# Table of Contents

2 2
5
6
6
7
8
8
9
10
11
.12
.12
. 13
13
14
14
.15
15
16
16
. 17
.17
.20
20
20
20 21
20
20 21 22
20 21 22 28
20 21 22 28
20 21 22 28 31 35
20 21 28 31 35
20 21 22 28 31 35
20 21 28 31 35 . 38 38
20 21 28 31 35 38 38
20 21 28 31 35 38 38 38 41
20 21 22 31 35 38 38 41
20 21 22 35 38 38 41 41
20 21 22 31 35 38 38 41 44 44 44
20 21 28 31 35 38 38 41 41 44 46 44

### Safety Informations



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 import operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE PROJECTOR 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. Read these instructions -before using this projector.
- 2. Keep these instructions –for future reference.
- 3. Follow all instructions.
- 4. Install in accordance with the manufacturer's instructions:
  - **A. Do not block any ventilation openings.** To ensure reliable operation of the projector and to protect it from overheating, put the projector in a position and location that will not interfere with its proper ventilation. For example, do not place the projector on a bed, sofa, carpet, or similar surface that may block the ventilation openings. Do not put it in an enclosure, such as a bookcase or a cabinet that may keep air from flowing through its ventilation openings.
  - **B. Do not use this projector near water or moisture.** To reduce the risk of fire or electric shock, do not expose the projector to rain or moisture.
  - **C. Do not install near any heat sources,** such as radiators, heaters, stoves or other apparatus (including amplifiers) that produce heat.
- 5. Clean only with a dry cloth.
- 6. Only use attachments/accessories specified by the manufacturer.
- 7. Refer all servicing to qualified service personnel. Servicing is required when the projector has been damaged in any way, such as:
  - Power supply cord or plug is damaged.
  - Liquids have spilled or objects have fallen into the apparatus.
  - The projector has been exposed to rain or moisture, does not operate normally, or has been dropped.

Do not attempt to service this projector yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please call Optoma to be referred to an authorized service center near you.

- Do not let objects or liquids enter the projector as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
- 9. See projector enclosure for safety related markings.
- The projector should not be adjusted or repaired by anyone except properly qualified 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 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 unit to cool down, and follow all replacement instructions. See 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- Use the "Lamp Reset" function from the on-screen display "Options | Lamp Settings" menu after replacing the lamp module (refer to page 37).
- Warning- When switching the projector off, please ensure the cooling cycle has been completed before disconnecting the power. Allow 90 seconds for the projector to cool down.
- Warning- Do not use the lens cap when projector is in operation.
- Warning- When the lamp is approaching to the end of its life, 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- To reduce the risk of injury to the eyes, do not look directly into the laser beam on the remote control and do not point the laser beam into anyone's eyes.

  This remote control is equipped with a Class II laser that emits radiation.



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 44-45.

#### Do:

- Turn off the product before cleaning.
- Use a soft cloth moistened with a mild detergent to clean the display housing.
- Disconnect the power plug from the AC outlet if the product is not being used for a long period of time.

#### Don't:

- Do not block the ventilation slots and openings on the unit.
- Do not use abrasive cleaners, waxes or solvents to clean the unit.
- Do not 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 that generates a strong magnetic field.
  - In direct sunlight.

### Eye Safety Warnings



- Avoid staring directly into the projector's beam of light at all times.
- Minimize standing facing into the beam. Keep your back to the beam as much as possible.
- Using a stick or laser pointer is recommended to avoid the need for the presenter to enter the beam.
- Ensure that projectors are located out of the line of sight from the screen to the audience; this ensures that, when presenters look at the audience, they do not also have to stare at the projector lamp. The best way to achieve this is by ceiling-mounting the projector rather than placing it on floor or table top.
- 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 needed, use room blinds to reduce ambient light levels.

### **Product Features**

This product is a 720p single chip 0.62" DLP® projector. Outstanding features include:

- ♦ Native 16:9 720p DLP® Technology
- HDMI & component support.
- Computer Compatibility:
   Apple Macintosh, iMac, and VESA Standards:
   UXGA, SXGA+, SXGA, XGA, SVGA, VGA
- Video Compatibility:
  - NTSC M/J, NTSC4.43
  - PAL B/D/I/G/H, PAL M, PAL N
  - SECAM B/D/G/K/L
  - SDTV compatible (480i/p, 576i/p)
  - HDTV compatible (720p, 1080i, 1080p)
- Auto source detection with user definable settings
- ◆ Full function IR remote control with back light
- User friendly multilingual On Screen Menu
- One build-in 2 Watt speaker
- Three discrete audio inputs
- Advanced digital keystone correction and high quality full screen image re-scaling
- User friendly control panel
- Macintosh and PC compatible
- ♦ DVI-D support (HDCP compliant)
- ◆ TrueVivid™ Image Technology



### Package Overview

This projector comes with all the items shown below. Check to make sure your unit is complete. Contact your dealer immediately if anything is missing.



Projector with lens cap



Power Cord



RCA Component Cable for YPbPr













VGA Cable

Composite Video Cable (Available in EMEA and (Available in EMEA only) (Available in Asia and US only)



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

SCART RGB/S-Video Adapter (Available in EMEA only)



IR Remote Control



2 x AAA Batteries

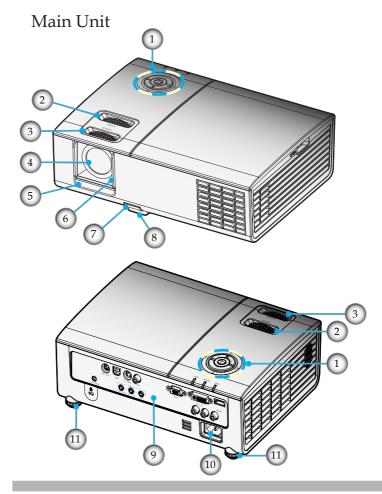
#### Documentation:

**▼** User's Manual

✓ Warranty Card

**✓** Quick Start Card

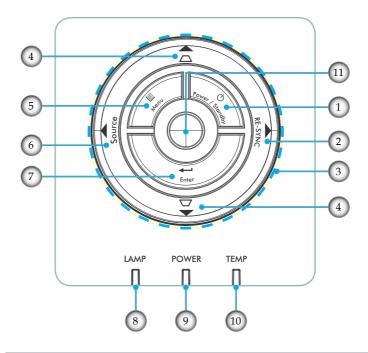
### **Product Overview**



- 1. Control Panel
- 2. Zoom
- 3. Focus
- 4. Zoom Lens
- 5. IR Receivers
- 6. Lens Door

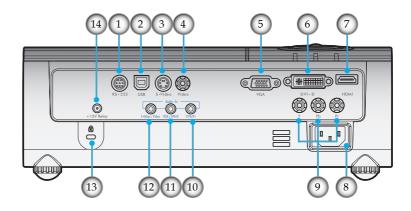
- 7. Elevator Button
- 8. Elevator Foot
- 9. Connection Ports
- 10. Power Socket
- 11. Tilt-Adjustment Foot

### Control Panel



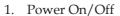
- 1. Power/Standby
- 2. Re-Sync
- 3. Four Directional Select Keys
- 4. Keystone Correction
- 5. Menu
- 6. Source
- 7. Enter
- 8. Lamp LED
- 9. Power LED
- 10. Temp LED
- 11. IR Receiver

#### **Connection Ports**

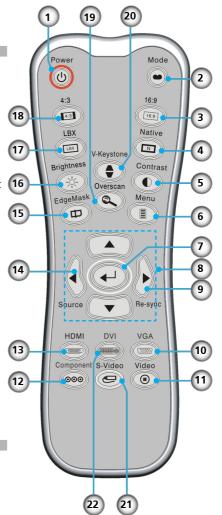


- 1. RS232 Connector
- 2. USB Connector (Connect to PC for Remote Mouse function)
- 3. S-Video Input Connector
- 4. Composite Video Input Connector
- 5. VGA Input Connector
- 6. DVI-D Input Connector (PC Digital and HDCP)
- 7. HDMI Connector
- 8. Power Socket
- 9. Component Video Input Connector
- 10. Audio-In (for Component Connector)
- 11. Audio-In (for VGA/DVI-D Connector)
- 12. Audio-In (for S-Video/Video Connector)
- 13.  $Kensington^{TM} Lock Port$
- 14. +12V Trigger Relay Connector

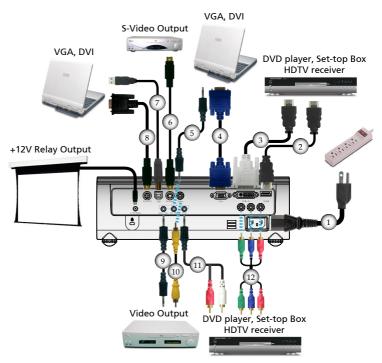
#### Remote Control



- 2. Mode
- 3. 16:9
- 4. Native
- 5. Contrast
- 6. Menu Format
- 7. Enter
- 8. Four Directional Select (16)
  Keys
- 9. Re-Sync
- 10. VGA Source
- 11. Video Source
- 12. Component Source
- 13. HDMI Source
- 14. Source
- 15. EdgeMask
- 16. Brightness
- 17. LBX
- 18. 4:3
- 19. Overscan
- 20. V-Keystone
- 21. S-Video Source
- 22. DVI Source



### Connecting the Projector





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

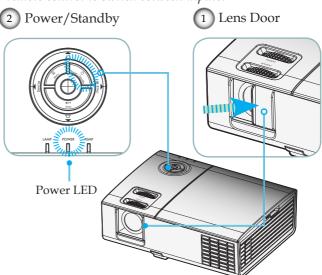
1	Power Cord
2	HDMI Cable
3	DVI-D Cable
4	VGA Cable
5	Audio Input Cable
	S-Video Cable
7	USB Cable
8	RS232 Cable
9	Audio Input Cable
10	
11	Audio Input Cable
12	RCA Component Cable for YPbPr
	r

### Powering On/Off the Projector

### Powering On the Projector

- 1. Open the lens door. **①**
- 2. Ensure that the power cord and signal cable are securely connected. 2 The Power LED will be Amber.
- 3. Turn on the lamp by pressing "Power/Standby" button either on the top of the projector or pressing "Power" button on the remote. The Power LED will flash green.

  The startup screen will display in approximately 10 seconds.
  - The startup screen will display in approximately 10 seconds. The first time you use the projector, you can select your preferred language from quick menu after the startup screen display.
- 4. Turn on your source (computer, notebook, video player, etc.). The projector will detect your source automatically.
- If the screen displays "No Signal", please make sure the signal cables are securely connected.
- \* If you connect multiple sources at the same time, press the "Source" button on the control panel or direct source key on the remote control to switch between inputs.





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

### Powering Off the Projector

Press the "Power/Standby" button to turn off the projector lamp, you will see a message displayed on the projector's screen.





- 2. Press the "Power/Standby" button again to confirm, otherwise the message will disappear after 15 seconds. When you press "Power/Standby" button second, the system will show the timing countdown on the screen.
- 3. The cooling fans continue to operate for about 10 seconds for cooling cycle. When the Power LED turn 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 "Power/ Standby" button to restart the projector.
- 4. Disconnect the power cord from the electrical outlet and the projector.
- 5. Do not turn on the projector immediately following a power off procedure.

### Warning Indicator

- When the "LAMP" indicator lights red, it indicates problem with the lamp and the projector will automatically shut down by itself. Please contact your local reseller or service center. See pages 52-53.
- When the "TEMP" indicator lights red, it indicates the projector has overheated. The projector will automatically shut itself down.
  - Under normal conditions, the projector can be switched on again after it has cooled down. If the problem persists, you should contact your local dealer or our service center. See pages 52-53.
- When the "LAMP" indicator flashes red, it indicates the fan has failed. Please contact your local dealer or our service center. See pages 52-53.

### Adjusting the Projected Image

### Adjusting the Projector's Height

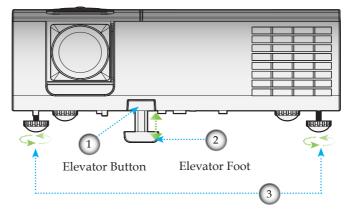
The projector is equipped with elevator foot for adjusting the image height.

#### To raise the image:

- 1. Press the elevator button **①**.
- 2. Raise the image to the desired height angle **2**, then release the button to lock the elevator foot into position.
- 3. Use screw in foot **3** to fine-tune the display angle.

#### To lower the image:

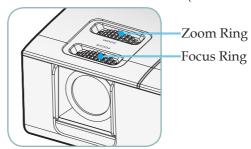
- 1. Press the elevator button.
- 2. Lower the image, then release the button to lock the elevator feet into position.
- 3. Use screw in foot **3** to fine-tune the display angle.



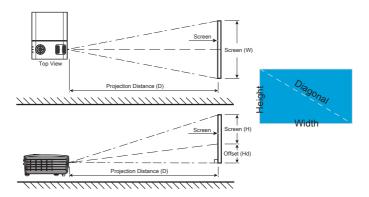
Tilt-Adjustment Feet

### Adjusting the Projector's Zoom / Focus

You may turn the zoom lever to zoom in or out. To focus the image, rotate the focus ring until the image is clear. The projector will focus at distances from 3.9 to 39.4 feet (1.2 to 12.0 meters).



### Adjusting Projection Image Size



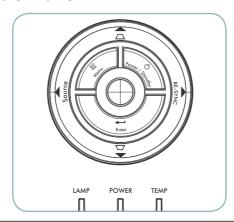
Diagonal Screen Size W X H (16:9)			Projection distance (D)				Offset			
length (inch) size	Screen Size W X II (10.5)				(m)		(feet)		(Hd)	
of 16:9 Screen	(n	n)	(feet)		wide	tele	wide	tele	(m)	(feet)
50	1.11	0.62	3.63	2.04	1.72	1.89	5.63	6.19	0.12	0.39
60	1.33	0.75	4.36	2.45	2.06	2.26	6.75	7.43	0.14	0.47
70	1.55	0.87	5.08	2.86	2.40	2.64	7.88	8.67	0.17	0.55
80	1.77	1.00	5.81	3.27	2.75	3.02	9.01	9.91	0.19	0.63
90	1.99	1.12	6.54	3.68	3.09	3.40	10.13	11.15	0.22	0.71
100	2.21	1.25	7.26	4.09	3.43	3.77	11.26	12.38	0.24	0.79
120	2.66	1.49	8.72	4.90	4.12	4.53	13.51	14.86	0.29	0.95
150	3.32	1.87	10.89	6.13	5.15	5.66	16.89	18.58	0.36	1.18
200	4.43	2.49	14.53	8.17	6.86	7.55	22.52	24.77	0.48	1.58
300	6.64	3.74	21.79	12.26	10.29	11.32	33.77	37.15	0.72	2.37

<sup>\*</sup> This graph is for user's reference only.

### Control Panel & Remote Control

There are two ways for you to control the functions: Control Panel and Remote Control.

#### Control Panel



Using the Control Panel			
Power	Refer to the "Power On/Off the Projector" section on pages 13-14.		
Menu	Press "Menu" to launch the on-screen display (OSD) menu. To exit OSD, Press "Menu" again.		
Enter	Confirm your item selection.		
Source	Press "Source" to select the input signal source.		
Re-Sync	Automatically synchronize the projector to the input source.		
Keystone <b>▽</b> /△	Adjust image distortion caused by tilting the projector (±16 degrees)		
Four Directional Select Keys	Use ▲ ▼ ◆ ▶ to select items or make adjustments to your selection.		
<b>ଓ</b> Power LED	Indicate the projector's status.		
¥ Lamp LED	Indicate the projector's lamp status.		
Temp LED	Indicate the projector's temperature status.		

### Remote Control



Using the Remote Control			
Power	<b>(</b> U)	Refer to the "Power On/Off the Projector" section on pages 13-14.	
Mode	•	Select the display mode from Cinema, Bright, TV, Photo and User.	
16:9	16:9	Scale the image at a 16:9 aspect ratio.	
Native	N	The input source will be displayed without scaling.	
Contrast	•	Control the degree of difference between the lightest and darkest parts of the picture.	
Menu		Press "Menu" to launch the on-screen display (OSD) menu. To exit OSD, Press "Menu" again.	
Re-Sync		Automatically synchronize the projector to the input source.	
VGA		Press "VGA" to choose VGA D-Sub (15 pins) connector source.	
Video	•	Press "Video" to choose Composite video source.	
DVI		Press "DVI" to choose DVI source.	
S-Video	9	Press "S-Video" to choose S-Video source.	
Component	000	Press "Component" to choose Component video source.	
HDMI		Press "HDMI" to choose source from HDMI connector.	
Source		Press "Source" to select the input signal source at the next terminal.	

### Remote Control



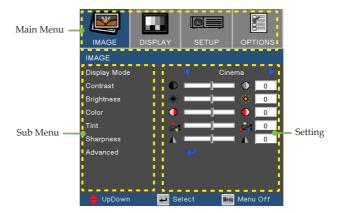
EdgeMask	<b>D</b>	Mask off a few pixels on each edge of the image to be displayed. Use this function to adjust if image source happens to have noise near any edge of the display image.
Brightness	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Adjust the brightness of the image.
Letter-Box	LBX	Enable the viewing of the letterboxed non- anamorphically enhanced movie at full screen width. Part of the original image will be lost if the image aspect ratio is less than 1.78:1.
4:3	4:3	Scale the image at a 4:3 aspect ratio.
Overscan	٥	Zoom the projector display in or out.
V. Keystone	•	Adjust image distortion vertically and makes a squarer image.
Four Directional Select Keys		Use ▲ ▼ ◀ ▶ to select items or make adjustments to your selection.
Enter	4	Confirm your item selection.

### On-screen Display Menus

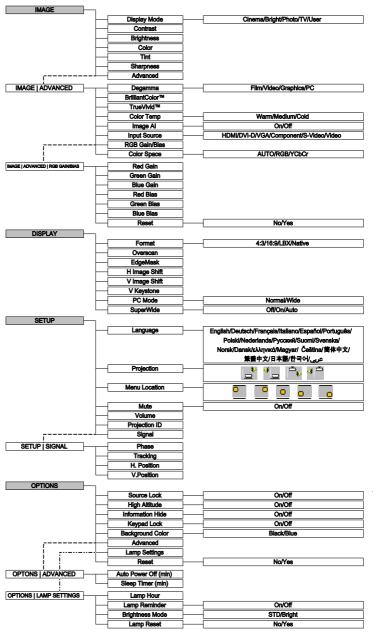
The Projector has multilingual On-screen Display menus that allow you to make image adjustments and change a variety of settings. The projector will automatically detect the source.

### How to operate

- To open the OSD menu, press "Menu" on the Remote Control or Projector Keypad.
- 2 When OSD is displayed, use ◀▶ keys to select any item in the main menu. While making a selection on a particular page, press ▼ or "Enter" key to enter sub menu.
- 3. Use ▲ ▼ keys to select the desired item and adjust the settings by ◀▶ 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







#### Display Mode

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

- Cinema: For home theater.
- ▶ Bright: Maximum brightness from PC input.
- ▶ Photo: Best color reproduction.
- TV: For TV.
- User: Memorize user's own settings.

#### Contrast

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

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

#### **Brightness**

Adjust the brightness of the image.

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



"Image mode-->TV" will support automatically "Overscan" with step "4" as default.







"Saturation" and "Tint" functions are only supported under video source.

#### Color

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

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

#### Tint

Adjusts the color balance of red and green.

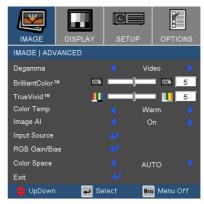
- ▶ Press the ◀ to decrease the amount of green in the image.
- ▶ Press the ▶ to increase the amount of red in the image.

#### Sharpness

Adjusts the sharpness of the image.

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

### Image | Advanced



#### Degamma

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.
- ▶ PC: for PC or computer source.

#### Brilliant Color<sup>TM</sup>

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.

#### <u>TrueVivid</u>TM

This adjustable item utilizes a new color-processing algorithm and enhancements to enable the picture's vividness to be significantly increased.

#### Color Temp.

Adjust the color temperature. With cold temperature, the screen looks colder; with Warm temperature, the screen looks warmer.

### Image | Advanced



#### Image AI

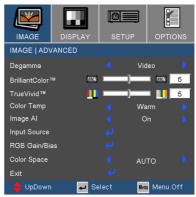
Image AI improves the contrast of the picture by optimizing the brightness of the lamp according to the picture content.

▶ On: The dynamic image performance manager is active in making sure your greatest pleasure from seeing a movie dynamically with the most dark details revealed, vivid and bright image performed all the way.



▶ Off: The dynamic image performance manager is on standby.

# Image | Advanced

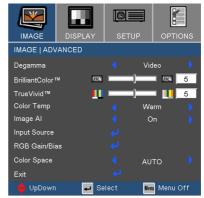


#### **Input Source**

Enable input sources. Press ← into the next menu as below and then use ▲ or ▼ to select. Press "Enter" to finalize the selection. The projector will not search inputs that are de-selected.



# Image | Advanced



#### RGB Gain/Bias

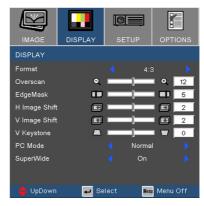
Press  $\longleftarrow$  into the next menu as below and then use  $\triangle$  or  $\triangledown$  to select item. Use  $\blacktriangleleft$  or  $\triangleright$  to select Red, Green, or Blue for brightness (Gain) and contrast (Bias).



#### Color Space

Select an appropriate color matrix type from RGB or YPbPr.

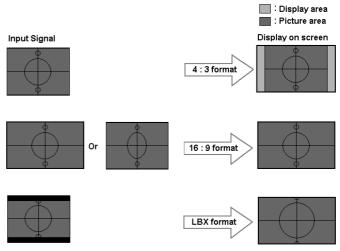
# Display



#### Format

Use this function to choose your desired aspect ratio.

- 4:3: This format is for 4x3 input sources not enhanced for Wide screen TV.
- ▶ 16:9: This format is for 16x9 input sources, like HDTV and DVD enhanced for Wide screen TV.
- ▶ 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.







#### Detail informations about LBX mode:

- 1. Some Letter-Box DVD contents are not enhanced for 16x9 TV, then image will not look right in 16:9 display. One can use 4:3 mode to view the correct info. But if the content itself is not 4:3, it will have black bars around the image in a 16:9 display. For this kind of content, you can use LBX mode to fill the image in the 16x9 display as much as possible.
- 2. If you use an external 16x9 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, the full lamp power and vertical resolution is fully utilized for maximum viewing effects.

Other than these two occasions, one should stay with 16:9 and 4:3 modes for most viewing experiences.

#### Overscan

Overscan function removes the noise in a video image. Overscan the image to remove video encoding noise on the edge of video source.

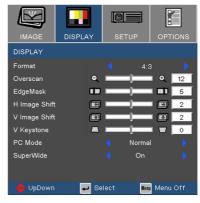
#### <u>EdgeMask</u>

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

#### H Image Shift

Shift the projected image position horizontally.

# Display



#### V Image Shift

Shift the projected image position vertically.

#### V Keystone

Press the  $\P$  or  $\blacktriangleright$  to adjust image distortion vertically and makes a squarer image.

#### PC Mode

This Mode is only for use when using this projector unit with a PC signal, either Analogue connector.

- ▶ Wide: If your PC output is a wide screen format resolution, you must select this setting.
  - Examples of Wide screen resolutions are: 1280 x 720 / 1920 x 1080.
- Normal: If your PC output is a Normal (4:3) resolution you must select this setting.
  - Examples of Normal resolutions are:  $640 \times 480 / 800 \times 600 / 1024 \times 768 / 1152 \times 864 / 1280 \times 1024 / 1400 \times 1050$ .
  - \* All supported resolutions are listed on pages 46-47.



- "SuperWide" is "Off" as default.
- \* How to use "Super-Wide"
  - 1. Use a 2.0:1 screen that buy from Optoma
  - 2. Enable Super-Wide feature to Auto
  - 3. Use zoom ring in top of projector to fit the image width to the screen width

#### SuperWide

- Off: The format can be chosen your desired aspect ratio including 4:3, 16:9, LBX and Native.
- ▶ On: The format only can be chosen 4:3 and 16:9.
- Auto: To solve the differences of the film formats, the option can keep the format in the same ratio.





#### 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.







#### Projection



The factory default setting.

Rear-Desktop

When you select this function, the projector reverses the image so you can project behind a translucent screen.



When you select this function, the projector turns the image upside down for ceiling-mounted projection.

Rear-Ceiling

When you select this function, the projector reverses and turns the image upside down at same time. You can project from behind a translucent screen with ceiling mounted projection.

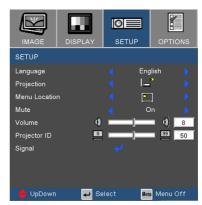
#### Menu Location

Choose the menu location on the display screen.

#### Mute

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

# Setup



#### Volume

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

#### Projection ID

Allow RS232 control of an individual projector. Range 01-99.

### Setup | Signal



#### Phase



- "Signal" only supports in VGA(RGB) .
   and component signal.
- When component signal is 480i or 576i, "Phase" and "Tracking" won't support.

Change the display data frequency to match the frequency of your computer's graphic card. When you experience a vertical flickering bar, use this function to make an adjustment.

#### **Tracking**

Synchronize the signal timing of the display with the graphic card. If you experience an unstable or flickering image, use this function to correct it.

#### 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.

### **Options**



#### Source Lock

- On: The projector will search specified connection port.
- Off: The projector will search for other signals if the current input signal is lost.

#### High Altitude

Choose "On" to turn on High Altitude mode. Operates the fans at full speed continuously to allow for proper high altitude cooling of the projector.

#### Information Hide

- ▶ On: Choose "On" to hide the searching message.
- ▶ Off: Choose "Off" to show the searching message.

#### Keypad Lock

When the keypad lock function is on, the control panel will be locked, but the projector can still be operated by the remote control. If canceling this function, use the remote control or press the "Enter" key on the control panel for 7 seconds to turn it off.

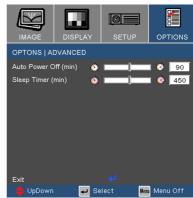
#### Background Colour

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

#### Reset

Press ← to the next menu then choose "Yes" to return the display parameters on all menus to the factory default settings.

# Options | Advanced



#### Auto Power Off (min)

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

#### Sleep Timer (min)

Set the countdown timer interval. The timer will begin, with or without a signal input. Then the projector will automatically power off then the sleep timer countdown has finished.

## **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 by up to 130%.
- ▶ BRIGHT: Choose "BRIGHT" to increase the brightness.

### Lamp Reset

Reset the lamp life hour 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.

(See pages 52-53 for details)

## **Image Problems**

## ? No image appears on-screen

- ▶ Ensure all the cables and power connections are correctly and securely connected as described in the "Installation" section.
- Ensure 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.

## Partial, scrolling or incorrectly displayed image

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

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

- 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 ( $1600 \times 1200$ ). (\*)
- If you are using a Notebook:
  - First, follow the steps above to adjust resolution of the computer.
  - 2. Press the toggle output settings. Example: [Fn]+[F4]

Compaq ⇒ Dell ⇒ Gateway ⇒ IBM ⇒	[Fn]+[F4] [Fn]+[F8] [Fn]+[F4] [Fn]+[F7]	Hewlett Packard ⇔ NEC ⇔ Toshiba ⇔	[Fn]+[F4] [Fn]+[F3] [Fn]+[F5]		
Mac Apple: System Preference ⇒ Display ⇒ Arrangement ⇒ Mirror display					

- ▶ 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 "Tracking" to correct it. See page 34 for more information.
- ▶ Change the monitor color setting on your computer.
- [7] Image has vertical flickering bar
- Use "Phase" to make an adjustment. See page 34 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 3.9 to 39.4 feet (1.2 to 12.0 meters) from the projector. 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 in 16:9 format on projector side.

If you play 4:3 format DVD title, please change the format as 4:3 in projector OSD.

If the image is still stretched, you will also need to adjust the aspect ratio by referring to the following:

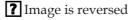
Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player.

## Image is too small or too large

- Adjust the Zoom Ring on the top of the projector.
- 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 centered on the screen and below the bottom of the screen.
- Press [Keystone +/-] button until the sides are vertical on the remote control.



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



Use of Keystone is not recommended.

### **Intermission Problems**

- 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.
- ? 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 52-53.

## **Projector Status Indication**

## ? LED lighting message

Message	Power / Standby LED	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
Error (Over Temp.)	0	*	0
Error (Fan fail)	0	0	Flashing (1 sec on, 1 sec off)
Error (Lamp fail)	0	0	<u></u>



Steady light ⇒ 🔆

No light ⇔ 🔘

## ? Message Reminders

Fan failed:



▶ Temperature warning:



▶ Replacing the lamp:



Out of display range:



### Remote Control Problems

- **?** If the remote control does not work
- ▶ Check the operating angle for the remote control is approximately ±22.5°.
- Make sure there are no obstructions between the remote control and the projector. Move to within 6 m (20 ft) of the projector.
- Make sure the batteries are inserted correctly.
- Make sure batteries are exhausted. If so, replace weak batteries in the remote control.

## 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.

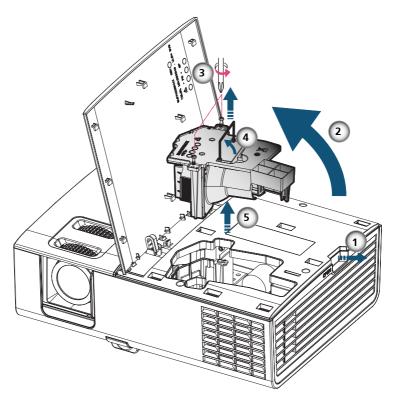


When you see this message, please contact your local reseller or service center to change the lamp as soon as possible. Make sure the projector has been cooled down for at least 30 minutes before changing the lamp.

### ! Caution

If ceiling mounted, use caution when opening lamp panel - Please see user manual for details

- ⚠ 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.



### Lamp Replacement Procedure:

- 1. Switch off the power to the projector by pressing the "Power/Standby" button.
- 2. Allow the projector to cool down for at least 30 minutes.
- 3. Disconnect the power cord.
- 4. Pull the cover carefully.
- 5. Open the top cover. 2
- 6. Use a screwdriver to unscrew the 2 screws from the lamp module.  $\ensuremath{\mathfrak{g}}$
- 7. Pull up the lamp handle carefully. 4
- 8. Pull out and remove the lamp module. 9

To replace the lamp module, reverse the previous steps.

9. Turn on the projector and use "Lamp Reset" after the lamp module is replaced.

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

# Compatibility Modes

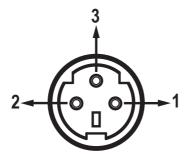
Modes	Resolution	V.Frequency (Hz)	Analog	Digital
VGA	640 x 350	70	✓	×
	640 x 350	85	✓	×
	640 x 400	85	✓	×
	640 x 480	60	✓	✓
	640 x 480	72	✓	✓
	640 x 480	75	✓	✓
	640 x 480	85	✓	✓
	720 x 400	70	✓	✓
	720 x 400	85	✓	×
SVGA	800 x 600	56	✓	×
	800 x 600	60	✓	✓
	800 x 600	72	✓	✓
	800 x 600	75	✓	✓
	800 x 600	85	✓	x
XGA	1024 x 768	60	✓	✓
	1024 x 768	70	✓	✓
	1024 x 768	75	✓	✓
	1024 x 768	85	✓	×
SXGA	1152 x 864	70	✓	x
	1152 x 864	75	✓	x
	1152 x 864	85	✓	x
	1280 x 1024	60	✓	✓
	1280 x 1024	75	✓	✓
	1280 x 1024	85	✓	×
SXGA+	1400 x 1050	60	✓	✓
UXGA	1600 x 1200	60	✓	✓
Wide	1280 x 720	60	✓	✓
	1280 x 720	50	x	✓
	1920 x 1080	60	x	✓
	1920 x 1080	24	x	✓
	1920 x 1080	50	×	✓

# Compatibility Modes

Modes	Resolution	V.Frequency (Hz)	Analog	Digital
Power Book G4	640 x 480	60	✓	×
	640 x 480	72	✓	×
	640 x 480	75	✓	×
	640 x 480	85	✓	×
	800 x 600	60	✓	×
	800 x 600	75	✓	×
	800 x 600	85	✓	×
	1024 x 768	60	✓	×
	1024 x 768	70	✓	×
	1024 x 768	75	✓	×
	1024 x 768	85	✓	×
	1280 x 768	60	✓	×
	1280 x 768	70	✓	×
	1280 x 720	60	✓	×
	1280 x 1024	60	✓	×
	1280 x 1024	75	✓	×
	1400 x 1050	60	✓	×
	1600 x 1200	60	✓	×
Power G4	640 x 480	72	✓	×
	640 x 480	75	✓	×
	640 x 480	85	✓	×
	800 x 600	60	✓	×
	800 x 600	75	✓	×
	800 x 600	85	✓	×
	1024 x 768	60	✓	×
	1024 x 768	70	✓	×
	1024 x 768	75	✓	×
	1024 x 768	85	✓	×
	1280 x 768	60	✓	×
	1280 x 1024	60	✓	×
	1280 x 1024	75	✓	×
	1600 x 1200	60	✓	×
iMAC	1024 x 768	60	✓	×

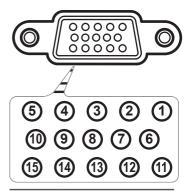
## **RS232 Commands**

**RS232 Connector** 



Pin no.	Name	I/O (From Projector Side
1	TXD	OUT
2	RXD	IN
3	GND	_

## **VGA-In Connector**



Pin no.	Spec.
1	R(RED)/Cr
2	G(GREEN)/Y
3	B(BLUE)/Cb
4	GND
5	GND
6	GND
7	GND
8	GND
9	DDC 5V
10	GND
11	GND
12	DDC Date
13	HD/CS
14	VD
15	DDC Clock

## **RS232 Protocol Function List**

### RS232 Commands

Baud Rate: 9600 Data Bits: 8 Parity: None Stop Bits: 1 Flow Control: None UART16550 FIFO: Disable Projector Return (Pass): P Projector Return (Fail): F

232 ASCII Code	or XX = 00 ~ 99 HEX Code	Function		Description
32 ASCII Code	HEX Code	Function		Description
-XX00 1 -XX00 2 -XX00 1 ~nnnn	7E 30 30 30 30 20 31 7E 30 30 30 30 20 32	Power ON Power OFF Power On with Password		
-XX01 1	7E 30 30 30 31 20 31	Resync		
-XX02 1 -XX02 2	7E 30 30 30 32 20 31 7E 30 30 30 32 20 32	AV Mute	On Off	
XX03 1	7E 30 30 30 33 20 31	Mute	On	
XX03 2 XX04 1	7E 30 30 30 33 20 32 7E 30 30 30 34 20 31	Freeze	Off	
XX04 2	7E 30 30 30 34 20 32	Unfreeze		
XX05 1 XX06 1	7E 30 30 30 35 20 31 7E 30 30 30 36 20 31	Zoom Plus Zoom Minus		
XX07 1	7E 30 30 30 37 20 31	Up (Pan under zoom)		
XX08 1 XX09 1	7E 30 30 30 38 20 31 7E 30 30 30 39 20 31	Down (Pan under zoom) Left (Pan under zoom)		
XX10 1	7E 30 30 31 30 20 31	Right (Pan under zoom)		
XX20 1		Display Mode	Presentation	
XX20 2 XX20 3			Bright Movie	
XX20 4 XX20 5			sRGB User 1	
-XX20 5 		Dai-haran	User I	n= -50 - +50
-XX22 n		Brightness Contrast		n= -50 - +50
XX23 n		Sharpness		n=-50 - +50
XX27 n XX28 n		Colour	Red Green	n= -45 - +4: n= -45 - +4:
XX29 n			Blue	n= -45 - +4
XX30 n XX31 n			Cyan Yellow	n= -45 - +4 n= -45 - +4
XX31 n XX32 n			Magenta	n= -45 - +4: n= -45 - +4:
XX33 1			Reset	
XX34 n XX35 1	7E 30 30 33 35 20 31	BrilliantColor™ Degamma	Film	n= -45 - +4:
XX35 2	7E 30 30 33 35 20 32	Degamina	Video	
XX35 3 XX35 4	7E 30 30 33 35 20 33 7E 30 30 33 35 20 34		Graphics PC	
XX36 1	7E 30 30 33 36 20 31	Colour Temp.	Low	
XX36 2	7E 30 30 33 36 20 32		Medium	
XX36 3 XX37 1	7E 30 30 33 36 20 33 7E 30 30 33 37 20 31	Colour Space	High Auto	
XX37 2 XX37 3	7E 30 30 33 37 20 32 7E 30 30 33 37 20 33		RGB YUV	
			DVI-D	
XX39 2 XX39 5	7E 30 30 33 39 20 32 7E 30 30 33 39 20 35	Input Source	VGA 1	
XX39 6 XX39 9	7E 30 30 33 39 20 36 7E 30 30 33 39 20 39		VGA 2 S-Video	
XX39 10	7E 30 30 33 39 20 31 30		Video	
XX60 1 XX60 2	7E 30 30 36 30 20 31 7E 30 30 36 30 20 32	Format	4:3 16:9-1	
XX60 2 XX60 3	7E 30 30 36 30 20 32 7E 30 30 36 30 20 33		16:9-II	
XX60 4	7E 30 30 36 30 20 34		Window	
XX61 n XX62 n		Overscan Zoom		n= 0 - 25 n= 0 - 10
XX63 n		H Image Shift		n=-50 - +50
XX64 n XX66 n		V Image Shift V Keystone		n= -50 - +50 n= -50 - +50
XX67 1	7E 30 30 36 37 20 31	PC Mode	Normal	
XX67 2	7E 30 30 36 37 20 32		Wide	
XX70 1 XX70 2	7E 30 30 37 30 20 31 7E 30 30 37 30 20 32	Language	English German	
XX70 3	7E 30 30 37 30 20 33		French	
XX70 4 XX70 5	7E 30 30 37 30 20 34 7E 30 30 37 30 20 35		Italian Spanish	
XX70 6	7E 30 30 37 30 20 36		Portuguese	
XX70 7 XX70 8	7E 30 30 37 30 20 37 7E 30 30 37 30 20 38		Polish Dutch	
XX70 9	7E 30 30 37 30 20 39		Swedish	
XX70 10 XX70 11	7E 30 30 37 30 20 31 30 7E 30 30 37 30 20 31 31		Norwegian/Danish Finnish	
XX70 12	7E 30 30 37 30 20 31 32		Greek	
XX70 13 XX70 14	7E 30 30 37 30 20 31 33 7E 30 30 37 30 20 31 34		Traditional Chinese Simplified Chinese	
XX70 15	7E 30 30 37 30 20 31 35		Japanese	
XX70 16 XX70 17	7E 30 30 37 30 20 31 36 7E 30 30 37 30 20 31 37		Korean Russian	
XX70 18	7E 30 30 37 30 20 31 38		Hungarian	
XX70 19 XX70 20	7E 30 30 37 30 20 31 39 7E 30 30 37 30 20 32 30		Czechoslovak Arabic	
XX70 20 XX70 21	7E 30 30 37 30 20 32 30 7E 30 30 37 30 20 32 31		Thai	

232 ASCII Code	HEX Code	Function			Description
~XX71 1 ~XX71 2 ~XX71 3 ~XX71 4	7E 30 30 37 31 20 31 7E 30 30 37 31 20 32 7E 30 30 37 31 20 33 7E 30 30 37 31 20 34	Projection	Front-Desktop Rear-Desktop Front-Ceiling Rear-Ceiling		
~XX72 1 ~XX72 2 ~XX72 3 ~XX72 4 ~XX72 5	TE 30 30 37 32 20 31 TE 30 30 37 32 20 32 TE 30 30 37 32 20 32 TE 30 30 37 32 20 33 TE 30 30 37 32 20 34 TE 30 30 37 32 20 35	Menu Location	Top Left Top Right Centre Bottom Left Bottom Right		
~XX73 n ~XX74 n ~XX75 n ~XX76 n		Signal	Frequency Phase H. Position V. Position		n= -50 - +50 n= -50 - +50 n= -50 - +50 n= -50 - +50
~XX77 n ~XX78 1 ~XX78 2	7E 30 30 37 38 20 31 7E 30 30 37 38 20 32	Security	Security Timer Security Settings	Month/Day/Hour Enable Disable	nnnnnn
~XX79 n		Projector ID			n=00-99
~XX80 1 ~XX80 2 ~XX81 n	7E 30 30 38 30 20 31 7E 30 30 38 30 20 32	Mute Volume	On Off	On Off	n=0-15
~XX100 1 ~XX100 2 ~XX101 1 ~XX101 2 ~XX102 1 ~XX102 2 ~XX103 1 ~XX103 2	7E 30 30 31 30 30 20 31 7E 30 30 31 30 30 20 32 7E 30 30 31 30 31 20 31 7E 30 30 31 30 31 20 32 7E 30 30 31 30 32 20 32 7E 30 30 31 30 32 20 31 7E 30 30 31 30 32 20 32 7E 30 30 31 30 33 20 32	Source Lock High Altitude Information Hide Keypad Lock		On Off On Off On Off On Off On Off	
~XX104 1 ~XX104 2	7E 30 30 31 30 34 20 31 7E 30 30 31 30 34 20 31 7E 30 30 31 30 34 20 32	Background Colour	Blue Black		
~XX105 1 ~XX105 2 ~XX106 n ~XX107 n	7E 30 30 31 30 35 20 31 7E 30 30 31 30 35 20 32	Advanced	Direct Power On  Auto Power Off (r  Sleep Timer (min)		n=0-180 n=000-999
~XX108 1 ~XX109 1 ~XX109 2 ~XX110 1 ~XX110 2 ~XX111 1 ~XX111 2	7E 30 30 31 30 38 20 31 7E 30 30 31 30 39 20 31 7E 30 30 31 30 39 20 32 7E 30 30 31 31 30 20 31 7E 30 30 31 31 30 20 32 7E 30 30 31 31 30 20 32 7E 30 30 31 31 31 20 31 7E 30 30 31 31 31 20 31	Lamp Setting	Lamp Hour Lamp Reminder Brightness Mode Lamp Reset	On Off Bright STD Yes No	
~XX112 1 ~XX112 2	7E 30 30 31 31 32 20 31 7E 30 30 31 31 32 20 32	Reset		Yes No	
SEND to Remote	XX = 00 ~ 99				
-XX140 3 -XX140 4 -XX140 5 -XX140 5 -XX140 6 -XX140 7 -XX140 7 -XX140 10 -XX140 11 -XX140 12 -XX140 12 -XX140 21 -XX140 21 -XX140 21 -XX140 22 -XX140 22 -XX140 23 -XX140 24	7E 90 30 31 34 30 20 33 7E 90 30 31 34 90 20 35 7E 90 30 31 34 30 20 39 7E 90 30 31 34 30 20 39 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 31 30 7E 90 30 31 34 30 20 32 30 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 32 7E 90 30 31 34 30 20 32 33 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30 20 32 34 7E 90 30 31 34 30		Remote Mouse Le Remote Mouse Le Remote Mouse Re Remote Mouse Ri, Remote Mouse Ri, Remote Mouse Ri, Remote Mouse Ri, Remote Mouse Right Click Up/Page + Left/Source Enter (for projectic Right/Re-SYNC Down/Page - Keystone + Volume - Volume + Brightness Menu Zoom DVI-D VGA-1 AV Mute	ft ter ght swn	
~XX140 24 ~XX140 25 ~XX140 26 ~XX140 27	7E 30 30 31 34 30 20 32 34 7E 30 30 31 34 30 20 32 35 7E 30 30 31 34 30 20 32 36 7E 30 30 31 34 30 20 32 37		S-Video VGA-2 Video		

## Ceiling Mount Installation

- 1. To prevent damaging your projector, please use the Optoma's recommended mount package for installation.
- 2. If you wish to use a third party ceiling mount kit, please ensure the screws used to attached a mount to the projector met the following specifications:
  - Screw type: M3
  - Maximum screw length: 10mm
  - Minimum screw length: 7.5mm

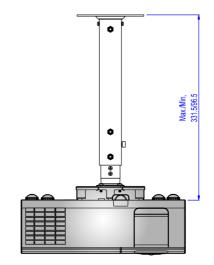


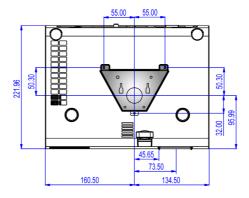
Please note that damage resulting from incorrect installation will invalidate the warranty.



Warning:

- 1. If you buy the ceiling mount from other company, please ensure that there is at least 10cm distance between the bottom cover of the projector and the ceiling.
- Avoid placing the projector near sources of heat such as air-conditioning units and heaters, otherwise, it may overheat and shut down automatically.





## **Optoma Global Offices**

For service or support please contact your local office.

### **USA**

715 Sycamore Drive Tel : 408-383-3700 Milpitas, CA 95035, USA Fax : 408-383-3702

www.optomausa.com Service: <a href="mailto:services@optoma.com">services@optoma.com</a>

### Canada

5630 Kennedy Road, Mississauga,

ON, L4Z 2A9, Canada Tel : 905-361-2582 www.optoma.ca Fax : 905-361-2581

### Europe

42 Caxton Way, The Watford Business Park

Watford, Hertfordshire,

WD18 8QZ, UK Tel: +44 (0) 1923 691 800 www.optoma.eu Fax: +44 (0) 1923 691 888

Service Tel: +44 (0)1923 691865 Service: service@tsc-europe.com

### France

Bâtiment E Tel.: +33 1 41 46 12 20 81-83 avenue Edouard Vaillant Fax : +33 1 41 46 94 35

92100 Boulogne Billancourt, France Service: <a href="mailto:savoptoma@optoma.fr">savoptoma@optoma.fr</a>

### Spain

Paseo de la Castellana Tel.: +34 91 790 67 01 135 7 Planta +34 91 790 67 02 Madrid, Spain Fax : + 34 91 790 68 69

### Deutschland

 Werftstrasse 25
 Tel: +49 (0) 211 506 6670

 D40549 Düsseldorf,
 Fax: +49 (0) 211 506 66799

 Germany
 Service: info@optoma.de

### Scandinavia

Grev Wedels Plass 2 Tel : +47 32 26 89 90 3015 Drammen Fax : +47 32 83 78 98 Norway Service : info@optoma.no

### Latin America

 715 Sycamore Drive
 Tel: 408-383-3700

 Milpitas, CA 95035, USA
 Fax: 408-383-3702

 www.optoma.com.br
 www.optoma.com.mx

### Korean

WOOMI TECH.CO.,LTD.

4F,Minu Bldg.33-14, Kangnam-Ku, Tel: +82+2+34430004 seoul,135-815, KOREA Fax: +82+2+34430005

### **Japanese**

東京都足立区綾瀬3-25-18 オーエス本社ビル

オーエス本社ビル E-mail: <u>info@osscreen.com</u> サポートセンター:0120-46-5040 www.os-worldwide.com

### **Taiwan**

5F., No. 108, Minchiuan Rd. Tel: +886-2-2218-2360 Shindian City, Fax: +886-2-2218-2313

Taipei Taiwan 231, R.O.C. Service: <a href="mailto:services@optoma.com.tw">services@optoma.com.tw</a>

www.optoma.com.tw asia.optoma.com

### Hong Kong

Unit A, 27/F Dragon Centre,
79 Wing Hong Street,
Cheung Sha Wan,
Kowloon, Hong Kong
Tel: +852-2396-8968
Fax: +852-2370-1222
www.optoma.com.hk

### China

5F, No. 1205, Kaixuan Rd., Tel: +86-21-62947376 Changning District Fax: +86-21-62947375 Shanghai, 200052, China www.optoma.com.cn

## **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 computer.

## **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 89/336/EEC (including amendments)
- Low Voltage Directive 73/23/EEC (amended by 93/68/EEC)
- R & TTE Directive 1999/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.