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Trademark Recognition

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

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

Important Safety Information

Important:

It is strongly recommended that you read this section carefully before using the projector. These safety and usage instructions will ensure that you enjoy many years of safe use of the projector. Keep this manual for future reference.

Symbols Used

Warning symbols are used on the unit and in this manual to alert you of hazardous situations.

The following styles are used in this manual to alert you to important information.

Note:

Provides additional information on the topic at hand.

Important:

Provides additional information that should not be overlooked.

Caution:

Alerts you to situations that may damage the unit.

Warning:

Alerts you to situations that may damage the unit, create a hazardous environment, or cause personal injury.

Throughout this manual, component parts and items in the OSD menus are denoted in bold font as in this example:

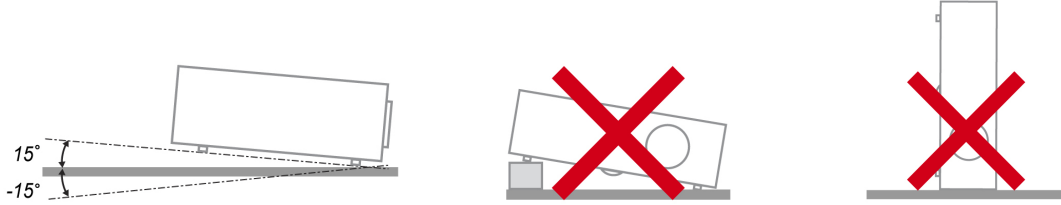
“Push the **Menu** button on the remote control to open the **Main** menu.”

General Safety Information

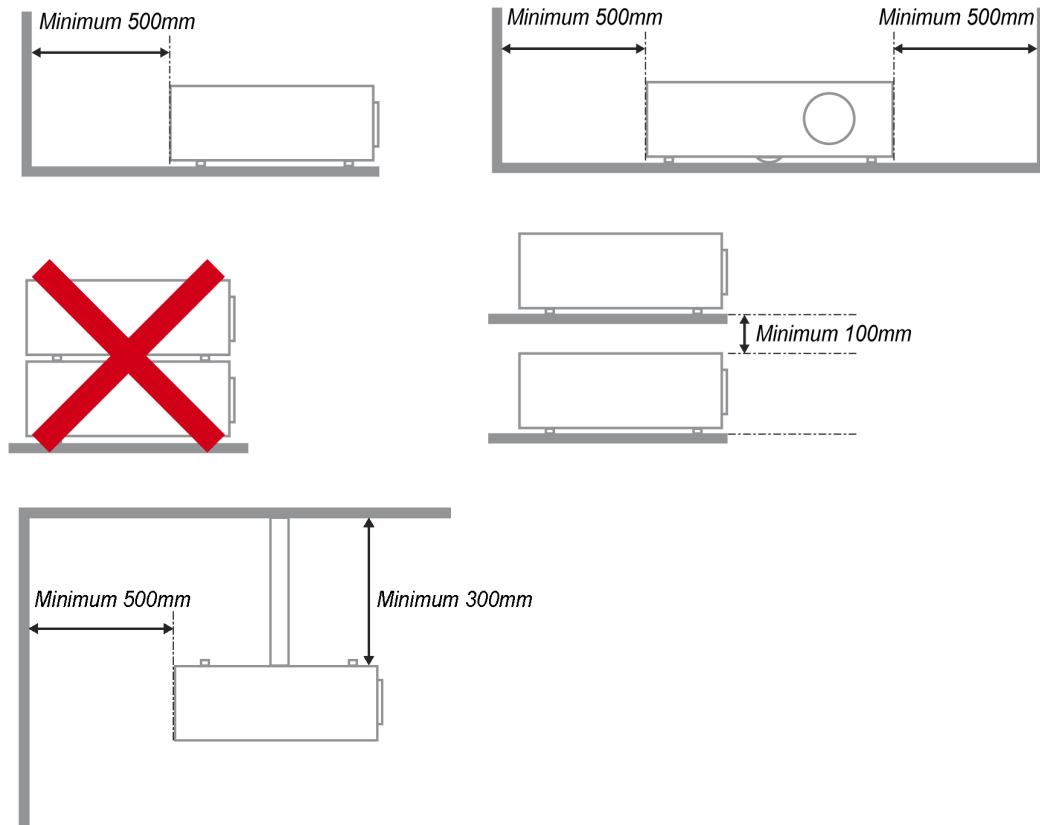
- Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- Follow all warnings and cautions in this manual and on the unit case.
- The projection lamp is extremely bright by design. To avoid damage to eyes, do not look into the lens when the lamp is on.
- Do not place the unit on an unstable surface, cart, or stand.
- Avoid using the system near water, in direct sunlight, or near a heating device.
- Do not place heavy objects such as books or bags on the unit.

Projector Installation Notice

- Place the projector in a horizontal position
The tilt angle of the projector should not exceed 15 degrees, nor should the projector be installed in any way other than the desktop and ceiling mount, otherwise lamp life could decrease dramatically.



- Allow at least 50 cm clearance around the exhaust vent.



- Ensure that the intake vents do not recycle hot air from the exhaust vent.
- When operating the projector in an enclosed space, ensure that the surrounding air temperature within the enclosure does not exceed 5 – 40°C while the projector is running, and the air intake and exhaust vents are unobstructed.
- All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air, as this may cause the device to shutdown even if the enclosure temperature is within the acceptable 5 – 40°C range.

Power Safety

- Only use the supplied power cord.
- Do not place anything on the power cord. Place the power cord where it will not be in the way of foot traffic.
- Remove the batteries from the remote control when storing or not in use for a prolonged period.

Replacing the Lamp

Replacing the lamp can be hazardous if done incorrectly. See *Replacing the Projection Lamp* on page 46 for clear and safe instructions for this procedure. Before replacing the lamp:

- Unplug the power cord.
- Allow the lamp to cool for about one hour.

Cleaning the Projector

- Unplug the power cord before cleaning. See *Cleaning the Projector* page 49.
- Allow the lamp to cool for about one hour.

Regulatory Warnings

Before installing and using the projector, read the regulatory notices in the *Regulatory Compliance* on page 61.

Important Recycle Instructions:



Lamp(s) inside this product contain mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at WWW.EIAE.ORG. For lamp specific disposal information check WWW.LAMPRECYCLE.ORG.

Symbol Explanations



DISPOSAL: Do not use household or municipal waste collection services for disposal of electrical and electronic equipment. EU countries require the use of separate recycling collection services.

Main Features

- *Lightweight unit, easy to pack away and transport.*
- *Compatible with all major video standards including NTSC, PAL, and SECAM.*
- *A high brightness rating allows for presentations in daylight or in lit rooms.*
- *Supports resolutions up to UXGA at 16.7 million colors to deliver crisp, clear images.*
- *Flexible setup allows for front, rear projections.*
- *Line-of-vision projections remain square, with advanced keystone correction for angled projections.*
- *Input source automatically detected.*

About this Manual

This manual is intended for end users and describes how to install and operate the DLP projector. Wherever possible, relevant information—such as an illustration and its description—has been kept on one page. This printer-friendly format is both for your convenience and to help save paper, thereby protecting the environment. It is suggested that you only print sections that are relevant to your needs.

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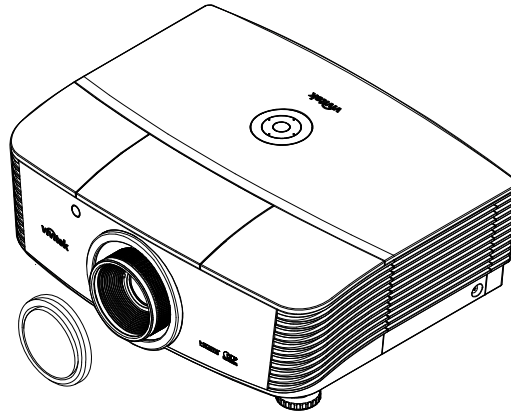
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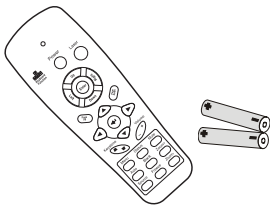
GETTING STARTED

Packing Checklist

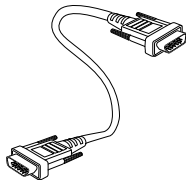
Carefully unpack the projector and check that the following items are included:



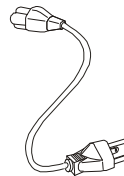
PROJECTOR WITH LENS CAP



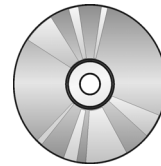
*REMOTE CONTROL
(WITH ONE AAA BATTERY)*



RGB CABLE



POWER CORD



*CD-ROM
(THIS USER'S MANUAL)*



WARRANTY CARD



QUICK START CARD

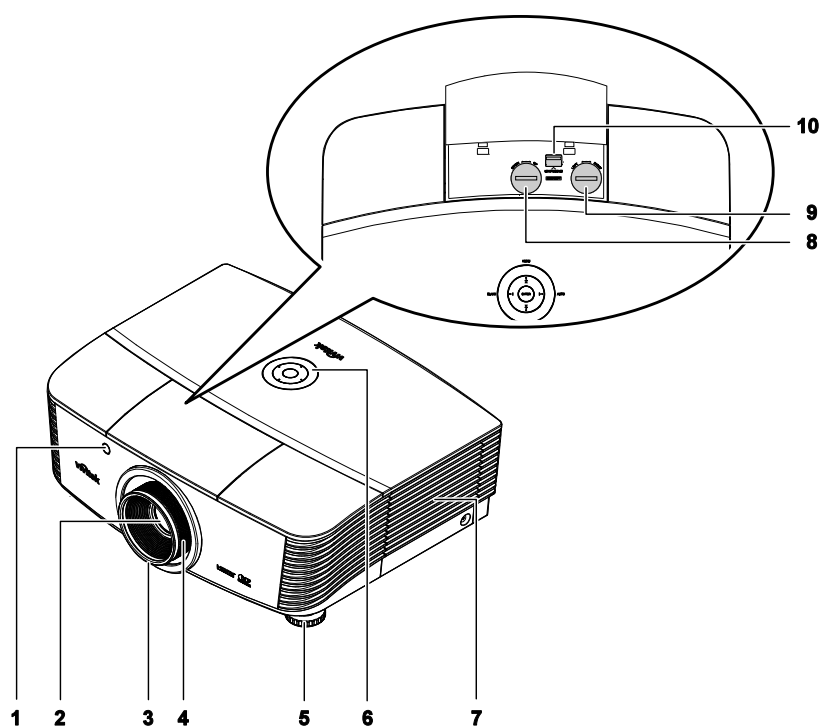
Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommended that you keep the original packing material should you ever need to return the equipment for warranty service.

Caution:

Avoid using the projector in dusty environments.

Views of Projector Parts

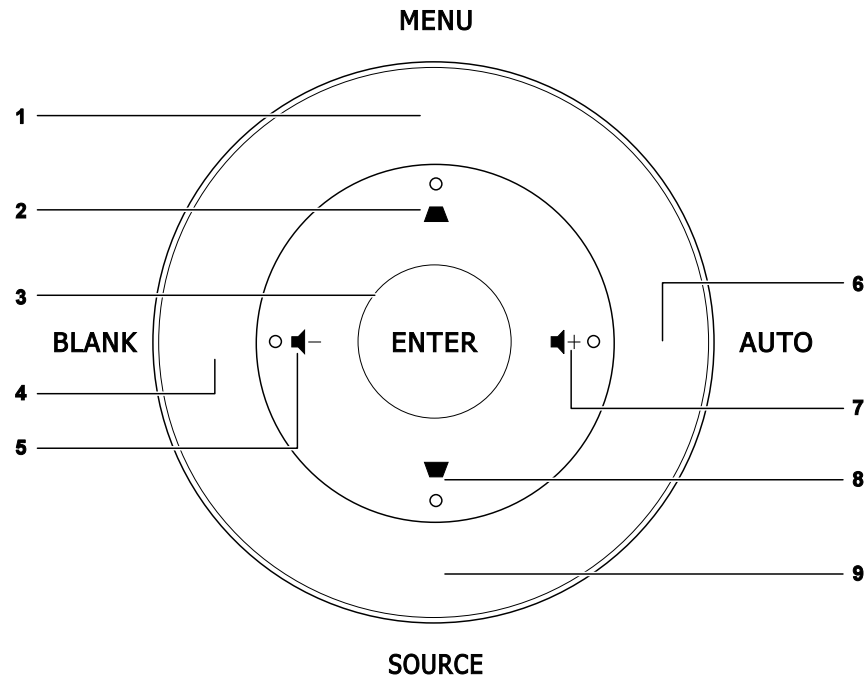
Front-right View



ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	IR receiver	Receives IR signal from remote control	7
2.	Lens	Projection Lens	
3.	Focus ring	Focuses the projected image	22
4.	Zoom ring	Enlarges the projected image	
5.	Height adjuster	Adjusts level of projector	19
6.	Function keys	See Top view—On-screen Display (OSD) buttons and LEDs.	3
7.	Lamp cover	Removes cover to replace lamp or color wheel	46
8.	Vertical lens shift	Adjusts the image position vertically	20
9.	Horizontal lens shift	Adjusts the image position horizontally	21
10.	Lens release button	Press the release button before removing the lens	13

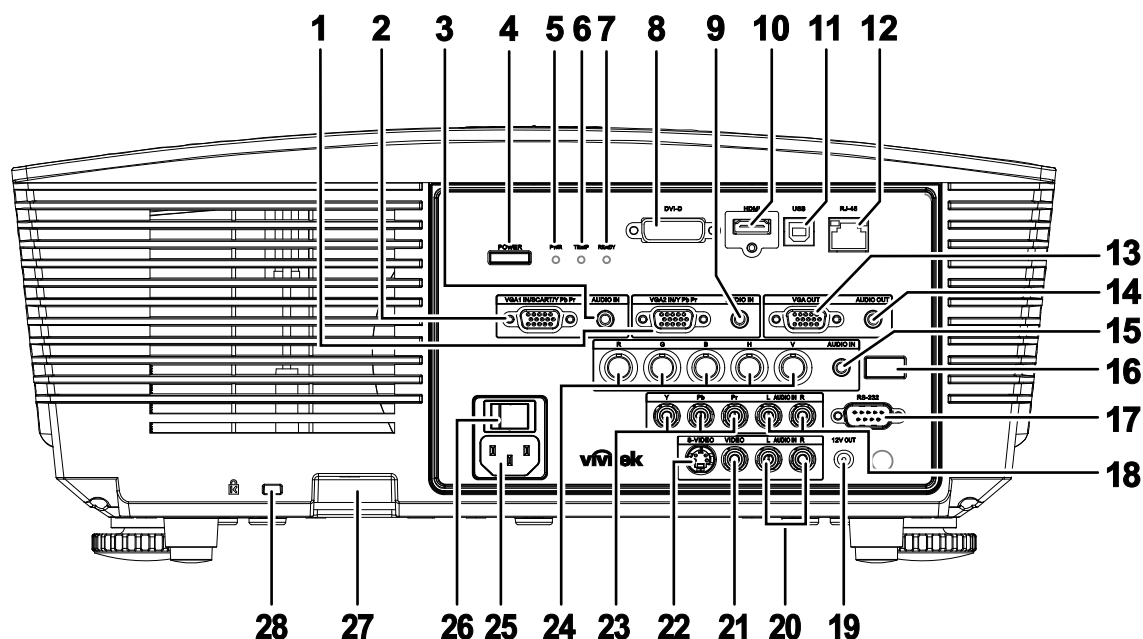
Important:

Ventilation openings on the projector allow for good air circulation, which keeps the projector lamp cool. Do not obstruct any of the ventilation openings.

Top view—On-screen Display (OSD) buttons and LEDs

ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	MENU	Opens and exits OSD menus	24
2.	▲ (Up cursor) / Keystone+	Navigates and changes settings in the OSD Quick Menu – For Keystone	
3.	ENTER	Enter or confirm highlighted OSD menu item	
4.	BLANK	Displays a blank screen and mutes audio	
5.	◀ (Volume -)	Quick Menu – For Volume -	24
6.	AUTO	Optimizes image size, position, and resolution	
7.	▶ (Volume +)	Quick Menu – For Volume +	24
8.	▼ (Down cursor) / Keystone-	Navigates and changes settings in the OSD Quick Menu – For Keystone	
9.	SOURCE	Enter the Source menu	11

Rear view



ITEM	LABEL	DESCRIPTION		SEE PAGE:
1.	VGA2 IN/ YPbPr	Connect an RGB cable from a computer or a video enabled device		11
2.	VGA1 IN/SCART/ YPbPr	Connect an RGB cable from a computer or a video enabled device		
3.	AUDIO IN (VGA1)	Connect an audio cable from the input device		
4.	POWER	Turns the projector on or off (main power switch must be turned on first). Press to place the projector in standby mode.		15
5.	PWR LED	Orange	Standby	52
		Green	In normal operation	
		Flashing	Powering on/ cooling	
6.	TEMP LED	Red	Error code	
7.	READY LED	Red	Error code	
		Flashing	Lamp is not ready (warming up/shutting down/cooling)	
8.	DVI-D	Connect the DVI cable (not supplied) from a computer		11
9.	AUDIO IN (VGA2/ DVI-D)	Connect an AUDIO cable from the input device		
10.	HDMI	Connect the HDMI cable from a HDMI device		
11.	USB	Connect the USB cable from a computer		
12.	RJ-45	Connect a LAN cable from Ethernet		

ITEM	LABEL	DESCRIPTION	SEE PAGE:
13.	VGA OUT	Connect the RGB cable to a display (Pass through by VGA1 only)	11
14.	AUDIO OUT	Connect an AUDIO cable for audio loop through	
15.	AUDIO IN (BNC)	Connect an AUDIO cable from the input device	
16.	IR receiver	Receive IR signal from remote control	7
17.	RS-232C	Connects RS-232 serial port cable for remote control	11
18.	AUDIO IN L/R RCA (YPbPr)	Connect the audio cables from a audio device	
19.	12V OUT	When connected to the screen through a commercially available cable, the screen deploys automatically on start up of the projector. The screen retracts when the projector is powered off (see notes below).	
20.	AUDIO IN L/R RCA (Video/ S-Video)	Connect the audio cables from a audio device	
21.	VIDEO	Connect the composite cable from a video device	
22.	S-VIDEO	Connect the S-video cable from a video device	
23.	YPbPr	Connect a component video enabled device	
24.	BNC	Connect an BNC cable from a computer or a video enabled device	
25.	AC IN	Connects the power cable	13
26.	Power switch	Turns on/off the projector	15
27.	Security chain lock	Helps protect the projector from unauthorized use	50
28.	Kensington Lock	Secures to permanent object with a Kensington® Lock system	

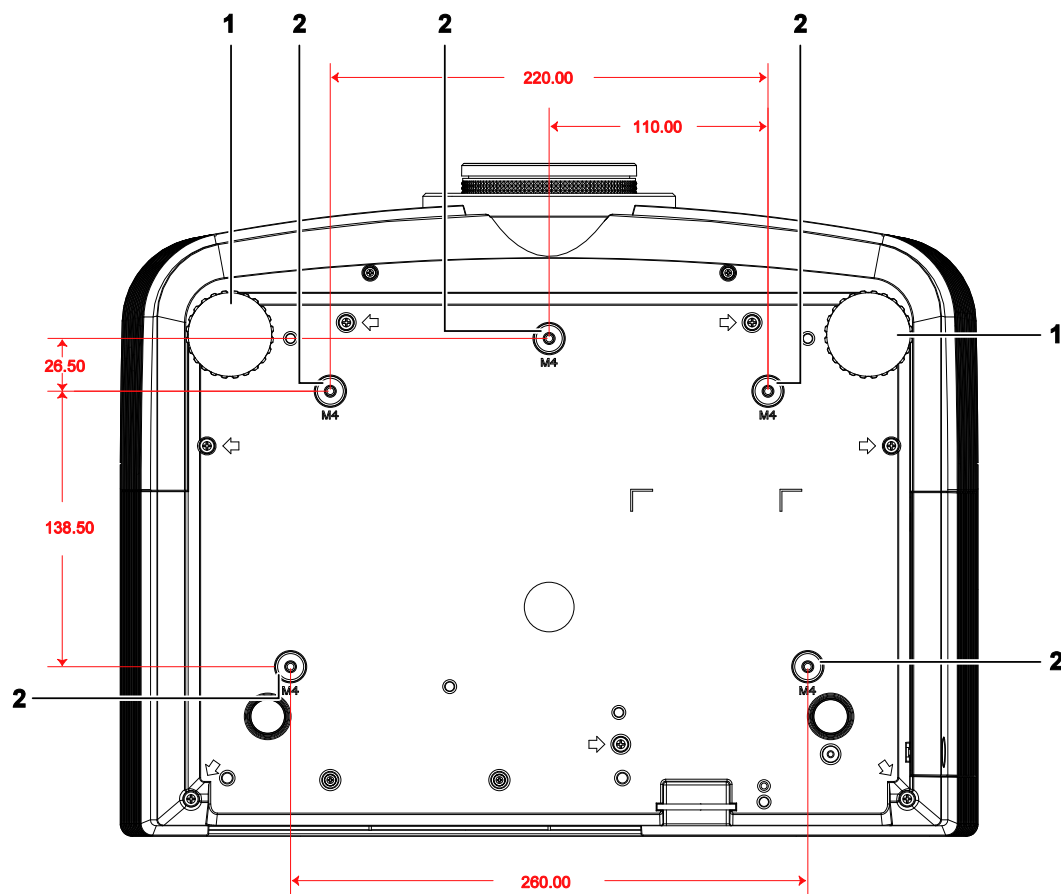
Note:

- To use this feature, you must plug in the connector before turn on/off the projector.
- Screen controllers are supplied and supported by screen manufacturers.
- Do not use this jack for anything other than intended use.

Note:

If your video equipment has both S-VIDEO and RCA jacks (composite video) connect to the S-VIDEO connector. S-VIDEO provides a better quality signal.

Bottom view



ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	Tilt adjustor	Rotate adjuster lever to adjust angle position.	19
2.	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling	

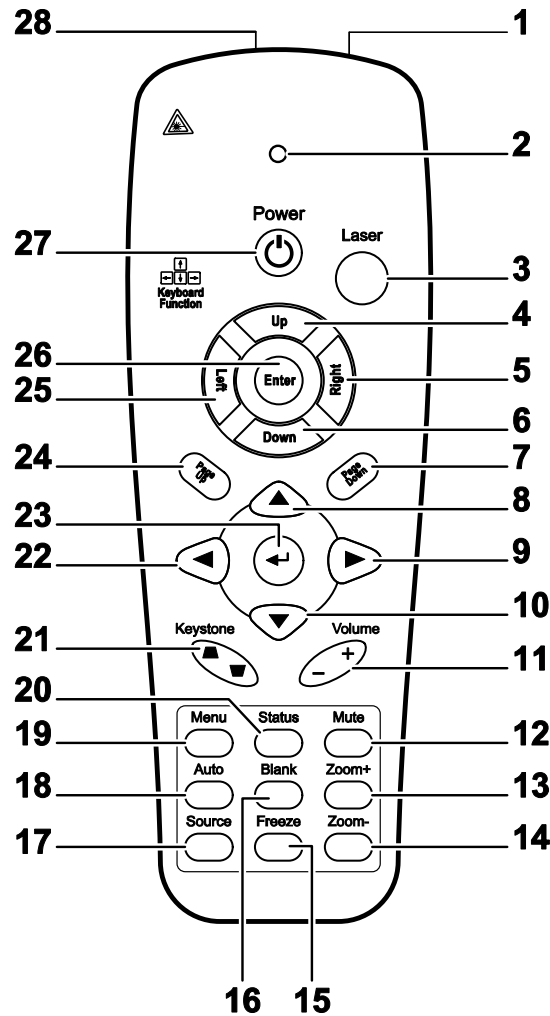
Note:

When installing, ensure that you use only UL Listed ceiling mounts.

For ceiling installations, use approved mounting hardware and M4 screws with a maximum screw depth of 6 mm (0.23 inch).

The construction of the ceiling mount must be of a suitable shape and strength. The ceiling mount load capacity must exceed the weight of the installed equipment, and as an additional precaution be capable of withstanding three times the weight of the equipment (not less than 5.15 kg) over a period of 60 seconds.

Remote Control Parts



Important:

1. Avoid using the projector with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.

2. Be sure nothing obstructs the path between the remote control and the projector. If the path between the remote control and the projector is obstructed, you can bounce the signal off certain reflective surfaces such as projector screens.

3. The buttons and keys on the projector have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.

ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	IR transmitter	Transmits signals to projector	
2.	Status LED	Lights when the remote control is used	
3.	Laser	Press to operate the on-screen pointer	
4.	Up	Up arrow when connected through USB to a PC	
5.	Right	Right arrow when connected through USB to a PC	
6.	Down	Down arrow when connected through USB to a PC	
7.	Page Down	Page down when connected through USB to a PC	
8.	Up cursor	Navigates and changes settings in the OSD	24
9.	Right cursor		
10.	Down cursor		
11.	Volume +/-	Adjusts volume	23
12.	Mute	Mutes the built-in speaker	
13.	Zoom+	Zoom in	
14.	Zoom-	Zoom out	
15.	Freeze	Freeze/unfreezes the on-screen picture	
16.	Blank	Makes the screen blank	
17.	Source	Detects the input device	
18.	Auto	Auto adjustment for phase, tracking, size, position	
19.	Menu	Opens the OSD	24
20.	Status	Opens the OSD Status menu (the menu only opens when an input device is detected)	37
21.	Keystone top/bottom	Corrects image-trapezoid (wider top/bottom) effect	22
22.	Left cursor	Navigates and changes settings in the OSD	24
23.	Enter	Changes settings in the OSD	
24.	Page Up	Page up when connected through USB to a PC	
25.	Left	Left arrow when connected through USB to a PC	
26.	Enter	Enter key when connected through USB to a PC	
27.	Power	Turns the projector on or off	13
28.	Laser	Use as on-screen pointer. DO NOT POINT IN EYES.	

Remote Control Operating Range

The remote control uses infrared transmission to control the projector. It is not necessary to point the remote directly at the projector. Provided you are not holding the remote perpendicular to the sides or the rear of the projector, the remote will function well within a radius of about 7 meters (23 feet) and 15 degrees above or below the projector level. If the projector does not respond to the remote control, move a little closer.

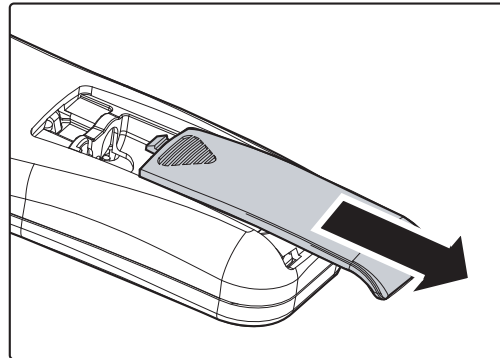
Projector and Remote Control Buttons

The projector can be operated using the remote control or the buttons on the top of the projector. All operations can be carried out with the remote control; however, the buttons on the projector are limited in use.

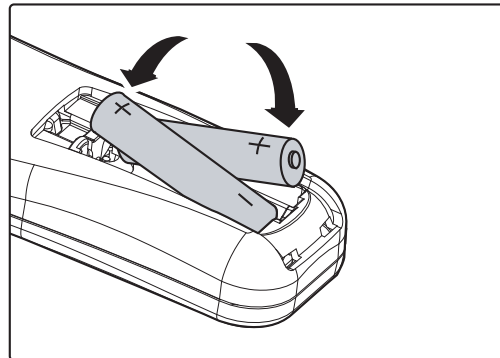
SETUP AND OPERATION

Inserting the Remote Control Batteries

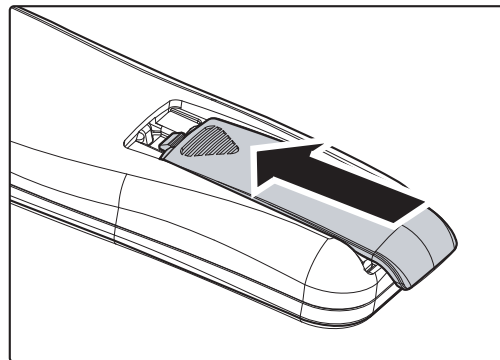
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



2. Insert the battery with the positive side facing up.



3. Replace the cover.

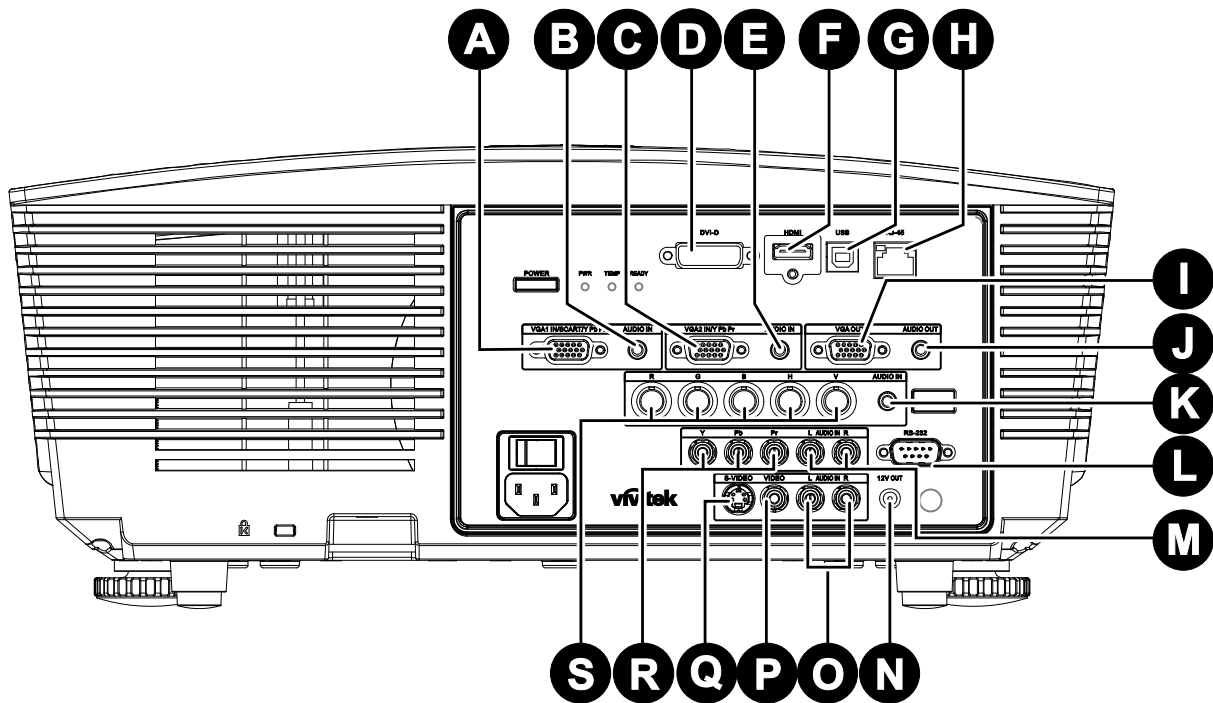


Caution:

1. Only use AAA batteries (Alkaline batteries are recommended).
2. Dispose of used batteries according to local ordinance regulations.
3. Remove the batteries when not using the projector for prolonged periods.

Connecting Input Devices

A PC or notebook computer and video devices can be connected to the projector at the same time. Video devices include DVD, VCD, and VHS players, as well as movie camcorders and digital still cameras. Check the user manual of the connecting device to confirm it has the appropriate output connector.



ITEM	LABEL	DESCRIPTION
A	VGA1 IN/SCART/YPbPr	Connect an RGB cable from a computer or a video enabled device
B	AUDIO IN (VGA1)	Connect an audio cable from the input device
C	VGA2 IN/YPbPr	Connect an RGB cable from a computer or a video enabled device
D	DVI-D	Connect the DVI cable (not supplied) from a computer
E	AUDIO IN (VGA2)	Connect an AUDIO cable from the input device
F	HDMI	Connect the HDMI cable from a HDMI device
G	USB	Connect the USB cable from a computer
H	RJ-45	Connect a LAN cable from Ethernet
I	VGA OUT	Connect the RGB cable to a display

ITEM	LABEL	DESCRIPTION
J	AUDIO OUT	Connect an AUDIO cable for audio loop through
K	AUDIO IN (BNC)	Connect an AUDIO cable from the input device
L	RS-232C	Connects RS-232 serial port cable for remote control
M	AUDIO IN L/R RCA (YPbPr)	Connect the audio cables from a audio device
N	12V OUT	When connected to the screen through a commercially available cable, the screen deploys automatically on start up of the projector. The screen retracts when the projector is powered off (see notes below).
O	AUDIO IN L/R RCA (Video/ S-Video)	Connect the audio cables from a audio device
P	VIDEO	Connect the composite cable from a video device
Q	S-VIDEO	Connect the S-video cable from a video device
R	YPbPr	Connect a component video enabled device
S	BNC	Connect an BNC cable from a computer or a video enabled device

Warning:

As a safety precaution, disconnect all power to the projector and connecting devices before making connections.

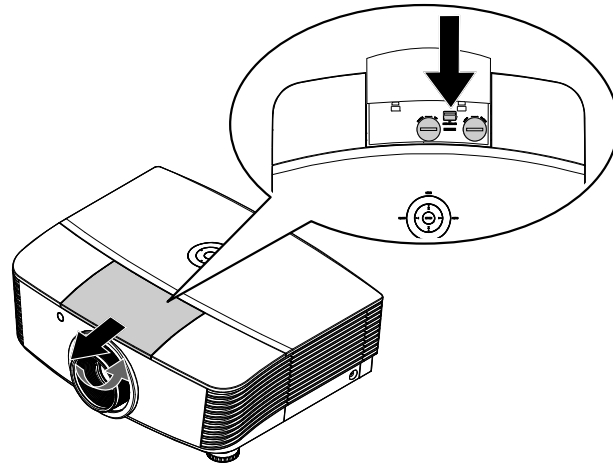
Installing or Removing the Optional Lens

Caution:

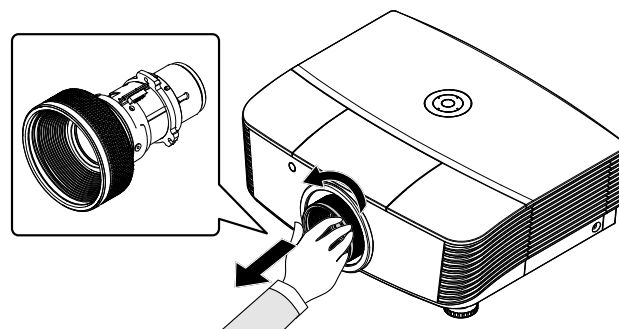
- Do not shake or place excessive pressure on the projector or the lens components as the projector and lens components contain precision parts.
- Before removing or installing the lens, be sure to turn off the projector, wait until the cooling fans stop, and turn off the main power switch.
- Do not touch the lens surface when removing or installing the lens.
- Keep fingerprints, dust or oil off the lens surface.
- Do not scratch the lens surface.
- Work on a level surface with a soft cloth under it to avoid scratching.
- If you remove and store the lens, attach the lens cap to the projector to keep off dust and dirt.

Removing the Existing Lens From the Projector

1. Pull and release the top cover to open as shown.
2. Push the LENSE RELEASE button to the unlock position.



3. Grasp the lens.
4. Rotate the lens counterclockwise. The existing lens will be disengaged.
5. Pull out the existing lens slowly.

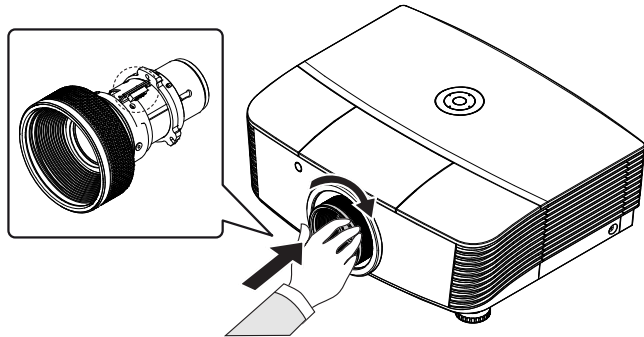


Installing the New Lens

1. Align the notches and correctly position the electrical contact pad as shown in the picture.

Note:

Pin of IRIS should be in the direction as shown in the picture.

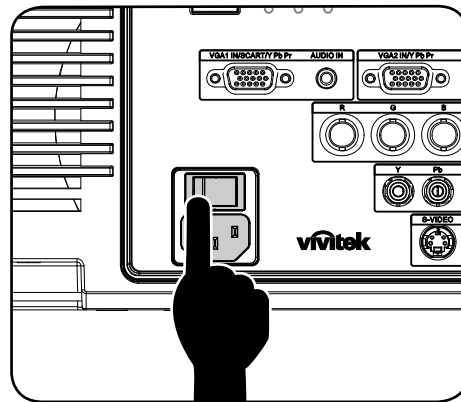
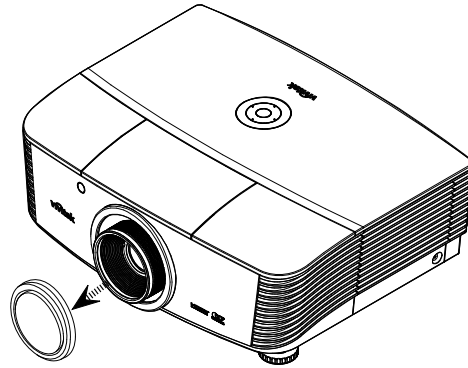


2. Rotate the lens clockwise until you feel it click into place.

Starting and Shutting down the Projector

1. Remove the lens cap.
2. Securely connect the power cord and signal cable. When connected, the power led will turn red.
3. Turn on the lamp by pressing
“POWER” button on the rear of the projector or “Power” on the remote control.

The PWR LED will now flash green.
The startup screen will display in approximately 30 seconds. The first time you use the projector, you can select your preferred language from quick menu after the startup screen display.

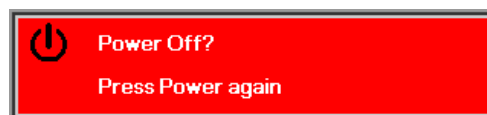


4. If more than one input device is connected, press the **SOURCE** button and use ▲▼ to scroll among devices. (Component is supported through the RGB to COMPONENT ADAPTER.)



- DVI: DVI
- HDMI: HDMI
- VGA1/ VGA2: Analog RGB
- BNC: Analog / serial digital interface video inputs
- Component Video: DVD input YCbCr / YPbPr, or HDTV input YPbPr via HD15 connector
- S-Video: Super video (Y/C separated)
- Composite Video: Traditional composite video

5. When the “Power Off? /Press **Power** again” message appears, press the **POWER** button. The projector turns off.



Caution:

1. Be sure to remove the lens cap before starting projector.
2. Do not unplug the power cord until the LAMP LED stops flashing—indicating the projector has cooled down.

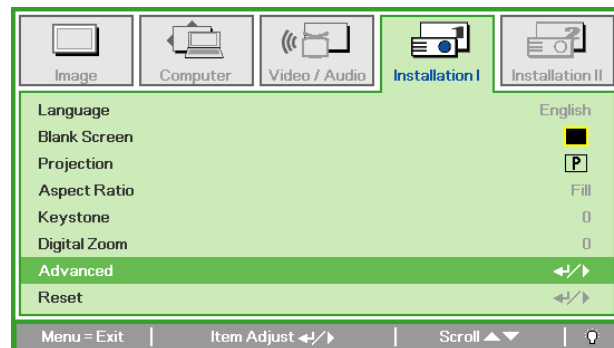
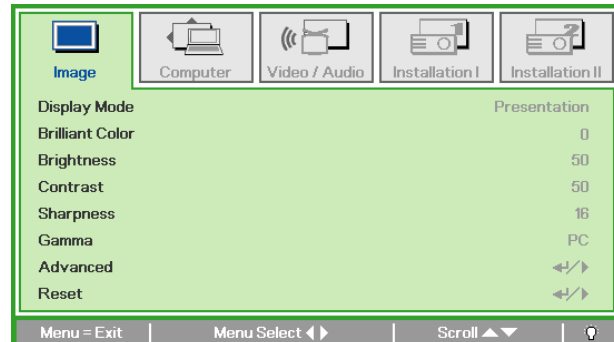
Setting an Access Password (Security Lock)

You can use the four (arrow) buttons to set a password and prevent unauthorized use of the projector. When enabled, the password must be entered after you power on the projector. (See *Navigating the OSD* on page 24 and *Setting the OSD Language* on page 25 for help on using OSD menus.)

Important:

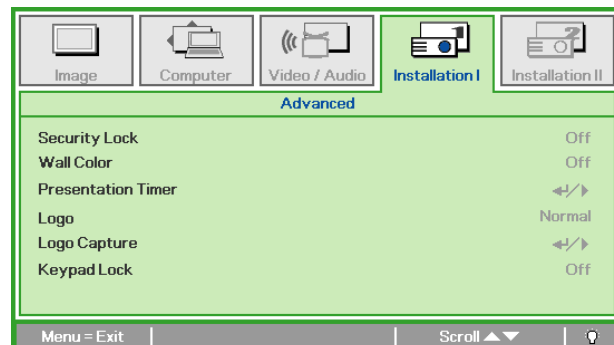
Keep the password in a safe place. Without the password, you will not be able to use the projector. If you lose the password, contact your reseller for information on clearing the password.

1. Press the **MENU** button to open the OSD menu.
2. Press the cursor **◀▶** button to move to the **Installation I** menu, press the cursor **▲▼** button to select **Advanced**.



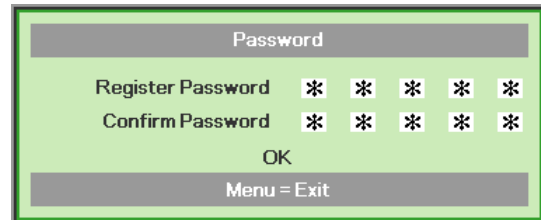
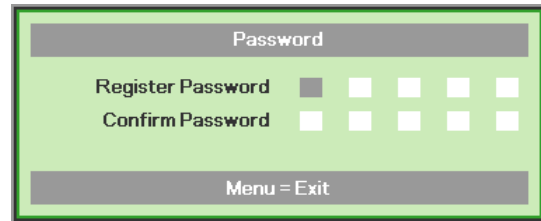
3. Press the cursor **▲▼** button to select **Security Lock**.
4. Press the cursor **◀▶** button to enable or disable security lock function.

A password dialog box automatically appears.

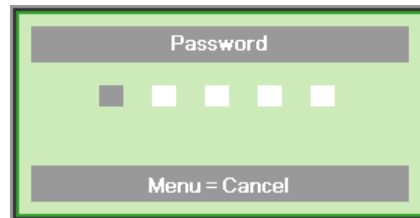


5. You can use the cursor buttons ▲▼◀▶ either on keypad or IR remote control for password entry. You can use any combination including the same arrow five times, but not less than five.

Press the cursor buttons in any order to set the password. Push the **MENU** button to exit the dialog box.



6. The password confirm menu appears when user presses the power-on key in case the **Security Lock** is enabled. Enter the password in the order you set it at step 5. In case you forget the password, please contact the service center. The service center will validate the owner and help reset the password.

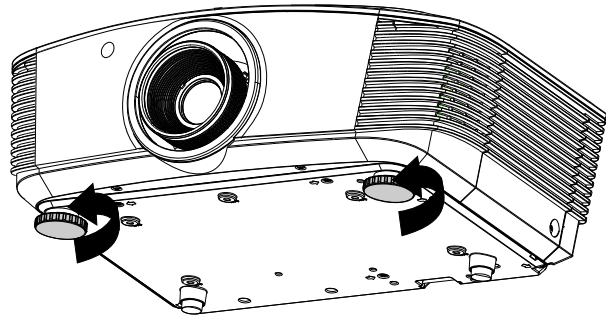


Adjusting the Projector Level

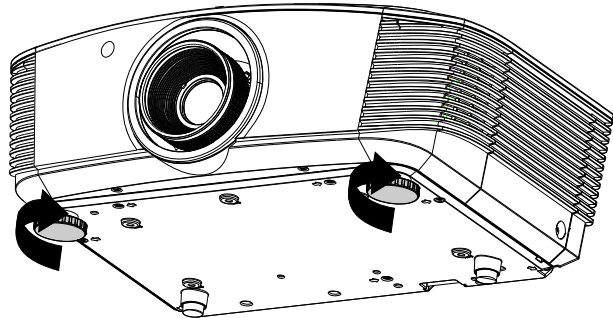
Take note of the following when setting up the projector:

- *The projector table or stand should be level and sturdy.*
- *Position the projector so that it is perpendicular to the screen.*
- *Remove the Back Foot Holder on the rear adjuster foot before adjusting the projection angle.*
- *Ensure the cables are in a safe location. You could trip over them.*

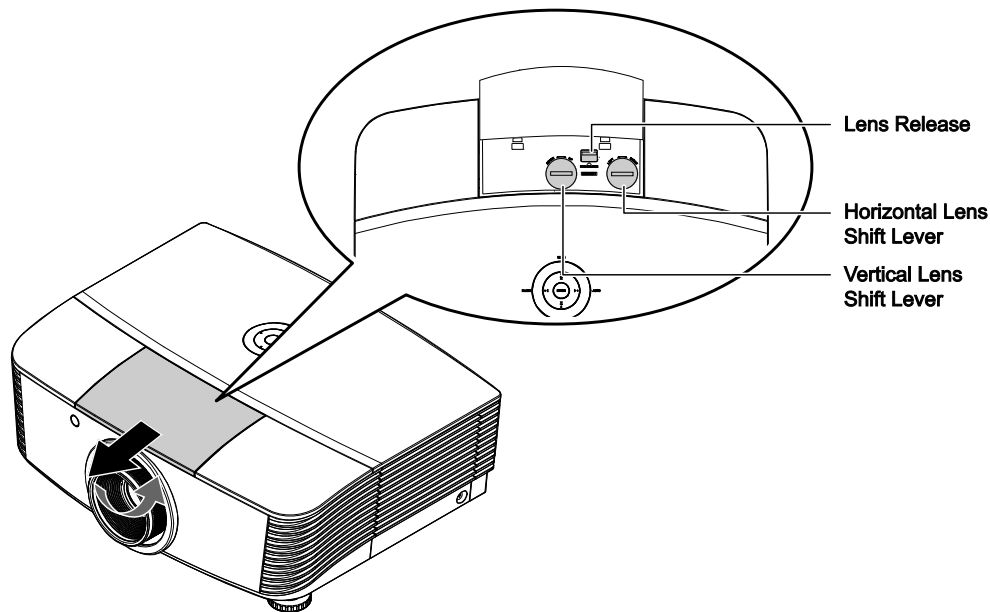
1. To raise the level of the projector, twist the adjusters clockwise.



2. To lower the level of the projector, lift the projector and twist the adjusters counter clockwise.



Adjusting Projected Image Position Using Shift

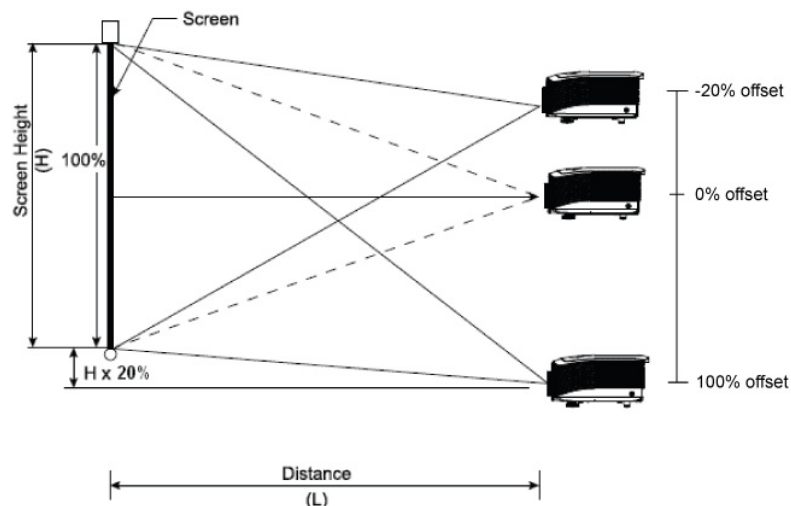


The Shift feature provides a lens shift function that can be used to adjust the position of the projected image either horizontally or vertically within the range detailed below.

Shift is a unique system that provides lens shift while maintaining a much higher ANSI contrast ratio than traditional lens shift systems.

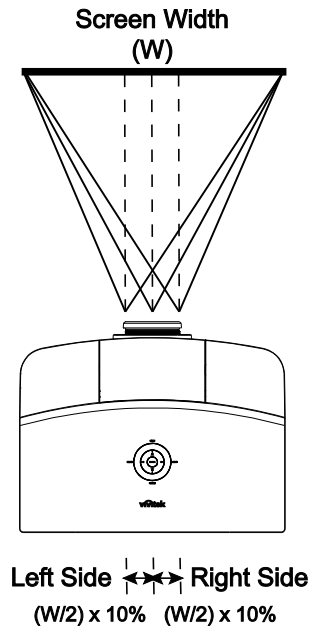
Adjusting the vertical image position

The vertical image height can be adjusted between 100% and -20% of half image height. Note that the maximum vertical image height adjustment can be limited by the horizontal image position. For example it is not possible to achieve the maximum vertical image position height detailed above if the horizontal image position is at maximum. Please consult the Shift Range diagram below for further clarification.

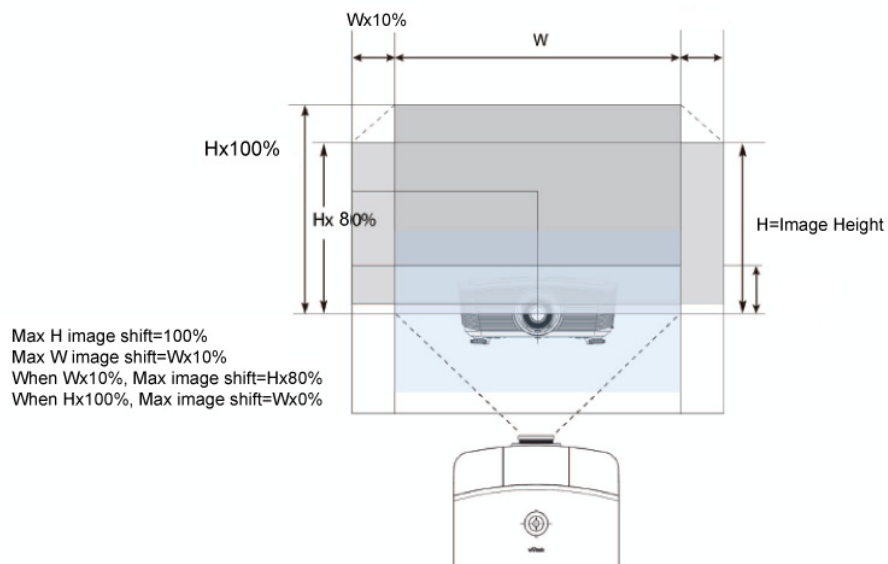


Adjusting the horizontal image position

With the lens in the center position the horizontal image position can be adjusted to the left or right by up to a maximum of 10% of the half image width. Note that the maximum horizontal image height adjustment can be limited by the vertical image position. For example it is not possible to achieve the maximum horizontal image position if the vertical image position is at maximum. Please consult the Shift Range diagram below for further clarification.

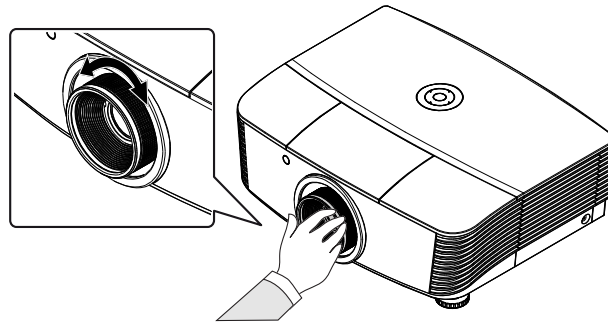


Shift Range Diagram

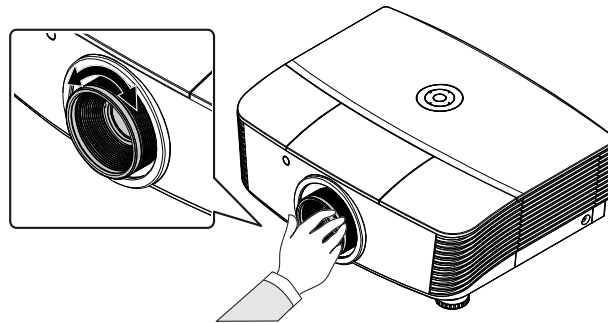


Adjusting the Zoom, Focus and Keystone

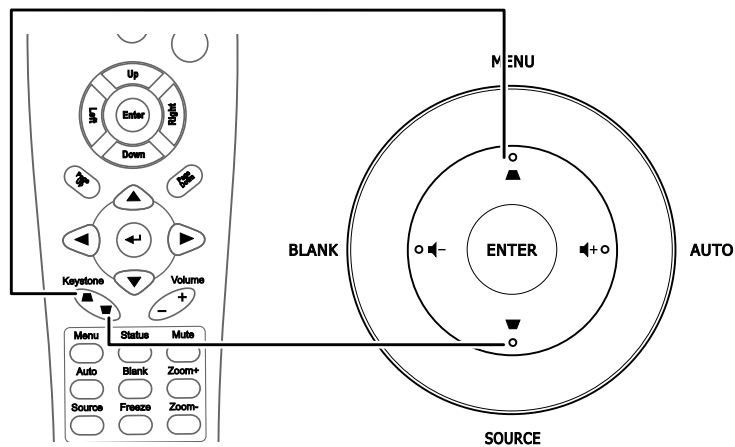
1. Use the **Image-zoom** control (on the projector only) to resize the projected image and screen size.



2. Use the **Image-focus** control (on the projector only) to sharpen the projected image.



3. Use the **KEYSTONE** buttons (on the projector or the remote control) to correct image-trapezoid (wider top or bottom) effect.



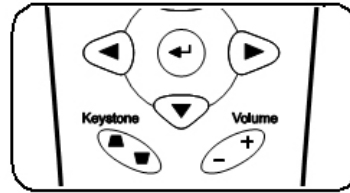
Remote control and OSD panel

4. The keystone control appears on the display.

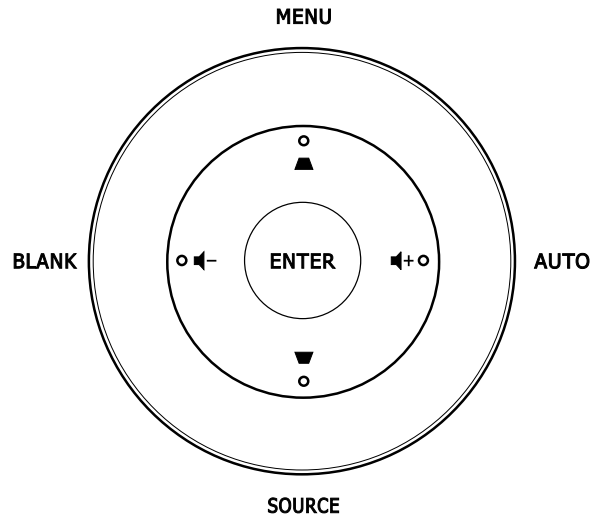


Adjusting the Volume

1. Press the **Volume +/-** buttons on the remote control.
The volume control appears on the display.



2. Press the **Left or Right Cursor** buttons on the keypad to adjust **Volume +/-**.



3. Press the **MUTE** button to turn off the volume (This feature is available only on the remote).



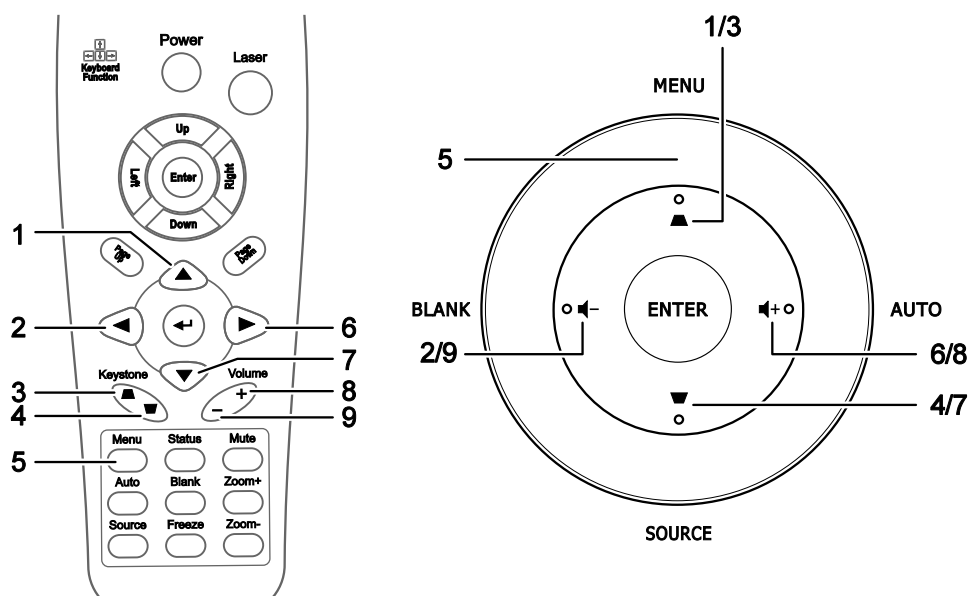
ON-SCREEN DISPLAY (OSD) MENU SETTINGS

OSD Menu Controls

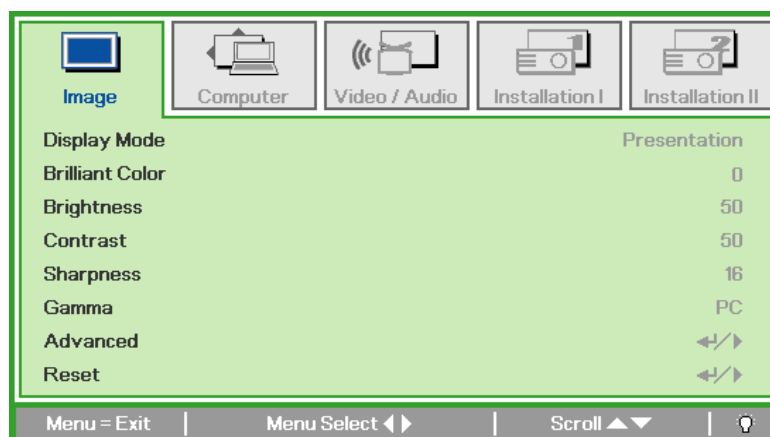
The projector has an OSD that lets you make image adjustments and change various settings.

Navigating the OSD

You can use the remote control cursor buttons or the buttons on the top of the projector to navigate and make changes to the OSD. The following illustration shows the corresponding buttons on the projector.



1. To enter the OSD, press the **MENU** button.
2. There are five menus. Press the cursor ◀▶ button to move through the menus.
3. Press the cursor ▲▼ button to move up and down in a menu.
4. Press ◀▶ to change values for settings.
5. Press **MENU** to close the OSD or leave a submenu.



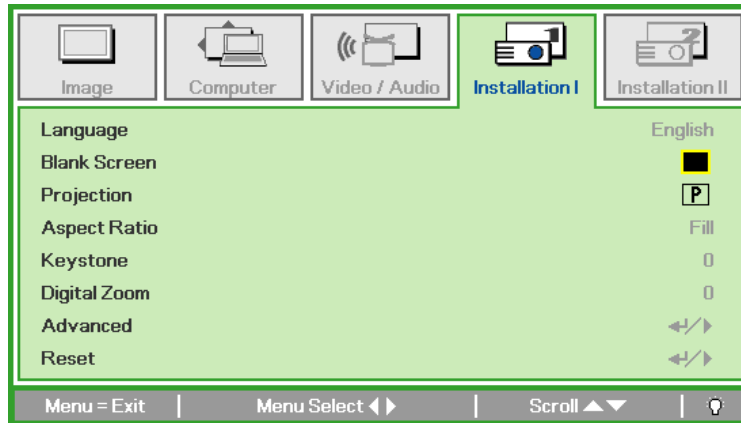
Note:

Depending on the video source, not all items in the OSD are available. For example, the **Horizontal/Vertical Position** items in the **Computer** menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.

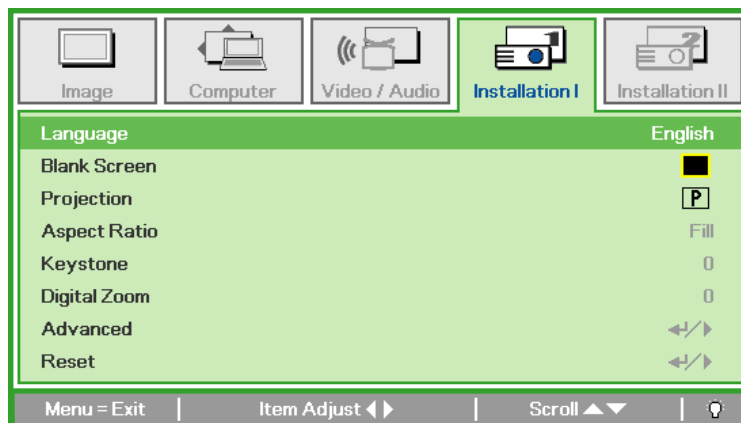
Setting the OSD Language

Set the OSD language to your preference before continuing.

1. Press the **MENU** button. Press the cursor ◀▶ button to navigate to Installation I.



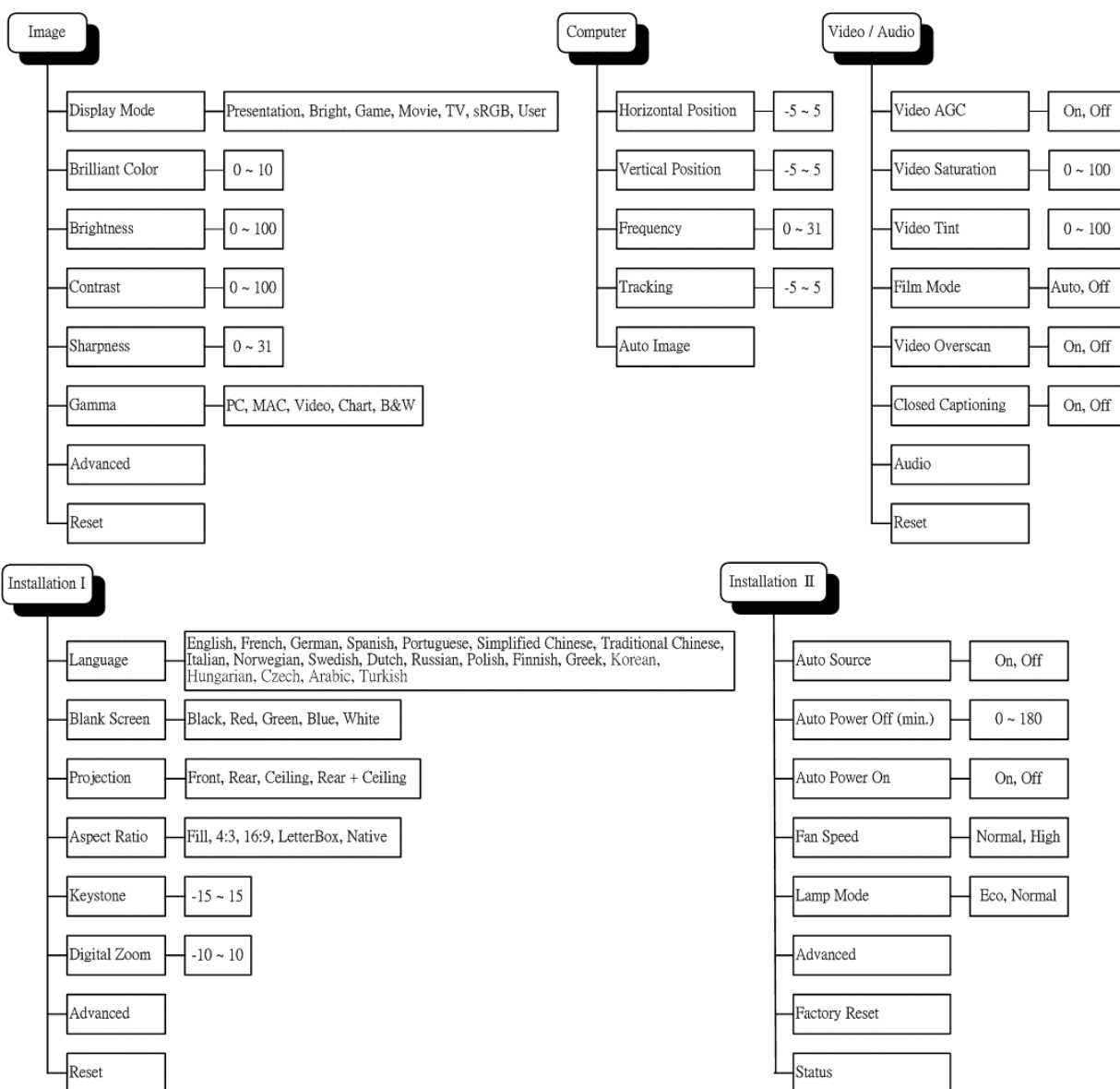
2. Press the cursor ▲▼ button until **Language** is highlighted.



3. Press the cursor ◀▶ button until the language you want is highlighted.
4. Press the **MENU** button twice to close the OSD.

OSD Menu Overview

Use the following illustration to quickly find a setting or determine the range for a setting.



OSD Sub-Menu Overview

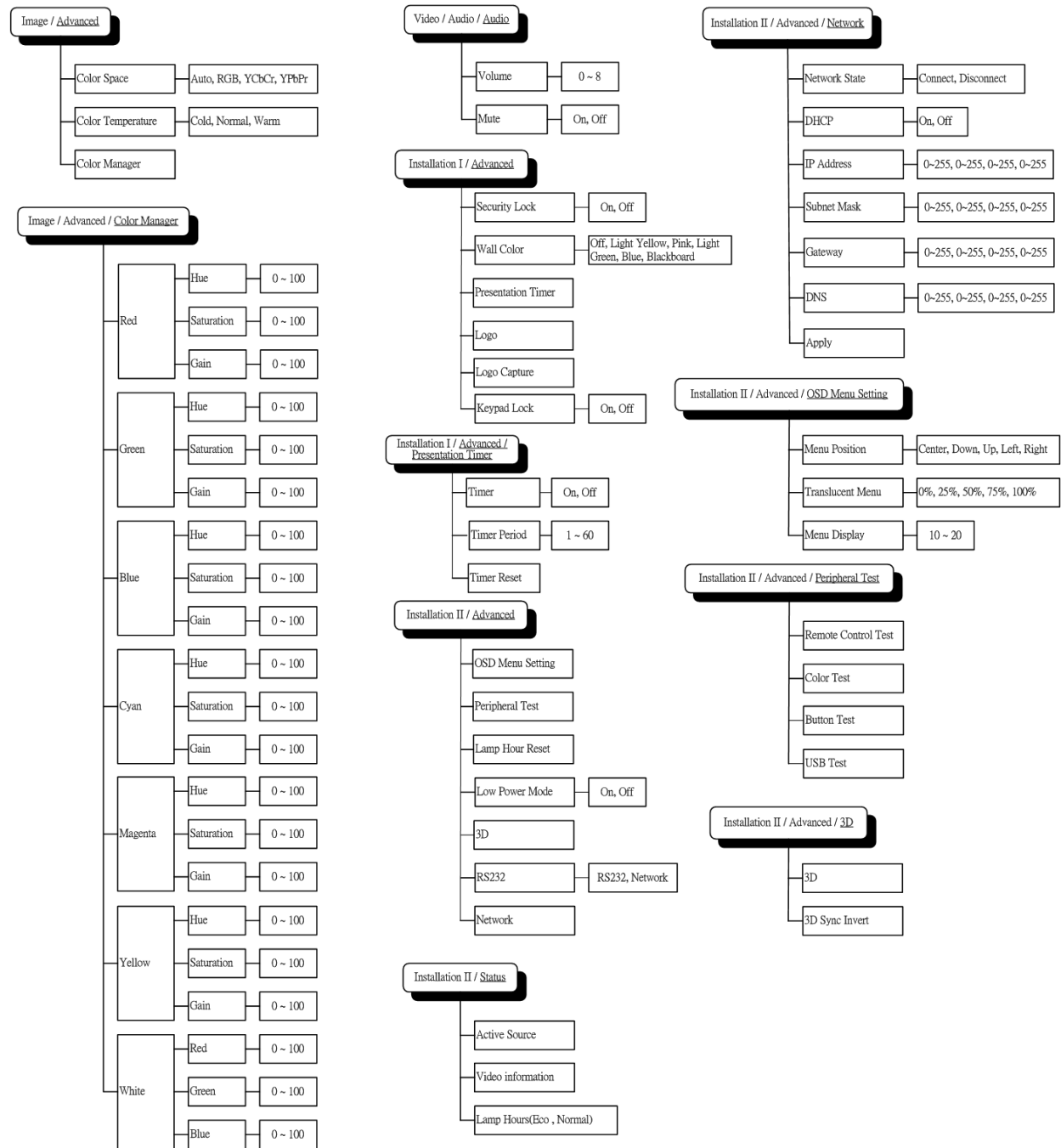
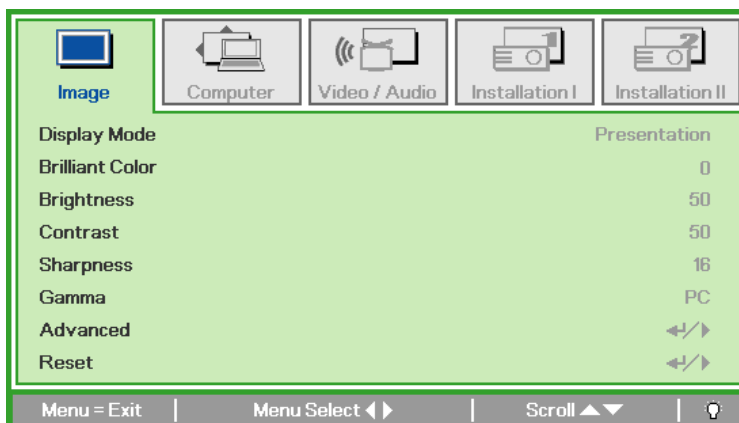


Image Menu

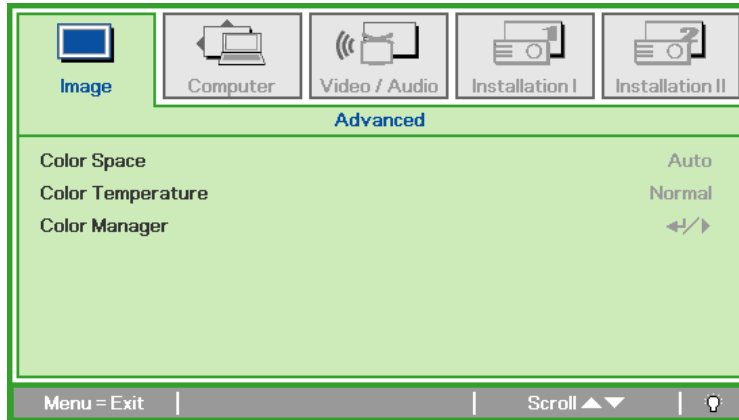
Press the **MENU** button to open the **OSD** menu. Press the cursor ◀▶ button to move to the **Image Menu**. Press the cursor ▲▼ button to move up and down in the **Image** menu. Press ◀▶ to change values for settings.



ITEM	DESCRIPTION
Display Mode	Press the cursor ◀▶ button to set the Display Mode.
Brilliant Color	Press the cursor ◀▶ button to adjust the Brilliant Color value.
Brightness	Press the cursor ◀▶ button to adjust the display brightness.
Contrast	Press the cursor ◀▶ button to adjust the display contrast.
Sharpness	Press the cursor ◀▶ button to adjust the display sharpness level.
Gamma	Press the cursor ◀▶ button to adjust the gamma correction of the display.
Advanced	Press ◀ (Enter) / ▶ to enter the Advanced menu. See <i>Advanced Feature</i> on page 29.
Reset	Press ◀ (Enter) / ▶ to reset all settings to default values.

Advanced Feature

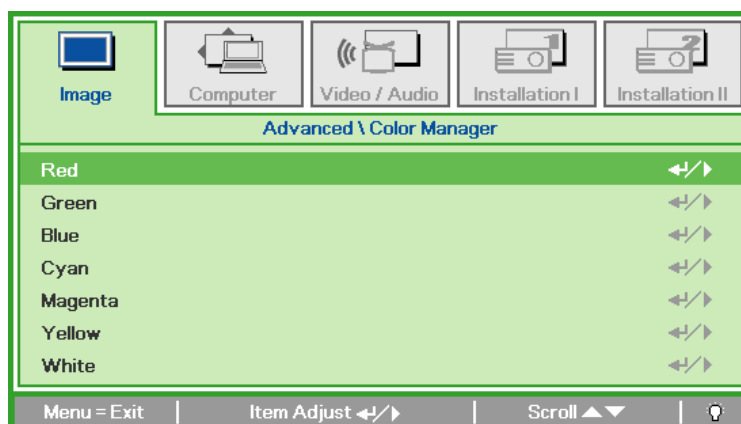
Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Image** menu. Press ▼▲ to move to the **Advanced** menu and then press **Enter** or ▶. Press ▼▲ to move up and down in the **Advanced** menu.



ITEM	DESCRIPTION
Color Space	Press the cursor ◀▶ button to adjust the color space. (Range: Auto – RGB – YPbPr – YCbCr)
Color Temperature	Press the cursor ◀▶ button to adjust the color temperature. (Range: Cold – Normal – Warm)
Color Manager	Press ◀ (Enter) / ▶ to enter the color manager menu. (Range: Red-Green-Blue-Cyan-Magenta-Yellow-White). See page 30 for more information on <i>Color Manager</i> .

Color Manager

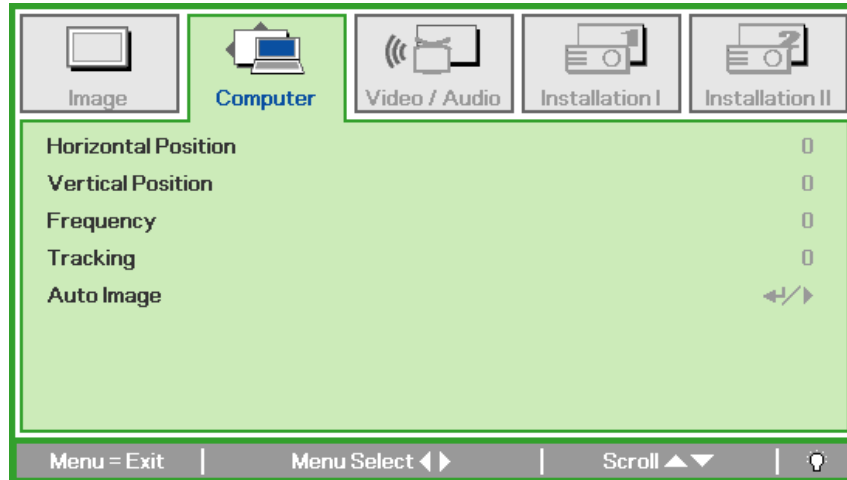
Press ◀ (Enter) / ▶ to enter the **Color Manager** sub menu.



ITEM	DESCRIPTION
Red	Select to enter the Red Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Green	Select to enter the Green Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Blue	Select to enter the Blue Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Cyan	Select to enter the Cyan Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Magenta	Select to enter the Magenta Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
Yellow	Select to enter the Yellow Color Manager. Press the ◀▶ buttons to adjust the Hue, Saturation, and Gain.
White	Select to enter the White Color Manager. Press the ◀▶ buttons to adjust the Red, Green, and Blue.

Computer Menu

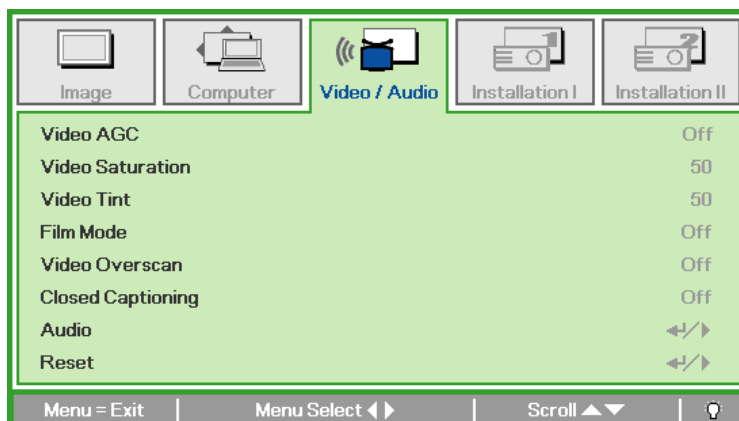
Press the **MENU** button to open the **OSD** menu. Press the cursor ◀▶ button to move to the **Computer** menu. Press the cursor ▲▼ button to move up and down in the computer menu. Press ◀▶ to change values for settings.



ITEM	DESCRIPTION
Horizontal Position	Press the cursor ◀▶ button to adjust the display position to left or right.
Vertical Position	Press the cursor ◀▶ button to adjust the display position to up or down.
Frequency	Press the cursor ◀▶ button to adjust the A/D sampling clock.
Tracking	Press the cursor ◀▶ button to adjust the A/D sampling dot.
Auto Image	Press ◀ (Enter) / ▶ to automatically adjustment for phase, tracking, size and position.

Video/Audio Menu

Press the **MENU** button to open the **OSD** menu. Press the cursor ◀▶ button to move to the **Video/Audio** menu. Press the cursor ▲▼ button to move up and down in the **Video/Audio** menu. Press ◀▶ to change values for settings.



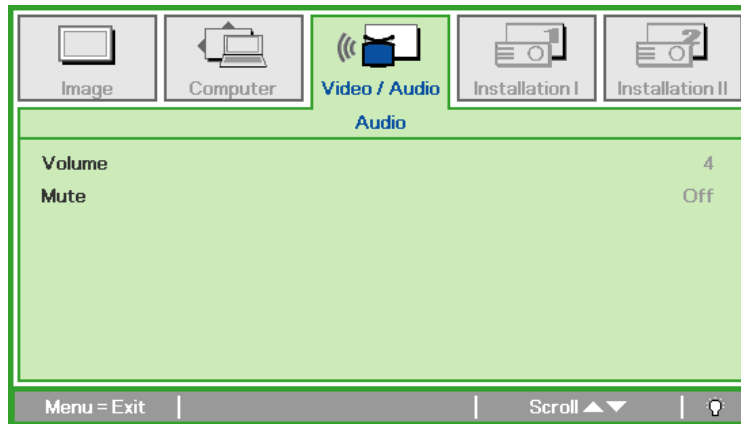
ITEM	DESCRIPTION
Video AGC	Press the ◀▶ buttons to enable or disable the Automatic Gain Control for video source.
Video Saturation	Press the ◀▶ buttons to adjust the video saturation.
Video Tint	Press the ◀▶ buttons to adjust the video tint/hue.
Film Mode	Press the ◀▶ buttons to select a different film mode.
Video Overscan	Press the ◀▶ buttons to enable or disable video over scan.
Closed Captioning	Press the ◀▶ buttons to enable or disable Closed Captioning
Audio	Press ◀ (Enter) / ▶ to enter the Audio menu. See <i>Audio</i> on page 33.
Reset	Press ◀ (Enter) / ▶ to reset all settings to default values.

Note:

Video jaggging may occur when playing interlace video. To overcome this issue, open the Video / Audio menu and adjust the Film Mode feature.

Audio

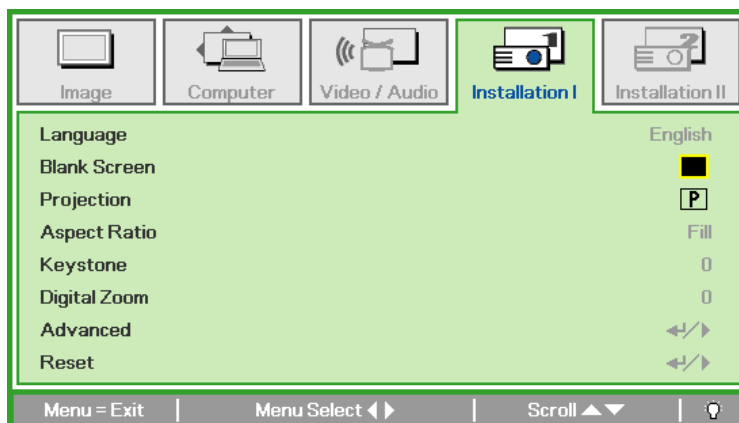
Press **↵** (Enter) / **▶** to enter the **Audio** sub menu.



ITEM	DESCRIPTION
Volume	Press the ◀▶ buttons to adjust the audio volume. (Range: 0~8)
Mute	Press the ◀▶ buttons to turn on or off the speaker.

Installation I Menu

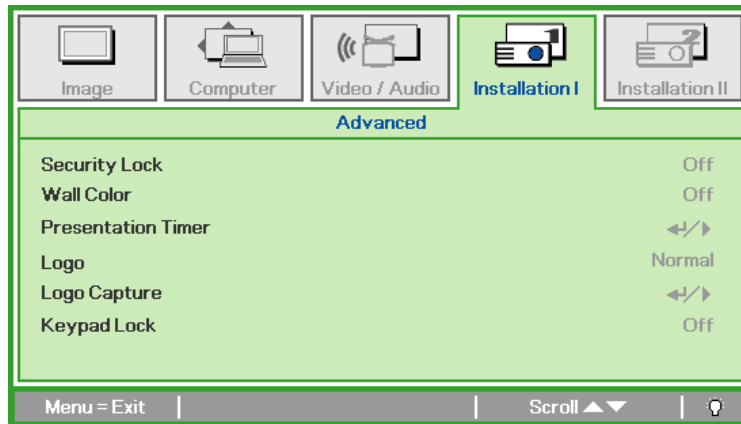
Press the **MENU** button to open the **OSD** menu. Press the cursor ◀▶ button to move to the **Installation I** menu. Press the cursor ▲▼ button to move up and down in the **Installation I** menu. Press ◀▶ to change values for settings.



ITEM	DESCRIPTION
Language	Press the cursor ◀▶ button to select a different localization Menu.
Blank Screen	Press the cursor ◀▶ button to select different color to blank the screen.
Projection	Press the cursor ◀▶ button to choose from four projection methods:
Aspect Ratio	Press the cursor ◀▶ button to adjust the video aspect ratio.
Keystone	Press the cursor ◀▶ button to adjust the display keystone.
Digital Zoom	Press the cursor ◀▶ button to adjust the Digital Zoom menu. (Range: -10 ~ +10)
Advanced	Press ◀ (Enter) / ▶ to enter the Advanced menu. See <i>Advanced Feature</i> on page 38.
Reset	Press ◀ (Enter) / ▶ to reset all settings to default values (except Language and Security Lock).

Advanced

Press ◀ (Enter) / ▶ to enter the **Advanced** sub menu.



ITEM	DESCRIPTION
Security Lock	Press the cursor ◀▶ button to enable or disable security lock function.
Wall Color	Press the cursor ◀▶ button to select different wall color settings.
Presentation Timer	Press ◀ (Enter) / ▶ to enter the Presentation menu. See <i>Presentation Timer</i> on page 38.
Logo	Press the cursor ◀▶ button to select the screen to display during startup.
Logo Capture	Press ◀ (Enter) / ▶ to capture a displayed screen to use as the startup screen.
Keypad Lock	Press the cursor ◀▶ button to enable or disable keypad lock function.

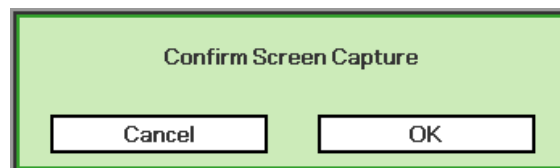
Logo

Select the screen to display during startup.

- Normal—the supplied default startup screen.
- User—customized screen capture using the **Logo Capture** function.

Logo Capture

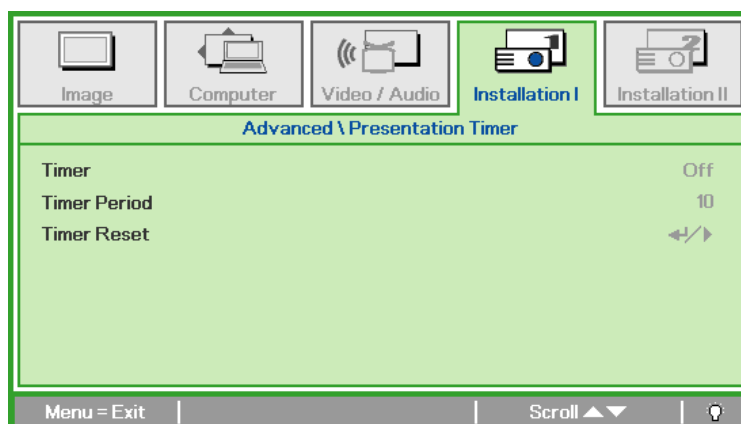
1. Display the desired screen on the projector.
2. Select **Logo Capture** from the **Advanced** menu. A confirmation screen displays.



3. Select **OK**. Screen capture in progress will display. When finished, Screen capture Succeeded will display. The captured screen is saved as User in the logo menu.

Presentation Timer

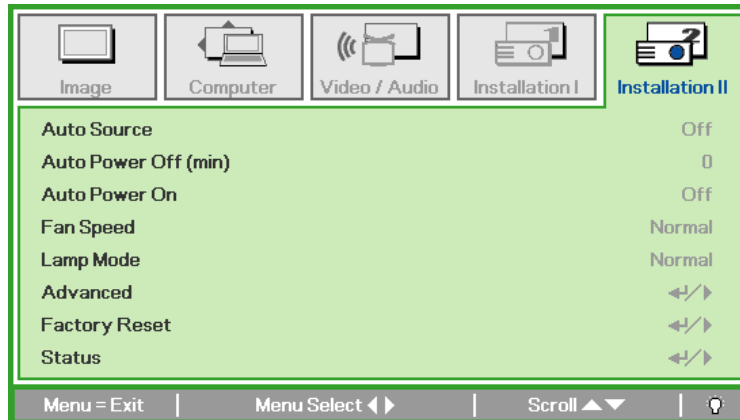
Press ◀ (Enter) / ▶ to enter the **Presentation Timer** sub menu.



ITEM	DESCRIPTION
Timer	Press the cursor ◀▶ button to enable or disable presentation timer function.
Timer Period	Press the cursor ◀▶ button to adjust the display timer period.
Timer Reset	Press ◀ (Enter) / ▶ to reset presentation timer counter.

Installation II Menu

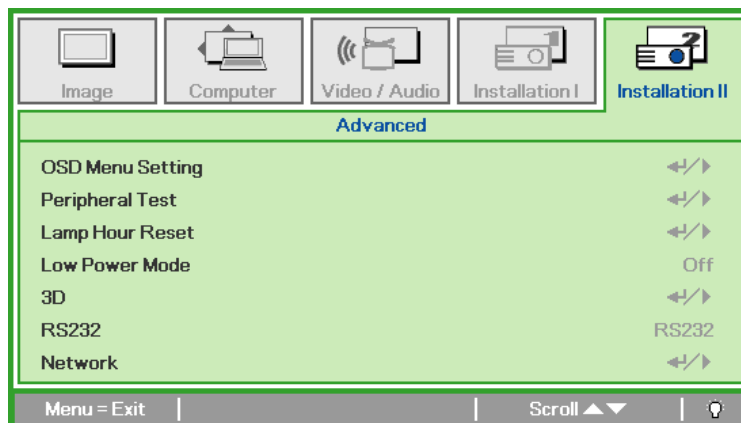
Press the **MENU** button to open the **OSD** menu. Press the cursor ◀▶ button to move to the **Installation II** menu. Press the cursor ▲▼ button to move up and down in the Installation II menu.



ITEM	DESCRIPTION
Auto Source	Press the cursor ◀▶ button to enable or disable automatic source detection. (Range: On ~ Off)
Auto Power Off (min.)	Press the cursor ◀▶ button to enable or disable automatic shutdown of lamp when no signal.
Auto Power On	Press the cursor ◀▶ button to enable or disable automatic power On when AC power is supplied.
Fan Speed	Press the cursor ◀▶ button to toggle between Normal and High fan speeds. Note: We recommend selecting high speed in high temperatures, high humidity, or high altitude areas.
Lamp Mode	Press the cursor ◀▶ button to select the lamp mode for higher brightness or lower brightness to save lamp life.
Advanced	Press ◀ (Enter) / ▶ to enter the Advanced menu. See <i>Advanced Feature</i> on page 38.
Factory Reset	Press ◀ (Enter) / ▶ to reset all items to factory preset values.
Status	Press ◀ (Enter) / ▶ to enter the Status menu. See page 45 for more information on Status.

Advanced Feature

Press the **Menu** button to open the **OSD** menu. Press ◀▶ to move to the **Installation II** menu. Press ▲▼ to move to the **Advanced** menu and then press **Enter** or ▶. Press ▲▼ to move up and down in the **Advanced** menu. Press ◀▶ to change values for setting.

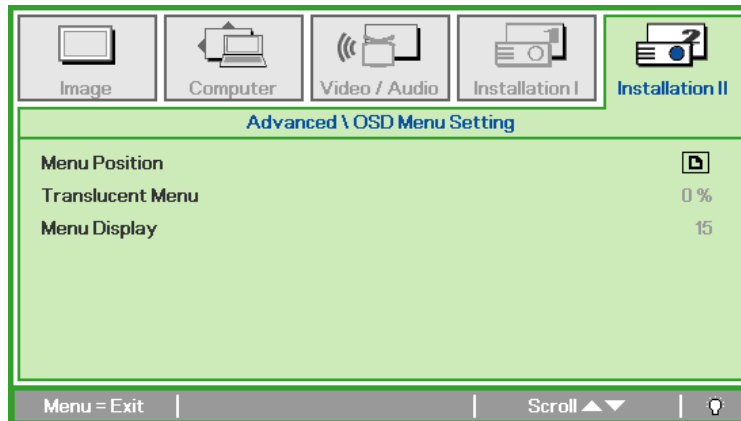


ITEM	DESCRIPTION
OSD Menu Setting	Press Enter / ▶ to enter the OSD setting menu. See page 39 for more information on <i>OSD Menu Setting</i> .
Peripheral Test	Press Enter/ ▶ to enter the Peripheral Test menu. See page 39 for more information on Peripheral Test.
Lamp Hour Reset	After replacing the lamp, this item should be reset. See page 40 for more information on <i>Lamp Hour Reset</i> .
Low Power Mode	Press ◀▶ to turn Low Power Mode on or off.
3D	Press ◀▶ to disable or enable different 3D modes.
RS232	Press ◀▶ to select RS232 (remote) or Network (LAN) mode depending on projector connection method.
Network	Press ◀ (Enter) / ▶ to enter the Network menu. See page 41 for more information on <i>Network</i> .

Note:

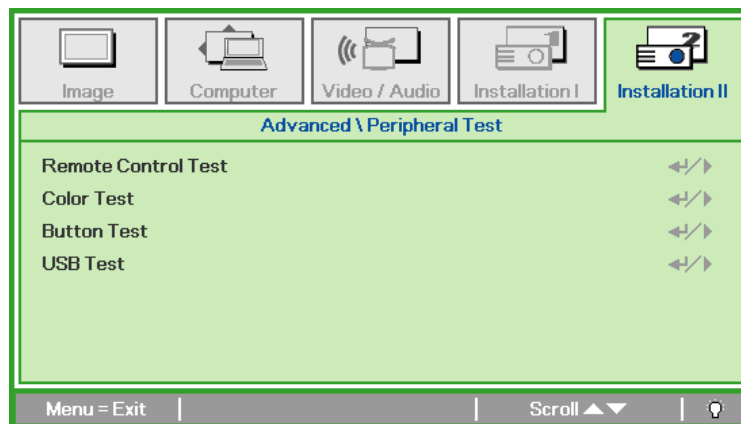
To enjoy the 3D function, first enable the Play Movie in 3D setting found in your DVD device under the 3D Disc Menu.

OSD Menu Setting



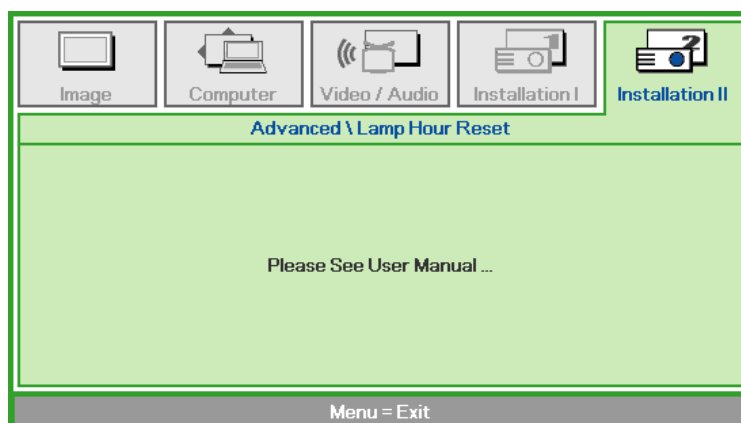
ITEM	DESCRIPTION
Menu Position	Press ◀▶ button to select different OSD location.
Translucent Menu	Press ◀▶ button to select OSD background translucent level.
Menu Display	Press ◀▶ button to select OSD timeout delay.

Peripheral Test



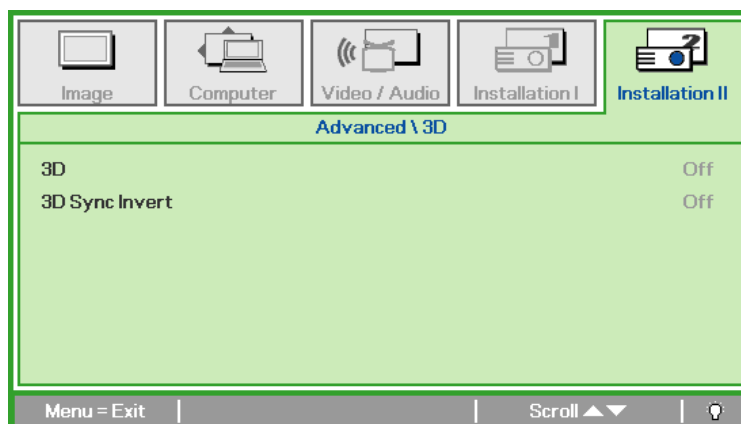
ITEM	DESCRIPTION
Remote Control Test	Press ◀ (Enter) / ▶ to test the IR remote controller for diagnostic.
Color Test	Press ◀ (Enter) / ▶ to select different colors on screen.
Button Test	Press ◀ (Enter) / ▶ to test the button on keypad.
USB Test	Press ◀ (Enter) / ▶ to test the USB connection with connected PC.

Lamp Hour Reset



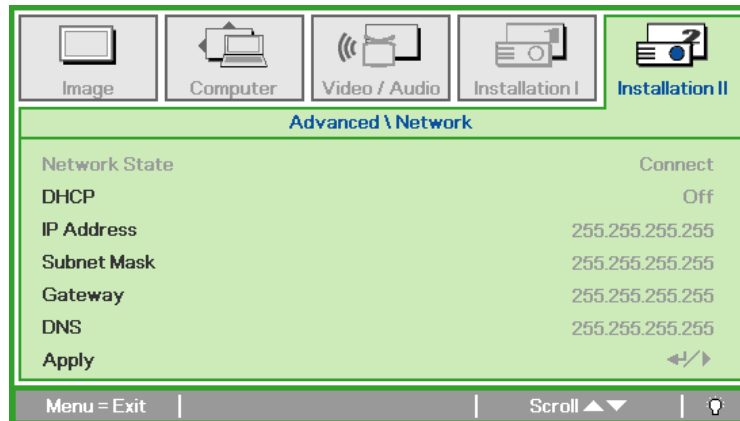
Please refer to *Resetting the Lamp* on page 48 to reset the lamp hour counter.

3D



When the 3D function is enabled, the current picture mode adjustment will be disabled.

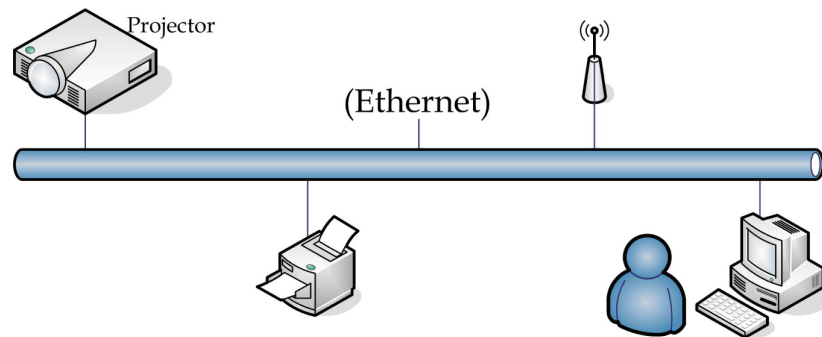
Network



ITEM	DESCRIPTION
Network State	Displays the network connection status.
DHCP	Press ◀▶ to turn DHCP On or Off. Note: If you select DHCP Off, complete the IP Address, Subnet Mask, Gateway, and DNS fields.
IP Address	Enter a valid IP address if DHCP is turned off.
Subnet Mask	Enter a valid Subnet Mask if DHCP is turned off.
Gateway	Enter a valid Gateway address if DHCP is turned off.
DNS	Enter a valid DNS name if DHCP is turned off.
Apply	Press ◀ (Enter) / ▶ to confirm settings.

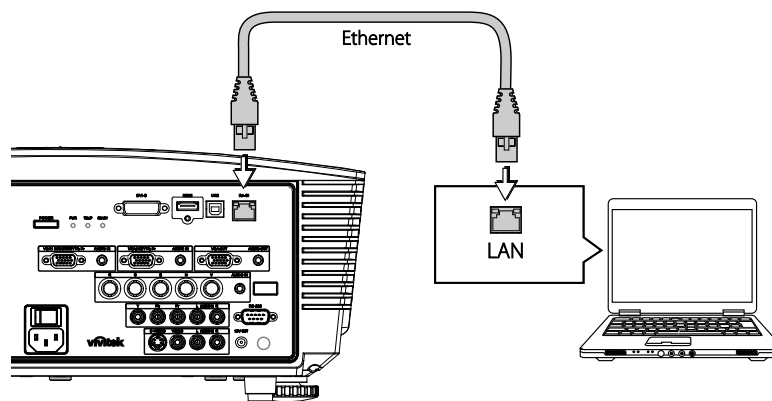
For simplicity and ease of operation, the projector provides diverse networking and remote management features.

The LAN/RJ45 function of the projector through a network, such as remotely manage: Power On/Off, Brightness and Contrast settings. Also, projector status information, such as: Video-Source, Sound-Mute, etc.

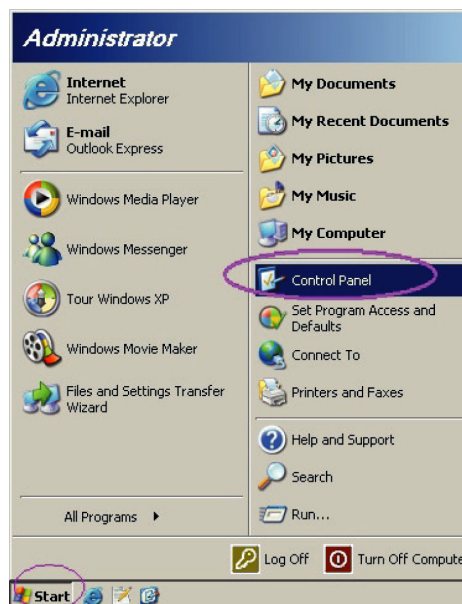


LAN_RJ45

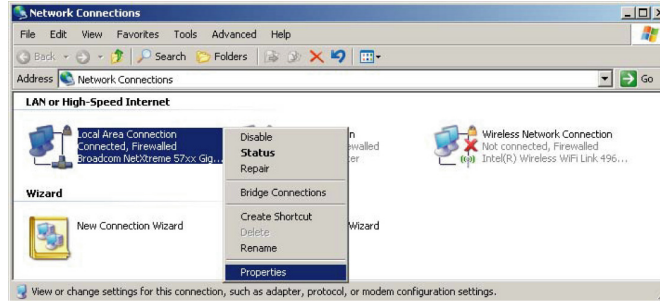
1. Connect an RJ45 cable to RJ45 ports on the projector and the PC (Laptop).



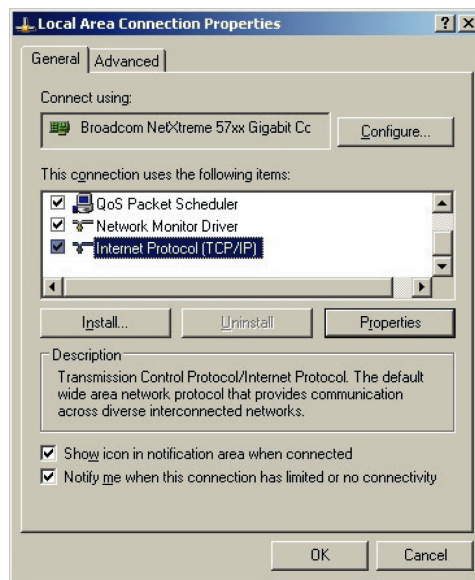
2. On the PC (Laptop), select **Start** → **Control Panel** → **Network Connections**.



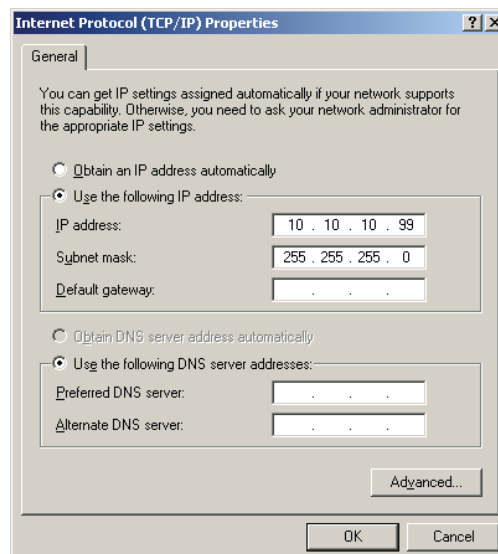
3. Right-click on **Local Area Connection**, and select **Properties**.



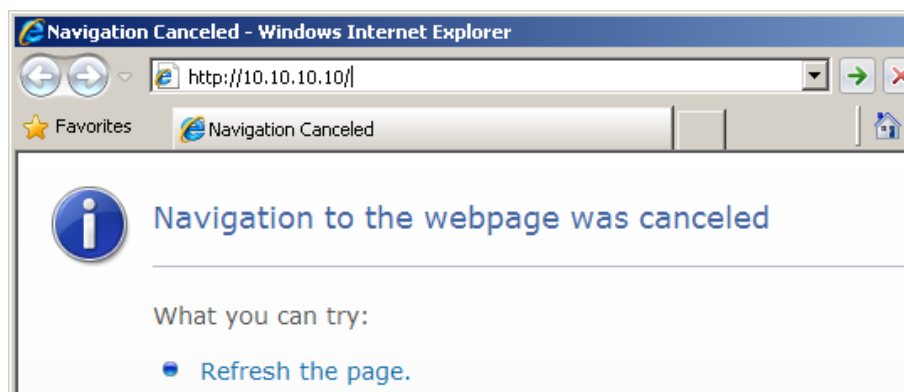
4. In the **Properties** window, select the **General** tab, and select **Internet Protocol (TCP/IP)**.
5. Click **Properties**.



6. Click **Use the following IP address** and fill in the IP address and Subnet mask, then click **OK**.



7. Press the **Menu** button on the projector.
8. Select **Installation II** → **Advanced** → **Network**.
9. After getting into **Network**, input the following:
 - ▶ DHCP: Off
 - ▶ IP Address: 10.10.10.10
 - ▶ Subnet Mask: 255.255.255.0
 - ▶ Gateway: 0.0.0.0
 - ▶ DNS Server: 0.0.0.0
10. Press **↵** (Enter) / **▶** to confirm settings.
Open a web browser
(for example, Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher).



11. In the Address bar, input the IP address: 10.10.10.10.
12. Press **↵** (Enter) / **▶**.

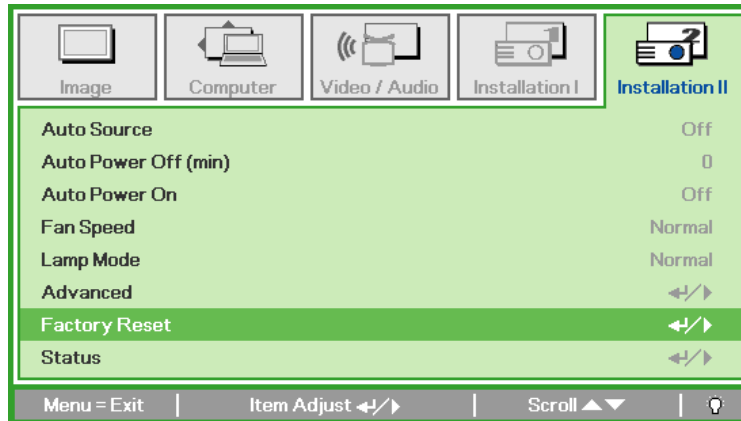
The projector is setup for remote management. The LAN/RJ45 function displays as follows.



For more information, please visit <http://www.crestron.com>.

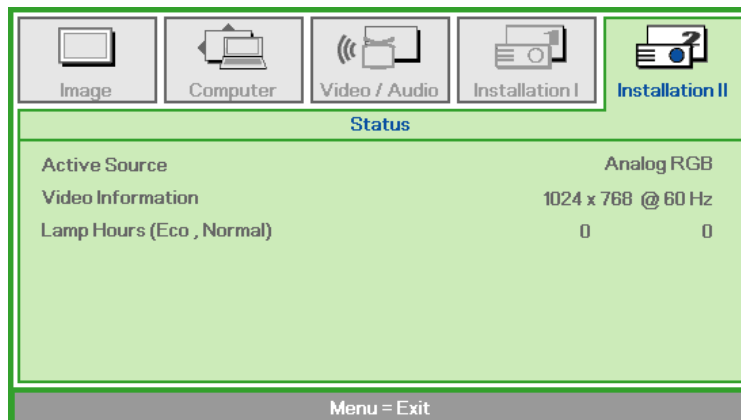
Factory Reset

Press the cursor ▲▼ button to move up and down in the **Installation II** menu. Select the **Factory Reset** sub menu and press ◀ (Enter) / ▶ to reset all the menu items to the factory default values (except Language and Security Lock).



Status

Press the cursor ▲▼ button to move up and down in the **Installation II** menu. Select the **Installation II** sub menu and press ◀ (Enter) / ▶ to enter the **Status** sub menu.



ITEM	DESCRIPTION
Active Source	Display the activated source.
Video Information	Displays resolution/video information for RGB source and color standard for Video source.
Lamp Hours	Lamp hour used information is displayed. Eco and Normal counters are separated.

MAINTENANCE AND SECURITY

Replacing the Projection Lamp

The projection lamp should be replaced when it burns out. It should only be replaced with a certified replacement part, which you can order from your local dealer.

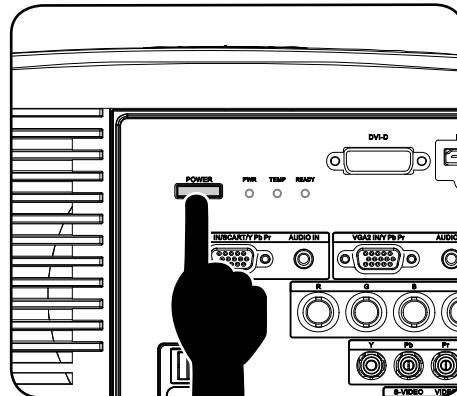
Important:

- a. The projection lamp used in this product contains a small amount of mercury.
- b. Do not dispose this product with general household waste.
- c. Disposal of this product must be carried out in accordance with the regulations of your local authority.

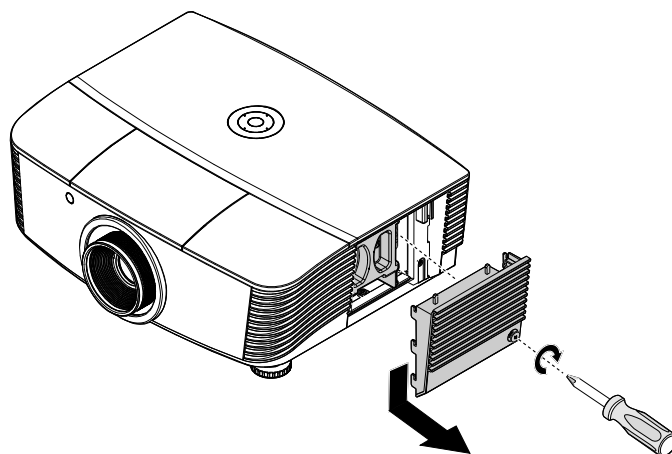
Warning:

Be sure to turn off and unplug the projector at least 30 minutes before replacing the lamp. Failure to do so could result in a severe burn.

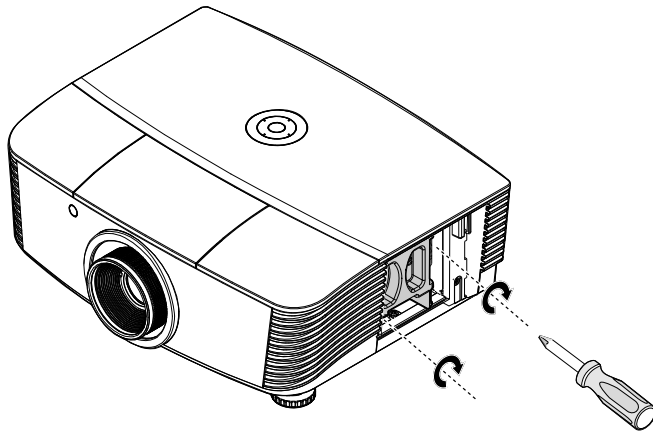
1. Switch off the power to the projector by pressing the POWER button.
2. Allow the projector to cool down at least 30 minutes.
3. Disconnect the power cord.



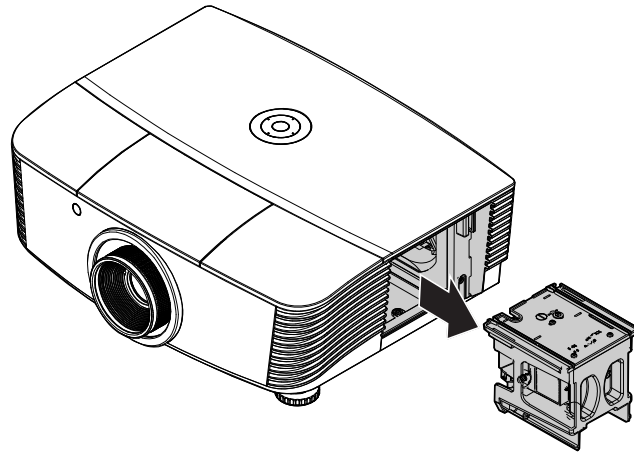
4. Unlock the lamp cover.
5. Pull up and remove the cover.



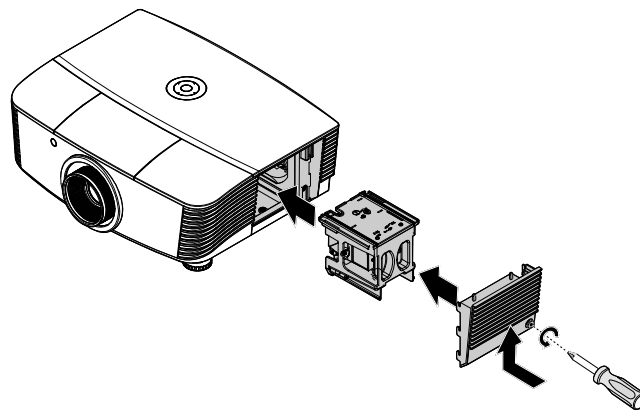
6. Use a screwdriver to remove the screws from the lamp module.



7. Pull out the lamp module.



8. Reverse steps 1 to 7 to install the new lamp module. While installing, align the lamp module with the connector and ensure it is level to avoid damage.



Note:

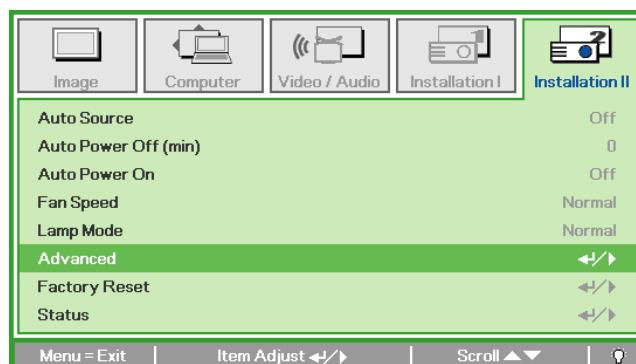
The lamp module must sit securely in place and the lamp connector must be connected properly before tightening the screws.

9. Turn on the projector and reset the lamp after the lamp module is replaced.
- Lamp Reset:
Press **Menu** → Select **SYSTEM SETUP : Advanced** → Select **Lamp** → Select **Lamp Mode** or **Reset Lamp Timer** → Press the ◀▶ buttons to adjust the settings.

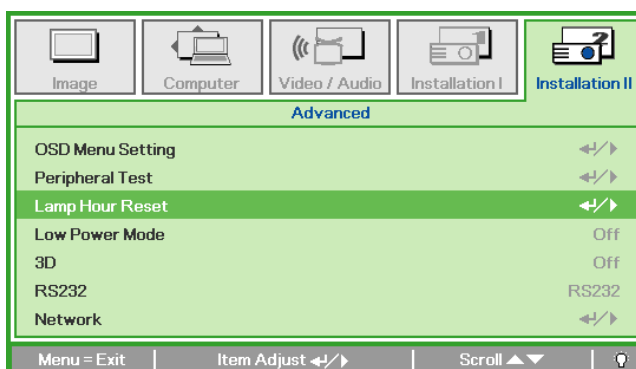
Resetting the Lamp

After replacing the lamp, you should reset the lamp hour counter to zero. Refer to the following:

1. Press the **MENU** button to open the OSD menu.
2. Press the cursor **◀▶** button to move to the **Installation II** menu. Press the cursor **▼▲** button to move down to **Advanced**.



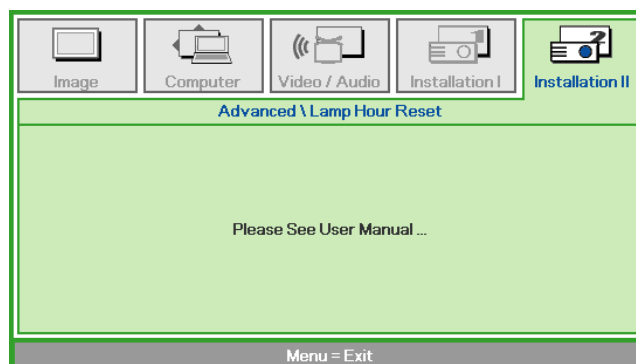
3. Press the cursor **▼▲** button to move down to **Lamp Hour Reset**.



4. Press the cursor **▶** or Enter button.

A message screen appears.

5. Press **▼▲◀▶** buttons to reset the lamp hour.



6. Press the **MENU** button to get back to Installation II.

Cleaning the Projector

Cleaning the projector to remove dust and grime will help ensure trouble-free operation.

Warning:

- 1. Be sure to turn off and unplug the projector at least 30 minutes before cleaning. Failure to do so could result in a severe burn.*
- 2. Use only a dampened cloth when cleaning. Do not allow water to enter the ventilation openings on the projector.*
- 3. If a little water gets into the projector interior while cleaning, leave unplugged in a well-ventilated room for several hours before using.*
- 4. If a lot of water gets into the projector interior when cleaning, have the projector serviced.*

Cleaning the Lens

You can purchase optic lens cleaner from most camera stores. Refer to the following to clean the projector lens.

1. Apply a little optic lens cleaner to a clean soft cloth. (Do not apply the cleaner directly to the lens.)
2. Lightly wipe the lens in a circular motion.

Caution:

- 1. Do not use abrasive cleaners or solvents.*
- 2. To prevent discoloration or fading, avoid getting cleaner on the projector case.*

Cleaning the Case

Refer to the following to clean the projector case.

1. Wipe off dust with a clean dampened cloth.
2. Moisten the cloth with warm water and mild detergent (such as used to wash dishes), and then wipe the case.
3. Rinse all detergent from the cloth and wipe the projector again.

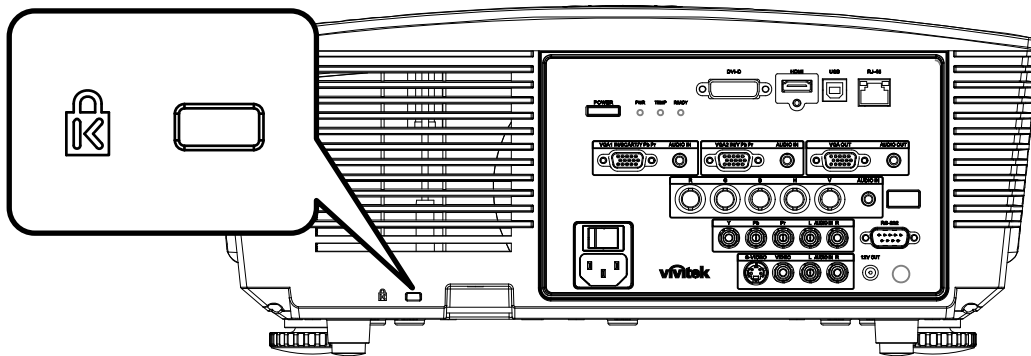
Caution:

To prevent discoloration or fading of the case, do not use abrasive alcohol-based cleaners.

Using the Physical Lock

Using the Kensington® Lock

If you are concerned about security, attach the projector to a permanent object with the Kensington slot and a security cable.



Note:

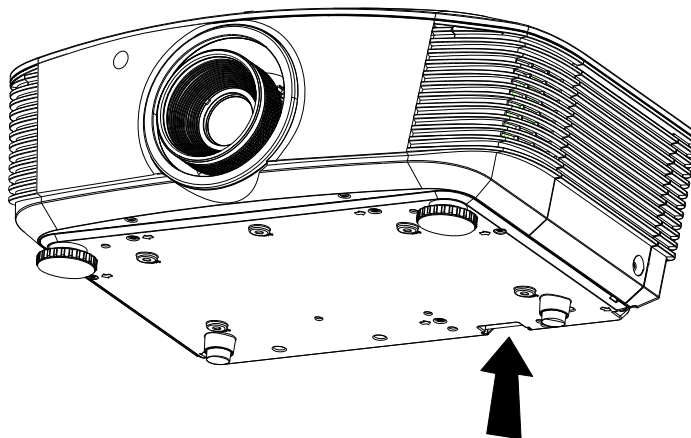
Contact your vendor for details on purchasing a suitable Kensington security cable.

The security lock corresponds to Kensington's MicroSaver Security System. If you have any comment, contact: Kensington, 2853 Campus Drive, San Mateo, CA 94403, U.S.A. Tel: 800-535-4242, <http://www.Kensington.com>.

Using the Security Chain Lock

In addition to the password protection function and the Kensington lock, the Security Chain Opening helps protect the PROJECTOR from unauthorized use.

See the following picture.



TROUBLESHOOTING

Common problems and solutions

These guidelines provide tips to deal with problems you may encounter while using the projector. If the problem remains unsolved, contact your dealer for assistance.

Often after time spent troubleshooting, the problem is traced to something as simple as a loose connection. Check the following before proceeding to the problem-specific solutions.

- *Use some other electrical device to confirm that the electrical outlet is working.*
- *Ensure the projector is turned on.*
- *Ensure all connections are securely attached.*
- *Ensure the attached device is turned on.*
- *Ensure a connected PC is not in suspending mode.*
- *Ensure a connected notebook computer is configured for an external display.
(This is usually done by pressing an Fn-key combination on the notebook.)*

Tips for Troubleshooting

In each problem-specific section, try the steps in the order suggested. This may help you to solve the problem more quickly.

Try to pin point the problem and thus avoid replacing non-defective parts.

For example, if you replace batteries and the problem remains, put the original batteries back and go to the next step.

Keep a record of the steps you take when troubleshooting: The information may be useful when calling for technical support or for passing on to service personnel.

LED Error Messages

ERROR CODE MESSAGES	POWER LED BLINK	OVER TEMP LED	LAMP LED BLINK
Over temperature	OFF	ON	0
Thermal break status error	4	0	0
Lamp error	ON	0	On
Fan1 error	6	0	1
Fan2 error	6	0	2
Fan3 error	6	0	3
Lamp door open	7	0	0
DMD error	8	0	0
Color wheel error	9	0	0

In the event of an error, please disconnect the AC power cord and wait for one (1) minute before re-starting the projector. If the Power or Lamp LEDs are still blinking or the Over Temp LED is lit, contact your service center.

Image Problems

Problem: No image appears on the screen

1. Verify the settings on your notebook or desktop PC.
2. Turn off all equipment and power up again in the correct order.

Problem: The image is blurred

1. Adjust the **Focus** on the projector.
2. Press the **Auto** button on the remote control or projector.
3. Ensure the projector-to-screen distance is within the 10-meter (33-feet) specified range.
4. Check that the projector lens is clean.

Problem: The image is wider at the top or bottom (trapezoid effect)

1. Position the projector so it is as perpendicular to the screen as possible.
2. Use the **Keystone** button on the remote control or projector to correct the problem.

Problem: The image is reversed

Check the **Projection** setting on the **Installation I** menu of the OSD.

Problem: The image is streaked

1. Set the **Frequency** and **Tracking** settings on the **Computer** menu of the OSD to the default settings.
2. To ensure the problem is not caused by a connected PC's video card, connect to another computer.

Problem: The image is flat with no contrast

Adjust the **Contrast** setting on the **Image** menu of the OSD.

Problem: The color of the projected image does not match the source image.

Adjust the **Color Temperature** and **Gamma** settings on the **Image** menu of the OSD.

Lamp Problems

Problem: There is no light from the projector

1. Check that the power cable is securely connected.
2. Ensure the power source is good by testing with another electrical device.
3. Restart the projector in the correct order and check that the Power LED is green.
4. If you have replaced the lamp recently, try resetting the lamp connections.
5. Replace the lamp module.
6. Put the old lamp back in the projector and have the projector serviced.

Problem: The lamp goes off

1. Power surges can cause the lamp to turn off. Re-plug power cord. When the Power LED is on, press the power button.
2. Replace the lamp module.
3. Put the old lamp back in the projector and have the projector serviced.

Remote Control Problems

Problem: The projector does not respond to the remote control

1. Direct the remote control towards remote sensor on the projector.
2. Ensure the path between remote and sensor is not obstructed.
3. Turn off any fluorescent lights in the room.
4. Check the battery polarity.
5. Replace the batteries.
6. Turn off other Infrared-enabled devices in the vicinity.
7. Have the remote control serviced.

Audio Problems

Problem: There is no sound

1. Adjust the volume on the remote control.
2. Adjust the volume of the audio source.
3. Check the audio cable connection.
4. Test the source audio output with other speakers.
5. Have the projector serviced.

Problem: The sound is distorted

1. Check the audio cable connection.
2. Test the source audio output with other speakers.
3. Have the projector serviced.

Having the Projector Serviced

If you are unable to solve the problem, you should have the projector serviced. Pack the projector in the original carton. Include a description of the problem and a checklist of the steps you took when trying to fix the problem: The information may be useful to service personnel. For servicing, return the projector to the place you purchased it.

HDMI Q & A

Q. What is the difference between a “Standard” HDMI cable and a “High-Speed” HDMI cable?

Recently, HDMI Licensing, LLC announced that cables would be tested as Standard or High-Speed cables.

- Standard (or “category 1”) HDMI cables have been tested to perform at speeds of 75Mhz or up to 2.25Gbps, which is the equivalent of a 720p/1080i signal.
- High Speed (or “category 2”) HDMI cables have been tested to perform at speeds of 340Mhz or up to 10.2Gbps, which is the highest bandwidth currently available over an HDMI cable and can successfully handle 1080p signals including those at increased color depths and/or increased refresh rates from the Source. High-Speed cables are also able to accommodate higher resolution displays, such as WQXGA cinema monitors (resolution of 2560 x 1600).

Q. How do I run HDMI cables longer than 10 meters?

There are many HDMI Adopters working on HDMI solutions that extend a cable's effective distance from the typical 10 meter range to much longer lengths. These companies manufacture a variety of solutions that include active cables (active electronics built into cables that boost and extend the cable's signal), repeaters, amplifiers as well as CAT5/6 and fiber solutions.

Q. How can I tell if a cable is an HDMI certified cable?

All HDMI products are required to be certified by the manufacturer as part of the HDMI Compliance Test Specification. However, there may be instances where cables bearing the HDMI logo are available but have not been properly tested. HDMI Licensing, LLC actively investigates these instances to ensure that the HDMI trademark is properly used in the market. We recommend that consumers buy their cables from a reputable source and a company that is trusted.

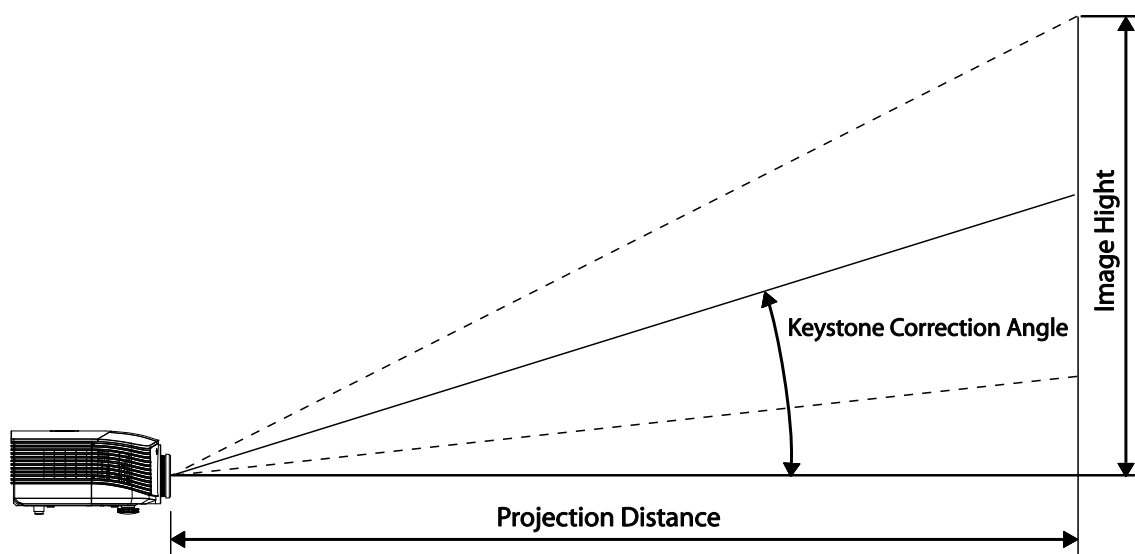
For more detail information check <http://www.hdmi.org/learningcenter/faq.aspx#49>

SPECIFICATIONS

Specifications

Model	D4500	D5000
Display type	TI DMD XGA 0.7"	
Resolution	XGA 1024x768 Native	
Brightness/ Contrast	4500 (Typical)/ 2200:1	5200 (Typical)/ 2500:1
Projection distance	1.5 meters ~ 7 meters	
Projection screen size	37.3 to 320 inches	
Projection lens	Manual Focus/Manual Zoom	
Zoom ratio	1.25	
Vertical keystone correction	+/- 30 degrees	
Projection methods	Front, Rear, Desktop/Ceiling (Rear, Front)	
Data compatibility	VGA, SVGA, XGA, SXGA, SXGA+, UXGA, Mac	
SDTV/EDTV/ HDTV	480i, 480p, 720p, 1080i, 1080p	
Video compatibility	NTSC/NTSC 4.43, PAL (B/G/H/I/M/N/60), SECAM	
H-Sync	15.6 – 91.1 kHz	
V-Sync	50 – 85 Hz	
Safety certification	FCC-B, cUL, UL, CE, C-tick, CCC, KC, CB, PCT, PSB, ICES-003, NOM	
Operation temperature	5° ~ 40°C	
Dimensions	431.11mm (W) x 344.16mm (D) x 161.51mm (H)	
AC Input	AC Universal 100 – 240, Typical @ 110VAC (100 – 240)/+/-10%	
Power consumption	Typical 430W (Normal) / Typical 390W (Eco)	
Stand By	<1 watts	
Lamp	330W (Normal) / 280W (Eco)	
Audio speaker	3W mono speaker	
Input Terminals	VGA x 2	
	DVI-D x 1	
	PC audio jack x 2	
	S-Video x 1	
	5 BNC (RGBHV) x 1	
	Component x 1	
	Composite video x 1	
	HDMI x 1	
	RCA stereo x 1	
Output Terminals	Mini-jack stereo x 1	
	VGA x 1	
Control Terminals	RS-232C	
	RJ45	
	Screen trigger: DC Jack x 1 (DC12V 200mA output function)	
	USB (Service only)	
Security	Kensington lock	

Projection Distance vs. Projection Size



Projection Distance and Size Table

Standard projection len: TR: 1.6~2; offset=100%

	TELE				WIDE			
Distance (m)	1.63	3.25	4.06	8.13	1.63	3.25	6.50	9.75
Diagonal (")	40	80	100	200	50	100	200	300
Keystone Correction angle (degree)	10.62	10.62	10.62	10.62	13.19	13.19	13.19	13.19
Image Height (mm)	609.6	1219.2	1524.0	3048.0	762.0	1524.0	3048.0	4572.0
Image Width (mm)	812.8	1625.6	2032.0	4064.0	1016.0	2032.0	4064.0	6096.0

Long throw projection len: TR: 2~3; offset=100%

	TELE				WIDE			
Distance (m)	2.44	6.10	12.19	19.51	2.03	6.10	12.19	19.91
Diagonal (")	40	100	200	320	50	150	300	490
Keystone Correction angle (degree)	7.13	7.13	7.13	7.13	10.62	10.62	10.62	10.62
Image Height (mm)	609.6	1524.0	3048.0	4876.8	762.0	2286.0	4572.0	7467.6
Image Width (mm)	812.8	2032.0	4064.0	6502.4	1016.0	3048.0	6096.0	9956.8

Short throw projection len: TR: 0.8; offset=100%

	Fix			
Distance (m)	0.65	1.30	1.63	3.25
Diagonal (")	40	80	100	200
Keystone Correction angle (degree)	25.11	25.11	25.11	25.11
Image Height (mm)	609.6	1219.2	1524.0	3048.0
Image Width (mm)	812.8	1625.6	2032.0	4064.0

Timing Mode Table

SIGNAL	RESOLUTION	H-SYNC (KHz)	V-SYNC (Hz)	COMPOSITE / S-VIDEO	COMPONENT	RGB	DVI/HDMI
NTSC	—	15.734	60.0	O	—	—	—
PAL/SECAM	—	15.625	50.0	O	—	—	—
VESA	720 x 400	37.9	85.0	—	—	O	O
	640 x 480	31.5	60.0	—	—	O	O
	640 x 480	37.9	72.0	—	—	O	O
	640 x 480	37.5	75.0	—	—	O	O
	640 x 480	43.3	85.0	—	—	O	O
	800 x 600	35.2	56.0	—	—	O	O
	800 x 600	37.9	60.0	—	—	O	O
	800 x 600	48.1	72.0	—	—	O	O
	800 x 600	46.9	75.0	—	—	O	O
	800 x 600	53.7	85.0	—	—	O	O
	1024 x 768	48.4	60.0	—	—	O	O
	1024 x 768	56.5	70.0	—	—	O	O
	1024 x 768	60.0	75.0	—	—	O	O
	1024 x 768	68.7	85.0	—	—	O	O
	1280 x 800	49.7	59.8	—	—	O	O
	1280 x 800	62.8	74.9	—	—	O	O
	1280 x 800	71.6	84.8	—	—	O	O
	1280 x 1024	63.98	60.0	—	—	O	O
	1280 x 1024	79.98	75.0	—	—	O	O
	1280 x 1024	91.10	85.0	—	—	O	O
	1280 x 960	60.0	60.0	—	—	O	O
	1280 x 960	85.9	85.0	—	—	O	O
	1400 x 1050	65.3	60.0	—	—	O	O
	1440 x 900	70.6	75.0	—	—	O	O
	1440 x 900	55.6	60.0	—	—	O	O

SIGNAL	RESOLUTION	H-SYNC (KHz)	V-SYNC (Hz)	COMPOSITE / S-VIDEO	COMPONENT	RGB	DVI/HDMI
VESA	1600 x 1200	75.0	60.0	—	—	O	O
	1920 x 1200	59.95		—	—	O	O
Apple Mac	640 x 480	35.0	66.68	—	—	O	O
	832 x 624	49.725	74.55	—	—	O	O
	1024 x 768	60.24	75.0	—	—	O	O
	1152 x 870	68.68	75.06	—	—	O	O
SDTV	480i	15.734	60.0	—	O	—	O
	576i	15.625	50.0	—	O	—	O
EDTV	480p	31.469	60.0	—	O	—	O
	576p	31.25	50.0	—	O	—	O
HDTV	720p	37.5	50.0	—	O	—	O
	720p	45.0	60.0	—	O	—	O
	1080i	33.8	60.0	—	O	—	O
	1080i	28.1	50.0	—	O	—	O
	1080p	67.5	60.0	—	O	—	O
	1080p	56.3	50.0	—	O	—	O

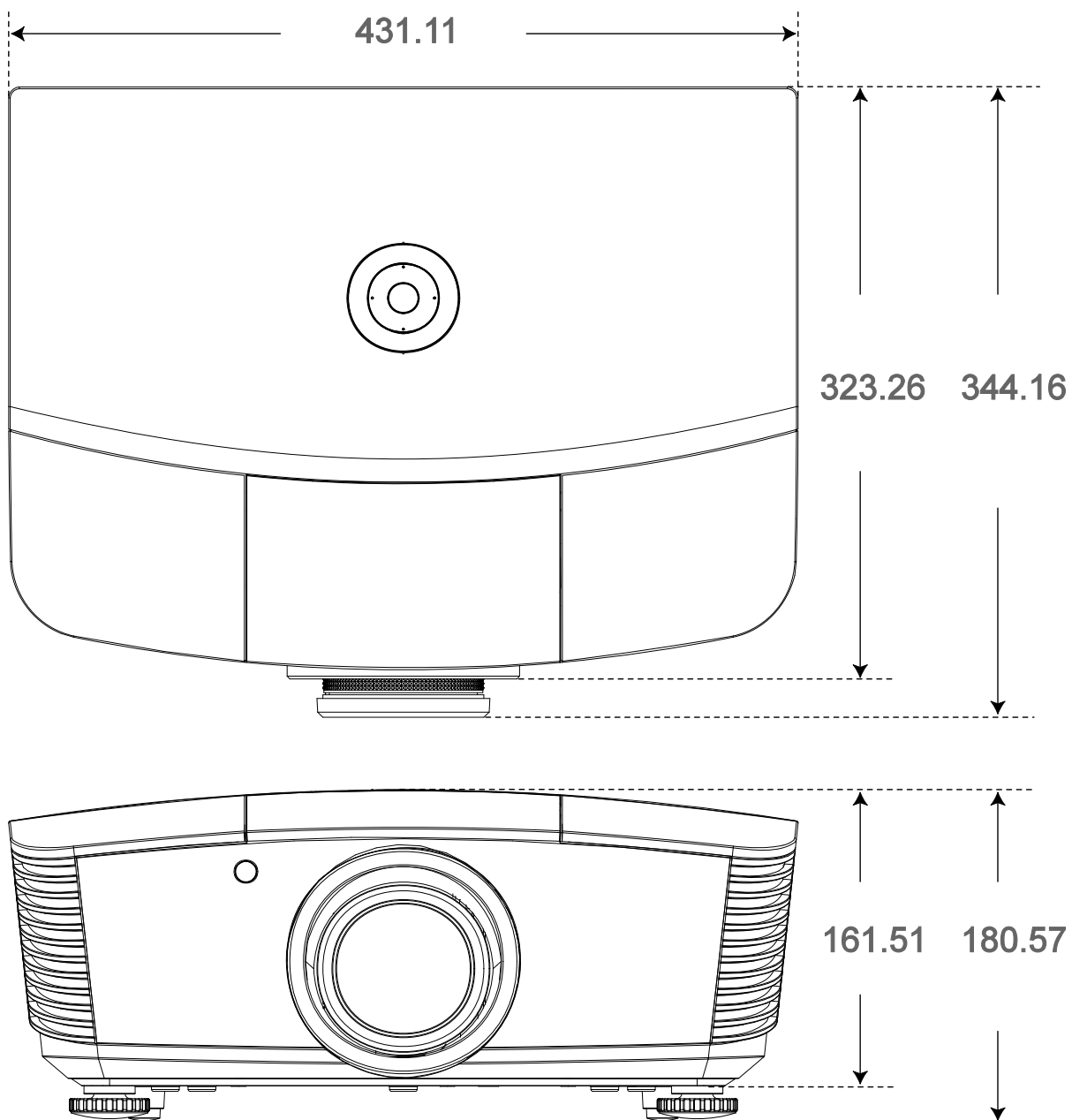
O: Frequency supported

—: Frequency not supported

* : Displayable level

The resolution of the panel for the projector is 1024 x 768. Resolution other than native resolution may display with uneven size of text or lines.

Projector Dimensions



REGULATORY COMPLIANCE

FCC Warning

This equipment 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 when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Changes or modifications not expressly approved by the parties responsible for compliance could void the user's authority to operate the equipment.

Canada

This class B digital apparatus complies with Canadian ICES-003.

Safety Certifications

FCC-B, UL, cUL, CB, CE, CCC, KC, PCT, PSB, ICES-003, NOM, and C-tick.