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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.

#### **Class B emissions limits**

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### Important Safety Instruction

- 1. Do not block any ventilation openings. To ensure reliable operation of the projector and to protect from over heating, it is recommended to install the projector in a location that does not block ventilation. As an example, do not place the projector on a crowded coffee table, sofa, bed, etc. Do not put the projector in an enclosure such as a book case or a cabinet that restricts air flow.
- 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 emits heat.
- 4. Clean only with dry cloth.
- 5. Only use attachments/accessories specified by the manufacturer.
- 6. Do not use the unit if it has been physically damaged or abused. Physical damage/abuse would be (but not limited to):
  - Unit has been dropped.
  - Power supply cord or plug has been damaged.
  - Liquid has been spilled on to the projector.
  - Projector has been exposed to rain or moisture.
  - ☐ Something has fallen in the projector or something is loose inside. Do not attempt to service the unit yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please call Optoma before you send the unit for repair.
- 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.
- 8. See projector enclosure for safety related markings.
- 9. The unit should only be repaired by appropriate service personnel.



#### **Precautions**



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

- 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 44-45.
- Warning- This projector will detect the life of the lamp itself. Please be sure to change the lamp when it shows warning messages.
- Warning- Reset the "Lamp Reset" function from the on-screen display "OPTIONS | Lamp Settings" menu after replacing the lamp module (refer to page 38).
- 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- Do not use lens cap when projector is in operation.
- Warning- When the lamp is approaching the end of its lifetime, the message "Lamp Warning: Lamp life exceeded." will show on the screen. Please contact your local reseller or service center to change the lamp as soon as possible.
- Warning- Do not look into or point the laser pointer on your remote control into your or someone's eyes. Laser pointer can cause permanent damage to eyesight.

#### 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.

#### Do not:

- Block the slots and openings on the unit provided for ventilation.
- 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 35°C.
    - ▶ Relative Humidity is 5 35°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, adequately supervise students when they are asked to point out something on the screen.
- In order to minimize the lamp power, use room blinds to reduce ambient light levels.

#### **Product Features**

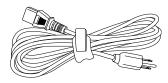
- WXGA (1280x800) Native resolution
- HD compatible 1080p supported
- BrilliantColor<sup>™</sup> Technology
- Security Bar and Kensington Lock
- RS232 control
- Rapid shutdown
- Built-in speaker

### **Package Overview**

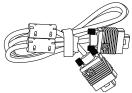
Unpack and inspect the box contents to ensure all parts listed below are in the box. If something is missing, please contact your nearest customer service center.



Projector with lens cap



Power Cord 1.8m



VGA Cable 1.8m



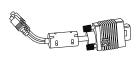
Due to different applications in each Country, some regions may have different accessories.



2 × AAA Batteries



IR Remote Control



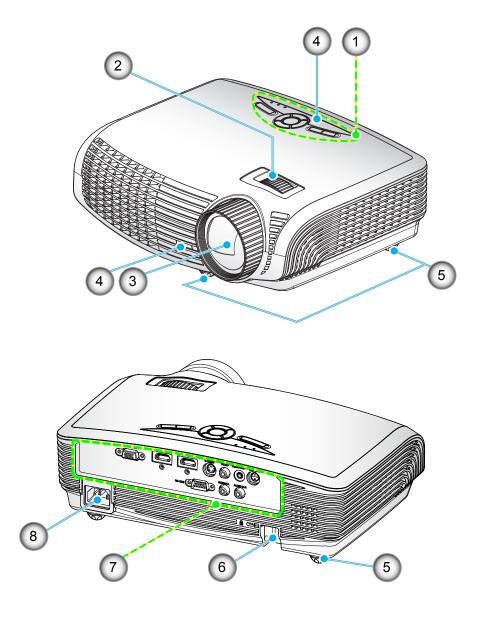
VGA/RCA Adaptor

#### Documentation:

- ✓ User's Manual
- ✓ Warranty Card
- ✓ Quick Start Card
- WEEE Card (for EMEA only)

### **Product Overview**

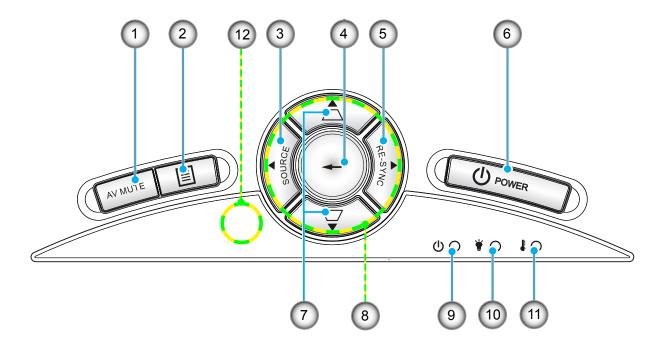
### Main Unit



- 1. Control Panel
- 2. Focus Ring
- 3. Lens
- 4. IR Receivers
- 5. Tilt-Adjustment Feet
- 6. Security Bar
- 7. Input / Output Connections
- 8. Power Socket

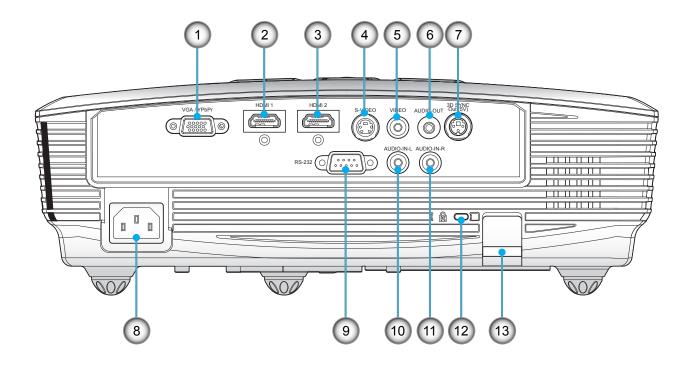


#### **Control Panel**



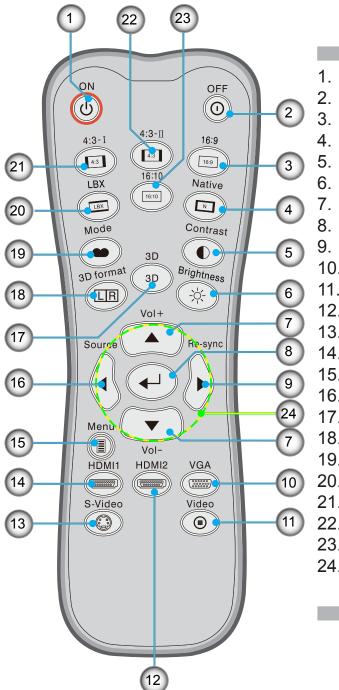
- 1. AV Mute
- 2. Menu
- 3. Source
- 4. Enter
- 5. Re-Sync
- 6. Power
- 7. Keystone Correction
- 8. Four Directional Select Keys
- 9. On/Standby LED
- 10. Lamp LED
- 11. Temp LED
- 12. IR Receiver

### **Input/Output Connections**



- VGA/YPbPr/ Connector (PC Analog Signal/Component Video Input/HDTV/YPbPr)
- 2. HDMI 1 Connector
- 3. HDMI 2 Connector
- 4. S-Video Input Connector
- 5. Composite Video Input Connector
- 6. Audio Output Connector (3.5mm Mini Jack)
- 7. 3D Sync Out (5V)
- 8. Power Socket
- 9. RS-232 Connector (9-pin)
- 10. Left RCA Audio Input Connector
- 11. Right RCA Audio Input Connector
- 12. Kensington™ Lock Port
- 13. Security Bar

#### **Remote Control**



- 1. Power On
- 2. Power Off
- 3. 16:9
- 4. Native
- 5. Contrast
- 6. Brightness
- 7. Vol+/-
- 8. Enter
- 9. Re-Sync
- 10. VGA Source
- 11. Video Source
- 12. HDMI 2 Source
- 13. S-Video Source
- 14. HDMI 1 Source
- 15. Menu
- 16. Source
- 17. 3D
- 18. 3D format
- 19. Mode
- 20. LBX
- 21. 4:3-I
- 22. 4:3-II
- 23. 16:10
- 24. Four Directional Select Keys

### **Connecting the Projector**

### **Connect to Computer/Notebook**



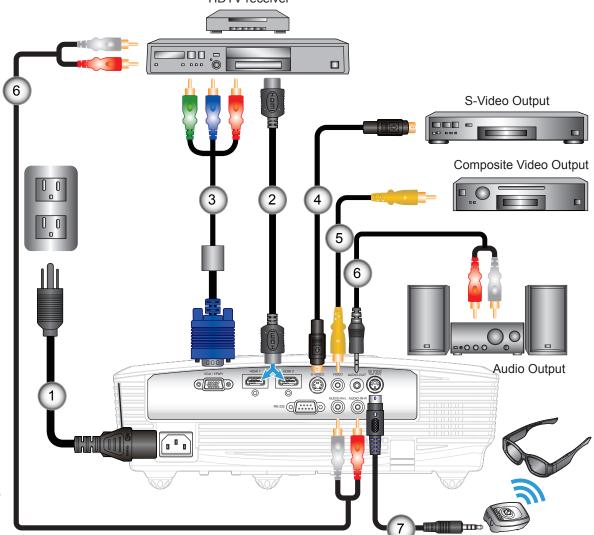


- Due to the difference in applications for each country, some regions may have different accessories.

1	Power Cord
2	*DVI/HDMI Cable
3	VGA Cable
4	*RS232 Cable
5	*Audio Input Cable
6	*Emitter cable

#### **Connect to Video Sources**

DVD Player, Set-top Box, HDTV receiver





- Due to the difference in applications for each country, some regions may have different accessories.
- (\*) Optional accessory

1	Power Cord
2	*HDMI Cable
3	VGA/RCA Adaptor
4	
5	
6	*Audio Cable Jack/RCA
7	*Emitter cable

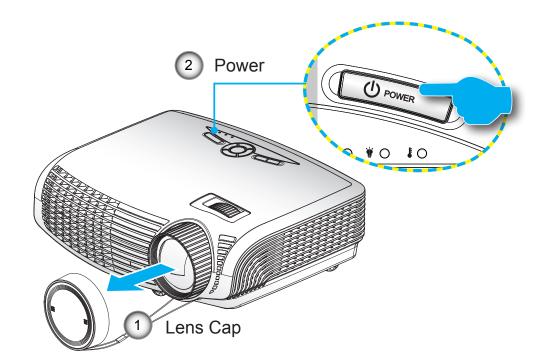
### **Powering On/Off the Projector**

#### **Powering On the Projector**

- 1. Remove the lens cap. 0
- 2. Securely connect the power cord and signal cable. When connected, the ON/STANDBY LED will turn Amber.
- 3. Turn on the lamp by pressing "**U**" button either on the top of the projector or on the remote. The ON/STANDBY LED will now turn Green. **2**

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.

- 4. 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, push 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.





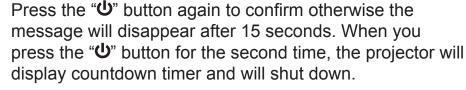
Turn on the projector first and then select the signal sources.

### **Powering Off the Projector**

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

The following message will be displayed on the screen.





- The cooling fans continue to operate for about 10 seconds for cooling cycle and the ON/STANDBY LED will Flash Green. When the ON/STANDBY LED lights solid Amber, the projector has entered standby mode.
  - If you wish to turn the projector back on, you must wait until the projector has completed the cooling cycle and has entered standby mode. Once in standby mode, simply press "**U**" button to restart the projector.
- 3. Disconnect the power cord from the electrical outlet and the projector.
- 4. Do not turn on the projector immediately following a power off procedure.

#### **Warning Indicator**

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

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

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



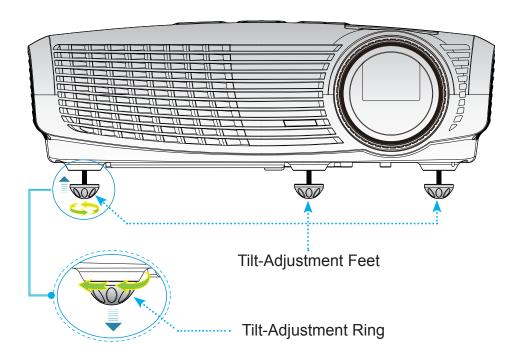


Contact the
 nearest service
 center if the
 projector displays
 these symptoms.
 See pages
 54-55 for more
 information.

# Adjusting the Projected Image Adjusting the Projector's Height

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

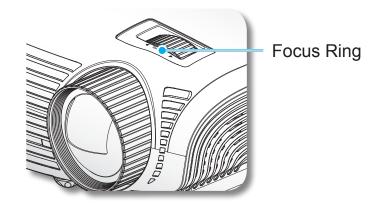
- 1. Locate the adjustable foot you wish to modify on the underside of the projector.
- 2. Rotate the adjustable ring clockwise to raise the projector or counter clockwise to lower it. Repeat with the remaining feet as needed.



### **Adjusting the Projector's Focus**

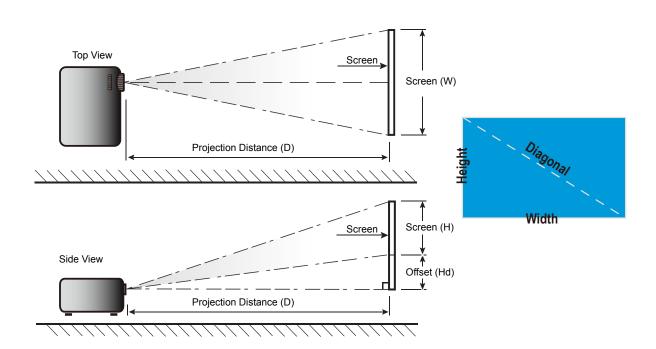
To focus the image, rotate the focus ring until the image is clear.

WXGA series: The projector will focus at distances from 1.64 to 16.40 feet (0.5 to 5.0 meters).



### **Adjusting Projection Image Size**

WXGA series: Projection Image Size from 34.0" to 322.0" (0.8 to 8.2 meters).

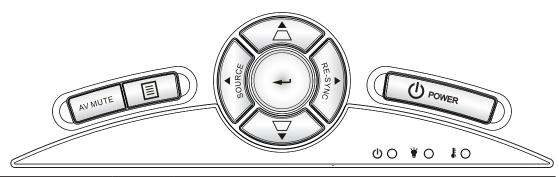


### WXGA

Diagonal length	Screen Size W x H				Projection Distance (D)		Offset (Hd)	
(inch) size of	(m)		(inch)		(m)	(feet)	Olise	ι (Πu)
16:10 Screen	Width	Height	Width	Height	wide	wide	(m)	(feet)
36.30	0.78	0.49	30.78	19.24	0.56	-	0.06	0.20
44.00	0.95	0.59	37.31	23.32	0.68	2.24	0.07	0.24
60.00	1.29	0.81	50.87	31.80	0.93	3.05	0.10	0.33
70.00	1.51	0.94	59.35	37.10	1.09	3.56	0.12	0.38
80.00	1.72	1.08	67.83	42.40	1.24	4.07	0.13	0.44
90.00	1.94	1.21	76.31	47.69	1.40	4.58	0.15	0.49
100.00	2.15	1.35	84.79	52.99	1.55	5.09	0.17	0.55
120.00	2.58	1.62	101.75	63.59	1.86	6.10	0.20	0.66
150.00	3.23	2.02	127.19	79.49	2.33	7.63	0.25	0.82
180.00	3.88	2.42	152.62	95.39	2.79	9.16	0.30	0.99
250.00	5.38	3.37	211.98	132.49	3.88	12.72	0.42	1.37
302.00	6.50	4.07	256.07	160.04	4.68	15.36	0.50	1.65
362.00	7.80	4.87	306.94	191.84	5.61	18.41	0.60	1.98

This table is for user's reference only.

# Control Panel & Remote Control Control Panel



Using the Control Panel			
POWER ()		Refer to the "Power On/Off the Projector" section on pages 13-14.	
RE-SYNC		Automatically synchronize the projector to the input source.	
Enter	<b>→</b>	Confirm your item selection.	
SOURCE		Press "SOURCE" to select an input signal.	
Menu		Press "Menu" to launch the on-screen display (OSD) menu. To exit OSD, Press "Menu" again.	
AV MUTE		Momentarily turns off/on the audio and video.	
Four Direction Select Keys	al	Use ▲ ▼ ◀▶ to select items or make adjustments to your selection.	
Keystone		Use  ☐ ☐ to adjust image distortion caused by tilting the projector. (±40 degrees)	
Lamp LED	₩ ○	Indicate the projector's lamp status.	
Temp LED	<b>&amp;</b> O	Indicate the projector's temperature status.	
ON/STAND- BY LED	<b>U</b> O	Indicate the projector's status.	

#### **Remote Control**





Using the Remote Control			
Power On	ტ	Refer to the "Power On" section on page 13.	
Power Off	0	Refer to the "Power On/Off the Projector" section on page 14.	
Mode	•	Select the display mode from Cinema, Bright, Photo, Reference and User.	
4:3-I	4:3	Scale the image at a 4:3-I (960x720) aspect ratio.	
4:3-II	4:3	Scale the image at a 4:3-II (1066x800) aspect ratio.	
16:9	16:9	Scale the image at a 16:9 (1280x720) aspect ratio.	
16:10	16:10	Scale the image at a 16:10 (1280x800) aspect ratio.	
LBX	LBX	Enable the viewing of the letterboxed nonan- amorphically enhanced movie at full screen width. Part of the original image will be lost if the image aspect ratio is less than 2.35:1.	
Native	N	The input source will be displayed without scaling.	
Brightness	->	Adjust the brightness of the image.	
Contrast	•	Control the degree of difference between the lightest and darkest parts of the picture.	
3D Format	LR	For Broadcast 3D signals in "3D format".	
3D	3D	Press the "3D" to turn the 3D OSD menu on/ off.	
Vol+ / Vol -		Adjust to increase / decrease the volume.	



### Using the Remote Control

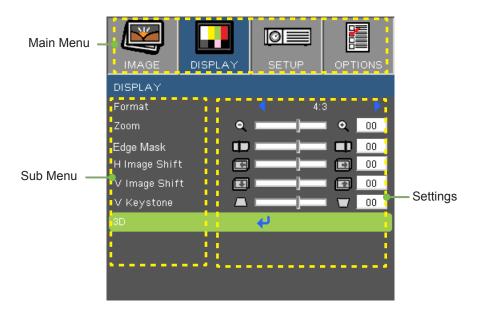
Enter		Confirm your item selection.		
Litter		Committi your item selection.		
Source		Press "Source" to select an input signal.		
Re-sync		Automatically synchronizes the projector to the input source.		
Menu		Display or exit the on-screen display menus for projector.		
HDMI 1	(**************************************	Press "HDMI 1" to choose source from HDMI 1 connector.		
HDMI 2	(**************************************	Press "HDMI 2" to choose source from HDMI 2 connector.		
VGA	000000	Press "VGA" to choose source from VGA/SCART/YPbPr connector.		
S-Video		Press "S-Video" to choose S-Video source.		
Video	•	Press "Video" to choose Composite video source.		
Four Directional Select Keys		Use ▲ ▼ ◀▶ to select items or make adjustments to your selection.		

### **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 Projector Keypad.
- When OSD is displayed, use ◀ ▶ keys to select any item in the main menu. While making a selection on a particular page, press ▼ or "Enter" key to enter sub menu.
- 3. 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 main menu.
- 6. To exit, press "MENU" again. The OSD menu will close and the projector will automatically save the new settings.



#### **Menu Tree**

Main Menu	Sub Menu		Settings
Image	Display Mode		Cinema / Bright / Presentation / Game / Blackboard / Classroom / 3D / User
	Brightness		-50 ~ +50
	Contrast		-50 ~ +50
	Sharpness	-	1~15
	*1 Color	_	-50 ~ +50
	#1 Tint		-50 ~ <b>+</b> 50
	Advanced	Gamma	Film / Video / Graphics / Standard
		BrilliantColor™	0~10
		Color Temp.	Warm / Medium / Cold
		Color	Red Gain / Green Gain / Blue Gain / Red Bias / Green Bias / Blue Bias / Cyan / Magenta / Yellow / Reset / Exit
		Color Space	AUTO / RGB / YUV
			**2 AUTO / RGB (0-255) / RGB (16-235) / YUV
		Input Source	VGA / S-Video / Video / HDMI 1 / HDMI 2
		Exit	
Display	Format		4:3-I / 4:3-II / 16:9 / 16:10 / LBX / Native / AUTO
	Edge Mask		0~10
	Zoom		-5 ~ <b>+</b> 25
	V Image Shift	_	-50 ~ +50
	V Keystone	_	-40 ~ +40
	3D	( 3D Mode	DLP-Link / VESA 3D
		3D -> 2D	3D / L / R
		3D Format	Auto / SBS / Top and Bottom / Frame Sequential
		#3 3D Sync. Invert	On / Off
		Exit	
Setup	Language		English / Deutsch / Français / Italiano / Español / Português / Svenska / Nederlands / Norsk/Dansk / Polski / Suomi / Русский / ελληνικά / Magyar / Čeština / عربي / فارسی / 繁體中文 / 简体中文 / 日本語 /한국어 / ไทย / Türkçe
	Projection		
	Menu Location		
	<sup>#4</sup> Signal	Automatic	Enable / Disable
		Frequency (VGA)	-5~5
		Phase (VGA)	0~63
		H. Position (VGA)	-5~5
		V. Position (VGA)	-5~5
		Exit	

Main Menu	Sub Menu		Settings
Setup	Security	Security	On / Off
		Security Timer	Month / Day / Hour
		Change Password	
		Exit	
	Projector ID		0~99
	Audio Settings	Internal Speaker	On / Off
		Mute	On / Off
		Volume	0~10
		Audio Input	Default / Audio / HDMI
		Exit	
Options	Source Lock		On / Off
оршоно	High Altitude		On / Off
	Information Hide		On / Off
	Keypad Lock		On / Off
	Background Color		Black / Red / Blue / Green / White
	Test Pattern		None / Grid / White Pattern
	Advanced	Oirect Power On	On / Off
		Auto Power Off (min.)	0~180
		Sleep Timer (min.)	0~995
		Exit	
	Lamp Settings		
		Lamp Reminder	On / Off
		Brightness Mode	STD / Bright
		Lamp Reset	Yes / No
		Exit	
	Reset		Yes / No



- Please note that the on-screen display (OSD) menus vary according to the signal type selected and the projector model you are using.
- (#1) "Color" and "Tint" are only supported in Video mode.
- (#3) "3D Sync Invert" is only available when 3D is enabled.
- (#4) "Signal" is only supported in Analog VGA (RGB) signal.





#### Display 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.
- ▶ Cinema: For home theater.
- ▶ Game: For game mode.
- ▶ Blackboard: This mode should be selected to achieve optimum color settings when projecting onto a blackboard (green).
- Classroom: This mode is recommended for projecting in a classroom.
- ▶ User: User's settings.
- ▶ 3D: Recommended setting for 3D mode enabled. Any further adjustments by the user in 3D will be saved in this mode for further use.

#### Contrast

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

- ▶ Press the ▶ to increase the contrast.

#### **Brightness**

Adjust the brightness of the image.

- ▶ Press the ◀ to darken image.
- ▶ Press the ▶ to lighten the image.

#### Color

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

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

#### Tint

Adjust the color balance of red and green.

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

#### **Sharpness**

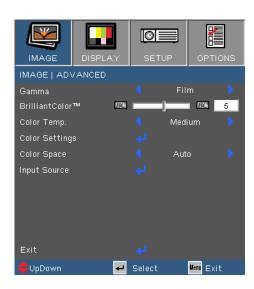
Adjust the sharpness of the image.

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



"Color" and "Tint" functions are only supported under Video mode.

### IMAGE | Advanced



#### BrilliantColor™

This adjustable item utilizes a new color-processing algorithm and system level enhancements to enable higher brightness while providing true, more vibrant colors in picture. The range is from "0" 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.

#### Gamma

This allows you to set up gamma curve type. After the initial setup and fi ne 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 image source.
- Standard: for standardized setting.

#### Color Temp

If set to cold temperature, the image looks more blue. (cold image) If set to warm temperature, the image looks more red. (warm image)

#### Color Settings

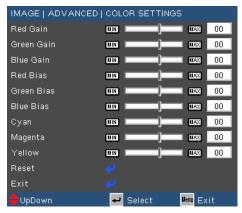
Press 

into the next menu as below and then use 

or 

to select item.

- Red/Green/Blue/Cyan/Magenta/Yellow: Use ◀ or ▶ to select Red, Green, Blue, Cyan, Magenta and Yellow Colors.
- ▶ Reset: Choose "Yes" to return the factory default settings for color adjustments.



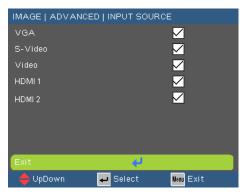


#### Color Space

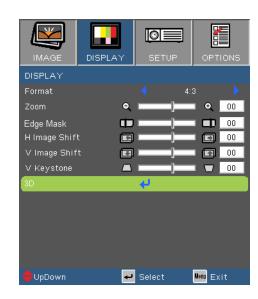
Select an appropriate color matrix type from AUTO, RGB, RGB(0-255)<sup>(\*)</sup>, RGB(16-235)<sup>(\*)</sup> or YUV.

#### 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.



### DISPLAY



#### **Format**

Use this function to choose your desired aspect ratio.

- ▶ 4:3-I: This format is for 4×3-I input sources.
- ▶ 4:3-II: This format is for 4×3-II input sources.
- ▶ 16:9: This format is for 16×9 input sources, like HDTV and DVD enhanced for Wide screen TV.
- ▶ 16:10: This format is for 16×10 input sources, like widescreen laptops.
- ▶ LBX: This format is for non-16x9, letterbox source and for users who use external 16x9 lens to display 2.35:1 aspect ratio using full resolution.
- Native: This format displays the original image without any scaling.
- ▶ AUTO: Automatically selects the appropriate display format.

Aspect ratio	Resize image	
(source detected)	WXGA model	
4:3-I	960 x 720 center	
4:3-II	1066 x 800 center	
16:9	1280 x 720 center	
16:10	1280 x 800 center	
LBX	1280 x 960 center, then get the central 1280 x 800 image to display	
Native	Resize image of native change to above description not pixels resolution.	



- Each I/O has different setting of "Edge Mask".
- "Edge Mask" and "Zoom" can't work at same time.

Detail informations about LBX mode:

 Some Letter-Box DVDs are not enhanced for 16x9 TVs. In this situation, the image will not look right when displayed in 16:9 mode.

In this situation, please try to using the 4:3 mode to view the DVD.

If the content is not 4:3, there will be black bars around the image in 16:9 display. For this type of content, you can use LBX mode to fill the image on the 16:9 display.

2. If you use an external anamorphic lens, this LBX mode also allows you to watch a 2.35:1 content (include Anamorphic DVD and HDTV film source) that support anamorphic wide is enhanced for 16x9 Display in a wide 2.35:1 image.

In this case, there are no black bars. Lamp power and vertical resolution are fully utilized.

#### Zoom

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

#### 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 source.

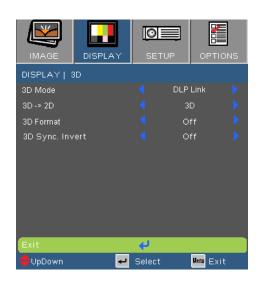
#### V Image Shift

Shift the projected image position vertically.

#### V Keystone

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

### DISPLAY | 3D





- "3D sync. Invert" function wouldn't save the setting. It will set to "Off" when powers on and changes source.
- 3D Format is only supported on 3D Timing on page 49.

#### 3D Mode

- ▶ DLP Link: Select "DLP Link" to use optimized settings for DLP Link 3D images. (For DLP glasses, please refer to page 15).
- VESA 3D: Select "VESA 3D" to use optimized setting for VESA 3D images. (For 3D emitter, please refer to page 13).

#### 3D -> 2D

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

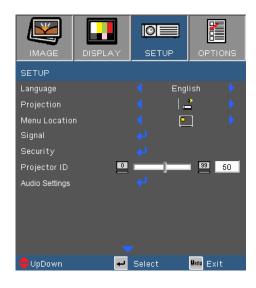
#### 3D Format

- ▶ Auto: When a 3D identification signal is detected, the 3D format is selected automatically.
- ▶ SBS: 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.

#### 3D Sync. Invert

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





#### Language

Choose the multilingual OSD menu. Press ◀ or ▶ into the sub menu and then use the ▲ or ▼ key to select your preferred language. Press "Enter" to finalize the selection.



 Rear-Desktop and Rear-Ceiling are to be used with a translucent screen.



#### <u>Projection</u>

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.

#### Projector ID

ID definition can be set up by menu (range 0~99), and allow user control an individual projector by RS232. Refer to pages 50~53 for the complete list of RS232 commands.

### SETUP | Security



#### Security

- On: Choose "On" to use security verification when the turning on the projector.
- Off: Choose "Off" to be able to switch on the projector without password verification.



Pass-code default value is "1234" (first time).

#### **Security Timer**

Can be select the time (Month/Day/Hour) function to set the number of hours the projector can be used. Once this time has elapsed you will be requested to enter your password again.

#### Change Password

- First time:
  - 1. Press "←" to set the password.
  - 2. The password has to be 4 digits.
  - 3. Use number button on the remote to enter your new password and then press "←" key to confirm your password.
- Change Password:
  - 1. Press "←" to input old password.
  - 2. Use number button to enter current password and then press "←" to confirm.
  - 3. Enter new password (4 digits in length) using the number buttons on the remote, then press "←" to confirm.
  - 4. Enter new password again and press "←" to confirm.

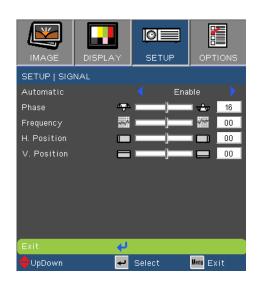


- ▶ If the incorrect password is entered 3 times, the projector will automatically shut down.
- If you have forgotten your password, please contact your local office for support.

### SETUP | Signal



 "Signal" is only supported in Analog VGA (RGB) signal.



#### <u>Automatic</u>

Automatically selects the singal. If you use this function, the Phase, frequency items are grayed out, and if Signal is not automatic, the phase, frequency items will appear for user to manually tune and saved in settings after that for next time projector turns off and on again.

#### 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.

#### <u>Frequency</u>

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.

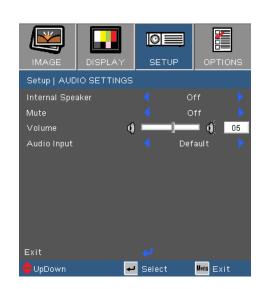
#### H. Position

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

#### V. Position

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

# SETUP | Audio Settings



#### Internal Speaker

Choose the "On" or "Off" to turn on or off the internal speaker.

#### Mute

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

#### Volume

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

#### Audio Input

The default audio settings are on the back panel of the projector. Use this option to reassign any of the Audio Inputs to the current image source.

- ▶ AUDIO: Audio connector port.
- ▶ HDMI: HDMI connector port.

### **User Controls**

### **OPTIONS**



#### Source Lock

- ▶ On: The projector will only search current input connection.
- 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 the info message.
- ▶ Off: Choose "Off" to show the "searching" 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 reuse the control panel.

### Background Color

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

### Test Pattern

Display a test pattern. There are Grid, White pattern and None.

### Reset

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



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

### **User Controls**

# OPTIONS | Advanced



### **Direct Power On**

Choose "On" to activate Direct Power mode. The projector will automatically power on when AC power is supplied, without pressing the "U" key on the projector control panel or on the remote control.

### Auto Power Off (min)

Sets the countdown timer interval. 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 (in minutes).

### Sleep Timer (min)

Sets the countdown timer interval. 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 (in minutes).

### **User Controls**

# OPTIONS | Lamp Settings



### Lamp Hours

Display the projection time.

### 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 lamp.

### Brightness Mode

- ▶ STD: Choose "STD" to dim the projector lamp which will lower power consumption and extend the lamp life.
- ▶ BRIGHT: Choose "BRIGHT" to increase the brightness.
- Image AI: Image AI improves the contrast of the picture by optimizing the brightness of the lamp according to the picture content. Image AI helps to ensure that details in dark scenes are visible, whilst maintaining bright and vivid images.

### <u>Lamp Reset</u>

Reset the lamp hour counter after replacing the lamp.

### **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.
- ▶ Check if the projection lamp has been securely installed. Please refer to the "Replacing the lamp" section.
- Make sure you have removed the lens cap and the projector is switched on.
- Ensure that the "AV mute" feature is not turned on.

### Partial, scrolling or incorrectly displayed image

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

#### For Windows 95, 98, 2000, XP, Windows 7:

- 1. Open the "My Computer" icon, the "Control Panel" folder, and then double click on the "Display" icon.
- 2. Select the "Settings" tab.
- 3. Verify that your display resolution setting is lower than or equal to UXGA ( $1600 \times 1200$ ).
- 4. Click on the "Advanced Properties" button.

If the projector is still not projecting the whole image, you will also need to change the monitor display you are using. Refer to the following steps.

- 5. Verify the resolution setting is lower than or equal to UXGA  $(1600 \times 1200)$ .
- 6. Select the "Change" button under the "Monitor" tab.

- 7. Click on "Show all devices". Next, select "Standard monitor types" under the SP box; choose the resolution mode you need under the "Models" box.
- 8. Verify that the resolution setting of the monitor display is lower than or equal to UXGA (1600 × 1200).
- If you are using a Notebook:
  - 1. First, follow the steps above to adjust resolution of the computer.
  - 2. Press the appropriate keys listed below for your notebook manufacturer to send signal out from notebook to projector. Example: [Fn]+[F4]

Acer ⇒ Asus ⇒ Dell ⇒ Gateway ⇒	[Fn]+[F5]	IBM/Lenovo ⇔	[Fn]+[F7]
	[Fn]+[F8]	HP/Compaq ⇔	[Fn]+[F4]
	[Fn]+[F8]	NEC ⇔	[Fn]+[F3]
	[Fn]+[F4]	Toshiba ⇔	[Fn]+[F5]
Mac Apple: System Prefedisplay	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 Notebook or PowerBook 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 information.
- Image is unstable or flickering
- ▶ Use "Phase" to correct it. See page 35 for more information.
- ▶ Change the monitor color setting on your computer.
- Image has vertical flickering bar
- Use "Frequency" to make an adjustment. See page 35 for more information.
- ▶ Check and reconfigure the display mode of your graphic card to make it compatible with the projector.

### ? Image is out of focus

- Make sure the lens cap is removed.
- Adjust the Focus Ring on the projector lens.
- Make sure the projection screen is between the required distance. See page 16.

### 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

- ▶ Move the projector closer to or further from the screen.
- Press "Menu" button on the remote control or projector panel, 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 " $\Box$  /  $\Box$ " on the projector panel, until the sides are vertical.

### ? 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
- ▶ If possible, turn off the projector, then unplug the power cord and wait at least 60 seconds before reconnecting power.
- Check that "Keypad Lock" is not activated by trying to control the projector with the remote control.
- 2 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 44-45.

### ? LED lighting message

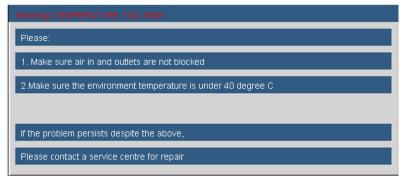
Message	<b>少</b> ○ ON/STANDBY LED	<b>▮</b> ○ Temp-LED	₩ ○ Lamp-LED
	(Green/Amber)	(Red)	(Red)
Standby State (Input power cord)	Amber	0	0
Power on (Warming)	Flashing Green	0	0
Lamp lighting	Green	0	0
Power off (Cooling)	Flashing Green	0	0
Error (Over Temp.)	Flashing Amber	**	0
Error (Fan fail)	Flashing Amber	Flashing	0
Error (Lamp fail)	Flashing Amber	0	*



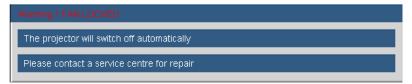
<sup>\*</sup> ON/STANDBY LED be ON when OSD appears, be OFF when OSD disappears.

### ? On Screen Messages

Temperature warning:



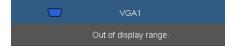
Fan failed:



Lamp warming:



Out of display range:



- ? If the remote control does not work
- ▶ Check the operating angle of the remote control is within ±15° both horizontally and vertically of one of the IR receivers on the projector.
- ▶ Make sure there are not any obstructions between the remote control and the projector. Move to within 7 m (±0°) of the projector.
- ▶ Make sure the batteries are inserted correctly.
- ▶ Replace batteries if they are exhausted.

### 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.

### ⚠ A CAUTION!

HIGH PRESSURE LAMP MAY EXPLODE IF IMPROPERLY HANDED. REFER TO LAMP REPLACEMENT INSTRUCTIONS.

#### ATTENTION:

Les lampes à haute pression peuvent exploser si elles sont mal utilisées.

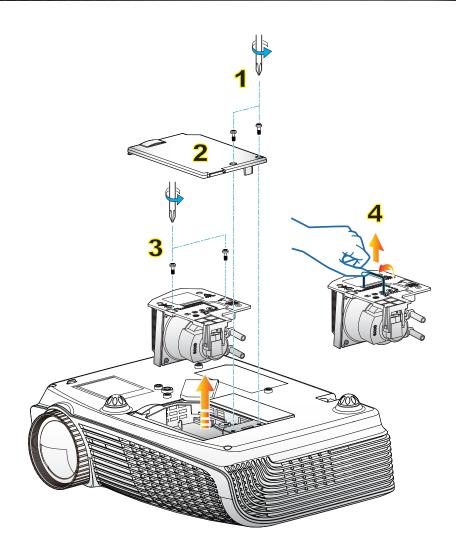
Confier l'entretien à une personne qualifiée.

⚠ 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."

 Marning: 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. Hand oil can cause the lamp to shatter. Use a dry cloth to clean the lamp module if it was accidentally touched.



### Lamp Replacement Procedure: o-

- 1. Switch off the power to the projector by pressing the "**ம**" button.
- 2. Allow the projector to cool down for at least 30 minutes.
- 3. Disconnect the power cord.
- 4. Unscrew the two screws on the cover. 1
- 5. Lift up and remove the cover. 2
- 6. Unscrew the two screws on the lamp module. 3
- 7. Lift up the lamp handle and remove the lamp module slowly and carefully. 4
  To replace the lamp module, reverse the previous steps.
- 8. Turn on the projector and use "Lamp Reset" after the lamp module is replaced.

Lamp Reset: (i) Press "Menu" → (ii) Select "OPTIONS" → (iii) Select "Lamp Settings" → (iv) Select "Lamp Reset" → (v) Select "Yes".

### **Compatibility Modes**

### Computer Compatibility

Mada	Decelution	V-Syn	c (Hz)	H-Synd	c (KHz)
Mode	Resolution	Anglog	Digital	Anglog	Digital
VGA	640 × 350	70	70	31.50	31.50
VGA	640 × 350	85	85	37.90	37.90
VGA	640 × 400	85	85	37.90	37.90
VGA	640 × 480	60	60	31.50	31.50
VGA	640 × 480	67	67	-	-
VGA	640 × 480	72	72	37.90	37.90
VGA	640 × 480	75	75	37.50	37.50
VGA	720 × 400	70	70	31.50	31.50
VGA	720 × 400	85	85	37.90	37.90
SVGA	800 × 600	56	56	35.20	35.20
SVGA	800 × 600	60	60	37.90	37.90
SVGA	800 × 600	72	72	48.10	48.10
SVGA	800 × 600	75	75	46.90	46.90
SVGA	800 × 600	120	120	-	-
XGA	1024 × 768	60	60	48.40	48.40
XGA	1024 × 768	70	70	56.50	56.50
XGA	1024 × 768	75	75	60.00	60.00
XGA	1024 × 768	120	120	-	-
WXGA	1280 × 800	60	60	49.68	49.64
SXGA	1280 × 1024	60	60	63.98	63.98
	1366 × 768	60	60	-	-
	1440 × 900	60	60	55.94	55.94
	1680 × 1050	60	60	-	-
SXGA+	1400 × 1050	60	60	63.98	63.98
UXGA	1600 × 1200	60	60	75.00	75.00
WSXGA+	1680 × 1050	60	60	65.00	65.00
HD	1280 × 720	60	60	45.00	45.00
HD	1280 × 720	120	120	-	-
HD	1920 × 1080	60	60	-	-



- For widescreen resolution (WXGA), the compatibility support is dependent on Notebook/PC models.
- 120Hz input signals may be dependent on graphics cards support.

### Computer Compatibility

Mode	Resolution	V-Sync (Hz)	H-Sync (KHz)
MAC LC 13"	640 × 480	66.66	34.98
MAC II 13"	640 × 480	66.68	35.00
MAC 16"	832 × 624	74.55	49.73
MAC 19"	1024 × 768	75	60.24
MAC	1152 × 870	75.06	68.68
MAC G4	640 × 480	60	31.35
i MAC DV	1024 × 768	75	60.00
i MAC DV	1152 × 870	75	68.49

### Video Compatibility

NTSC	M (3.58MHz), 4.43 MHz
PAL	B, D, G, H, I, M, N
SECAM	B, D, G, K, K1, L
SDTV/HDTV	480i/p, 576i/p, 720p@50Hz/60Hz, 1080i/p@50Hz/60Hz

### **▶ 3D input Compatibility**

HDMI 1.4a 3D timing	3									
Formats	Modes	Resolution	V.Frequency	H.Frequency	Pixel Rate	DLP link	VESA 3D	Auto 3D format	Auto detection of L/R frame	3D to 2D
			[Hz]	[KHz]	[MHz]					
	720p	1280x720	50	75	148.5	0	0	0	0	0
Frame Packing	720p	1280x720	60	90	148.5	0	0	0	0	0
	1080p	1920x1080	24	54	148.5	0	0	0	0	0
	720p	1280x720	50	37.5	74.25	0	0	0	0	0
Top and Bottom	720p	1280x720	60	45	74.25	0	0	0	0	0
	1080p	1920x1080	24	27	74.25	0	0	0	0	0
Side by Side (half)	1080i	1920x1080	50(25)	33.75	74.25	0	0	0	0	0
Side by Side (ffair)	1080i	1920x1080	60(30)	33.75	74.25	0	0	0	0	0

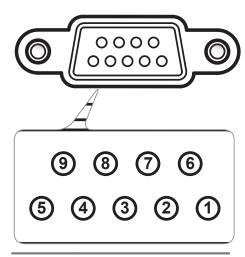
Formats	Modes	Resolution	V.Frequency	H.Frequency	Pixel Rate	DLP link	VESA 3D	Auto 3D format	Auto detection of L/R frame	3D to 2E
Tomats	modes	Resolution	[Hz]	[KHz]	[MHz]					
	SVGA	800x600	120	76.3	73.25	0	0	х	Х	0
Frame Sequential	XGA	1024x768	120	97.6	115.5	0	0	х	Х	0
	720p	1280x720	120/60			0	0	х	Х	0
011 1 011 11 10	1080i	1920x1080	50(25)	33.75	74.25	0	0	х	Х	0
Side by Side (half)	1080i	1920x1080	60(30)	33.75	74.25	0	0	х	Х	0
T 00 " " "	1080i	1920x1080	50(25)	33.75	74.25	0	0	х	Х	0
Top & Bottom (half)	1080i	1920x1080	60(30)	33.75	74.25	0	0	x	Х	0

VGA 1.3 3D timing										
Formats	Modes	Resolution	V.Frequency	H.Frequency	Pixel Rate	DLP link	VESA 3D	Auto 3D format	Auto detection of L/R frame	3D to 2D
Formats Mod	wodes	Resolution	[Hz]	[KHz]	[MHz]					
	SVGA	800x600	120	76.3	73.25	0	0	х	Х	х
Frame Sequential	XGA	1024x768	120	97.6	115.5	0	0	х	Х	х
	720p	1280x720	120/60			0	0	х	Х	Х

CVBS/S-Video	CVBS/S-Video											
Formats	Modes	Modes	Resolution	V.Frequency	H.Frequency	Pixel Rate	DLP link	VESA 3D	Auto 3D format	Auto detection of L/R frame	3D to 2D	
Formats		S Resolution	[Hz]	[KHz]	[MHz]							
Frame Sequential	NTSC	720x480	60	15.73		0	0	х	Х	х		
i rame sequential	PAL	720x576	50	15.63		0	0	х	Х	х		

# 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**

Optoma Data and HT Projectors

GT75

 Baud Rate
 9600

 Data Bits
 8

 Parity
 None

 Stop Bits
 1

 Flow Control
 None

 UART16550 FIFO
 Disable

Power Power Power On with Password Ressync AV Mute Mute Freeze Unfreeze Zoom Plus Zoom Minus	Pı	rojector ID  Function	Comr On/Off	mand ID			space	variable Pass	carriage return Fail									
Power On with Password Re-sync AV Mute Mute Freeze Unfreeze Zoom Plus		Function	On/Off	1			ASCII	Pass	Fail									
Power On with Password Re-sync AV Mute Mute Freeze Unfreeze Zoom Plus		Function	On/Off				ASCII	Pass	Fail									
Power On with Password Re-sync AV Mute Mute Freeze Unfreeze Zoom Plus			On/Off															
Re-sync AV Mute Mute Freeze Unfreeze Zoom Plus		ļ				n=1/n=0 & 2	~XX00 n	P	F									
AV Mute Mute Freeze Unfreeze Zoom Plus			<del> </del>	+			~XX00 1 ~nnnn ~XX01 n	P P	F									
Mute Freeze Unfreeze Zoom Plus		<del>                                     </del>	On/Off	+		n=1/n=0 & 2	~XX01 n ~XX02 n	P	F									
Freeze Unfreeze Zoom Plus			On/Off	<u> </u>		n=1/n=0 & 2	~XX03 n	P	F									
Zoom Plus						n=1	~XX04 n	P	F									
Zoom Minus			<del> </del>			n=0 & 2 n=1	~XX05 n	P	F									
			<u> </u>			n=1	~XX06 n	P	F									
ı		HDMI 1				n=1	~XX12 n	P										
		HDMI 2 VGA 1	<del> </del>			n=15 n=5												
Direct Source Commands		VGA 1 SCART		1		n=7												
		VGA 1 Component				n=8												
		S-Video Video	<del> </del>	+		n=9 n=10												
		Presentation	<del>                                     </del>	+		n=1	~XX20 n	P	F									
		Cinema				n=11												
		Bright User	<u> </u>	-		n=2 n=5												
	Display Mode	Blackboard	<del>                                     </del>	+		n=7												
		Classroom				n=8												
		3D				n=9												
	Brightness	Game	<del> </del>	+		n=12 n= -50 - +50	~XX21 n	P	F									
	Contrast			+		n= -50 - +50	~XX2111 ~XX22 n	P	F									
	Sharpness					n= 1- +15	~XX23 n	Р	F									
	Tint			_		n= -50 - +50	~XX44 n	P	F									
	Color		<del> </del>	Red Gain		n= -50 - +50 n= -50 - +50	~XX45 n ~XX24 n	P	F									
		1	İ	Green Gain		n= -50 - +50	~XX25 n											
		1	İ	Blue Gain		n= -50 - +50	~XX26 n											
		1	İ	Red Bias Green Bias		n= -50 - +50 n= -50 - +50	~XX27 n											
		Color Settings	RGB Gain/Bias	Blue Bias		n= -50 - +50 n= -50 - +50	~XX28 n ~XX29 n											
		1	1	Cvan	Gain	n= -50 - +50	~XX30 n											
IMAGE		1	1	Yellow	Gain	n= -50 - +50	~XX31 n											
		1	1	Magenta Reset	Gain	n= -50 - +50 n=1	~XX32 n ~XX33 n											
		BrilliantColor™		Reset		n= 0 - 10	~XX34 n	Р	F									
	Advanced		Film			n=1	~XX35 n	P	F									
		Gamma	Video			n=2	~XX35 n											
		Gaillilla	Graphics PC\Standard	<del>                                     </del>		n=3	~XX35 n ~XX35 n											
			PCIStandard Warm	+		n=4 n=1	~XX35 n ~XX36 n	P	F									
		Color Temp.	Medium	1		n=2	7010011		·									
		,	Cold			n=3												
		1	Auto		L	n=1	~XX37 n	P	F									
		Color Space	RGB \ RGB (0-255)* RGB(16 - 235)*	* supports when detected	HDMI IS	n=2 n=4												
		1	YUV			n=3												
		HDMI 1				n=1	~XX39 n	P	F									
		HDMI 2	<del> </del>	+		n=7												
	Input Source Filters	VGA 1 S-Video	<del> </del>	+		n=5 n=9												
		Video		1		n=10												
			4:3			n=1	~XX60 n	P	F									
			16:09 16:10	+		n=2 n=3												
		Format	LBX	+		n=5												
		Format	Native			n=6												
		1	AUTO			n=7												
			4:3-II			n=10												
		Edge masking				n = 0 - 10	~XX61 n	P	F									
		Zoom H Image Shift	<del> </del>	+		n=0-10 n= -50 - +50	~XX62 n ~XX63 n	P P	F									
		V Image Shift		†		n= -50 - +50	~XX64 n	P	F									
DISPLAY		V Keystone				n= -50 - +50	~XX66 n	P	F									
		1	3D Mode	DLP Link/VESA		n=1/ <b>n=3</b>	~XX230 n											
		1	35 Mode	3D	<u> </u>	11-1/11-3	AA230 II	Р	F									
		1			2D->2D; 3D-													
		1	3D->2D	3D/L/R	>3D / 3D->L /3D->R	n=0/n=1/n=2	~XX400 n	_	_									
		3D Settings	<del> </del>		/3D=2K			Р	F									
		1	ĺ	SBS/Top and	Decoding	n=4/												
		1	3D Format		HUMIT.3 3D	n=1/ n=3/n=4/n=5	~XX405 n											
		1	İ	Auto	timing													
			3D Sync. Invert	On/Off		n=0/n=1	~XX231 n											
		English				n=1	~XX70 n	P	F									
		German French	<del> </del>	+	$\vdash$	n=2 n=3												
		Italian		1		n=4												
		Spanish				n=5												
		Portuguese		_		n=6												
		Polish Dutch	<del></del>	+		n=7 n=8												
ļ ,		Swedish		1		n=9												
	Language	Norwegian/Danish				n=10												
SETUP		Finnish				n=11												
SETUP		Greek Traditional Chinese	<del> </del>	+		n=12 n=13			-									
SETUP					ļ	F		F	F									
SETUP		Simplified Chinese				n=14												
SETUP		Simplified Chinese Japanese				n=15												
SETUP		Simplified Chinese Japanese Korean				n=15 n=16												
SETUP		Simplified Chinese Japanese				n=15												

~	X	X	X		X	X		n	CR
Lead Code		rojector ID	Comm	and ID			space	variable	carriage return
		Arabic Thai				n=20 n=21			
	Language	Turkish				n=22			
		Farsi Front-Desktop				n=23 n=1	~XX71 n	P	F
	Projection	Rear-Desktop				n=2			
		Front-Ceiling Rear-Ceiling				n=3 n=4			
		Top Left				n=1	~XX72 n	P	F
	Menu Location	Top Right Centre				n=2 n=3			
		Bottom Left				n=4			
SETUP		Bottom Right Automatic	Enable/Disable			n=5 n=1/n=0	~XX91 n		
	0:1	Frequency				n= -5 - +5	~XX73 n	P	F
	Signal	Phase H. Position				n= 0 - 63 n= -5 - +5	~XX74 n ~XX75 n	P P	F F
		V. Position				n= -5 - +5	~XX76 n	P	F
	Security	Security Timer Change Password	Month/Day/Hour			nnnnn	~XX77 n send ba	P ck the password to	F confirm
		Security	On/Off			n=1/n=0 & 2	~XX78 n	P	F
	Projector ID Internal Speaker		On/Off			n=00-99 n=1/n=0 & 2	~XX79 n ~XX310 n	P P	F F
	Mute		On/Off			n=1/n=0 & 2	~XX80 n	P P	F
	Volume					n=0-10	~XX81 n	P	F
	Audio Input Source Lock		Default/Audio/HDMI On/Off			n=1/n=2/n=6 n=1/n=0 & 2	~XX89 n ~XX100 n	P	F F
	High Altitude		On/Off			n=1/n=0 & 2	~XX101 n	Р	F
	Information Hide		On/Off On/Off			n=1/n=0 & 2	~XX102 n ~XX103 n	P P	F
	Keypad Lock test Pattern		None / Grid / White Pattern			n=1/n=0 & 2 n=0/n=1/n=2	~XX195 n		·
		Blue				n=1	~XX104 n	P	F
	Background Color	Black Red				n=2 n=3			
		Green				n=4			
		White Direct Power On	On/Off			n=5 n=1/n=0 & 2	~XX105 n	P	F
		Auto Power Off (min)				n=0-180	~XX106 n	Р	F
OPTIONS	Advanced								
		Sleep Timer (min)				n=000-995	~XX107 n	Р	F
		Lamp Hour Lamp Reminder	On/Off			n=1 n=1/n=0 & 2	~XX108 n ~XX109 n	nnnn P	F F
		Brightness Mode	Bright/STD			n=1/n=2	~XX10911 ~XX110 n	P	F
		Lamp Reset	Yes No			n=1 n=2	~XX111 n	P	F
			Yes			n=1	~XX112 n	P	F
	Reset		No			n=2			·
Information from Projector Auto when:	Standby Mode					a=0		INFOa	
wileli.	Warming up					a=0 a=1		INFOa	
	Cooling Down					a=2		INFOa	
	Out of Range Lamp Fail					a=3 a=4		INFOa	
	Thermal Switch Error					a=5			
	Fan Lock Over Temperature				<del></del>	a=6 a=7			
	Lamp Hours Running Out					a=8			
READ/Return Information from	projector								
	Information					n=1	~XX150 n	Okabbbbccdddde	
		a = Power State	Off\On			a=0/1			
						hhhh			
		b = Lamp Hour c = Input Source Commands	None			bbbb c=00			
		b = Lamp Hour	VGA1			bbbb c=00 c=02			
		b = Lamp Hour				bbbb c=00			
		b = Lamp Hour	VGA1 S-Video Video HDM11			c=00 c=02 c=04 c=05 c=07			
		b = Lamp Hour	VGA1 S-Video Video			bbbb c=00 c=02 c=04 c=05			
		b = Lamp Hour c = Input Source Commands	VGA1 S-Video Video HDMI1 HDMI2 None			bbbb c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0			
		b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video HDMI1 HDMI2			bbbb c=00 c=02 c=04 c=05 c=07 c=08 dddd			
		b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video HDM1 HDM12 None Presentation Bright Cinema			bbbb c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=2 e=11			
		b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video Video HDMI1 HDMI2 None Presentation Bright Cinema User(1)			bbbb c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=2 e=11 e=5			
		b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video Video Video HDMI1 HDMI2  None Presentation Bright Cinema User(1) ISF Day / Blackboard ISF Night / Classroom			bbbb c=00 c=02 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=1 e=5 e=7 e=8			
		b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video HDM11 HDM12 None Presentation Bright Cinema User(1) ISF Day / Blackboard			bbbb c=00 c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=11 e=5 e=7 c=8 e=12 e=12			
		b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video Video HDMI1 HDMI2 None Presentation Bright Cinema User(1) ISF Day/ Blackboard ISF Night / Classroom Game			bbbb c=00 c=00 c=02 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=1 e=5 e=7 e=8 e=12 e=9			
	Model Name	b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video Video HDMI1 HDMI2  None Presentation Bright Ginema User(1) ISF Day/ Blackboard ISF Night / Classroom Game 3D		GT750 a=21	bbbb c=00 c=02 c=04 c=05 c=02 c=04 c=05 c=07 c=08 c=0 c=0 c=0 c=0 c=0 c=0 c=0 c=0 c=0 c=0	-XX151 n	Oka	
	Model Name	b = Lamp Hour c = Input Source Commands d = Firmware Version	VGA1 S-Video Video Video HDMI1 HDMI2 None Presentation Bright Cinema User(1) ISF Day/ Blackboard ISF Night / Classroom Game		GT750 a=21	bbbb c=00 c=00 c=02 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=1 e=5 e=7 e=8 e=12 e=9	~XX151 n	Oka	
	Model Name	b = Lamp Hour c = Input Source Commands  d = Firmware Version e = Display mode	VGA1 S-Video Video Video HDMI1 HDMI2  None Presentation Bright Ginema User(1) ISF Day/ Blackboard ISF Night / Classroom Game 3D		GT750 a=21	bbbb c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=2 e=11 e=5 e=7 e=8 e=12 e=9 n = 1 a=0/1/2	~XX121 n	Oka	a=0/1/2/3/4/5/6/7/8/9.
	Model Name	b = Lamp Hour c = Input Source Commands  d = Firmware Version e = Display mode  Input Source Commands  Software Version	VGA1 S-Video Video Video Video Video HDMI1 HDMI2  None Presentation Bright Gnema User(1) ISF Day/ Blackboard ISF Night / Classroom Game 3D  Depends  Depends  None/DVI/VGA-1/VGA-2/S-Video/Nideo/BNC/HDMI1/HDMI2/HDMI3/Wireles SiComponent None/Presentation(Cinema)/BrightMovie(Photos) ysRGB(Reference)/User(1)/User(2/ ISF		GT750 a=21	bbbb c=00 c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=5 e=7 e=8 e=12 e=9 n = 1 a=0/1/2	~XX121 n ~XX122 n		0/11
	Model Name	b = Lamp Hour c = Input Source Commands  d = Firmware Version e = Display mode  Input Source Commands  Software Version  Display Mode Power State	VGA1     S-Video     Video     Video     Video     Video     HDMI1     HDMI2     None     Presentation     Bright     Cinema     User(1)     ISF Day   Blackboard     ISF Play   Blackboard     ISF Play   Blackboard     ISF Night   Classroom     Game     3D     Depends     Depends     None/DVI/VGA-1/VGA-2/S-Video/Video/BNC/HDMI1/HDMI2/HDMI3/Wireles     Video/Video/BNC/HDMI1/HDMI2/HDMI3/Wireles     Video/Video/Video/BNC/HDMI1/HDMI2/HDMI3/Wireles     Video/Video/Video/BNC/HDMI1/H		GT750 a=21	bbbb c=00 c=00 c=02 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=1 e=5 e=7 e=12 e=9 n=1 a=01/2 n=1 n=1 n=1 n=1 n=1 n=1	~XX121 n ~XX122 n ~XX123 n ~XX124 n	Oka Okdddd Oka Oka	0/11
	Model Name	b = Lamp Hour c = Input Source Commands  d = Firmware Version e = Display mode  input Source Commands  Software Version  Display Mode	VGA1 S-Video Video Video Video Video HDMI1 HDMI2  None Presentation Bright Cinema User(1) ISF Day/ Blackboard ISF Night / Classroom Game 3D  Depends  Depends  None/DVI/VGA-1/VGA-2/S- Video/Video/BNC/HDMI1/HDMI2/HDMI3/Wireles s/Component None/Presentation(Cinema)/Bright/Movie(Photos) ysRGB(Reference)/User(1)/User2/ ISF Day(Backboard)/ISF Day(Backboard)/ISF Day(Backboard)/ISF Day(Backboard)/ISF Day(Backboard)/ISF Day(Backboard)/ISF Day(Backboard)/ISF Day(Backboard)/ISF		GT750 a=21	bbbb c=00 c=00 c=02 c=04 c=05 c=07 c=08 dddd e=0 e=1 e=5 e=7 e=8 e=12 e=9 n=1 a=0/1/2 n=1 n=1 n=1 n=1	~XX121 n ~XX122 n ~XX123 n	Oka Okdddd Oka	a=0/1/2/5/7/8/9/10/11

~	X	X	X	Х	X		n	CR
Lead Code	Projector ID		Command ID			space	variable	carriage return
			4:3/16:9-I/16:9- II(16:10)/Window/LBX/Native/AutoAuto235/Super wide/4:3-II		n=1	~XX127 n	Oka	a=1/2/3/5/6/7/10 for 4:3/16:9-I/16:9- II(16:10)/LBX/Native/F uto/4:3-II
		Color Temperature	Warm Medium Cold		n=1	~XX128 n	Oka	a=0/1/2 Warm/Medium/Cold
		Projection Mode	Front-Desktop Rear-Desktop Front-Ceiling Rear-Ceiling		n=1	~XX129 n	Oka	a=0/1/2/3 for Front- Desktop/Rear-Desktop /Front-Ceiling/Rear- Ceiling
		Output 3D State	n : 0/1 = 2D/3D			~XX503	Okn	n:0/1=2D/3D

### **Ceiling Mount Installation**

- 1. To prevent damage to your projector, please use the Optoma ceiling mount.
- 2. If you wish to use a third party ceiling mount kit, please ensure the screws used to attach a mount to the projector meet the following specifications:
  - Screw type: M3\*3
  - Maximum screw length: 10mm
  - Minimum screw length: 7.5mm

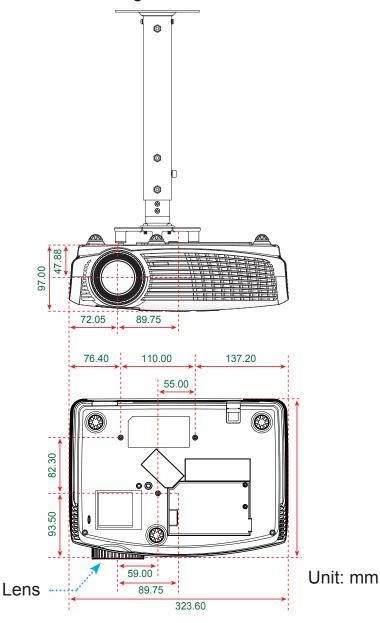


Please note that damage resulting from incorrect installation will void the warranty.



### /!\ Warning:

- If you buy a ceiling mount from another company, please be sure to use the correct screw size. Screw size will vary depending on the thickness of the mounting plate.
- 2. Be sure to keep at least 10 cm gap between the ceiling and the bottom of the projector.
- Avoid installing the projector near a heat source.



### **Optoma Global Offices**

For service or support please contact your local office.

### USA

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**6** 510-897-8601

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### **Regulation & Safety Notices**

This appendix lists the general notices of 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
- 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 2004/108/EC (including amendments)
- Low Voltage Directive 2006/95/EC
- R & TTE Directive 1999/5/EC (if product has RF function)

### **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.