,4)	
HDMI2 & return	(SRC5!)	(0-22,5)	
Aspect		return code (ok)	
Status ?	(ARZ?)	(0-6,n) n=0,1,2,3,4,6	
Auto	(ARZ0)		
Native	(ARZ1)		

English

Aspect		return code (ok)	
4 X 3	(ARZ2)		
16 X 9	(ARZ3)		
Letterbox	(ARZ4)		
Auto & return	(ARZ0!)	(0-6,0)	
Native & return	(ARZ1!)	(0-6,1)	
4 X 3 & return	(ARZ2!)	(0-6,2)	
16 X 9 & return	(ARZ3!)	(0-6,3)	
Letterbox & return	(ARZ4!)	(0-6,4)	
Lamp Low Power(ECO M	lode)	return code (ok)	
Status ?	(IPM?)	(0-1,n) n=0,1	
ON	(IPM1)		
OFF	(IPM0)		
ON & return	(IPM1!)	(0-1,1)	
OFF & return	(IPM0!)	(0-1,0)	
Volume	return code (ok)		
Status ?	(VOL?)	(0-10,nn) n=0~10	
volume +	(VOL+)		
volume -	(VOL-)		
Set volume	(VOLnn) n=0 ~ 10		
volume + & return	(VOL+!)	(0-10,nn) n=0~10	
volume - & return	(VOL-!)	(0-10,nn) n=0~10	
Set volume & return	(VOLnn!) n=0 ~ 10	(0-10,nn) n=0~10	
Mute		return code (ok)	
Status ?	(MTE?)	(0-1,n) n=0,1	
ON	(MTE1)		
OFF	(MTE0)		
ON & return	(MTE1!)	(0-1,1)	
OFF & return	(MTE0!)	(0-1,0)	
Firmware Version		return code (ok)	
Status ?	(FVS?)	(nnnn) n=x.x.xx	
Lamp ECO Hours		return code (ok)	
Status ? (LME?)		(0-65535,n) n=lamp hours	
Lamp Normal Hours	5	return code (ok)	
Status ?	(LMO?)	(0-65535,n) n=lamp hours	
Lamp Dynamic Hours		return code (ok)	
Status ?	(LML?)	(0-65535,n) n=lamp hours	

Lamp Hours	return code (ok)		
Status ?	(LMP?)	(0-65535,n) n=lamp hours	
Total ECO Hours	return code (ok)		
Status ?	(LTE?)	(0-65535,n) n=lamp hours	
Total Normal Hours	;	return code (ok)	
Status ?	(LTO?)	(0-65535,n) n=lamp hours	
Total Dynamic Hour	s	return code (ok)	
Status ?	(LTL?)	(0-65535,n) n=lamp hours	
Total Hours		return code (ok)	
Status ?	(LMT?)	(0-65535,n) n=lamp hours	
Lamp Hours Reset Tin	nes	return code (ok)	
Status ?	(LMR?)	(0-65535,n) n=lamp reset times	
Lamp hours reset	-	return code (ok)	
Execute lamp hour reset	(LRT1)		
Ceiling Set		return code (ok)	
Status ?	(CEL?)	(0-3,n) n=0,1,2,3	
Front table	(CEL0)		
Front ceiling	(CEL1)		
rear table	(CEL2)		
rear ceiling	(CEL3)		
Front table & return	(CEL0!)	(0-3,0)	
Front ceiling & return	(CEL1!)	(0-3,1)	
rear table & return	(CEL2!)	(0-3,2)	
rear ceiling & return	(CEL3!)	(0-3,3)	
Brightness		return code (ok)	
Status ?	(BRT?)	(0-100,nn) n=0~100	
Brightness +	(BRT+)		
Brightness -	(BRT-)		
Set Brightness	(BRTnn) n=0 ~ 100		
Brightness + & return	(BRT+!)	(0-100,nn) n=0~100	
Brightness - & return	(BRT-!)	(0-100,nn) n=0~100	
Set Brightness & return	(BRTnn!) n=0 ~ 100	(0-100,nn) n=0~100	
Contrast		return code (ok)	
Status ?	(CON?)	(0-100,nn) n=0~100	
Contrast +	(CON+)		
Contrast -	(CON-)		
Set Contrast	(CONnn) n=0 ~ 100		
Contrast + & return	(CON+!)	(0-100,nn) n=0~100	

English

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Contrast		return code (ok)	
Contrast - & return	(CON-!)	(0-100,nn) n=0~100	
Set Contrast & return	(CONnn!) n=0 ~ 100	(0-100,nn) n=0~100	
Presets		return code (ok)	
Status ?	(PST?)	(0-13,n) n=0-13	
User	(PST1)		
Presentation	(PST5)		
Movie	(PST7)		
Bright	(PST10)		
sRGB	(PST11)		
Blackboard	(PST12)		
User & return	(PST1!)	(0-13,1)	
Presentation & return	(PST5!)	(0-13,5)	
Movie & return	(PST7!)	(0-13,7)	
Bright & return	(PST10!)	(0-13,10)	
sRGB & return	(PST11!)	(0-13,11)	
Blackboard & return	(PST12!)	(0-13,12)	
Freeze		return code (ok)	
Status ?	(FRZ?)	(0-1,n) n=0-1	
Freeze ON	(FRZ1)		
Freeze OFF	(FRZ0)		
Freeze ON & return	(FRZ1!)	(0-1,1)	
Freeze OFF & return	(FRZ0!)	(0-1,0)	
Key Pad		return code (ok)	
Menu	(NAV0)		
Up	(NAV1)		
Down	(NAV2)		
Select	(NAV3)		
Left	(NAV4)		
Right	(NAV5)		
Menu & return	(NAV0!)	(0-5,0)	
Up & return	(NAV1!)	(0-5,1)	
Down & return	(NAV2!)	(0-5,2)	
Select & return	(NAV3!)	(0-5,3)	
Left & return	(NAV4!)	(0-5,4)	
Right & return	(NAV5!)	(0-5,5)	

3.5

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## **Ceiling Mount Installation**

To prevent damage to your projector, please use only approved InFocus ceiling mounts: https://www.infocus.com/accessories/mounts

To use a ceiling mount, please ensure the screws used to attach a mount to the projector meet the following specifications:

- Screw type: M4\*3
- Minimum screw length: 10mm



Unit: mm



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English

## **Regulation & Safety Notices**

This appendix lists the general notices for your projector.

## FCC Notice

This device has been tested and found to comply with the limits for a Class B 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, the user 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 B digital apparatus complies with Canadian ICES-003.

# *Remarque à l'intention des utilisateurs canadiens*

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

### Declaration of Conformity for EU countries

- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU

## **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.

