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Touchboards

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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:

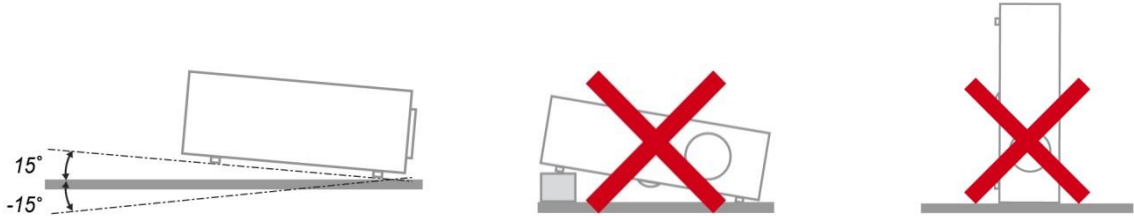
“Push the **Menu** button on the remote control to open the **Main** menu.”

General Safety Information

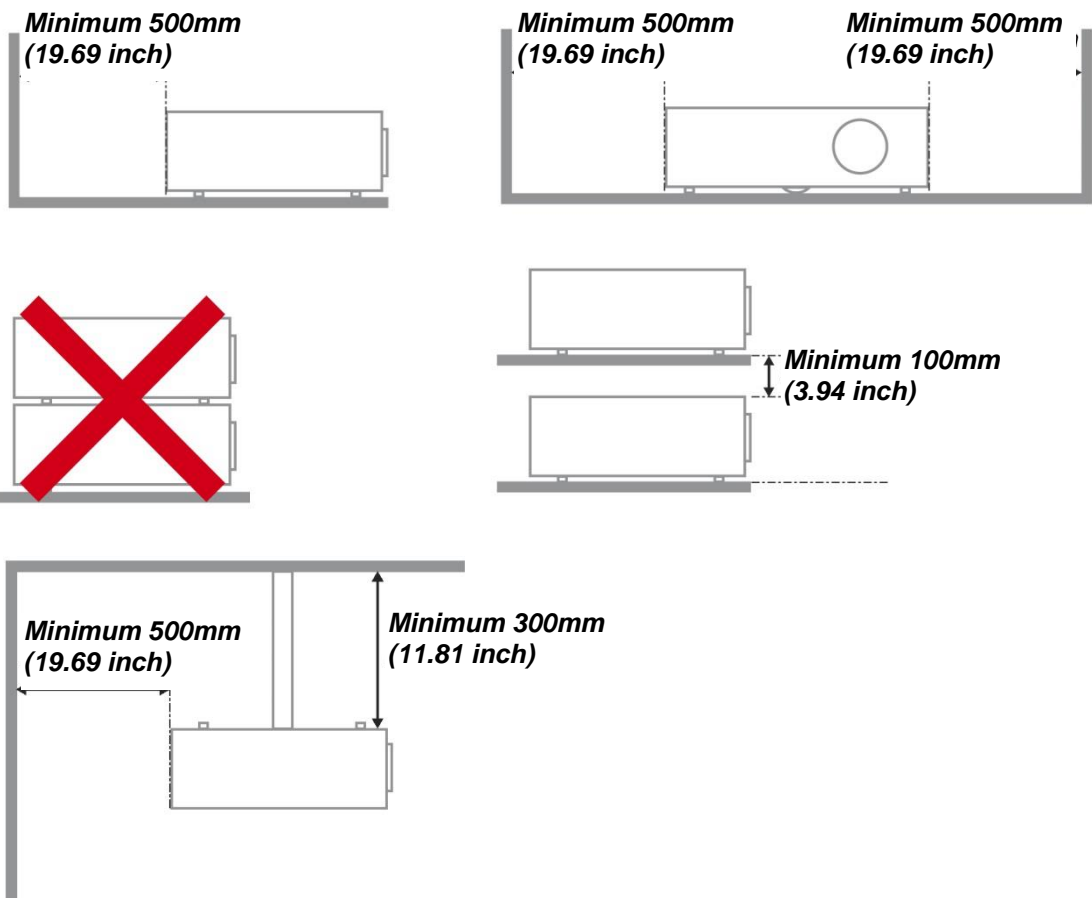
- Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- Follow all warnings and cautions in this manual and on the unit case.
- The projection lamp is extremely bright by design. To avoid damage 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, and may lead to other **unpredictable damages**.



- 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 operation temperature while the projector is running, and the air intake and exhaust vents are unobstructed.
- All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air, as this may cause the device to shutdown even if the enclosure temperature is within the acceptable operation temperature range.

Verify Installation Location

- To supply power, the 3-blade (with earthing lead) socket should be used to ensure proper grounding and equalized ground potential for all of the equipment in the Projector System.
- The power code provided with the Projector should be used. In case of any missing item, other qualified 3-blade (with earthing lead) power cord can be used as substitution; however, do not use 2-blade power cord.
- Verify if the voltage is stable, grounded properly and there is no electricity leakage.
- Measure total power consumption which should not higher the safety capacity and avoid safety issue and short circuit.
- Turn on Altitude Mode when located in high altitude areas
- The projector can only be installed upright or inverted.
- When installation the bracket, make sure the weight limit is not exceed and firmly secured.
- Avoid installing near air conditioner duct or subwoofer.
- Avoid installing at high temperature, insufficient cooling and heavy dust locations.
- Keep your product away from fluorescent lamps to avoid malfunction caused by IR interference
- The VGA IN connector should be connected to the VGA IN port. Note that it should be inserted tightly, with the screws on both sides securely fastened to ensure proper connection of the signal wire for achieving optimal display effect.
- The AUDIO IN connector should be connected to the AUDIO IN port and CANNOT be connected to AUDIO OUT or other ports like BNC, RCA; otherwise, it will lead to mute output and even DAMAGE the port.
- Install the projector above 200cm to avoid damage.
- The power cord and signal cable should be connected before power on the projector. During the projector starting and operating process, DO NOT insert or remove the signal cable or the power cord to avoid damaging the projector.

Cooling notes

Air outlet

- Make sure the air outlet is 50cm clear of any obstruction to ensure proper cooling.
- Air outlet location should not be in front of the lens of other projector to avoid causing illusions.
- Keep the outlet at least 100cm away from the inlets of other projectors
- The projector generates a massive amount of heat during use. The internal fan dissipates the heat of the projector when shutting down, and such process may continue for a certain period. After the project enters STANDBY MODE status, press the AC power button to turn off the projector and remove the power cord. DO NOT remove the power cord during the shutdown process, as it may cause damage to the projector. In the meantime, the delayed heat radiating will also affect the service life of the projector. The shutdown process may vary depending on the model used. Whatever the case may be, be sure to disconnect the power cord till after the projector enters the STANDBY status.

Air inlet

- Make sure there is no object blocking air input within 30 cm.
- Keep the inlet away from other heat sources
- Avoided heavy dust area

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 63 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 66.
- 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 83.

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.*
- *Flexible setup allows for front, rear projections.*
- *Line-of-vision projections remain square, with advanced keystone correction for angled projections.*
- *Input source automatically detected.*
- *High brightness for projection in just about any environment.*
- *Supports resolutions up to WUXGA for clear and crisp images.*
- *DLP® and BrilliantColor™ technologies from Texas Instruments.*
- *Centered lens for easy installation.*
- *Horizontal and vertical lens shift.*
- *MHL device compatibility for streaming of video and audio content from a compatible mobile device.*
- *Built-in speaker with multiple audio-in and audio-out ports.*
- *Network ready for integration and system administration via RJ45.*
- *Sealed engine to minimizing the impact of dust and smoke.*
- *Top sided lamp cover for simple lamp removal and insertion.*
- *Anti-theft security features include: Kensington® security slot, security bar.*

About this Manual

This manual is intended for end users and describes how to install and operate the DLP projector. Whenever 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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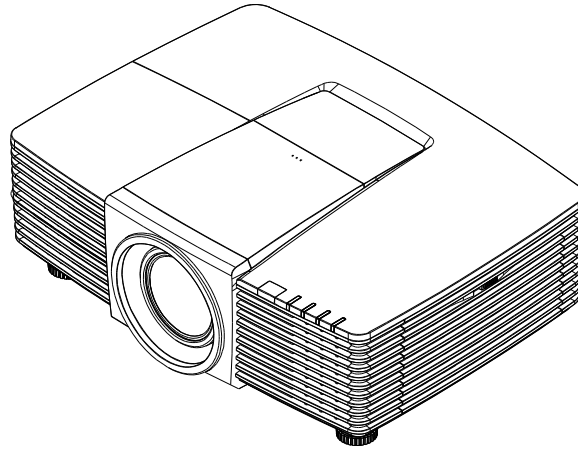
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GETTING STARTED

Packing Checklist

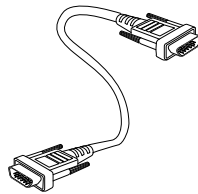
Carefully unpack the projector and check that the following items are included:



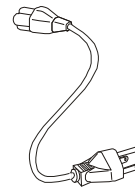
Projector



Remote Control
(Batteries Included)



VGA 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.

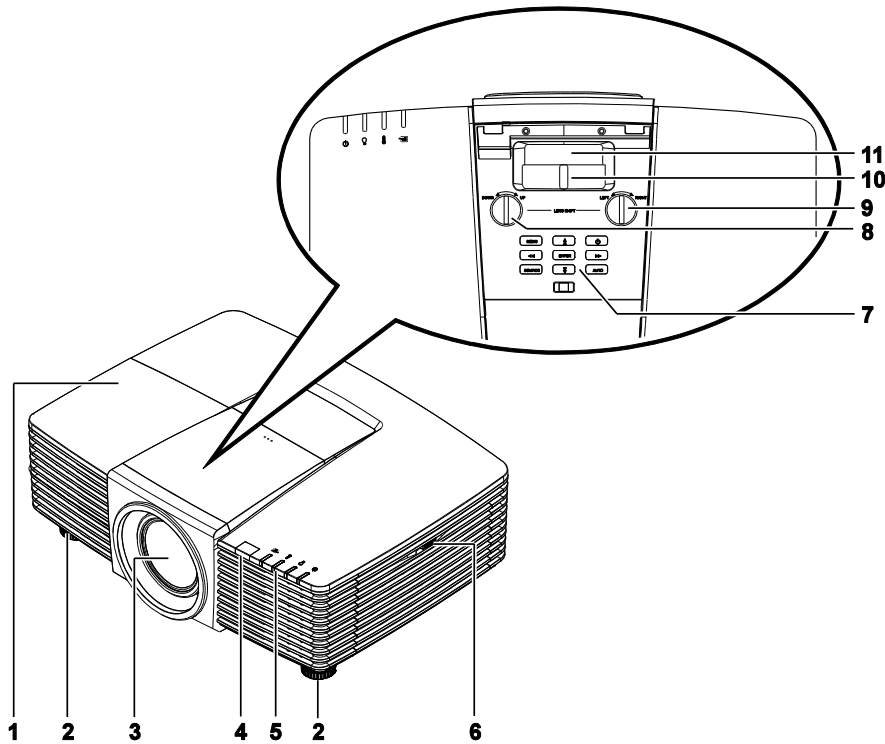


Caution:

Avoid using the projector in dusty environments.

Views of Projector Parts

Front-right View



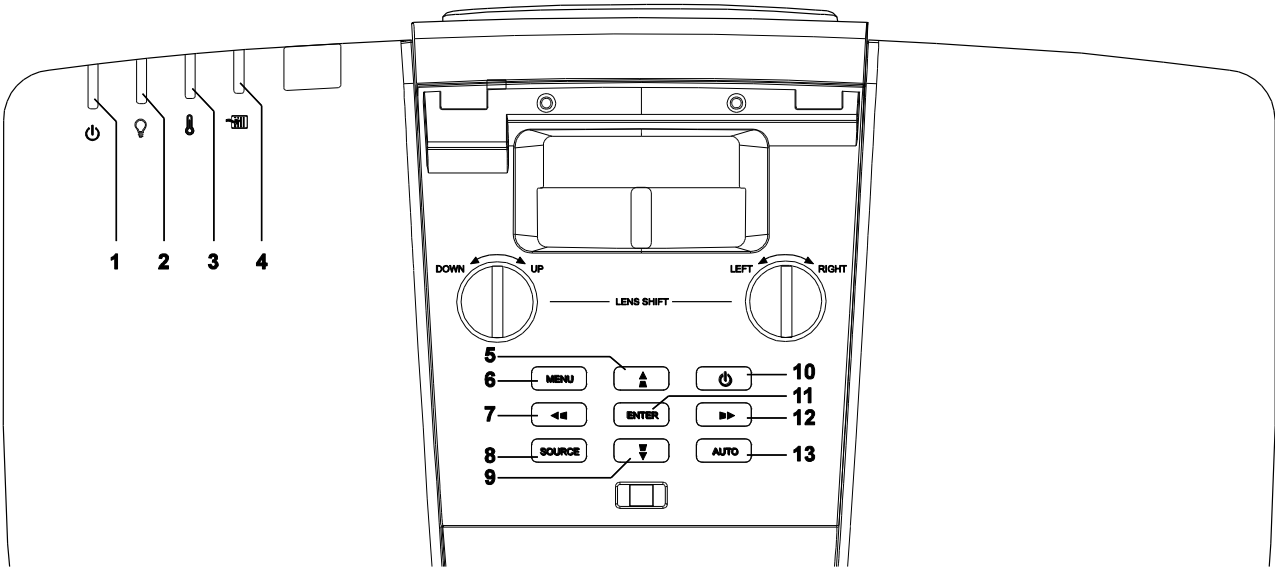
| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|-----------------------|---|-----------|
| 1. | Lamp Cover | Remove cover to replace lamp. | 63 |
| 2. | Tilt Adjuster | Rotate adjuster lever to adjust angle position. | 14 |
| 3. | Lens | Projection Lens. | |
| 4. | IR Receiver | Receives IR signal from remote control. | 7 |
| 5. | LEDs | Displays the projector status. | 3 |
| 6. | Vent | Cool air intake. | 67 |
| 7. | Function Keys | On-Screen Display (OSD) buttons. | 3 |
| 8. | Vertical Lens Shift | Adjusts the image position vertically. | 16 |
| 9. | Horizontal Lens Shift | Adjusts the image position horizontally. | 17 |
| 10. | Zoom Ring | Enlarges the projected image. | 18 |
| 11. | Focus Ring | Focuses the projected image. | 18 |



Important:

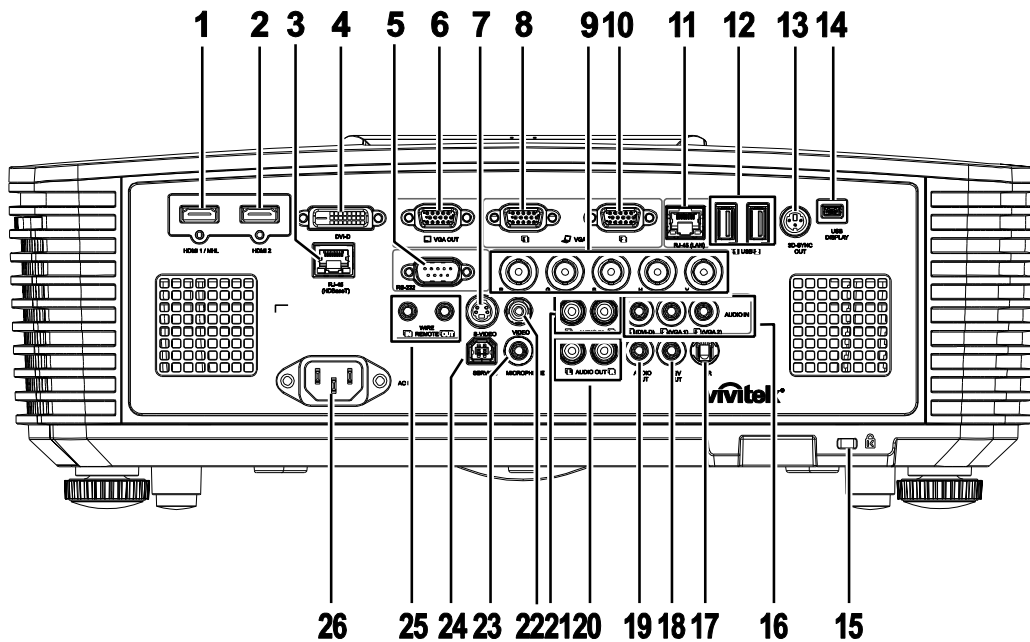
Ventilation openings on the projector allow for good air circulation, which keeps the projector lamp cool. Do not obstruct any of the ventilation openings.

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



| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|----------------------|--|-----------|
| 1. | Power LED | Display the power on/off sequence status. | 72 |
| 2. | Lamp LED | Display the lamp status. | 72 |
| 3. | Temp LED | Display the thermal status. | 72 |
| 4. | Filter LED | Display the filter replacing warning message. | 72 |
| 5. | ▲ (Up Cursor) / ▴ | Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone. | 20 |
| 6. | MENU | Opens and exits OSD menus. | 20 |
| 7. | ◀ (Left Cursor) / ◀ | Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone. | 20 |
| 8. | SOURCE | Enter the Source menu. | |
| 9. | ▼ (Down Cursor) / ▾ | Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone. | 20 |
| 10. | Power | Turn the projector on or off. | 12 |
| 11. | ENTER | Enter or confirm highlighted OSD menu item. | 20 |
| 12. | ▶ (Right Cursor) / ▶ | Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone. | 20 |
| 13. | AUTO | Optimizes image size, position, and resolution. | |

Rear view



| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|---|--|-----------|
| 1. | HDMI 1 /MHL | Connect the HDMI/MHL cable from an HDMI/MHL device. Note: Set the Source to HDMI 1/MHL also can be charging connected MHL compatible smart device as long as the projector Power On. | |
| 2. | HDMI 2 | Connect the HDMI cable from an HDMI device. | |
| 3. | RJ45 (HDBaseT) (Available in DW3321) | Connect an RJ45 Cat5e/Cat6 cable for HDBaseT signal received. | |
| 4. | DVI-D | Connect the DVI CABLE to a display. | |
| 5. | RS-232 | Connects RS-232 serial port cable for remote control. | |
| 6. | VGA OUT | Connect an RGB cable to a display (Pass through by VGA1 only). | |
| 7. | S-VIDEO | Connect a S-VIDEO cable from a video device. | |
| 8. | VGA 1 | Connect an RGB cable from a computer or a video enabled device. | |
| 9. | BNC | Connect a BNC cable from a computer. | |
| 10. | VGA 2 | Connect an RGB cable from a computer or a video enabled device. | |
| 11. | RJ45 (LAN) | Connect a LAN cable from Ethernet. | |
| 12. | USB | Connect a USB cable for USB host. Note: Support 5V/1.0A for each port output as long as the projector Power On. | |
| 13. | 3D-SYNC OUT | Connect 3D IR glasses receiver unit. | |
| 14. | USB DISPLAY | Connect your projector to a PC through a USB cable. | |
| 15. | Kensington® Security Slot | Secures to permanent object with a Kensington® Lock system. | 70 |

| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|---------------|--|-----------|
| 16. | AUDIO IN | Connect an AUDIO cable from the input device. | |
| 17. | IR | Receive IR signal from remote control. | |
| 18. | 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). | |
| 19. | AUDIO OUT | Connect an AUDIO cable for audio loop through. | |
| 20. | AUDIO OUT L/R | Connect an AUDIO cable for audio loop through. | |
| 21. | AUDIO IN L/R | Connect the audio cables from an audio device for VIDEO or S-VIDEO audio input. | |
| 22. | VIDEO | Connect the composite cable from a video device. | |
| 23. | MICROPHONE | Connect the microphone input device. | |
| 24. | SERVICE | For service personnel only. | |
| 25. | WIRE REMOTE | Connect the wire remote from remote control to the projector for wire remote control. Connect "WIRE REMOTE OUT" to another projector (same model) "WIRE REMOTE IN" for serial control. | |
| 26. | AC IN | Connect the POWER cable. | |

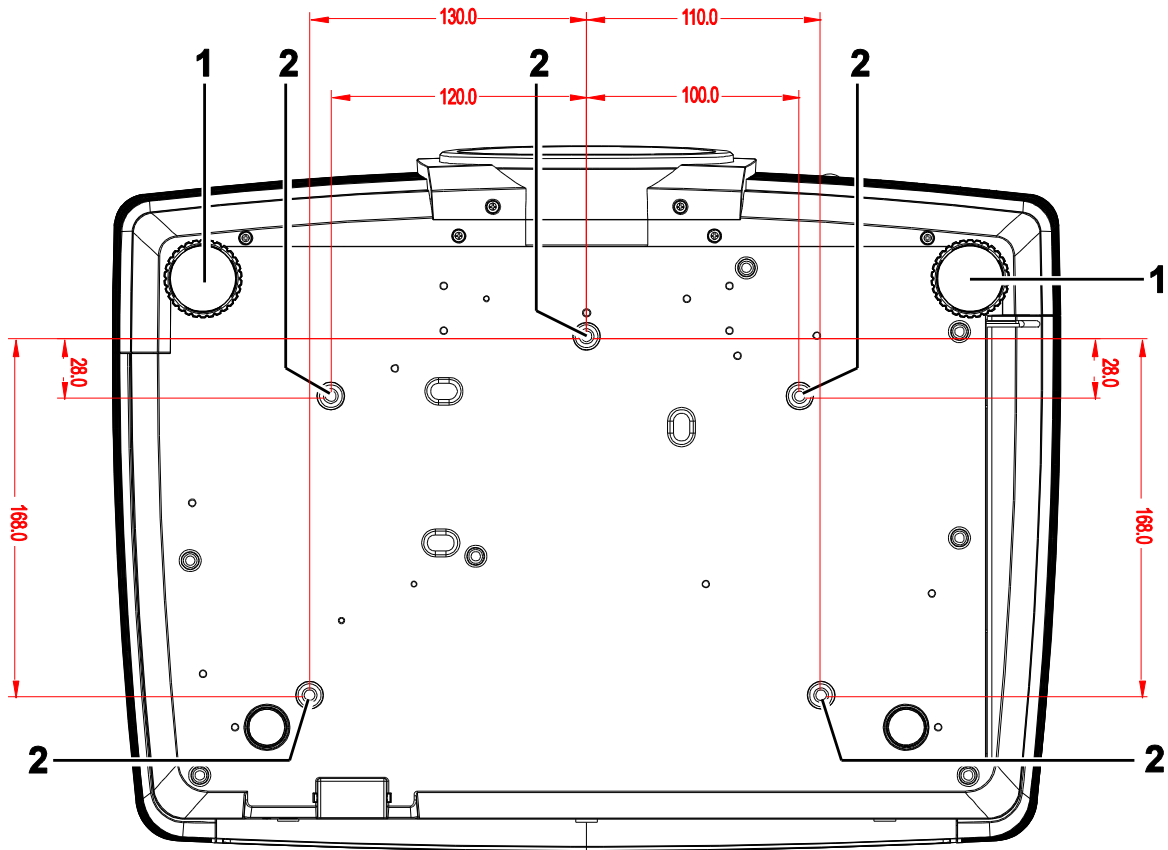
Note:

- 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.

**Warning:**

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

Bottom view



| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|---------------------|---|-----------|
| 1. | Tilt Adjustor | Rotate adjuster lever to adjust angle position. | 14 |
| 2. | Ceiling Mount Holes | Contact your dealer for information on mounting the projector on a ceiling. | |

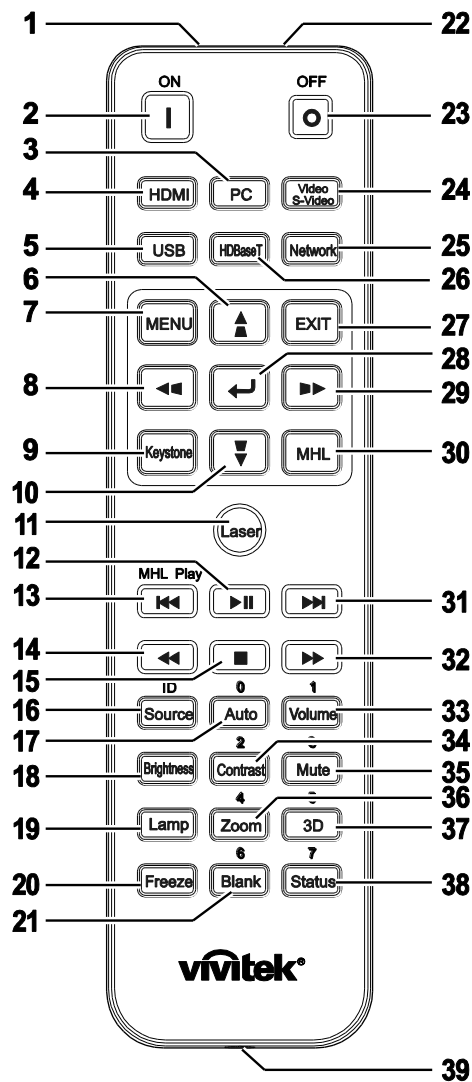
Note:

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.

Note:

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007

**Caution:**

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|----------------------|--|-----------|
| 1. | IR Transmitter | Transmits signals to projector. | |
| 2. | Power On | Turns the projector on. | 12 |
| 3. | PC | Displays the VGA1/VGA2/PC source selection (toggle). | |
| 4. | HDMI | Displays the HDMI 1/2 source selection (toggle). | |
| 5. | USB | Displays the USB source selection. | |
| 6. | ▲ (Up Cursor) / ▲ | Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone. | 20 |
| 7. | MENU | Opens the OSD. | 20 |
| 8. | ◀ (Left Cursor) / ◀ | Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone. | 20 |
| 9. | Keystone | Opens the Keystone menu. | |
| 10. | ▼ (Down Cursor) / ▼ | Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone. | 20 |
| 11. | Laser | Press to operate the on-screen pointer. DO NOT POINT IN EYES. | |
| 12. | Play/Pause | Play or pause video/music for MHL. | |
| 13. | Reverse | Reverse in set increments for MHL. | |
| 14. | Prev | Play the previous item on the programming list for MHL. | |
| 15. | Stop | Stop video/music playing for MHL. | |
| 16. | Source/ID | Alternate input source. Combo key function for Remote Control customer code settings (ID + Number). | 20 |
| 17. | Auto/0 | Auto adjustment for frequency, phase, and position. Number for Remote ID setting used. | 20 |
| 18. | Brightness | Displays the brightness setting bar. | |
| 19. | Lamp | Displays the lamp selections. | |
| 20. | Freeze | Freezes/unfreezes the on-screen picture. | |
| 21. | Blank/6 | Makes the screen blank. Number for Remote ID setting used. | |
| 22. | Laser | Use as on-screen pointer. DO NOT POINT IN EYES. | |
| 23. | Power Off | Turns the projector off. | 12 |
| 24. | Video/S-Video | Displays the VIDEO/S-VIDEO source selection. | |
| 25. | Network | Displays the Network source selection. | |
| 26. | HDBaseT | Displays the HDBaseT source selection. | |
| 27. | EXIT | Return to last OSD page. | |
| 28. | ENTER | Enters and confirms settings in the OSD. | 20 |
| 29. | ▶ (Right Cursor) / ▶ | Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone. | 20 |
| 30. | MHL | Enable the Mobile High-Definition Link technology feature for smart devices. | |
| 31. | Forward | Forward in set increments for MHL. | |
| 32. | Next | Play the following item on the programming list for MHL. | |

| ITEM | LABEL | DESCRIPTION | SEE PAGE: |
|------|------------|---|-----------|
| 33. | Volume/1 | Displays the Volume setting bar. Number for Remote ID setting used. | |
| 34. | Contrast/2 | Displays the Contrast settings bar. Number for Remote ID setting used. | |
| 35. | Mute/3 | Mutes the built-in speaker. Number for Remote ID setting used. | |
| 36. | Zoom/4 | Displays the digital zoom settings bar. Number for Remote ID setting used. | 18 |
| 37. | 3D/5 | Enable 3D feature. Number for Remote ID setting used. | |
| 38. | Status/7 | Opens the OSD Status menu (the menu only opens when an input device is detected). Number for Remote ID setting used. | |
| 39. | Wired Jack | Connect wire remote to the projector. | |

Note:

Remote Combo Key Settings:

ID+0: Reset Remote Control customer code to default settings.

ID+1: Set Remote Control customer code to "1".

~

ID+7: Set Remote Control customer code to "7".

Projector also need setting ID for unique control. Projector ID settings see page 37.

Note:

*When the projector is under **MHL** mode, The keypad on projector should be with the same definition of the key on remote control.*

*When **MHL** function:*

***MENU** for App settings, ▲ **Up**, ▼ **Down**, ◀ **Left** and ▶ **Right** are used as directional arrows, also included **ENTER** and **EXIT**.*

Controlling your smart device with the remote control:

*When the projector projects the contents from your **MHL** compatible smart device, you can use the remote control to control your smart device.*

*To enter the **MHL** mode, the following buttons are available for controlling your smart device, Arrow keys (▲ **Up**, ▼ **Down**, ◀ **Left**, ▶ **Right**), **MENU**, **EXIT**, **MHL** control buttons.*

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.

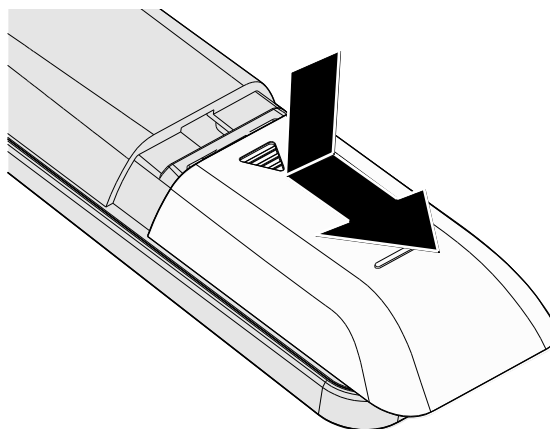
Projector and Remote Control Buttons

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.

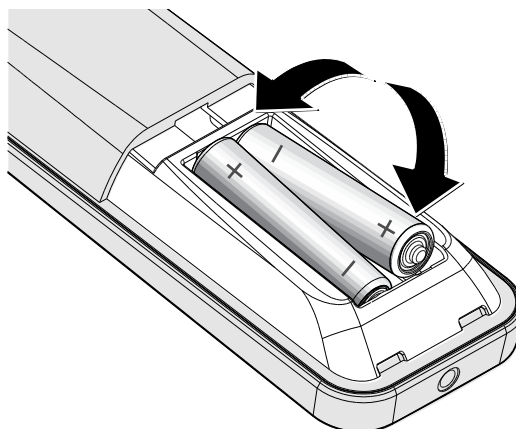
SETUP AND OPERATION

Inserting the Remote Control Batteries

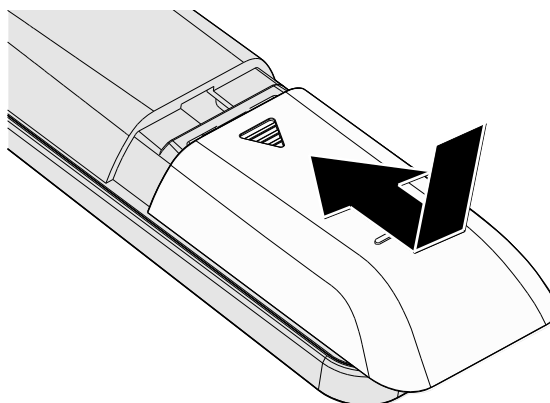
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



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



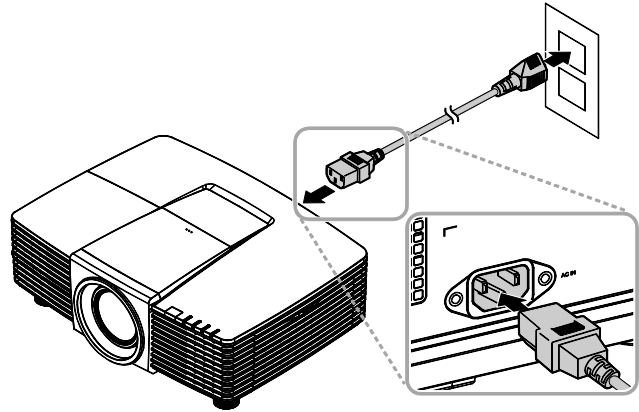
3. Replace the cover.



**Caution:**

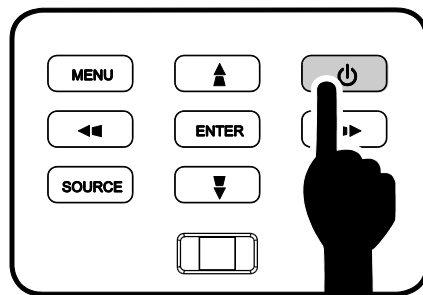
1. Only use AAA batteries (Alkaline batteries are recommended).
2. Dispose of used batteries according to local ordinance regulations.
3. Remove the batteries when not using the projector for prolonged periods.

Starting and Shutting down the Projector

1. Securely connect the power cord and signal cable. When connected, the power led will flash green to solid green.



2. Turn on the lamp by pressing “” button on the top of the projector or “” 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. (See [Setting the OSD Language](#) on page 21)



- 3.** 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.)

| |
|-----------------|
| HDMI 1 / MHL |
| HDMI 2 |
| DVI |
| VGA 1 |
| VGA 2 |
| BNC |
| Video |
| S-Video |
| Network Display |
| USB Reader |
| USB Display |
| HDBaseT |

- HDMI 1 / MHL: High-Definition Multimedia Interface and Mobile High-Definition Link compatible
- HDMI 2: High-Definition Multimedia Interface compatible
- DVI: DVI
- VGA 1 / 2: Analog RGB
DVD input YCbCr/ YPbPr, or HDTV input YPbPr via D-sub connector
- BNC: Analog RGB
- VIDEO: Tradition composite video
- S-Video: Super video (Y/C separated)
- Network Display: Network Display Source
- USB Reader: USB reader Source
- USB Display: USB Display from PC USB connection
- HDBaseT: Digital Video through the Network transmitter (Available in DW3321)

Note: The HDBaseT 5Play™ feature set enables delivering the signal over a single 100m / 328ft CAT5e / 6 cable.

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



Caution:

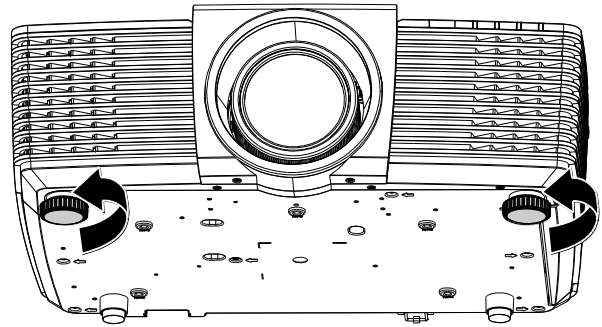
Do not unplug the power cord until the POWER LED stops flashing – indicating the projector has cooled down.

Adjusting the Projector Level

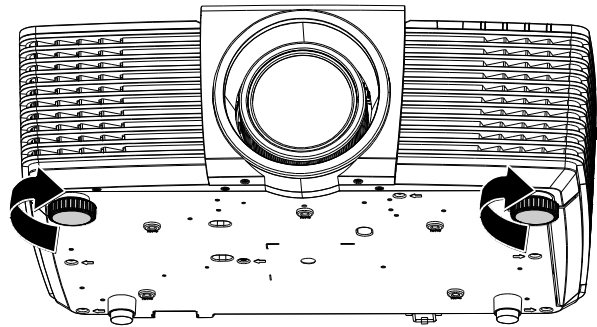
Take note of the following when setting up the projector:

- *The projector table or stand should be level and sturdy.*
- *Position the projector so that it is perpendicular to the screen.*
- *Ensure the cables are in a safe location. You could trip over them.*

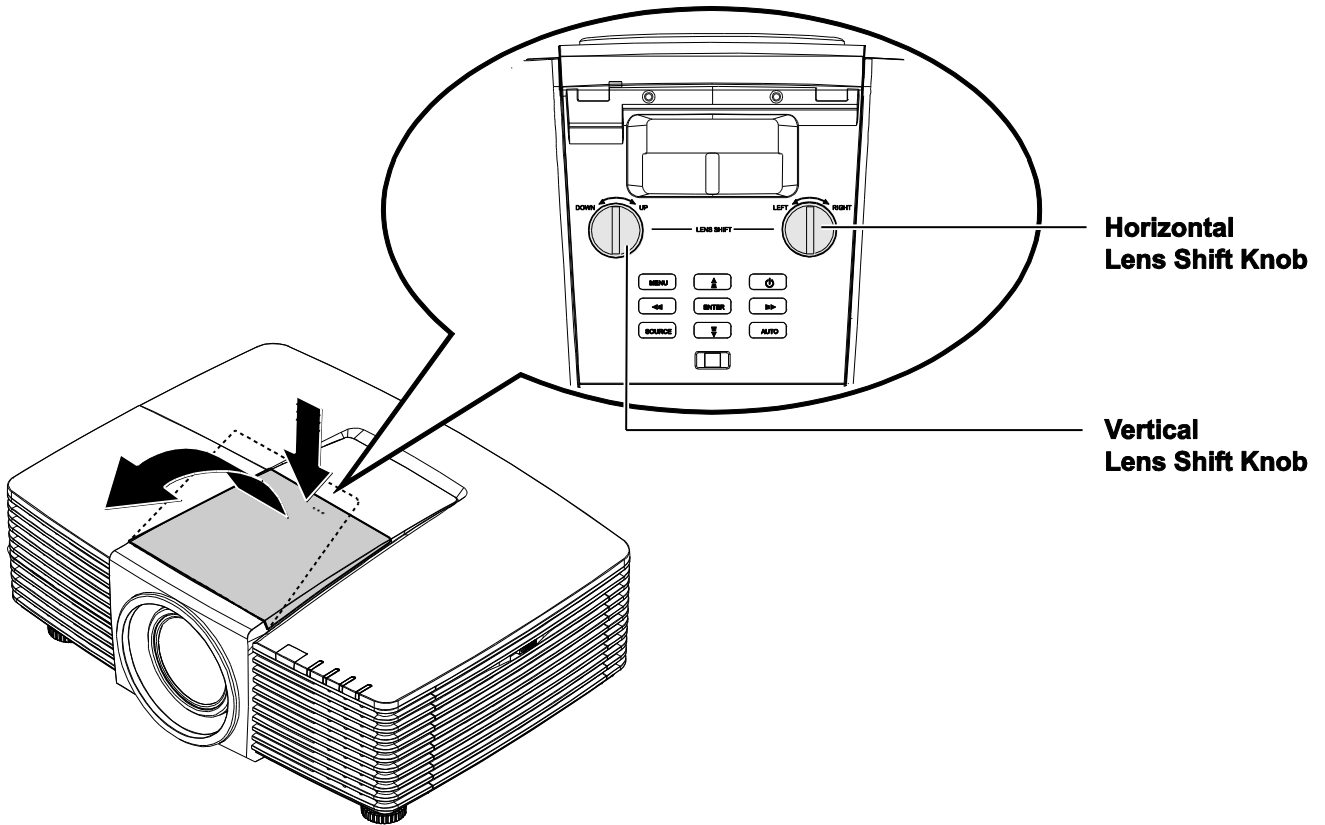
- 1.** To raise the level of the projector, twist the adjusters counter clockwise.



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



Adjusting Projected Image Position Using Lens Shift

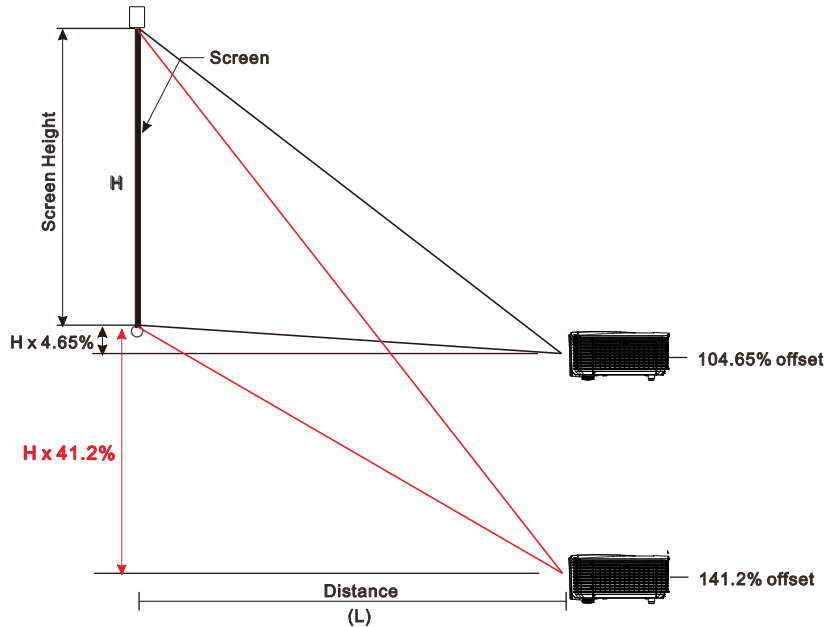


The Lens Shift feature provides a lens shift function that can be used to adjust the position of the projected image either horizontally or vertically within the range detailed below.

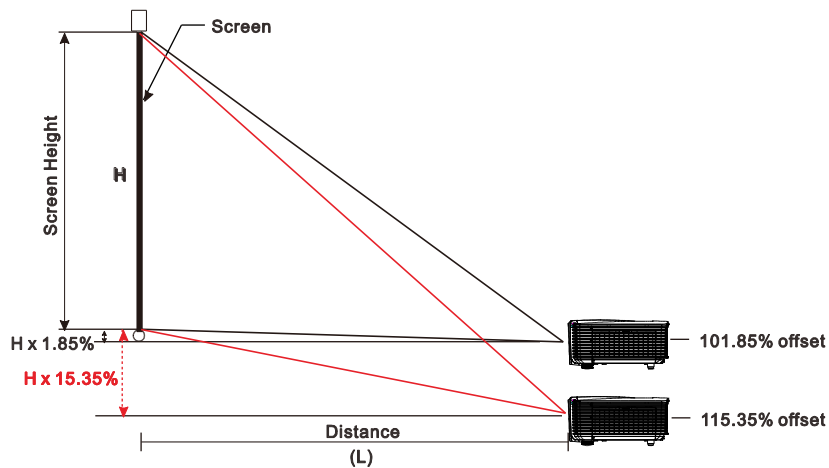
Adjusting the vertical image position

The vertical image height can be adjusted between 141.2% and 104.65% for WXGA, 115.35% and 101.85% for XGA of 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.

WXGA

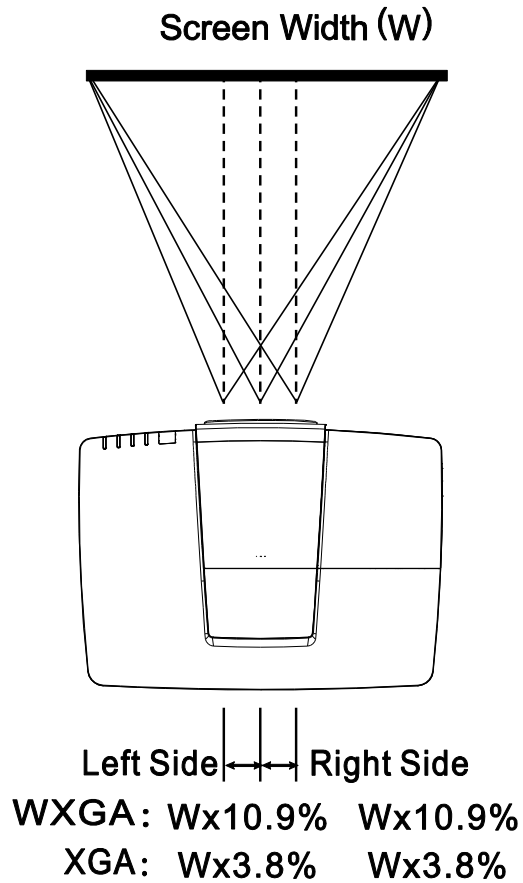


XGA



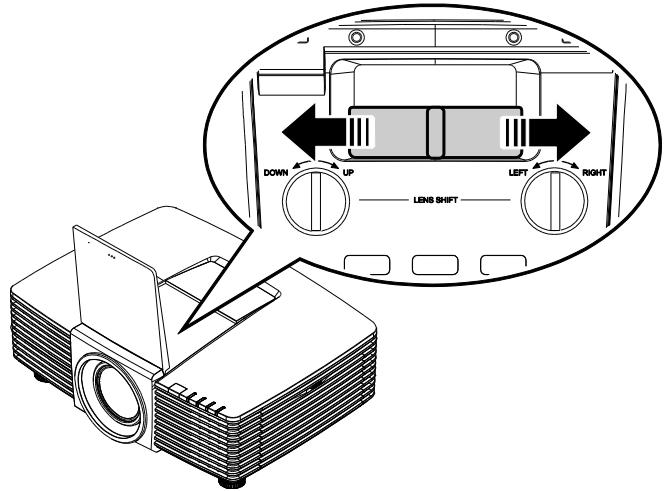
Adjusting the horizontal image position

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 10.9% for WXGA, 3.8% for XGA of the 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.

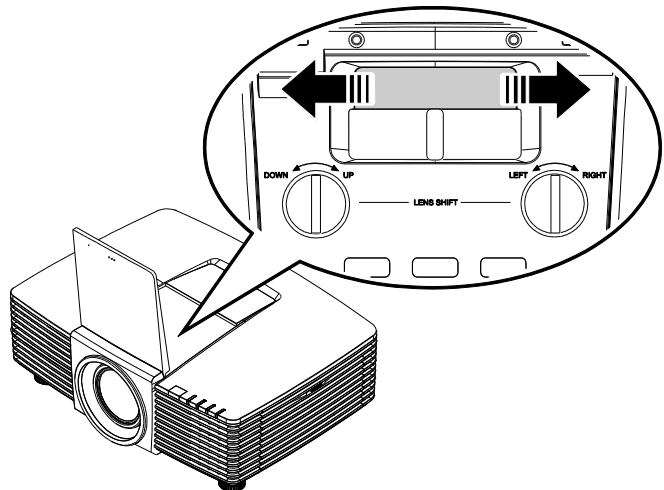






Adjusting the Zoom, Focus and Keystone

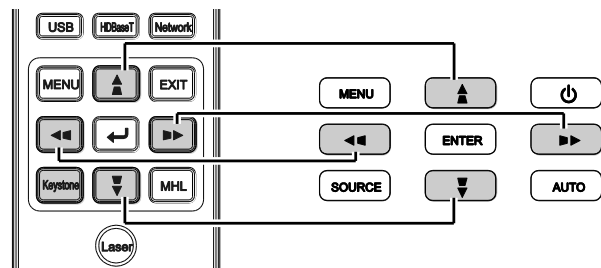
1. Use the **Image-zoom** control (on the projector only) to resize the projected image and screen size.



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





3. Press the  /  /  /  buttons (on the projector or the remote control) to correct vertical or horizontal image-trapezoid or press the **Keystone** button (on the remote) to selected V (Vertical) or H (Horizontal) keystone.





Remote control and OSD panel

4. The keystone control appears on the display.

Press  /  for V Keystone correcting image.



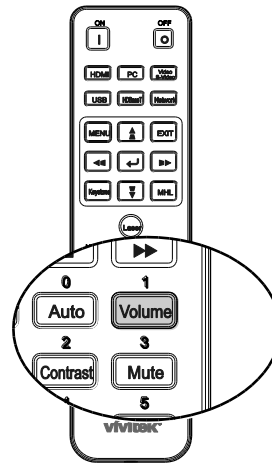
Press  /  for H Keystone correcting image.



Adjusting the Volume

1. Press the **Volume** buttons on the remote control.

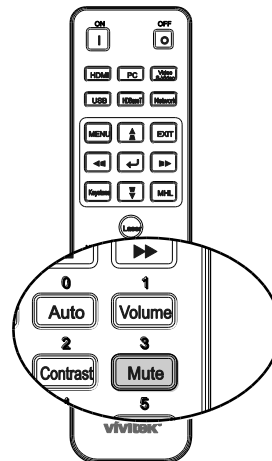
The volume control appears on the display.



2. Press the ◀ / ▶ 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).



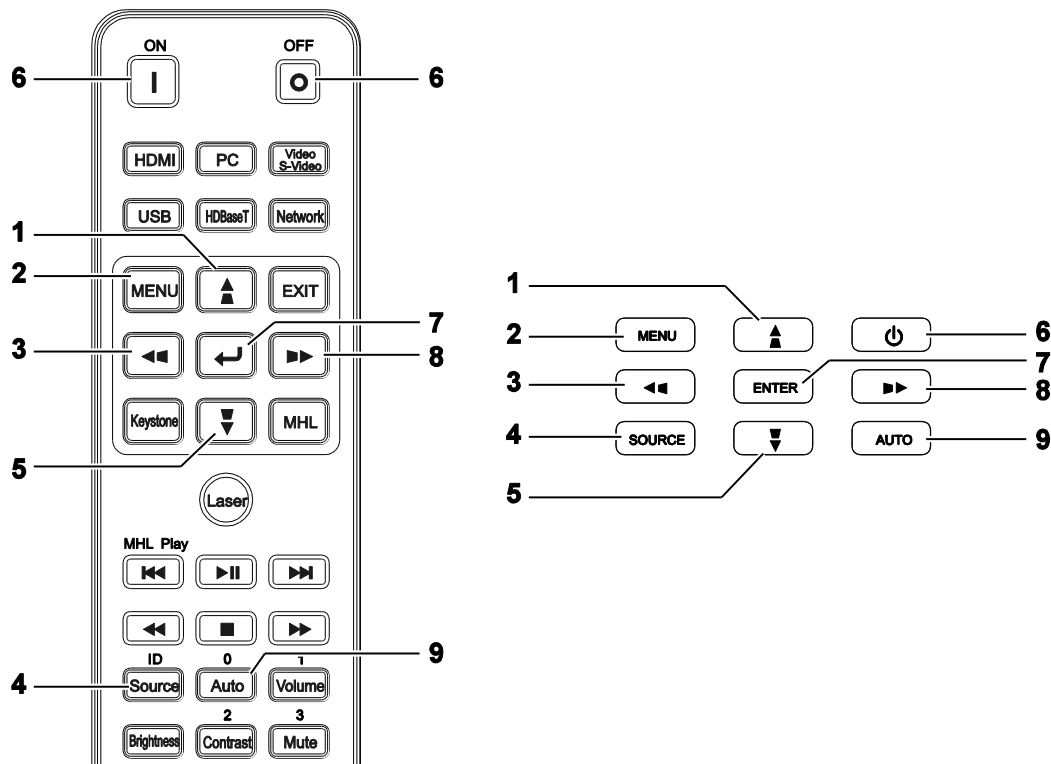
ON-SCREEN DISPLAY (OSD) MENU SETTINGS

OSD Menu Controls

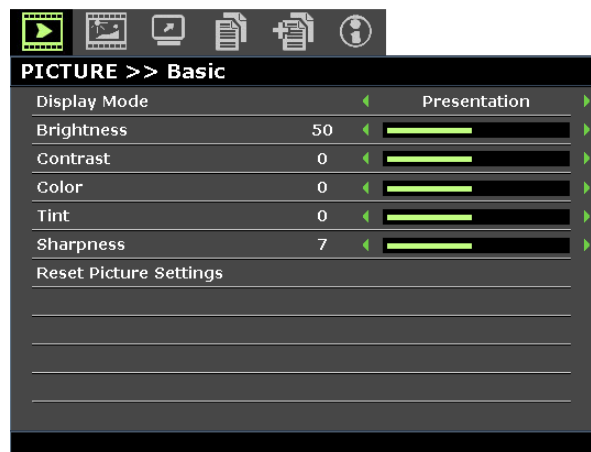
The projector has an OSD that lets you make image adjustments and change various settings.

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 six menus. Press the cursor **◀ / ▶** buttons to move through the menus.
3. Press the cursor **▲ / ▼** buttons to move up and down in a menu.
4. Press the cursor **◀ / ▶** buttons to change values for settings.
5. Press the **MENU** button to close the OSD or leave a submenu. Press the **EXIT** button to return to the previous menu.



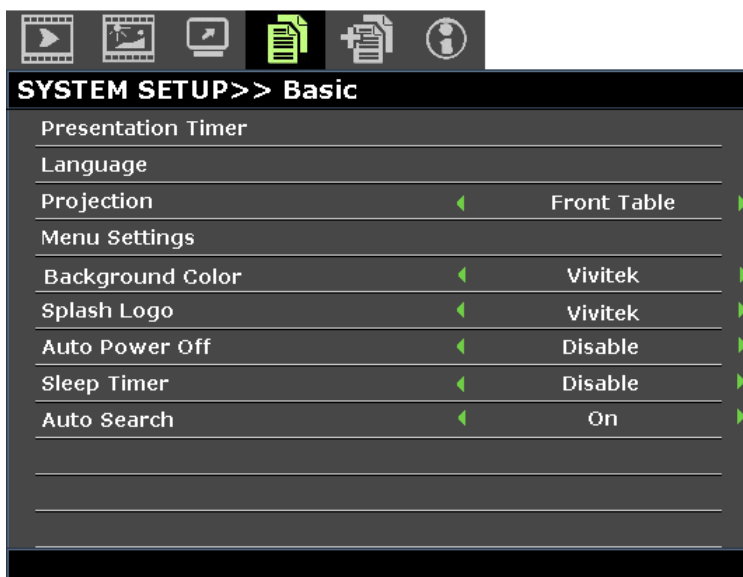
Note:

Depending on the video source, not all items in the OSD are available. For example, the **Horizontal/Vertical Position** items in the **PC Detail Adjustment** 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 ◀ / ▶ buttons to navigate to **SYSTEM SETUP >> Basic**.



2. Press the cursor ▲ / ▼ buttons until **Language** is highlighted.
3. Press the cursor ◀ / ▶ buttons until the language you want is selected.
4. Press the **MENU** button to close the OSD.

OSD Menu Overview

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

| MAIN MENU | SUB MENU | SETTINGS | |
|---------------------|------------------------|--|------------------|
| PICTURE >> Basic | Display Mode | Presentation, Bright, Game, Movie, Vivi, TV, sRGB, Blackboard, DICOM SIM, 3D, User1, User2 | |
| | Brightness | 0~100 | |
| | Contrast | 50~50 | |
| | Color | 50~50 | |
| | Tint | 50~50 | |
| | Sharpness | 0~15 | |
| | Reset Picture Settings | Current | |
| | | All | |
| | | Cancel | |
| | PICTURE >> Advanced | Brilliant Color | On, Off |
| Color Temperature | | D65 (Warm), D75 (Normal), D83 (Cool) | |
| Wall Color | | Off, Light Yellow, Pink, Light Green, Blue, Blackboard | |
| Gamma | | 1.8, 2.0, 2.2, 2.4, B&W, Linear, S-curve | |
| HSG Adjustment | | Primary Color | R, G, B, C, M, Y |
| | | Hue | -99~99 |
| | | Saturation | 0~199 |
| | | Gain | 5~195 |
| User Color Temp | | White Gain Red | 0~100 |
| | | White Gain Green | 0~100 |
| | | White Gain Blue | 0~100 |
| White Balance | | Red Gain | 0~100 |
| | | Green Gain | 0~100 |
| | | Blue Gain | 0~100 |
| | | Red Offset | -50~50 |
| | | Green Offset | -50~50 |
| | | Blue Offset | -50~50 |

| MAIN MENU | SUB MENU | SETTINGS | |
|--------------------------|----------------------|--|--|
| DISPLAY | Aspect Ratio | Fill, 4:3, 16:9, 16:10, Letter, Box, Native, 2.35:1 | |
| | V Keystone | -30 ~30 | |
| | H Keystone | -25 ~25 | |
| | 4 Corner | Left-Top, Right-Top, Right-Bottom, Left-Bottom | |
| | Pincushion | Horz. Left, Horz. L+R, Horz. Right, Vert. Top, Vert. T+B, Vert. Bottom | |
| | PC Detail Adjustment | Auto | |
| | | Frequency | -15 ~ 15 |
| | | Phase | 0~63 |
| | | Horizontal Position | -5 ~ 5 |
| | | Vertical Position | -5 ~ 5 |
| | 3D Setting | 3D Mode | Auto, Top/Bottom, Frame Sequential, Frame Packing, Side By Side, Off |
| | | 3D Sync | Off, DLP-Link, IR |
| | | 3D Sync Invert | Off, On |
| | Digital Zoom | 0 ~10 Video/YUV signal only 0~8 | |
| SYSTEM SETUP >> Basic | Presentation Timer | Timer Period | 1~240 |
| | | Timer | Off, On |
| | Language | English, 한국어, Hrvatski, Français, Svenska, Română, Deutsch, Nederlands, Norsk, Italiano, Türkçe, Dansk, Español, Čeština, Български, Русский, Português, Suomi, 繁體中文, 简体中文, Indonesian, 简体中文, Polski, Ελληνικά, 日本語, Magyar, العربية, हिन्दी | |
| | Projection | Front Table, Rear Table, Front Ceiling, Rear Ceiling | |
| | Menu Settings | Menu Display Time | 5 Sec, 10 Sec, 20 Sec, 30 Sec, Always |
| | | Menu position | Top-Left, Top-Right, Center, Bottom-Left, Bottom-Right |
| | Background Color | Vivitek, Black, Blue, Purple | |
| | Splash Logo | Vivitek, Black, Blue | |
| | Auto Power Off | Disable, 5 Min, 10 Min, 15 Min, 20 Min, 25 Min, 30 Min | |
| | Sleep Timer | Disable, 30 Min, 1 Hr, 2 Hr, 3 Hr, 4Hr, 8Hr, 12 Hr | |
| | Auto Search | On, Off | |

| MAIN MENU | SUB MENU | SETTINGS | | |
|--------------------------------|--------------------|---|--------------------------|----------------------------|
| SYSTEM SETUP >> Advanced | High Altitude Mode | Off, On | | |
| | Audio Settings | Mute | Off, On | |
| | | Volume | 0 ~ 10 | |
| | | Out | Off, Mini, RCA | |
| | Lamp Settings | Lamp Mode | Normal, ECO, Dynamic ECO | |
| | | Reset Lamp Timer | Yes, No | |
| | | Total Lamp Hour | | |
| | Test Pattern | Off, Grid, White, Red, Green, Blue, Black | | |
| | Closed Caption | Closed Caption Enable | Off, On | |
| | | Caption Version | CC1, CC2, CC3, CC4 | |
| | Low Power Mode | Off, On, On By Lan | | |
| | Network Settings | Wired Lan | Status | Connect, Disconnect |
| | | | DHCP | On, Off |
| | | | IP Address | 0~255, 0~255, 0~255, 0~255 |
| | | | Subnet Mask | 0~255, 0~255, 0~255, 0~255 |
| | | | Default Gateway | 0~255, 0~255, 0~255, 0~255 |
| | | | DNS Server | 0~255, 0~255, 0~255, 0~255 |
| | | | Apply | |
| | | Wireless Lan | Status | Connect, Disconnect |
| | | | SSID | Refresh, Other |
| | | | SSID Display | On, Off |
| | | | IP Address | 0~255, 0~255, 0~255, 0~255 |
| | | | Connection Mode | AP, Infrastructure |
| | | | Apply | |
| | | Remote Desktop | Account | |
| | | | Password | |
| | | | Connection Mode | AP, Infrastructure |
| | | Projection Login Code | On, Off | |
| | | Broadcasting | Broadcasting | On, Off |
| | | | Channel | 2~25 |
| | | | IP Address | |
| | | AMX Device Discovery | On, Off | |
| MAC Address | | xx.xx.xx.xx.xx.xx | | |
| Reset All Settings | | Reset, Cancel | | |
| Air Filter Timer Reset | | Yes, No | | |
| Remote ID | | Default, 1, 2, 3, 4, 5, 6, 7 | | |

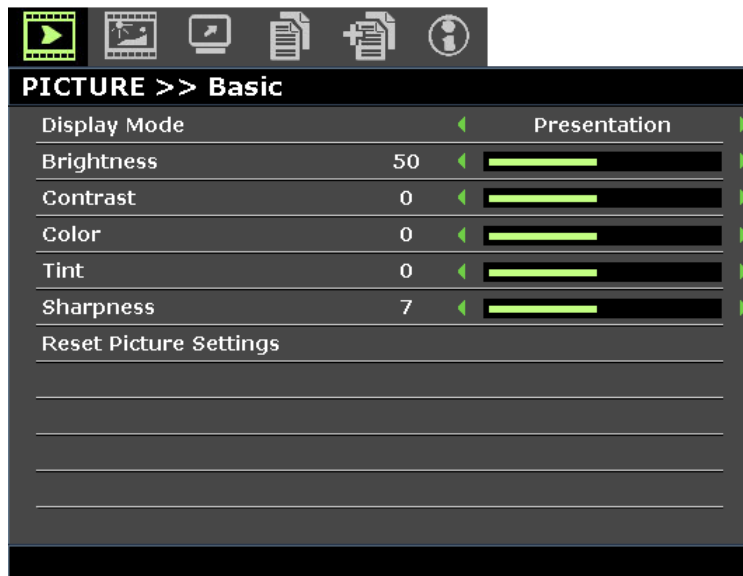
| MAIN MENU | SUB MENU | SETTINGS |
|-------------|--------------------------------------|----------|
| INFORMATION | Source | |
| | Picture Mode | |
| | Lamp Mode | |
| | Resolution | |
| | 3D Info | |
| | Lamp Hour (Normal, ECO, Total) | |
| | Air filter hour | |
| | Firmware Version | |
| | Remote ID | |
| | S/N | |

PICTURE >> Basic Menu

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

Note:

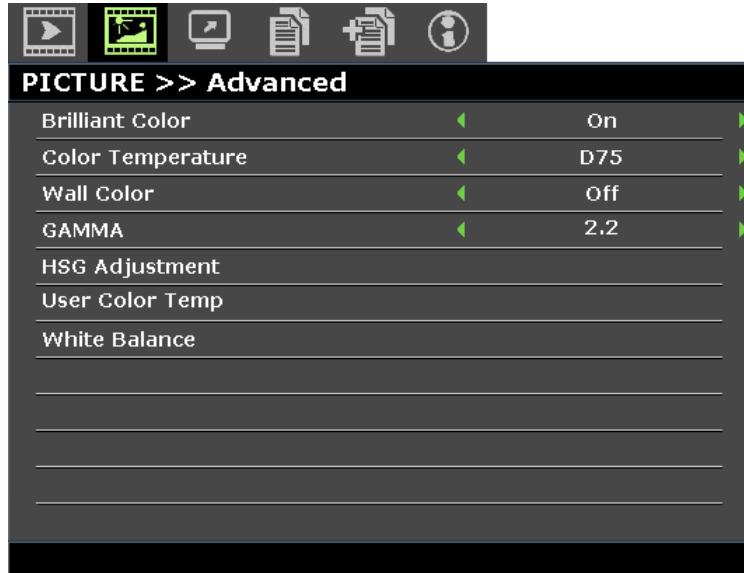
Customizing the settings in **PICTURE >> Basic** menu is only available in User 1 / 2 mode.



| ITEM | DESCRIPTION |
|------------------------|---|
| Display Mode | Press the cursor ◀ / ▶ buttons to set the display mode. Note: The DISCOM SIM mode simulates the grayscale/gamma performance of the equipment used for "Digital Image and Communication in Medicine"(DICOM). Important: This display mode should NEVER be used for medical diagnosis; it is for education/training purpose only. |
| Brightness | Press the cursor ◀ / ▶ buttons to adjust the display brightness. |
| Contrast | Press the cursor ◀ / ▶ buttons to adjust the display contrast. |
| Color | Press the cursor ◀ / ▶ buttons to adjust the video saturation. Note: This function is only available when Component, Video or S-Video input source is selected. |
| Tint | Press the cursor ◀ / ▶ buttons to adjust the video tint/hue. Note: This function is only available when Component, Video or S-Video with NTSC system input source is selected. |
| Sharpness | Press the cursor ◀ / ▶ buttons to adjust the display sharpness. Note: This function is only available when Component, Video or S-Video input source is selected. |
| Reset Picture Settings | Press the ENTER button to reset Current or All settings to default values. |

PICTURE >> Advanced Menu

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



| ITEM | DESCRIPTION |
|-------------------|---|
| Brilliant Color | Press the cursor ◀ / ▶ buttons to set the brilliant color. |
| Color Temperature | Press the cursor ◀ / ▶ buttons to set the color temperature. |
| Wall Color | Press the cursor ◀ / ▶ buttons to select different wall color setting. |
| Gamma | Press the cursor ◀ / ▶ buttons to adjust the gamma correction of the display. |
| HSG Adjustment | Press the ENTER button to enter the HSG Adjustment sub menu. See HSG Adjustment on page 28. |
| User Color Temp | Press the ENTER button to enter the User Color Temp sub menu. See User Color Temp on page 28. |
| White Balance | Press the ENTER button to enter the White Balance sub menu. See White Balance on page 29. |

HSG Adjustment

Press the **ENTER** button to enter the **HSG Adjustment** sub menu.



| ITEM | DESCRIPTION |
|---------------|--|
| Primary Color | Press the cursor ◀ / ▶ buttons to set the Primary Color. |
| Hue | Press the cursor ◀ / ▶ buttons to adjust the Hue. |
| Saturation | Press the cursor ◀ / ▶ buttons to adjust the Saturation. |
| Gain | Press the cursor ◀ / ▶ buttons to adjust the Gain. |

User Color Temp

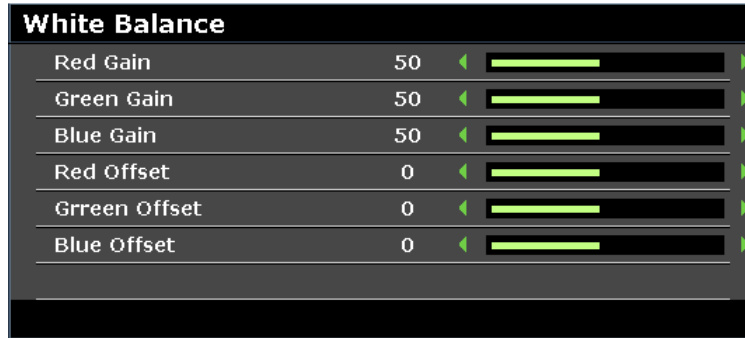
Press the **ENTER** button to enter the **User Color Temp** sub menu.



| ITEM | DESCRIPTION |
|------------------|--|
| White Gain Red | Press the cursor ◀ / ▶ buttons to adjust the White Gain Red. |
| White Gain Green | Press the cursor ◀ / ▶ buttons to adjust the White Gain Green. |
| White Gain Blue | Press the cursor ◀ / ▶ buttons to adjust the White Gain Blue. |

White Balance

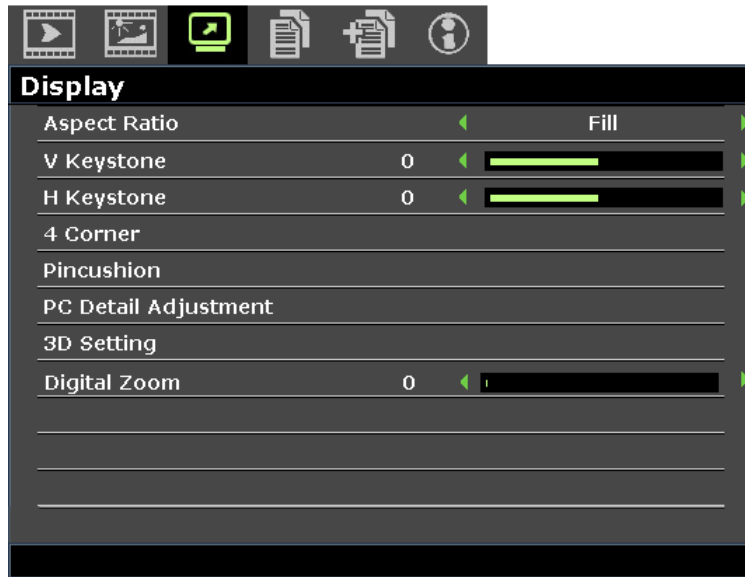
Press the **ENTER** button to enter the **White Balance** sub menu.



| ITEM | DESCRIPTION |
|--------------|--|
| Red Gain | Press the cursor ◀ / ▶ buttons to adjust the Red Gain. |
| Green Gain | Press the cursor ◀ / ▶ buttons to adjust the Green Gain. |
| Blue Gain | Press the cursor ◀ / ▶ buttons to adjust the Blue Gain. |
| Red Offset | Press the cursor ◀ / ▶ buttons to adjust the Red Offset. |
| Green Offset | Press the cursor ◀ / ▶ buttons to adjust the Green Offset. |
| Blue Offset | Press the cursor ◀ / ▶ buttons to adjust the Blue Offset. |

DISPLAY Menu

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

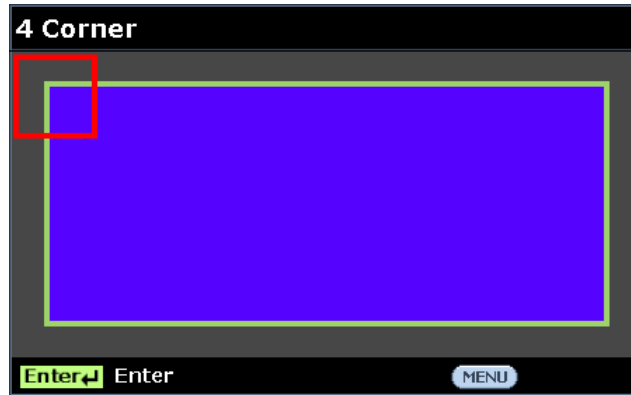


| ITEM | DESCRIPTION |
|----------------------|---|
| Aspect Ratio | Press the cursor ◀ / ▶ buttons to set the aspect ratio. Note: Without support when 3D mode activated. |
| Vertical Keystone | Press the cursor ◀ / ▶ buttons to adjust the vertical keystone. |
| Horizontal Keystone | Press the cursor ◀ / ▶ buttons to adjust the horizontal keystone. Note: Without support when 3D mode activated. |
| 4 Corner | Press the ENTER button to enter the 4 Corner sub menu. See 4 Corner on page 31. Note: Without support when 3D mode activated. |
| Pincushion | Press the ENTER button to enter the Pincushion sub menu. See Pincushion on page 32. Note: Without support when 3D mode activated. |
| PC Detail Adjustment | Press the ENTER button to enter the PC Detail Adjustment sub menu. See PC Detail Adjustment on page 33. |
| 3D Setting | Press the ENTER button to enter the 3D Setting sub menu. See 3D Setting on page 34. |
| Digital Zoom | Press the cursor ◀ / ▶ buttons to adjust the digital zoom. Note: <ol style="list-style-type: none"> Without support when 3D mode activated. Resync signal will adjust digital zoom to 0 automatically. Aspect ratio adjustment will make digital zoom back to 0 automatically. Signal re-sync will make digital zoom back to 0. Only 0~8 is allowed to adjust for Video/YUV signal. |

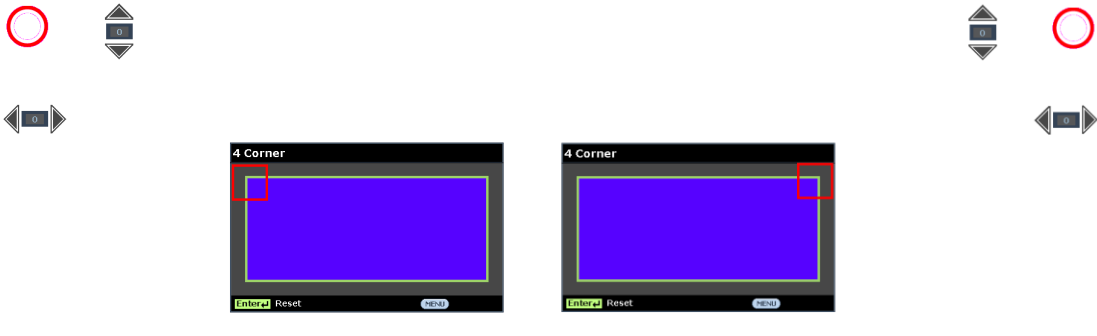
4 Corner

Press the **ENTER** button to enter the **4 Corner** sub menu.

1. Press the cursor **▲ / ▼ / ◀ / ▶** buttons to select a corner and press **ENTER**.



2. Press the cursor **▲ / ▼** buttons to adjust vertical and press the cursor **◀ / ▶** buttons to adjust horizontal.
3. Press **ENTER** to save the settings.



Pincushion

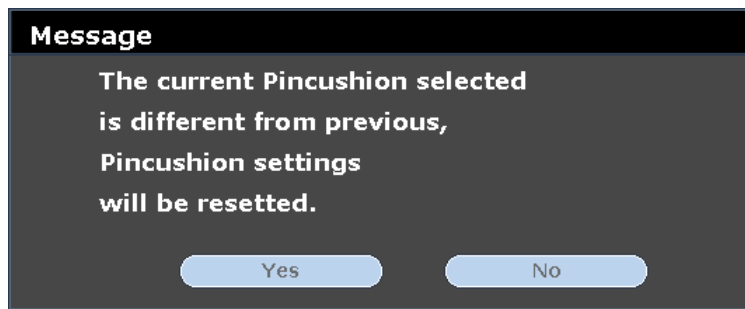
Press the **ENTER** button to enter the **Pincushion** sub menu.

1. Press the cursor **▲ / ▼** buttons to select one or both side and press **ENTER**.

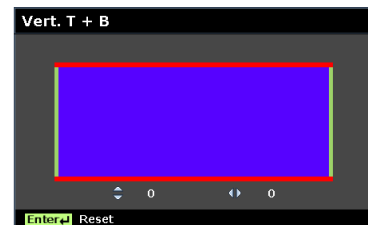
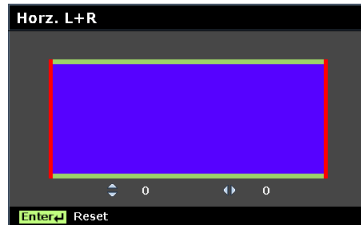
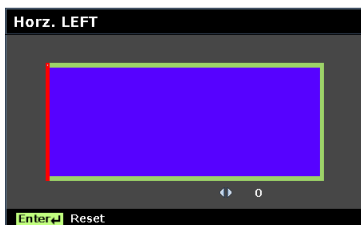


Note:

Only one Pincushion setting will be stored so if you want to change from the previous direction to the other, the notice message will pop-up to remind you to reset the previous Pincushion setting.



2. Press the cursor **▲ / ▼ / ◀ / ▶** buttons to adjust the desired side convex or concave.
3. Press **ENTER** to save the settings.



PC Detail Adjustment

Press the **ENTER** button to enter the **PC Detail Adjustment** sub menu.

Note:

Customizing the settings in **PC Detail Adjustment** menu is only available when PC input source (analog RGB) is selected.



| ITEM | DESCRIPTION |
|---------------------|---|
| Auto | Press the ENTER/AUTO buttons on the control panel or the ENTER/AUTO buttons on the remote control to automatically adjust frequency, phase, and position. |
| Frequency | Press the cursor ◀ / ▶ buttons to adjust the A/D sampling number. |
| Phase | Press the cursor ◀ / ▶ buttons to adjust the A/D sampling clock. |
| Horizontal Position | Press the cursor ◀ / ▶ buttons to adjust the display position right or left. |
| Vertical Position | Press the cursor ◀ / ▶ buttons to adjust the display position up or down. |

Note:

Some signals may take time to display or may not be displayed correctly.
If the Auto Adjust operation cannot optimize the PC signal, try to adjust Frequency and Phase manually.

3D Setting

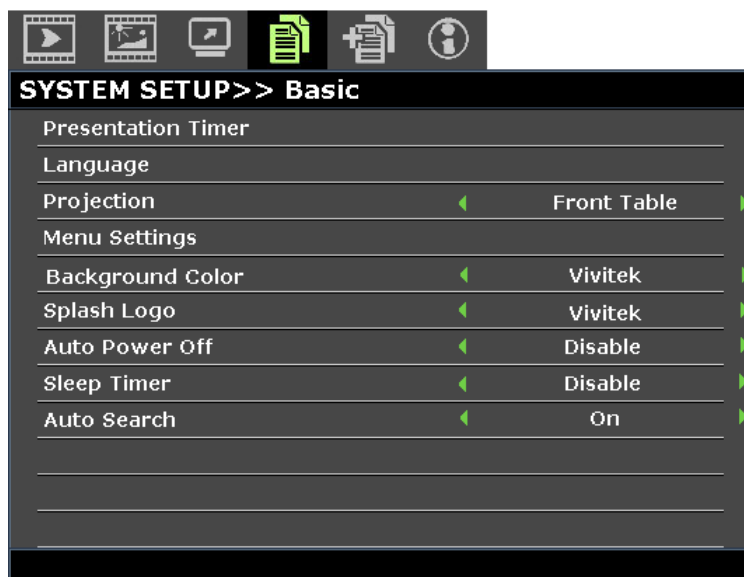
Press the **ENTER** button to enter the **3D Setting** sub menu.



| ITEM | DESCRIPTION |
|----------------|---|
| 3D Mode | Press the cursor ◀ / ▶ buttons to select different 3D mode. |
| 3D Sync | Press the cursor ◀ / ▶ buttons to select different 3D Sync. |
| 3D Sync Invert | Press the cursor ◀ / ▶ buttons to enable or disable 3D Sync Invert. |

SYSTEM SETUP >> Basic Menu

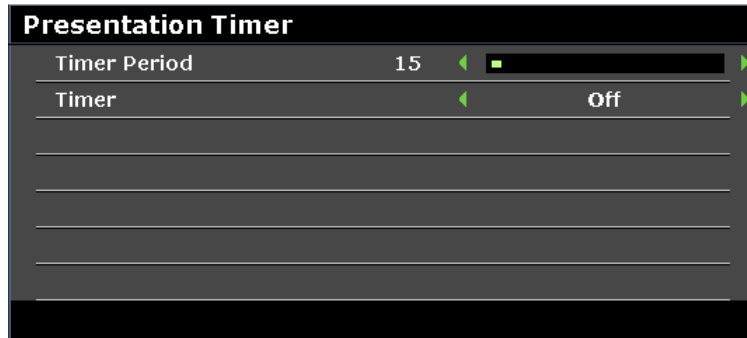
Press the **MENU** button to open the **OSD** menu. Press the cursor ◀ / ▶ buttons to move to the **SYSTEM SETUP >> BASIC** menu. Press the cursor ▲ / ▼ buttons to move up and down in the **SYSTEM SETUP >> BASIC** menu. Press the cursor ◀ / ▶ buttons to change values for settings.



| ITEM | DESCRIPTION |
|--------------------|---|
| Presentation Timer | Press the ENTER button to the presentation timer menu. See Presentation Timer on page 36. |
| Language | Press the cursor ◀ / ▶ buttons to select a different localization menu. |
| Projection | Press the cursor ◀ / ▶ buttons to choose from four projection methods. |
| Menu Settings | Press the ENTER button to enter the Menu Settings sub menu. See Menu Settings on page 36. |
| Background Color | Press the cursor ◀ / ▶ buttons to select the background color when no input source is detected. |
| Splash Logo | Press the cursor ◀ / ▶ buttons to select a different startup screen. |
| Auto Power Off | Press the cursor ◀ / ▶ buttons to set the auto power off timer. The projector automatically turns off if no input source is detected after the preset period of time. |
| Sleep Timer | Press the cursor ◀ / ▶ buttons to set sleep timer. The projector automatically turns off after the preset period of time. |
| Auto Search | Press the cursor ◀ / ▶ buttons to turn on or off auto search. |

Presentation Timer

The **Presentation Timer** function can indicate the presentation time on the screen to help you achieve better time management when giving presentations.



| ITEM | DESCRIPTION |
|--------------|---|
| Timer Period | Press the cursor ◀ / ▶ buttons to select timer period (1 ~ 240). |
| Timer | Press the cursor ◀ / ▶ buttons to enable or disable presentation timer. |

Menu Settings

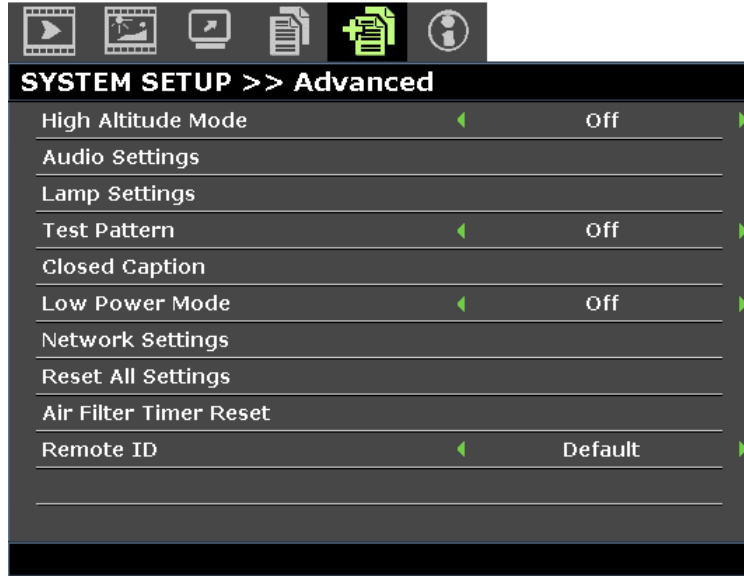
Press the **ENTER** button to enter the **Menu Settings** sub menu.



| ITEM | DESCRIPTION |
|-------------------|--|
| Menu Display Time | Press the cursor ◀ / ▶ buttons to set the menu display timer before the OSD times out. |
| Menu Position | Press the cursor ◀ / ▶ buttons to select from five OSD locations. |

SYSTEM SETUP >> Advanced Menu

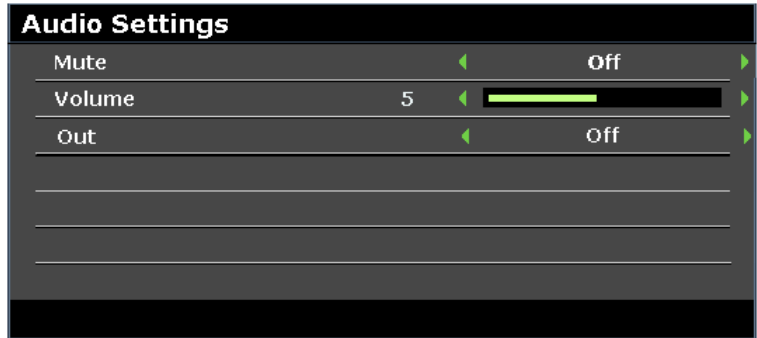
Press the **MENU** button to open the **OSD** menu. Press the cursor ◀ / ▶ buttons to move to the **SYSTEM SETUP >> Advanced** menu. Press the cursor ▲ / ▼ buttons to move up and down in the **SYSTEM SETUP >> Advanced** menu.



| ITEM | DESCRIPTION |
|------------------------|---|
| High Altitude Mode | Press the cursor ◀ / ▶ buttons to turn on or off high altitude mode. Recommended to turn on when the altitude of the environment is higher than 1500m (4921ft). |
| Audio Settings | Press the ENTER button to enter the Audio Settings sub menu. See Audio Settings on page 38. |
| Lamp Settings | Press the ENTER button to enter the Lamp Settings sub menu. See Lamp Settings on page 38. |
| Test Pattern | Press the cursor ◀ / ▶ buttons to select test pattern. |
| Closed Caption | Press the ENTER button to enter the Closed Caption sub menu. See Closed Caption on page 39. |
| Low Power Mode | Press the cursor ◀ / ▶ buttons to set Low Power Mode Off, On or On by LAN. Note: When Low Power Mode set to Off and On by LAN, VGA OUT terminal can output signal during projector in Standby mode. |
| Network Settings | Press the ENTER button to enter the Network Settings sub menu. See Network Settings on page 39. |
| Reset All Settings | Press the ENTER button to reset all settings to default values. |
| Air Filter Timer Reset | Press the ENTER button to reset air filter timer. |
| Remote ID | Press the cursor ◀ / ▶ buttons to select remote ID to fit the current remote ID settings. |

Audio Settings

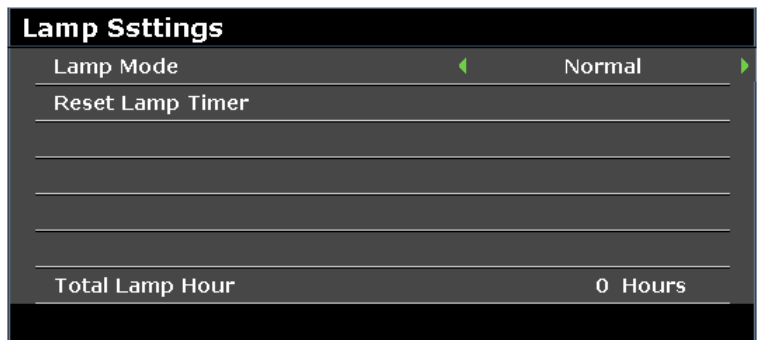
Press the **ENTER** button to enter the **Audio Settings** sub menu.



| ITEM | DESCRIPTION |
|--------|--|
| Mute | Press the cursor ◀ / ▶ buttons to turn on or off the speaker. |
| Volume | Press the cursor ◀ / ▶ buttons to adjust the audio Volume. |
| Out | Press the cursor ◀ / ▶ buttons to select audio output connector. Note: When select Off, the default sound is output from speakers. |

Lamp Settings

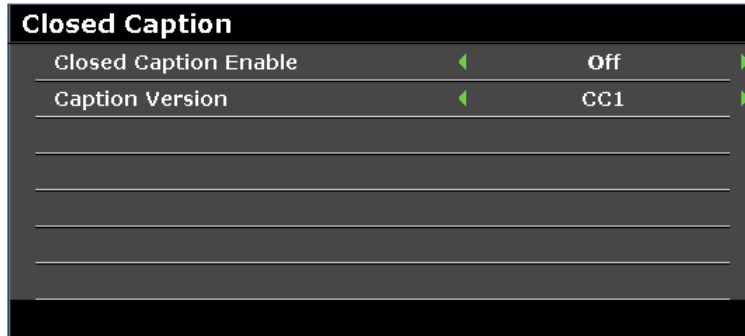
Press the **ENTER** button to enter the **Lamp Setting** sub menu.



| ITEM | DESCRIPTION |
|------------------|---|
| Lamp Mode | Press the cursor ◀ / ▶ buttons to adjust lamp brightness. |
| Reset Lamp Timer | Press the ENTER button to reset the Lamp Hour after the lamp is replaced. |
| Total Lamp Hour | Displays the number of equivalent hours the lamp has been in use. Note: Lamp Mode is not allowed to adjust when 3D mode is activated. |

Closed Caption

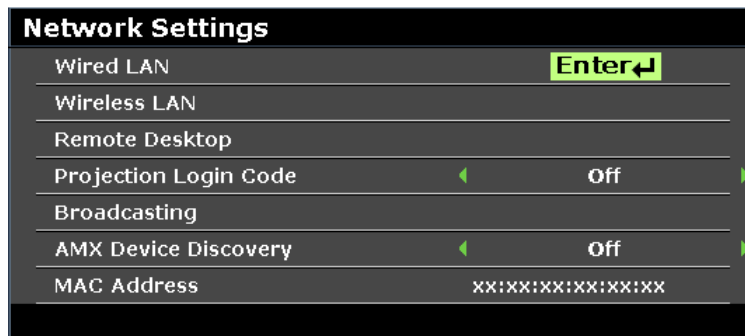
Press the **ENTER** button to enter the **Closed Caption** sub menu.



| ITEM | DESCRIPTION |
|-----------------------|--|
| Closed Caption Enable | Press the cursor ◀ / ▶ buttons to turn on or off Closed Caption. |
| Caption Version | Press the cursor ◀ / ▶ buttons to select the Caption Version. |

Network Settings

Press the **ENTER** button to enter the **Network Settings** sub menu.



| ITEM | DESCRIPTION |
|-----------------------|---|
| Wired LAN | Press the ENTER button to enter the Wired LAN sub menu. See Wired LAN on page 40. |
| Wireless LAN | Press the ENTER button to enter the Wireless LAN sub menu. |
| Remote Desktop | Press the ENTER button to enable remote access to the computer. |
| Projection Login Code | Press the cursor ◀ / ▶ buttons to turn on or off the projection of the login code. |
| Broadcasting | Press the ENTER button to enter the Broadcasting sub menu. |
| AMX Device Discovery | Press the cursor ◀ / ▶ buttons to turn on or off discovery of AMX devices. |
| MAC Address | Press the ENTER button to enter the MAC address. |

Wired LAN

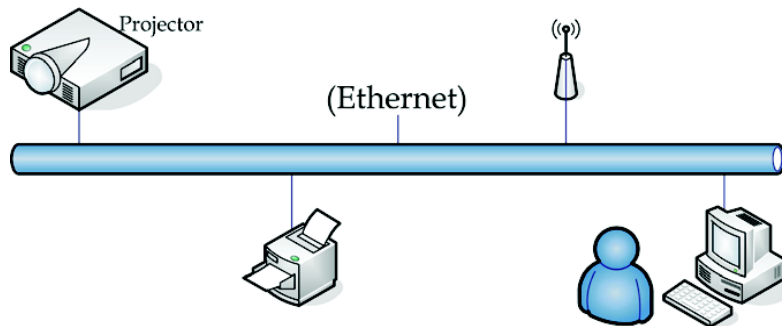
Press the **ENTER** button to enter the **Wired LAN** sub menu.

| Wired Lan | |
|-----------------|---------------|
| Status | Connect |
| DHCP | On |
| IP Address | 192.168.2.1 |
| Subnet Mask | 255.255.255.0 |
| Default Gateway | 192.168.0.254 |
| DNS Server | 192.168.0.1 |
| Apply | |

| ITEM | DESCRIPTION |
|-----------------|---|
| Status | Displays the network connection status. |
| DHCP | Press the cursor ◀ / ▶ buttons 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. |
| Default Gateway | Displays the default Gateway address on the network. |
| DNS Server | 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.



Wired LAN Terminal Function

Remote control and monitoring of a projector from a computer through a wired LAN is possible. Compatibility with Crestron / AMX (Device Discovery) / Extron control boxes enables projector management through a network as well as a remote computer’s browser.

* Crestron is a registered trademark of Crestron Electronics, Inc. of the United States.

* Extron is a registered trademark of Extron Electronics, Inc. of the United States.

* AMX is a registered trademark of AMX LLC of the United States.

Supported External Devices

This projector supports command inputs from a Crestron Electronics controller and related software (RoomView[®]), for further information: <http://www.crestron.com/>

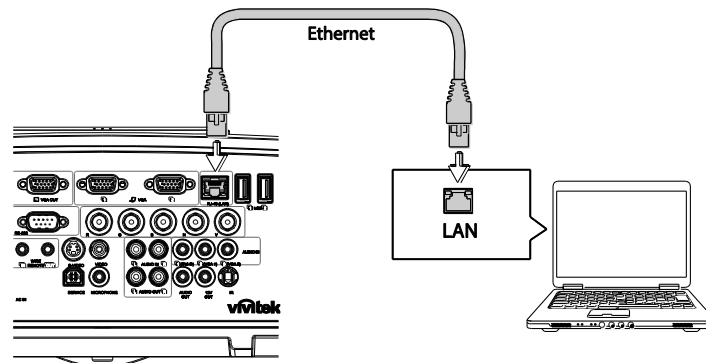
This projector supports the AMX (Device Discovery), for further information: <http://www.amx.com/>

This projector complies and supports Extron device(s), for further information: <http://www.extron.com/>

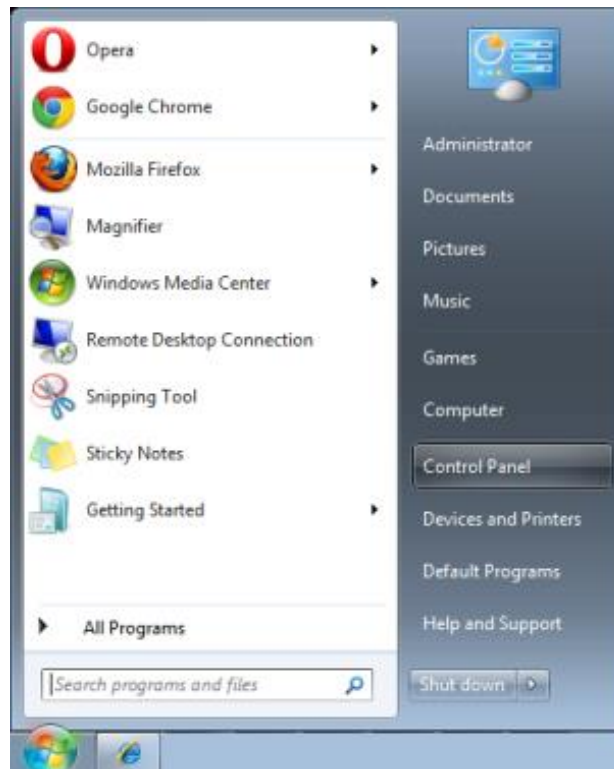
For more information on the external devices and their related control commands supported through the LAN/RJ45 port and the projector's remote/control function contact the service support team directly.

LAN RJ45

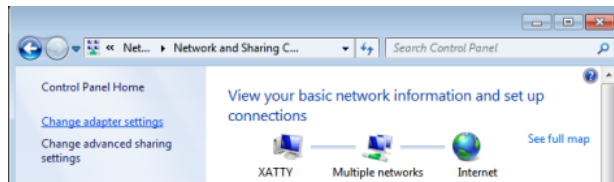
1. Connect an RJ45 cable to the RJ45 port on the projector and computer.



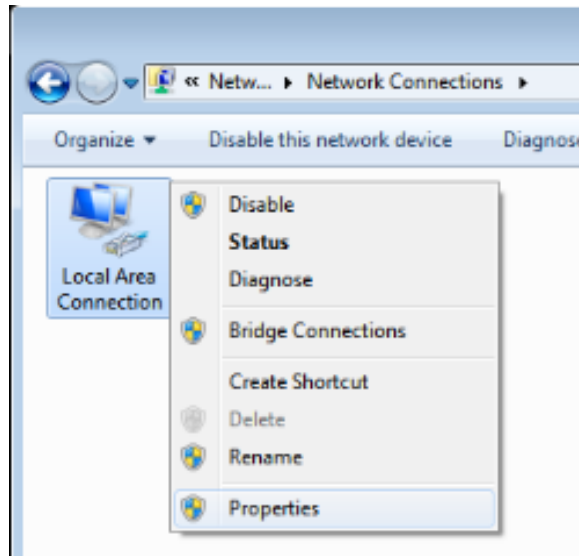
2. On the computer, select **Start >> Control Panel >> Network and Internet**.



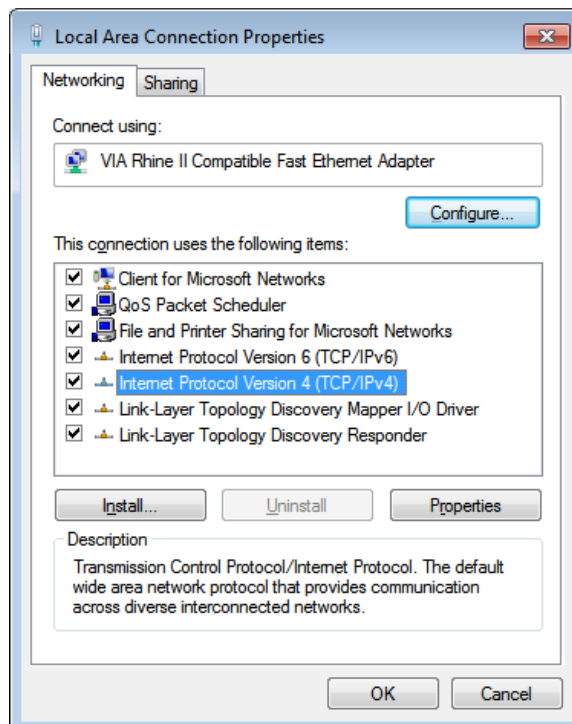
The Network and Internet screen displays.



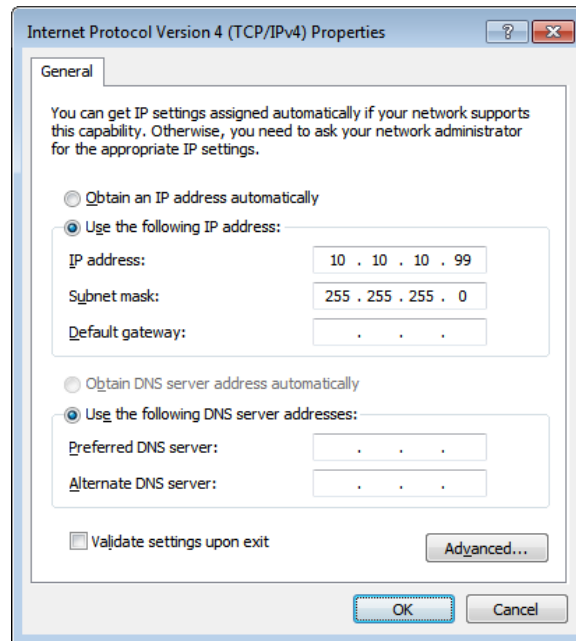
3. Click **Change adapter settings** to continue.
4. Right-click on **Local Area Connection**, and select **Properties**.



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



7. Click **Use the following IP address** and fill in the IP address and Subnet mask.
For this example, the IP address used is as follows:
IP address: 10.10.10.99
Subnet mask: 255.255.255.0
8. Click **OK** to save the settings.



9. On the projector (remote control) press the **MENU** button.
10. Select **SYSTEM SETUP >> Advanced >> Network Settings >> Wired LAN**. The Wired LAN screen displays.
11. Change the IP Address and the Subnet Mask. Make sure the network settings are compatible with those on the computer. The project and computer must be configured to use the same subnet, see the following example.

Example:

Projector IP settings: 10.10.10. X (whereas, X is a number between 1 and 254).

Subnet Mask: 255.255.255.0

| Wired Lan | |
|-----------------|---------------|
| Status | Connect |
| DHCP | On |
| IP Address | 10.10.10.99 |
| Subnet Mask | 255.255.255.0 |
| Default Gateway | 0.0.0.0 |
| DNS Server | 0.0.0.0 |
| Apply | |

Wireless LAN Settings

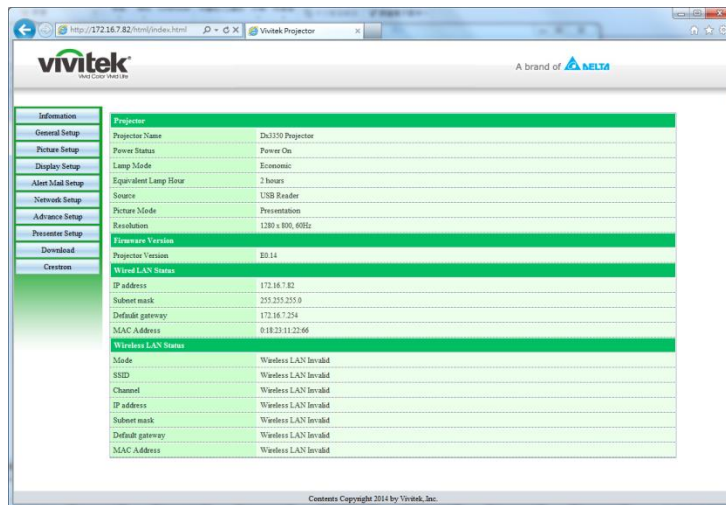
1. Connect the Vivitek wireless dongle (optional) to the USB TYPE-A port of the projector.
2. Select **SYSTEM SETUP >> Advanced >> Network Settings >> Wireless LAN** menu
3. In an AP mode connection, you must first obtain the target SSID information. In the pwPresenter search for the wireless SSID host.
For a connection in infrastructure mode, select the projector's SSID to connect.



4. On the computer, use the wireless network function to connect to a wireless network.
5. If the wireless network requires a password, the user must manually enter the password.

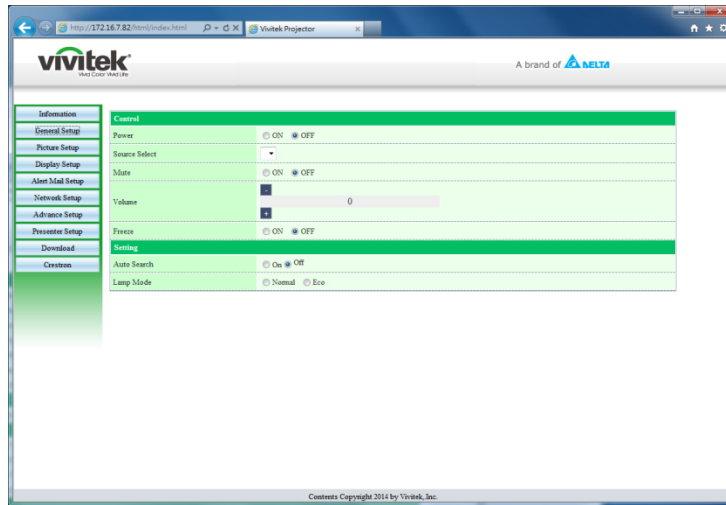
Browser Based Management

1. Open a browser such as the Microsoft Internet Explorer*.
2. In the Address bar, type the projector's IP address as set in Wired LAN Terminal Function. The projector is setup for web control page. The LAN/RJ45 function displays as follows. The Information page displays the information and status of this projector.

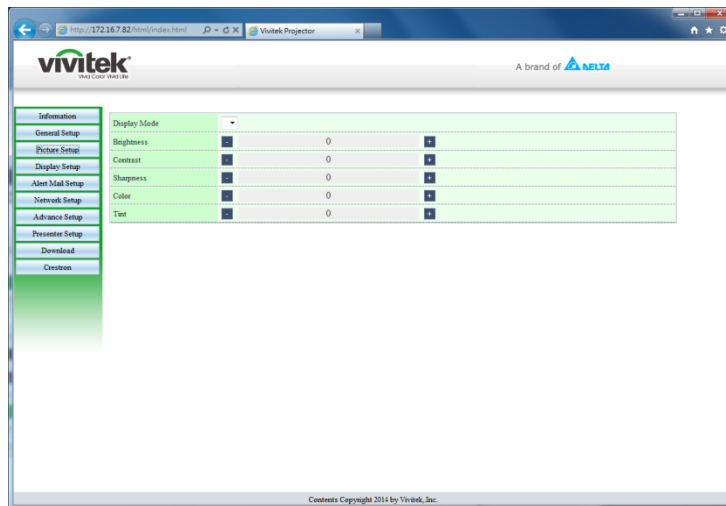


* Adobe Flash Player 9.0 or higher is required to view the interface through the browser.

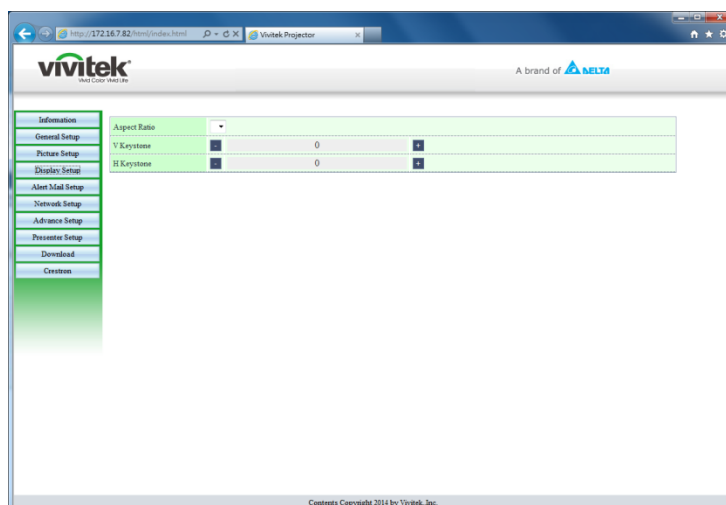
The General Setup page provides the normal functionality of the OSD, such as: power/source/volume/Freeze Auto search/Lamp mode control.



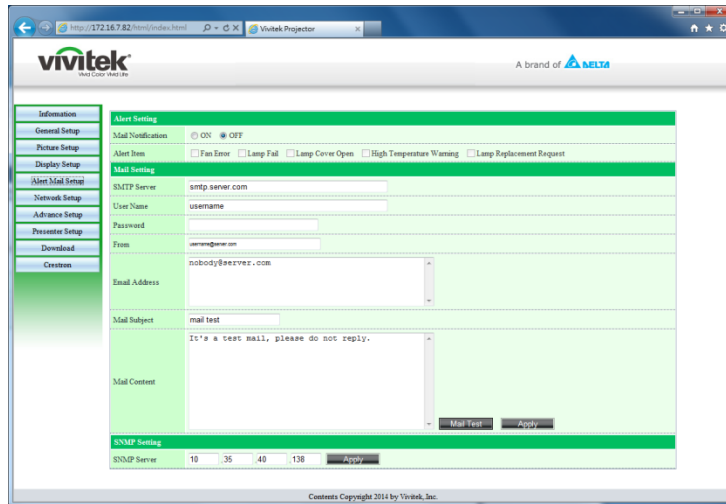
The Display Setup page provides image fine tuning functionality.



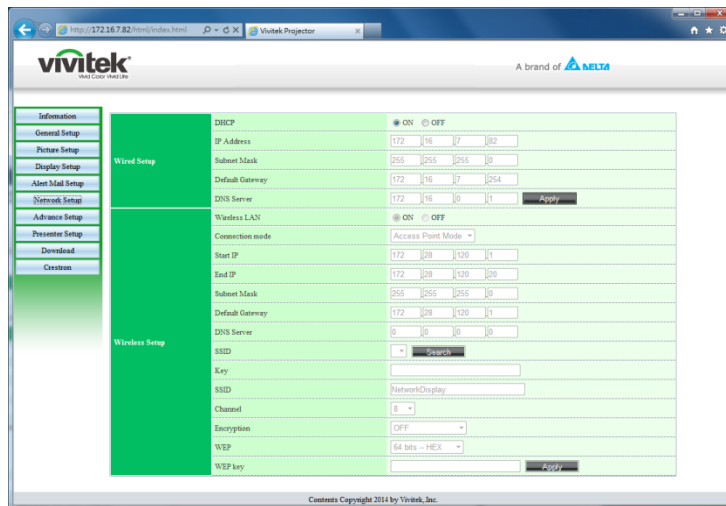
The Display Setup page provides keystone and aspect ratio adjustment functionality.



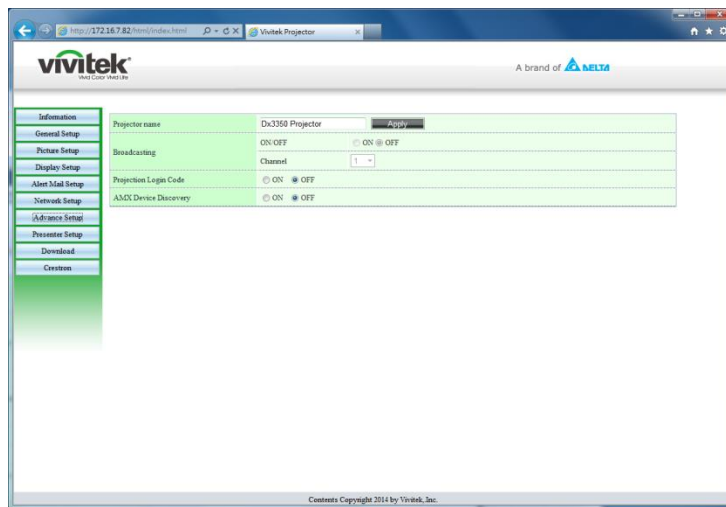
The Alert and Mail Settings pages provide status and mail notification functionality.



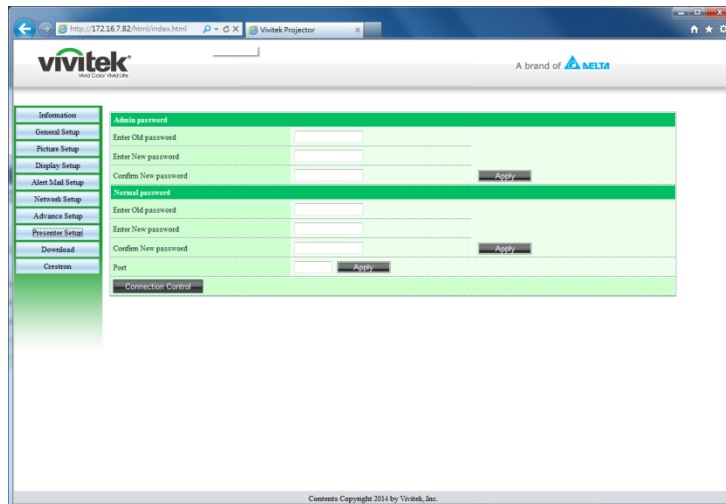
The Network Setup page provides configuration functionality for wired or wireless network setup.



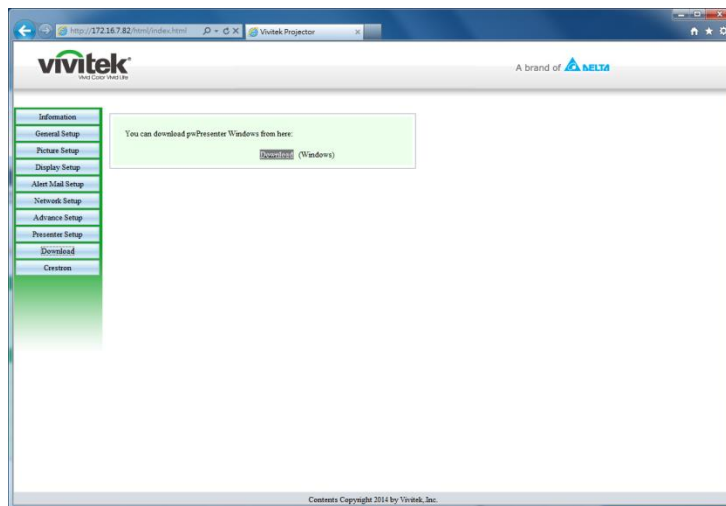
The Advance Setup page provides broadcasting and projector name modification functionality.



The Presenter Setup page provides pwPresenter admin and normal user password setup.



The download page provides downloading a function for pwPresenter.



The Crestron page, supporting RoomView version 6.2.2.9, is only available on a Wired LAN network setup. It allows remote control of the projector.

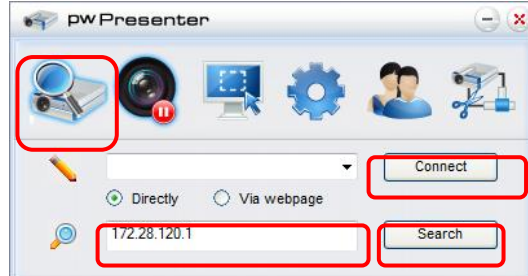


For more information, visit <http://www.crestron.com>.

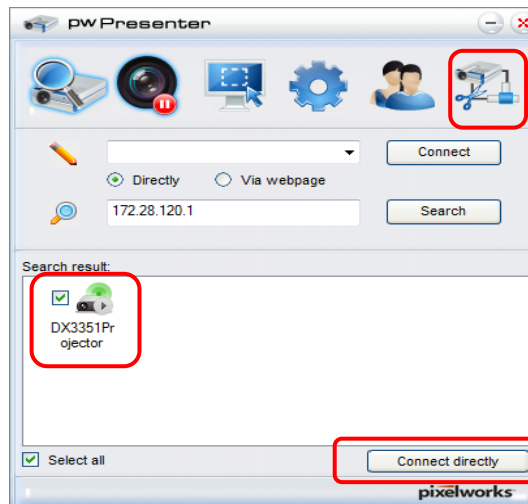
pwPresenter

The pwPresenter is a computer-based application to allow remote display of the computer's desktop on the projector. pwPresenter works through a properly configured wireless or wired network connection. Make sure all other virtual networks control programs are disabled before using pwPresenter.

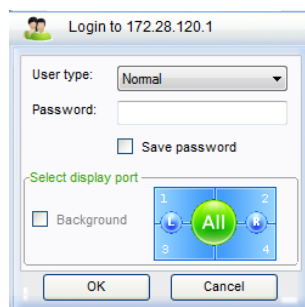
1. Connect an RJ45 cable to the projector and computer's RJ45 ports.
2. Enter the IP address of the projector in the address bar of an open browser.
3. Download pwPresenter (Zipped file) from the web control page. Unzip it and install the pwPresenter on the computer.
4. Once installed, double click the pwPresenter icon. The pw Presenter page appears.
5. Click the Search icon to search and connect to a networked display.



- a. Type in the IP address (see [Browser Based Management](#) on page 44 for details.) and click Search.
- b. The networked projector is displayed. Select it to continue.
- c. Click Connect and the computer's desktop image is displayed through the projector.




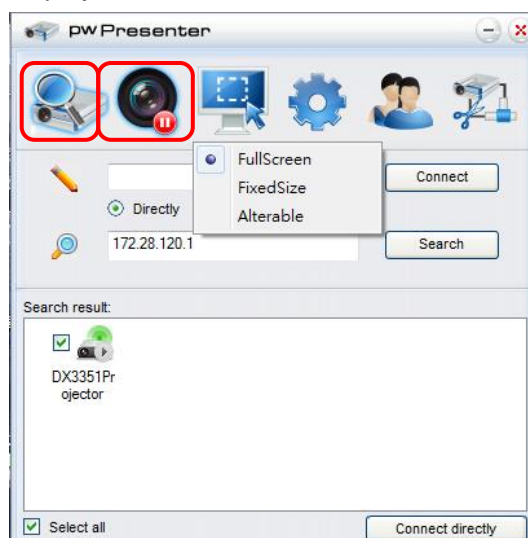
- d. After connecting to the projector, pwPresenter prompts for a password, as set up in the Presenter Setup screen.



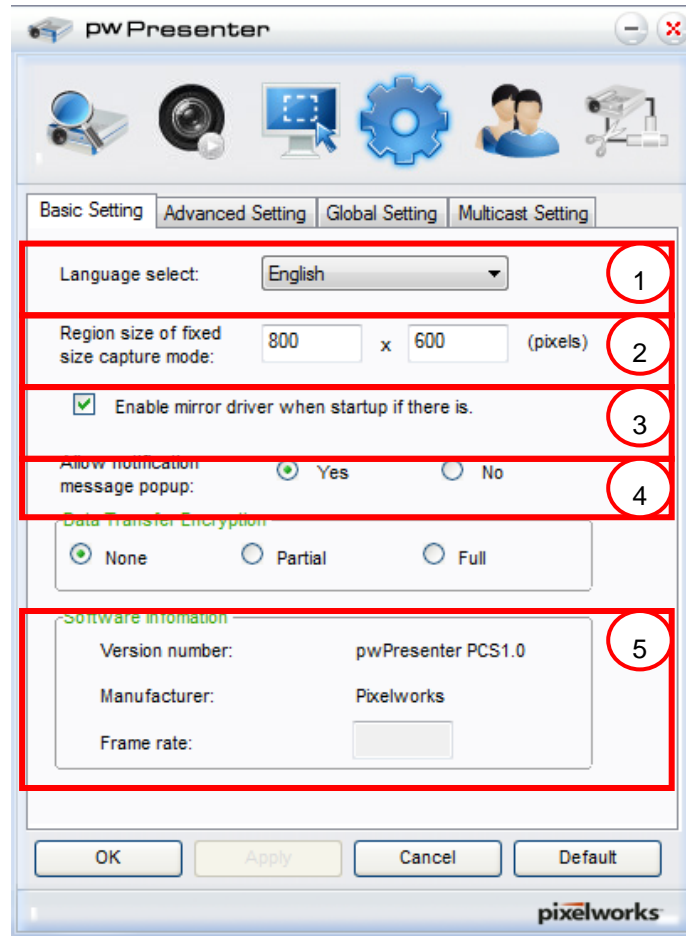
- e. Click the disconnect button to disconnect all available projectors.

6. Controlling the remote display

- Click **Play/Pause**  to display the desktop on the connected network display.
- Display up to four computers on a single projector at one time. Click a location to display the image. Four locations can be selected (1-4) or two in a continuous mode (Left and right) for two computers.
- Once the display is selected the image displays through the projector. Select any location or revert to full screen or blank out mode.
- Capture mode allows management of advanced functions.
- Define the projector's display area
 - Full Screen: displays the entire screen through the projector.
 - FixedSize: displays a fixed screen, place the screen over a desired area to identify the display area for the projector.
 - Alterable: displays an adjustable screen, which is used to identify the display area for the projector.

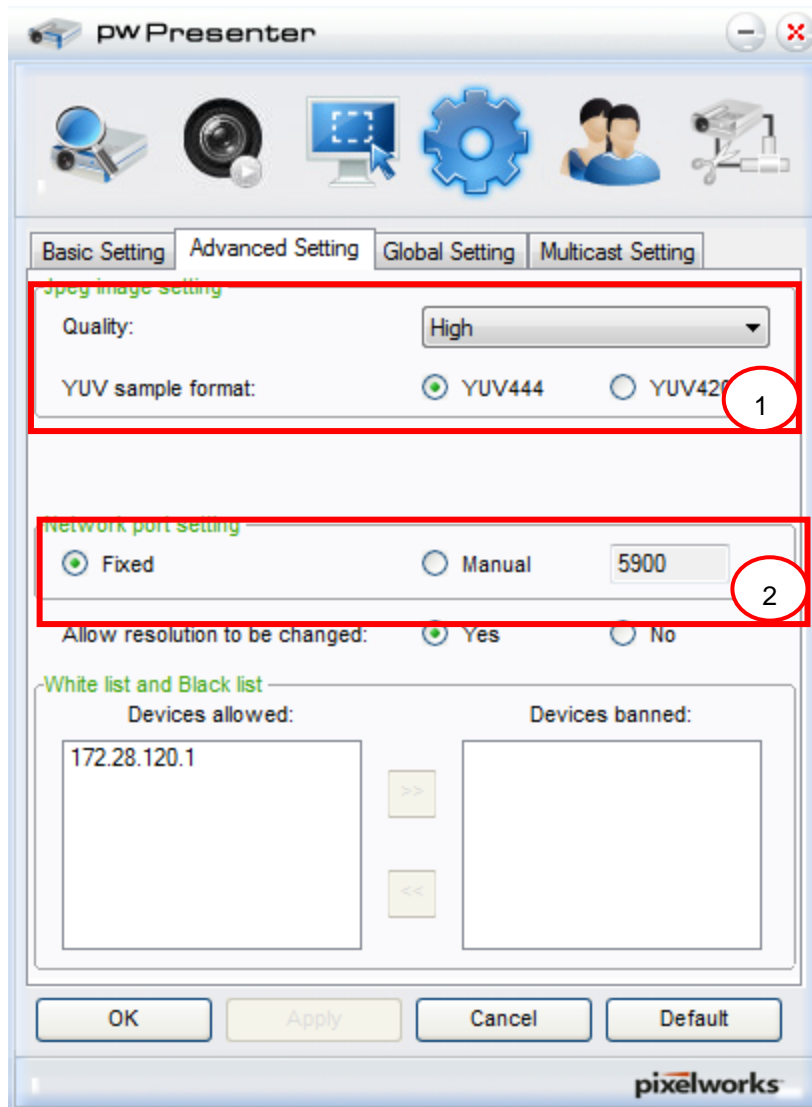


7. Click the **Basic** Setting tab to configure pwPresenter basic settings.



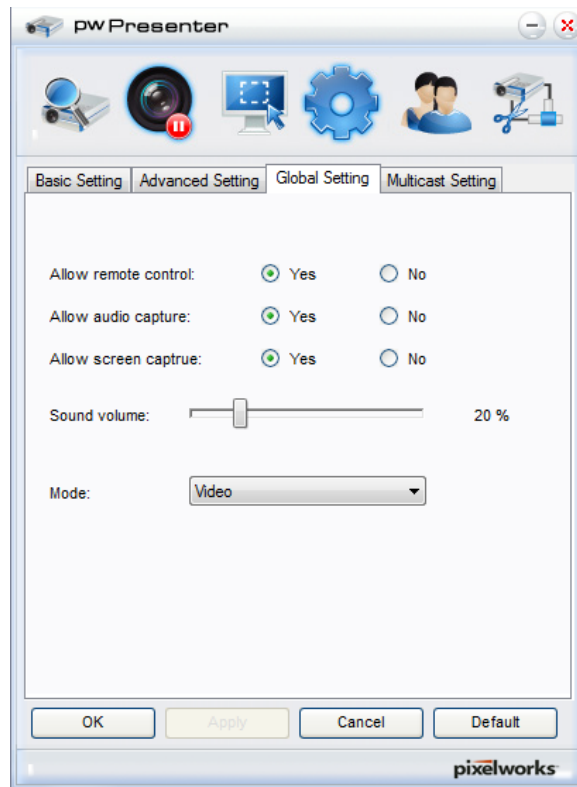
- a. Select the interface language: click the drop-down menu and select the desired language. Click **Apply**.
- b. Change the size of the FixedSize frame in capture mode. Enter the size in pixels units. Click **Apply** to save the settings.
- c. Enable the mirror driver upon startup (driver must be previously installed).
- d. Allow message notification. Click **Yes**, then **Apply** to save the settings.
- e. Displays the software information.

8. Click the **Advanced** Setting tab to configure pwPresenter advanced settings.

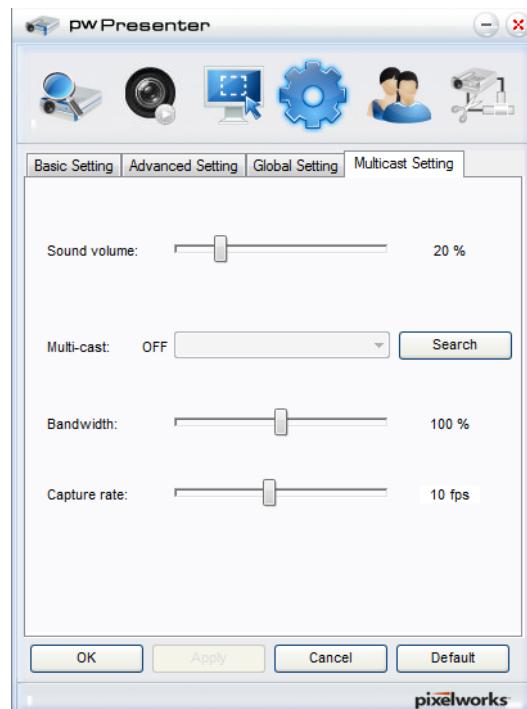


- a. Set the image quality setting. Click the drop-down menu to select the desired image quality. Click **Apply** to save the setting.
- b. Define the network port, fixed or manual. If manual is selected, enter the port number. Click **Apply** to save the setting.

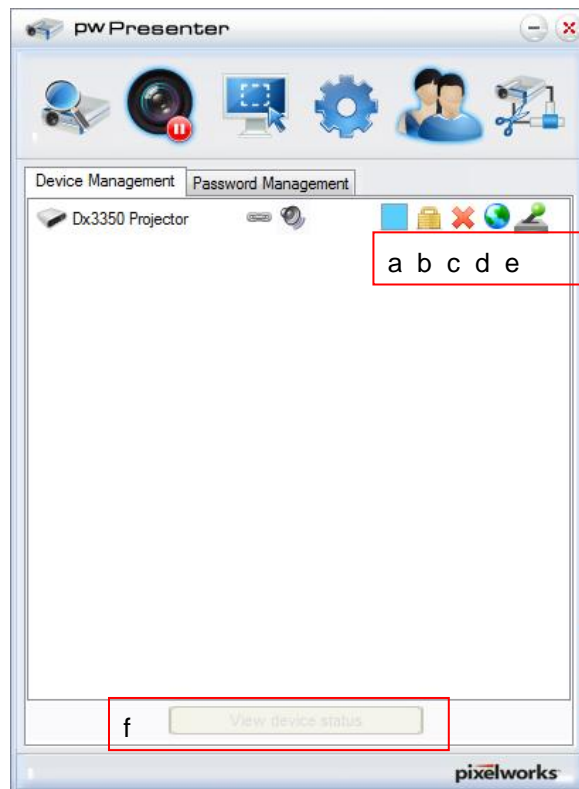
9. Click the **Global Setting** tab to configure pwPresenter global settings, which allows for remote control of the computer through the projector.



10. Click the **Multicast Setting** tab to configure pwPresenter broadcast settings.



11. Device management.



- a. Click the **Display Port Location** icon to adjust the location of the displayed area.
- b. Click the **Password** icon to change the user password.
- c. Click the **Disconnect** icon to disconnect the projector from the network.
- d. Click the **Webpage** icon to allow access to the Vivitek webpage control interface.
- e. Click the **Remote Desktop** icon to enable the remote access function.
- f. Displays the device status and setting information. Also, provides access to conference control mode.

Using the Broadcasting Function

The 1:N LAN Display is available in two ways.

- TCP/IP—supporting up to 8 projectors (default)
- Multicast—supporting up to 255 projectors (new design)

Select the channel for the corresponding IP address (grayed out): 1 to 25.

Twenty five channels (25 IPs) are available for selection, for example: 239.192.19.21 ~ 45.

Pre-set channels, such as a channel setup for emergency broadcasting, are automatically detected by the projector and the source is displayed. Manual source selection is not required.

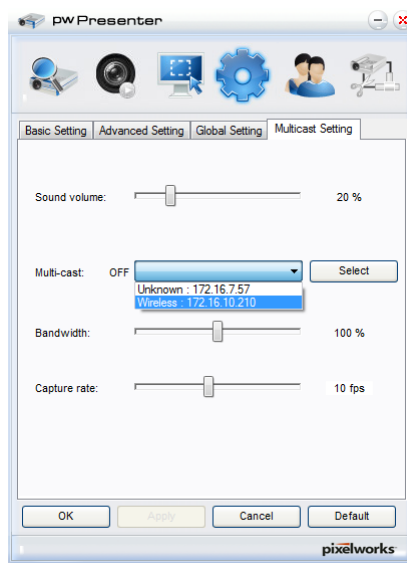
To activate this function:

1. Go to the **SYSTEM SETUP >> Advanced >> Network Settings** menu after opening the OSD menu.
2. Press **ENTER**.

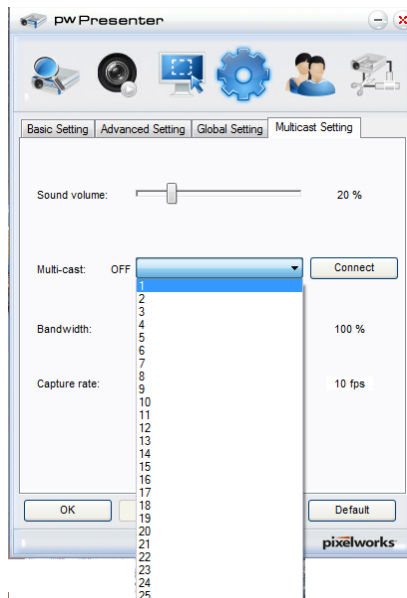
3. Press ▼ to select **Broadcasting** and press ◀ / ▶ to select **On**.



4. Open pwPresenter and select the Multicast Setting tab.
5. Click **Search** and click **Apply**.
6. From the Multi-cast drop-down menu select the broadcasting device (IP address).



7. Select the channel as it is setup in the projector **Broadcasting** menu.



8. Press **Connect** to broadcast the captured screen from the computer.

Note:

The function requires the pwPresenter software available on the provided CD.

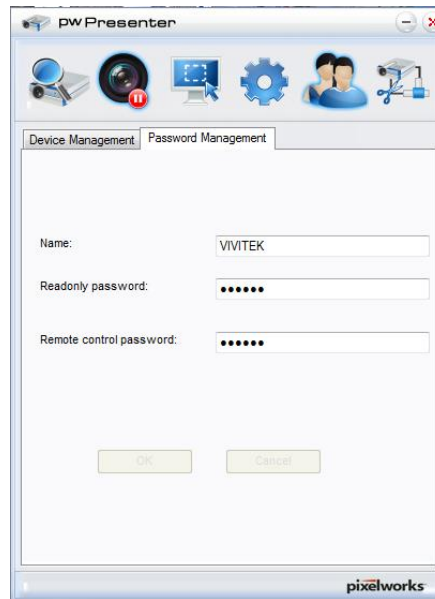
This function is only available when the Network Display source is selected.

Minimum system requirements: Intel® Core 2 Duo, 2.4GHz CPU, 2G DDR.

Remote Desktop Control through pwPresenter

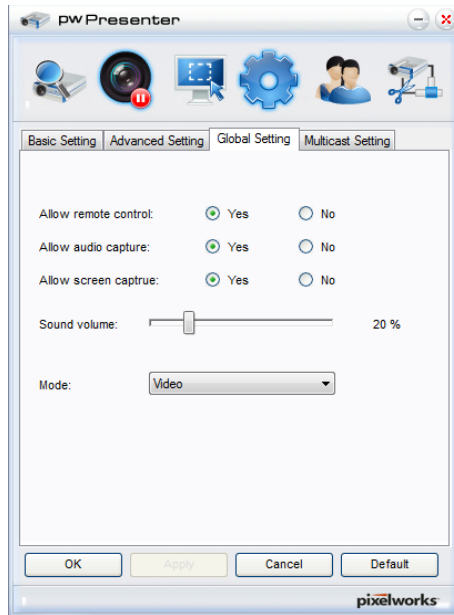
pwPresenter provides remote desktop control function for the projector.

1. Setup a login account (User name and Password) in pwPresenter. Enter the user name in the Name field.
2. Designate a password for read-only access in the Read-only password field.
3. Designate a password for remote control access in the Remote control password field.



- Name: must be eight or more characters, capital letters (A~Z) and/or numbers (0 ~9).
 - Password: must be a numerical combination (1 ~ 4), a minimum of six digits.
 - The on-screen password is visible as left, down, right symbols.
 - If identical pwPresenter names are used, a **duplicate** error is displayed.
4. Click the tab **pwPresenter** >> **Parameter Settings** >> **Global Settings** to open Remote Desktop screen.

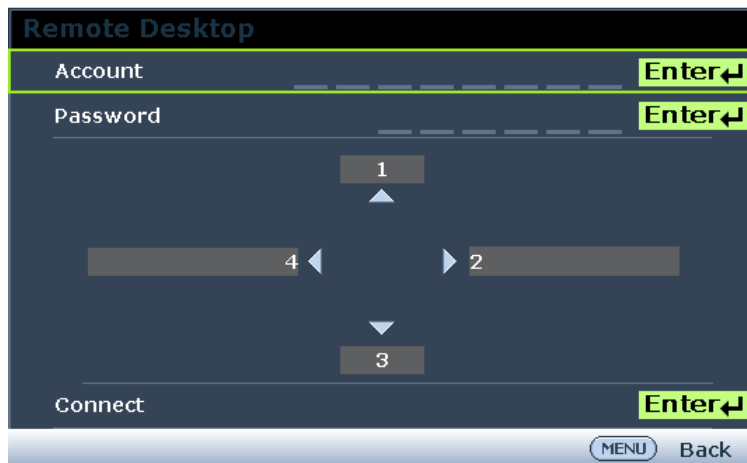
5. Select the radio button and click **Yes** to enable the remote control/audio capture/screen capture function.



When you installing the pwPresenter, the operating system's default language is selected for pwPresenter. If a language is not available, English is selected.

- a. You can select whether to allow notification message popup.
 - b. Once you set to activate 1:N display, 1PC/NB can display up to 8 projectors at the same time.
 - c. Once set, press **Apply** to save the changes.
 - d. You can select Video or Graphic display mode.
Graphic Mode: worse image quality but faster transmission speed.
Video Mode: better image quality but slower transmission speed.
The actual transmission performance is determined by the current network bandwidth.
 - e. You can select whether to automatically open the pwPresenter application when the computer is powered on.
 - f. Once set, press **Apply** to save the changes.
6. Open the OSD menu and go to the **SYSTEM SETUP >> Advanced > Network Settings > Remote Desktop**.

7. Enter the **Account** and **Password** the same as defined in Remote Desktop Control through pwPresenter.



8. Select **Connect** and press **ENTER** to connect to the selected PC.
9. Connect USB keyboard or mouse to control the host PC's desktop through the projector.
 - Remote Desktop Control does not support PC Standby mode.
 - Remote Desktop Control only supports LAN source so the projector source is fixed on LAN.

Presenting From a USB Reader

This feature displays a slide show of images stored on a USB flash drive connected to the projector. It can eliminate the need for a computer source.

Image File Types

USB Reader displays images files in JPEG, GIF, TIFF, PNG and BMP formats.

- A square box on the filename identified unknown characters.
- Thai file naming system is not supported.
- GIF, TIFF, PNG and BMP formatted files can be displayed if the file is under WXGA (1280 x 800).
- If a folder contains more than 200 photos, only the first 200 photos are displayed.

Preparation

To view your pictures as a slideshow, follow these steps:

1. Connect a USB flash drive to your computer and copy files from your computer to the USB flash drive.
2. Turn on your projector.
3. Remove the USB flash drive from your computer and plug it into the USB jack of the projector.
4. Select **USB Reader** from the source selection bar.

USB Reader menu

The USB Reader menu displays only when a USB device source is selected. This menu includes a slideshow feature for selecting settings.



| ITEM | DESCRIPTION |
|---------------------|--|
| Slideshow | Press the ENTER button to start slideshow. |
| Slideshow Direction | Press the cursor ◀ / ▶ buttons to select a slideshow direction. |
| Slideshow Timing | Press the cursor ◀ / ▶ buttons to select the image display frequency. |
| Repeat Slideshow | Press the cursor ◀ / ▶ buttons to turn on or off the repeat slideshow function. |
| Auto Rotation | Press the cursor ◀ / ▶ buttons to turn on or off auto rotate. |
| Best Fit | Press the cursor ◀ / ▶ buttons to turn on or off the best fit function, which adjusts the image for the best screen fit. |

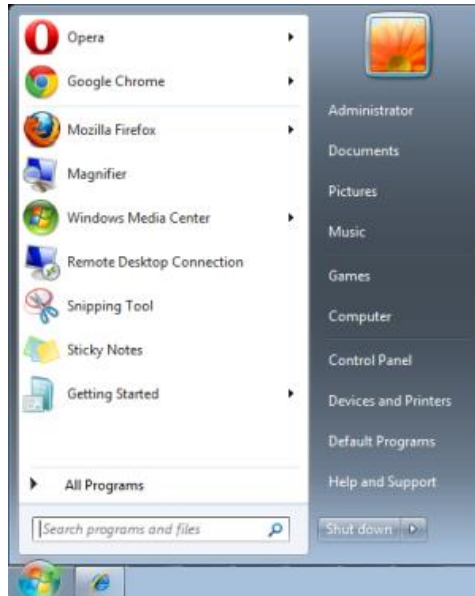
RS232 by Telnet Function

The projector supports RS232 control functionality through Telnet by using a RJ45 connection.

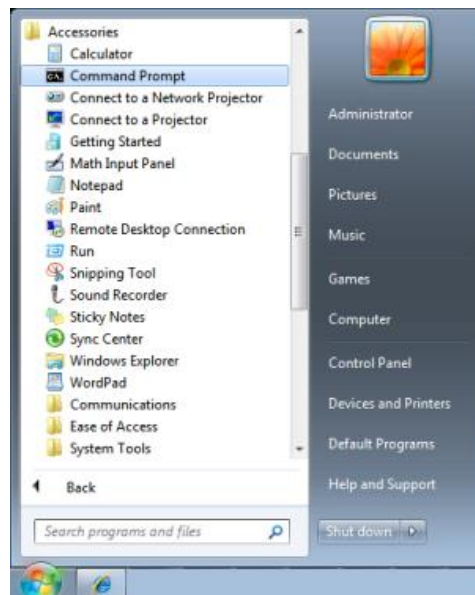
Quick Start-Guide for TELNET

Obtain the projector's IP-Address. Make sure the projector is properly setup to function within the local network.

1. Disable any Windows Firewall settings to allow for Telnet access.



2. Navigate to **Start > All Programs > Accessories** and select **Command Prompt**. The command window displays.



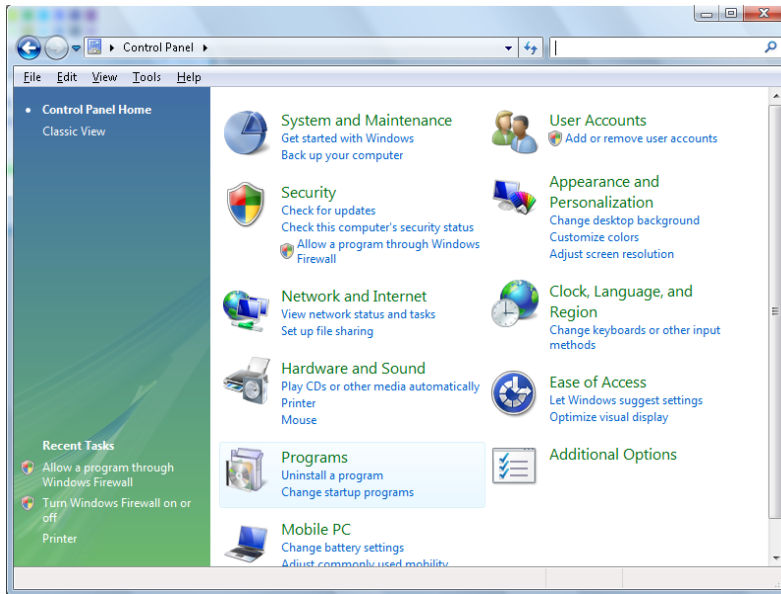
3. In the command window, type the IP address of the projector in the following format.
telnet ttt.xxx.yyy.zzz 23 (whereas **ttt.xxx.yyy.zzz** is the IP-Address of the projector).
4. Press **Enter** to continue.

Once the Telnet connection is established, enter commands to remotely control the project.

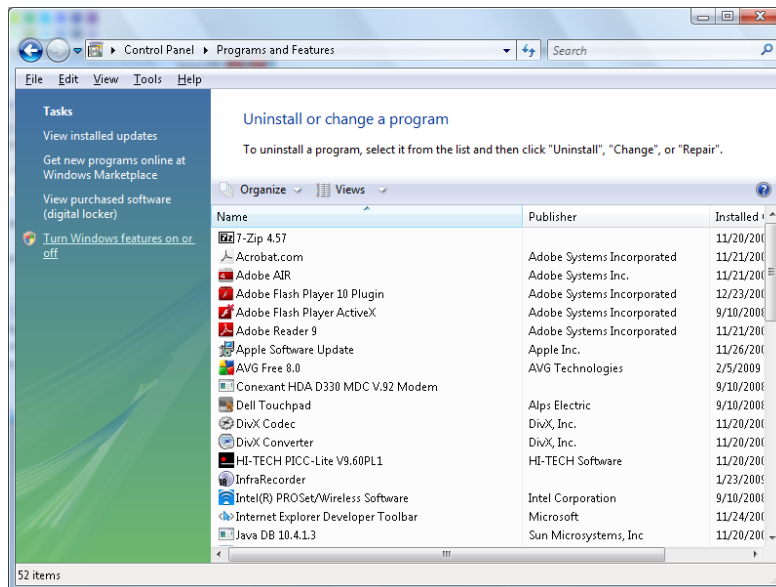
Enabling TELNET in Windows VISTA and Windows 7

By default installation for Windows VISTA the Telnet function is not enabled. It is enabled by configuring Windows features..

1. Navigate to **Start > Control Panel** in Windows Vista.

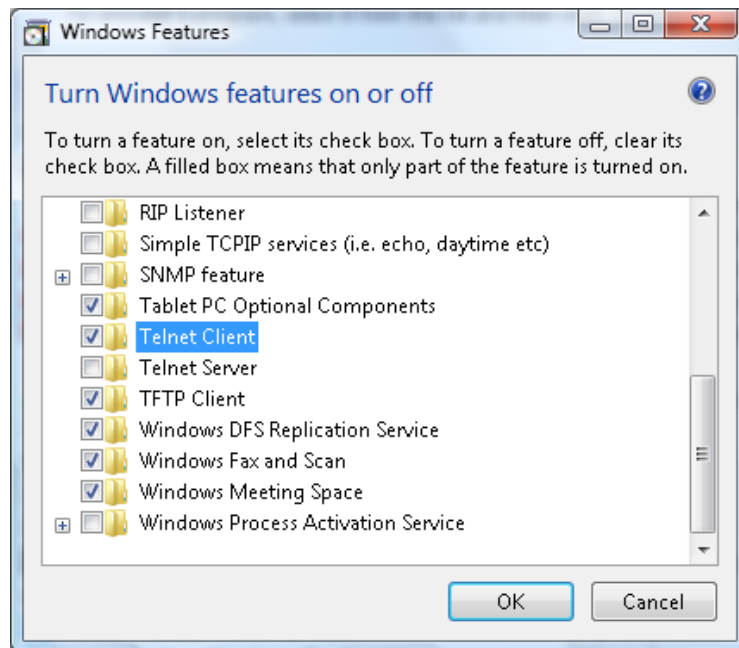


2. Select **Programs** to continue.

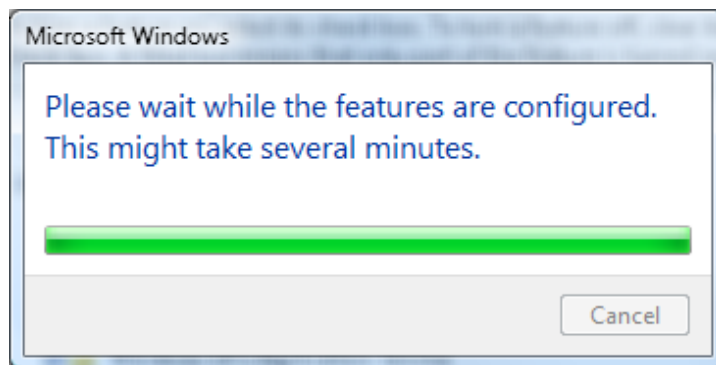


3. Select **Turn Windows features on or off** to open the Windows Features window.
4. Scroll down until the Telnet Client feature is displayed.

- Click the radio box to enable the Telnet Client feature.



- Click **OK** to continue.
The feature requires additional Windows configuration.

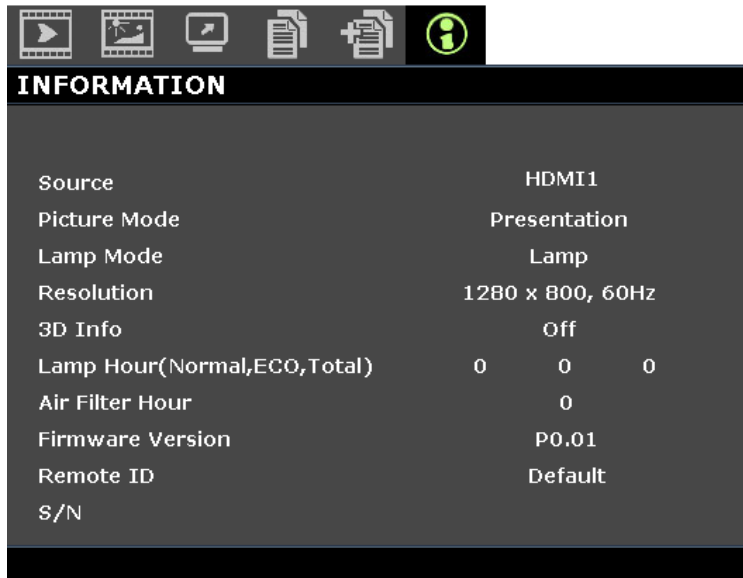


RS232 Spec sheet for Telnet

- Telnet: TCP.
- Telnet port: 23 (for further information, contact the system administrator).
- In console mode, type Telnet.exe to open the Windows console utility.
- Disconnect from RS232-by-Telnet normally:
Close Windows Telnet utility after Telnet connection is established.
- Limitation 1 for Telnet-Control: there is only one connection for Telnet-Control per projector.
Limitation 2 for Telnet-Control: there are less than 50 bytes for successive network payload for Telnet-Control application.
Limitation 3 for Telnet-Control: there are less than 26 bytes for one complete RS232 command for Telnet-Control.
Limitation 4 for Telnet-Control: Minimum delay between RS232 commands must be more than 200 (ms).
(*In Windows built-in **TELNET.exe** utility, **Enter** key represents a Carriage-Return and New-Line code value.)

INFORMATION Menu

Press the **MENU** button to open the **OSD** menu. Press the cursor ◀ / ▶ buttons to move to the **INFORMATION** Menu.



| ITEM | DESCRIPTION |
|--------------------------------|--|
| Source | Displays the activated input source. |
| Picture Mode | Displays picture mode for projection. |
| Lamp Mode | Displays lamp mode for projection. |
| Resolution | Displays the native resolution of input source. |
| 3D Info | Displays 3D image information for projection. |
| Lamp Hour (Normal, ECO, Total) | Displays the number of hours the lamp has been in use. |
| Air Filter Hour | Displays the number of hours the air filter has been in use. |
| Firmware Version | Displays the firmware version of the projector. |
| Remote ID | Displays the projector ID to for remote viewing. |
| S/N | Displays the serial number of the projector |

Note:

INFORMATION displayed in this menu is for viewing only and cannot be edited.

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.



Caution:

In rare cases the lamp bulb may burn out during normal operation and cause glass dust or shards to be discharged outward from the rear exhaust vent.

Do not inhale or do not touch glass dust or shards. Doing so could result in injury.

Always keep your face away from the exhaust vent so that you do not suffer from the gas and broken shards of the lamp.

When removing the lamp from a ceiling-mounted projector, make sure that no one is under the projector. Glass fragments could fall if the lamp has been burned out.



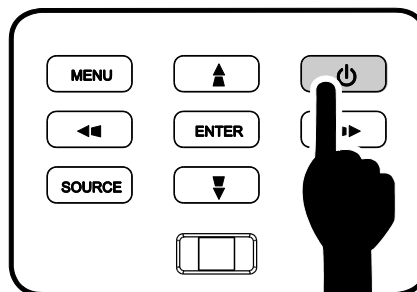
IF A LAMP EXPLODES

If a lamp explodes, the gas and broken shards may scatter inside the projector and they may come out of the exhaust vent. The gas contains toxic mercury.

Open windows and doors for ventilation.

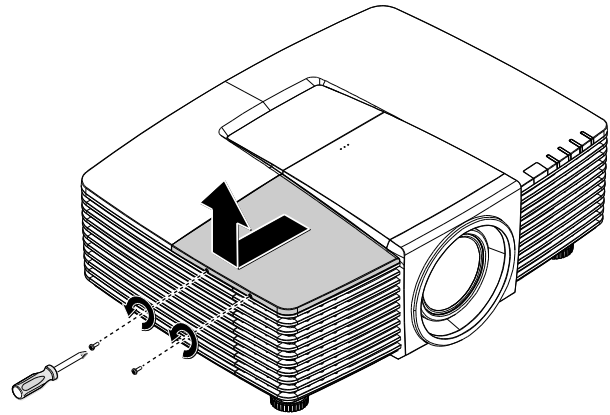
If you inhale the gas or the shards of the broken lamp enter your eyes or mouth, consult the doctor immediately.

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.



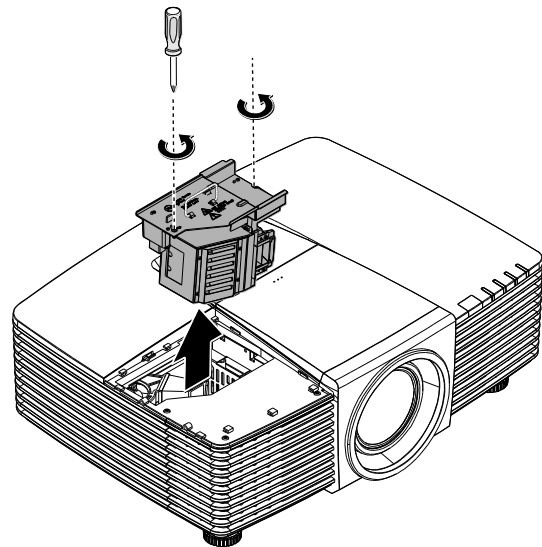
4. Unlock the lamp cover.

5. Pull up and remove the cover.



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

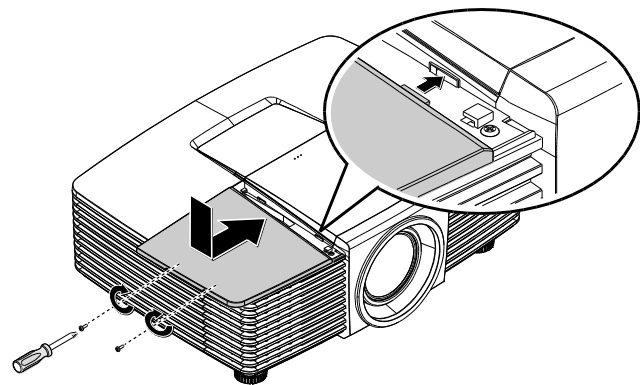
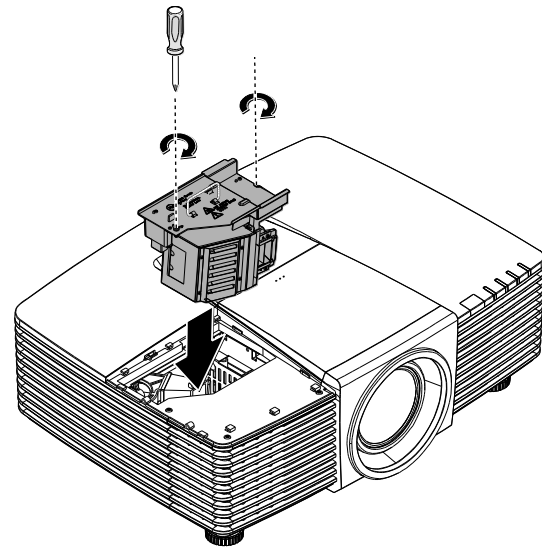
7. Pull out the lamp module.



- 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 Settings** > Select **Reset Lamp Timer** > Press the ◀ / ▶ buttons to adjust the settings.

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.



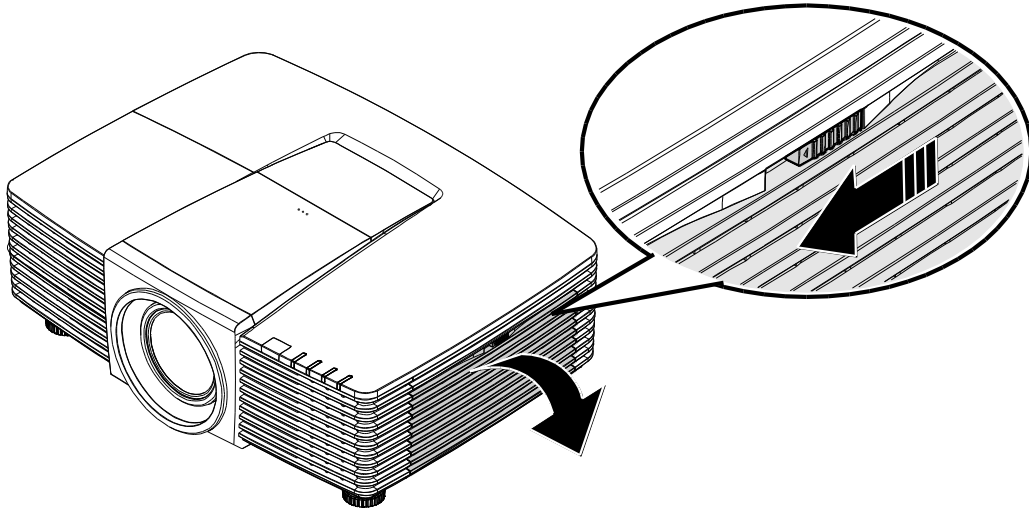
Caution:

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

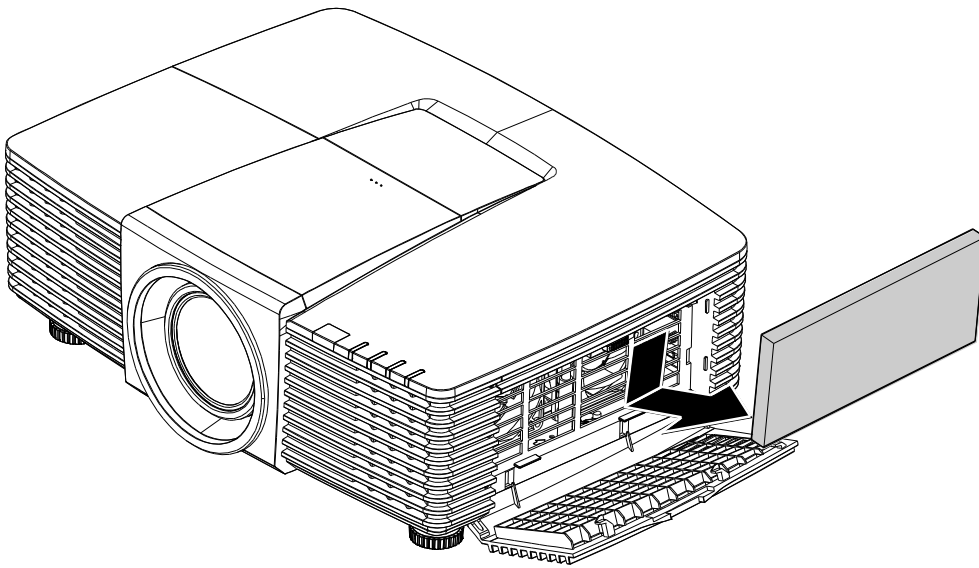
Cleaning the Air Filter

Refer to the following to clean the air filter.

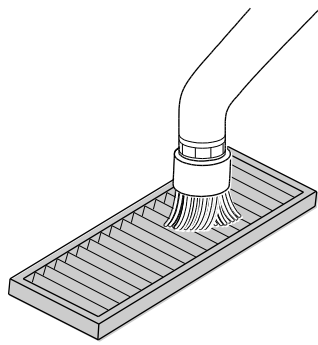
1. Open the latch to open the filter door.



2. Remove the filter.



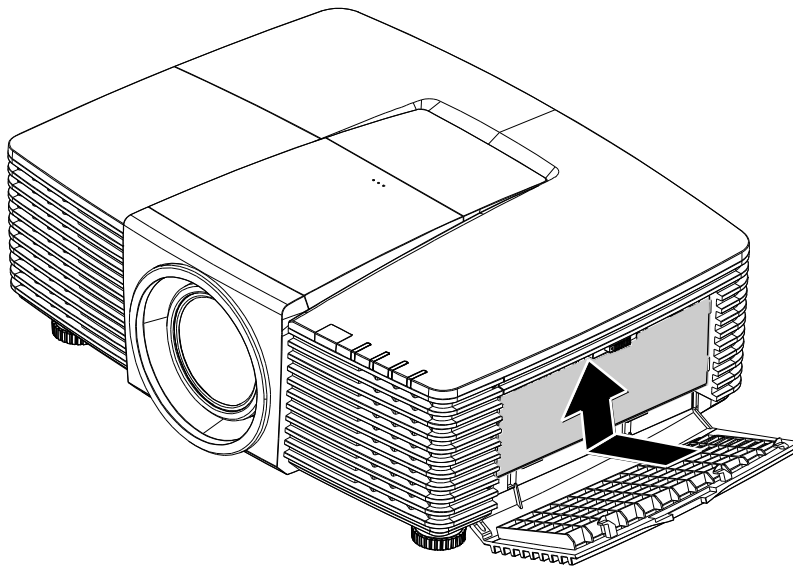
3. Use a vacuum cleaner to vacuum the dust inside.



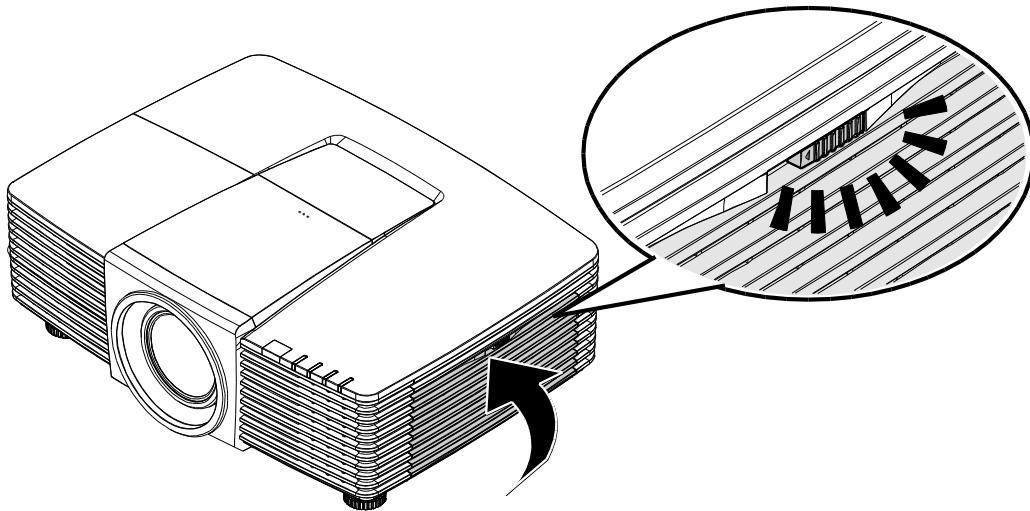
Note:

1. Use the soft brush attachment when you vacuum the filter to avoid damage it.
2. Do not wash the filter with water. Doing so can result in filter clogging.

4. Put the filter back.



5. Close the filter door and lock the latch.



6. Turn on the projector and reset the lamp after the lamp module is replaced.
Lamp Reset:
Press **MENU** > Select **SYSTEM SETUP** >> **Advanced** and select **Air Filter Timer Reset**.
Press **ENTER** to reset timer.



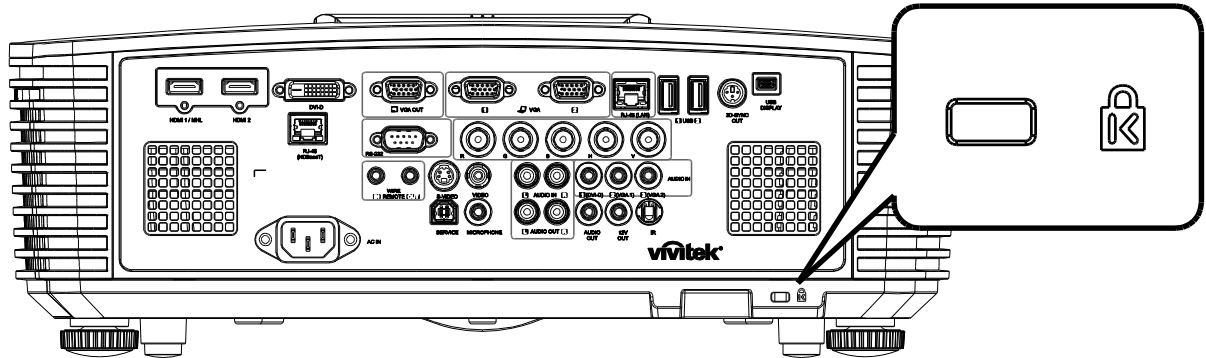
Important:

*The Filter LED lights when the filter service time is on (1000 hours).
If the filter is broken, please use a new one.*

Using the Physical Lock

Using the Kensington® Security Slot

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



Note:

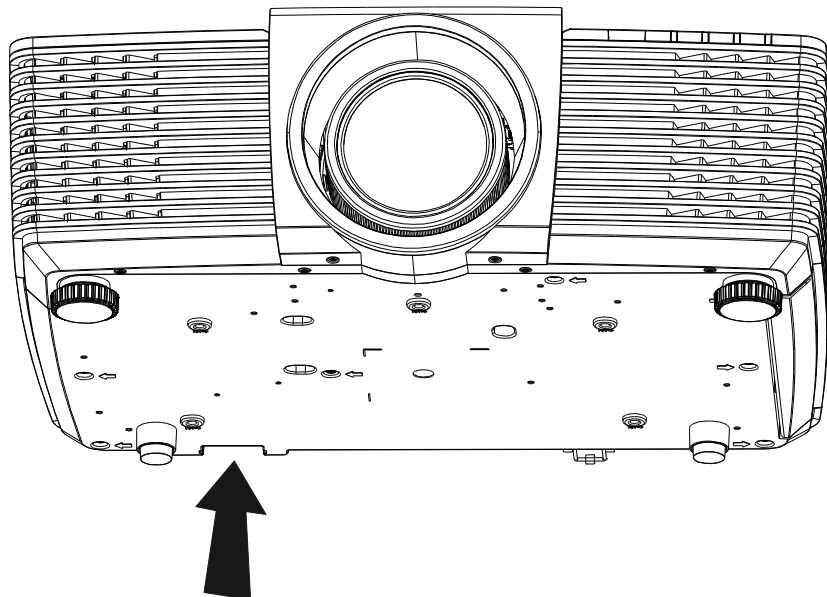
Contact your vendor for details on purchasing a suitable Kensington security cable.

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 Bar Lock

In addition to the password protection function and the Kensington lock, the Security Bar 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 | LAMP LED | TEMP LED | FILTER LED |
|---|------------------|-----------------|-----------------|-------------------|
| Lamp Ready | ON | | | |
| Start | Flashing | | | |
| Cooling | Flashing | | | |
| Over Temperature | | | ON | |
| Thermal Break Sensor error | 4 blinks | | | |
| Lamp Re-Strike 6 times Failed | 5 blinks | | | |
| Lamp Temperature shut down (Ballast Temp) | 5 blinks | 1 blinks | | |
| Lamp Short circuit in output detected (Ballast circuit short) | 5 blinks | 2 blinks | | |
| Lamp End of lamp life detected | 5 blinks | 3 blinks | | |
| Lamp did not ignite | 5 blinks | 4 blinks | | |
| Lamp extinguished during normal operation | 5 blinks | 5 blinks | | |
| Lamp extinguished during run-up phase | 5 blinks | 6 blinks | | |
| Lamp voltage too low | 5 blinks | 7 blinks | | |
| Lamp Ballast Fail | 5 blinks | 8 blinks | | |
| Lamp Ballast COMM Fail | 5 blinks | 10 blinks | | |
| Lamp Ballast Over Temp | 5 blinks | 11 blinks | | |
| Lamp voltage too low | 5 blinks | 12 blinks | | |
| FAN1 error(Blower FAN1) | 6 blinks | 1 blinks | | |
| FAN2 error(Blower FAN2) | 6 blinks | 2 blinks | | |
| FAN3 error(Lamp FAN3) | 6 blinks | 3 blinks | | |
| FAN4 error(DMD FAN) | 6 blinks | 4 blinks | | |
| FAN5 error (Power FAN) | 6 blinks | 5 blinks | | |
| 1W MCU detects scaler stops working | 2 blinks | | | |
| Case Open | 7 blinks | | | |
| DMD error | 8 blinks | | | |
| DDP442x not ready | 8 blinks | 1 blinks | | |
| Color wheel error | 9 blinks | | | |
| Air Filter replace warning | ON | | | ON |

In the event of an error, please disconnect the AC power cord and wait for one (1) minute before restarting 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-foot) 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 **SYSTEM SETUP >> Basic > Projection** menu of the OSD.

Problem: The image is streaked

1. Set the **Frequency** and **Phase** settings on the **PC Detail Adjustment** 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 **PICTURE >> Basic** 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 **PICTURE >> Advanced** 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 on.
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

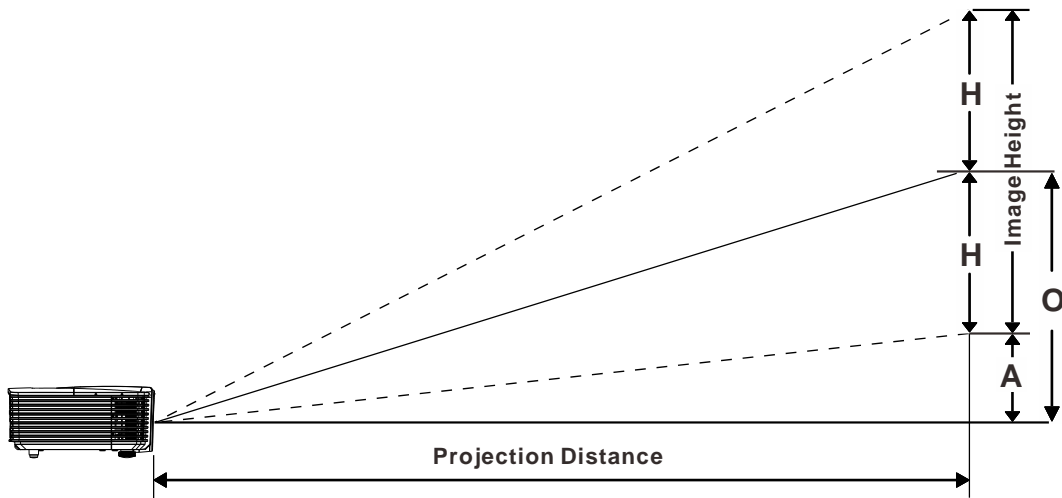
Specifications

| | | | | | |
|-------------------------------|-------------------|--|---------------------|----------------|--|
| Model Name | | DX3351 | DW3321 | | |
| Display Type | | 0.7" XGA | 0.65" WXGA | | |
| Resolution | | 1024x768 Native | 1280x800 Native | | |
| Projection Distance | | 1 meters ~ 10 meters | | | |
| Projection Screen Size | | 22.3"~378.6" inches | 20.7"~351.7" inches | | |
| Projection Lens | | Manual Focus/Manual Zoom | | | |
| Zoom Ratio | | 1.7x | | | |
| Keystone Correction | Vertical | ±30° for ±30 steps | | | |
| | Horizontal | ±25° for ±25 steps | | | |
| Projection Methods | | Front, Rear, Desktop/Ceiling (Rear, Front) | | | |
| Data Compatibility | | VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA@60hz, 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 | | 15.31 – 91.4kHz | | | |
| V-Sync | | 24 - 30Hz, 47 – 120 Hz | | | |
| Safety Certification | | FCC-B, cUL, UL, CE, C-tick, CCC, KC, CB, CU, ICES-003, NOM, SASO, China CECP | | | |
| Operation Temperature | | 5° ~ 35°C | | | |
| Dimensions | | 444.6mm (W) x 330.2mm (D) x 161.5mm (H) | | | |
| AC Input | | AC Universal 100 – 240, Typical @ 110VAC (100 – 240)/+-10% | | | |
| Power Consumption | | Typical 530W (Normal) / Typical 430W (Eco) | | | |
| Stand By | | <0.5 watts | | | |
| Lamp | | 370W (Normal) / 280W (Eco) | | | |
| Audio Speaker | | 7W RMS x 2 | | | |
| Input Terminals | | VGA x 2 | | | |
| | | DVI-D x 1 | | | |
| | | S-Video x 1 | | | |
| | | 5 BNC (RGBHV) x 1 | | | |
| | | Mini-jack Stereo x 3 | | | |
| | | Composite video x 1 | | | |
| | | HDMI (MHL) x 1, HDMI x 1 | | | |
| | | Audio RCA (R/L) x 1 | | | |
| | | Microphone mini jack x 1 | | | |
| | | USB type A x 2 | | | |
| | | - | | RJ45 (HDBaseT) | |

| | |
|-------------------|--|
| Output Terminals | VGA x 1 |
| | Audio RCA (R/L) x 1 |
| | PC audio x 1 |
| | 3D-Sync x 1 |
| Control Terminals | RS-232C x 1 |
| | RJ45 x 1 |
| | 12V OUT: PC Jack x 1 (DC12V 200mA output function) |
| | Wired Remote x 1 |
| | Wired Remote Out x 1 |
| | USB (Type B) (Service only) |
| | USB Display (Mini B) x 1 |
| | Kensington® Security Slot |
| Security | Security Bar |

Note: For questions regarding product specifications, please contact your local distributor.

Projection Distance vs. Projection Size



Projection Distance and Size Table

DW3321 0.65" WXGA

| | TELE | | | | | WIDE | | | | |
|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Distance (m) | 1.93 | 3.86 | 4.82 | 9.65 | 10 | 1.42 | 2.84 | 5.69 | 8.53 | 10 |
| Diagonal (") | 40 | 80 | 100 | 200 | 207 | 50 | 100 | 200 | 300 | 352 |
| Image Width (cm) | 86.2 | 172.3 | 215.4 | 430.8 | 446.4 | 107.7 | 215.4 | 430.8 | 646.2 | 757.6 |
| Image Height (cm) | 53.8 | 107.7 | 134.6 | 269.2 | 279 | 67.3 | 134.6 | 269.2 | 403.9 | 473.5 |
| H (cm) | 27 | 54 | 67 | 135 | 140 | 34 | 67 | 135 | 202 | 237 |
| O (cm) | 36 | 72 | 90 | 181 | 187 | 45 | 90 | 181 | 271 | 318 |
| A (cm) | 9.2 | 18.5 | 23.1 | 46.2 | 47.8 | 11.5 | 23.1 | 46.2 | 69.3 | 81.2 |

DX3351 XGA 0.7" XGA

| | TELE | | | | | WIDE | | | | |
|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| Distance (m) | 1.8 | 3.59 | 4.49 | 8.98 | 10 | 1.32 | 2.64 | 5.28 | 7.92 | 10 |
| Diagonal (") | 40 | 80 | 100 | 200 | 223 | 50 | 100 | 200 | 300 | 378.5 6 |
| Image Width (cm) | 81.3 | 162.6 | 203.2 | 406.4 | 452.5 | 101.6 | 203.2 | 406.4 | 609.6 | 769.2 |
| Image Height (cm) | 61 | 121.9 | 152.4 | 304.8 | 339.4 | 76.2 | 152.4 | 304.8 | 457.2 | 579.2 |
| H (cm) | 31 | 61 | 76 | 152 | 170 | 38 | 76 | 152 | 229 | 290 |
| O (cm) | 38 | 76 | 95 | 190 | 212 | 48 | 95 | 190 | 285 | 361 |
| A (cm) | 7.5 | 15.1 | 18.8 | 37.6 | 41.9 | 9.4 | 18.8 | 37.6 | 56.5 | 71.3 |

Timing Mode Table

| SIGNAL | RESOLUTION | H-SYNC (KHz) | V-SYNC (Hz) | COMPOSITE S_VIDEO | COMPONENT | VGA/BNC (ANALOG) | HDMI (DIGITAL) |
|------------|------------|--------------|-------------|-------------------|-----------------------|-----------------------|-----------------------|
| NTSC | — | 15.734 | 60.0 | ○ (3D:S) | — | — | — |
| PAL/SECAM | — | 15.625 | 50.0 | ○ | — | — | — |
| VESA | 720 x 400 | 31.5 | 70.1 | — | — | ○ | ○ |
| | 640 x 480 | 31.5 | 60.0 | — | — | ○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) |
| | 640 x 480 | 35.0 | 66.667 | — | — | MAC13 | MAC13 |
| | 640 x 480 | 37.86 | 72.8 | — | — | — | ○ |
| | 640 x 480 | 37.5 | 75.0 | — | — | ○ | ○ |
| | 640 x 480 | 43.3 | 85.0 | — | — | ○ | ○ |
| | 640 x 480 | 61.9 | 119.5 | — | — | ○(3D:FS) | ○ |
| | 800 x 600 | 37.9 | 60.3 | — | — | ○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) |
| | 800 x 600 | 46.9 | 75.0 | — | — | ○ | ○ |
| | 800 x 600 | 48.1 | 72.2 | — | — | ○ | ○ |
| | 800 x 600 | 53.7 | 85.1 | — | — | ○ | ○ |
| | 800 x 600 | 76.3 | 120.0 | — | — | ○(3D:FS) | ○(3D:FS) |
| | 832 x 624 | 49.722 | 74.546 | — | — | MAC16 | MAC16 |
| | 1024 x 576 | 35.82 | 60.0 | — | — | ○ | — |
| | 1024 x 600 | 37.5 | 60.0 | — | — | ○ | — |
| | 1024 x 600 | 41.47 | 60.0 | — | — | ○ | — |
| | 1024 x 768 | 48.4 | 60.0 | — | — | ○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) |
| | 1024 x 768 | 56.5 | 70.1 | — | — | ○ | ○ |
| | 1024 x 768 | 60.241 | 75.02 | — | — | MAC19 | MAC19 |
| | 1024 x 768 | 60.0 | 75.0 | — | — | ○ | ○ |
| | 1024 x 768 | 68.7 | 85.0 | — | — | ○ | ○ |
| | 1024 x 768 | 97.6 | 120.0 | — | — | ○ (3D:FS) | ○ (3D:FS) |
| 1152 x 870 | 68.68 | 75.06 | — | — | MAC21 | MAC21 | |
| 1280 x 720 | 45.0 | 60.0 | — | — | ○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) | |
| 1280 x 720 | 90.0 | 120.0 | — | — | ○ (3D:FS) | ○ (3D:FS) | |

| SIGNAL | RESOLUTION | H-SYNC (KHz) | V-SYNC (Hz) | COMPOSITE S_VIDEO | COMPONENT | VGA/BNC (ANALOG) | HDMI (DIGITAL) | |
|--------|-------------------------------|--------------|-------------|-------------------|-----------|---------------------|--------------------|---------|
| VESA | 1280 x 768 (Reduce Blanking) | 47.4 | 60 | — | — | ○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) | |
| | 1280 x 768 | 47.8 | 59.9 | — | — | ○○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) | |
| | 1280 x 800 | 49.7 | 59.8 | — | — | ○○ (3D:FS, TB, SBS) | ○ (3D:FS, TB, SBS) | |
| | 1280 x 800 | 62.8 | 74.9 | — | — | ○ | ○ | |
| | 1280 x 800 | 71.6 | 84.9 | — | — | ○ | ○ | |
| | 1280 x 800 | 101.6 | 119.9 | — | — | ○ (3D:FS) | ○ (3D:FS) | |
| | 1280 x 1024 | 64.0 | 60.0 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1280 x 1024 | 80.0 | 75.0 | — | — | ○ | ○ | |
| | 1280 x 1024 | 91.1 | 85.0 | — | — | ○ | ○ | |
| | 1280 x 960 | 60.0 | 60.0 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1280 x 960 | 85.9 | 85.0 | — | — | ○ | ○ | |
| | 1400 x 1050 | 65.3 | 60.0 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1440 x 900 | 55.9 | 59.9 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1600 x1200 | 75.0 | 60 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1680 x1050 (Reduce Blanking) | 64.67 | 59.88 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1680 x1050 | 65.29 | 59.95 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | 1920 x 1080 | 67.5 | 60.0 | — | — | ○ | ○ | |
| | 1920 x 1200 (Reduce Blanking) | 74.038 | 59.95 | — | — | ○ (3D:TB, SBS) | ○ (3D:TB, SBS) | |
| | SDTV | 480i | 15.734 | 60.0 | — | ○ | — | (3D:FS) |
| | | 576i | 15.625 | 50.0 | — | ○ | — | — |

| SIGNAL | RESOLUTION | H-SYNC (KHz) | V-SYNC (Hz) | COMPOSITE S_VIDEO | COMPONENT | VGA/BNC (ANALOG) | HDMI (DIGITAL) |
|--------|------------|--------------|-------------|-------------------|-----------|------------------|----------------|
| EDTV | 576p | 31.3 | 50.0 | — | ○ | — | — |
| | 480p | 31.5 | 60.0 | — | ○ | — | — |
| HDTV | 720p | 37.5 | 50.0 | — | ○ | — | (3D:FP, TB) |
| | 720p | 45.0 | 60.0 | — | ○ | — | (3D:FP, TB) |
| | 1080i | 33.8 | 60.0 | — | ○ | — | (3D:SBS) |
| | 1080i | 28.1 | 50.0 | — | ○ | — | (3D:SBS) |
| | 1080p | 27 | 24.0 | — | ○ | — | (3D:FP, TB) |
| | 1080p | 28 | 25.0 | — | ○ | — | — |
| | 1080p | 33.7 | 30.0 | — | ○ | — | — |
| | 1080p | 56.3 | 50.0 | — | ○ | — | — |
| | 1080p | 67.5 | 60.0 | — | ○ | — | — |

O: Frequency supported

—: Frequency not supported

(*) VGA support EDTV/SDTV/HDTV component with an adapter.

3D:

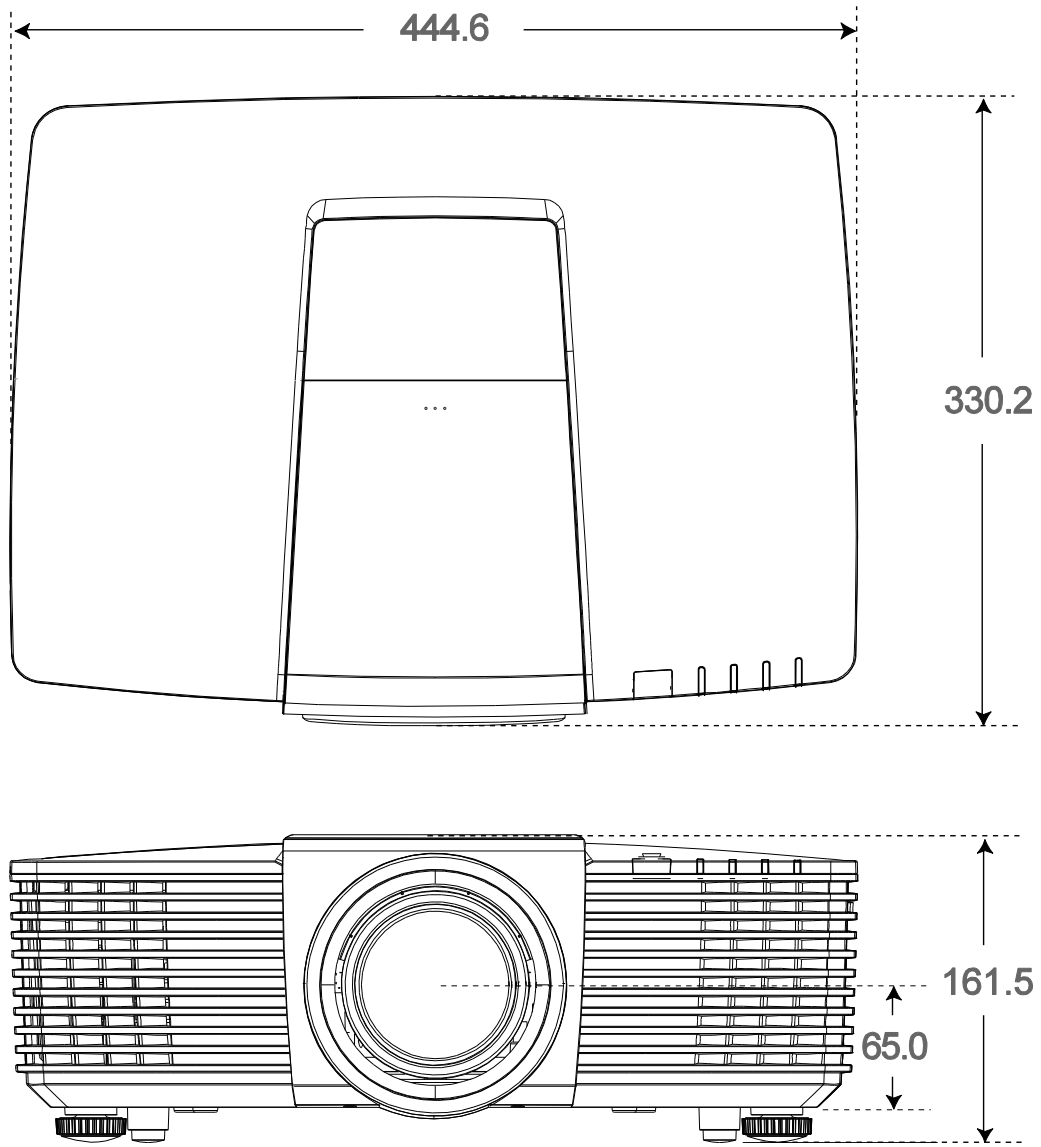
FS: Field Sequential

TB: Top / Bottom

SBS: Side-By-Side

FP: Frame Packing

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.

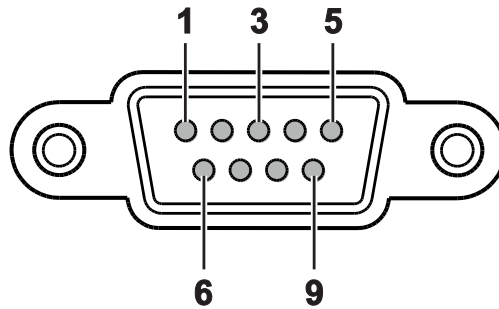


205 Westwood Ave, Long Branch, NJ 07740

Phone: 866-94 BOARDS (26273) / (732)-222-1511

Fax: (732)-222-7088 | E-mail: sales@touchboards.com

RS232 Pin Assignments (Projector Side)



| PIN NO. | NAME | I/O (FROM PROJECTOR SIDE) |
|---------|------|---------------------------|
| 1 | NC | — |
| 2 | RXD | IN |
| 3 | TXD | OUT |
| 4 | NC | — |
| 5 | GND | — |
| 6 | NC | — |
| 7 | NC | — |
| 8 | NC | — |
| 9 | NC | — |

RS-232C Protocol

RS232 Setting

| | |
|----------------|---------|
| Baud rate: | 9600 |
| Parity check: | None |
| Data bit: | 8 |
| Stop bit: | 1 |
| Flow Control | None |
| UART16550 FIFO | Disable |

Control Command Structure

The command is structured by the Header code, command code, data code and end code. Most of the commands are structured except some for the compatibility issue with other projectors.

| | HEADER CODE | COMMAND CODE | DATA CODE | END CODE |
|-------|-------------|--------------|-----------|----------|
| HEX | | Command | Data | 0Dh |
| ASCII | 'V' | Command | Data | CR |

Operation Command

Note:

"CR" mean Carriage Return

XX=00-98, projector's ID, XX=99 is for all projectors

Return Result P=Pass / F=Fail

n: 0:Disable/1: Enable/Vaule(0~9999)

| COMMAND GROUP 00 | | | |
|------------------|---------------------------------------|----------------------|--|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXS0001 | 56H 39H 39H 53H 30H 30H 30H 31H 0DH | Power On | |
| VXXS0002 | 56H 39H 39H 53H 30H 30H 30H 32H 0DH | Power Off | |
| VXXS0003 | 56H 39H 39H 53H 30H 30H 30H 33H 0DH | Resync | |
| VXXG0004 | 56H 39H 39H 47H 30H 30H 30H 34H 0DH | Get Lamp Hours | |
| VXXS0005n | 56H 39H 39H 53H 30H 30H 30H 35H n 0DH | Set Air filter timer | n= 0~60000 |
| VXXG0005 | 56H 39H 39H 47H 30H 30H 30H 35H 0DH | Get Air filter timer | n= 0~60000 |
| VXXS0006 | 56H 39H 39H 53H 30H 30H 30H 36H 0DH | System Reset | |
| VXXG0007 | 56H 39H 39H 47H 30H 30H 30H 37H 0DH | Get System Status | 1: Standby 2: Operation 3: Cooling |
| VXXG0008 | 56H 39H 39H 47H 30H 30H 30H 38H 0DH | Get F/W Version | |

| COMMAND GROUP 01 | | | |
|------------------|---------------------------------------|-----------------------|---|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXG0101 | 56H 39H 39H 47H 30H 31H 30H 31H 0DH | Get Brightness | n= 0~100 |
| VXXS0101n | 56H 39H 39H 53H 30H 31H 30H 31H n 0DH | Set Brightness | n= 0~100 |
| VXXG0102 | 6H 39H 39H 47H 30H 31H 30H 32H 0DH | Get Contrast | n= -50~50 |
| VXXS0102n | 56H 39H 39H 53H 30H 31H 30H 32H n 0DH | Set Contrast | n= -50~50 |
| VXXG0103 | 56H 39H 39H 47H 30H 31H 30H 33H 0DH | Get Color | n= -50~50 |
| VXXS0103n | 56H 39H 39H 53H 30H 31H 30H 33H n 0DH | Set Color | n= -50~50 |
| VXXG0104 | 56H 39H 39H 47H 30H 31H 30H 34H 0DH | Get Tint | n= -50~50 |
| VXXS0104n | 56H 39H 39H 53H 30H 31H 30H 34H n 0DH | Set Tint | n= -50~50 |
| VXXG0105 | 56H 39H 39H 47H 30H 31H 30H 35H 0DH | Get Sharpness | 0~15 |
| VXXS0105n | 56H 39H 39H 53H 30H 31H 30H 35H n 0DH | Set Sharpness | 0~15 |
| VXXG0106 | 56H 39H 39H 47H 30H 31H 30H 36H 0DH | Get Color Temperature | 0: D65 (Warm) 1: D75 (Normal) 2: D83 (Cold) |
| VXXS0106n | 56H 39H 39H 53H 30H 31H 30H 36H n 0DH | Set Color Temperature | 0: D65 (Warm) 1: D75 (Normal) 2: D83 (Cold) |

| COMMAND GROUP 01 | | | |
|------------------|---------------------------------------|------------------|---|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXG0107 | 56H 39H 39H 47H 30H 31H 30H 37H 0DH | Get Gamma | 0: 1.8 1: 2.0 2: 2.2 3: 2.4 4: S Curve 5: B&W 6: Linear |
| VXXS0107n | 56H 39H 39H 53H 30H 31H 30H 37H n 0DH | Set Gamma | 0: 1.8 1: 2.0 2: 2.2 3: 2.4 4: S Curve 5: B&W 6: Linear |
| XXG0108 | 56H 39H 39H 47H 30H 31H 30H 38H 0DH | Get Display Mode | 0: Presentation 1: Bright 2: Game 3: Movie 4: Vivi 5: TV 6: sRGB 7: Blackboard 8: DICOM SIM 10: User1 11: User2 |
| VXXS0108n | 56H 39H 39H 53H 30H 31H 30H 38H n 0DH | Set Display Mode | 0: Presentation 1: Bright 2: Game 3: Movie 4: Vivi 5: TV 6: sRGB 7: Blackboard 8: DICOM SIM 10: User1 11: User2 |

| COMMAND GROUP 02 | | | |
|------------------|-------------------------------------|----------------|-------------|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXS0201 | 56H 39H 39H 53H 30H 32H 30H 31H 0DH | Select VGA1 | |
| VXXS0202 | 56H 39H 39H 53H 30H 32H 30H 32H 0DH | Select VGA2 | |
| VXXS0203 | 56H 39H 39H 53H 30H 32H 30H 33H 0DH | Select DVI | |
| VXXS0204 | 56H 39H 39H 53H 30H 32H 30H 34H 0DH | Select Video | |
| VXXS0205 | 56H 39H 39H 53H 30H 32H 30H 35H 0DH | Select S-Video | |
| VXXS0206 | 56H 39H 39H 53H 30H 32H 30H 36H 0DH | Select HDMI 1 | |
| VXXS0207 | 56H 39H 39H 53H 30H 32H 30H 37H 0DH | Select BNC | |
| VXXS0209 | 56H 39H 39H 53H 30H 32H 30H 39H 0DH | Select HDMI 2 | |
| VXXS0212 | 56H 39H 39H 53H 30H 32H 32H 31H 0DH | Select Network | |

| COMMAND GROUP 02 | | | |
|------------------|-------------------------------------|--------------------|---|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| | | Display | |
| VXXS0213 | 56H 39H 39H 53H 30H 32H 33H 31H 0DH | Select USB Reader | |
| VXXS0214 | 56H 39H 39H 53H 30H 32H 34H 31H 0DH | Select USB Display | |
| VXXS0215 | 56H 39H 39H 53H 30H 32H 35H 31H 0DH | Select HD BasT | |
| VXXG0220 | 56H 39H 39H 47H 30H 32H 32H 30H 0DH | Get Current Source | Return 1: VGA 1 2: VGA 2 3: DVI 4: Video 5: S-Video 6: HDMI 1 / MHL 7: BNC 9: HDMI 2 12: Network Display 13: USB Reader 14: USB Display 15: HDBaseT |

| COMMAND GROUP 03 | | | |
|------------------|---------------------------------------|-------------|---|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXG0301 | 56H 39H 39H 47H 30H 33H 30H 31H 0DH | Get Scaling | 0: Fill 1: 4:3 2: 16:9 3: 16:10 4: Letter Box (Not support in 3D) 5: Native 6: 2.35:1 |
| VXXS0301n | 56H 39H 39H 53H 30H 33H 30H 31H n 0DH | Set Scaling | 0: Fill 1: 4:3 2: 16:9 3: 16:10 4: Letter Box (Not support in 3D) 5: Native 6: 2.35:1 |
| VXXG0302 | 56H 39H 39H 47H 30H 33H 30H 32H 0DH | Get Blank | |
| VXXS0302n | 56H 39H 39H 53H 30H 33H 30H 32H n 0DH | Set Blank | n= 0 UnBlank, n= 1 Blank |
| VXXG0304 | 56H 39H 39H 47H 30H 33H 30H 34H 0DH | Get Freeze | |
| VXXS0304n | 56H 39H 39H 53H 30H 33H 30H 34H n 0DH | Set Freeze | n= 0 UnFreeze, n= 1 Freeze |
| VXXG0305 | 56H 39H 39H 47H 30H 33H 30H 35H 0DH | Volume | n= 0~10 |
| VXXS0305n | 56H 39H 39H 53H 30H 33H 30H 35H n 0DH | Volume | n= 0~10 |

| COMMAND GROUP 03 | | | |
|------------------|---|-------------------------------|--|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXG0308 | 56H 39H 39H 47H 30H 33H 30H 38H 0DH | Projection Mode | 0: Front 1: Rear 2: Ceiling 3: Rear+Ceiling |
| VXXS0308n | 56H 39H 39H 53H 30H 33H 30H 38H n 0DH | Projection Mode | 0: Front 1: Rear 2: Ceiling 3: Rear+Ceiling |
| VXXG0309 | 56H 39H 39H 47H 30H 33H 30H 39H 0DH | Set vertical keystone value | n= -30~30 |
| VXXS0309n | 56H 39H 39H 53H 30H 33H 30H 39H n 0DH | Set vertical keystone value | n= -30~30 |
| VXXG0310 | 56H 39H 39H 47H 30H 33H 31H 30H 0DH | Set horizontal keystone value | n= -25~+25 |
| VXXS0310n | 56H 39H 39H 53H 30H 33H 31H 30H n 0DH | Set horizontal keystone value | n= -25~+25 |
| VXXG0315 | 56H 39H 39H 47H 30H 33H 31H 35H 0DH | Get 3D | 0:Off(When Set 3D Format is Off, this 3D sync returns Off.) 1:DLP-Link 2:IR |
| VXXS0315n | 56H 39H 39H 53H 30H 33H 31H 35H n 0DH | Set 3D | 0:Off(Not support item "Off", Use Set 3D Format to turn 3D sync Off.) 1:DLP-Link 2:IR |
| VXXG0316 | 56H 39H 39H 47H 30H 33H 31H 36H 0DH | Get 3D Sync Invert | 0: Off 1: On |
| VXXS0316n | 56H 39H 39H 53H 30H 33H 31H 36H n 0DH | Set 3D Sync Invert | 0: Off 1: On |
| VXXG0317 | 56H 39H 39H 47H 30H 33H 31H 37H 0DH | Get 3D Format | 0: Off 2: Top/Bottom 3: Frame Sequential 4: Frame Packing 5: Side-By-Side 7: Auto |
| VXXS0317n | 56H 39H 39H 53H 30H 33H 31H 37H n 0DH | Set 3D Format | 0: Off 2: Top/Bottom 3: Frame Sequential 4: Frame Packing 5: Side-By-Side 7: Auto |
| VXXG0319 | 56H 39H 39H 47H 30H 33H 31H 38 39H 0DH | Get Lamp Mode | 0: Eco 1: Normal 2: Dynamic ECO |

| COMMAND GROUP 03 | | | |
|------------------|--|------------------|---|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXS0319n | 56H 39H 39H 53H 30H 33H 31H 38 39H n 0DH | Get Lamp Mode | 0: Eco 1: Normal 2: Dynamic ECO |
| VXXG0321 | 56H 39H 39H 47H 30H 33H 32H 31H 0DH | Get Splash Logo | 0: STD (Vivitek) 1: Black 2: Blue |
| VXXS0321n | 56H 39H 39H 53H 30H 33H 32H 31H n 0DH | Set Splash Logo | 0: STD (Vivitek) 1: Black 2: Blue |
| VXXG0330 | 56H 39H 39H 47H 30H 33H 33H 30H 0DH | Get Sleep Timer | 0: Disable 1: 30min 2: 60min 3: 120min 4: 180min 5: 240min 6: 480min 7: 720min |
| VXXS0330n | 56H 39H 39H 53H 30H 33H 33H 30H n 0DH | Set Sleep Timer | 0: Disable 1: 30min 2: 60min 3: 120min 4: 180min 5: 240min 6: 480min 7: 720min |
| VXXG0331 | 56H 39H 39H 47H 30H 33H 33H 31H 0DH | Get R Gain | n= 0~100 |
| VXXS0331n | 56H 39H 39H 53H 30H 33H 33H 31H n 0DH | Set R Gain | n= 0~100 |
| VXXG0332 | 56H 39H 39H 47H 30H 33H 33H 32H 0DH | Get G Gain | n= 0~100 |
| VXXS0332n | 56H 39H 39H 53H 30H 33H 33H 32H n 0DH | Set G Gain | n= 0~100 |
| VXXG0333 | 56H 39H 39H 47H 30H 33H 33H 33H 0DH | Get B Gain | n= 0~100 |
| VXXS0333n | 56H 39H 39H 53H 30H 33H 33H 33H n 0DH | Set B Gain | n= 0~100 |
| VXXG0334 | 56H 39H 39H 47H 30H 33H 33H 34H 0DH | Get R Offset | n= -50~50 |
| VXXS0334n | 56H 39H 39H 53H 30H 33H 33H 34H n 0DH | Set R Offset | n= -50~50 |
| VXXG0335 | 56H 39H 39H 47H 30H 33H 33H 35H 0DH | Get G Offset | n= -50~50 |
| VXXS0335n | 56H 39H 39H 53H 30H 33H 33H 35H n 0DH | Set G Offset | n= -50~50 |
| VXXG0336 | 56H 39H 39H 47H 30H 33H 33H 36H 0DH | Get B Offset | n= -50~50 |
| VXXS0336n | 56H 39H 39H 53H 30H 33H 33H 36H n 0DH | Set B Offset | n= -50~50 |
| VXXG0337 | 56H 39H 39H 47H 30H 33H 33H 37H 0DH | Get White R Gain | n= 0~100 |
| VXXS0337n | 56H 39H 39H 53H 30H 33H 33H 37H n 0DH | Set White R Gain | n= 0~100 |
| VXXG0338 | 56H 39H 39H 47H 30H 33H 33H 38H 0DH | Get White G Gain | n= 0~100 |
| VXXS0338n | 56H 39H 39H 53H 30H 33H 33H 38H n 0DH | Set White G Gain | n= 0~100 |
| VXXG0339 | 56H 39H 39H 47H 30H 33H 33H 39H 0DH | Get White B Gain | n= 0~100 |
| VXXS0339n | 56H 39H 39H 53H 30H 33H 33H 39H n 0DH | Set White B Gain | n= 0~100 |
| VXXG0340 | 56H 39H 39H 47H 30H 33H 34H 30H 0DH | Get R_Hue | n= -99~99 |

| COMMAND GROUP 03 | | | |
|------------------|---------------------------------------|------------------|-------------|
| ASCII | HEX | FUNCTION | DESCRIPTION |
| VXXS0340n | 56H 39H 39H 53H 30H 33H 34H 30H n 0DH | Set R_Hue | n= -99~99 |
| VXXG0341 | 56H 39H 39H 47H 30H 33H 34H 31H 0DH | Get R_Saturation | n= 0~199 |
| VXXS0341n | 56H 39H 39H 53H 30H 33H 34H 31H n 0DH | Set R_Saturation | n= 0~199 |
| VXXG0342 | 56H 39H 39H 47H 30H 33H 34H 32H 0DH | Get R_Gain | n= 5~195 |
| VXXS0342n | 56H 39H 39H 53H 30H 33H 34H 32H n 0DH | Set R_Gain | n= 5~195 |
| VXXG0343 | 56H 39H 39H 47H 30H 33H 34H 33H 0DH | Get G_Hue | n= -99~99 |
| VXXS0343n | 56H 39H 39H 53H 30H 33H 34H 33H n 0DH | Set G_Hue | n= -99~99 |
| VXXG0344 | 56H 39H 39H 47H 30H 33H 34H 34H 0DH | Get G_Saturation | n= 0~199 |
| VXXS0344n | 56H 39H 39H 53H 30H 33H 34H 34H n 0DH | Set G_Saturation | n= 0~199 |
| VXXG0345 | 56H 39H 39H 47H 30H 33H 34H 35H 0DH | Get G_Gain | n= 5~195 |
| VXXS0345n | 56H 39H 39H 53H 30H 33H 34H 35H n 0DH | Set G_Gain | n= 5~195 |
| VXXG0346 | 56H 39H 39H 47H 30H 33H 34H 36H 0DH | Get B_Hue | n= -99~99 |
| VXXS0346n | 56H 39H 39H 53H 30H 33H 34H 36H n 0DH | Set B_Hue | n= -99~99 |
| VXXG0347 | 56H 39H 39H 47H 30H 33H 34H 37H 0DH | Get B_Saturation | n= 0~199 |
| VXXS0347n | 56H 39H 39H 53H 30H 33H 34H 37H n 0DH | Set B_Saturation | n= 0~199 |
| VXXG0348 | 56H 39H 39H 47H 30H 33H 34H 38H 0DH | Get B_Gain | n= 5~195 |
| VXXS0348n | 56H 39H 39H 53H 30H 33H 34H 38H n 0DH | Set B_Gain | n= 5~195 |
| VXXG0349 | 56H 39H 39H 47H 30H 33H 34H 39H 0DH | Get C_Hue | n= -99~99 |
| VXXS0349n | 56H 39H 39H 53H 30H 33H 34H 39H n 0DH | Set C_Hue | n= -99~99 |
| VXXG0350 | 56H 39H 39H 47H 30H 33H 35H 30H 0DH | Get C_Saturation | n= 0~199 |
| VXXS0350n | 56H 39H 39H 53H 30H 33H 35H 30H n 0DH | Set C_Saturation | n= 0~199 |
| VXXG0351 | 56H 39H 39H 47H 30H 33H 35H 31H 0DH | Get C_Gain | n= 5~195 |
| VXXS0351n | 56H 39H 39H 53H 30H 33H 35H 31H n 0DH | Set C_Gain | n= 5~195 |
| VXXG0352 | 56H 39H 39H 47H 30H 33H 35H 32H 0DH | Get M_Hue | n= -99~99 |
| VXXS0352n | 56H 39H 39H 53H 30H 33H 35H 32H n 0DH | Set M_Hue | n= -99~99 |
| VXXG0353 | 56H 39H 39H 47H 30H 33H 35H 33H 0DH | Get M_Saturation | n= 0~199 |
| VXXS0353n | 56H 39H 39H 53H 30H 33H 35H 33H n 0DH | Set M_Saturation | n= 0~199 |
| VXXG0354 | 56H 39H 39H 47H 30H 33H 35H 34H 0DH | Get M_Gain | n= 5~195 |
| VXXS0354n | 56H 39H 39H 53H 30H 33H 35H 34H n 0DH | Set M_Gain | n= 5~195 |
| VXXG0355 | 56H 39H 39H 47H 30H 33H 35H 35H 0DH | Get Y_Hue | n= -99~99 |
| VXXS0355n | 56H 39H 39H 53H 30H 33H 35H 35H n 0DH | Set Y_Hue | n= -99~99 |
| VXXG0356 | 56H 39H 39H 47H 30H 33H 35H 36H 0DH | Get Y_Saturation | n= 0~199 |
| VXXS0356n | 56H 39H 39H 53H 30H 33H 35H 36H n 0DH | Set Y_Saturation | n= 0~199 |
| VXXG0357 | 56H 39H 39H 47H 30H 33H 35H 37H 0DH | Get Y_Gain | n= 5~195 |
| VXXS0357n | 56H 39H 39H 53H 30H 33H 35H 37H n 0DH | Set Y_Gain | n= 5~195 |